



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 660

Part II of II

**SEVERN
TRENT
SERVICES**

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

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

ANALYTICAL REPORT

PROJECT NO. UXB 7512-060

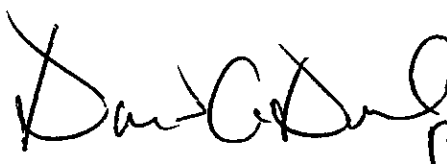
Dunn Field, Def Depot Memphis

Lot #: C0F080328

Frank Johnson

UXB International

SEVERN TRENT LABORATORIES, INC.



Dave Dunlap
Project Manager

June 30, 2000

CASE NARRATIVE
UXB International Inc.
Dunn Field

LOT # C0F080328

Sample Receiving:

Two coolers were received on June 8, 2000. Both cooler temperatures were within acceptance limits.

Volatiles:

There were no problems associated with the analyses.

Semivolatiles:

There were no problems associated with the analyses.

Pesticides:

There were no problems associated with the analyses.

Herbicides:

There were no problems associated with the analyses.

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

COF080328

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
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

C0F080328

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT</u>	<u>SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
DEEHC	001	DF/S1/0159/SDC/008		06/07/00	10:30
DEEHP	002	DF/S1/0159/SDC/009		06/07/00	10:45

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 Record

Quanterra, Inc. - Pittsburgh PA Lab
450 William Pitt Way
Pittsburgh PA 15238



660 730

QUA 4124

Client

WKB Int'l. Inc.

Project Manager

Frank Johnson

Date

6/7/00

Chain Of Custody Number

67348

Address

6141 Old Forge Pike

Telephone Number (Area Code)/Fax Number

(901) 745-4999

Lab Number

Page of

Analysis

City

State

Zip Code

Site Contact

Carrier/Waybill Number

Project Name

Dunn Field

Contract/Purchase Order/Quote No

Sample / D. No and Description

Date

Time

Sample Type

Total Volume

Containers Type No

Preservative

Condition on Receipt

D1510159/5001009

6/7/00

1045

5012

4,832oz

Glass 3

—

X TLCP & RC1

X Total 6010B

Special Instructions

Possible Hazard Identification

☒ Non-Hazard

☐ Flammable

☐ Skin Irritant

☐ Poison B

☐ Unknown

Sample Disposal

☐ Return To Client

☐ Disposal By Lab

☐ Archive For

Months

Turn Around Time Required

☒ Normal

☐ Rush

QC Level

☐ I.

☐ II.

☐ III.

Project Specific (Specify)

1 Relinquished By

D.A. Kord.

Date

Time

6/7/00

1. Received By

2. Received By

3. Received By

Date

Time

Date

Time

2 Relinquished By

D.A. Kord.

Date

Time

6/7/00

2. Received By

3. Received By

Date

Time

Date

Time

3 Relinquished By

D.A. Kord.

Date

Time

6/7/00

3. Received By

Date

Time

Date

Time

Date

Time

Comments

DISTRIBUTION: WHITE - Slays with Sample, CANARY - Returned to Client with Report, PINK - Field Copy

Quanterra, Inc. - Pittsburgh PA Lab
450 William Pitt Way
Pittsburgh PA 15238

[illegible]

Possible Hazard Identification				Sample Disposal			
☒ Non-Hazard	☐ Flammable	☐ Skin Irritant	☐ Poison B	☐ Unknown	☐ Return To Client	☐ Disposal By Lab	☐ Archive For _____ Months
Turn Around Time Required				Project Specific (Specify)			
☒ Normal	☐ Rush	QC Level		☐ I.	☐ II.	☐ III.	
1. Relinquished By <i>J.A. Frank</i>		Date	<i>6/7/00</i>	Time	<i>1030</i>	1. Received By _____	
2. Relinquished By _____		Date		Time		2. Received By _____	
3. Relinquished By _____		Date		Time		3. Received By <i>Quincy</i>	
Comments				Pittsburgh			

Cooler Receipt Form

STL Pittsburgh

660 732

Client: USD FJTK Project: 6-8-00 Quote: 34828
 Cooler Rec'd & Opened for Temp. Check on: 6-8-00
 Coolers Opened and Unpacked on: _____ By: [Signature]
(Signature)

STL Pittsburgh Lot Number: 20F080328

	Yes	No
1. Were custody seals on the outside of the cooler? _____	☒	☐
If YES, how many and where? Quantity <u>2</u> Location <u>Front</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? <u>1</u>	☒	☐
If YES, what type? <u>Bubble wrap</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> <u>UPS</u> CLIENT DROP-OFF OTHER AIRBORNE		

Explain any discrepancies: _____

Level 2 Review _____
 Was contacted on _____ by _____ to resolve discrepancies.

P: Preserved
UP: Unpreserved

(1) "NUT" could include sample bottles for ammonia, chemical oxygen demand, nitrate/nitrite, TKN, or total phosphorus

Soil Sampler

[illegible]

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

2020

4a Express Package Service Packages up to 150 lb
 Delivery commitment: We'll be there in some way
☒ **FedEx Priority Overnight** ☐ **FedEx Standard Overnight** ☐ **FedEx First Overnight**
 Next business morning Next business afternoon Early next business morning
☐ **FedEx 2Day*** ☐ **FedEx Express Saver***
 Second business day Third business day

4b Express Freight Service Packages over 150 lb
 Delivery commitment: We'll be there in some way
☐ **FedEx 1Day Freight*** ☐ **FedEx 2Day Freight** ☐ **FedEx 3Day Freight**
 Next business day Second business day Third business day

* FedEx letter boxes not available for these services
 Minimum charge: One pound rate

5 Packaging Declaring value limit \$500
☒ **FedEx letter*** ☐ **FedEx Pak*** ☒ **Other Pkg.**
 (includes FedEx Box, FedEx Tube, and customer Pkg.)

6 Special Handling
☒ **Signature Delivery** ☐ **Sunday Delivery** ☐ **HOLD Weekday** ☐ **HOLD Saturday**
 Available for FedEx Priority Available for FedEx Priority Available for FedEx Priority Available for FedEx Priority
 Deliveries to FedEx Priority Deliveries to FedEx Priority Deliveries to FedEx Priority Deliveries to FedEx Priority
 to select ZIP codes to select ZIP codes to select ZIP codes to select ZIP codes

Does this shipment contain dangerous goods?
☐ No ☐ Yes ☐ Yes
 As per attached Shipper's Declaration Shipper's Declaration not required

Dangerous Goods cannot be shipped in FedEx packages.

7 Payment Bill to: Enter FedEx Acc't. No. or Credit Card the below. ☐ Dry Ice ☐ Lith. & UA Mats ☐ X ☐ by ☐ **Cargo Aircraft Only**
☒ **Sender** ☐ **Recipient** ☐ **Third Party** ☐ **Credit Card** ☐ **Other Recp.**
 (bill to this location) (bill to this location) (bill to this location) (bill to this location)

8 Release Signature Sign in multiple delivery without obtaining signature

Our liability is limited to \$100 unless you declare a higher value. See back for details.

Total Packages **Total Weight** **Total Declared Value*** **Total Charges**

2 28 \$.00

Card (cut here)

By signing your address on to deliver this shipment without obtaining a signature and agree to deliver and hold it harmless from any resulting claim.
Questions? Call 1-800-Go-FedEx (800-463-3333)
 Visit our Web site at www.fedex.com
 Fax (11/97) 015815-015815-01 fax: (11/97) 015815-015815-01

360

Federal Express

FedEx.

Severn Trent
450 William Pitt Way
Pittsburgh, Pa. 15238

212 34878
Q

SHIP# 12719 07JUN00

FedEx.

PRIORITY OVERNIGHT

THU

Master 8212 7736 7277 FORM 0200

Deliver By:
08JUN00
AA

002/002 MP# 8151 3146 6516 FORM 0260

PIT

15238 -PA-US

XBACGA



SBCCOM
Monitoring Branch Laboratory

CLEARANCE REPORT

June-07, 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 59/SDC/ 008		ND	ND	N/A	ND	ND
DF/S1/01 59/SDC/ 009		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

SBCCOM
Monitoring Branch Laboratory

CLEARANCE REPORT

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DF/S1/01 59/SDC/ 008		ND	ND	N/A	ND	ND
DF/S1/01 59/SDC/ 009		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: C0F080328 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/08/00

Work Order: DEEHC102

Date Extracted: 06/14/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0166201

Client Sample Id: DF/S1/0159/SDC/008

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	0.016	J
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: COF080328 002

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/08/00

Work Order: DEEHP102

Date Extracted: 06/14/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 18

QC Batch: 0166201

Client Sample Id: DF/S1/0159/SDC/009

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: C0F080328 002

Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 06/08/00

Work Order: DEEHP10L Date Extracted: 06/14/00

Dilution factor: 1 Date Analyzed: 06/14/00

Moisture %: 18

QC Batch: 0166201

Client Sample Id: DF/S1/0159/SDC/009

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.478	
78-93-3	2-Butanone	0.364	
56-23-5	Carbon tetrachloride	0.460	
108-90-7	Chlorobenzene	0.473	
67-66-3	Chloroform	0.493	
107-06-2	1,2-Dichloroethane	0.519	
75-35-4	1,1-Dichloroethene	0.443	
127-18-4	Tetrachloroethene	0.450	
79-01-6	Trichloroethene	0.458	
75-01-4	Vinyl chloride	0.508	

660 743

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 002

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/08/00

Work Order: DEEHP10M

Date Extracted: 06/14/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 18

QC Batch: 0166201

Client Sample Id: DF/S1/0159/SDC/009

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.476	
78-93-3	2-Butanone	0.350	
56-23-5	Carbon tetrachloride	0.481	
108-90-7	Chlorobenzene	0.470	
67-66-3	Chloroform	0.485	
107-06-2	1,2-Dichloroethane	0.502	
75-35-4	1,1-Dichloroethene	0.446	
127-18-4	Tetrachloroethene	0.456	
79-01-6	Trichloroethene	0.461	
75-01-4	Vinyl chloride	0.525	

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F140000 201

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/08/00

Work Order: DEM7K101

Date Extracted: 06/14/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

QC Batch: 0166201

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.470	
78-93-3	2-Butanone	0.360	
56-23-5	Carbon tetrachloride	0.441	
108-90-7	Chlorobenzene	0.462	
67-66-3	Chloroform	0.482	
107-06-2	1,2-Dichloroethane	0.506	
75-35-4	1,1-Dichloroethene	0.405	
127-18-4	Tetrachloroethene	0.422	
79-01-6	Trichloroethene	0.441	
75-01-4	Vinyl chloride	0.486	

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F080328

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	DF/S1/0159/SDC/008	114	104	91	106	00
02	DF/S1/0159/SDC/009	114	98	89	105	00
03	METHOD BLK. DEJHQ201 RE-1	108	101	90	104	00
04	METHOD BLK. DEKMV101	115	95	89	105	00
05	LCS DEM7K101	109	100	98	107	00
06	DF/S1/0159/SDC/009 D	109	103	98	106	00
07	DF/S1/0159/SDC/009 S	114	105	96	108	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

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F140000

WO #: DEM7K101

BATCH: 0166201

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Benzene	0.500	0.470	94	79 - 116	
2-Butanone	0.500	0.360	72	35 - 156	
Carbon tetrachloride	0.500	0.441	88	72 - 133	
Chlorobenzene	0.500	0.462	92	81 - 115	
Chloroform	0.500	0.482	96	81 - 122	
1,2-Dichloroethane	0.500	0.506	101	73 - 127	
1,1-Dichloroethene	0.500	0.405	81	65 - 119	
Tetrachloroethene	0.500	0.422	84	78 - 131	
Trichloroethene	0.500	0.441	88	80 - 122	
Vinyl chloride	0.500	0.486	97	53 - 134	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

660 747

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/S1/0159/SDC/009

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHP10L

BATCH: 0166201

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	ND	0.478	96	73 - 123	
2-Butanone	0.500	ND	0.364	73	10 - 151	
Carbon tetrachloride	0.500	ND	0.460	92	61 - 143	
Chlorobenzene	0.500	ND	0.473	95	70 - 122	
Chloroform	0.500	ND	0.493	99	65 - 131	
1,2-Dichloroethane	0.500	ND	0.519	104	67 - 132	
1,1-Dichloroethene	0.500	ND	0.443	89	57 - 138	
Tetrachloroethene	0.500	ND	0.450	90	70 - 130	
Trichloroethene	0.500	ND	0.458	92	58 - 141	
Vinyl chloride	0.500	ND	0.508	102	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:

FORM III

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0159/SDC/009

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHP10M

BATCH: 0166201

COMPOUND	SPIKE	MSD	MSD		QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	REC	
=====	=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	0.476	95	0.25	20	73 - 123	
2-Butanone	0.500	0.350	70	3.9	34	10 - 151	
Carbon tetrachloride	0.500	0.481	96	4.4	20	61 - 143	
Chlorobenzene	0.500	0.470	94	0.53	20	70 - 122	
Chloroform	0.500	0.485	97	1.7	20	65 - 131	
1,2-Dichloroethane	0.500	0.502	100	3.2	20	67 - 132	
1,1-Dichloroethene	0.500	0.446	89	0.69	20	57 - 138	
Tetrachloroethene	0.500	0.456	91	1.2	20	70 - 130	
Trichloroethene	0.500	0.461	92	0.80	20	58 - 141	
Vinyl chloride	0.500	0.525	105	3.4	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:

660 749

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DEKMOV101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number: 6-516

Lab File ID: 4061402.d

Lot Number: C0F080328

Date Analyzed: 06/14/00

Time Analyzed: 12:36

Matrix: SOLID

Date Extracted: 06/07/00

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/S1/0159/SDC/008	DEEHC102	4061409.d	06/14/00	15:31
02	DF/S1/0159/SDC/009	DEEHP10L S	4061405.d	06/14/00	13:47
03	DF/S1/0159/SDC/009	DEEHP10M D	4061406.d	06/14/00	14:11
04	DF/S1/0159/SDC/009	DEEHP102	4061404.d	06/14/00	13:22
05	CHECK SAMPLE	DEM7K101 C	4061407.d	06/14/00	14:36
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
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20					
21					
22					
23					
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: C0F130000 208

Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 06/08/00

Work Order: DEKMV101 Date Extracted: 06/14/00

Dilution factor: 1 Date Analyzed: 06/14/00

Moisture %: NA

QC Batch: 0166201

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

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: C0F080328

Lab File ID (Standard): 1C40614

Date Analyzed: 06/14/00

Instrument ID: HP4

Time Analyzed: 1143

GC Column: DB 624

ID: 0.18 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DCB)		IS3	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	166447	10.12	250585	12.46	701065	7.00
UPPER LIMIT	332894	10.32	501170	12.66	1402130	7.20
LOWER LIMIT	83224	9.92	125292	12.26	350532	6.80
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	159954	10.12	230694	12.46	718243	7.00
02 DF/S1/0159/S	153190	10.12	219029	12.46	686926	7.00
03 DF/S1/0159/S	155880	10.13	232712	12.46	674108	7.00
04 DF/S1/0159/S	159226	10.12	238408	12.46	665003	7.00
05 INTRA-LAB CH	163530	10.12	245700	12.46	673089	7.00
06 DF/S1/0159/S	156536	10.12	223023	12.45	720534	7.01
07						
08						
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: C0F080328 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEEHC103

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164286

Client Sample Id: DF/S1/0159/SDC/008

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: C0F080328 002

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEEHP103

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 18

QC Batch: 0164286

Client Sample Id: DF/S1/0159/SDC/009

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: C0F120000 286

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEJH7102

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

QC Batch: 0164286

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.169	
121-14-2	2,4-Dinitrotoluene	0.145	
118-74-1	Hexachlorobenzene	0.152	
87-68-3	Hexachlorobutadiene	0.161	
67-72-1	Hexachloroethane	0.170	
98-95-3	Nitrobenzene	0.160	
87-86-5	Pentachlorophenol	0.166	
110-86-1	Pyridine	0.163	
95-95-4	2,4,5-Trichlorophenol	0.162	
88-06-2	2,4,6-Trichlorophenol	0.158	
1319-77-3	Cresols (total)	0.552	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEEHC10N

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164286

Client Sample Id: DF/S1/0159/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.128	
121-14-2	2,4-Dinitrotoluene	0.137	
118-74-1	Hexachlorobenzene	0.181	
87-68-3	Hexachlorobutadiene	0.119	
67-72-1	Hexachloroethane	0.123	
98-95-3	Nitrobenzene	0.130	
87-86-5	Pentachlorophenol	0.174	
110-86-1	Pyridine	0.112	
95-95-4	2,4,5-Trichlorophenol	0.145	
88-06-2	2,4,6-Trichlorophenol	0.138	
1319-77-3	Cresols (total)	0.442	

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEEHC10M

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164286

Client Sample Id: DF/S1/0159/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.133	
121-14-2	2,4-Dinitrotoluene	0.136	
118-74-1	Hexachlorobenzene	0.178	
87-68-3	Hexachlorobutadiene	0.121	
67-72-1	Hexachloroethane	0.125	
98-95-3	Nitrobenzene	0.134	
87-86-5	Pentachlorophenol	0.169	
110-86-1	Pyridine	0.116	
95-95-4	2,4,5-Trichlorophenol	0.143	
88-06-2	2,4,6-Trichlorophenol	0.138	
1319-77-3	Cresols (total)	0.462	

SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: COF080328

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	DF/S1/0159/SDC/008	68	62	79	59	73	74	00
02	DF/S1/0159/SDC/009	59	55	73	53	63	68	00
03	METHOD BLK. DEJH7101	72	69	78	68	76	69	00
04	LCS DEJH7102	66	61	63	65	73	61	00
05	DF/S1/0159/SDC/008 D	53	50	80	47	57	60	00
06	DF/S1/0159/SDC/008 S	54	50	80	50	59	59	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

660 759

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0159/SDC/008

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHC10M

BATCH: 0164286

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.250	ND	0.133	53	18 - 110	
2,4-Dinitrotoluene	0.250	ND	0.136	54	31 - 131	
Hexachlorobenzene	0.250	ND	0.178	71	36 - 132	
Hexachlorobutadiene	0.250	ND	0.121	48	18 - 116	
Hexachloroethane	0.250	ND	0.125	50	18 - 110	
Nitrobenzene	0.250	ND	0.134	54	10 - 211	
Pentachlorophenol	0.250	ND	0.169	68	10 - 140	
Pyridine	0.250	ND	0.116	46	10 - 148	
2,4,5-Trichlorophenol	0.250	ND	0.143	57	24 - 143	
2,4,6-Trichlorophenol	0.250	ND	0.138	55	36 - 135	
Cresols (total)	0.750	ND	0.462	62	25 - 144	

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 11 outside limits

COMMENTS.

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0159/SDC/008

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHC10N

BATCH: 0164286

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
=====	=====	=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.250	0.128	51	3.8	36	18 - 110	
2,4-Dinitrotoluene	0.250	0.137	55	0.73	32	31 - 131	
Hexachlorobenzene	0.250	0.181	72	1.7	22	36 - 132	
Hexachlorobutadiene	0.250	0.119	48	1.7	32	18 - 116	
Hexachloroethane	0.250	0.123	49	1.6	33	18 - 110	
Nitrobenzene	0.250	0.130	52	3.0	50	10 - 211	
Pentachlorophenol	0.250	0.174	70	2.9	56	10 - 140	
Pyridine	0.250	0.112	45	3.5	65	10 - 148	
2,4,5-Trichlorophenol	0.250	0.145	58	1.4	22	24 - 143	
2,4,6-Trichlorophenol	0.250	0.138	55	0.0	27	36 - 135	
Cresols (total)	0.750	0.442	59	4.4	33	25 - 144	

NOTES (S) :

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

* Values outside of QC limits

RPD: 0 out of 11 outside limitsSpike Recovery: 0 out of 11 outside limits

COMMENTS:

660 761

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F120000

WO #: DEJH7102

BATCH: 0164286

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	0.169	68	28 - 110	
2,4-Dinitrotoluene	0.250	0.145	58	47 - 131	
Hexachlorobenzene	0.250	0.152	61	57 - 128	
Hexachlorobutadiene	0.250	0.161	64	36 - 116	
Hexachloroethane	0.250	0.170	68	30 - 110	
Nitrobenzene	0.250	0.160	64	45 - 130	
Pentachlorophenol	0.250	0.166	66	10 - 140	
Pyridine	0.250	0.163	65	10 - 148	
2,4,5-Trichlorophenol	0.250	0.162	65	41 - 125	
2,4,6-Trichlorophenol	0.250	0.158	63	46 - 135	
Cresols (total)	0.750	0.552	74	29 - 144	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

BLANK WORKORDER NO.

SW846 8270C METHOD BLANK SUMMARY

DEJH7101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: F0614003.

Lot Number: C0F080328

Date Analyzed: 06/14/00

Time Analyzed: 14:49

Matrix: SOLID

Date Extracted: 06/12/00

GC Column: HP5MS ID: .25

Extraction Method: 1311/3520C

Instrument ID: 722

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/S1/0159/SDC/008	DEEHC10M S	F0614005.	06/14/00	15:58
02	DF/S1/0159/SDC/008	DEEHC10N D	F0614006.	06/14/00	16:32
03	DF/S1/0159/SDC/008	DEEHC103	F0614007.	06/14/00	17:07
04	DF/S1/0159/SDC/009	DEEHP103	F0614008.	06/14/00	17:41
05	CHECK SAMPLE	DEJH7102 C	F0614004.	06/14/00	15:24
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
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19					
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21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

660 763

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F120000 286

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEJH7101

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

QC Batch: 0164286

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

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

660 764

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: DUNN FIELD

Lab File ID (Standard): F06140C1

Date Analyzed: 06/14/00

Instrument ID: 722

Time Analyzed: 1307

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	180567	5.12	730246	6.67	405705	9.73
UPPER LIMIT	361134	5.62	1460492	7.17	811410	10.23
LOWER LIMIT	90284	4.62	365123	6.17	202853	9.23
CLIENT						
SAMPLE NO.						
01 INTRA-LAB BL	165210	5.11	676667	6.66	403252	9.71
02 INTRA-LAB CH	185412	5.12	788486	6.67	489299	9.73
03 DF/S1/0159/S	160766	5.12	671124	6.67	411189	9.73
04 DF/S1/0159/S	174362	5.12	718347	6.67	430815	9.73
05 DF/S1/0159/S	172297	5.11	703703	6.66	426454	9.71
06 DF/S1/0159/S	182546	5.12	753239	6.68	450381	9.73
07						
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:

Case No :

SAS No.:

SDG No.: DUNN FIELD

Lab File ID (Standard): F06140C1

Date Analyzed: 06/14/00

Instrument ID: 722

Time Analyzed: 1307

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	707454	13.04	580168	19.68	570934	23.05
UPPER LIMIT	1414908	13.54	1160336	20.18	1141868	23.55
LOWER LIMIT	353727	12.54	290084	19.18	285467	22.55
CLIENT						
SAMPLE NO.						
01 INTRA-LAB BL	725292	13.03	646623	19.67	681943	23.03
02 INTRA-LAB CH	885588	13.06	810738	19.69	848942	23.06
03 DF/S1/0159/S	742532	13.05	665444	19.68	683819	23.05
04 DF/S1/0159/S	774735	13.05	698614	19.69	713060	23.05
05 DF/S1/0159/S	773171	13.03	705352	19.66	715824	23.03
06 DF/S1/0159/S	812468	13.05	733723	19.69	750977	23.05
07						
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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.

PESTICIDE SUMMARY

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHC104

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164449

Client Sample Id: DF/S1/0159/SDC/008

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: C0F080328 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHC10P

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164449

Client Sample Id: DF/S1/0159/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00225	
76-44-8	Heptachlor	0.00194	
1024-57-3	Heptachlor epoxide	0.00200	
58-89-9	Lindane	0.00165	
72-43-5	Methoxychlor	0.00230	

660 769

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DBEHC10Q

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164449

Client Sample Id: DF/S1/0159/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00225	
76-44-8	Heptachlor	0.00198	
1024-57-3	Heptachlor epoxide	0.00200	
58-89-9	Lindane	0.00167	
72-43-5	Methoxychlor	0.00233	

FORM I

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 002

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHP104

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 18

QC Batch: 0164449

Client Sample Id: DF/S1/0159/SDC/009

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

660 771

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID
Method: SW846 8081A
Pesticides (8081A)

Lab Sample ID: C0F120000 449

Sample WT/Vol: 100 / mL
Work Order: DEK4C102
Dilution factor: 1
Moisture %: NA

Date Received: 06/08/00
Date Extracted: 06/12/00
Date Analyzed: 06/14/00

QC Batch: 0164449

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00228	
76-44-8	Heptachlor	0.00208	
1024-57-3	Heptachlor epoxide	0.00212	
58-89-9	Lindane	0.00178	
72-43-5	Methoxychlor	0.00236	

SW846 8081A SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F080328

	CLIENT ID.	SRG01	SRG02	TOT OUT
	=====	=====	=====	=====
01	DF/S1/0159/SDC/008	96	69	00
02	DF/S1/0159/SDC/009	95	75	00
03	METHOD BLK. DEK4C101	94	81	00
04	LCS DEK4C102	96	88	00
05	DF/S1/0159/SDC/008 D	93	82	00
06	DF/S1/0159/SDC/008 S	94	80	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

660-773 SW846 8081A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F120000

WO #: DEK4C102

BATCH: 0164449

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
Lindane	0.00250	0.00178	71	49 - 137	
Heptachlor	0.00250	0.00208	83	57 - 124	
Heptachlor epoxide	0.00250	0.00212	85	53 - 135	
Endrin	0.00250	0.00228	91	46 - 137	
Methoxychlor	0.00250	0.00236	94	12 - 154	

NOTES(S) :

* Values outside of QC 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/S1/0159/SDC/008

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHC10P

BATCH: 0164449

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
Methoxychlor	0.00250	ND	0.00230	92	13 - 154	
Lindane	0.00250	ND	0.00165	66	30 - 148	
Heptachlor	0.00250	ND	0.00194	78	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00200	80	38 - 138	
Endrin	0.00250	ND	0.00225	90	28 - 148	

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:

660 775

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/S1/0159/SDC/008

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHC10Q

BATCH: 0164449

COMPOUND	SPIKE	MSD	MSD	QC LIMITS				QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	REC		
Lindane	0.00250	0.00167	67	1.4	22	30 - 148		
Heptachlor	0.00250	0.00198	79	2.0	32	25 - 135		
Heptachlor epoxide	0.00250	0.00200	80	0.20	31	38 - 138		
Endrin	0.00250	0.00225	90	0.080	40	28 - 148		
Methoxychlor	0.00250	0.00233	93	1.2	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 limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

SW846 8081A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DEK4C101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: d-a3321.d

Lot Number: C0F080328

Matrix: SOLID

Extraction Method: 1311/3510

Date Extracted: 06/12/00

Date Analyzed(1): 06/14/00

Date Analyzed(2): N/A

Time Analyzed(1): 01:35

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/S1/0159/SDC/008	DEEHC10P S	06/14/00	N/A
02	DF/S1/0159/SDC/008	DEEHC10Q D	06/14/00	N/A
03	DF/S1/0159/SDC/008	DEEHC104	06/14/00	N/A
04	DF/S1/0159/SDC/009	DEEHP104	06/14/00	N/A
05	CHECK SAMPLE	DEK4C102 C	06/14/00	N/A
06				
07				
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
Method: SW846 8081A
Pesticides (8081A)

Lab Sample ID: C0F120000 449

Sample WT/Vol: 100 / mL
Work Order: DEK4C101
Dilution factor: 1
Moisture %: NA

Date Received: 06/08/00
Date Extracted: 06/12/00
Date Analyzed: 06/14/00

QC Batch: 0164449

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: C0F080328 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHC105

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164454

Client Sample Id: DF/S1/0159/SDC/008

		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
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHC10R

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164454

Client Sample Id: DF/S1/0159/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.151	
93-72-1	2,4,5-TP (Silvex)	0.0372	

660 781

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHC10T

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164454

Client Sample Id: DF/S1/0159/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.162	
93-72-1	2,4,5-TP (Silvex)	0.0386	

FORM I

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 002

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHP105

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 18

QC Batch: 0164454

Client Sample Id: DF/S1/0159/SDC/009

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

660 783

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F120000 454

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEK4H102

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

QC Batch: 0164454

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.157	
93-72-1	2,4,5-TP (Silvex)	0.0397	

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F080328

	CLIENT ID.	SRG01	TOT OUT
	=====	=====	=====
01	DF/S1/0159/SDC/008	85	00
02	DF/S1/0159/SDC/009	78	00
03	METHOD BLK. DEK4H101	101	00
04	LCS DEK4H102	104	00
05	DF/S1/0159/SDC/008 D	86	00
06	DF/S1/0159/SDC/008 S	75	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

660 785 SW846 8151A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F120000

WO #: DEK4H102

BATCH: 0164454

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
2,4-D	0.160	0.157	98	28 - 136	
2,4,5-TP (Silvex)	0.0400	0.0397	99	50 - 128	

NOTES (S) :

* Values outside of QC 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/S1/0159/SDC/008

Lot #: C0F080328

WO #: DEEHC10R

BATCH: 0164454

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
2,4-D	0.160	ND	0.151	94	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0372	93	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/S1/0159/SDC/008

Lot #: C0F080328

WO #: DEEHC10T

BATCH: 0164454

COMPOUND	SPIKE	MSD	MSD	QC LIMITS			QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	REC	
2,4-D	0.160	0.162	101	7.4	20	35 - 133	
2,4,5-TP (Silvex)	0.0400	0.0386	96	3.8	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:

SW846 8151A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

660-788

DEK4H101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: a-a30293.

Lot Number: C0F080328

Matrix: SOLID

Extraction Method:

Date Extracted: 06/12/00

Date Analyzed(1): 06/14/00

Date Analyzed(2): N/A

Time Analyzed(1): 09:46

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/S1/0159/SDC/008	DEEHC10R S	06/14/00	N/A
02	DF/S1/0159/SDC/008	DEEHC10T D	06/14/00	N/A
03	DF/S1/0159/SDC/008	DEEHC105	06/14/00	N/A
04	DF/S1/0159/SDC/009	DEEHP105	06/14/00	N/A
05	CHECK SAMPLE	DEK4H102 C	06/14/00	N/A
06				
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17				
18				
19				
20				

COMMENTS:

FORM IV

660 789

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COF120000 454

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEK4H101

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

QC Batch: 0164454

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

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEEHC Client ID: DF/S1/0159/SDC/008
Matrix: Soil Units: mg/kg Prep Date: 6/13/00 Prep Batch: 0165171
Weight: 1.0 Volume: 100 Percent Moisture: 18.7

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.32	1.2	11.2		1	ICPST	6/13/00	14:00

Comments: Lot #: C0F080328 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: DEEHP Client ID: DF/S1/0159/SDC/009
Matrix: Soil Units: mg/kg Prep Date: 6/13/00 Prep Batch: 0165171
Weight: 1.0 Volume: 100 Percent Moisture: 18.22

Element	WL/ Mass	MDL	Report Limit	Conc	O	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.31	1.2	10.6		1	ICPST	6/13/00	14:04

Comments: Lot #: C0F080328 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

Initial Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00613B ARC

Standard Source: _____

Standard ID: _____

			ICB1 6/13/00 12:59 PM				
Element	WL/ Mass	Report Limit	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: T00613B.ARC

Standard Source: _____

Standard ID: _____

			CCB1 6/13/00 1:52 PM	CCB2 6/13/00 2:12 PM			
Element	WL/ Mass	Report Limit	Found O	Found O	Found O	Found O	Found O
Arsenic	189 042	10	2.6 U	2.6 U			

660 795

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank ResultsLab Sample ID: DEKGJBMatrix: Soil Units: mg/kg Prep Date: 6/13/00 Prep Batch: 0165171Weight: 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	1.0	0.26	U	1	ICPST	6/13/00	13:14

Comments: Lot #. C0F080328

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

Laboratory Control Sample Results

Lab Sample ID: DEKGJCMatrix: Soil Units: mg/kg Prep Date: 6/13/00 Prep Batch: 0165171Weight: 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	203	101.7		80-120	1	ICPST	6/13/00	13:18

Comments: Lot #: C0F080328

Version 3.63.4

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

660 797

**TCLP
METALS SUMMARY**

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEEHCT Client ID: DF/S1/0159/SDC/008
 Matrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204
 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	0.12	B	1	ICP	6/14/00	18:44
Barium	493.41	0.00041	10.0	1.5	B	1	ICP	6/14/00	18:44
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/14/00	18:44
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	6/14/00	18:44
Lead	220.35	0.025	0.50	0.026	B	1	ICP	6/14/00	18:44
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/14/00	18:44
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/14/00	18:44

Comments: Lot#: C0F080328 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: DEEHPT Client ID: DF/S1/0159/SDC/009
 Matrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204
 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	0.14	B	1	ICP	6/14/00	18:57
Barium	493.41	0.00041	10.0	1.3	B	1	ICP	6/14/00	18:57
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/14/00	18:57
Chromium	267.72	0.0038	0.50	0.034	B	1	ICP	6/14/00	18:57
Lead	220.35	0.025	0.50	0.025	U	1	ICP	6/14/00	18:57
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/14/00	18:57
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/14/00	18:57

Comments: Lot#: C0F080328 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: DEEHCT Client ID: DF/S1/0159/SDC/008
Matrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095
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	6/14/00	10:53

Comments: _____

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEEHPT Client ID: DF/S1/0159/SDC/009
Matrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095
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	0.00029		1	CVAA	6/14/00	10:59

Comments: _____

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

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0614HGA PRN

Standard Source: _____

Standard ID: _____

			ICB1 6/14/00 9:49 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: J00614D.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 6/14/00 6.07 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	2.8	U										
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										

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0614HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 6/14/00 9:55 AM	CCB2 6/14/00 10:14 AM	CCB3 6/14/00 10:41 AM	CCB4 6/14/00 11:07 AM	
			Found O	Found O	Found O	Found O	
Mercury	253.7	0.2	0.0 U	-0.1 B	0.2 B	0.0 U	

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00614D.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 6/14/00 6:41 PM		CCB2 6/14/00 7:03 PM		Found	O	Found	O	Found	O	Found	O
			Found	O	Found	O								
Arsenic	193.696	500	30.3	U	30.3	U								
Barium	493.409	10000	0.4	U	0.4	U								
Cadmium	228.802	100	2.8	U	2.8	U								
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	3.1	U								

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DEJ9GBT

Matrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204

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	0.10	B	1	ICP	6/14/00	18:22
Barium	493.409	0.00041	10.0	0.00077	B	1	ICP	6/14/00	18:22
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	6/14/00	18:22
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	6/14/00	18:22
Lead	220.353	0.025	0.50	0.025	U	1	ICP	6/14/00	18:22
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	6/14/00	18:22
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	6/14/00	18:22

Comments: _____

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DEKMLBTMatrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204Weight: 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	0.030	U	1	ICP	6/14/00	18:18
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	6/14/00	18:18
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	6/14/00	18:18
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	6/14/00	18:18
Lead	220.353	0.025	0.50	0.025	U	1	ICP	6/14/00	18:18
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	6/14/00	18:18
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	6/14/00	18:18

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

Preparation Blank Results

Lab Sample ID: DEJ9GBTMatrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095Weight: 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	0.000090	B	1	CVAA	6/14/00	10:21

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

Preparation Blank Results

Lab Sample ID: DELTXBTMatrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095Weight: 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	-0.000098	B	1	CVAA	6/14/00	10:16

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: DEEHCT
 Original Sample ID: DEEHCT Client ID: DF/S1/0159/SDC/008S
 Matrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204
 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	0.12	B	5.0		5	98.3	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Barium	493.4	1.5	B	44.9		50	86.9	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Cadmium	228.8	0.0028	U	0.97		1	96.6	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Chromium	267.7	0.0038	U	4.5		5	89.5	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Lead	220.4	0.026	B	4.6		5	90.6	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Selenium	196.0	0.067	U	1.1		1	106.6	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Silver	328.1	0.0031	U	0.94		1	93.6	1	1	ICP	6/14/00	18:44	6/14/00	18:50

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: DEEHCDT

Original Sample ID: DEEHCT

Client ID: DF/S1/0159/SDC/008D

Matrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204

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	0.12	B	5.2		5	101.8	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Barium	493.4	1.5	B	46.1		50	89.3	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Cadmium	228.8	0.0028	U	0.98		1	98.2	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Chromium	267.7	0.0038	U	4.5		5	90.8	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Lead	220.4	0.026	B	4.6		5	91.9	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Selenium	196.0	0.067	U	1.1		1	105.2	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Silver	328.1	0.0031	U	0.95		1	95.2	1	1	ICP	6/14/00	18:44	6/14/00	18:54

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 Sample Results

Spike Sample ID: DEEHCST
 Original Sample ID: DEEHCT Client ID: DF/S1/0159/SDC/008S
 Matrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095
 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	0.000045	U	0.0050		0.005	99.8	1	1	CVAA	6/14/00	10:53	6/14/00	10:55

Comments: _____

Version 3.63.4

U Result is less than the MDL

Form SA Equivalent

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DEEHCDT
 Original Sample ID: DEEHCT Client ID: DF/S1/0159/SDC/008D
 Matrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095
 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	0.000045	U	0.0050		0.005	100.4	1	1	CVAA	6/14/00	10:53	6/14/00	10:57

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: DEEHCDTMatrix Spike Sample ID: DEEHCST Client ID: DF/S1/0159/SDC/008DMatrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.696	5.0		5.2		3.5 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Barium	493.409	44.9		46.1		2.6 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Cadmium	228.802	0.97		0.98		1.7 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Chromium	267.716	4.5		4.5		1.5 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Lead	220.353	4.6		4.6		1.4 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Selenium	196.026	1.1		1.1		1.3 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Silver	328.068	0.94		0.95		1.6 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54

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: DEEHCDTMatrix Spike Sample ID: DEEHCST Client ID: DF/S1/0159/SDC/008DMatrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.0050		0.0050		0.6 %	1	1	CVAA	6/14/00	10:55	6/14/00	10:57

Comments _____

Version 3 63 4

U Result is less than the MDL

Form 6 Equivalent

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DEKMLCTMatrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204Weight: 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	2.1	105.8		80-120	1	ICP	6/14/00	18:25
Barium	493.409	2.0	1.8	90.1	B	80-120	1	ICP	6/14/00	18:25
Cadmium	228.802	0.050	0.049	98.4	B	80-120	1	ICP	6/14/00	18:25
Chromium	267.716	0.20	0.19	93.7	B	80-120	1	ICP	6/14/00	18:25
Lead	220.353	0.50	0.48	95.2	B	80-120	1	ICP	6/14/00	18:25
Selenium	196.026	2.0	2.1	104.8		80-120	1	ICP	6/14/00	18:25
Silver	328.068	0.050	0.048	96.6	B	80-120	1	ICP	6/14/00	18:25

Comments: _____

Version 3.63.4

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

660 817

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DELTXCTMatrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095Weight: 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	0.0026	103.2		80-120	1	CVAA	6/14/00	10:19

Comments: _____

Version 3.63.4

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

GENERAL CHEMISTRY SUMMARY

660 819

UXB INTERNATIONAL

Client Sample ID: DF/S1/0159/SDC/008

General Chemistry

Lot-Sample #...: C0F080328-001 Work Order #...: DEEHC Matrix.....: SOLID
 Date Sampled...: 06/07/00 Date Received...: 06/08/00
 % Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.3		No Units	SW846 9045C	06/09/00	0161143
			Dilution Factor: 1	MS Run #..... : 0161036		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/09/00	0161138
			Dilution Factor: 1	MS Run #... : 0161031		
Percent Solids	81.3		%	MCAWW 160.3 MOD	06/09-06/10/00	0161205
			Dilution Factor: 1	MS Run #..... : 0161077		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/12/00	0165112
			Dilution Factor: 1	MS Run #..... : 0165032		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/12/00	0165111
			Dilution Factor: 1	MS Run #..... : 0165033		

UXB INTERNATIONAL

Client Sample ID: DF/S1/0159/SDC/009

General Chemistry

Lot-Sample #...: C0F080328-002 Work Order #...: DEEHP Matrix.....: SOLID
 Date Sampled...: 06/07/00 Date Received...: 06/08/00
 % Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	06/09/00	0161143
		Dilution Factor: 1		MS Run #: 0161036		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/09/00	0161138
		Dilution Factor: 1		MS Run #.....: 0161031		
Percent Solids	81.8		%	MCAWW 160.3 MOD	06/09-06/10/00	0161205
		Dilution Factor: 1		MS Run #... . . . 0161077		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/12/00	0165112
		Dilution Factor: 1		MS Run #.....: 0165032		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/12/00	0165111
		Dilution Factor: 1		MS Run #.... .: 0165033		

660 821

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0F080328

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	Work Order #: DEKA3101 200	mg/kg	MB Lot-Sample #: A0F130000-112 SW846 7.3.3	06/12/00	0165112
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DEKA4101 200	mg/kg	MB Lot-Sample #: A0F130000-111 SW846 7.3.4	06/12/00	0165111
		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 #...: C0F080328

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 #: DEET4101 (85 - 115)	LCS Lot-Sample#: C0F090000-143 SW846 9045C	06/09/00	0161143
		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 #...: C0F080328

Work Order #...: DED5F-SMP
DED5F-DUP

Matrix.....: SOLID

Date Sampled...: 06/07/00

Date Received...: 06/08/00

% Moisture.....: 11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1	8.2	No Units	0.99	(0-20)	SD Lot-Sample #: C0F080184-001 SW846 9045C	06/09/00	0161143
			Dilution Factor: 1					
			Prep Date.... 0161036			Analysis Date...		Prep Batch # ...

GC/MS VOLATILE DATA

**GC/MS VOLATILE
QC SUMMARY**

SW846 8260B SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT QESSDG:

Lot #: C0F080328

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	DF/S1/0159/SDC/008	114	104	91	106	00
02	DF/S1/0159/SDC/009	114	98	89	105	00
03	METHOD BLK. DEJHQ201 RE-1	108	101	90	104	00
04	METHOD BLK. DEKMV101	115	95	89	105	00
05	LCS DEM7K101	109	100	98	107	00
06	DF/S1/0159/SDC/009 D	109	103	98	106	00
07	DF/S1/0159/SDC/009 S	114	105	96	108	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

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F140000

WO #: DEM7K101

BATCH: 0166201

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Benzene	0.500	0.470	94	79 - 116	
2-Butanone	0.500	0.360	72	35 - 156	
Carbon tetrachloride	0.500	0.441	88	72 - 133	
Chlorobenzene	0.500	0.462	92	81 - 115	
Chloroform	0.500	0.482	96	81 - 122	
1,2-Dichloroethane	0.500	0.506	101	73 - 127	
1,1-Dichloroethene	0.500	0.405	81	65 - 119	
Tetrachloroethene	0.500	0.422	84	78 - 131	
Trichloroethene	0.500	0.441	88	80 - 122	
Vinyl chloride	0.500	0.486	97	53 - 134	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

660 831

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/S1/0159/SDC/009

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHP10L

BATCH: 0166201

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	ND	0.478	96	73 - 123	
2-Butanone	0.500	ND	0.364	73	10 - 151	
Carbon tetrachloride	0.500	ND	0.460	92	61 - 143	
Chlorobenzene	0.500	ND	0.473	95	70 - 122	
Chloroform	0.500	ND	0.493	99	65 - 131	
1,2-Dichloroethane	0.500	ND	0.519	104	67 - 132	
1,1-Dichloroethene	0.500	ND	0.443	89	57 - 138	
Tetrachloroethene	0.500	ND	0.450	90	70 - 130	
Trichloroethene	0.500	ND	0.458	92	58 - 141	
Vinyl chloride	0.500	ND	0.508	102	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:

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/S1/0159/SDC/009

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHP10M

BATCH: 0166201

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
=====	=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	0.476	95	0.25	20	73 - 123	
2-Butanone	0.500	0.350	70	3.9	34	10 - 151	
Carbon tetrachloride	0.500	0.481	96	4.4	20	61 - 143	
Chlorobenzene	0.500	0.470	94	0.53	20	70 - 122	
Chloroform	0.500	0.485	97	1.7	20	65 - 131	
1,2-Dichloroethane	0.500	0.502	100	3.2	20	67 - 132	
1,1-Dichloroethene	0.500	0.446	89	0.69	20	57 - 138	
Tetrachloroethene	0.500	0.456	91	1.2	20	70 - 130	
Trichloroethene	0.500	0.461	92	0.80	20	58 - 141	
Vinyl chloride	0.500	0.525	105	3.4	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:

660 833

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DEKMOV101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number: 6-516

Lab File ID: 4061402.d

Lot Number: C0F080328

Date Analyzed: 06/14/00

Time Analyzed: 12:36

Matrix: SOLID

Date Extracted: 06/07/00

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/S1/0159/SDC/008	DEEHC102	4061409.d	06/14/00	15:31
02	DF/S1/0159/SDC/009	DEEHP10L S	4061405.d	06/14/00	13:47
03	DF/S1/0159/SDC/009	DEEHP10M D	4061406.d	06/14/00	14:11
04	DF/S1/0159/SDC/009	DEEHP102	4061404.d	06/14/00	13:22
05	CHECK SAMPLE	DEM7K101 C	4061407.d	06/14/00	14:36
06					
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

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

660 834

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					

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: C0F080328

Lab File ID: BF40614

BFB Injection Date: 06/14/00

Instrument ID: HP4

BFB Injection Time: 1105

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	18.1
75	30.0 - 60.0% of mass 95	43.3
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	50.0 - 100.0% of mass 95	66.0
175	5.0 - 9.0% of mass 174	4.8 (7.3)1
176	95.0 - 101.0% of mass 174	64.0 (97.0)1
177	5.0 - 9.0% of mass 176	4.3 (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	1C40614	06/14/00	1143
02	INTRA-LAB BL	DEKMOV101	4061402	06/14/00	1236
03	DF/S1/0159/S	DEEHP102	4061404	06/14/00	1322
04	DF/S1/0159/S	DEEHP10L	4061405	06/14/00	1347
05	DF/S1/0159/S	DEEHP10M	4061406	06/14/00	1411
06	INTRA-LAB CH	DEM7K101	4061407	06/14/00	1436
07	DF/S1/0159/S	DEEHC102	4061409	06/14/00	1531
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

660 836

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT Case No.:

SAS No.: 40325

SDG No.: C0F080328

Lab File ID (Standard): 1C40614

Date Analyzed: 06/14/00

Instrument ID: HP4

Time Analyzed: 1143

GC Column: DB 624 ID: 0.18 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DCB)		IS3	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	166447	10.12	250585	12.46	701065	7.00
UPPER LIMIT	332894	10.32	501170	12.66	1402130	7.20
LOWER LIMIT	83224	9.92	125292	12.26	350532	6.80
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	159954	10.12	230694	12.46	718243	7.00
02 DF/S1/0159/S	153190	10.12	219029	12.46	686926	7.00
03 DF/S1/0159/S	155880	10.13	232712	12.46	674108	7.00
04 DF/S1/0159/S	159226	10.12	238408	12.46	665003	7.00
05 INTRA-LAB CH	163530	10.12	245700	12.46	673089	7.00
06 DF/S1/0159/S	156536	10.12	223023	12.45	720534	7.01
07						
08						
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.

660-837

**GC/MS VOLATILE
SAMPLE DATA**

--

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix. (soil/water) SOLID

Lab Sample ID: COF080328 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/08/00

Work Order: DEEHC102

Date Extracted: 06/14/00

Dilution factor: 1

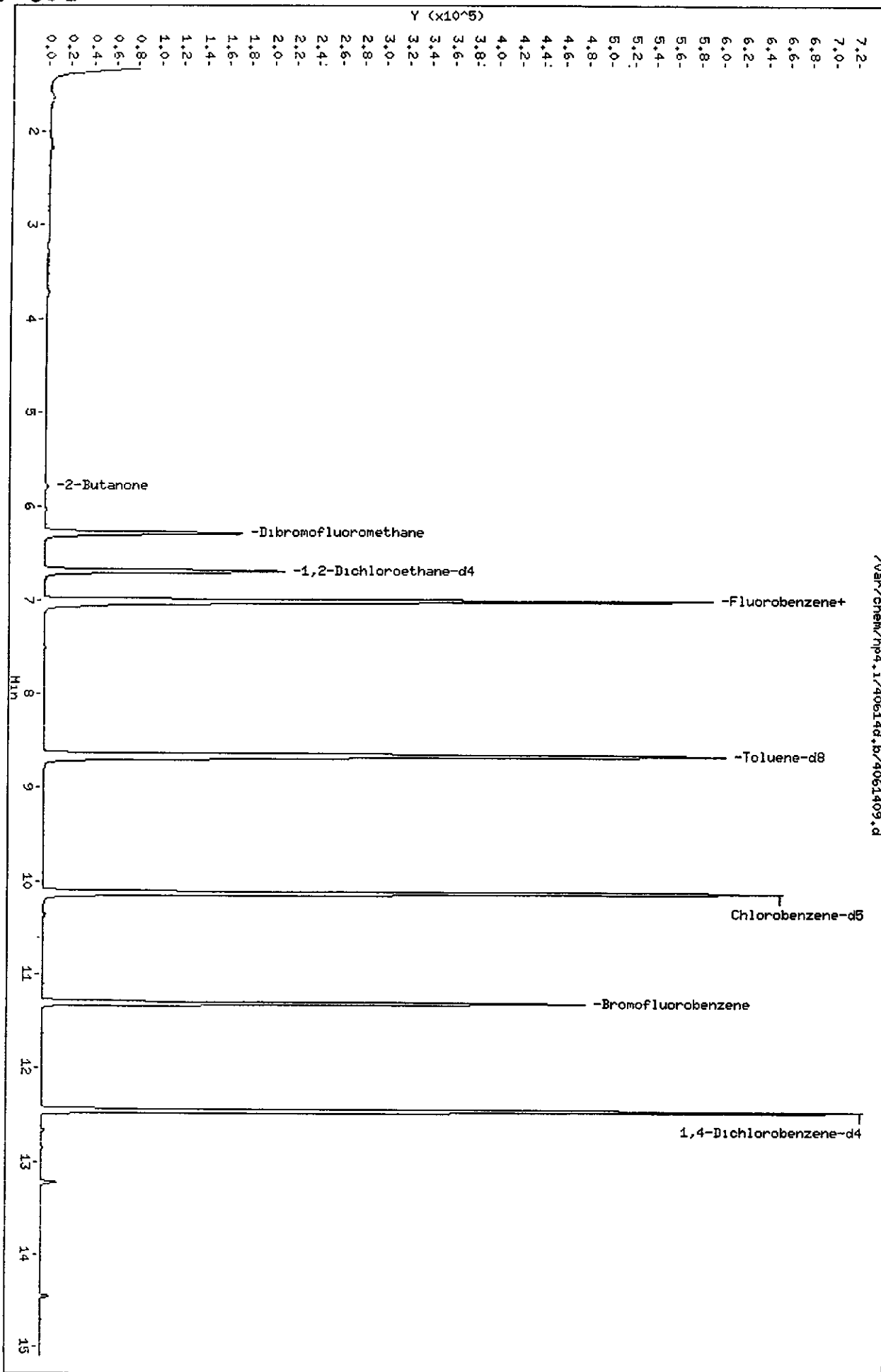
Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0166201

Client Sample Id: DF/S1/0159/SDC/008

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	0.016	J
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: /var/chem/hp4.i/40614d.b/4061409.d
Date: 14-JUN-2000 15:31
Client ID: DF/S1/0159/SDC/008
Sample Info: c0f080328-001 (4ml/10ml)/5ml
Volume Injected (uL): 5.0
Column phase: DB 624

Instrument: hp4.i
Operator: 034635
Column diameter: 0.18

Data File: ./var/chem/hp4.i/40614d.b/4061409.d
Report Date: 14-Jun-2000 17:54

Page 1

STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40614d.b/4061409.d
Lab Smp Id: DEEHC102 Client Smp ID: DF/S1/0159/SDC/008
Inj Date : 14-JUN-2000 15:31
Operator : 034635 Inst ID: hp4.i
Smp Info : c0f080328-001 (1ml/10ml)/5ml
Misc Info : deehc102,40614d.b
Comment :
Method : /var/chem/hp4.i/40614d.b/8260bh2o.m
Meth Date : 14-Jun-2000 12:05 h Quant Type: ISTD
Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tclp.sub
Target Version: 3.40
Processing Host: hpuxcs21

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

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

File 4/14/00

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96		7.007	6.998	(1.000)	720534		
* 69 Chlorobenzene-d5	119		10.125	10.122	(1.000)	156536		
* 92 1,4-Dichlorobenzene-d4	152		12.454	12.458	(1.000)	223023		
\$ 43 1,2-Dichloroethane-d4	65		6.689	6.687	(0.955)	157773	283.939	56.79
\$ 39 Dibromofluoromethane	113		6.286	6.289	(0.897)	139544	266.123	53.22
\$ 59 Toluene-d8	98		8.652	8.649	(0.854)	627718	259.241	51.85
\$ 80 Bromofluorobenzene	95		11.305	11.308	(1.117)	213897	227.087	45.42
3 Vinyl Chloride	62.00		Compound Not Detected.					
12 1,1-Dichloroethene	96.00		Compound Not Detected					
31 2-Butanone	43		5.797	5.800	(0.827)	4786	7.79291	1.558
37 Chloroform	83.00		Compound Not Detected.					
41 Carbon Tetrachloride	117.00		Compound Not Detected					
42 Benzene	78.00		Compound Not Detected					
45 1,2-Dichloroethane	62.00		Compound Not Detected					
47 Trichloroethene	130.00		Compound Not Detected					

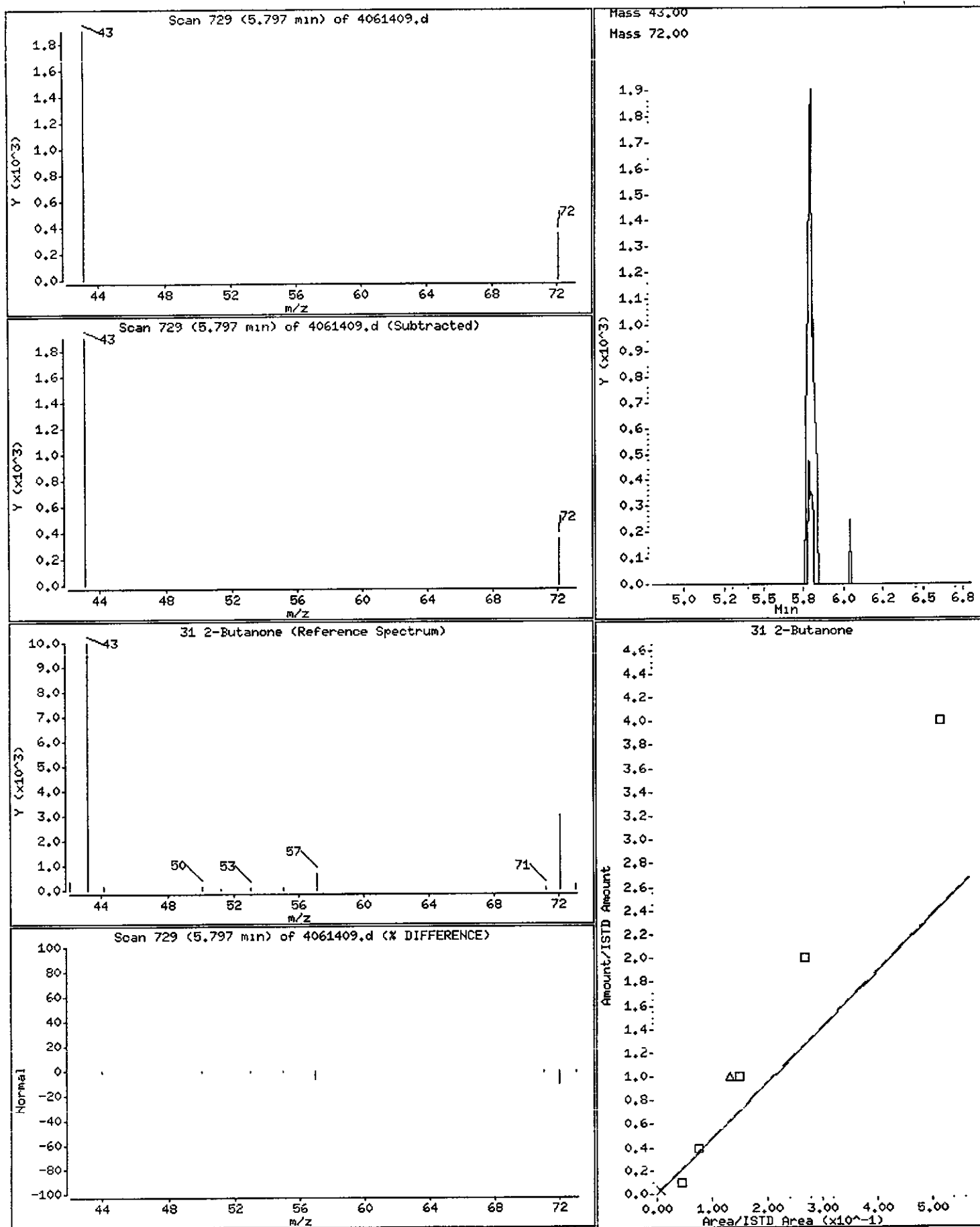
660 841

Data File: /var/chem/hp4.i/40614d.b/4061409.d
Report Date: 14-Jun-2000 17:54

Page 2

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(UG/L)
=====	====	==	=====	=====	=====	=====	=====
65 Tetrachloroethene	164 00				Compound Not Detected		
70 Chlorobenzene	112 00				Compound Not Detected		

31 2-Butanone



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COF080328 002

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol. 5 / mL

Date Received: 06/08/00

Work Order: DEEHP102

Date Extracted: 06/14/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 18

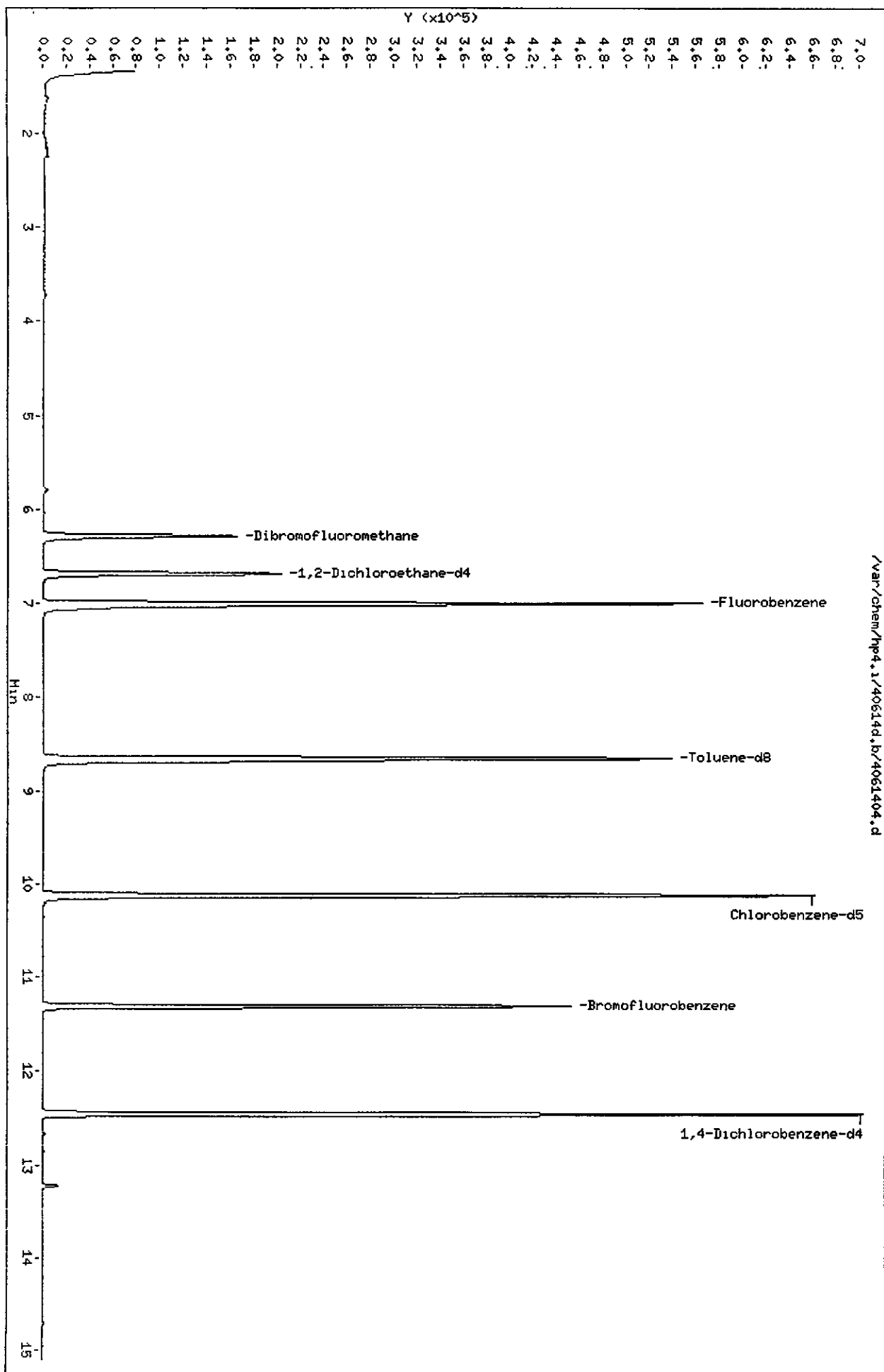
QC Batch: 0166201

Client Sample Id: DF/S1/0159/SDC/009

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: /var/chem/hp4.1/40614d.b/4061404.d
Date: 14-JUN-2000 13:22
Client ID: DF/S1/0159/SDC/009
Sample Info: c0f080328-002 (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column phase: DB 624

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



Data File: /var/chem/hp4.i/40614d.b/4061404.d
 Report Date: 14-Jun-2000 13:56

Page 1

STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40614d.b/4061404.d
 Lab Smp Id: DEEHP102 Client Smp ID: DF/S1/0159/SDC/009
 Inj Date : 14-JUN-2000 13:22
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0f080328-002 (1ml/10ml)/5ml
 Misc Info : deehp102,40614d.b
 Comment :
 Method : /var/chem/hp4.i/40614d.b/8260bh2o.m
 Meth Date : 14-Jun-2000 12:05 h Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 3.40
 Processing Host: hpuxcs21

Ks 6/14/00

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	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	7.005	6.998	(1.000)	686926		
* 69 Chlorobenzene-d5	119	10.123	10.122	(1.000)	153190		
* 92 1,4-Dichlorobenzene-d4	152	12.458	12.458	(1.000)	219029		
\$ 43 1,2-Dichloroethane-d4	65	6.687	6.687	(0.955)	150546	284.188	56.84
\$ 39 Dibromofluoromethane	113	6.290	6.289	(0.898)	131056	262.163	52.43
\$ 59 Toluene-d8	98	8.656	8.649	(0.855)	583245	246.135	49.23
\$ 80 Bromofluorobenzene	95	11.303	11.308	(1.117)	205111	222.516	44.50
3 Vinyl Chloride	62.00	Compound Not Detected.					
12 1,1-Dichloroethene	96.00	Compound Not Detected					
31 2-Butanone	43.00	Compound Not Detected					
37 Chloroform	83.00	Compound Not Detected					
41 Carbon Tetrachloride	117.00	Compound Not Detected					
42 Benzene	78.00	Compound Not Detected					
45 1,2-Dichloroethane	62.00	Compound Not Detected					
47 Trichloroethene	130.00	Compound Not Detected					

Data File: /var/chem/hp4.i/40614d.b/4061404.d
Report Date: 14-Jun-2000 13:56

Page 2

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(UG/L)
=====	=====	==	=====	=====	=====	=====	=====
65 Tetrachloroethene	164 00				Compound Not Detected.		
70 Chlorobenzene	112 00				Compound Not Detected		

**GC/MS VOLATILE
CALIBRATION DATA**

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

Date : 06-JUN-2000 10:58

Client ID: 50NGBFB

Instrument: hp4.1

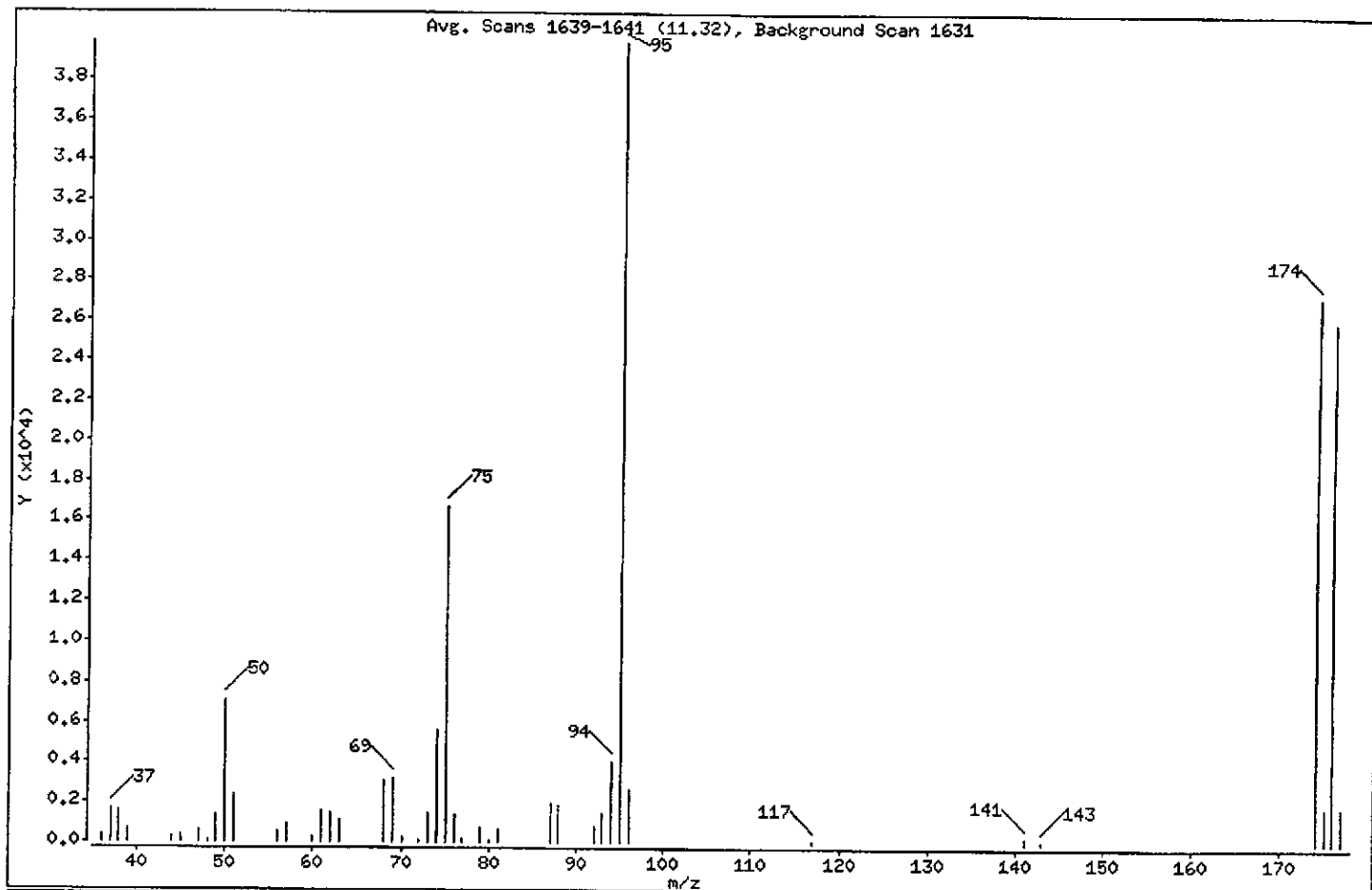
Sample Info: bfb 1ul inj

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

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)

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		

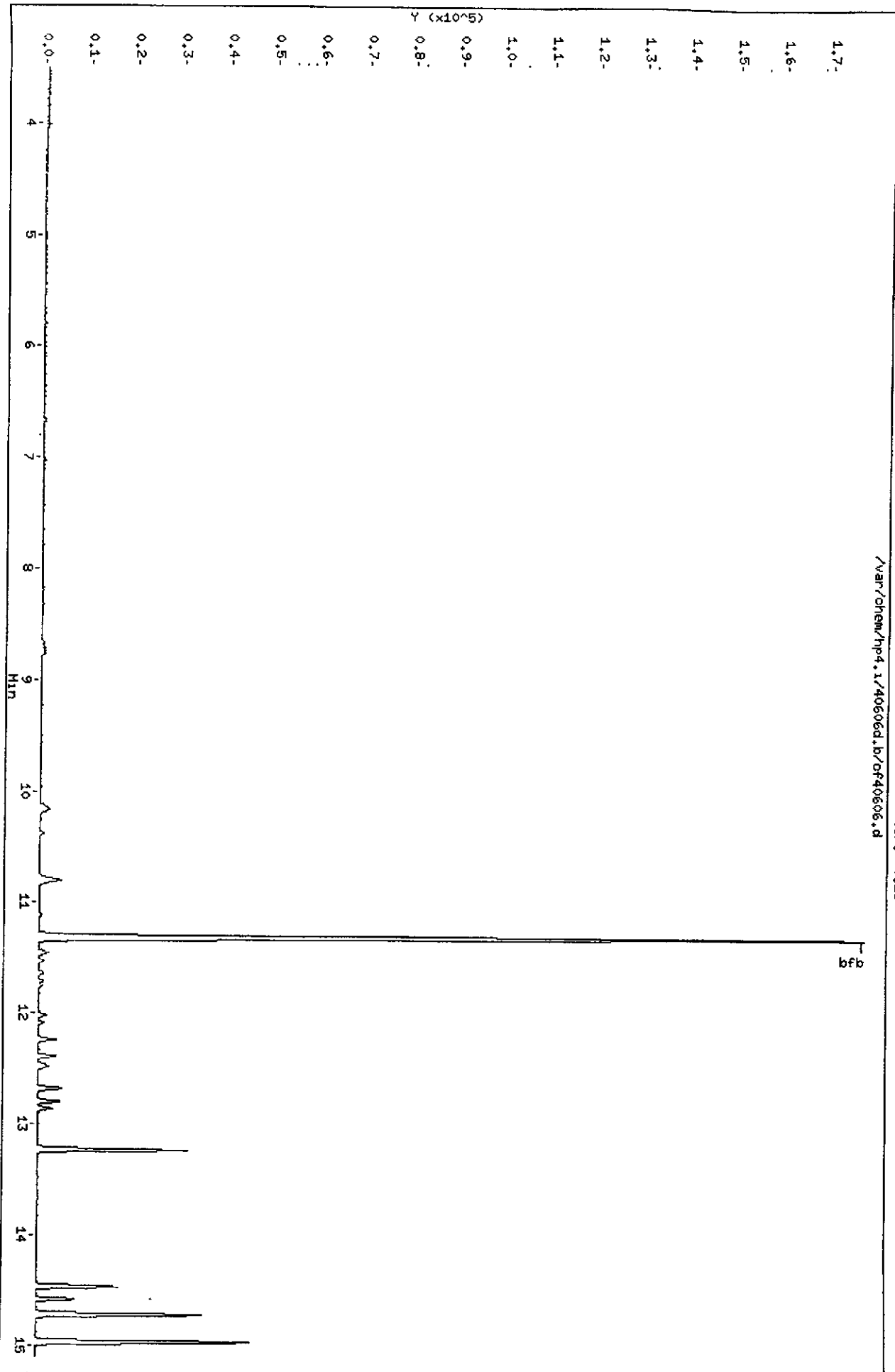
Data File: /var/chem/hp4.i/40606d.b/cf40606.d
Date: 06-JUN-2000 10:58
Client ID: SONGBFB
Sample Info: bfb 1ul 1uJ

Instrument: hp4.i

Operator: 16328
Column diameter: 0.18

Column phase: DB624 20m

/var/chem/hp4.i/40606d.b/cf40606.d



VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPTT

Case No.:

SAS No.: 40325

SDG No.: C0F080328

Instrument ID: HP4

Calibration Date: 06/14/00 Time: 1143

Lab File ID: 1C40614

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	0.121	0.01	12.0	50.0
Chloromethane	0.289	0.238	0.1	17.6	50.0
Vinyl Chloride	0.242	0.221	0.01	8.7	20.0
Bromomethane	0.028	0.029	0.01	3.6	50.0
Chloroethane	0.037	0.035	0.01	5.4	50.0
Trichlorofluoromethane	0.077	0.078	0.01	1.3	50.0
1,1-Dichloroethene	0.169	0.165	0.01	2.4	20.0
Methylene Chloride	0.207	0.189	0.01	8.7	50.0
trans-1,2-Dichloroethene	0.217	0.196	0.01	9.7	50.0
1,1-Dichloroethane	0.380	0.340	0.1	10.5	50.0
cis-1,2-dichloroethene	0.253	0.232	0.01	8.3	50.0
Chloroform	0.350	0.329	0.01	6.0	20.0
Bromochloromethane	0.111	0.103	0.01	7.2	50.0
1,1,1-Trichloroethane	0.275	0.264	0.01	4.0	50.0
Carbon Tetrachloride	0.211	0.206	0.01	2.4	50.0
1,2-Dichloroethane	0.245	0.231	0.01	5.7	50.0
Benzene	0.999	0.915	0.01	8.4	50.0
Trichloroethene	0.242	0.222	0.01	8.3	50.0
1,2-Dichloropropane	0.245	0.224	0.01	8.6	20.0
Bromodichloromethane	0.246	0.237	0.01	3.6	50.0
cis-1,3-Dichloropropene	0.372	0.349	0.01	6.2	50.0
Toluene	4.742	4.352	0.01	8.2	20.0
trans-1,3-Dichloropropene	1.374	1.285	0.01	6.5	50.0
1,1,2-Trichloroethane	0.897	0.806	0.01	10.1	50.0
Tetrachloroethene	0.749	0.677	0.01	9.6	50.0
Dibromochloromethane	0.722	0.692	0.01	4.2	50.0
Chlorobenzene	3.034	2.769	0.3	8.7	50.0
Ethylbenzene	1.686	1.557	0.01	7.6	20.0
Styrene	3.267	3.139	0.01	3.9	50.0
Bromoform	0.393	0.371	0.1	5.6	50.0
1,1,2,2-Tetrachloroethane	0.773	0.662	0.3	14.4	50.0
1,3-Dichlorobenzene	1.434	1.360	0.01	5.2	50.0
1,4-Dichlorobenzene	1.472	1.352	0.01	8.2	50.0
1,2-Dichlorobenzene	1.366	1.246	0.01	8.8	50.0
Dibromomethane	0.124	0.113	0.01	8.9	50.0
1,2-Dibromoethane	0.850	0.771	0.01	9.3	50.0
1,1,1,2-Tetrachloroethane	0.823	0.810	0.01	1.6	50.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: C0F080328

Instrument ID: HP4

Calibration Date: 06/14/00 Time: 1143

Lab File ID: 1C40614

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

Heated Purge: (Y/N) N

Init. Calib. Times: 1126 1309

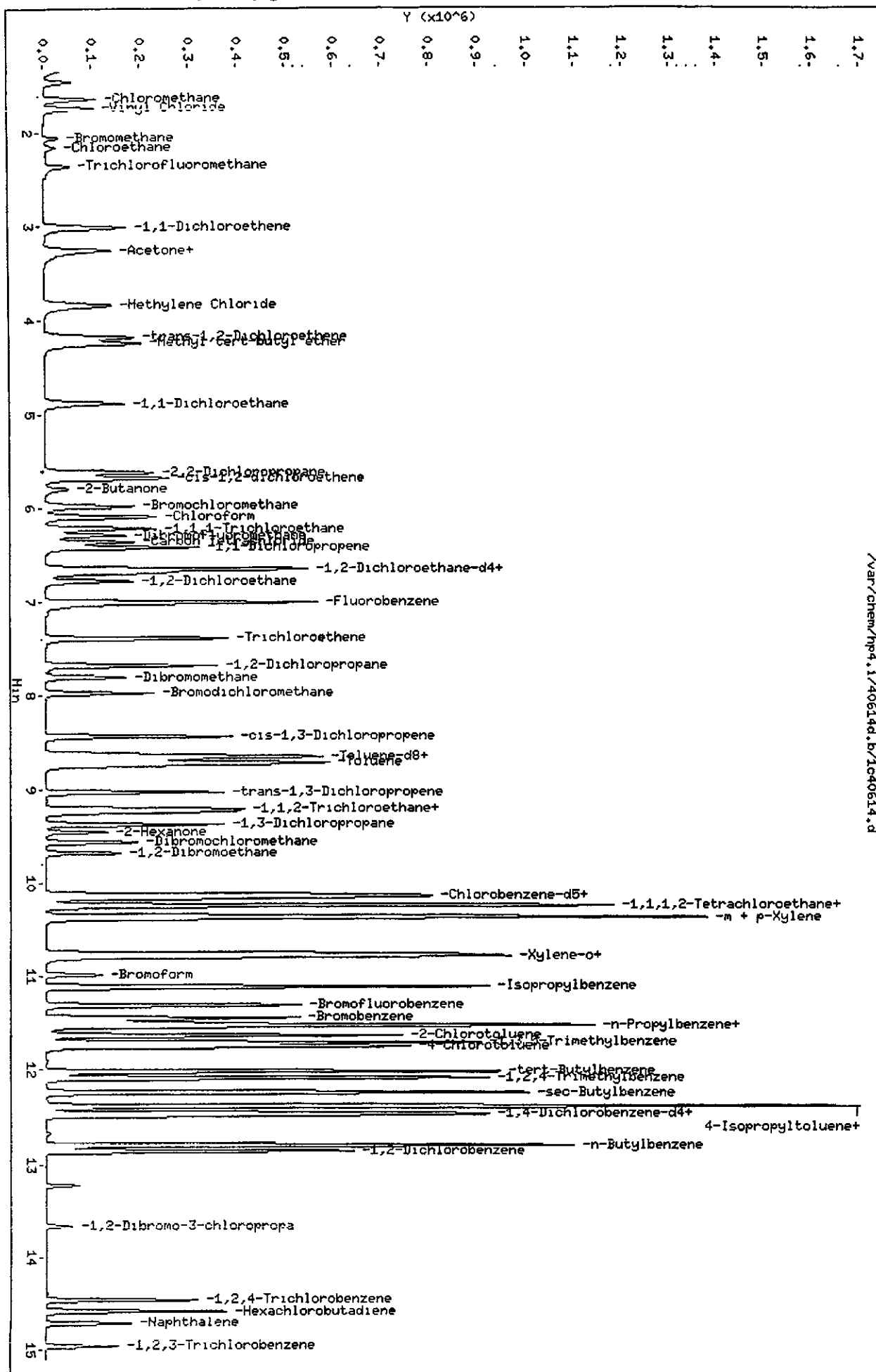
GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
1,2,3-Trichloropropane	0.216	0.194	0.01	10.2	50.0
1,2-Dibromo-3-chloropropane	0.097	0.067	0.01	30.9	50.0
2,2-Dichloropropane	0.284	0.262	0.01	7.7	50.0
1,1-Dichloropropene	0.290	0.270	0.01	6.9	50.0
1,3-Dichloropropane	1.596	1.432	0.01	10.3	50.0
n-Propylbenzene	0.966	0.922	0.01	4.6	50.0
Bromobenzene	0.724	0.682	0.01	5.8	50.0
1,3,5-Trimethylbenzene	2.647	2.567	0.01	3.0	50.0
2-Chlorotoluene	0.796	0.755	0.01	5.2	50.0
4-Chlorotoluene	0.817	0.782	0.01	4.3	50.0
tert-Butylbenzene	2.351	2.256	0.01	4.0	50.0
1,2,4-Trimethylbenzene	2.718	2.622	0.01	3.5	50.0
sec-Butylbenzene	3.579	3.446	0.01	3.7	50.0
4-Isopropyltoluene	2.849	2.789	0.01	2.1	50.0
n-Butylbenzene	3.009	2.798	0.01	7.0	50.0
1,2,4-Trichlorobenzene	0.648	0.426	0.01	34.2	50.0
Hexachlorobutadiene	0.335	0.272	0.01	18.8	50.0
Naphthalene	1.305	0.672	0.01	48.5	50.0
1,2,3-Trichlorobenzene	0.452	0.208	0.01	54.0	50.0
Acetone	0.055	0.049	0.01	10.9	50.0
Carbon Disulfide	0.505	0.509	0.01	0.8	50.0
2-Butanone	0.213	0.134	0.01	37.1	50.0
4-Methyl-2-Pentanone	0.889	0.841	0.01	5.4	50.0
2-Hexanone	0.605	0.571	0.01	5.6	50.0
Methyl tert-butyl ether	0.476	0.443	0.01	6.9	50.0
Isopropylbenzene	4.844	4.632	0.01	4.4	50.0
1,2-Dichloroethene (total)	0.235	0.214	0.01	8.9	50.0
Xylenes (total)	1.990	1.870	0.01	6.0	50.0
=====	=====	=====	=====	=====	=====
Dibromofluoromethane	0.182	0.190	0.01	4.4	50.0
1,2-Dichloroethane-d4	0.193	0.203	0.01	5.2	50.0
Toluene-d8	3.867	3.937	0.01	1.8	50.0
Bromofluorobenzene	1.504	1.457	0.01	3.1	50.0

<-

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORTInstrument ID: hp4.i
Lab File ID: 1c40614.d
Analysis Type: WATERInjection Date: 14-JUN-2000 11:43
Lab Sample ID: vstd50
Method File: /var/chem/hp4.i/40614d.b/8260bh2o.m

COMPOUND	EXPECTED CONC	MEASURED CONC	%D	MAX %D
0 Xylene-o	250.0000	235.0058	6.0	50.0
0 m + p-Xylene	500.0000	468.0547	6.4	50.0
1 Dichlorodifluoromethane	250.0000	280.2256	12.1	50.0
2 Chloromethane	250.0000	205.6477	17.7	50.0
3 Vinyl Chloride	250.0000	228.9758	8.4	20.0
4 Bromomethane	250.0000	255.7045	2.3	50.0
5 Chloroethane	250.0000	235.9964	5.6	50.0
6 Trichlorofluoromethane	250.0000	251.3253	0.5	50.0
9 1,1-Dichloroethene	250.0000	243.5450	2.6	20.0
10 Methylene Chloride	250.0000	228.3097	8.7	50.0
13 trans-1,2-Dichloroethene	250.0000	224.7756	10.1	50.0
15 1,1-Dichloroethane	250.0000	223.2290	10.7	50.0
17 cis-1,2-dichloroethene	250.0000	228.9977	8.4	50.0
18 Chloroform	250.0000	235.1172	6.0	20.0
19 Bromochloromethane	250.0000	232.2369	7.1	50.0
20 1,1,1-Trichloroethane	250.0000	239.7148	4.1	50.0
21 Carbon Tetrachloride	250.0000	243.6475	2.5	50.0
23 1,2-Dichloroethane	250.0000	236.7012	5.3	50.0
24 Benzene	250.0000	229.0631	8.4	50.0
26 Trichloroethene	250.0000	229.3046	8.3	50.0
27 1,2-Dichloropropane	250.0000	228.6514	8.5	20.0
28 Bromodichloromethane	250.0000	241.1606	3.5	50.0
31 cis-1,3-Dichloropropene	250.0000	234.6292	6.1	50.0
33 Toluene	250.0000	229.4722	8.2	20.0
34 trans-1,3-Dichloropropene	250.0000	233.6817	6.5	50.0
36 1,1,2-Trichloroethane	250.0000	224.7484	10.1	50.0
37 Tetrachloroethene	250.0000	226.2068	9.5	50.0
38 Dibromochloromethane	250.0000	239.4400	4.2	50.0
40 Chlorobenzene	250.0000	228.1646	8.7	50.0
41 Ethylbenzene	250.0000	230.9890	7.6	20.0
44 Styrene	250.0000	240.1484	3.9	50.0
45 Bromoform	250.0000	235.7610	5.7	50.0
46 1,1,2,2-Tetrachloroethane	250.0000	214.0694	14.4	50.0
48 1,3-Dichlorobenzene	250.0000	237.0076	5.2	50.0
49 1,4-Dichlorobenzene	250.0000	229.6968	8.1	50.0
50 1,2-Dichlorobenzene	250.0000	228.0978	8.8	50.0
60 Dibromomethane	250.0000	226.8210	9.3	50.0
63 1,2-Dibromoethane	250.0000	226.6456	9.3	50.0
64 1,1,1,2-Tetrachloroethane	250.0000	246.0239	1.6	50.0



Data File: /var/chem/hp4.1/40614d.b/1c40614.d
 Date: 14-JUN-2000 11:43
 Client ID: vstd50
 Sample Info: vstd50 5ml
 Volume Injected (ul): 5.0
 Column phase: DB 624

/var/chem/hp4.1/40614d.b/1c40614.d

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

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: hp4.i
 Lab File ID: 1c40614.d
 Analysis Type: WATER

Injection Date: 14-JUN-2000 11:43
 Lab Sample ID: vstd50
 Method File: /var/chem/hp4.i/40614d.b/8260bh2

COMPOUND	EXPECTED CONC.	MEASURED CONC	%D	MAX %D
65 1,2,3-Trichloropropane	250.0000	225.1241	10.0	50.0
69 1,2-Dibromo-3-chloropropane	250.0000	171.4142	31.4	50.0
74 2,2-Dichloropropane	250.0000	231.1117	7.6	50.0
75 1,1-Dichloropropene	250.0000	233.2807	6.7	50.0
77 1,3-Dichloropropane	250.0000	224.2478	10.3	50.0
83 n-Propylbenzene	250.0000	238.8046	4.5	50.0
84 Bromobenzene	250.0000	235.5574	5.8	50.0
85 1,3,5-Trimethylbenzene	250.0000	242.5197	3.0	50.0
86 2-Chlorotoluene	250.0000	237.2277	5.1	50.0
87 4-Chlorotoluene	250.0000	239.2226	4.3	50.0
88 tert-Butylbenzene	250.0000	239.8158	4.1	50.0
89 1,2,4-Trimethylbenzene	250.0000	241.1570	3.5	50.0
90 sec-Butylbenzene	250.0000	240.7267	3.7	50.0
91 4-Isopropyltoluene	250.0000	244.7558	2.1	50.0
94 n-Butylbenzene	250.0000	232.3995	7.0	50.0
95 1,2,4-Trichlorobenzene	250.0000	164.2780	34.3	50.0
96 Hexachlorobutadiene	250.0000	203.0928	18.8	50.0
97 Naphthalene	250.0000	128.6571	48.5	50.0
98 1,2,3-Trichlorobenzene	250.0000	115.2095	53.9	50.0
101 Chlorobenzene-d5	250.0000	250.0000	0.0	50.0
102 1,4-Dichlorobenzene-d4	250.0000	250.0000	0.0	50.0
106 Acetone	250.0000	223.5661	10.6	50.0
107 Carbon Disulfide	250.0000	251.5770	0.6	50.0
108 2-Butanone	250.0000	157.3651	37.1	50.0
110 4-Methyl-2-Pentanone	250.0000	236.5069	5.4	50.0
111 2-Hexanone	250.0000	235.9249	5.6	50.0
134 Methyl tert-butyl ether	250.0000	233.0654	6.8	50.0
137 Fluorobenzene	250.0000	250.0000	0.0	50.0
144 Isopropylbenzene	250.0000	239.0947	4.4	50.0
153 1,2-Dichloroethene (total)	500.0000	454.0928	9.2	50.0
154 Xylenes (total)	750.0000	707.3314	5.7	50.0
149 Dibromofluoromethane	250.0000	261.2705	4.5	50.0
150 1,2-Dichloroethane-d4	250.0000	263.3911	5.4	50.0
151 Toluene-d8	250.0000	254.5342	1.8	50.0
152 Bromofluorobenzene	250.0000	242.0912	3.2	50.0

STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40614d.b/1c40614.d
Lab Smp Id: vstd50 Client Smp ID: vstd50
Inj Date : 14-JUN-2000 11:43 Inst ID: hp4.i
Operator : 16328
Smp Info : vstd50 5ml
Misc Info : ,40614d.b
Comment :
Method : /var/chem/hp4.i/40614d.b/8260bh2o.m
Meth Date : 14-Jun-2000 12:05 h Quant Type: ISTD
Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000 Compound Sublist: 2-padep.sub
Integrator: HP RTE
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 MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.998	6.998	(1.000)	701065		
* 69 Chlorobenzene-d5	119	10.122	10.122	(1.000)	166447		
* 92 1,4-Dichlorobenzene-d4	152	12.458	12.458	(1.000)	250585		
\$ 39 Dibromofluoromethane	113	6.289	6.289	(0.899)	133298	250.000	261.3
\$ 43 1,2-Dichloroethane-d4	65	6.687	6.687	(0.955)	142401	250.000	263.4
\$ 59 Toluene-d8	98	8.649	8.649	(0.854)	655343	250.000	254.5
\$ 80 Bromofluorobenzene	95	11.308	11.308	(1.117)	242467	250.000	242.1
1 Dichlorodifluoromethane	85	1.454	1.454	(0.208)	84878	250.000	280.2
2 Chloromethane	50	1.637	1.637	(0.234)	166618	250.000	205.6
3 Vinyl Chloride	62	1.741	1.741	(0.249)	155256	250.000	229.0
4 Bromomethane	94	2.065	2.065	(0.295)	20255	250.000	255.7
5 Chloroethane	64	2.157	2.157	(0.308)	24601	250.000	236.0
6 Trichlorofluoromethane	101	2.358	2.358	(0.337)	54430	250.000	251.3
12 1,1-Dichloroethene	96	3.013	3.013	(0.430)	115632	250.000	243.5
13 Acetone	43	3.318	3.318	(0.474)	34360	250.000	223.6

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
15 Carbon Disulfide	76	3 257	3 257	(0.465)	356701	250.000	251.6
18 Methylene Chloride	84	3 832	3 832	(0.547)	132555	250 000	228 3
19 trans-1,2-Dichloroethene	96	4.174	4 174	(0.596)	137138	250.000	224 8
20 Methyl tert-butyl ether	73	4 241	4 241	(0.606)	310863	250 000	233.1
24 1,1-Dichloroethane	63	4 883	4 883	(0.698)	238095	250 000	223 2
27 2,2-Dichloropropane	77	5 623	5.623	(0.803)	184024	250 000	231.1
28 cis-1,2-dichloroethene	96	5.678	5 678	(0.811)	162592	250 000	229.0
M 29 1,2-Dichloroethene (total)	100				299730	500 000	454.1
30 Bromochloromethane	128	5.978	5 978	(0.854)	72205	250 000	232 2
31 2-Butanone	43	5 800	5.800	(0.829)	94034	250 000	157 4
37 Chloroform	83	6 088	6 088	(0.870)	230752	250 000	235 1
38 1,1,1-Trichloroethane	97	6.216	6.216	(0.888)	185291	250 000	239 7
40 1,1-Dichloropropene	75	6.418	6 418	(0.917)	189479	250 000	233 3
41 Carbon Tetrachloride	117	6 357	6.357	(0.908)	144244	250 000	243.6
42 Benzene	78	6 644	6 644	(0.949)	641663	250 000	229.1
45 1,2-Dichloroethane	62	6 772	6 772	(0.968)	162289	250 000	236.7
47 Trichloroethene	130	7.384	7.384	(1.055)	155322	250.000	229 3
49 1,2-Dichloropropane	63	7.671	7 671	(1.096)	157033	250.000	228.6
50 Dibromomethane	93	7 799	7.799	(1.114)	79104	250 000	226 8
53 Bromodichloromethane	83	7 971	7.971	(1.139)	166421	250.000	241 2
57 cis-1,3-Dichloropropene	75	8.435	8 435	(1.205)	245020	250 000	234 6
58 4-Methyl-2-Pentanone	43	8 619	8 619	(0.851)	140028	250 000	236.5
60 Toluene	91	8.716	8 716	(0.861)	724457	250 000	229 5
61 trans-1,3-Dichloropropene	75	9 028	9 028	(0.892)	213834	250.000	233 7
63 1,3-Dichloropropane	76	9.377	9 377	(0.926)	238340	250 000	224 2
64 1,1,2-Trichloroethane	97	9 205	9 205	(0.909)	134218	250 000	224 7
65 Tetrachloroethene	164	9.236	9 236	(0.912)	112730	250 000	226 2
66 2-Hexanone	43	9.456	9 456	(0.934)	95017	250.000	235 9
67 Dibromochloromethane	129	9.566	9 566	(0.945)	115131	250 000	239 4
68 1,2-Dibromoethane	107	9.682	9 682	(0.957)	128337	250 000	226.6
70 Chlorobenzene	112	10.153	10.153	(1.003)	460916	250 000	228 2
71 1,1,1,2-Tetrachloroethane	131	10.245	10 245	(1.012)	134871	250.000	246.0
72 Ethylbenzene	106	10.232	10 232	(1.011)	259226	250 000	231 0
73 m + p-Xylene	106	10 361	10 361	(1.024)	625589	500 000	468 0
74 Xylene-o	106	10.752	10.752	(1.062)	311262	250 000	235 0
M 75 Xylenes (total)	106				936851	250 000	707 3
76 Styrene	104	10 783	10 783	(1.065)	522438	250.000	240.1
77 Bromoform	173	10 984	10 984	(1.085)	61688	250 000	235 8
78 Isopropylbenzene	105	11.107	11 107	(1.097)	771068	250 000	239 1
79 Bromobenzene	156	11.443	11 443	(0.919)	171021	250 000	235 6
81 n-Propylbenzene	120	11 522	11.522	(0.925)	231158	250 000	238.8
82 2-Chlorotoluene	126	11.632	11 632	(0.934)	189156	250 000	237.2
83 1,1,2,2-Tetrachloroethane	83	11 486	11 486	(0.922)	165777	250 000	214 1
84 1,2,3-Trichloropropane	110	11 535	11 535	(0.926)	48732	250 000	225 1
85 4-Chlorotoluene	126	11 749	11 749	(0.943)	195929	250 000	239 2
86 1,3,5-Trimethylbenzene	105	11.706	11 706	(0.940)	643356	250 000	242 5
87 tert-Butylbenzene	119	12 018	12 018	(0.965)	565287	250 000	239 8

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
88 1,2,4-Trimethylbenzene	105	12.079	12.079	(0.970)	657118	250.000	241.2
89 sec-Butylbenzene	105	12.238	12.238	(0.982)	863579	250.000	240.7
90 4-Isopropyltoluene	119	12.384	12.384	(0.994)	698835	250.000	244.8
91 1,3-Dichlorobenzene	146	12.384	12.384	(0.994)	340675	250.000	237.0
93 1,4-Dichlorobenzene	146	12.482	12.482	(1.002)	338844	250.000	229.7
94 n-Butylbenzene	91	12.794	12.794	(1.027)	701032	250.000	232.4
95 1,2-Dichlorobenzene	146	12.855	12.855	(1.032)	312312	250.000	228.1
96 1,2-Dibromo-3-chloropropane	157	13.662	13.662	(1.097)	16775	250.000	171.4
97 1,2,4-Trichlorobenzene	180	14.457	14.457	(1.160)	106739	250.000	164.3
98 Hexachlorobutadiene	225	14.579	14.579	(1.170)	68137	250.000	203.1
99 Naphthalene	128	14.713	14.713	(1.181)	168268	250.000	128.6
100 1,2,3-Trichlorobenzene	180	14.958	14.958	(1.201)	52174	250.000	115.2

**GC/MS VOLATILE
QC DATA**

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

Date : 06-JUN-2000 10:58

Client ID: 50NGBFB

Instrument: hp4.1

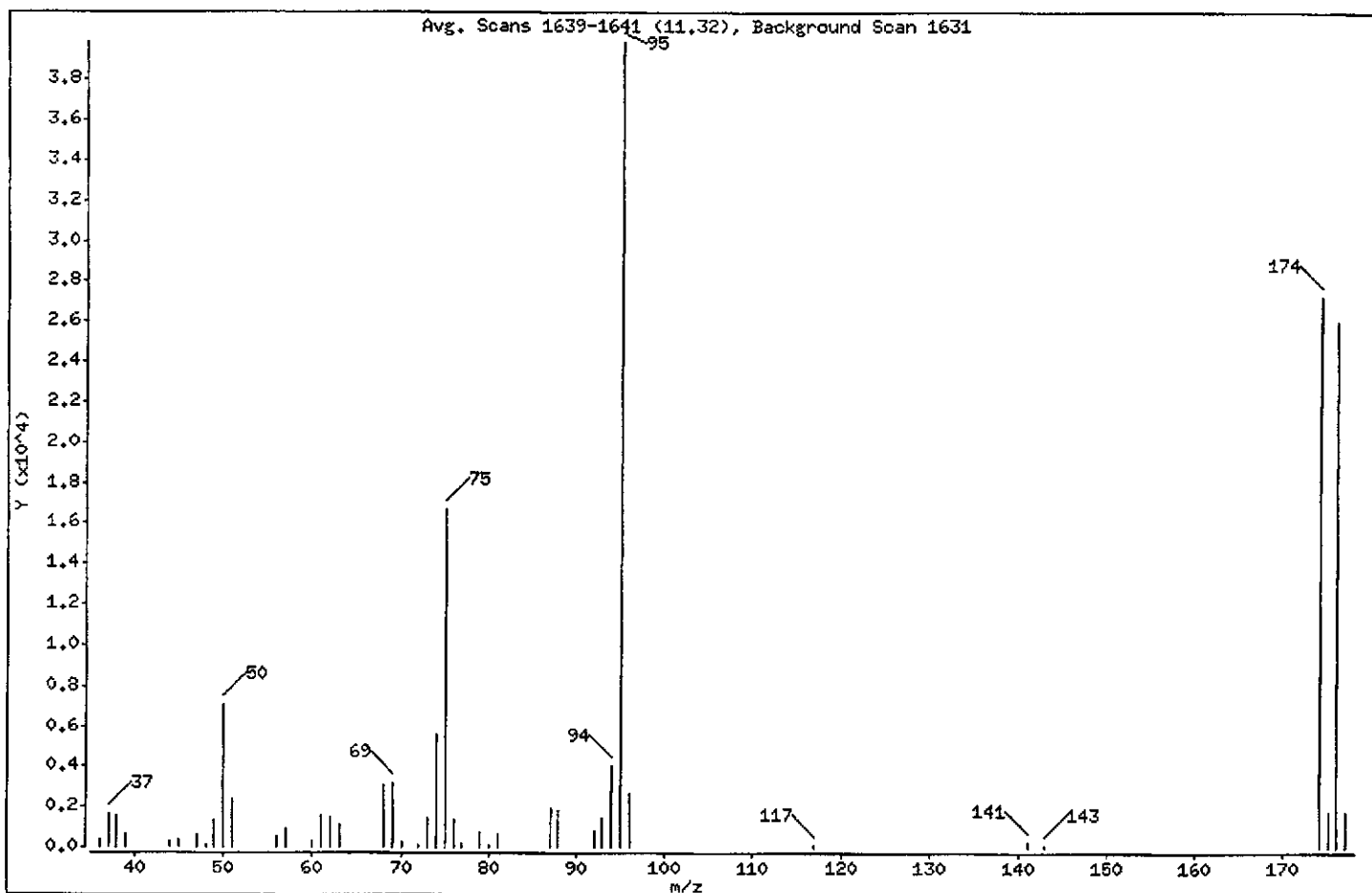
Sample Info: bfb 1ul inj

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

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)

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		

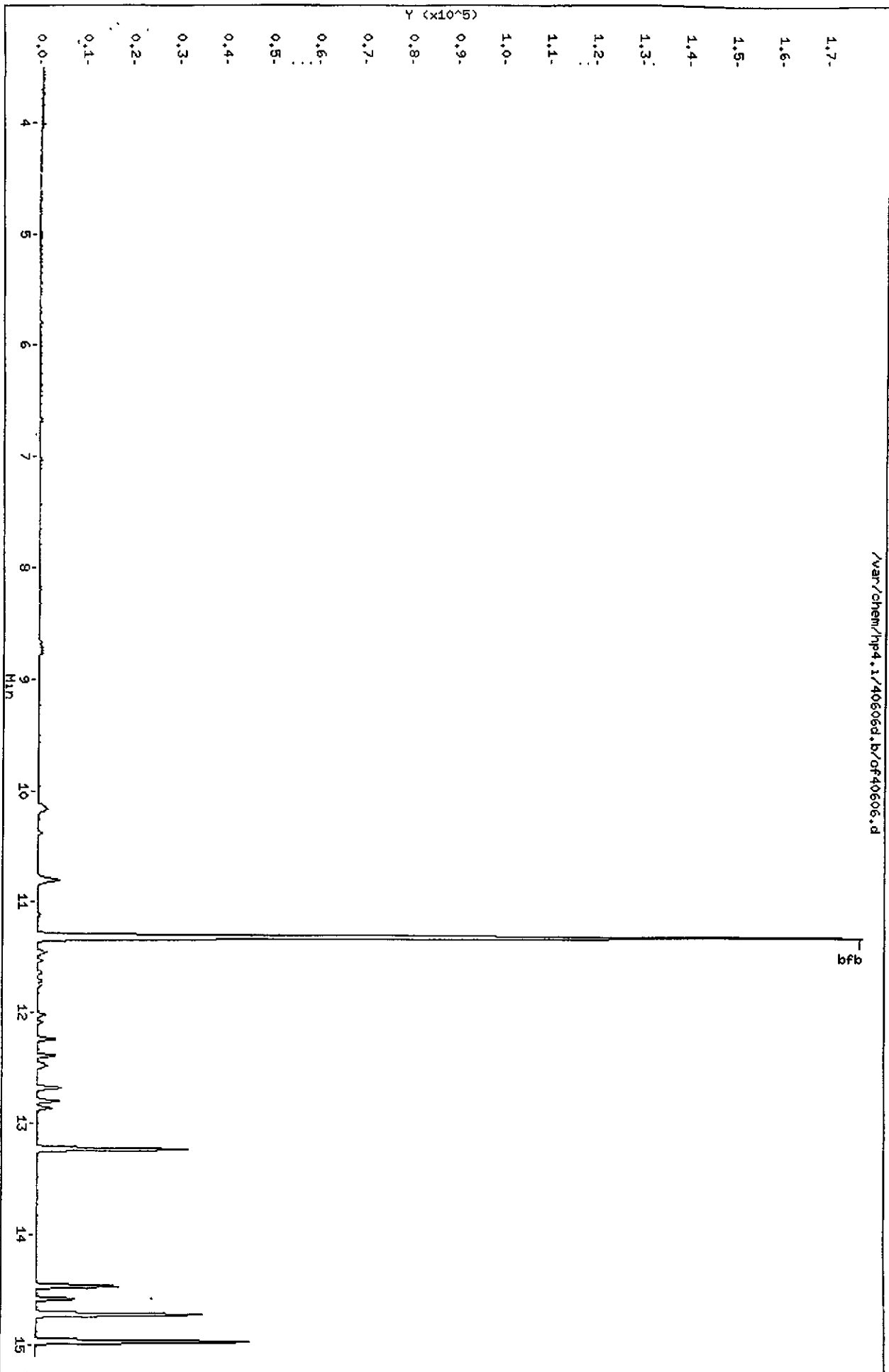
Data File: /var/chem/hp4.1/40606d.b/cf40606.d
Date: 06-JUN-2000 10:58
Client ID: SONGBFB
Sample Info: bfb 1ul 1nJ

