



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 672

**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

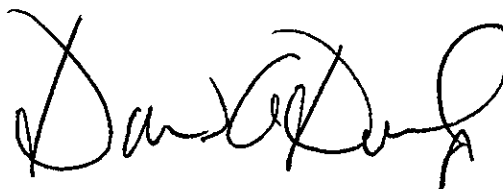
Dunn Field, Def Depot Memphis

Lot #: C0H310206

Frank Johnson

Memphis Depot

SEVERN TRENT LABORATORIES, INC.



Dave Dunlap
Project Manager

September 15, 2000

CASE NARRATIVE
UXB International Inc.
Dunn Field

LOT # C0H310206

Sample Receiving:

STL Pittsburgh received samples on August 31, 2000 in good condition and within the proper temperature range.

Volatiles:

There were no problems associated with the analysis.

Semivolatiles:

There were no problems associated with the analysis.

Pesticides:

There were no problems associated with the analysis.

Herbicides:

There were no problems associated with the analysis.

Total Metals:

There were no problems associated with the analysis.

TCLP Metals:

There were no problems associated with the analysis.

General Chemistry:

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

There were no problems associated with the analyses.

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METHODS SUMMARY

COH310206

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

References:

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

SAMPLE SUMMARY

COH310206

WO #	SAMPLE#	CLIENT	SAMPLE ID	DATE	TIME
DJP8W	001	DF/S1/242/SDC/031		08/30/00	11:00
DJP90	002	DF/S1/242/SDC/033		08/30/00	11:00
DJP91	003	DF/S1/242/SDC/034		08/30/00	11:00
DJP92	004	DF/S1/242/SDC/035		08/30/00	11:00

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.



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

Chain of Custody Record

Client: UXB International Project Manager: Jim Thoren Date: 8/30/00 Chain Of Custody Number: 67990
Address: Residence Inn #116, 6141 Old Baker PK Telephone Number (Area Code/Fax Number): (901) 745-4994 Lab Number: _____
City: Memphis State: TN Zip Code: 38119 Site Contact: James Rateliff / Chris Rose Page: 1 of 1
Project Name: Duran Field Carrier/Waybill Number: _____

Residence In: 110, 6111 Old Road		Site Contact		James Ratcliff / Chris Rose		Carrier/Waybill Number		Analysis	
City	State	Zip Code	State	Zip Code					
Memphis	TN	38119							
Project Name		Duan Field							
Contract/Purchase Order/Quote No.									
Sample I D. No. and Description		Date	Time	Sample Type	Total Volume	Containers Type No.		Preservative	Condition on Receipt
BE/S1/242/SDC/031		8/30/00	1100	Soil	4,832oz	Glass	3	None	X TCEP + PCB
DE/S1/242/SDC/033		8/30/00	1100	Soil	4,832oz	Glass	3	None	X TCEP + PCB

Cooler Receipt Form
STL Pittsburgh

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Client: WKB Project: 8/31/09 Quote: _____
Cooler Rec'd & Opened for Temp. Check on: 8/31/09
Coolers Opened and Unpacked on: 8/31/09 By: [Signature]
(Signature)
STL Pittsburgh Lot Number: Colt310206

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

Explain any discrepancies: _____

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

P: Preserved
UP: Unpreserved

[illegible]

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

Comments:

[illegible]

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

FedEx® USA Airbill

Tracking Number 822525868539

1 From Date 8/30/00

Sender's Name Chris Rose Phone 901 745-4999

Company UXB International

Address 6441 Old Poplar Pike, #116

City Memphis State TN ZIP 38119

2 Your Internal Billing Reference

3 To Recipient's Name Rusty Vincine Phone 412 820-2091

Company Severn Tient

Address 450 William Pitt Way

City Pittsburgh State PA ZIP 15238



4a Express Package Service ☒ FedEx Priority Overnight ☐ FedEx Standard Overnight ☐ FedEx First Overnight ☐ FedEx 2Day* ☐ FedEx Express Saver* ☐ FedEx 3Day Freight ☐ FedEx Freight Service ☐ FedEx 2Day Freight ☐ FedEx 3Day Freight		Packages up to 150 lbs. Delivery commitment may be later in some areas. ☐ FedEx First Overnight Excludes next business morning delivery to select locations.	
4b Express Freight Service ☐ FedEx 1Day Freight* ☐ FedEx 2Day Freight ☐ FedEx 3Day Freight ☐ FedEx 1Day Freight* ☐ FedEx 2Day Freight ☐ FedEx 3Day Freight		Packages over 150 lbs. Delivery commitment may be later in some areas. ☐ FedEx 3Day Freight Excludes next business morning delivery to select locations.	
5 Packaging ☐ FedEx Envelope/Letter* ☐ FedEx Pak*		* Declared value limit \$500 Other Pkg. Includes FedEx Box, FedEx Tube, and customer Pkg.	
6 Special Handling ☐ SATURDAY Delivery ☐ SUNDAY Delivery ☐ HOLD Saturday ☐ Available for FedEx Priority Overnight and FedEx 2Day in select ZIP codes. Does this shipment contain dangerous goods? ☐ No ☐ Yes One box must be checked. ☐ No ☐ Yes ☐ Shipper's Declaration ☐ Shipper's Declaration not required Dangerous Goods cannot be shipped in FedEx packaging.		Include FedEx address in Section 3. ☐ HOLD Saturday ☐ HOLD Sunday Available for FedEx Priority Overnight and FedEx 2Day in select ZIP codes. Excludes next business morning delivery to select locations.	
7 Payment ☒ Bill to ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check Sender's Account No. ☐ Enter FedEx Account No. or Credit Card No. below. ☐ Other in Recip. ☐ Other in Recip.		8 Release Signature Signature of shipper or authorized agent required.	
Total Packages <u>2</u> Total Weight <u>62</u> lbs. Total Declared Value \$ <u>.00</u>		Total Charges <u>02.00</u> Credit Card Acct.	

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SBCCOM
Monitoring Branch Laboratory

CLEARANCE REPORT

Sample# **DF/S1/242/SDC/031**

Dunn Field, Memphis Defense Depot

Results for CWM Soil Sample Analysis

Analyst: John L Schwarz

Prepared by: Joseph A. Baranoski

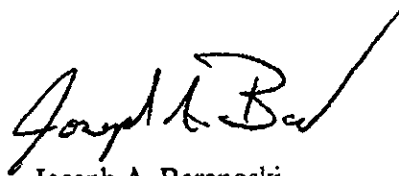
August 30, 2000

SAMPLE NUMBER	1,4-Thioxane	1,4-Dithiane	TDG	Mustard	Lewisite
DF/S1/0227/B7B11/274	ND	ND	N/A	ND	ND
DF/S1/0227/B3B10/275	ND	ND	N/A	ND	ND
DF/S1/0228/B15B16/276	ND	ND	N/A	ND	ND
DF/S1/0228/B2B5/277	ND	ND	N/A	ND	ND
DF/S1/0228/B14B20/278	ND	ND	N/A	ND	ND

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

MDL= 200 ppb

Prepared by:



Joseph A. Baranoski
Site Supervisor

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/31/00

Work Order: DJP8W102

Date Extracted: 09/06/00

Dilution factor: 1

Date Analyzed: 09/06/00

Moisture %: 16

QC Batch: 0250140

Client Sample Id: DF/S1/242/SDC/031

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 002

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/31/00

Work Order: DJP90102

Date Extracted: 09/06/00

Dilution factor: 1

Date Analyzed: 09/06/00

Moisture %: 6.8

QC Batch: 0250140

Client Sample Id: DF/S1/242/SDC/033

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 003

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/31/00

Work Order: DJP91102

Date Extracted: 09/06/00

Dilution factor: 1

Date Analyzed: 09/06/00

Moisture %: 9.2

QC Batch: 0250140

Client Sample Id: DF/S1/242/SDC/034

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

FORM I

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 004

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/31/00

Work Order: DJP92102

Date Extracted: 09/06/00

Dilution factor: 1

Date Analyzed: 09/06/00

Moisture %: 12

QC Batch: 0250140

Client Sample Id: DF/S1/242/SDC/035

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

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0I060000 140

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 09/01/00

Work Order: DJX28101

Date Extracted: 09/06/00

Dilution factor: 1

Date Analyzed: 09/06/00

Moisture %: NA

QC Batch: 0250140

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.490	
78-93-3	2-Butanone	0.286	
56-23-5	Carbon tetrachloride	0.472	
108-90-7	Chlorobenzene	0.487	
67-66-3	Chloroform	0.466	
107-06-2	1,2-Dichloroethane	0.428	
75-35-4	1,1-Dichloroethene	0.525	
127-18-4	Tetrachloroethene	0.429	
79-01-6	Trichloroethene	0.445	
75-01-4	Vinyl chloride	0.418	

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0H310206

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	DF/S1/242/SDC/031	96	107	102	103	00
02	DF/S1/242/SDC/033	87	100	92	94	00
03	DF/S1/242/SDC/034	93	101	93	98	00
04	DF/S1/242/SDC/035	90	98	91	95	00
05	INTRA-LAB QC	85	97	90	92	00
06	METHOD BLK. DJX0F101	90	100	93	96	00
07	LCS DJX28101	85	105	100	94	00
08	LAB MS/MSD D	84	100	96	90	00
09	LAB MS/MSD S	89	104	102	96	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 #: C0I060000

WO #: DJX28101

BATCH: 0250140

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
Carbon tetrachloride	0.500	0.472	94	72 - 133	
Chlorobenzene	0.500	0.487	97	81 - 115	
Benzene	0.500	0.490	98	79 - 116	
2-Butanone	0.500	0.286	57	35 - 156	
Chloroform	0.500	0.466	93	81 - 122	
Trichloroethene	0.500	0.445	89	80 - 122	
Vinyl chloride	0.500	0.418	84	53 - 134	
1,2-Dichloroethane	0.500	0.428	86	73 - 127	
1,1-Dichloroethene	0.500	0.525	105	65 - 119	
Tetrachloroethene	0.500	0.429	86	78 - 131	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

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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: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV139

BATCH: 0250140

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	ND	0.497	99	73 - 123	
Chlorobenzene	0.500	ND	0.486	97	70 - 122	
Chloroform	0.500	ND	0.488	98	65 - 131	
1,2-Dichloroethane	0.500	ND	0.442	88	67 - 132	
2-Butanone	0.500	ND	0.300	60	10 - 151	
Carbon tetrachloride	0.500	ND	0.483	97	61 - 143	
1,1-Dichloroethene	0.500	ND	0.555	111	57 - 138	
Tetrachloroethene	0.500	ND	0.427	85	70 - 130	
Vinyl chloride	0.500	ND	0.440	88	51 - 133	
Trichloroethene	0.500	ND	0.462	92	58 - 141	

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

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: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV13A

BATCH: 0250140

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
=====	=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	0.485	97	2.4	20	73 - 123	
2-Butanone	0.500	0.317	63	5.6	34	10 - 151	
Carbon tetrachloride	0.500	0.478	96	1.0	20	61 - 143	
Chlorobenzene	0.500	0.477	95	1.9	20	70 - 122	
Chloroform	0.500	0.466	93	4.6	20	65 - 131	
1,2-Dichloroethane	0.500	0.431	86	2.4	20	67 - 132	
1,1-Dichloroethene	0.500	0.504	101	9.7	20	57 - 138	
Tetrachloroethene	0.500	0.421	84	1.4	20	70 - 130	
Trichloroethene	0.500	0.447	89	3.4	20	58 - 141	
Vinyl chloride	0.500	0.415	83	5.8	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:

DJX0F101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: 3090603.D

Lot Number: C0H310206

Date Analyzed: 09/06/00

Time Analyzed: 07:23

Matrix: SOLID

Date Extracted: 09/06/00

GC Column: RTX-624 ID: .18

Extraction Method: 1311/5030B

Instrument ID: HP3

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/S1/242/SDC/031	DJP8W102	3090611.D	09/06/00	10:22
02	DF/S1/242/SDC/033	DJP90102	3090612.D	09/06/00	10:45
03	DF/S1/242/SDC/034	DJP91102	3090613.D	09/06/00	11:08
04	DF/S1/242/SDC/035	DJP92102	3090614.D	09/06/00	11:33
05	LAB MS/MSD	DJRHV13A D	3090609.D	09/06/00	09:39
06	INTRA-LAB QC	DJRHV138	3090606.D	09/06/00	08:29
07	LAB MS/MSD	DJRHV139 S	3090608.D	09/06/00	09:17
08	CHECK SAMPLE	DJX28101 C	3090607.D	09/06/00	08:52
09					
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27					
28					
29					
30					

COMMENTS:

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0I060000 104

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

Sample WT/Vol: 5 / mL

Date Received: 08/31/00

Work Order: DJX0F101

Date Extracted: 09/06/00

Dilution factor: 1

Date Analyzed: 09/06/00

Moisture %: NA

QC Batch: 0250140

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

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: C0H310206

Lab File ID (Standard): CC30906

Date Analyzed: 09/06/00

Instrument ID: HP3

Time Analyzed: 0545

GC Column: DB 624 ID: 0.18 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ)	RT #	IS2 (DCB)	RT #	IS3	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	164373	9.73	264930	12.05	622018	6.59
UPPER LIMIT	328746	9.93	529860	12.25	1244036	6.79
LOWER LIMIT	82187	9.53	132465	11.85	311009	6.39
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	150143	9.73	225275	12.05	585292	6.60
02 INTRA-LAB CH	159316	9.73	249702	12.05	636344	6.60
03 DF/S1/242/SD	148877	9.73	226713	12.05	580085	6.60
04 DF/S1/242/SD	165355	9.73	241363	12.05	663759	6.60
05 DF/S1/242/SD	151996	9.73	224349	12.05	590744	6.60
06 DF/S1/242/SD	160148	9.74	234877	12.05	634045	6.60
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: COH310206 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/31/00

Work Order: DJP8W103

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: 16

QC Batch: 0255104

Client Sample Id: DF/S1/242/SDC/031

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 002

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/31/00

Work Order: DJP90103

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: 6.8

QC Batch: 0255104

Client Sample Id: DF/S1/242/SDC/033

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 003

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/31/00

Work Order: DJP91103

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: 9.2

QC Batch: 0255104

Client Sample Id: DF/S1/242/SDC/034

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 004

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/31/00

Work Order: DJP92103

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: 12

QC Batch: 0255104

Client Sample Id: DF/S1/242/SDC/035

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
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0I110000 104

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 09/01/00

Work Order: DK5F6102

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: NA

QC Batch: 0255104

Client Sample Id: CHECK SAMPLE

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.169	
121-14-2	2,4-Dinitrotoluene	0.176	
118-74-1	Hexachlorobenzene	0.166	
87-68-3	Hexachlorobutadiene	0.166	
67-72-1	Hexachloroethane	0.171	
98-95-3	Nitrobenzene	0.174	
87-86-5	Pentachlorophenol	0.168	
110-86-1	Pyridine	0.181	
95-95-4	2,4,5-Trichlorophenol	0.162	
88-06-2	2,4,6-Trichlorophenol	0.159	
1319-77-3	Cresols (total)	0.506	

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0H310206

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	DF/S1/242/SDC/031	63	52	67	49	59	64	00
02	DF/S1/242/SDC/033	69	58	70	54	62	68	00
03	DF/S1/242/SDC/034	63	53	66	50	59	63	00
04	DF/S1/242/SDC/035	62	53	67	50	59	67	00
05	INTRA-LAB QC	56	47	64	40	46	65	00
06	METHOD BLK. DK5F6101	82	74	72	71	79	81	00
07	LCS DK5F6102	74	66	63	62	67	69	00
08	LAB MS/MSD D	70	58	70	55	62	70	00
09	LAB MS/MSD S	66	54	66	52	58	66	00

SURROGATES

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

QC LIMITS

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

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

FORM II

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0I110000

WO #: DK5F6102

BATCH: 0255104

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	0.176	70	47 - 131	
Hexachlorobenzene	0.250	0.166	66	57 - 128	
Hexachlorobutadiene	0.250	0.166	66	36 - 116	
Hexachloroethane	0.250	0.171	68	30 - 110	
Nitrobenzene	0.250	0.174	70	45 - 130	
Pentachlorophenol	0.250	0.168	67	10 - 140	
Pyridine	0.250	0.181	72	10 - 148	
2,4,5-Trichlorophenol	0.250	0.162	65	41 - 125	
2,4,6-Trichlorophenol	0.250	0.159	64	46 - 135	
Cresols (total)	0.750	0.506	67	29 - 144	

NOTES (S) :

* Values outside of QC 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: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV13D

BATCH: 0255104

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	ND	0.139	56	18 - 110	
2,4-Dinitrotoluene	0.250	ND	0.172	69	31 - 131	
Hexachlorobenzene	0.250	ND	0.176	70	36 - 132	
Hexachlorobutadiene	0.250	ND	0.130	52	18 - 116	
Hexachloroethane	0.250	ND	0.133	53	18 - 110	
Nitrobenzene	0.250	ND	0.164	66	10 - 211	
Pentachlorophenol	0.250	ND	0.163	65	10 - 140	
Pyridine	0.250	ND	0.147	59	10 - 148	
2,4,5-Trichlorophenol	0.250	ND	0.155	62	24 - 143	
2,4,6-Trichlorophenol	0.250	ND	0.155	62	36 - 135	
Cresols (total)	0.750	ND	0.464	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:

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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: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV13E

BATCH: 0255104

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
1,4-Dichlorobenzene	0.250	0.149	60	6.9	36	18 - 110	
2,4-Dinitrotoluene	0.250	0.188	75	8.9	32	31 - 131	
Hexachlorobenzene	0.250	0.188	75	6.6	22	36 - 132	
Hexachlorobutadiene	0.250	0.137	55	5.2	32	18 - 116	
Hexachloroethane	0.250	0.140	56	5.1	33	18 - 110	
Nitrobenzene	0.250	0.174	70	5.9	50	10 - 211	
Pentachlorophenol	0.250	0.176	70	7.7	56	10 - 140	
Pyridine	0.250	0.155	62	5.3	65	10 - 148	
2,4,5-Trichlorophenol	0.250	0.167	67	7.4	22	24 - 143	
2,4,6-Trichlorophenol	0.250	0.166	66	6.8	27	36 - 135	
Cresols (total)	0.750	0.501	67	7.7	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

BLANK WORKORDER NO.

SW846 8270C METHOD BLANK SUMMARY

DK5F6101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: F0912001.

Lot Number: COH310206

Date Analyzed: 09/12/00

Time Analyzed: 09:53

Matrix: SOLID

Date Extracted: 09/07/00

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/S1/242/SDC/031	DJP8W103	F0912003.	09/12/00	11:02
02	DF/S1/242/SDC/033	DJP90103	F0912004.	09/12/00	11:36
03	DF/S1/242/SDC/034	DJP91103	F0912005.	09/12/00	12:10
04	DF/S1/242/SDC/035	DJP92103	F0912006.	09/12/00	12:44
05	INTRA-LAB QC	DJRHV13C	F0912007.	09/12/00	13:18
06	LAB MS/MSD	DJRHV13D S	F0912008.	09/12/00	13:53
07	LAB MS/MSD	DJRHV13E D	F0912009.	09/12/00	14:27
08	CHECK SAMPLE	DK5F6102 C	F0912002.	09/12/00	10:27
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

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0I110000 104

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 09/01/00

Work Order: DK5F6101

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: NA

QC Batch: 0255104

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

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Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0H310206

Lab File ID (Standard): F09120C1

Date Analyzed: 09/12/00

Instrument ID: 722

Time Analyzed: 0811

	IS1 (DCB)	RT #	IS2 (NPT)	RT #	IS3 (ANT)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	121248	4.95	437244	6.48	226205	9.47
UPPER LIMIT	242496	5.45	874488	6.98	452410	9.97
LOWER LIMIT	60624	4.45	218622	5.98	113103	8.97
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	113322	4.94	431026	6.46	227226	9.45
02 INTRA-LAB CH	122265	4.96	469524	6.47	252325	9.47
03 DF/S1/242/SD	120504	4.95	457238	6.47	242756	9.47
04 DF/S1/242/SD	114935	4.96	436678	6.47	231332	9.47
05 DF/S1/242/SD	112589	4.95	428837	6.47	225950	9.46
06 DF/S1/242/SD	123068	4.95	471814	6.46	250902	9.46
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.: C0H310206

Lab File ID (Standard): F09120C1

Date Analyzed: 09/12/00

Instrument ID: 722

Time Analyzed: 0811

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	370517	12.76	419673	19.40	475500	22.76
UPPER LIMIT	741034	13.26	839346	19.90	951000	23.26
LOWER LIMIT	185259	12.26	209837	18.90	237750	22.26
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	359230	12.74	381930	19.37	407275	22.73
02 INTRA-LAB CH	408619	12.76	443736	19.39	474689	22.75
03 DF/S1/242/SD	376845	12.75	398154	19.38	414435	22.75
04 DF/S1/242/SD	363872	12.75	393028	19.38	407683	22.75
05 DF/S1/242/SD	350629	12.75	380750	19.38	394960	22.74
06 DF/S1/242/SD	390238	12.75	421844	19.38	432157	22.74
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.

PESTICIDE SUMMARY

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP8W104

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: 16

QC Batch: 0251502

Client Sample Id: DF/S1/242/SDC/031

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 002

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP90104

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: 6.8

QC Batch: 0251502

Client Sample Id: DF/S1/242/SDC/033

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 003

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP91104

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: 9.2

QC Batch: 0251502

Client Sample Id: DF/S1/242/SDC/034

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 004

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP92104

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: 12

QC Batch: 0251502

Client Sample Id: DF/S1/242/SDC/035

CONCENTRATION UNITS:

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

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0I070000 502

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 09/01/00

Work Order: DK2C8102

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: NA

QC Batch: 0251502

Client Sample Id: CHECK SAMPLE

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00242	
76-44-8	Heptachlor	0.00235	
1024-57-3	Heptachlor epoxide	0.00238	
58-89-9	Lindane	0.00145	
72-43-5	Methoxychlor	0.00264	

SW846 8081A SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0H310206

	CLIENT ID.	SRG01	SRG02	TOT OUT
	=====	=====	=====	=====
01	DF/S1/242/SDC/031	99	75	00
02	DF/S1/242/SDC/033	101	90	00
03	DF/S1/242/SDC/034	103	91	00
04	DF/S1/242/SDC/035	100	88	00
05	~~INTRA LAB QC~~ 029-1100	102	90	00
06	METHOD BLK. DK2C8101	103	90	00
07	LCS DK2C8102	103	90	00
08	~~LAB MS/MSD D~~	96	85	00
09	~~LAB MS/MSD S~~ 029-1100	98	87	00

SURROGATES

SRG01 = Decachlorobiphenyl
 SRG02 = Tetrachloro-m-xylene

QC LIMITS

(10-147)
 (39-130)

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

FORM II

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0I070000

WO #: DK2C8102

BATCH: 0251502

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Lindane	0.00250	0.00145	58	49 - 137	
Heptachlor	0.00250	0.00235	94	57 - 124	
Heptachlor epoxide	0.00250	0.00238	95	53 - 135	
Endrin	0.00250	0.00242	97	46 - 137	
Methoxychlor	0.00250	0.00264	106	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: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV13G

BATCH: 0251502

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Lindane	0.00250	ND	0.00143	57	30 - 148	
Heptachlor	0.00250	ND	0.00226	91	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00224	90	38 - 138	
Endrin	0.00250	ND	0.00255	102	28 - 148	
Methoxychlor	0.00250	ND	0.00260	104	13 - 154	

NOTES (S) :

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

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

COMMENTS:

672 48

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: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV13H

BATCH: 0251502

COMPOUND	SPIKE	MSD	MSD	QC LIMITS				QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	REC		
Lindane	0.00250	0.00139	56	2.5	22	30 - 148		
Heptachlor	0.00250	0.00221	89	2.2	32	25 - 135		
Heptachlor epoxide	0.00250	0.00222	89	0.94	31	38 - 138		
Endrin	0.00250	0.00241	96	5.7	40	28 - 148		
Methoxychlor	0.00250	0.00252	101	3.4	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

BLANK WORKORDER NO.