Column phase: DB624 20m

/var/chem/hp4.1/40606d.b/cf40606.d

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

bfb



Date : 14-JUN-2000 11:05

Client ID: 50NCBFB

Instrument: hp4.1

Sample Info: bfb 1ul inj

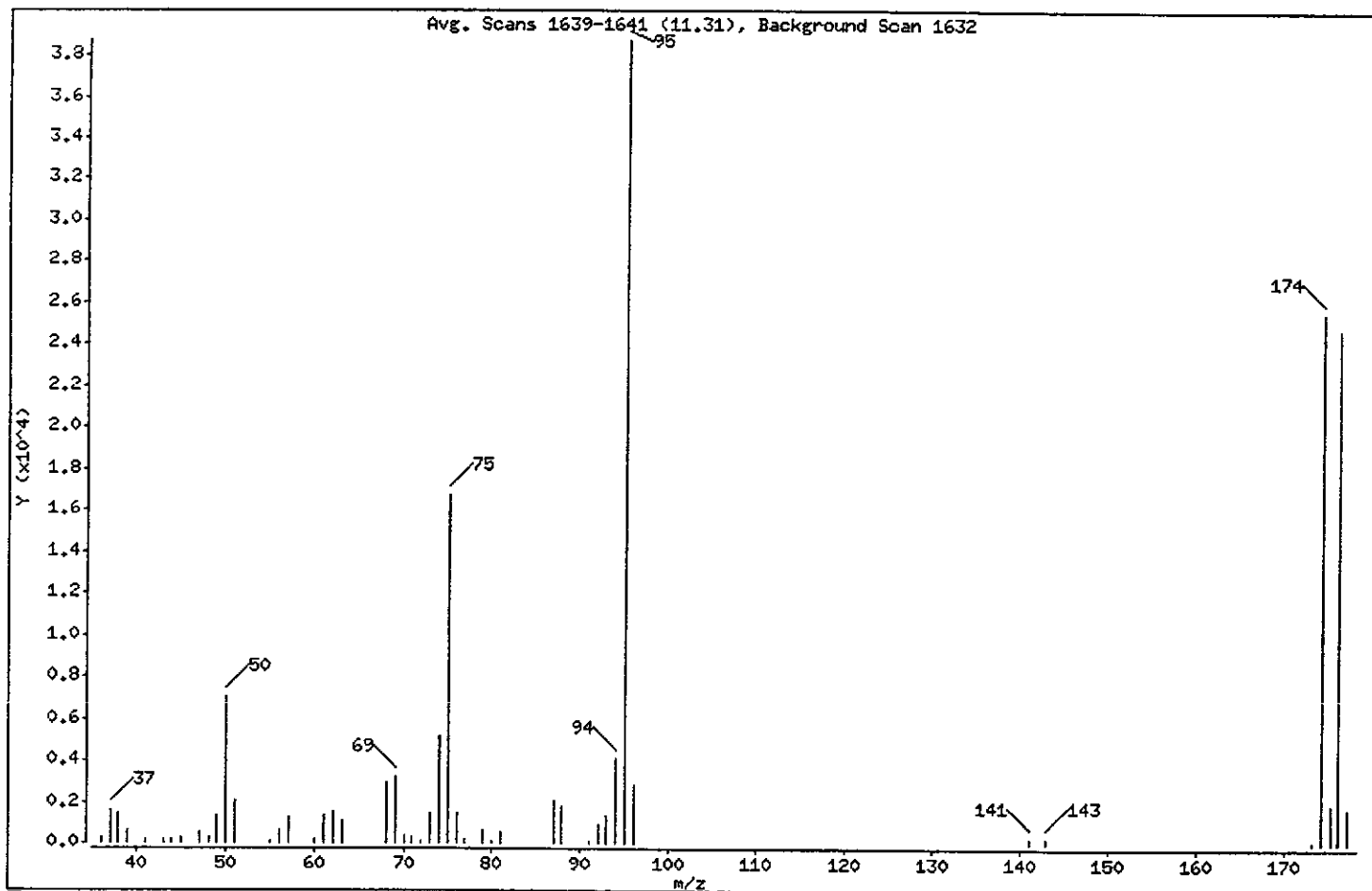
Volume Injected (uL): 1.0

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	18.10
75	30.00 - 60.00% of mass 95	43.34
96	5.00 - 9.00% of mass 95	7.45
173	Less than 2.00% of mass 174	0.28 (0.43)
174	50.00 - 100.00% of mass 95	66.02
175	5.00 - 9.00% of mass 174	4.82 (7.30)
176	95.00 - 101.00% of mass 174	64.01 (96.96)
177	5.00 - 9.00% of mass 176	4.30 (6.72)

Date : 14-JUN-2000 11:05

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: bf40614.d

Spectrum: Avg. Scans 1639-1641 (11.31), Background Scan 1632

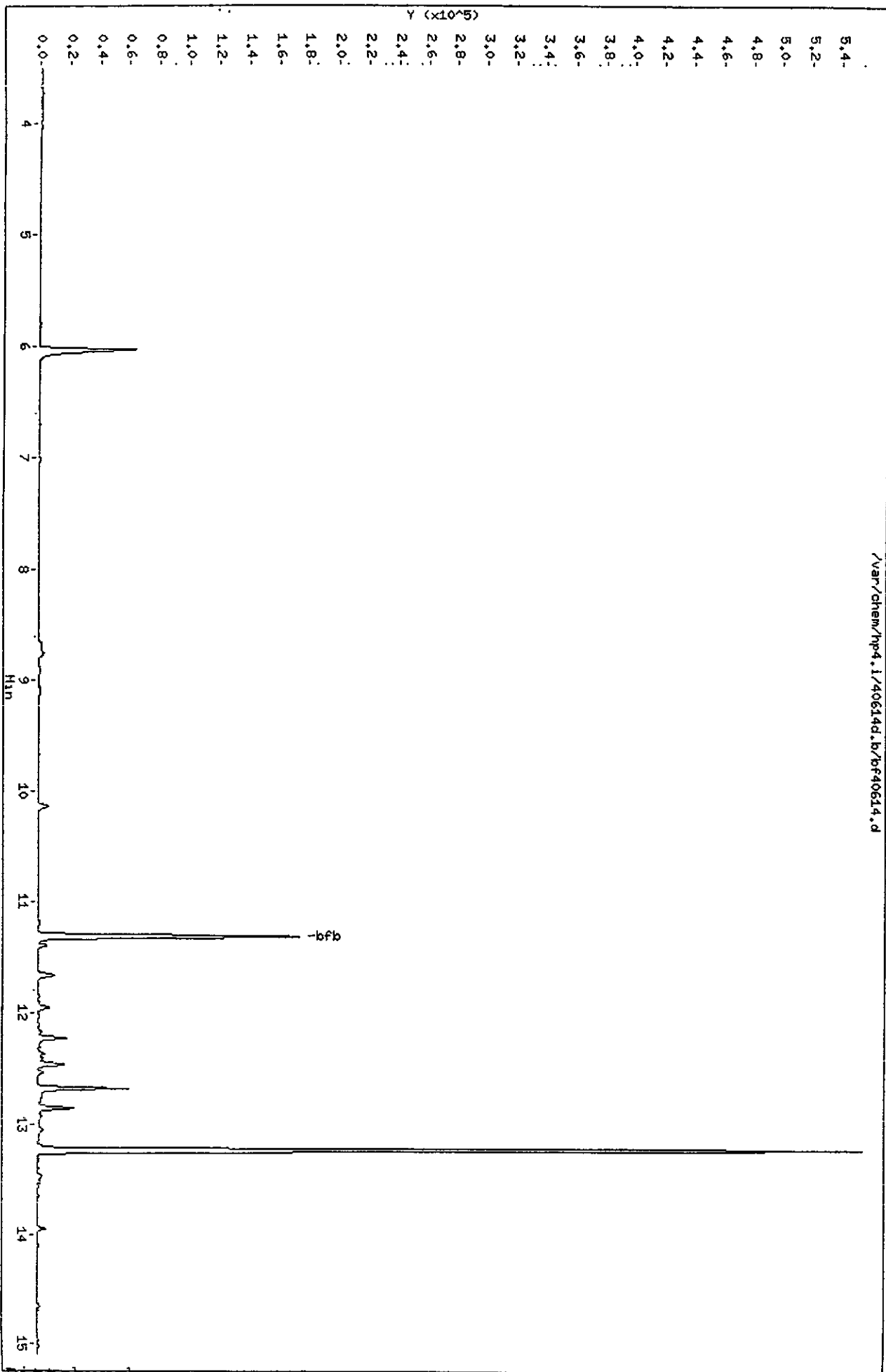
Location of Maximum: 95.00

Number of points: 48

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	240	55.00	72	74.00	5173	95.00	38720
37.00	1629	56.00	652	75.00	16776	96.00	2884
38.00	1427	57.00	1224	76.00	1389	141.00	235
39.00	643	60.00	205	77.00	180	143.00	266
41.00	150	61.00	1374	79.00	608	173.00	110
43.00	189	62.00	1519	80.00	98	174.00	25560
44.00	178	63.00	1031	81.00	540	175.00	1867
45.00	303	68.00	2954	87.00	2025	176.00	24784
47.00	491	69.00	3171	88.00	1794	177.00	1666
48.00	235	70.00	348	91.00	70		
49.00	1355	71.00	245	92.00	851		
50.00	7007	72.00	86	93.00	1334		
51.00	2069	73.00	1419	94.00	4083		

Data File: /var/chem/hp4.i/40614d.b/bf40614.d
 Date : 14-JUN-2000 11:05
 Client ID: 50NGBFB
 Sample Info: bfb 1ul 1nJ
 Volume Injected (ul): 1.0
 Column phase: DB624 20m

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



UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0F130000 208

Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/08/00

Work Order: DEKMOV101

Date Extracted: 06/14/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

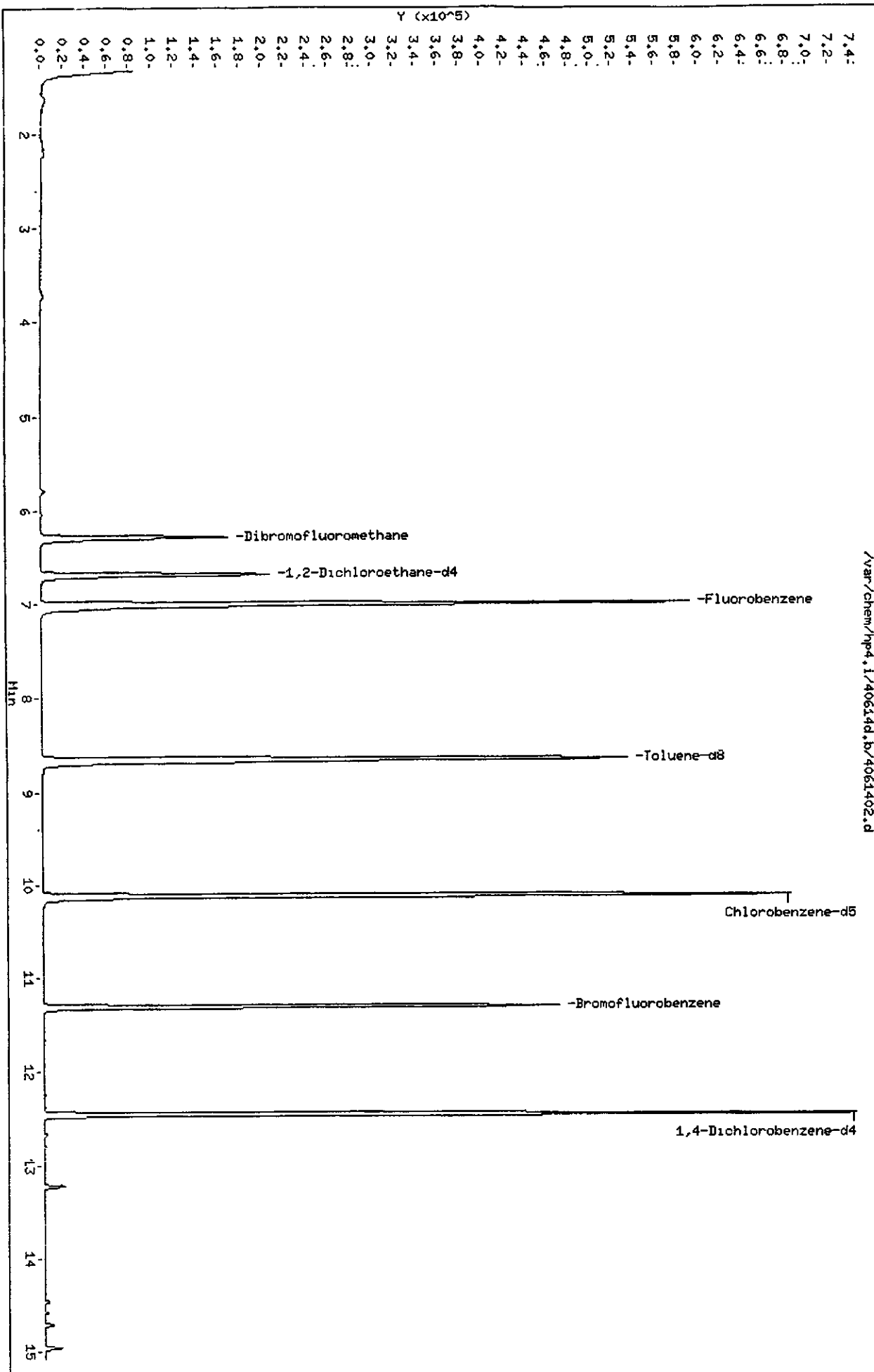
QC Batch: 0166201

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

Data File: /var/chem/hp4.i/40614d.b/4061402.d
Date: 14-JUN-2000 12:36
Client ID: INTRA-LAB BLANK
Sample Info: pb blk c0f080184 (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column phase: DB 624

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



298.099

Data File: /var/chem/hp4.i/40614d.b/4061402.d
Report Date: 14-Jun-2000 12:50

Page 1

STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40614d.b/4061402.d
Lab Smp Id: DEKMOV101 Client Smp ID: INTRA-LAB BLANK
Inj Date : 14-JUN-2000 12:36
Operator : 16328 Inst ID: hp4.i
Smp Info : pb blk c0f080184 (1ml/10ml)/5ml
Misc Info : dekmv101,40614d.b
Comment :
Method : /var/chem/hp4.i/40614d.b/8260bh2o.m
Meth Date : 14-Jun-2000 12:05 h Quant Type: ISTD
Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
Als bottle: 6 QC Sample: METHOD BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tclp.sub
Target Version: 3.40
Processing Host: hpuxcs21

Ks 6/14/00

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	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ng)	FINAL (UG/L)	
* 46 Fluorobenzene	96	7.004	6.998	(1.000)	718243			
* 69 Chlorobenzene-d5	119	10.122	10.122	(1.000)	159954			
* 92 1,4-Dichlorobenzene-d4	152	12.457	12.458	(1.000)	230694			
\$ 43 1,2-Dichloroethane-d4	65	6.686	6.687	(0.955)	158801	286.700	57.34	
\$ 39 Dibromofluoromethane	113	6.289	6.289	(0.898)	136768	261.660	52.33	
\$ 59 Toluene-d8	98	8.655	8.649	(0.855)	585968	236.828	47.36	
\$ 80 Bromofluorobenzene	95	11.302	11.308	(1.117)	215038	223.420	44.68	
3 Vinyl Chloride	62.00	Compound Not Detected.						
12 1,1-Dichloroethene	96.00	Compound Not Detected.						
31 2-Butanone	43.00	Compound Not Detected.						
37 Chloroform	83.00	Compound Not Detected.						
41 Carbon Tetrachloride	117.00	Compound Not Detected.						
42 Benzene	78.00	Compound Not Detected.						
45 1,2-Dichloroethane	62.00	Compound Not Detected.						
47 Trichloroethene	130.00	Compound Not Detected.						

.660 869

Data File: /var/chem/hp4.i/40614d.b/4061402.d
Report Date: 14-Jun-2000 12:50

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Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(UG/L)
*****	***	**	*****	*****	*****	*****	*****
65 Tetrachloroethene	164 00				Compound Not Detected.		
70 Chlorobenzene	112 00				Compound Not Detected		

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0F140000 201

Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/08/00

Work Order: DEM7K101

Date Extracted: 06/14/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

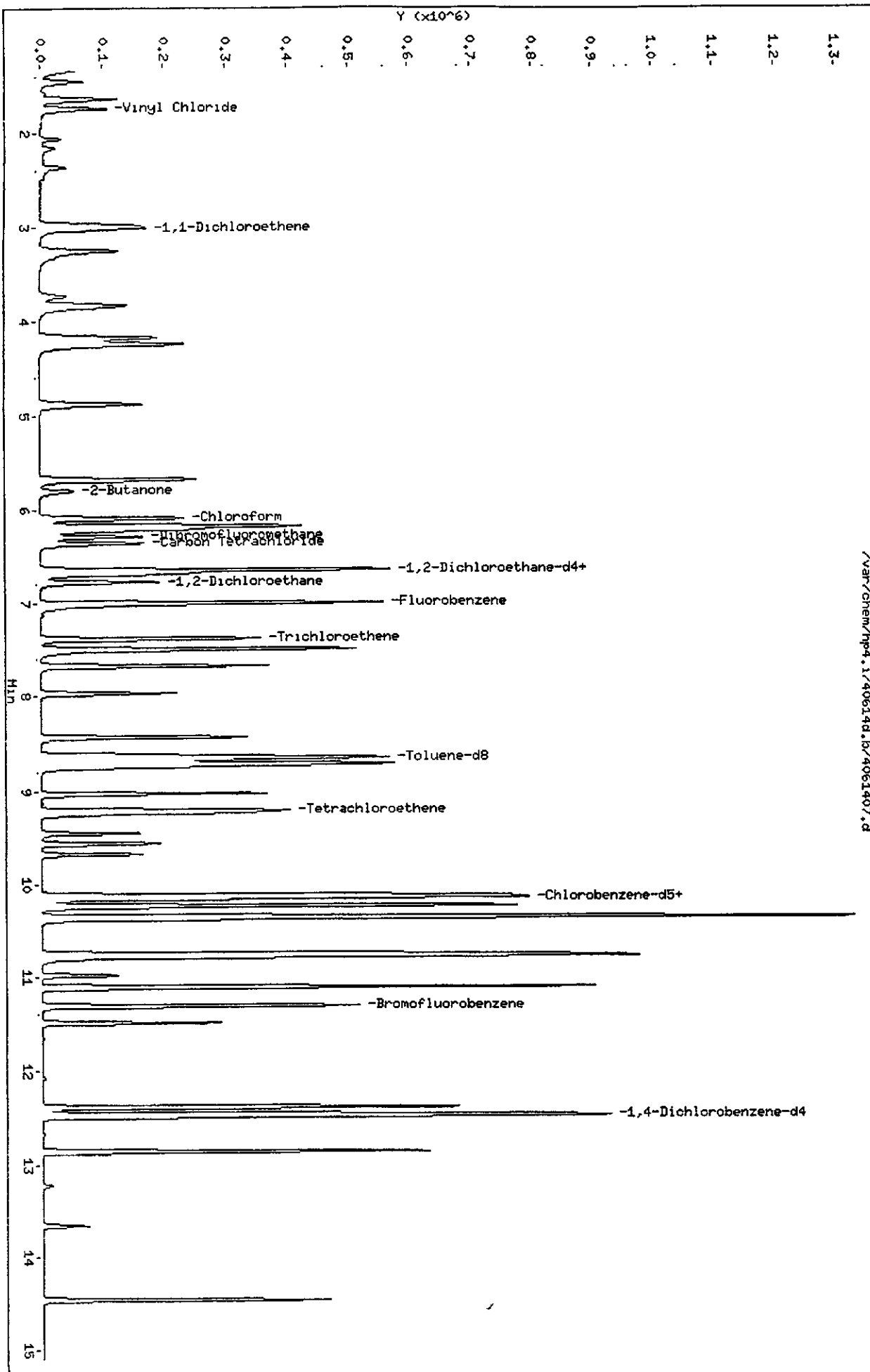
QC Batch: 0166201

Client Sample Id: CHECK SAMPLE

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.470	
78-93-3	2-Butanone	0.360	
56-23-5	Carbon tetrachloride	0.441	
108-90-7	Chlorobenzene	0.462	
67-66-3	Chloroform	0.482	
107-06-2	1,2-Dichloroethane	0.506	
75-35-4	1,1-Dichloroethene	0.405	
127-18-4	Tetrachloroethene	0.422	
79-01-6	Trichloroethene	0.441	
75-01-4	Vinyl chloride	0.486	

Data File: /var/chem/hp4.i/40614d.b/4061407.d
 Date: 14-JUN-2000 14:36
 Client ID: INTRA-LAB CHECK
 Sample Info: blk ms (1ml/10ml)/5ml
 Volume Injected (uL): 5.0
 Column phase: DB 624

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



Data File: /var/chem/hp4.i/40614d.b/4061407.d
 Report Date: 14-Jun-2000 14:52

STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40614d.b/4061407.d
 Lab Smp Id: DEM7K101 Client Smp ID: INTRA-LAB CHECK
 Inj Date : 14-JUN-2000 14:36 Inst ID: hp4.i
 Operator : 16328
 Smp Info : blk ms (1ml/10ml)/5ml
 Misc Info : dem7k101,40614d.b
 Comment :
 Method : /var/chem/hp4.i/40614d.b/8260bh2o.m
 Meth Date : 14-Jun-2000 12:05 h Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 11 QC Sample: METHOD SPIKE
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 3.40
 Processing Host: hpuxcs21

K₆/M/w

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	6.999	6.998	(1.000)	673089		
* 69 Chlorobenzene-d5	119	10.123	10.122	(1.000)	163530		
* 92 1,4-Dichlorobenzene-d4	152	12.459	12.458	(1.000)	245700		
\$ 43 1,2-Dichloroethane-d4	65	6.688	6.687	(0.955)	141360	272.333	54.47
\$ 39 Dibromofluoromethane	113	6.284	6.289	(0.898)	130573	266.567	53.31
\$ 59 Toluene-d8	98	8.650	8.649	(0.854)	631453	249.630	49.93
\$ 80 Bromofluorobenzene	95	11.303	11.308	(1.117)	240059	243.962	48.79
3 Vinyl Chloride	62	1.748	1.741	(0.250)	158201	243.017	48.60
12 1,1-Dichloroethene	96	3.013	3.013	(0.431)	92319	202.525	40.50
31 2-Butanone	43	5.801	5.800	(0.829)	103265	179.996	36.00
37 Chloroform	83	6.095	6.088	(0.871)	227227	241.149	48.23
41 Carbon Tetrachloride	117	6.357	6.357	(0.908)	125289	220.426	44.08
42 Benzene	78	6.645	6.644	(0.949)	631347	234.748	46.95
45 1,2-Dichloroethane	62	6.773	6.772	(0.968)	166559	253.026	50.60
47 Trichloroethene	130	7.385	7.384	(1.055)	143530	220.703	44.24

660 873

Data File: /var/chem/hp4.i/40614d.b/4061407.d
Report Date: 14-Jun-2000 14:52

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Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
=====	----	--	-----	-----	-----	(ng)	(UG/L)	
65 Tetrachloroethene	164	9.237	9 236	(0 912)	103300	210 982	42.20	
70 Chlorobenzene	112	10 154	10.153	(1.003)	458849	231.193	46.24	

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0F080328 002

Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 06/08/00

Work Order: DEEHP10L

Date Extracted: 06/14/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 18

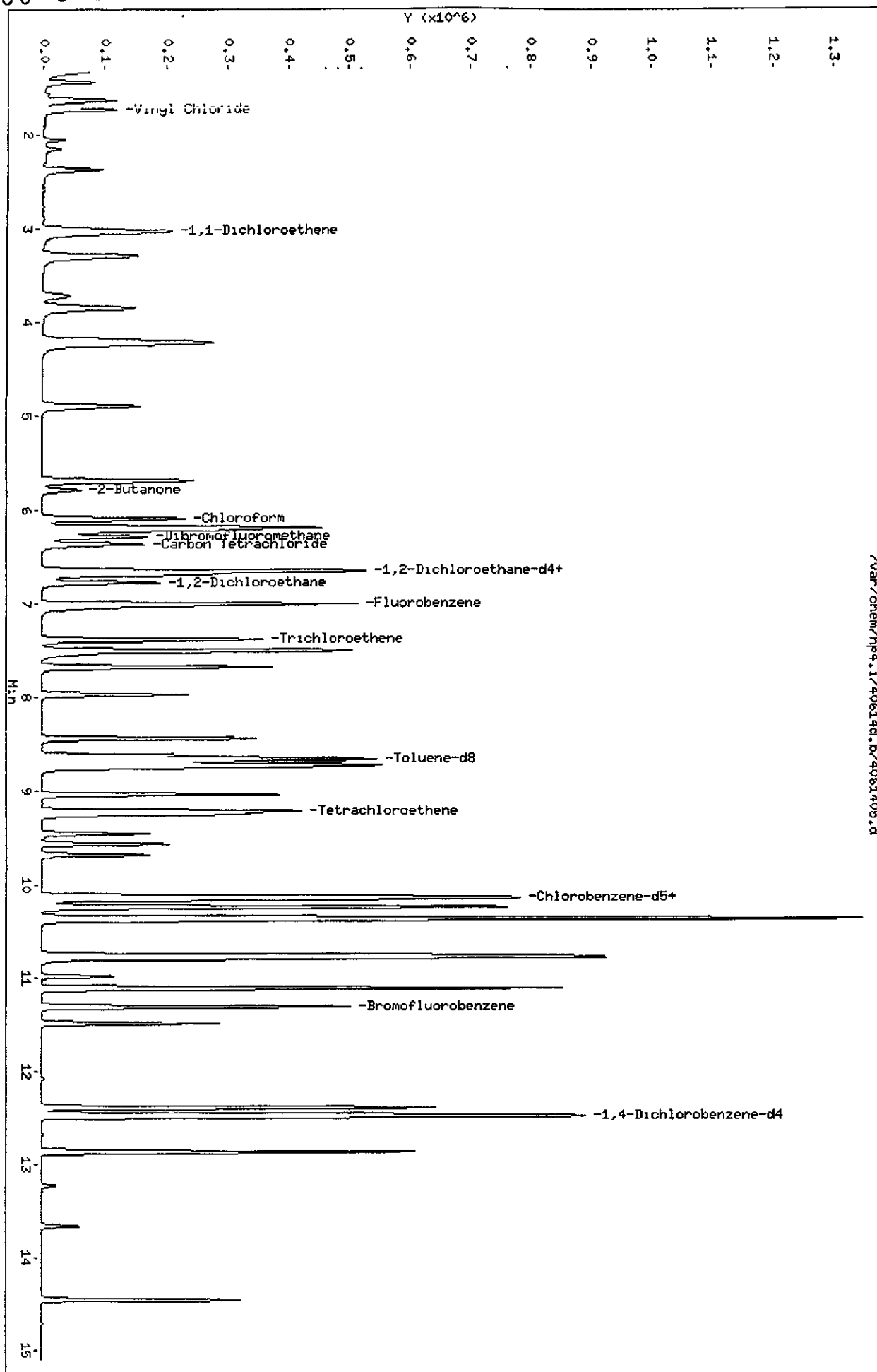
QC Batch: 0166201

Client Sample Id: DF/S1/0159/SDC/009

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.478	
78-93-3	2-Butanone	0.364	
56-23-5	Carbon tetrachloride	0.460	
108-90-7	Chlorobenzene	0.473	
67-66-3	Chloroform	0.493	
107-06-2	1,2-Dichloroethane	0.519	
75-35-4	1,1-Dichloroethene	0.443	
127-18-4	Tetrachloroethene	0.450	
79-01-6	Trichloroethene	0.458	
75-01-4	Vinyl chloride	0.508	

Data File: /var/chem/hp4.1/40614d.b/4061405.d
Date: 14-JUN-2000 13:47
Client ID: DF/S1/0159/SDC/009
Sample Info: c0f080328-002.ms (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column phase: DB 624

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



Data File: /var/chem/hp4.i/40614d.b/4061405.d
 Report Date: 14-Jun-2000 14:05

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STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40614d.b/4061405.d
 Lab Smp Id: DEEHP10L Client Smp ID: DF/S1/0159/SDC/009
 Inj Date : 14-JUN-2000 13:47
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0f080328-002 ms (1ml/10ml)/5ml
 Misc Info : deehp101,40614d.b
 Comment :
 Method : /var/chem/hp4.i/40614d.b/8260bh2o.m
 Meth Date : 14-Jun-2000 12:05 h Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 9 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 3.40
 Processing Host: hpuxcs21

Ks 6/14/00

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	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
								ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	7.002	6.998	(1.000)	674108				
* 69 Chlorobenzene-d5	119	10.126	10.122	(1.000)	155880				
* 92 1,4-Dichlorobenzene-d4	152	12.455	12.458	(1.000)	232712				
\$ 43 1,2-Dichloroethane-d4	65	6.690	6.687	(0.955)	147625	283.973	56.79		
\$ 39 Dibromofluoromethane	113	6.287	6.289	(0.898)	131916	268.901	53.78		
\$ 59 Toluene-d8	98	8.653	8.649	(0.855)	633326	262.656	52.53		
\$ 80 Bromofluorobenzene	95	11.306	11.308	(1.117)	226298	241.264	48.25		
3 Vinyl Chloride	62	1.738	1.741	(0.248)	165473	253.803	50.76		
12 1,1-Dichloroethene	96	3.047	3.013	(0.435)	101146	221.554	44.31		
31 2 Butanone	43	5.785	5.800	(0.826)	104577	182.007	36.40		
37 Chloroform	83	6.091	6.088	(0.870)	232587	246.464	49.29		
41 Carbon Tetrachloride	117	6.366	6.357	(0.909)	130977	230.085	46.02		
42 Benzene	78	6.654	6.644	(0.950)	643063	238.743	47.75		
45 1,2-Dichloroethane	62	6.776	6.772	(0.968)	170941	259.290	51.86		
47 Trichloroethene	130	7.387	7.384	(1.055)	149009	228.782	45.76		

660 877

Data File: /var/chem/hp4.i/40614d.b/4061405.d
Report Date: 14-Jun-2000 14:05

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Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ng)	(UG/L)	
=====	====	==	=====	=====	=====	=====	=====	
65 Tetrachloroethene	164	9 240	9 236	(0 912)	104992	224 961	44 99	
70 Chlorobenzene	112	10 150	10 153	(1 002)	447365	236 469	47 29	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix (soil/water) SOLID Lab Sample ID: C0F080328 002
Method: SW846 8260B
 Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 06/08/00
Work Order. DEEHP10M Date Extracted: 06/14/00
Dilution factor: 1 Date Analyzed: 06/14/00
Moisture %: 18

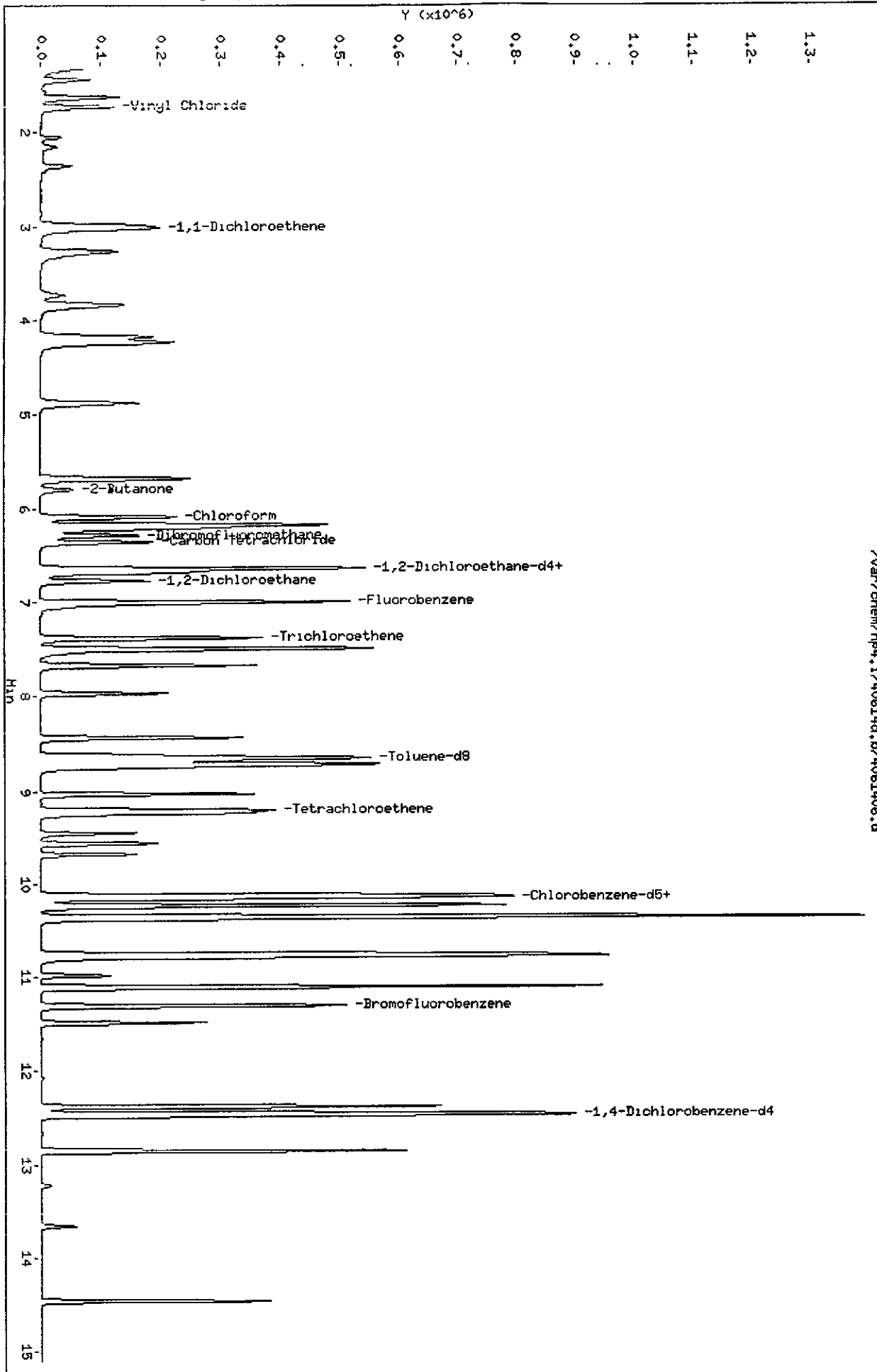
QC Batch: 0166201

Client Sample Id: DF/S1/0159/SDC/009

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.476	
78-93-3	2-Butanone	0.350	
56-23-5	Carbon tetrachloride	0.481	
108-90-7	Chlorobenzene	0.470	
67-66-3	Chloroform	0.485	
107-06-2	1,2-Dichloroethane	0.502	
75-35-4	1,1-Dichloroethene	0.446	
127-18-4	Tetrachloroethene	0.456	
79-01-6	Trichloroethene	0.461	
75-01-4	Vinyl chloride	0.525	

Data File: /var/chem/hp4.i/40614d.b/4061406.d
Date: 14-JUN-2000 14:11
Client ID: DF/SL/0159/SDC/009
Sample Info: c0f080328-002.msd (1ml/10ml)/5ml
Volume Injected (uL): 5.0
Column phase: DB 624

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



Data File: /var/chem/hp4.i/40614d.b/4061406.d

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Report Date: 14-Jun-2000 14:30

STL-PITTSBURGH

VOLATILE REPORT SW-846 Method

Data file : /var/chem/hp4.i/40614d.b/4061406.d
 Lab Smp Id: DEEHP10M Client Smp ID: DF/S1/0159/SDC/009
 Inj Date : 14-JUN-2000 14:11
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0f080328-002 msd (1ml/10ml)/5ml
 Misc Info : deehp10m,40614d.b
 Comment :
 Method : /var/chem/hp4.i/40614d.b/8260bh2o.m
 Meth Date : 14-Jun-2000 12:05 h Quant Type: ISTD
 Cal Date : 06-JUN-2000 12:18 Cal File: 4c40606.d
 Als bottle: 10 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 3.40
 Processing Host: hpuxcs21

6/14/00

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 MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	7.005	6 998	(1.000)	665003		
* 69 Chlorobenzene-d5	119	10.123	10 122	(1 000)	159226		
* 92 1,4-Dichlorobenzene-d4	152	12.458	12.458	(1 000)	238408		
\$ 43 1,2-Dichloroethane-d4	65	6.687	6 687	(0 955)	139289	271.606	54 32
\$ 39 Dibromofluoromethane	113	6.290	6 289	(0 898)	127674	263 818	52 76
\$ 59 Toluene-d8	98	8 649	8 649	(0.854)	633741	257 307	51.46
\$ 80 Bromofluorobenzene	95	11.309	11 308	(1 117)	234569	244.827	48 96
3 Vinyl Chloride	62	1.741	1 741	(0.249)	168868	262.557	52.51
12 1,1-Dichloroethene	96	3.019	3 013	(0 431)	100470	223.086	44.62
31 2-Butanone	43	5.794	5 800	(0 827)	99189	174 993	35 00
37 Chloroform	83	6 094	6 088	(0 870)	225598	242 331	48 47
41 Carbon Tetrachloride	117	6 357	6 357	(0 907)	134994	240 388	48 08
42 Benzene	78	6 644	6 644	(0 949)	632835	238 163	47 63
45 1,2-Dichloroethane	62	6 773	6 772	(0 967)	163396	251 239	50 25
47 Trichloroethene	130	7 384	7 384	(1 054)	148201	230 656	46 13

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Data File: /var/chem/hp4.i/40614d.b/4061406.d
Report Date: 14-Jun-2000 14:30

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Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ng)	(UG/L)	
*****	****	==	=====	=====	*****	=====	*****	
65 Tetrachloroethene	164	9.236	9.236	(0.912)	108578	227.756	45.55	
70 Chlorobenzene	112	10.153	10.153	(1.003)	454544	235.215	47.04	

**GC/MS VOLATILE
MISCELLANEOUS**

Analyst: Ko

Reviewed by:

Date:

Method No.: 8260-H2O

Instrument ID:

Methanol Lot No.:

Sid.: 192-184-11 BFD

Sid.: 192-186-9 DWT

Sid.: 192-186-16 SW

Sid.: 192-187-10 K&L

Sid.: 192-184-1 C/LHMS

Sid.: 192-182-4 200V3

Sid.: 192-183-6 V&J Ach

Sid.: 192-184-2 V&A

Date	Run No.	Lot No./ Sample No.	Vol./Wt	pH	Port No.	Comments
6/6/00	1. 13F406062	BFD	1.0			905
	2. CC406062	VSTD30	5.0			VE, 11-Dec-1
	3. 1C406062	VSTD30 Bonus	5.0			
	4. 2C406062	VSTD30	5.0			
	5. CF40606	BFD	1.0			1058
	6. 4A40606	V STD5	5.0			
	7. 4B40606	VSTD20	5.0			
	8. 4C40606	VSTD50	5.0			
	9. 4D40606	VSTD100	5.0			
	10. 4E40606	VSTD200	5.0			
	11.					
	12.					
	13.					
	14.					
	15.					
	16.					
	17.					
	18.					
	19.					
	20.					
	21.					
	22.					

GCMS Volatile**Run Log**Method: GC/MS-ALV

Inst. ID



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

Analyst K. J. P.J.

Reviewed by:

Date:

Std: 192-180-11 GC/MS Std: 192-180-10 SwStd: 192-184-1 GC/MS Std: 192-182-10 MSStd: 192-180-9 DUTStd: 192-183-10 KetchStd: 192-184-2 VCA

Std:

Std:

Date	File ID	Lot No./Sample No.	Vol./Wt.	pH	Port#	Comments
1/14/00	1. BF40614	GF0	1.0			1105
	2. 1040614	VRDS	5.0			
	3. 4061401	PB GLC COF070184	(1.0/1.0) 5.0	5		
	4. 4061402	PB GLC COF080184	(1.0/1.0) 5.0	5		
	5. 4061403	COF070184-006	(1.0/1.0) 5.0	5		
	6. 4061404	COF050328-002	(1.0/1.0) 5.0	5		
	7. 4061405	COF080328-002 MS	(1.0/1.0) 5.0	5		
	8. 4061406	COF080328-002 MID	(1.0/1.0) 5.0	5		
	9. 4061407	BLK MS	(1.0/1.0) 5.0	5		
	10. 4061408	COF070184-007	(1.0/1.0) 5.0	5		
	11. 4061409	COF080328-001	(1.0/1.0) 5.0	5		
	12. 4061410	COF080184-001	(1.0/1.0) 5.0	6		
	13. 4061411	VBK	(1.0/1.0) 5.0			
	14. 4061412	BLK MS	(1.0/1.0) 5.0			
	15. 4061413	BLK MS	(1.0/1.0) 5.0			
	16. 4061414	COF080184-001	(1.0/1.0) 5.0			
	17.					
	18.					
	19.					
	20.					
	21.					
	22.					

ZHE Leachate Worksheet

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, PA 15238

(Method 1311)

Ph Buffer 4 4.00
Ph Buffer 7 7.01
Ph Buffer 10 10.03

F016501

 **Quanterra**
TCLP Ph - 4.94 Pittsburgh

Temp: 22

Lab Sample ID #	Client ID Ph	Weight (gm)	Vessel	Extraction Fluid No. / Volume	On			Off		
					Date	Time	Initials	Date	Time	Initials
1 C0F080184	B1K	4.91	JT	TCLP #1	6/13/2000	09:50	WT	6/14/2000	06:15	WT
2 ↓	001	6.48	22	↓	↓	↓	↓	↓	↓	↓
3 C0F080328	001	5.03	SS	↓	↓	↓	↓	↓	↓	↓
4 ↓	002	5.05	AA	↓	↓	↓	↓	↓	↓	↓
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

Extract(s) (Record line number from above)

Date: 6/14/2000 Time: 07:05 Analyst: B. Stewart Location: Dng Proc Cell 1 Date: 6/14/2000 Time: 07:10 Analyst: B. Stewart Location: CLP-01

Revised by: James McAllister Date: 6-14-00

STL Pittsburgh

PSR024 6/13/00 6:14:43 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>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
10B	DED5F-1-02	___	239772	366694	A-58-QK	COF080184	001		SOLID	0	4 1
10C CLP1	DEEHC-1-02	___	239773	399411	A-58-QK	COF080328	001		SOLID	0	3 1
10C CLP1	DEEHP-1-02	___	239774	399411	A-58-QK	COF080328	002		SOLID	0	3 1

RELINQUISHED BYRECEIVED BYDATE/TIME

ACM
B Trout

B Trout
ACM

6/13/2000 08:05
6/13/2000 0809:30

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

660 887

GC/MS SEMIVOLATILE DATA

**GC/MS SEMIVOLATILE
QC SUMMARY**

660 889

SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT QESSDG:

Lot #: C0F080328

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	DF/S1/0159/SDC/008	68	62	79	59	73	74	00
02	DF/S1/0159/SDC/009	59	55	73	53	63	68	00
03	METHOD BLK. DEJH7101	72	69	78	68	76	69	00
04	LCS DEJH7102	66	61	63	65	73	61	00
05	DF/S1/0159/SDC/008 D	53	50	80	47	57	60	00
06	DF/S1/0159/SDC/008 S	54	50	80	50	59	59	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

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0159/SDC/008

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHC10M

BATCH: 0164286

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.250	ND	0.133	53	18 - 110	
2,4-Dinitrotoluene	0.250	ND	0.136	54	31 - 131	
Hexachlorobenzene	0.250	ND	0.178	71	36 - 132	
Hexachlorobutadiene	0.250	ND	0.121	48	18 - 116	
Hexachloroethane	0.250	ND	0.125	50	18 - 110	
Nitrobenzene	0.250	ND	0.134	54	10 - 211	
Pentachlorophenol	0.250	ND	0.169	68	10 - 140	
Pyridine	0.250	ND	0.116	46	10 - 148	
2,4,5-Trichlorophenol	0.250	ND	0.143	57	24 - 143	
2,4,6-Trichlorophenol	0.250	ND	0.138	55	36 - 135	
Cresols (total)	0.750	ND	0.462	62	25 - 144	

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 11 outside limits

COMMENTS:

660 891

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0159/SDC/008

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHC10N

BATCH: 0164286

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS			QUAL
			% REC	% RPD	RPD	REC		
1,4-Dichlorobenzene	0.250	0.128	51	3.8	36	18 - 110		
2,4-Dinitrotoluene	0.250	0.137	55	0.73	32	31 - 131		
Hexachlorobenzene	0.250	0.181	72	1.7	22	36 - 132		
Hexachlorobutadiene	0.250	0.119	48	1.7	32	18 - 116		
Hexachloroethane	0.250	0.123	49	1.6	33	18 - 110		
Nitrobenzene	0.250	0.130	52	3.0	50	10 - 211		
Pentachlorophenol	0.250	0.174	70	2.9	56	10 - 140		
Pyridine	0.250	0.112	45	3.5	65	10 - 148		
2,4,5-Trichlorophenol	0.250	0.145	58	1.4	22	24 - 143		
2,4,6-Trichlorophenol	0.250	0.138	55	0.0	27	36 - 135		
Cresols (total)	0.750	0.442	59	4.4	33	25 - 144		

NOTES (S) :

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

RPD: 0 out of 11 outside limits
 Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F120000

WO #: DEJH7102

BATCH: 0164286

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.250	0.169	68	28 - 110	
2,4-Dinitrotoluene	0.250	0.145	58	47 - 131	
Hexachlorobenzene	0.250	0.152	61	57 - 128	
Hexachlorobutadiene	0.250	0.161	64	36 - 116	
Hexachloroethane	0.250	0.170	68	30 - 110	
Nitrobenzene	0.250	0.160	64	45 - 130	
Pentachlorophenol	0.250	0.166	66	10 - 140	
Pyridine	0.250	0.163	65	10 - 148	
2,4,5-Trichlorophenol	0.250	0.162	65	41 - 125	
2,4,6-Trichlorophenol	0.250	0.158	63	46 - 135	
Cresols (total)	0.750	0.552	74	29 - 144	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

660 893

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DEJH7101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: F0614003.

Lot Number: C0F080328

Date Analyzed: 06/14/00

Time Analyzed: 14:49

Matrix: SOLID

Date Extracted: 06/12/00

GC Column: HP5MS ID: .25

Extraction Method: 1311/3520C

Instrument ID: 722

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/S1/0159/SDC/008	DEEHC10M S	F0614005.	06/14/00	15:58
02	DF/S1/0159/SDC/008	DEEHC10N D	F0614006.	06/14/00	16:32
03	DF/S1/0159/SDC/008	DEEHC103	F0614007.	06/14/00	17:07
04	DF/S1/0159/SDC/009	DEEHP103	F0614008.	06/14/00	17:41
05	CHECK SAMPLE	DEJH7102 C	F0614004.	06/14/00	15:24
06					
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

5B
SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

660 894

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Lab File ID: F0607DF1

DFTPP Injection Date: 06/07/00

Instrument ID: 722

DFTPP Injection Time: 0956

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	39.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	52.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	18.4
365	Greater than 1.0% of mass 198	2.3
441	Present, but less than mass 443	9.4
442	40.0 - 100.0% of mass 198	56.8
443	17.0 - 23.0% of mass 442	11.2 (19.7)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	F06070C2	06/07/00	1046
02	SSTD020	SSTD020	F06070C3	06/07/00	1120
03	SSTD080	SSTD080	F06070C4	06/07/00	1154
04	SSTD120	SSTD120	F06070C5	06/07/00	1228
05	SSTD160	SSTD160	F06070C6	06/07/00	1302
06					
07					
08					
09					
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11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: DUNN FIELD

Lab File ID: F0614DF1

DFTPP Injection Date: 06/14/00

Instrument ID: 722

DFTPP Injection Time: 1250

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	32.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	35.3
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	50.3
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	6.3
275	10.0 - 30.0% of mass 198	18.9
365	Greater than 1.0% of mass 198	1.40
441	Present, but less than mass 443	8.4
442	40.0 - 100.0% of mass 198	52.4
443	17.0 - 23.0% of mass 442	9.9 (18.8)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	SSTD050	F06140C1	06/14/00	1307
02	INTRA-LAB BL	F0614003	06/14/00	1449
03	INTRA-LAB CH	F0614004	06/14/00	1524
04	DF/S1/0159/S	F0614005	06/14/00	1558
05	DF/S1/0159/S	F0614006	06/14/00	1632
06	DF/S1/0159/S	F0614007	06/14/00	1707
07	DF/S1/0159/S	F0614008	06/14/00	1741
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: DUNN FIELD

Lab File ID (Standard): F06140C1

Date Analyzed: 06/14/00

Instrument ID: 722

Time Analyzed: 1307

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	180567	5.12	730246	6.67	405705	9.73
UPPER LIMIT	361134	5.62	1460492	7.17	811410	10.23
LOWER LIMIT	90284	4.62	365123	6.17	202853	9.23
CLIENT						
SAMPLE NO.						
01 INTRA-LAB BL	165210	5.11	676667	6.66	403252	9.71
02 INTRA-LAB CH	185412	5.12	788486	6.67	489299	9.73
03 DF/S1/0159/S	160766	5.12	671124	6.67	411189	9.73
04 DF/S1/0159/S	174362	5.12	718347	6.67	430815	9.73
05 DF/S1/0159/S	172297	5.11	703703	6.66	426454	9.71
06 DF/S1/0159/S	182546	5.12	753239	6.68	450381	9.73
07						
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:

Case No.:

SAS No.:

SDG No.: DUNN FIELD

Lab File ID (Standard): F06140C1

Date Analyzed: 06/14/00

Instrument ID: 722

Time Analyzed: 1307

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	707454	13.04	580168	19.68	570934	23.05
UPPER LIMIT	1414908	13.54	1160336	20.18	1141868	23.55
LOWER LIMIT	353727	12.54	290084	19.18	285467	22.55
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	725292	13.03	646623	19.67	681943	23.03
02 INTRA-LAB CH	885588	13.06	810738	19.69	848942	23.06
03 DF/S1/0159/S	742532	13.05	665444	19.68	683819	23.05
04 DF/S1/0159/S	774735	13.05	698614	19.69	713060	23.05
05 DF/S1/0159/S	773171	13.03	705352	19.66	715824	23.03
06 DF/S1/0159/S	812468	13.05	733723	19.69	750977	23.05
07						
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.

**GC/MS SEMIVOLATILE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEEHC103

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

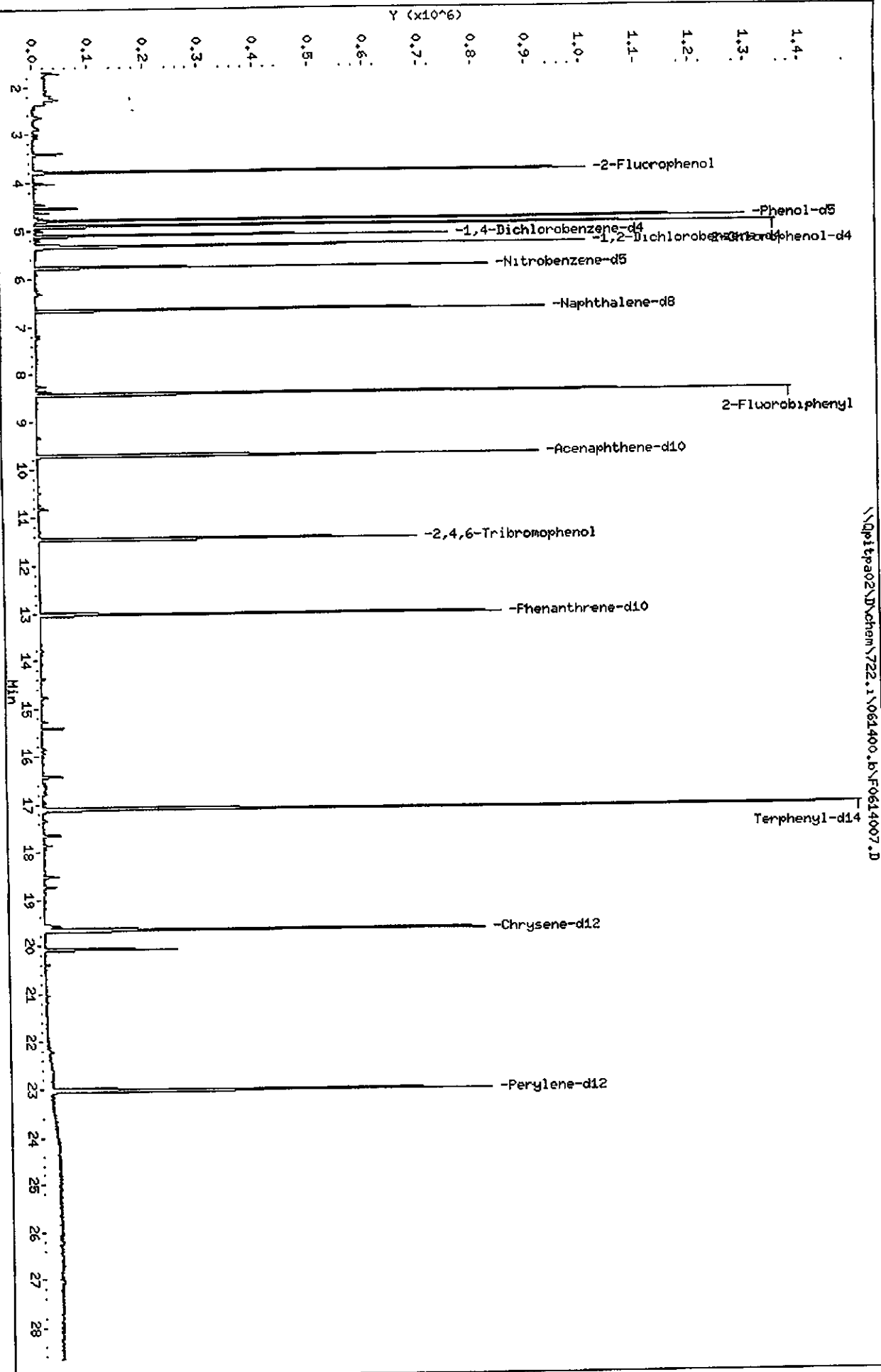
QC Batch: 0164286

Client Sample Id: DF/S1/0159/SDC/008

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: \\Opitpa02\chem\722.1\061400.b\F0614007.D
Date: 14-JUN-2000 17:07
Client ID: DF/S1/0159/SDC/008
Sample Info: C0F080328-001 6/12/00 TCLP
Volume Injected (uL): 2.0
Column phase: He5-MS

Instrument: 722.i
Operator: 007062
Column diameter: 0.25



Data File: \\Opitpa02\D\chem\722.i\061400.b\F0614007.D
Report Date: 15-Jun-2000 05:47

STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Opitpa02\D\chem\722.i\061400.b\F0614007.D
Lab Smp Id: DEEHC103 Client Smp ID: DF/S1/0159/SDC/008
Inj Date : 14-JUN-2000 17:07
Operator : 007062 Inst ID: 722.i
Smp Info : C0F080328-001 6/12/00 TCLP
Misc Info : deehc103,061400.b,8270b.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\722.i\061400.b\8270b.m
Meth Date : 15-Jun-2000 05:22 bungardf Quant Type: ISTD
Cal Date : 07-JUN-2000 13:02 Cal File: F06070C6.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tclp.sub
Target Version: 4.04
Processing Host: PITPC083

10B
6/15/00

Concentration Formula: Amt * DF * Uf * Vt/(Vo * 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		
		QUANT SIG					ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(NG)	(mg/L)
=====		=====	==	=====	=====	=====	=====	=====
*	1 1,4-Dichlorobenzene-d4	152	5.110	5.115	(1.000)	172297	40.0000	
*	2 Naphthalene-d8	136	6.659	6.669	(1.000)	703703	40.0000	
*	3 Acenaphthene-d10	164	9.709	9.725	(1.000)	426454	40.0000	
*	4 Phenanthrene-d10	188	13.027	13.042	(1.000)	773171	40.0000	
*	5 Chrysene-d12	240	19.662	19.683	(1.000)	705352	40.0000	
*	6 Perylene-d12	264	23.032	23.053	(1.000)	715824	40.0000	
	9 Pyridine	79	Compound Not Detected.					
	27 1,4-Dichlorobenzene	146	Compound Not Detected.					
M	195 Cresols, total	100	Compound Not Detected.					
	30 2-Methylphenol	108	Compound Not Detected.					
	192 4-Methylphenol	108	Compound Not Detected.					
	193 3-Methylphenol	108	Compound Not Detected.					
	34 Hexachloroethane	117	Compound Not Detected.					
	35 Nitrobenzene	77	Compound Not Detected.					

Data File: \\Qpitpa02\D\chem\722.i\061400.b\F0614007.D
 Report Date: 15-Jun-2000 05:47

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
=====	----	--	-----	-----	-----	-----	-----
56 Hexachlorobutadiene	224				Compound Not Detected.		
66 2,4,6-Trichlorophenol	196				Compound Not Detected		
67 2,4,5-Trichlorophenol	196				Compound Not Detected		
87 2,4-Dinitrotoluene	165				Compound Not Detected.		
107 Hexachlorobenzene	283				Compound Not Detected.		
111 Pentachlorophenol	265				Compound Not Detected.		
\$ 154 Nitrobenzene-d5	82	5.772	5.777	(0.867)	389257	68.0043	0.170 (a)
\$ 155 2-Fluorobiphenyl	172	8.411	8.421	(0.866)	801339	61.5817	0.154 (a)
\$ 156 Terphenyl-d14	244	17.103	17.108	(0.870)	1219824	78.7277	0.197 (a)
\$ 157 Phenol-d5	99	4.784	4.789	(0.936)	748466	109.888	0.275 (a)
\$ 158 2-Fluorophenol	112	3.779	3.779	(0.740)	490578	89.1227	0.223 (a)
\$ 159 2,4,6-Tribromophenol	330	11.461	11.466	(0.880)	152963	111.174	0.278 (a)
\$ 186 2-Chlorophenol-d4	132	4.907	4.906	(0.960)	606169	114.287	0.286 (a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.323	5.323	(1.042)	239782	64.8286	0.162 (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: C0F080328 002

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEEHP103

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 18

QC Batch: 0164286

Client Sample Id: DF/S1/0159/SDC/009

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: \\Qp1tpa02\\N\\chem\\722.1\\061400.b\\F0614008.D

Date: 14-JUN-2000 17:41

Client ID: DF/SL/0159/SDC/009

Sample Info: COF080328-002 6/12/00 TCLP

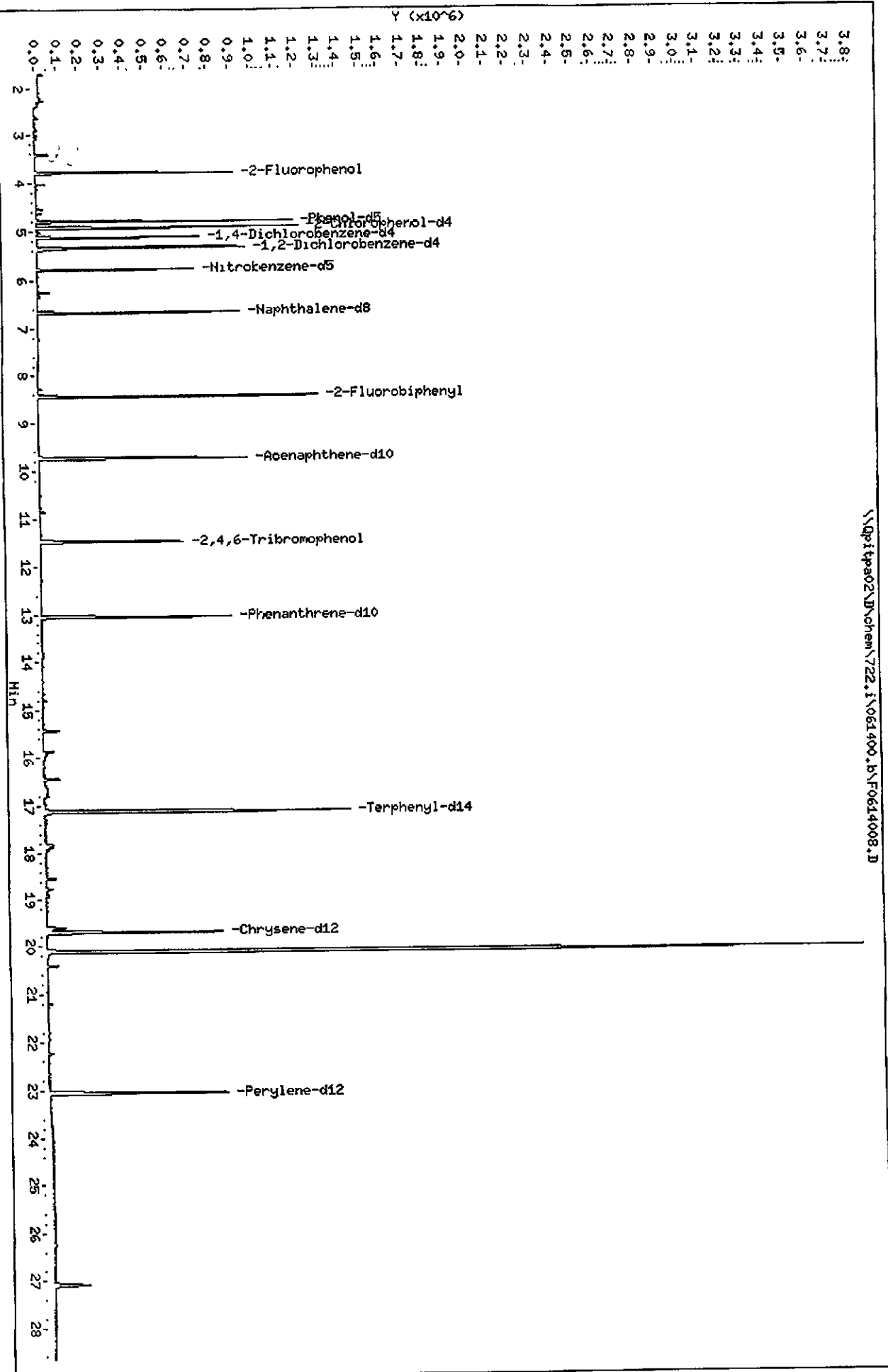
Volume Injected (uL): 2.0

Column phase: Hp5-HS

Instrument: 722.1

Operator: 007062

Column diameter: 0.25



Data File: \\Qpitpa02\D\chem\722.i\061400.b\F0614008.D
 Report Date: 15-Jun-2000 05:47

STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\722.i\061400.b\F0614008.D
 Lab Smp Id: DEEHP103 Client Smp ID: DF/S1/0159/SDC/009
 Inj Date : 14-JUN-2000 17:41
 Operator : 007062 Inst ID: 722.i
 Smp Info : C0F080328-002 6/12/00 TCLP
 Misc Info : deehp103,061400.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\061400.b\8270b.m
 Meth Date : 15-Jun-2000 05:22 bungardf Quant Type: ISTD
 Cal Date : 07-JUN-2000 13:02 Cal File: F06070C6.D
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC083

KBB
6/15/00

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

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
*****	----	--	-----	-----	-----	-----	-----
* 1 1,4-Dichlorobenzene-d4	152	5.121	5 115	(1.000)	182546	40.0000	(Q)
* 2 Naphthalene-d8	136	6.675	6 669	(1 000)	753239	40.0000	
* 3 Acenaphthene-d10	164	9 731	9 725	(1.000)	450381	40 0000	
* 4 Phenanthrene-d10	188	13.048	13.042	(1.000)	812468	40.0000	
* 5 Chrysene-d12	240	19.689	19.683	(1.000)	733723	40 0000	
* 6 Perylene-d12	264	23 054	23 053	(1 000)	750977	40.0000	
9 Pyridine	79	Compound Not Detected					
27 1,4-Dichlorobenzene	146	Compound Not Detected.					
M 195 Cresols, total	100	Compound Not Detected.					
30 2-Methylphenol	108	Compound Not Detected					
192 4-Methylphenol	108	Compound Not Detected.					
193 3-Methylphenol	108	Compound Not Detected.					
34 Hexachloroethane	117	Compound Not Detected.					
35 Nitrobenzene	77	Compound Not Detected.					

Data File: \\Qpitpa02\D\chem\722.i\061400.b\F0614008.D
 Report Date: 15-Jun-2000 05:47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
56 Hexachlorobutadiene	224				Compound Not Detected.		
66 2,4,6-Trichlorophenol	196				Compound Not Detected.		
67 2,4,5-Trichlorophenol	196				Compound Not Detected.		
87 2,4-Dinitrotoluene	165				Compound Not Detected.		
107 Hexachlorobenzene	283				Compound Not Detected.		
111 Pentachlorophenol	265				Compound Not Detected.		
\$ 154 Nitrobenzene-d5	82	5.783	5.777	(0.866)	360167	58.7842	0.147(a)
\$ 155 2-Fluorobiphenyl	172	8.428	8.421	(0.866)	760325	55.3257	0.138(a)
\$ 156 Terphenyl-d14	244	17.119	17.108	(0.869)	1180443	73.2401	0.183(a)
\$ 157 Phenol-d5	99	4.795	4.789	(0.936)	686174	95.0862	0.238(a)
\$ 158 2-Fluorophenol	112	3.785	3.779	(0.739)	461314	79.1011	0.198(a)
\$ 159 2,4,6-Tribromophenol	330	11.478	11.466	(0.880)	148158	102.473	0.255(a)
\$ 186 2-Chlorophenol-d4	132	4.918	4.906	(0.960)	565748	100.678	0.252(a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.334	5.323	(1.042)	227983	58.1779	0.145(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

660 907

**GC/MS SEMIVOLATILE
CALIBRATION DATA**

6B
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

660 908

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Instrument ID: 722

Calibration Date(s): 06/07/00

Min RRF for SPCC(#) = 0.050

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:		RRF1 =F06070C3.D	RRF2 =F06070C2.D				
RRF3 =F06070C4.D		RRF4 =F06070C5.D	RRF5 =F06070C6.D				
COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	RRF	% RSD
Phenol	1.938	1.841	1.804	1.617	1.481	1.736	10.6*
bis(2-Chloroethyl) ether	1.442	1.416	1.398	1.310	1.254	1.364	5.8
2-Chlorophenol	1.453	1.402	1.410	1.310	1.262	1.367	5.7
1,3-Dichlorobenzene	1.600	1.572	1.529	1.431	1.367	1.500	6.5
1,4-Dichlorobenzene	1.615	1.566	1.540	1.433	1.353	1.501	7.1*
1,2-Dichlorobenzene	1.515	1.448	1.419	1.287	1.202	1.374	9.2
2-Methylphenol	1.294	1.284	1.295	1.220	1.187	1.256	4.0
2,2'-oxybis(1-Chloropropane	1.657	1.627	1.626	1.550	1.478	1.588	4.6
4-Methylphenol	1.353	1.301	1.272	1.138	1.054	1.224	10.1
Hexachloroethane	0.564	0.566	0.560	0.528	0.513	0.546	4.4
Nitrobenzene	0.348	0.348	0.348	0.330	0.321	0.339	3.7
Isophorone	0.615	0.612	0.617	0.583	0.576	0.601	3.3
2-Nitrophenol	0.176	0.181	0.194	0.191	0.192	0.187	4.2*
2,4-Dimethylphenol	0.316	0.325	0.327	0.313	0.304	0.317	3.0
bis(2-Chloroethoxy) methane	0.416	0.408	0.409	0.386	0.376	0.399	4.3
N-Nitroso-di-n-propylamine	0.918	0.906	0.916	0.874	0.868	0.896	2.6#
2,4-Dichlorophenol	0.284	0.284	0.285	0.272	0.265	0.278	3.2*
1,2,4-Trichlorobenzene	0.303	0.294	0.294	0.278	0.271	0.288	4.5
Naphthalene	1.118	1.080	1.051	0.966	0.906	1.024	8.4
4-Chloroaniline	0.435	0.433	0.440	0.416	0.404	0.426	3.6
Hexachlorobutadiene	0.146	0.144	0.145	0.136	0.132	0.141	4.5*
4-Chloro-3-Methylphenol	0.278	0.278	0.292	0.280	0.279	0.281	2.1*
2-Methylnaphthalene	0.714	0.697	0.689	0.642	0.614	0.671	6.2
Hexachlorocyclopentadiene	0.315	0.332	0.328	0.319	0.321	0.323	2.1#
2,4,6-Trichlorophenol	0.328	0.333	0.344	0.330	0.327	0.332	2.1*
2,4,5-Trichlorophenol	0.354	0.354	0.361	0.353	0.351	0.355	1.0
2-Chloronaphthalene	1.159	1.140	1.100	1.012	0.967	1.076	7.7
2-Nitroaniline	0.271	0.290	0.307	0.302	0.308	0.296	5.2
Dimethylphthalate	1.244	1.256	1.271	1.216	1.213	1.240	2.0
Acenaphthylene	1.858	1.834	1.815	1.694	1.639	1.768	5.4
2,6-Dinitrotoluene	0.248	0.259	0.277	0.273	0.278	0.267	4.8
3-Nitroaniline	0.318	0.332	0.359	0.350	0.358	0.343	5.2
Acenaphthene	1.169	1.163	1.151	1.074	1.050	1.121	4.9*
2,4-Dinitrophenol	0.084	0.119	0.146	0.156	0.174	0.136	26.0#
4-Nitrophenol	0.119	0.135	0.146	0.145	0.151	0.139	9.2#
Dibenzofuran	1.631	1.586	1.585	1.482	1.449	1.547	5.0
2,4-Dinitrotoluene	0.313	0.337	0.372	0.370	0.385	0.355	8.3

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Instrument ID: 722

Calibration Date(s): 06/07/00

Min $\overline{RRF}$ for SPCC(#) = 0.050

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:		RRF1	=F06070C3.D	RRF2	=F06070C2.D	
RRF3		=F06070C4.D	RRF4	=F06070C5.D	RRF5	=F06070C6.D

COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	RRF	% RSD
Diethylphthalate	1.188	1.216	1.258	1.181	1.175	1.204	2.8
4-Chlorophenyl-phenylether	0.563	0.554	0.565	0.531	0.518	0.546	3.8
Fluorene	1.303	1.288	1.285	1.190	1.155	1.244	5.4
4-Nitroaniline	0.310	0.329	0.360	0.351	0.363	0.343	6.5
4,6-Dinitro-2-methylphenol	0.086	0.103	0.120	0.126	0.132	0.113	16.4
N-Nitrosodiphenylamine (1)*	0.576	0.571	0.564	0.547	0.533	0.558	3.2*
4-Bromophenyl-phenylether	0.172	0.174	0.174	0.167	0.164	0.170	2.6
Hexachlorobenzene	0.170	0.168	0.171	0.165	0.164	0.168	1.8
Pentachlorophenol	# 0.090	0.105	0.115	0.118	0.120	0.110	10.9#
Phenanthrene	1.078	1.074	1.059	1.002	0.970	1.037	4.7
Anthracene	1.082	1.102	1.097	1.040	1.000	1.064	4.1
Carbazole	1.009	1.026	1.035	0.995	0.976	1.008	2.3
Di-n-Butylphthalate	1.101	1.202	1.231	1.177	1.163	1.175	4.1
Fluoranthene	* 0.982	1.028	1.057	1.009	1.002	1.016	2.8*
Pyrene	1.323	1.323	1.304	1.261	1.247	1.292	2.7
Butylbenzylphthalate	0.581	0.638	0.645	0.650	0.662	0.635	4.9
3,3'-Dichlorobenzidine	0.375	0.410	0.406	0.409	0.412	0.402	3.8
Benzo (a) Anthracene	1.054	1.115	1.132	1.115	1.133	1.110	2.9
Chrysene	1.040	1.057	1.066	1.061	1.069	1.059	1.1
bis (2-ethylhexyl) Phthalate	0.783	0.885	0.895	0.897	0.907	0.873	5.8
Di-n-octylphthalate	* 1.584	1.774	1.790	1.732	1.626	1.701	5.4*
Benzo (b) fluoranthene	1.153	1.197	1.276	1.242	1.437	1.261	8.6
Benzo (k) fluoranthene	1.366	1.367	1.355	1.190	0.924	1.240	15.5
Benzo (a) pyrene	* 1.085	1.156	1.194	1.176	1.168	1.156	3.6*
Indeno (1,2,3-cd) pyrene	1.277	1.395	1.447	1.480	1.504	1.421	6.3
Dibenz (a,h) anthracene	1.102	1.203	1.266	1.285	1.298	1.231	6.6
Benzo (g,h,i) perylene	1.065	1.185	1.240	1.266	1.314	1.214	7.8
Pyridine	1.266	1.230	1.220	1.161	1.135	1.202	4.4
N-Nitrosodimethylamine	0.686	0.674	0.674	0.632	0.605	0.654	5.3
Aniline	2.325	2.196	2.157	1.965	1.818	2.092	9.6
Benzyl Alcohol	0.988	0.975	0.960	0.922	0.892	0.947	4.2
Benzoic Acid	0.078	0.134	0.169	0.185	0.211	0.155	33.1
2,3,4,6-Tetrachlorophenol	0.254	0.260	0.263	0.255	0.249	0.256	2.1
2,3,5,6-Tetrachlorophenol	0.244	0.252	0.266	0.263	0.263	0.258	3.5
1,2-Diphenylhydrazine	0.767	0.790	0.761	0.739	0.719	0.755	3.6

(1) Cannot be separated from Diphenylamine

Contract:

Lab Code:

Case No. :

SAS No.:

SDG No. :

Instrument ID: 722

Calibration Date(s) : 06/07/00

Min $\overline{\text{RRF}}$ for SPCC(♯) = 0.050

Max %RSD for CCC(*) = 30.0%

[illegible]

660 911

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
Lab File ID: F06070C6.D
Analysis Type: NONE

Injection Date: 07-JUN-2000 13:02
Lab Sample ID: sstd160
Method File: \\QPITPA02\D\chem\722.i\060700.b\

COMPOUND	%RSD
=====	=====
Benzo(a)pyrene	3.6
Indeno(1,2,3-cd)pyrene	6.3
Dibenz(a,h)anthracene	6.6
Benzo(g,h,i)perylene	7.8

The average of all %RSD's in the initial calibration is 5.8

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
Lab File ID: F06070C6.D
Analysis Type: NONE

Injection Date: 07-JUN-2000 13:02
Lab Sample ID: sstd160
Method File: \\QPITPA02\D\chem\722.i\060700.b\

COMPOUND	%RSD
N-Nitrosodimethylamine	5.3
Pyridine	4.4
2-Fluorophenol	5.3
Phenol-d5	7.9
Phenol	10.6
Aniline	9.6
bis(2-Chloroethyl)ether	5.8
2-Chlorophenol-d4	5.7
2-Chlorophenol	5.7
1,3-Dichlorobenzene	6.5
1,4-Dichlorobenzene	7.1
Benzyl Alcohol	4.2
1,2-Dichlorobenzene-d4	7.8
1,2-Dichlorobenzene	9.2
2-Methylphenol	4.0
2,2'-oxybis(1-Chloropropane)	4.6
4-Methylphenol	10.1
N-Nitroso-di-n-propylamine	2.6
Hexachloroethane	4.4
Nitrobenzene-d5	2.5
Nitrobenzene	3.7
Isophorone	3.3
2-Nitrophenol	4.2
2,4-Dimethylphenol	3.0
bis(2-Chloroethoxy)methane	4.3
Benzoic Acid	33.1
2,4-Dichlorophenol	3.2
1,2,4-Trichlorobenzene	4.5
Naphthalene	8.4
4-Chloroaniline	3.6
Hexachlorobutadiene	4.5
4-Chloro-3-Methylphenol	2.1
2-Methylnaphthalene	6.2
1-Methylnaphthalene	6.4
Hexachlorocyclopentadiene	2.1
2,4,6-Trichlorophenol	2.1
2,4,5-Trichlorophenol	1.0
2-Fluorobiphenyl	5.3
2-Chloronaphthalene	7.7

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
 Lab File ID: F06070C6.D
 Analysis Type: NONE

Injection Date: 07-JUN-2000 13:02
 Lab Sample ID: sstd160
 Method File: \\QPITPA02\D\chem\722.i\060700.b\

COMPOUND	%RSD
2-Nitroaniline	5.2
Dimethylphthalate	2.0
Acenaphthylene	5.4
2,6-Dinitrotoluene	4.8
3-Nitroaniline	5.2
Acenaphthene	4.9
2,4-Dinitrophenol	26.0
4-Nitrophenol	9.2
Dibenzofuran	5.0
2,4-Dinitrotoluene	8.3
2,3,5,6-Tetrachlorophenol	3.5
2,3,4,6-Tetrachlorophenol	2.1
Diethylphthalate	2.8
Fluorene	5.4
4-Chlorophenyl-phenylether	3.8
4-Nitroaniline	6.5
4,6-Dinitro-2-methylphenol	16.4
N-Nitrosodiphenylamine	3.2
1,2-Diphenylhydrazine	3.6
2,4,6-Tribromophenol	3.3
4-Bromophenyl-phenylether	2.6
Hexachlorobenzene	1.8
Pentachlorophenol	10.9
Phenanthrene	4.7
Anthracene	4.1
Carbazole	2.3
Di-n-Butylphthalate	4.1
Fluoranthene	2.8
Benzidine	5.8
Pyrene	2.7
Terphenyl-d14	1.7
Butylbenzylphthalate	4.9
Benzo(a)Anthracene	2.9
3,3'-Dichlorobenzidine	3.8
Chrysene	1.1
bis(2-ethylhexyl) Phthalate	5.8
Di-n-octylphthalate	5.4
Benzo(b)fluoranthene	8.6
Benzo(k)fluoranthene	15.5

Date : 07-JUN-2000 11:20

Sample Info: SSTD020 (10ppb) 194-175-10

Column phase: Hp5-MS

Operator: 007062

Column diameter: 0.25



STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270
Data file : \\Qpitpa02\D\chem\722.i\060700.b\F06070C3.D
Lab Smp Id: sstd020 Client Smp ID: SST020
Inj Date : 07-JUN-2000 11:20
Operator : 007062 Inst ID: 722.i
Smp Info : SST020 (10ppb) 194-175-10
Misc Info : sstd020,060700.b,8270b.m,2-root.sub,1,1
Comment :
Method : \\QPITPA02\D\chem\722.i\060700.b\8270b.m
Meth Date : 07-Jun-2000 12:00 bungardf Quant Type: ISTD
Cal Date : 07-JUN-2000 11:20 Cal File: F06070C3.D
Als bottle: 21 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC083

BB
6/7/00

Compounds	QUANT SIG			AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)
						ON-COL (NG)
* 1 1,4-Dichlorobenzene-d4	152	5.171	5.171 (1.000)		177622	40 0000
* 2 Naphthalene-d8	136	6.736	6 736 (1.000)		680835	40.0000
* 3 Acenaphthene-d10	164	9.803	9.803 (1 000)		362063	40.0000
* 4 Phenanthrene-d10	188	13.131	13.131 (1.000)		589426	40 0000
* 5 Chrysene-d12	240	19.776	19.776 (1 000)		451740	40 0000
* 6 Perylene-d12	264	23.142	23 142 (1 000)		383418	40.0000
10 N-Nitrosodimethylamine	74	2.174	2.174 (0.420)		60892	20 0000
9 Pyridine	79	2 211	2.211 (0 428)		112454	20.0000
21 Aniline	93	4 861	4 861 (0 940)		206507	20.0000
22 Phenol	94	4.840	4.840 (0.936)		172131	20.0000
23 bis(2-Chloroethyl)ether	93	4 925	4.925 (0.952)		128032	20.0000
24 2-Chlorophenol	128	4 973	4 973 (0.962)		129018	20 0000
26 1,3-Dichlorobenzene	146	5.128	5.128 (0.992)		142101	20.0000
27 1,4-Dichlorobenzene	146	5.187	5 187 (1.003)		143442	20.0000
28 1,2-Dichlorobenzene	146	5.401	5.401 (1.044)		134527	20 0000
29 Benzyl Alcohol	108	5 347	5.347 (1 034)		87732	20 0000
30 2-Methylphenol	108	5 491	5 491 (1 062)		114944	20.0000
31 2,2'-oxybis(1-Chloropropane)	45	5.529	5 529 (1.069)		147186	20.0000
32 N-Nitroso-di-n-propylamine	70	5 689	5 689 (1 100)		81546	20.0000
192 4-Methylphenol	108	5.652	5.652 (1.093)		120189	20 0000
34 Hexachloroethane	117	5.753	5 753 (1.113)		50123	20 0000
35 Nitrobenzene	77	5 860	5.860 (0 870)		118591	20.0000
41 Isophorone	82	6.143	6 143 (0.912)		209369	20.0000
42 2-Nitrophenol	139	6 255	6 255 (0.929)		59867	20.0000
43 2,4-Dimethylphenol	107	6.293	6.293 (0.934)		107670	20.0000
44 bis(2-Chloroethoxy)methane	93	6.426	6 426 (0 954)		141537	20 0000

Data File: \\Qpitpa02\D\chem\722.i\060700.b\F06070C3.D
Report Date: 07-Jun-2000 12:01

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
48 2,4-Dichlorophenol	162	6.549	6.549	(0.972)	96637	20.0000	20.2
49 Benzoic Acid	122	6.389	6.389	(0.948)	26619	20.0000	14.4 (H)
50 1,2,4-Trichlorobenzene	180	6.677	6.677	(0.991)	103275	20.0000	20.2
51 Naphthalene	128	6.763	6.763	(1.004)	380507	20.0000	20.4
52 4-Chloroaniline	127	6.859	6.859	(1.018)	148244	20.0000	20.1
56 Hexachlorobutadiene	225	7.019	7.019	(1.042)	49900	20.0000	20.2
59 4-Chloro-3-Methylphenol	107	7.586	7.586	(1.126)	94701	20.0000	19.8
62 2-Methylnaphthalene	142	7.815	7.815	(1.160)	243102	20.0000	20.3
205 1-Methylnaphthalene	142	7.997	7.997	(1.187)	229959	20.0000	20.4
64 Hexachlorocyclopentadiene	237	8.211	8.211	(0.838)	57114	20.0000	19.9
66 2,4,6-Trichlorophenol	196	8.349	8.349	(0.852)	59439	20.0000	19.9
67 2,4,5-Trichlorophenol	196	8.414	8.414	(0.858)	64124	20.0000	19.8
70 2-Chloronaphthalene	162	8.670	8.670	(0.884)	209852	20.0000	20.2
73 2-Nitroaniline	65	8.926	8.926	(0.911)	49104	20.0000	19.0
76 Dimethylphthalate	163	9.370	9.370	(0.956)	225131	20.0000	19.8
78 2,6-Dinitrotoluene	165	9.498	9.498	(0.969)	45004	20.0000	19.4
79 Acenaphthylene	152	9.487	9.487	(0.968)	336344	20.0000	20.1
81 3-Nitroaniline	138	9.765	9.765	(0.996)	57562	20.0000	19.4
82 Acenaphthene	153	9.867	9.867	(1.007)	211615	20.0000	20.1
83 2,4-Dinitrophenol	184	9.984	9.984	(1.019)	15145	20.0000	17.1
85 4-Nitrophenol	109	10.128	10.128	(1.033)	21572	20.0000	18.1
86 Dibenzofuran	168	10.203	10.203	(1.041)	295208	20.0000	20.2
87 2,4-Dinitrotoluene	165	10.321	10.321	(1.053)	56621	20.0000	19.0
91 2,3,5,6-Tetrachlorophenol	232	10.481	10.481	(1.069)	44273	20.0000	19.6
88 2,3,4,6-Tetrachlorophenol	232	10.577	10.577	(1.079)	45986	20.0000	19.7
93 Diethylphthalate	149	10.908	10.908	(1.113)	215108	20.0000	19.6
94 Fluorene	166	10.962	10.962	(1.118)	235861	20.0000	20.2
95 4-Chlorophenyl-phenylether	204	10.994	10.994	(1.122)	101868	20.0000	20.2
96 4-Nitroaniline	138	11.101	11.101	(1.132)	56207	20.0000	19.2
98 4,6-Dinitro-2-methylphenol	198	11.213	11.213	(0.854)	25388	20.0000	18.0
99 N-Nitrosodiphenylamine	169	11.277	11.277	(0.859)	169898	20.0000	20.2
100 1,2-Diphenylhydrazine	77	11.346	11.346	(0.864)	226118	20.0000	19.6
106 4-Bromophenyl-phenylether	248	12.110	12.110	(0.922)	50602	20.0000	20.2
107 Hexachlorobenzene	284	12.415	12.415	(0.945)	50100	20.0000	20.2
111 Pentachlorophenol	266	12.853	12.853	(0.979)	26694	20.0000	17.9
115 Phenanthrene	178	13.179	13.179	(1.004)	317824	20.0000	20.1
116 Anthracene	178	13.286	13.286	(1.012)	318833	20.0000	19.9
119 Carbazole	167	13.724	13.724	(1.045)	297391	20.0000	19.7
120 Di-n-Butylphthalate	149	14.862	14.862	(1.132)	324414	20.0000	18.9
123 Fluoranthene	202	16.128	16.128	(1.228)	289498	20.0000	19.5
124 Benzidine	184	16.550	16.550	(0.837)	113782	20.0000	18.0
125 Pyrene	202	16.673	16.673	(0.843)	298779	20.0000	20.2
131 Butylbenzylphthalate	149	18.612	18.612	(0.941)	131299	20.0000	19.1
135 3,3'-Dichlorobenzidine	252	19.776	19.776	(1.000)	84702	20.0000	19.1
136 Benzo(a)Anthracene	228	19.734	19.734	(0.998)	237975	20.0000	19.3
137 Chrysene	228	19.835	19.835	(1.003)	235008	20.0000	19.7
139 bis(2-ethylhexyl)Phthalate	149	20.182	20.182	(1.021)	176887	20.0000	18.9

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Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	====	==	=====	=====	=====	=====	=====
140 Di-n-octylphthalate	149	21.651	21 651	(0.936)	303659	20.0000	19 8
141 Benzo(b)fluoranthene	252	22.319	22 319	(0.964)	220979	20 0000	19.9
142 Benzo(k)fluoranthene	252	22.373	22 373	(0.967)	261798	20.0000	20 0
146 Benzo(a)pyrene	252	23.014	23.014	(0.994)	208037	20.0000	19.3
149 Indeno(1,2,3-cd)pyrene	276	25 455	25 455	(1.100)	244851	20 0000	18 1
150 Dibenz(a,h)anthracene	278	25 508	25 508	(1 102)	211185	20 0000	18 2
151 Benzo(g,h,i)perylene	276	26.064	26 064	(1 126)	204194	20.0000	17 4
\$ 154 Nitrobenzene-d5	82	5.839	5 839	(0.867)	110869	20.0000	19 7
\$ 155 2-Fluorobiphenyl	172	8 494	8 494	(0.866)	231641	20.0000	20.1
\$ 156 Terphenyl-d14	244	17 201	17.201	(0.870)	195419	20 0000	19 9
\$ 157 Phenol-d5	99	4.829	4 829	(0.934)	152788	20.0000	20 2
\$ 158 2-Fluorophenol	112	3 819	3 819	(0.739)	118993	20.0000	20.0
\$ 159 2,4,6-Tribromophenol	330	11.549	11.549	(0 880)	19751	20 0000	19.5
\$ 186 2-Chlorophenol-d4	132	4.957	4.957	(0.959)	115710	20.0000	20 1
\$ 187 1,2-Dichlorobenzene-d4	152	5 385	5 385	(1 041)	82136	20.0000	20 2

QC Flag Legend

H - Operator selected an alternate compound hit.

Instrument: 722.1

Operator: 007062

Column diameter: 0.25

\\qpi\IT\PA02\DO\chem\722.1\060700.b\F06070C2.D



660 919

Data File: \\Qpitpa02\D\chem\722.i\060700.b\F06070C1.D
 Report Date: 07-Jun-2000 11:20

Page 1

STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\722.i\060700.b\F06070C1.D
 Lab Smp Id: sstd050 Client Smp ID: SST050
 Inj Date : 07-JUN-2000 10:13
 Operator : 007062 Inst ID: 722.i
 Smp Info : SST050 (25ppb) 194-177-7
 Misc Info : sstd050,060700.b,8270b.m,2-root.sub,1,2
 Comment :
 Method : \\QPITPA02\D\chem\722.i\060700.b\8270b.m
 Meth Date : 07-Jun-2000 11:20 bungardf Quant Type: ISTD
 Cal Date : 07-JUN-2000 10:13 Cal File: F06070C1.D
 Als bottle: 2 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-root.sub
 Target Version: 4.04
 Processing Host: PITPC083

Handwritten:
 1/1/00

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT ON-COL (NG) (NG)
*****	****	==	=====	=====	=====	=====	=====
* 1 1,4-Dichlorobenzene-d4	152	5 171	5.171	(1.000)	141382	40.0000	
* 2 Naphthalene-d8	136	6.737	6 737	(1 000)	543196	40.0000	
* 3 Acenaphthene-d10	164	9.808	9 808	(1 000)	282224	40.0000	
* 4 Phenanthrene-d10	188	13 137	13.137	(1 000)	456958	40.0000	
* 5 Chrysene-d12	240	19 788	19.788	(1 000)	380724	40 0000	
* 6 Perylene-d12	264	23.153	23 153	(1 000)	360618	40 0000	
10 N-Nitrosodimethylamine	74	2.169	2.169	(0 420)	121831	50 0000	50 0
9 Pyridine	79	2.191	2 191	(0.424)	213961	50.0000	50.0
21 Aniline	93	4 862	4 862	(0 940)	388013	50.0000	50.0
22 Phenol	94	4.846	4.846	(0 937)	328274	50.0000	50.0
23 bis(2-Chloroethyl)ether	93	4.931	4.931	(0.954)	253058	50.0000	50 0
24 2-Chlorophenol	128	4.979	4.979	(0.963)	250179	50.0000	50.0
26 1,3-Dichlorobenzene	146	5.134	5.134	(0.993)	279941	50 0000	50 0
27 1,4-Dichlorobenzene	146	5.193	5 193	(1.004)	281415	50 0000	50.0
28 1,2-Dichlorobenzene	146	5.401	5 401	(1.044)	259731	50.0000	50 0
29 Benzyl Alcohol	108	5.353	5.353	(1.035)	172109	50.0000	50 0
30 2-Methylphenol	108	5 497	5.497	(1 063)	227924	50.0000	50.0
31 2,2'-oxybis(1-Chloropropane)	45	5 535	5.535	(1.070)	292130	50.0000	50 0
32 N-Nitroso-di-n-propylamine	70	5 695	5 695	(1.101)	160416	50 0000	50.0
192 4-Methylphenol	108	5 658	5 658	(1.094)	230265	50.0000	50 0
34 Hexachloroethane	117	5.754	5 754	(1 113)	101065	50.0000	50.0
35 Nitrobenzene	77	5 866	5 866	(0 871)	239522	50 0000	50.0
41 Isophorone	82	6.149	6 149	(0.913)	416381	50.0000	50 0
42 2-Nitrophenol	139	6.261	6 261	(0 929)	124256	50 0000	50.0
43 2,4-Dimethylphenol	107	6.299	6 299	(0.935)	226878	50 0000	50.0
44 bis(2-Chloroethoxy)methane	93	6.432	6.432	(0.955)	279196	50 0000	50 0

Data File: \\Qp1tpa02\D\chem\722.i\060700.b\F06070C1.D
Report Date: 07-Jun-2000 11:20

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
48 2,4-Dichlorophenol	162	6.555	6.555	(0.973)	189138	50.0000	50.0
49 Benzoic Acid	122	6.432	6.432	(0.955)	93884	50.0000	50.0
50 1,2,4-Trichlorobenzene	180	6.683	6.683	(0.992)	201286	50.0000	50.0
51 Naphthalene	128	6.769	6.769	(1.005)	731013	50.0000	50.0
52 4-Chloroaniline	127	6.870	6.870	(1.020)	291630	50.0000	50.0
56 Hexachlorobutadiene	225	7.025	7.025	(1.043)	97779	50.0000	50.0
59 4-Chloro-3-Methylphenol	107	7.597	7.597	(1.128)	192681	50.0000	50.0
62 2-Methylnaphthalene	142	7.821	7.821	(1.161)	469593	50.0000	50.0
205 1-Methylnaphthalene	142	8.003	8.003	(1.188)	441973	50.0000	50.0
64 Hexachlorocyclopentadiene	237	8.216	8.216	(0.838)	112267	50.0000	50.0
66 2,4,6-Trichlorophenol	196	8.355	8.355	(0.852)	116491	50.0000	50.0
67 2,4,5-Trichlorophenol	196	8.425	8.425	(0.859)	127447	50.0000	50.0
70 2-Chloronaphthalene	162	8.676	8.676	(0.885)	402538	50.0000	50.0
73 2-Nitroaniline	65	8.938	8.938	(0.911)	105199	50.0000	50.0
76 Dimethylphthalate	163	9.381	9.381	(0.956)	447561	50.0000	50.0
78 2,6-Dinitrotoluene	165	9.509	9.509	(0.970)	93539	50.0000	50.0
79 Acenaphthylene	152	9.493	9.493	(0.968)	649946	50.0000	50.0
81 3-Nitroaniline	138	9.776	9.776	(0.997)	118667	50.0000	50.0
82 Acenaphthene	153	9.878	9.878	(1.007)	409728	50.0000	50.0
83 2,4-Dinitrophenol	184	9.995	9.995	(1.019)	39433	50.0000	50.0
85 4-Nitrophenol	109	10.145	10.145	(1.034)	50638	50.0000	50.0
86 Dibenzofuran	168	10.214	10.214	(1.041)	561613	50.0000	50.0
87 2,4-Dinitrotoluene	165	10.332	10.332	(1.053)	122072	50.0000	50.0
91 2,3,5,6-Tetrachlorophenol	232	10.492	10.492	(1.070)	89594	50.0000	50.0
88 2,3,4,6-Tetrachlorophenol	232	10.588	10.588	(1.080)	92466	50.0000	50.0
93 Diethylphthalate	149	10.925	10.925	(1.114)	437417	50.0000	50.0
94 Fluorene	166	10.968	10.968	(1.118)	451784	50.0000	50.0
95 4-Chlorophenyl-phenylether	204	11.005	11.005	(1.122)	195556	50.0000	50.0
96 4-Nitroaniline	138	11.123	11.123	(1.134)	119144	50.0000	50.0
98 4,6-Dinitro-2-methylphenol	198	11.224	11.224	(0.854)	59781	50.0000	50.0
99 N-Nitrosodiphenylamine	169	11.294	11.294	(0.860)	324185	50.0000	50.0
100 1,2-Diphenylhydrazine	77	11.358	11.358	(0.865)	455017	50.0000	50.0
106 4-Bromophenyl-phenylether	248	12.122	12.122	(0.923)	96509	50.0000	50.0
107 Hexachlorobenzene	284	12.431	12.431	(0.946)	94901	50.0000	50.0
111 Pentachlorophenol	266	12.864	12.864	(0.979)	63657	50.0000	50.0
115 Phenanthrene	178	13.190	13.190	(1.004)	610387	50.0000	50.0
116 Anthracene	178	13.297	13.297	(1.012)	624482	50.0000	50.0
119 Carbazole	167	13.730	13.730	(1.045)	593241	50.0000	50.0
120 Di-n-Butylphthalate	149	14.873	14.873	(1.132)	700618	50.0000	50.0
123 Fluoranthene	202	16.139	16.139	(1.229)	592152	50.0000	50.0
124 Benzdine	184	16.561	16.561	(0.837)	292150	50.0000	50.0
125 Pyrene	202	16.684	16.684	(0.843)	617314	50.0000	50.0
131 Butylbenzylphthalate	149	18.618	18.618	(0.941)	303299	50.0000	50.0
135 3,3'-Dichlorobenzidine	252	19.788	19.788	(1.000)	194807	50.0000	50.0
136 Benzo(a)Anthracene	228	19.750	19.750	(0.998)	536853	50.0000	50.0
137 Chrysene	228	19.846	19.846	(1.003)	508833	50.0000	50.0
139 bis(2-ethylhexyl)Phthalate	149	20.194	20.194	(1.021)	417225	50.0000	50.0

660 921

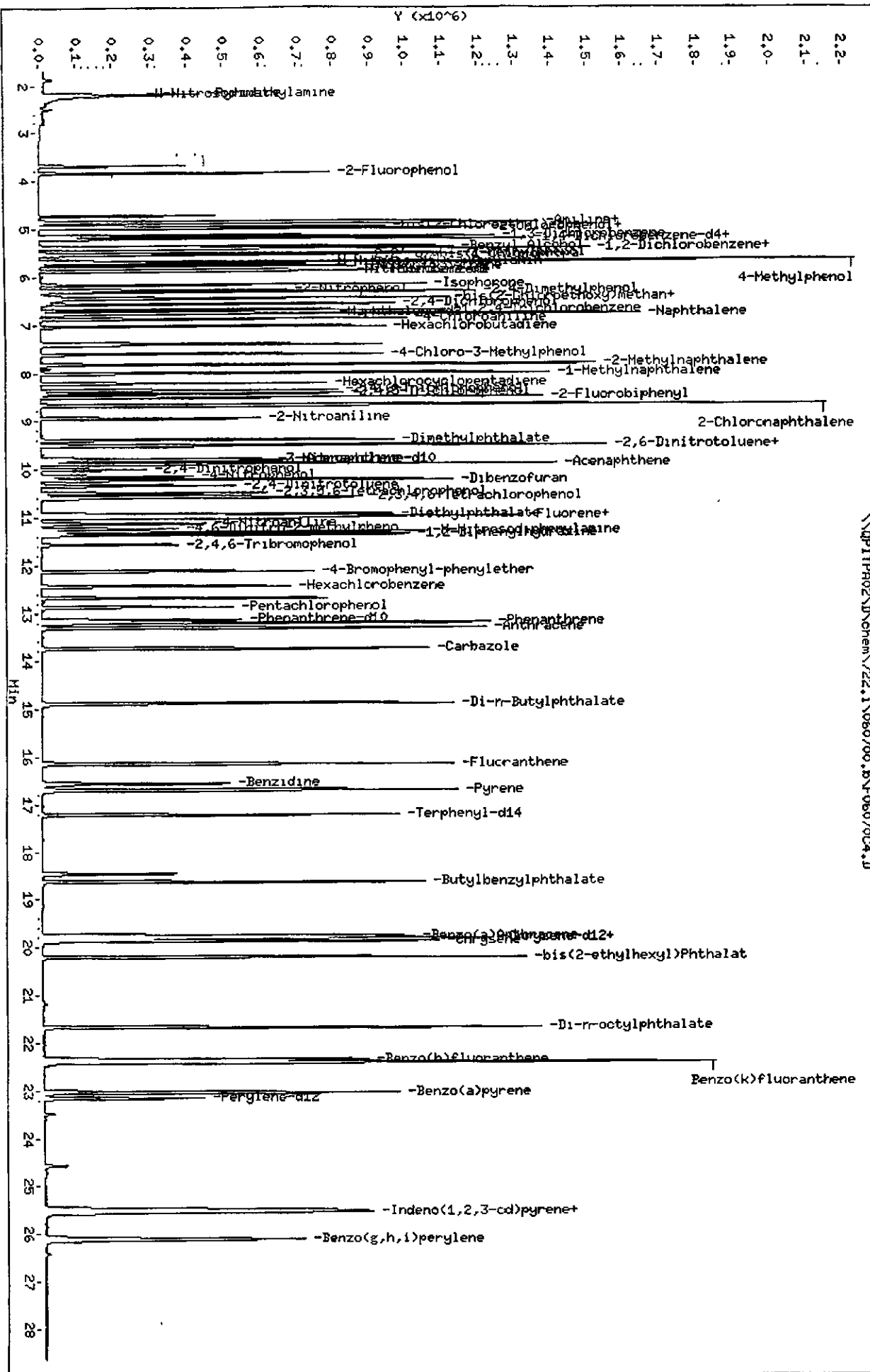
Data File: \\Opitpa02\D\chem\722.i\060700.b\F06070C1.D
Report Date: 07-Jun-2000 11:20

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Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	====	==	=====	=====	=====	=====	=====
140 Di-n-octylphthalate	149	21.663	21.663	(0.936)	730832	50.0000	50.0
141 Benzo(b)fluoranthene	252	22.336	22.336	(0.965)	523771	50.0000	50.0
142 Benzo(k)fluoranthene	252	22.389	22.389	(0.967)	617267	50.0000	50.0
146 Benzo(a)pyrene	252	23.030	23.030	(0.995)	523930	50.0000	50.0
149 Indeno(1,2,3-cd)pyrene	276	25.488	25.488	(1.101)	698643	50.0000	50.0
150 Dibenz(a,h)anthracene	278	25.530	25.530	(1.103)	593356	50.0000	50.0
151 Benzo(g,h,i)perylene	276	26.102	26.102	(1.127)	619888	50.0000	50.0
\$ 154 Nitrobenzene-d5	82	5.845	5.845	(0.868)	227578	50.0000	50.0
\$ 155 2-Fluorobiphenyl	172	8.505	8.505	(0.867)	447236	50.0000	50.0
\$ 156 Terphenyl-d14	244	17.213	17.213	(0.870)	414626	50.0000	50.0
\$ 157 Phenol-d5	99	4.835	4.835	(0.935)	296361	50.0000	50.0
\$ 158 2-Fluorophenol	112	3.820	3.820	(0.739)	237185	50.0000	50.0
\$ 159 2,4,6-Tribromophenol	330	11.561	11.561	(0.880)	40286	50.0000	50.0
\$ 186 2-Chlorophenol-d4	132	4.963	4.963	(0.960)	227628	50.0000	50.0
\$ 187 1,2-Dichlorobenzene-d4	152	5.385	5.385	(1.041)	160522	50.0000	50.0

Data File: \NPIPA02\chem\722.1\060700.b\F0607004.D
 Date : 07-JUN-2000 11:54
 Client ID:
 Sample Info: SST080 (40ppb) 194-175-12
 Volume Injected (uL): 2.0
 Column phase: Hp5-HS

Instrument: 722.1
 Operator: 007062
 Column diameter: 0.25



660 923:

STL Pittsburgh

Semivolatiles REPORT SW-846 Method 8270
Data file : \\Qpitpa02\D\chem\722.i\060700.b\F06070C4.D
Lab Smp Id: sstd080 Client Smp ID: SSTD080
Inj Date : 07-JUN-2000 11:54
Operator : 007062 Inst ID: 722.i
Smp Info : SSTD080 (40ppb) 194-175-12
Misc Info : sstd080,060700.b,8270b.m,2-root.sub,1,3
Comment :
Method : \\QPITPA02\D\chem\722.i\060700.b\8270b.m
Meth Date : 07-Jun-2000 12:27 bungardf Quant Type: ISTD
Cal Date : 07-JUN-2000 11:54 Cal File: F06070C4.D
Als bottle: 22 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC083

6/7/00

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	(NG)	(NG)	(NG)	(NG)	(NG)	(NG)	(NG)
=====	=====	=====	=====	=====	=====	=====	=====
* 1 1,4-Dichlorobenzene-d4	152	5.177	5.177	(1.000)	150449	40.0000	
* 2 Naphthalene-d8	136	6.742	6.742	(1.000)	579915	40.0000	
* 3 Acenaphthene-d10	164	9.809	9.809	(1.000)	314441	40.0000	
* 4 Phenanthrene-d10	188	13.137	13.137	(1.000)	523113	40.0000	
* 5 Chrysene-d12	240	19.788	19.788	(1.000)	435485	40.0000	
* 6 Perylene-d12	264	23.153	23.153	(1.000)	385411	40.0000	
10 N-Nitrosodimethylamine	74	2.175	2.175	(0.420)	202772	80.0000	78.9
9 Pyridine	79	2.191	2.191	(0.423)	367021	80.0000	79.2
21 Aniline	93	4.867	4.867	(0.940)	648987	80.0000	77.5
22 Phenol	94	4.851	4.851	(0.937)	542926	80.0000	77.3
23 bis(2-Chloroethyl)ether	93	4.936	4.936	(0.954)	420767	80.0000	78.6
24 2-Chlorophenol	128	4.985	4.985	(0.963)	424133	80.0000	79.1
26 1,3-Dichlorobenzene	146	5.134	5.134	(0.992)	460068	80.0000	77.8
27 1,4-Dichlorobenzene	146	5.193	5.193	(1.003)	463543	80.0000	77.9
28 1,2-Dichlorobenzene	146	5.407	5.407	(1.044)	427051	80.0000	77.3
29 Benzyl Alcohol	108	5.359	5.359	(1.035)	288838	80.0000	78.8
30 2-Methylphenol	108	5.503	5.503	(1.063)	389684	80.0000	80.1
31 2,2'-oxybis(1-Chloropropane)	45	5.535	5.535	(1.069)	489130	80.0000	79.0
32 N-Nitroso-di-n-propylamine	70	5.700	5.700	(1.101)	275554	80.0000	80.2
192 4-Methylphenol	108	5.663	5.663	(1.094)	382615	80.0000	77.7
34 Hexachloroethane	117	5.759	5.759	(1.112)	168415	80.0000	79.2
35 Nitrobenzene	77	5.866	5.866	(0.870)	403215	80.0000	79.6
41 Isophorone	82	6.155	6.155	(0.913)	715831	80.0000	80.3
42 2-Nitrophenol	139	6.261	6.261	(0.929)	224716	80.0000	84.1
43 2,4-Dimethylphenol	107	6.304	6.304	(0.935)	379280	80.0000	80.3
44 bis(2-Chloroethoxy)methane	93	6.438	6.438	(0.955)	474418	80.0000	79.4

Data File: \\Qpitpa02\D\chem\722.i\060700.b\F06070C4.D
Report Date: 07-Jun-2000 12:28

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
=====	====	==	=====	=====	=====	=====	=====
48 2,4-Dichlorophenol	162	6.561	6.561	(0.973)	331076	80.0000	80.8
49 Benzoic Acid	122	6.459	6.459	(0.958)	196520	80.0000	105
50 1,2,4-Trichlorobenzene	180	6.683	6.683	(0.991)	340464	80.0000	78.8
51 Naphthalene	128	6.769	6.769	(1.004)	1218910	80.0000	77.7
52 4-Chloroaniline	127	6.870	6.870	(1.019)	510750	80.0000	81.0
56 Hexachlorobutadiene	225	7.025	7.025	(1.042)	168300	80.0000	79.9
59 4-Chloro-3-Methylphenol	107	7.602	7.602	(1.128)	338304	80.0000	82.0
62 2-Methylnaphthalene	142	7.821	7.821	(1.160)	799149	80.0000	78.9
205 1-Methylnaphthalene	142	8.008	8.008	(1.188)	744547	80.0000	78.3
64 Hexachlorocyclopentadiene	237	8.217	8.217	(0.838)	206281	80.0000	81.8
66 2,4,6-Trichlorophenol	196	8.361	8.361	(0.852)	216338	80.0000	82.4
67 2,4,5-Trichlorophenol	196	8.425	8.425	(0.859)	226820	80.0000	80.4
70 2-Chloronaphthalene	162	8.681	8.681	(0.885)	692014	80.0000	77.6
73 2-Nitroaniline	65	8.938	8.938	(0.911)	192994	80.0000	84.0
76 Dimethylphthalate	163	9.386	9.386	(0.957)	799517	80.0000	80.6
78 2,6-Dinitrotoluene	165	9.515	9.515	(0.970)	174136	80.0000	84.0
79 Acenaphthylene	152	9.493	9.493	(0.968)	1141327	80.0000	79.0
81 3-Nitroaniline	138	9.782	9.782	(0.997)	225915	80.0000	85.1
82 Acenaphthene	153	9.878	9.878	(1.007)	723863	80.0000	79.3
83 2,4-Dinitrophenol	184	10.001	10.001	(1.020)	91966	80.0000	103
85 4-Nitrophenol	109	10.150	10.150	(1.035)	91903	80.0000	85.8
86 Dibenzofuran	168	10.215	10.215	(1.041)	997045	80.0000	79.1
87 2,4-Dinitrotoluene	165	10.337	10.337	(1.054)	234104	80.0000	86.6
91 2,3,5,6-Tetrachlorophenol	232	10.492	10.492	(1.070)	167542	80.0000	83.6
88 2,3,4,6-Tetrachlorophenol	232	10.588	10.588	(1.080)	165349	80.0000	81.0
93 Diethylphthalate	149	10.925	10.925	(1.114)	791116	80.0000	81.9
94 Fluorene	166	10.973	10.973	(1.119)	807983	80.0000	79.7
95 4-Chlorophenyl-phenylether	204	11.005	11.005	(1.122)	355605	80.0000	80.6
96 4-Nitroaniline	138	11.128	11.128	(1.135)	226276	80.0000	85.7
98 4,6-Dinitro-2-methylphenol	198	11.235	11.235	(0.855)	126035	80.0000	92.9
99 N-Nitrosodiphenylamine	169	11.299	11.299	(0.860)	589748	80.0000	79.2
100 1,2-Diphenylhydrazine	77	11.358	11.358	(0.865)	796196	80.0000	78.6
106 4-Bromophenyl-phenylether	248	12.122	12.122	(0.923)	181914	80.0000	81.1
107 Hexachlorobenzene	284	12.432	12.432	(0.946)	178505	80.0000	80.8
111 Pentachlorophenol	266	12.864	12.864	(0.979)	120493	80.0000	87.1
115 Phenanthrene	178	13.195	13.195	(1.004)	1107537	80.0000	79.2
116 Anthracene	178	13.302	13.302	(1.013)	1147745	80.0000	80.5
119 Carbazole	167	13.735	13.735	(1.046)	1082855	80.0000	80.6
120 Di-n-Butylphthalate	149	14.873	14.873	(1.132)	1287587	80.0000	83.0
123 Fluoranthene	202	16.144	16.144	(1.229)	1106109	80.0000	82.5
124 Benzidine	184	16.556	16.556	(0.837)	497490	80.0000	81.2
125 Pyrene	202	16.689	16.689	(0.843)	1135327	80.0000	79.7
131 Butylbenzylphthalate	149	18.623	18.623	(0.941)	561787	80.0000	83.1
135 3,3'-Dichlorobenzidine	252	19.793	19.793	(1.000)	353235	80.0000	81.8
136 Benzo(a)Anthracene	228	19.750	19.750	(0.998)	985849	80.0000	82.0
137 Chrysene	228	19.857	19.857	(1.004)	928046	80.0000	80.5
139 bis(2-ethylhexyl)Phthalate	149	20.194	20.194	(1.021)	779570	80.0000	84.1

660-925

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
140 Di-n-octylphthalate	149	21.663	21 663	(0 936)	1380192	80.0000	86.0
141 Benzo(b)fluoranthene	252	22 341	22 341	(0 965)	983728	80.0000	85.3
142 Benzo(k)fluoranthene	252	22.400	22 400	(0 967)	1044593	80.0000	79 5
146 Benzo(a)pyrene	252	23.041	23 041	(0 995)	920644	80.0000	83.3
149 Indeno(1,2,3-cd)pyrene	276	25.493	25.493	(1.101)	1115661	80 0000	81 3
150 Dibenz(a,h)anthracene	278	25 541	25 541	(1 103)	976176	80.0000	82 5
151 Benzo(g,h,i)perylene	276	26 107	26.107	(1.128)	955809	80 0000	80.9
\$ 154 Nitrobenzene-d5	82	5 845	5 845	(0 867)	389440	80.0000	80.8
\$ 155 2-Fluorobiphenyl	172	8.505	8.505	(0.867)	784055	80.0000	78.9
\$ 156 Terphenyl-d14	244	17.213	17 213	(0 870)	775457	80.0000	81.3
\$ 157 Phenol-d5	99	4 835	4 835	(0 934)	480383	80.0000	76 7
\$ 158 2-Fluorophenol	112	3.825	3 825	(0 739)	389818	80 0000	78.2
\$ 159 2,4,6-Tribromophenol	330	11.566	11 566	(0.880)	75398	80.0000	82 5
\$ 186 2-Chlorophenol-d4	132	4 969	4.969	(0 960)	374889	80 0000	77.9
\$ 187 1,2-Dichlorobenzene-d4	152	5 391	5.391	(1 041)	265121	80.0000	77.9

Instrument: 722.1
Operator: 007062
Column diameter: 0.25



660 927

Data File: \\Qpitpa02\D\chem\722.i\060700.b\F06070C5.D
Report Date: 07-Jun-2000 13:01

Page 1

STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\722.i\060700.b\F06070C5.D
 Lab Smp Id: sstd120 Client Smp ID: SSTD120
 Inj Date : 07-JUN-2000 12:28
 Operator : 007062 Inst ID: 722.i
 Smp Info : SSTD120 (60ppb) 194-175-13
 Misc Info : sstd120,060700.b,8270b.m,2-root.sub,1,4
 Comment :
 Method : \\QPITPA02\D\chem\722.i\060700.b\8270b.m
 Meth Date : 07-Jun-2000 13:00 bungardf Quant Type: ISTD
 Cal Date : 07-JUN-2000 12:28 Cal File: F06070C5.D
 Als bottle: 23 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-root.sub
 Target Version: 4.04
 Processing Host: PITPC083

2/7/00

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
=====	=====	=====	=====	=====	=====	=====	=====
* 1 1,4-Dichlorobenzene-d4	152	5.171	5 171	(1.000)	152547	40.0000	
* 2 Naphthalene-d8	136	6 741	6.741	(1.000)	589759	40.0000	
* 3 Acenaphthene-d10	164	9 808	9.808	(1.000)	317133	40.0000	
* 4 Phenanthrene-d10	188	13.136	13.136	(1.000)	519460	40.0000	
* 5 Chrysene-d12	240	19.792	19.792	(1.000)	427850	40.0000	
* 6 Perylene-d12	264	23.152	23 152	(1.000)	395849	40.0000	
10 N-Nitrosodimethylamine	74	2.174	2.174	(0.420)	289128	120.000	114
9 Pyridine	79	2.179	2 179	(0.421)	531307	120.000	114
21 Aniline	93	4.866	4.866	(0.941)	899478	120.000	109
22 Phenol	94	4 850	4.850	(0.938)	740003	120.000	108
23 bis(2-Chloroethyl)ether	93	4.936	4 936	(0.955)	599500	120.000	113
24 2-Chlorophenol	128	4.984	4.984	(0.964)	599369	120.000	113
26 1,3-Dichlorobenzene	146	5 133	5.133	(0.993)	654892	120.000	112
27 1,4-Dichlorobenzene	146	5.192	5 192	(1.004)	655734	120.000	112
28 1,2-Dichlorobenzene	146	5.400	5.400	(1.044)	589109	120.000	109
29 Benzyl Alcohol	108	5 358	5.358	(1.036)	421728	120.000	115
30 2-Methylphenol	108	5.502	5 502	(1.064)	558136	120.000	115
31 2,2'-oxybis(1-Chloropropane)	45	5 534	5.534	(1.070)	709194	120.000	115
32 N-Nitroso-di-n-propylamine	70	5 699	5 699	(1.102)	399930	120.000	116
192 4-Methylphenol	108	5 667	5 667	(1.096)	520575	120.000	108
34 Hexachloroethane	117	5 753	5 753	(1.113)	241667	120.000	114
35 Nitrobenzene	77	5.865	5 865	(0.870)	584396	120.000	115
41 Isophorone	82	6.154	6 154	(0.913)	1031732	120.000	115
42 2-Nitrophenol	139	6 260	6.260	(0.929)	337445	120.000	123
43 2,4-Dimethylphenol	107	6.303	6 303	(0.935)	554483	120.000	117
44 bis(2-Chloroethoxy)methane	93	6 437	6.437	(0.955)	683371	120.000	114

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
48 2,4-Dichlorophenol	162	6.560	6.560	(0.973)	480925	120.000	116
49 Benzoic Acid	122	6.485	6.485	(0.962)	326833	120.000	156
50 1,2,4-Trichlorobenzene	180	6.682	6.682	(0.991)	492359	120.000	114
51 Naphthalene	128	6.768	6.768	(1.004)	1709610	120.000	110
52 4-Chloroaniline	127	6.869	6.869	(1.019)	736118	120.000	116
56 Hexachlorobutadiene	225	7.024	7.024	(1.042)	240588	120.000	114
59 4-Chloro-3-Methylphenol	107	7.607	7.607	(1.128)	495925	120.000	119
62 2-Methylnaphthalene	142	7.820	7.820	(1.160)	1136481	120.000	112
205 1-Methylnaphthalene	142	8.002	8.002	(1.187)	1071734	120.000	112
64 Hexachlorocyclopentadiene	237	8.210	8.210	(0.837)	303697	120.000	118
66 2,4,6-Trichlorophenol	196	8.360	8.360	(0.852)	313668	120.000	118
67 2,4,5-Trichlorophenol	196	8.424	8.424	(0.859)	335890	120.000	119
70 2-Chloronaphthalene	162	8.680	8.680	(0.885)	962361	120.000	110
73 2-Nitroaniline	65	8.942	8.942	(0.912)	287394	120.000	124
76 Dimethylphthalate	163	9.386	9.386	(0.957)	1157033	120.000	117
78 2,6-Dinitrotoluene	165	9.514	9.514	(0.970)	259704	120.000	124
79 Acenaphthylene	152	9.492	9.492	(0.968)	1611828	120.000	113
81 3-Nitroaniline	138	9.781	9.781	(0.997)	333348	120.000	124
82 Acenaphthene	153	9.877	9.877	(1.007)	1021952	120.000	113
83 2,4-Dinitrophenol	184	10.000	10.000	(1.020)	148663	120.000	148
85 4-Nitrophenol	109	10.155	10.155	(1.035)	137992	120.000	128
86 Dibenzofuran	168	10.214	10.214	(1.041)	1409527	120.000	113
87 2,4-Dinitrotoluene	165	10.342	10.342	(1.054)	351911	120.000	128
91 2,3,5,6-Tetrachlorophenol	232	10.491	10.491	(1.070)	249845	120.000	123
88 2,3,4,6-Tetrachlorophenol	232	10.593	10.593	(1.080)	242523	120.000	118
93 Diethylphthalate	149	10.929	10.929	(1.114)	1124046	120.000	117
94 Fluorene	166	10.972	10.972	(1.119)	1131964	120.000	113
95 4-Chlorophenyl-phenylether	204	11.004	11.004	(1.122)	505119	120.000	115
96 4-Nitroaniline	138	11.138	11.138	(1.136)	334108	120.000	125
98 4,6-Dinitro-2-methylphenol	198	11.239	11.239	(0.856)	195827	120.000	138
99 N-Nitrosodiphenylamine	169	11.298	11.298	(0.860)	852414	120.000	116
100 1,2-Diphenylhydrazine	77	11.362	11.362	(0.865)	1151420	120.000	116
106 4-Bromophenyl-phenylether	248	12.115	12.115	(0.922)	260750	120.000	117
107 Hexachlorobenzene	284	12.431	12.431	(0.946)	256720	120.000	117
111 Pentachlorophenol	266	12.863	12.863	(0.979)	183259	120.000	132
115 Phenanthrene	178	13.194	13.194	(1.004)	1561936	120.000	114
116 Anthracene	178	13.301	13.301	(1.013)	1620489	120.000	116
119 Carbazole	167	13.734	13.734	(1.046)	1551176	120.000	118
120 Di-n-Butylphthalate	149	14.872	14.872	(1.132)	1834489	120.000	120
123 Fluoranthene	202	16.143	16.143	(1.229)	1572143	120.000	119
124 Benzidine	184	16.560	16.560	(0.837)	721912	120.000	122
125 Pyrene	202	16.688	16.688	(0.843)	1618239	120.000	116
131 Butylbenzylphthalate	149	18.622	18.622	(0.941)	834130	120.000	124
135 3,3'-Dichlorobenzidine	252	19.792	19.792	(1.000)	524873	120.000	123
136 Benzo(a)Anthracene	228	19.749	19.749	(0.998)	1431171	120.000	121
137 Chrysene	228	19.861	19.861	(1.004)	1361759	120.000	120
139 bis(2-ethylhexyl)Phthalate	149	20.187	20.187	(1.020)	1150848	120.000	124

Report Date: 07-Jun-2000 13:01

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	====	==	=====	=====	=====	=====	=====
140 Di-n-octylphthalate	149	21.662	21.662	(0.936)	2056709	120.000	121
141 Benzo(b)fluoranthene	252	22.346	22.346	(0.965)	1474897	120.000	122
142 Benzo(k)fluoranthene	252	22.404	22.404	(0.968)	1413731	120.000	108
146 Benzo(a)pyrene	252	23.045	23.045	(0.995)	1396523	120.000	122
149 Indeno(1,2,3-cd)pyrene	276	25.497	25.497	(1.101)	1757171	120.000	127
150 Dibenzo(a,h)anthracene	278	25.545	25.545	(1.103)	1525691	120.000	127
151 Benzo(g,h,i)perylene	276	26.128	26.128	(1.129)	1503115	120.000	128
\$ 154 Nitrobenzene-d5	82	5.844	5.844	(0.867)	565509	120.000	117
\$ 155 2-Fluorobiphenyl	172	8.504	8.504	(0.867)	1114727	120.000	113
\$ 156 Terphenyl-d14	244	17.212	17.212	(0.870)	1115427	120.000	118
\$ 157 Phenol-d5	99	4.839	4.839	(0.936)	687154	120.000	111
\$ 158 2-Fluorophenol	112	3.824	3.824	(0.740)	562021	120.000	113
\$ 159 2,4,6-Tribromophenol	330	11.565	11.565	(0.880)	113366	120.000	123
\$ 186 2-Chlorophenol-d4	132	4.962	4.962	(0.960)	545413	120.000	114
\$ 187 1,2-Dichlorobenzene-d4	152	5.384	5.384	(1.041)	370897	120.000	110

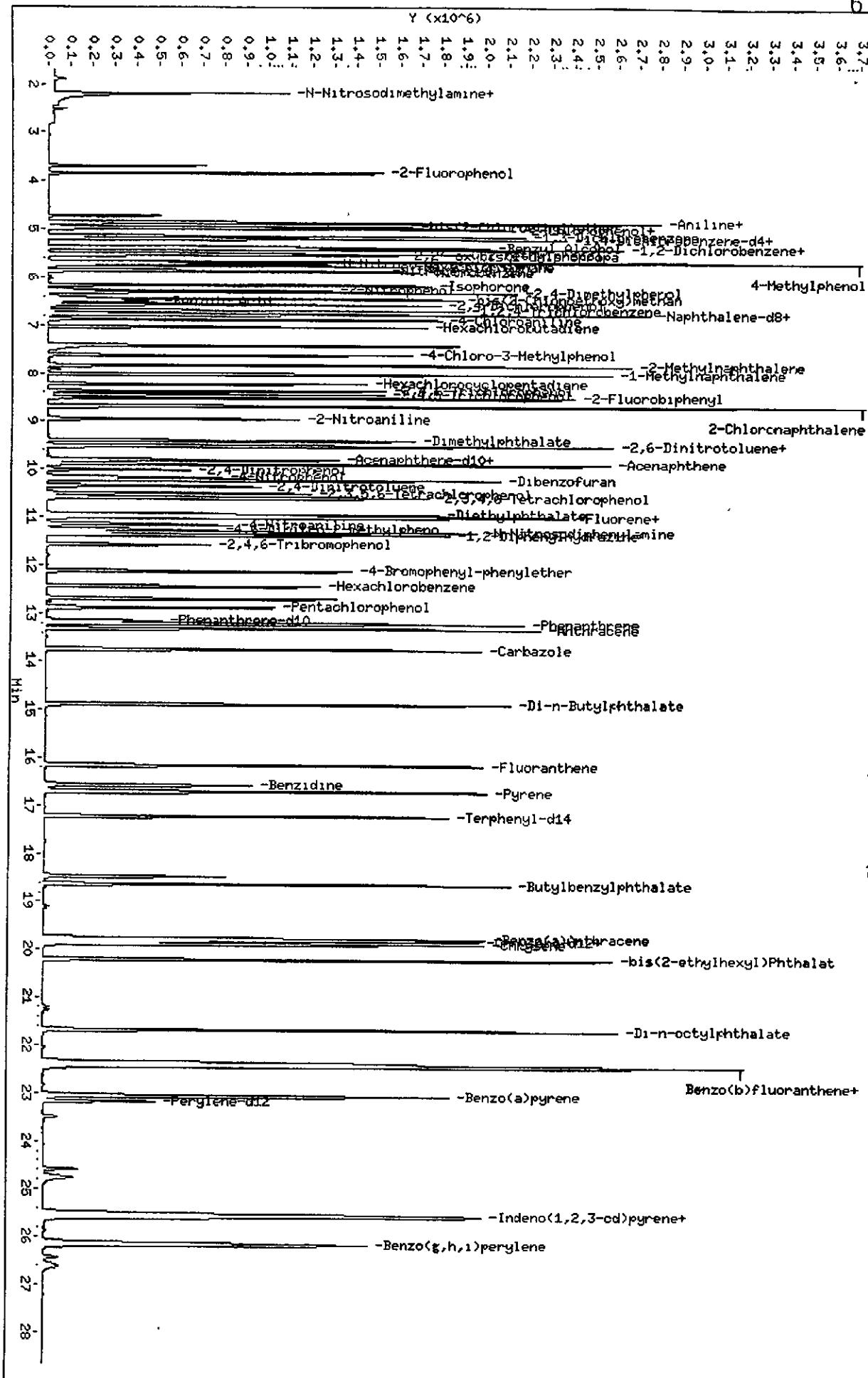
Data File: \\QPI7P002\\chem\\722.1\\060700.b\\F060700C6.D
Date: 07-JUN-2000 13:02

Client ID:

Sample Info: SST1260 (80ppb) 194-175-14
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 722.1

Operator: 007062
Column diameter: 0.25



660-931

STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\722.i\060700.b\F06070C6.D
Lab Smp Id: sstd160 Client Smp ID: SSTD160
Inj Date : 07-JUN-2000 13:02
Operator : 007062 Inst ID: 722.i
Smp Info : SSTD160 (80ppb) 194-175-14
Misc Info : sstd160,060700.b,8270b.m,2-root.sub,1,5
Comment :
Method : \\QPITPA02\D\chem\722.i\060700.b\8270b.m
Meth Date : 08-Jun-2000 05:17 bungardf Quant Type: ISTD
Cal Date : 07-JUN-2000 13:02 Cal File: F06070C6.D
Als bottle: 24 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC083

6/7/00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
* 1 1,4-Dichlorobenzene-d4	152	5.182	5.182	(1.000)	155730	40.0000	
* 2 Naphthalene-d8	136	6.747	6.747	(1.000)	601770	40.0000	
* 3 Acenaphthene-d10	164	9.819	9.819	(1.000)	322220	40.0000	
* 4 Phenanthrene-d10	188	13.152	13.152	(1.000)	538348	40.0000	
* 5 Chrysene-d12	240	19.809	19.809	(1.000)	442773	40.0000	
* 6 Perylene-d12	264	23.174	23.174	(1.000)	438247	40.0000	
10 N-Nitrosodimethylamine	74	2.180	2.180	(0.421)	376625	160.000	148
9 Pyridine	79	2.185	2.185	(0.422)	706870	160.000	151
21 Aniline	93	4.878	4.878	(0.941)	1132269	160.000	139
22 Phenol	94	4.867	4.867	(0.939)	922558	160.000	136
23 bis(2-Chloroethyl)ether	93	4.947	4.947	(0.955)	781364	160.000	147
24 2-Chlorophenol	128	4.995	4.995	(0.964)	786436	160.000	148
26 1,3-Dichlorobenzene	146	5.145	5.145	(0.993)	851632	160.000	146
27 1,4-Dichlorobenzene	146	5.198	5.198	(1.003)	842626	160.000	144
28 1,2-Dichlorobenzene	146	5.412	5.412	(1.044)	748783	160.000	140
29 Benzyl Alcohol	108	5.369	5.369	(1.036)	555893	160.000	151
30 2-Methylphenol	108	5.513	5.513	(1.064)	739232	160.000	151
31 2,2'-oxybis(1-Chloropropane)	45	5.540	5.540	(1.069)	921006	160.000	149
32 N-Nitroso-di-n-propylamine	70	5.716	5.716	(1.103)	540987	160.000	155
192 4-Methylphenol	108	5.679	5.679	(1.096)	656668	160.000	138
34 Hexachloroethane	117	5.764	5.764	(1.112)	319518	160.000	150
35 Nitrobenzene	77	5.882	5.882	(0.872)	772679	160.000	152
41 Isophorone	82	6.165	6.165	(0.914)	1385905	160.000	153
42 2-Nitrophenol	139	6.272	6.272	(0.930)	462067	160.000	164 (A)
43 2,4-Dimethylphenol	107	6.315	6.315	(0.936)	731235	160.000	153
44 bis(2-Chloroethoxy)methane	93	6.448	6.448	(0.956)	904550	160.000	151

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
48 2,4-Dichlorophenol	162	6.571	6.571	(0.974)	638687	160.000	153
49 Benzoic Acid	122	6.518	6.518	(0.966)	508396	160.000	217 (A)
50 1,2,4-Trichlorobenzene	180	6.694	6.694	(0.992)	652817	160.000	150
51 Naphthalene	128	6.779	6.779	(1.005)	2180793	160.000	142
52 4-Chloroaniline	127	6.881	6.881	(1.020)	972629	160.000	152
56 Hexachlorobutadiene	225	7.036	7.036	(1.043)	318668	160.000	150
59 4-Chloro-3-Methylphenol	107	7.618	7.618	(1.129)	671110	160.000	158
62 2-Methylnaphthalene	142	7.832	7.832	(1.161)	1477838	160.000	146
205 1-Methylnaphthalene	142	8.019	8.019	(1.188)	1388737	160.000	146
64 Hexachlorocyclopentadiene	237	8.222	8.222	(0.837)	414088	160.000	159
66 2,4,6-Trichlorophenol	196	8.371	8.371	(0.853)	421503	160.000	157
67 2,4,5-Trichlorophenol	196	8.441	8.441	(0.860)	452405	160.000	158
70 2-Chloronaphthalene	162	8.692	8.692	(0.885)	1246474	160.000	144
73 2-Nitroaniline	65	8.954	8.954	(0.912)	397010	160.000	167 (A)
76 Dimethylphthalate	163	9.402	9.402	(0.958)	1563850	160.000	156
78 2,6-Dinitrotoluene	165	9.531	9.531	(0.971)	358038	160.000	166 (A)
79 Acenaphthylene	152	9.504	9.504	(0.968)	2112532	160.000	148
81 3-Nitroaniline	138	9.803	9.803	(0.998)	461166	160.000	167 (A)
82 Acenaphthene	153	9.894	9.894	(1.008)	1353372	160.000	150
83 2,4-Dinitrophenol	184	10.017	10.017	(1.020)	223823	160.000	205 (A)
85 4-Nitrophenol	109	10.177	10.177	(1.036)	194939	160.000	174 (A)
86 Dibenzofuran	168	10.230	10.230	(1.042)	1867403	160.000	150
87 2,4-Dinitrotoluene	165	10.359	10.359	(1.055)	495774	160.000	173 (A)
91 2,3,5,6-Tetrachlorophenol	232	10.508	10.508	(1.070)	339038	160.000	163 (A)
88 2,3,4,6-Tetrachlorophenol	232	10.610	10.610	(1.081)	321525	160.000	156
93 Diethylphthalate	149	10.946	10.946	(1.115)	1513991	160.000	156
94 Fluorene	166	10.989	10.989	(1.119)	1488709	160.000	148
95 4-Chlorophenyl-phenylether	204	11.021	11.021	(1.122)	667830	160.000	152
96 4-Nitroaniline	138	11.165	11.165	(1.137)	468192	160.000	170 (A)
98 4,6-Dinitro-2-methylphenol	198	11.261	11.261	(0.856)	283763	160.000	186 (A)
99 N-Nitrosodiphenylamine	169	11.320	11.320	(0.861)	1147511	160.000	153
100 1,2-Diphenylhydrazine	77	11.379	11.379	(0.865)	1547866	160.000	152
106 4-Bromophenyl-phenylether	248	12.132	12.132	(0.922)	353698	160.000	154
107 Hexachlorobenzene	284	12.442	12.442	(0.946)	352691	160.000	156
111 Pentachlorophenol	266	12.885	12.885	(0.980)	257726	160.000	174 (A)
115 Phenanthrene	178	13.211	13.211	(1.004)	2087749	160.000	150
116 Anthracene	178	13.323	13.323	(1.013)	2153140	160.000	150
119 Carbazole	167	13.756	13.756	(1.046)	2102110	160.000	155
120 Di-n-Butylphthalate	149	14.889	14.889	(1.132)	2504241	160.000	158
123 Fluoranthene	202	16.160	16.160	(1.229)	2157169	160.000	158
124 Benzidine	184	16.571	16.571	(0.837)	1019917	160.000	165 (A)
125 Pyrene	202	16.710	16.710	(0.844)	2209112	160.000	154
131 Butylbenzylphthalate	149	18.634	18.634	(0.941)	1172404	160.000	167 (A)
135 3,3'-Dichlorobenzidine	252	19.814	19.814	(1.000)	730536	160.000	164 (A)
136 Benzo (a) Anthracene	228	19.766	19.766	(0.998)	2007353	160.000	163 (A)
137 Chrysene	228	19.878	19.878	(1.004)	1893820	160.000	162 (A)
139 bis(2-ethylhexyl) Phthalate	149	20.204	20.204	(1.020)	1606207	160.000	166 (A)

660-933

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
140 Di-n-octylphthalate	149	21.679	21.679	(0.935)	2850810	160.000	153
141 Benzo(b)fluoranthene	252	22.378	22.378	(0.966)	2519148	160.000	182 (A)
142 Benzo(k)fluoranthene	252	22.442	22.442	(0.968)	1619894	160.000	119
146 Benzo(a)pyrene	252	23.067	23.067	(0.995)	2047762	160.000	162 (A)
149 Indeno(1,2,3-cd)pyrene	276	25.530	25.530	(1.102)	2636353	160.000	169 (A)
150 Dibenz(a,h)anthracene	278	25.584	25.584	(1.104)	2275224	160.000	169 (A)
151 Benzo(g,h,i)perylene	276	26.166	26.166	(1.129)	2302739	160.000	173 (A)
\$ 154 Nitrobenzene-d5	82	5.855	5.855	(0.868)	759379	160.000	155
\$ 155 2-Fluorobiphenyl	172	8.516	8.516	(0.867)	1462011	160.000	149
\$ 156 Terphenyl-d14	244	17.229	17.229	(0.870)	1539866	160.000	158
\$ 157 Phenol-d5	99	4.851	4.851	(0.936)	880355	160.000	143
\$ 158 2-Fluorophenol	112	3.830	3.830	(0.739)	739429	160.000	149
\$ 159 2,4,6-Tribromophenol	330	11.582	11.582	(0.881)	156112	160.000	163 (A)
\$ 186 2-Chlorophenol-d4	132	4.974	4.974	(0.960)	705488	160.000	147
\$ 187 1,2-Dichlorobenzene-d4	152	5.396	5.396	(1.041)	478457	160.000	143

QC Flag Legend

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

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Instrument ID: 722

Calibration Date: 06/14/00 Time: 1307

Lab File ID: F06140C1

Init. Calib. Date(s): 06/07/00 06/07/00

Init. Calib. Times: 1046 1302

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

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.736	1.749	0.01	0.7	20.0
bis(2-Chloroethyl) ether	1.364	1.454	0.01	6.6	50.0
2-Chlorophenol	1.367	1.439	0.01	5.3	50.0
1,3-Dichlorobenzene	1.500	1.564	0.01	4.3	50.0
1,4-Dichlorobenzene	1.501	1.554	0.01	3.5	20.0
1,2-Dichlorobenzene	1.374	1.427	0.01	3.8	50.0
2-Methylphenol	1.256	1.311	0.01	4.4	50.0
2,2'-oxybis(1-Chloropropane)	1.588	1.521	0.01	4.2	50.0
4-Methylphenol	1.224	1.312	0.01	7.2	50.0
Hexachloroethane	0.546	0.568	0.01	4.0	50.0
Nitrobenzene	0.339	0.333	0.01	1.8	50.0
Isophorone	0.601	0.602	0.01	0.2	50.0
2-Nitrophenol	0.187	0.189	0.01	1.1	20.0
2,4-Dimethylphenol	0.317	0.323	0.01	1.9	50.0
bis(2-Chloroethoxy) methane	0.399	0.412	0.01	3.2	50.0
N-Nitroso-di-n-propylamine	0.896	0.903	0.05	0.8	50.0
2,4-Dichlorophenol	0.278	0.284	0.01	2.2	20.0
1,2,4-Trichlorobenzene	0.288	0.293	0.01	1.7	50.0
Naphthalene	1.024	1.045	0.01	2.0	50.0
4-Chloroaniline	0.426	0.447	0.01	4.9	50.0
Hexachlorobutadiene	0.141	0.139	0.01	1.4	20.0
4-Chloro-3-Methylphenol	0.281	0.298	0.01	6.0	20.0
2-Methylnaphthalene	0.671	0.686	0.01	2.2	50.0
Hexachlorocyclopentadiene	0.323	0.292	0.05	9.6	50.0
2,4,6-Trichlorophenol	0.332	0.346	0.01	4.2	20.0
2,4,5-Trichlorophenol	0.355	0.366	0.01	3.1	50.0
2-Chloronaphthalene	1.076	1.079	0.01	0.3	50.0
2-Nitroaniline	0.296	0.283	0.01	4.4	50.0
Dimethylphthalate	1.240	1.279	0.01	3.1	50.0
Acenaphthylene	1.768	1.814	0.01	2.6	50.0
2,6-Dinitrotoluene	0.267	0.264	0.01	1.1	50.0
3-Nitroaniline	0.343	0.362	0.01	5.5	50.0
Acenaphthene	1.121	1.134	0.01	1.2	20.0
2,4-Dinitrophenol	0.136	0.137	0.05	0.7	50.0
4-Nitrophenol	0.139	0.140	0.05	0.7	50.0
Dibenzofuran	1.547	1.601	0.01	3.5	50.0
2,4-Dinitrotoluene	0.355	0.358	0.01	0.8	50.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Instrument ID: 722

Calibration Date: 06/14/00 Time: 1307

Lab File ID: F06140C1

Init. Calib. Date(s): 06/07/00 06/07/00

Init. Calib. Times: 1046 1302

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

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.204	1.261	0.01	4.7	50.0
4-Chlorophenyl-phenylether	0.546	0.576	0.01	5.5	50.0
Fluorene	1.244	1.290	0.01	3.7	50.0
4-Nitroaniline	0.343	0.374	0.01	9.0	50.0
4,6-Dinitro-2-methylphenol	0.113	0.105	0.01	7.1	50.0
N-Nitrosodiphenylamine	0.558	0.553	0.01	0.9	20.0
4-Bromophenyl-phenylether	0.170	0.163	0.01	4.1	50.0
Hexachlorobenzene	0.168	0.159	0.01	5.4	50.0
Pentachlorophenol	0.110	0.096	0.05	12.7	20.0
Phenanthrene	1.037	1.040	0.01	0.3	50.0
Anthracene	1.064	1.070	0.01	0.6	50.0
Carbazole	1.008	1.025	0.01	1.7	50.0
Di-n-Butylphthalate	1.175	1.242	0.01	5.7	50.0
Fluoranthene	1.016	1.050	0.01	3.3	20.0
Pyrene	1.292	1.324	0.01	2.5	50.0
Butylbenzylphthalate	0.635	0.692	0.01	9.0	50.0
3,3'-Dichlorobenzidine	0.402	0.438	0.01	9.0	50.0
Benzo(a)Anthracene	1.110	1.190	0.01	7.2	50.0
Chrysene	1.059	1.144	0.01	8.0	50.0
bis(2-ethylhexyl) Phthalate	0.873	0.976	0.01	11.8	50.0
Di-n-octylphthalate	1.701	1.810	0.01	6.4	20.0
Benzo(b)fluoranthene	1.261	1.199	0.01	4.9	50.0
Benzo(k)fluoranthene	1.240	1.251	0.01	0.9	50.0
Benzo(a)pyrene	1.156	1.164	0.01	0.7	20.0
Indeno(1,2,3-cd)pyrene	1.421	1.390	0.01	2.2	50.0
Dibenz(a,h)anthracene	1.231	1.216	0.01	1.2	50.0
Benzo(g,h,i)perylene	1.214	1.204	0.01	0.8	50.0
Pyridine	1.202	1.116	0.01	7.2	50.0
N-Nitrosodimethylamine	0.654	0.605	0.01	7.5	50.0
Aniline	2.092	2.054	0.01	1.8	50.0
Benzyl Alcohol	0.947	1.022	0.01	7.9	50.0
Benzoic Acid	0.155	0.174	0.01	12.2	50.0
2,3,4,6-Tetrachlorophenol	0.256	0.264	0.01	3.1	50.0
2,3,5,6-Tetrachlorophenol	0.258	0.258	0.01	0.0	50.0
1,2-Diphenylhydrazine	0.755	0.737	0.01	2.4	50.0
Benzidine	0.559	0.662	0.01	18.4	50.0
1-Methylnaphthalene	0.632	0.659	0.01	4.3	50.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

660-936

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Instrument ID: 722

Calibration Date: 06/14/00 Time: 1307

Lab File ID: F06140C1

Init. Calib. Date(s): 06/07/00 06/07/00

Init. Calib. Times: 1046 1302

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

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Nitrobenzene-d5	0.325	0.317	0.01	2.5	50.0
2-Fluorobiphenyl	1.221	1.222	0.01	0.1	50.0
Terphenyl-d14	0.878	0.903	0.01	2.8	50.0
Phenol-d5	1.581	1.656	0.01	4.7	50.0
2-Fluorophenol	1.278	1.326	0.01	3.8	50.0
2,4,6-Tribromophenol	0.071	0.065	0.01	8.4	50.0
2-Chlorophenol-d4	1.231	1.244	0.01	1.0	50.0
1,2-Dichlorobenzene-d4	0.859	0.892	0.01	3.8	50.0

660 937

Data File: \\Qpitpa02\D\chem\722.i\061400.b\F06140C1.D
 Report Date: 06/15/2000

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: 722.i
 Lab File ID: F06140C1.D
 Analysis Type: NONE

Injection Date: 14-JUN-2000 13:07
 Lab Sample ID: sstd050
 Method File: \\QPITPA02\D\chem\722.i\061400.b\

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
=====	=====	=====	=====	=====
67 N-Nitrosodimethylamine	50.0000	46.2634	7.5	50.0
66 Pyridine	50.0000	46.4137	7.2	50.0
185 2-Fluorophenol	50.0000	51.8915	3.8	50.0
184 Phenol-d5	50.0000	52.3683	4.7	50.0
1 Phenol	50.0000	50.3549	0.7	20.0
68 Aniline	50.0000	49.0780	1.8	50.0
2 bis(2-Chloroethyl)ether	50.0000	53.2796	6.6	50.0
187 2-Chlorophenol-d4	50.0000	50.4996	1.0	50.0
3 2-Chlorophenol	50.0000	52.6236	5.2	50.0
4 1,3-Dichlorobenzene	50.0000	52.1181	4.2	50.0
11 1,4-Dichlorobenzene-d4	40.0000	40.0000	0.0	50.0
5 1,4-Dichlorobenzene	50.0000	51.7436	3.5	20.0
69 Benzyl Alcohol	50.0000	53.9432	7.9	50.0
188 1,2-Dichlorobenzene-d4	50.0000	51.9238	3.8	50.0
6 1,2-Dichlorobenzene	50.0000	51.9084	3.8	50.0
7 2-Methylphenol	50.0000	52.1954	4.4	50.0
8 2,2'-oxybis(1-Chloropropane)	50.0000	47.8918	4.2	50.0
9 4-Methylphenol	50.0000	53.6074	7.2	50.0
18 N-Nitroso-di-n-propylamine	50.0000	50.3761	0.8	50.0
12 Hexachloroethane	50.0000	51.9436	3.9	50.0
181 Nitrobenzene-d5	50.0000	48.7487	2.5	50.0
13 Nitrobenzene	50.0000	49.1391	1.7	50.0
14 Isophorone	50.0000	50.0826	0.2	50.0
15 2-Nitrophenol	50.0000	50.6696	1.3	20.0
16 2,4-Dimethylphenol	50.0000	50.8709	1.7	50.0
17 bis(2-Chloroethoxy)methane	50.0000	51.6623	3.3	50.0
71 Benzoic Acid	50.0000	55.7824	11.6	50.0
18 2,4-Dichlorophenol	50.0000	51.0846	2.2	20.0
19 1,2,4-Trichlorobenzene	50.0000	50.8534	1.7	50.0
32 Naphthalene-d8	40.0000	40.0000	0.0	50.0
20 Naphthalene	50.0000	51.0237	2.0	50.0
21 4-Chloroaniline	50.0000	52.5448	5.1	50.0
22 Hexachlorobutadiene	50.0000	49.3650	1.3	20.0
23 4-Chloro-3-Methylphenol	50.0000	52.9134	5.8	20.0
24 2-Methylnaphthalene	50.0000	51.0833	2.2	50.0
205 1-Methylnaphthalene	50.0000	52.0958	4.2	50.0
25 Hexachlorocyclopentadiene	50.0000	45.1872	9.6	50.0
26 2,4,6-Trichlorophenol	50.0000	52.0183	4.0	20.0
27 2,4,5-Trichlorophenol	50.0000	51.6117	3.2	50.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 722.i
Lab File ID: F06140C1.D
Analysis Type: NONE

Injection Date: 14-JUN-2000 13:07
Lab Sample ID: sstd050
Method File: \\QPITPA02\D\chem\722.i\061400.b\

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
182 2-Fluorobiphenyl	50.0000	50.0561	0.1	50.0
28 2-Chloronaphthalene	50.0000	50.1767	0.4	50.0
29 2-Nitroaniline	50.0000	47.9181	4.2	50.0
30 Dimethylphthalate	50.0000	51.5869	3.2	50.0
31 Acenaphthylene	50.0000	51.3128	2.6	50.0
32 2,6-Dinitrotoluene	50.0000	49.4663	1.1	50.0
33 3-Nitroaniline	50.0000	52.6585	5.3	50.0
52 Acenaphthene-d10	40.0000	40.0000	0.0	50.0
34 Acenaphthene	50.0000	50.5414	1.1	20.0
35 2,4-Dinitrophenol	50.0000	50.5806	1.2	50.0
36 4-Nitrophenol	50.0000	50.4131	0.8	50.0
37 Dibenzofuran	50.0000	51.7528	3.5	50.0
38 2,4-Dinitrotoluene	50.0000	50.3264	0.7	50.0
77 2,3,5,6-Tetrachlorophenol	50.0000	50.1547	0.3	50.0
76 2,3,4,6-Tetrachlorophenol	50.0000	51.4529	2.9	50.0
39 Diethylphthalate	50.0000	52.3878	4.8	50.0
41 Fluorene	50.0000	51.8299	3.7	50.0
40 4-Chlorophenyl-phenylether	50.0000	52.7413	5.5	50.0
42 4-Nitroaniline	50.0000	54.4812	9.0	50.0
43 4,6-Dinitro-2-methylphenol	50.0000	46.3949	7.2	50.0
44 N-Nitrosodiphenylamine	50.0000	49.5699	0.9	20.0
78 1,2-Diphenylhydrazine	50.0000	48.8061	2.4	50.0
186 2,4,6-Tribromophenol	50.0000	45.5317	8.9	50.0
45 4-Bromophenyl-phenylether	50.0000	47.7406	4.5	50.0
46 Hexachlorobenzene	50.0000	47.3945	5.2	50.0
47 Pentachlorophenol	50.0000	43.8359	12.3	20.0
78 Phenanthrene-d10	40.0000	40.0000	0.0	50.0
48 Phenanthrene	50.0000	50.1832	0.4	50.0
49 Anthracene	50.0000	50.2549	0.5	50.0
50 Carbazole	50.0000	50.8210	1.6	50.0
51 Di-n-Butylphthalate	50.0000	52.8511	5.7	50.0
52 Fluoranthene	50.0000	51.6766	3.4	20.0
79 Benzidine	50.0000	59.1303	18.3	50.0
53 Pyrene	50.0000	51.2739	2.5	50.0
183 Terphenyl-d14	50.0000	51.4026	2.8	50.0
54 Butylbenzylphthalate	50.0000	54.4972	9.0	50.0
56 Benzo(a)Anthracene	50.0000	53.6257	7.3	50.0
90 Chrysene-d12	40.0000	40.0000	0.0	50.0
55 3,3'-Dichlorobenzidine	50.0000	54.4932	9.0	50.0

660 939

Data File: \\Qpitpa02\D\chem\722.i\061400.b\F06140C1.D
 Report Date: 06/15/2000

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

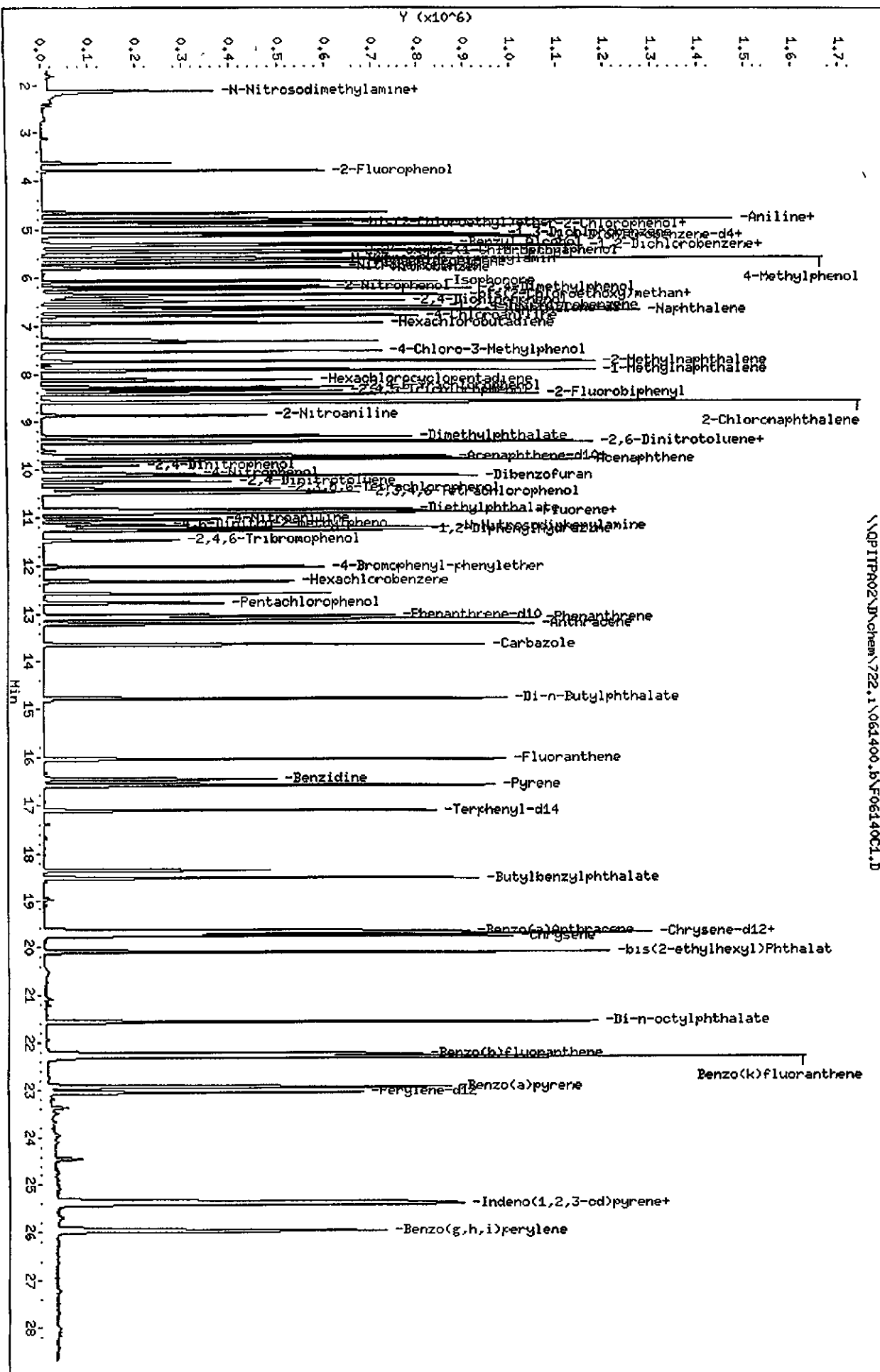
Instrument ID: 722.i
 Lab File ID: F06140C1.D
 Analysis Type: NONE

Injection Date: 14-JUN-2000 13:07
 Lab Sample ID: sstd050
 Method File: \\QPITPA02\D\chem\722.i\061400.b\

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
=====	=====	=====	=====	=====
57 Chrysene	50.0000	54.0184	8.0	50.0
58 bis(2-ethylhexyl)Phthalate	50.0000	55.9019	11.8	50.0
59 Di-n-octylphthalate	50.0000	53.1891	6.4	20.0
60 Benzo(b)fluoranthene	50.0000	47.5415	4.9	50.0
61 Benzo(k)fluoranthene	50.0000	50.4113	0.8	50.0
62 Benzo(a)pyrene	50.0000	50.3469	0.7	20.0
101 Perylene-di2	40.0000	40.0000	0.0	50.0
63 Indeno(1,2,3-cd)pyrene	50.0000	48.9201	2.2	50.0
64 Dibenz(a,h)anthracene	50.0000	49.4159	1.2	50.0
65 Benzo(g,h,i)perylene	50.0000	49.5981	0.8	50.0

Data File: \\QPIITP602\JN\chem\722.1\061400.b\F06140C1.D
 Date: 14-JUN-2000 13:07
 Client ID:
 Sample Info: SSTJ060 (25ppb) 194-178-5
 Volume Injected (uL): 2.0
 Column phase: HP5-MS

Instrument: 722.1
 Operator: 007062
 Column diameter: 0.25



Data File: \\Qpitpa02\D\chem\722.i\061400.b\F06140C1.D
Report Date: 15-Jun-2000 05:23

STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\722.i\061400.b\F06140C1.D
Lab Smp Id: sstd050 Client Smp ID: SSTD050
Inj Date : 14-JUN-2000 13:07
Operator : 007062 Inst ID: 722.i
Smp Info : SSTD050 (25ppb) 194-178-5
Misc Info : sstd050,061400.b,8270b.m,2-root.sub,2,2
Comment :
Method : \\QPITPA02\D\chem\722.i\061400.b\8270b.m
Meth Date : 15-Jun-2000 05:22 bungardf Quant Type: ISTD
Cal Date : 07-JUN-2000 13:02 Cal File: F06070C6.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC083

FBB
6/15/00

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(NG)	(NG)
*****	****	==	=====	=====	=====	=====	=====	=====
* 1 1,4-Dichlorobenzene-d4		152	5.115	5.115	(1.000)	180567	40.0000	
* 2 Naphthalene-d8		136	6.669	6.669	(1.000)	730246	40.0000	
* 3 Acenaphthene-d10		164	9.725	9.725	(1.000)	405705	40.0000	
* 4 Phenanthrene-d10		188	13.042	13.042	(1.000)	707454	40.0000	
* 5 Chrysene-d12		240	19.683	19.683	(1.000)	580168	40.0000	
* 6 Perylene-d12		264	23.053	23.053	(1.000)	570934	40.0000	
10 N-Nitrosodimethylamine		74	2.107	2.107	(0.412)	136581	50.0000	46.3
9 Pyridine		79	2.118	2.118	(0.414)	251927	50.0000	46.4
21 Aniline		93	4.810	4.810	(0.940)	463524	50.0000	49.1
22 Phenol		94	4.799	4.799	(0.938)	394697	50.0000	50.4
23 bis(2-Chloroethyl)ether		93	4.874	4.874	(0.953)	328093	50.0000	53.3
24 2-Chlorophenol		128	4.922	4.922	(0.962)	324790	50.0000	52.6
26 1,3-Dichlorobenzene		146	5.072	5.072	(0.992)	352896	50.0000	52.1
27 1,4-Dichlorobenzene		146	5.131	5.131	(1.003)	350728	50.0000	51.7
28 1,2-Dichlorobenzene		146	5.339	5.339	(1.044)	322036	50.0000	51.9
29 Benzyl Alcohol		108	5.296	5.296	(1.036)	230695	50.0000	53.9
30 2-Methylphenol		108	5.446	5.446	(1.065)	295914	50.0000	52.2
31 2,2'-oxybis(1-Chloropropane)		45	5.467	5.467	(1.069)	343248	50.0000	47.9
32 N-Nitroso-di-n-propylamine		70	5.633	5.633	(1.101)	203887	50.0000	50.4
192 4-Methylphenol		108	5.606	5.606	(1.096)	296100	50.0000	53.6
34 Hexachloroethane		117	5.686	5.686	(1.112)	128093	50.0000	51.9
35 Nitrobenzene		77	5.798	5.798	(0.869)	304109	50.0000	49.1
41 Isophorone		82	6.082	6.082	(0.912)	549217	50.0000	50.1
42 2-Nitrophenol		139	6.194	6.194	(0.929)	172657	50.0000	50.7
43 2,4-Dimethylphenol		107	6.242	6.242	(0.936)	294489	50.0000	50.9
44 bis(2-Chloroethoxy)methane		93	6.365	6.365	(0.954)	376391	50.0000	51.7

Data File: \\Qpitpa02\D\chem\722.i\061400.b\F06140C1.D
Report Date: 15-Jun-2000 05:23

Page 2

Compounds	QUANT SIG	AMOUNTS					
		CAL-AMT	ON-COL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(NG)	(NG)
=====	----	--	-----	-----	-----	-----	-----
48 2,4-Dichlorophenol	162	6.493	6.493	(0.974)	259302	50.0000	51.1
49 Benzoic Acid	122	6.391	6.391	(0.958)	158403	50.0000	55.8
50 1,2,4-Trichlorobenzene	180	6.610	6.610	(0.991)	267543	50.0000	50.8
51 Naphthalene	128	6.696	6.696	(1.004)	954074	50.0000	51.0
52 4-Chloroaniline	127	6.797	6.797	(1.019)	408432	50.0000	52.5
56 Hexachlorobutadiene	225	6.947	6.947	(1.042)	126981	50.0000	49.4
59 4-Chloro-3-Methylphenol	107	7.535	7.535	(1.130)	271754	50.0000	52.9
62 2-Methylnaphthalene	142	7.743	7.743	(1.161)	625991	50.0000	51.1
205 1-Methylnaphthalene	142	7.925	7.925	(1.188)	601360	50.0000	52.1
64 Hexachlorocyclopentadiene	237	8.128	8.128	(0.836)	148130	50.0000	45.2
66 2,4,6-Trichlorophenol	196	8.282	8.282	(0.852)	175344	50.0000	52.0
67 2,4,5-Trichlorophenol	196	8.352	8.352	(0.859)	185627	50.0000	51.6
70 2-Chloronaphthalene	162	8.592	8.592	(0.884)	547373	50.0000	50.2
73 2-Nitroaniline	65	8.859	8.859	(0.911)	143729	50.0000	47.9
76 Dimethylphthalate	163	9.297	9.297	(0.956)	648794	50.0000	51.6
78 2,6-Dinitrotoluene	165	9.431	9.431	(0.970)	133968	50.0000	49.5
79 Acenaphthylene	152	9.410	9.410	(0.968)	920205	50.0000	51.3
81 3-Nitroaniline	138	9.698	9.698	(0.997)	183475	50.0000	52.6
82 Acenaphthene	153	9.789	9.789	(1.007)	574850	50.0000	50.5
83 2,4-Dinitrophenol	184	9.917	9.917	(1.020)	69638	50.0000	50.6
85 4-Nitrophenol	109	10.083	10.083	(1.037)	71201	50.0000	50.4
86 Dibenzofuran	168	10.126	10.126	(1.041)	811772	50.0000	51.8
87 2,4-Dinitrotoluene	165	10.248	10.248	(1.054)	181332	50.0000	50.3
91 2,3,5,6-Tetrachlorophenol	232	10.409	10.409	(1.070)	131124	50.0000	50.2
88 2,3,4,6-Tetrachlorophenol	232	10.505	10.505	(1.080)	133780	50.0000	51.4
93 Diethylphthalate	149	10.836	10.836	(1.114)	639549	50.0000	52.4
94 Fluorene	166	10.879	10.879	(1.119)	654003	50.0000	51.8
95 4-Chlorophenyl-phenylether	204	10.911	10.911	(1.122)	292197	50.0000	52.7
96 4-Nitroaniline	138	11.039	11.039	(1.135)	189425	50.0000	54.5
98 4,6-Dinitro-2-methylphenol	198	11.146	11.146	(0.855)	93077	50.0000	46.4
99 N-Nitrosodiphenylamine	169	11.205	11.205	(0.859)	489416	50.0000	49.6
100 1,2-Diphenylhydrazine	77	11.263	11.263	(0.864)	651935	50.0000	48.8
106 4-Bromophenyl-phenylether	248	12.027	12.027	(0.922)	143832	50.0000	47.7
107 Hexachlorobenzene	284	12.332	12.332	(0.946)	140358	50.0000	47.4
111 Pentachlorophenol	266	12.775	12.775	(0.980)	85051	50.0000	43.8
115 Phenanthrene	178	13.096	13.096	(1.004)	920084	50.0000	50.2
116 Anthracene	178	13.203	13.203	(1.012)	945821	50.0000	50.2
119 Carbazole	167	13.641	13.641	(1.046)	906282	50.0000	50.8
120 Di-n-Butylphthalate	149	14.773	14.773	(1.133)	1098053	50.0000	52.8
123 Fluoranthene	202	16.039	16.039	(1.230)	928188	50.0000	51.7
124 Benzidine	184	16.456	16.456	(0.836)	479903	50.0000	59.1
125 Pyrene	202	16.584	16.584	(0.843)	960451	50.0000	51.3
131 Butylbenzylphthalate	149	18.513	18.513	(0.941)	502063	50.0000	54.5
135 3,3'-Dichlorobenzidine	252	19.688	19.688	(1.000)	318008	50.0000	54.5
136 Benzo(a)Anthracene	228	19.645	19.645	(0.998)	863199	50.0000	53.6
137 Chrysene	228	19.747	19.747	(1.003)	829453	50.0000	54.0
139 bis(2-ethylhexyl) Phthalate	149	20.083	20.083	(1.020)	708196	50.0000	55.9

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
140 Di-n-octylphthalate	149	21.552	21.552	(0.935)	1291705	50.0000	53.2
141 Benzo(b)fluoranthene	252	22.231	22.231	(0.964)	855621	50.0000	47.5
142 Benzo(k)fluoranthene	252	22.284	22.284	(0.967)	892514	50.0000	50.4
146 Benzo(a)pyrene	252	22.925	22.925	(0.994)	830621	50.0000	50.3
149 Indeno(1,2,3-cd)pyrene	276	25.351	25.351	(1.100)	991911	50.0000	48.9
150 Dibenz(a,h)anthracene	278	25.399	25.399	(1.102)	868133	50.0000	49.4
151 Benzo(g,h,i)perylene	276	25.960	25.960	(1.126)	859419	50.0000	49.6
\$ 154 Nitrobenzene-d5	82	5.777	5.777	(0.866)	289563	50.0000	48.7
\$ 155 2-Fluorobiphenyl	172	8.421	8.421	(0.866)	619669	50.0000	50.0
\$ 156 Terphenyl-d14	244	17.108	17.108	(0.869)	655093	50.0000	51.4
\$ 157 Phenol-d5	99	4.789	4.789	(0.936)	373810	50.0000	52.4
\$ 158 2-Fluorophenol	112	3.779	3.779	(0.739)	299348	50.0000	51.9
\$ 159 2,4,6-Tribromophenol	330	11.466	11.466	(0.879)	57322	50.0000	45.5
\$ 186 2-Chlorophenol-d4	132	4.906	4.906	(0.959)	280701	50.0000	50.5
\$ 187 1,2-Dichlorobenzene-d4	152	5.323	5.323	(1.041)	201269	50.0000	51.9

**GC/MS SEMIVOLATILE
QC DATA**

Date : 07-JUN-2000 09:56

Client ID: DFTPP02

Instrument: 722.1

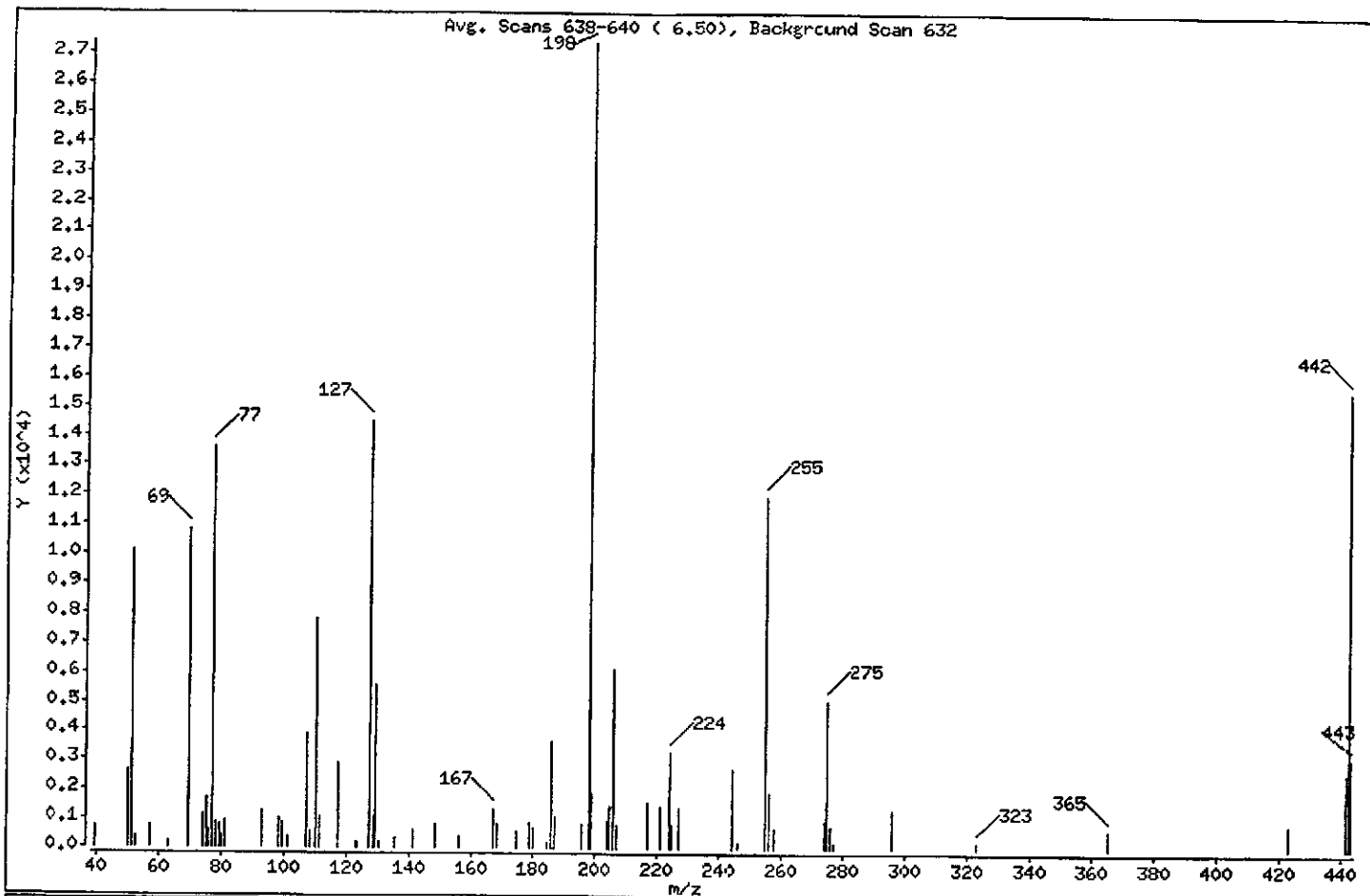
Sample Info: DFTPP050 (25ppb) 194-175-8

Operator: 007062

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	36.92
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	39.48
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	52.92
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.04
275	10.00 - 30.00% of mass 198	18.40
365	Greater than 1.00% of mass 198	2.33
441	Present, but less than mass 443	9.35
442	40.00 - 100.00% of mass 198	56.82
443	17.00 - 23.00% of mass 442	11.19 (19.69)

Data File: \\qpitpa02\chem\722.1\060700.b\F0607DF1.D
Date: 07-JUN-2000 09:56

Client ID: DFTPP02

Sample Info: DFTPP050 (20ppb) 194-175-8

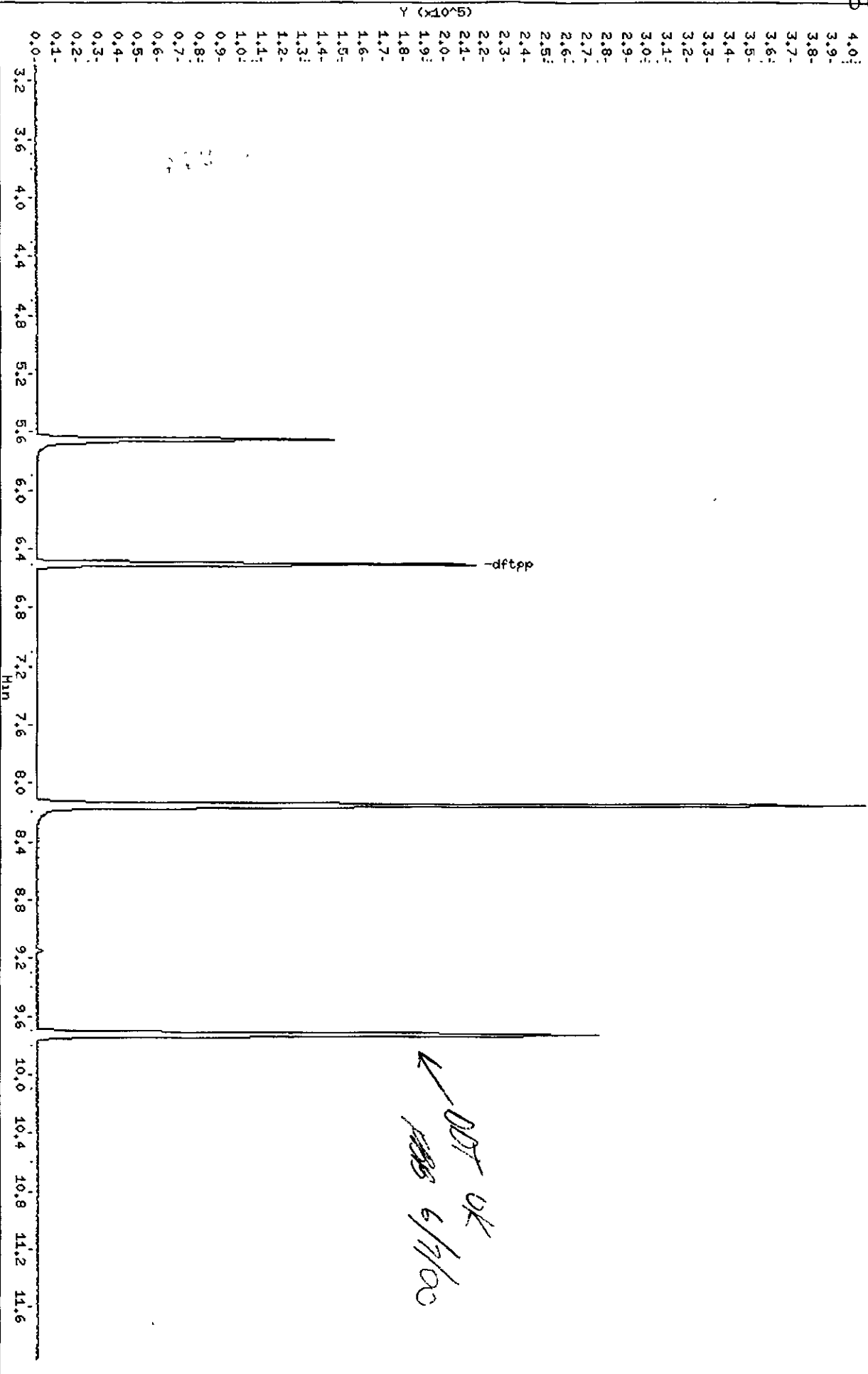
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Operator: 007062

Column diameter: 2.00

Column phase:

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Page 4

Date : 07-JUN-2000 09:56

Client ID: DFTPP02

Instrument: 722.i

Sample Info: DFTPP050 (25ppb) 194-175-8

Operator: 007062

Column phase:

Column diameter: 2.00

Data File: F0607DF1.D

Spectrum: Avg. Scans 638-640 (6.50), Background Scan 632

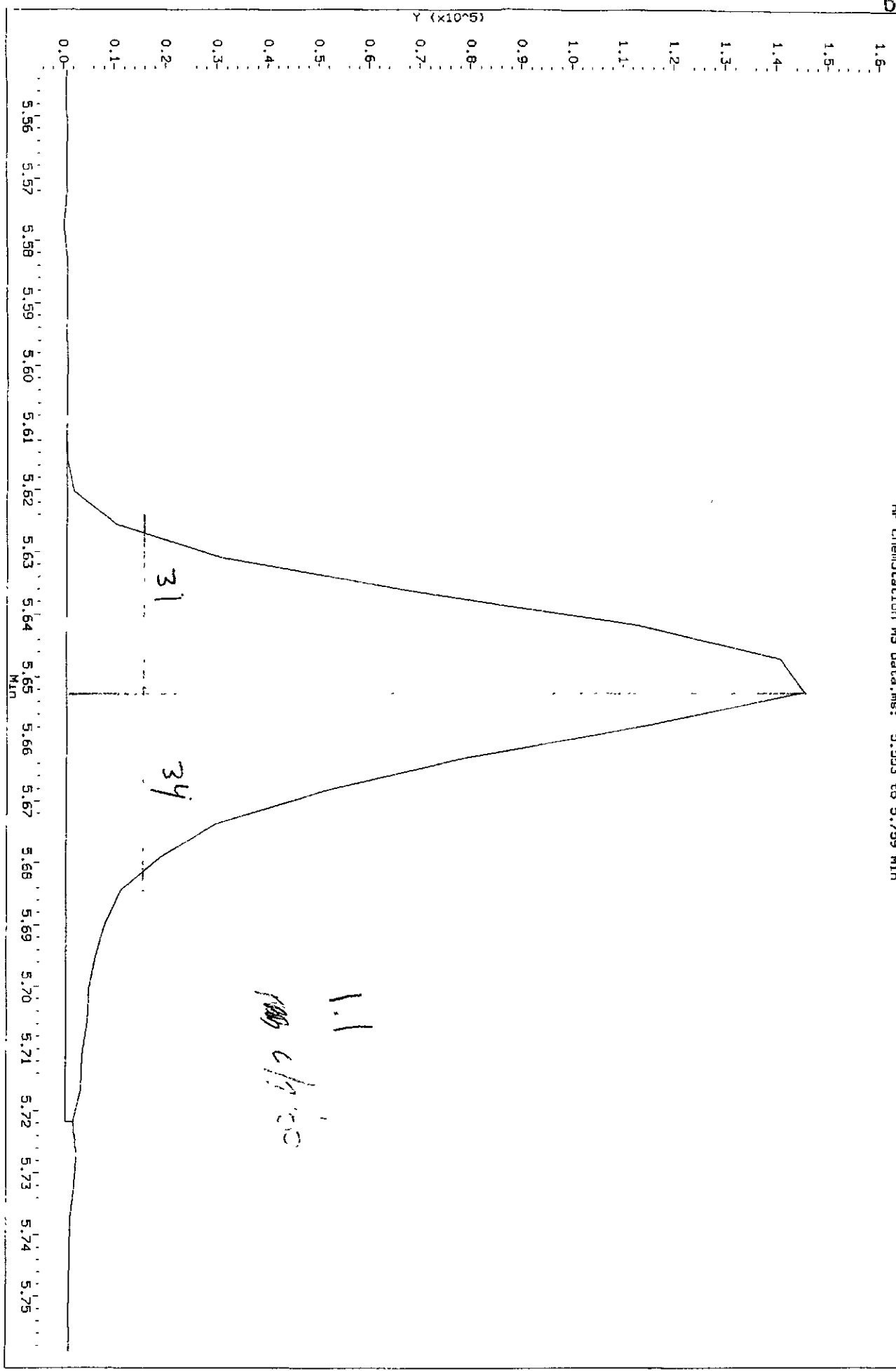
Location of Maximum: 198.00

Number of points: 69

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50.00	2641	107.00	3907	180.00	707	255.00	11971
51.00	10111	108.00	593	185.00	210	256.00	1882
52.00	369	110.00	7824	186.00	3653	258.00	704
57.00	750	111.00	1098	187.00	1061	274.00	933
63.00	182	117.00	2904	196.00	796	275.00	5039
69.00	10812	123.00	184	198.00	27384	276.00	742
74.00	1155	127.00	14492	199.00	1873	277.00	187
75.00	1705	128.00	1080	204.00	957	296.00	1325
76.00	638	129.00	5569	205.00	1468	323.00	171
77.00	13610	130.00	180	206.00	6087	365.00	638
78.00	881	135.00	342	207.00	842	423.00	792
79.00	787	141.00	640	217.00	1596	441.00	2561
80.00	461	148.00	800	221.00	1435	442.00	15559
81.00	942	156.00	391	224.00	3251	443.00	3063
93.00	1265	167.00	1318	225.00	816		
98.00	1036	168.00	799	227.00	1404		
99.00	902	175.00	589	244.00	2731		

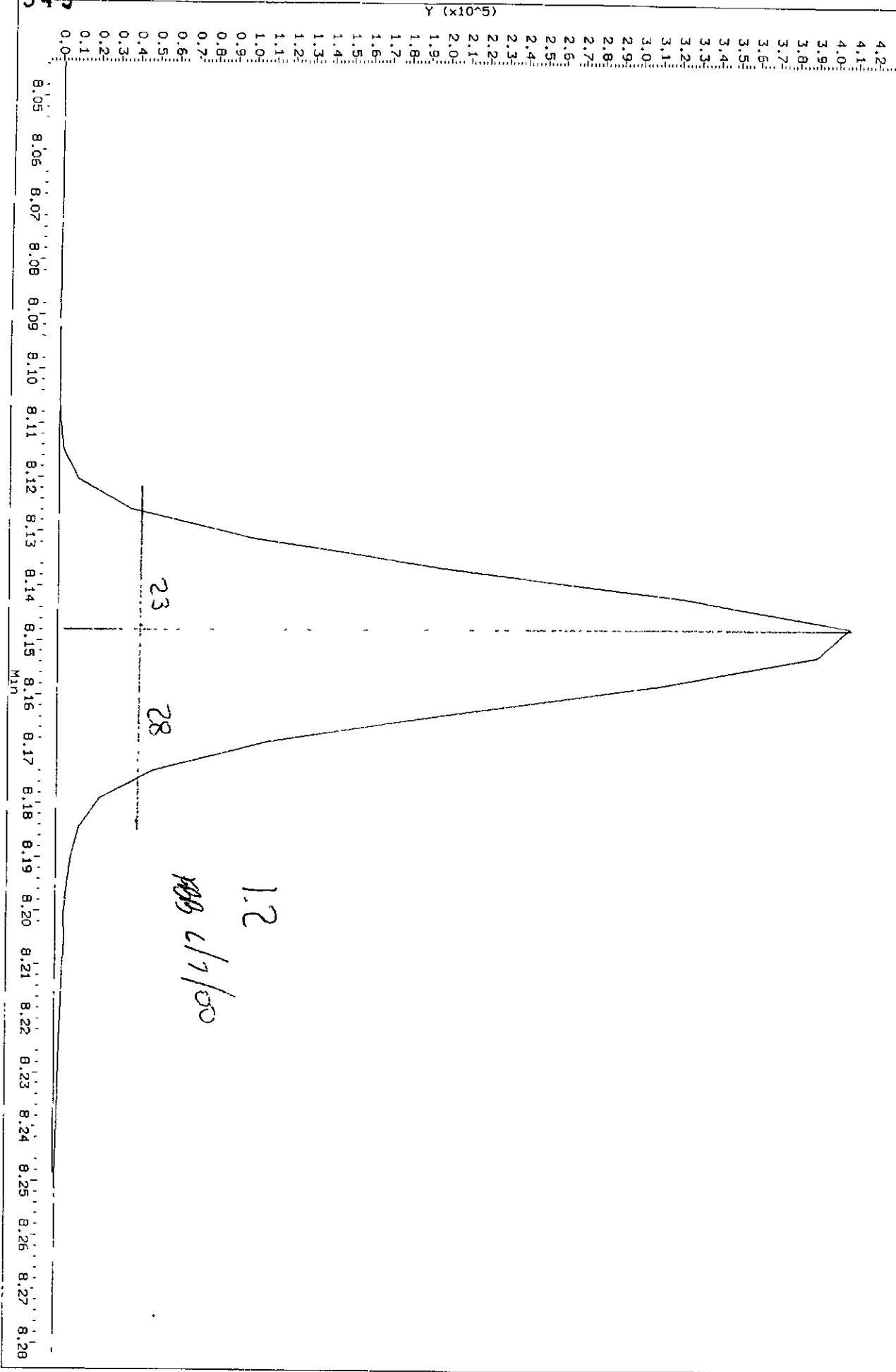
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Injection Date: 07-JUN-2000 09:56
Instrument: 722.1
Client Sample ID: DFTPP02

HP ChemStation MS data.ms: 5.553 to 5.759 Min



Data File: \\Qp1p02\0\chem\722.1\060700.b\F0607DF1.D
Injection Date: 07-JUN-2000 09:56
Instrument: 722.1
Client Sample ID: DFTFP02

HP ChemStation MS data.ms: 8.044 to 8.282 Min



Data File: \\QPITPA02\B\chem\722.1\061400.b\F0614DF1.D

Page 3

Date : 14-JUN-2000 12:50

Client ID: DFTPP02

Instrument: 722.1

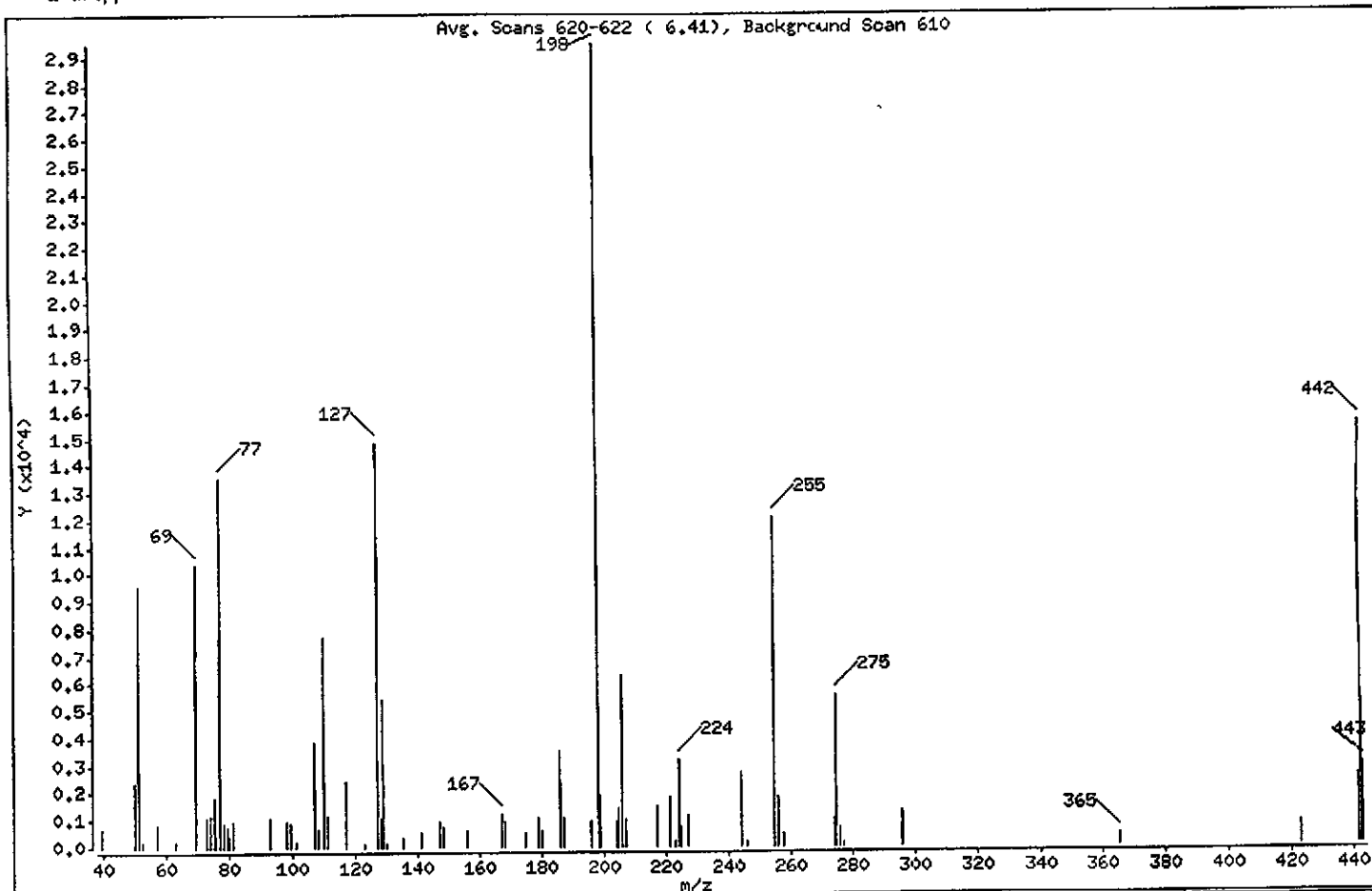
Sample Info: DFTPP050 (25ppb) 194-175-8

Operator: 007062

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	32.30
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	35.25
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	50.34
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.35
275	10.00 - 30.00% of mass 198	18.85
365	Greater than 1.00% of mass 198	1.40
441	Present, but less than mass 443	8.42
442	40.00 - 100.00% of mass 198	52.37
443	17.00 - 23.00% of mass 442	9.86 (18.83)

Data File: \\QP1TP02\J\chem\722.i\061400.b\F0614DF1.D

Date: 14-JUN-2000 12:50

Client ID: DFTPP02

Sample Info: DFTPP050 (25ppb) 194-175-8

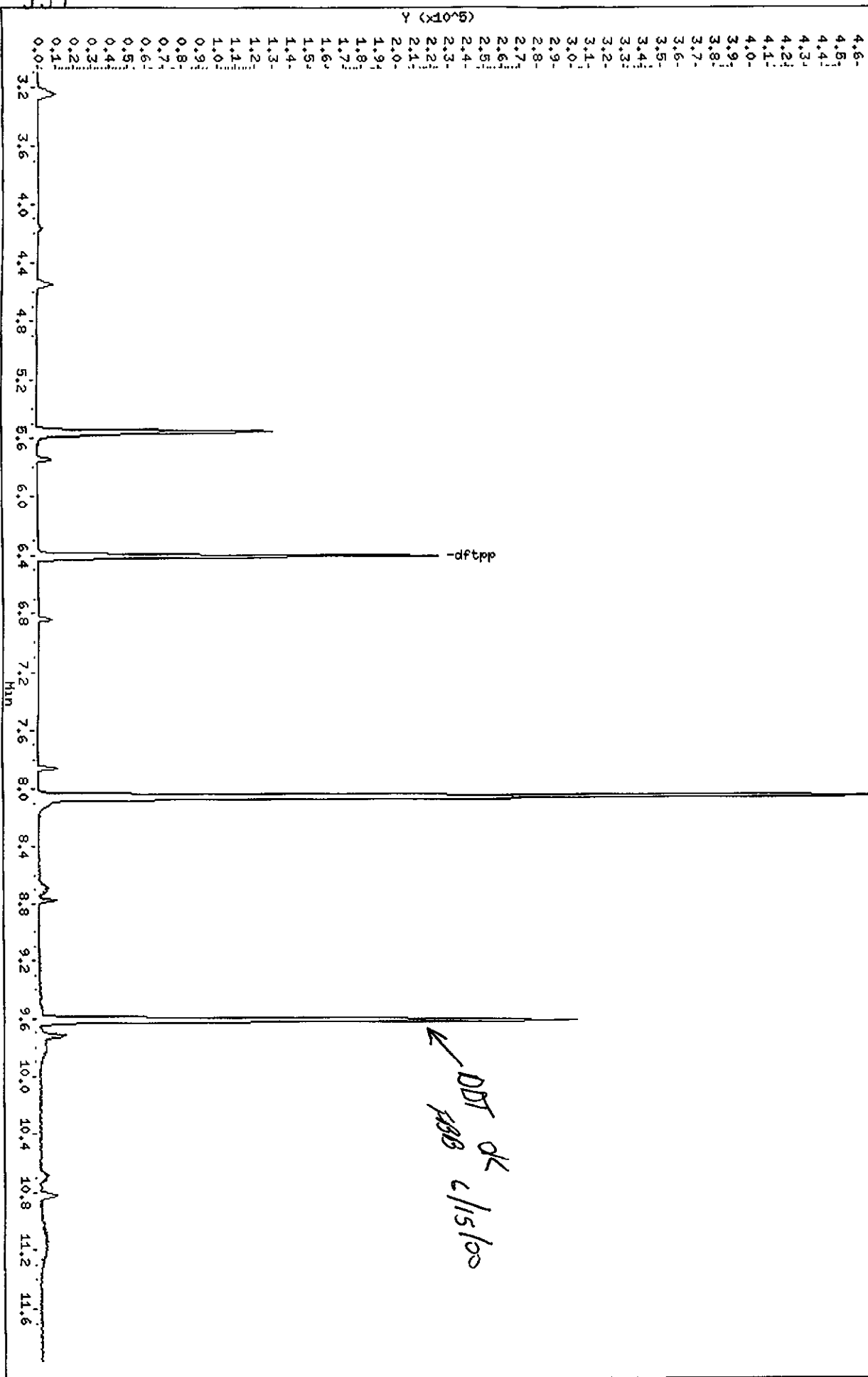
Instrument: 722.1

Operator: 007062

Column diameter: 2.00

Column phase:

\\QP1TP02\J\chem\722.i\061400.b\F0614DF1.D



660 951

Data File: \\QPITPA02\D\chem\722.1\F061400.b\F0614DF1.D

Page 4

Date : 14-JUN-2000 12:50

Client ID: DFTPP02

Instrument: 722.1

Sample Info: DFTPP050 (25ppb) 194-175-8

Operator: 007062

Column phase:

Column diameter: 2.00

Data File: F0614DF1.D

Spectrum: Avg. Scans 620-622 (6.41), Background Scan 610

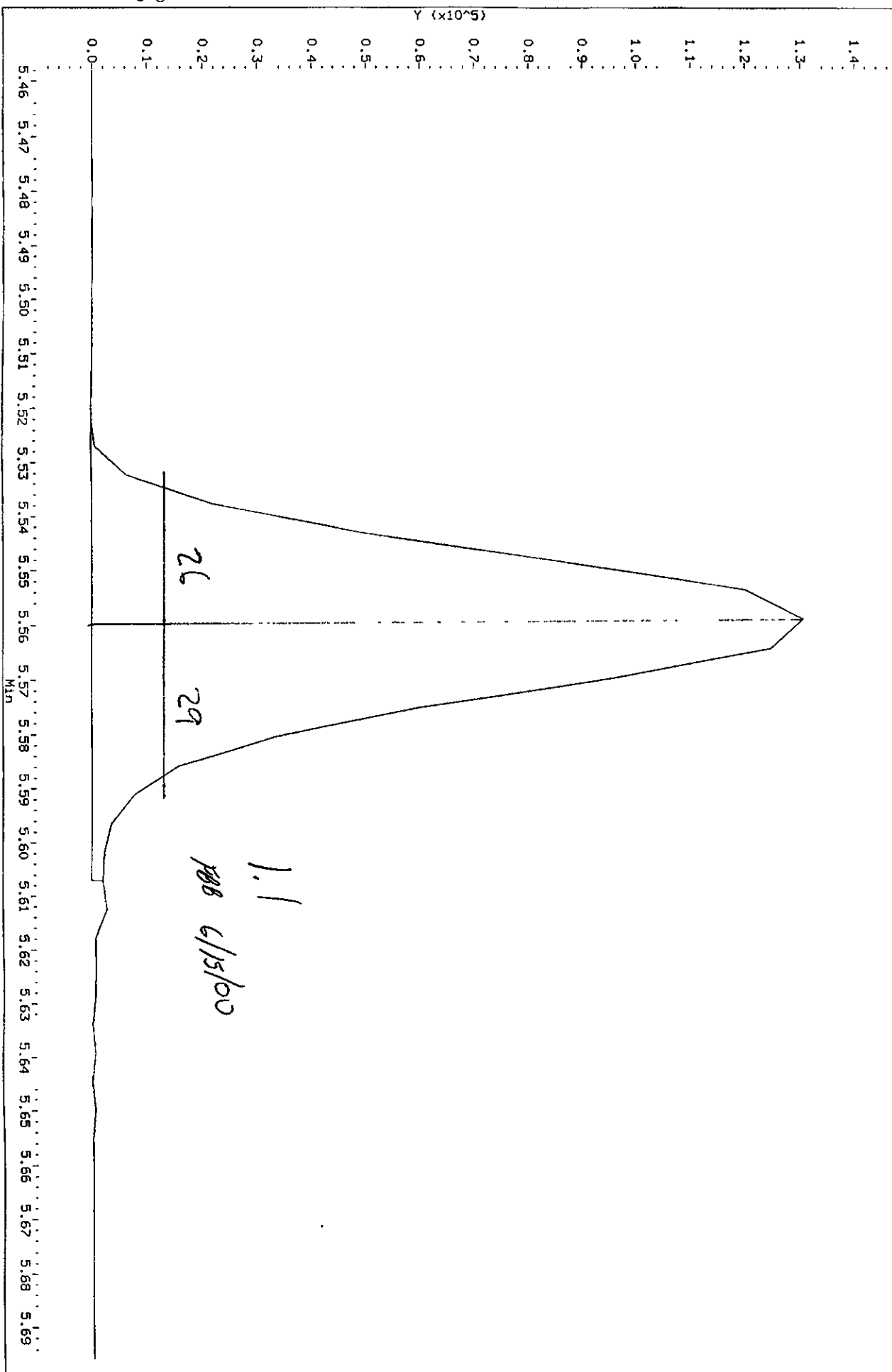
Location of Maximum: 198.00

Number of points: 70

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50.00	2385	101.00	195	175.00	538	244.00	2711
51.00	9519	107.00	3854	179.00	1064	246.00	178
52.00	196	108.00	651	180.00	641	255.00	12082
57.00	834	110.00	7696	186.00	3547	256.00	1815
63.00	190	111.00	1179	187.00	1060	258.00	448
69.00	10389	117.00	2423	196.00	948	274.00	1003
73.00	1050	123.00	167	198.00	29464	275.00	5556
74.00	1161	127.00	14836	199.00	1871	276.00	708
75.00	1813	128.00	1081	204.00	926	277.00	168
76.00	440	129.00	5394	205.00	1445	296.00	1305
77.00	13546	130.00	167	206.00	6283	365.00	414
78.00	880	135.00	363	207.00	1045	423.00	832
79.00	730	141.00	517	217.00	1490	441.00	2481
80.00	412	147.00	966	221.00	1855	442.00	15433
81.00	963	148.00	750	223.00	185	443.00	2906
93.00	1080	156.00	591	224.00	3190		
98.00	961	167.00	1240	225.00	778		

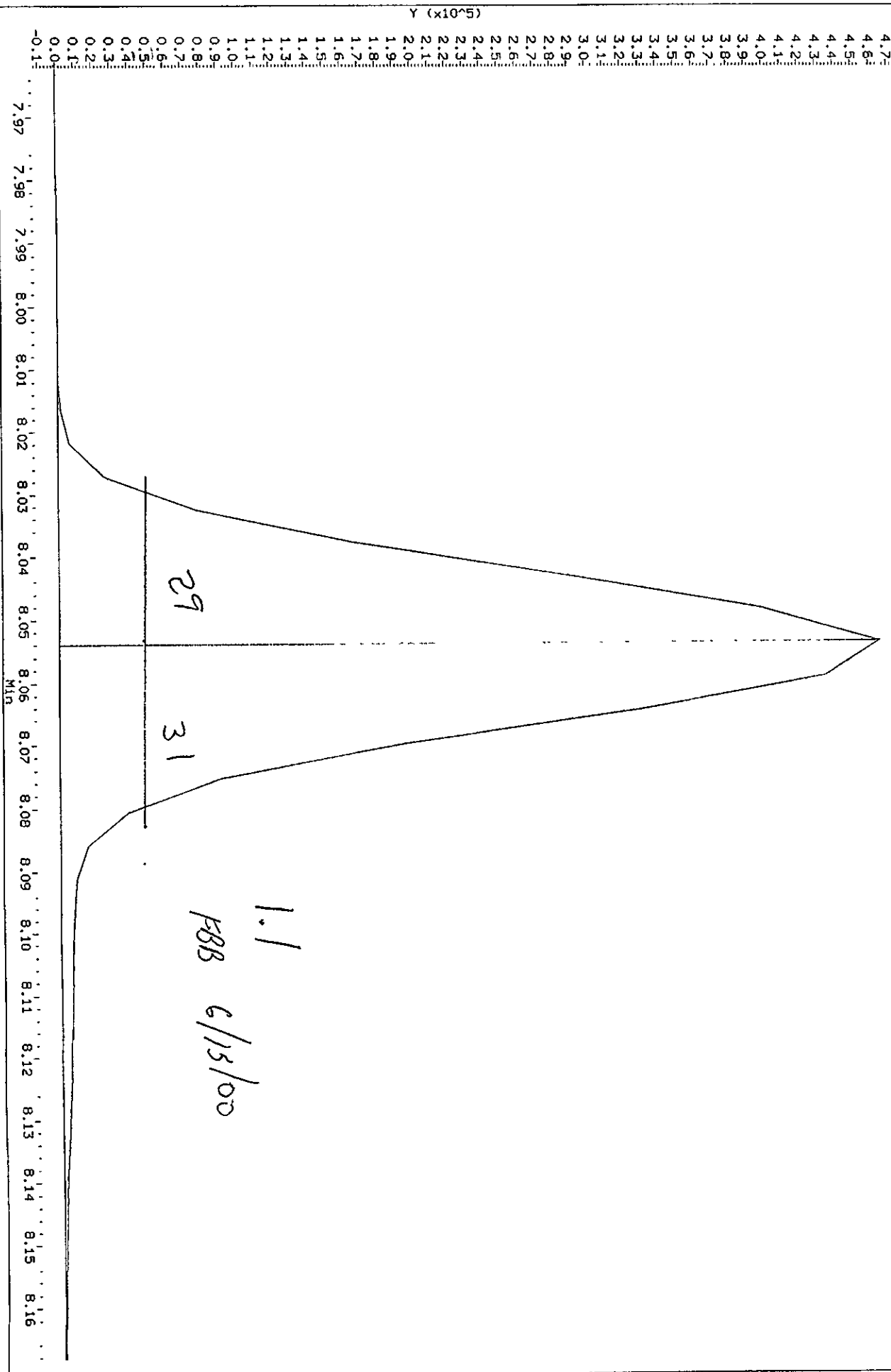
Data File: \\Dp1tpa02\VD\chem\722_1\061400.b\F0614DF1.D
Injection Date: 14-JUN-2000 12:50
Instrument: 722.1
Client Sample ID: DFTPP02

HP ChemStation MS data.ms: 5.458 to 5.696 Min



660 954
 Data File: \\gpltp02\chem\722.1\061400.b\061400.F1.D
 Injection Date: 14-JUN-2000 12:50
 Instrument: 722.1
 Client Sample ID: DFTPP02

HP ChemStation MS data.ms: 7.962 to 8.168 Min



UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0F120000 286
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL Date Received: 06/08/00
Work Order: DEJH7101 Date Extracted: 06/12/00
Dilution factor: 1 Date Analyzed: 06/14/00
Moisture %: NA

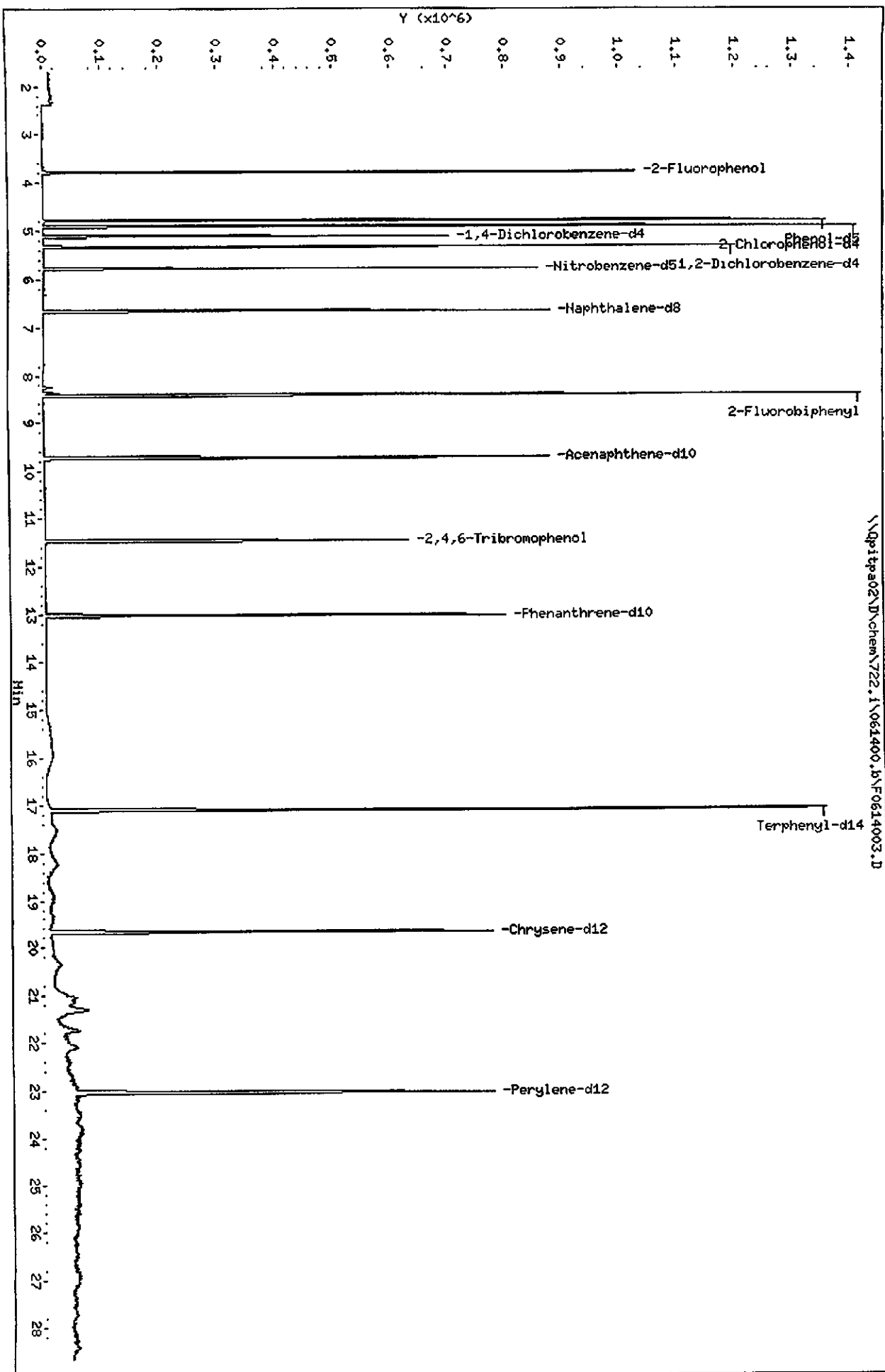
QC Batch: 0164286

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: \\qipitpa02\chem\722.1\061400.b\F0614003.D
Date: 14-JUN-2000 14:49
Client ID: INTRA-LAB BLANK
Sample Info: COF080328-BLK 6/12/00 TCLP
Volume Injected (uL): 2.0
Column phase: HPS-MS

Instrument: 722.1
Operator: 007062
Column diameter: 0.25



STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\722.i\061400.b\F0614003.D
 Lab Smp Id: DEJH7101 Client Smp ID: INTRA-LAB BLANK
 Inj Date : 14-JUN-2000 14:49
 Operator : 007062 Inst ID: 722.i
 Smp Info : C0F080328-BLK 6/12/00 TCLP
 Misc Info : dejh7101,061400.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\061400.b\8270b.m
 Meth Date : 15-Jun-2000 05:22 bungardf Quant Type: ISTD
 Cal Date : 07-JUN-2000 13:02 Cal File: F06070C6.D
 Als bottle: 5 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC083

Handwritten:
 6/15/00

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (NG)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	5 109	5.115	(1.000)	165210	40.0000	(Q)	
* 2 Naphthalene-d8	136	6.658	6 669	(1.000)	676667	40.0000		
* 3 Acenaphthene-d10	164	9 714	9.725	(1.000)	403252	40.0000		
* 4 Phenanthrene-d10	188	13.031	13.042	(1.000)	725292	40.0000		
* 5 Chrysene-d12	240	19.666	19.683	(1.000)	646623	40.0000		
* 6 Perylene-d12	264	23.032	23.053	(1.000)	681943	40.0000		
9 Pyridine	79	Compound Not Detected						
27 1,4-Dichlorobenzene	146	Compound Not Detected.						
M 195 Cresols, total	100	Compound Not Detected						
30 2-Methylphenol	108	Compound Not Detected.						
192 4-Methylphenol	108	Compound Not Detected.						
193 3-Methylphenol	108	Compound Not Detected.						
34 Hexachloroethane	117	Compound Not Detected.						
35 Nitrobenzene	77	Compound Not Detected.						