DK2C8101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: D-B6081.d

Lot Number: C0H310206

Matrix: SOLID

Extraction Method: 1311/3510

Date Extracted: 09/07/00

Date Analyzed(1): 09/08/00

Date Analyzed(2): N/A

Time Analyzed(1): 22:40

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/S1/242/SDC/031	DJP8W104	09/08/00	N/A
02	DF/S1/242/SDC/033	DJP90104	09/08/00	N/A
03	DF/S1/242/SDC/034	DJP91104	09/08/00	N/A
04	DF/S1/242/SDC/035	DJP92104	09/08/00	N/A
05	~~INTRA-LAB QC~~	DJRHV13F	09/08/00	N/A
06	~~LAB MS/MSD~~ <i>DE-1166</i>	DJRHV13G S	09/08/00	N/A
07	~~LAB MS/MSD~~	DJRHV13H D	09/08/00	N/A
08	CHECK SAMPLE	DK2C8102 C	09/08/00	N/A
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0I070000 502
Method: SW846 8081A
Pesticides (8081A)

Sample WT/Vol: 100 / mL Date Received: 09/01/00
Work Order: DK2C8101 Date Extracted: 09/07/00
Dilution factor: 1 Date Analyzed: 09/08/00
Moisture %: NA

QC Batch: 0251502

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

HERBICIDE SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP8W105

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

Client Sample Id: DF/S1/242/SDC/031

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 002

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP90105

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

Client Sample Id: DF/S1/242/SDC/033

		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

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 003

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP91105

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

Client Sample Id: DF/S1/242/SDC/034

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

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 004

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP92105

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

Client Sample Id: DF/S1/242/SDC/035

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

672 56

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0I070000 520

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 09/01/00

Work Order: DK2EF102

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.121	
93-72-1	2,4,5-TP (Silvex)	0.0292	

FORM I

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: COH310206

	CLIENT ID.	SRG01	TOT OUT
	=====	=====	=====
01	DF/S1/242/SDC/031	70	00
02	DF/S1/242/SDC/033	70	00
03	DF/S1/242/SDC/034	74	00
04	DF/S1/242/SDC/035	62	00
05	~~INTRA LAB QC~~	~~95~~	~~00~~
06	METHOD BLK. DK2EF101	73	00
07	LCS DK2EF102	73	00
08	~~LAB MS/MSD D~~	~~82~~	~~00~~
09	~~LAB MS/MSD S~~	~~73~~	~~00~~

LM
9/12/00

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

672 '58 SW846 8151A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0I070000

WO #: DK2EF102

BATCH: 0251520

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
2,4-D	0.160	0.121	76	28 - 136	
2,4,5-TP (Silvex)	0.0400	0.0292	73	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: LAB MS/MSD

Lot #: C0I010228

WO #: DJRHV13K

BATCH: 0251520

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
2,4-D	0.160	ND	0.133	83	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0327	82	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

672 60 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: LAB MS/MSD

Lot #: C0I010228

WO #: DJRHV13L

BATCH: 0251520

COMPOUND	SPIKE	MSD	MSD		QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	REC	
2,4-D	0.160	0.154	96	14	20	35 - 133	
2,4,5-TP (Silvex)	0.0400	0.0367	92	11	20	50 - 131	

NOTES(S) :

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

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

COMMENTS:

FORM III

BLANK WORKORDER NO.

SW846 8151A METHOD BLANK SUMMARY

DK2EF101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: A-B60037.

Lot Number: C0H310206

Matrix: SOLID

Extraction Method:

Date Extracted: 09/07/00

Date Analyzed(1): 09/08/00

Date Analyzed(2): N/A

Time Analyzed(1): 23:29

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/S1/242/SDC/031	DJP8W105	09/08/00	N/A
02	DF/S1/242/SDC/033	DJP90105	09/08/00	N/A
03	DF/S1/242/SDC/034	DJP91105	09/08/00	N/A
04	DF/S1/242/SDC/035	DJP92105	09/08/00	N/A
05	~~INTRA-LAB OC~~	~~DJRHV13J~~	~~09/08/00~~	~~N/A~~
06	~~LAB MS/MSD~~	~~DJRHV13K S~~	~~09/08/00~~	~~N/A~~
07	~~LAB MS/MSD~~	~~DJRHV13L D~~	~~09/08/00~~	~~N/A~~
08	CHECK SAMPLE	DK2EF102 C	09/08/00	N/A
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

un 9/12/00

COMMENTS:

FORM IV

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0I070000 520

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 09/01/00

Work Order: DK2EF101

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

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

METALS SUMMARY

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP8W Client ID: DF/S1/242/SDC/031
Matrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152
Weight: 1.00 Volume: 100 Percent Moisture: 16.4

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.31	1.2	9.0		1	ICPST	9/6/00	11:52

Comments: C0H310206001

Version 4.10.2

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: DJP90 Client ID: DF/S1/242/SDC/033
Matrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152
Weight: 1.00 Volume: 100 Percent Moisture: 6.77

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.28	1.1	7.6		1	ICPST	9/6/00	12:09

Comments: C0H310206002

Version 4.10.2

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

Form I Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP91 Client ID: DF/S1/242/SDC/034
Matrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152
Weight: 1.00 Volume: 100 Percent Moisture: 9.17

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.28	1.1	10.2		1	ICPST	9/6/00	12:13

Comments: C0H310206003

Version 4.10.2

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

Form 1 Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP92 Client ID: DF/S1/242/SDC/035
Matrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152
Weight: 1.00 Volume: 100 Percent Moisture: 12.04

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.29	1.1	14.8		1	ICPST	9/6/00	12:17

Comments: COH310206004

Version 4.10.2

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

Form 1 Equivalent

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00906A.ARC

Standard Source: _____

Standard ID: _____

			ICB1 9/6/00 8:35 AM					
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	2.6	U				

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00906A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 9/6/00 9:27 AM	CCB2 9/6/00 10:17 AM	CCB3 9/6/00 11:07 AM	CCB4 9/6/00 11:40 AM	CCB5 9/6/00 12:25 PM
			Found Q	Found Q	Found Q	Found Q	Found Q
Arsenic	189.042	10	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJVGEBMatrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152Weight: 1.00 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	9/6/00	11:44

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DJP8WS
 Original Sample ID: DJP8W Client ID: DF/S1/242/SDC/031S
 Matrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152
 Weight: 1.00 Volume: 100 Percent Moisture: 16.4

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	189.0	9.0		253		239.23	101.9	1	1	ICPST	9/6/00	11:52	9/6/00	12:01

Comments: _____

Version 4.10.2

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

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Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DJP8WD
 Original Sample ID: DJP8W Client ID: DF/S1/242/SDC/031D
 Matrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152
 Weight: 1.00 Volume: 100 Percent Moisture: 16.4

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
Arsenic	189.0	9.0		253		239.23	102.1	1	1	ICPST	9/6/00	11:52	9/6/00	12:05

Comments: _____

Version 4.10.2

- 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: DJP8WDMatrix Spike Sample ID: DJP8WS Client ID: DF/S1/242/SDC/031DMatrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152Weight: 1.00 Volume: 100 Percent Moisture: 16.4

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	189.042	253		253		0.2 %	1	1	ICPST	9/6/00	12:01	9/6/00	12:05

Comments: _____

Version 4.10.2

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

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJVGECMatrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152Weight: 1.00 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	216	107.8		80-120	1	ICPST	9/6/00	11:48

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

TCLP METALS SUMMARY

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP8WT Client ID: DF/S1/242/SDC/031
Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095
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	9/7/00	9:53

Comments: Lot#: C0H310206 Sample#: 1

Version 4.10.2

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

Form 1 Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP90T Client ID: DF/S1/242/SDC/033
Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095
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	9/7/00	9:55

Comments: Lot#: C0H310206 Sample#: 2

Version 4.10.2

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

Form I Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP91T Client ID: DF/S1/242/SDC/034
Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095
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	9/7/00	9:57

Comments: Lot#: C0H310206 Sample#: 3

Version 4.10.2

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: DJP92T Client ID: DF/S1/242/SDC/035
Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095
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	9/7/00	9:58

Comments: Lot#: C0H310206 Sample#: 4

Version 4.10.2

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

Form 1 Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP8WT Client ID: DF/S1/242/SDC/031
 Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130
 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	0.12	B	1	ICP	9/7/00	14:00
Barium	493.41	0.00041	10.0	1.2	B	1	ICP	9/7/00	14:00
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	9/7/00	14:00
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	9/7/00	14:00
Lead	220.35	0.025	0.50	0.025	U	1	ICP	9/7/00	14:00
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	9/7/00	14:00
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	9/7/00	14:00

Comments: Lot#: C0H310206 Sample#: 1

Version 4.10.2

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: DJP90T Client ID: DF/S1/242/SDC/033
 Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130
 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	0.11	B	1	ICP	9/7/00	14:03
Barium	493.41	0.00041	10.0	1.5	B	1	ICP	9/7/00	14:03
Cadmium	228.80	0.0028	0.10	0.024	B	1	ICP	9/7/00	14:03
Chromium	267.72	0.0038	0.50	0.0059	B	1	ICP	9/7/00	14:03
Lead	220.35	0.025	0.50	2.0		1	ICP	9/7/00	14:03
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	9/7/00	14:03
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	9/7/00	14:03

Comments: Lot#: C0H310206 Sample#: 2

Version 4.10.2

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

Form 1 Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP91T Client ID: DF/S1/242/SDC/034
 Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130
 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	0.10	B	1	ICP	9/7/00	14:06
Barium	493.41	0.00041	10.0	1.6	B	1	ICP	9/7/00	14:06
Cadmium	228.80	0.0028	0.10	0.017	B	1	ICP	9/7/00	14:06
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	9/7/00	14:06
Lead	220.35	0.025	0.50	1.0	1	1	ICP	9/7/00	14:06
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	9/7/00	14:06
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	9/7/00	14:06

Comments: Lot#: C0H310206 Sample#: 3

Version 4.10.2

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: DJP92T Client ID: DF/S1/242/SDC/035
 Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130
 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	9/7/00	14:09
Barium	493.41	0.00041	10.0	1.3	B	1	ICP	9/7/00	14:09
Cadmium	228.80	0.0028	0.10	0.011	B	1	ICP	9/7/00	14:09
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	9/7/00	14:09
Lead	220.35	0.025	0.50	2.4		1	ICP	9/7/00	14:09
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	9/7/00	14:09
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	9/7/00	14:09

Comments: Lot#: C0H310206 Sample#: 4

Version 4.10.2

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

Form 1 Equivalent

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0907HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 9/7/00 9:44 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U						

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00907C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 9/7/00 1:30 PM							
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U						
Barium	493.409	10000	0.4	U						
Cadmium	228.802	100	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: 0907HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 9/7/00 9:47 AM		CCB2 9/7/00 10:06 AM					
			Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U	0.0	U				

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00907C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 9/7/00 2:19 PM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q								
Arsenic	193.696	500	30.3	U								
Barium	493.409	10000	0.4	U								
Cadmium	228.802	100	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

Preparation Blank Results

Lab Sample ID: DJXV6BTMatrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095Weight: 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	0.000065	B	1	CVAA	9/7/00	9:52

Comments: _____

Version 4.10.2

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: DK0LPBT
Matrix: Water **Units:** mg/L **Prep Date:** 9/7/00 **Prep Batch:** 0251095
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	9/7/00	9:49

Comments: _____

Version 4.10.2

 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: DJXV6BTMatrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130Weight: 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	0.12	B	1	ICP	9/7/00	13:53
Barium	493.409	0.00041	10.0	0.0014	B	1	ICP	9/7/00	13:53
Cadmium	228.802	0.0028	0.10	-0.0035	B	1	ICP	9/7/00	13:53
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	9/7/00	13:53
Lead	220.353	0.025	0.50	0.025	U	1	ICP	9/7/00	13:53
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	9/7/00	13:53
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	9/7/00	13:53

Comments: _____

Version 4.10.2

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: DK0NNBTMatrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130Weight: 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	-0.049	B	1	ICP	9/7/00	13:50
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	9/7/00	13:50
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	9/7/00	13:50
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	9/7/00	13:50
Lead	220.353	0.025	0.50	0.025	U	1	ICP	9/7/00	13:50
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	9/7/00	13:50
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	9/7/00	13:50

Comments: _____

Version 4.10.2

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: DK0LPCTMatrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0025	0.0027	106.4		80-120	1	CVAA	9/7/00	9:51

Comments: _____

Version 4.10.2

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

Form 7 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DK0NNCTMatrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130Weight: 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	2.2	107.8		80-120	1	ICP	9/7/00	13:57
Barium	493.409	2.0	1.9	93.3	B	80-120	1	ICP	9/7/00	13:57
Cadmium	228.802	0.050	0.051	101.4	B	80-120	1	ICP	9/7/00	13:57
Chromium	267.716	0.20	0.19	95.7	B	80-120	1	ICP	9/7/00	13:57
Lead	220.353	0.50	0.47	94.8	B	80-120	1	ICP	9/7/00	13:57
Selenium	196.026	2.0	2.2	109.6		80-120	1	ICP	9/7/00	13:57
Silver	328.068	0.050	0.049	97.3	B	80-120	1	ICP	9/7/00	13:57

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

GENERAL CHEMISTRY SUMMARY

UXB INTERNATIONAL

Client Sample ID: DF/S1/242/SDC/031

General Chemistry

Lot-Sample #...: C0H310206-001 Work Order #...: DJP8W Matrix.....: SOLID
 Date Sampled...: 08/30/00 Date Received...: 08/31/00
 % Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.9		No Units	SW846 9045C	09/01/00	0245319
				Dilution Factor: 1	MS Run #: 0245119	
Ignitability	NO	--	No Units	SW846 SECTION 7.1	09/05/00	0249117
				Dilution Factor: 1	MS Run #: 0249018	
Percent Solids	83.6		%	MCAWW 160.3 MOD	09/05-09/06/00	0249296
				Dilution Factor: 1	MS Run #: 0249124	
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	09/01/00	0249146
				Dilution Factor: 1	MS Run #: 0249054	
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	09/01/00	0249143
				Dilution Factor: 1	MS Run #: 0249048	

UXB INTERNATIONAL

Client Sample ID: DF/S1/242/SDC/033

General Chemistry

Lot-Sample #...: C0H310206-002 Work Order #...: DJP90 Matrix.....: SOLID
 Date Sampled...: 08/30/00 Date Received...: 08/31/00
 % Moisture.....: 6.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	09/01/00	0245319
			Dilution Factor: 1	MS Run #.....: 0245119		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	09/05/00	0249117
			Dilution Factor: 1	MS Run #.....: 0249018		
Percent Solids	93.2		%	MCAWW 160.3 MOD	09/05-09/06/00	0249296
			Dilution Factor: 1	MS Run #.....: 0249124		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	09/01/00	0249146
			Dilution Factor: 1	MS Run #.....: 0249054		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	09/01/00	0249143
			Dilution Factor: 1	MS Run #.....: 0249048		

UXB INTERNATIONAL

Client Sample ID: DF/S1/242/SDC/034

General Chemistry

Lot-Sample #...: COH310206-003 Work Order #...: DJP91 Matrix.....: SOLID
 Date Sampled...: 08/30/00 Date Received...: 08/31/00
 % Moisture.....: 9.2

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	09/01/00	0245319
				Dilution Factor: 1	MS Run #: 0245119	
Ignitability	NO	--	No Units	SW846 SECTION 7.1	09/05/00	0249117
				Dilution Factor: 1	MS Run #: 0249018	
Percent Solids	90.8		%	MCAWW 160.3 MOD	09/05-09/06/00	0249296
				Dilution Factor: 1	MS Run #: 0249124	
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	09/01/00	0249146
				Dilution Factor: 1	MS Run #: 0249054	
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	09/01/00	0249143
				Dilution Factor: 1	MS Run #: 0249048	

UXB INTERNATIONAL

Client Sample ID: DF/S1/242/SDC/035

General Chemistry

Lot-Sample #...: C0H310206-004 Work Order #...: DJP92 Matrix.....: SOLID
 Date Sampled...: 08/30/00 Date Received...: 08/31/00
 % Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	09/01/00	0245319
			Dilution Factor: 1	MS Run #.....: 0245119		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	09/05/00	0249117
			Dilution Factor: 1	MS Run #.....: 0249018		
Percent Solids	88.0		%	MCAWW 160.3 MOD	09/05-09/06/00	0249296
			Dilution Factor: 1	MS Run #.....: 0249124		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	09/01/00	0249146
			Dilution Factor: 1	MS Run #.....: 0249054		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	09/01/00	0249143
			Dilution Factor: 1	MS Run #.....: 0249048		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0H310206

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Reactive Cyanide	ND	Work Order #: DJVGH101 200	mg/kg	MB Lot-Sample #: A0I050000-146 SW846 7.3.3	09/01/00	0249146
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DJVG6101 200	mg/kg	MB Lot-Sample #: A0I050000-143 SW846 7.3.4	09/01/00	0249143
		Dilution Factor: 1				

NOTE(S) :

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

672 100

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H310206

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 #: DJR8W101 (85 - 115)	LCS Lot-Sample#: C0I010000-319 SW846 9045C	09/01/00	0245319
		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 #...: C0H310206

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

Matrix.....: SOLID

Date Sampled...: 08/29/00

Date Received...: 08/30/00

% Moisture.....: 7.1

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	ND	mg/kg	0.0	(0-20)	SD Lot-Sample #: A0H300174-001 SW846 7.3.3	09/01/00	0249146
Dilution Factor: 1								
			Prep Date.....: 0249054	Analysis Date...:		Prep Batch #....:		
Reactive Sulfide	ND	ND	mg/kg	0	(0-20)	SD Lot-Sample #: A0H300174-001 SW846 7.3.4	09/01/00	0249143
Dilution Factor: 1								
			Prep Date.....: 0249048	Analysis Date...:		Prep Batch #....:		

672 102

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H310206 Work Order #...: DJP8W-SMP Matrix.....: SOLID
Date Sampled...: 08/30/00 Date Received...: 08/31/00
% Moisture.....: 16

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.9	8.1	No Units	2.4	(0-20)	SW846 9045C	09/01/00	0245319
Dilution Factor: 1								
Prep Date.....: 0245119 Analysis Date...: Prep Batch #....:								

Ignitability

SD Lot-Sample #: C0H310206-001						
No Units	0	(0-0.0)	SW846	SECTION 7.1	09/05/00	0249117
Dilution Factor: 1						
Prep Date.....: 0249018 Analysis Date...: Prep Batch #....:						

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H310206 Work Order #...: DJRHV-SMP Matrix.....: SOLID

DJRHV-DUP

Date Sampled...: 08/30/00 Date Received...: 09/01/00

% Moisture.....: 63

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	36.6	36.3	%	0.79	(0-20)	MCAWW 160.3 MOD	09/06-09/07/00	0249296

SD Lot-Sample #: C0I010228-001

Dilution Factor: 1

Prep Date.....: 0249124 Analysis Date...

Prep Batch #...:

672 104

GC/MS VOLATILE DATA

GC/MS VOLATILE
QC SUMMARY

672 106

SW846 8260B SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0H310206

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	DF/S1/242/SDC/031	96	107	102	103	00
02	DF/S1/242/SDC/033	87	100	92	94	00
03	DF/S1/242/SDC/034	93	101	93	98	00
04	DF/S1/242/SDC/035	90	98	91	95	00
05	INTRA-LAB QC	85	97	90	92	00
06	METHOD BLK. DJX0F101	90	100	93	96	00
07	LCS DJX28101	85	105	100	94	00
08	LAB MS/MSD D	84	100	96	90	00
09	LAB MS/MSD S	89	104	102	96	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 #: C0I060000

WO #: DJX28101

BATCH: 0250140

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
Carbon tetrachloride	0.500	0.472	94	72 - 133	
Chlorobenzene	0.500	0.487	97	81 - 115	
Chloroform	0.500	0.466	93	81 - 122	
1,2-Dichloroethane	0.500	0.428	86	73 - 127	
1,1-Dichloroethene	0.500	0.525	105	65 - 119	
Tetrachloroethene	0.500	0.429	86	78 - 131	
Benzene	0.500	0.490	98	79 - 116	
2-Butanone	0.500	0.286	57	35 - 156	
Trichloroethene	0.500	0.445	89	80 - 122	
Vinyl chloride	0.500	0.418	84	53 - 134	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

672 108 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: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV139

BATCH: 0250140

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
2-Butanone	0.500	ND	0.300	60	10- 151	
Benzene	0.500	ND	0.497	99	73- 123	
Carbon tetrachloride	0.500	ND	0.483	97	61- 143	
Chlorobenzene	0.500	ND	0.486	97	70- 122	
Chloroform	0.500	ND	0.488	98	65- 131	
Trichloroethene	0.500	ND	0.462	92	58- 141	
Vinyl chloride	0.500	ND	0.440	88	51- 133	
Tetrachloroethene	0.500	ND	0.427	85	70- 130	
1,2-Dichloroethane	0.500	ND	0.442	88	67- 132	
1,1-Dichloroethene	0.500	ND	0.555	111	57- 138	

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 10 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV13A

BATCH: 0250140

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
Benzene	0.500	0.485	97	2.4	20	73 - 123	
Carbon tetrachloride	0.500	0.478	96	1.0	20	61 - 143	
Chlorobenzene	0.500	0.477	95	1.9	20	70 - 122	
Chloroform	0.500	0.466	93	4.6	20	65 - 131	
2-Butanone	0.500	0.317	63	5.6	34	10 - 151	
1,2-Dichloroethane	0.500	0.431	86	2.4	20	67 - 132	
1,1-Dichloroethene	0.500	0.504	101	9.7	20	57 - 138	
Tetrachloroethene	0.500	0.421	84	1.4	20	70 - 130	
Trichloroethene	0.500	0.447	89	3.4	20	58 - 141	
Vinyl chloride	0.500	0.415	83	5.8	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:

672 110 SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DJX0F101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: 3090603.D

Lot Number: C0H310206

Date Analyzed: 09/06/00

Time Analyzed: 07:23

Matrix: SOLID

Date Extracted: 09/06/00

GC Column: RTX-624 ID: .18

Extraction Method: 1311/5030B

Instrument ID: HP3

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/S1/242/SDC/031	DJP8W102	3090611.D	09/06/00	10:22
02	DF/S1/242/SDC/033	DJP90102	3090612.D	09/06/00	10:45
03	DF/S1/242/SDC/034	DJP91102	3090613.D	09/06/00	11:08
04	DF/S1/242/SDC/035	DJP92102	3090614.D	09/06/00	11:33
05	LAB MS/MSD	DJRHV13A D	3090609.D	09/06/00	09:39
06	INTRA-LAB QC	DJRHV138	3090606.D	09/06/00	08:29
07	LAB MS/MSD	DJRHV139 S	3090608.D	09/06/00	09:17
08	CHECK SAMPLE	DJX28101 C	3090607.D	09/06/00	08:52
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)

672 111

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: 30810D

Lab File ID: BF30810

BFB Injection Date: 08/10/00

Instrument ID: HP3

BFB Injection Time: 0630

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	23.6
75	30.0 - 60.0% of mass 95	44.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	76.4
175	5.0 - 9.0% of mass 174	5.9 (7.8)1
176	95.0 - 101.0% of mass 174	74.0 (96.9)1
177	5.0 - 9.0% of mass 176	4.9 (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	CC30810	08/10/00	0656
02	VSTD5	VSTD5	1A30810	08/10/00	0754
03	VSTD20	VSTD20	1B30810	08/10/00	0817
04	VSTD100	VSTD100	1D30810	08/10/00	0839
05	VSTD200	VSTD200	1E30810	08/10/00	0906
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

672 112

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: C0H310206

Lab File ID: BF30906

BFB Injection Date: 09/06/00

Instrument ID: HP3

BFB Injection Time: 0522

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	23.2
75	30.0 - 60.0% of mass 95	41.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	58.4
175	5.0 - 9.0% of mass 174	4.4 (7.5)1
176	95.0 - 101.0% of mass 174	56.6 (97.0)1
177	5.0 - 9.0% of mass 176	3.8 (6.8)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	CC30906	09/06/00	0545
02	INTRA-LAB BL	DJX0F101	3090603	09/06/00	0723
03	INTRA-LAB CH	DJX28101	3090607	09/06/00	0852
04	DF/S1/242/SD	DJP8W102	3090611	09/06/00	1022
05	DF/S1/242/SD	DJP90102	3090612	09/06/00	1045
06	DF/S1/242/SD	DJP91102	3090613	09/06/00	1108
07	DF/S1/242/SD	DJP92102	3090614	09/06/00	1133
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

672 113

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: COH310206

Lab File ID (Standard): CC30906

Date Analyzed: 09/06/00

Instrument ID: HP3

Time Analyzed: 0545

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	164373	9.73	264930	12.05	622018	6.59
UPPER LIMIT	328746	9.93	529860	12.25	1244036	6.79
LOWER LIMIT	82187	9.53	132465	11.85	311009	6.39
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	150143	9.73	225275	12.05	585292	6.60
02 INTRA-LAB CH	159316	9.73	249702	12.05	636344	6.60
03 DF/S1/242/SD	148877	9.73	226713	12.05	580085	6.60
04 DF/S1/242/SD	165355	9.73	241363	12.05	663759	6.60
05 DF/S1/242/SD	151996	9.73	224349	12.05	590744	6.60
06 DF/S1/242/SD	160148	9.74	234877	12.05	634045	6.60
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.