Data File: \\Qpitpa02\D\chem\722.i\061400.b\F0614003.D
 Report Date: 15-Jun-2000 05:44

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
56 Hexachlorobutadiene	. 224				Compound Not Detected.		
66 2,4,6-Trichlorophenol	196				Compound Not Detected.		
67 2,4,5-Trichlorophenol	196				Compound Not Detected.		
87 2,4-Dinitrotoluene	165				Compound Not Detected.		
107 Hexachlorobenzene	283				Compound Not Detected.		
111 Pentachlorophenol	265				Compound Not Detected.		
\$ 154 Nitrobenzene-d5	82	5.771	5.777	(0.867)	398390	72.3807	0.181(a)
\$ 155 2-Fluorobiphenyl	172	8.410	8.421	(0.866)	844592	68.6402	0.172(a)
\$ 156 Terphenyl-d14	244	17.102	17.108	(0.870)	1103936	77.7193	0.194(a)
\$ 157 Phenol-d5	99	4.783	4.789	(0.936)	748073	114.542	0.286(a)
\$ 158 2-Fluorophenol	112	3.778	3.779	(0.740)	539850	102.281	0.256(a)
\$ 159 2,4,6-Tribromophenol	330	11.460	11.466	(0.879)	134210	103.983	0.260(a)
\$ 186 2-Chlorophenol-d4	132	4.906	4.906	(0.960)	633215	124.508	0.311(a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.322	5.323	(1.042)	275195	77.5947	0.194(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).
 Q - Qualifier signal failed the ratio test.

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F120000 286

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEJH7102

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

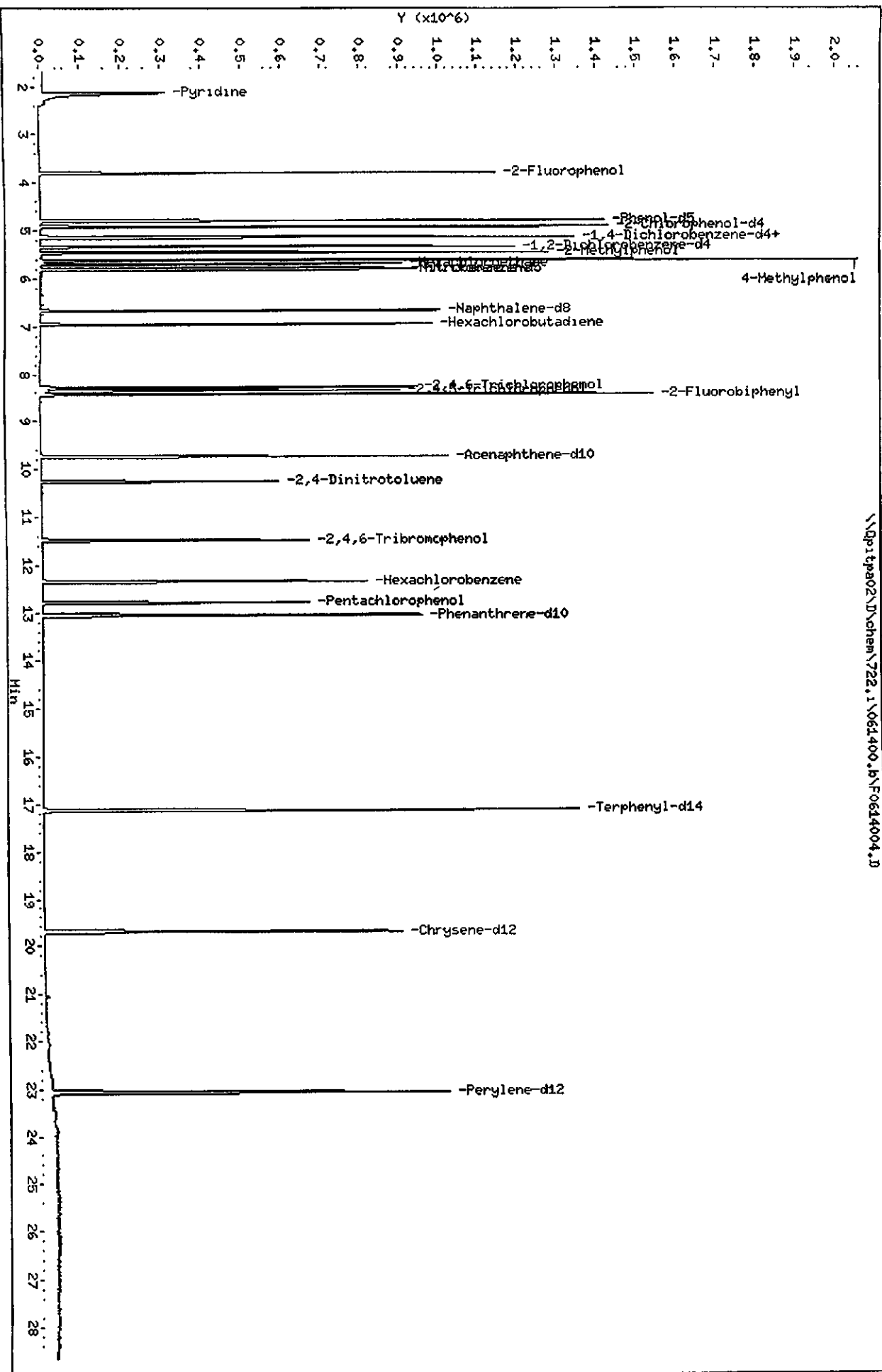
QC Batch: 0164286

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.169	
121-14-2	2,4-Dinitrotoluene	0.145	
118-74-1	Hexachlorobenzene	0.152	
87-68-3	Hexachlorobutadiene	0.161	
67-72-1	Hexachloroethane	0.170	
98-95-3	Nitrobenzene	0.160	
87-86-5	Pentachlorophenol	0.166	
110-86-1	Pyridine	0.163	
95-95-4	2,4,5-Trichlorophenol	0.162	
88-06-2	2,4,6-Trichlorophenol	0.158	
1319-77-3	Cresols (total)	0.552	

Data File: \\dp1tpa02\J\chem\722.1\061400.b\F0614004.D
 Date: 14-JUN-2000 15:24
 Client ID: INTRA-LAB CHECK
 Sample Info: COF080328-LCS 6/12/00 TLP
 Volume Injected (uL): 2.0
 Column phase: Hp5-MS

Instrument: 722.i
 Operator: 007062
 Column diameter: 0.25



Data File: \\Qpitpa02\D\chem\722.i\061400.b\F0614004.D
Report Date: 15-Jun-2000 05:45

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STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\722.i\061400.b\F0614004.D
Lab Smp Id: DEJH7102 Client Smp ID: INTRA-LAB CHECK
Inj Date : 14-JUN-2000 15:24
Operator : 007062 Inst ID: 722.i
Smp Info : C0F080328-LCS 6/12/00 TCLP
Misc Info : dejh7102,061400.b,8270b.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\722.i\061400.b\8270b.m
Meth Date : 15-Jun-2000 05:22 bungardf Quant Type: ISTD
Cal Date : 07-JUN-2000 13:02 Cal File: F06070C6.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tclp.sub
Target Version: 4.04
Processing Host: PITPC083

PBB
6/15/00

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	5.122	5.115	(1.000)	185412	40.0000	
* 2 Naphthalene-d8	136	6.672	6.669	(1.000)	788486	40.0000	
* 3 Acenaphthene-d10	164	9.733	9.725	(1.000)	489299	40.0000	
* 4 Phenanthrene-d10	188	13.055	13.042	(1.000)	885588	40.0000	
* 5 Chrysene-d12	240	19.690	19.683	(1.000)	810738	40.0000	
* 6 Perylene-d12	264	23.061	23.053	(1.000)	848942	40.0000	
9 Pyridine	79	2.136	2.118	(0.417)	363623	65.2414	0.163
27 1,4-Dichlorobenzene	146	5.138	5.131	(1.003)	470193	67.5559	0.169
M 195 Cresols, total	100				1263538	220.832	0.552
30 2-Methylphenol	108	5.448	5.446	(1.064)	429365	73.7554	0.184
192 4-Methylphenol	108	5.619	5.606	(1.097)	834173	147.076	0.368
193 3-Methylphenol	108	Compound Not Detected.					
34 Hexachloroethane	117	5.699	5.686	(1.113)	172065	67.9516	0.170
35 Nitrobenzene	77	5.812	5.798	(0.871)	426850	63.8776	0.160

Data File: \\Opitpa02\D\chem\722.i\061400.b\F0614004.D
 Report Date: 15-Jun-2000 05:45

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(NG)	(mg/L)	
-----	----	--	-----	-----	-----	-----	-----	-----
56 Hexachlorobutadiene	225	6.960	6.947	(1.043)	178669	64.3287	0.161	
66 2,4,6-Trichlorophenol	196	8.285	8.282	(0.851)	257238	63.2757	0.158	
67 2,4,5-Trichlorophenol	196	8.354	8.352	(0.858)	281062	64.7956	0.162	
87 2,4-Dinitrotoluene	165	10.256	10.248	(1.054)	252572	58.1223	0.145	
107 Hexachlorobenzene	284	12.345	12.332	(0.946)	225562	60.8447	0.152	
111 Pentachlorophenol	266	12.783	12.775	(0.979)	161680	66.5692	0.166	
\$ 154 Nitrobenzene-d5	82	5.790	5.777	(0.868)	427031	66.5817	0.166 (a)	
\$ 155 2-Fluorobiphenyl	172	8.435	8.421	(0.867)	909586	60.9225	0.152 (a)	
\$ 156 Terphenyl-d14	244	17.126	17.108	(0.870)	1121731	62.9860	0.157 (a)	
\$ 157 Phenol-d5	99	4.797	4.789	(0.936)	797282	108.775	0.272 (a)	
\$ 158 2-Fluorophenol	112	3.792	3.779	(0.740)	579490	97.8287	0.244 (a)	
\$ 159 2,4,6-Tribromophenol	330	11.485	11.466	(0.880)	144023	91.3884	0.228 (a)	
\$ 186 2-Chlorophenol-d4	132	4.919	4.906	(0.960)	678534	118.882	0.297 (a)	
\$ 187 1,2-Dichlorobenzene-d4	152	5.336	5.323	(1.042)	292923	73.5942	0.184 (a)	

QC Flag Legend

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

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEEHC10M

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

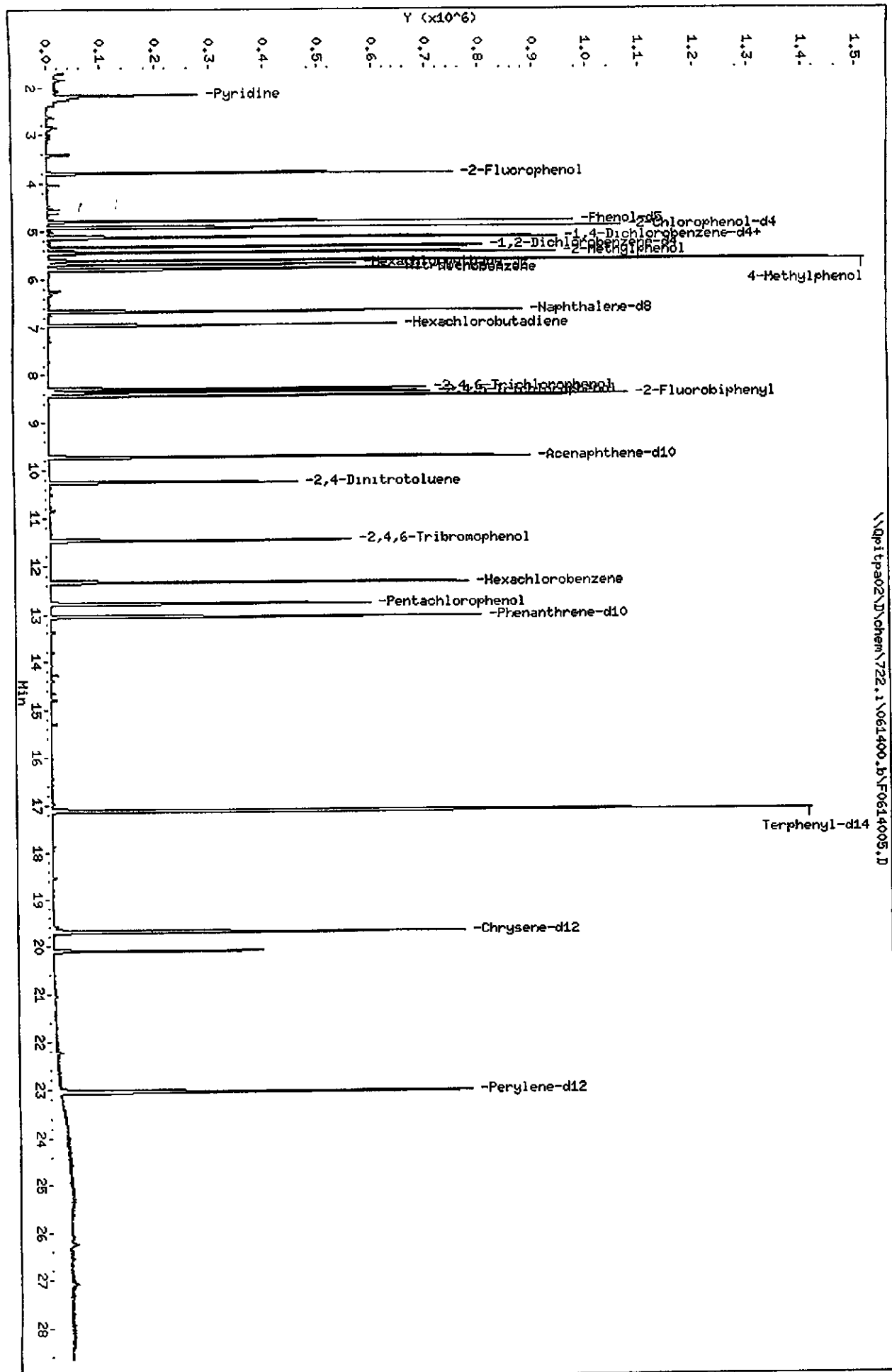
QC Batch: 0164286

Client Sample Id: DF/S1/0159/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
106-46-7	1,4-Dichlorobenzene	0.133	
121-14-2	2,4-Dinitrotoluene	0.136	
118-74-1	Hexachlorobenzene	0.178	
87-68-3	Hexachlorobutadiene	0.121	
67-72-1	Hexachloroethane	0.125	
98-95-3	Nitrobenzene	0.134	
87-86-5	Pentachlorophenol	0.169	
110-86-1	Pyridine	0.116	
95-95-4	2,4,5-Trichlorophenol	0.143	
88-06-2	2,4,6-Trichlorophenol	0.138	
1319-77-3	Cresols (total)	0.462	

Data File: \\qipitpa02\chem\722.1\061400.b\F0614005.D
 Date: 14-JUN-2000 15:58
 Client ID: DF/S1/0159/SBC/008
 Sample Info: C0F080328-0015 6/12/00 TCLP
 Volume Injected (uL): 2.0
 Column phase: HPL-MS

Instrument: 722.i
 Operator: 007062
 Column diameter: 0.25



660,965

Data File: \\Qpitpa02\D\chem\722.i\061400.b\F0614005.D
Report Date: 15-Jun-2000 05:45

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STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\722.i\061400.b\F0614005.D
Lab Smp Id: DEEHC10M Client Smp ID: DF/S1/0159/SDC/008
Inj Date : 14-JUN-2000 15:58
Operator : 007062 Inst ID: 722.i
Smp Info : C0F080328-001S 6/12/00 TCLP
Misc Info : deehc10m,061400.b,8270b.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\722.i\061400.b\8270b.m
Meth Date : 15-Jun-2000 05:22 bungardf Quant Type: ISTD
Cal Date : 07-JUN-2000 13:02 Cal File: F06070C6.D
Als bottle: 7 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tclp.sub
Target Version: 4.04
Processing Host: PITPC083

BB
6/15/00

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

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	5.121	5.115	(1.000)	160766	40.0000	
* 2 Naphthalene-d8	136	6.670	6.669	(1.000)	671124	40.0000	
* 3 Acenaphthene-d10	164	9.726	9.725	(1.000)	411189	40.0000	
* 4 Phenanthrene-d10	188	13.049	13.042	(1.000)	742532	40.0000	
* 5 Chrysene-d12	240	19.684	19.683	(1.000)	665444	40.0000	
* 6 Perylene-d12	264	23.049	23.053	(1.000)	683819	40.0000	
9 Pyridine	79	2.151	2.118	(0.420)	223778	46.3056	0.116
27 1,4-Dichlorobenzene	146	5.137	5.131	(1.003)	321783	53.3204	0.133
M 195 Cresols, total	100				916637	184.811	0.462
30 2-Methylphenol	108	5.452	5.446	(1.065)	302234	59.8762	0.150
192 4-Methylphenol	108	5.618	5.606	(1.097)	614403	124.935	0.312
193 3-Methylphenol	108	Compound Not Detected.					
34 Hexachloroethane	117	5.693	5.686	(1.112)	109812	50.0151	0.125
35 Nitrobenzene	77	5.805	5.798	(0.870)	303774	53.4091	0.134

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
*****	----	--	-----	-----	-----	-----	-----
56 Hexachlorobutadiene	225	6.953	6.947	(1.042)	114357	48.3737	0.121
66 2,4,6-Trichlorophenol	196	8.284	8.282	(0.852)	188601	55.2050	0.138
67 2,4,5-Trichlorophenol	196	8.348	8.352	(0.858)	209111	57.3658	0.143
87 2,4-Dinitrotoluene	165	10.249	10.248	(1.054)	198665	54.4016	0.136
107 Hexachlorobenzene	284	12.338	12.332	(0.946)	221904	71.3902	0.178
111 Pentachlorophenol	266	12.776	12.775	(0.979)	138003	67.7676	0.169
\$ 154 Nitrobenzene-d5	82	5.783	5.777	(0.867)	294769	53.9969	0.135(a)
\$ 155 2-Fluorobiphenyl	172	8.428	8.421	(0.867)	634347	50.5584	0.126(a)
\$ 156 Terphenyl-d14	244	17.119	17.108	(0.870)	1164911	79.6925	0.199(a)
\$ 157 Phenol-d5	99	4.790	4.789	(0.935)	561480	88.3478	0.221(a)
\$ 158 2-Fluorophenol	112	3.785	3.779	(0.739)	383609	74.6883	0.187(a)
\$ 159 2,4,6-Tribromophenol	330	11.473	11.466	(0.879)	116890	88.4613	0.221(a)
\$ 186 2-Chlorophenol-d4	132	4.913	4.906	(0.959)	473192	95.6149	0.239(a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.329	5.323	(1.041)	189941	55.0367	0.138(a)

QC Flag Legend

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

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COF080328 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 06/08/00

Work Order: DEEHC10N

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

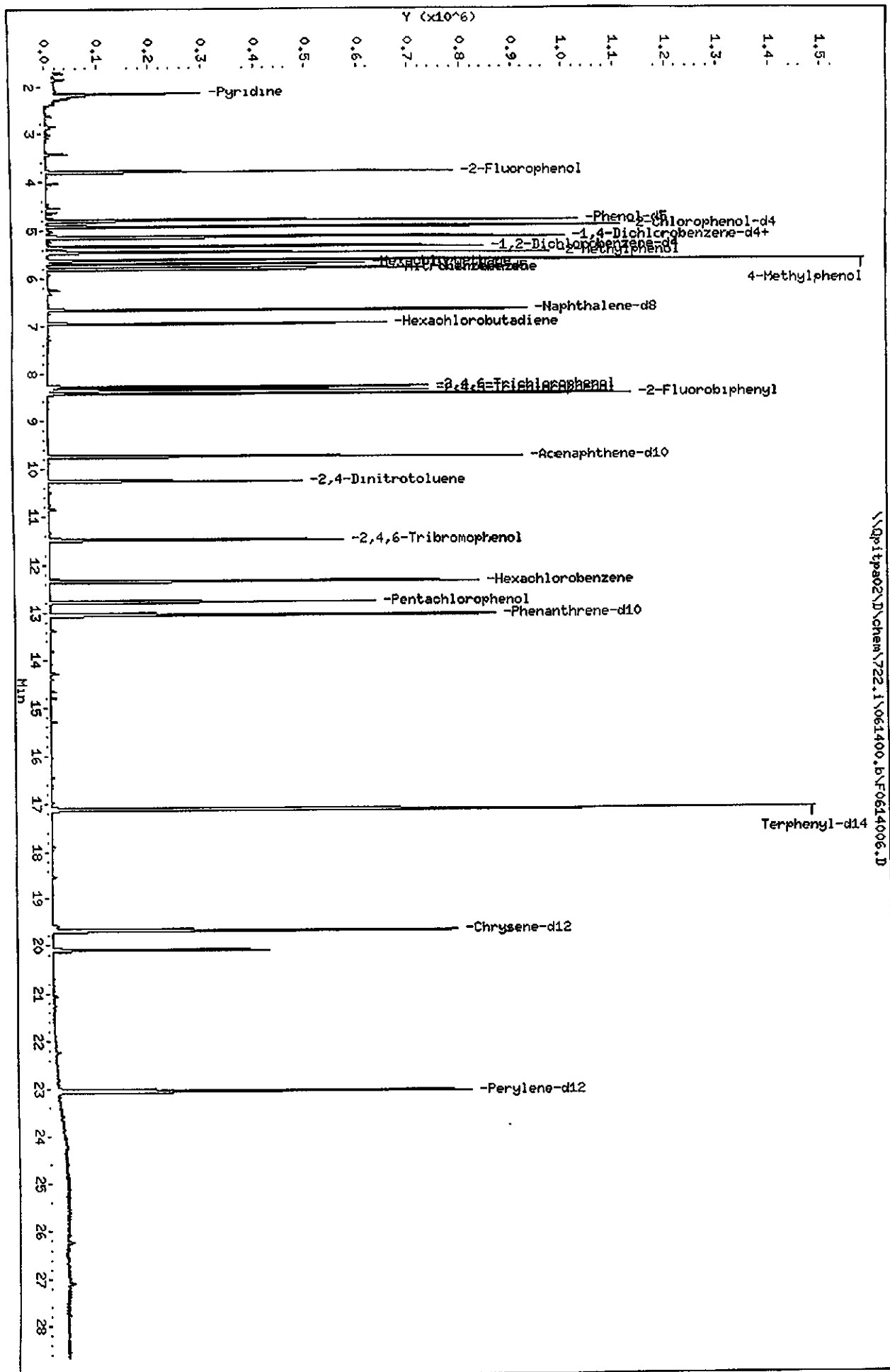
QC Batch: 0164286

Client Sample Id: DF/S1/0159/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.128	
121-14-2	2,4-Dinitrotoluene	0.137	
118-74-1	Hexachlorobenzene	0.181	
87-68-3	Hexachlorobutadiene	0.119	
67-72-1	Hexachloroethane	0.123	
98-95-3	Nitrobenzene	0.130	
87-86-5	Pentachlorophenol	0.174	
110-86-1	Pyridine	0.112	
95-95-4	2,4,5-Trichlorophenol	0.145	
88-06-2	2,4,6-Trichlorophenol	0.138	
1319-77-3	Cresols (total)	0.442	

Data File: \\qptipa02\J\chem\722.1\061400.b\F0614006.D
 Date: 14-JUN-2000 16:32
 Client ID: DF/S1/0159/SDC/008
 Sample Info: Cof080328-001D 6/12/00 TCLP
 Volume Injected (uL): 2.0
 Column phase: HPS-HS

Instrument: 722.1
 Operator: 007062
 Column diameter: 0.25



Data File: \\Qpitpa02\D\chem\722.i\061400.b\F0614006.D
Report Date: 15-Jun-2000 05:46

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STL Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\722.i\061400.b\F0614006.D
Lab Smp Id: DEEHC10N Client Smp ID: DF/S1/0159/SDC/008
Inj Date : 14-JUN-2000 16:32
Operator : 007062 Inst ID: 722.i
Smp Info : C0F080328-001D 6/12/00 TCLP
Misc Info : deehc10n,061400.b,8270b.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\722.i\061400.b\8270b.m
Meth Date : 15-Jun-2000 05:22 bungardf Quant Type: ISTD
Cal Date : 07-JUN-2000 13:02 Cal File: F06070C6.D
Als bottle: 8 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tclp.sub
Target Version: 4.04
Processing Host: PITPC083

BBB
6/15/00

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (NG)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4		152	5.123	5.115	(1.000)	174362	40.0000	
* 2 Naphthalene-d8		136	6.673	6.669	(1.000)	718347	40.0000	
* 3 Acenaphthene-d10		164	9.734	9.725	(1.000)	430815	40.0000	
* 4 Phenanthrene-d10		188	13.051	13.042	(1.000)	774735	40.0000	
* 5 Chrysene-d12		240	19.686	19.683	(1.000)	698614	40.0000	
* 6 Perylene-d12		264	23.052	23.053	(1.000)	713060	40.0000	
9 Pyridine		79	2.159	2.118	(0.421)	235972	45.0214	0.112
27 1,4-Dichlorobenzene		146	5.139	5.131	(1.003)	334247	51.0670	0.128
M 195 Cresols, total		100				950666	176.733	0.442
30 2-Methylphenol		108	5.455	5.446	(1.065)	312066	57.0033	0.142
192 4-Methylphenol		108	5.620	5.606	(1.097)	638600	119.730	0.299
193 3-Methylphenol		108	Compound Not Detected.					
34 Hexachloroethane		117	5.700	5.686	(1.113)	117029	49.1458	0.123
35 Nitrobenzene		77	5.807	5.798	(0.870)	316717	52.0241	0.130

Data File: \\Opitpa02\D\chem\722.i\061400.b\F0614006.D
 Report Date: 15-Jun-2000 05:46

Page 2

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
=====	----	--	-----	-----	-----	(NG)	(mg/L)	
56 Hexachlorobutadiene	225	6.961	6.947	(1.043)	120372	47.5708	0.119	
66 2,4,6-Trichlorophenol	196	8.286	8.282	(0.851)	197081	55.0592	0.138	
67 2,4,5-Trichlorophenol	196	8.350	8.352	(0.858)	222092	58.1513	0.145	
87 2,4-Dinitrotoluene	165	10.252	10.248	(1.053)	209232	54.6851	0.137	
107 Hexachlorobenzene	284	12.346	12.332	(0.946)	234842	72.4121	0.181	
111 Pentachlorophenol	266	12.784	12.775	(0.980)	147496	69.4186	0.174	
\$ 154 Nitrobenzene-d5	82	5.786	5.777	(0.867)	309910	53.0385	0.132 (a)	
\$ 155 2-Fluorobiphenyl	172	8.430	8.421	(0.866)	655348	49.8527	0.125 (a)	
\$ 156 Terphenyl-d14	244	17.122	17.108	(0.870)	1220010	79.4991	0.199 (a)	
\$ 157 Phenol-d5	99	4.792	4.789	(0.935)	583292	84.6233	0.212 (a)	
\$ 158 2-Fluorophenol	112	3.788	3.779	(0.739)	397235	71.3105	0.178 (a)	
\$ 159 2,4,6-Tribromophenol	330	11.481	11.466	(0.880)	124295	90.1554	0.225 (a)	
\$ 186 2-Chlorophenol-d4	132	4.915	4.906	(0.959)	492962	91.8426	0.230 (a)	
\$ 187 1,2-Dichlorobenzene-d4	152	5.332	5.323	(1.041)	199365	53.2629	0.133 (a)	

QC Flag Legend

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

**GC/MS SEMIVOLATILE
MISCELLANEOUS**

Instrument Name: GC/MS Instrument #1

Sequence File: C:\HPCHEM\1\SEQUENCE\060700.S

Comment: STL- PITT HP5973-2 LOG 2ul inj 100ul+1ul int

Operator: 007062

Data Path: C:\HPCHEM\1\DATA\060700.b\

Method Path: C:\HPCHEM\1\METHODS\

8270C
6/7/00
FBB

Line Type	Vial	DataFile	Method	Sample Name
1) Sample	9:56 1	F0607DF1	DFTPP	DFTPP050 (25ppb) 194-175-8
2) Sample	APC 2	F06070C2	72EARLY	SSTD050 (25ppb) 194-177-7
3) Sample	APC 21	F06070C3	72EARLY	SSTD020 (10ppb) 194-175-10
4) Sample	APC 22	F06070C4	72EARLY	SSTD080 (40ppb) 194-175-12
5) Sample	APC 23	F06070C5	72EARLY	SSTD120 (60ppb) 194-175-13
6) Sample	APC 24	F06070C6	72EARLY	SSTD160 (80ppb) 194-175-14
7) Sample	APC 3	F0607001	72EARLY	C0F010153-001 x2 6/05/00 2g/1ml
8) Sample	APC 4	F0607002	72EARLY	C0F020171-BLK 6/05/00 H2O
9) Sample	APC 5	F0607003	72EARLY	C0F020171-LCS 6/05/00 H2O
10) Sample	APC 6	F0607004	72EARLY	C0F020171-LCSD 6/05/00 H2O
11) Sample	APC 7	F0607005	72EARLY	C0F020171-001 6/05/00 H2O

Bytes Needed: 566009 Space on drive C: 1023932928

Sequence Verification Done!

Continuous L-L Extraction Worksheet

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

Submitted To Your Success

Began	6-12-00	Time	13:50	Prep Meth	#35200	H2SO4	18.15/12	Solvent Lot	NaSO4 Lot Number	Clean up Method				
Change over	6/13/00	Time	10:50	Analysis	8270	NaOH	0090-09	Solvent Mfg	Batch					
Completed	6/14/00	Time	12:35	Client ID		Extract Vol	(mL)	Final Volume mL	pH	Surrogate Lot #				
Lot Number		Sample ID												
1. COF080388	BUC			N/A	200	1.0		5/2/11	194-178-1	0.5	N/A	194-178-3	0.5	N/A
2.	UCS							5/2/11				194-178-3	0.5	N/A
3.	MS (ac1)							6/2/11				194-178-3	0.5	N/A
4.	MSD (ac1)							6/2/11				194-178-3	0.5	N/A
5.	001							7/2/11						
6.	002							7/2/11						
7. COF080184	001							5/2/11						
8. COF070184	001							5/2/11						
9.	003							5/2/11						
10.	003							5/2/11						
11.	004							7/2/11						
12.	005							5/2/11						
13.	006							5/2/11						
14.	007							7/2/11						
15.	008							6/2/11						
16.	009							5/2/11						
17.	010							194-178-1	0.5	N/A				
18.														
19.														
20.														
21.														
22.														
23.														
Prep Analyst	KG	KG		KG	WT	SM	WT	SM/WT	SM/WT	SM/WT	KG			
Extract(s)														
(Record line number from above)		Date	Time	Analyst	Location	Date	Time	Analyst	Location					
ALL	1600	6-14-00	12:35	Juan M. Dela	006.1800	6-14-00	12:40	Juan M. Dela	006.1800					
ALL	1800	6-14-00	12:50	Juan M. Dela	006.1800	6-14-00	13:30	Juan M. Dela	006.1800					
Batch Number	0164286					Reviewed By								

660-974

Instrument Name: GC/MS Instrument #1

Sequence File: C:\HPCHEM\1\SEQUENCE\061400.S

Comment: STL- PITT HP5973-2 LOG 2ul inj 100ul+1ul int

Operator: 007062

Data Path: C:\HPCHEM\1\DATA\061400.b\

Method Path: C:\HPCHEM\1\METHODS\

8270C
6/15/00
FBB

Line	Type	Vial	DataFile	Method	Sample Name
1)	Sample	12.50 1	F0614DF1	DFTPP	DFTPP050 (25ppb) 194-175-8
2)	Sample	APC 2	F06140C1	72EARLY	SSTD050 (25ppb) 194-178-5
3)	Sample	(APC 2) - 3	F0614001	72EARLY	CCF090198-012 x10 6/12/00 Soil
4)	Sample	APC 4	F0614002	72EARLY	CCF090198-013 x6 6/12/00 Soil
5)	Sample	5	F0614003	72EARLY	CCF080328-BLK 6/12/00 TCLP
6)	Sample	6	F0614004	72EARLY	CCF080328-LCS 6/12/00 TCLP
7)	Sample	7	F0614005	72EARLY	CCF080328-001S 6/12/00 TCLP
8)	Sample	8	F0614006	72EARLY	CCF080328-001D 6/12/00 TCLP
9)	Sample	9	F0614007	72EARLY	CCF080328-001 6/12/00 TCLP
10)	Sample	10	F0614008	72EARLY	CCF080328-002 6/12/00 TCLP
11)	Sample	11	F0614009	72EARLY	CCF080184-001 6/12/00 TCLP
12)	Sample	12	F0614010	72EARLY	CCF070184-001 6/12/00 TCLP
13)	Sample	13	F0614011	72EARLY	CCF070184-002 6/12/00 TCLP
14)	Sample	14	F0614012	72EARLY	CCF070184-003 6/12/00 TCLP
15)	Sample	15	F0614013	72EARLY	CCF070184-004 6/12/00 TCLP
16)	Sample	16	F0614014	72EARLY	CCF070184-005 6/12/00 TCLP
17)	Sample	17	F0614015	72EARLY	CCF070184-006 6/12/00 TCLP
18)	Sample	18	F0614016	72EARLY	CCF070184-007 6/12/00 TCLP
19)	Sample	19	F0614017	72EARLY	CCF070184-008 6/12/00 TCLP
20)	Sample	20	F0614018	72EARLY	CCF070184-009 6/12/00 TCLP
21)	Sample	(23.58) 21	F0614019	72EARLY	CCF070184-010 6/12/00 TCLP

Bytes Needed: 1063449 Space on drive C: 1023932928

Sequence Verification Done!

(0164286)

660 975

PSR024 6/12/00 8:26:30 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: GEEHRINK

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

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SEF	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
10A CLP1	DE9XX-1-02	___	239556	131369	A-59-QL	C0F070184	001		SOLID	0	2 1
10A CLP1	DEA02-1-02	___	239557	131369	A-59-QL	C0F070184	002		SOLID	0	2 1
10A CLP1	DEA04-1-02	___	239558	131369	A-59-QL	C0F070184	003		SOLID	0	2 1
10A CLP1	DEA05-1-02	___	239559	131369	A-59-QL	C0F070184	004		SOLID	0	2 1
10A CLP1	DEA07-1-02	___	239560	131369	A-59-QL	C0F070184	005		SOLID	0	2 1
10A CLP1	DEA09-1-02	___	239561	131369	A-59-QL	C0F070184	006		SOLID	0	2 1
10A CLP1	DEA0A-1-02	___	239562	131369	A-59-QL	C0F070184	007		SOLID	0	2 1
10A CLP1	DEA0C-1-02	___	239563	131369	A-59-QL	C0F070184	008		SOLID	0	2 1
10A CLP1	DEA0F-1-02	___	239564	131369	A-59-QL	C0F070184	009		SOLID	0	2 1
10A CLP1	DEA0G-1-02	___	239565	131369	A-59-QL	C0F070184	010		SOLID	0	2 1
10B	DED5F-1-01	___	239555	366694	A-59-QL	C0F080184	001		SOLID	0	4 1
10C CLP1	DEEHC-1-03	___	239553	399411	A-59-QL	C0F080328	001		SOLID	0	3 1
10C CLP1	DEEHP-1-03	___	239554	399411	A-59-QL	C0F080328	002		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

6-12-00 1130
6-12-00 1400

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

PESTICIDE DATA

660 977

**PESTICIDE
QC SUMMARY**

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F080328

	CLIENT ID.	SRG01	SRG02	TOT OUT
	=====	=====	=====	=====
01	DF/S1/0159/SDC/008	96	69	00
02	DF/S1/0159/SDC/009	95	75	00
03	METHOD BLK. DEK4C101	94	81	00
04	LCS DEK4C102	96	88	00
05	DF/S1/0159/SDC/008 D	93	82	00
06	DF/S1/0159/SDC/008 S	94	80	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

660 979

SW846 8081A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F120000

WO #: DEK4C102

BATCH: 0164449

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Lindane	0.00250	0.00178	71	49 - 137	
Heptachlor	0.00250	0.00208	83	57 - 124	
Heptachlor epoxide	0.00250	0.00212	85	53 - 135	
Endrin	0.00250	0.00228	91	46 - 137	
Methoxychlor	0.00250	0.00236	94	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/S1/0159/SDC/008

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHC10P

BATCH: 0164449

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Methoxychlor	0.00250	ND	0.00230	92	13 - 154	
Lindane	0.00250	ND	0.00165	66	30 - 148	
Heptachlor	0.00250	ND	0.00194	78	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00200	80	38 - 138	
Endrin	0.00250	ND	0.00225	90	28 - 148	

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:

660 981

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/S1/0159/SDC/008

Level: (low/med) LOW

Lot #: C0F080328

WO #: DEEHC10Q

BATCH: 0164449

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS			QUAL
			% REC	% RPD	RPD	REC		
Lindane	0.00250	0.00167	67	1.4	22	30 - 148		
Heptachlor	0.00250	0.00198	79	2.0	32	25 - 135		
Heptachlor epoxide	0.00250	0.00200	80	0.20	31	38 - 138		
Endrin	0.00250	0.00225	90	0.080	40	28 - 148		
Methoxychlor	0.00250	0.00233	93	1.2	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

DEK4C101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: d-a3321.d

Lot Number: C0F080328

Matrix: SOLID

Extraction Method: 1311/3510

Date Extracted: 06/12/00

Date Analyzed(1): 06/14/00

Date Analyzed(2): N/A

Time Analyzed(1): 01:35

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/S1/0159/SDC/008	DEEHC10P S	06/14/00	N/A
02	DF/S1/0159/SDC/008	DEEHC10Q D	06/14/00	N/A
03	DF/S1/0159/SDC/008	DEEHC104	06/14/00	N/A
04	DF/S1/0159/SDC/009	DEEHP104	06/14/00	N/A
05	CHECK SAMPLE	DEK4C102 C	06/14/00	N/A
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

**PESTICIDE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHC104

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164449

Client Sample Id: DF/S1/0159/SDC/008

		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

Data File: /var/chem/gc4.i/3130-G.b/d-a3325.d

Report Date: 14-Jun-2000 09:41

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3325.d
 Lab Smp Id: DEEHC104 Client Smp ID: DF/S1/0159/SDC/008
 Inj Date : 14-JUN-2000 03:26
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DEEHC104,3130-G.b,,PEST.sub,,,
 Misc Info : 080328001
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 14-Jun-2000 09:36 g Quant Type: ESTD
 Cal Date : 13-JUN-2000 07:05 Cal File: d-a3281.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	10000.000	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)
5 alpha-BHC				Compound Not Detected		
4 HEXACHLORO BENZENE				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				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	15.327	15.340	-0.013	1947	0.000647	0.06469 (a)
20 Endrin				Compound Not Detected.		
18 Toxaphene				Compound Not Detected		

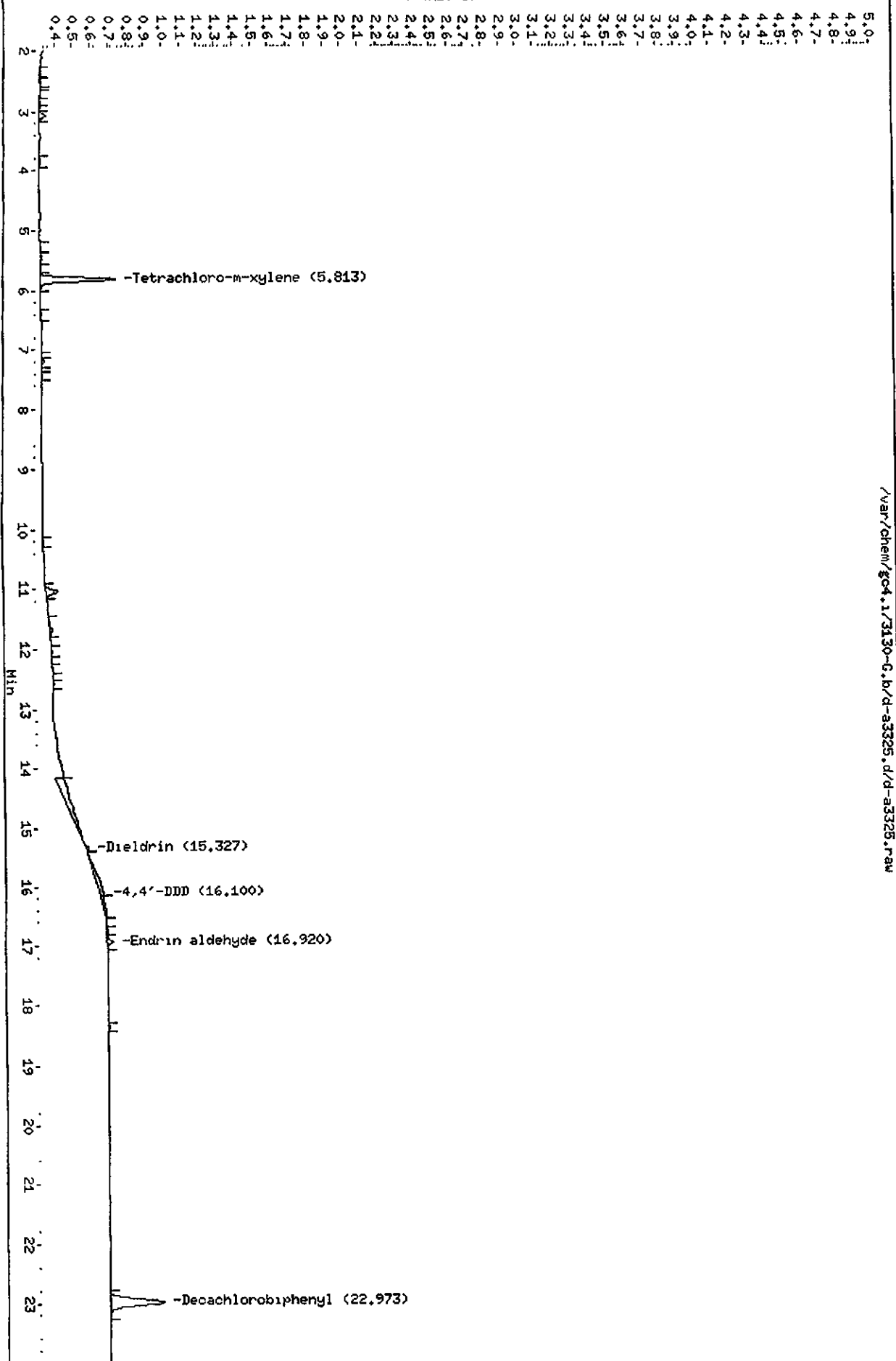
Data File: /var/chem/gc4.i/3130-G.b/d-a3325.d

Report Date: 14-Jun-2000 09:41

Compounds	RT	EXP RT	DLT RT	RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
=====	==	=====	=====	=====	=====	=====	=====
21 4,4'-DDD	16.100	16.120	-0.020		2612	0.00102	0.1022 (a)
22 Endosulfan II	Compound Not Detected.						
23 4,4'-DDT	Compound Not Detected						
24 Endrin aldehyde	16.920	16.880	0.040		3156	0.00144	0.1444 (a)
26 Endosulfan sulfate	Compound Not Detected.						
25 Methoxychlor	Compound Not Detected.						
27 Endrin ketone	Compound Not Detected						
\$ 1 Tetrachloro-m-xylene	5.813	5.833	-0.020		42005	0.01373	1.373 (R)
\$ 30 Decachlorobiphenyl	22.973	23.013	-0.040		30192	0.01928	1.928 (R)

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/gc4.1/3130-G.b/d-a3325.d

Data File: /var/chem/gc4.1/3130-G.b/d-a3325.d

Date: 14-JUN-2000 03:26

Client ID: DF/SL/0159/SDC/008

Sample Info: DEEH104,3130-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: C0F080328 002

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHP104

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 18

QC Batch: 0164449

Client Sample Id: DF/S1/0159/SDC/009

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

660 989

Data File: /var/chem/gc4.i/3130-G.b/d-a3326.d
Report Date: 14-Jun-2000 09:41

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3326.d
Lab Smp Id: DEEHP104 Client Smp ID: DF/S1/0159/SDC/009
Inj Date : 14-JUN-2000 03:53
Operator : 1891 Inst ID: gc4.i
Smp Info : DEEHP104,3130-G.b,,PEST.sub,,,
Misc Info : 080328002
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 14-Jun-2000 09:36 g Quant Type: ESTD
Cal Date : 13-JUN-2000 07:05 Cal File: d-a3281.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	10000.000	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)
5 alpha-BHC								
4 HEXACHLOROBENZENE								
6 gamma-BHC (Lindane)								
7 beta-BHC								
9 Chlordane								
10 Heptachlor								
8 delta-BHC								
11 Aldrin	12.033	12.020	0.013		816	0.000332	0.03317(a)	
12 Heptachlor epoxide								
13 gamma-Chlordane								
14 alpha-Chlordane								
15 Endosulfan I								
16 4,4'-DDE								
17 Dieldrin	15.333	15.340	-0.007		1128	0.000375	0.03748(a)	
20 Endrin								
18 Toxaphene								

Data File: /var/chem/gc4.i/3130-G.b/d-a3326.d

Report Date: 14-Jun-2000 09:41

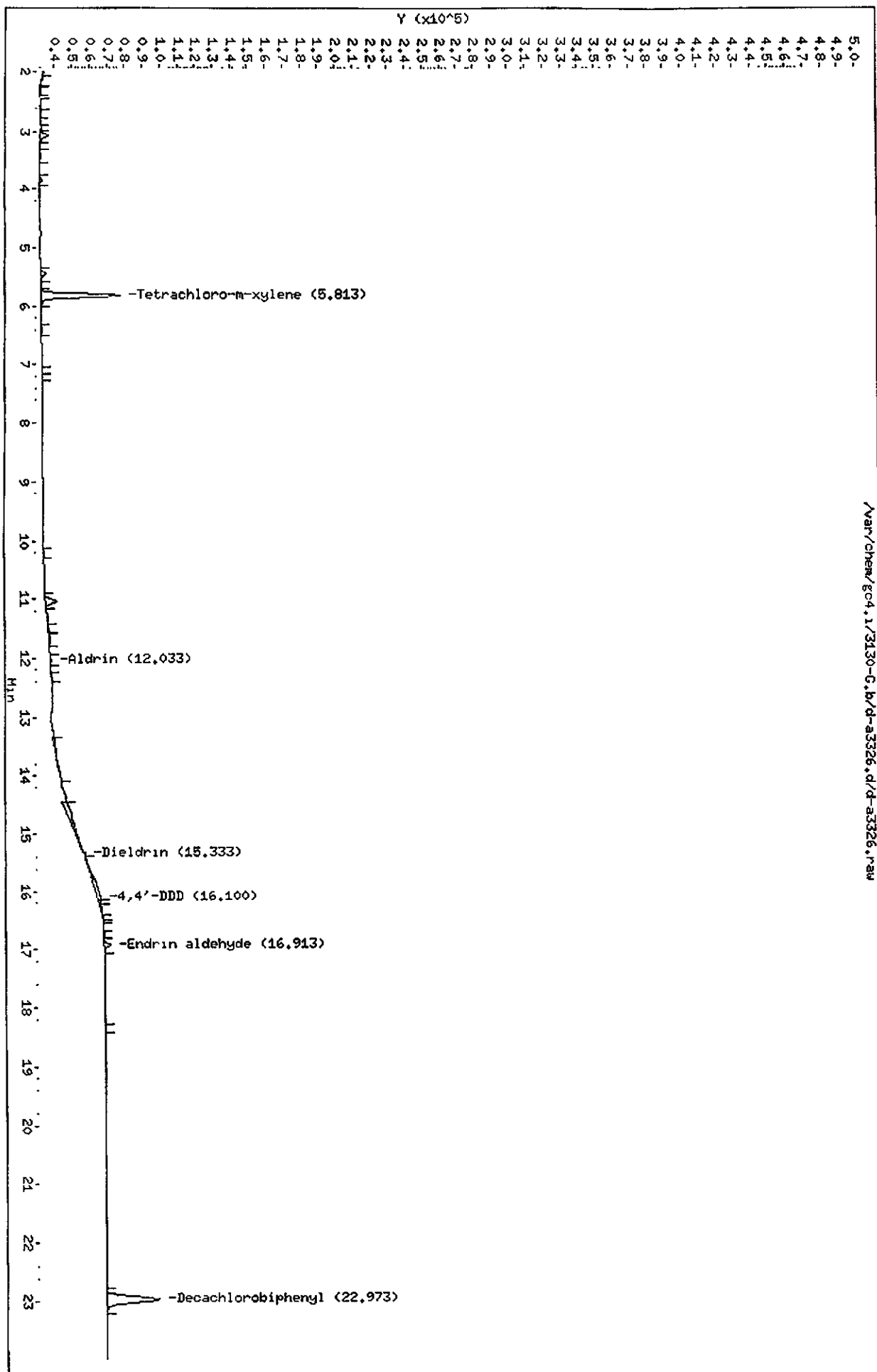
Compounds	RT	EXP RT	DLT RT	RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
=====	==	=====	=====	=====	=====	=====	=====
21 4,4'-DDD	16.100	16.120	-0.020		2363	0.000925	0.09249(a)
22 Endosulfan II							Compound Not Detected
23 4,4'-DDT							Compound Not Detected.
24 Endrin aldehyde	16.913	16.880	0.033		3601	0.00165	0.1647(a)
26 Endosulfan sulfate							Compound Not Detected.
25 Methoxychlor							Compound Not Detected.
27 Endrin ketone							Compound Not Detected.
\$ 1 Tetrachloro-m-xylene	5.813	5.833	-0.020		45729	0.01495	1.494(R)
\$ 30 Decachlorobiphenyl	22.973	23.013	-0.040		29767	0.01901	1.900(R)

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-a3326.d
Date: 14-JUN-2000 03:53
Client ID: DF/S1/0459/SDC/009
Sample Info: DEHP104,3130-G.b,,PEST,sub,,
Volume Injected (uL): 1.0
Column phase: DB608

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



**PESTICIDE
CALIBRATION DATA**

660 993

Report Date : 13-Jun-2000 13:49

6D
4M 5870 4A
6/13/00 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 : 13-Jun-2000 13:48 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	5.833	5.783-5.883	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	8.173	8.123-8.223	3.509e+06
6 gamma-BHC (Lindane)	9.613	9.563-9.663	3.015e+06
7 beta-BHC	9.887	9.837-9.937	1.659e+06
8 delta-BHC	11.307	11.257-11.357	3.145e+06
9 Chlordane	10.287	10.237-10.337	7.763e+04
	10.887	10.837-10.937	1.390e+05
	14.300	14.250-14.350	2.638e+05
	14.673	14.623-14.723	2.093e+05
10 Heptachlor	10.887	10.837-10.937	2.605e+06
11 Aldrin	12.020	11.970-12.070	2.460e+06
12 Heptachlor epoxide	13.887	13.837-13.937	2.592e+06
13 gamma-Chlordane	14.300	14.250-14.350	2.867e+06
14 alpha-Chlordane	14.667	14.617-14.717	2.974e+06
15 Endosulfan I	14.733	14.683-14.783	2.711e+06
16 4,4'-DDE	15.180	15.130-15.230	3.156e+06
17 Dieldrin	15.340	15.290-15.390	3.010e+06
18 Toxaphene	16.153	16.103-16.203	6.233e+04
	16.313	16.263-16.363	7.480e+04
	16.707	16.657-16.757	5.799e+04
	17.980	17.930-18.030	4.471e+04

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DB608

Report Date : 13-Jun-2000 13:49

STL-PITTSBURGH

COMPOUND LISTING

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

Compound	RT	RT Window	RF
19 Isodrin	12.613	12.563-12.663	
20 Endrin	15.973	15.923-16.023	2.542e+06
21 4,4'-DDD	16.120	16.070-16.170	2.555e+06
22 Endosulfan II	16.280	16.230-16.330	2.826e+06
23 4,4'-DDT	16.653	16.603-16.703	2.491e+06
24 Endrin aldehyde	16.880	16.830-16.930	2.186e+06
25 Methoxychlor	18.533	18.483-18.583	1.083e+06
26 Endosulfan sulfate	17.120	17.070-17.170	2.271e+06
27 Endrin ketone	19.000	18.950-19.050	2.234e+06
28 Chlorobenzilate	15.313	15.263-15.363	
29 Kepone	15.533	15.483-15.583	
\$ 30 Decachlorobiphenyl	23.013	22.963-23.063	1.566e+06

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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 Iodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++
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

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5		
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

660 997

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

UM
6/13/00

660 999

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 : 1907

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	15.96	15.92	16.02	0.02626	0.02500	5.0
4,4'-DDT	16.65	16.60	16.70	0.02624	0.02500	5.0

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

~~3.12~~
3.0
~~11.50~~
9.5

Endrin % breakdown (1):

~~8.38~~
6.5

Combined % breakdown (1):

unlabeled

Data File: /var/chem/gc4.i/3130-G.b/d-a3305.d
 Report Date: 14-Jun-2000 09:35

7E
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 D8607

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 13-JUN-2000 18:11
 Lab File ID: d-a3305.d Init. Calibration Date(s): 06/13/00 06/13/00
 Analysis Type: Init. Calibration Times: 02:00 07:05
 Lab Sample ID: MEDA Method File: /var/chem/gc4.i/3130-G.b/PESTA.m
 Quant Type: ESTD

COMPOUND	RRF	RFO	MIN	MAX
1 Tetrachloro-m-xylene	3059664.000	3140160.000	0.000	-2.6 15.0
5 alpha-BHC	3509398.000	3615640.000	0.010	-3.0 15.0
6 gamma-BHC (Lindane)	3014664.000	3102400.000	0.010	-2.9 15.0
10 Heptachlor	2605212.000	2627320.000	0.010	-0.8 15.0
15 Endosulfan I	2711002.000	2745240.000	0.010	-1.3 15.0
17 Dieldrin	3009834.000	3090840.000	0.010	-2.7 15.0
20 Endrin	2542202.000	2695680.000	0.010	-6.0 15.0
21 4,4'-DDD	2554750.000	2635200.000	0.010	-3.1 15.0
23 4,4'-DDT	2490552.000	2553520.000	0.010	-2.5 15.0
25 Methoxychlor	1083382.000	1123720.000	0.010	-3.7 15.0
30 Decachlorobiphenyl	1566272.000	1603880.000	0.010	-2.4 15.0

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58924AData File: /var/chem/gc4.i/3130-G.b/d-a3306.d
Report Date: 14-Jun-2000 09:35

06608

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i
Lab File ID: d-a3306.d
Analysis Type:
Lab Sample ID: MEDB
Quant Type: ESTDInjection Date: 13-JUN-2000 18:39
Init. Calibration Date(s): 06/13/0 06/13/0
Init. Calibration Times: 02:00 07:05
Method File: /var/chem/gc4.i/3130-G.b/PESTA.m

COMPOUND	RRF	RFO	MIN	RRF	%D	MAX
=====	=====	=====	=====	=====	=====	=====
11 Aldrin	2459876.000	2457200.000	0.010	0.1	15.0	
7 beta-BHC	1659476.000	1682840.000	0.010	-1.4	15.0	
8 delta-BHC	3144734.000	3196520.000	0.010	-1.6	15.0	
12 Heptachlor epoxide	2591612.000	2602280.000	0.010	-0.4	15.0	
13 gamma-Chlordane	2866866.000	2871320.000	0.010	-0.2	15.0	
14 alpha-Chlordane	2974368.000	3017000.000	0.010	-1.4	15.0	
16 4,4'-DDE	3155848.000	3234520.000	0.010	-2.5	15.0	
22 Endosulfan II	2826056.000	2832040.000	0.010	-0.2	15.0	
24 Endrin aldehyde	2185774.000	2229280.000	0.010	-2.0	15.0	
26 Endosulfan sulfate	2271330.000	2369880.000	0.010	-4.3	15.0	
27 Endrin ketone	2234340.000	2267120.000	0.010	-1.5	15.0	

Data File: /var/chem/gc4.i/3130-G.b/d-a3328.d
 Report Date: 14-Jun-2000 09:36

12
 58904A
 DB608

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i
 Lab File ID: d-a3328.d
 Analysis Type:
 Lab Sample ID: MEDA
 Quant Type: ESTD

Injection Date: 14-JUN-2000 04:49
 Init. Calibration Date(s): 06/13/0 06/13/0
 Init. Calibration Times: 02:00 07:05
 Method File: /var/chem/gc4.i/3130-G.b/PESTA.m

COMPOUND	RRF	RF0	MIN	MAX
RRF	RF0	RRF	%D	%D
1 Tetrachloro-m-xylene	3059664.000	3128440.000	0.000	-2.2 15.0
5 alpha-BHC	3509398.000	3616640.000	0.010	-3.1 15.0
6 gamma-BHC (Lindane)	3014664.000	3117280.000	0.010	-3.4 15.0
10 Heptachlor	2605212.000	2620720.000	0.010	-0.6 15.0
15 Endosulfan I	2711002.000	2746720.000	0.010	-1.3 15.0
17 Dieldrin	3009834.000	3045760.000	0.010	-1.2 15.0
20 Endrin	2542202.000	2615680.000	0.010	-2.9 15.0
21 4,4'-DDD	2554750.000	2642320.000	0.010	-3.4 15.0
23 4,4'-DDT	2490552.000	2562000.000	0.010	-2.9 15.0
25 Methoxychlor	1083382.000	1118600.000	0.010	-3.3 15.0
30 Decachlorobiphenyl	1566272.000	1596680.000	0.010	-1.9 15.0

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DB608Data File: /var/chem/gc4.i/3130-G.b/d-a3329.d
Report Date: 14-Jun-2000 09:36

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i
Lab File ID: d-a3329.d
Analysis Type:
Lab Sample ID: MEDB
Quant Type: ESTDInjection Date: 14-JUN-2000 05:17
Init. Calibration Date(s): 06/13/0 06/13/0
Init. Calibration Times: 02:00 07:05
Method File: /var/chem/gc4.i/3130-G.b/PESTA.m

COMPOUND	RRF	RFO	MIN	MAX
=====	=====	=====	=====	=====
11 Aldrin	2459876.000	2537000.000	0.010	-3.1 15.0
7 beta-BHC	1659476.000	1746200.000	0.010	-5.2 15.0
8 delta-BHC	3144734.000	3359680.000	0.010	-6.8 15.0
12 Heptachlor epoxide	2591612.000	2717080.000	0.010	-4.8 15.0
13 gamma-Chlordane	2866866.000	3021320.000	0.010	-5.4 15.0
14 alpha-Chlordane	2974368.000	3134040.000	0.010	-5.4 15.0
16 4,4'-DDE	3155848.000	3344800.000	0.010	-6.0 15.0
22 Endosulfan II	2826056.000	2942400.000	0.010	-4.1 15.0
24 Endrin aldehyde	2185774.000	2296240.000	0.010	-5.0 15.0
26 Endosulfan sulfate	2271330.000	2391240.000	0.010	-5.3 15.0
27 Endrin ketone	2234340.000	2351240.000	0.010	-5.2 15.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIIT

Case No.:

SAS No.: 40325

SDG No.: C0F080328

GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 06/13/00 06/13/00

Instrument ID: GC4

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
TCX: 5.83			DCB: 23.01		
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	LOWA	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	MEDEB	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	MEDA	06/13/00	1811	5.82	22.99
18	MEDEB	06/13/00	1839		
19	EVALB	06/13/00	1907	5.82	22.99
20	PBLK1 DEK4C101	06/14/00	0135	5.82	22.98
21	LCS1 DEK4C102	06/14/00	0203	5.81	22.98
22	DF/S1/0159/S DEEHC10P ^{MS}	06/14/00	0230	5.81	22.98
23	DF/S1/0159/S DEEHC10Q ^{MSD}	06/14/00	0258	5.81	22.98
24	DF/S1/0159/S DEEHC104	06/14/00	0326	5.81	22.97
25	DF/S1/0159/S DEEHP104	06/14/00	0353	5.81	22.97
26	MEDA	06/14/00	0449	5.81	22.97
27	MEDEB	06/14/00	0517		
28					
29					
30					
31					
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.

6601005

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	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	0.00105	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
Endrin = 7.1

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

Data File: /var/chem/gc4.i/3130-G.b/d-d-33269.d

Date: 13-JUN-2000 01:33

Client ID:

Sample Info: EVALB, 3130-G.b, EVAL BR, sub, 3,1

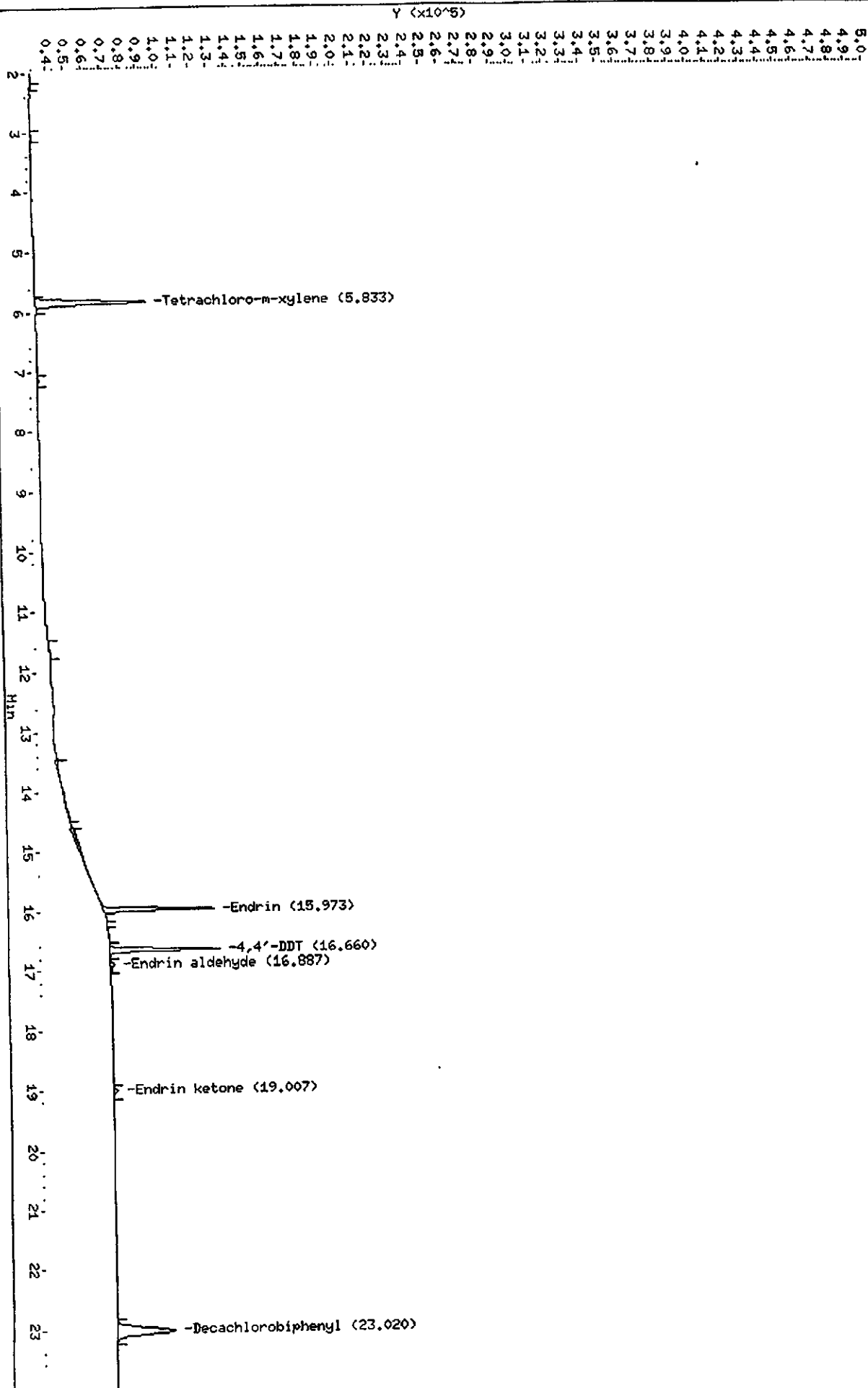
Column phase: DB608

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53

/var/chem/gc4.i/3130-G.b/d-d-33269.d/d-d-33269.raw



6601007

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
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
Cal Date :
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.40

Inst ID: gc4.i
Quant Type: ESTD
Cal File:
Calibration Sample, Level: 3
Compound Sublist: 1-TOX.sub

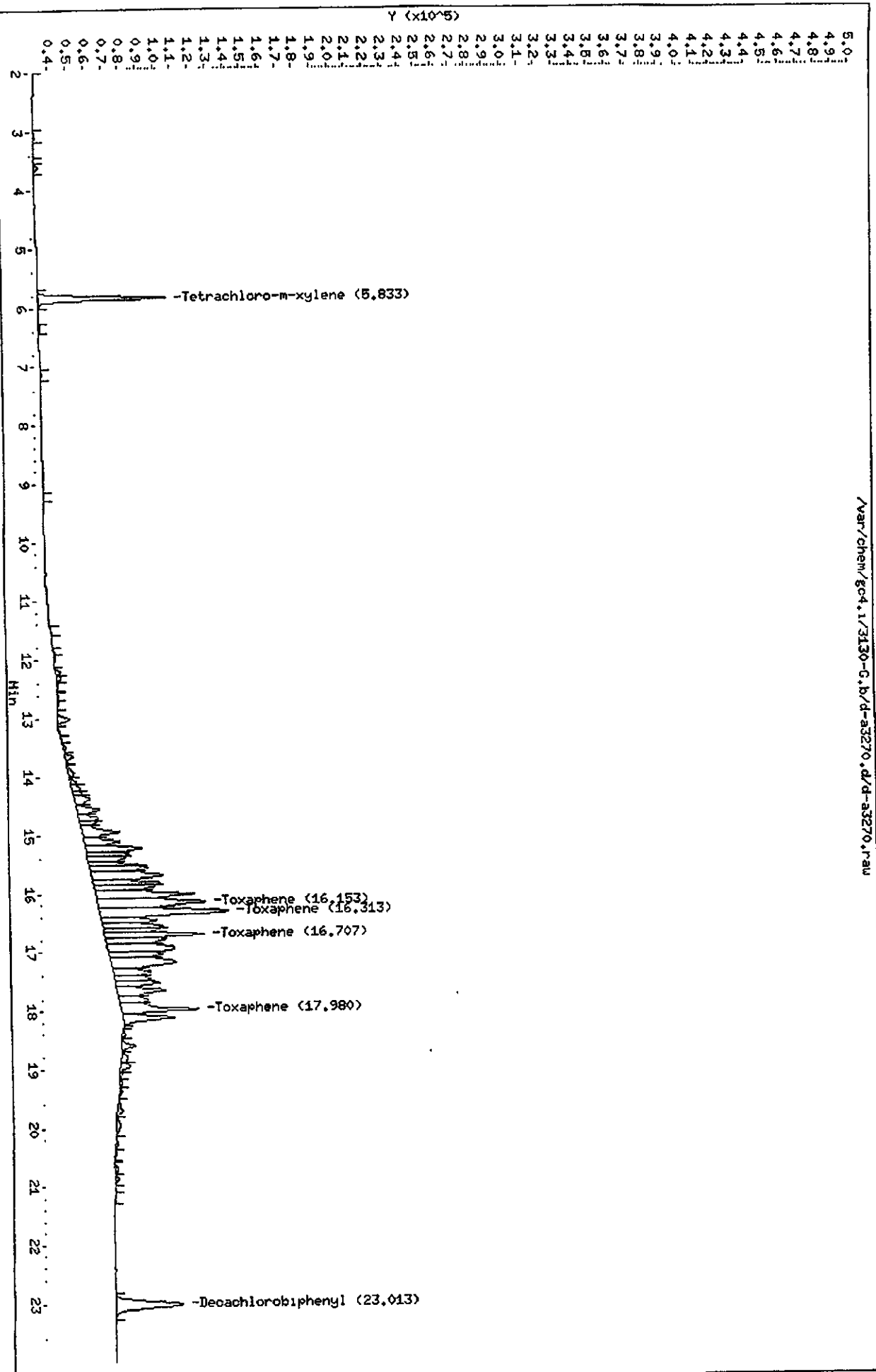
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
18 Toxaphene	16.153	16.153	0.000	62331	1.00000	1.000 (M)
\$ 1 Tetrachloro-m-xylene	5.833	5.833	0.000	74042	0.02500	0.02500 (M)
\$ 30 Decachlorobiphenyl	23.013	23.013	0.000	38462	0.02500	0.02500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

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/gc04.1/3130-G.b/d-d-a3270.d
Date: 13-JUN-2000 02:00
Client ID:
Sample Info: HEDTOX, 3130-G.b, 1-TOX.sub, 1,3
Column phase: DB608

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



6601009

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	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					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)

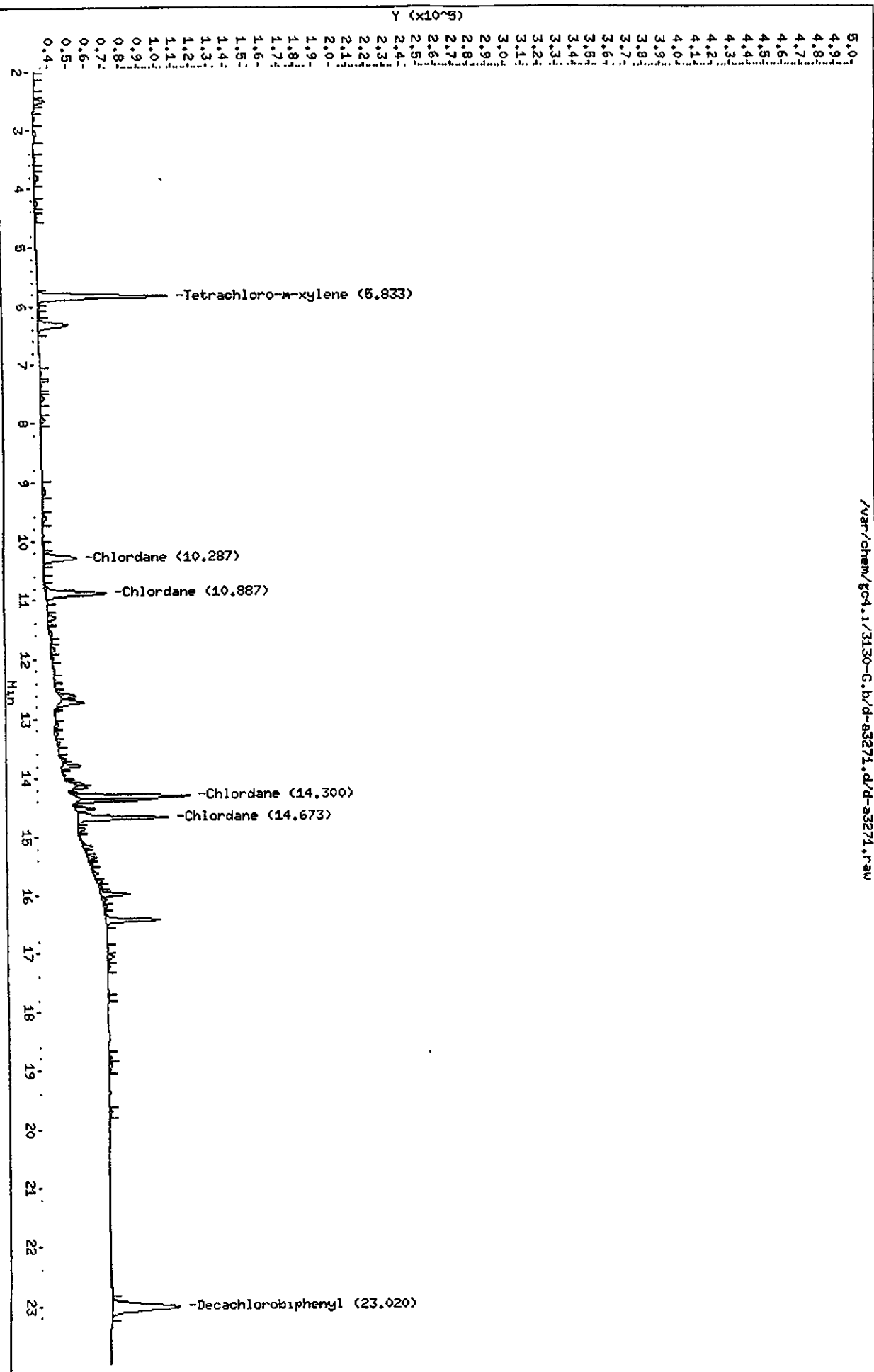
QC Flag Legend

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: HEDCHLOR, 3130-G.b., 2-CHLO, sub., 1,3

Column phase: DB608

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



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

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 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/gc04.1/3130-G.b/d-a3272.d

Date: 13-JUN-2000 02:56

Client ID:

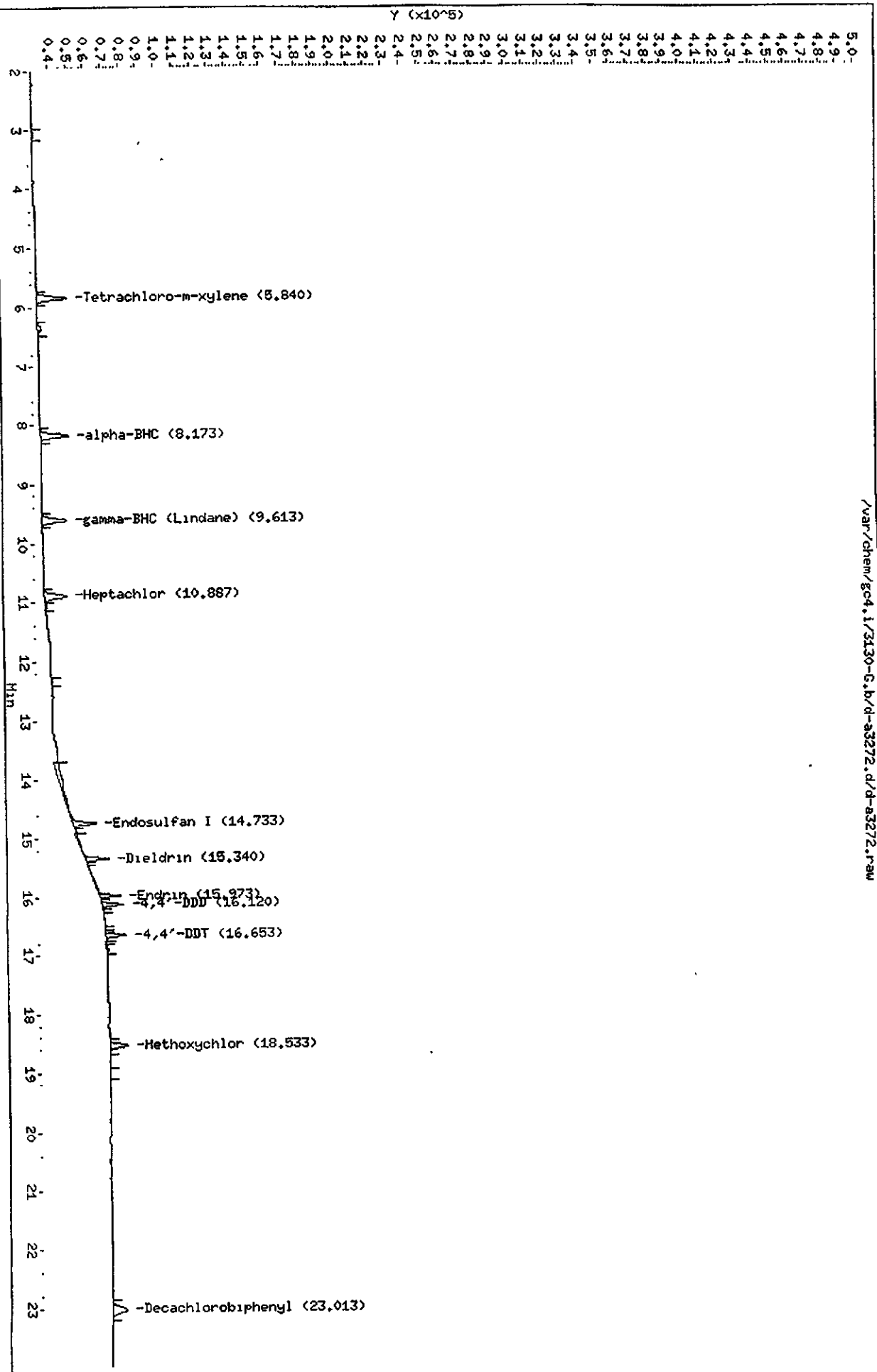
Sample Info: LONA, 3130-G.b, 3-INDA, sub., 1.1

Column phase: DB608

Instrument: gc04.i

Operator: 1891

Column diameter: 0.53



6601013

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/gc4.1/3130-G.b/d-a3273.d

Date: 13-JUN-2000 03:23

Client ID:

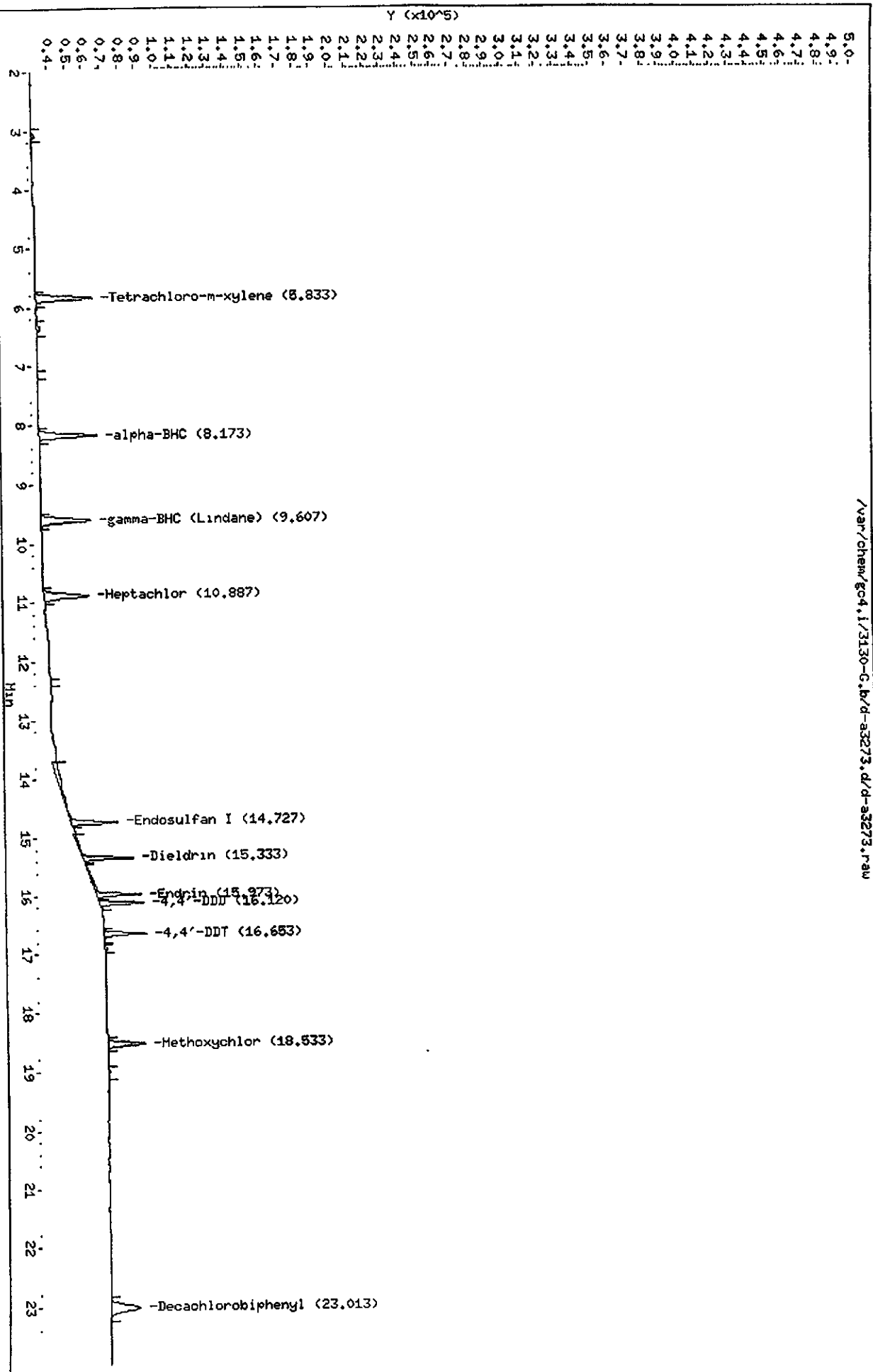
Sample Info: ML08A,3130-G.b,,3-INDA,sub,,4,2

Column phase: DB608

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



6601015

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

AMOUNTS						
Compounds	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT	ON-COL
					(ng)	(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:

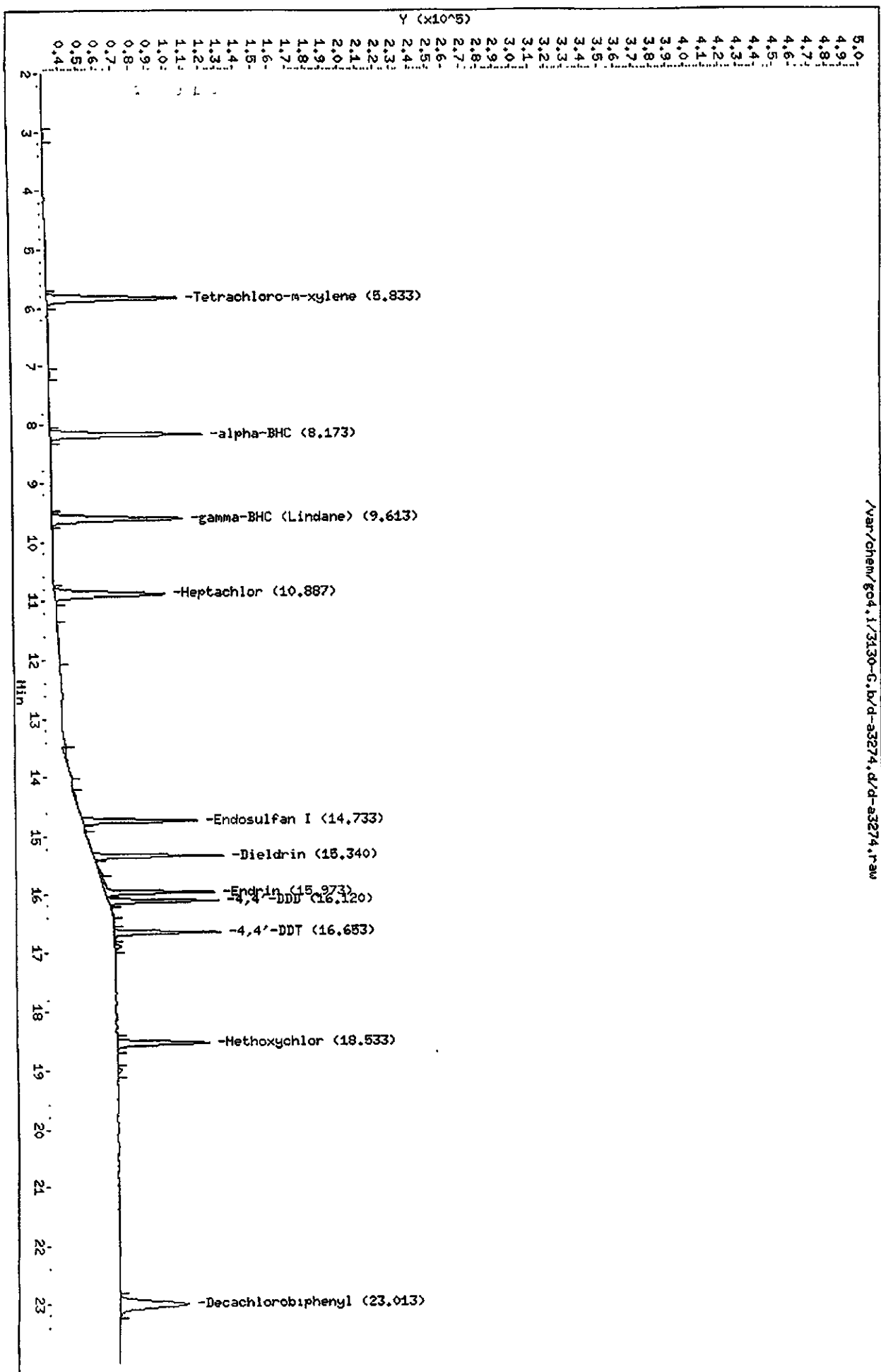
Sample Info: MEDA, 3130-G.b, 3-INDA.sub, 1,3

Column phase: DB608

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



6601017

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

		AMOUNTS					
					CAL-AMT	ON-COL	
Compounds	RT	EXP RT	DLT RT	RT	RESPONSE	(ng)	(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/gc4.1/3130-G.b/d-a3275.d

Date: 13-JUN-2000 04:19

Client ID:

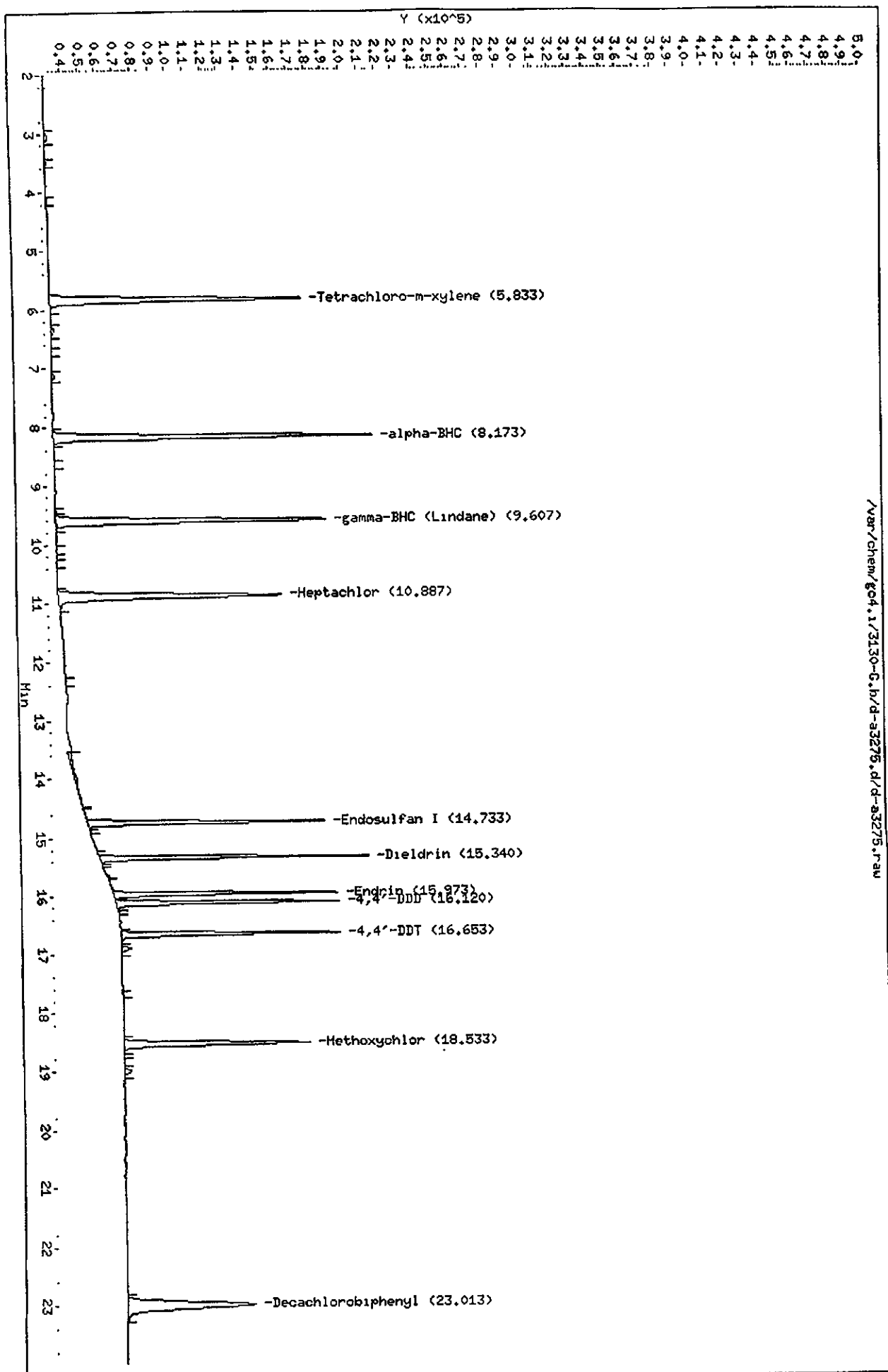
Sample Info: HHIGHa,3130-G.b/,3-INDA,sub,/,1,4

Column phase: DB608

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



6601019

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

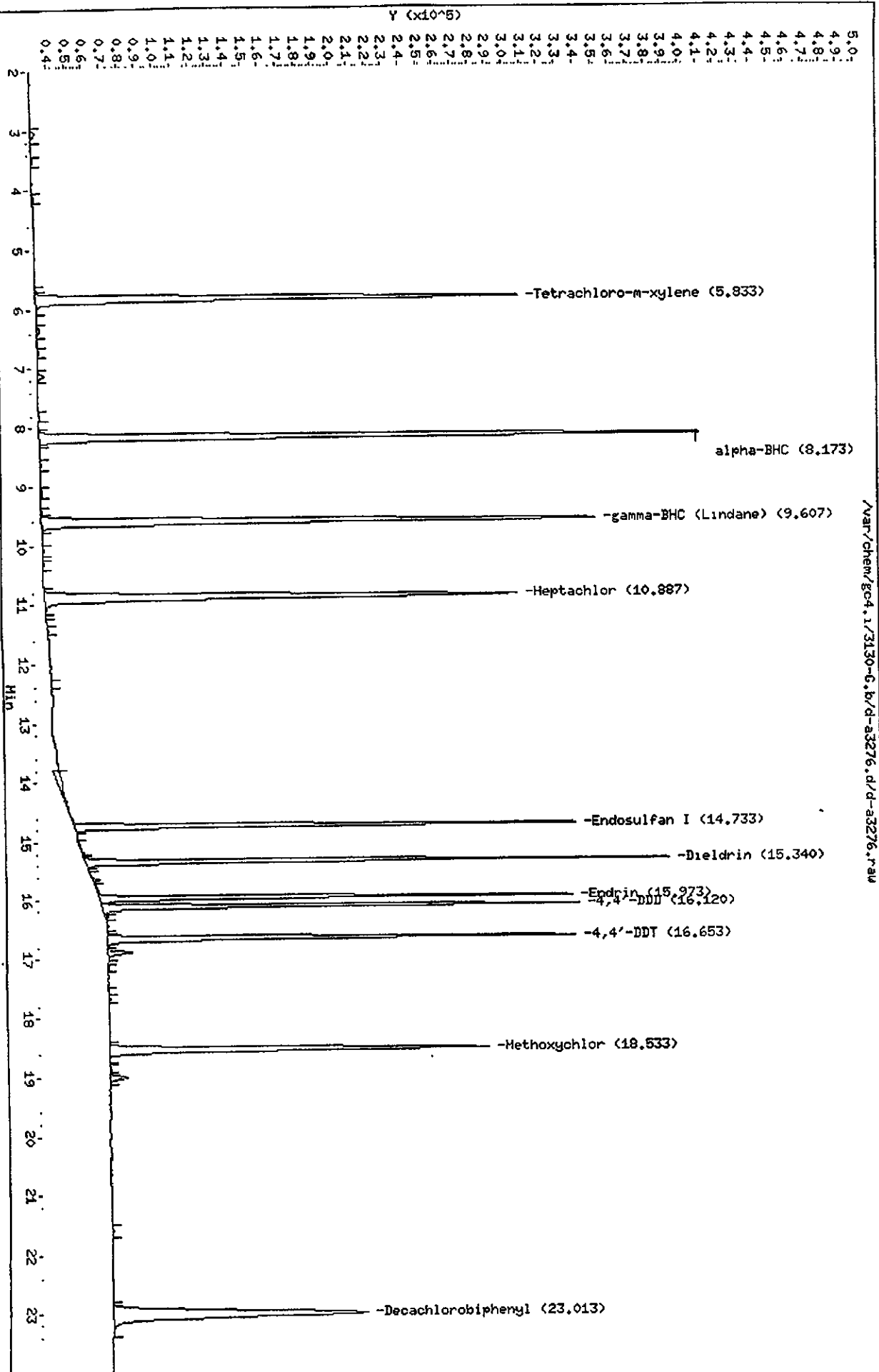
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
*****	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.833	5.833	0.000	275958	0.10000	0.09019
5 alpha-BHC	8.173	8.173	0.000	377847	0.10000	0.1077 (A)
6 gamma-BHC (Lindane)	9.607	9.613	-0.006	316630	0.10000	0.1050 (A)
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/gc04.i/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: gc04.1
Operator: 1891
Column diameter: 0.53



6601021

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:

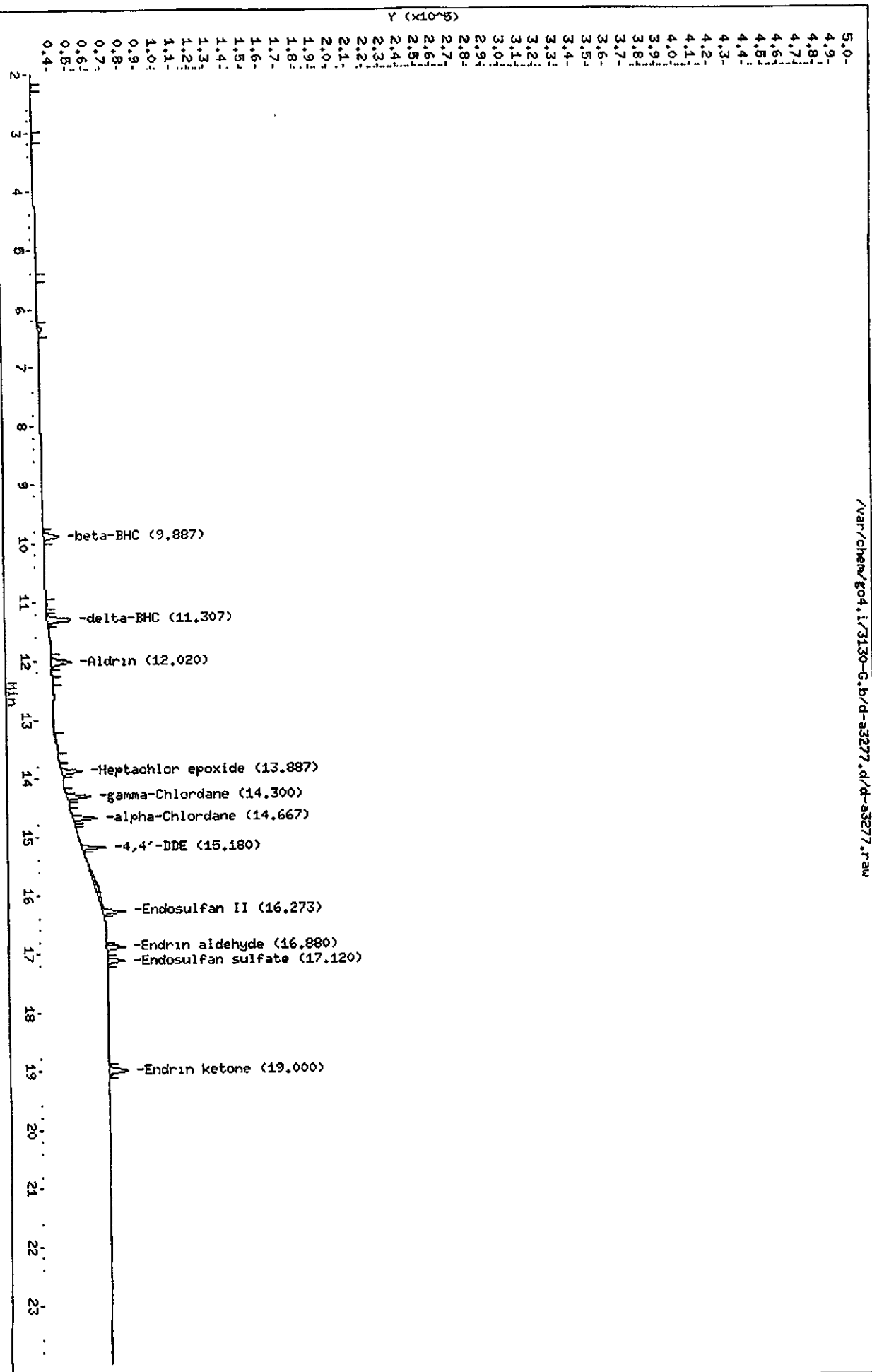
Sample Info: LOMB, 3130-G.b., 4-INDB.sub., 1.1

Column phase: DB608

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



6601023

Data File: /var/chem/gc4.i/3130-G.b/d-a3278.d
Report Date: 13-Jun-2000 14:04

STL-PITTSBURGH

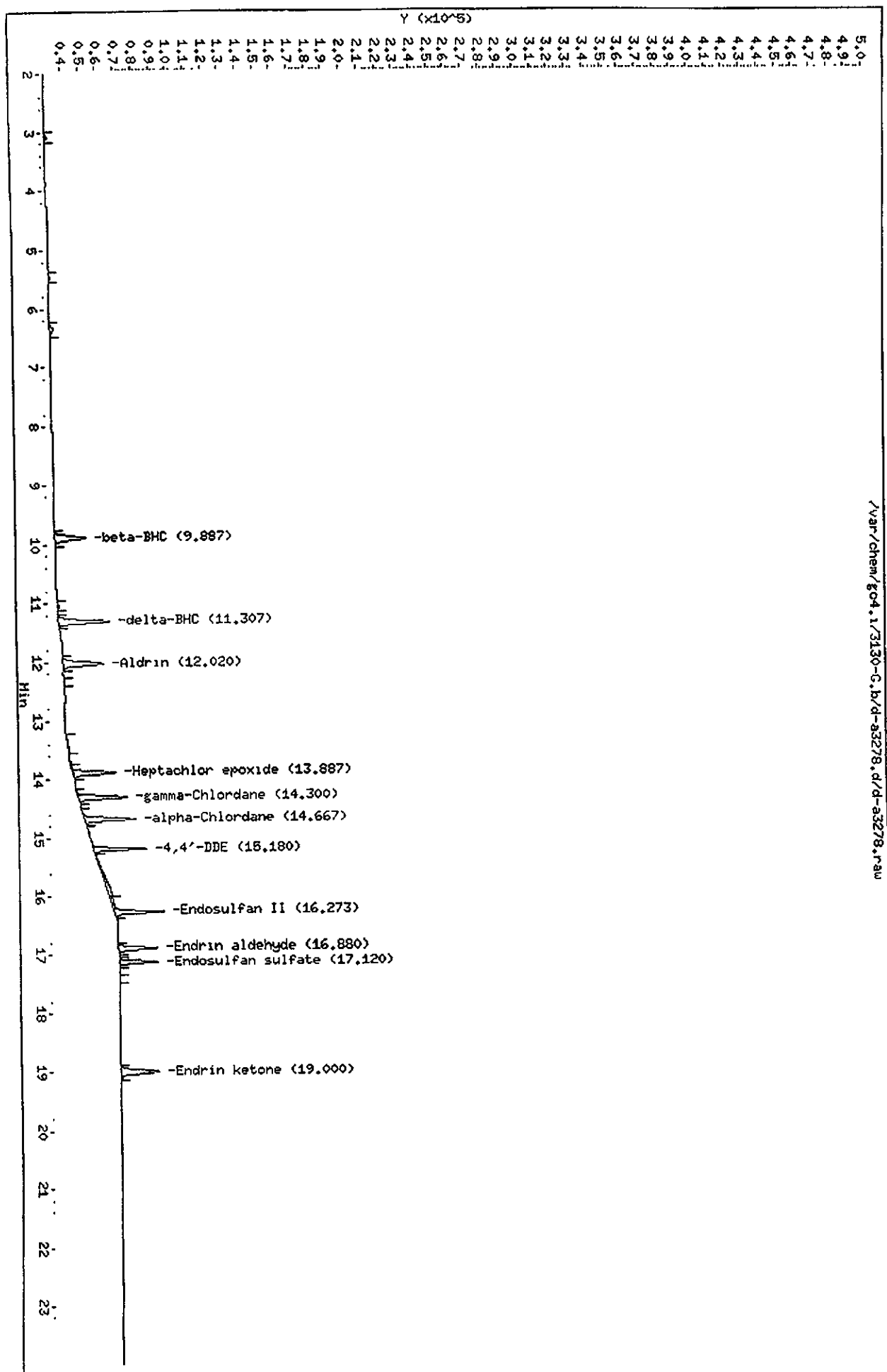
Data file : /var/chem/gc4.i/3130-G.b/d-a3278.d
Lab Smp Id: MLOWB
Inj Date : 13-JUN-2000 05:42
Operator : 1891 Inst ID: gc4.i
Smp Info : MLOWB,3130-G.b,,4-INDB.sub,,1,2
Misc Info : 190-84-8
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
Cal Date : 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 09:42
Client ID:
Sample Info: MLDNB,3130-G.b,,4-INDB,sub,,1,2

Column phase: DB608

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



6601025

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	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	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:

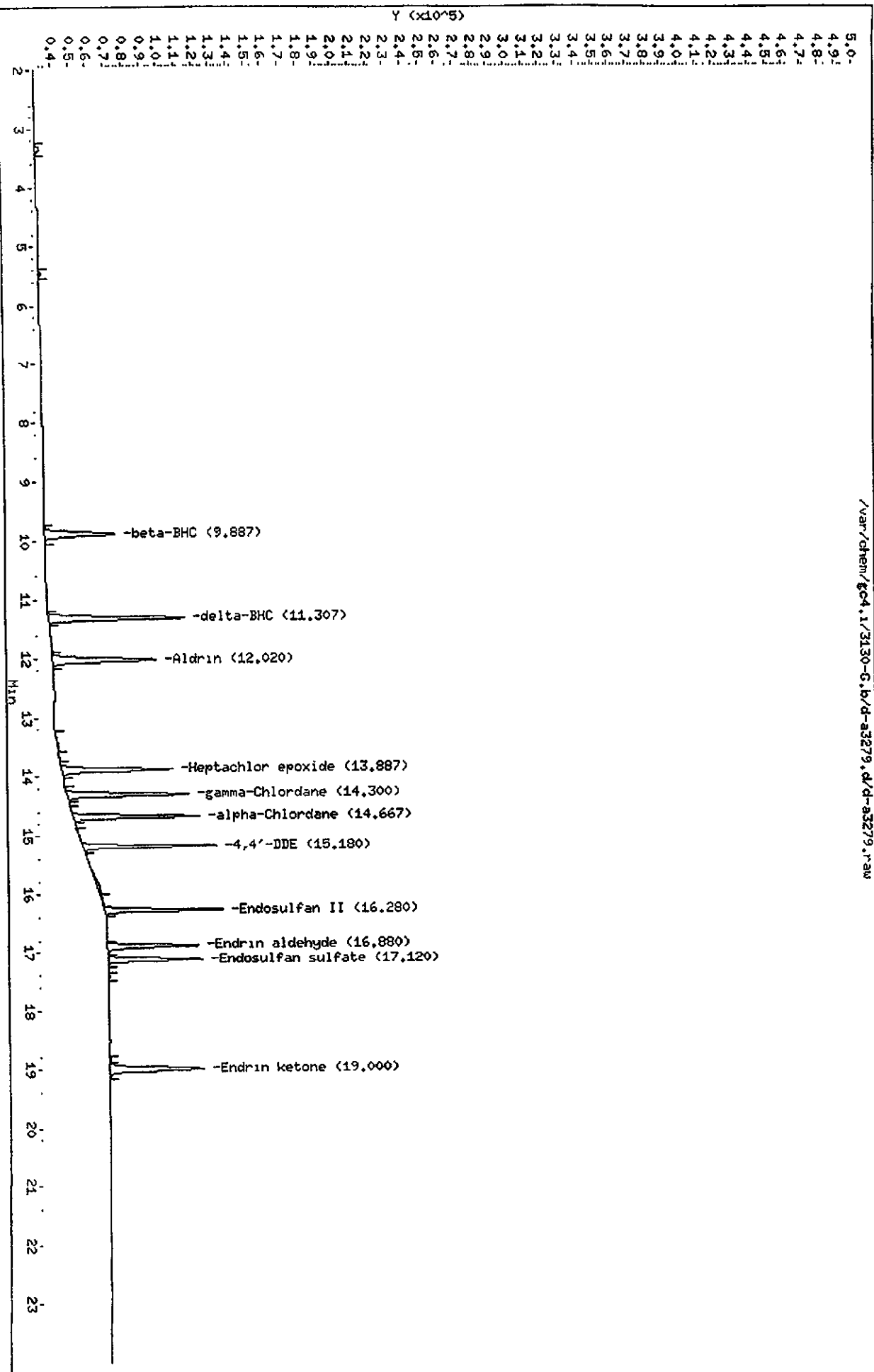
Sample Info: MEDB.3130-G.b, 4-INDB.sub, 1,3

Column phase: DB608

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



6601027

Data File: /var/chem/gc4.i/3130-G.b/d-a3280.d
Report Date: 13-Jun-2000 14:04

STL-PITTSBURGH

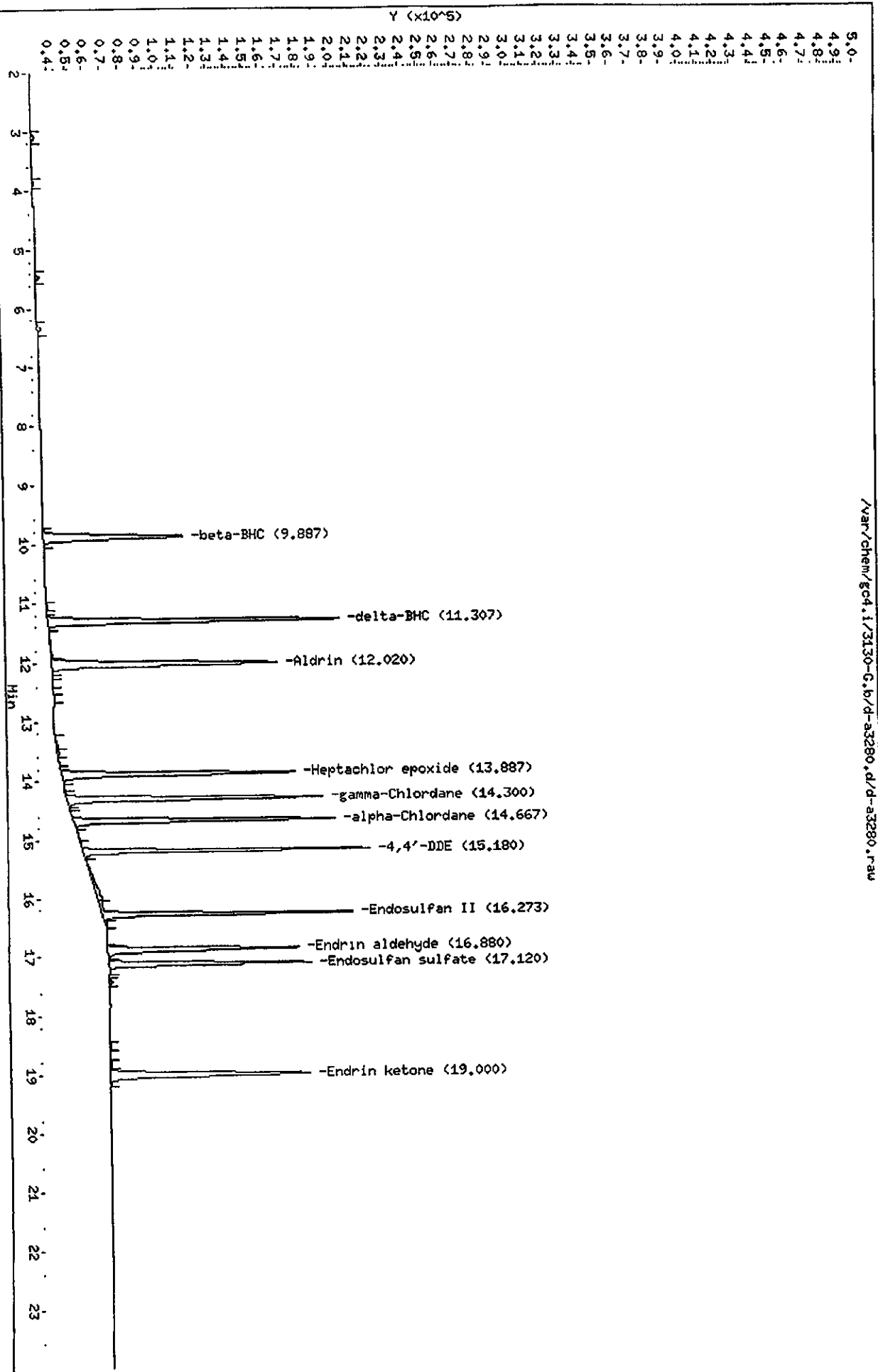
Data file : /var/chem/gc4.i/3130-G.b/d-a3280.d
Lab Smp Id: MHIGHB
Inj Date : 13-JUN-2000 06:37
Operator : 1891 Inst ID: gc4.i
Smp Info : MHIGHB, 3130-G.b, , 4-INDB.sub, , 1, 4
Misc Info : 190-84-10
Comment :
Method : /var/chem/gc4.i/3130-G.b/PESTA.m
Meth Date : 13-Jun-2000 14:02 matkol Quant Type: ESTD
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					ON-COL	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	(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.i/3130-G.b/d-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.i
Operator: 1891
Column diameter: 0.53



6601029

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
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
Cal Date : 13-JUN-2000 07:05
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.40

Inst ID: gc4.i
Quant Type: ESTD
Cal File: d-a3281.d
Calibration Sample, Level: 5
Compound Sublist: 4-INDB.sub

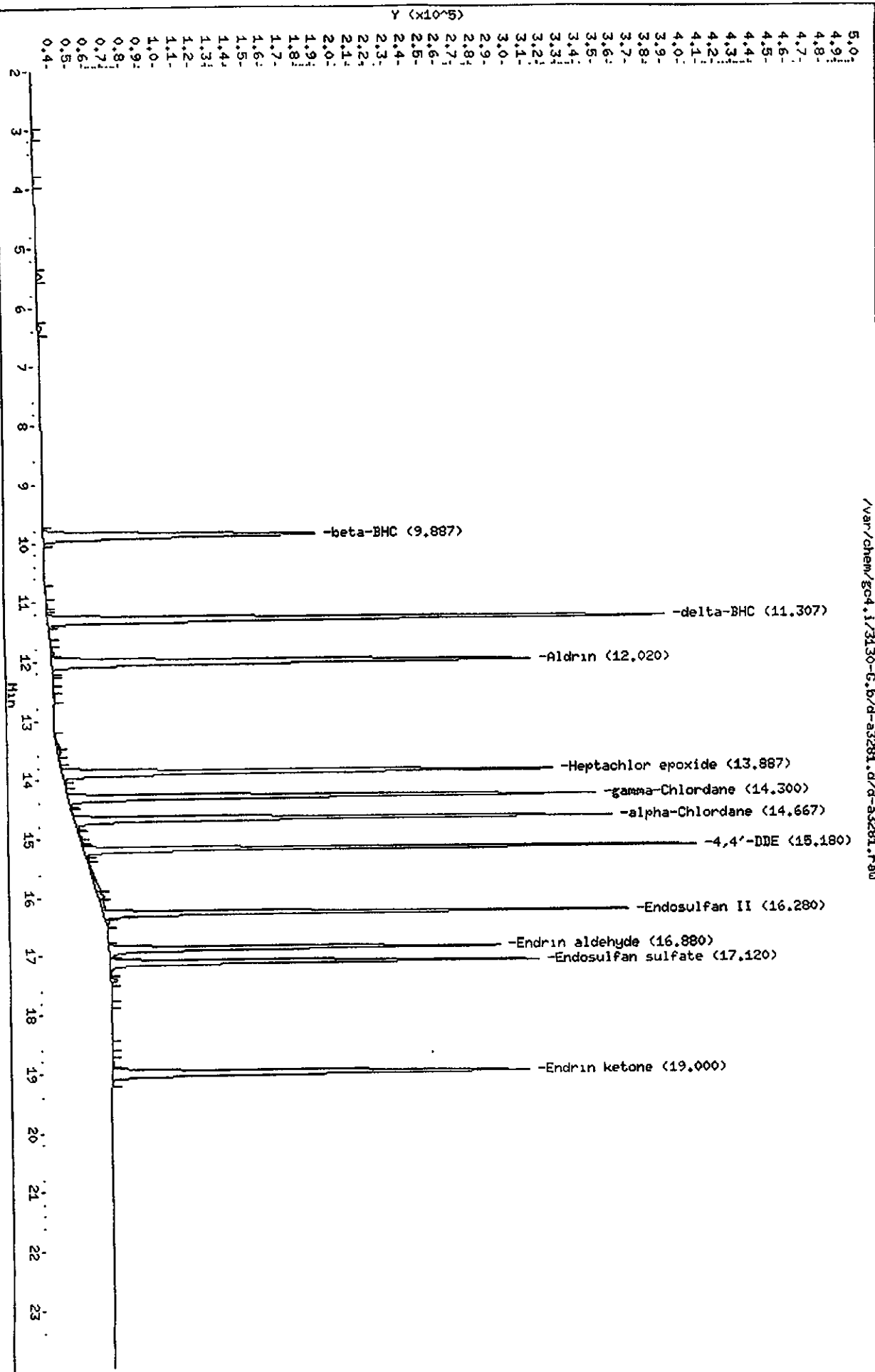
Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	12.020	12.020	0.000	274596	0.10000	0.1116(A)
7 beta-BHC	9.887	9.887	0.000	155234	0.10000	0.09354
8 delta-BHC	11.307	11.307	0.000	353701	0.10000	0.1125(A)
12 Heptachlor epoxide	13.887	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/gc4.1/3130-G.b/d-a3281.d
Date: 13-JUN-2000 07:05
Client ID:
Sample Info: HICB, 3130-G.b., 4-INDB.sub., 1.5
Column phase: DB608

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



6601031

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

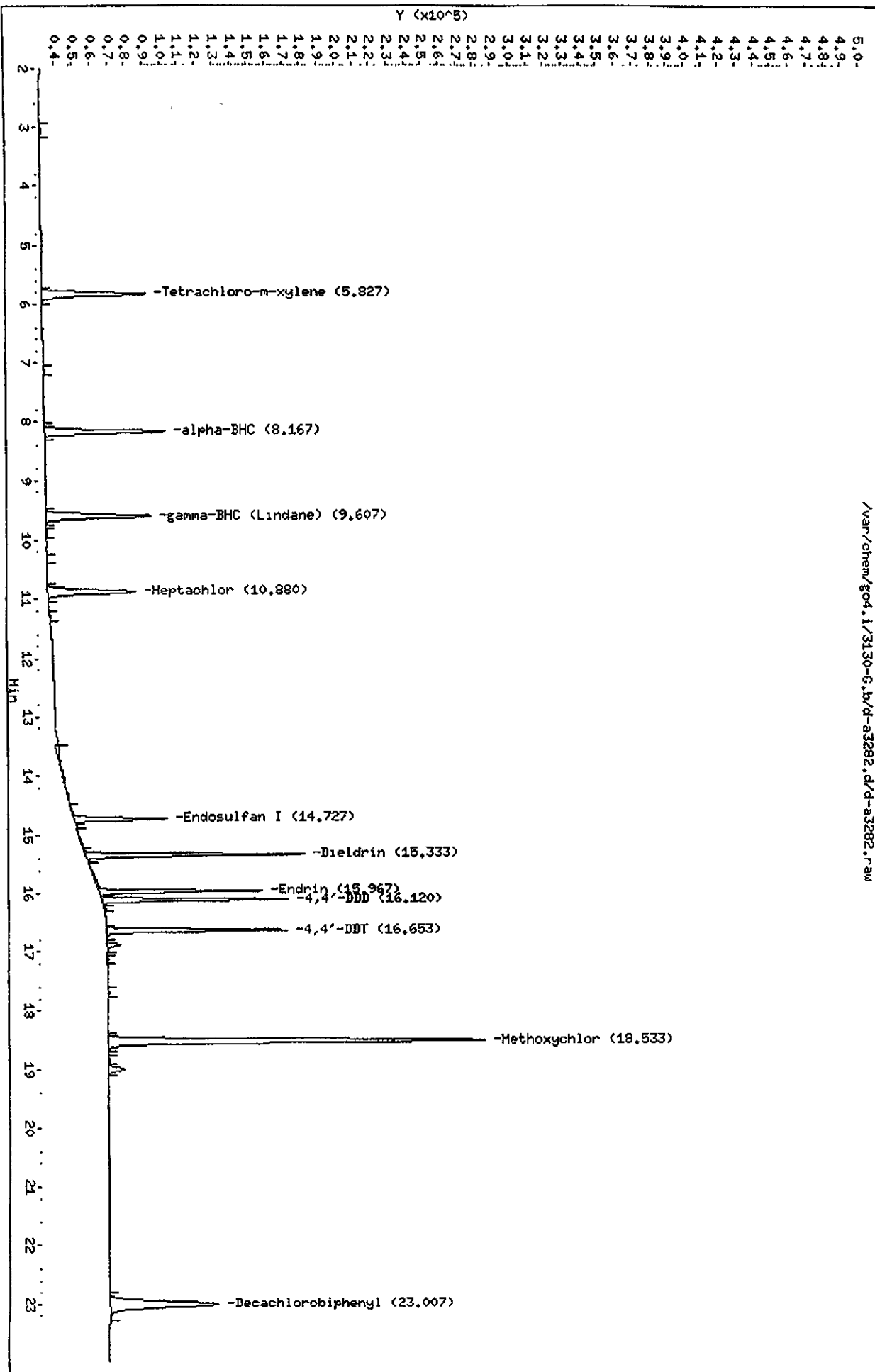
Compounds	RT	EXP RT	DLT RT	RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
*****	==	*****	*****	*****	*****	*****	*****
\$ 1 Tetrachloro-m-xylene	5.827	5.833	-0.006		59945	0.02500	0.01959
5 alpha-BHC	8.167	8.173	-0.006		69378	0.02500	0.01977
6 gamma-BHC (Lindane)	9.607	9.613	-0.006		60465	0.02500	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/gc4.1/3130-G.b/d-a3282.d
 Date: 13-JUN-2000 07:33
 Client ID:
 Sample Info: 2ND A, 3130-G.b, INDA.sub, 2.3
 Column phase: DB608

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



6601033

Data File: /var/chem/gc4.i/3130-G.b/d-a3283.d
 Report Date: 13-Jun-2000 14:04

STL-PITTSBURGH

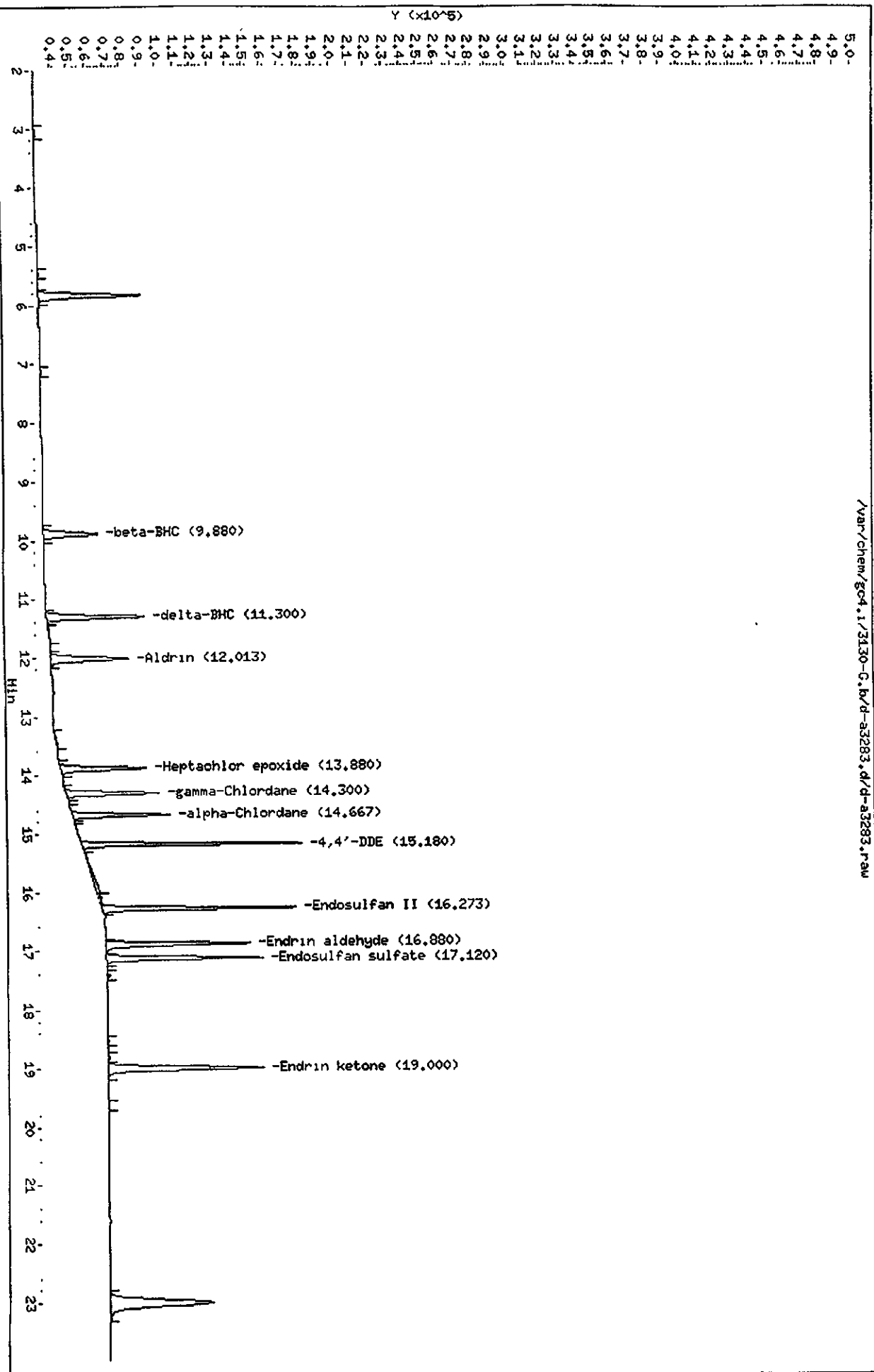
Data file : /var/chem/gc4.i/3130-G.b/d-a3283.d
 Lab Smp Id: 2ND B
 Inj Date : 13-JUN-2000 08:00
 Operator : 1891
 Smp Info : 2ND B,3130-G.b,,INDB.sub,,2,3
 Misc Info : 190-82-5
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 13-Jun-2000 14:02 matkol
 Cal Date : 13-JUN-2000 07:05
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc4.i
 Quant Type: ESTD
 Cal File: d-a3281.d
 Continuing Calibration Sample
 Compound Sublist: INDB.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT 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/gc4.1/3130-G.b/d-a3283.d
Date: 13-JUN-2000 08:00
Client ID:
Sample Info: 2ND B, 3130-G.b, INDB.sub, 2,3
Column phase: DB608

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



6601035

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	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

Endrin Breakdown = $\frac{(3745 + 2817)}{(3745 + 2817 + 6536)} \times 100 = 9.6\%$

Data File: /var/chem/gc4.i/3130-G.b/d-a3284.d

Date: 13-JUN-2000 08:28

Client ID:

Sample Info: EVALR,3130-G.b,EVALBR,sub,3,1

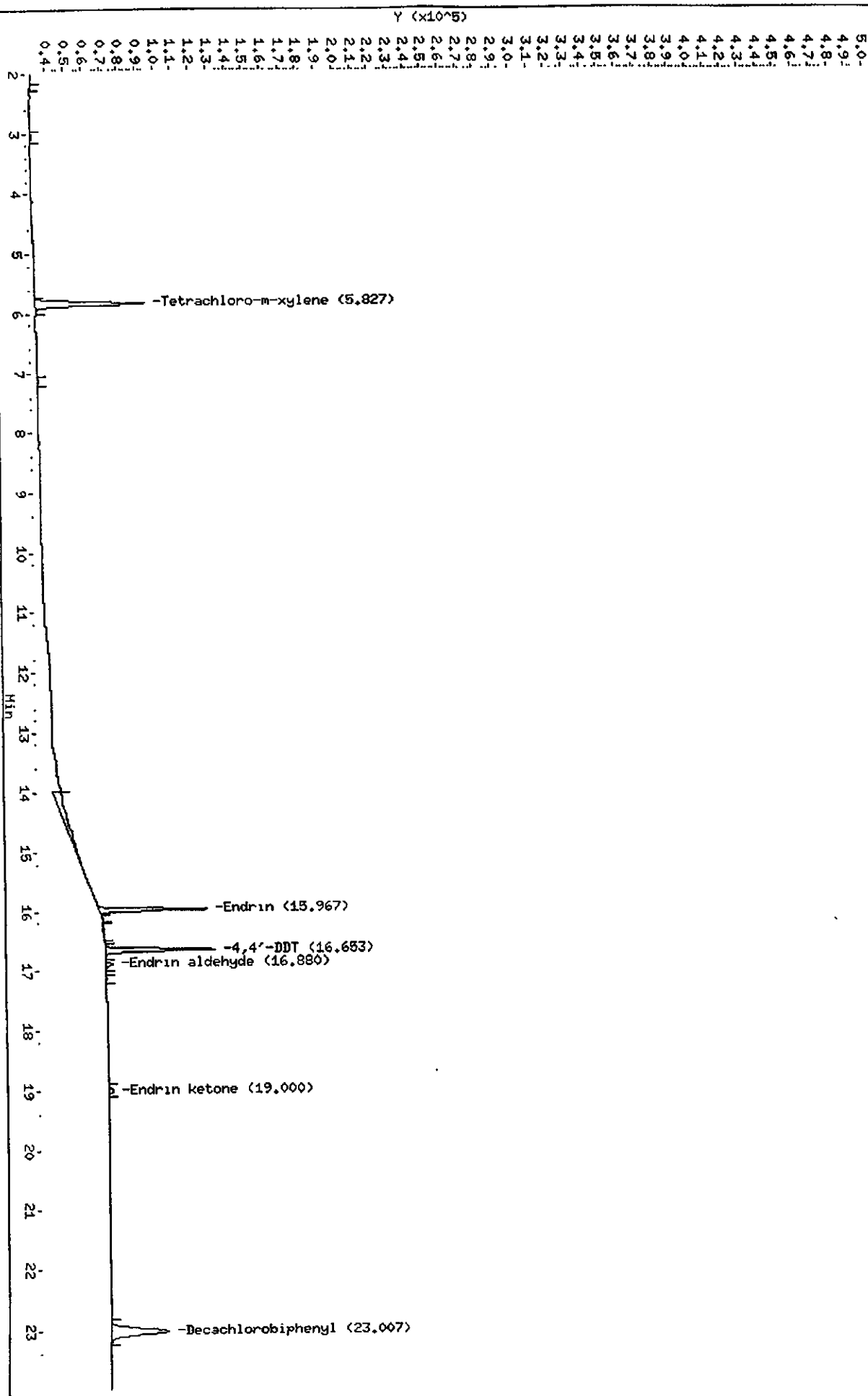
Column phase: DB608

Instrument: gc4.i

Operator: 1891

Column diameter: 0.53

/var/chem/gc4.i/3130-G.b/d-a3284.d/d-a3284.raw



6601037

Data File: /var/chem/gc4.i/3130-G.b/d-a3305.d
 Report Date: 14-Jun-2000 09:39

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3305.d
 Lab Smp Id: MEDA
 Inj Date : 13-JUN-2000 18:11
 Operator : 1891
 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 : 14-Jun-2000 09:36 g
 Cal Date : 13-JUN-2000 07:05
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc4.i
 Quant Type: ESTD
 Cal File: d-a3281.d
 Continuing Calibration Sample
 Compound Sublist: INDA.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.820	5.833	-0.013	78504	0.02500	0.02566
5 alpha-BHC	8.160	8.173	-0.013	90391	0.02500	0.02576
6 gamma-BHC (Lindane)	9.593	9.613	-0.020	77560	0.02500	0.02573
10 Heptachlor	10.867	10.887	-0.020	65683	0.02500	0.02521
15 Endosulfan I	14.720	14.733	-0.013	68631	0.02500	0.02532
17 Dieldrin	15.327	15.340	-0.013	77271	0.02500	0.02567
20 Endrin	15.960	15.973	-0.013	67392	0.02500	0.02651
21 4,4'-DDD	16.113	16.120	-0.007	65880	0.02500	0.02579
23 4,4'-DDT	16.647	16.653	-0.006	63838	0.02500	0.02563
25 Methoxychlor	18.520	18.533	-0.013	56186	0.05000	0.05186
\$ 30 Decachlorobiphenyl	22.993	23.013	-0.020	40097	0.02500	0.02560

Data File: /var/chem/gc04.i/3130-G.b/d-a3305.d

Date: 13-JUN-2000 18:11

Client ID:

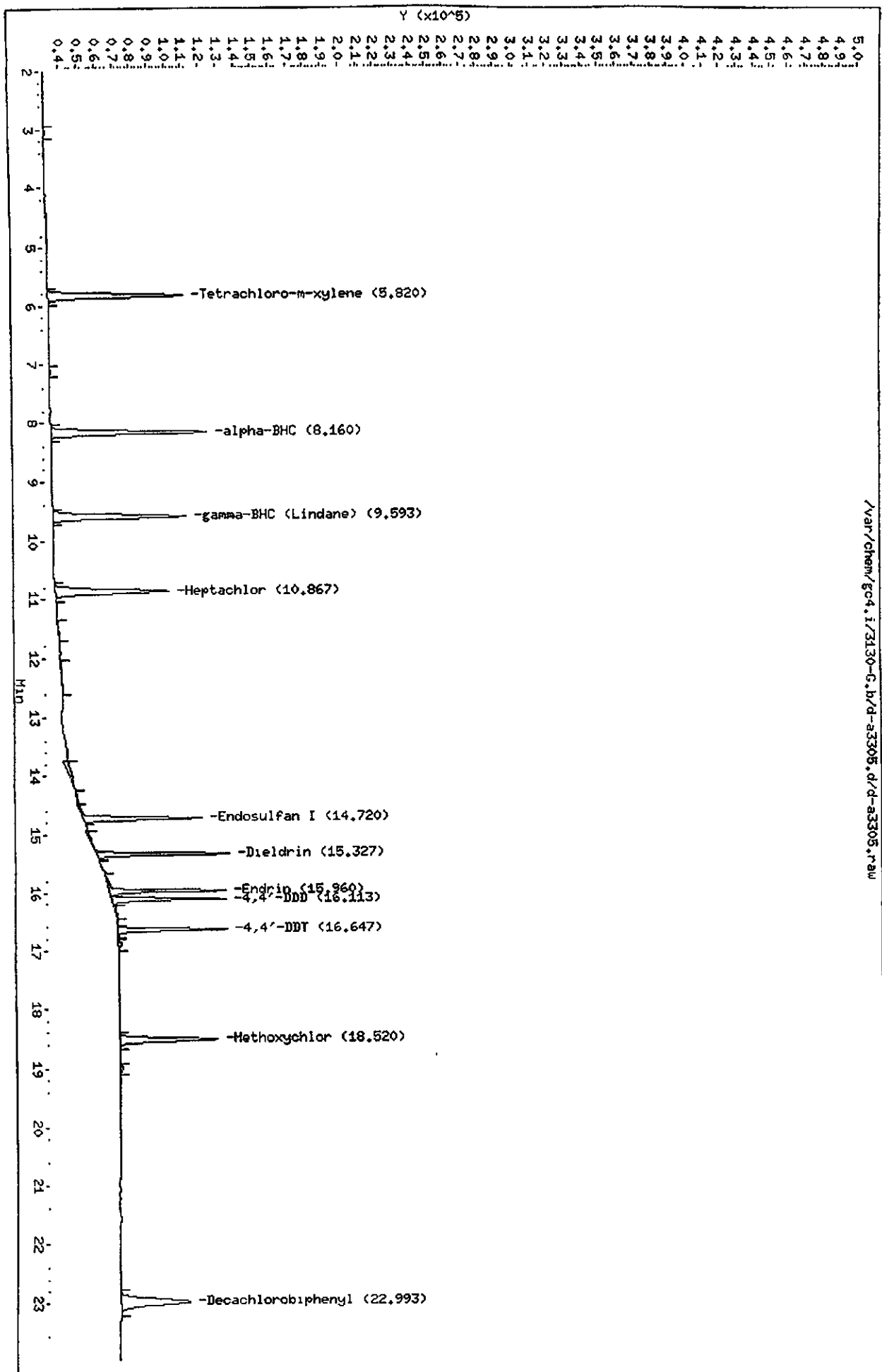
Sample Info: HEDA,3130-G.b, INDIA.sub.,2,3

Column phase: DB608

Instrument: gc04.i

Operator: 1891

Column diameter: 0.53



6601039

Data File: /var/chem/gc4.i/3130-G.b/d-a3306.d
Report Date: 14-Jun-2000 09:39

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3306.d
Lab Smp Id: MEDB
Inj Date : 13-JUN-2000 18:39
Operator : 1891
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 : 14-Jun-2000 09:36 g
Cal Date : 13-JUN-2000 07:05
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 3.40

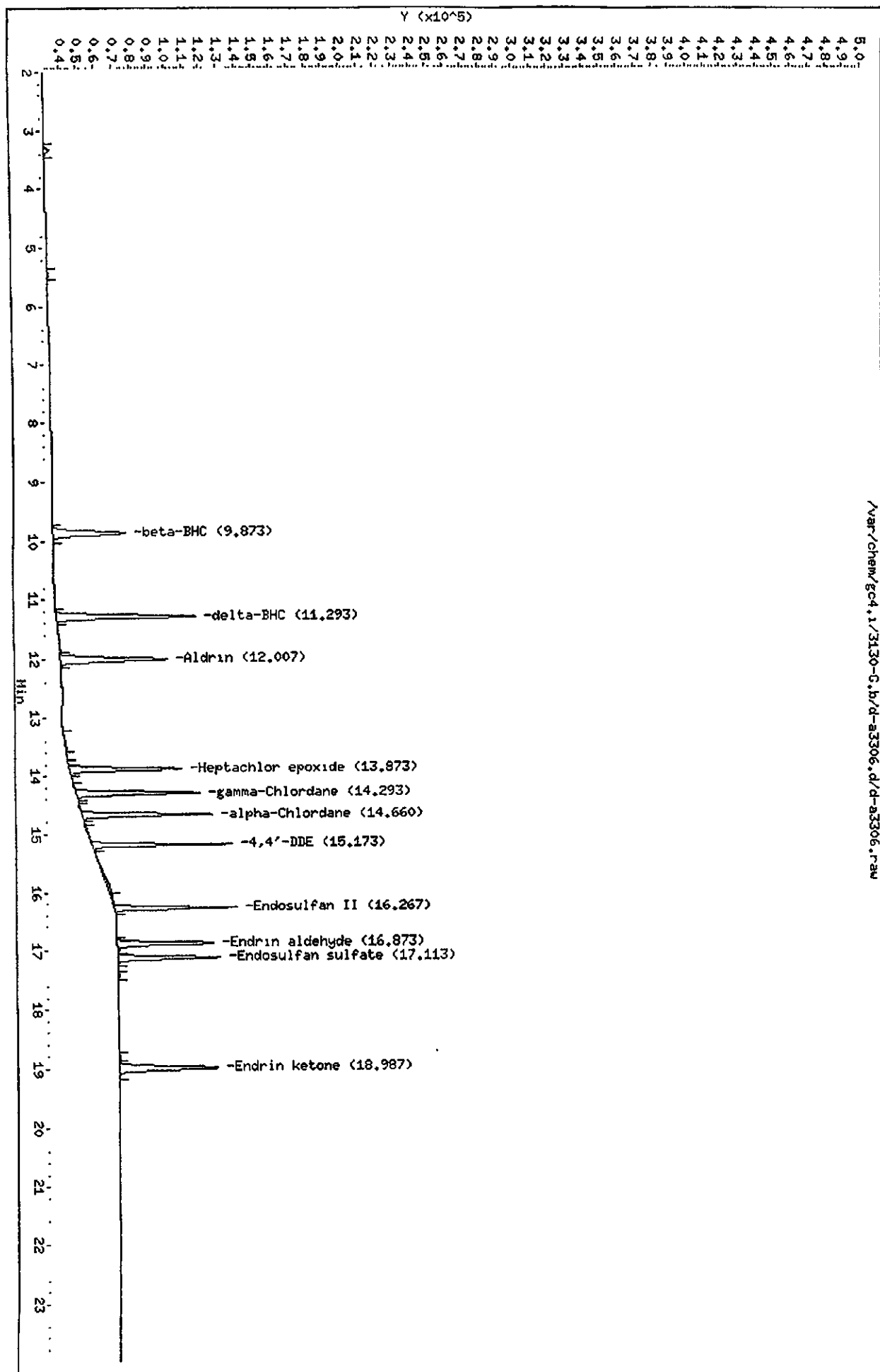
Inst ID: gc4.i
Quant Type: ESTD
Cal File: d-a3281.d
Continuing Calibration Sample
Compound Sublist: INDB.sub

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	12.007	12.020	-0.013	61430	0.02500	0.02497
7 beta-BHC	9.873	9.887	-0.014	42071	0.02500	0.02535
8 delta-BHC	11.293	11.307	-0.014	79913	0.02500	0.02541
12 Heptachlor epoxide	13.873	13.887	-0.014	65057	0.02500	0.02510
13 gamma-Chlordane	14.293	14.300	-0.007	71783	0.02500	0.02504
14 alpha-Chlordane	14.660	14.667	-0.007	75425	0.02500	0.02536
16 4,4'-DDE	15.173	15.180	-0.007	80863	0.02500	0.02562
22 Endosulfan II	16.267	16.280	-0.013	70801	0.02500	0.02505
24 Endrin aldehyde	16.873	16.880	-0.007	55732	0.02500	0.02550
26 Endosulfan sulfate	17.113	17.120	-0.007	59247	0.02500	0.02608
27 Endrin ketone	18.987	19.000	-0.013	56678	0.02500	0.02537

Data File: /var/chem/gc4.1/3130-G.b/d-a3306.d
Date: 13-JUN-2000 18:39
Client ID:
Sample Info: MEDB,3130-G.b.,1NDB,sub,,2,3

Column phase: DB608

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



6601041

Data File: /var/chem/gc4.i/3130-G.b/d-a3307.d
Report Date: 14-Jun-2000 09:39

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3307.d
Lab Smp Id: EVALB
Inj Date : 13-JUN-2000 19:07
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 : 14-Jun-2000 09:36 g 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	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ng)
§ 1 Tetrachloro-m-xylene	5.820	5.833	-0.013	64035	0.02093	0.02093(R)
16 4,4'-DDE	Compound Not Detected.					
20 Endrin	15.960	15.973	-0.013	66752	0.02626	0.02626
21 4,4'-DDD	16.153	16.120	0.033	1995	0.000781	0.0007809
23 4,4'-DDT	16.647	16.653	-0.006	65349	0.02624	0.02624
24 Endrin aldehyde	16.873	16.880	-0.007	2366	0.00108	0.001082
27 Endrin ketone	18.987	19.000	-0.013	2262	0.00101	0.001012
§ 30 Decachlorobiphenyl	22.993	23.013	-0.020	33189	0.02119	0.02119(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

DDT = 3.0
Endrin = 6.5

Data File: /var/chem/gc4.i/3130-G.b/d-a3307.d
Date: 13-JUN-2000 19:07

Client ID:

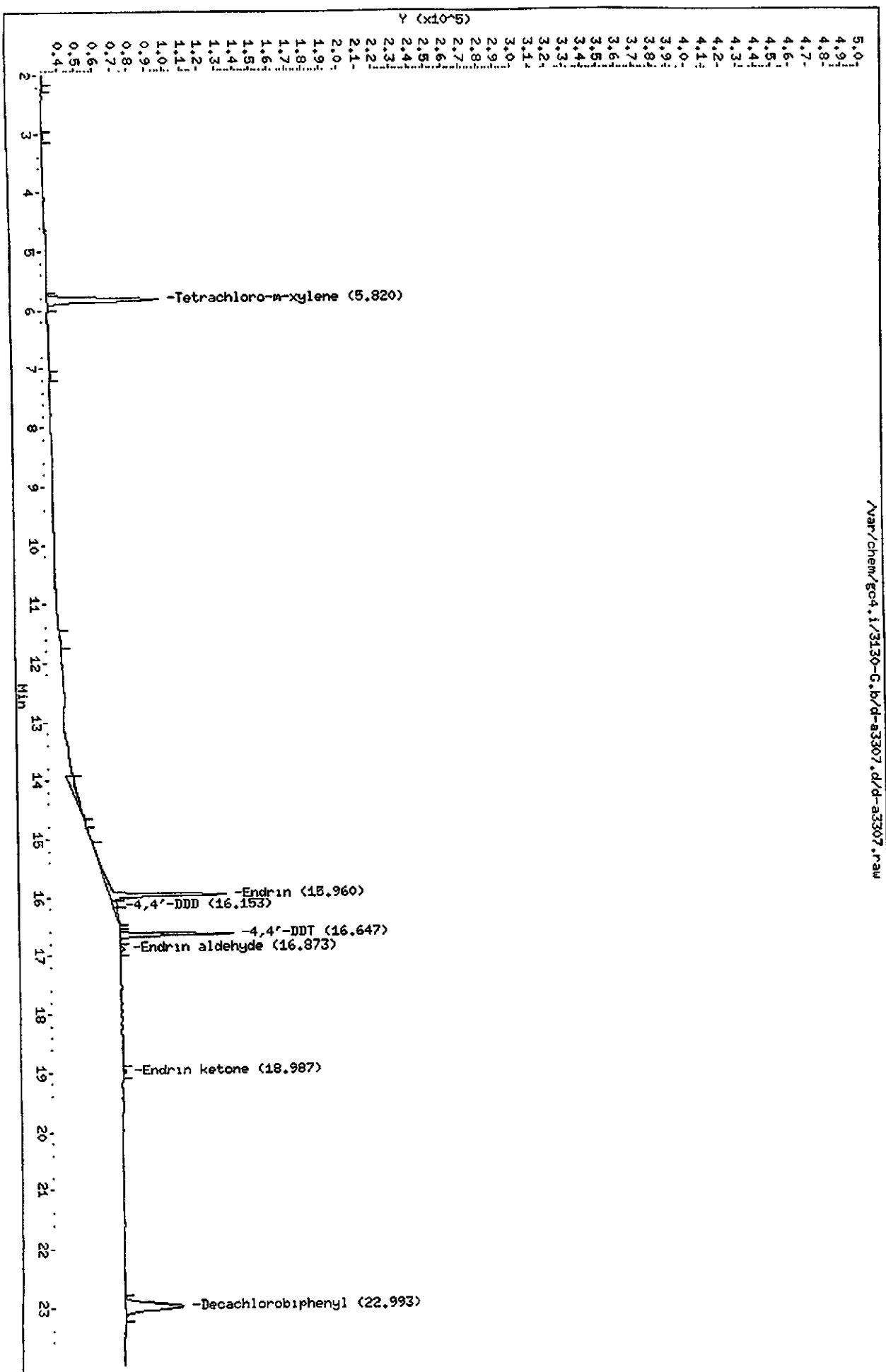
Sample Info: EVALB,3130-G.b.,EVALBR,sub,3,1

Column phase: DB608

Instrument: gc4.i

Operator: 1891

Column diameter: 0.53



Data File: /var/chem/gc4.i/3130-G.b/d-a3328.d
 Report Date: 14-Jun-2000 09:41

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3328.d
 Lab Smp Id: MEDA
 Inj Date : 14-JUN-2000 04:49
 Operator : 1891
 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 : 14-Jun-2000 09:36 g
 Cal Date : 13-JUN-2000 07:05
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc4.i
 Quant Type: ESTD
 Cal File: d-a3281.d
 Continuing Calibration Sample
 Compound Sublist: INDA.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.813	5.833	-0.020	78211	0.02500	0.02556
5 alpha-BHC	8.147	8.173	-0.026	90416	0.02500	0.02576
6 gamma-BHC (Lindane)	9.580	9.613	-0.033	77932	0.02500	0.02585
10 Heptachlor	10.860	10.887	-0.027	65518	0.02500	0.02515
15 Endosulfan I	14.713	14.733	-0.020	68668	0.02500	0.02533
17 Dieldrin	15.320	15.340	-0.020	76144	0.02500	0.02530
20 Endrin	15.953	15.973	-0.020	65392	0.02500	0.02572
21 4,4'-DDD	16.107	16.120	-0.013	66058	0.02500	0.02586
23 4,4'-DDT	16.640	16.653	-0.013	64050	0.02500	0.02572
25 Methoxychlor	18.513	18.533	-0.020	55930	0.05000	0.05162
\$ 30 Decachlorobiphenyl	22.973	23.013	-0.040	39917	0.02500	0.02548

Data File: /var/chem/gc04.1/3130-G.b/d-a3328.d

Date: 14-JUN-2000 04:49

Client ID:

Sample Info: HEDA, 3130-G.b, INDA, sub., 2.3

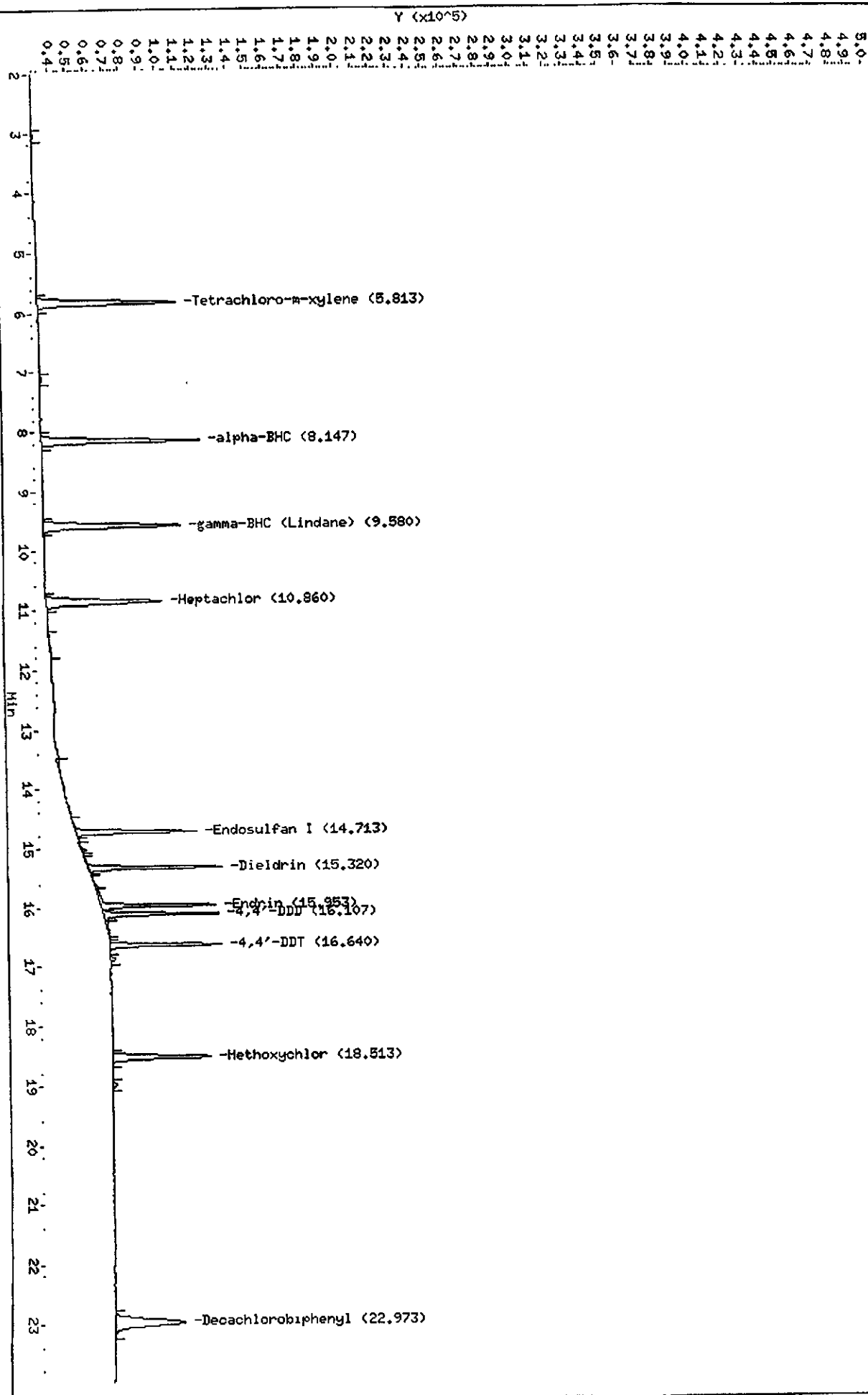
Column phase: DB608

Instrument: gc04.1

Operator: 1891

Column diameter: 0.53

/var/chem/gc04.1/3130-G.b/d-a3328.d/d-a3328.raw



6601045

Data File: /var/chem/gc4.i/3130-G.b/d-a3329.d
Report Date: 14-Jun-2000 09:41

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3329.d
Lab Smp Id: MEDB
Inj Date : 14-JUN-2000 05:17
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 : 14-Jun-2000 09:36 g 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	RESPONSE	CAL-AMT	ON-COL
					(ng)	(ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.993	12.020	-0.027	63425	0.02500	0.02578
7 beta-BHC	9.860	9.887	-0.027	43655	0.02500	0.02631
8 delta-BHC	11.280	11.307	-0.027	83992	0.02500	0.02671
12 Heptachlor epoxide	13.867	13.887	-0.020	67927	0.02500	0.02621
13 gamma-Chlordane	14.280	14.300	-0.020	75533	0.02500	0.02635
14 alpha-Chlordane	14.653	14.667	-0.014	78351	0.02500	0.02634
16 4,4'-DDE	15.167	15.180	-0.013	83620	0.02500	0.02650
22 Endosulfan II	16.260	16.280	-0.020	73560	0.02500	0.02603
24 Endrin aldehyde	16.867	16.880	-0.013	57381	0.02500	0.02625
26 Endosulfan sulfate	17.107	17.120	-0.013	59781	0.02500	0.02632
27 Endrin ketone	18.973	19.000	-0.027	58781	0.02500	0.02631

Data File: /var/chem/gc04.1/3130-G.b/d-a3329.d

Date: 14-JUN-2000 05:17

Client ID:

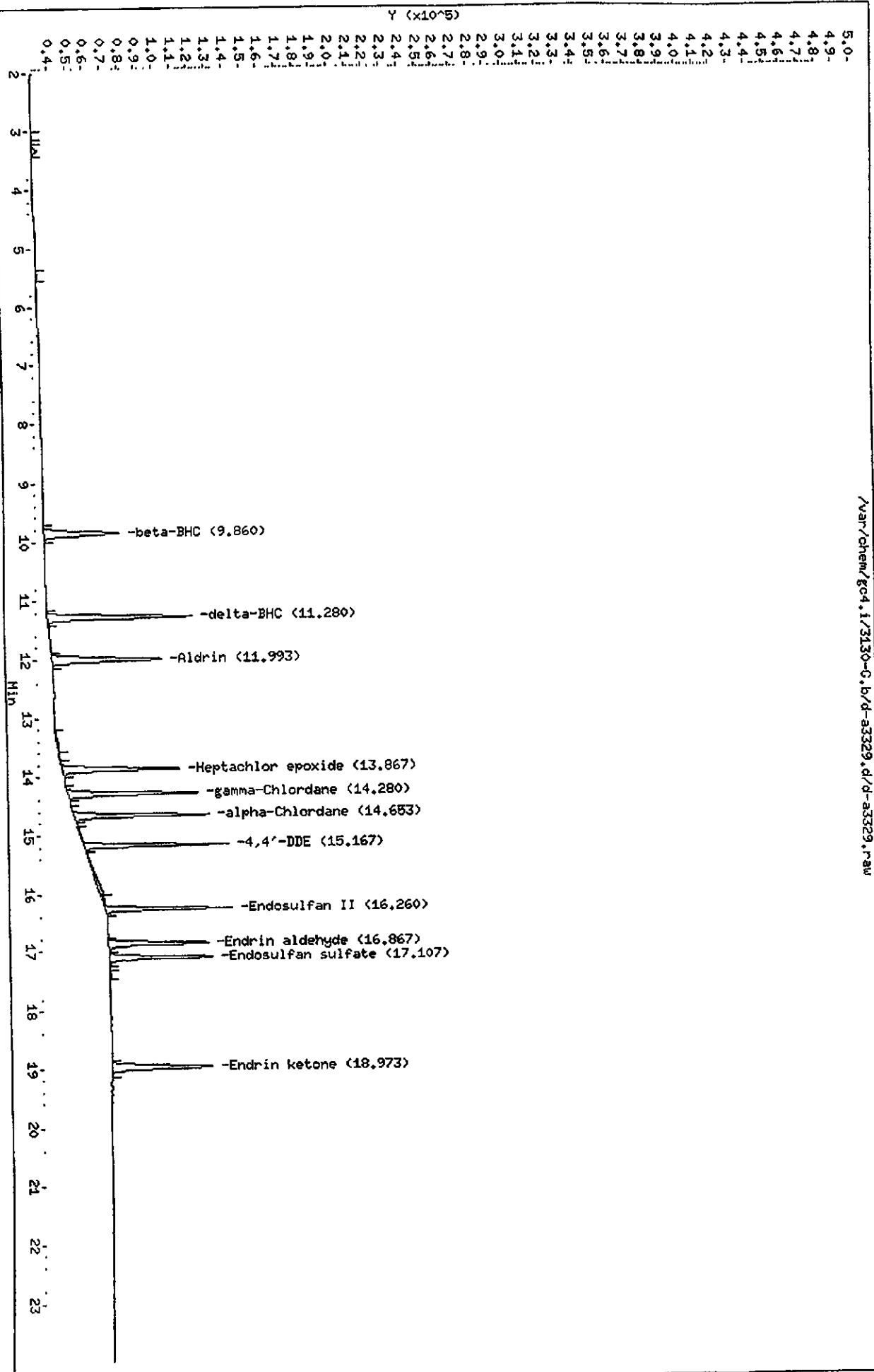
Sample Info: HEDB,3130-G.b,1NDB.sub,2,3

Column phase: DB608

Instrument: GC4.1

Operator: 1891

Column diameter: 0.53



6601047

**PESTICIDE
QC DATA**

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID
Method: SW846 8081A
Pesticides (8081A)

Lab Sample ID: C0F120000 449

Sample WT/Vol: 100 / mL
Work Order: DEK4C101
Dilution factor: 1
Moisture %: NADate Received: 06/08/00
Date Extracted: 06/12/00
Date Analyzed: 06/14/00

QC Batch: 0164449

Client Sample Id: INTRA-LAB BLANK

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

6601049

Data File: /var/chem/gc4.i/3130-G.b/d-a3321.d
 Report Date: 14-Jun-2000 09:40

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3321.d
 Lab Smp Id: DEK4C101 Client Smp ID: PBLK1
 Inj Date : 14-JUN-2000 01:35
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DEK4C101,3130-G.b,,PEST.sub,,3,
 Misc Info : 080328BLK
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 14-Jun-2000 09:36 g Quant Type: ESTD
 Cal Date : 13-JUN-2000 07:05 Cal File: d-a3281.d
 Als bottle: 1 QC Sample: BLANK
 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	10000.000	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)
5 alpha-BHC				Compound Not Detected.		
4 HEXACHLOROBENZENE				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				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				Compound Not Detected.		
20 Endrin				Compound Not Detected		
18 Toxaphene				Compound Not Detected		

Data File: /var/chem/gc4.i/3130-G.b/d-a3321.d

Report Date: 14-Jun-2000 09:40

Compounds	RT	EXP	RT	DLT	RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng)	(ug/L)
=====	==	=====	=====	=====	=====	=====	=====	=====
21 4,4'-DDD	16.100	16.120	-0.020		2292	0.000897	0.08972 (a)	
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.						
\$ 1 Tetrachloro-m-xylene	5.820	5.833	-0.013		49377	0.01614	1.614 (R)	
\$ 30 Decachlorobiphenyl	22.980	23.013	-0.033		29594	0.01889	1.889 (R)	

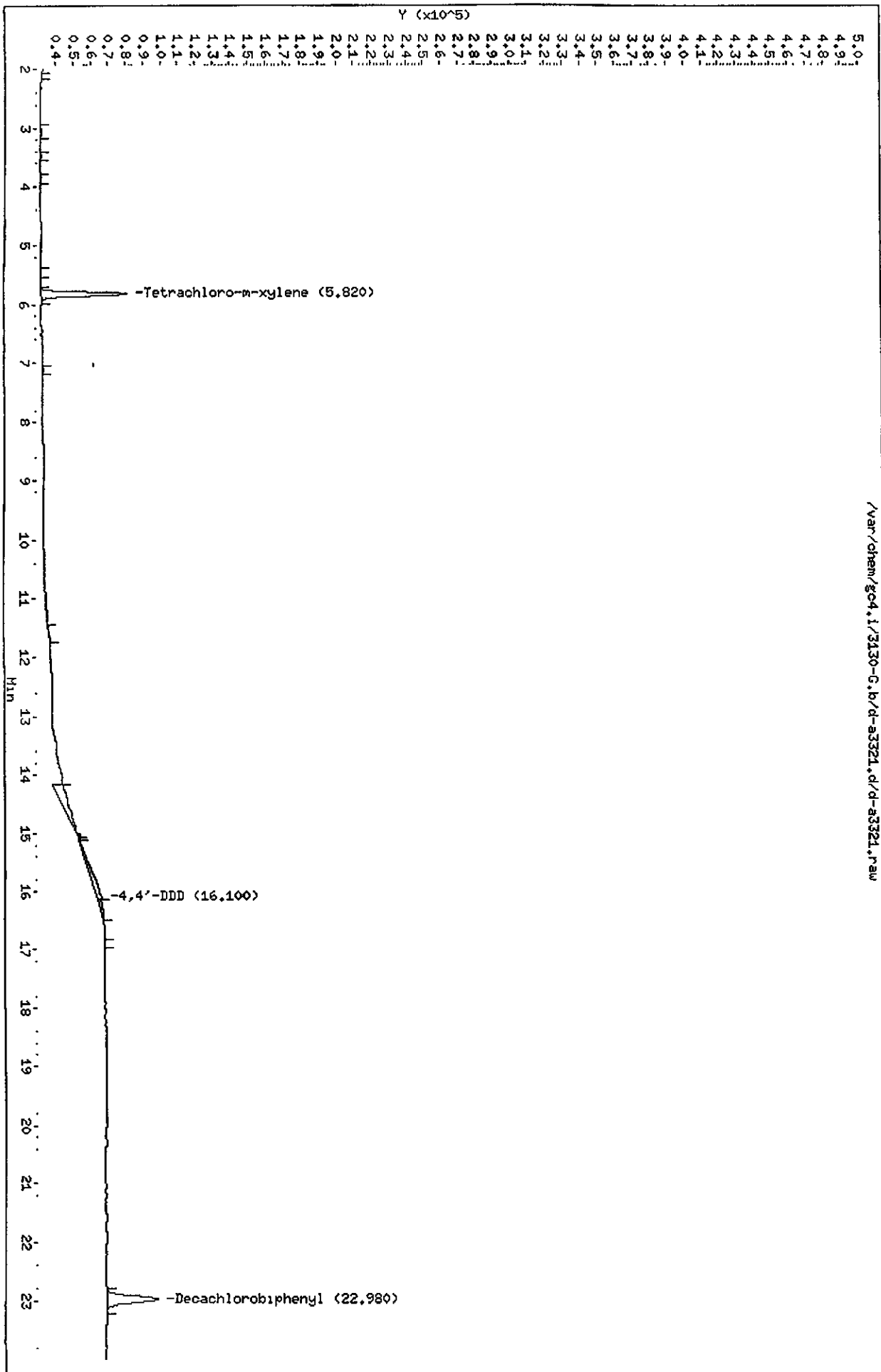
QC Flag Legend

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

6601051

Data File: /var/chem/gc04.1/3130-G,b/d-a3321.d
Date: 14-JUN-2000 01:35
Client ID: PBLK1
Sample Info: DEK4C101,3130-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: C0F120000 449

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEK4C102

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

QC Batch: 0164449

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00228	
76-44-8	Heptachlor	0.00208	
1024-57-3	Heptachlor epoxide	0.00212	
58-89-9	Lindane	0.00178	
72-43-5	Methoxychlor	0.00236	

6601053

Data File: /var/chem/gc4.i/3130-G.b/d-a3322.d

Report Date: 14-Jun-2000 09:41

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3322.d
 Lab Smp Id: DEK4C102 Client Smp ID: LCS1
 Inj Date : 14-JUN-2000 02:03
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DEK4C102,3130-G.b,,PEST.sub,,3,
 Misc Info : 080328LCS
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 14-Jun-2000 09:36 g Quant Type: ESTD
 Cal Date : 13-JUN-2000 07:05 Cal File: d-a3281.d
 Als bottle: 1 QC Sample: LCS
 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	10000.000	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 (ug/L)
5 alpha-BHC	8.153	8.173	-0.020	50709	0.01445	1.445
4 HEXACHLORO BENZENE	6.693	6.650	0.043	7024		(a)
6 gamma-BHC (Lindane)	9.587	9.613	-0.026	53617	0.01779	1.778(R)
7 beta-BHC	9.867	9.887	-0.020	34829	0.02099	2.099
9 Chlordane	Compound Not Detected.					
10 Heptachlor	10.860	10.887	-0.027	54192	0.02080	2.080(R)
8 delta-BHC	11.287	11.307	-0.020	3786	0.00120	0.1204(a)
11 Aldrin	12.000	12.020	-0.020	50788	0.02065	2.065(R)
12 Heptachlor epoxide	13.867	13.887	-0.020	54940	0.02120	2.120
13 gamma-Chlordane	14.287	14.300	-0.013	62261	0.02172	2.172
14 alpha-Chlordane	14.660	14.667	-0.007	65020	0.02186	2.186
15 Endosulfan I	14.713	14.733	-0.020	63565	0.02345	2.345
16 4,4'-DDE	15.167	15.180	-0.013	71337	0.02260	2.260
17 Dieldrin	15.327	15.340	-0.013	65752	0.02185	2.184(R)
20 Endrin	15.960	15.973	-0.013	57886	0.02277	2.277(R)
18 Toxaphene	Compound Not Detected.					

Data File: /var/chem/gc4.i/3130-G.b/d-a3322.d

Report Date: 14-Jun-2000 09:41

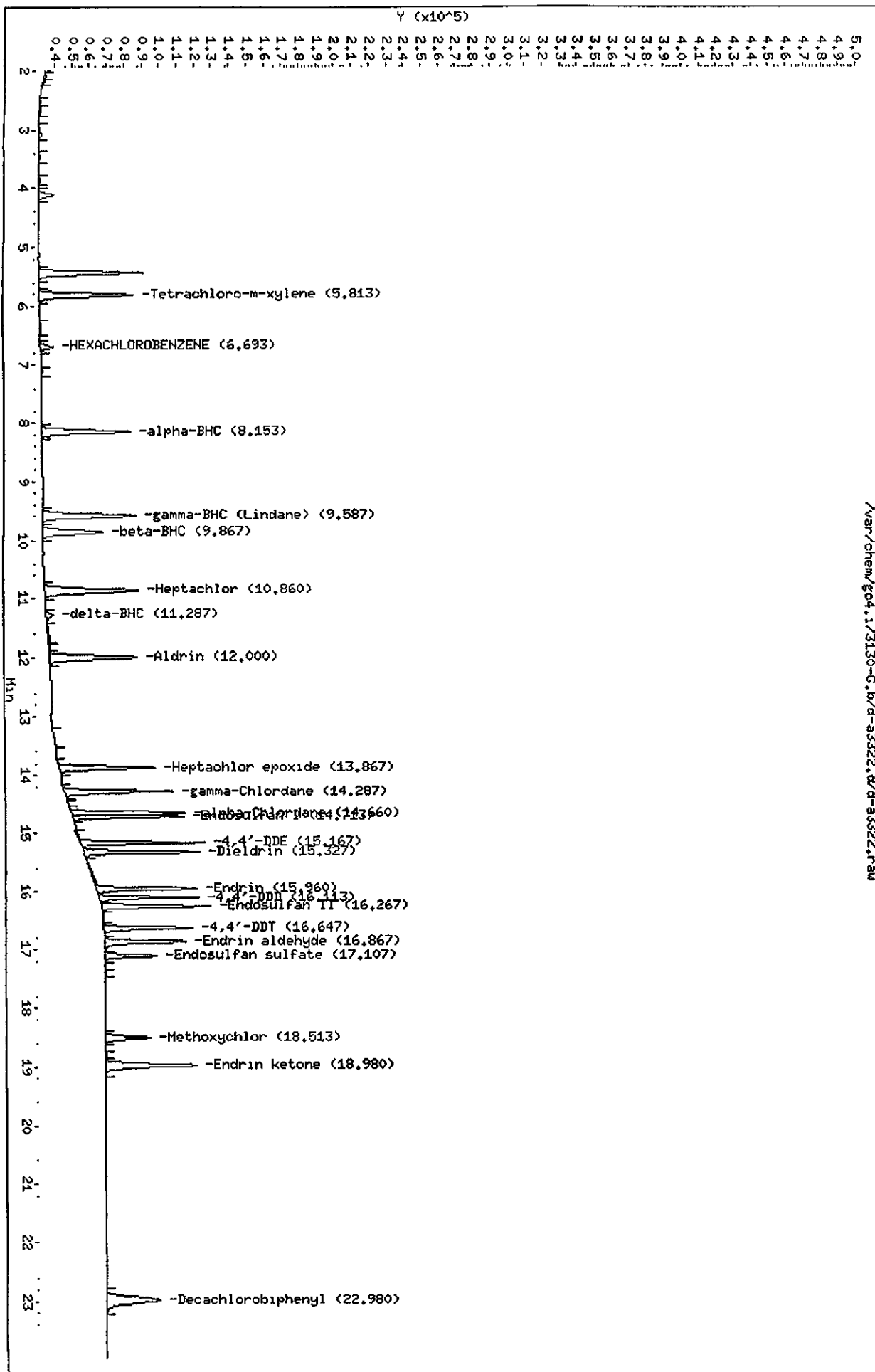
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
=====	==	=====	=====	=====	=====	=====
21 4,4'-DDD	16.113	16.120	-0.007	57083	0.02234	2.234
22 Endosulfan II	16.267	16.280	-0.013	62026	0.02195	2.195
23 4,4'-DDT	16.647	16.653	-0.006	51128	0.02053	2.053 (R)
24 Endrin aldehyde	16.867	16.880	-0.013	46617	0.02133	2.133
26 Endosulfan sulfate	17.107	17.120	-0.013	29733	0.01309	1.309
25 Methoxychlor	18.513	18.533	-0.020	25581	0.02361	2.361
27 Endrin ketone	18.980	19.000	-0.020	51821	0.02319	2.319
\$ 1 Tetrachloro-m-xylene	5.813	5.833	-0.020	53725	0.01756	1.756 (R)
\$ 30 Decachlorobiphenyl	22.980	23.013	-0.033	30217	0.01929	1.929 (R)

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-a3322.d
 Date: 14-JUN-2000 02:03
 Client ID: LC81
 Sample Info: DEK4102, 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

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHC10P

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164449

Client Sample Id: DF/S1/0159/SDC/008

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00225	
76-44-8	Heptachlor	0.00194	
1024-57-3	Heptachlor epoxide	0.00200	
58-89-9	Lindane	0.00165	
72-43-5	Methoxychlor	0.00230	

Data File: /var/chem/gc4.i/3130-G.b/d-a3323.d

Report Date: 14-Jun-2000 09:41

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3323.d
 Lab Smp Id: DEEHC10P Client Smp ID: DF/S1/0159/SDC/008S
 Inj Date : 14-JUN-2000 02:30
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DEEHC10P,3130-G.b,,PEST.sub,,3,
 Misc Info : 080328001S
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 14-Jun-2000 09:36 g Quant Type: ESTD
 Cal Date : 13-JUN-2000 07:05 Cal File: d-a3281.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	10000.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

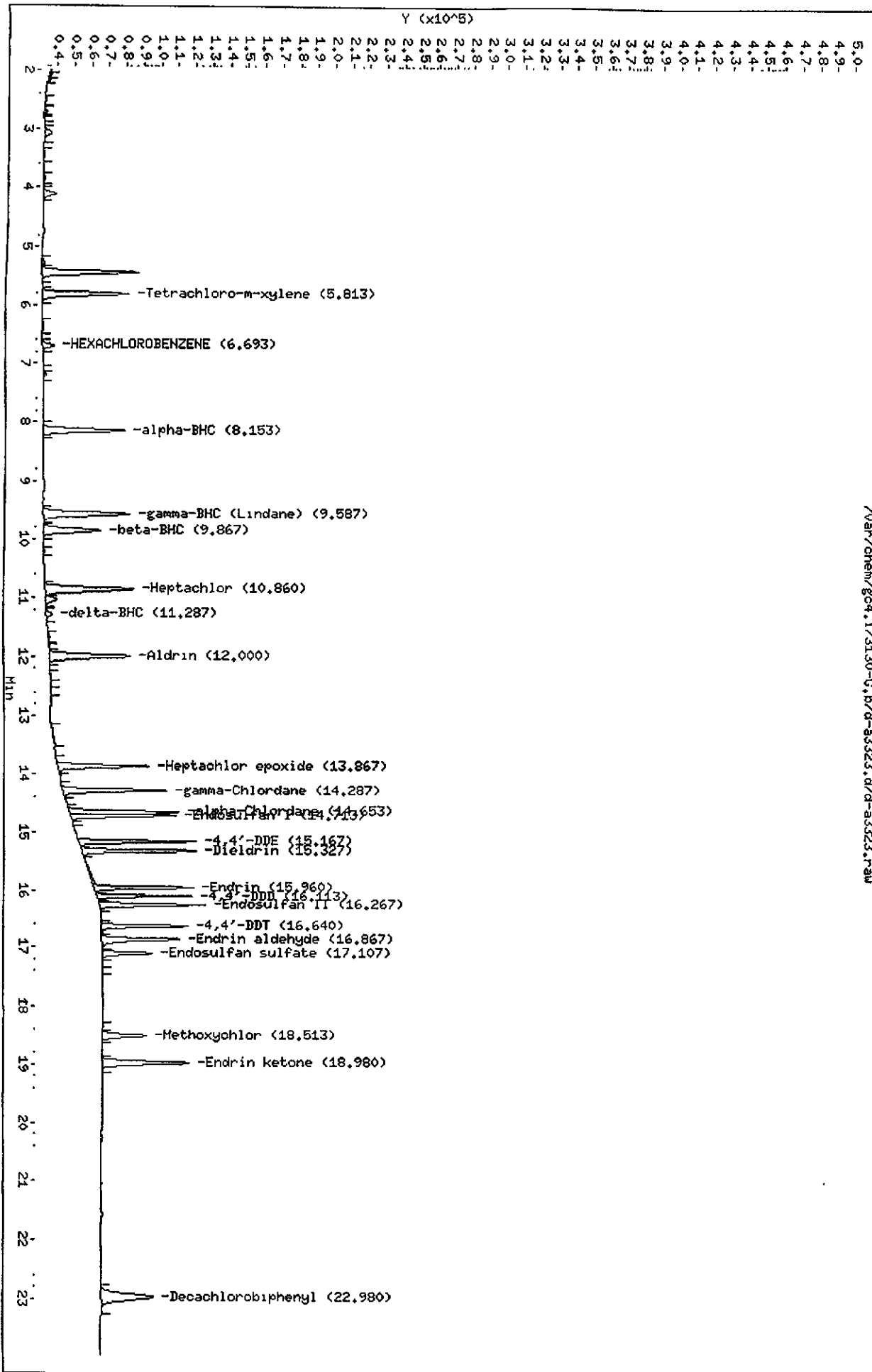
Compounds						CONCENTRATIONS	
	RT	EXP RT	DLT RT	RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
5 alpha-BHC	8.153	8.173	-0.020		47367	0.01350	1.350
4 HEXACHLOROBENZENE	6.693	6.650	0.043		6511		(a)
6 gamma-BHC (Lindane)	9.587	9.613	-0.026		49669	0.01648	1.648 (R)
7 beta-BHC	9.867	9.887	-0.020		32770	0.01975	1.975
9 Chlordane	Compound Not Detected.						
10 Heptachlor	10.860	10.887	-0.027		50553	0.01940	1.940 (R)
8 delta-BHC	11.287	11.307	-0.020		3663	0.00116	0.1165 (a)
11 Aldrin	12.000	12.020	-0.020		46857	0.01905	1.905 (R)
12 Heptachlor epoxide	13.867	13.887	-0.020		51943	0.02004	2.004
13 gamma-Chlordane	14.287	14.300	-0.013		58929	0.02056	2.056
14 alpha-Chlordane	14.653	14.667	-0.014		62181	0.02091	2.090
15 Endosulfan I	14.713	14.733	-0.020		59796	0.02206	2.206
16 4,4'-DDE	15.167	15.180	-0.013		67323	0.02133	2.133
17 Dieldrin	15.327	15.340	-0.013		65556	0.02178	2.178 (R)
20 Endrin	15.960	15.973	-0.013		57130	0.02247	2.247 (R)
18 Toxaphene	Compound Not Detected.						

Data File: \var\chem\gc4.i\3130-G.b\d-a3323.d
 Report Date: 14-Jun-2000 09:41

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
=====	==	=====	=====	=====	=====	=====
21 4,4'-DDD	16.113	16.120	-0.007	54745	0.02143	2.143
22 Endosulfan II	16.267	16.280	-0.013	60577	0.02144	2.144
23 4,4'-DDT	16.640	16.653	-0.013	49412	0.01984	1.984(R)
24 Endrin aldehyde	16.867	16.880	-0.013	44600	0.02040	2.040
26 Endosulfan sulfate	17.107	17.120	-0.013	28563	0.01258	1.258
25 Methoxychlor	18.513	18.533	-0.020	24903	0.02299	2.299
27 Endrin ketone	18.980	19.000	-0.020	49317	0.02207	2.207
\$ 1 Tetrachloro-m-xylene	5.813	5.833	-0.020	49192	0.01608	1.608(R)
\$ 30 Decachlorobiphenyl	22.980	23.013	-0.033	29425	0.01879	1.879(R)

QC Flag Legend

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



/var/chem/gc4.1/3130-G,b/d-a3323.raw

Data File: /var/chem/gc4.1/3130-G,b/d-a3323.d
 Date: 14-JUN-2000 02:30
 Client ID: DF/31/0159/SDC/0085
 Sample Info: DEEHC10P, 3130-G,b, PEST, sub, 3,
 Volume Injected (uL): 1.0
 Column phase: DB608

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

6601060

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHC10Q

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164449

Client Sample Id: DF/S1/0159/SDC/008

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00225	
76-44-8	Heptachlor	0.00198	
1024-57-3	Heptachlor epoxide	0.00200	
58-89-9	Lindane	0.00167	
72-43-5	Methoxychlor	0.00233	

Data File: /var/chem/gc4.i/3130-G.b/d-a3324.d

Report Date: 14-Jun-2000 09:41

STL-PITTSBURGH

Data file : /var/chem/gc4.i/3130-G.b/d-a3324.d
 Lab Smp Id: DEEHC10Q Client Smp ID: DF/S1/0159/SDC/008D
 Inj Date : 14-JUN-2000 02:58
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DEEHC10Q, 3130-G.b,, PEST.sub,, 3,
 Misc Info : 080328001D
 Comment :
 Method : /var/chem/gc4.i/3130-G.b/PESTA.m
 Meth Date : 14-Jun-2000 09:36 g Quant Type: ESTD
 Cal Date : 13-JUN-2000 07:05 Cal File: d-a3281.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	10000.000	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 (ug/L)
5 alpha-BHC	8.153	8.173	-0.020	48180	0.01373	1.373
4 HEXACHLOROBENZENE	6.693	6.650	0.043	6604		(a)
6 gamma-BHC (Lindane)	9.587	9.613	-0.026	50394	0.01672	1.672 (R)
7 beta-BHC	9.867	9.887	-0.020	33230	0.02002	2.002
9 Chlordane	Compound Not Detected.					
10 Heptachlor	10.867	10.887	-0.020	51567	0.01979	1.979 (R)
8 delta-BHC	11.287	11.307	-0.020	3679	0.00117	0.1170 (a)
11 Aldrin	12.000	12.020	-0.020	47322	0.01924	1.924 (R)
12 Heptachlor epoxide	13.867	13.887	-0.020	51821	0.02000	2.000
13 gamma-Chlordane	14.287	14.300	-0.013	59194	0.02065	2.065
14 alpha-Chlordane	14.660	14.667	-0.007	62610	0.02105	2.105
15 Endosulfan I	14.713	14.733	-0.020	60819	0.02243	2.243
16 4,4'-DDE	15.167	15.180	-0.013	68034	0.02156	2.156
17 Dieldrin	15.327	15.340	-0.013	66379	0.02205	2.205 (R)
20 Dndrin	15.960	15.973	-0.013	57166	0.02249	2.249 (R)
18 Toxaphene	Compound Not Detected					

Data File: /var/chem/gc4.i/3130-G.b/d-a3324.d

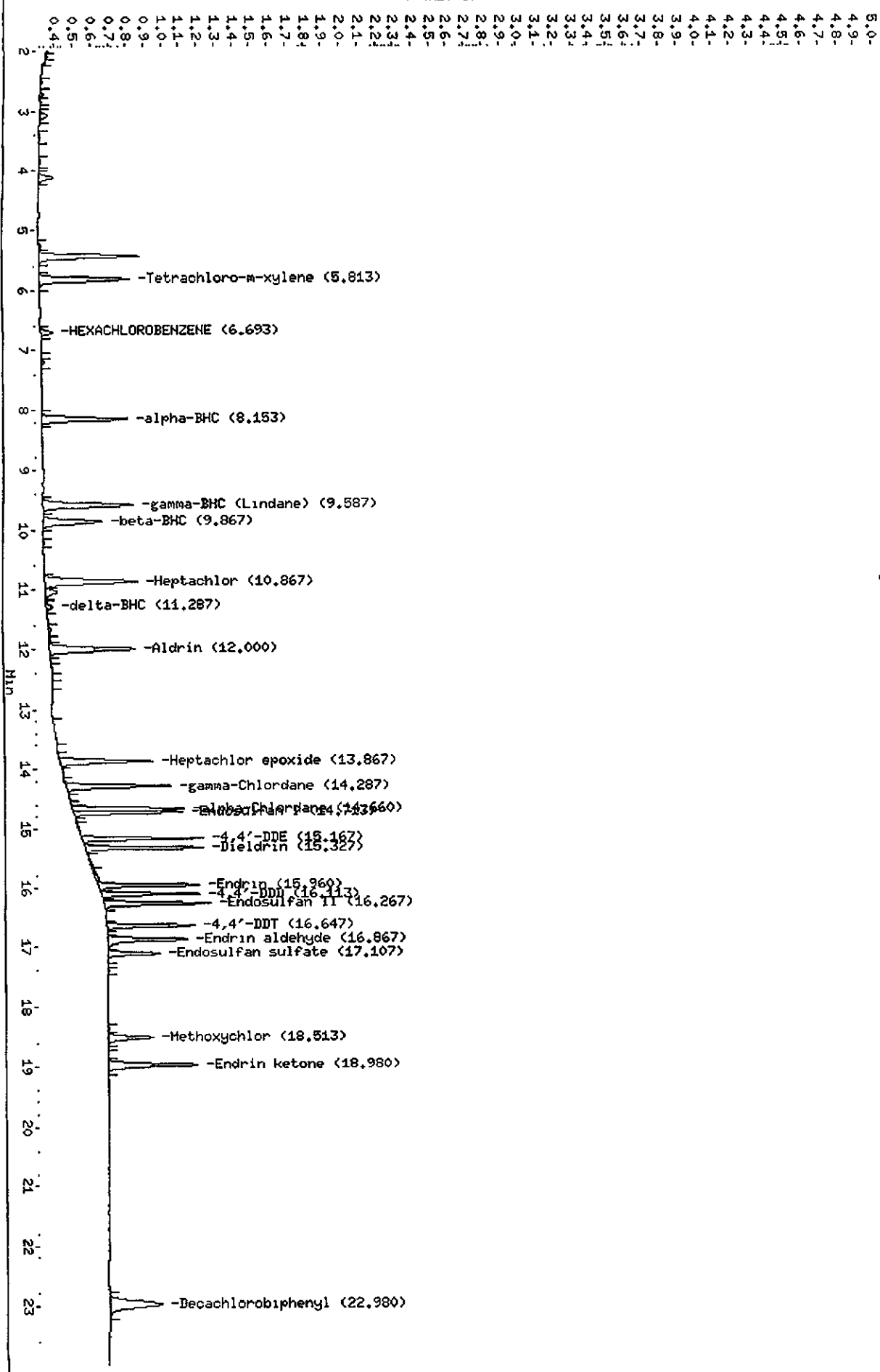
Report Date: 14-Jun-2000 09:41

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
=====	==	=====	=====	=====	=====	=====
21 4,4'-DDD	16.113	16.120	-0.007	55412	0.02169	2.169
22 Endosulfan II	16.267	16.280	-0.013	60012	0.02124	2.124
23 4,4'-DDT	16.647	16.653	-0.006	49234	0.01977	1.977(R)
24 Endrin aldehyde	16.867	16.880	-0.013	44911	0.02055	2.055
26 Endosulfan sulfate	17.107	17.120	-0.013	29134	0.01283	1.283
25 Methoxychlor	18.513	18.533	-0.020	25221	0.02328	2.328
27 Endrin ketone	18.980	19.000	-0.020	50062	0.02241	2.240
\$ 1 Tetrachloro-m-xylene	5.813	5.833	-0.020	49968	0.01633	1.633(R)
\$ 30 Decachlorobiphenyl	22.980	23.013	-0.033	29126	0.01860	1.860(R)

QC Flag Legend

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

6601063

Y (x10⁵)

Data File: /var/chem/gc4.i/3130-G.b/d-a3324.d
 Date: 14-JUN-2000 02:58
 Client ID: DF/S1/0159/SDC/008D
 Sample Info: DEHC10Q,3130-G.b,PEST,sub,3,
 Volume Injected (uL): 1.0
 Column phase: DB608

/var/chem/gc4.i/3130-G.b/d-a3324.d/d-a3324.raw

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

**PESTICIDE
MISCELLANEOUS**

Separatory Funnel Extraction Worksheet

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

ST
Committed To Your Success

B#0164325

6729

Observations on 2000 INTERESTS	Solvent Vol	Solvent Mfr
Hexane N44279 BA 6		

[illegible]

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 : 6/13/00 13:32
 Description : QUAN TERRA PGH 8081 RUN ON GC#4 DB608/DB1701
 REVIEWED BY:

Number of Times Edited : 1

Sequence File Header Information:

Number of Rows : 83
 Instrument Type : 760 / 900 Series Intelligent Interface
 Injection Type : SINGLE

Row	Type	Sample Name	Sample Number	Sequence Sample Descriptions - Channel A 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	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	DE28K101, 3130-G	060209BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Sample	DE28K102, 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	DE3JR101, 3130-G	020113BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
46	Sample	DE3JR102, 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	DE3F4120, 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	020113LCO		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	DE2HP104, 3130-G	080328002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
59	Sample	DE9X103, 3130-G	070184001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

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59	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	DEDE6103, 3130-G	080239004	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
76	Sample	DEDD103, 3130-G	080239005	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
77	Sample	DEDOH103, 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	080239LCD	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

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:,LPT
3	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A3271	D-A3271		D-A3271	N	MED	N	LPT1:,LPT
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:
36	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3304	D-A3304		D-A3304	-	-	-	LPT1:
37	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A3305	D-A3305		D-A3305	-	-	-	LPT1:
38	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A3306	D-A3306		D-A3306	-	-	-	LPT1:
39	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3307	D-A3307		D-A3307	-	-	-	LPT1:
40	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3308	D-A3308		D-A3308	-	-	-	LPT1:
41	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3309	D-A3309		D-A3309	-	-	-	LPT1:
42	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3310	D-A3310		D-A3310	-	-	-	LPT1:
43	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3311	D-A3311		D-A3311	-	-	-	LPT1:
44	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3312	D-A3312		D-A3312	-	-	-	LPT1:
45	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3313	D-A3313		D-A3313	-	-	-	LPT1:
46	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3314	D-A3314		D-A3314	-	-	-	LPT1:
47	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3315	D-A3315		D-A3315	-	-	-	LPT1:
48	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3316	D-A3316		D-A3316	-	-	-	LPT1:
49	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3317	D-A3317		D-A3317	-	-	-	LPT1:
50	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3318	D-A3318		D-A3318	-	-	-	LPT1:
51	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3319	D-A3319		D-A3319	-	-	-	LPT1:
52	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3320	D-A3320		D-A3320	-	-	-	LPT1:
53	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3321	D-A3321		D-A3321	-	-	-	LPT1:
54	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3322	D-A3322		D-A3322	-	-	-	LPT1:
55	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3323	D-A3323		D-A3323	-	-	-	LPT1:
56	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A3324	D-A3324		D-A3324	-	-	-	LPT1:

6601069

PSR024 6/12/00 13:32:38 NT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: YUSHINSC

METHOD: QJ Pesticides (8081A)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
10A CLP1	DE9XX-1-03	— — —	239681	131369	A-36-QJ	C0F070184	001		SOLID	0	2 1
10A CLP1	DEA02-1-03	— — —	239682	131369	A-36-QJ	C0F070184	002		SOLID	0	2 1
10A CLP1	DEA04-1-03	— — —	239683	131369	A-36-QJ	C0F070184	003		SOLID	0	2 1
10A CLP1	DEA05-1-03	— — —	239684	131369	A-36-QJ	C0F070184	004		SOLID	0	2 1
10A CLP1	DEA07-1-03	— — —	239685	131369	A-36-QJ	C0F070184	005		SOLID	0	2 1
10A CLP1	DEA09-1-03	— — —	239686	131369	A-36-QJ	C0F070184	006		SOLID	0	2 1
10A CLP1	DEA0A-1-03	— — —	239687	131369	A-36-QJ	C0F070184	007		SOLID	0	2 1
10A CLP1	DEA0C-1-03	— — —	239688	131369	A-36-QJ	C0F070184	008		SOLID	0	2 1
10A CLP1	DEA0F-1-03	— — —	239689	131369	A-36-QJ	C0F070184	009		SOLID	0	2 1
10A CLP1	DEA0G-1-03	— — —	239690	131369	A-36-QJ	C0F070184	010		SOLID	0	2 1
10C CLP1	DEEHC-1-04	— — —	239691	399411	A-36-QJ	C0F080328	001		SOLID	0	3 1
10C CLP1	DEEHP-1-04	— — —	239692	399411	A-36-QJ	C0F080328	002		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>P. Yushinski</i>	<i>P. Yushinski</i>	6-12-00 154
<i>P. Yushinski</i>	<i>P. Yushinski</i>	6-12-00 2150

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

STL Pittsburgh

3094

HERBICIDE DATA

6601071

**HERBICIDE
QC SUMMARY**

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0F080328

	CLIENT ID.	SRG01	TOT OUT
	=====	=====	=====
01	DF/S1/0159/SDC/008	85	00
02	DF/S1/0159/SDC/009	78	00
03	METHOD BLK. DEK4H101	101	00
04	LCS DEK4H102	104	00
05	DF/S1/0159/SDC/008 D	86	00
06	DF/S1/0159/SDC/008 S	75	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

6601073

SW846 8151A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0F120000

WO #: DEK4H102

BATCH: 0164454

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
2,4-D	0.160	0.157	98	28 - 136	
2,4,5-TP (Silvex)	0.0400	0.0397	99	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/S1/0159/SDC/008

Lot #: C0F080328

WO #: DEEHC10R

BATCH: 0164454

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
2,4-D	0.160	ND	0.151	94	35- 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0372	93	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:

6601075 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/S1/0159/SDC/008

Lot #: C0F080328

WO #: DEEHC10T

BATCH: 0164454

COMPOUND	SPIKE	MSD	MSD		QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	REC	
=====	=====	=====	=====	=====	=====	=====	=====
2,4-D	0.160	0.162	101	7.4	20	35 - 133	
2,4,5-TP (Silvex)	0.0400	0.0386	96	3.8	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.

DEK4H101

SW846 8151A METHOD BLANK SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

Lab File ID: a-a30293.

Matrix: SOLID

SDG Number:

Lot Number: C0F080328

Extraction Method:

Date Extracted: 06/12/00

Date Analyzed(2): N/A

Date Analyzed(1): 06/14/00

Time Analyzed(1): 09:46

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/S1/0159/SDC/008	DEEHC10R S	06/14/00	N/A
02	DF/S1/0159/SDC/008	DEEHC10T D	06/14/00	N/A
03	DF/S1/0159/SDC/008	DEEHC105	06/14/00	N/A
04	DF/S1/0159/SDC/009	DEEHP105	06/14/00	N/A
05	CHECK SAMPLE	DEK4H102 C	06/14/00	N/A
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

6601077

**HERBICIDE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHC105

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164454

Client Sample Id: DF/S1/0159/SDC/008

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

6601079

Data File: /var/chem/gc1.i/3080.b/a-a30307.d
Report Date: 15-Jun-2000 11:25

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30307.d
Lab Smp Id: DEEHC105 Client Smp ID: DF/S1/0159/SDC/008
Inj Date : 14-JUN-2000 16:34
Operator : 01797 Inst ID: gc1.i
Smp Info : DEEHC105,3080.b
Misc Info : 080328-1
Comment :
Method : /var/chem/gc1.i/3080.b/LONGH.m
Meth Date : 15-Jun-2000 11:24 g Quant Type: ESTD
Cal Date : 08-JUN-2000 18:58 Cal File: a-a30213.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 3.40

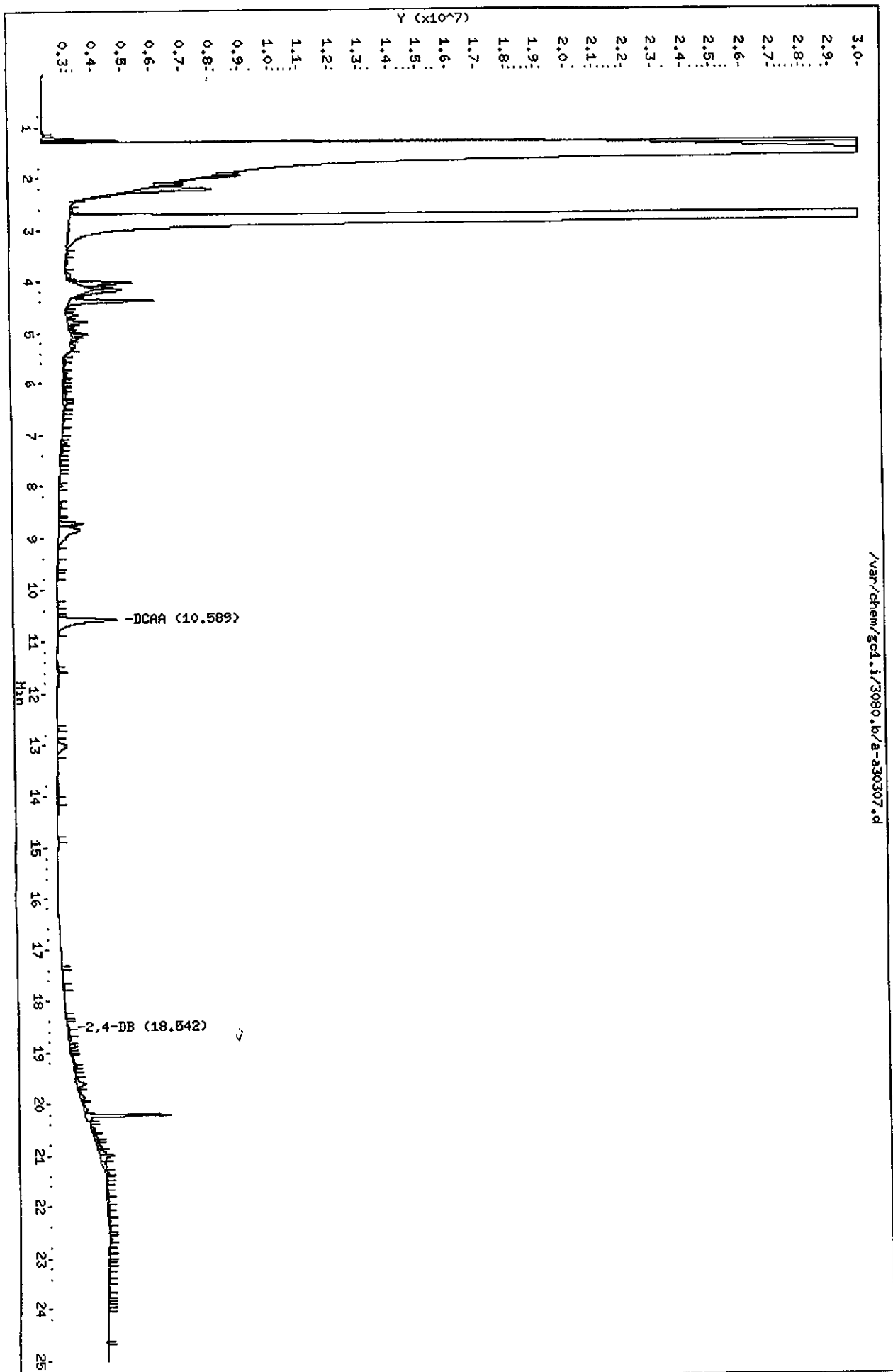
Concentration Formula: $\text{Amt} * \text{DF} * 20 * \text{Vt} / \text{Vo} / \text{Vi}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

		CONCENTRATIONS					
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ng)	(.ug/L)
=====		==	=====	=====	=====	=====	=====
1 DALAPON					Compound Not Detected.		
\$ 2 DCAA		10.589	10.579	0.010	12789825	0.04269	85.38
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		18.542	18.554	-0.022	274634	0.00144	2.872

Data File: /var/chem/gc1.1/3080.b/a-a30307.d
Date: 14-JUN-2000 16:34
Client ID: DF/S1/0159/SDC/008
Sample Info: DEHC105,3080.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc1.1
Operator: 01797
Column diameter: 0.53



6601081

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 002

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHP105

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 18

QC Batch: 0164454

Client Sample Id: DF/S1/0159/SDC/009

		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

FORM I

Data File: /var/chem/gc1.i/3080.b/a-a30308.d
 Report Date: 15-Jun-2000 11:25

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30308.d
 Lab Smp Id: DEEHP105 Client Smp ID: DF/S1/0159/SDC/009
 Inj Date : 14-JUN-2000 17:03
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DEEHP105,3080.b
 Misc Info : 080328-2
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 15-Jun-2000 11:24 g Quant Type: ESTD
 Cal Date : 08-JUN-2000 18:58 Cal File: a-a30213.d
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 3.40

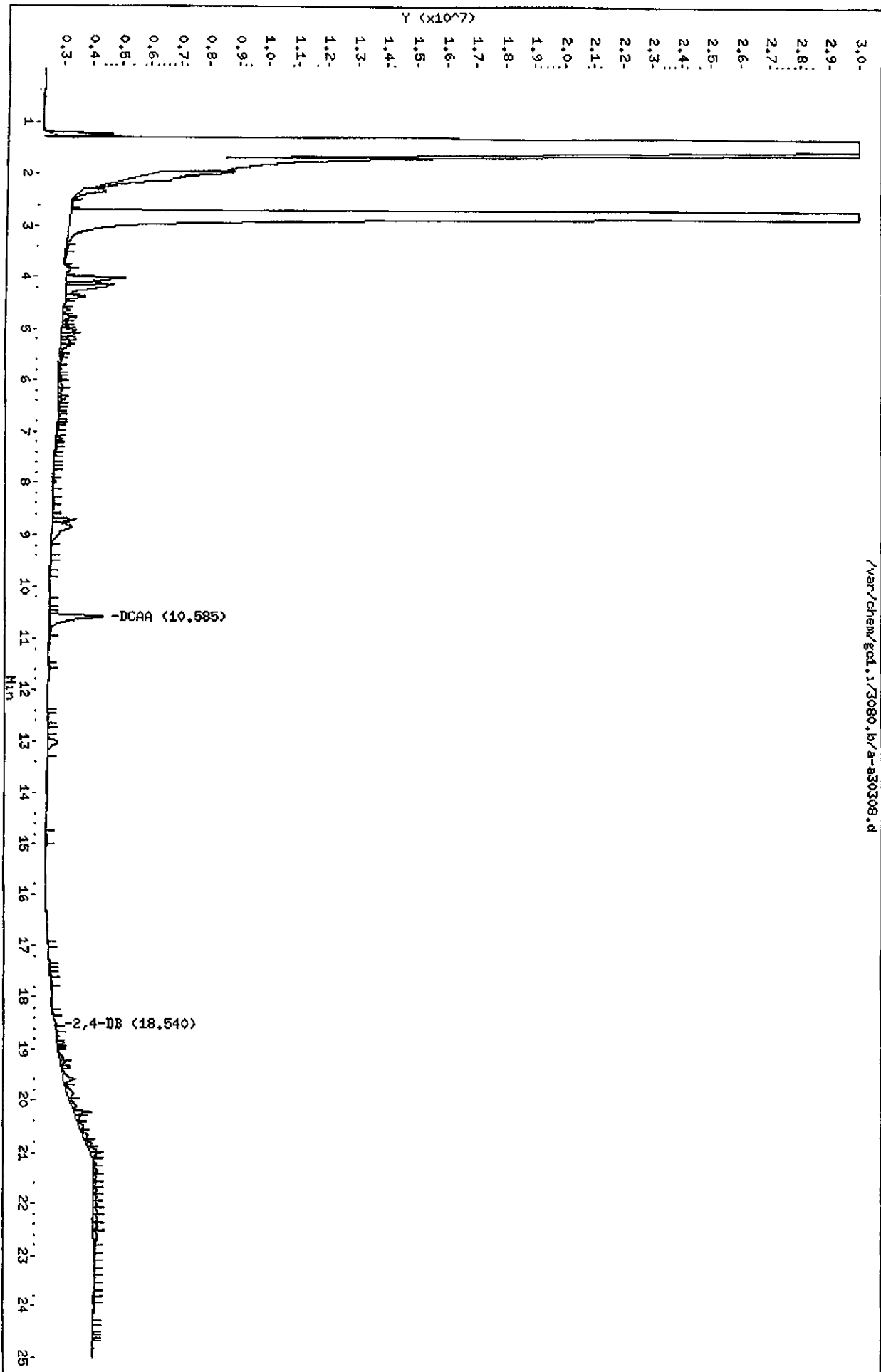
Concentration Formula: $\text{Amt} * \text{DF} * 20 * \text{Vt} / \text{Vo} / \text{Vi}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	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)	(ug/L)
1 DALAPON						Compound Not Detected.		
2 DCAA	10.585	10.579	0.006		11681994		0.03899	77.98
3 MCPPE					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	18.540	18.564	-0.024		346530		0.00181	3.624

Data File: /var/chem/gc1.1/3080.b/a-a30308.d
Date: 14-JUN-2000 17:03
Client ID: DF/S1/01E9/SDC/009
Sample Info: DEHP105,3080.b
Volume Injected (uL): 1.0
Column Phase: DB608

Instrument: gc1.1
Operator: 01797
Column diameter: 0.53



**HERBICIDE
CALIBRATION DATA**

6601085

Report Date : 14-Jun-2000 13:11

STL-PITTSBURGH

COMPOUND LISTING

Method file : /var/chem/gc1.i/3080.b/LONGH.m
 Quant Method : ESTD Target Version : 3.40
 Last Update : 14-Jun-2000 13:11 Number of Cpnds : 12
 Data Type : GC MULTI COMP

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	3.733	3.663-3.803	8.591e+07
\$ 2 DCAA	10.579	10.509-10.649	2.996e+08
3 MCPP	11.022	10.952-11.092	4.432e+05
4 DICAMBA	11.196	11.126-11.266	2.200e+08
5 MCPA	11.985	11.915-12.055	5.273e+05
6 DICHLOROPROP	12.813	12.743-12.883	6.021e+07
7 2,4-D	14.319	14.248-14.389	3.673e+08
8 PENTACHLOROPHENOL	15.550	15.480-15.620	5.582e+08
9 2,4,5-TP (SILVEX)	16.773	16.703-16.843	1.667e+09
10 2,4,5-T	17.889	17.819-17.959	1.401e+09
11 DINOSEB	18.069	17.999-18.139	1.161e+09
12 2,4-DB	18.564	18.494-18.634	1.912e+08

62
68901A
03608

Report Date : 09-Jun-2000 10:48

STL-PITTSBURGH

INITIAL CALIBRATION DATA

Start Cal Date : 08-JUN-2000 17:02
 End Cal Date : 08-JUN-2000 18:58
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : Falcon
 Method file : /var/chem/gc1.i/3080.b/LONGH.m
 Cal Date : 09-Jun-2000 10:47 g
 Curve Type : Average

Calibration File Names:

Level 1: /var/chem/gc1.i/3080.b/a-a30209.d
 Level 2: /var/chem/gc1.i/3080.b/a-a30210.d
 Level 3: /var/chem/gc1.i/3080.b/a-a30211.d
 Level 4: /var/chem/gc1.i/3080.b/a-a30212.d
 Level 5: /var/chem/gc1.i/3080.b/a-a30213.d

	0.00500	0.01000	0.02500	0.05000	0.10000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
1 DALAPON	83820182	79742545	93223394	89514818	83229625	85906113	6.271
3 MCPP	608960	523559	469877	353215	260486	443219	31.126 <-
4 DICAMBA	199455472	197876854	243859341	236276757	222763259	220046337	9.515
5 MCPA	721457	613807	551996	421689	327430	527276	29.517 <-
6 DICHLOROPROP	58230236	56959953	66691745	62213400	56930879	60205243	7.011
7 2,4-D	350474265	353019412	405871680	382393624	344786968	367309190	7.086
8 PENTACHLOROPHENOL	467143609	475299436	609794079	625162735	613674031	558214778	14.272
9 2,4,5-TP(SILVEX)	1.494e+09	1.473e+09	1.820e+09	1.804e+09	1.743e+09	1.667e+09	10.187
10 2,4,5-T	1.296e+09	1.250e+09	1.525e+09	1.502e+09	1.432e+09	1.401e+09	8.776
11 DINOSBB	1.095e+09	1.059e+09	1.267e+09	1.226e+09	1.156e+09	1.161e+09	7.495
12 2,4-DB	220001564	214372938	187859503	175175592	158694210	191220761	13.564
\$ 2 DCAA	293843146	292008024	329364877	306322006	276457476	299599106	6.586

AVE=12.6

6601087

Data File: /var/chem/gc1.i/3080.b/a-a30292.d
 Report Date: 14-Jun-2000 13:10

12
 68901A
 DB608

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 14-JUN-2000 09:17
 Lab File ID: a-a30292.d Init. Calibration Date(s): 06/08/0 06/08/0
 Analysis Type: Init. Calibration Times: 17:02 18:58
 Lab Sample ID: Mherb Method File: /var/chem/gc1.i/3080.b/LONGH.m
 Quant Type: ESTD

COMPOUND	RRF	RFO	MIN	MAX
1 DALAPON	85906112.824	90636127.563	0.010	-5 5 15.0
2 DCAA	299599105.608	303913525.264	0.010	-1.4 15.0
3 MCPP	443219.496	427848.944	0.010	3.5 15.0
4 DICAMBA	220046336.583	222529505.882	0.010	-1.1 15.0
5 MCPA	527276.044	504894.626	0.010	4 2 15.0
6 DICHLOROPROP	60205242.604	60415306.604	0.010	-0 3 15 0
7 2,4-D	367309189.744	368506462.985	0.010	-0.3 15.0
8 PENTACHLOROPHENOL	558214777.915	561825187.970	0.010	-0.6 15.0
9 2,4,5-TP (SILVEX)	1666944513.622	1678014786.730	0.010	-0.7 15 0
10 2,4,5-T	1400893122.132	1406794123.223	0.010	-0 4 15.0
11 DINOSBB	1160648819.643	1215538425.197	0.010	-4.7 15.0
12 2,4-DB	191220761.421	170942532.544	0.010	10.6 15.0

Data File: /var/chem/gc1.i/3080.b/a-a30313.d
 Report Date: 15-Jun-2000 11:24

7E
 68901A
 DB608

STL-PITTSBURGH

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 14-JUN-2000 19:27
 Lab File ID: a-a30313.d Init. Calibration Date(s): 06/08/0 06/08/0
 Analysis Type: Init. Calibration Times: 17:02 18:58
 Lab Sample ID: Mherb Method File: /var/chem/gc1.i/3080.b/LONGH.m
 Quant Type: ESTD

			MIN		MAX
COMPOUND	RRF	RFO	RRF	%D	%D
=====	=====	=====	=====	=====	=====
1 DALAPON	85906112.824	91849772.210	0.010	-6.9	15.0
\$ 2 DCAA	299599105.608	322545981.199	0.010	-7.7	15.0
3 MCPP	443219.496	438178.756	0.010	1.1	15.0
4 DICAMBA	220046336.583	236315976.471	0.010	-7.4	15.0
5 MCPA	527276.044	511518.692	0.010	3.0	15.0
6 DICHLOROPROP	60205242.604	62745117.925	0.010	-4.2	15.0
7 2,4-D	367309189.744	391230505.288	0.010	-6.5	15.0
8 PENTACHLOROPHENOL	558214778.000	584741165.414	0.010	-4.8	15.0
9 2,4,5-TP (SILVEX)	1666944513.622	1774779146.919	0.010	-6.5	15.0
10 2,4,5-T	1400893122.132	1470313412.322	0.010	-5.0	15.0
11 DINOSEB	1160648819.643	1261197795.276	0.010	-8.7	15.0
12 2,4-DB	191220761.421	179304745.562	0.010	6.2	15.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIIT

Case No.:

SAS No.: 40325

SDG No.: C0F080328

GC Column: DB608

ID: 0.53 (mm) Init. Calib. Date(s): 06/08/00 06/08/00

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	06/08/00	1702	10.59			
02	MLHERB	06/08/00	1731	10.59			
03	MHERB	06/08/00	1800	10.58			
04	MHHERB	06/08/00	1829	10.59			
05	HHERB	06/08/00	1858	10.59			
06	MHERB	06/14/00	0917	10.58			
07	PBLK1	DEK4H101	06/14/00	0946	10.58		
08	LCS1	DEK4H102	06/14/00	1015	10.58		
09	DF/S1/0159/S	DEEHC10R	06/14/00	1044	10.58		
10	DF/S1/0159/S	DEEHC10T	06/14/00	1114	10.58		
11	DF/S1/0159/S	DEEHC105	06/14/00	1634	10.59		
12	DF/S1/0159/S	DEEHP105	06/14/00	1703	10.58		
13	MHERB	06/14/00	1927	10.59			
14							
15							
16							
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.