672 114

GC/MS VOLATILE
SAMPLE DATA

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/31/00

Work Order: DJP8W102

Date Extracted: 09/06/00

Dilution factor: 1

Date Analyzed: 09/06/00

Moisture %: 16

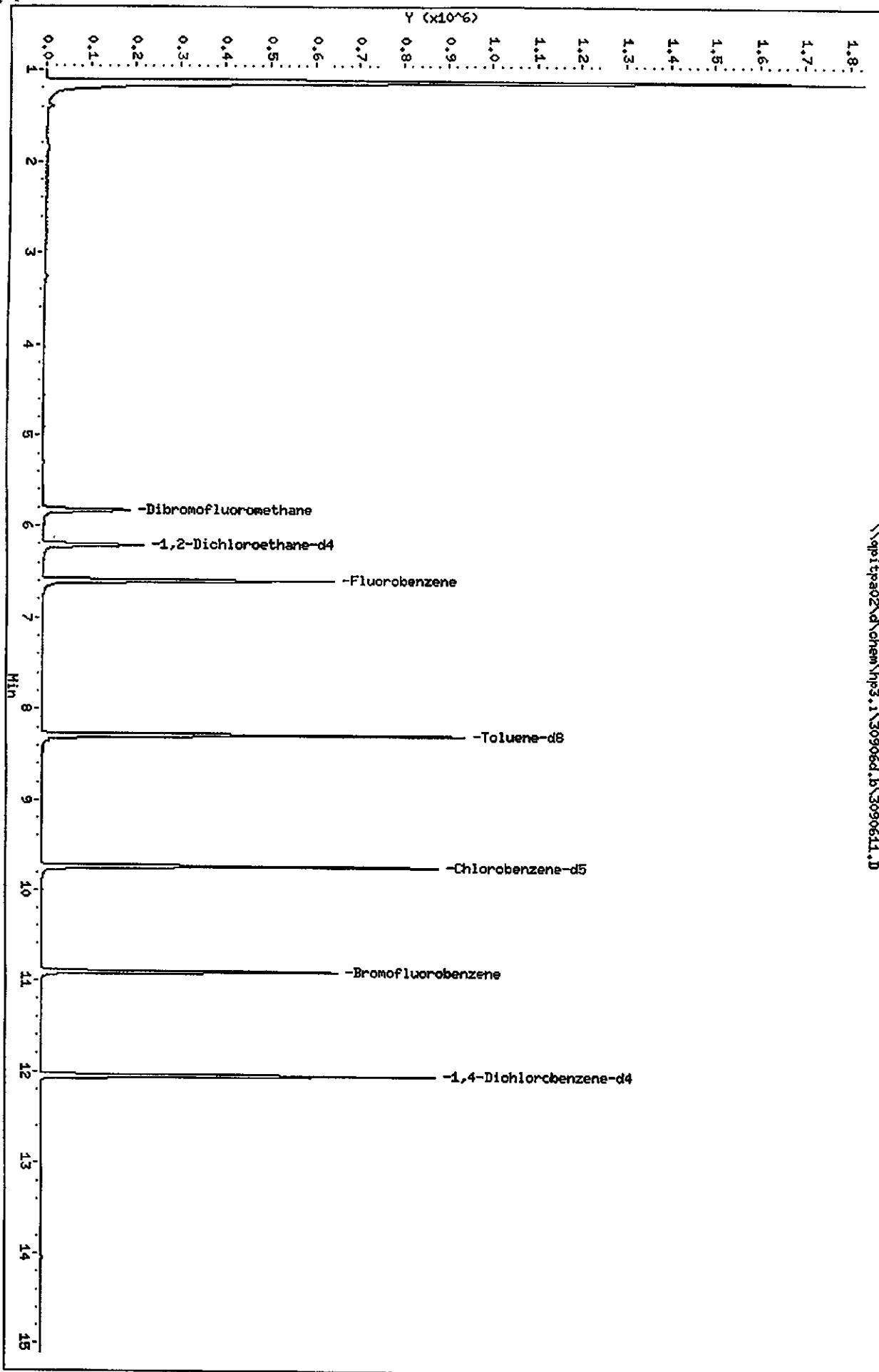
QC Batch: 0250140

Client Sample Id: DF/S1/242/SDC/031

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: \\qpi1pa02\chem\hp3.1\30906d.b\30906d11.D
Date: 06-SEP-2000 10:22
Client ID: HP/S1/242/SDC/031
Sample Info: COH310206-001 (1ML/10ML)/5HL
Purge Volume: 5.0
Column Phase: DB 624

Instrument: hp3.1
Operator: 10099
Column diameter: 0.18



Data File: \\gpitpa02\d\chem\hp3.i\30906d.b\3090611.D
Report Date: 06-Sep-2000 10:49

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\gpitpa02\d\chem\hp3.i\30906d.b\3090611.D
Lab Smp Id: DJP8W102 Client Smp ID: DF/S1/242/SDC/031
Inj Date : 06-SEP-2000 10:22 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : C0H310206-001 (1ML/10ML)/5ML
Misc Info : djp8w102,30906d.b,8260bh2o.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30906d.b\8260bh2o.m
Meth Date : 06-Sep-2000 06:09 gordonk Quant Type: ISTD
Cal Date : 10-AUG-2000 09:06 Cal File: 1E30810.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tclp.sub
Target Version: 4.04
Processing Host: PITPC063

KUG
9/6/00

Concentration Formula: Amt * DF * 1/Vo * Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.599	6.593	(1.000)	580085	250.000	
* 69 Chlorobenzene-d5	119	9.732	9.732	(1.000)	148877	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.050	12.050	(1.000)	226713	250.000	
\$ 39 Dibromofluoromethane	113	5.832	5.826	(0.884)	138666	256.316	51.26
\$ 43 1,2-Dichloroethane-d4	65	6.210	6.204	(0.941)	149880	240.309	48.06
\$ 59 Toluene-d8	98	8.290	8.284	(0.852)	596931	266.641	53.33
\$ 80 Bromofluorobenzene	95	10.906	10.900	(1.121)	236279	253.921	50.78
3 Vinyl Chloride	62	Compound Not Detected.					
12 1,1-Dichloroethene	96	Compound Not Detected.					
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	Compound Not Detected.					
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	Compound Not Detected.					
65 Tetrachloroethene	164	Compound Not Detected.					

672 118

Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\3090611.D
Report Date: 06-Sep-2000 10:49

Page 2

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 002

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/31/00

Work Order: DJP90102

Date Extracted: 09/06/00

Dilution factor: 1

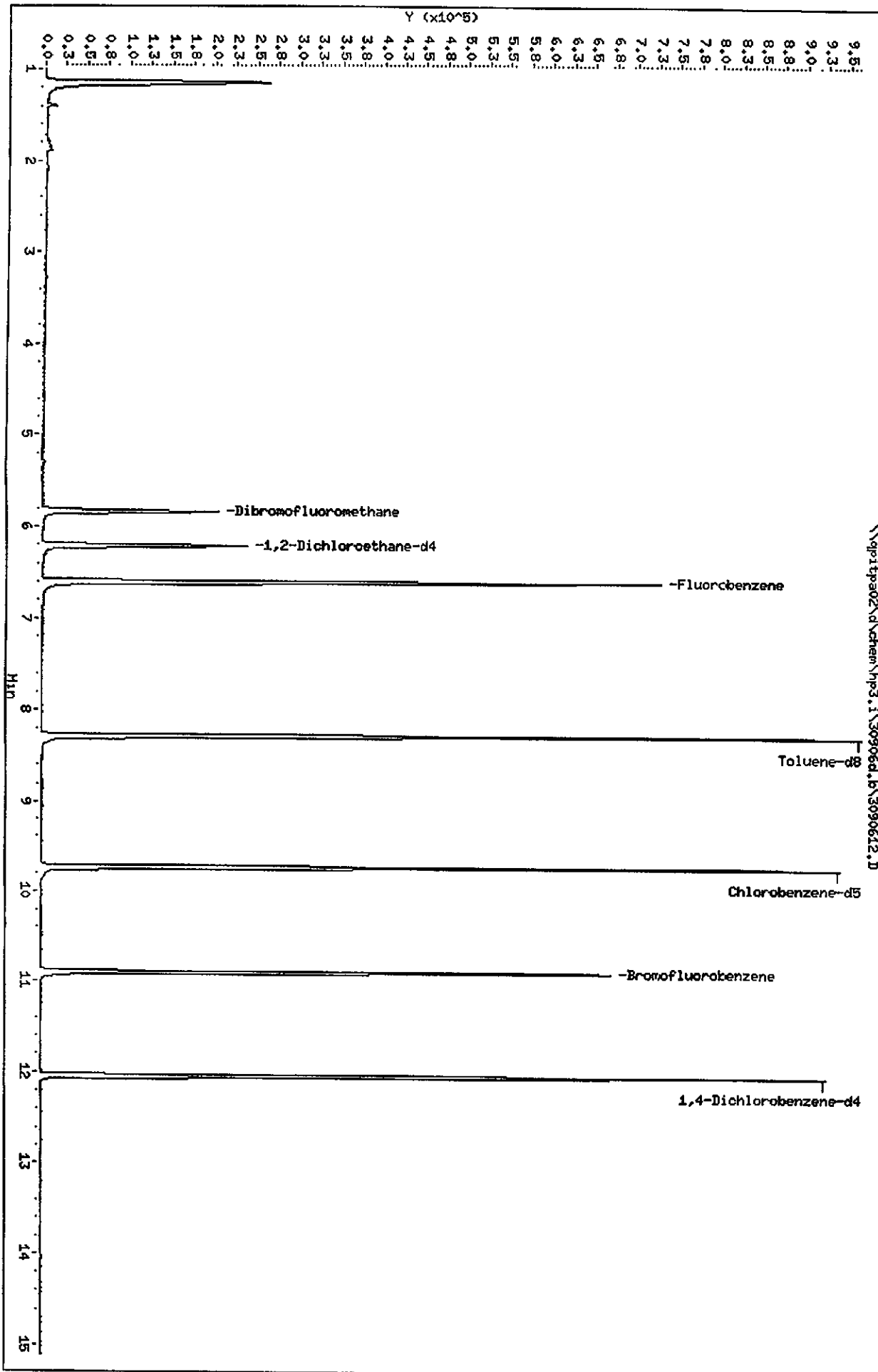
Date Analyzed: 09/06/00

Moisture %: 6.8

QC Batch: 0250140

Client Sample Id: DF/S1/242/SDC/033

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: \\p01tpa02\chem\hp3.1\30906d.b\3090612.D
Date: 06-SEP-2000 10:45
Client ID: DF/S1/242/SDC/033
Sample Info: COH310206-002 (1HL/10ML)/BHL
Purge Volume: 5.0
Column phase: DB 624

Instrument: hp3.1
Operator: 10099
Column diameter: 0.18

Data File: \\gpitpa02\d\chem\hp3.i\30906d.b\3090612.D
Report Date: 06-Sep-2000 11:21

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\gpitpa02\d\chem\hp3.i\30906d.b\3090612.D
Lab Smp Id: DJP90102 Client Smp ID: DF/S1/242/SDC/033
Inj Date : 06-SEP-2000 10:45 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : C0H310206-002 (1ML/10ML)/5ML
Misc Info : djp90102,30906d.b,8260bh2o.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30906d.b\8260bh2o.m
Meth Date : 06-Sep-2000 06:09 gordonk Quant Type: ISTD
Cal Date : 10-AUG-2000 09:06 Cal File: 1E30810.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC063

Compound Sublist: tclp.sub

Concentration Formula: Amt * DF * 1/Vo*Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.599	6.593	(1.000)	663759	250.000	
* 69 Chlorobenzene-d5	119	9.732	9.732	(1.000)	165355	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.050	12.050	(1.000)	241363	250.000	
\$ 39 Dibromofluoromethane	113	5.833	5.826	(0.884)	145290	234.705	46.94
\$ 43 1,2-Dichloroethane-d4	65	6.210	6.204	(0.941)	155604	218.036	43.61
\$ 59 Toluene-d8	98	8.291	8.284	(0.852)	621127	249.801	49.96
\$ 80 Bromofluorobenzene	95	10.907	10.900	(1.121)	238946	231.198	46.24
3 Vinyl Chloride	62	Compound Not Detected.					
12 1,1-Dichloroethene	96	Compound Not Detected.					
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	Compound Not Detected.					
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	Compound Not Detected.					
65 Tetrachloroethene	164	Compound Not Detected.					

672 122

Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\3090612.D
Report Date: 06-Sep-2000 11:21

Page 2

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 003

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/31/00

Work Order: DJP91102

Date Extracted: 09/06/00

Dilution factor: 1

Date Analyzed: 09/06/00

Moisture %: 9.2

QC Batch: 0250140

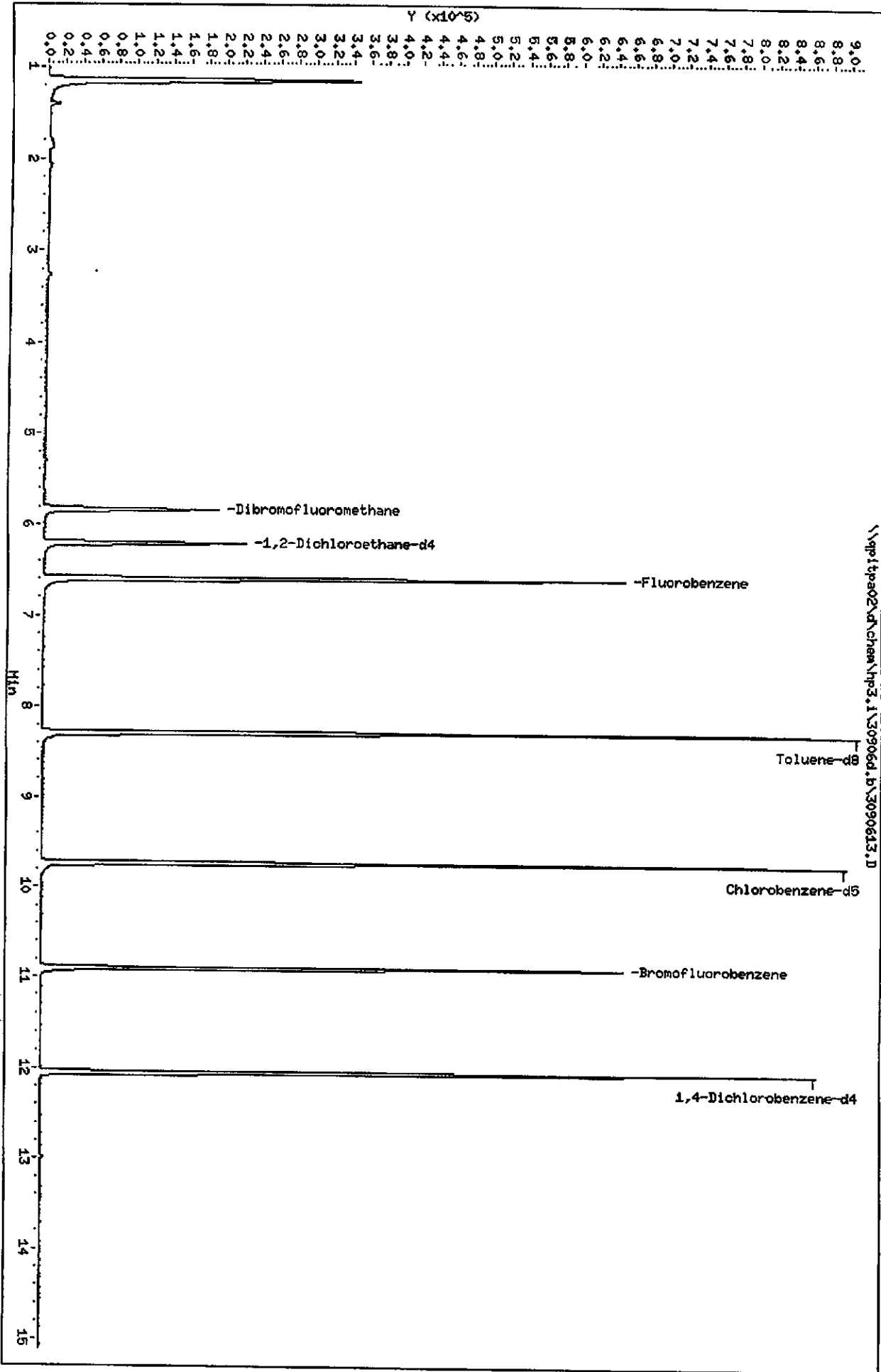
Client Sample Id: DF/S1/242/SDC/034

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: \\ppltpa02\chem\hp3.1\30906d.b\3090613.D
Date: 06-SEP-2000 11:08
Client ID: DF/S1/242/SDC/034
Sample Info: COH310206-003 (1HL/10ML)/SHL
Purge Volume: 5.0
Column phase: DB 624

Instrument: hp3.1
Operator: 10099
Column diameter: 0.18



Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\3090613.D
 Report Date: 06-Sep-2000 11:33

Page 1

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30906d.b\3090613.D
 Lab Smp Id: DJP91102 Client Smp ID: DF/S1/242/SDC/034
 Inj Date : 06-SEP-2000 11:08 MS Autotune Date: 08-AUG-2000 16:28
 Operator : 10099 Inst ID: hp3.i
 Smp Info : C0H310206-003 (1ML/10ML)/5ML
 Misc Info : djp91102,30906d.b,8260bh2o.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\hp3.i\30906d.b\8260bh2o.m
 Meth Date : 06-Sep-2000 06:09 gordonk Quant Type: ISTD
 Cal Date : 10-AUG-2000 09:06 Cal File: 1E30810.D
 Als bottle: 16
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC063

KIG
9/6/00

Compound Sublist: tclp.sub

Concentration Formula: Amt * DF * 1/Vo*Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(UG/L)
* 46 Fluorobenzene	96	6.600	6.593	(1.000)	590744	250.000	
* 69 Chlorobenzene-d5	119	9.733	9.732	(1.000)	151996	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.051	12.050	(1.000)	224349	250.000	
\$ 39 Dibromofluoromethane	113	5.833	5.826	(0.884)	135166	245.338	49.07
\$ 43 1,2-Dichloroethane-d4	65	6.210	6.204	(0.941)	147629	232.429	46.48
\$ 59 Toluene-d8	98	8.291	8.284	(0.852)	576450	252.209	50.44
\$ 80 Bromofluorobenzene	95	10.907	10.900	(1.121)	222038	233.720	46.74
3 Vinyl Chloride	62	Compound Not Detected.					
12 1,1-Dichloroethene	96	Compound Not Detected.					
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	Compound Not Detected.					
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	Compound Not Detected.					
65 Tetrachloroethene	164	Compound Not Detected.					

672.126

Data File: \\gpitpa02\d\chem\hp3.i\30906d.b\3090613.D
Report Date: 06-Sep-2000 11:33

Page 2

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 004

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/31/00

Work Order: DJP92102

Date Extracted: 09/06/00

Dilution factor: 1

Date Analyzed: 09/06/00

Moisture %: 12

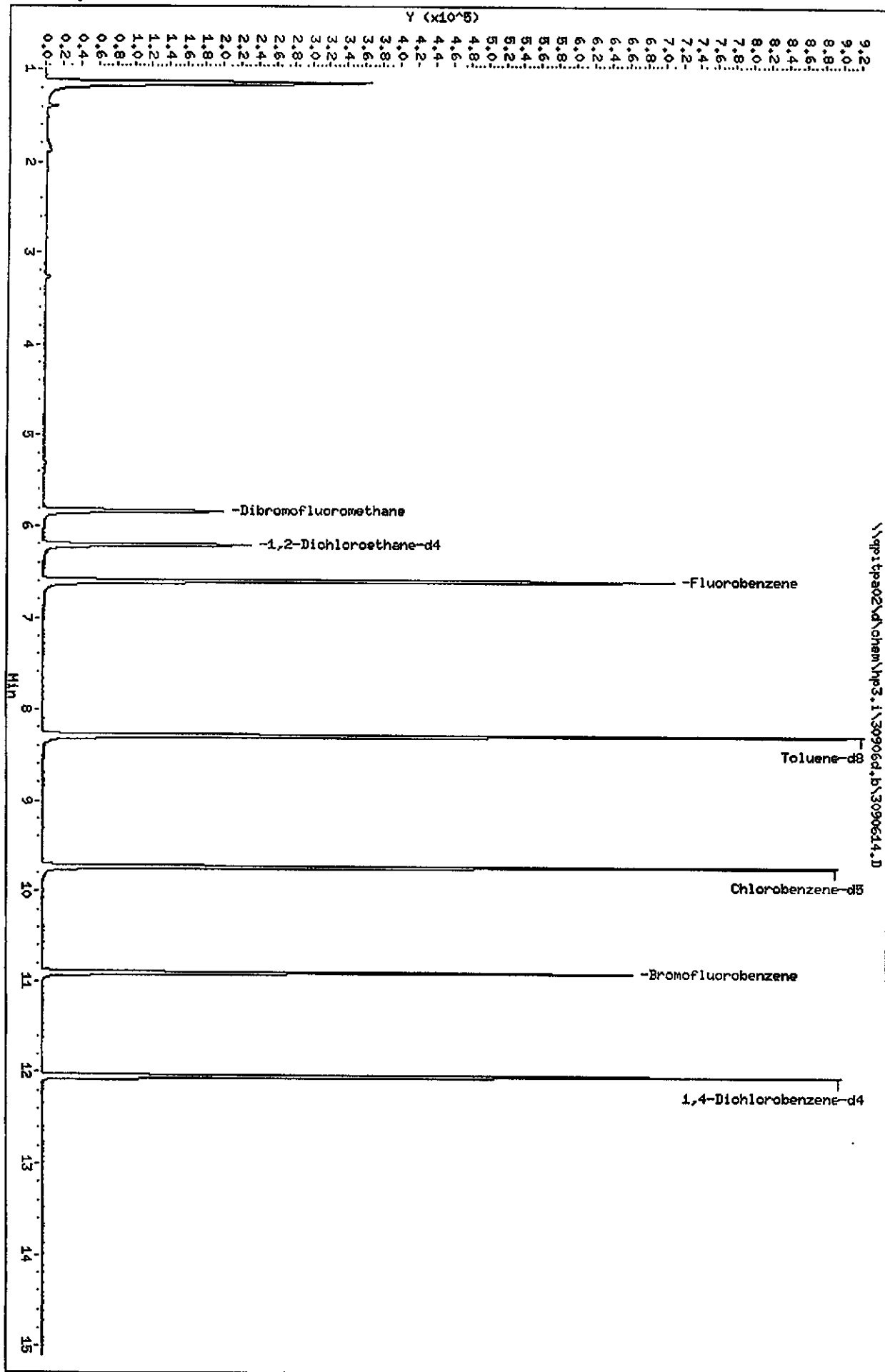
QC Batch: 0250140

Client Sample Id: DF/S1/242/SDC/035

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: \\pptipa02\chem\hp3.1\30906d.b\30906d4.D
Date: 06-SEP-2000 11:33
Client ID: DF/SI/242/SIC/035
Sample Info: COH310206-004 (LHL/10HL)/BHL
Purge Volume: 5.0
Column phase: DB 624

Instrument: hp3.1
Operator: 10099
Column diameter: 0.18



Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\3090614.D
 Report Date: 06-Sep-2000 11:52

Page 1

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30906d.b\3090614.D
 Lab Smp Id: DJP92102 Client Smp ID: DF/S1/242/SDC/035
 Inj Date : 06-SEP-2000 11:33 MS Autotune Date: 08-AUG-2000 16:28
 Operator : 10099 Inst ID: hp3.i
 Smp Info : C0H310206-004 (1ML/10ML)/5ML
 Misc Info : djp92102,30906d.b,8260bh2o.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\hp3.i\30906d.b\8260bh2o.m
 Meth Date : 06-Sep-2000 06:09 gordonk Quant Type: ISTD
 Cal Date : 10-AUG-2000 09:06 Cal File: 1E30810.D
 Als bottle: 17
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC063

UG
9/6/00

Concentration Formula: Amt * DF * 1/Vo*Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.603	6.593	(1.000)	634045	250.000	
* 69 Chlorobenzene-d5	119	9.736	9.732	(1.000)	160148	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.054	12.050	(1.000)	234877	250.000	
\$ 39 Dibromofluoromethane	113	5.837	5.826	(0.884)	140323	237.304	47.46
\$ 43 1,2-Dichloroethane-d4	65	6.214	6.204	(0.941)	153571	225.272	45.05
\$ 59 Toluene-d8	98	8.289	8.284	(0.851)	592442	246.011	49.20
\$ 80 Bromofluorobenzene	95	10.905	10.900	(1.120)	228750	228.529	45.70
3 Vinyl Chloride	62	Compound Not Detected.					
12 1,1-Dichloroethene	96	Compound Not Detected.					
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	Compound Not Detected.					
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	Compound Not Detected.					
65 Tetrachloroethene	164	Compound Not Detected.					