Data File: /var/chem/gc1.i/3080.b/a-a30209.d
 Report Date: 09-Jun-2000 11:00

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30209.d
 Lab Smp Id: Lherb
 Inj Date : 08-JUN-2000 17:02
 Operator : 01797
 Smp Info : Lherb,3080.b
 Misc Info : 190-80-1
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 09-Jun-2000 10:57 g
 Cal Date : 08-JUN-2000 17:02
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30209.d
 Calibration Sample, Level: 1
 Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.737	3.737	0.000	922022	0.01100	0.01042
\$ 2 DCAA	10.588	10.585	0.003	6258859	0.02130	0.02008
3 MCPP	11.031	11.027	0.004	1290996	2.12000	2.393
4 DICAMBA	11.204	11.203	0.001	2114228	0.01060	0.009538
5 MCPA	11.998	11.992	0.006	1543919	2.14000	2.425
6 DICHLOROPROP	12.828	12.823	0.005	1234481	0.02120	0.01976
7 2,4-D	14.341	14.328	0.013	7395007	0.02110	0.01955
8 PENTACHLOROPHENOL	15.574	15.562	0.012	1242602	0.00266	0.002308
9 2,4,5-TP (SILVEX)	16.781	16.779	0.002	7845540	0.00525	0.004734
10 2,4,5-T	17.902	17.897	0.005	6828788	0.00527	0.004842
11 DINOSEB	18.076	18.077	-0.001	3469731	0.00317	0.002939
12 2,4-DB	18.573	18.573	0.000	4642033	0.02110	0.02276

6601091

Data File: /var/chem/gol.1/3080.b/a-a30209.d

Date: 08-JUN-2000 17:02

Client ID:

Sample Info: Lherb.3080.b

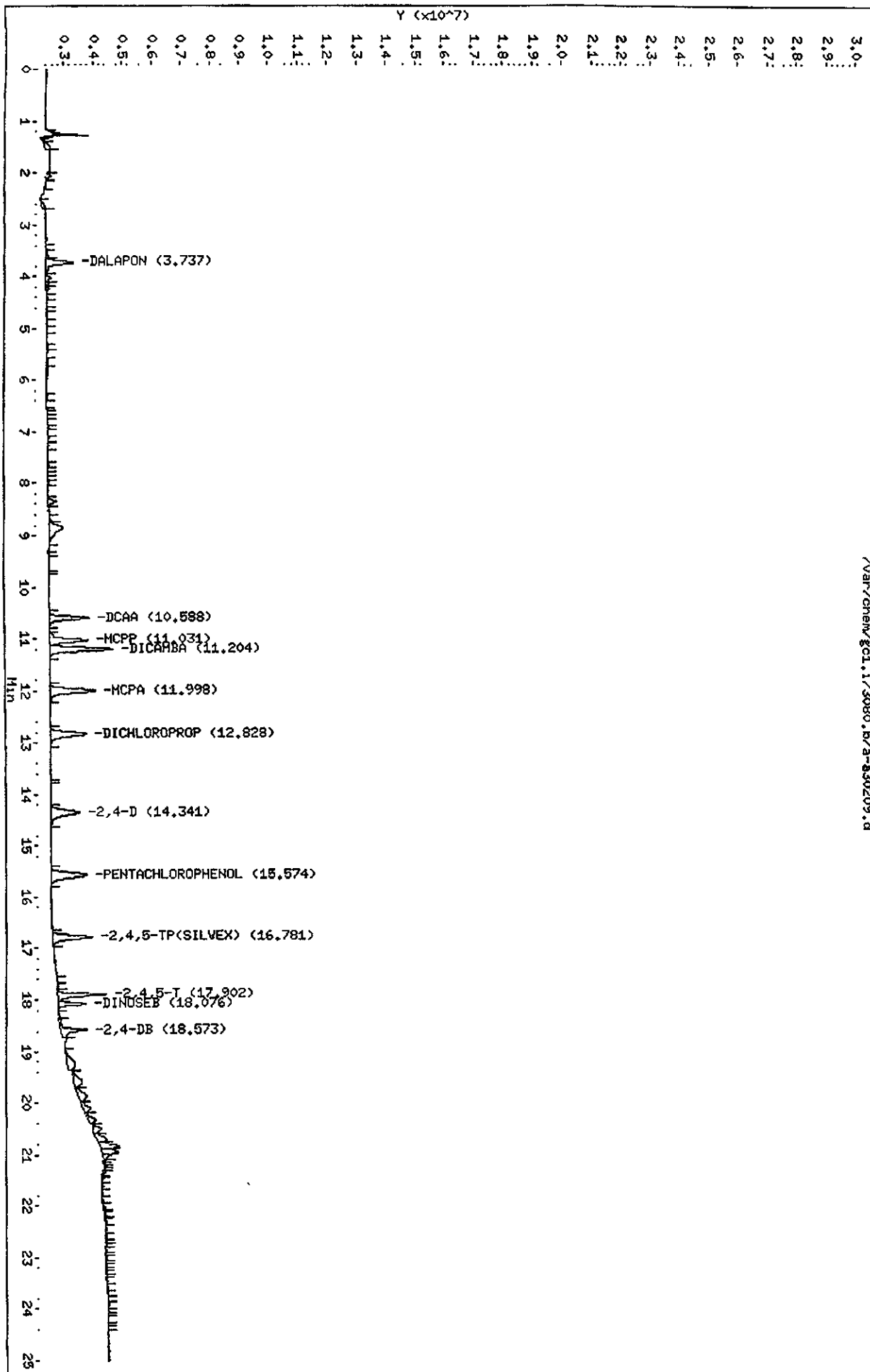
Column phase: DB608

Instrument: gol.1

Operator: 01797

Column diameter: 0.53

/var/chem/gol.1/3080.b/a-a30209.d



Data File: /var/chem/gc1.i/3080.b/a-a30210.d
 Report Date: 09-Jun-2000 11:00

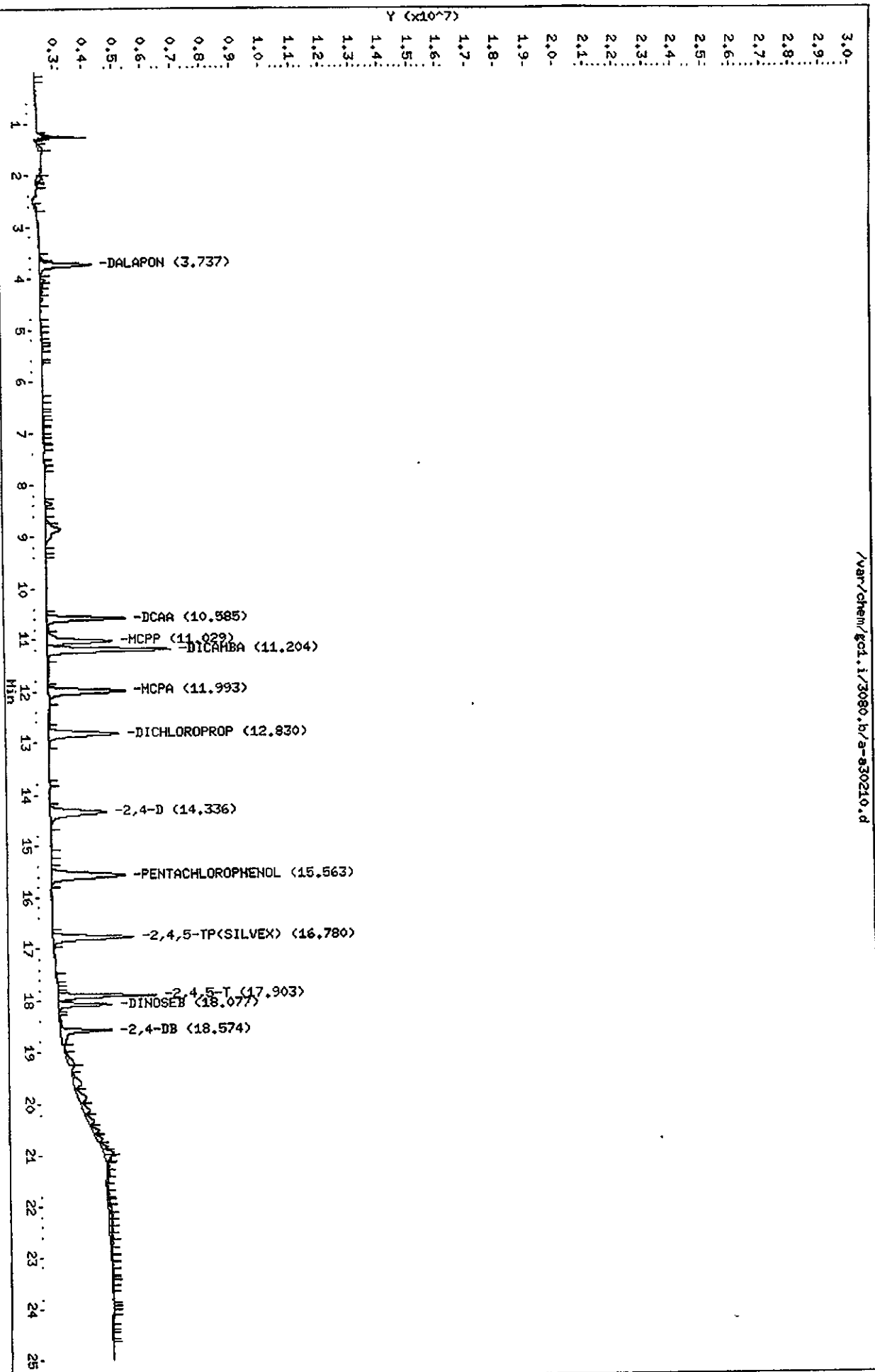
STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30210.d
 Lab Smp Id: MLherb
 Inj Date : 08-JUN-2000 17:31
 Operator : 01797
 Smp Info : MLherb,3080.b
 Misc Info : 190-80-2
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 09-Jun-2000 10:57 g
 Cal Date : 08-JUN-2000 17:02
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30209.d
 Calibration Sample, Level: 2
 Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.737	3.737	0.000	1754336	0.02200	0.02050
\$ 2 DCAA	10.585	10.585	0.000	12410341	0.04250	0.04068
3 MCPP	11.029	11.027	0.002	2230362	4.26000	4.176
4 DICAMBA	11.204	11.203	0.001	4214777	0.02130	0.01972
5 MCPA	11.993	11.992	0.001	2627096	4.28000	4.176
6 DICHLOROPROP	12.830	12.823	0.007	2415102	0.04240	0.03984
7 2,4-D	14.336	14.328	0.008	15003325	0.04250	0.04057
8 PENTACHLOROPHENOL	15.563	15.562	0.001	2528593	0.00532	0.004887
9 2,4,5-TP(SILVEX)	16.780	16.779	0.001	15468485	0.01050	0.009693
10 2,4,5-T	17.903	17.897	0.006	13121659	0.01050	0.009672
11 DINOSEB	18.077	18.077	0.000	6725480	0.00635	0.005899
12 2,4-DB	18.574	18.573	0.001	9046538	0.04220	0.04362

6601093



Data File: /var/chem/gc1.i/3080.b/a-a30210.d
Date: 08-JUN-2000 17:34
Client ID:
Sample Info: HLherb,3080.b
Column phase: DB608

Instrument: gc1.i
Operator: Q1797
Column diameter: 0.53

Data File: /var/chem/gc1.i/3080.b/a-a30211.d
 Report Date: 09-Jun-2000 11:00

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30211.d
 Lab Smp Id: Mherb
 Inj Date : 08-JUN-2000 18:00
 Operator : 01797
 Smp Info : Mherb,3080.b
 Misc Info : 190-80-3
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 09-Jun-2000 10:57 g
 Cal Date : 08-JUN-2000 18:00
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30211.d
 Calibration Sample, Level: 3
 Compound Sublist: all.sub

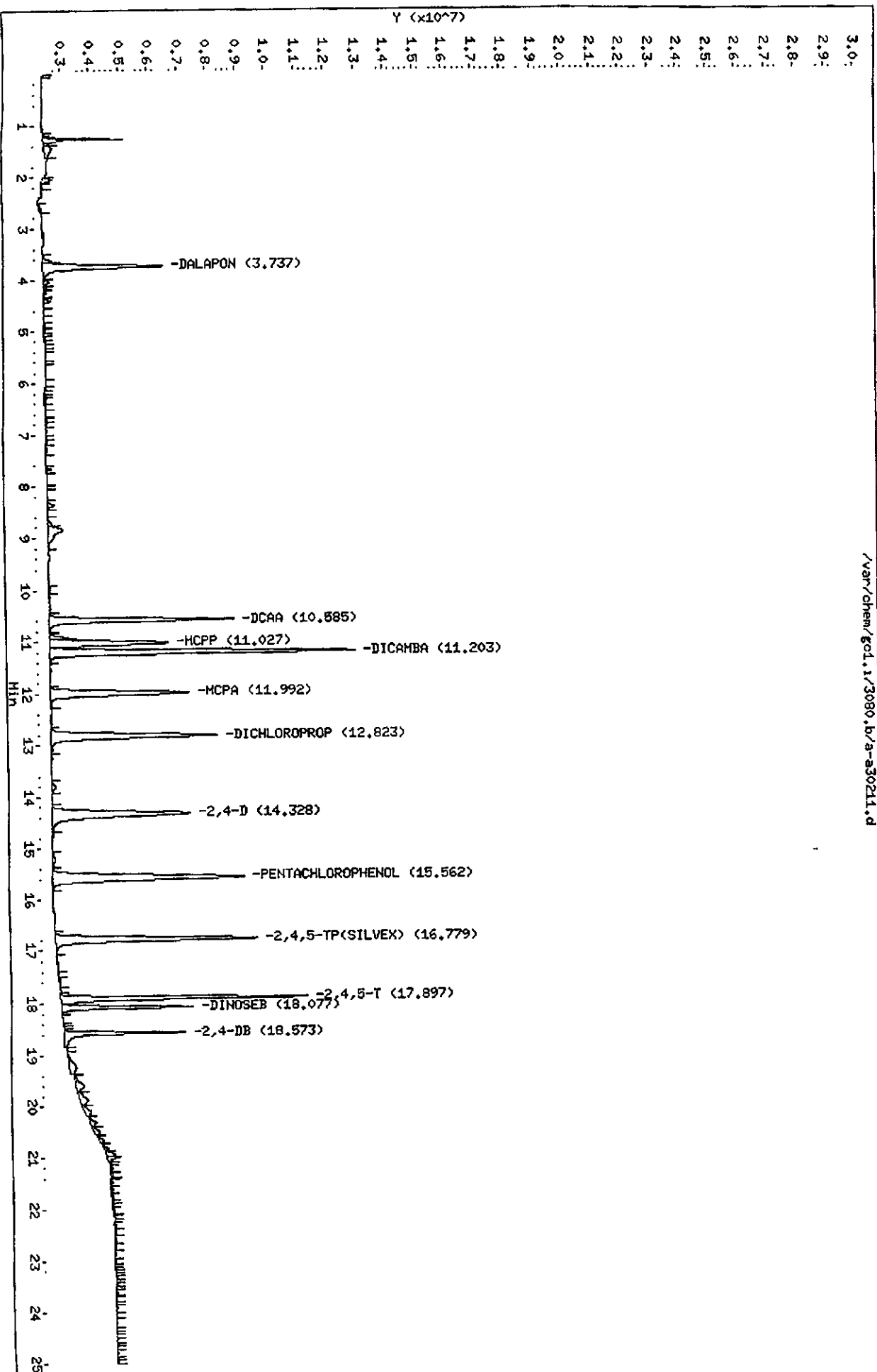
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.737	3.737	0.000	4092507	0.04390	0.04390
\$ 2 DCAA	10.585	10.585	0.000	28028951	0.08510	0.08510
3 MCPP	11.027	11.027	0.000	4003351	8.52000	8.520
4 DICAMBA	11.203	11.203	0.000	10364022	0.04250	0.04250
5 MCPA	11.992	11.992	0.000	4725086	8.56000	8.560
6 DICHLOROPROP	12.823	12.823	0.000	5655460	0.08480	0.08480
7 2,4-D	14.328	14.328	0.000	34539680	0.08510	0.08510
8 PENTACHLOROPHENOL	15.562	15.562	0.000	6488209	0.01064	0.01064
9 2,4,5-TP(SILVEX)	16.779	16.779	0.000	38399294	0.02110	0.02110
10 2,4,5-T	17.897	17.897	0.000	32170336	0.02110	0.02110
11 DINOSEB	18.077	18.077	0.000	16088810	0.01270	0.01270
12 2,4-DB	18.573	18.573	0.000	15874128	0.08450	0.08450

6001095

Data File: /var/chem/gc1.1/3080.b/a-a30211.d
Date: 08-JUN-2000 18:00
Client ID:
Sample Info: Mherb,3080.b

Column phase: DB608

Instrument: gc1.1
Operator: 01797
Column diameter: 0.53



Data File: /var/chem/gc1.i/3080.b/a-a30212.d
 Report Date: 09-Jun-2000 11:00

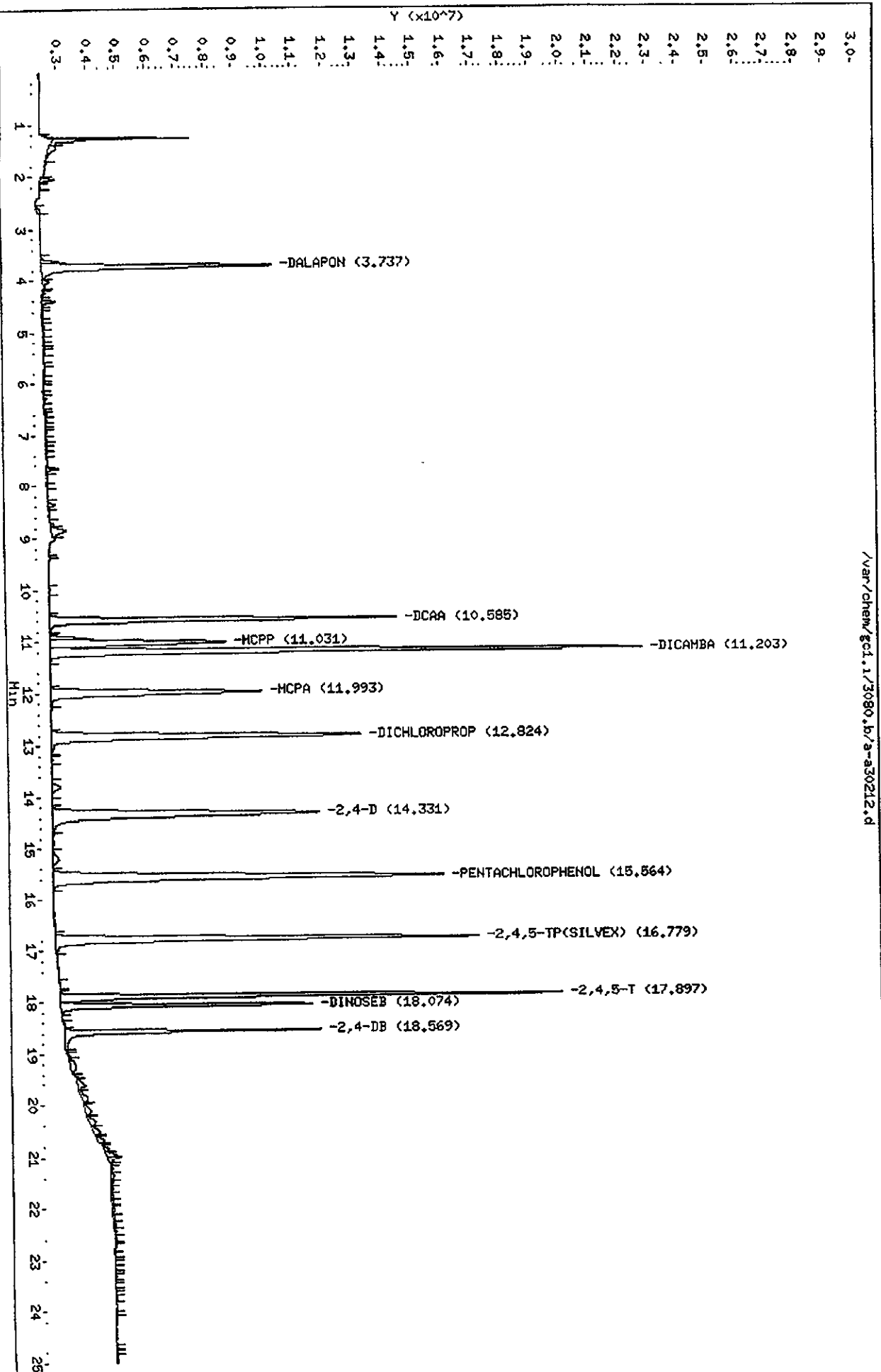
STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30212.d
 Lab Smp Id: MHherb
 Inj Date : 08-JUN-2000 18:29
 Operator : 01797
 Smp Info : MHherb,3080.b
 Misc Info : 190-80-4
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 09-Jun-2000 10:57 g
 Cal Date : 08-JUN-2000 18:29
 Als bottle: 6
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30212.d
 Calibration Sample, Level: 4
 Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	3.737	3.737	0.000	7859401	0.08780	0.09078
\$ 2 DCAA	10.585	10.585	0.000	52074741	0.17000	0.1705
3 MCPP	11.031	11.027	0.004	6004654	17.0000	12.28
4 DICAMBA	11.203	11.203	0.000	20107152	0.08510	0.09166
5 MCPA	11.993	11.992	0.001	7210885	17.1000	12.49
6 DICHLOROPROP	12.824	12.823	0.001	10576278	0.17000	0.1733
7 2,4-D	14.331	14.328	0.003	65006916	0.17000	0.1743
8 PENTACHLOROPHENOL	15.564	15.562	0.002	13303463	0.02128	0.02444
9 2,4,5-TP(SILVEX)	16.779	16.779	0.000	75955468	0.04210	0.04609
10 2,4,5-T	17.897	17.897	0.000	63390555	0.04220	0.04550
11 DINOSEB	18.074	18.077	-0.003	31146627	0.02540	0.02681
12 2,4-DB	18.569	18.573	-0.004	29604675	0.16900	0.1485

6601097



Data File: /var/chem/gc1.1/3080.b/a-a30212.d
Date: 08-JUN-2000 18:29
Client ID:
Sample Info: MHherb,3080.b
Column phase: DB608

Instrument: gc1.1
Operator: 01797
Column diameter: 0.53

/var/chem/gc1.1/3080.b/a-a30212.d

Data File: /var/chem/gc1.i/3080.b/a-a30213.d
 Report Date: 09-Jun-2000 11:00

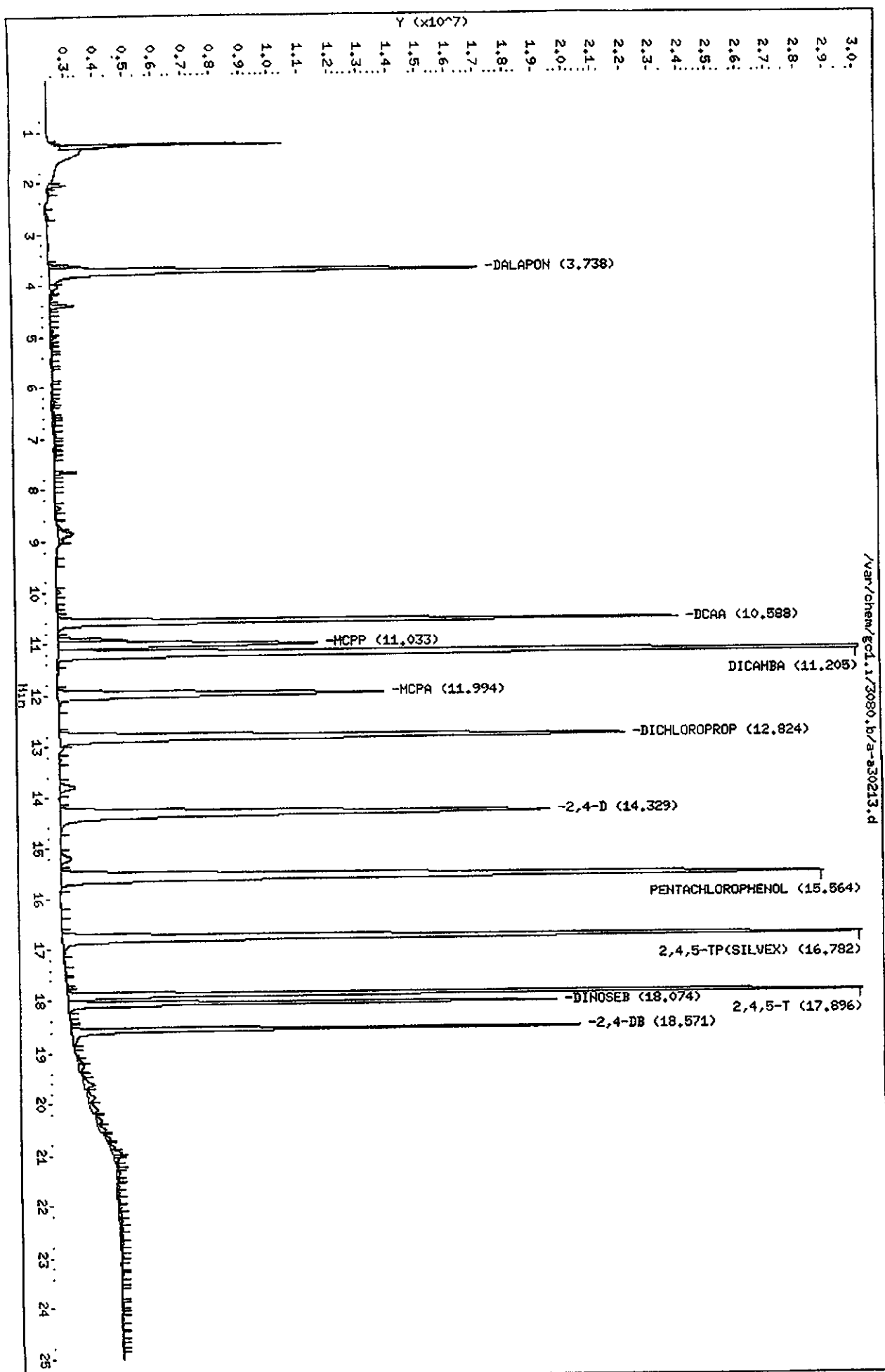
STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30213.d
 Lab Smp Id: Hherb
 Inj Date : 08-JUN-2000 18:58
 Operator : 01797
 Smp Info : Hherb,3080.b
 Misc Info : 190-80-5
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 09-Jun-2000 10:57 g
 Cal Date : 08-JUN-2000 18:58
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30213.d
 Calibration Sample, Level: 5
 Compound Sublist: all.sub

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.738	3.737	0.001	14648414	0.17600	0.1705
\$ 2 DCAA	10.588	10.585	0.003	93995542	0.34000	0.3137
3 MCPP	11.033	11.027	0.006	8882577	34.1000	20.04
4 DICAMBA	11.205	11.203	0.002	37869754	0.17000	0.1721
5 MCPA	11.994	11.992	0.002	11132622	34.0000	21.11
6 DICHLOROPROP	12.824	12.823	0.001	19299568	0.33900	0.3206
7 2,4-D	14.329	14.328	0.001	117227569	0.34000	0.3192
8 PENTACHLOROPHENOL	15.564	15.562	0.002	26111830	0.04255	0.04678
9 2,4,5-TP(SILVEX)	16.782	16.779	0.003	146420846	0.08400	0.08784
10 2,4,5-T	17.896	17.897	-0.001	120877028	0.08440	0.08628
11 DINOSEB	18.074	18.077	-0.003	58749206	0.05080	0.05062
12 2,4-DB	18.571	18.573	-0.002	53638643	0.33800	0.2805

6601099



Column phase: DB608

Data File: /var/chem/gc1.1/3080.b/a-a30213.d
Date: 08-JUN-2000 18:58
Client ID:
Sample Info: Herb, 3080.b

Instrument: gc1.1
Operator: 01797
Column diameter: 0.53

Data File: /var/chem/gc1.i/3080.b/a-a30292.d
 Report Date: 14-Jun-2000 13:12

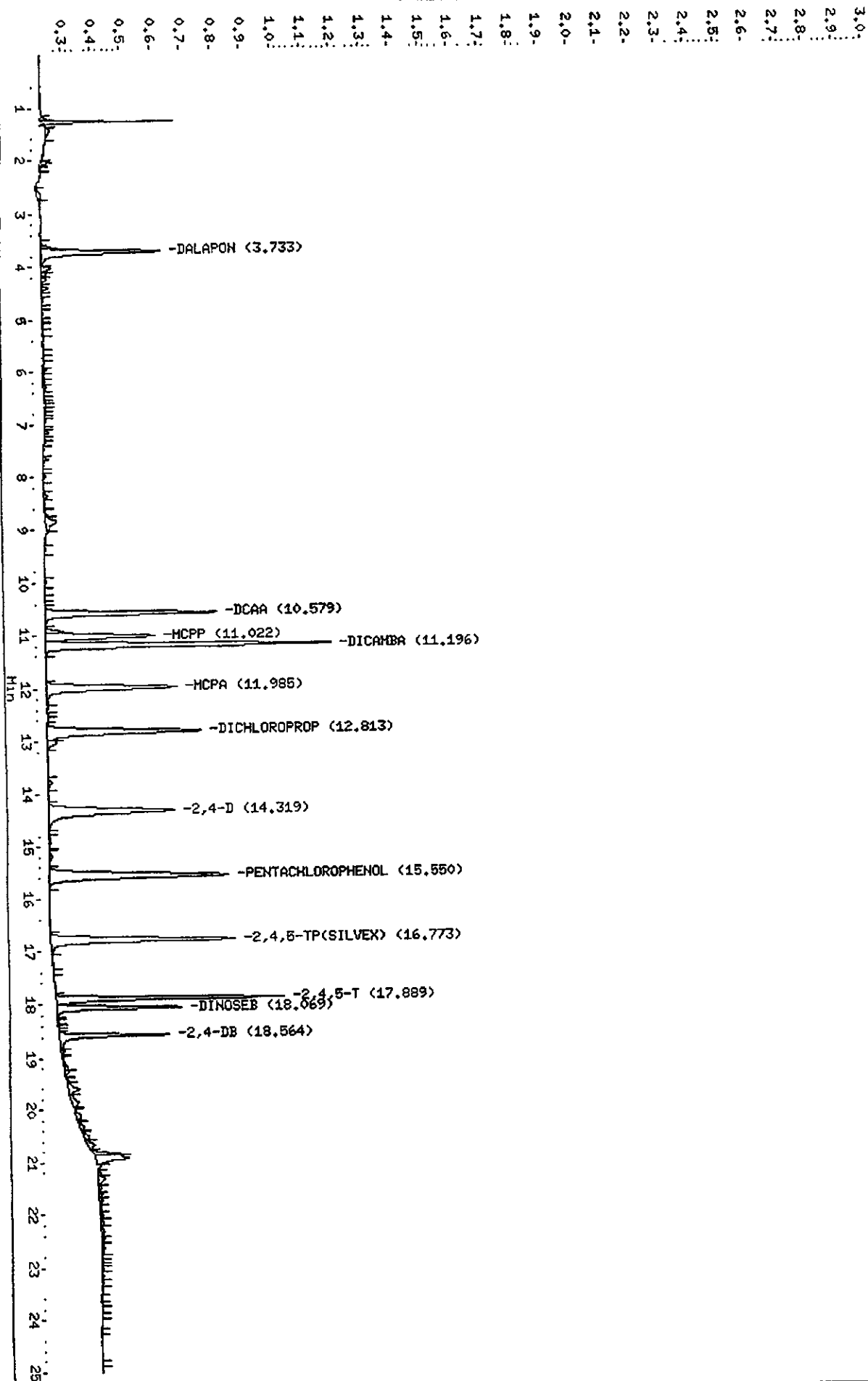
STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30292.d
 Lab Smp Id: Mherb
 Inj Date : 14-JUN-2000 09:17
 Operator : 01797
 Smp Info : Mherb,3080.b
 Misc Info : 190-80-3
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 14-Jun-2000 13:12 matkol
 Cal Date : 08-JUN-2000 18:58
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30213.d
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds					AMOUNTS	
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.733	3.733	0.000	3978926	0.04390	0.04632
\$ 2 DCAA	10.579	10.579	0.000	25863041	0.08510	0.08632
3 MCPP	11.022	11.022	0.000	3645273	8.52000	8.224
4 DICAMBA	11.196	11.196	0.000	9457504	0.04250	0.04298
5 MCPA	11.985	11.985	0.000	4321898	8.56000	8.197
6 DICHLOROPROP	12.813	12.813	0.000	5123218	0.08480	0.08510
7 2,4-D	14.319	14.319	0.000	31359900	0.08510	0.08538
8 PENTACHLOROPHENOL	15.550	15.550	0.000	5977820	0.01064	0.01071
9 2,4,5-TP (SILVEX)	16.773	16.773	0.000	35406112	0.02110	0.02124
10 2,4,5-T	17.889	17.889	0.000	29683356	0.02110	0.02119
11 DINOSEB	18.069	18.069	0.000	15437338	0.01270	0.01330
12 2,4-DB	18.564	18.564	0.000	14444644	0.08450	0.07554

6601101

Y (x10⁻⁷)

Column phase: DB608

/var/chem/gc1.i/3080.b/a-a30292.d

Data File: /var/chem/gc1.i/3080.b/a-a30292.d
Date: 14-JUN-2000 09:17
Client ID:
Sample Info: Mherb,3080.b

Instrument: gc1.i
Operator: 01797
Column diameter: 0.53

Data File: /var/chem/gc1.i/3080.b/a-a30313.d
 Report Date: 15-Jun-2000 11:26

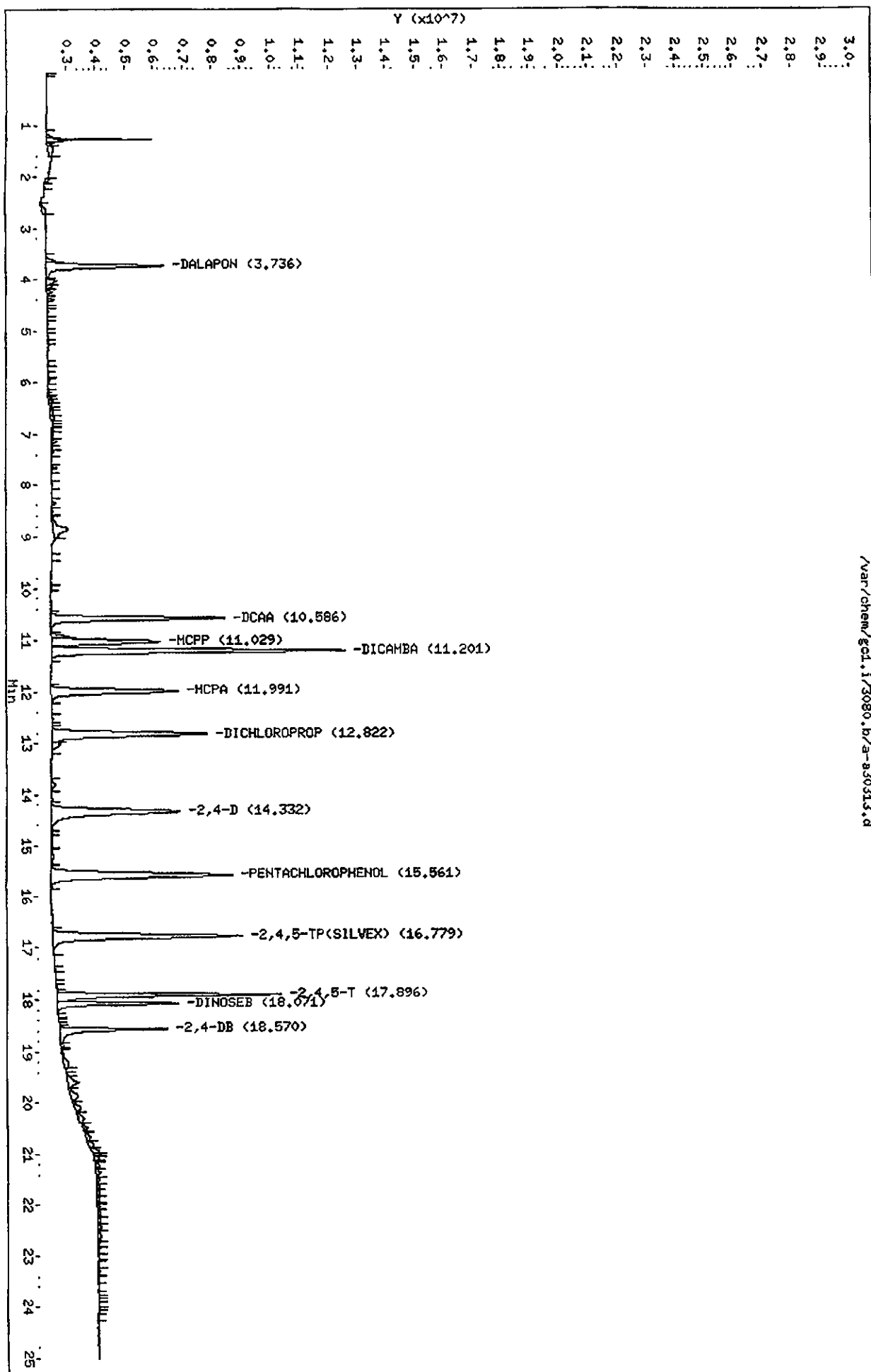
STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30313.d
 Lab Smp Id: Mherb
 Inj Date : 14-JUN-2000 19:27
 Operator : 01797
 Smp Info : Mherb,3080.b
 Misc Info : 190-80-3
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 15-Jun-2000 11:24 g
 Cal Date : 08-JUN-2000 18:58
 Als bottle: 61
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 3.40

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: a-a30213.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	3.733	0.003	4032205	0.04390	0.04694
\$ 2 DCAA	10.586	10.579	0.007	27448663	0.08510	0.09162
3 MCPP	11.029	11.022	0.007	3733283	8.52000	8.423
4 DICAMBA	11.201	11.196	0.005	10043429	0.04250	0.04564
5 MCPA	11.991	11.985	0.006	4378600	8.56000	8.304
6 DICHLOROPROP	12.822	12.813	0.009	5320786	0.08480	0.08838
7 2,4-D	14.332	14.319	0.013	33293716	0.08510	0.09064
8 PENTACHLOROPHENOL	15.561	15.550	0.011	6221646	0.01064	0.01114
9 2,4,5-TP(SILVEX)	16.779	16.773	0.006	37447840	0.02110	0.02246
10 2,4,5-T	17.896	17.889	0.007	31023613	0.02110	0.02214
11 DINOSEB	18.071	18.069	0.002	16017212	0.01270	0.01380
12 2,4-DB	18.570	18.564	0.006	15151251	0.08450	0.07923

6601103



Data File: /var/chem/gcd.i/3080.b/a-a30313.d
 Date: 14-JUN-2000 19:27
 Client ID:
 Sample Info: Herb, 3080.b
 Column phase: DB608

/var/chem/gcd.i/3080.b/a-a30313.d

Instrument: gcd.i
 Operator: 01797
 Column diameter: 0.53

**HERBICIDE
QC DATA**

6601105

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID

Lab Sample ID: C0F120000 454

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEK4H101

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

QC Batch: 0164454

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

Data File: /var/chem/gc1.i/3080.b/a-a30293.d
 Report Date: 14-Jun-2000 13:13

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30293.d
 Lab Smp Id: DEK4H101 Client Smp ID: PBLK1
 Inj Date : 14-JUN-2000 09:46
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DEK4H101,3080.b
 Misc Info : 080238blk
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 14-Jun-2000 13:12 matkol Quant Type: ESTD
 Cal Date : 08-JUN-2000 18:58 Cal File: a-a30213.d
 Als bottle: 4 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	10000.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

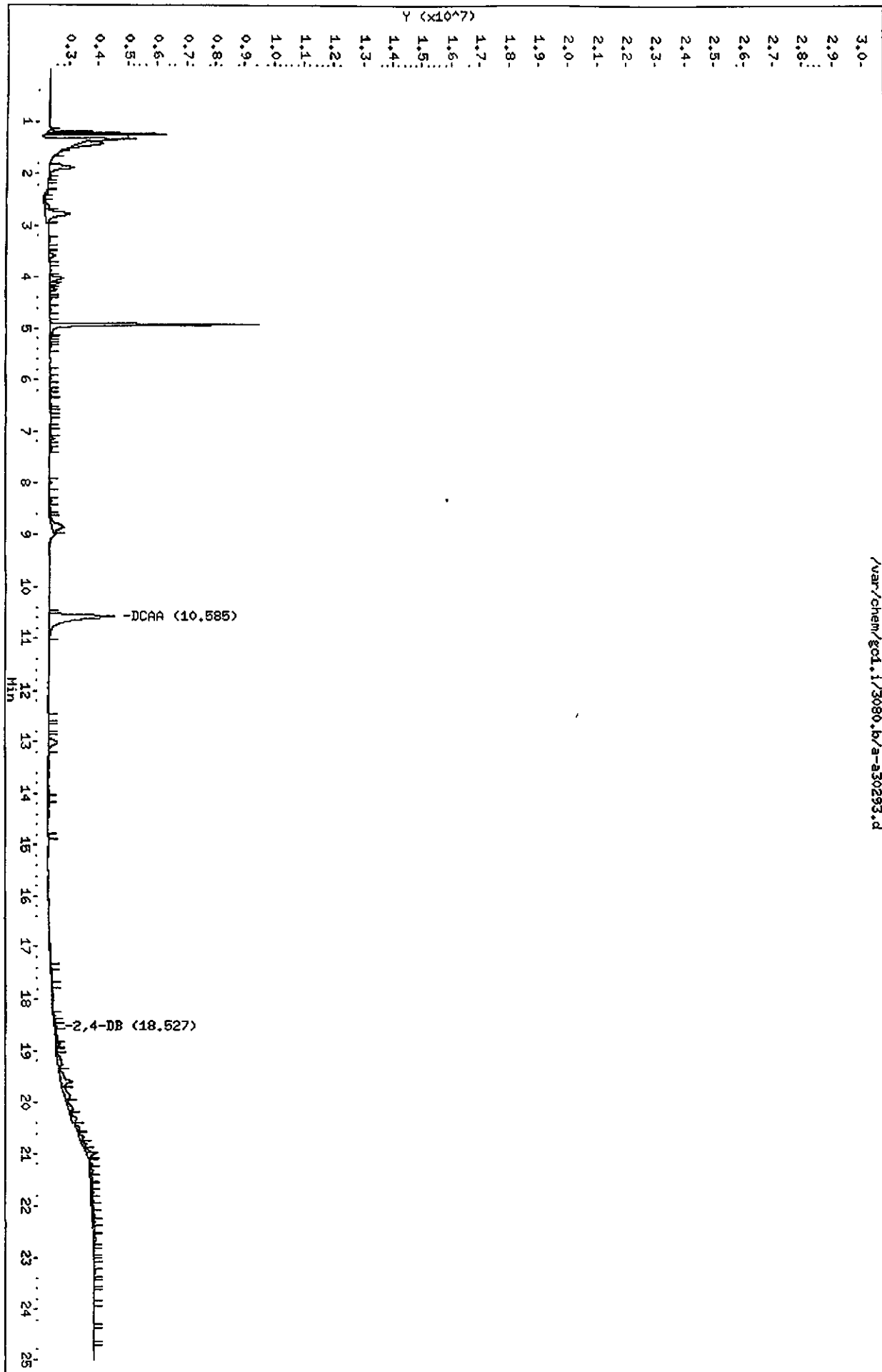
Compound	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON				Compound Not Detected		
2 DCAA	10.585	10.579	0.006	15172766	0.05064	101.3
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected.		
5 MCEA				Compound Not Detected.		
6 DICHLOROPROP				Compound 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 DINOSRB				Compound Not Detected.		
12 2,4-DB	18.527	18.564	-0.037	237492	0.00124	2.484

6601107

Data File: /var/chem/gc1.1/3080.b/a-a30293.d
 Date : 14-JUN-2000 09:46
 Client ID: PBLK1
 Sample Info: DEK4H101,3080.b
 Volume Injected (uL): 1.0
 Column phase: DB608

Instrument: gc1.1
 Operator: 01797
 Column diameter: 0.53

/var/chem/gc1.1/3080.b/a-a30293.d



UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F120000 454

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEK4H102

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: NA

QC Batch: 0164454

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.157	
93-72-1	2,4,5-TP (Silvex)	0.0397	

6601109

Data File: /var/chem/gc1.i/3080.b/a-a30294.d
Report Date: 14-Jun-2000 13:13

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30294.d
Lab Smp Id: DEK4H102 Client Smp ID: LCS1
Inj Date : 14-JUN-2000 10:15
Operator : 01797 Inst ID: gc1.i
Smp Info : DEK4H102,3080.b
Misc Info : 080328LCS
Comment :
Method : /var/chem/gc1.i/3080.b/LONGH.m
Meth Date : 14-Jun-2000 13:12 matkol Quant Type: ESTD
Cal Date : 08-JUN-2000 18:58 Cal File: a-a30213.d
Als bottle: 5 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	10000.000	Volume of final extract (uL)
Vo	100.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

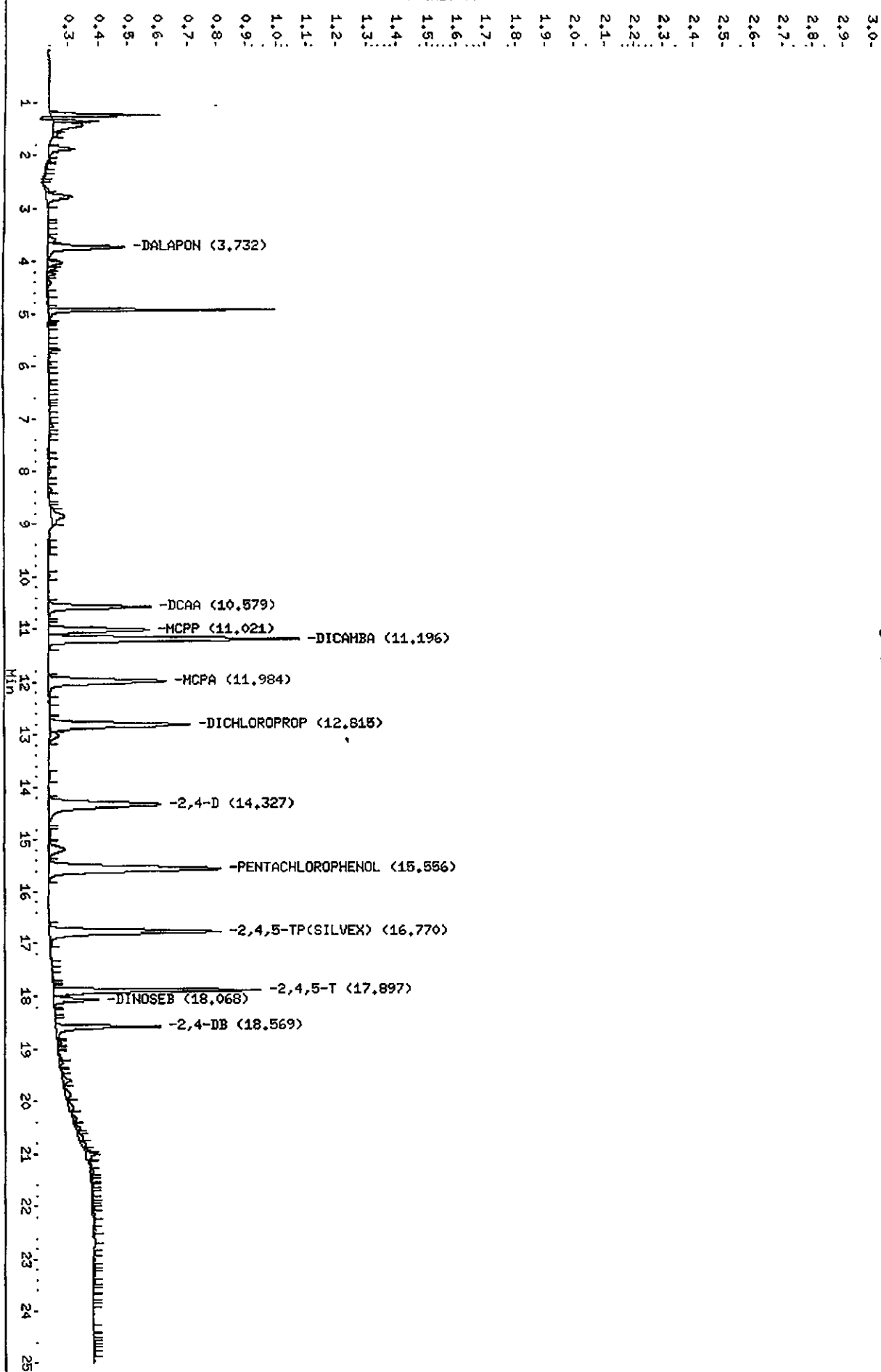
		CONCENTRATIONS					
						ON-COLUMN	FINAL
Compounds		RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)
=====		==	=====	=====	=====	=====	=====
1 DALAPON		3.732	3.733	-0.001	2562473	0.02983	59.66
\$ 2 DCAA		10.579	10.579	0.000	15499048	0.05173	103.5
3 MCPP		11.021	11.022	-0.001	3363903	7.58970	15180
4 DICAMBA		11.196	11.196	0.000	8353654	0.03796	75.93
5 MCPA		11.984	11.985	-0.001	3923460	7.44100	14880
6 DICHLOROPROP		12.815	12.813	0.002	4682651	0.07778	155.6
7 2,4-D		14.327	14.319	0.008	28859742	0.07857	157.1
8 PBNTACHLOROPHENOL		15.556	15.550	0.006	5750936	0.01030	20.60 (R)
9 2,4,5-TP (SILVEX)		16.770	16.773	-0.003	33091312	0.01985	39.70
10 2,4,5-T		17.897	17.889	0.008	27589361	0.01969	39.39
11 DINOSEB		18.068	18.069	-0.001	5888381	0.00507	10.15
12 2,4-DB		18.569	18.564	0.005	13673765	0.07151	143.0

Data File: /var/chem/gc1.i/3080.b/a-a30294.d
Report Date: 14-Jun-2000 13:13

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

6601111

 $\gamma \times 10^{-7}$ 

/var/chem/gcd.1/3080.b/a-a30294.d

Data File: /var/chem/gcd.1/3080.b/a-a30294.d
Date: 14-JUN-2000 10:15
Client ID: LCS1
Sample Info: DEK4H02,3080.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gcd.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: C0F080328 001
Method: SW846 8151A
Herbicides (8151A)Sample WT/Vol: 100 / mL Date Received: 06/08/00
Work Order: DEEHC10R Date Extracted: 06/12/00
Dilution factor: 1 Date Analyzed: 06/14/00
Moisture %: 19

QC Batch: 0164454

Client Sample Id: DF/S1/0159/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	mg/L	
94-75-7	2,4-D	0.151		
93-72-1	2,4,5-TP (Silvex)	0.0372		

6601113

Data File: /var/chem/gc1.i/3080.b/a-a30295.d
 Report Date: 14-Jun-2000 13:13

STL-PITTSBURGH

Data file : /var/chem/gc1.i/3080.b/a-a30295.d
 Lab Smp Id: DEEHC10R Client Smp ID: DF/S1/0159/SDC/008S
 Inj Date : 14-JUN-2000 10:44
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DEEHC10R, 3080.b
 Misc Info : 0303281S
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 14-Jun-2000 13:12 matkol Quant Type: ESTD
 Cal Date : 08-JUN-2000 18:58 Cal File: a-a30213.d
 Als bottle: 6 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 3.40

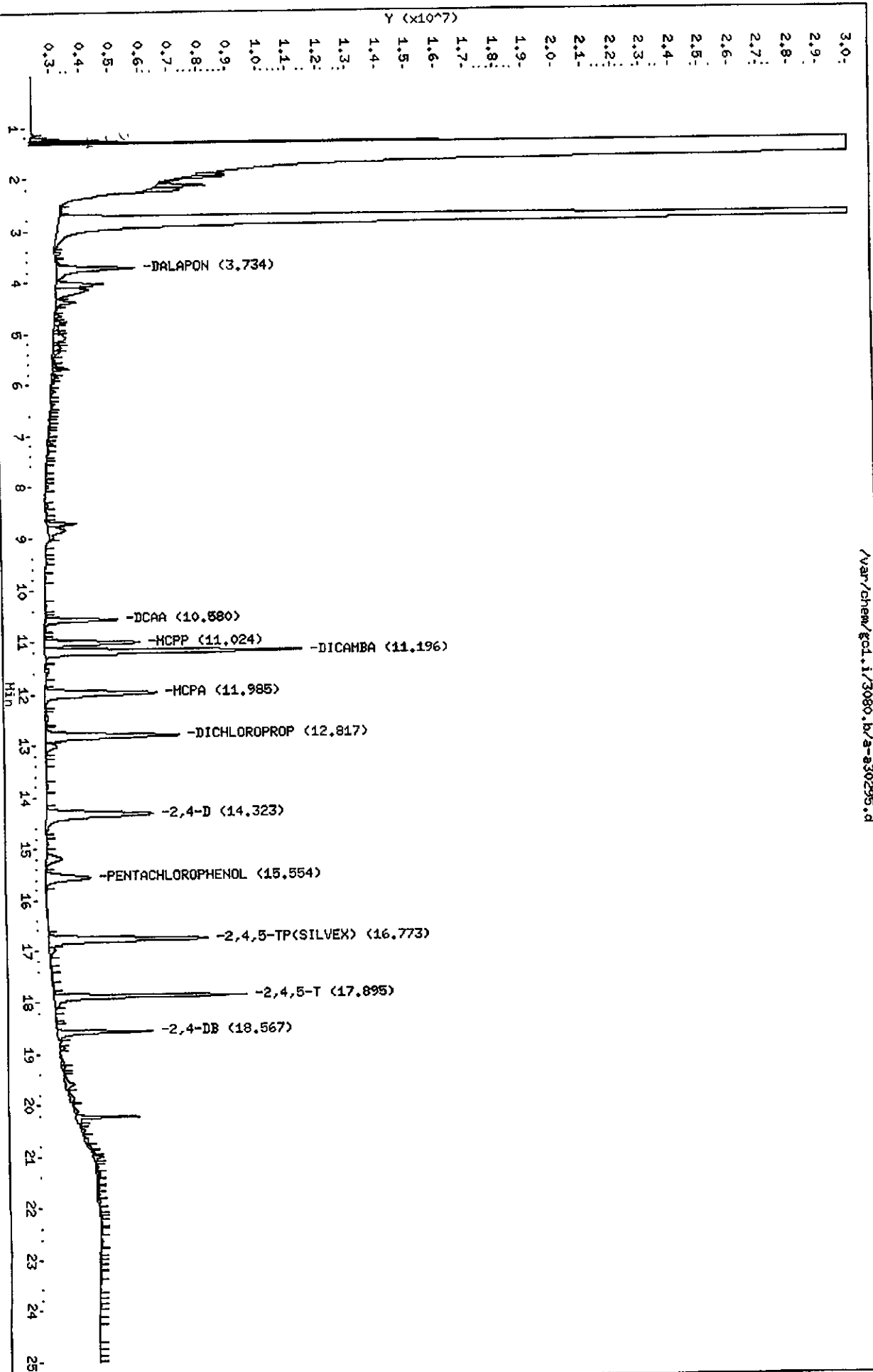
Concentration Formula: $\text{Amt} * \text{DF} * 20 * \text{Vt} / \text{Vo} / \text{Vi}$

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	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	3.734	3.733	0.001	2643606	0.03077	61.55
\$ 2 DCAA	10.580	10.579	0.001	11200285	0.03738	74.77
3 MCPP	11.024	11.022	0.002	3233348	7.29514	14590
4 DICAMBA	11.196	11.196	0.000	8706589	0.03957	79.13
5 MCPA	11.985	11.985	0.000	3790335	7.18852	14380
6 DICHLOROPROP	12.817	12.813	0.004	4545354	0.07550	151.0
7 2,4-D	14.323	14.319	0.004	27669634	0.07533	150.7
8 PENTACHLOROPHENOL	15.554	15.550	0.004	1513941	0.00271	5.424
9 2,4,5-TP(SILVEX)	16.773	16.773	0.000	30962360	0.01857	37.15
10 2,4,5-T	17.895	17.889	0.006	26641806	0.01902	38.04
11 DINOSEB	Compound Not Detected.					
12 2,4-DB	18.567	18.564	0.003	12025690	0.06289	125.8

Data File: /var/chem/gcl.i/3080.b/a-s30295.d
Date: 14-JUN-2000 10:44
Client ID: WF/S1/0159/SDC/008S
Sample Info: DEHCHLOR.3080.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gcl.i
Operator: 01797
Column diameter: 0.53



6601115

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0F080328 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 06/08/00

Work Order: DEEHC10T

Date Extracted: 06/12/00

Dilution factor: 1

Date Analyzed: 06/14/00

Moisture %: 19

QC Batch: 0164454

Client Sample Id: DF/S1/0159/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.162	
93-72-1	2,4,5-TP (Silvex)	0.0386	

Data File: /var/chem/gc1.i/3080.b/a-a30296.d
 Report Date: 14-Jun-2000 13:13

STL-PITTSBURGH

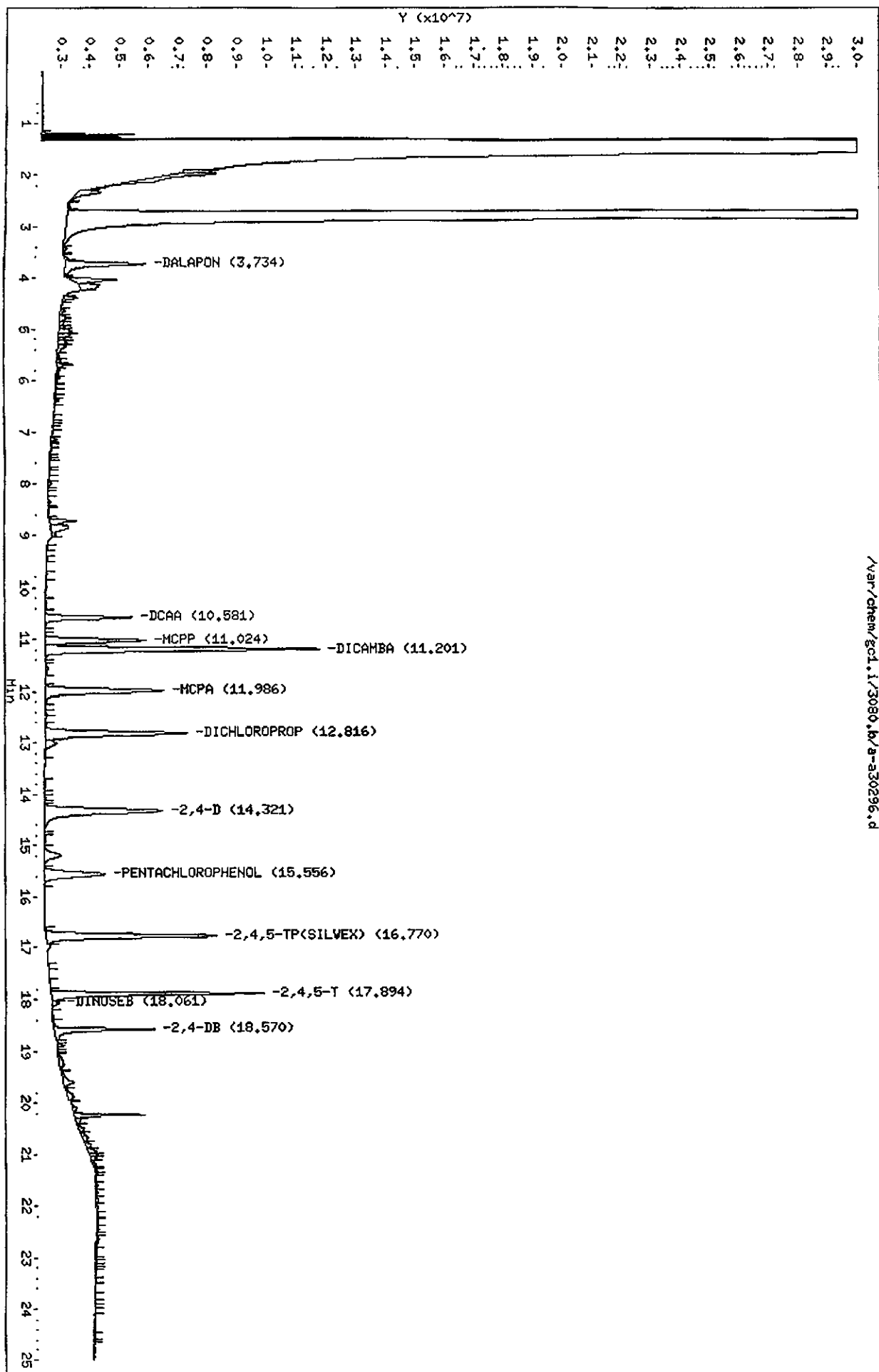
Data file : /var/chem/gc1.i/3080.b/a-a30296.d
 Lab Smp Id: DEEHC10T Client Smp ID: DF/S1/0159/SDC/008D
 Inj Date : 14-JUN-2000 11:14
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DEEHC10T,3080.b
 Misc Info : 080328-1D
 Comment :
 Method : /var/chem/gc1.i/3080.b/LONGH.m
 Meth Date : 14-Jun-2000 13:12 matkol Quant Type: ESTD
 Cal Date : 08-JUN-2000 18:58 Cal File: a-a30213.d
 Als bottle: 7 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	10000.000	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	3.734	3.733	0.001	2728344	0.03176	63.52
2 DCAA	10.581	10.579	0.002	12888006	0.04302	86.04
3 MCPP	11.024	11.022	0.002	3375169	7.61512	15230
4 DICAMBA	11.201	11.196	0.005	9211578	0.04186	83.72
5 MCPA	11.986	11.985	0.001	3981330	7.55075	15100
6 DICHLOROPROP	12.816	12.813	0.003	4785128	0.07948	159.0
7 2,4-D	14.321	14.319	0.002	29803620	0.08114	162.3
8 PENTACHLOROPHENOL	15.556	15.550	0.006	2031396	0.00364	7.278
9 2,4,5-TP (SILVEX)	16.770	16.773	-0.003	32176629	0.01930	38.60
10 2,4,5-T	17.894	17.889	0.005	27490424	0.01962	39.25
11 DINOSEB	18.061	18.069	-0.008	1048272	0.000903	1.806
12 2,4-DB	18.570	18.564	0.006	13643992	0.07135	142.7

6601117



Data File: /var/chem/gc1.i/3080.b/a-a30296.d
Date: 14-JUN-2000 11:14
Client ID: DF/S1/0169/SDC/008D
Sample Info: DEHC10T,3080.b
Volume Injected (uL): 1.0
Column Phase: DB608

/var/chem/gc1.i/3080.b/a-a30296.d

Instrument: gc1.i
Operator: 01797
Column diameter: 0.53

100

**HERBICIDE
MISCELLANEOUS**

(Method 1311)

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



Sample Number **054** Log Book Number **96-MT-526**

Client Name: Jeff O. Braxton Date: 6-11-00 Checked by: [Signature]
 Lot Number: COF 020528 COF 020528 457 C861241 Client Address: 394411, 131369, 34494, 403650
 Solution Number 1 - Log Book Number: 004497-12 Solution Number 2 - Log Book Number: 004497-12

Fluid Determination

TCLP Extraction

Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1, or #2	Cone HNO ₃ to Acidity (for Metals)	Sample ID	Wgt (g) Weir/Dry	Fluid Vol	Final pH After Tumbling
EHK	4.000/9.000	9.30	11.2	501/1	5 ml	1. DE HCL	100.00g	6.55	4.91
EHF	7.65	1.55				2. DE HCL			5.72
EXX	7.65	1.55				3. DE HCL			5.07
EA02	8.04	1.55				4. DE HCL			4.95
EA04	6.95	1.51				5. DE HCL			5.03
EA05	9.14	1.61				6. DE HCL			5.02
EA07	8.57	1.58				7. DE HCL			5.85
EA09	8.19	1.52				8. DE HCL			5.27
EA0A	6.90	1.52				9. DE HCL			5.02
EA0C	8.48	1.57				10. DE HCL			5.11
EA0F	9.03	1.58				11. DE HCL			6.08
EA0G	8.61	1.53				12. DE HCL			5.13
EA0H	9.17	1.96				13. DE HCL			5.48

Extract(s)

(Record line number from above)

Extract(s) Received

Extract(s) Refracted

Date	Time	Analyst	Location	Date	Time	Analyst	Location
6-11-00	11:00	Jeff O. Braxton	Lab 1	6-11-00	11:00	Jeff O. Braxton	Lab 1

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

* 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)

* Extraction Fluid No. 2 5.7 mL Glacial Acetic Acid dil to 1L (pH 2.88 ± 0.05)

ACID M T.M.P. 1'10"

6111099

Method 1311

6601120

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



Environmental Services

4051

Page 2 of 2

Field # 8320701W

Serial Number 055
Log Book Number 96-MT-526

Lot Number COF070151	Date 6-11-00	Checked by <i>[Signature]</i>	Date 6-12-00	pH Instrument Accumet AP2	Probe SA9082030	Balance C91817
Client Codes COF070151				Solution Number 1 - Log Book Number OC04197-10	Solution Number 2 - Log Book Number	

Fluid Determination

TCLP Extraction

Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1, or #2	Conc. HNO3 to Acidity (for Metals)	Sample ID	Wgt (g) Wet/Dry	Fluid Vol.	Final pH After Tumbling
1. DEHOG	5.00g/91.5mL	8.73	1.51	50:1 #1	6.1	1. DEHOG	100.00g	200mL Glass	5.03
2. DEDST	↓	↓	↓	↓	↓	2. DEDST	↓	↓	6.62
3. DEFJR	↓	↓	↓	↓	↓	3. DEFJR	↓	↓	4.99
4. DEFJX	↓	↓	↓	↓	↓	4. DEFJX	↓	↓	4.98
5.						5.			
6.						6.			
7.						7.			
8.						8.			
9.						9.			
10.						10.			
11.						11.			
12.						12.			
13.						13.			

Extract(s)

Extract(s) Received

Extract(s) Relinquished

Record line number from above)

Date

Time

Analyst

Location

Date

Time

Analyst

Location

All Above 6-11-00 11:10 Michael J. Maut 6-11-00 on 11:15 Michael J. Maut 6-11-00

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

* Extraction Fluid No. 1 5.7 mL Glacial Acetic Acid dlt 500 mL + 64.3 mL of 1N Na OH dlt to 1L (pH 4.93 ± 0.05)

* Extraction Fluid No. 2 5.7 mL Glacial Acetic Acid dlt to 1L (pH 2.88 ± 0.05)

Room Temp 24°

Date/Time On 6-11-00 13:00	Date/Time Off 6-12-00 07:00	Agitation Apparatus RPMs 30 ± 2
Date 6-11-00	pH Calibration (4.0)	(7.0)
Date 6-12-00	4.00	7.01
	7.01	10.04
	7.01	10.03
Comments		

8#0164454



STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-9380

4052

Separatory Funnel Extraction Worksheet

204
06.300

(TLP)

HEXANE

N44277

044277

044277

044277

Date Extraction Began	Date Completed	Parameter	Method	pH	Sample Volume (mL)	Final Volume (mL)	Surrogate Number	Solvent Lot	Surrogate Volume (mL)	Solvent Mfg.	Matrix Spike No.	Matrix Spike Volume (mL)	Clean up Method
6-12-00	6-13-00	00	00	00	00	00	00	00	00	00	00	00	00

1.	POE080328	BPE	LC5	N/A	100	10.0	190-91-1	1.0	190-91-3	N/A	N/A	N/A	N/A
2.													
3.													
4.													
5.													
6.													
7.	POE070184	001	002										
8.													
9.													
10.													
11.													
12.													
13.													
14.													
15.													
16.													
17.													
18.													
19.													
20.													
21.													
22.													
23.													
24.													

Analyst	Extract(s)	Method	Surrogate	Surrogate	Surrogate	Surrogate	Surrogate	Surrogate	Surrogate	Surrogate	Surrogate	Surrogate	Surrogate
NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY	NY

Record line number from above	Date	Time	Location	Date	Time	Location	Date	Time	Location	Date	Time	Location	Date	Time	Location
1	6-12-00	21:50	Lab	6-13-00	11:00	Lab	6-13-00	15:00	Lab	6-13-00	15:00	Lab	6-13-00	15:00	Lab
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
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14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Sequence Table (Front Injector):

Vial Information Part:

Line Vial Vial Information

A

====	====	=====
1	2	RINSE
2	3	190-80-1 209
3	4	190-80-2 210
4	5	190-80-3 211
5	6	190-80-4 212
6	7	190-80-5 213
7	8	060162BLK 214
8	9	060162LCS 215
9	10	060162001S 216
10	11	060162001D 217
11	12	060162001 218
12	13	060162002 219
13	14	060162003 220
14	15	050145BLK 221
15	16	050145LCS 222
16	17	050145001S 223
17	18	050145001D 224
18	19	050145001 225
19	20	050145002 226
20	21	050145003 227
21	22	050145004 228
22	23	050145005 229
23	24	190-80-3 230
24	25	020192-1S 231
25	26	020192-1D 232

PK 723304

Line	Vial	Vial Information	
====	====	=====	=====
26	27	020192-1	233
27	28	240147-1	234
28	29	020192-BLK	235
29	30	020192-LCS	236
30	24	190-80-3	237

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
1	2	HEXANE	HERB	1	Sample		
2	3	Lherb,3080.b	HERB	1	Sample		
3	4	MLherb,3080.b	HERB	1	Sample		
4	5	Mherb,3080.b	HERB	1	Sample		
5	6	MHherb,3080.b	HERB	1	Sample		
6	7	Hherb,3080.b	HERB	1	Sample		
7	8	DE8LV101,3080.b	HERB	1	Sample		
8	9	DE8LV102,3080.b	HERB	1	Sample		
9	10	DE844104,3080.b	HERB	1	Sample		
10	11	DE844105,3080.b	HERB	1	Sample		
11	12	DE844102,3080.b	HERB	1	Sample		
12	13	DE84C102,3080.b	HERB	1	Sample		
13	14	DE84F102,3080.b	HERB	1	Sample		
14	15	DEC6R101,3080.b	HERB	1	Sample		
15	16	DEC6R102,3080.b	HERB	1	Sample		
16	17	DE6PH10J,3080.b	HERB	1	Sample		
17	18	DE6PH10K,3080.b	HERB	1	Sample		
18	19	DE6PH104,3080.b	HERB	1	Sample		
19	20	DE6PL104,3080.b	HERB	1	Sample		
20	21	DE6PM104,3080.b	HERB	1	Sample		
21	22	DE6PN104,3080.b	HERB	1	Sample		
22	23	DE6PP104,3080.b	HERB	1	Sample		
23	24	Mherb,3080.b	HERB	1	Sample		
24	25	DE451111,3080.b	HERB	1	Sample		
25	26	DE451112,3080.b	HERB	1	Sample		
26	27	DE451101,3080.b	HERB	1	Sample		
27	28	DDL6111D,3080.b	HERB	1	Sample		
28	29	DE7EG101,3080.b	HERB	1	Sample		
29	30	DE7EG102,3080.b	HERB	1	Sample		
30	24	Mherb,3080.b	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
====	====	=====
1	1	RINSE

Sequence Table (Front Injector):

Vial Information Part:

Line Vial Vial Information

=====

1	2	
2	3	292 190-80-3 ✓
3	4	293 080328BLK
4	5	294 080328LCS
5	6	295 080328001S
6	7	296 080328001D
7	20	297 130113BLK
8	21	298 130113LCS
9	22	299 130113001
10	23	300 130113002
11	24	301 130113003
12	25	302 130113004
13	26	303 130113004S
14	27	304 130113004D
15	28	305 130115-1
16	29	306 130115-2
17	8	307 080328001
18	9	308 080328002
19	10	309 070184-1
20	11	310 070184-2
21	12	311 070184-3
22	13	312 070184-4
23	61	313 190-80-3
24	14	314 070184-5
25	15	315 070184-6

✓ OE
6-15-00✓ OE
6-14-00

6601125

Line Vial Vial Information

=====

26	16	316	070184-7
27	17	317	070184-8
28	18	318	070184-9
29	19	319	070184-10
30	62	320	190-80-3
31	51	321	070157-3 *1000
32	52	322	070157-4 *100
33	53	323	070157-5 *10000
34	54	324	070157-6 *50
35	55	325	070157BLK
36	63	326	190-80-3

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
1	2	HEXANE	HERB	1	Sample		
2	3	Mherb,3080.b	HERB	1	Sample		
3	4	DEK4H101,3080.b	HERB	1	Sample		
4	5	DEK4H102,3080.b	HERB	1	Sample		
5	6	DEEHC10R,3080.b	HERB	1	Sample		
6	7	DEEHC10T,3080.b	HERB	1	Sample		
7	20	DELHR101,3080.b	HERB	1	Sample		
8	21	DELHR102,3080.b	HERB	1	Sample		
9	22	DEKAL102,3080.b	HERB	1	Sample		
10	23	DEKAN102,3080.b	HERB	1	Sample		
11	24	DEKAP102,3080.b	HERB	1	Sample		
12	25	DEKAQ102,3080.b	HERB	1	Sample		
13	26	DEKAQ103,3080.b	HERB	1	Sample		
14	27	DEKAQ104,3080.b	HERB	1	Sample		
15	28	DEKAW102,3080.b	HERB	1	Sample		
16	29	DEKAX103,3080.b	HERB	1	Sample		
17	8	DEEHC105,3080.b	HERB	1	Sample		
18	9	DEEHP105,3080.b	HERB	1	Sample		
19	10	DE9XX104,3080.b	HERB	1	Sample		
20	11	DEA02104,3080.b	HERB	1	Sample		
21	12	DEA04104,3080.b	HERB	1	Sample		
22	13	DEA05104,3080.b	HERB	1	Sample		
23	61	Mherb,3080.b	HERB	1	Sample		
24	14	DEA07104,3080.b	HERB	1	Sample		
25	15	DEA09104,3080.b	HERB	1	Sample		
26	16	DEA0A104,3080.b	HERB	1	Sample		
27	17	DEA0C104,3080.b	HERB	1	Sample		
28	18	DEA0F104,3080.b	HERB	1	Sample		
29	19	DEA0G104,3080.b	HERB	1	Sample		

PSR024 6/12/00 13:34:03 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

REQUESTED BY: YUSHINSC

METHOD: QS Herbicides (8151A)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
10A CLP1	DE9XX-1-04	— — —	239695	131369	A-64-QS	COF070184	001		SOLID	0	2 1
10A CLP1	DEA02-1-04	— — —	239696	131369	A-64-QS	COF070184	002		SOLID	0	2 1
10A CLP1	DEA04-1-04	— — —	239697	131369	A-64-QS	COF070184	003		SOLID	0	2 1
10A CLP1	DEA05-1-04	— — —	239698	131369	A-64-QS	COF070184	004		SOLID	0	2 1
10A CLP1	DEA07-1-04	— — —	239699	131369	A-64-QS	COF070184	005		SOLID	0	2 1
10A CLP1	DEA09-1-04	— — —	239700	131369	A-64-QS	COF070184	006		SOLID	0	2 1
10A CLP1	DEA0A-1-04	— — —	239701	131369	A-64-QS	COF070184	007		SOLID	0	2 1
10A CLP1	DEA0C-1-04	— — —	239702	131369	A-64-QS	COF070184	008		SOLID	0	2 1
10A CLP1	DEA0F-1-04	— — —	239703	131369	A-64-QS	COF070184	009		SOLID	0	2 1
10A CLP1	DEA0G-1-04	— — —	239704	131369	A-64-QS	COF070184	010		SOLID	0	2 1
10C CLP1	DEEHC-1-05	— — —	239705	399411	A-64-QS	COF080328	001		SOLID	0	3 1
10C CLP1	DEEHP-1-05	— — —	239706	399411	A-64-QS	COF080328	002		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>P. Yushinski</i>	<i>P. Yushinski</i>	6-12-00 1540
<i>P. Yushinski</i>	<i>P. Yushinski</i>	6-12-00 2150

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

6601127

METALS DATA

**METALS
RESULTS**

6601129

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

<u>Client ID</u>
<u>DF/S1/0159/SDC/008</u>
<u>DF/S1/0159/SDC/009</u>

<u>Lab Sample ID:</u>
<u>DEEHC</u>
<u>DEEHP</u>

Comments: UXB, DUNN FIELD
C0F080328
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: _____

REVIEWED BY: <u>mtw</u>
DATE: <u>6-14-00</u>

Version 3.63.4

Cover Page Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEEHC Client ID: DF/S1/0159/SDC/008
Matrix: Soil Units: mg/kg Prep Date: 6/13/00 Prep Batch: 0165171
Weight: 1.0 Volume: 100 Percent Moisture: 18.7

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.32	1.2	11.2		1	ICPST	6/13/00	14:00

Comments: Lot #: C0F080328 Sample #: 1

Version 3 63.4

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

Form 1 Equivalent

6601131

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEEHP Client ID: DF/S1/0159/SDC/009
Matrix: Soil Units: mg/kg Prep Date: 6/13/00 Prep Batch: 0165171
Weight: 1.0 Volume: 100 Percent Moisture: 18.22

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.31	1.2	10.6		1	ICPST	6/13/00	14:04

Comments: Lot #: C0F080328 Sample #: 2

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 Standard

Instrument: ICPSTUnits: ug/LChart Number: T00613B ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0014-110-4

Element	WL/ Mass	True Conc	ICV3-1 6/13/00 12 55 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	250.0	253.33	101.3								

6601133

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPSTUnits: ug/LChart Number: T00613B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0014-131-1

Element	WL/ Mass	True Conc	CCV3-1 6/13/00 1:47 PM		CCV3-2 6/13/00 2:08 PM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	500.0	529.91	106.0	510.61	102.1				

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00613B.ARC

Standard Source: _____

Standard ID: _____

			ICB1 6/13/00 12:59 PM					
Element	WL/ Mass	Report Limit	Found	O	Found	O	Found	O
Arsenic	189.042	10	2.6	U				

6601135

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00613B.ARC

Standard Source: _____

Standard ID: _____

			CCB1 6/13/00 1:52 PM	CCB2 6/13/00 2:12 PM			
Element	WL/ Mass	Report Limit	Found O	Found O	Found O	Found O	Found O
Arsenic	189.042	10	2.6 U	2.6 U			

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results**Lab Sample ID:** DEKGJB**Matrix:** Soil **Units:** mg/kg **Prep Date:** 6/13/00 **Prep Batch:** 0165171**Weight:** 1.0 **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	0.26	1.0	0.26	U	1	ICPST	6/13/00	13:14

Comments. Lot #: C0F080328

6601137

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPSTUnits: ug/LChart Number: T00613B.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0014-129-11

				ICSA 6/13/00 1:03 PM				
Element	WL/ Mass	Reporting Limit	True Conc	Found	Found	Found	Found	Found
Arsenic	189.042	10		1				

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPSTUnits: ug/LChart Number: T00613B.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-075-12

Element	WL/ Mass	True Conc	ICSAB 6/13/00 1:07 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	1032.5	103.3								

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample ResultsLab Sample ID: DEKGJCMatrix: Soil Units: mg/kg Prep Date: 6/13/00 Prep Batch: 0165171Weight: 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	203	101.7		80-120	1	ICPST	6/13/00	13:18

Comments: Lot # C0F080328

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPSTUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	189.04	10	2.6	4/1/00

6601141

STL-Pittsburgh

Metals Data Reporting Form

Inter-Element Correction FactorsInstrument: ICPSTDate of IEC's: 5/30/00

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(0.000111), 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: ICPSTUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189.04	10000	3/15/00

6601143

STL-Pittsburgh
Metals Data Reporting Form

Preparation Log

Preparation Batch: 0165171 **Instrument:** ICP **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DEKGJB	6/13/00	1.0	100	NA
DEKGJC	6/13/00	1.0	100	NA
DEEHC	6/13/00	1.0	100	18.7
DEEHP	6/13/00	1.0	100	18.22

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPSTChart Number: T00613B.ARC

Sample Name	Date of Analysis	Time of Analysis
STD1	6/13/00	12:43 PM
STD6	6/13/00	12:47 PM
STD7	6/13/00	12:51 PM
ICV3-1	6/13/00	12:55 PM
ICB1	6/13/00	12:59 PM
ICSA	6/13/00	1:03 PM
ICSAB	6/13/00	1:07 PM
DEKGJB	6/13/00	1:14 PM
DEKGJC	6/13/00	1:18 PM
ZZZZZZ	6/13/00	1:22 PM
ZZZZZZ	6/13/00	1:26 PM
ZZZZZZ	6/13/00	1:31 PM
ZZZZZZ	6/13/00	1:35 PM
ZZZZZZ	6/13/00	1:39 PM
ZZZZZZ	6/13/00	1:43 PM
CCV3-1	6/13/00	1:47 PM
CCB1	6/13/00	1:52 PM
ZZZZZZ	6/13/00	1:56 PM
DEEHC	6/13/00	2:00 PM
DEEHP	6/13/00	2:04 PM
CCV3-2	6/13/00	2:08 PM
CCB2	6/13/00	2:12 PM
ZZZZZZ	6/13/00	2:19 PM
ZZZZZZ	6/13/00	2:23 PM
ZZZZZZ	6/13/00	2:27 PM
ZZZZZZ	6/13/00	2:32 PM
ZZZZZZ	6/13/00	2:36 PM
ZZZZZZ	6/13/00	2:40 PM
ZZZZZZ	6/13/00	2:44 PM
ZZZZZZ	6/13/00	2:48 PM
ZZZZZZ	6/13/00	2:52 PM

6601145

**METALS
RAW DATA**

Michael W. Wenzel 6-13-00
 # Sample Name AS

1	STD1	-.00183
2	STD6	6.40005
3	STD7	
4	ICV3-1 0014-110-4	.25333
5	ICB1	-.00030
6	ICSA 0014-129-11	.00072
7	ICSAB 0014-075-12	1.0325
8	DEKGJB	.00001
9	DEKGJC	2.0343
10	DEK7R	H11.405
11	DEK7RP5	2.3576
12	DEK7RS	H14.395
13	DEK7RD	H10.309
14	DEK7T	H10.177
15	DEK7V	H11.501
16	CCV3-1 0014-131-1	.52991
17	CCB1	.00208
18	DEK7W	H22.529
19	DEEHC	.09140
20	DEEHP	.08685
21	CCV3-2	.51061
22	CCB2	.00080
23	DEK7R/2 AS	5.7579
24	DEK7RP10 AS	1.1851
25	DEK7RS/2 AS	7.3761
26	DEK7RD/2 AS	5.2644
27	DEK7T/2 AS	5.3267
28	DEK7V/2 AS	5.7875
29	DEK7W/5 AS	4.9323
30	CCV3-3	.51810
31	CCB3	.00130

VOID: Samples are over-range
 and require dilutions
 See dilutions Below

MTW
 6-13-00

MTW 6-13-00

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T00613B	METTRA	06/13/00	12:43		X	IR
2	STD6	T00613B	METTRA	06/13/00	12:47		X	IR
3	STD7	T00613B	METTRA	06/13/00	12:51		X	IR
4	ICV3-1 0014-110-4	T00613B	METTRA	06/13/00	12:55	MTW	S	CONC
5	ICB1	T00613B	METTRA	06/13/00	12:59	MTW	S	CONC
6	ICSA 0014-129-11	T00613B	METTRA	06/13/00	13:03	MTW	Q	CONC
7	ICSAB 0014-075-12	T00613B	METTRA	06/13/00	13:07	MTW	Q	CONC
8	DEKGJB	T00613B	METTRA	06/13/00	13:14	MTW	S	CONC
9	DEKGJC	T00613B	METTRA	06/13/00	13:18	MTW	S	CONC
10	DEK7R	T00613B	METTRA	06/13/00	13:22	MTW	S	CONC
11	DEK7RP5	T00613B	METTRA	06/13/00	13:26	MTW	S	CONC
12	DEK7RS	T00613B	METTRA	06/13/00	13:31	MTW	S	CONC
13	DEK7RD	T00613B	METTRA	06/13/00	13:35	MTW	S	CONC
14	DEK7T	T00613B	METTRA	06/13/00	13:39	MTW	S	CONC
15	DEK7V	T00613B	METTRA	06/13/00	13:43	MTW	S	CONC
16	CCV3-1 0014-131-1	T00613B	METTRA	06/13/00	13:47	MTW	S	CONC
17	CCB1	T00613B	METTRA	06/13/00	13:52	MTW	S	CONC
18	DEK7W	T00613B	METTRA	06/13/00	13:56	MTW	S	CONC
19	DEEHC	T00613B	METTRA	06/13/00	14:00	MTW	S	CONC
20	DEEHP	T00613B	METTRA	06/13/00	14:04	MTW	S	CONC
21	CCV3-2	T00613B	METTRA	06/13/00	14:08	MTW	S	CONC
22	CCB2	T00613B	METTRA	06/13/00	14:12	MTW	S	CONC
23	DEK7R/2 AS	T00613B	METTRA	06/13/00	14:19	MTW	S	CONC
24	DEK7RP10 AS	T00613B	METTRA	06/13/00	14:23	MTW	S	CONC
25	DEK7RS/2 AS	T00613B	METTRA	06/13/00	14:27	MTW	S	CONC
26	DEK7RD/2 AS	T00613B	METTRA	06/13/00	14:32	MTW	S	CONC
27	DEK7T/2 AS	T00613B	METTRA	06/13/00	14:36	MTW	S	CONC
28	DEK7V/2 AS	T00613B	METTRA	06/13/00	14:40	MTW	S	CONC
29	DEK7W/5 AS	T00613B	METTRA	06/13/00	14:44	MTW	S	CONC
30	CCV3-3	T00613B	METTRA	06/13/00	14:48	MTW	S	CONC
31	CCB3	T00613B	METTRA	06/13/00	14:52	MTW	S	CONC

Standardization Rpt.

06/13/00 12:47:27 PM

6601148
page 1Method: METTRA : Standard: STD1
Run Time: 06/13/00 12:43:19

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	-.00085	.12658	-.00183	.00114	-.05878	.00365	.00201
SDev	.00295	.00123	.00250	.00048	.00007	.00003	.00099
%RSD	345.87	.97058	136.70	42.491	.12126	.69793	49.012
#1	.00123	.12745	-.00360	.00148	-.05883	.00363	.00271
#2	-.00294	.12571	-.00006	.00080	-.05873	.00367	.00132
Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00115	-.00003	.00835	-.00117	-.00080	.00135	.00111
SDev	.00019	.00126	.00004	.00087	.00017	.00017	.00018
%RSD	16.487	4559.3	.49050	74.786	21.278	12.370	16.198
#1	-.00102	.00086	.00838	-.00179	-.00068	.00123	.00123
#2	-.00128	-.00092	.00832	-.00055	-.00092	.00147	.00098
Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00037	.02671	.00303	-.02890	.00533	-.10597	.08666
SDev	.00026	.01615	.00446	.03161	.00806	.01910	.00550
%RSD	71.078	60.453	147.18	109.39	151.16	18.024	6.3508
#1	.00055	.03813	-.00012	-.05125	.01103	-.09246	.09055
#2	.00018	.01529	.00618	-.00655	-.00037	-.11948	.08277
Elem	TL	V	ZN				
Avge	-.03637	.00009	.00037				
SDev	.00013	.00013	.00009				
%RSD	.34490	141.42	23.093				
#1	-.03628	.00018	.00031				
#2	-.03646	.00000	.00043				

6601149

Standardization Rpt.

06/13/00 12:47:27 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	16290	--	--	--	--	--	--
SDev	79.90307	--	--	--	--	--	--
%RSD	.4905038	--	--	--	--	--	--
#1	16234	--	--	--	--	--	--
#2	16346	--	--	--	--	--	--

Standardization Rpt.

06/13/00 12:51:38 PM

page 1

Method: METTRA Standard: STD6 0014-087-8
 Run Time: 06/13/00 12:47:32

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	11.323	6.4001	16.315	6.5975	8.5889	10.895	7.0359
SDev	.008	.0052	.005	.0285	.0070	.002	.0102
%RSD	.07336	.08186	.02897	.43147	.08125	.01686	.14524

#1	11.317	6.4038	16.318	6.5773	8.5840	10.894	7.0287
#2	11.328	6.3963	16.311	6.6176	8.5939	10.897	7.0431

Elem	SE/1	SE/2	TL
Avge	5.9703	5.8119	4.8556
SDev	.0070	.0321	.0174
%RSD	.11662	.55161	.35751

#1	5.9752	5.7892	4.8433
#2	5.9654	5.8346	4.8678

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16541	--	--	--	--	--	--
SDev	12.65749	--	--	--	--	--	--
%RSD	.0765203	--	--	--	--	--	--
#1	16532	--	--	--	--	--	--
#2	16550	--	--	--	--	--	--

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Standardization Rpt.

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Method: METTRA Standard: STD7 0014-087-9
 Run Time: 06/13/00 12:51:43

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	6.8355	12.900	14.284	5.7611	3.6171	14.302	3.4278
SDev	.0135	.031	.004	.0007	.0005	.000	.0057
%RSD	.19726	.24379	.02811	.01211	.01300	.00196	.16750

#1	6.8260	12.877	14.281	5.7606	3.6174	14.303	3.4238
#2	6.8451	12.922	14.287	5.7616	3.6168	14.302	3.4319

Elem	FE	MG	MN	MO	NI	V	ZN
Avge	4.6806	16.219	11.730	2.6213	2.9194	.93427	3.4876
SDev	.0037	.001	.002	.0137	.0014	.00009	.0017
%RSD	.07959	.00478	.01408	.52143	.04751	.00958	.04967

#1	4.6779	16.219	11.729	2.6116	2.9184	.93421	3.4888
#2	4.6832	16.218	11.731	2.6309	2.9204	.93434	3.4864

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16291	--	--	--	--	--	--
SDev	37.79499	--	--	--	--	--	--
%RSD	.2320031	--	--	--	--	--	--

#1	16264	--	--	--	--	--	--
#2	16317	--	--	--	--	--	--

Standardization

Report

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Method: METTRA

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.176626	.000151	06/13/00 12:51:43
AL	308.215	STD7	STD1	7.47240	-.945885	06/13/00 12:51:43
AS	189.042	STD6	STD1	.156204	.000286	06/13/00 12:51:43
BA	493.409	STD7	STD1	.310117	-.000353	06/13/00 12:51:43
BE	313.042	STD7	STD1	.276566	.016256	06/13/00 12:51:43
CA	317.933	STD7	STD1	17.3687	-.063439	06/13/00 12:51:43
CD	226.502	STD6	STD1	.061303	-.000123	06/13/00 12:51:43
CO	228.616	STD7	STD1	1.10551	.001272	06/13/00 12:51:43
CR	267.716	STD7	STD1	.279536	.000008	06/13/00 12:51:43
CU	324.753	STD7	STD1	1.16977	-.009766	06/13/00 12:51:43
FE	271.441	STD7	STD1	10.7557	.012568	06/13/00 12:51:43
MG	279.078	STD7	STD1	6.16549	.004918	06/13/00 12:51:43
MN	257.610	STD7	STD1	.341050	-.000460	06/13/00 12:51:43
MO	202.030	STD7	STD1	1.52663	-.001688	06/13/00 12:51:43
NI	231.604	STD7	STD1	1.36942	-.000505	06/13/00 12:51:43
PB/1	220.351	STD6	STD1	.152190	-.004065	06/13/00 12:51:43
PB/2	220.352	STD6	STD1	.116470	-.000353	06/13/00 12:51:43
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.091538	.002645	06/13/00 12:51:43
SB/2	206.832	STD6	STD1	.142236	-.000758	06/13/00 12:51:43
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.164574	.017440	06/13/00 12:51:43
SE/2	196.022	STD6	STD1	.174665	-.015137	06/13/00 12:51:43
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.408837	.014870	06/13/00 12:51:43
V	292.402	STD7	STD1	4.26314	-.000394	06/13/00 12:51:43
ZN	213.856	STD7	STD1	1.15410	-.000425	06/13/00 12:51:43

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Michael W. Wernick 6-13-00

Analysis Report

06/13/00 12:59:29 PM

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Method: METTRA Sample Name: ICV3-1 0014-110-4 Operator: MTW
 Run Time: 06/13/00 12:55:23
 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
Avg	.50615	11.889	.25333	.98900	.98869	25.063	.24818
SDev	.00027	.034	.00084	.00094	.00262	.084	.00042
%RSD	.05308	.28883	.33157	.09511	.26447	.33330	.16757
#1	.50634	11.865	.25393	.98833	.99054	25.122	.24848
#2	.50596	11.913	.25274	.98966	.98684	25.004	.24789
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	1.0124	1.0137	.96323	12.425	24.040	.98601	1.0189
SDev	.0002	.0014	.00010	.014	.059	.00149	.0000
%RSD	.02408	.14020	.00985	.11387	.24740	.15109	.00285
#1	1.0126	1.0147	.96316	12.435	24.082	.98706	1.0189
#2	1.0122	1.0127	.96330	12.415	23.998	.98496	1.0189
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	1.0127	.25444	.25127	.25232	.25539	.25319	.25392
SDev	.0079	.00149	.00321	.00164	.00076	.00098	.00040
%RSD	.78314	.58527	1.2771	.65176	.29963	.38723	.15718
#1	1.0183	.25549	.24900	.25116	.25485	.25388	.25420
#2	1.0070	.25338	.25354	.25349	.25593	.25249	.25364
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	.25742	.25885	.25838	.50881	.99502	1.0289	
SDev	.00168	.00176	.00173	.00489	.00262	.0031	
%RSD	.65096	.67942	.66998	.96168	.26340	.30452	
#1	.25624	.25761	.25715	.50535	.99688	1.0311	
#2	.25861	.26009	.25960	.51227	.99317	1.0267	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.27500	.55000	1.1000	1.1000	
Low			.22500	.45000	.90000	.90000	

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	16563	--	--	--	--	--	--
SDev	7.989478	--	--	--	--	--	--
%RSD	.0482370	--	--	--	--	--	--
#1	16569	--	--	--	--	--	--
#2	16557	--	--	--	--	--	--

Method: METTRA Sample Name: ICB1

Operator: MTW

Run Time: 06/13/00 12:59:32

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	-.00025	.01606	-.00031	.00026	.00042	.02456	-.00005
SDev	.00039	.00670	.00029	.00000	.00004	.00585	.00006
%RSD	158.71	41.685	93.540	.60185	9.6043	23.800	127.49

#1	.00003	.02080	-.00010	.00026	.00039	.02043	-.00000
#2	-.00052	.01133	-.00051	.00026	.00045	.02870	-.00009

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	.00035	.00039	-.00008	.00057	.00834	.00033	.00586
SDev	.00000	.00010	.00023	.01031	.00268	.00007	.00095
%RSD	.67475	25.365	287.93	1822.9	32.185	21.982	16.264

#1	.00035	.00046	-.00024	.00785	.00644	.00028	.00653
#2	.00035	.00032	.00008	-.00672	.01024	.00038	.00519

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	-.00029	.00104	-.00038	.00009	-.00078	.00079	.00027
SDev	.00006	.00123	.00183	.00163	.00006	.00246	.00166
%RSD	20.578	117.64	481.26	1722.2	7.6315	311.28	620.82

#1	-.00025	.00018	-.00167	-.00106	-.00082	-.00095	-.00091
#2	-.00034	.00191	.00091	.00124	-.00074	.00253	.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	-.00075	-.00104	-.00094	.00032	.00303	.00136
SDev	.00062	.00020	.00008	.00186	.00001	.00060
%RSD	83.089	19.058	8.0431	584.15	.40783	44.324

#1	-.00031	-.00118	-.00089	.00163	.00304	.00093
#2	-.00119	-.00090	-.00099	-.00099	.00302	.00178

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

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	16183	--	--	--	--	--	--
SDev	41.40165	--	--	--	--	--	--
%RSD	.2558410	--	--	--	--	--	--
#1	16153	--	--	--	--	--	--
#2	16212	--	--	--	--	--	--

Method: METTRA Sample Name: ICSA 0014-129-11 Operator: MTW
 Run Time: 06/13/00 13:03:42
 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	528.99	.00072	.00186	-.00042	495.29	-.00473
SDev	.00037	2.19	.00102	.00015	.00002	1.91	.00047
%RSD	116.60	.41333	140.28	8.2995	5.4978	.38636	9.8642

#1	-.00058	527.44	.00144	.00197	-.00044	496.64	-.00506
#2	-.00006	530.53	.00001	.00175	-.00040	493.94	-.00440

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
Avge	.00042	.00125	-.00232	205.91	536.25	.00772	.00046
SDev	.00007	.00040	.00017	.14	1.33	.00005	.00108
%RSD	16.383	32.208	7.3179	.06895	.24892	.67556	233.90

#1	.00047	.00096	-.00220	206.01	537.20	.00776	.00122
#2	.00038	.00153	-.00244	205.81	535.31	.00768	-.00030

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
Avge	.00177	.03623	-.02178	-.00246	.00204	.00403	.00337
SDev	.00131	.00119	.00238	.00198	.00531	.00330	.00043
%RSD	73.964	3.2745	10.927	80.607	260.02	81.777	12.719

#1	.00084	.03540	-.02346	-.00386	-.00171	.00636	.00367
#2	.00269	.03707	-.02009	-.00106	.00580	.00170	.00307

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
Avge	-.00046	-.00662	-.00457	-.00913	.01041	-.00181
SDev	.00345	.00860	.00689	.00524	.00013	.00010
%RSD	742.88	129.95	150.69	57.374	1.2765	5.4554

#1	-.00290	-.01270	-.00944	-.01283	.01051	-.00188
#2	.00197	-.00054	.00030	-.00543	.01032	-.00174

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	15319	--	--	--	--	--	--
SDev	127.1377	--	--	--	--	--	--
%RSD	.8299453	--	--	--	--	--	--
#1	15229	--	--	--	--	--	--
#2	15409	--	--	--	--	--	--

Method: METTRA Sample Name: ICSAB 0014-075-12 Operator: MTW
 Run Time: 06/13/00 13:07:51
 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	1.1202	531.94	1.0325	.53509	.49577	494.08	.93070
SDev	.0054	3.20	.0002	.00299	.00200	1.90	.00379
%RSD	.48193	.60239	.01916	.55816	.40327	.38437	.40669
#1	1.1164	529.68	1.0324	.53298	.49436	492.74	.92802
#2	1.1240	534.21	1.0327	.53720	.49718	495.42	.93337
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	.49640	.50883	.54988	206.69	535.63	.51239	.99986
SDev	.00236	.00287	.00362	1.09	2.65	.00232	.00961
%RSD	.47538	.56471	.65868	.52655	.49563	.45332	.96063
#1	.49473	.50680	.54732	205.92	533.75	.51075	.99307
#2	.49807	.51086	.55244	207.45	537.51	.51403	1.0067
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	1.0020	1.0589	.97759	1.0047	1.0705	1.0497	1.0566
SDev	.0028	.0115	.00196	.0025	.0024	.0149	.0107
%RSD	.27763	1.0905	.20022	.25281	.22452	1.4150	1.0133
#1	1.0000	1.0508	.97898	1.0029	1.0688	1.0392	1.0490
#2	1.0040	1.0671	.97621	1.0065	1.0722	1.0602	1.0642
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	1.0232	1.0594	1.0473	1.0570	.52558	1.0552	
SDev	.0205	.0013	.0060	.0025	.00238	.0046	
%RSD	2.0019	.11840	.57137	.23397	.45281	.43441	
#1	1.0087	1.0603	1.0431	1.0588	.52390	1.0519	
#2	1.0377	1.0585	1.0516	1.0553	.52726	1.0584	
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	15388	--	--	--	--	--	--
SDev	67.81181	--	--	--	--	--	--
%RSD	.4406870	--	--	--	--	--	--
#1	15436	--	--	--	--	--	--
#2	15340	--	--	--	--	--	--

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Analysis Report

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Method: METTRA Sample Name: DEKGJB

Operator: MTW

Run Time: 06/13/00 13:14:17

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	.00033	.03145	.00002	.00040	.00006	.24883	.00003
SDev	.00008	.01361	.00003	.00002	.00013	.00354	.00006
%RSD	25.361	43.285	172.85	5.1337	233.99	1.4209	160.52
#1	.00027	.04108	-.00000	.00039	-.00004	.25133	.00007
#2	.00039	.02183	.00004	.00042	.00015	.24633	-.00000
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	-.00009	.00086	.00113	.01564	.02305	.00034	.00242
SDev	.00040	.00001	.00030	.00713	.00234	.00008	.00044
%RSD	440.42	.54988	26.756	45.548	10.160	24.287	18.245
#1	.00019	.00085	.00135	.02068	.02470	.00040	.00273
#2	-.00038	.00086	.00092	.01061	.02139	.00028	.00211
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	.00125	.00669	-.00049	.00190	-.00189	.00105	.00007
SDev	.00080	.00195	.00036	.00089	.00046	.00078	.00067
%RSD	64.052	29.200	71.917	46.804	24.086	74.718	998.93
#1	.00182	.00807	-.00024	.00252	-.00157	.00160	.00054
#2	.00069	.00531	-.00075	.00127	-.00221	.00049	-.00041
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	-.00348	-.00013	-.00124	-.00309	-.00039	.01655	
SDev	.00154	.00079	.00002	.00305	.00000	.00017	
%RSD	44.242	623.52	1.2509	98.853	.64050	1.0361	
#1	-.00457	.00043	-.00123	-.00525	-.00039	.01667	
#2	-.00239	-.00069	-.00125	-.00093	-.00039	.01642	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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	15992	--	--	--	--	--	--
SDev	141.7397	--	--	--	--	--	--
%RSD	.8863370	--	--	--	--	--	--
#1	15891	--	--	--	--	--	--
#2	16092	--	--	--	--	--	--

Method: METTRA Sample Name: DEKGJC

Operator: MTW

Run Time: 06/13/00 13:18:26

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	.05100	1.8648	2.0343	1.9789	.05170	L.26182	.05111
SDev	.00008	.0074	.0039	.0070	.00006	.00082	.00016
%RSD	.15185	.39640	.19043	.35239	.12498	.31231	.31237
#1	.05105	1.8596	2.0316	1.9740	.05174	L.26124	.05122
#2	.05094	1.8700	2.0371	1.9839	.05165	L.26239	.05100
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	.52527	.20927	.24856	1.0466	L.01472	.50748	L.00159
SDev	.00257	.00093	.00089	.0057	.00082	.00098	.00007
%RSD	.48903	.44565	.35888	.54773	5.5495	.19378	4.1855
#1	.52345	.20861	.24793	1.0506	L.01414	.50678	L.00164
#2	.52709	.20993	.24920	1.0425	L.01529	.50817	L.00155
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	.52591	.51712	.51111	.51311	-.00098	.00242	L.00129
SDev	.00075	.00137	.00089	.00014	.00022	.00040	.00034
%RSD	.14264	.26467	.17353	.02647	22.379	16.307	26.104
#1	.52538	.51616	.51173	.51321	-.00114	.00214	L.00105
#2	.52645	.51809	.51048	.51301	-.00083	.00270	L.00153
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	1.9981	2.0163	2.0102	2.0529	.50209	.55100	
SDev	.0042	.0009	.0008	.0148	.00105	.00088	
%RSD	.21008	.04684	.03858	.72075	.20880	.15874	
#1	1.9951	2.0170	2.0097	2.0424	.50283	.55038	
#2	2.0010	2.0156	2.0108	2.0633	.50135	.55162	
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	

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	16047	--	--	--	--	--	--
SDev	2.581216	--	--	--	--	--	--
%RSD	.0160856	--	--	--	--	--	--
#1	16049	--	--	--	--	--	--
#2	16045	--	--	--	--	--	--

6601165

Analysis Report

06/13/00 01:26:45 PM

page 1

Method: METTRA Sample Name: DEK7R

Operator: MTW

Run Time: 06/13/00 13:22:40

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	.00165	18.827	H11.405	.07330	.00169	1.9808	.00237
SDev	.00000	.131	.036	.00066	.00005	.0132	.00019
%RSD	.22702	.69479	.31945	.89922	2.8912	.66831	8.0028
#1	.00165	18.735	H11.380	.07283	.00172	1.9714	.00224
#2	.00165	18.920	H11.431	.07377	.00165	1.9901	.00250
Errors	LC Pass	LC Pass	LC High	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	.01456	.25817	.10795	93.159	.91017	.44160	.00686
SDev	.00027	.00143	.00064	.542	.00567	.00259	.00011
%RSD	1.8721	.55391	.59523	.58148	.62324	.58532	1.5836
#1	.01476	.25716	.10750	92.776	.90616	.43978	.00693
#2	.01437	.25918	.10841	93.542	.91418	.44343	.00678
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	.05753	.24334	.22196	.22908	.16502	.16456	.16471
SDev	.00102	.00311	.00092	.00042	.00096	.00257	.00140
%RSD	1.7745	1.2788	.41468	.18436	.58309	1.5637	.84753
#1	.05825	.24114	.22261	.22878	.16570	.16274	.16373
#2	.05681	.24554	.22131	.22938	.16434	.16638	.16570
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	.01126	.01804	.01578	.00188	.24112	.16959	
SDev	.00047	.00184	.00107	.00302	.00053	.00032	
%RSD	4.2153	10.218	6.7887	160.44	.21972	.18692	
#1	.01092	.01934	.01654	-.00025	.24075	.16937	
#2	.01160	.01674	.01503	.00402	.24149	.16982	
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	

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	16615	--	--	--	--	--	--
SDev	41.50661	--	--	--	--	--	--
%RSD	.2498133	--	--	--	--	--	--
#1	16644	--	--	--	--	--	--
#2	16586	--	--	--	--	--	--

Analysis Report

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page 1

Method: METTRA Sample Name: DEK7RP5

Operator: MTW

Run Time: 06/13/00 13:26:54

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	.00045	3.6975	2.3576	.01466	.00055	.40698	.00045
SDev	.00009	.0340	.0142	.00021	.00015	.00629	.00000
%RSD	20.588	.92066	.60035	1.4213	27.783	1.5458	.09894
#1	.00039	3.6735	2.3476	.01451	.00065	.40254	.00045
#2	.00052	3.7216	2.3676	.01480	.00044	.41143	.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	.00307	.05237	.02108	18.688	.18323	.08873	.00182
SDev	.00020	.00098	.00055	.148	.00283	.00079	.00009
%RSD	6.5579	1.8783	2.5895	.79449	1.5433	.89054	4.6756
#1	.00292	.05168	.02069	18.583	.18123	.08817	.00176
#2	.00321	.05307	.02146	18.793	.18523	.08929	.00188
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	.01098	.04792	.04424	.04547	.03476	.03434	.03448
SDev	.00065	.00064	.00149	.00078	.00123	.00156	.00063
%RSD	5.9143	1.3438	3.3651	1.7124	3.5268	4.5335	1.8278
#1	.01144	.04747	.04530	.04602	.03562	.03324	.03403
#2	.01052	.04838	.04319	.04492	.03389	.03544	.03492
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	.00150	.00024	.00066	-.00148	.04879	.03457	
SDev	.00221	.00104	.00004	.00092	.00084	.00026	
%RSD	146.90	434.48	6.0166	62.241	1.7113	.75347	
#1	.00306	-.00050	.00069	-.00083	.04820	.03438	
#2	-.00006	.00098	.00063	-.00213	.04939	.03475	
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	

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	16338	--	--	--	--	--	--
SDev	87.96436	--	--	--	--	--	--
%RSD	.5383919	--	--	--	--	--	--
#1	16401	--	--	--	--	--	--
#2	16276	--	--	--	--	--	--

Method: METTRA Sample Name: DEK7RS

Operator: MTW

Run Time: 06/13/00 13:31:02

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	.05258	18.564	H14.395	2.0193	.05170	2.0552	.05184
SDev	.00011	.015	.001	.0034	.00000	.0001	.00012
%RSD	.20966	.08276	.00630	.16730	.00468	.00702	.23615
#1	.05266	18.553	H14.394	2.0169	.05170	2.0553	.05192
#2	.05250	18.574	H14.396	2.0217	.05170	2.0551	.05175
Errors	LC Pass	LC Pass	LC High	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	.52536	.49203	.36885	90.636	.80168	.92103	.00840
SDev	.00076	.00058	.00064	.103	.00448	.00030	.00023
%RSD	.14424	.11758	.17375	.11325	.55918	.03313	2.7630
#1	.52483	.49244	.36840	90.564	.80485	.92125	.00856
#2	.52590	.49162	.36930	90.709	.79851	.92082	.00823
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	.62968	.74087	.71357	.72266	.18133	.18196	.18175
SDev	.00200	.00010	.00170	.00117	.00354	.00181	.00003
%RSD	.31789	.01291	.23830	.16136	1.9508	.99341	.01525
#1	.63110	.74081	.71237	.72184	.17883	.18324	.18177
#2	.62827	.74094	.71477	.72349	.18383	.18068	.18173
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	1.9949	2.0118	2.0062	2.0209	.76184	.68395	
SDev	.0067	.0014	.0013	.0019	.00328	.00084	
%RSD	.33714	.06938	.06523	.09232	.43074	.12312	
#1	1.9902	2.0128	2.0053	2.0196	.76416	.68335	
#2	1.9997	2.0109	2.0071	2.0222	.75952	.68455	
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	

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	16277	--	--	--	--	--	--
SDev	53.28091	--	--	--	--	--	--
%RSD	.3273291	--	--	--	--	--	--
#1	16240	--	--	--	--	--	--
#2	16315	--	--	--	--	--	--

Method: METTRA Sample Name: DEK7RD

Operator: MTW

Run Time: 06/13/00 13:35:16

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	.05170	18.335	H10.309	2.0155	.05173	2.2455	.05223
SDev	.00031	.063	.040	.0033	.00003	.0061	.00033
%RSD	.59314	.34471	.38757	.16213	.05995	.27230	.62902
#1	.05148	18.291	H10.280	2.0132	.05171	2.2412	.05200
#2	.05192	18.380	H10.337	2.0179	.05175	2.2499	.05246
Errors	LC Pass	LC Pass	LC High	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	.52468	.38762	.34635	73.652	.85925	.84565	.00565
SDev	.00165	.00092	.00100	.298	.00255	.00257	.00089
%RSD	.31515	.23644	.28798	.40487	.29679	.30370	15.850
#1	.52351	.38697	.34565	73.441	.85745	.84384	.00628
#2	.52585	.38827	.34706	73.863	.86105	.84747	.00502
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	.56815	.71954	.69752	.70485	.12042	.12030	.12034
SDev	.00025	.00071	.00728	.00509	.00030	.00021	.00024
%RSD	.04348	.09841	1.0434	.72218	.24667	.17814	.20097
#1	.56832	.71904	.69238	.70125	.12021	.12015	.12017
#2	.56797	.72004	.70267	.70845	.12063	.12045	.12051
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	1.9900	1.9979	1.9953	2.0159	.70359	.67509	
SDev	.0074	.0200	.0158	.0066	.00344	.00205	
%RSD	.37261	1.0027	.79347	.32611	.48888	.30440	
#1	1.9848	1.9838	1.9841	2.0113	.70116	.67363	
#2	1.9952	2.0121	2.0065	2.0206	.70603	.67654	
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	

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	16436	--	--	--	--	--	--
SDev	54.16410	--	--	--	--	--	--
%RSD	.3295415	--	--	--	--	--	--
#1	16474	--	--	--	--	--	--
#2	16398	--	--	--	--	--	--

6601173

Analysis Report

06/13/00 01:43:35 PM

page 1

Method: METTRA Sample Name: DEK7T

Operator: MTW

Run Time: 06/13/00 13:39:29

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	.00215	15.676	H10.177	.06518	.00171	1.9745	.00197
SDev	.00004	.017	.010	.00010	.00003	.0011	.00010
%RSD	1.9807	.10694	.10042	.15399	2.0791	.05457	4.8930

#1	.00212	15.664	H10.184	.06526	.00173	1.9752	.00190
#2	.00218	15.688	H10.169	.06511	.00168	1.9737	.00204

Errors	LC Pass	LC Pass	LC High	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	.01340	.24910	.09713	85.232	.77864	.37141	.00652
SDev	.00003	.00049	.00048	.046	.00193	.00008	.00012
%RSD	.20867	.19732	.49688	.05373	.24834	.02071	1.8171

#1	.01338	.24945	.09679	85.200	.77728	.37147	.00644
#2	.01342	.24876	.09747	85.265	.78001	.37136	.00661

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	.05718	.23817	.21672	.22386	.14265	.14243	.14250
SDev	.00033	.00205	.00176	.00049	.00296	.00113	.00174
%RSD	.57885	.85924	.81045	.21891	2.0765	.79686	1.2234

#1	.05741	.23961	.21548	.22351	.14056	.14163	.14127
#2	.05694	.23672	.21796	.22421	.14475	.14323	.14374

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	.01029	.01600	.01410	.00027	.21960	.16391
SDev	.00361	.00372	.00128	.00117	.00030	.00019
%RSD	35.107	23.263	9.0744	432.81	.13426	.11666

#1	.01284	.01336	.01319	.00110	.21981	.16404
#2	.00773	.01863	.01500	-.00056	.21939	.16377

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	16359	--	--	--	--	--	--
SDev	26.72919	--	--	--	--	--	--
%RSD	.1633868	--	--	--	--	--	--
#1	16341	--	--	--	--	--	--
#2	16378	--	--	--	--	--	--

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Method: METTRA Sample Name: DEK7V

Operator: MTW

Run Time: 06/13/00 13:43:43

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	.00155	17.473	H11.501	.07095	.00176	1.8495	.00250
SDev	.00092	.088	.080	.00046	.00001	.0126	.00010
%RSD	59.695	.50370	.69170	.65274	.71487	.68144	3.9780
#1	.00089	17.535	H11.558	.07127	.00177	1.8584	.00243
#2	.00220	17.411	H11.445	.07062	.00175	1.8406	.00257
Errors	LC Pass	LC Pass	LC High	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	.01475	.25804	.10860	92.462	.79078	.41194	.00674
SDev	.00072	.00165	.00053	.523	.00333	.00295	.00060
%RSD	4.8638	.64018	.48700	.56600	.42058	.71642	8.8943
#1	.01425	.25921	.10897	92.832	.79313	.41403	.00632
#2	.01526	.25687	.10822	92.092	.78843	.40985	.00716
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	.05826	.27150	.25200	.25849	.13367	.13192	.13251
SDev	.00086	.00295	.00083	.00043	.00040	.00025	.00030
%RSD	1.4705	1.0865	.32860	.16633	.29581	.19151	.22655
#1	.05886	.26942	.25259	.25819	.13339	.13174	.13229
#2	.05765	.27359	.25141	.25880	.13395	.13210	.13272
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	.00753	.01278	.01103	.00071	.24855	.15838	
SDev	.00042	.00091	.00047	.00152	.00179	.00105	
%RSD	5.5802	7.1497	4.2582	214.62	.72143	.66616	
#1	.00723	.01343	.01137	.00179	.24982	.15913	
#2	.00782	.01214	.01070	-.00037	.24728	.15763	
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	

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	16480	--	--	--	--	--	--
SDev	108.5768	--	--	--	--	--	--
%RSD	.6588488	--	--	--	--	--	--
#1	16403	--	--	--	--	--	--
#2	16557	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-1 0014-131-1 Operator: MTW
 Run Time: 06/13/00 13:47:57
 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	1.0510	24.493	.52992	2.0197	2.0529	51.335	.50314
SDev	.0017	.099	.00146	.0097	.0012	.023	.00070
%RSD	.16447	.40445	.27570	.47995	.05892	.04540	.13853
#1	1.0498	24.423	.53095	2.0129	2.0538	51.318	.50363
#2	1.0522	24.564	.52889	2.0266	2.0521	51.351	.50265
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	2.0643	2.0599	1.9864	25.508	50.140	2.0278	2.0773
SDev	.0014	.0009	.0077	.034	.057	.0024	.0096
%RSD	.06695	.04449	.38570	.13279	.11359	.11597	.46402
#1	2.0634	2.0592	1.9810	25.484	50.099	2.0261	2.0705
#2	2.0653	2.0605	1.9918	25.532	50.180	2.0294	2.0842
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	2.0607	.52220	.51052	.51441	.52639	.52420	.52493
SDev	.0004	.00206	.00019	.00081	.00404	.00031	.00114
%RSD	.01774	.39442	.03780	.15836	.76726	.05979	.21638
#1	2.0610	.52366	.51066	.51499	.52353	.52442	.52412
#2	2.0605	.52074	.51039	.51383	.52924	.52398	.52573
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	.52679	.52797	.52757	1.0633	2.0436	2.0837	
SDev	.00042	.00220	.00133	.0046	.0005	.0000	
%RSD	.07992	.41716	.25189	.43110	.02616	.00158	
#1	.52709	.52641	.52663	1.0601	2.0433	2.0836	
#2	.52649	.52952	.52851	1.0665	2.0440	2.0837	
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	

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	16093	--	--	--	--	--	--
SDev	53.63377	--	--	--	--	--	--
%RSD	.3332713	--	--	--	--	--	--
#1	16055	--	--	--	--	--	--
#2	16131	--	--	--	--	--	--

Method: METTRA Sample Name: CCB1

Operator: MTW

Run Time: 06/13/00 13:52:05.

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	-.00008	.02547	.00208	.00033	.00119	.02948	-.00001
SDev	.00080	.00455	.00035	.00014	.00011	.00301	.00029
%RSD	993.54	17.879	16.912	42.357	9.1979	10.210	5259.6

#1	-.00064	.02869	.00184	.00023	.00126	.02735	-.00021
#2	.00048	.02225	.00233	.00043	.00111	.03161	.00020

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	.00050	.00045	-.00098	.00533	.01035	.00046	.00578
SDev	.00071	.00058	.00061	.00733	.00345	.00010	.00216
%RSD	142.76	127.62	61.563	137.53	33.293	22.255	37.415

#1	-.00000	.00004	-.00141	.00015	.00792	.00039	.00731
#2	.00100	.00086	-.00056	.01052	.01279	.00053	.00425

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	.00108	.00183	.00030	.00081	.00318	.00218	.00252
SDev	.00000	.00109	.00065	.00080	.00066	.00090	.00038
%RSD	.08064	59.564	215.66	98.495	20.875	41.196	15.080

#1	.00108	.00106	-.00016	.00025	.00365	.00155	.00225
#2	.00108	.00260	.00077	.00137	.00271	.00282	.00278

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	-.00050	-.00141	-.00111	.00289	.00052	.00227
SDev	.00015	.00066	.00049	.00028	.00019	.00060
%RSD	29.266	46.919	44.270	9.8714	36.123	26.205

#1	-.00040	-.00094	-.00076	.00309	.00038	.00185
#2	-.00060	-.00188	-.00145	.00269	.00065	.00269

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

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	16450	--	--	--	--	--	--
SDev	4.136299	--	--	--	--	--	--
%RSD	.0251452	--	--	--	--	--	--
#1	16453	--	--	--	--	--	--
#2	16447	--	--	--	--	--	--

Method: METTRA Sample Name: DEK7W

Operator: MTW

Run Time: 06/13/00 13:56:15

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	.00315	37.710	H22.529	.14853	.00335	4.1145	.00646
SDev	.00028	.268	.216	.00115	.00001	.0365	.00009
%RSD	9.0480	.70949	.95938	.77304	.25263	.88732	1.4597
#1	.00295	37.899	H22.682	.14934	.00334	4.1403	.00639
#2	.00336	37.521	H22.377	.14771	.00336	4.0887	.00653
Errors	LC Pass	LC Pass	LC High	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	.02946	.55656	.23337	196.47	1.7551	.86369	.01715
SDev	.00005	.00488	.00196	1.55	.0155	.00736	.00049
%RSD	.15842	.87708	.84104	.78861	.88103	.85219	2.8288
#1	.02949	.56001	.23475	197.57	1.7660	.86890	.01749
#2	.02943	.55311	.23198	195.38	1.7442	.85849	.01681
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	.13753	.54374	.49894	.51386	.29913	.29362	.29545
SDev	.00257	.00222	.00416	.00352	.00160	.00193	.00182
%RSD	1.8658	.40760	.83467	.68418	.53354	.65678	.61523
#1	.13934	.54531	.50188	.51634	.30026	.29498	.29674
#2	.13571	.54218	.49599	.51137	.29800	.29226	.29417
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	.02002	.03025	.02684	.00130	.53417	.32142	
SDev	.00028	.00445	.00306	.00227	.00792	.00345	
%RSD	1.4208	14.709	11.410	174.93	1.4826	1.0721	
#1	.01981	.02711	.02468	.00290	.53977	.32385	
#2	.02022	.03340	.02901	-.00031	.52857	.31898	
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	

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	16492	--	--	--	--	--	--
SDev	138.2394	--	--	--	--	--	--
%RSD	.8382004	--	--	--	--	--	--
#1	16395	--	--	--	--	--	--
#2	16590	--	--	--	--	--	--

Method: METTRA Sample Name: DEEHC

Operator: MTW

Run Time: 06/13/00 14:00:29

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	.00118	160.34	.09140	2.2441	.00772	268.91	-.00207
SDev	.00021	2.80	.00275	.0389	.00010	6.02	.00008
%RSD	17.957	1.7468	3.0118	1.7355	1.2760	2.2401	3.7344
#1	.00133	162.32	.09335	2.2717	.00779	273.17	-.00213
#2	.00103	158.36	.08945	2.2166	.00765	264.65	-.00202
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	.06599	.20687	.20799	165.34	23.390	5.0801	.00696
SDev	.00122	.00453	.00356	3.45	.504	.1065	.00164
%RSD	1.8548	2.1887	1.7132	2.0862	2.1561	2.0954	23.543
#1	.06686	.21007	.21051	167.77	23.747	5.1554	.00812
#2	.06513	.20367	.20547	162.90	23.034	5.0048	.00580
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	.16230	.30482	.26960	.28133	.01560	.00819	.01066
SDev	.00416	.01059	.00196	.00483	.00080	.00131	.00114
%RSD	2.5657	3.4730	.72590	1.7170	5.1364	16.050	10.730
#1	.16525	.31230	.27099	.28474	.01617	.00912	.01147
#2	.15936	.29733	.26822	.27791	.01503	.00726	.00985
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	.00128	-.00090	-.00017	.01240	.35556	.59073	
SDev	.00421	.00056	.00103	.00216	.00977	.01307	
%RSD	328.05	62.028	607.87	17.421	2.7474	2.2132	
#1	.00426	-.00129	.00056	.01392	.36247	.59997	
#2	-.00170	-.00050	-.00090	.01087	.34866	.58148	
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	

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	17578	--	--	--	--	--	--
SDev	211.6721	--	--	--	--	--	--
%RSD	1.204155	--	--	--	--	--	--
#1	17429	--	--	--	--	--	--
#2	17728	--	--	--	--	--	--

6601185

Analysis Report

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Method: METTRA Sample Name: DEEHP

Operator: MTW

Run Time: 06/13/00 14:04:38

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	.00055	96.312	.08685	1.4399	.00685	80.753	-.00234
SDev	.00011	.148	.00141	.0028	.00007	.183	.00048
%RSD	19.358	.15366	1.6258	.19598	1.0506	.22671	20.312

#1	.00063	96.207	.08586	1.4379	.00690	80.882	-.00268
#2	.00048	96.417	.08785	1.4419	.00679	80.623	-.00201

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	.07278	.12323	.15826	164.13	20.791	5.3631	.00698
SDev	.00025	.00038	.00001	.07	.025	.0001	.00040
%RSD	.33931	.30766	.00637	.04334	.12112	.00219	5.7404

#1	.07261	.12296	.15825	164.08	20.809	5.3630	.00727
#2	.07296	.12349	.15827	164.18	20.774	5.3632	.00670

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	.16146	.16945	.14505	.15317	.00673	.00628	.00643
SDev	.00085	.00103	.00034	.00011	.00034	.00092	.00050
%RSD	.52538	.60622	.23638	.07402	5.0741	14.646	7.7765

#1	.16206	.17018	.14481	.15325	.00649	.00694	.00679
#2	.16086	.16873	.14529	.15309	.00697	.00563	.00608

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	-.00075	.00221	.00122	.00292	.24619	.53981
SDev	.00069	.00120	.00057	.00062	.00007	.00314
%RSD	92.465	54.357	46.607	21.085	.02910	.58162

#1	-.00124	.00306	.00163	.00336	.24614	.54203
#2	-.00026	.00136	.00082	.00249	.24624	.53759

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

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	17782	--	--	--	--	--	--
SDev	75.23644	--	--	--	--	--	--
%RSD	.4230938	--	--	--	--	--	--
#1	17729	--	--	--	--	--	--
#2	17836	--	--	--	--	--	--

Analysis Report

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page 1

Method: METTRA Sample Name: CCV3-2

Operator: MTW

Run Time: 06/13/00 14:08:48

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	1.0286	23.740	.51061	1.9611	1.9998	50.004	.48935
SDev	.0019	.080	.00259	.0015	.0040	.035	.00098
%RSD	.18001	.33694	.50739	.07612	.19886	.06971	.20122
#1	1.0273	23.683	.50878	1.9601	1.9970	49.979	.48865
#2	1.0299	23.796	.51244	1.9622	2.0026	50.028	.49005
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	2.0104	2.0091	1.9376	24.782	48.938	1.9708	2.0226
SDev	.0048	.0038	.0027	.049	.069	.0035	.0187
%RSD	.23660	.18769	.14006	.19970	.14008	.17623	.92319
#1	2.0070	2.0064	1.9357	24.747	48.889	1.9683	2.0094
#2	2.0138	2.0117	1.9395	24.817	48.986	1.9732	2.0358
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	2.0046	.51002	.50271	.50514	.51726	.51210	.51382
SDev	.0011	.00242	.00300	.00280	.00125	.00301	.00242
%RSD	.05261	.47366	.59609	.55492	.24246	.58703	.47152
#1	2.0039	.50831	.50059	.50316	.51637	.50997	.51210
#2	2.0054	.51173	.50482	.50712	.51814	.51422	.51553
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	.51925	.51844	.51871	1.0349	1.9911	2.0301	
SDev	.00524	.00494	.00504	.0021	.0018	.0028	
%RSD	1.0085	.95190	.97077	.20133	.09258	.13919	
#1	.51554	.51495	.51515	1.0364	1.9924	2.0281	
#2	.52295	.52193	.52227	1.0335	1.9898	2.0321	
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	

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	65.15948	--	--	--	--	--	--
%RSD	.3966023	--	--	--	--	--	--
#1	16476	--	--	--	--	--	--
#2	16383	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2

Operator: MTW

Run Time: 06/13/00 14:12:57

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	.00024	.03804	.00080	.00041	.00135	.02412	.00001
SDev	.00015	.01609	.00133	.00010	.00036	.00102	.00003
%RSD	64.761	42.288	165.85	23.568	26.800	4.2443	384.13
#1	.00013	.02666	-.00014	.00034	.00161	.02340	-.00001
#2	.00035	.04941	.00175	.00047	.00109	.02485	.00003
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	.00050	.00058	-.00142	.00327	.01399	.00071	.00678
SDev	.00051	.00028	.00050	.00302	.00285	.00011	.00194
%RSD	101.89	47.946	35.135	92.306	20.358	15.839	28.595
#1	.00014	.00038	-.00177	.00541	.01197	.00063	.00815
#2	.00086	.00077	-.00106	.00114	.01600	.00079	.00541
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	.00013	.00164	.00069	.00101	.00244	.00176	.00199
SDev	.00043	.00210	.00022	.00085	.00037	.00106	.00059
%RSD	336.64	127.76	31.836	83.994	15.211	60.501	29.485
#1	-.00018	.00313	.00084	.00161	.00218	.00251	.00240
#2	.00043	.00016	.00053	.00041	.00271	.00101	.00157
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	.00036	-.00319	-.00200	.00248	.00325	.00106	
SDev	.00194	.00069	.00018	.00331	.00007	.00003	
%RSD	531.79	21.774	9.1228	133.17	2.2384	2.6959	
#1	.00174	-.00368	-.00188	.00482	.00320	.00104	
#2	-.00101	-.00270	-.00213	.00014	.00331	.00108	
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	16366	--	--	--	--	--	--
SDev	331.6331	--	--	--	--	--	--
%RSD	2.026304	--	--	--	--	--	--
#1	16601	--	--	--	--	--	--
#2	16132	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DEK7R/2 AS Operator: MTW
 Run Time: 06/13/00 14:19:35
 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	.00088	9.1175	5.7579	.03591	.00160	.98054	.00121
SDev	.00001	.1015	.0556	.00034	.00014	.01398	.00008
%RSD	1.6132	1.1129	.96490	.95906	8.9871	1.4262	6.3169
#1	.00087	9.0457	5.7186	.03566	.00170	.97065	.00115
#2	.00089	9.1892	5.7972	.03615	.00150	.99043	.00126
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	.00728	.12805	.05192	45.786	.45111	.21769	.00417
SDev	.00042	.00137	.00071	.453	.00460	.00196	.00014
%RSD	5.7325	1.0716	1.3736	.98930	1.0200	.90175	3.4109
#1	.00758	.12708	.05142	45.466	.44785	.21631	.00427
#2	.00698	.12902	.05243	46.106	.45436	.21908	.00407
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	.02796	.12001	.10808	.11205	.08271	.08416	.08368
SDev	.00038	.00108	.00013	.00044	.00194	.00039	.00039
%RSD	1.3470	.89612	.12070	.39725	2.3428	.46182	.46133
#1	.02769	.11924	.10798	.11173	.08134	.08443	.08340
#2	.02822	.12077	.10817	.11236	.08408	.08388	.08395
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	.00807	.00814	.00812	-.00129	.11951	.08399	
SDev	.00153	.00169	.00062	.00182	.00129	.00074	
%RSD	18.916	20.797	7.6523	141.86	1.0788	.88254	
#1	.00915	.00694	.00768	.00000	.11859	.08346	
#2	.00699	.00934	.00855	-.00257	.12042	.08451	
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	

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	16555	--	--	--	--	--	--
SDev	151.1800	--	--	--	--	--	--
%RSD	.9132038	--	--	--	--	--	--
#1	16662	--	--	--	--	--	--
#2	16448	--	--	--	--	--	--

6601193

Analysis Report

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page 1

Method: METTRA Sample Name: DEK7RP10 AS Operator: MTW
 Run Time: 06/13/00 14:23:44
 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
Avg	.00033	1.8332	1.1851	.00697	.00097	.20854	.00005
SDev	.00015	.0129	.0081	.00002	.00006	.00794	.00016
%RSD	45.897	.70430	.68651	.31861	6.2480	3.8081	323.02
#1	.00044	1.8423	1.1909	.00698	.00092	.20292	.00016
#2	.00023	1.8241	1.1793	.00695	.00101	.21415	-.00006
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	.00186	.02637	.00859	9.2294	.09336	.04399	.00177
SDev	.00026	.00033	.00002	.0261	.00115	.00007	.00028
%RSD	14.234	1.2662	.25483	.28324	1.2311	.16429	15.709
#1	.00205	.02661	.00860	9.2479	.09417	.04404	.00196
#2	.00168	.02614	.00857	9.2109	.09255	.04394	.00157
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	.00599	.02858	.02042	.02314	.01618	.01868	.01785
SDev	.00009	.00076	.00084	.00082	.00029	.00097	.00055
%RSD	1.4203	2.6575	4.1354	3.5275	1.7897	5.2147	3.1003
#1	.00605	.02911	.02102	.02371	.01638	.01799	.01746
#2	.00593	.02804	.01982	.02256	.01597	.01937	.01824
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	-.00005	-.00092	-.00063	-.00141	.02500	.01812	
SDev	.00029	.00016	.00020	.00225	.00010	.00050	
%RSD	608.25	17.161	31.818	160.13	.38674	2.7581	
#1	.00016	-.00081	-.00049	.00019	.02506	.01777	
#2	-.00025	-.00104	-.00077	-.00300	.02493	.01847	
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	

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	16348	--	--	--	--	--	--
SDev	64.55871	--	--	--	--	--	--
%RSD	.3949149	--	--	--	--	--	--
#1	16302	--	--	--	--	--	--
#2	16393	--	--	--	--	--	--

Method: METTRA Sample Name: DEK7RS/2 AS Operator: MTW
 Run Time: 06/13/00 14:27:53
 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	.02600	9.0206	7.3761	.99589	.02652	1.0143	.02610
SDev	.00007	.0079	.0012	.00260	.00008	.0001	.00024
%RSD	.27532	.08718	.01657	.26117	.29689	.00804	.92693
#1	.02605	9.0150	7.3752	.99405	.02657	1.0143	.02592
#2	.02595	9.0262	7.3769	.99773	.02646	1.0144	.02627
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	.26274	.24459	.17873	44.847	.39624	.45610	.00438
SDev	.00003	.00007	.00049	.049	.00048	.00040	.00062
%RSD	.01205	.02965	.27542	.10864	.12181	.08666	14.070
#1	.26272	.24454	.17838	44.813	.39658	.45582	.00394
#2	.26276	.24464	.17907	44.882	.39589	.45638	.00481
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	.31239	.36930	.35516	.35987	.08976	.08965	.08969
SDev	.00072	.00041	.00306	.00191	.00252	.00019	.00097
%RSD	.23124	.11121	.86278	.52995	2.8028	.21359	1.0765
#1	.31188	.36901	.35733	.36122	.08798	.08952	.08900
#2	.31290	.36959	.35300	.35852	.09153	.08979	.09037
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	1.0050	1.0223	1.0166	1.0132	.37875	.34164	
SDev	.0027	.0130	.0078	.0007	.00255	.00044	
%RSD	.26445	1.2689	.76409	.06972	.67302	.13000	
#1	1.0031	1.0315	1.0220	1.0137	.37695	.34132	
#2	1.0069	1.0132	1.0111	1.0127	.38055	.34195	
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	

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	16244	--	--	--	--	--	--
SDev	46.81061	--	--	--	--	--	--
%RSD	.2881699	--	--	--	--	--	--
#1	16277	--	--	--	--	--	--
#2	16211	--	--	--	--	--	--

6601197

Analysis Report

06/13/00 02:36:07 PM

page 1

Method: METTRA Sample Name: DEK7RD/2 AS Operator: MTW
 Run Time: 06/13/00 14:32:02
 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	.02560	8.8916	5.2644	.99122	.02643	1.1136	.02610
SDev	.00010	.0449	.0394	.00363	.00019	.0079	.00025
%RSD	.40265	.50505	.74838	.36566	.71070	.71338	.94604
#1	.02552	8.9233	5.2923	.99379	.02657	1.1192	.02627
#2	.02567	8.8598	5.2366	.98866	.02630	1.1080	.02592
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	.26212	.19324	.16719	36.408	.42482	.41954	.00293
SDev	.00227	.00126	.00075	.207	.00096	.00256	.00047
%RSD	.86567	.65266	.44657	.56896	.22565	.61114	16.016
#1	.26373	.19413	.16772	36.555	.42550	.42135	.00326
#2	.26052	.19234	.16666	36.262	.42414	.41773	.00260
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	.27988	.35806	.35214	.35411	.06082	.06140	.06121
SDev	.00277	.00092	.00475	.00348	.00021	.00151	.00108
%RSD	.99011	.25753	1.3491	.98158	.35319	2.4537	1.7587
#1	.28184	.35871	.35550	.35657	.06066	.06034	.06045
#2	.27792	.35740	.34878	.35165	.06097	.06247	.06197
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	1.0024	1.0223	1.0157	1.0146	.34942	.33767	
SDev	.0063	.0145	.0118	.0093	.00247	.00255	
%RSD	.62688	1.4217	1.1605	.91861	.70692	.75451	
#1	1.0068	1.0326	1.0240	1.0212	.35117	.33947	
#2	.99794	1.0120	1.0073	1.0080	.34768	.33587	
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	

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	16364	--	--	--	--	--	--
SDev	26.97640	--	--	--	--	--	--
%RSD	.1648483	--	--	--	--	--	--
#1	16345	--	--	--	--	--	--
#2	16383	--	--	--	--	--	--

Method: METTRA Sample Name: DEK7T/2 AS Operator: MTW
 Run Time: 06/13/00 14:36:11
 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	.00091	7.8485	5.3267	.03274	.00130	1.0039	.00094
SDev	.00004	.2978	.1668	.00110	.00018	.0317	.00027
%RSD	4.4525	3.7949	3.1305	3.3536	13.734	3.1555	28.815

#1	.00088	8.0591	5.4446	.03352	.00117	1.0263	.00075
#2	.00093	7.6379	5.2088	.03196	.00143	.98150	.00113

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	.00636	.12714	.04753	43.237	.39458	.18924	.00308
SDev	.00066	.00344	.00124	1.318	.01145	.00609	.00045
%RSD	10.391	2.7056	2.6042	3.0475	2.9015	3.2158	14.609

#1	.00589	.12958	.04841	44.169	.40268	.19355	.00276
#2	.00683	.12471	.04666	42.305	.38649	.18494	.00339

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	.02971	.12931	.10786	.11500	.07184	.07846	.07626
SDev	.00202	.01137	.00161	.00271	.00415	.00621	.00276
%RSD	6.8057	8.7896	1.4887	2.3598	5.7699	7.9093	3.6181

#1	.03114	.13734	.10672	.11692	.06891	.08285	.07821
#2	.02828	.12127	.10899	.11308	.07477	.07407	.07431

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	.00786	.00543	.00624	-.00200	.11207	.08452
SDev	.00535	.00643	.00251	.00193	.00437	.00258
%RSD	68.106	118.48	40.182	96.432	3.9006	3.0524

#1	.01165	.00088	.00447	-.00336	.11516	.08635
#2	.00408	.00998	.00801	-.00064	.10898	.08270

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

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	16009	--	--	--	--	--	--
SDev	302.5360	--	--	--	--	--	--
%RSD	1.889796	--	--	--	--	--	--
#1	15795	--	--	--	--	--	--
#2	16223	--	--	--	--	--	--

Method: METTRA Sample Name: DEK7V/2 AS Operator: MTW
 Run Time: 06/13/00 14:40:19
 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	.00047	8.4854	5.7875	.03468	.00179	.90513	.00144
SDev	.00024	.0745	.0289	.00021	.00023	.00484	.00003
%RSD	51.799	.87851	.49889	.60468	12.834	.53486	2.2955
#1	.00030	8.4327	5.7671	.03453	.00195	.90170	.00142
#2	.00065	8.5381	5.8079	.03483	.00163	.90855	.00146
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	.00705	.12720	.05183	45.337	.38762	.20239	.00326
SDev	.00002	.00122	.00052	.277	.00679	.00115	.00050
%RSD	.32568	.95793	1.0077	.61083	1.7514	.57076	15.253
#1	.00704	.12634	.05146	45.141	.38282	.20157	.00291
#2	.00707	.12806	.05220	45.533	.39242	.20321	.00362
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	.02702	.13577	.12448	.12824	.06592	.06410	.06471
SDev	.00007	.00029	.00018	.00022	.00037	.00169	.00100
%RSD	.26403	.21679	.14450	.16999	.55464	2.6314	1.5506
#1	.02707	.13556	.12435	.12809	.06617	.06291	.06400
#2	.02696	.13598	.12461	.12839	.06566	.06530	.06542
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	.00476	.00619	.00571	.00129	.12241	.07803	
SDev	.00079	.00093	.00036	.00013	.00023	.00072	
%RSD	16.614	15.087	6.2868	9.9622	.18742	.92297	
#1	.00420	.00685	.00597	.00138	.12225	.07752	
#2	.00532	.00553	.00546	.00120	.12258	.07854	
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	

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	16498	--	--	--	--	--	--
SDev	133.1833	--	--	--	--	--	--
%RSD	.8072631	--	--	--	--	--	--
#1	16592	--	--	--	--	--	--
#2	16404	--	--	--	--	--	--

Method: METTRA Sample Name: DEK7W/5 AS Operator: MTW
 Run Time: 06/13/00 14:44:28
 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	.00046	7.5108	4.9323	.03007	.00137	.86119	.00155
SDev	.00022	.3116	.1718	.00110	.00044	.03532	.00007
%RSD	46.944	4.1482	3.4835	3.6567	32.467	4.1015	4.6090
#1	.00061	7.2905	4.8108	.02929	.00168	.83621	.00150
#2	.00031	7.7311	5.0538	.03084	.00105	.88616	.00160
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	.00595	.11549	.04479	40.381	.35756	.17804	.00347
SDev	.00011	.00401	.00252	1.458	.01107	.00636	.00008
%RSD	1.8199	3.4688	5.6237	3.6113	3.0960	3.5701	2.2832
#1	.00587	.11265	.04301	39.350	.34973	.17354	.00341
#2	.00602	.11832	.04657	41.412	.36539	.18253	.00352
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	.02826	.11300	.10293	.10628	.06252	.06230	.06237
SDev	.00046	.00206	.00437	.00360	.00382	.00178	.00246
%RSD	1.6099	1.8211	4.2487	3.3892	6.1125	2.8488	3.9381
#1	.02794	.11154	.09984	.10373	.05982	.06105	.06064
#2	.02858	.11445	.10602	.10883	.06522	.06356	.06411
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	.00380	.00639	.00553	-.00212	.10973	.06789	
SDev	.00107	.00091	.00025	.00144	.00342	.00314	
%RSD	28.184	14.290	4.5662	67.783	3.1132	4.6181	
#1	.00456	.00575	.00535	-.00111	.10732	.06567	
#2	.00304	.00704	.00571	-.00314	.11215	.07011	
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	

Analysis Report

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6601204

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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	16145	--	--	--	--	--	--
SDev	457.3565	--	--	--	--	--	--
%RSD	2.832859	--	--	--	--	--	--
#1	16468	--	--	--	--	--	--
#2	15821	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3

Operator: MTW

Run Time: 06/13/00 14:48:37

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	1.0419	24.044	.51810	1.9822	2.0249	50.587	.49639
SDev	.0004	.021	.00403	.0037	.0022	.063	.00038
%RSD	.03988	.08640	.77745	.18452	.10679	.12523	.07746
#1	1.0422	24.030	.52095	1.9796	2.0265	50.632	.49666
#2	1.0416	24.059	.51525	1.9848	2.0234	50.542	.49612
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	2.0371	2.0312	1.9595	25.006	49.696	1.9994	2.0558
SDev	.0021	.0002	.0004	.002	.049	.0013	.0076
%RSD	.10362	.00977	.02242	.00703	.09915	.06461	.37071
#1	2.0386	2.0313	1.9598	25.008	49.731	2.0004	2.0504
#2	2.0356	2.0310	1.9592	25.005	49.661	1.9985	2.0612
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	2.0268	.51642	.50905	.51150	.52485	.51946	.52125
SDev	.0092	.00214	.00294	.00268	.00144	.00110	.00025
%RSD	.45280	.41452	.57813	.52312	.27483	.21169	.04856
#1	2.0333	.51793	.51113	.51340	.52383	.52024	.52143
#2	2.0203	.51490	.50697	.50961	.52587	.51868	.52108
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	.52412	.52638	.52563	1.0547	2.0123	2.0600	
SDev	.00049	.00167	.00128	.0042	.0044	.0062	
%RSD	.09343	.31791	.24337	.39631	.21882	.30100	
#1	.52447	.52756	.52653	1.0576	2.0154	2.0644	
#2	.52378	.52520	.52472	1.0517	2.0092	2.0556	
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	16057	--	--	--	--	--	--
SDev	8.202163	--	--	--	--	--	--
%RSD	.0510801	--	--	--	--	--	--
#1	16052	--	--	--	--	--	--
#2	16063	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3

Operator: MTW

Run Time: 06/13/00 14:52:46

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	.04977	.00131	.00036	.00140	.01587	.00006
SDev	.00057	.00394	.00096	.00009	.00012	.00209	.00015
%RSD	89.148	7.9149	73.087	24.256	8.7351	13.150	240.69
#1	.00105	.04699	.00198	.00029	.00148	.01439	.00016
#2	.00024	.05256	.00063	.00042	.00131	.01734	-.00004
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	.00103	.00108	-.00145	.01409	.01766	.00060	.00645
SDev	.00034	.00014	.00054	.00512	.00072	.00005	.00214
%RSD	32.880	12.915	37.653	36.305	4.0503	8.6807	33.156
#1	.00127	.00118	-.00183	.01771	.01816	.00057	.00796
#2	.00079	.00098	-.00106	.01048	.01715	.00064	.00494
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	.00080	.00358	-.00023	.00104	-.00061	.00273	.00162
SDev	.00125	.00216	.00068	.00027	.00050	.00318	.00196
%RSD	155.58	60.255	299.37	25.678	81.134	116.55	121.00
#1	.00168	.00511	-.00070	.00123	-.00096	.00498	.00300
#2	-.00008	.00205	.00025	.00085	-.00026	.00048	.00023
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	.00108	-.00241	-.00125	.00158	.00356	.00114	
SDev	.00091	.00044	.00001	.00226	.00034	.00007	
%RSD	84.215	18.419	.55042	142.80	9.7147	5.9796	
#1	.00044	-.00209	-.00125	-.00002	.00380	.00109	
#2	.00172	-.00272	-.00124	.00318	.00331	.00118	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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	16209	--	--	--	--	--	--
SDev	116.6726	--	--	--	--	--	--
%RSD	.7198214	--	--	--	--	--	--
#1	16291	--	--	--	--	--	--
#2	16126	--	--	--	--	--	--

Metals Preparation

-og



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412-820-8380

Committed to Your Success

Method: 3050B	Matrix: 5011	Start Time: 0900	SDG: _____	Balance# C94817	Reagents: 50ml 1% HNO ₃ , 50ml 1% HNO ₃ , 10ml 30% H ₂ O ₂ , 10ml conc. HCl	COH-122-16					
Analyst: <i>James Lane</i>	Date: 6-13-00	Lot Number: C0F080328	Lab Lot No. (book, page, line): 0014-0891	MS 58-6-13-00	5240N49407 Mallinckrodt	5240N49407 Mallinckrodt					
Sample ID	Init Wt/Vol g/mL	Final Vol mL	Comments	Color Pre Post	Clarity Pre Post	Texture Pre Post	Artifacts	Artifact Codes			
DEEH C	1.0g	100ml	3.6-13-00					S-Stones			
DEK7R			1 ml MS-BIREV					O=Organic (plant mat'l)			
DEK7R5			1 ml MS-BIREV					W=free H ₂ O			
DEK7R D			5.6-13-00					G=Glass			
DEK7T			1 ml MS-BIREV					M=Metal Fragments			
DEK7V			1 ml MS-BIREV					R=Rubber/Plastic			
DEK7W			1 ml MS-BIREV					C=Cloth			
DEK6JC			1 ml MS-BIREV					P=Paper			
DEK6JC			1 ml MS-BIREV					I=Insects			
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
13.											
14.											
Digestate(s)	Date	Time	Analyst	Location	Date	Time	Analyst	Location	Hot plate /Block Temp	Correction Factor	Color
6-13-00	1215		<i>James Lane</i>	<i>Metals Lab</i>	6-13-00	1230	<i>James Lane</i>	<i>Metals Lab</i>	95°C	-0.3%	R=Red BL=Blue BR=Brown BLK=Black Y=Yellow O=Orange
6-13-00	1235		<i>James Lane</i>	<i>Metals Lab</i>	6-13-00	1500	<i>James Lane</i>	<i>Metals Lab</i>	95°C	-0.3%	V=Violet P=Pink W=White GY=Gray GN=Green C=Colorless

REQUESTED BY: KRANCES

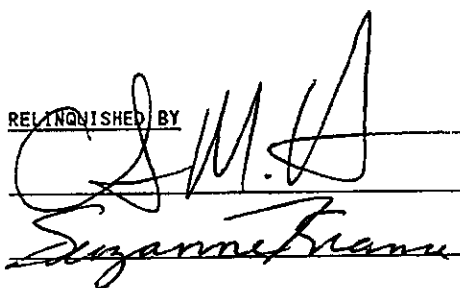
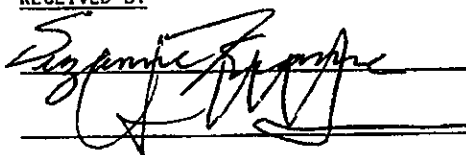
METHOD: QM Inductively Coupled Plasma (6010B Trace)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
10C CLP1	DEEHC	— — —	239766	399411	A-46-QM	COF080328	001		SOLID	0	3 1
10C CLP1	DEEHP	— — —	239767	399411	A-46-QM	COF080328	002		SOLID	0	3 1
11D	DEK7R	— — —	239768	405650	A-46-QM	COF130101	001		SOLID	0	1 1
11D	DEK7T	— — —	239769	405650	A-46-QM	COF130101	002		SOLID	0	1 1
11D	DEK7V	— — —	239770	405650	A-46-QM	COF130101	003		SOLID	0	1 1
11D	DEK7W	— — —	239771	405650	A-46-QM	COF130101	004		SOLID	0	1 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME


Suzanne Krances6-13-00 0835
5:45 PM
6-13-00 1000

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

6601211

**TCLP
METALS DATA**

**TCLP
METALS
RESULTS**

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
DF/S1/0159/SDC/008	DEEHCT
DF/S1/0159/SDC/008D	DEEHCDT
DF/S1/0159/SDC/008S	DEEHCST
DF/S1/0159/SDC/009	DEEHPT

Comments: UXB, DUNN FIELD TCLP'S
C0F080328
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>6-15-00</u>

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEEHCT Client ID: DF/S1/0159/SDC/008
 Matrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204
 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	0.12	B	1	ICP	6/14/00	18:44
Barium	493.41	0.00041	10.0	1.5	B	1	ICP	6/14/00	18:44
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/14/00	18:44
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	6/14/00	18:44
Lead	220.35	0.025	0.50	0.026	B	1	ICP	6/14/00	18:44
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/14/00	18:44
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/14/00	18:44

Comments: Lot#: C0F080328 Sample#: 1

Version 3.63.4

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

Form 1 Equivalent

6601215

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEEHPT **Client ID:** DF/S1/0159/SDC/009
Matrix: Water **Units:** mg/L **Prep Date:** 6/13/00 **Prep Batch:** 0165204
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	0.14	B	1	ICP	6/14/00	18:57
Barium	493.41	0.00041	10.0	1.3	B	1	ICP	6/14/00	18:57
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	6/14/00	18:57
Chromium	267.72	0.0038	0.50	0.034	B	1	ICP	6/14/00	18:57
Lead	220.35	0.025	0.50	0.025	U	1	ICP	6/14/00	18:57
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	6/14/00	18:57
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	6/14/00	18:57

Comments: Lot# C0F080328 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: DEEHCT Client ID: DF/S1/0159/SDC/008
Matrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095
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	6/14/00	10:53

Comments: _____

6601217

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DEEHPT Client ID: DF/S1/0159/SDC/009
Matrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095
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	0.00029		1	CVAA	6/14/00	10:59

Comments: _____

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 Standard

Instrument: CVAAUnits: ug/LChart Number: 0614HGA.PRNAcceptable Range: 90% - 110%Standard Source: UltraStandard ID: 0014-134-10

			ICV5-1 6/14/00 9:47 AM							
Element	WL/ Mass	True Conc	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.52	100.8						

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPUnits: ug/LChart Number: J00614D.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0014-119-2

Element	WL/ Mass	True Conc	ICV2-1 6/14/00 6:04 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000.0	1017.89	101.8								
Barium	493.409	1000.0	987.84	98.8								
Cadmium	228.802	1000.0	1009.55	101.0								
Chromium	267.716	1000.0	1006.87	100.7								
Lead	220.353	1000.0	1036.77	103.7								
Selenium	196.026	1000.0	1026.82	102.7								
Silver	328.068	500.0	505.78	101.2								

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAAUnits: ug/LChart Number: 0614HGA.PRNAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-134-12

Element	WL/ Mass	True Conc	CCV5-1 6/14/00 9:53 AM		CCV5-2 6/14/00 10:13 AM		CCV5-3 6/14/00 10:39 AM		CCV5-4 6/14/00 11:05 AM			
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.04	100.8	5.03	100.6	4.98	99.6	4.90	98.0		

6601221

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J00614D ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0014-129-12

Element	WL/ Mass	True Conc	CCV2-1 6/14/00 6:38 PM		CCV2-2 6/14/00 7:00 PM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	5000.0	5088.74	101.8	5018.66	100.4				
Barium	493.409	5000.0	4883.52	97.7	4739.85	94.8				
Cadmium	228.802	5000.0	4999.53	100.0	5036.83	100.7				
Chromium	267.716	5000.0	4928.15	98.6	4943.68	98.9				
Lead	220.353	5000.0	4998.75	100.0	4995.83	99.9				
Selenium	196.026	5000.0	5149.02	103.0	5116.28	102.3				
Silver	328.068	1000.0	996.74	99.7	993.73	99.4				

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0614HGA.PRN

Standard Source: _____

Standard ID: _____

			ICB1 6/14/00 9:49 AM				
Element	WL/ Mass	Report Limit	Found O	Found O	Found O	Found O	Found O
Mercury	253.7	0.2	0 0 U				

6601223

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00614D.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 6/14/00 6:07 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	2.8	U										
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										

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0614HGA.PRN

Standard Source: _____

Standard ID: _____

			CCB1 6/14/00 9:55 AM	CCB2 6/14/00 10:14 AM	CCB3 6/14/00 10:41 AM	CCB4 6/14/00 11:07 AM	
Element	WL/ Mass	Report Limit	Found O	Found O	Found O	Found O	Found O
Mercury	253.7	0.2	0.0 U	-0.1 B	0.2 B	0.0 U	

6601225

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00614D.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 6/14/00 6:41 PM		CCB2 6/14/00 7:03 PM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q	Found	Q								
Arsenic	193.696	500	30.3	U	30.3	U								
Barium	493.409	10000	0.4	U	0.4	U								
Cadmium	228.802	100	2.8	U	2.8	U								
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	3.1	U								

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results
Lab Sample ID: DEJ9GBT
Matrix: Water **Units:** mg/L **Prep Date:** 6/13/00 **Prep Batch:** 0165204
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	0.10	B	1	ICP	6/14/00	18:22
Barium	493.409	0.00041	10.0	0.00077	B	1	ICP	6/14/00	18:22
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	6/14/00	18:22
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	6/14/00	18:22
Lead	220.353	0.025	0.50	0.025	U	1	ICP	6/14/00	18:22
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	6/14/00	18:22
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	6/14/00	18:22

Comments _____

6601227

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DEKMLBTMatrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204Weight: 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	0.030	U	1	ICP	6/14/00	18:18
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	6/14/00	18:18
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	6/14/00	18:18
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	6/14/00	18:18
Lead	220.353	0.025	0.50	0.025	U	1	ICP	6/14/00	18:18
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	6/14/00	18:18
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	6/14/00	18:18

Comments: _____

Version 3.63 4

U Result is less than the MDL

Form 3 Equivalent

B Result is between MDL and RL

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank ResultsLab Sample ID: DEJ9GBTMatrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095Weight: 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	0.000090	B	1	CVAA	6/14/00	10:21

Comments: _____

6601229

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results**Lab Sample ID:** DELTXBT**Matrix:** Water **Units:** mg/L **Prep Date:** 6/14/00 **Prep Batch:** 0166095**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	-0.000098	B	1	CVAA	6/14/00	10:16

Comments: _____

Version 3.63.4

U Result is less than the MDL
B Result is between MDL and RL*Form 3 Equivalent*

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPUnits: ug/LChart Number: J00614D.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0014-129-11

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 6/14/00 6:10 PM	Found	Found	Found	Found
				Found				
Arsenic	193.696	500		-4				
Barium	493.409	10000		2				
Cadmium	228.802	100		-4				
Chromium	267.716	500		-2				
Lead	220.353	500		92				
Selenium	196.026	250		42				
Silver	328.068	500		0				

6601231

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPUnits: ug/LChart Number: J00614D.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-104-1

Element	WL/ Mass	True Conc	ICSAB 6/14/00 6 13 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000	864.7	86.5								
Barium	493.409	500	454.9	91.0								
Cadmium	228.802	1000	956.0	95.6								
Chromium	267.716	500	441.8	88.4								
Lead	220.353	1000	1007.0	100.7								
Selenium	196.026	1000	990.3	99.0								
Silver	328.068	1000	953.8	95.4								

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DEEHCT
 Original Sample ID: DEEHCT Client ID: DF/S1/0159/SDC/008S
 Matrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204
 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	0.12	B	5.0	.	5	98.3	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Barium	493.4	1.5	B	44.9		50	86.9	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Cadmium	228.8	0.0028	U	0.97		1	96.6	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Chromium	267.7	0.0038	U	4.5		5	89.5	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Lead	220.4	0.026	B	4.6		5	90.6	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Selenium	196.0	0.067	U	1.1		1	106.6	1	1	ICP	6/14/00	18:44	6/14/00	18:50
Silver	328.1	0.0031	U	0.94		1	93.6	1	1	ICP	6/14/00	18:44	6/14/00	18:50

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

6601233

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DEEHCDT

Original Sample ID: DEEHCT Client ID: DF/S1/0159/SDC/008D

Matrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204

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	0.12	B	5.2		5	101.8	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Barium	493.4	1.5	B	46.1		50	89.3	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Cadmium	228.8	0.0028	U	0.98		1	98.2	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Chromium	267.7	0.0038	U	4.5		5	90.8	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Lead	220.4	0.026	B	4.6		5	91.9	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Selenium	196.0	0.067	U	1.1		1	105.2	1	1	ICP	6/14/00	18:44	6/14/00	18:54
Silver	328.1	0.0031	U	0.95		1	95.2	1	1	ICP	6/14/00	18:44	6/14/00	18:54

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 SA Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DEEHCT
 Original Sample ID: DEEHCT Client ID: DF/S1/0159/SDC/008S
 Matrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095
 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	0.000045	U	0.0050		0.005	99.8	1	1	CVAA	6/14/00	10:53	6/14/00	10:55

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

6601235

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DEEHCDTOriginal Sample ID: DEEHCT Client ID: DF/S1/0159/SDC/008DMatrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.000045	U	0 0050		0.005	100.4	1	1	CVAA	6/14/00	10:53	6/14/00	10:57

Comments: _____

Version 3.63.4

U Result is less than the MDL

Form 5A Equivalent

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DEEHCDTMatrix Spike Sample ID: DEEH CST Client ID: DF/S1/0159/SDC/008DMatrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204Weight: 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		5.2		3.5 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Barium	493.409	44.9		46.1		2.6 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Cadmium	228.802	0.97		0.98		1.7 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Chromium	267.716	4.5		4.5		1.5 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Lead	220.353	4.6		4.6		1.4 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Selenium	196.026	1.1		1.1		1.3 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54
Silver	328.068	0.94		0.95		1.6 %	1	1	ICP	6/14/00	18:50	6/14/00	18:54

Comments: _____

Version 3.63.4

U Result is less than the MDL

Form 6 Equivalent

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

6601237

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DEEHCDTMatrix Spike Sample ID: DEEHCST Client ID: DF/S1/0159/SDC/008DMatrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095Weight: 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	0.0050		0.0050		0.6 %	1	1	CVAA	6/14/00	10:55	6/14/00	10:57

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: DEKMLCTMatrix: Water Units: mg/L Prep Date: 6/13/00 Prep Batch: 0165204Weight: 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	2.1	105.8		80-120	1	ICP	6/14/00	18:25
Barium	493.409	2.0	1.8	90.1	B	80-120	1	ICP	6/14/00	18:25
Cadmium	228.802	0.050	0.049	98.4	B	80-120	1	ICP	6/14/00	18:25
Chromium	267.716	0.20	0.19	93.7	B	80-120	1	ICP	6/14/00	18:25
Lead	220.353	0.50	0.48	95.2	B	80-120	1	ICP	6/14/00	18:25
Selenium	196.026	2.0	2.1	104.8		80-120	1	ICP	6/14/00	18:25
Silver	328.068	0.050	0.048	96.6	B	80-120	1	ICP	6/14/00	18:25

Comments: _____

Version 3.63.4

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

6601239

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DELTXCTMatrix: Water Units: mg/L Prep Date: 6/14/00 Prep Batch: 0166095Weight: 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	0.0026	103.2		80-120	1	CVAA	6/14/00	10:19

Comments: _____

Version 3.63.4

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

STL-Pittsburgh
Metals Data Reporting Form

Serial Dilution RPD Report
Serial Dilution Sample ID: DEEHCT
Original Sample ID: DEEHCT **Client ID:** DF/S1/0159/SDC/008
Matrix: Water **Units:** mg/L **Prep Date:** 6/13/00 **Prep Batch:** 0165204
Weight: 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	0.12	B	0.24	B	6.1 %	1	5	ICP	6/14/00	18:44	6/14/00	18:47
Barium	493.409	1.5	B	1.6	B		1	5	ICP	6/14/00	18:44	6/14/00	18:47
Cadmium	228.802	0.0028	U	0.014	U		1	5	ICP	6/14/00	18:44	6/14/00	18:47
Chromium	267.716	0.0038	U	0.019	U		1	5	ICP	6/14/00	18:44	6/14/00	18:47
Lead	220.353	0.026	B	0.12	U		1	5	ICP	6/14/00	18:44	6/14/00	18:47
Selenium	196.026	0.067	U	0.34	U		1	5	ICP	6/14/00	18:44	6/14/00	18:47
Silver	328.068	0.0031	U	0.016	U		1	5	ICP	6/14/00	18:44	6/14/00	18:47

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

6601241

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA

Units: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	0.2	0.045	3/20/00

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

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPDate of IEC's: 3/27/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(0.008365), Mn(0.00002), Pb(0.000527)
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(0.001314), B(-0.001921), Cd(-0.000034), Cu(-0.00008), Mn(-0.000288), Mo(-0.00015), Pb(0.000225), Se(-0.003656), 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)

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

6601245

STL-Pittsburgh
Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: 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

Metals Data Reporting Form

Preparation LogPreparation Batch: 0165204 Instrument: ICP Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DEJ9GBT	6/13/00	NA	50	NA
DEKMLBT	6/13/00	NA	50	NA
DEKMLCT	6/13/00	NA	50	NA
DEEHCDT	6/13/00	NA	50	NA
DEEHCST	6/13/00	NA	50	NA
DEEHCT	6/13/00	NA	50	NA
DEEHPT	6/13/00	NA	50	NA

6601247

STL-Pittsburgh
Metals Data Reporting Form

Preparation Log

Preparation Batch: 0166095 Instrument: CVAA Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DEJ9GBT	6/14/00	NA	100	NA
DELTXBT	6/14/00	NA	100	NA
DELTXCT	6/14/00	NA	100	NA
DEEHCDT	6/14/00	NA	100	NA
DEEHCST	6/14/00	NA	100	NA
DEEHCT	6/14/00	NA	100	NA
DEEHPT	6/14/00	NA	100	NA

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0614HGA.PRN

Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ	6/14/00	11:03 AM
CCV5-4	6/14/00	11:05 AM
CCB4	6/14/00	11:07 AM
ZZZZZZ	6/14/00	11:09 AM
ZZZZZZ	6/14/00	11:11 AM
ZZZZZZ	6/14/00	11:14 AM
ZZZZZZ	6/14/00	11:16 AM
ZZZZZZ	6/14/00	11:17 AM
ZZZZZZ	6/14/00	11:20 AM
ZZZZZZ	6/14/00	11:22 AM
ZZZZZZ	6/14/00	11:25 AM
ZZZZZZ	6/14/00	11:27 AM
ZZZZZZ	6/14/00	11:29 AM
ZZZZZZ	6/14/00	11:31 AM
ZZZZZZ	6/14/00	11:34 AM
ZZZZZZ	6/14/00	11:36 AM
ZZZZZZ	6/14/00	11:38 AM
ZZZZZZ	6/14/00	11:40 AM
ZZZZZZ	6/14/00	11:42 AM
ZZZZZZ	6/14/00	11:44 AM
ZZZZZZ	6/14/00	11:46 AM
ZZZZZZ	6/14/00	11:49 AM
ZZZZZZ	6/14/00	11:51 AM
ZZZZZZ	6/14/00	11 53 AM
ZZZZZZ	6/14/00	11:55 AM

6601249

STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00614D.ARC

Sample Name	Date of Analysis	Time of Analysis
STD1	6/14/00	5:54 PM
STD5A	6/14/00	5:57 PM
STD5B	6/14/00	6:01 PM
ICV2-1	6/14/00	6:04 PM
ICB1	6/14/00	6:07 PM
ICSA	6/14/00	6:10 PM
ICSAB	6/14/00	6:13 PM
DEKMLBT	6/14/00	6:18 PM
DEJ9GBT	6/14/00	6:22 PM
DEKMLCT	6/14/00	6:25 PM
ZZZZZZ	6/14/00	6:28 PM
ZZZZZZ	6/14/00	6:32 PM
ZZZZZZ	6/14/00	6:35 PM
CCV2-1	6/14/00	6:38 PM
CCB1	6/14/00	6:41 PM
DEEHCT	6/14/00	6:44 PM
DEEHCPT	6/14/00	6 47 PM
DEEHCST	6/14/00	6:50 PM
DEEHCDT	6/14/00	6:54 PM
DEEHPT	6/14/00	6:57 PM
CCV2-2	6/14/00	7:00 PM
CCB2	6/14/00	7:03 PM
ZZZZZZ	6/14/00	7 06 PM
ZZZZZZ	6/14/00	7:09 PM
ZZZZZZ	6/14/00	7:12 PM
ZZZZZZ	6/14/00	7:15 PM
ZZZZZZ	6/14/00	7:19 PM
ZZZZZZ	6/14/00	7:22 PM
ZZZZZZ	6/14/00	7:25 PM
ZZZZZZ	6/14/00	7:28 PM
ZZZZZZ	6/14/00	7:31 PM
ZZZZZZ	6/14/00	7:34 PM
ZZZZZZ	6/14/00	7:37 PM
ZZZZZZ	6/14/00	7:40 PM
ZZZZZZ	6/14/00	7:44 PM
ZZZZZZ	6/14/00	7:47 PM

**TCLP
METALS
RAW DATA**

COF080328 TCP'S
 Analysis Report *WUB* Averages
Penmark 61500

06/15/00 07:30:46 AM

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6601251

#	Sample Name	AG	AS	BA	CD	CR	PB
1	STD1	-.00054	.00024	.00014	0	.0007	.0004
2	STD5A	.2781	.57749	4.49835	.94336	3.9327	.2741
3	STD5B						
4	ICV2-1 0014-119-2	.50578	1.0179	.98784	1.0095	1.0069	1.0368
5	ICB1	.00000	.00963	.00013	-.00082	-.00139	-.00706
6	ICSA 0014-129-11	.00030	-.00433	.00177	-.00403	-.00190	.09148
7	ICSAB 0014-104-1	.95379	.86471	.45491	.95604	.44176	1.0070
8	DEKMLBT	-.00104	.01496	.00017	-.00186	-.00127	-.00529
9	DEJ9GBT	-.00034	.10210	.00077	-.00059	.00076	-.00882
10	DEKMLCT	.04832	2.1169	1.8025	.04921	.18735	.47604
11	DEFJRT	-.00103	.38651	.08541	.00636	.00279	.00146
12	DEFJXT	-.00070	.48240	.09279	.00946	.00267	-.00201
13	DED5FT	-.00451	.09276	.29074	.00146	-.00280	.02306
14	CCV2-1 0014-129-12	.99674	5.0887	4.8835	4.9995	4.9281	4.9988
15	CCB1	-.00104	.01237	.00008	-.00035	-.00012	-.00705
16	DEEHCT	-.00216	.11766	1.4660	.00194	.00127	.02562
17	DEEHCP5T	-.00099	.04766	.31096	-.00080	-.00101	-.00374
18	DEEHCST	.93621	5.0350	44.933	.96607	4.4747	4.5555
19	DEEHCdT	.95161	5.2087	46.092	.98218	4.5420	4.6193
20	DEEHPT	-.00123	.13739	1.2784	.00078	.03421	.02086
21	CCV2-2	.99373	5.0187	4.7399	5.0368	4.9437	4.9958
22	CCB2	-.00279	-.00700	.00028	.00007	-.00088	.00353
23	DE9XXT	.00133	.12897	.19257	.00128	-.00088	.17012
24	DEA02T	-.00113	.13323	.46834	.00165	-.00012	.03171
25	DEA04T	-.00042	.14240	.40035	-.00003	.02213	.03895
26	DEA05T	-.00276	.14717	.42563	.01531	.00025	.09050
27	DEA07T	-.00341	.15740	.33030	.00534	-.00127	.32979
28	CCV2-3	.98800	5.0543	4.7169	5.0202	4.9391	4.9512
29	CCB3	-.00139	.04676	.00019	.00010	.00013	.00889
30	DEA09T	-.00076	.18491	.39330	.00044	.00139	.04067
31	DEA0AT	-.00321	.17541	.64682	-.00127	-.00114	61.892
32	DEA0CT	-.00468	.09790	.50089	.02475	-.00330	.05145
33	DEA0FT	-.00494	.11238	.62977	.00778	-.00279	.08870
34	DEA0GT	-.00298	.13716	.56634	.00463	-.00038	2.7056
35	CCV2-4	1.0005	5.0746	4.8635	5.0212	4.9865	4.9662
36	CCB4	-.00104	.01938	.00064	.00054	.00051	-.00528

#	Sample Name	SE
1	STD1	-.00049
2	STD5A	.56484
3	STD5B	
4	ICV2-1 0014-119-2	1.0268
5	ICB1	-.00353
6	ICSA 0014-129-11	.04244
7	ICSAB 0014-104-1	.99027
8	DEKMLBT	-.02914
9	DEJ9GBT	-.02383
10	DEKMLCT	2.0962
11	DEFJRT	-.01277
12	DEFJXT	.00490
13	DED5FT	-.00899

#	Sample Name	SE
14	CCV2-1 0014-129-12	5.1490
15	CCB1	.02211
16	DEEHCT	-.01967
17	DEEHCP5T	.02122
18	DEEHCST	1.0656
19	DEEHCDT	1.0523
20	DEEHPT	-.00380
21	CCV2-2	5.1163
22	CCB2	.00442
23	DE9XXT	.01243
24	DEA02T	-.01387
25	DEA04T	-.00789
26	DEA05T	.01430
27	DEA07T	.02836
28	CCV2-3	5.1296
29	CCB3	.01239
30	DEA09T	.02670
31	DEA0AT	-.02189
32	DEA0CT	-.02990
33	DEA0FT	-.01230
34	DEA0GT	.02039
35	CCV2-4	5.2555
36	CCB4	-.02297

746 61500

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J00614D	QUANMET	06/14/00	17:54		X	IR
2	STD5A	J00614D	QUANMET	06/14/00	17:57		X	IR
3	STD5B	J00614D	QUANMET	06/14/00	18:01		X	IR
4	ICV2-1 0014-119-2	J00614D	QUANMET	06/14/00	18:04	RJG	S	CONC
5	ICB1	J00614D	QUANMET	06/14/00	18:07	RJG	S	CONC
6	ICSA 0014-129-11	J00614D	QUANMET	06/14/00	18:10	RJG	Q	CONC
7	ICSAB 0014-104-1	J00614D	QUANMET	06/14/00	18:13	RJG	Q	CONC
8	DEKMLBT	J00614D	QUANMET	06/14/00	18:18	RJG	S	CONC
9	DEJ9GBT	J00614D	QUANMET	06/14/00	18:22	RJG	S	CONC
10	DEKMLCT	J00614D	QUANMET	06/14/00	18:25	RJG	S	CONC
11	DEFJRT	J00614D	QUANMET	06/14/00	18:28	RJG	S	CONC
12	DEFJXT	J00614D	QUANMET	06/14/00	18:32	RJG	S	CONC
13	DED5FT	J00614D	QUANMET	06/14/00	18:35	RJG	S	CONC
14	CCV2-1 0014-129-12	J00614D	QUANMET	06/14/00	18:38	RJG	S	CONC
15	CCB1	J00614D	QUANMET	06/14/00	18:41	RJG	S	CONC
16	DEEHCT	J00614D	QUANMET	06/14/00	18:44	RJG	S	CONC
17	DEEHCP5T	J00614D	QUANMET	06/14/00	18:47	RJG	S	CONC
18	DEEHCST	J00614D	QUANMET	06/14/00	18:50	RJG	S	CONC
19	DEEHCdT	J00614D	QUANMET	06/14/00	18:54	RJG	S	CONC
20	DEEHPT	J00614D	QUANMET	06/14/00	18:57	RJG	S	CONC
21	CCV2-2	J00614D	QUANMET	06/14/00	19:00	RJG	S	CONC
22	CCB2	J00614D	QUANMET	06/14/00	19:03	RJG	S	CONC
23	DE9XXT	J00614D	QUANMET	06/14/00	19:06	RJG	S	CONC
24	DEA02T	J00614D	QUANMET	06/14/00	19:09	RJG	S	CONC
25	DEA04T	J00614D	QUANMET	06/14/00	19:12	RJG	S	CONC
26	DEA05T	J00614D	QUANMET	06/14/00	19:15	RJG	S	CONC
27	DEA07T	J00614D	QUANMET	06/14/00	19:19	RJG	S	CONC
28	CCV2-3	J00614D	QUANMET	06/14/00	19:22	RJG	S	CONC
29	CCB3	J00614D	QUANMET	06/14/00	19:25	RJG	S	CONC
30	DEA09T	J00614D	QUANMET	06/14/00	19:28	RJG	S	CONC
31	DEA0AT	J00614D	QUANMET	06/14/00	19:31	RJG	S	CONC
32	DEA0CT	J00614D	QUANMET	06/14/00	19:34	RJG	S	CONC
33	DEA0FT	J00614D	QUANMET	06/14/00	19:37	RJG	S	CONC
34	DEA0GT	J00614D	QUANMET	06/14/00	19:40	RJG	S	CONC
35	CCV2-4	J00614D	QUANMET	06/14/00	19:44	RJG	S	CONC
36	CCB4	J00614D	QUANMET	06/14/00	19:47	RJG	S	CONC

Standardization Rpt.

06/14/00 05:57:47 PM

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Method: QUANMET Standard: STD1

Run Time: 06/14/00 17:54:39

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00055	.01240	.00025	.00090	.00014	.00325	-.00131
SDev	.00019	.00069	.00224	.00104	.00007	.00010	.00051
%RSD	34.816	5.5873	894.13	115.47	48.112	3.0769	38.706

#1	-.00040	.01180	.00080	.00180	.00020	.00340	-.00072
#2	-.00040	.01340	.00280	.00180	.00008	.00320	-.00162
#3	-.00060	.01220	-.00260	.00000	.00008	.00320	-.00184
#4	-.00080	.01220	.00000	.00000	.00020	.00320	-.00108

Elem	CD	CO	CR	CU	FE	K	LI
Avge	.00001	.00000	.00070	.00105	.00105	-.02045	-.00056
SDev	.00014	.00052	.00060	.00010	.00019	.00871	.00017
%RSD	1623.4	.00000	85.714	9.5238	18.237	42.573	31.026

#1	.00004	.00060	.00120	.00120	.00120	-.01780	-.00072
#2	.00008	-.00060	.00000	.00100	.00080	-.02960	-.00055
#3	-.00020	-.00020	.00040	.00100	.00120	-.02480	-.00064
#4	.00012	.00020	.00120	.00100	.00100	-.00960	-.00032

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	-.00020	.00010	-.00005	.05905	-.00008	.00040	.00010
SDev	.00121	.00012	.00019	.00146	.00059	.00043	.00012
%RSD	605.53	115.47	382.97	2.4793	715.81	108.01	115.47

#1	.00100	.00020	-.00020	.06000	-.00049	.00020	.00000
#2	-.00160	.00020	.00020	.06060	.00045	.00000	.00020
#3	.00060	.00000	.00000	.05780	-.00068	.00100	.00020
#4	-.00080	.00000	-.00020	.05780	.00040	.00040	.00000

Elem	SE	SI	SN	SR	TI	TL	V
Avge	-.00050	.00220	.00025	.00004	.00160	-.00030	.00000
SDev	.00132	.00092	.00025	.00014	.00016	.00076	.00000
%RSD	264.32	41.989	100.66	374.64	10.206	252.40	.00000

#1	.00020	.00140	.00060	-.00008	.00180	.00020	.00000
#2	-.00140	.00300	.00020	-.00008	.00160	.00020	.00000
#3	.00100	.00300	.00020	.00012	.00160	-.00140	.00000
#4	-.00180	.00140	.00000	.00020	.00140	-.00020	.00000

Elem	ZN
Avge	.00026
SDev	.00025
%RSD	96.566

#1	.00052
#2	.00028
#3	.00032
#4	-.00008

6601255

Standardization Rpt.

06/14/00 06:00:56 PM

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Method: QUANMET Standard: STD5A
Run Time: 06/14/00 17:57:50

0014072.2

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.27810	.57750	.63732	4.4984	16.602	.94336	1.5624
SDev	.00038	.00380	.00273	.0259	.078	.00169	.0022
%RSD	.13771	.65861	.42901	.57657	.47213	.17934	.14254

#1	.27780	.58260	.63864	4.5222	16.684	.94380	1.5602
#2	.27780	.57680	.63332	4.4614	16.496	.94325	1.5626
#3	.27860	.57340	.63795	4.5053	16.609	.94525	1.5654
#4	.27820	.57720	.63939	4.5046	16.620	.94116	1.5614

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.9327	2.4500	4.4046	2.1216	.43905	1.9141	.27410
SDev	.0064	.0186	.0467	.0022	.00087	.0037	.00178
%RSD	.16191	.75847	1.0610	.10269	.19813	.19350	.64854

#1	3.9260	2.4680	4.4563	2.1218	.43920	1.9180	.27380
#2	3.9306	2.4240	4.3443	2.1198	.43780	1.9164	.27660
#3	3.9412	2.4526	4.4191	2.1246	.43980	1.9099	.27360
#4	3.9330	2.4554	4.3986	2.1202	.43940	1.9123	.27240

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.21165	.56485	.36050	1.0472	8.7627	6.5245	.38065
SDev	.00072	.00259	.00298	.0066	.0458	.0201	.00318
%RSD	.33961	.45927	.82599	.63103	.52316	.30843	.83669

#1	.21180	.56740	.35640	1.0418	8.8067	6.5414	.38060
#2	.21100	.56400	.36020	1.0450	8.6982	6.4954	.37620
#3	.21260	.56640	.36260	1.0568	8.7724	6.5326	.38240
#4	.21120	.56160	.36280	1.0450	8.7735	6.5286	.38340

Elem	V	ZN
Avge	1.7252	1.6084
SDev	.0029	.0024
%RSD	.16853	.14852

#1	1.7266	1.6086
#2	1.7224	1.6065
#3	1.7286	1.6117
#4	1.7232	1.6068

Standardization Rpt.

06/14/00 06:04:05 PM

page 1

Method: QUANMET Standard: STD5B
Run Time: 06/14/00 18:01:00

0014.0723

Elem	AL	CA	FE	K	MG	NA
Avge	11.902	25.960	31.543	2.2306	7.8927	52.314
SDev	.020	.226	.093	.0104	.0132	.349
%RSD	.16942	.86951	.29367	.46682	.16679	.66687
#1	11.925	25.730	31.439	2.2396	7.9004	52.812
#2	11.899	25.836	31.492	2.2208	7.9018	52.201
#3	11.907	26.031	31.601	2.2396	7.8950	52.241
#4	11.877	26.242	31.638	2.2224	7.8734	51.999

Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.00278	.003852	06/14/00 06:01:00
AL	308.215	STD5B	STD1	8.41068	-.104292	06/14/00 06:01:00
AS	193.696	STD5A	STD1	17.6222	-.004406	06/14/00 06:01:00
B ₂	249.600	STD5A	STD1	15.7444	-.014170	06/14/00 06:01:00
B _A	493.409	STD5A	STD1	2.22311	-.000314	06/14/00 06:01:00
BE	313.042	STD5A	STD1	.604043	-.001963	06/14/00 06:01:00
CA	317.933	STD5B	STD1	3.85188	.005064	06/14/00 06:01:00
CD	228.802	STD5A	STD1	10.7593	-.000095	06/14/00 06:01:00
CO	228.616	STD5A	STD1	6.43098	.000000	06/14/00 06:01:00
CR	267.716	STD5A	STD1	2.54394	-.001781	06/14/00 06:01:00
CU	324.754	STD5A	STD1	4.07966	-.004284	06/14/00 06:01:00
FE	259.940	STD5B	STD1	3.17043	-.003329	06/14/00 06:01:00
K ₂	766.491	STD5B	STD1	44.4237	.908465	06/14/00 06:01:00
Li	670.789	STD5A	STD1	2.27009	.001262	06/14/00 06:01:00
MG	279.079	STD5B	STD1	12.6697	.002534	06/14/00 06:01:00
MN	257.610	STD5A	STD1	4.71209	-.000471	06/14/00 06:01:00
MO	202.030	STD5A	STD1	22.7739	.001139	06/14/00 06:01:00
NA	588.995	STD5B	STD1	1.91371	-.113005	06/14/00 06:01:00
NI	231.604	STD5A	STD1	5.22172	.000430	06/14/00 06:01:00
PB	220.353	STD5A	STD1	35.4615	-.014185	06/14/00 06:01:00
SB	206.838	STD5A	STD1	47.3249	-.004732	06/14/00 06:01:00
SE	196.026	STD5A	STD1	17.6882	.008844	06/14/00 06:01:00
SI	288.158	STD5A	STD1	27.5534	-.060617	06/14/00 06:01:00
SN	189.989	STD5A	STD1	9.54204	-.002386	06/14/00 06:01:00
SR	409.552	STD5A	STD1	1.14121	-.000044	06/14/00 06:01:00
TI	334.941	STD5A	STD1	1.53306	-.002453	06/14/00 06:01:00
TL	190.864	STD5A	STD1	52.7465	.015824	06/14/00 06:01:00
V ₂	292.402	STD5A	STD1	5.67299	.000000	06/14/00 06:01:00
Zn	213.856	STD5A	STD1	6.23973	-.001615	06/14/00 06:01:00

Analysis Report

06/14/00 06:07:14 PM

Method: QUANMET Sample Name: ICV2-1 0014-119-2 Operator: RJG
Run Time: 06/14/00 18:04:09
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

*Revised
6/15/00*

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50579	25.119	1.0179	1.0070	.98784	.97493	25.410
SDev	.00183	.065	.0253	.0058	.00263	.00297	.138
%RSD	.36220	.25855	2.4888	.57391	.26646	.30413	.54145
#1	.50790	25.065	1.0526	1.0040	.98502	.97759	25.601
#2	.50507	25.062	1.0035	1.0006	.98635	.97083	25.283
#3	.50366	25.184	1.0201	1.0133	.98920	.97483	25.345
#4	.50652	25.166	.99535	1.0102	.99080	.97649	25.413
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
Avg	1.0096	.99494	1.0069	.97885	26.137	25.193	.99058
SDev	.0077	.00382	.0048	.00122	.071	.249	.01176
%RSD	.76232	.38427	.47917	.12432	.27176	.98890	1.1872
#1	1.0210	.99973	1.0140	.97703	26.213	24.844	.97740
#2	1.0074	.99077	1.0053	.97945	26.050	25.279	.98696
#3	1.0050	.99334	1.0048	.97946	26.113	25.430	1.0056
#4	1.0049	.99591	1.0033	.97947	26.172	25.217	.99238
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
Avg	25.416	.99924	.98660	25.212	.99302	1.0368	.99966
SDev	.050	.00476	.01084	.325	.00241	.0196	.05089
%RSD	.19661	.47641	1.0990	1.2904	.24306	1.8881	5.0910
#1	25.438	1.0059	.97522	24.839	.99611	1.0599	.93106
#2	25.342	.99451	.97976	25.127	.99180	1.0456	1.0541
#3	25.433	.99830	.99343	25.623	.99362	1.0172	1.0068
#4	25.451	.99831	.99799	25.260	.99055	1.0244	1.0067
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
Avg	1.0268	.96182	1.0113	.98294	.98085	4.9322	.98773
SDev	.0399	.02521	.0259	.00235	.00220	.0936	.00375
%RSD	3.8904	2.6206	2.5596	.23866	.22397	1.8973	.37922
#1	1.0421	.99901	1.0263	.98103	.98147	4.9472	.98752
#2	1.0557	.94391	1.0173	.98080	.97779	4.8329	.98759

#3	1.0418	.94936	.97319	.98468	.98116	5.0538	.98332
#4	.96770	.95499	1.0285	.98523	.98300	4.8949	.99248

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	.99305
SDev	.00452
%RSD	.45481

#1	.99882
#2	.99209
#3	.98787
#4	.99342

Errors	LC Pass
High	1.1000
Low	.90000

Analysis Report

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Method: QUANMET Sample Name: ICB1

Operator: RJG

Run Time: 06/14/00 18:07:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.00671	.00963	.01968	.00013	.00003	.00169
SDev	.00176	.00193	.02880	.00157	.00000	.00007	.00320
%RSD	264180.	28.724	298.94	7.9927	.00000	225.66	189.64
#1	-.00176	.00507	.05196	.02047	.00013	-.00003	.00017
#2	-.00035	.00501	-.01150	.02046	.00013	-.00003	-.00210
#3	.00245	.00838	-.00448	.01732	.00013	.00009	.00452
#4	-.00034	.00838	.00255	.02047	.00013	.00009	.00416
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	-.00083	.00161	-.00140	.00041	.00159	-.02888	-.00011
SDev	.00110	.00064	.00113	.00041	.00189	.22623	.00052
%RSD	133.18	40.020	80.708	99.666	119.38	783.46	456.46
#1	.00022	.00129	-.00280	-.00020	.00111	-.32651	-.00082
#2	-.00211	.00129	-.00178	.00061	-.00079	-.07774	.00027
#3	-.00004	.00129	-.00076	.00061	.00238	.17992	-.00018
#4	-.00138	.00258	-.00025	.00061	.00365	.10884	.00027
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	-.00887	.00071	.00456	.00584	-.00111	-.00706	-.00712
SDev	.01712	.00047	.00228	.00319	.00436	.01002	.01614
%RSD	193.08	66.549	49.998	54.732	392.96	141.93	226.89
#1	-.01267	.00047	.00114	.00679	.00067	.00710	-.01421
#2	-.02534	.00047	.00569	.00258	.00423	-.01418	-.02363
#3	-.01267	.00142	.00569	.00986	-.00460	-.01414	.01418
#4	.01520	.00047	.00569	.00411	-.00473	-.00703	-.00480
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	-.00353	.02618	-.00099	.00002	.00031	-.01849	.00009
SDev	.02493	.00276	.01484	.00020	.00025	.05407	.00097
%RSD	705.91	10.527	1502.1	859.04	81.650	292.46	1131.9
#1	-.02299	.02754	.01663	-.00004	-.00000	-.02638	-.00112
#2	.01238	.02204	-.00250	-.00004	.00031	.05802	.00011

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Analysis Report

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#3	-.02652	.02755	-.01950	-.00014	.00061	-.06860	.00011
#4	.02301	.02757	.00141	.00032	.00031	-.03699	.00124

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	-.00025
SDev	.00052
%RSD	204.10

#1	-.00015
#2	-.00038
#3	-.00087
#4	.00038

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: ICSA 0014-129-11 Operator: RJG
 Run Time: 06/14/00 18:10:25
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00030	495.60	-.00434	-.04379	.00178	.00002	480.61
SDev	.00136	1.90	.12440	.00474	.00015	.00007	.99
%RSD	451.90	.38390	2868.8	10.816	8.4904	395.94	.20515

#1	.00140	496.34	.02618	-.04918	.00191	.00008	481.27
#2	.00132	493.06	.07517	-.04408	.00165	.00008	480.92
#3	-.00148	497.56	-.18803	-.04425	.00165	-.00004	479.14
#4	-.00004	495.42	.06934	-.03763	.00191	-.00004	481.10

Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value		500.00					500.00
Range		20.000					20.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00404	.00937	-.00191	-.00839	183.14	-.44424	.00097
SDev	.00328	.00244	.00064	.00002	.16	.33032	.00053
%RSD	81.299	26.075	33.553	.17839	.08747	74.357	54.525

#1	-.00821	.01292	-.00127	-.00837	183.35	-.23767	.00126
#2	-.00019	.00775	-.00178	-.00840	183.01	-.37094	.00073
#3	-.00370	.00776	-.00280	-.00840	183.02	-.93068	.00035
#4	-.00404	.00905	-.00178	-.00839	183.19	-.23767	.00153

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK
Value					200.00		
Range					20.000		

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	483.67	.00819	.01144	-.00048	-.01568	.09148	-.00704
SDev	.70	.00089	.00436	.00496	.01182	.01165	.05605
%RSD	.14441	10.829	38.122	1036.9	75.347	12.737	795.99

#1	484.02	.00753	.01489	.00182	-.00075	.08757	-.02348
#2	482.66	.00938	.01029	.00488	-.01367	.08936	.07122
#3	484.24	.00835	.01484	-.00660	-.01926	.10809	-.06159
#4	483.78	.00750	.00576	-.00201	-.02906	.08091	-.01432

Errors	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	500.00						
Range	20.000						

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04245	.07032	-.07108	.01351	-.02047	.42176	.00476
SDev	.04371	.02397	.05108	.00024	.00029	.08783	.00008
%RSD	102.98	34.084	71.869	1.7798	1.4344	20.823	1.7671

#1	.04940	.09374	-.07254	.01364	-.02085	.44332	.00482
#2	.05524	.04965	-.14278	.01350	-.02054	.39411	.00473

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Analysis Report

QC Standard

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#3	-.01903	.08823	-.03653	.01373	-.02024	.32018	.00482
#4	.08418	.04966	-.03246	.01318	-.02024	.52943	.00465

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	.00118
SDev	.00158
%RSD	133.50

#1	.00060
#2	-.00006
#3	.00069
#4	.00350

Errors	NOCHECK
Value	
Range	

Analysis Report

QC Standard

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Method: QUANMET Sample Name: ICSAB 0014-104-1 Operator: RJG
 Run Time: 06/14/00 18:13:33
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95380	490.45	.86472	.91027	.45491	.44875	477.64
SDev	.00357	1.75	.15396	.00633	.00189	.00112	1.38
%RSD	.37393	.35605	17.804	.69552	.41527	.24899	.28964
#1	.95272	489.22	1.0532	.91426	.45419	.44841	477.09
#2	.94983	488.72	.90623	.91074	.45278	.44734	477.28
#3	.95839	492.29	Q.68878	.91491	.45723	.44986	476.52
#4	.95425	491.57	.81070	.90118	.45545	.44938	479.66
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	.95604	.44663	.44176	.47267	181.62	9.9931	.96077
SDev	.00808	.00342	.00270	.00140	.36	.2836	.00735
%RSD	.84468	.76464	.61142	.29672	.19930	2.8381	.76478
#1	.94836	.44730	.44494	.47409	181.43	10.415	.95160
#2	.95518	.44471	.44291	.47081	181.23	9.8021	.95812
#3	.96736	.44338	.43884	.47330	181.76	9.8732	.96741
#4	.95327	.45114	.44036	.47251	182.05	9.8821	.96594
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	477.50	.45344	.90167	9.8556	.86639	1.0070	.93143
SDev	1.08	.00054	.01080	.0653	.02375	.0442	.04502
%RSD	.22629	.11921	1.1973	.66217	2.7412	4.3845	4.8332
#1	477.42	.45317	.89368	9.7847	.85583	1.0415	.99764
#2	476.02	.45313	.89365	9.8157	.83994	.94236	.92184
#3	478.11	.45322	.91650	9.9079	.87501	1.0254	.90302
#4	478.46	.45425	.90288	9.9141	.89479	1.0188	.90321
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	.99027	1.0211	.83101	.91671	.87507	9.3528	.45369
SDev	.06422	.0082	.03667	.00289	.00175	.2106	.00328
%RSD	6.4850	.80752	4.4121	.31556	.20026	2.2515	.72394
#1	1.0789	1.0143	.82174	.91547	.87507	9.2255	.45723
#2	.96498	1.0252	Q.78701	.91332	.87262	9.2276	.44929

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QC Standard

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#3	.92801	1.0308	.84045	.91985	.87599	9.6651	.45426
#4	.98920	1.0142	.87485	.91821	.87660	9.2929	.45400
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 .92595
SDev .00271
%RSD .29234

#1 .92999
#2 .92431
#3 .92489
#4 .92458

Errors QC Pass
Value 1.0000
Range 20.000

Analysis Report

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Method: QUANMET Sample Name: DEKMLBT Operator: RJG
 Run Time: 06/14/00 18:18:57
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00105	-.00044	.01496	.01285	.00018	-.00000	.11144
SDev	.00292	.01123	.03855	.00704	.00009	.00012	.00191
%RSD	279.62	2573.3	257.65	54.810	51.852	12979.	1.7119
#1	-.00457	-.00673	-.02545	.00252	.00013	.00010	.11115
#2	-.00033	.00334	.03426	.01418	.00013	-.00004	.11255
#3	.00245	.01350	.05890	.01734	.00031	-.00015	.11319
#4	-.00174	-.01186	-.00787	.01734	.00013	.00009	.10888
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
Avg	-.00187	.00129	-.00127	.00041	.01236	.07108	-.00040
SDev	.00088	.00379	.00195	.00041	.00271	.18098	.00110
%RSD	46.870	293.00	153.31	99.870	21.938	254.62	274.46
#1	-.00109	-.00257	.00026	.00061	.00935	-.01555	-.00176
#2	-.00134	.00515	.00025	.00062	.01316	.33984	.00062
#3	-.00200	.00386	-.00382	.00062	.01570	.01111	.00035
#4	-.00305	-.00128	-.00178	-.00020	.01125	-.05109	-.00082
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
Avg	.00443	-.00023	.00342	.10344	.00070	-.00530	-.00711
SDev	.00728	.00047	.00263	.00705	.00412	.02415	.05435
%RSD	164.13	204.05	76.938	6.8129	586.23	456.01	764.07
#1	-.00000	-.00047	.00114	.09827	.00470	-.00726	-.07103
#2	.01520	-.00047	.00570	.10401	-.00498	.02850	-.00485
#3	-.00000	.00048	.00114	.11320	.00236	-.02819	.06159
#4	.00253	-.00047	.00570	.09827	.00073	-.01424	-.01416
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
Avg	-.02914	.01516	.00808	.00016	-.00046	.01305	.00035
SDev	.01169	.02479	.02390	.00019	.00102	.04828	.00288
%RSD	40.125	163.54	295.76	119.29	221.11	370.08	828.90
#1	-.03004	.02751	.02592	.00009	-.00153	.00522	-.00338
#2	-.01587	.02760	.03004	.00018	-.00061	-.03713	.00351

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#3	-.02647	.02755	-.00401	-.00004	.00092	.00508	.00001
#4	-.04418	-.02203	-.01962	.00041	-.00061	.07900	.00124

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00959
SDev	.00061
%RSD	6.3724

#1	.00907
#2	.00913
#3	.00982
#4	.01035

Errors	NOCHECK
High	
Low	

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Method: QUANMET Sample Name: DEJ9GBT Operator: RJG
 Run Time: 06/14/00 18:22:04
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	.00756	.10211	.01757	.00078	-.00000	.23807
SDev	.00256	.00898	.03149	.00637	.00018	.00005	.00705
%RSD	750.21	118.75	30.844	36.276	23.509	1760.2	2.9593
#1	.00245	.01857	.05534	.02363	.00076	-.00003	.24161
#2	-.00315	.00675	.11183	.02049	.00102	-.00003	.23781
#3	.00108	.00830	.11878	.00882	.00058	.00008	.24452
#4	-.00175	-.00337	.12249	.01734	.00076	-.00003	.22834
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
Avg	-.00060	.00193	.00076	-.00102	.01220	.20879	.00063
SDev	.00150	.00246	.00150	.00221	.00183	.41726	.00094
%RSD	251.51	127.42	196.24	217.32	15.017	199.85	149.46
#1	.00057	.00514	.00076	-.00020	.01443	.41980	.00035
#2	-.00133	.00258	.00229	-.00020	.01252	.57084	.00035
#3	.00073	-.00000	.00127	.00061	.01189	.22434	.00198
#4	-.00235	.00001	-.00127	-.00428	.00998	-.37982	-.00018
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
Avg	.01014	.00095	.00228	S1519.0	.00001	-.00883	-.00716
SDev	.01418	.00055	.00228	1754.1	.00637	.01579	.00902
%RSD	139.94	57.549	99.919	115.48	52462.	178.82	126.04
#1	.00507	.00142	.00114	S-.11300	-.00829	.00723	.00461
#2	.02281	.00048	.00114	S3038.0	.00534	.00005	-.01423
#3	.02027	.00142	.00570	S3038.0	.00466	-.01421	-.01423
#4	-.00760	.00047	.00114	S-.11300	-.00166	-.02838	-.00478
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
Avg	-.02383	.01517	.02239	.00086	-.00046	.01304	.00118
SDev	.05368	.02481	.00492	.00011	.00092	.04336	.00231
%RSD	225.24	163.54	21.976	12.614	200.00	332.49	196.07
#1	.05135	.02755	.02436	.00087	.00031	.06839	.00002
#2	-.03356	-.02204	.02809	.00078	-.00092	-.02652	.00003

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#3	-.07602	.02761	.02045	.00078	.00031	.02623	.00465
#4	-.03711	.02755	.01668	.00100	-.00153	-.01592	.00002

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.01922
SDev	.00123
%RSD	6.3928

#1	.01911
#2	.01907
#3	.02085
#4	.01786

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DEKMLCT

Operator: RJG

Run Time: 06/14/00 18:25:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04832	1.8985	2.1169	.91231	1.8025	.04524	.38376
SDev	.00161	.0178	.0853	.01636	.0128	.00006	.00578
%RSD	3.3378	.93641	4.0271	1.7930	.70864	.12710	1.5064
#1	.04691	1.8964	2.1276	.92648	1.8187	.04516	.37870
#2	.04972	1.9082	1.9935	.92647	1.8030	.04527	.38364
#3	.04694	1.8744	2.1664	.89814	1.7876	.04526	.39188
#4	.04972	1.9148	2.1802	.89815	1.8005	.04527	.38083
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.06000		2.4000		2.4000		
Low	.04000		1.6000		1.6000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04922	.46102	.18736	.23957	.99599	.46645	.90702
SDev	.00303	.00265	.00404	.00349	.00226	.46191	.02384
%RSD	6.1616	.57545	2.1543	1.4552	.22657	99.028	2.6284
#1	.04858	.45941	.18520	.24344	.99599	.12661	.93555
#2	.05352	.46326	.18875	.24100	.99282	.73077	.91394
#3	.04640	.46329	.19232	.23855	.99726	.97954	.87893
#4	.04837	.45813	.18316	.23528	.99790	.02888	.89966
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.06000		.24000				
Low	.04000		.16000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04308	.46463	.00357	S-.11300	.46005	.47604	-.02700
SDev	.01616	.00161	.00789	.00000	.00544	.02350	.03370
%RSD	37.512	.34616	221.30	.00000	1.1827	4.9362	124.82
#1	.02787	.46251	.00129	S-.11300	.45877	.44412	.00139
#2	.03801	.46627	-.00327	S-.11300	.45969	.47259	.00143
#3	.06588	.46440	.01495	S-.11300	.46741	.49382	-.04595
#4	.04054	.46533	.00129	S-.11300	.45432	.49363	-.06486
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.60000	
Low						.40000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0962	.07608	.01533	.91041	.00069	1.8237	.45598
SDev	.0454	.02896	.00642	.00533	.00046	.0587	.00211
%RSD	2.1657	38.063	41.907	.58580	66.667	3.2184	.46236
#1	2.0466	.03335	.02262	.91703	.00031	1.8263	.45423
#2	2.0961	.09398	.01498	.91087	.00092	1.8791	.45528

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#3	2.1563	.09403	.01667	.90402	.00031	1.7419	.45905
#4	2.0855	.08296	.00704	.90973	.00123	1.8474	.45536

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	2.4000						
Low	1.6000						

Elem	ZN
Units	ppm
Avge	.50027
SDev	.00339
%RSD	.67772

#1	.49739
#2	.49865
#3	.50511
#4	.49994

Errors	NOCHECK
High	
Low	

Analysis Report

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Method: QUANMET Sample Name: DEFJRT

Operator: RJG

Run Time: 06/14/00 18:28:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00104	.64210	.38651	.05670	.08541	.00009	7.2107
SDev	.00139	.00394	.04853	.00889	.00062	.00001	.0440
%RSD	134.11	.61396	12.557	15.672	.72133	7.6481	.61039
#1	.00105	.64256	.33191	.05128	.08453	.00009	7.2472
#2	-.00173	.64750	.41992	.06796	.08594	.00008	7.2011
#3	-.00175	.63924	.43415	.05943	.08568	.00009	7.1523
#4	-.00173	.63910	.36006	.04813	.08550	.00008	7.2420
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	.00636	.00219	.00280	.03469	.13396	.65081	.00075
SDev	.00371	.00065	.00102	.00041	.00082	.26802	.00034
%RSD	58.354	29.723	36.364	1.1778	.61149	41.183	45.305
#1	.00786	.00250	.00331	.03489	.13491	.57973	.00073
#2	.01029	.00121	.00331	.03408	.13364	.89958	.00118
#3	.00153	.00252	.00127	.03489	.13428	.30430	.00035
#4	.00578	.00251	.00331	.03489	.13301	.81962	.00073
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	1.6306	.15765	.00685	S-.11300	.03128	.00146	-.00452
SDev	.0125	.00047	.00436	.00000	.00916	.01063	.00010
%RSD	.76657	.29851	63.641	.00000	29.280	728.06	2.1910
#1	1.6293	.15788	.00571	S-.11300	.02236	.00679	-.00464
#2	1.6293	.15694	.01027	S-.11300	.02930	.00675	-.00452
#3	1.6167	.15788	.00116	S-.11300	.02936	-.01449	-.00450
#4	1.6471	.15788	.01027	S-.11300	.04411	.00679	-.00440
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	-.01278	1.9053	.00763	.03469	.00276	.02848	.00212
SDev	.02865	.0053	.01514	.00011	.00025	.04748	.00242
%RSD	224.24	.27552	198.43	.32901	9.0722	166.69	113.74
#1	.00934	1.9067	.02623	.03451	.00307	.06805	.00012
#2	.00933	1.9012	-.01002	.03474	.00245	.02584	.00361

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#3	-.05080	1.9122	.01097	.03474	.00276	.05750	.00002
#4	-.01897	1.9012	.00333	.03474	.00276	-.03746	.00474
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	.12295
SDev	.00234
%RSD	1.9018

#1	.12315
#2	.12315
#3	.11990
#4	.12560

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DEFJXT

Operator: RJG

Run Time: 06/14/00 18:32:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00071	.55763	.48241	.01891	.09280	.00009	8.1483
SDev	.00134	.00802	.04046	.01436	.00096	.00000	.0943
%RSD	190.36	1.4392	8.3879	75.900	1.0351	1.8412	1.1569
#1	-.00176	.55349	.46307	.00812	.09368	.00009	8.0408
#2	.00105	.56347	.51230	.00628	.09324	.00009	8.2552
#3	-.00176	.56517	.43477	.02479	.09280	.00009	8.1058
#4	-.00036	.54840	.51950	.03646	.09146	.00009	8.1915
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	.00947	.00185	.00267	.04142	.13317	.79296	.00071
SDev	.00181	.00222	.00152	.00094	.00333	.40044	.00097
%RSD	19.123	120.07	56.887	2.2783	2.5019	50.499	135.70
#1	.00676	-.00007	.00229	.04060	.13110	.27765	-.00021
#2	.01052	.00121	.00127	.04224	.13808	.83739	.00001
#3	.01012	.00121	.00229	.04060	.13111	.80185	.00180
#4	.01046	.00507	.00484	.04224	.13238	1.2550	.00126
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	2.2280	.19558	.00230	S-.11300	.03526	-.00202	.02156
SDev	.0159	.00134	.00683	.00000	.00358	.02490	.03026
%RSD	.71556	.68246	297.41	.00000	10.160	1235.6	140.32
#1	2.2425	.19463	-.00795	S-.11300	.03698	-.01451	-.00442
#2	2.2400	.19747	.00571	S-.11300	.03946	-.01441	.05233
#3	2.2096	.19464	.00571	S-.11300	.03194	-.01448	-.00442
#4	2.2197	.19558	.00571	S-.11300	.03264	.03534	.04276
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	.00491	1.7166	.01061	.03524	.00284	.08674	.00033
SDev	.04057	.0071	.02828	.00043	.00063	.02772	.00062
%RSD	826.55	.41477	266.49	1.2239	22.287	31.961	186.69
#1	-.00483	1.7138	.02051	.03556	.00215	.08941	-.00015
#2	-.03310	1.7249	.02077	.03556	.00337	.09989	.00125

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#3	-.00483	1.7193	-.03102	.03520	.00245	.04720	.00011
#4	.06239	1.7083	.03218	.03465	.00337	.11046	.00012
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	.15035
SDev	.00203
%RSD	1.3475