672 130

Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\3090614.D
Report Date: 06-Sep-2000 11:52

Page 2

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

GC/MS VOLATILE
CALIBRATION DATA

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: 30810D

Instrument ID: HP3

Calibration Date(s): 08/10/00 08/10/00

Heated Purge: (Y/N) N

Calibration Time(s): 0656 0906

GC Column: DB 624 ID: 0.18 (mm)

LAB FILE ID:		RRF5 =1A30810		RRF20 =1B30810			
RRF50 =CC30810		RRF100=1D30810		RRF200=1E30810			
COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
Dichlorodifluoromethane	0.320	0.270	0.221	0.242	0.235	0.258	15.2
Chloromethane	* 0.595	0.494	0.417	0.442	0.430	0.476	15.3*
Vinyl Chloride	0.435	0.371	0.320	0.331	0.324	0.356	13.6
Bromomethane	0.084	0.062	0.042	0.048	0.045	0.056	30.4
Chloroethane	0.082	0.069	0.058	0.061	0.059	0.066	15.5
Trichlorofluoromethane	0.379	0.297	0.109	0.118	0.119	0.204	61.4
1,1-Dichloroethene	0.198	0.163	0.144	0.150	0.153	0.162	13.3
Methylene Chloride	0.237	0.194	0.166	0.175	0.176	0.190	15.0
trans-1,2-Dichloroethene	0.206	0.175	0.160	0.164	0.166	0.174	10.8
1,1-Dichloroethane	* 0.452	0.386	0.351	0.362	0.362	0.383	10.7*
cis-1,2-dichloroethene	0.304	0.274	0.246	0.253	0.244	0.264	9.5
Chloroform	0.472	0.408	0.364	0.371	0.360	0.395	12.0
Bromochloromethane	0.152	0.135	0.120	0.124	0.122	0.131	10.2
1,1,1-Trichloroethane	0.356	0.306	0.294	0.307	0.305	0.314	7.7
Carbon Tetrachloride	0.313	0.258	0.264	0.275	0.276	0.277	7.7
1,2-Dichloroethane	0.449	0.382	0.344	0.350	0.342	0.373	12.2
Benzene	1.272	1.100	0.972	0.990	0.950	1.057	12.6
Trichloroethene	0.322	0.283	0.253	0.265	0.264	0.277	9.8
1,2-Dichloropropane	0.361	0.322	0.290	0.297	0.295	0.313	9.4
Bromodichloromethane	0.340	0.307	0.287	0.294	0.286	0.303	7.3
cis-1,3-Dichloropropene	0.395	0.382	0.355	0.374	0.364	0.374	4.1
Toluene	5.290	4.626	4.185	4.363	4.272	4.547	9.8
trans-1,3-Dichloropropene	1.508	1.403	1.332	1.454	1.484	1.436	4.9
1,1,2-Trichloroethane	1.078	0.940	0.828	0.860	0.857	0.913	11.1
Tetrachloroethene	1.397	0.950	0.832	0.854	0.857	0.978	24.4
Dibromochloromethane	0.962	0.935	0.885	0.945	0.976	0.941	3.7
Chlorobenzene	* 4.034	3.352	2.949	3.030	2.939	3.261	14.2*
Ethylbenzene	2.061	1.801	1.624	1.679	1.607	1.754	10.7
Styrene	4.357	3.821	3.339	3.427	3.201	3.629	12.9
Bromoform	* 0.628	0.604	0.597	0.644	0.671	0.629	4.8*
1,1,2,2-Tetrachloroethane	* 0.866	0.703	0.615	0.638	0.611	0.687	15.5*
1,3-Dichlorobenzene	1.902	1.517	1.374	1.459	1.447	1.540	13.6
1,4-Dichlorobenzene	2.003	1.562	1.413	1.486	1.479	1.589	15.0
1,2-Dichlorobenzene	1.827	1.410	1.247	1.277	1.230	1.398	17.9
Dibromomethane	0.173	0.157	0.139	0.141	0.135	0.149	10.5
1,2-Dibromoethane	1.134	0.971	0.861	0.926	0.934	0.965	10.6
1,1,1,2-Tetrachloroethane	1.208	1.068	0.977	1.024	1.019	1.059	8.4

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

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

672 133

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: 30810D

Instrument ID: HP3

Calibration Date(s): 08/10/00 08/10/00

Heated Purge: (Y/N) N

Calibration Time(s): 0656 0906

GC Column: DB 624 ID: 0.18 L (mm) :

LAB FILE ID: RRF5 =1A30810 RRF20 =1B30810 RRF50 =CC30810 RRF100=1D30810 RRF200=1E30810							
COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
1,2,3-Trichloropropane	0.283	0.230	0.204	0.222	0.222	0.232	12.9
1,2-Dibromo-3-chloropropane	0.140	0.121	0.115	0.128	0.136	0.128	8.3
2,2-Dichloropropane	0.323	0.282	0.283	0.301	0.299	0.298	5.6
1,1-Dichloropropene	0.312	0.272	0.242	0.260	0.257	0.269	9.9
1,3-Dichloropropane	2.016	1.690	1.526	1.578	1.566	1.675	11.9
n-Propylbenzene	1.012	0.879	0.812	0.861	0.844	0.882	8.8
Bromobenzene	0.924	0.776	0.704	0.742	0.730	0.775	11.3
1,3,5-Trimethylbenzene	3.027	2.531	2.293	2.360	2.272	2.497	12.5
2-Chlorotoluene	0.922	0.760	0.701	0.735	0.731	0.770	11.4
4-Chlorotoluene	0.968	0.796	0.707	0.717	0.689	0.775	14.8
tert-Butylbenzene	2.542	2.152	2.034	2.120	2.119	2.193	9.1
1,2,4-Trimethylbenzene	3.041	2.572	2.358	2.472	2.436	2.576	10.5
sec-Butylbenzene	4.160	3.312	3.084	3.164	3.146	3.373	13.3
4-Isopropyltoluene	3.423	2.776	2.585	2.673	2.667	2.825	12.1
n-Butylbenzene	3.126	2.427	2.218	2.231	2.166	2.434	16.4
1,2,4-Trichlorobenzene	1.155	0.832	0.772	0.826	0.844	0.886	17.3
Hexachlorobutadiene	0.693	0.418	0.405	0.400	0.422	0.468	27.0
Naphthalene	2.416	1.550	1.357	1.558	1.614	1.699	24.3
1,2,3-Trichlorobenzene	1.130	0.706	0.646	0.677	0.704	0.773	26.0
Acetone	0.195	0.109	0.108	0.102	0.093	0.121	34.2
Carbon Disulfide	0.445	0.512	0.447	0.499	0.491	0.479	6.4
2-Butanone	0.322	0.238	0.216	0.215	0.208	0.240	19.8
4-Methyl-2-Pentanone	1.275	1.396	1.400	1.574	1.606	1.450	9.5
2-Hexanone	0.946	0.954	1.008	1.126	1.160	1.039	9.5
Methyl tert-butyl ether	0.396	0.422	0.404	0.437	0.457	0.423	5.8
Isopropylbenzene	6.046	5.433	4.896	5.050	4.861	5.257	9.4
1,2-Dichloroethene (total)	0.255	0.224	0.203	0.209	0.205	0.219	9.9
Xylenes (total)	2.339	2.143	1.891	1.936	1.835	2.029	10.3
Dibromofluoromethane	0.239	0.250	0.233	0.230	0.214	0.233	5.8
1,2-Dichloroethane-d4	0.291	0.282	0.263	0.261	0.247	0.269	6.6
Toluene-d8	3.853	3.937	3.651	3.779	3.577	3.759	3.9
Bromofluorobenzene	1.651	1.665	1.502	1.541	1.454	1.563	5.9

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

672 134

INITIAL CALIBRATION REPORT

Instrument ID: hp3.i
 Lab File ID: 1E30810.D
 Analysis Type: WATER

Injection Date: 10-AUG-2000 09:06
 Lab Sample ID: VSTD200
 Method File: \\QPITPA02\D\chem\hp3.i\30810d.b

COMPOUND	%RSD
Xylenes (total)	10.3
1,2-Dichloroethene (total)	9.9
Dichlorodifluoromethane	15.2
Chloromethane	15.3
Vinyl Chloride	13.6
Bromomethane	30.4
Chloroethane	15.5
Trichlorofluoromethane	61.4
1,1-Dichloroethene	13.3
Carbon Disulfide	6.4
Acetone	34.2
Methylene Chloride	15.0
trans-1,2-Dichloroethene	10.8
Methyl tert-butyl ether	5.8
1,1-Dichloroethane	10.7
2,2-Dichloropropane	5.6
cis-1,2-dichloroethene	9.5
2-Butanone	19.8
Bromochloromethane	10.2
Chloroform	12.0
1,1,1-Trichloroethane	7.7
Dibromofluoromethane	5.8
Carbon Tetrachloride	7.7
1,1-Dichloropropene	9.9
1,2-Dichloroethane-d4	6.6
Benzene	12.6
1,2-Dichloroethane	12.2
Trichloroethene	9.8
1,2-Dichloropropane	9.4
Dibromomethane	10.5
Bromodichloromethane	7.3
cis-1,3-Dichloropropene	4.1
4-Methyl-2-Pentanone	9.5
Toluene-d8	3.9
Toluene	9.8
trans-1,3-Dichloropropene	4.9
1,1,2-Trichloroethane	11.1
Tetrachloroethene	24.4
1,3-Dichloropropane	11.9

INITIAL CALIBRATION REPORT

Instrument ID: hp3.i
Lab File ID: 1E30810.D
Analysis Type: WATER

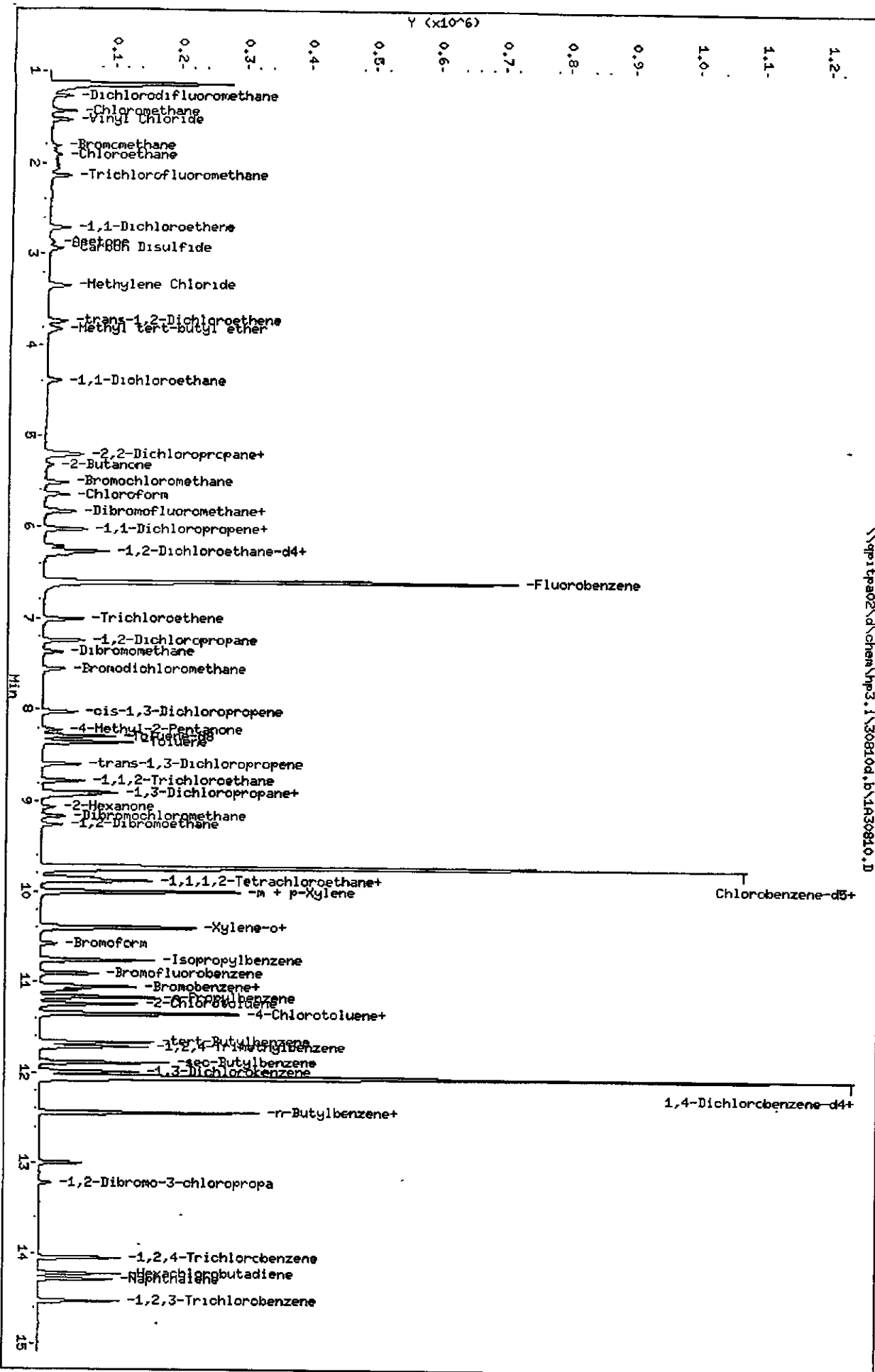
Injection Date: 10-AUG-2000 09:06
Lab Sample ID: VSTD200
Method File: \\QPITPA02\D\chem\hp3.i\30810d.b

COMPOUND	%RSD
2-Hexanone	9.5
Dibromochloromethane	3.7
1,2-Dibromoethane	10.6
Chlorobenzene	14.2
1,1,1,2-Tetrachloroethane	8.4
Ethylbenzene	10.7
m + p-Xylene	15.2
Xylene-o	10.3
Styrene	12.9
Bromoform	4.8
Isopropylbenzene	9.4
Bromofluorobenzene	5.9
Bromobenzene	11.3
1,1,2,2-Tetrachloroethane	15.5
1,2,3-Trichloropropane	12.9
n-Propylbenzene	8.8
2-Chlorotoluene	11.4
1,3,5-Trimethylbenzene	12.5
4-Chlorotoluene	14.8
tert-Butylbenzene	9.1
1,2,4-Trimethylbenzene	10.5
sec-Butylbenzene	13.3
1,3-Dichlorobenzene	13.6
4-Isopropyltoluene	12.1
1,4-Dichlorobenzene	15.0
n-Butylbenzene	16.4
1,2-Dichlorobenzene	17.9
1,2-Dibromo-3-chloropropane	8.3
1,2,4-Trichlorobenzene	17.3
Hexachlorobutadiene	27.0
Naphthalene	24.3
1,2,3-Trichlorobenzene	26.0

The average of all %RSD's in the initial calibration is 12.9

Data File: \\q1tpa02\chem\hp3.i\30810d.b\A30810.D
 Date: 10-AUG-2000 07:54
 Client ID: VSTD5
 Sample Info: VSTD5 SYL
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: hp3.i
 Operator: 10099
 Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method
Data file : \\qpitpa02\d\chem\hp3.i\30810d.b\1A30810.D
Lab Smp Id: VSTD5 Client Smp ID: VSTD5
Inj Date : 10-AUG-2000 07:54 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD5 5ML
Misc Info : ,30810d.b,8260bh2o.m,4-dwh20.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30810d.b\8260bh2o.m
Meth Date : 10-Aug-2000 08:24 gordonk Quant Type: ISTD
Cal Date : 10-AUG-2000 07:54 Cal File: 1A30810.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC073

KLG
8/10/00

Concentration Formula: Amt * DF * 1/Vo*Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

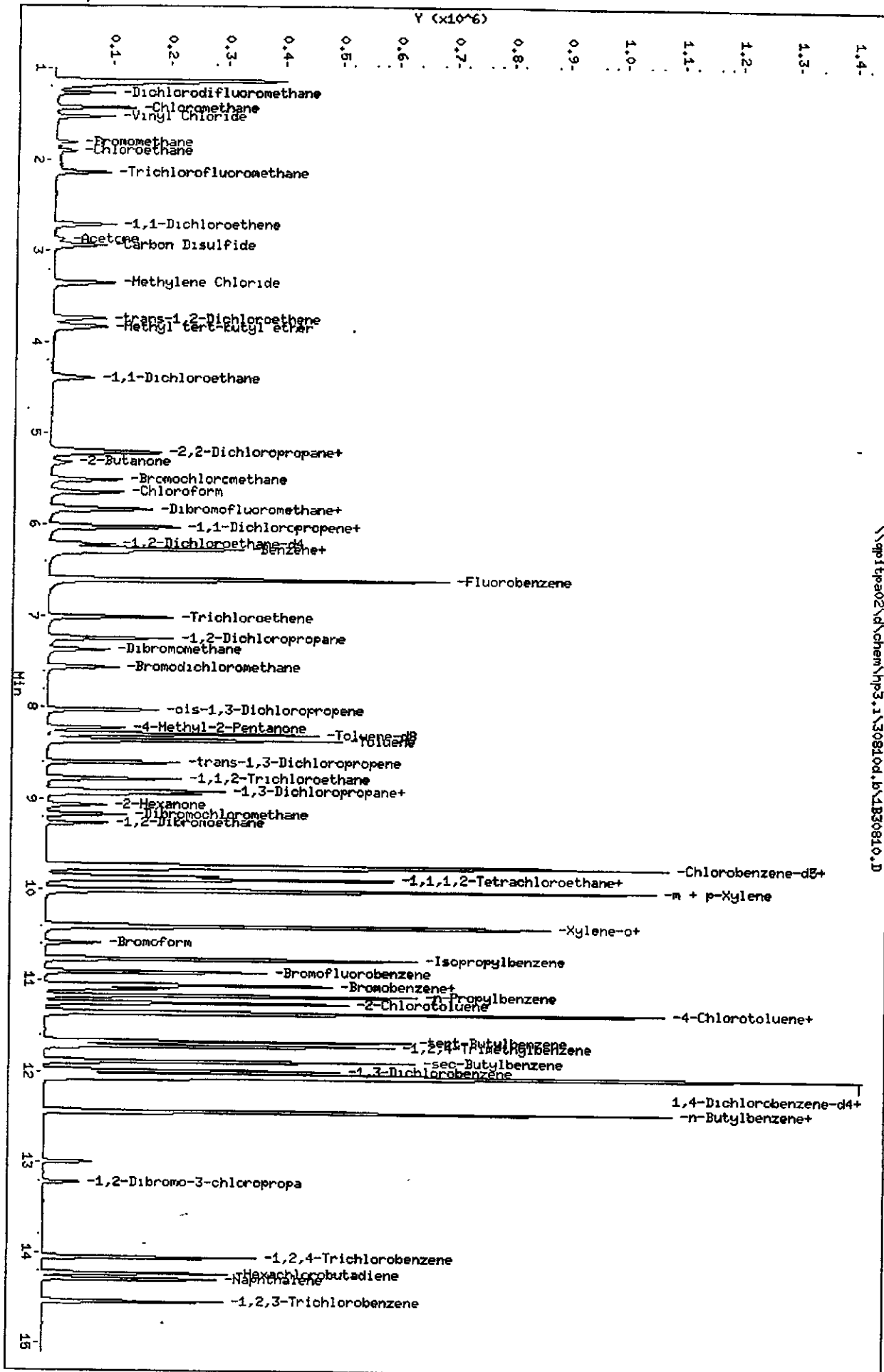
Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)
						ON-COL (ng)
* 46 Fluorobenzene	96	6.603	6.603	(1.000)	666943	250.000
* 69 Chlorobenzene-d5	119	9.736	9.736	(1.000)	184162	250.000
* 92 1,4-Dichlorobenzene-d4	152	12.054	12.054	(1.000)	320253	250.000
\$ 39 Dibromofluoromethane	113	5.843	5.843	(0.885)	15915	25.0000 25.28
\$ 43 1,2-Dichloroethane-d4	65	6.214	6.214	(0.941)	19395	25.0000 26.27
\$ 59 Toluene-d8	98	8.288	8.288	(0.851)	70952	25.0000 25.67
\$ 80 Bromofluorobenzene	95	10.904	10.904	(1.120)	30401	25.0000 26.18
1 Dichlorodifluoromethane	85	1.268	1.268	(0.192)	21320	25 0000 29.56
2 Chloromethane	50	1.426	1.426	(0.216)	39689	25 0000 29.40
3 Vinyl Chloride	62	1.529	1.529	(0.232)	29044	25.0000 28.81
4 Bromomethane	94	1.815	1.815	(0.275)	5574	25.0000 33.31
5 Chloroethane	64	1.900	1.900	(0.288)	5502	25.0000 29.32
6 Trichlorofluoromethane	101	2.138	2.138	(0.324)	25292	25 0000 38.82
12 1,1-Dichloroethene	96	2.716	2.716	(0.411)	13236	25 0000 28.97
15 Carbon Disulfide	76	2.941	2.941	(0.445)	29703	25.0000 24.95
13 Acetone	43	2.874	2.874	(0.435)	13007	25.0000 32.12

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
-----	----	--	-----	-----	-----	-----	-----
18 Methylene Chloride	84	3.348	3.348	(0.507)	15822	25.0000	29.40
19 trans-1,2-Dichloroethene	96	3.738	3.738	(0.566)	13769	25.0000	28.19
20 Methyl tert-butyl ether	73	3.823	3.823	(0.579)	26448	25.0000	24.77
24 1,1-Dichloroethane	63	4.389	4.389	(0.665)	30170	25.0000	28.15
27 2,2-Dichloropropane	77	5.192	5.192	(0.786)	21538	25.0000	26.63
28 cis-1,2-dichloroethene	96	5.216	5.216	(0.790)	20263	25.0000	27.62
M 29 1,2-Dichloroethene (total)	96				34032	50.0000	55.70
30 Bromochloromethane	128	5.514	5.514	(0.835)	10149	25.0000	27.92
31 2-Butanone	43	5.319	5.319	(0.806)	21513	25.0000	29.92
37 Chloroform	83	5.648	5.648	(0.855)	31483	25.0000	28.24
38 1,1,1-Trichloroethane	97	5.824	5.824	(0.882)	23741	25.0000	27.37
40 1,1-Dichloropropene	75	6.031	6.031	(0.913)	20794	25.0000	28.17
41 Carbon Tetrachloride	117	6.019	6.019	(0.912)	20901	25.0000	27.12
42 Benzene	78	6.268	6.268	(0.949)	84853	25.0000	28.35
45 1,2-Dichloroethane	62	6.305	6.305	(0.955)	29973	25.0000	28.33
47 Trichloroethene	130	7.017	7.017	(1.063)	21491	25.0000	28.01
49 1,2-Dichloropropane	63	7.242	7.242	(1.097)	24059	25.0000	27.73
50 Dibromomethane	93	7.370	7.370	(1.116)	11516	25.0000	27.73
53 Bromodichloromethane	83	7.558	7.558	(1.145)	22681	25.0000	27.10
57 cis-1,3-Dichloropropene	75	8.027	8.027	(1.216)	26339	25.0000	26.32
58 4-Methyl-2-Pentanone	43	8.221	8.221	(0.844)	23486	25.0000	23.84
60 Toluene	91	8.355	8.355	(0.858)	97415	25.0000	27.92
61 trans-1,3-Dichloropropene	75	8.598	8.598	(0.883)	27782	25.0000	26.55
63 1,3-Dichloropropane	76	8.939	8.939	(0.918)	37123	25.0000	28.46
64 1,1,2-Trichloroethane	97	8.781	8.781	(0.902)	19851	25.0000	28.27
65 Tetrachloroethene	164	8.909	8.909	(0.915)	25724	25.0000	31.33
66 2-Hexanone	43	9.061	9.061	(0.931)	17428	25.0000	24.21
67 Dibromochloromethane	129	9.170	9.170	(0.942)	17727	25.0000	26.06
68 1,2-Dibromoethane	107	9.261	9.261	(0.951)	20891	25.0000	28.42
70 Chlorobenzene	112	9.766	9.766	(1.003)	74297	25.0000	28.88
71 1,1,1,2-Tetrachloroethane	131	9.852	9.852	(1.012)	22254	25.0000	27.64
72 Ethylbenzene	106	9.882	9.882	(1.015)	37956	25.0000	27.96
73 m + p-Xylene	106	10.004	10.004	(1.027)	97582	50.0000	57.49
74 Xylene-o	106	10.393	10.393	(1.067)	43072	25.0000	27.65
M 75 Xylenes (total)	106				140654	25.0000	90.29
76 Styrene	104	10.405	10.405	(1.069)	80235	25.0000	28.30
77 Bromoform	173	10.582	10.582	(1.087)	11560	25.0000	25.63
78 Isopropylbenzene	105	10.758	10.758	(1.105)	111354	25.0000	27.63
79 Bromobenzene	156	11.050	11.050	(0.917)	29592	25.0000	28.39
81 n-Propylbenzene	120	11.172	11.172	(0.927)	32422	25.0000	27.75
82 2-Chlorotoluene	126	11.245	11.245	(0.933)	29526	25.0000	28.40
83 1,1,2,2-Tetrachloroethane	83	11.062	11.062	(0.918)	27727	25.0000	29.23
84 1,2,3-Trichloropropane	110	11.093	11.093	(0.920)	9057	25.0000	29.05
85 4-Chlorotoluene	126	11.354	11.354	(0.942)	30988	25.0000	28.88
86 1,3,5-Trimethylbenzene	105	11.348	11.348	(0.941)	96934	25.0000	28.45
87 tert-Butylbenzene	119	11.671	11.671	(0.968)	81409	25.0000	27.77
88 1,2,4-Trimethylbenzene	105	11.719	11.719	(0.972)	97387	25.0000	28.16

Compounds	↓ QUANT SIG	AMOUNTS					
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	====	==	=====	=====	=====	=====	=====
89 sec-Butylbenzene	105	11.883	11.883	(0.986)	133239	25.0000	28.71
90 4-Isopropyltoluene	119	12.036	12.036	(0.998)	109629	25.0000	28.49
91 1,3-Dichlorobenzene	146	11.987	11.987	(0.994)	60930	25.0000	29.03
93 1,4-Dichlorobenzene	146	12.078	12.078	(1.002)	64153	25.0000	29.32
94 n-Butylbenzene	91	12.443	12.443	(1.032)	100128	25.0000	29.25
95 1,2-Dichlorobenzene	146	12.443	12.443	(1.032)	58504	25.0000	29.72
96 1,2-Dibromo-3-chloropropane	157	13.216	13.216	(1.096)	4483	25.0000	27.49
97 1,2,4-Trichlorobenzene	180	14.049	14.049	(1.166)	36980	25.0000	29.97
98 Hexachlorobutadiene	225	14.226	14.226	(1.180)	22187	25.0000	31.55
99 Naphthalene	128	14.286	14.286	(1.185)	77372	25.0000	32.01
100 1,2,3-Trichlorobenzene	180	14.530	14.530	(1.205)	36176	25.0000	31.80

Data File: \\ap1tpa02\chem\hp3.1\308104.b\1B30810.D
 Date: 10-AUG-2000 08:17
 Client ID: VSTD20
 Sample Info: VSTD20 5HL
 Purge Volume: 5.0
 Column Phase: DB 624

Instrument: hp3.1
 Operator: 10099
 Column diameter: 0.18



Data File: \\qpitpa02\d\chem\hp3.i\30810d.b\1B30810.D
Report Date: 10-Aug-2000 08:48

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STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30810d.b\1B30810.D
Lab Smp Id: VSTD20 Client Smp ID: VSTD20
Inj Date : 10-AUG-2000 08:17 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD20 5ML
Misc Info : ,30810d.b,8260bh2o.m,4-dwh20.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30810d.b\8260bh2o.m
Meth Date : 10-Aug-2000 08:47 gordonk Quant Type: ISTD
Cal Date : 10-AUG-2000 08:17 Cal File: 1B30810.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000 Compound Sublist: 4-dwh20.sub
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC073

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8/10/00

Concentration Formula: Amt * DF * 1/Vo * Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

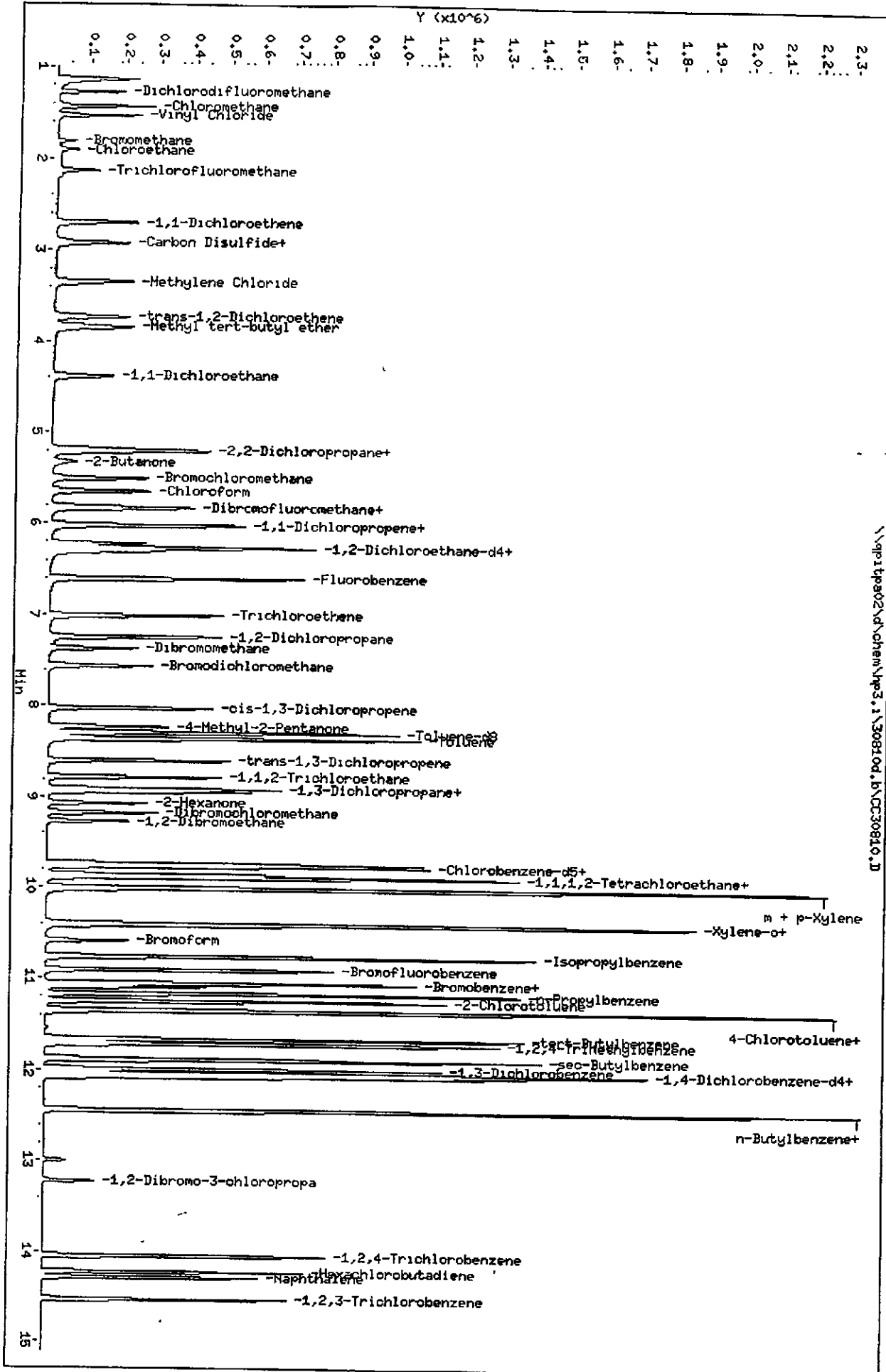
Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)
						ON-COL (ng)
* 46 Fluorobenzene	96	6.606	6.606	(1.000)	658264	250.000
* 69 Chlorobenzene-d5	119	9.739	9.739	(1.000)	189756	250.000
* 92 1,4-Dichlorobenzene-d4	152	12.057	12.057	(1.000)	342121	250.000
\$ 39 Dibromofluoromethane	113	5.839	5.839	(0.884)	65981	100.000 104.0
\$ 43 1,2-Dichloroethane-d4	65	6.216	6.216	(0.941)	74405	100.000 101.4
\$ 59 Toluene-d8	98	8.291	8.291	(0.851)	298821	100.000 103.2
\$ 80 Bromofluorobenzene	95	10.907	10.907	(1.120)	126375	100.000 103.7
1 Dichlorodifluoromethane	85	1.271	1.271	(0.192)	71227	100.000 100.0
2 Chloromethane	50	1.429	1.429	(0.216)	130008	100.000 98.38
3 Vinyl Chloride	62	1.526	1.526	(0.231)	97753	100.000 98.83
4 Bromomethane	94	1.812	1.812	(0.274)	16322	100.000 99.21
5 Chloroethane	64	1.903	1.903	(0.288)	18205	100.000 98.86
6 Trichlorofluoromethane	101	2.134	2.134	(0.323)	78313	100.000 113.6
12 1,1-Dichloroethene	96	2.712	2.712	(0.411)	42885	100.000 96.68
15 Carbon Disulfide	76	2.937	2.937	(0.445)	134853	100.000 109.4
13 Acetone	43	2.877	2.877	(0.436)	28607	100.000 79.07

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
18 Methylene Chloride	84	3.345	3.345	(0.506)	50999	100.000	97.30
19 trans-1,2-Dichloroethene	96	3.734	3.734	(0.565)	46123	100.000	97.07
20 Methyl tert-butyl ether	73	3.826	3.826	(0.579)	111059	100.000	103.5
24 1,1-Dichloroethane	63	4.385	4.385	(0.664)	101708	100.000	97.40
27 2,2-Dichloropropane	77	5.194	5.194	(0.786)	74132	100 000	95 13
28 cis-1,2-dichloroethene	96	5.213	5.213	(0.789)	72069	100.000	99 70
M 29 1,2-Dichloroethene (total)	96				118193	200.000	197.3
30 Bromochloromethane	128	5.511	5.511	(0.834)	35496	100.000	99 29
31 2-Butanone	43	5.316	5.316	(0.805)	62735	100.000	91.96
37 Chloroform	83	5.645	5.645	(0.855)	107548	100.000	98 49
38 1,1,1-Trichloroethane	97	5.827	5.827	(0.882)	80700	100 000	96 10
40 1,1-Dichloropropene	75	6.034	6.034	(0.913)	71646	100.000	98.88
41 Carbon Tetrachloride	117	6.022	6.022	(0.912)	68057	100.000	92.74
42 Benzene	78	6.271	6.271	(0.949)	289691	100.000	98.69
45 1,2-Dichloroethane	62	6.302	6.302	(0.954)	100632	100.000	97.54
47 Trichloroethene	130	7.013	7.013	(1.062)	74547	100.000	98.95
49 1,2-Dichloropropane	63	7.245	7.245	(1.097)	84794	100 000	99.34
50 Dibromomethane	93	7.372	7.372	(1.116)	41274	100 000	100.5
53 Bromodichloromethane	83	7.561	7.561	(1.145)	80804	100.000	98.53
57 cis-1,3-Dichloropropene	75	8.029	8.029	(1.215)	100547	100 000	101.2
58 4-Methyl-2-Pentanone	43	8.224	8.224	(0.844)	105986	100.000	102.9
60 Toluene	91	8.358	8.358	(0.858)	351110	100.000	98.42
61 trans-1,3-Dichloropropene	75	8.601	8.601	(0.883)	106466	100.000	99.17
63 1,3-Dichloropropane	76	8.942	8.942	(0.918)	128319	100.000	96.94
64 1,1,2-Trichloroethane	97	8.784	8.784	(0.902)	71377	100.000	99 10
65 Tetrachloroethene	164	8.911	8.911	(0.915)	72072	100.000	89.62
66 2-Hexanone	43	9.064	9.064	(0.931)	72423	100.000	98.41
67 Dibromochloromethane	129	9.167	9.167	(0.941)	70939	100 000	100.8
68 1,2-Dibromoethane	107	9.264	9.264	(0.951)	73682	100.000	98.17
70 Chlorobenzene	112	9.763	9.763	(1.002)	254395	100.000	97.28
71 1,1,1,2-Tetrachloroethane	131	9.854	9.854	(1.012)	81066	100.000	98.47
72 Ethylbenzene	106	9.885	9.885	(1.015)	136684	100.000	98.47
73 m + p-Xylene	106	10.000	10.000	(1.027)	343712	200.000	197.7
74 Xylene-o	106	10.390	10.390	(1.067)	162640	100 000	100.9
M 75 Xylenes (total)	106				506353	100.000	314.1
76 Styrene	104	10.408	10.408	(1.069)	290013	100.000	99.53
77 Bromoform	173	10.584	10.584	(1.087)	45824	100 000	99.06
78 Isopropylbenzene	105	10.761	10.761	(1.105)	412352	100.000	99.53
79 Bromobenzene	156	11.053	11.053	(0.917)	106140	100.000	96 82
81 n-Propylbenzene	120	11.168	11.168	(0.926)	120258	100.000	97.54
82 2-Chlorotoluene	126	11.247	11.247	(0.933)	103950	100.000	95.63
83 1,1,2,2-Tetrachloroethane	83	11.059	11.059	(0.917)	96268	100.000	96.61
84 1,2,3-Trichloropropane	110	11.095	11.095	(0.920)	31423	100.000	96.15
85 4-Chlorotoluene	126	11.357	11.357	(0.942)	108946	100.000	96.65
86 1,3,5-Trimethylbenzene	105	11.351	11.351	(0.941)	346332	100.000	96 71
87 tert-Butylbenzene	119	11.667	11.667	(0.968)	294575	100.000	95.97
88 1,2,4-Trimethylbenzene	105	11.716	11.716	(0.972)	352022	100.000	96.80

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
89 sec-Butylbenzene	105	11.886	11.886	(0.986)	453305	100.000	94.13
90 4-Isopropyltoluene	119	12.032	12.032	(0.998)	379894	100.000	94.80
91 1,3-Dichlorobenzene	146	11.990	11.990	(0.994)	207610	100.000	94.94
93 1,4-Dichlorobenzene	146	12.081	12.081	(1.002)	213730	100.000	94.12
94 n-Butylbenzene	91	12.440	12.440	(1.032)	332186	100.000	93.70
95 1,2-Dichlorobenzene	146	12.446	12.446	(1.032)	192939	100.000	94.34
96 1,2-Dibromo-3-chloropropane	157	13.219	13.219	(1.096)	16511	100.000	96.44
97 1,2,4-Trichlorobenzene	180	14.046	14.046	(1.165)	113873	100.000	90.49
98 Hexachlorobutadiene	225	14.228	14.228	(1.180)	57267	100.000	82.80
99 Naphthalene	128	14.289	14.289	(1.185)	212159	100.000	87.37
100 1,2,3-Trichlorobenzene	180	14.533	14.533	(1.205)	96625	100.000	85.35

Data File: \\p1tp02\chem\hp3.1\30810d.b\CC30810.D
 Date: 10-AUG-2000 06:56
 Client ID: VSTD50
 Sample Info: VSTD50 5HL
 Purge Volume: 8.0
 Column phase: DB 624

Instrument: hp3.1
 Operator: 10099
 Column diameter: 0.18



Data File: \\qpitpa02\d\chem\hp3.i\30810d.b\CC30810.D
Report Date: 10-Aug-2000 08:13

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STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30810d.b\CC30810.D
Lab Smp Id: VSTD50 Client Smp ID: VSTD50
Inj Date : 10-AUG-2000 06:56 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD50 5ML
Misc Info : vstd50,30810d.b,8260bh2o.m,1-tcl.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30810d.b\8260bh2o.m
Meth Date : 10-Aug-2000 08:13 gordonk Quant Type: ISTD
Cal Date : 10-AUG-2000 06:56 Cal File: CC30810.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC073

KL6
8/10/00

Compound Sublist: 4-dwh20.sub

Concentration Formula: Amt * DF * 1/Vo*Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

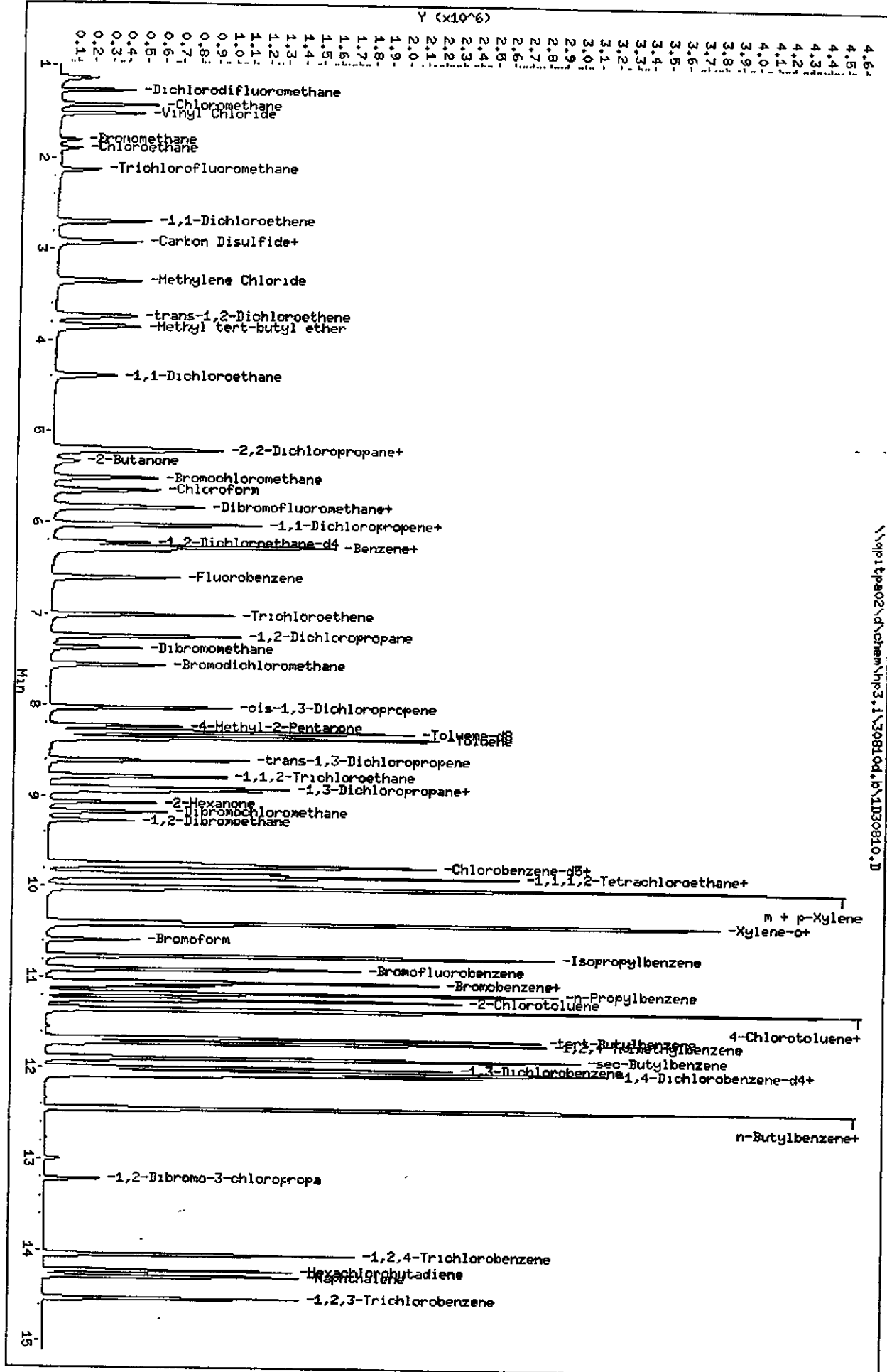
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.605	6.605	(1.000)	679255	250.000	
* 69 Chlorobenzene-d5	119	9.738	9.738	(1.000)	188996	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.056	12.056	(1.000)	329346	250.000	
\$ 39 Dibromofluoromethane	113	5.844	5.844	(0.885)	158484	250.000	250.0
\$ 43 1,2-Dichloroethane-d4	65	6.216	6.216	(0.941)	178389	250.000	250.0
\$ 59 Toluene-d8	98	8.290	8.290	(0.851)	690016	250.000	250.0
\$ 80 Bromofluorobenzene	95	10.912	10.912	(1.121)	283892	250.000	250.0
1 Dichlorodifluoromethane	85	1.276	1.276	(0.193)	150174	250.000	250.0
2 Chloromethane	50	1.434	1.434	(0.217)	283147	250.000	250.0
3 Vinyl Chloride	62	1.531	1.531	(0.232)	217488	250.000	250.0
4 Bromomethane	94	1.817	1.817	(0.275)	28455	250.000	250.0
5 Chloroethane	64	1.908	1.908	(0.289)	39523	250.000	250.0
6 Trichlorofluoromethane	101	2.134	2.134	(0.323)	74139	250.000	250.0
12 1,1-Dichloroethene	96	2.705	2.705	(0.410)	97849	250.000	250.0
15 Carbon Disulfide	76	2.924	2.924	(0.443)	303814	250.000	250.0
13 Acetone	43	2.894	2.894	(0.438)	73740	250.000	250.0

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	====	==	=====	=====	=====	=====	=====
18 Methylene Chloride	84	3.350	3.350	(0.507)	112943	250.000	250.0
19 trans-1,2-Dichloroethene	96	3.733	3.733	(0.565)	108511	250.000	250.0
20 Methyl tert-butyl ether	73	3.843	3.843	(0.582)	274276	250.000	250.0
24 1,1-Dichloroethane	63	4.391	4.391	(0.665)	238453	250.000	250.0
27 2,2-Dichloropropane	77	5.187	5.187	(0.785)	192518	250.000	250.0
28 cis-1,2-dichloroethene	96	5.212	5.212	(0.789)	167159	250.000	250.0
M 29 1,2-Dichloroethene (total)	96				275671	500.000	500.0
30 Bromochloromethane	128	5.510	5.510	(0.834)	81727	250.000	250.0
31 2-Butanone	43	5.333	5.333	(0.808)	147042	250.000	250.0
37 Chloroform	83	5.650	5.650	(0.855)	246972	250.000	250.0
38 1,1,1-Trichloroethane	97	5.826	5.826	(0.882)	199912	250.000	250.0
40 1,1-Dichloropropene	75	6.033	6.033	(0.913)	164133	250.000	250.0
41 Carbon Tetrachloride	117	6.021	6.021	(0.912)	179513	250.000	250.0
42 Benzene	78	6.270	6.270	(0.949)	660134	250.000	250.0
45 1,2-Dichloroethane	62	6.307	6.307	(0.955)	233554	250.000	250.0
47 Trichloroethene	130	7.012	7.012	(1.062)	171870	250.000	250.0
49 1,2-Dichloropropane	63	7.244	7.244	(1.097)	196795	250.000	250.0
50 Dibromomethane	93	7.371	7.371	(1.116)	94163	250.000	250.0
53 Bromodichloromethane	83	7.560	7.560	(1.145)	195238	250.000	250.0
57 cis-1,3-Dichloropropene	75	8.028	8.028	(1.216)	241304	250.000	250.0
58 4-Methyl-2-Pentanone	43	8.229	8.229	(0.845)	264577	250.000	250.0
60 Toluene	91	8.363	8.363	(0.859)	790936	250.000	250.0
61 trans-1,3-Dichloropropene	75	8.600	8.600	(0.883)	251733	250.000	250.0
63 1,3-Dichloropropane	76	8.941	8.941	(0.918)	288356	250.000	250.0
64 1,1,2-Trichloroethane	97	8.783	8.783	(0.902)	156587	250.000	250.0
65 Tetrachloroethene	164	8.911	8.911	(0.915)	157289	250.000	250.0
66 2-Hexanone	43	9.069	9.069	(0.931)	190567	250.000	250.0
67 Dibromochloromethane	129	9.172	9.172	(0.942)	167195	250.000	250.0
68 1,2-Dibromoethane	107	9.269	9.269	(0.952)	162779	250.000	250.0
70 Chlorobenzene	112	9.768	9.768	(1.003)	557424	250.000	250.0
71 1,1,1,2-Tetrachloroethane	131	9.853	9.853	(1.012)	184727	250.000	250.0
72 Ethylbenzene	106	9.884	9.884	(1.015)	307013	250.000	250.0
73 m + p-Xylene	106	10.006	10.006	(1.027)	740583	500.000	500.0
74 Xylene-o	106	10.395	10.395	(1.067)	357319	250.000	250.0
M 75 Xylenes (total)	106				1097903	250.000	768.2
76 Styrene	104	10.407	10.407	(1.069)	631084	250.000	250.0
77 Bromoform	173	10.583	10.583	(1.087)	112821	250.000	250.0
78 Isopropylbenzene	105	10.760	10.760	(1.105)	925314	250.000	250.0
79 Bromobenzene	156	11.052	11.052	(0.917)	231711	250.000	250.0
81 n-Propylbenzene	120	11.174	11.174	(0.927)	267334	250.000	250.0
82 2-Chlorotoluene	126	11.253	11.253	(0.933)	230986	250.000	250.0
83 1,1,2,2-Tetrachloroethane	83	11.064	11.064	(0.918)	202581	250.000	250.0
84 1,2,3-Trichloropropane	110	11.094	11.094	(0.920)	67194	250.000	250.0
85 4-Chlorotoluene	126	11.356	11.356	(0.942)	232937	250.000	250.0
86 1,3,5-Trimethylbenzene	105	11.350	11.350	(0.941)	755277	250.000	250.0
87 tert-Butylbenzene	119	11.666	11.666	(0.968)	670044	250.000	250.0
88 1,2,4-Trimethylbenzene	105	11.721	11.721	(0.972)	776756	250.000	250.0

Data File: \\qpitpa02\d\chem\hp3.i\30810d.b\CC30810.D
Report Date: 10-Aug-2000 08:13

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Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ng)	(ng)
=====	----	--	-----	-----	-----	-----	-----
89 sec-Butylbenzene	105	11.885	11.885	(0.986)	1015719	250.000	250.0
90 4-Isopropyltoluene	119	12.037	12.037	(0.998)	851469	250.000	250.0
91 1,3-Dichlorobenzene	146	11.989	11.989	(0.994)	452500	250.000	250.0
93 1,4-Dichlorobenzene	146	12.080	12.080	(1.002)	465482	250.000	250.0
94 n-Butylbenzene	91	12.439	12.439	(1.032)	730592	250.000	250.0
95 1,2-Dichlorobenzene	146	12.445	12.445	(1.032)	410608	250.000	250.0
96 1,2-Dibromo-3-chloropropane	157	13.218	13.218	(1.096)	37768	250.000	250.0
97 1,2,4-Trichlorobenzene	180	14.051	14.051	(1.166)	254186	250.000	250.0
98 Hexachlorobutadiene	225	14.227	14.227	(1.180)	133386	250.000	250.0
99 Naphthalene	128	14.288	14.288	(1.185)	447002	250.000	250.0
100 1,2,3-Trichlorobenzene	180	14.532	14.532	(1.205)	212827	250.000	250.0



Data File: \\pittpa02\chem\mp3.1\30810d.b\11030810.D
 Date: 10-AUG-2000 08:39
 Client ID: VSTD100
 Sample Info: VSTD100 BML
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: mp3.1
 Operator: 10099
 Column diameter: 0.18

Data File: \\qpitpa02\d\chem\hp3.i\30810d.b\1D30810.D
 Report Date: 10-Aug-2000 09:13

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STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30810d.b\1D30810.D
 Lab Smp Id: VSTD100 Client Smp ID: VSTD100
 Inj Date : 10-AUG-2000 08:39 MS Autotune Date: 08-AUG-2000 16:28
 Operator : 10099 Inst ID: hp3.i
 Smp Info : VSTD100 5ML
 Misc Info : ,30810d.b,8260bh2o.m,4-dwh20.sub
 Comment :
 Method : \\QPITPA02\D\chem\hp3.i\30810d.b\8260bh2o.m
 Meth Date : 10-Aug-2000 09:12 gordonk Quant Type: ISTD
 Cal Date : 10-AUG-2000 08:39 Cal File: 1D30810.D
 Als bottle: 6 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 4-dwh20.sub
 Target Version: 4.04
 Processing Host: PITPC073

Concentration Formula: Amt * DF * 1/Vo*Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

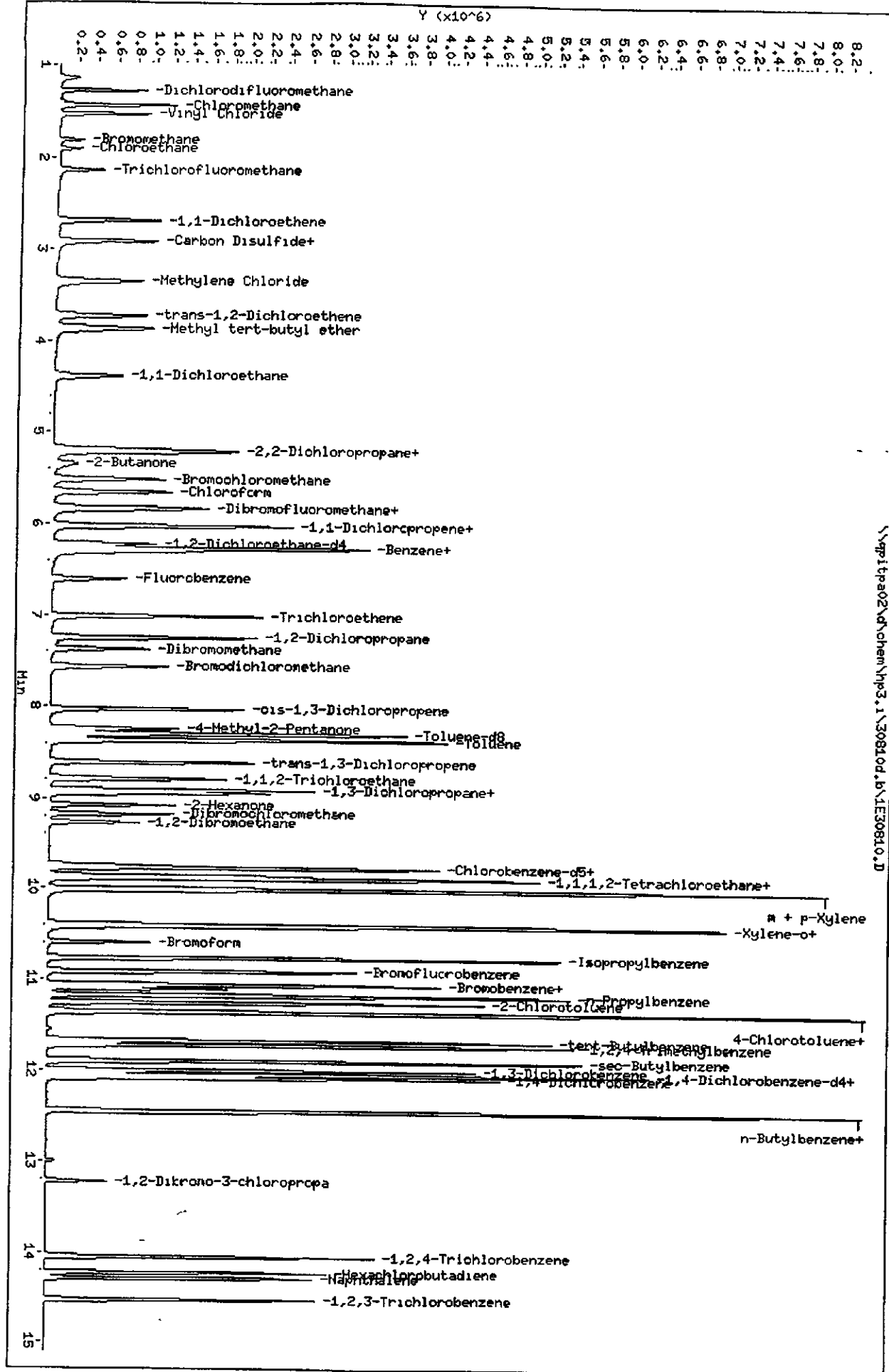
Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.609	6.609	(1.000)	711482	250.000		
* 69 Chlorobenzene-d5	119	9.742	9.742	(1.000)	190206	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.059	12.059	(1.000)	324912	250.000		
\$ 39 Dibromofluoromethane	113	5.842	5.842	(0.884)	326647	500.000	482.2	
\$ 43 1,2-Dichloroethane-d4	65	6.219	6.219	(0.941)	371065	500.000	475.5	
\$ 59 Toluene-d8	98	8.294	8.294	(0.851)	1437506	500.000	496.6	
\$ 80 Bromofluorobenzene	95	10.910	10.910	(1.120)	586218	500.000	484.7	
1 Dichlorodifluoromethane	85	1.273	1.273	(0.193)	344299	500.000	459.5	
2 Chloromethane	50	1.432	1.432	(0.217)	629599	500.000	454.2	
3 Vinyl Chloride	62	1.529	1.529	(0.231)	471321	500.000	454.3	
4 Bromomethane	94	1.815	1.815	(0.275)	68308	500.000	407.7	
5 Chloroethane	64	1.906	1.906	(0.288)	86716	500.000	450.1	
6 Trichlorofluoromethane	101	2.131	2.131	(0.323)	167581	500.000	260.7	
12 1,1-Dichloroethene	96	2.703	2.703	(0.409)	213964	500.000	458.6	
15 Carbon Disulfide	76	2.928	2.928	(0.443)	710554	500.000	524.5	
13 Acetone	43	2.898	2.898	(0.439)	145702	500.000	397.9	

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
18 Methylene Chloride	84	3.348	3.348	(0.507)	248862	500.000	453.0
19 trans-1,2-Dichloroethene	96	3.731	3.731	(0.565)	234099	500.000	466.1
20 Methyl tert-butyl ether	73	3.847	3.847	(0.582)	622172	500.000	527.0
24 1,1-Dichloroethane	63	4.388	4.388	(0.664)	514829	500.000	466.4
27 2,2-Dichloropropane	77	5.191	5.191	(0.786)	428895	500.000	506.9
28 cis-1,2-dichloroethene	96	5.215	5.215	(0.789)	360358	500.000	470.3
M 29 1,2-Dichloroethene (total)	96				594457	1000.00	937.3
30 Bromochloromethane	128	5.514	5.514	(0.834)	175900	500.000	465.7
31 2-Butanone	43	5.331	5.331	(0.807)	306205	500.000	433.6
37 Chloroform	83	5.647	5.647	(0.855)	528438	500.000	459.8
38 1,1,1-Trichloroethane	97	5.824	5.824	(0.881)	436982	500.000	486.0
40 1,1-Dichloropropene	75	6.031	6.031	(0.913)	369282	500.000	478.4
41 Carbon Tetrachloride	117	6.025	6.025	(0.912)	391219	500.000	494.9
42 Benzene	78	6.268	6.268	(0.948)	1409231	500.000	456.9
45 1,2-Dichloroethane	62	6.304	6.304	(0.954)	498198	500.000	459.0
47 Trichloroethene	130	7.016	7.016	(1.062)	376582	500.000	471.3
49 1,2-Dichloropropane	63	7.247	7.247	(1.097)	422754	500.000	468.0
50 Dibromomethane	93	7.369	7.369	(1.115)	201027	500.000	463.7
53 Bromodichloromethane	83	7.564	7.564	(1.145)	418708	500.000	479.0
57 cis-1,3-Dichloropropene	75	8.026	8.026	(1.214)	531821	500.000	496.4
58 4-Methyl-2-Pentanone	43	8.233	8.233	(0.845)	598883	500.000	557.7
60 Toluene	91	8.361	8.361	(0.858)	1659903	500.000	472.6
61 trans-1,3-Dichloropropene	75	8.604	8.604	(0.883)	553197	500.000	510.5
63 1,3-Dichloropropane	76	8.945	8.945	(0.918)	600250	500.000	463.4
64 1,1,2-Trichloroethane	97	8.786	8.786	(0.902)	327040	500.000	463.9
65 Tetrachloroethene	164	8.914	8.914	(0.915)	325094	500.000	423.8
66 2-Hexanone	43	9.066	9.066	(0.931)	428549	500.000	558.3
67 Dibromochloromethane	129	9.170	9.170	(0.941)	359659	500.000	507.3
68 1,2-Dibromoethane	107	9.267	9.267	(0.951)	352448	500.000	476.0
70 Chlorobenzene	112	9.766	9.766	(1.002)	1152548	500.000	453.4
71 1,1,1,2-Tetrachloroethane	131	9.857	9.857	(1.012)	389478	500.000	478.7
72 Ethylbenzene	106	9.888	9.888	(1.015)	638597	500.000	468.6
73 m + p-Xylene	106	10.003	10.003	(1.027)	1501359	1000.00	892.3
74 Xylene-o	106	10.392	10.392	(1.067)	736406	500.000	466.0
M 75 Xylenes (total)	106				2237766	500.000	1416
76 Styrene	104	10.411	10.411	(1.069)	1303528	500.000	458.6
77 Bromoform	173	10.587	10.587	(1.087)	245169	500.000	521.2
78 Isopropylbenzene	105	10.764	10.764	(1.105)	1921199	500.000	471.4
79 Bromobenzene	156	11.056	11.056	(0.917)	481958	500.000	471.7
81 n-Propylbenzene	120	11.171	11.171	(0.926)	559378	500.000	483.1
82 2-Chlorotoluene	126	11.250	11.250	(0.933)	477776	500.000	471.6
83 1,1,2,2-Tetrachloroethane	83	11.062	11.062	(0.917)	414872	500.000	452.3
84 1,2,3-Trichloropropane	110	11.098	11.098	(0.920)	144197	500.000	473.0
85 4-Chlorotoluene	126	11.360	11.360	(0.942)	466107	500.000	450.0
86 1,3,5-Trimethylbenzene	105	11.348	11.348	(0.941)	1533786	500.000	462.3
87 tert-Butylbenzene	119	11.670	11.670	(0.968)	1377372	500.000	479.1
88 1,2,4-Trimethylbenzene	105	11.719	11.719	(0.972)	1606479	500.000	473.4

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
89 sec-Butylbenzene	105	11.889	11.889	(0.986)	2055819	500.000	461.2
90 4-Isopropyltoluene	119	12.035	12.035	(0.998)	1736964	500.000	466.6
91 1,3-Dichlorobenzene	146	11.992	11.992	(0.994)	948125	500.000	466.7
93 1,4-Dichlorobenzene	146	12.078	12.078	(1.002)	965415	500.000	459.7
94 n-Butylbenzene	91	12.443	12.443	(1.032)	1449536	500.000	446.0
95 1,2-Dichlorobenzene	146	12.449	12.449	(1.032)	830120	500.000	443.5
96 1,2-Dibromo-3-chloropropane	157	13.221	13.221	(1.096)	82967	500.000	507.7
97 1,2,4-Trichlorobenzene	180	14.049	14.049	(1.165)	536596	500.000	460.8
98 Hexachlorobutadiene	225	14.231	14.231	(1.180)	259677	500.000	417.2
99 Naphthalene	128	14.286	14.286	(1.185)	1012612	500.000	452.9
100 1,2,3-Trichlorobenzene	180	14.529	14.529	(1.205)	439814	500.000	428.5

Data File: \\pitt02\chem\hps3.1\308104.b\1E30810.D
 Date: 10-AUG-2000 09:06
 Client ID: VSTD200
 Sample Info: VSTD200 5HL
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: hps3.1
 Operator: 10099
 Column diameter: 0.18



Data File: \\qpitpa02\d\chem\hp3.i\30810d.b\1E30810.D
Report Date: 10-Aug-2000 09:40

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STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30810d.b\1E30810.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 10-AUG-2000 09:06 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD200 5ML
Misc Info : ,30810d.b,8260bh2o.m,4-dwh20.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30810d.b\8260bh2o.m
Meth Date : 10-Aug-2000 09:39 gordonk Quant Type: ISTD
Cal Date : 10-AUG-2000 09:06 Cal File: 1E30810.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC073

KEG
8/14/00

Concentration Formula: Amt * DF * 1/Vo*Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene		96	6.608	6.608	(1.000)	754476	250.000	
* 69 Chlorobenzene-d5		119	9.741	9.741	(1.000)	188870	250.000	
* 92 1,4-Dichlorobenzene-d4		152	12.059	12.059	(1.000)	317726	250.000	
\$ 39 Dibromofluoromethane		113	5.848	5.848	(0.885)	644875	1000.00	916.5
\$ 43 1,2-Dichloroethane-d4		65	6.219	6.219	(0.941)	746031	1000.00	919.7
\$ 59 Toluene-d8		98	8.299	8.299	(0.852)	2702534	1000.00	951.6
\$ 80 Bromofluorobenzene		95	10.915	10.915	(1.121)	1098458	1000.00	930.5
1 Dichlorodifluoromethane		85	1.273	1.273	(0.193)	708809	1000.00	911.7
2 Chloromethane		50	1.431	1.431	(0.217)	1297323	1000.00	903.8
3 Vinyl Chloride		62	1.529	1.529	(0.231)	979406	1000.00	910.2
4 Bromomethane		94	1.814	1.814	(0.275)	137216	1000.00	809.2
5 Chloroethane		64	1.906	1.906	(0.288)	178162	1000.00	895.0
6 Trichlorofluoromethane		101	2.137	2.137	(0.323)	359254	1000.00	582.0
12 1,1-Dichloroethene		96	2.691	2.691	(0.407)	462484	1000.00	947.1
15 Carbon Disulfide		76	2.910	2.910	(0.440)	1481307	1000.00	1025
13 Acetone		43	2.922	2.922	(0.442)	281416	1000.00	767.0

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Data File: \\qpitpa02\d\chem\hp3.i\30810d.b\1E30810.D
Report Date: 10-Aug-2000 09:40

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Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
18 Methylene Chloride	84	3.348	3.348	(0.507)	531476	1000.00	928.6
19 trans-1,2-Dichloroethene	96	3.725	3.725	(0.564)	500648	1000.00	951.5
20 Methyl tert-butyl ether	73	3.865	3.865	(0.585)	1378947	1000.00	1080
24 1,1-Dichloroethane	63	4.388	4.388	(0.664)	1091458	1000.00	945.2
27 2,2-Dichloropropane	77	5.191	5.191	(0.786)	902799	1000.00	1005
28 cis-1,2-dichloroethene	96	5.215	5.215	(0.789)	736202	1000.00	923.5
M 29 1,2-Dichloroethene (total)	96				1236851	2000.00	1869
30 Bromochloromethane	128	5.513	5.513	(0.834)	367933	1000.00	933.8
31 2-Butanone	43	5.349	5.349	(0.809)	627237	1000.00	865.8
37 Chloroform	83	5.653	5.653	(0.855)	1085170	1000.00	910.3
38 1,1,1-Trichloroethane	97	5.823	5.823	(0.881)	919983	1000.00	971.6
40 1,1-Dichloropropene	75	6.030	6.030	(0.913)	777035	1000.00	958.9
41 Carbon Tetrachloride	117	6.018	6.018	(0.911)	832049	1000.00	994.0
42 Benzene	78	6.274	6.274	(0.949)	2867219	1000.00	898.9
45 1,2-Dichloroethane	62	6.310	6.310	(0.955)	1031865	1000.00	915.4
47 Trichloroethene	130	7.016	7.016	(1.062)	798383	1000.00	953.3
49 1,2-Dichloropropane	63	7.253	7.253	(1.098)	890388	1000.00	942.8
50 Dibromomethane	93	7.375	7.375	(1.116)	408776	1000.00	909.3
53 Bromodichloromethane	83	7.569	7.569	(1.145)	864767	1000.00	945.6
57 cis-1,3-Dichloropropene	75	8.032	8.032	(1.215)	1097100	1000.00	972.4
58 4-Methyl-2-Pentanone	43	8.245	8.245	(0.846)	1212966	1000.00	1107
60 Toluene	91	8.366	8.366	(0.859)	3227156	1000.00	939.4
61 trans-1,3-Dichloropropene	75	8.610	8.610	(0.884)	1121070	1000.00	1033
63 1,3-Dichloropropane	76	8.944	8.944	(0.918)	1183371	1000.00	935.0
64 1,1,2-Trichloroethane	97	8.792	8.792	(0.903)	647769	1000.00	939.3
65 Tetrachloroethene	164	8.914	8.914	(0.915)	647408	1000.00	876.2
66 2-Hexanone	43	9.078	9.078	(0.932)	876513	1000.00	1116
67 Dibromochloromethane	129	9.175	9.175	(0.942)	737424	1000.00	1038
68 1,2-Dibromoethane	107	9.273	9.273	(0.952)	705862	1000.00	967.8
70 Chlorobenzene	112	9.772	9.772	(1.003)	2220058	1000.00	901.2
71 1,1,1,2-Tetrachloroethane	131	9.857	9.857	(1.012)	769600	1000.00	961.7
72 Ethylbenzene	106	9.887	9.887	(1.015)	1213953	1000.00	915.9
73 m + p-Xylene	106	10.009	10.009	(1.027)	2784665	2000.00	1724
74 Xylene-o	106	10.398	10.398	(1.067)	1386166	1000.00	904.5
M 75 Xylenes (total)	106				4170832	1000.00	2722
76 Styrene	104	10.417	10.417	(1.069)	2418033	1000.00	882.0
77 Bromoform	173	10.593	10.593	(1.087)	506707	1000.00	1067
78 Isopropylbenzene	105	10.769	10.769	(1.106)	3672597	1000.00	924.7
79 Bromobenzene	156	11.055	11.055	(0.917)	927408	1000.00	941.7
81 n-Propylbenzene	120	11.177	11.177	(0.927)	1072910	1000.00	957.6
82 2-Chlorotoluene	126	11.256	11.256	(0.933)	929318	1000.00	949.8
83 1,1,2,2-Tetrachloroethane	83	11.067	11.067	(0.918)	776216	1000.00	889.4
84 1,2,3-Trichloropropane	110	11.104	11.104	(0.921)	282476	1000.00	957.5
85 4-Chlorotoluene	126	11.366	11.366	(0.942)	875935	1000.00	888.7
86 1,3,5-Trimethylbenzene	105	11.353	11.353	(0.941)	2887485	1000.00	910.0
87 tert-Butylbenzene	119	11.676	11.676	(0.968)	2693202	1000.00	966.1
88 1,2,4-Trimethylbenzene	105	11.724	11.724	(0.972)	3095410	1000.00	945.5

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ng)	(ng)
89 sec-Butylbenzene	105	11.889	11.889	(0.986)	3998500	1000.00	932.6
90 4-Isopropyltoluene	119	12.041	12.041	(0.998)	3389482	1000.00	944.1
91 1,3-Dichlorobenzene	146	11.992	11.992	(0.994)	1838978	1000.00	939.6
93 1,4-Dichlorobenzene	146	12.083	12.083	(1.002)	1879174	1000.00	930.8
94 n-Butylbenzene	91	12.442	12.442	(1.032)	2752177	1000.00	889.8
95 1,2-Dichlorobenzene	146	12.448	12.448	(1.032)	1563416	1000.00	879.8
96 1,2-Dibromo-3-chloropropane	157	13.221	13.221	(1.096)	173318	1000.00	1066
97 1,2,4-Trichlorobenzene	180	14.048	14.048	(1.165)	1073031	1000.00	953.2
98 Hexachlorobutadiene	225	14.231	14.231	(1.180)	536864	1000.00	903.3
99 Naphthalene	128	14.292	14.292	(1.185)	2050999	1000.00	949.8
100 1,2,3-Trichlorobenzene	180	14.535	14.535	(1.205)	894194	1000.00	910.8

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: 30906D

Instrument ID: HP3

Calibration Date: 09/06/00 Time: 0545

Lab File ID: CC30906

Init. Calib. Date(s): 08/10/00 08/10/00

Heated Purge: (Y/N) N

Init. Calib. Times: 0656 0906

GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.258	0.176	0.01	31.8	50.0
Chloromethane	0.476	0.375	0.1	21.2	50.0
Vinyl Chloride	0.356	0.294	0.01	17.4	20.0
Bromomethane	0.056	0.040	0.01	28.6	50.0
Chloroethane	0.066	0.056	0.01	15.2	50.0
Trichlorofluoromethane	0.204	0.264	0.01	29.4	50.0
1,1-Dichloroethene	0.162	0.156	0.01	3.7	20.0
Methylene Chloride	0.190	0.176	0.01	7.4	50.0
trans-1,2-Dichloroethene	0.174	0.170	0.01	2.3	50.0
1,1-Dichloroethane	0.383	0.347	0.1	9.4	50.0
cis-1,2-dichloroethene	0.264	0.266	0.01	0.8	50.0
Chloroform	0.395	0.364	0.01	7.8	20.0
Bromochloromethane	0.131	0.121	0.01	7.6	50.0
1,1,1-Trichloroethane	0.314	0.296	0.01	5.7	50.0
Carbon Tetrachloride	0.277	0.249	0.01	10.1	50.0
1,2-Dichloroethane	0.373	0.324	0.01	13.1	50.0
Benzene	1.057	1.037	0.01	1.9	50.0
Trichloroethene	0.277	0.252	0.01	9.0	50.0
1,2-Dichloropropane	0.313	0.283	0.01	9.6	20.0
Bromodichloromethane	0.303	0.280	0.01	7.6	50.0
cis-1,3-Dichloropropene	0.374	0.337	0.01	9.9	50.0
Toluene	4.547	4.816	0.01	5.9	20.0
trans-1,3-Dichloropropene	1.436	1.304	0.01	9.2	50.0
1,1,2-Trichloroethane	0.913	0.899	0.01	1.5	50.0
Tetrachloroethene	0.978	0.823	0.01	15.8	50.0
Dibromochloromethane	0.941	0.881	0.01	6.4	50.0
Chlorobenzene	3.261	3.266	0.3	0.2	50.0
Ethylbenzene	1.754	1.735	0.01	1.1	20.0
Styrene	3.629	3.565	0.01	1.8	50.0
Bromoform	0.629	0.495	0.1	21.3	50.0
1,1,2,2-Tetrachloroethane	0.687	0.608	0.3	11.5	50.0
1,3-Dichlorobenzene	1.540	1.610	0.01	4.5	50.0
1,4-Dichlorobenzene	1.589	1.625	0.01	2.3	50.0
1,2-Dichlorobenzene	1.398	1.416	0.01	1.3	50.0
Dibromomethane	0.149	0.139	0.01	6.7	50.0
1,2-Dibromoethane	0.965	0.837	0.01	13.3	50.0
1,1,1,2-Tetrachloroethane	1.059	1.044	0.01	1.4	50.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

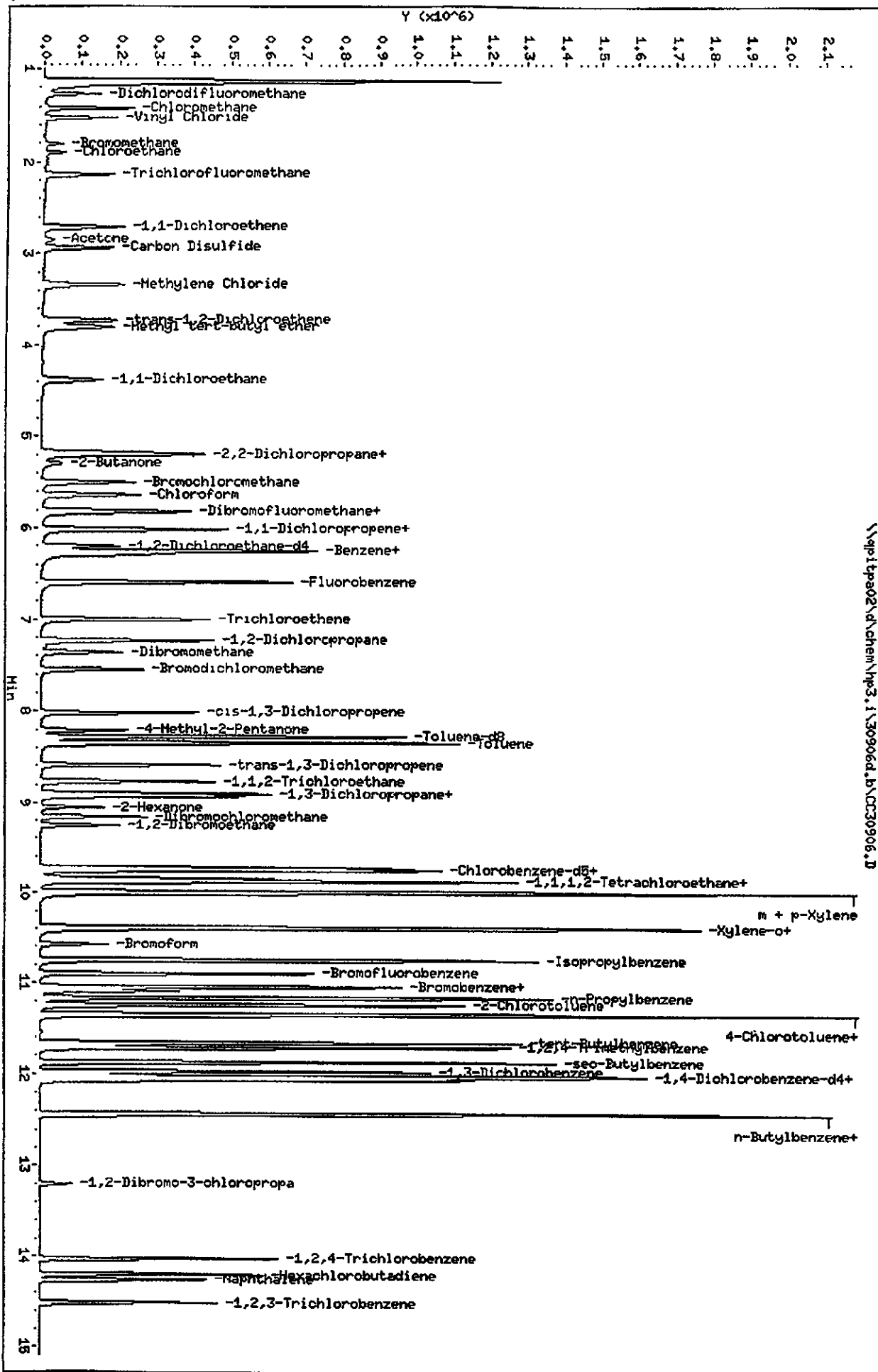
672 157

Lab Name: STL PITTSBURGH Contract:
Lab Code: STLPIT Case No.: SAS No.: SDG No.: 30906D
Instrument ID: HP3 Calibration Date: 09/06/00 Time: 0545
Lab File ID: CC30906 Init. Calib. Date(s): 08/10/00 08/10/00
Heated Purge: (Y/N) N Init. Calib. Times: 0656 0906
GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
1,2,3-Trichloropropane	0.232	0.193	0.01	16.8	50.0
1,2-Dibromo-3-chloropropane	0.128	0.080	0.01	37.5	50.0
2,2-Dichloropropane	0.298	0.259	0.01	13.1	50.0
1,1-Dichloropropene	0.269	0.242	0.01	10.0	50.0
1,3-Dichloropropane	1.675	1.555	0.01	7.2	50.0
n-Propylbenzene	0.882	0.973	0.01	10.3	50.0
Bromobenzene	0.775	0.799	0.01	3.1	50.0
1,3,5-Trimethylbenzene	2.497	2.656	0.01	6.4	50.0
2-Chlorotoluene	0.770	0.829	0.01	7.7	50.0
4-Chlorotoluene	0.775	0.831	0.01	7.2	50.0
tert-Butylbenzene	2.193	2.375	0.01	8.3	50.0
1,2,4-Trimethylbenzene	2.576	2.716	0.01	5.4	50.0
sec-Butylbenzene	3.373	3.588	0.01	6.4	50.0
4-Isopropyltoluene	2.825	3.059	0.01	8.3	50.0
n-Butylbenzene	2.434	2.692	0.01	10.6	50.0
1,2,4-Trichlorobenzene	0.886	0.679	0.01	23.4	50.0
Hexachlorobutadiene	0.468	0.397	0.01	15.2	50.0
Naphthalene	1.699	1.235	0.01	27.3	50.0
1,2,3-Trichlorobenzene	0.773	0.512	0.01	33.8	50.0
Acetone	0.121	0.072	0.01	40.5	50.0
Carbon Disulfide	0.479	0.486	0.01	1.5	50.0
2-Butanone	0.240	0.137	0.01	42.9	50.0
4-Methyl-2-Pentanone	1.450	0.981	0.01	32.3	50.0
2-Hexanone	1.039	0.669	0.01	35.6	50.0
Methyl tert-butyl ether	0.423	0.360	0.01	14.9	50.0
Isopropylbenzene	5.257	5.244	0.01	0.2	50.0
1,2-Dichloroethene (total)	0.219	0.218	0.01	0.4	50.0
Xylenes (total)	2.029	1.998	0.01	1.5	50.0
=====	=====	=====	=====	=====	=====
Dibromofluoromethane	0.233	0.224	0.01	3.9	50.0
1,2-Dichloroethane-d4	0.269	0.222	0.01	17.5	50.0
Toluene-d8	3.759	3.814	0.01	1.5	50.0
Bromofluorobenzene	1.563	1.586	0.01	1.5	50.0

Data File: \\pittpa02\chem\mp3.1\30906d.b\CC30906.D
 Date: 06-SEP-2000 05:45
 Client ID: vstd50
 Sample Info: VSTD50 BHL
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: mp3.1
 Operator: 10039
 Column diameter: 0.18



Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\CC30906.D
Report Date: 06-Sep-2000 06:09

Page 1

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30906d.b\CC30906.D
Lab Smp Id: vstd50 Client Smp ID: vstd50
Inj Date : 06-SEP-2000 05:45 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD50 5ML
Misc Info : ,30906d.b,8260bh2o.m,4-dwh20.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30906d.b\8260bh2o.m
Meth Date : 06-Sep-2000 06:09 gordonk Quant Type: ISTD
Cal Date : 10-AUG-2000 09:06 Cal File: 1E30810.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC063

KLG
9/16/00

Compound Sublist: 4-dwh20.sub

Concentration Formula: Amt * DF * 1/Vo*Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	----	96	6.593	6.593	(1.000)	622018	250.000	
* 69 Chlorobenzene-d5		119	9.732	9.732	(1.000)	164373	250.000	
* 92 1,4-Dichlorobenzene-d4		152	12.050	12.050	(1.000)	264930	250.000	
\$ 39 Dibromofluoromethane		113	5.826	5.826	(0.884)	139243	250.000	240.0
\$ 43 1,2-Dichloroethane-d4		65	6.204	6.204	(0.941)	138165	250.000	206.6
\$ 59 Toluene-d8		98	8.284	8.284	(0.851)	626954	250.000	253.6
\$ 80 Bromofluorobenzene		95	10.900	10.900	(1.120)	260775	250.000	253.8
1 Dichlorodifluoromethane		85	1.270	1.270	(0.193)	109671	250.000	171.1
2 Chloromethane		50	1.422	1.422	(0.216)	233241	250.000	197.1
3 Vinyl Chloride		62	1.525	1.525	(0.231)	182639	250.000	205.9
4 Bromomethane		94	1.811	1.811	(0.275)	24972	250.000	178.6
5 Chloroethane		64	1.903	1.903	(0.289)	35046	250.000	213.6
6 Trichlorofluoromethane		101	2.146	2.146	(0.326)	164161	250.000	322.6
12 1,1-Dichloroethene		96	2.718	2.718	(0.412)	97087	250.000	241.2
15 Carbon Disulfide		76	2.943	2.943	(0.446)	302367	250.000	253.7
13 Acetone		43	2.852	2.852	(0.433)	45102	250.000	149.1

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
=====	----	--	-----	-----	-----	-----	-----
18 Methylene Chloride	84	3.344	3.344	(0.507)	109776	250.000	232.6
19 trans-1,2-Dichloroethene	96	3.728	3.728	(0.565)	105444	250.000	243.1
20 Methyl tert-butyl ether	73	3.801	3.801	(0.577)	223904	250.000	212.6
24 1,1-Dichloroethane	63	4.379	4.379	(0.664)	216013	250.000	226.9
27 2,2-Dichloropropane	77	5.182	5.182	(0.786)	160894	250.000	217.2
28 cis-1,2-dichloroethene	96	5.206	5.206	(0.790)	165495	250.000	251.8
M 29 1,2-Dichloroethene (total)	96				270940	500.000	496.6
30 Bromochloromethane	128	5.504	5.504	(0.835)	75224	250.000	231.6
31 2-Butanone	43	5.297	5.297	(0.803)	85517	250.000	143.2
37 Chloroform	83	5.638	5.638	(0.855)	226764	250.000	230.7
38 1,1,1-Trichloroethane	97	5.814	5.814	(0.882)	184253	250.000	236.0
40 1,1-Dichloropropene	75	6.027	6.027	(0.914)	150324	250.000	225.0
41 Carbon Tetrachloride	117	6.015	6.015	(0.912)	154719	250.000	224.2
42 Benzene	78	6.258	6.258	(0.949)	645168	250.000	245.3
45 1,2-Dichloroethane	62	6.295	6.295	(0.955)	201367	250.000	216.7
47 Trichloroethene	130	7.007	7.007	(1.063)	156492	250.000	226.6
49 1,2-Dichloropropane	63	7.238	7.238	(1.098)	176079	250.000	226.2
50 Dibromomethane	93	7.359	7.359	(1.116)	86742	250.000	234.0
53 Bromodichloromethane	83	7.554	7.554	(1.146)	174108	250.000	230.9
57 cis-1,3-Dichloropropene	75	8.016	8.016	(1.216)	209895	250.000	225.6
58 4-Methyl-2-Pentanone	43	8.211	8.211	(0.844)	161237	250.000	169.1
60 Toluene	91	8.351	8.351	(0.858)	791640	250.000	264.8
61 trans-1,3-Dichloropropene	75	8.594	8.594	(0.883)	214338	250.000	227.0
63 1,3-Dichloropropane	76	8.929	8.929	(0.917)	255608	250.000	232.0
64 1,1,2-Trichloroethane	97	8.771	8.771	(0.901)	147768	250.000	246.2
65 Tetrachloroethene	164	8.905	8.905	(0.915)	135338	250.000	210.5
66 2-Hexanone	43	9.057	9.057	(0.931)	109995	250.000	161.0
67 Dibromochloromethane	129	9.160	9.160	(0.941)	144754	250.000	234.0
68 1,2-Dibromoethane	107	9.257	9.257	(0.951)	137549	250.000	216.7
70 Chlorobenzene	112	9.756	9.756	(1.002)	536809	250.000	250.4
71 1,1,1,2-Tetrachloroethane	131	9.848	9.848	(1.012)	171550	250.000	246.3
72 Ethylbenzene	106	9.878	9.878	(1.015)	285257	250.000	247.3
73 m + p-Xylene	106	9.994	9.994	(1.027)	689060	500.000	490.2
74 Xylene-o	106	10.383	10.383	(1.067)	328468	250.000	246.3
M 75 Xylenes (total)	106				1017528	250.000	762.9
76 Styrene	104	10.401	10.401	(1.069)	585976	250.000	245.6
77 Bromoform	173	10.578	10.578	(1.087)	81376	250.000	196.8
78 Isopropylbenzene	105	10.754	10.754	(1.105)	861966	250.000	249.4
79 Bromobenzene	156	11.046	11.046	(0.917)	211680	250.000	257.8
81 n-Propylbenzene	120	11.162	11.162	(0.926)	257724	250.000	275.9
82 2-Chlorotoluene	126	11.241	11.241	(0.933)	219532	250.000	269.1
83 1,1,1,2,2-Tetrachloroethane	83	11.058	11.058	(0.918)	161063	250.000	221.3
84 1,2,3-Trichloropropane	110	11.089	11.089	(0.920)	51209	250.000	208.2
85 4-Chlorotoluene	126	11.350	11.350	(0.942)	220102	250.000	267.8
86 1,3,5-Trimethylbenzene	105	11.344	11.344	(0.941)	703780	250.000	266.0
87 tert-Butylbenzene	119	11.660	11.660	(0.968)	629160	250.000	270.6
88 1,2,4-Trimethylbenzene	105	11.709	11.709	(0.972)	719505	250.000	263.6

Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\CC30906.D
 Report Date: 06-Sep-2000 06:09

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ng)	(ng)
*****	----	--	-----	-----	-----	-----	-----
89 sec-Butylbenzene	105	11.879	11.879	(0.986)	950572	250.000	265.9
90 4-Isopropyltoluene	119	12.032	12.032	(0.998)	810398	250.000	270.7
91 1,3-Dichlorobenzene	146	11.983	11.983	(0.994)	426662	250.000	261.4
93 1,4-Dichlorobenzene	146	12.074	12.074	(1.002)	430631	250.000	255.8
94 n-Butylbenzene	91	12.433	12.433	(1.032)	713087	250.000	276.5
95 1,2-Dichlorobenzene	146	12.439	12.439	(1.032)	375223	250.000	253.2
96 1,2-Dibromo-3-chloropropane	157	13.212	13.212	(1.096)	21129	250.000	155.9
97 1,2,4-Trichlorobenzene	180	14.045	14.045	(1.166)	179929	250.000	191.7
98 Hexachlorobutadiene	225	14.222	14.222	(1.180)	105125	250.000	212.1
99 Naphthalene	128	14.282	14.282	(1.185)	327123	250.000	181.7
100 1,2,3-Trichlorobenzene	180	14.526	14.526	(1.205)	135662	250.000	165.7

672 162

GC/MS VOLATILE
QC DATA

Data File: \\QPITPA02\chem\hp3.1\30810d.b\BF30810.D

Date : 10-AUG-2000 06:30

Client ID: 31019D

Instrument: hp3.1

Sample Info: BFB 192-188-2 BONG

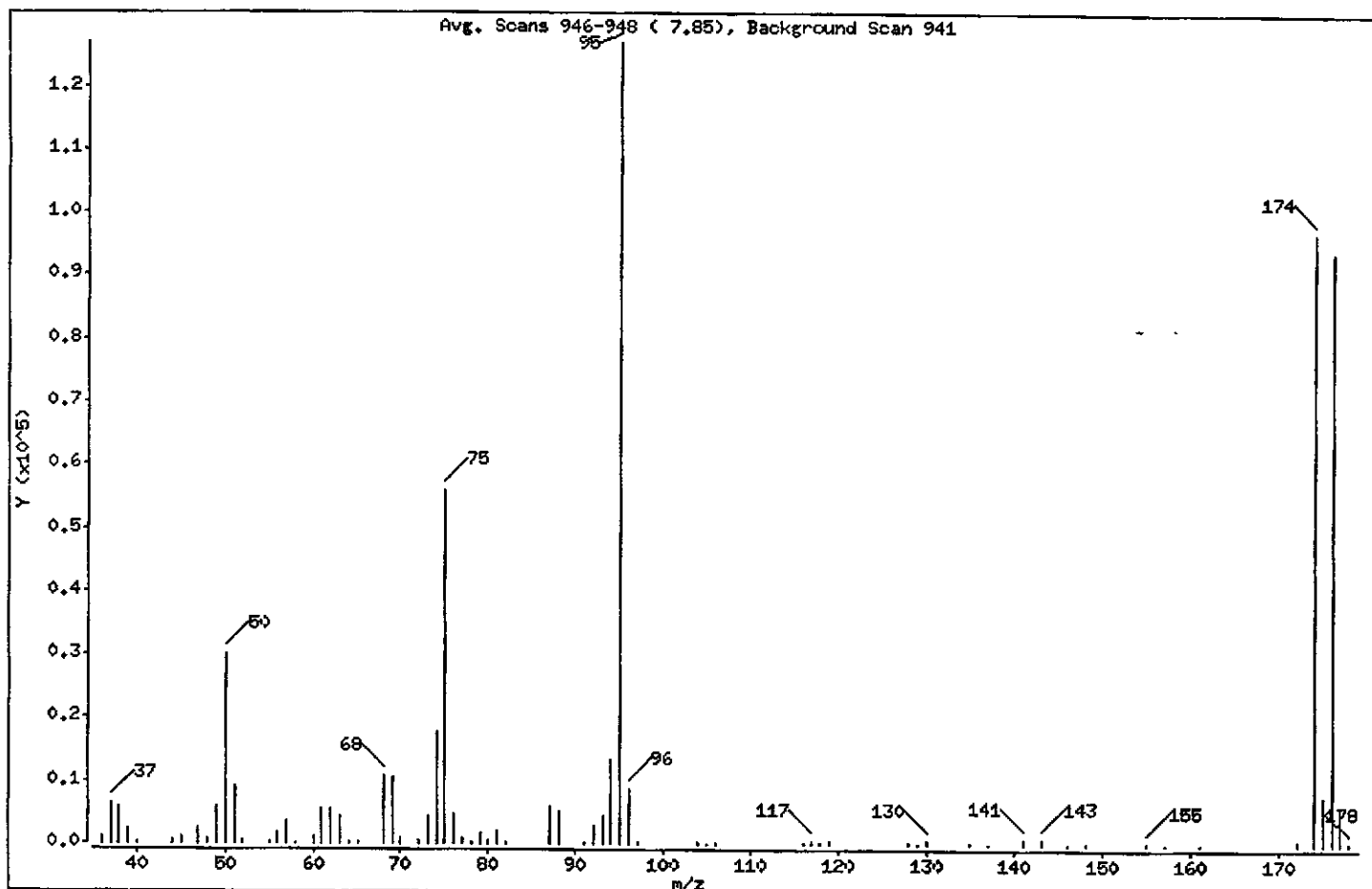
Volume Injected (uL): 1.0

Operator: 10099

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	23.64
75	30.00 - 60.00% of mass 95	44.19
96	5.00 - 9.00% of mass 95	6.82
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	76.43
175	5.00 - 9.00% of mass 174	5.94 (7.77)
176	95.00 - 101.00% of mass 174	74.04 (96.87)
177	5.00 - 9.00% of mass 176	4.93 (6.66)

Data File: \\QPITPA02\chem\hp3.i\30810d.b\BF30810.D

Date : 10-AUG-2000 06:30

Client ID: 31019D

Instrument: hp3.i

Sample Info: BFB 192-188-2 50NG

Volume Injected (uL): 1.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.18

Data File: BF30810.D

Spectrum: Avg. Scans 946-948 (7.85), Background Scan 941

Location of Maximum: 95.00

Number of points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1177	61.00	5423	82.00	395	129.00	78
37.00	6335	62.00	5523	87.00	5891	130.00	459
38.00	5927	63.00	4280	88.00	5314	135.00	197
39.00	2432	64.00	436	91.00	247	137.00	93
40.00	179	65.00	368	92.00	3023	141.00	997
44.00	648	68.00	10704	93.00	4462	143.00	950
45.00	1252	69.00	10533	94.00	13374	146.00	78
47.00	2625	70.00	783	95.00	126904	148.00	227
48.00	882	72.00	611	96.00	8649	155.00	292
49.00	5774	73.00	4489	97.00	241	157.00	104
50.00	29992	74.00	17816	104.00	410	161.00	75
51.00	9013	75.00	56072	105.00	81	172.00	655
52.00	495	76.00	4541	106.00	304	174.00	96992
55.00	408	77.00	861	116.00	398	175.00	7539
56.00	1837	78.00	375	117.00	575	176.00	93960
57.00	3426	79.00	1869	118.00	404	177.00	6260
58.00	69	80.00	560	119.00	456	178.00	152
60.00	1084	81.00	1939	128.00	265		

Data File: \\QPIITPA02\\chem\\hp3.1\\30810d.b\\BF30810.D

Date: 10-AUG-2000 06:30

Client ID: 31019D

Sample Info: BFB 192-188-2 50NG

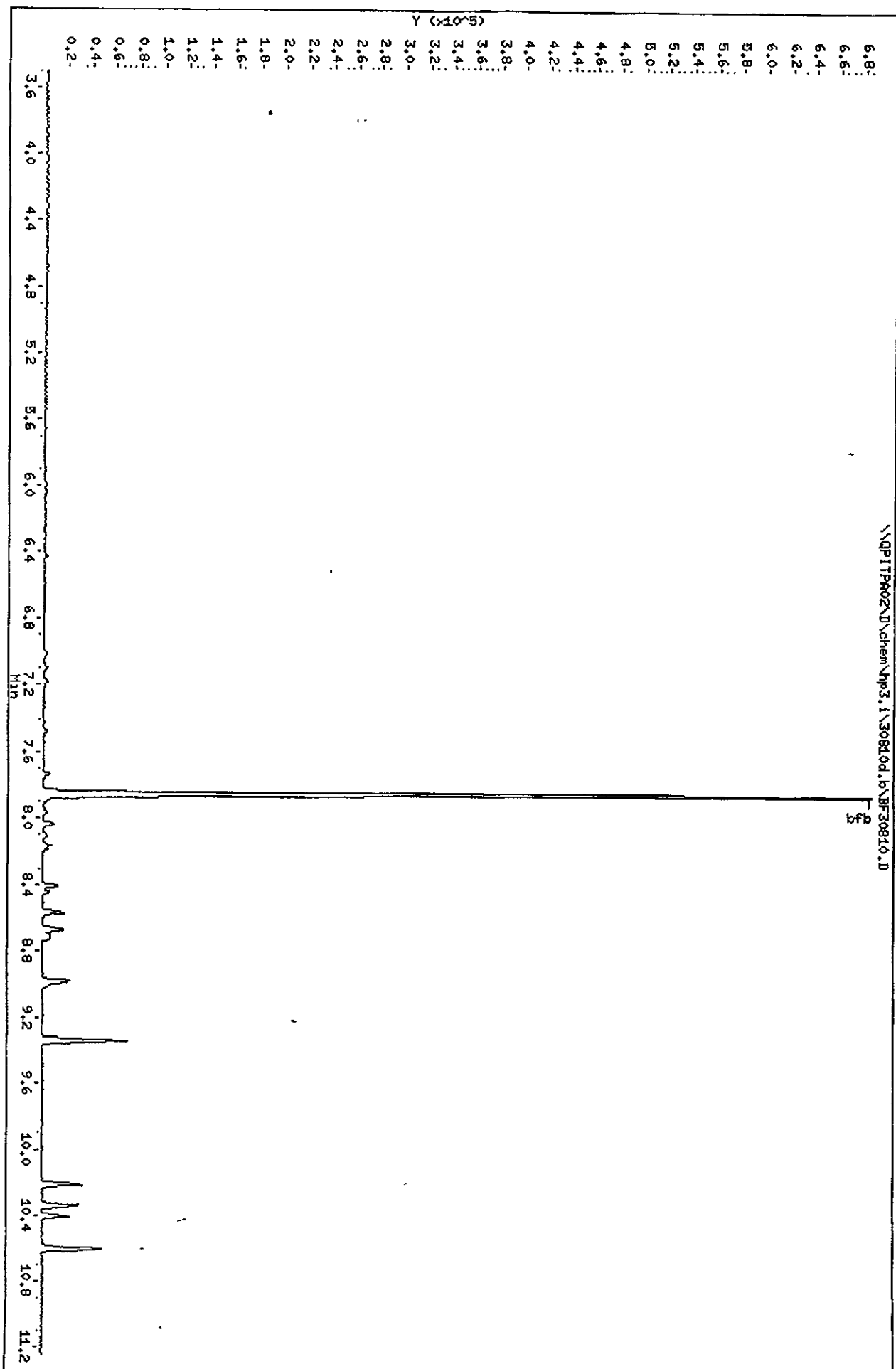
Volume Injected (uL): 1.0

Column phase: DB624 20m

Instrument: hp3.1

Operator: 10099

Column diameter: 0.18



Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\BF30906.D

Page 2

Date : 06-SEP-2000 05:22

Client ID: 31019D

Instrument: hp3.i

Sample Info: BFB 192-189-5 50NG

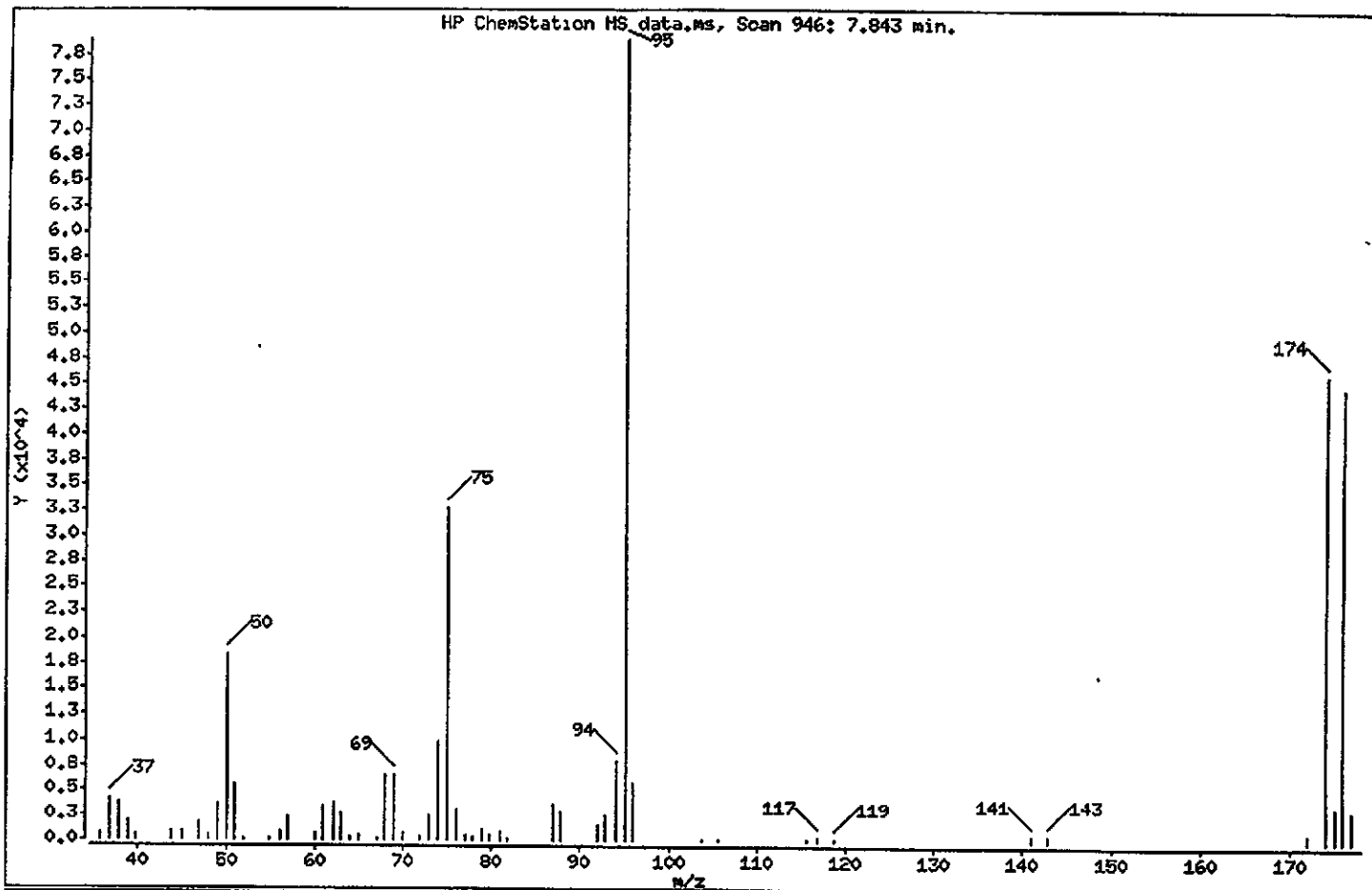
Volume Injected (uL): 1.0

Operator: 10099

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	23.17
75	30.00 - 60.00% of mass 95	41.50
96	5.00 - 9.00% of mass 95	7.28
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	58.39
175	5.00 - 9.00% of mass 174	4.40 (7.53)
176	95.00 - 101.00% of mass 174	56.63 (96.98)
177	5.00 - 9.00% of mass 176	3.85 (6.80)

Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\BF30906.D

Date : 06-SEP-2000 05:22

Client ID: 31019D

Instrument: hp3.i

Sample Info: BFB 192-189-5 50NG

Volume Injected (uL): 1.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.18

Data File: BF30906.D

Spectrum: HP ChemStation MS data.ms, Scan 946: 7.843 min.

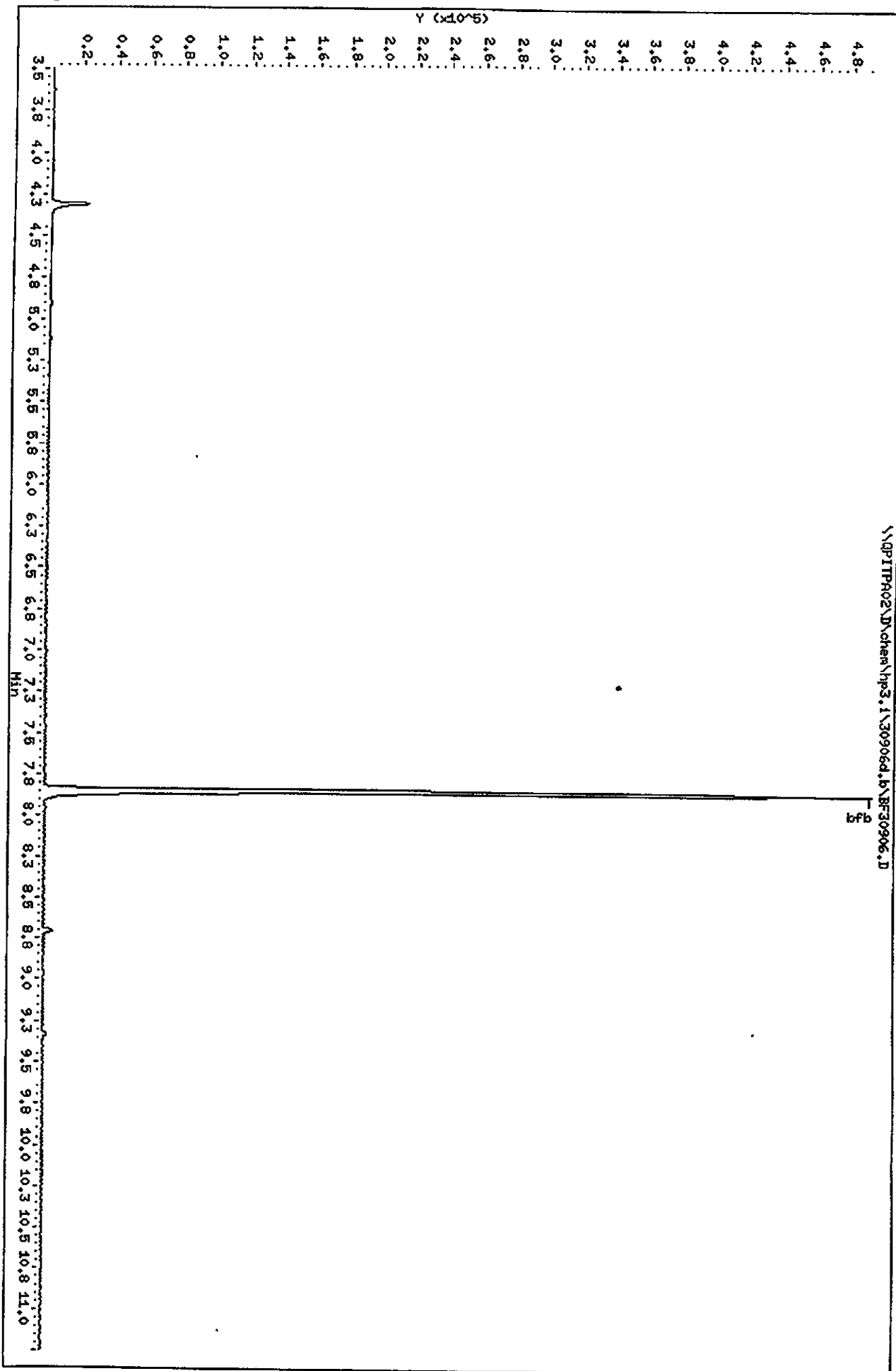
Location of Maximum: 95.00

Number of points: 56

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	762	56.90	2274	76.00	3175	105.70	257
37.00	4182	60.00	641	77.10	464	115.70	200
38.00	3794	60.90	3533	77.90	379	116.90	349
39.00	2000	62.00	3883	78.90	1143	118.80	225
39.90	467	63.00	2756	79.70	509	140.90	606
43.90	893	63.90	442	80.90	930	142.80	597
45.00	909	64.90	540	81.90	203	171.90	638
47.00	1802	67.00	223	86.90	3573	173.90	46064
47.90	595	67.90	6562	87.90	2950	174.90	3468
49.00	3594	69.00	6561	91.90	1587	175.90	44672
50.00	18280	70.00	660	92.90	2564	176.90	3036
50.90	5714	71.90	312	94.00	7924		
52.00	257	72.90	2466	95.00	78888		
54.90	266	74.00	9786	96.00	5740		
56.00	936	75.00	32736	103.80	269		

Data File: \\QPITPA02\1\chem\hp3.1\30906d.b\BF30906.D
 Date: 06-SEP-2000 05:22
 Client ID: 31019D
 Sample Info: BFB 192-189-5 50MC
 Volume Injected (uL): 1.0
 Column phase: DB624 20m

Instrument: hp3.1
 Operator: 10099
 Column diameter: 0.18



672 168

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C01060000 104

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/31/00

Work Order: DJX0F101

Date Extracted: 09/06/00

Dilution factor: 1

Date Analyzed: 09/06/00

Moisture %: NA

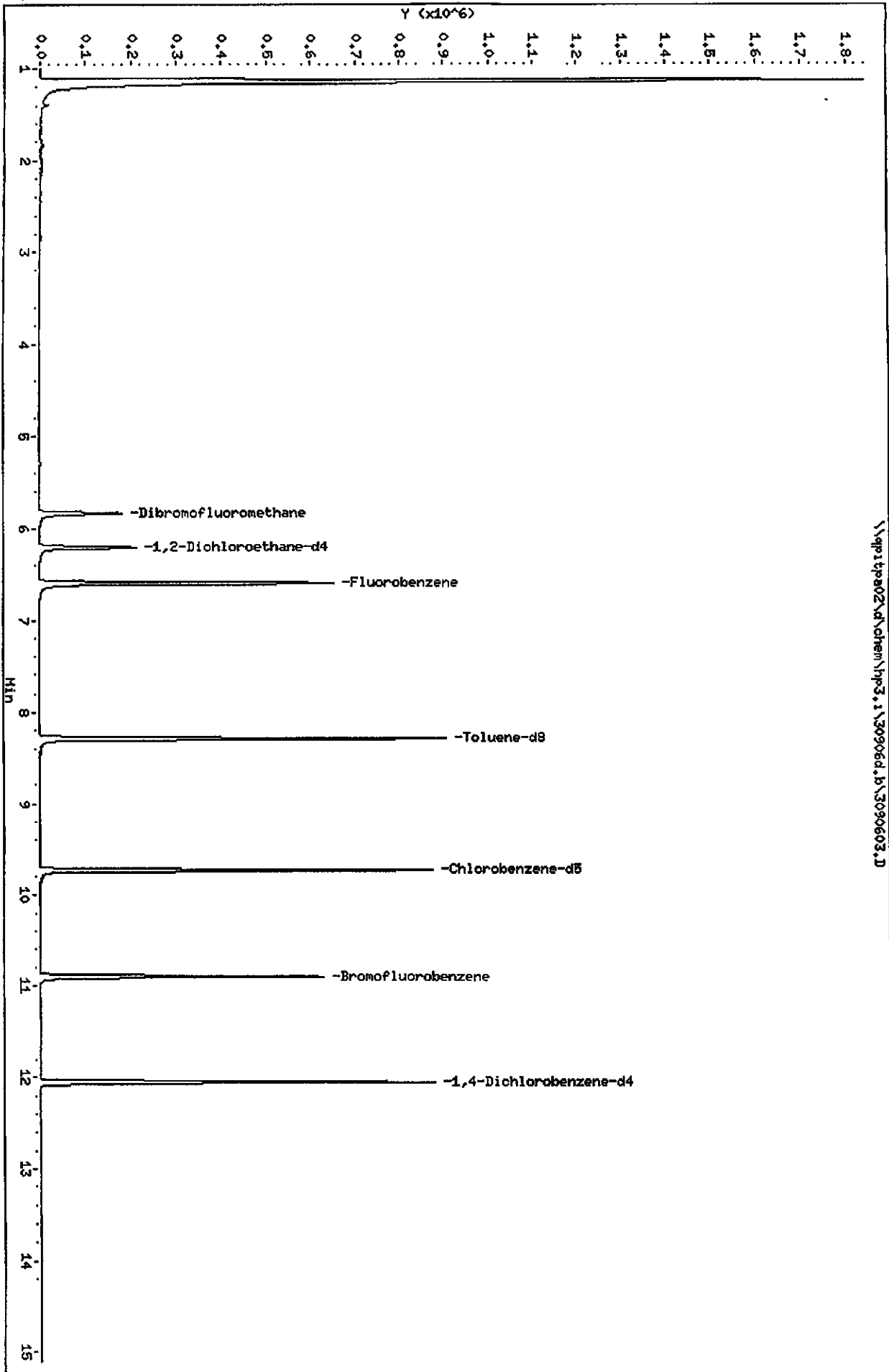
QC Batch: 0250140

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

Data File: \\vp1tpa02\chem\hpc3.1\30906d.b\3090603.D
Date : 06-SEP-2000 07:23
Client ID:
Sample Info: TCLP PREP BLANK 9/5/00 (1HL/10ML)/5ML
Purge Volume: 5.0
Column phase: DB 624

Instrument: hpc3.i
Operator: 10099
Column diameter: 0.18



Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\3090603.D
Report Date: 06-Sep-2000 07:43

Page 1

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30906d.b\3090603.D

Lab Smp Id:

Inj Date : 06-SEP-2000 07:23

MS Autotune Date: 08-AUG-2000 16:28

Operator : 10099

Inst ID: hp3.i

Smp Info : TCLP PREP BLANK 9/5/00 (1ML/10ML)/5ML

Misc Info : ,30906d.b,8260bh2o.m,tclp.sub

Comment :

Method : \\QPITPA02\D\chem\hp3.i\30906d.b\8260bh2o.m

Meth Date : 06-Sep-2000 06:09 gordonk

Quant Type: ISTD

Cal Date : 10-AUG-2000 09:06

Cal File: 1E30810.D

Als bottle: 6

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: tclp.sub

Target Version: 4.04

Processing Host: PITPC076

K6
9/8/00

Concentration Formula: Amt * DF * 1/Vo * Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(UG/L)
* 46 Fluorobenzene	96	6.597	6.593	(1.000)	585292	250.000	
* 69 Chlorobenzene-d5	119	9.730	9.732	(1.000)	150143	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.048	12.050	(1.000)	225275	250.000	
\$ 39 Dibromofluoromethane	113	5.831	5.826	(0.884)	130774	239.577	47.92
\$ 43 1,2-Dichloroethane-d4	65	6.208	6.204	(0.941)	142134	225.862	45.17
\$ 59 Toluene-d8	98	8.288	8.284	(0.852)	562736	249.247	49.85
\$ 80 Bromofluorobenzene	95	10.898	10.900	(1.120)	217088	231.330	46.26
3 Vinyl Chloride	62				Compound Not Detected.		
12 1,1-Dichloroethene	96				Compound Not Detected.		
31 2-Butanone	43				Compound Not Detected.		
37 Chloroform	83				Compound Not Detected.		
41 Carbon Tetrachloride	117				Compound Not Detected.		
42 Benzene	78				Compound Not Detected.		
45 1,2-Dichloroethane	62				Compound Not Detected.		
47 Trichloroethene	130				Compound Not Detected.		
65 Tetrachloroethene	164				Compound Not Detected.		

672 172

Data File: \\gpitpa02\d\chem\hp3.i\30906d.b\3090603.D
Report Date: 06-Sep-2000 07:43

Page 2

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

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0I060000 140

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

Sample WT/Vol: 5 / mL Date Received: 09/01/00

Work Order: DJX28101 Date Extracted: 09/06/00