#1	.14752
#2	.15103
#3	.15055
#4	.15230

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DED5FT

Operator: RJG

Run Time: 06/14/00 18:35:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00452	.23204	.09276	.08312	.29075	.00036	H844.11
SDev	.00228	.01107	.03485	.01715	.00288	.00007	2.57
%RSD	50.393	4.7723	37.569	20.627	.99011	19.586	.30495
#1	-.00173	.24383	.11649	.05862	.28657	.00031	H845.24
#2	-.00451	.23874	.09530	.08826	.29209	.00030	H847.21
#3	-.00454	.22028	.04269	.08697	.29306	.00043	H841.90
#4	-.00730	.22529	.11657	.09863	.29128	.00042	H842.08
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	.00146	.00603	-.00280	-.00039	.19943	5.2598	.02436
SDev	.00136	.00123	.00083	.00103	.00355	.2657	.00092
%RSD	92.635	20.401	29.629	265.51	1.7796	5.0514	3.7846
#1	-.00010	.00635	-.00178	-.00181	.19817	5.0754	.02319
#2	.00318	.00763	-.00280	-.00018	.20260	5.1820	.02543
#3	.00161	.00506	-.00382	-.00018	.20197	5.1287	.02452
#4	.00116	.00506	-.00281	.00063	.19499	5.6529	.02431
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	37.789	7.3165	.00458	S-.11300	.00999	.02306	.01203
SDev	.290	.0286	.00228	.00000	.00307	.01871	.05089
%RSD	.76841	.39127	49.684	.00000	30.692	81.142	422.96
#1	37.396	7.2996	.00572	S-.11300	.00734	.04973	.06167
#2	38.037	7.3561	.00572	S-.11300	.01296	.01421	-.00450
#3	37.976	7.3184	.00572	S-.11300	.01231	.02131	.04282
#4	37.746	7.2920	.00117	S-.11300	.00735	.00700	-.05187
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	-.00900	H31.323	.01074	1.0847	-.04201	.09969	.01115
SDev	.02474	.236	.00633	.0101	.00083	.03145	.00296
%RSD	274.85	.75290	58.939	.93548	1.9767	31.547	26.552
#1	-.03288	H30.998	.01145	1.0709	-.04078	.08644	.00918
#2	-.02225	H31.483	.01305	1.0915	-.04231	.06557	.01372

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#3	-.00457	H31.510	.00182	1.0930	-.04231	.13927	.00805
#4	.02371	H31.301	.01665	1.0833	-.04262	.10750	.01363
Errors	LC Pass	LC High	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 .02046
SDev .00218
%RSD 10.676

#1 .02159
#2 .01960
#3 .02281
#4 .01785

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

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Method: QUANMET Sample Name: CCV2-1 0014-129-12 Operator: RJG
Run Time: 06/14/00 18:38:21
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99675	49.850	5.0887	4.9662	4.8835	4.9316	50.621
SDev	.00198	.188	.0400	.0244	.0321	.0231	.258
%RSD	.19883	.37658	.78688	.49089	.65660	.46868	.50924
#1	.99675	49.930	5.0784	5.0017	4.8998	4.9457	50.477
#2	.99816	50.057	5.1477	4.9530	4.9162	4.9525	50.418
#3	.99394	49.793	5.0690	4.9623	4.8757	4.9274	50.599
#4	.99813	49.619	5.0599	4.9479	4.8424	4.9008	50.991
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	4.9995	4.9156	4.9282	4.9083	51.532	49.055	4.8637
SDev	.0286	.0050	.0101	.0436	.030	.544	.0617
%RSD	.57128	.10251	.20539	.88861	.05773	1.1097	1.2680
#1	5.0364	4.9088	4.9199	4.9228	51.541	49.748	4.9231
#2	4.9668	4.9154	4.9234	4.9521	51.566	49.224	4.8954
#3	4.9988	4.9179	4.9265	4.9097	51.496	48.691	4.8550
#4	4.9962	4.9205	4.9428	4.8485	51.523	48.557	4.7812
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	50.068	4.9245	4.9337	49.561	4.8886	4.9988	4.9819
SDev	.257	.0040	.0131	.441	.0162	.0309	.0096
%RSD	.51350	.08046	.26511	.88973	.33084	.61883	.19301
#1	50.157	4.9231	4.9417	49.913	4.8951	4.9719	4.9866
#2	50.365	4.9203	4.9143	49.852	4.8804	5.0217	4.9866
#3	49.995	4.9250	4.9371	49.527	4.9078	4.9723	4.9869
#4	49.756	4.9297	4.9417	48.950	4.8710	5.0291	4.9675
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	5.1490	4.9771	4.9451	4.8809	4.9216	9.8049	4.9342
SDev	.0512	.0444	.0525	.0287	.0161	.0379	.0024
%RSD	.99446	.89246	1.0619	.58863	.32771	.38651	.04776
#1	5.2136	4.9399	4.9842	4.8952	4.9254	9.7969	4.9352
#2	5.1217	5.0281	4.9937	4.9110	4.9404	9.8282	4.9358

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#3	5.1639	5.0005	4.8850	4.8725	4.9190	9.8395	4.9351
#4	5.0968	4.9399	4.9174	4.8449	4.9015	9.7549	4.9307

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	4.9856
SDev	.0060
%RSD	.12025

#1	4.9824
#2	4.9890
#3	4.9789
#4	4.9920

Errors	LC Pass
High	5.5000
Low	4.5000

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Method: QUANMET Sample Name: CCB1

Operator: RJG

Run Time: 06/14/00 18:41:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00105	-.00681	.01238	.01699	.00009	.00024	.01318
SDev	.00081	.00566	.03543	.00597	.00029	.00018	.01352
%RSD	77.637	83.178	286.25	35.127	344.81	74.714	102.62
#1	-.00175	-.00346	.04849	.02362	-.00031	.00009	.00062
#2	-.00034	-.00348	-.03260	.01195	.00013	.00045	.03108
#3	-.00034	-.00508	.00266	.02046	.00039	.00033	.01580
#4	-.00175	-.01523	.03096	.01194	.00013	.00009	.00520
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	-.00035	.00193	-.00012	.00000	.00048	.26654	.00012
SDev	.00043	.00246	.00168	.00234	.00137	.28527	.00015
%RSD	120.55	127.57	1352.3	130710.	287.46	107.03	126.20
#1	-.00064	.00000	-.00178	.00061	.00111	.10884	.00017
#2	-.00061	.00257	.00178	.00143	.00174	.60638	.00025
#3	.00027	.00514	.00077	.00143	.00048	.38427	.00017
#4	-.00045	.00000	-.00127	-.00347	-.00143	-.03332	-.00010
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	.00570	.00000	.01139	.04947	-.00252	-.00705	-.01195
SDev	.00522	.00094	.00228	.04816	.00468	.01922	.00469
%RSD	91.625	23391.	20.001	97.355	185.53	272.57	39.235
#1	-.00000	.00047	.01025	-.00086	-.00296	-.02130	-.01430
#2	.00507	.00048	.01480	.11205	.00393	.02133	-.01429
#3	.01267	.00047	.01025	.05808	-.00382	-.01406	-.01431
#4	.00507	-.00141	.01025	.02861	-.00725	-.01418	-.00492
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	.02211	-.03306	.01998	.00027	.00031	-.02640	.00079
SDev	.02169	.00449	.00832	.00030	.00035	.07048	.00068
%RSD	98.089	13.589	41.649	112.07	115.47	267.00	86.992
#1	.02300	-.02755	.01281	-.00014	.00061	-.12133	.00019
#2	.04776	-.03856	.01854	.00055	-.00000	.03688	.00142

#3	-.00530	-.03305	.01663	.00045	.00061	.01577	.00133
#4	.02299	-.03306	.03194	.00022	-.00000	-.03692	.00020
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	.00043
SDev	.00051
%RSD	118.00

#1	.00111
#2	.00035
#3	-.00014
#4	.00041

Errors	LC Pass
High	.02000
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DEEHCT

Operator: RJG

Run Time: 06/14/00 18:44:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00217	1.3330	.11766	.03059	1.4660	.00050	207.19
SDev	.00181	.0099	.03223	.00278	.0083	.00007	.66
%RSD	83.390	.74273	27.390	9.0738	.56608	13.945	.31786
#1	-.00427	1.3188	.11338	.03211	1.4547	.00056	207.35
#2	-.00007	1.3389	.07443	.02972	1.4672	.00044	207.29
#3	-.00287	1.3338	.14850	.02712	1.4748	.00056	206.27
#4	-.00147	1.3405	.13434	.03342	1.4674	.00044	207.84
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	.00195	-.00012	.00127	.00723	1.1496	1.7725	.00276
SDev	.00340	.00166	.00093	.00067	.0035	.3050	.00046
%RSD	174.57	1338.9	73.010	9.2158	.30355	17.206	16.569
#1	.00514	.00180	.00229	.00805	1.1463	2.1523	.00335
#2	.00380	.00051	.00076	.00642	1.1546	1.4060	.00236
#3	-.00262	-.00076	.00178	.00723	1.1488	1.7525	.00244
#4	.00147	-.00205	.00025	.00723	1.1488	1.7792	.00289
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	19.528	.08112	.00587	S-.11300	.00676	.02563	-.00475
SDev	.046	.00047	.00372	.00000	.01236	.02269	.00014
%RSD	.23651	.58181	63.408	.00000	183.04	88.552	3.0130
#1	19.463	.08088	.00131	S-.11300	.01179	.03455	-.00466
#2	19.532	.08088	.00587	S-.11300	.01204	-.00805	-.00467
#3	19.549	.08088	.00587	S-.11300	-.01167	.03447	-.00497
#4	19.570	.08183	.01042	S-.11300	.01486	.04153	-.00471
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	-.01968	6.7093	.01494	.81520	.01257	.08350	.00465
SDev	.03410	.0386	.01331	.00372	.00075	.02509	.00007
%RSD	173.29	.57495	89.110	.45660	5.9744	30.055	1.5085
#1	-.02942	6.6514	.00540	.81011	.01196	.10989	.00457
#2	-.04354	6.7286	.00349	.81545	.01349	.09926	.00465

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#3	-.03648	6.7286	.03212	.81901	.01196	.06769	.00466
#4	.03073	6.7286	.01876	.81623	.01288	.05715	.00474

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	.04315
SDev	.00120
%RSD	2.7717

#1	.04461
#2	.04315
#3	.04168
#4	.04314

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DEEHCP5T

Operator: RJG

Run Time: 06/14/00 18:47:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00099	.26664	.04766	-.00125	.31096	.00009	42.652
SDev	.00292	.01176	.02540	.00530	.00087	.00017	.247
%RSD	294.64	4.4123	53.298	424.78	.27917	190.97	.57804
#1	.00252	.28090	.04221	-.00611	.31032	.00020	42.978
#2	-.00450	.26074	.07064	.00334	.31147	-.00015	42.457
#3	-.00170	.25403	.06364	-.00556	.31191	.00021	42.466
#4	-.00030	.27089	.01415	.00334	.31014	.00009	42.707
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	-.00081	.00016	-.00102	-.00120	.24286	.05775	.00083
SDev	.00062	.00162	.00206	.00078	.00256	.62161	.00063
%RSD	76.466	996.12	201.80	64.909	1.0534	1076.4	75.319
#1	-.00094	-.00016	-.00127	-.00182	.24397	-.08663	.00110
#2	.00000	-.00145	-.00382	-.00182	.24017	-.76187	-.00010
#3	-.00080	-.00016	.00076	-.00018	.24143	.50865	.00107
#4	-.00150	.00241	.00025	-.00100	.24588	.57084	.00126
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	4.1550	.01726	-.00338	277.13	.00075	-.00374	-.00471
SDev	.0271	.00047	.00000	3.51	.00410	.01228	.00771
%RSD	.65185	2.7322	.01132	1.2659	545.89	328.05	163.67
#1	4.1329	.01750	-.00338	273.20	-.00141	.00689	.00468
#2	4.1303	.01656	-.00338	278.34	-.00375	-.01444	-.01420
#3	4.1785	.01750	-.00338	281.35	.00282	.00689	-.00465
#4	4.1785	.01750	-.00338	275.63	.00534	-.01432	-.00467
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	.02123	1.3460	.00526	.17276	.00238	-.02615	.00078
SDev	.01669	.0083	.02110	.00062	.00063	.01799	.00170
%RSD	78.598	.61466	400.82	.35652	26.601	68.804	217.14
#1	.00974	1.3502	.03202	.17239	.00276	-.00772	.00334
#2	.00972	1.3336	.00331	.17298	.00184	-.04985	-.00007

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#3	.04510	1.3501	-.01954	.17353	.00184	-.01822	-.00006
#4	.02036	1.3501	.00526	.17216	.00307	-.02883	-.00006

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	.00945
SDev	.00043
%RSD	4.5259

#1	.00984
#2	.00910
#3	.00980
#4	.00907

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DEEHCST Operator: RJG
 Run Time: 06/14/00 18:50:52
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.93621	1.3444	5.0350	.02429	44.933	.00050	197.76
SDev	.00139	.0071	.0706	.00182	.227	.00007	.61
%RSD	.14864	.52499	1.4026	7.4807	.50471	14.505	.30842
#1	.93691	1.3339	4.9840	.02586	44.844	.00056	197.87
#2	.93691	1.3491	5.0508	.02271	45.070	.00056	196.92
#3	.93412	1.3474	4.9768	.02586	44.658	.00043	198.37
#4	.93691	1.3474	5.1284	.02272	45.161	.00044	197.90
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	.96607	.00430	4.4747	.00683	1.1725	1.6948	.00296
SDev	.01156	.00107	.0084	.00047	.0029	.1404	.00096
%RSD	1.1962	24.975	.18784	6.8991	.24324	8.2835	32.451
#1	.94958	.00310	4.4740	.00724	1.1691	1.7881	.00244
#2	.97630	.00420	4.4639	.00642	1.1710	1.5837	.00425
#3	.97068	.00571	4.4766	.00724	1.1748	1.8414	.00308
#4	.96771	.00418	4.4842	.00642	1.1748	1.5659	.00206
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	18.591	.07806	.00131	S-.11300	.01188	4.5555	-.00587
SDev	.030	.00000	.00000	.00000	.00272	.0209	.03578
%RSD	.16065	.00094	.03246	.00000	22.902	.45866	609.26
#1	18.599	.07806	.00131	S-.11300	.01414	4.5484	.02488
#2	18.581	.07806	.00131	S-.11300	.01432	4.5839	.02499
#3	18.556	.07806	.00131	S-.11300	.00981	4.5342	-.04140
#4	18.627	.07806	.00131	S-.11300	.00926	4.5554	-.03197
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	1.0656	6.4888	-.00033	.77036	.01403	.03310	.00519
SDev	.0338	.0032	.01244	.00340	.00046	.10205	.00170
%RSD	3.1674	.04884	3741.1	.44098	3.2787	308.34	32.832
#1	1.0320	6.4860	.01126	.76957	.01441	-.04861	.00434
#2	1.0850	6.4915	-.00019	.77195	.01441	.06740	.00432

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#3	1.0426	6.4861	.00523	.76602	.01380	-.04871	.00775
#4	1.1027	6.4915	-.01763	.77391	.01349	.16231	.00436
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	.04831
SDev	.00151
%RSD	3.1223

#1	.04637
#2	.04938
#3	.04786
#4	.04962

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DEEHCDT Operator: RJG
 Run Time: 06/14/00 18:54:00
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95161	1.3338	5.2087	.02541	46.092	.00044	197.41
SDev	.00478	.0097	.0980	.00189	.367	.00014	.72
%RSD	.50248	.72633	1.8824	7.4565	.79627	31.386	.36250
#1	.94951	1.3254	5.2977	.02586	46.045	.00056	197.14
#2	.95232	1.3423	5.2342	.02587	46.172	.00032	197.04
#3	.94671	1.3255	5.0687	.02272	45.631	.00056	198.48
#4	.95791	1.3422	5.2342	.02718	46.520	.00032	196.98
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	.98218	.00142	4.5420	.00581	1.1752	1.3149	.00237
SDev	.00578	.00298	.0088	.00168	.0037	.5184	.00067
%RSD	.58892	209.35	.19389	28.999	.31307	39.423	28.229
#1	.98607	.00369	4.5320	.00560	1.1704	1.4415	.00161
#2	.97817	.00236	4.5422	.00560	1.1742	1.2639	.00316
#3	.98813	.00261	4.5534	.00805	1.1774	1.9036	.00262
#4	.97637	-.00296	4.5402	.00397	1.1786	.65081	.00209
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	18.645	.07806	.00587	S-.11300	.00784	4.6193	.01242
SDev	.094	.00000	.00372	.00000	.01183	.0209	.00900
%RSD	.50600	.00090	63.357	.00000	150.96	.45336	72.475
#1	18.637	.07806	.01042	S-.11300	.00443	4.6335	.00540
#2	18.652	.07806	.00587	S-.11300	.00541	4.6051	.00530
#3	18.531	.07806	.00131	S-.11300	.02464	4.6406	.01485
#4	18.761	.07806	.00587	S-.11300	-.00312	4.5979	.02413
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	1.0523	6.5232	.00358	.78080	.01188	.03046	.00428
SDev	.0272	.0435	.01334	.00567	.00063	.04088	.00057
%RSD	2.5814	.66644	372.84	.72618	5.3201	134.19	13.376
#1	1.0320	6.4860	-.01554	.78039	.01196	.03576	.00463
#2	1.0390	6.5521	.00545	.78222	.01196	.04628	.00456

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#3	1.0461	6.4860	.01504	.77345	.01104	-.02759	.00450
#4	1.0921	6.5687	.00936	.78715	.01257	.06739	.00342

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	.04289
SDev	.00099
%RSD	2.3171

#1	.04340
#2	.04141
#3	.04354
#4	.04320

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DEEHPT

Operator: RJG

Run Time: 06/14/00 18:57:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00123	.73760	.13740	.01166	1.2784	.00044	140.02
SDev	.00239	.01438	.02607	.01438	.0066	.00010	.96
%RSD	193.71	1.9500	18.973	123.25	.51996	22.360	.68248
#1	-.00018	.74349	.11884	-.00978	1.2761	.00056	138.87
#2	-.00439	.71990	.17543	.01987	1.2754	.00032	139.68
#3	-.00159	.73343	.13302	.01671	1.2883	.00044	140.48
#4	.00122	.75358	.12228	.01987	1.2739	.00044	141.06
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	.00078	.00385	.03421	.00536	.65249	1.2927	.00583
SDev	.00168	.00246	.00209	.00122	.00266	.3349	.00036
%RSD	214.93	64.060	6.1161	22.833	.40769	25.907	6.2152
#1	.00078	.00578	.03383	.00475	.64979	1.5215	.00545
#2	.00316	.00063	.03180	.00474	.65169	1.0329	.00599
#3	-.00027	.00577	.03688	.00475	.65233	.97954	.00562
#4	-.00054	.00321	.03434	.00719	.65614	1.6370	.00626
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	19.041	.06756	.00237	S-.11300	.01703	.02086	-.00723
SDev	.073	.00077	.00228	.00000	.00270	.02244	.01188
%RSD	.38484	1.1394	95.880	.00000	15.849	107.59	164.27
#1	19.055	.06756	.00579	S-.11300	.01413	.00674	.00454
#2	18.934	.06661	.00124	S-.11300	.01572	-.00052	-.02377
#3	19.078	.06756	.00124	S-.11300	.02033	.02801	-.00485
#4	19.096	.06850	.00124	S-.11300	.01794	.04921	-.00485
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	-.00381	5.4556	.00866	.56558	.00414	.01995	.00465
SDev	.04327	.0368	.00835	.00292	.00059	.03444	.00004
%RSD	1136.9	.67507	96.416	.51668	14.184	172.59	.93898
#1	.05013	5.4060	.01683	.56514	.00429	.01996	.00472
#2	-.04538	5.4556	-.00239	.56272	.00368	-.02222	.00463

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#3	-.03122	5.4942	.01297	.56966	.00368	.06214	.00464
#4	.01124	5.4667	.00724	.56481	.00491	.01993	.00463

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	.04666
SDev	.00141
%RSD	3.0237

#1	.04665
#2	.04466
#3	.04766
#4	.04765

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: CCV2-2

Operator: RJG

Run Time: 06/14/00 19:00:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99374	48.953	5.0187	4.8827	4.7399	4.8505	51.260
SDev	.00260	.079	.0554	.0231	.0138	.0180	.208
%RSD	.26154	.16125	1.1049	.47278	.29091	.37197	.40551
#1	.99096	49.058	5.0089	4.9097	4.7595	4.8761	51.045
#2	.99508	48.969	4.9501	4.8874	4.7379	4.8383	51.210
#3	.99225	48.887	5.0319	4.8798	4.7274	4.8373	51.241
#4	.99666	48.898	5.0838	4.8537	4.7347	4.8502	51.544
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	5.0368	4.9205	4.9437	4.7606	51.285	48.024	4.6602
SDev	.0335	.0205	.0127	.0224	.115	.374	.0487
%RSD	.66575	.41606	.25617	.47119	.22424	.77937	1.0453
#1	4.9930	4.9039	4.9377	4.7922	51.307	47.678	4.6942
#2	5.0469	4.9180	4.9382	4.7547	51.207	48.211	4.6861
#3	5.0340	4.9103	4.9362	4.7563	51.187	48.460	4.6720
#4	5.0735	4.9500	4.9626	4.7392	51.439	47.749	4.5884
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	49.170	4.9209	4.9223	47.926	4.8996	4.9958	4.9416
SDev	.094	.0112	.0224	.300	.0211	.0353	.0529
%RSD	.19215	.22807	.45595	.62605	.43055	.70733	1.0709
#1	49.290	4.9146	4.9052	47.988	4.9285	4.9651	4.8828
#2	49.087	4.9193	4.9143	48.042	4.8853	5.0294	4.9110
#3	49.201	4.9127	4.9143	48.181	4.9020	4.9655	4.9865
#4	49.103	4.9372	4.9553	47.493	4.8827	5.0233	4.9863
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	5.1163	4.9878	4.9842	4.7620	4.8555	9.6651	4.9045
SDev	.0506	.0322	.0722	.0141	.0085	.1242	.0132
%RSD	.98886	.64586	1.4488	.29623	.17583	1.2853	.26856
#1	5.0889	4.9396	4.9954	4.7825	4.8632	9.7151	4.9073
#2	5.0886	5.0056	4.8925	4.7574	4.8506	9.6950	4.8961

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#3	5.0956	5.0055	5.0684	4.7502	4.8460	9.4843	4.8927
#4	5.1920	5.0004	4.9806	4.7580	4.8623	9.7661	4.9219

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	4.9720
SDev	.0150
%RSD	.30149

#1	4.9760
#2	4.9618
#3	4.9588
#4	4.9915

Errors	LC Pass
High	5.5000
Low	4.5000

Analysis Report

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Method: QUANMET Sample Name: CCB2

Operator: RJG

Run Time: 06/14/00 19:03:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00279	-.00855	-.00700	.01575	.00029	.00033	.00369
SDev	.00071	.00717	.03076	.00766	.00021	.00022	.00669
%RSD	25.485	83.945	439.16	48.645	73.105	65.658	181.11
#1	-.00315	-.01359	-.00077	.01195	.00013	.00009	-.00019
#2	-.00315	-.01533	-.04305	.00695	.00013	.00021	-.00368
#3	-.00173	-.00007	-.01506	.02362	.00058	.00056	.01014
#4	-.00315	-.00520	.03087	.02048	.00031	.00045	.00851
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	.00007	-.00064	-.00089	-.00224	.00175	-.23545	-.00019
SDev	.00214	.00268	.00087	.00106	.00187	.33601	.00041
%RSD	2998.5	416.31	97.652	47.048	107.03	142.71	210.24
#1	.00118	-.00000	-.00076	-.00184	.00048	-.29986	-.00002
#2	.00252	-.00387	-.00127	-.00347	-.00016	-.56640	-.00037
#3	-.00207	.00258	.00025	-.00102	.00365	.23322	.00027
#4	-.00134	-.00128	-.00178	-.00265	.00301	-.30874	-.00066
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	.00317	-.00023	.01253	.02765	-.00269	.00353	-.00009
SDev	.00784	.00047	.00456	.01772	.00237	.02053	.00551
%RSD	247.66	204.47	36.361	64.073	88.339	581.39	6344.6
#1	.00760	-.00047	.01480	.01483	-.00541	.02128	-.00487
#2	-.00760	-.00047	.01480	.01100	-.00369	-.01429	-.00484
#3	.01014	-.00047	.00569	.03665	-.00172	.02135	.00467
#4	.00253	.00048	.01480	.04813	.00006	-.01421	.00469
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	.00443	-.03994	-.00048	.00060	.00038	.03426	.00137
SDev	.01617	.00277	.01385	.00013	.00029	.03269	.00218
%RSD	365.23	6.9242	2894.4	21.344	76.594	95.424	158.76
#1	.00885	-.04409	.00332	.00041	.00031	.03691	.00028
#2	.02299	-.03857	-.00622	.00064	-.00000	.07915	.00028

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#3	.00178	-.03852	.01672	.00068	.00061	.01573	.00465
#4	-.01591	-.03857	-.01572	.00068	.00061	.00525	.00028

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	.00045
SDev	.00066
%RSD	147.02

#1	-.00012
#2	.00091
#3	-.00012
#4	.00111

Errors	LC Pass
High	.02000
Low	-.02000

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Method: QUANMET Sample Name: DE9XXT Operator: RJG
 Run Time: 06/14/00 19:06:32
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00134	.26908	.12897	.05513	.19257	.00008	109.89
SDev	.00211	.00854	.01559	.00134	.00131	.00010	.96
%RSD	158.26	3.1745	12.085	2.4371	.67970	117.31	.87089
#1	-.00043	.25733	.12030	.05513	.19257	.00009	109.35
#2	-.00043	.26911	.13430	.05569	.19435	.00009	108.87
#3	.00380	.27742	.14825	.05328	.19213	-.00004	110.32
#4	.00240	.27245	.11304	.05643	.19124	.00020	111.00
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	.00129	.00182	-.00089	.01897	.01571	2.3456	.00238
SDev	.00123	.00128	.00157	.00105	.00248	.3394	.00098
%RSD	95.229	70.428	176.89	5.5575	15.816	14.471	41.277
#1	.00034	.00118	-.00178	.01856	.01317	2.2412	.00126
#2	.00145	.00118	-.00229	.01775	.01444	2.0546	.00289
#3	.00041	.00118	-.00076	.01938	.01634	2.2501	.00190
#4	.00296	.00375	.00127	.02020	.01888	2.8365	.00345
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	3.8541	.40076	.00683	S-.11300	.00541	.17013	.00709
SDev	.0093	.00090	.00228	.00000	.00293	.04454	.02364
%RSD	.24007	.22532	33.323	.00000	54.123	26.180	333.16
#1	3.8643	.40006	.00570	S-.11300	.00491	.17719	-.00480
#2	3.8491	.40006	.00570	S-.11300	.00172	.12045	-.00470
#3	3.8440	.40100	.01025	S-.11300	.00626	.15591	-.00466
#4	3.8592	.40194	.00570	S-.11300	.00874	.22697	.04255
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	.01244	9.1381	.01338	1.1102	.00391	.05481	.00240
SDev	.00958	.0094	.03503	.0054	.00046	.02515	.00265
%RSD	76.973	.10317	261.77	.48666	11.765	45.879	110.38
#1	.02658	9.1422	.04147	1.1107	.00368	.06013	.00011
#2	.00536	9.1257	-.01196	1.1176	.00337	.07067	.00011

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#3	.00890	9.1478	-.02150	1.1075	.00429	.07062	.00473
#4	.00891	9.1368	.04551	1.1051	.00429	.01783	.00465

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	.13068
SDev	.00094
%RSD	.71967

#1	.12932
#2	.13080
#3	.13131
#4	.13130

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DEA02T

Operator: RJG

Run Time: 06/14/00 19:09:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00113	.38137	.13324	.08924	.46834	.00020	83.691
SDev	.00243	.00958	.04649	.00326	.00447	.00001	.266
%RSD	214.32	2.5125	34.890	3.6535	.95489	2.2838	.31808
#1	.00097	.39024	.18602	.08489	.46434	.00020	83.387
#2	.00097	.38006	.10151	.09174	.46701	.00020	83.790
#3	-.00323	.38672	.15785	.09174	.46727	.00020	84.005
#4	-.00325	.36847	.08758	.08858	.47475	.00021	83.583
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	.00166	.00069	-.00013	.03754	.07490	2.6921	.00192
SDev	.00418	.00285	.00140	.00078	.00141	.2200	.00105
%RSD	252.49	416.63	1098.7	2.0855	1.8791	8.1707	54.378
#1	-.00343	-.00026	-.00178	.03652	.07538	2.6499	.00046
#2	.00221	.00229	.00127	.03815	.07665	2.8986	.00281
#3	.00675	-.00286	.00076	.03733	.07411	2.8187	.00252
#4	.00110	.00358	-.00076	.03815	.07348	2.4011	.00190
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	16.037	.57253	.00343	S-.11300	.02675	.03171	-.00215
SDev	.112	.00203	.00789	.00000	.00762	.01782	.00478
%RSD	.69832	.35544	230.19	.00000	28.503	56.178	222.66
#1	15.928	.57065	-.00340	S-.11300	.02697	.03524	.00502
#2	16.035	.57159	.01026	S-.11300	.02863	.04949	-.00452
#3	15.994	.57254	.01026	S-.11300	.03489	.03516	-.00453
#4	16.192	.57536	-.00341	S-.11300	.01652	.00697	-.00456
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	-.01388	8.0346	-.00962	.24006	.02346	.08946	.00262
SDev	.02793	.0590	.01169	.00197	.00053	.03488	.00179
%RSD	201.27	.73424	121.49	.82181	2.2641	38.993	68.552
#1	-.04748	7.9795	-.01770	.23827	.02330	.04989	.00333
#2	.00912	7.9905	-.01775	.23964	.02422	.07096	.00360

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#3	-.02626	8.0677	.00707	.23945	.02300	.11322	.00360
#4	.00911	8.1007	-.01011	.24287	.02330	.12377	-.00007

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	.18853
SDev	.00185
%RSD	.97893

#1	.18804
#2	.19126
#3	.18750
#4	.18732

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DEA04T

Operator: RJG

Run Time: 06/14/00 19:12:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00042	.24432	.14240	.05152	.40036	.00002	104.30
SDev	.00257	.01047	.02093	.00163	.00244	.00012	.50
%RSD	608.18	4.2856	14.698	3.1589	.61042	473.27	.47492
#1	-.00183	.23719	.14514	.05069	.40102	.00009	104.18
#2	.00099	.25062	.12030	.05383	.39809	.00008	104.39
#3	-.00323	.23383	.16984	.05014	.40351	-.00015	103.71
#4	.00239	.25565	.13433	.05143	.39880	.00008	104.91
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	-.00003	.00171	.02213	.68437	.01701	2.1323	.00113
SDev	.00228	.00268	.00266	.00447	.00172	.5163	.00139
%RSD	7305.2	156.88	12.017	.65270	10.106	24.211	123.64
#1	.00259	.00106	.02010	.68355	.01637	2.0279	.00070
#2	-.00142	.00493	.02417	.68192	.01637	2.8009	.00164
#3	-.00238	-.00150	.01959	.69089	.01573	1.5482	-.00055
#4	.00108	.00235	.02467	.68110	.01954	2.1523	.00273
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	6.7434	.43092	.00114	S-.11300	.01137	.03895	.01169
SDev	.0148	.00090	.00372	.00000	.00722	.01883	.03319
%RSD	.21991	.20956	325.87	.00000	63.468	48.340	283.78
#1	6.7352	.43021	.00114	S-.11300	.00688	.02118	-.00491
#2	6.7656	.43116	.00570	S-.11300	.00860	.06384	-.00492
#3	6.7377	.43021	-.00341	S-.11300	.00786	.02821	-.00487
#4	6.7352	.43210	.00114	S-.11300	.02214	.04258	.06148
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	-.00790	5.8345	.01957	.29839	.01272	.09981	.00205
SDev	.04099	.0145	.00102	.00116	.00095	.05538	.00239
%RSD	519.03	.24852	5.2253	.39025	7.4919	55.484	116.39
#1	-.02647	5.8193	.02045	.29871	.01288	.10246	.00006
#2	.04782	5.8248	.01854	.29734	.01349	.07077	.00356

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#3	-.04770	5.8468	.02045	.29989	.01134	.04975	-.00003
#4	-.00524	5.8469	.01885	.29761	.01318	.17624	.00461

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	.32105
SDev	.00067
%RSD	.20777

#1	.32162
#2	.32061
#3	.32034
#4	.32161

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DEA05T

Operator: RJG

Run Time: 06/14/00 19:15:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00276	.08659	.14718	.04337	.42563	.00008	H603.84
SDev	.00289	.01811	.02826	.01416	.00101	.00001	3.96
%RSD	104.40	20.910	19.202	32.649	.23740	5.6053	.65618
#1	-.00241	.08904	.14274	.03629	.42637	.00008	599.62
#2	-.00661	.06556	.17818	.06461	.42592	.00008	H601.91
#3	.00039	.10934	.11085	.03629	.42414	.00008	H608.73
#4	-.00243	.08241	.15695	.03630	.42610	.00009	H605.13
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	.01532	.00397	.00025	1.2839	.04334	4.1714	.00680
SDev	.00361	.00323	.00144	.0086	.00321	.0455	.00039
%RSD	23.583	81.229	567.15	.67125	7.4063	1.0913	5.7200
#1	.02026	-.00022	.00127	1.2914	.04223	4.2314	.00690
#2	.01179	.00752	.00127	1.2898	.03969	4.1781	.00671
#3	.01380	.00494	-.00178	1.2727	.04413	4.1247	.00727
#4	.01543	.00365	.00026	1.2816	.04730	4.1514	.00634
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	23.424	3.4401	.00570	S-.11300	.12152	.09050	.01530
SDev	.064	.0140	.00372	.00000	.00873	.01058	.01340
%RSD	.27215	.40778	65.241	.00000	7.1816	11.695	87.563
#1	23.462	3.4233	.00570	S-.11300	.12772	.09925	.01538
#2	23.495	3.4347	.01025	S-.11300	.11555	.08527	-.00367
#3	23.376	3.4554	.00115	S-.11300	.13019	.07811	.02484
#4	23.365	3.4469	.00570	S-.11300	.11262	.09937	.02466
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	.01431	6.2795	.01927	.76560	-.02813	.05316	.00380
SDev	.05361	.0204	.01896	.00169	.00084	.06057	.00170
%RSD	374.64	.32415	98.391	.22042	3.0014	113.93	44.852
#1	-.00515	6.2602	.00161	.76628	-.02851	.04519	.00465
#2	.02314	6.2657	.00725	.76628	-.02913	-.01807	.00474

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#3	.08330	6.2877	.04364	.76309	-.02729	.12971	.00456
#4	-.04405	6.3042	.02456	.76674	-.02760	.05582	.00125

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	1.8155
SDev	.0090
%RSD	.49537

#1	1.8066
#2	1.8092
#3	1.8252
#4	1.8209

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DEA07T

Operator: RJG

Run Time: 06/14/00 19:19:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00341	.13117	.15740	.03624	.33030	.00011	355.05
SDev	.00198	.00814	.04183	.00001	.00193	.00006	1.15
%RSD	58.020	6.2065	26.573	.02069	.58324	55.488	.32516
#1	-.00621	.11936	.15309	.03625	.33122	.00008	353.34
#2	-.00201	.13293	.10716	.03624	.32970	.00008	355.76
#3	-.00201	.13448	.20936	.03625	.33237	.00008	355.35
#4	-.00341	.13790	.15999	.03623	.32792	.00020	355.74
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	.00535	.00145	-.00127	.34106	.01691	2.3123	.00228
SDev	.00327	.00284	.00131	.00214	.00172	.3105	.00036
%RSD	61.242	196.28	103.03	.62853	10.153	13.428	15.527
#1	.00378	-.00015	-.00280	.34331	.01755	2.0813	.00262
#2	.01026	.00497	.00025	.33923	.01755	2.5433	.00206
#3	.00364	-.00144	-.00178	.34249	.01818	2.0102	.00190
#4	.00370	.00242	-.00077	.33923	.01438	2.6143	.00254
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	23.072	1.4351	.00000	S-.11300	.03314	.32980	.02872
SDev	.086	.0025	.00228	.00000	.00858	.01358	.03318
%RSD	.37202	.17273	90043.	.00000	25.880	4.1181	115.55
#1	23.082	1.4329	.00114	S-.11300	.04300	.31199	.00515
#2	23.135	1.4348	-.00341	S-.11300	.02313	.32639	.06175
#3	23.122	1.4386	.00114	S-.11300	.03661	.34031	-.00440
#4	22.947	1.4339	.00114	S-.11300	.02982	.34049	.05238
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	.02836	8.8392	.01546	.91079	-.01403	.03688	.00454
SDev	.04525	.0395	.01296	.00457	.00015	.04902	.00004
%RSD	159.56	.44668	83.860	.50177	1.0929	132.92	.92622
#1	.00891	8.8282	.01487	.91342	-.01410	.09753	.00455
#2	-.02647	8.8337	.02849	.90923	-.01380	-.00799	.00447

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#3	.06551	8.8943	.02055	.91539	-.01410	.05537	.00456
#4	.06550	8.8006	-.00209	.90512	-.01410	.00260	.00456
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	.80539
SDev	.00529
%RSD	.65654

#1	.80379
#2	.80637
#3	.81204
#4	.79938

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: CCV2-3

Operator: RJG

Run Time: 06/14/00 19:22:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98800	48.661	5.0543	4.8679	4.7169	4.8181	51.237
SDev	.00370	.225	.1165	.0289	.0237	.0270	.185
%RSD	.37477	.46278	2.3053	.59343	.50176	.56072	.36068
#1	.99221	48.517	5.1198	4.8686	4.7012	4.8279	51.453
#2	.98959	48.969	5.0730	4.9085	4.7491	4.8497	51.328
#3	.98367	48.471	4.8846	4.8465	4.6971	4.7865	51.091
#4	.98655	48.686	5.1398	4.8479	4.7201	4.8083	51.076
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	5.0203	4.9052	4.9391	4.7204	51.052	47.531	4.6533
SDev	.0122	.0145	.0129	.0285	.170	.344	.0468
%RSD	.24364	.29641	.26108	.60357	.33374	.72323	1.0065
#1	5.0382	4.9103	4.9535	4.7065	51.112	47.100	4.6030
#2	5.0162	4.9206	4.9464	4.7604	51.257	47.438	4.7080
#3	5.0108	4.8860	4.9301	4.6950	50.862	47.687	4.6282
#4	5.0157	4.9039	4.9265	4.7195	50.977	47.900	4.6740
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	48.818	4.9018	4.9120	47.729	4.8438	4.9512	4.8796
SDev	.230	.0157	.0202	.369	.0196	.0273	.0375
%RSD	.47034	.32018	.41162	.77266	.40549	.55177	.76847
#1	48.773	4.9145	4.9006	47.298	4.8674	4.9727	4.9105
#2	49.087	4.9146	4.9371	48.158	4.8470	4.9727	4.8632
#3	48.535	4.8824	4.8915	47.592	4.8197	4.9437	4.8344
#4	48.877	4.8956	4.9188	47.869	4.8413	4.9157	4.9104
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	5.1296	4.9352	4.9835	4.7274	4.8304	9.6017	4.8890
SDev	.0607	.0055	.0746	.0223	.0181	.0855	.0193
%RSD	1.1825	.11091	1.4974	.47158	.37399	.89074	.39430
#1	5.0882	4.9393	5.0070	4.7168	4.8310	9.5906	4.8879
#2	5.2090	4.9397	4.8808	4.7589	4.8549	9.6416	4.9159

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#3	5.0767	4.9281	5.0582	4.7078	4.8123	9.4878	4.8707
#4	5.1443	4.9337	4.9880	4.7260	4.8233	9.6869	4.8814

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	4.9539
SDev	.0164
%RSD	.33192

#1	4.9648
#2	4.9705
#3	4.9356
#4	4.9449

Errors	LC Pass
High	5.5000
Low	4.5000

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Method: QUANMET Sample Name: CCB3

Operator: RJG

Run Time: 06/14/00 19:25:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00139	-.01021	.04676	.00102	.00020	.00033	.01139
SDev	.00266	.01054	.03972	.00786	.00020	.00017	.00714
%RSD	190.79	103.16	84.940	768.57	101.25	51.125	62.724
#1	-.00315	-.02366	.08037	.00158	.00013	.00033	.00873
#2	.00247	-.00184	.00259	-.00471	.00039	.00044	.02079
#3	-.00175	-.00180	.02379	-.00472	.00031	.00045	.01218
#4	-.00315	-.01355	.08029	.01195	-.00005	.00009	.00384
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	.00011	.00096	.00013	-.00265	.00333	-.04887	.00033
SDev	.00223	.00065	.00192	.00115	.00246	.30815	.00110
%RSD	2026.2	67.108	1470.5	43.550	73.800	630.60	336.84
#1	-.00276	.00129	-.00127	-.00347	.00238	-.36205	.00025
#2	.00114	.00128	.00280	-.00102	.00619	.37538	.00126
#3	-.00036	.00128	-.00127	-.00265	.00428	-.12217	.00099
#4	.00242	-.00001	.00026	-.00347	.00048	-.08663	-.00120
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	.00824	.00024	.01366	.09951	-.00241	.00889	-.00481
SDev	.01265	.00047	.00228	.01000	.00431	.02676	.00005
%RSD	153.59	195.82	16.668	10.046	178.75	301.01	1.0938
#1	.01520	.00048	.01480	.09903	.00166	.00004	-.00478
#2	.01774	.00048	.01480	.11052	-.00043	.01421	-.00478
#3	.01014	.00048	.01480	.10210	-.00252	-.02125	-.00481
#4	-.01014	-.00047	.01025	.08640	-.00836	.04255	-.00489
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	.01239	-.05785	-.00575	.00021	.00054	.04215	.00112
SDev	.04919	.00320	.01250	.00019	.00081	.03498	.00172
%RSD	396.90	5.5233	217.49	92.354	150.28	82.991	154.28
#1	.01593	-.06062	-.00431	.00028	-.00031	.06854	.00028
#2	.07254	-.05506	-.02150	.00041	.00123	.06847	.00370

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#3	-.04774	-.05511	-.00623	-.00004	.00123	-.00533	.00028
#4	.00885	-.06062	.00904	.00018	-.00000	.03691	.00020
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 .00114
SDev .00117
%RSD 101.79

#1 .00163
#2 .00090
#3 -.00035
#4 .00239

Errors LC Pass
High .02000
Low -.02000

Analysis Report

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Method: QUANMET Sample Name: DEA09T

Operator: RJG

Run Time: 06/14/00 19:28:25

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00076	.31789	.18492	.11692	.39331	.00027	64.130
SDev	.00240	.00363	.02403	.01751	.00512	.00006	.479
%RSD	314.33	1.1406	12.994	14.975	1.3007	23.575	.74676
#1	-.00040	.32291	.18660	.09168	.38883	.00032	63.738
#2	.00240	.31618	.15141	.12521	.38902	.00032	63.856
#3	-.00323	.31795	.19377	.11946	.39676	.00021	64.117
#4	-.00183	.31453	.20789	.13132	.39862	.00021	64.808
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	.00045	.00268	.00140	.06712	.04647	1.9702	.00128
SDev	.00211	.00123	.00157	.00245	.00168	.1998	.00070
%RSD	470.12	45.882	112.52	3.6454	3.6150	10.141	55.078
#1	.00214	.00365	.00229	.06508	.04679	2.1701	.00089
#2	.00127	.00365	.00280	.06508	.04869	1.9124	.00164
#3	-.00263	.00237	-.00076	.06834	.04488	1.7170	.00051
#4	.00101	.00107	.00127	.06997	.04552	2.0813	.00206
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	12.155	.43541	.00456	S-.11300	.01740	.04067	-.00461
SDev	.126	.00418	.00228	.00000	.00385	.01344	.00772
%RSD	1.0335	.95978	49.927	.00000	22.114	33.051	167.41
#1	12.046	.43117	.00570	S-.11300	.01296	.04957	.00482
#2	12.054	.43305	.00570	S-.11300	.02236	.04956	-.00463
#3	12.221	.43682	.00115	S-.11300	.01714	.02116	-.00455
#4	12.300	.44059	.00570	S-.11300	.01713	.04239	-.01409
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	.02670	4.0394	.00378	.20595	.00652	.00985	.00236
SDev	.03886	.0509	.01607	.00291	.00068	.10600	.00265
%RSD	145.53	1.2594	425.01	1.4114	10.435	1076.4	112.22
#1	.05854	3.9953	-.00047	.20320	.00675	-.12998	.00465
#2	-.00867	3.9953	.02620	.20375	.00736	.08099	.00465

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#3	-.00514	4.0834	-.01196	.20786	.00613	-.01385	.00002
#4	.06207	4.0834	.00135	.20900	.00583	.10222	.00011

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	.17789
SDev	.00193
%RSD	1.0830

#1	.17548
#2	.17722
#3	.17969
#4	.17917

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DEA0AT

Operator: RJG

Run Time: 06/14/00 19:31:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00321	.71579	.17542	.03363	.64683	.00024	154.36
SDev	.00162	.00799	.01331	.00409	.00463	.00006	.88
%RSD	50.379	1.1159	7.5888	12.164	.71528	26.814	.57082
#1	-.00180	.70984	.17984	.03762	.64122	.00020	153.94
#2	-.00462	.71669	.19042	.03631	.65189	.00033	154.27
#3	-.00460	.70986	.15870	.03187	.64522	.00020	155.61
#4	-.00182	.72675	.17271	.02873	.64896	-.00021	153.61
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	-.00128	.00322	-.00115	.04958	.05815	1.3127	.00154
SDev	.00288	.00123	.00152	.00000	.00201	.1850	.00118
%RSD	225.20	38.276	132.58	.00195	3.4506	14.095	76.921
#1	.00006	.00226	-.00331	.04957	.05942	1.4771	.00190
#2	-.00131	.00483	-.00076	.04958	.05562	1.1661	-.00010
#3	L-.00527	.00356	.00025	.04958	.05752	1.4682	.00270
#4	.00140	.00225	-.00076	.04957	.06006	1.1395	.00164
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	4.2355	.41207	-.00113	S-.11300	.01547	61.892	.01908
SDev	.0247	.00194	.00263	.00000	.00567	.235	.02734
%RSD	.58312	.47141	232.72	.00000	36.667	.37988	143.27
#1	4.2013	.41043	.00115	S-.11300	.01845	61.653	.04272
#2	4.2570	.41325	-.00341	S-.11300	.01593	61.937	.04279
#3	4.2494	.41420	.00115	S-.11300	.02015	62.199	-.00457
#4	4.2342	.41042	-.00341	S-.11300	.00737	61.781	-.00461
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	-.02190	1.6147	.01682	.15359	-.00698	.06498	.00168
SDev	.02423	.0000	.02141	.00099	.00046	.02510	.00201
%RSD	110.66	.00155	127.23	.64387	6.5934	38.631	120.10
#1	-.02985	1.6147	.04365	.15253	-.00675	.05968	.00342
#2	-.04402	1.6146	.00167	.15481	-.00736	.04919	-.00007

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#3	.01259	1.6147	.02435	.15312	-.00736	.04916	.00343
#4	-.02631	1.6146	-.00237	.15390	-.00644	.10189	-.00007

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	.10372
SDev	.00138
%RSD	1.3264

#1	.10491
#2	.10241
#3	.10491
#4	.10266

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DEA0CT

Operator: RJG

Run Time: 06/14/00 19:34:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E1CP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00468	.07641	.09791	.08006	.50089	.00014	H716.50
SDev	.00135	.00287	.05472	.00450	.00351	.00007	5.18
%RSD	28.755	3.7612	55.891	5.6191	.70103	50.766	.72240
#1	-.00501	.07550	.03704	.07909	.49591	.00007	H712.98
#2	-.00364	.08057	.16748	.07409	.50098	.00020	H722.02
#3	-.00364	.07396	.07942	.08353	.50302	.00020	H719.73
#4	-.00646	.07562	.10769	.08353	.50365	.00009	H711.29
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	.02475	.00038	-.00331	.45713	.04506	4.4202	.01019
SDev	.00216	.00247	.00269	.00330	.00151	.3770	.00039
%RSD	8.7414	644.92	81.350	.72133	3.3519	8.5301	3.8546
#1	.02319	.00103	-.00077	.45264	.04601	4.7467	.01024
#2	.02387	-.00155	-.00382	.45672	.04411	4.5334	.01072
#3	.02400	.00360	-.00178	.45917	.04664	4.5246	.00981
#4	.02796	-.00156	-.00687	.45998	.04347	3.8760	.01000
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	17.798	2.5688	.00798	S-.11300	.06468	.05146	.05741
SDev	.036	.0154	.00263	.00000	.00656	.03240	.00949
%RSD	.20046	.59862	32.964	.00000	10.139	62.972	16.530
#1	17.755	2.5516	.01026	S-.11300	.06189	.04261	.06209
#2	17.811	2.5808	.01025	S-.11300	.07012	.09928	.06213
#3	17.839	2.5827	.00570	S-.11300	.07000	.02850	.06224
#4	17.786	2.5601	.00570	S-.11300	.05672	.03542	.04317
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	-.02991	8.0649	.01329	.86707	-.03518	.06144	.00469
SDev	.02468	.0468	.01496	.00574	.00063	.03553	.00375
%RSD	82.533	.58071	112.60	.66150	1.7966	57.833	79.954
#1	.00547	7.9961	.01713	.85914	-.03557	.04020	.00927
#2	-.03345	8.0842	.03239	.86686	-.03465	.05099	.00473

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#3	-.04051	8.1008	-.00196	.86997	-.03465	.04038	.00464
#4	-.05114	8.0787	.00559	.87230	-.03587	.11420	.00010

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	1.7579
SDev	.0094
%RSD	.53534

#1	1.7484
#2	1.7695
#3	1.7613
#4	1.7526

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DEA0FT

Operator: RJG

Run Time: 06/14/00 19:37:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00494	.14298	.11238	.03624	.62977	.00017	368.46
SDev	.00257	.01468	.05376	.00001	.00095	.00006	1.47
%RSD	51.934	10.269	47.836	.01796	.15067	36.397	.40010
#1	-.00776	.12117	.05095	.03624	.62992	.00021	367.89
#2	-.00213	.15296	.11756	.03625	.62985	.00020	367.40
#3	-.00634	.14977	.09997	.03624	.63081	.00020	367.90
#4	-.00354	.14803	.18105	.03624	.62851	.00008	370.64
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	.00779	.00452	-.00280	.31965	.02069	2.5210	.00270
SDev	.00132	.00162	.00125	.00067	.00187	.1850	.00142
%RSD	16.939	35.821	44.578	.20840	9.0331	7.3391	52.686
#1	.00962	.00484	-.00127	.32046	.01879	2.6143	.00137
#2	.00721	.00227	-.00229	.31965	.02323	2.6588	.00471
#3	.00654	.00613	-.00382	.31965	.02006	2.5610	.00225
#4	.00778	.00484	-.00382	.31883	.02069	2.2501	.00246
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	32.419	2.0476	.00228	S-.11300	.01879	.08871	.00736
SDev	.118	.0065	.00573	.00000	.00430	.02751	.02498
%RSD	.36253	.31741	251.33	.00000	22.898	31.007	339.34
#1	32.477	2.0446	.00114	S-.11300	.01653	.09936	.00494
#2	32.277	2.0408	.01025	S-.11300	.01443	.09217	-.00453
#3	32.546	2.0493	-.00341	S-.11300	.02428	.11362	.04300
#4	32.376	2.0559	.00114	S-.11300	.01990	.04967	-.01397
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	-.01231	4.1565	-.00704	.40078	-.02146	.04027	.00344
SDev	.04859	.0506	.02290	.00068	.00087	.05742	.00229
%RSD	394.87	1.2173	325.28	.17041	4.0406	142.57	66.367
#1	-.04061	4.1110	-.00037	.40088	-.02269	.10096	.00002
#2	-.00168	4.1716	-.02332	.40020	-.02085	-.03627	.00473

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Analysis Report

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#3	.05137	4.1220	-.02691	.40170	-.02146	.03763	.00446
#4	-.05830	4.2212	.02244	.40033	-.02085	.05877	.00455

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	.67624
SDev	.00442
%RSD	.65369

#1	.67043
#2	.67546
#3	.67843
#4	.68065

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DEA0GT

Operator: RJG

Run Time: 06/14/00 19:40:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00298	.44871	.13716	.07036	.56634	.00024	95.245
SDev	.00177	.00573	.03466	.01631	.00476	.00006	1.040
%RSD	59.427	1.2758	25.272	23.181	.84068	24.053	1.0922
#1	-.00334	.45082	.09754	.07458	.56901	.00021	94.159
#2	-.00474	.44072	.13287	.08032	.57168	.00021	94.634
#3	-.00052	.44912	.18206	.08032	.56279	.00020	95.734
#4	-.00332	.45418	.13620	.04624	.56190	.00032	96.451
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	.00463	.00324	-.00038	1.7553	.01568	1.7814	.00255
SDev	.00264	.00162	.00201	.0210	.00201	.4129	.00095
%RSD	57.082	49.964	524.94	1.1957	12.796	23.178	37.291
#1	.00402	.00099	-.00127	1.7638	.01441	1.2639	.00145
#2	.00781	.00356	-.00280	1.7810	.01378	1.6992	.00206
#3	.00524	.00356	.00127	1.7386	.01822	1.9124	.00335
#4	.00145	.00486	.00127	1.7377	.01632	2.2501	.00335
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	11.781	.97351	.00228	S-.11300	.03623	2.7056	.00270
SDev	.055	.00578	.00228	.00000	.00503	.0373	.01616
%RSD	.46906	.59415	99.889	.00000	13.889	1.3799	597.90
#1	11.778	.96645	.00114	S-.11300	.04307	2.6523	.00507
#2	11.854	.97399	.00570	S-.11300	.03139	2.7233	-.01387
#3	11.719	.97304	.00114	S-.11300	.03661	2.7375	-.00437
#4	11.773	.98058	.00114	S-.11300	.03386	2.7092	.02398
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	.02040	5.6567	.00432	.15735	-.00307	.01847	.00231
SDev	.04079	.0240	.01742	.00098	.00056	.04825	.00260
%RSD	199.94	.42503	403.25	.62154	18.257	261.27	112.38
#1	-.03355	5.6650	.02819	.15736	-.00337	-.01054	.00002
#2	.06550	5.6209	-.01198	.15873	-.00368	.07389	.00010

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#3	.02660	5.6705	-.00430	.15664	-.00276	.04216	.00456
#4	.02305	5.6705	.00537	.15668	-.00245	-.03164	.00456
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	1.0866
SDev	.0074
%RSD	.68175

#1	1.0762
#2	1.0936
#3	1.0890
#4	1.0876

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: CCV2-4

Operator: RJG

Run Time: 06/14/00 19:44:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0005	49.835	5.0746	4.9858	4.8635	4.9355	51.343
SDev	.0007	.374	.0863	.0413	.0507	.0395	.152
%RSD	.07139	.75018	1.7015	.82914	1.0430	.79958	.29603
#1	1.0010	49.416	5.0824	4.9551	4.8064	4.8843	51.501
#2	1.0012	49.776	5.0610	4.9522	4.8552	4.9389	51.425
#3	.99994	50.325	5.1827	5.0402	4.9298	4.9806	51.157
#4	.99981	49.823	4.9725	4.9957	4.8628	4.9384	51.290
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	5.0212	4.9538	4.9865	4.8800	51.864	49.037	4.8186
SDev	.0161	.0119	.0053	.0572	.172	.320	.0588
%RSD	.32113	.23965	.10630	1.1713	.33235	.65193	1.2195
#1	5.0384	4.9449	4.9799	4.8126	51.635	49.295	4.7616
#2	5.0004	4.9706	4.9880	4.8731	51.892	48.797	4.8096
#3	5.0183	4.9460	4.9855	4.9522	52.053	49.330	4.9009
#4	5.0279	4.9538	4.9926	4.8820	51.876	48.726	4.8024
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	49.999	4.9628	4.9713	49.485	4.9220	4.9662	5.0407
SDev	.367	.0093	.0225	.523	.0187	.0157	.0544
%RSD	.73462	.18769	.45241	1.0566	.37930	.31669	1.0796
#1	49.577	4.9495	4.9462	48.922	4.9225	4.9732	4.9767
#2	49.908	4.9656	4.9599	49.445	4.9175	4.9809	5.1095
#3	50.463	4.9713	4.9964	50.186	4.9466	4.9444	5.0433
#4	50.048	4.9647	4.9827	49.387	4.9015	4.9662	5.0334
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	5.2555	4.9982	5.0241	4.8613	4.9322	9.7352	4.9677
SDev	.1082	.0396	.0757	.0434	.0311	.1032	.0206
%RSD	2.0588	.79174	1.5059	.89291	.63008	1.0599	.41451
#1	5.1574	4.9400	5.1274	4.8121	4.8954	9.7430	4.9399
#2	5.2255	5.0285	5.0039	4.8562	4.9312	9.7189	4.9697

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Analysis Report

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#3	5.4101	5.0123	4.9463	4.9179	4.9714	9.8650	4.9897
#4	5.2290	5.0120	5.0189	4.8592	4.9306	9.6137	4.9713

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	5.0073
SDev	.0125
%RSD	.25053

#1	4.9968
#2	5.0201
#3	5.0159
#4	4.9962

Errors	LC Pass
High	5.5000
Low	4.5000

Analysis Report

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Method: QUANMET Sample Name: CCB4

Operator: RJG

Run Time: 06/14/00 19:47:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00105	-.00177	.01939	.01608	.00064	.00069	.00956
SDev	.00292	.01263	.01784	.00881	.00027	.00017	.00658
%RSD	278.31	713.13	92.032	54.809	41.691	24.595	68.820
#1	-.00455	-.01355	.04152	.02362	.00039	.00045	-.00019
#2	.00245	.00996	.01312	.02363	.00058	.00082	.01263
#3	-.00175	-.01181	-.00079	.00695	.00102	.00082	.01413
#4	-.00035	.00832	.02371	.01010	.00058	.00069	.01168
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	.00054	.00160	.00051	-.00224	.00555	-.08218	.00053
SDev	.00167	.00193	.00158	.00082	.00264	.40394	.00041
%RSD	306.78	119.99	308.75	36.446	47.595	491.51	76.634
#1	-.00183	.00000	-.00025	-.00347	.00238	-.66413	.00017
#2	.00103	.00257	.00026	-.00183	.00872	.25099	.00027
#3	.00208	.00385	.00280	-.00183	.00618	.10884	.00107
#4	.00090	-.00000	-.00076	-.00184	.00492	-.02443	.00062
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	.01014	.00024	.01253	.03320	-.00046	-.00528	-.00717
SDev	.01418	.00047	.00456	.01166	.00284	.01067	.00909
%RSD	139.94	195.32	36.364	35.129	612.11	201.97	126.69
#1	-.01014	.00048	.01025	.01636	-.00044	-.01420	-.01427
#2	.01267	.00048	.01936	.03435	.00141	-.01414	-.01431
#3	.02281	-.00047	.01025	.04086	.00166	.00721	.00471
#4	.01520	.00048	.01025	.04124	-.00449	-.00001	-.00483
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	-.02297	-.03169	.00044	.00097	.00077	.05004	.00024
SDev	.05934	.00276	.00884	.00018	.00064	.01008	.00009
%RSD	258.28	8.6957	2001.1	18.099	83.267	20.139	36.098
#1	-.06190	-.02755	.00327	.00087	-.00000	.03690	.00020
#2	-.04773	-.03306	.00899	.00078	.00153	.05791	.00037

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Analysis Report

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#3	.06547	-.03306	-.01191	.00114	.00061	.04737	.00020
#4	-.04774	-.03306	.00141	.00110	.00092	.05797	.00020
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	.00100
SDev	.00083
%RSD	82.913

#1	-.00013
#2	.00089
#3	.00162
#4	.00164

Errors	LC Pass
High	.02000
Low	-.02000

TCLP (Method 1311)

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



6601324

By <u>Jeffrey D. Sarant</u>	Date <u>6-11-00</u>	Checked by <u>[Signature]</u>	Page <u>1 of 2</u>	Filter lot # <u>8320701W</u>	Serial Number <u>054</u>	Log Book Number <u>96-MT-526</u>
Project Number <u>COF030522 COF080184 COF070184 COF080184</u>	Client codes <u>34411, 131369, 346644, 405650</u>	Date <u>6-12-00</u>	pH instrument <u>Accumet M25</u>	Probe <u>SN9082050</u>	Balance <u>C94817</u>	
		Solution Number 1 - Log Book Number <u>064497-12</u>	Solution Number 2 - Log Book Number			

Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1, or #2	Conc. HNO3 to Acidity (for Metals)	Fluid Determination		TCLP Extraction		Final pH After Tumbling
						Sample ID	Wgt (g)	Fluid Vol.		
DEEHC	5.00g/96.5ml	8.30	1.62	501#1	5ml	1. PB TCLP 6-11-00	100.00g	900.0ml	6hrs	4.94
DEEHP	1	9.03	1.56			2. DEEHC				5.22
DE9XX	1	7.65	1.55			3. DEEHP				5.07
DEA02	1	8.04	1.55			4. DE9XX				4.95
DEA04	1	6.95	1.51			5. DEA02				5.03
DEA05	1	9.14	1.61			6. DEA04				5.02
DEA07	1	8.57	1.58			7. DEA05				5.85
DEA09	1	8.19	1.52			8. DEA07				5.27
DEA0A	1	6.90	1.52			9. DEA09				5.02
DEA0C	1	8.98	1.57			10. DEA0A				5.11
DEA0F	1	9.03	1.58			11. DEA0C				6.08
DEA0G	1	8.61	1.53			12. DEEHC				5.13
DEEFT	1	9.47	1.96			13. DEA0F				5.48

Extract(s)	(Record line number from above)	Date	Time	Analyst	Location	Extract(s) Received		Extract(s) Relinquished		Location
						Date	Time	Date	Time	
All Above	6-2-00	1140	Jeffrey D. Sarant	Metals Rep	6-12-00	1145	Jeffrey D. Sarant			11E

* = 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 24P

TCLP (Method 1311)

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



QUA-4181

Page 2 of 2

Filter lot # 8320701W

Serial Number 055 Log Book Number 96-MT-526

By Deborah D. Baurt Date 6-11-00 Checked by [Signature] Date 6-12-00 pH Instrument Accumet 4075 Probe SN 9082030 Balance 69187

Project Number 605070184 Log Number 605070184 Client Codes 394411, 131369, 366694, 405650 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) Wet/Dry	Fluid Vol.	Final pH After Tumbling
DEFSR	5.00g/95.5mL	8.73	1.51	501#1	5mL	1. DEAGG	100.00g	2000mL Glass	5.03
DEFSX	✓ / ✓	8.73	1.51	✓	✓	2. DEOSF	✓	✓	6.62
						3. DEFSR	✓	✓	4.99
						4. DEFSX	✓	✓	4.98
						5.			
						6.			
						7.			
						8.			
						9.			
						10.			
						11.			
						12.			
						13.			

Extract(s)

Extract(s) Received

Extract(s) Relinquished

(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst	Location

All Above 6-12-00 11:10 Deborah D. Baurt Metals Lab 6-12-00 11:45 Deborah D. Baurt 6-12-00

= 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 24°

Date/Time On	Date/Time Off	Agitation Apparatus RPMs
6-11-00 1200	6-12-00 0700	30 ± 2
6-11-00	pH Calibration	(4.0) (7.0) (10.0)
6-12-00		4.00 7.01 10.04
6-12-00		4.00 7.01 10.03

6601326

Metals Preparation

.0g



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

Submitted To Your Scientists

Method: 3010A		Matrix: Water		Start Time: 0845		SDG: _____		Balance# _____		Reagents: 3ml conc. HNO ₃ 5ml 1:1 HCl 6623N35058 Melindero 6044-134-5-26 6/30 6044-181-2	
Analyst: Keanne Sance		Date: 6-13-00		Lot Number: COFO90166		Lab Lot No. (book, page, line): 2017-084-1, 9950-114-13					
Prepared By: Muelly Hulse		Date: 6-13-00		COFO80328		COFO70184		COFO80184		MS	
Sample ID		Init Wt/Vol g/mL	Final Vol mL	Comments		Color		Clarity		Texture	
DE9XX	50ml	50ml	SP 6-13-00		Pre	Post	Pre	Post	Pre	Post	Artifacts
DEA02											S=Stones
DEA04											O=Organic
DEA05											(plant mat)
DEA07											W=free H ₂ O
DEA09											G=Glass
DEA0A											M=Metal Fragments
DEA0C											R=Rubber/Plastic
DEA0F											C=Cloth
DEA0G											P=Paper
1. DE05F											I=Insects
2. DE05H											
3. DE05C											
4. DE05C											
5. DE05H											
6. DE05J											
7. DE05J											
8. DE05J											
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98. DE05J											
99. DE05J											
100. DE05J											

REQUESTED BY: KRANCES

METHOD: QO Inductively Coupled Plasma (60108)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
10A CLP1	DE9XX	— — —	239741	131369	A-34-QO C0F070184	001			SOLID	0	2 1
10A CLP1	DEA02	— — —	239742	131369	A-34-QO C0F070184	002			SOLID	0	2 1
10A CLP1	DEA04	— — —	239743	131369	A-34-QO C0F070184	003			SOLID	0	2 1
10A CLP1	DEA05	— — —	239744	131369	A-34-QO C0F070184	004			SOLID	0	2 1
10A CLP1	DEA07	— — —	239745	131369	A-34-QO C0F070184	005			SOLID	0	2 1
10A CLP1	DEA09	— — —	239746	131369	A-34-QO C0F070184	006			SOLID	0	2 1
10A CLP1	DEA0A	— — —	239747	131369	A-34-QO C0F070184	007			SOLID	0	2 1
10A CLP1	DEA0C	— — —	239748	131369	A-34-QO C0F070184	008			SOLID	0	2 1
10A CLP1	DEA0F	— — —	239749	131369	A-34-QO C0F070184	009			SOLID	0	2 1
10A CLP1	DEA0G	— — —	239750	131369	A-34-QO C0F070184	010			SOLID	0	2 1
10B	DED5F	— — —	239751	366694	A-34-QO C0F080184	001			SOLID	0	4 1
10C CLP1	DEEHC	— — —	239739	399411	A-34-QO C0F080328	001			SOLID	0	3 1
10C CLP1	DEEHP	— — —	239740	399411	A-34-QO C0F080328	002			SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

6-13-00 0835

6-13-00 1000

REQUESTED BY: FAUSTG

METHOD: QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SEF	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
10A CLP1	DE9XX	— — —	239417	131369	A-34-QO C0F070184	001			SOLID	0	2 1
10A CLP1	DEA02	— — —	239418	131369	A-34-QO C0F070184	002			SOLID	0	2 1
10A CLP1	DEA04	— — —	239419	131369	A-34-QO C0F070184	003			SOLID	0	2 1
10A CLP1	DEA05	— — —	239420	131369	A-34-QO C0F070184	004			SOLID	0	2 1
10A CLP1	DEA07	— — —	239421	131369	A-34-QO C0F070184	005			SOLID	0	2 1
10A CLP1	DEA09	— — —	239422	131369	A-34-QO C0F070184	006			SOLID	0	2 1
10A CLP1	DEA0A	— — —	239423	131369	A-34-QO C0F070184	007			SOLID	0	2 1
10A CLP1	DEA0C	— — —	239424	131369	A-34-QO C0F070184	008			SOLID	0	2 1
10A CLP1	DEA0F	— — —	239425	131369	A-34-QO C0F070184	009			SOLID	0	2 1
10A CLP1	DEA0G	— — —	239426	131369	A-34-QO C0F070184	010			SOLID	0	2 1
10B	DED5F	— — —	239414	366694	A-34-QO C0F080184	001			SOLID	0	4 1
10C CLP1	DEEHC	— — —	239415	399411	A-34-QO C0F080328	001			SOLID	0	3 1
10C CLP1	DEEHP	— — —	239416	399411	A-34-QO C0F080328	002			SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Geoffrey D. Faust
Geoffrey D. Faust

Geoffrey D. Faust
Geoffrey D. Faust

6-11-00 0730
6-11-00 0900

6601329

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A. Hoyle

Date of Analysis: 6-14-00

File ID: 0614HGA

Matrix: WATER

Lot Number/SDG

Method

<u>IDL-2</u>		<u>ILM04.0</u>
<u>COF070184</u>	<u>TCLP</u>	<u>7470A</u>
<u>COF080184</u>		
<u>COF080328</u>		
<u>COF100141</u>		
<u>COF080239</u>		

William A. Hoyle 6-14-00

09:33:48 14 Jun 2000

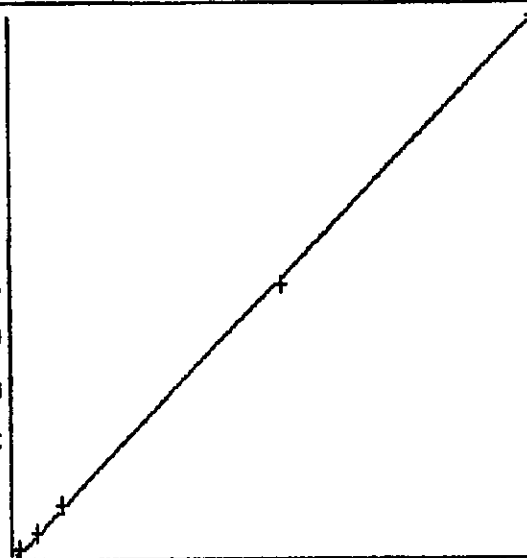
Folder: 0614HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0	09:33:48 14 Jun 2000 HG			
Hg	.000	ppb	24266					
*** Standard: 2 Rep: 1				Seq: 1	09:36:10 14 Jun 2000 HG			
Hg	.200	ppb	37642	0014-134-5				
*** Standard: 3 Rep: 1				Seq: 2	09:38:05 14 Jun 2000 HG			
Hg	.500	ppb	107970	0014-134-6				
*** Standard: 4 Rep: 1				Seq: 3	09:40:48 14 Jun 2000 HG			
Hg	1.00	ppb	209321	0014-134-7				
*** Standard: 5 Rep: 1				Seq: 4	09:42:55 14 Jun 2000 HG			
Hg	5.00	ppb	1087789	0014-134-8				
*** Standard: 6 Rep: 1				Seq: 5	09:44:52 14 Jun 2000 HG			
Hg	10.0	ppb	2101127	0014-134-9				

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 0614HGA Seq: 6 Batch:
 Prot: R/T On Pump: On
 Rev: 4.2 09:45:09 14 Jun 2000 Xmit: Off Gas: 0.38 LPM
 State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGMET
 Hg Accepted
 Conc. Calc. Dev. ->linear
 S1 .000 .073 .073 Quadratic
 S2 .200 .137 -.063 Wtdlinear
 S3 .500 .471 -.029 C
 S4 1.00 .952 -.048 Accept o
 S5 5.00 5.13 .126 n
 S6 10.0 9.94 -.059 c
 A .0000000 r .999000
 B 4.75148e-6 C -4.23064e-2



Mean
 S1 24266 0 SD 24266
 S2 37642 0 %RSD 37642
 S3 187978 0 %RSD 187978
 S4 289321 0 %RSD 289321
 S5 1887789 0 %RSD 1887789
 S6 2181127 0 %RSD 2181127

New cal coefficients stored

09:47:50 14 Jun 2000

Folder: 0614HGA
Protocol: HGMET

Page 997

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6	09:47:50 14 Jun 2000 HG			
Hg	2.52	ppb	540062	0614-134-10				
*** Sample ID: ICB1				Seq: 7	09:49:41 14 Jun 2000 HG			
Hg	.022	ppb	13496					
*** Sample ID: CRA-1				Seq: 8	09:51:42 14 Jun 2000 HG			
Hg	.139	ppb	38237	0014-134-11				
*** Sample ID: CCV5-1				Seq: 9	09:53:34 14 Jun 2000 HG			
Hg	5.04	ppb	1070205	0014-134-12				
*** Sample ID: CCB1				Seq: 10	09:55:35 14 Jun 2000 HG			
Hg	.004	ppb	9777					
*** Sample ID: IDL-1				Seq: 11	09:57:24 14 Jun 2000 HG			
Hg	.077	ppb	25071	0014-135-4				
*** Sample ID: IDL-2				Seq: 12	09:59:43 14 Jun 2000 HG			
Hg	.340	ppb	80364					
*** Sample ID: IDL-3				Seq: 13	10:01:35 14 Jun 2000 HG			
Hg	.063	ppb	22168					
*** Sample ID: IDL-4				Seq: 14	10:03:45 14 Jun 2000 HG			
Hg	.242	ppb	59801					
*** Sample ID: IDL-5				Seq: 15	10:05:36 14 Jun 2000 HG			
Hg	.235	ppb	58279					
*** Sample ID: IDL-6				Seq: 16	10:07:55 14 Jun 2000 HG			
Hg	.080	ppb	25730					
*** Sample ID: IDL-7				Seq: 17	10:10:39 14 Jun 2000 HG			
Hg	.168	ppb	44221					

VOID
INCONSISTANT
READINGS
WAH
6-14-00

6601333

10:13:09 14 Jun 2000				Folder: 0614HGA Protocol: HGMET		Page 998		
Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: CCV5-2				Seq: 18		10:13:09 14 Jun 2000	HG	
Hg	5.03	ppb	1067295					
*** Sample ID: CCB2				Seq: 19		10:14:59 14 Jun 2000	HG	
Hg	-.083	ppb	-8634					
*** Sample ID: DELTXBT				Seq: 20		10:16:58 14 Jun 2000	HG	
Hg	-.098	ppb	-11701					
*** Sample ID: DELTXCT				Seq: 21		10:19:11 14 Jun 2000	HG	
Hg	2.58	ppb	552676					
*** Sample ID: DEJ96BT				Seq: 22		10:21:15 14 Jun 2000	HG	
Hg	.090	ppb	27770					
*** Sample ID: DE9XXT				Seq: 23		10:24:46 14 Jun 2000	HG	
Hg	.077	ppb	25171					
*** Sample ID: DEA02T				Seq: 24		10:26:40 14 Jun 2000	HG	
Hg	.101	ppb	30139					
*** Sample ID: DEA04T				Seq: 25		10:28:49 14 Jun 2000	HG	
Hg	-.006	ppb	7644					
*** Sample ID: DEA05T				Seq: 26		10:31:08 14 Jun 2000	HG	
Hg	.165	ppb	43552					
*** Sample ID: DEA07T				Seq: 27		10:32:58 14 Jun 2000	HG	
Hg	.184	ppb	47691					
*** Sample ID: DEA09T				Seq: 28		10:35:38 14 Jun 2000	HG	
Hg	.055	ppb	20560					
*** Sample ID: DEA0AT				Seq: 29		10:37:42 14 Jun 2000	HG	
Hg	.072	ppb	24134					

- 135-1
0014-134-12 WAH
6.4.00

10:39:31 14 Jun 2000

Folder: 0614HGA
Protocol: HGMET

Page 999

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: CCV5-3				Seq: 30		10:39:31 14 Jun 2000 HG		
Hg	4.98	ppb	1056944					
*** Sample ID: CCB3				Seq: 31		10:41:35 14 Jun 2000 HG		
Hg	.198	ppb	50675					
*** Sample ID: DEAOCT				Seq: 32		10:44:15 14 Jun 2000 HG		
Hg	.029	ppb	14976					
*** Sample ID: DEAOFT				Seq: 33		10:46:16 14 Jun 2000 HG		
Hg	.117	ppb	33496					
*** Sample ID: DEAOGT				Seq: 34		10:48:27 14 Jun 2000 HG		
Hg	.035	ppb	16251					
*** Sample ID: DED5FT				Seq: 35		10:50:20 14 Jun 2000 HG		
Hg	.189	ppb	48757					
*** Sample ID: DEEHCT				Seq: 36		10:53:00 14 Jun 2000 HG		
Hg	.040	ppb	17343					
*** Sample ID: DEEHCST				Seq: 37		10:55:14 14 Jun 2000 HG		
Hg	4.99	ppb	1058692					
*** Sample ID: DEEHCDT				Seq: 38		10:57:09 14 Jun 2000 HG		
Hg	5.02	ppb	1065155					
*** Sample ID: DEEHPT				Seq: 39		10:59:12 14 Jun 2000 HG		
Hg	.294	ppb	70747					
*** Sample ID: DELV1B				Seq: 40		11:01:18 14 Jun 2000 HG		
Hg	.047	ppb	18775					
*** Sample ID: DELV1C				Seq: 41		11:03:10 14 Jun 2000 HG		
Hg	2.48	ppb	531689					

0014-135-2

SP.REC.
99%SP.REC.
100%

11:05:46 14 Jun 2000

Folder: 0614HGA
Protocol: HGMET

Page 1000

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: CCV5-4				Seq: 42	11:05:46 14 Jun 2000	HG		
Hg	4.90	ppb	1040811					
*** Sample ID: CCB4				Seq: 43	11:07:48 14 Jun 2000	HG		
Hg	-.007	ppb	7505					
*** Sample ID: DEHD3				Seq: 44	11:09:43 14 Jun 2000	HG		
Hg	.134	ppb	37017					
*** Sample ID: DEJ66				Seq: 45	11:11:39 14 Jun 2000	HG		
Hg	.004	ppb	9701					
*** Sample ID: DEJ66S				Seq: 46	11:14:03 14 Jun 2000	HG		
Hg	1.04	ppb	226745					
*** Sample ID: DEJ66D				Seq: 47	11:16:04 14 Jun 2000	HG		
Hg	1.08	ppb	236422					
*** Sample ID: DEJ67				Seq: 48	11:17:55 14 Jun 2000	HG		
Hg	-.029	ppb	2705					
*** Sample ID: DEJ69				Seq: 49	11:20:31 14 Jun 2000	HG		
Hg	.059	ppb	21242					
*** Sample ID: DEJ6C				Seq: 50	11:22:47 14 Jun 2000	HG		
Hg	-.038	ppb	861					
*** Sample ID: DELV3B				Seq: 51	11:25:09 14 Jun 2000	HG		
Hg	.099	ppb	29811					
*** Sample ID: DELV3C				Seq: 52	11:27:07 14 Jun 2000	HG		
Hg	2.41	ppb	515203					
*** Sample ID: DEDMH				Seq: 53	11:29:13 14 Jun 2000	HG		
Hg	-.014	ppb	5948					

SP-REC.
104%SP-REC.
108%

0014-135-3

11:31:37 14 Jun 2000

Folder: 0614HGA
Protocol: HGMET

Page 1001

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: CCV5-5				Seq: 54	11:31:37 14 Jun 2000 HG			
Hg	5.11	ppb	1084686					
*** Sample ID: CCB5				Seq: 55	11:34:11 14 Jun 2000 HG			
Hg	.144	ppb	39265					
*** Sample ID: DEDP5				Seq: 56	11:36:04 14 Jun 2000 HG			
Hg	.161	ppb	42696					
*** Sample ID: DEDPF				Seq: 57	11:38:08 14 Jun 2000 HG			
Hg	-.005	ppb	7864					
*** Sample ID: DEDPFS				Seq: 58	11:40:12 14 Jun 2000 HG			
Hg	.974	ppb	213930					
*** Sample ID: DEDPFD				Seq: 59	11:42:18 14 Jun 2000 HG			
Hg	.945	ppb	207885					
*** Sample ID: DEDQ6				Seq: 60	11:44:32 14 Jun 2000 HG			
Hg	.082	ppb	26226					
*** Sample ID: DEDQD				Seq: 61	11:46:36 14 Jun 2000 HG			
Hg	4.77	ppb	1012666					
*** Sample ID: DEDQH				Seq: 62	11:49:23 14 Jun 2000 HG			
Hg	.067	ppb	23083					
*** Sample ID: DEDQK				Seq: 63	11:51:20 14 Jun 2000 HG			
Hg	-.150	ppb	-22659					
*** Sample ID: CCV5-6				Seq: 64	11:53:24 14 Jun 2000 HG			
Hg	4.74	ppb	1005502					
*** Sample ID: CCB6				Seq: 65	11:55:18 14 Jun 2000 HG			
Hg	-.132	ppb	-18824					

SP.REC.
97%SP.REC.
95%END OF ANALYSIS
WAH
6-14-00

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0614HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:31:09 14 Jun 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1

cup ID	Extended id	Weight	Volume	Macro	check macros
1	ICV5-1	1.0000	1.0000		
2	ICB1	1.0000	1.0000		
3	CRA-1	1.0000	1.0000		
4	CCV5-1	1.0000	1.0000		
5	CCB1	1.0000	1.0000		
6	IDL-1	1.0000	1.0000		
7	IDL-2	1.0000	1.0000		
8	IDL-3	1.0000	1.0000		
9	IDL-4	1.0000	1.0000		
10	IDL-5	1.0000	1.0000		
11	IDL-6	1.0000	1.0000		
12	IDL-7	1.0000	1.0000		
13	CCV5-2	1.0000	1.0000		
14	CCB2	1.0000	1.0000		
15	DELTXBT	1.0000	1.0000		

PgDn

Cup 1 ID: ICV5-1

Cell down mode Ins to switch

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0614HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	08:31:11 14 Jun 2000	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1 PgUp

cup ID	Extended id	Weight	Volume	Macro	check macros
16 DELTXCT		1.0000	1.0000		
17 DEJ9GBT		1.0000	1.0000		
18 DE9XXT		1.0000	1.0000		
19 DEA02T		1.0000	1.0000		
20 DEA04T		1.0000	1.0000		
21 DEA05T		1.0000	1.0000		
22 DEA07T		1.0000	1.0000		
23 DEA09T		1.0000	1.0000		
24 DEA0AT		1.0000	1.0000		
25 CCV5-3		1.0000	1.0000		
26 CCB3		1.0000	1.0000		
27 DEA0CT		1.0000	1.0000		
28 DEA0FT		1.0000	1.0000		
29 DEA0GT		1.0000	1.0000		
30 DED5FT		1.0000	1.0000		

PgDn

Cup 16 ID: DELTXCT

Cell down mode Ins to switch

6601339

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0614HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:31:12 14 Jun 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1 PgUp
cup ID Extended id Weight Volume Macro check macros
31 DEEHCT 1.0000 1.0000
32 DEEHCT 1.0000 1.0000
33 DEEHCT 1.0000 1.0000
34 DEEHCT 1.0000 1.0000
35 DELV1B 1.0000 1.0000
36 DELV1C 1.0000 1.0000
37 CCV5-4 1.0000 1.0000
38 CCB4 1.0000 1.0000
39 DEHD3 1.0000 1.0000
40 DEJ66 1.0000 1.0000
41 DEJ66S 1.0000 1.0000
42 DEJ66D 1.0000 1.0000
43 DEJ67 1.0000 1.0000
44 DEJ69 1.0000 1.0000

PgDn

Cup 31 ID: DEEHCT

Cell down mode Ins to switch

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS

RunFold: 0614HGA Seq: 0 Batch:

Prnt: R/T On

Pump: Off

Rev: 4.2 08:36:49 14 Jun 2000 Xmit: Off Gas:

User: WAH

LPM

A/S: On

State: Idle

AUTOSAMPLER: Rack Edit rack: RACK2

cup ID	Extended id	Weight	Volume	Macro	check macros
1 DEJ6C		1.0000	1.0000		
2 DELV3B		1.0000	1.0000		
3 DELV3C		1.0000	1.0000		
4 DEDMH		1.0000	1.0000		
5 CCV5-5		1.0000	1.0000		
6 CCB5		1.0000	1.0000		
7 DEDP5		1.0000	1.0000		
8 DEDPF		1.0000	1.0000		
9 DEDPFS		1.0000	1.0000		
10 DEDPFD		1.0000	1.0000		
11 DEDQ6		1.0000	1.0000		
12 DEDRD		1.0000	1.0000		
13 DEDQH		1.0000	1.0000		
14 DEDQK		1.0000	1.0000		
15 CCV5-6		1.0000	1.0000		

PgDn

Cup 1 ID: DEJ6C

Cell down mode Ins to switch

6601341

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0614HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:36:50 14 Jun 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK2 PgUp
cup ID Extended id Weight Volume Macro check macros
16 CCB6 1.0000 1.0000
17 1.0000 1.0000
18 1.0000 1.0000
19 1.0000 1.0000
20 1.0000 1.0000
21 1.0000 1.0000
22 1.0000 1.0000
23 1.0000 1.0000
24 1.0000 1.0000
25 1.0000 1.0000
26 1.0000 1.0000
27 1.0000 1.0000
28 1.0000 1.0000
29 1.0000 1.0000
30 1.0000 1.0000

PgDn

Cup 16 ID: CCB6

Cell down mode Ins to switch

Hg Digestion Log

Pipet # H31609

QUA-4169

Serial Number 008 Log Book Number 96-M1-579 Start Time 08:00-28:15

Sample ID	Date Rec'd	Prep Date	Prepared By	WVVol	Sample Type	Run Date	Comments
1. STD0	N/A	6-14-00	WAH	100ml	WATER	6-14-00	N/A
2. STD1							0014-134.5
3. STD2							0014-134.6
4. STD3							0014-134.7
5. STD4							0014-134.8
6. STD5							0014-134.9
7. ICB							0014-134.10
8. ICB							N/A
9. CRR							0014-134.11
10. CCV							0014-134.12
11. CCB							N/A
12. IDL-2 DELTAXT (L1X05)							0014-135.4
13. DELTAXT DELTAXT (L1X05)							N/A
14. DELTAXT DELTAXT							0014-135.1
15. DELTAXT							N/A
16. DELTAXT	6-7-00						
17. DELTAXT							
18. DELTAXT							
19. DELTAXT							
20. DELTAXT							
21. DELTAXT							
22. DELTAXT							
23. DELTAXT							
24. DELTAXT							
25. DELTAXT							
Reagents		Vol (mL)		Ref. Number		Method	
HNO3	3.5ml			MAIL/ACKRODT 6623 N35058		ELM040/74704 AUTOCALVE 15PSI 100°C	
H2SO4	5.0ml			MAIL/ACKRODT 5557 N21A12		SAC12 = 0014-129.9	
KMNO4	15.0ml			0014-130-13		AGCL-NHSCN = 0014-120-3	
K2S2O4	8.0ml			0014-123-15		WAH 6-14-00	
Extract(s)			Extract(s) Received			Extract(s) Relinquished	
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Location
			WAH 6-14-00				

Hg Digestion Log

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



QIA-4169

PIPET⁴ H31609

Serial Number

009

Log Book Number

96-MI-579

Start Time

08:00-08:15

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1 DEDSET	6-8-00	6-14-00	WAM	100ml	WATER	6-14-00	N/A
2 DEHCT							45ml 0014-134-3
3 DEHCST							45ml 0014-134-3
4 DEHCBDT							45ml 0014-134-3
5 DEHPT							N/A
6 DELV18	N/A						N/A
7 DELV15							0014-135-2
8 DEHD3	6-10-00						N/A
9 DEJ66							N/A
10 DEJ65							41ml 0014-134-3
11 DEJ66D							41ml 0014-134-3
12 DEJ67							N/A
13 DEJ69							N/A
14 DEJ6C							N/A
15 DELV38	N/A						0014-135-3
16 DELV3C							N/A
17 DEdmH	6-8-00						N/A
18 DEDP5							N/A
19 DEDPF							N/A
20 DEDPF5							41ml 0014-134-3
21 DEDPFD							41ml 0014-134-3
22 DEDP6							N/A
23 DEPD							N/A
24 DEPDH							N/A
25 DEPDH							N/A
Reagents		Vol (ml)				Ref. Number	Method
HNO3	2.5ml					MAILBACKBODT 6623 N35058	TIME 0.14704 AUTOCALIBRE 15PSI 120°C
H2SO4	5.0ml					MAILBACKBODT 5557 N11H13	SACCE 2 0014-127-8
KMNO4	15.0ml					0014-130-13	MACC. K1H2O4 = 0014-120-3
K2S2O4	8.0ml					0014-123-15	WAM 6-14-00
Extract(s)			Extract(s) Received				Extract(s) Relinquished
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
			WAM 6-14-00				

PSR024 6/13/00 11:30:54 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: HOYLEV

METHOD: 08 Mercury (7470A, Cold Vapor) - Liquid

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
10A CLP1	DE9XX	---	239837	131369	A-OM-08	COF070184	001		SOLID	0	2 1
10A CLP1	DEA02	---	239838	131369	A-OM-08	COF070184	002		SOLID	0	2 1
10A CLP1	DEA04	---	239839	131369	A-OM-08	COF070184	003		SOLID	0	2 1
10A CLP1	DEA05	---	239840	131369	A-OM-08	COF070184	004		SOLID	0	2 1
10A CLP1	DEA07	---	239841	131369	A-OM-08	COF070184	005		SOLID	0	2 1
10A CLP1	DEA09	---	239842	131369	A-OM-08	COF070184	006		SOLID	0	2 1
10A CLP1	DEA0A	---	239843	131369	A-OM-08	COF070184	007		SOLID	0	2 1
10A CLP1	DEA0C	---	239844	131369	A-OM-08	COF070184	008		SOLID	0	2 1
10A CLP1	DEA0F	---	239845	131369	A-OM-08	COF070184	009		SOLID	0	2 1
10A CLP1	DEA0G	---	239846	131369	A-OM-08	COF070184	010		SOLID	0	2 1
10B	DE05F	---	239847	366694	A-OM-08	COF080184	001		SOLID	0	4 1
10C CLP1	DEEHC	---	239835	399411	A-OM-08	COF080328	001		SOLID	0	3 1
10C CLP1	DEEHP	---	239836	399411	A-OM-08	COF080328	002		SOLID	0	3 1

TCLP
LEACHATE

DET9GB

RELINQUISHED BY

RECEIVED BY

DATE/TIME

William A. HoyleWilliam A. Hoyle6-14-0006:10William A. HoyleWilliam A. Hoyle6-14-0007:05

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

6601345

GENERAL CHEMISTRY DATA

UXB INTERNATIONAL

Client Sample ID: DF/S1/0159/SDC/008

General Chemistry

Lot-Sample #...: C0F080328-001 Work Order #...: DEEHC Matrix.....: SOLID
 Date Sampled...: 06/07/00 Date Received...: 06/08/00
 % Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.3		No Units	SW846 9045C	06/09/00	0161143
		Dilution Factor 1		MS Run #	0161036	
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/09/00	0161138
		Dilution Factor 1		MS Run #	0161031	
Percent Solids	81.3		%	MCAWW 160.3 MOD	06/09-06/10/00	0161205
		Dilution Factor 1		MS Run #..	0161077	
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/12/00	0165112
		Dilution Factor: 1		MS Run #	0165032	
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/12/00	0165111
		Dilution Factor 1		MS Run #	0165033	

6601347

UXB INTERNATIONAL

Client Sample ID: DF/S1/0159/SDC/009

General Chemistry

Lot-Sample #...: C0F080328-002 Work Order #...: DEEHP Matrix.....: SOLID
 Date Sampled...: 06/07/00 Date Received...: 06/08/00
 % Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	06/09/00	0161143
		Dilution Factor 1		MS Run # . . 0161036		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	06/09/00	0161138
		Dilution Factor 1		MS Run # 0161031		
Percent Solids	81.8		%	MCAWW 160.3 MOD	06/09-06/10/00	0161205
		Dilution Factor 1		MS Run # . . 0161077		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	06/12/00	0165112
		Dilution Factor 1		MS Run # 0165032		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	06/12/00	0165111
		Dilution Factor 1		MS Run #. . 0165033		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0F080328

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	Work Order #: DEKA3101 200	mg/kg	MB Lot-Sample #: A0F130000-112 SW846 7.3.3	06/12/00	0165112
		Dilution Factor 1				
Reactive Sulfide	ND	Work Order #: DEKA4101 200	mg/kg	MB Lot-Sample #: A0F130000-111 SW846 7.3.4	06/12/00	0165111
		Dilution Factor 1				

NOTE(S) :

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

6601349

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F080328

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 #: DEET4101 (85 - 115)	LCS Lot-Sample#: C0F090000-143 SW846 9045C	06/09/00	0161143
		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 #...: C0F080328

Work Order #...: DED5F-SMP
DED5F-DUP

Matrix.....: SOLID

Date Sampled...: 06/07/00

Date Received...: 06/08/00

% Moisture.....: 11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1	8.2	No Units	0.99	(0-20)	SD Lot-Sample #: C0F080184-001 SW846 9045C	06/09/00	0161143
			Dilution Factor 1					
			Prep Date . 0161036			Analysis Date		
						Prep Batch # .		

6601351

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F080328

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

Matrix.....: SOLID

Date Sampled...: 06/07/00

Date Received...: 06/08/00

% Moisture.....: 19

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD</u>	<u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
		<u>RESULT</u>						<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Ignitability									
			No Units 0		(0-0.0)		SD Lot-Sample #: C0F080328-001		
			Dilution Factor 1				SW846 SECTION 7 1 06/09/00		0161138
			Prep Date	0161031		Analysis Date		Prep Batch #.	

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F080328 Work Order #...: DE9DQ-SMP Matrix.....: SOLID

DE9DQ-DUP

Date Sampled...: 06/06/00

Date Received...: 06/07/00

% Moisture.....: 1.3

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	98.7	98.4	%	0.35	(0-20)	MCAWW 160.3 MOD	06/09-06/10/00	0161205

SD Lot-Sample #: C0F070123-004

Dilution Factor 1

Prep Date 0161077 Analysis Date : Prep Batch # .

6601353

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0F080328

Work Order #...: DE9QN-SMP

Matrix.....: SOLID

Date Sampled...: 06/06/00

Date Received...: 06/07/00

% Moisture.....: 17

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	ND	mg/kg	0	(0-20)	SD Lot-Sample #: A0F070168-009 SW846 7.3.3	06/12/00	0165112
			Dilution Factor	1				
			Prep Date	. 0165032	Analysis Date		Prep Batch #	
Reactive Sulfide	ND	ND	mg/kg	0	(0-20)	SD Lot-Sample #: A0F070168-009 SW846 7 3.4	06/12/00	0165111
			Dilution Factor	1				
			Prep Date	. . 0165033	Analysis Date		Prep Batch # .	

Quanterra Environmental Services pH LOG SHEET

Page 1 of 1

Lot No. COF080104 Batch No. 0161142 SDG No.
COF090262
COF080184
COF080328
COF090166

Includes attachment(s) Analyst: CLLOTHEIDEDate: 6-9-00Start Time: 0800

pH Meter Calibration

Reading	Buffer	Manf. Lot No.	Rec'd	Expire
<u>7.00</u>	<u>7.0</u>	<u>LABCHEM 929-13</u>	<u>2-29-00</u>	<u>11-12-01</u>
<u>4.00</u>	<u>4.0</u>	<u>9167-08</u>	<u>5-9-00</u>	<u>6-25-01</u>
<u>10.01</u>	<u>10.0</u>	<u>0010-01</u>	<u>2-29-00</u>	<u>1-11-01</u>

LCS ID No.: 342-15570

Relative Percent Difference =

Range = ± .05 pH units

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X₁ = Original ResultX₂ = Duplicate

Sample ID	pH Reading
LCS	7.02
COF080104-001	10.32
-001 Dup	10.30
COF080184-001	8.08
-001 Dup	8.16
COF080328-001	8.31
-002	8.14
LCS	7.03
LCS	7.01
COF090262-001	6.00
-002	6.01
COF090166-001	6.53
-002	6.58
LCS	7.00
26 6-9-00 6	

[Signature] 6-9-00
[Signature] 6-9-00

6601355

Method: *IGNITABILITY*ANALYST: *CLLOTHEYDE*DATE: *6-9-00*BATCH: *0161138*TIME: *0630*

SAMPLE ID

RESULT

*COF080184-001**NO**COF080328-001**NO**COF080**-001 Dup**NO**-002**NO*Reviewed by *CL L. M. L.*Date *6-9-00*

STL - Pittsburgh WATER CONTENT SHEET

HEET NUM 0006007
 TESTED: CLL 6/9/00
 CHECKED: ELW 6/12/00

CREATED: 6/9/00 12:03:01 PM

REVISED: 6/12/00 6:55:29 AM

COMMENTS:

C0F080238 C0F070123 C0F080269 C0F080239 C0F090125 C0F090131

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.
C0F080238	001	SMP	152	1.16	7.15	6.03	10:40	1.12	18.698	81.302
C0F080238	002	SMP	141	1.19	7.01	5.95	10:40	1.06	18.213	81.787
C0F070123	004	SMP	40	1.13	6.53	6.46	10:40	0.07	1.296	98.704
C0F070123	004D	SMP	181	1.11	6.59	6.5	10:40	0.09	1.642	98.358
C0F080269	001	SMP	51	1.13	7.76	6.61	10:40	1.15	17.345	82.655
C0F080269	002	SMP	177	1.14	6.76	6.21	10:40	0.55	9.786	90.214
C0F080269	003	SMP	46	1.14	6.34	5.71	10:40	0.63	12.115	87.885
C0F080269	004	SMP	V	1.12	6.44	5.92	10:40	0.52	9.774	90.226
C0F080269	005	SMP	108	1.14	6.79	6.28	10:40	0.51	9.027	90.973
C0F080269	006	SMP	118	1.12	7.04	6.26	10:40	0.78	13.176	86.824
C0F080269	007	SMP	AB	1.12	7.18	6.5	10:40	0.68	11.221	88.779
C0F080269	008	SMP	94	1.13	6.77	5.96	10:40	0.81	14.362	85.638
C0F080269	009	SMP	115	1.12	7.04	6.41	10:40	0.63	10.642	89.358
C0F080269	010	SMP	1151	1.11	7.05	6.4	10:40	0.65	10.943	89.057
C0F080239	008	SMP	PU	1.16	6.37	4.07	10:40	2.3	44.146	55.854
C0F080239	009	SMP	33	1.14	7.26	4.66	10:40	2.6	42.484	57.516
C0F080239	010	SMP	105	1.16	7.01	4.19	10:40	2.82	48.205	51.795
C0F090125	001	SMP	25	1.16	7.32	6.2	11:15	1.12	18.182	81.818

6601357

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUMBER: 0006007
 TESTED: CLL 6/9/00
 CHECKED: ELW 6/12/00

CREATED: 6/9/00 12:03:01 PM

REVISED: 6/12/00 6:55:29 AM

COMMENTS:

C0F080238 C0F070123 C0F080269 C0F080239 C0F090125 C0F090131

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
C0F090125	002	SMP	916	1.13	7.27	6.16	11:15	1.11	18.078 <i>ppd 65%</i>	81.922
C0F090125	002D	SMP	182	1.12	7.44	6.29	11:15	1.15	18.196	81.804
C0F090131	001	SMP	165	1.14	8.32	6.87	11:45	1.45	20.195	79.805
C0F090131	002	SMP	188	1.14	7.64	6.63	11:45	1.01	15.538	84.462
C0F090131	002D	SMP	A	1.15	6.71	5.75	11:45	0.96	17.266 <i>ppd 21%</i>	82.734
C0F090131	003	SMP	64	1.13	6.12	5.53	11:45	0.59	11.824	88.176
090131	004	SMP	82	1.12	6.44	5.59	11:45	0.85	15.977	84.023
C0F090131	005	SMP	149	1.15	6.35	5.49	11:45	0.86	16.538	83.462
C0F090131	006	SMP	43	1.12	6.3	5.27	11:45	1.03	19.884	80.116

0

COF080228
COF080223
COF080269
COF080239
COF080218

TS

COF080218 70161208

6601358 6601

0161205

STL Pittsburgh

TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

COE090131 70161234

Oven Temperature: 103°C ± 2°C

Analyst: C. Lohayde

Date 6-9-00

Time in 1040 / 1145

Date 6-10-00

Time out 0700

Balance ID #: C94817

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
COF080228-001	152	1.16	7.15	6.03					
-002	141	1.19	7.01	5.95					
COF080223-004	40	1.13	6.53	6.46					
-004D	181	1.11	6.59	6.50					
COF080269-001	51	1.13	7.76	6.61					
-002	177	1.14	6.76	6.21					
-003	46	1.14	6.34	5.71					
-004	V	1.12	6.44	5.92					
-005	108	1.14	6.79	6.28					
-006	118	1.12	7.04	6.26					
-007	AB	1.12	7.18	6.50					
-008	94	1.13	6.77	5.96					
-009	115	1.12	7.04	6.41					
-010	1151	1.11	7.05	6.40					
COF080239-008	PU	1.16	6.37	4.07					
-009	33	1.14	7.26	4.66					
-010	105	1.16	7.01	4.19					
COF080218-001	25	1.16	7.32	6.20					
-002	916	1.13	7.27	6.16					
-0021	182	1.12	7.44	6.29					
COF090131-001	165	1.14	8.32	6.87					
-002	188	1.14	7.64	6.63					
-002D	A	1.15	6.71	5.25					
-003	64	1.13	6.12	5.53					
-004	82	1.12	6.44	5.59					
-005	149	1.15	6.35	5.49					
-006	43	1.12	6.30	5.27					

97%
moisture

C. Lohayde

6601359

PSR024 6/09/00 3:13.40 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 002

REQUESTED BY: LONEYDEC

METHOD: OZ pH (9045C) - Non-Aqueous

PICKED

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX DESCRIPTION</u>	<u>QTY RCVD</u>	<u>QTY REQD</u>
	DED5F-1-0E	___	239172	366694	A-88-OZ	C0F080184	001		SOLID	4	1
10C	DEEHC-1-0F	___	239173	399411	A-88-OZ	C0F080328	001		SOLID	3	1
10C	DEEHP-1-0F	___	239174	399411	A-88-OZ	C0F080328	002		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

6-9-00 0530

6-9-00 0840

6601360

PSR024 6/09/00 7:49:29 MT

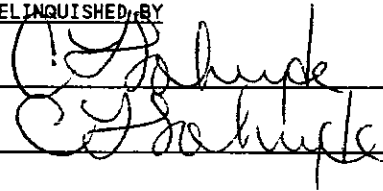
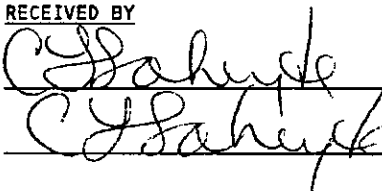
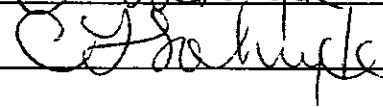
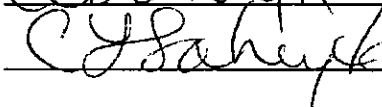
SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: LOHEYDEC

METHOD: SM Solids, Percent (as TS - 160.3 MOD) - 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>
10C CLP1	DEEHC-1-01	___	239297	399411	A-88-SM	COF080328	001		SOLID	0	3
10C CLP1	DEEHP-1-01	___	239298	399411	A-88-SM	COF080328	002		SOLID	0	3

<u>RELINQUISHED BY</u>	<u>RECEIVED BY</u>	<u>DATE/TIME</u>
		6-9-00 1000
		6-9-00 1045

QUANTERRA- NORTH CANTON
TITRIMETRIC LOGSHEET

QUANTERRA- NORTH CANTON
TITRIMETRIC LOGSHEET

Analysis Reactive Sulfide
Prep/ Anal. Date 000613
Analyst DNM

Batch Number 0165711
LCS Number
LCS Prep Date
RL 200 mg/kg

Titrant Name Sodium Thio
Titrant Normality 0.0246
Titrant Standardization Date/ Initials _____

[illegible]

Batch Number 016.5712
LCS Number —
LCS Prep Date —
RL 200 mg/Kg

Titrant Name Silver Nitrate
Titrant Normality 0.0192N
Titrant Standardization Date/Initials _____

[illegible]

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE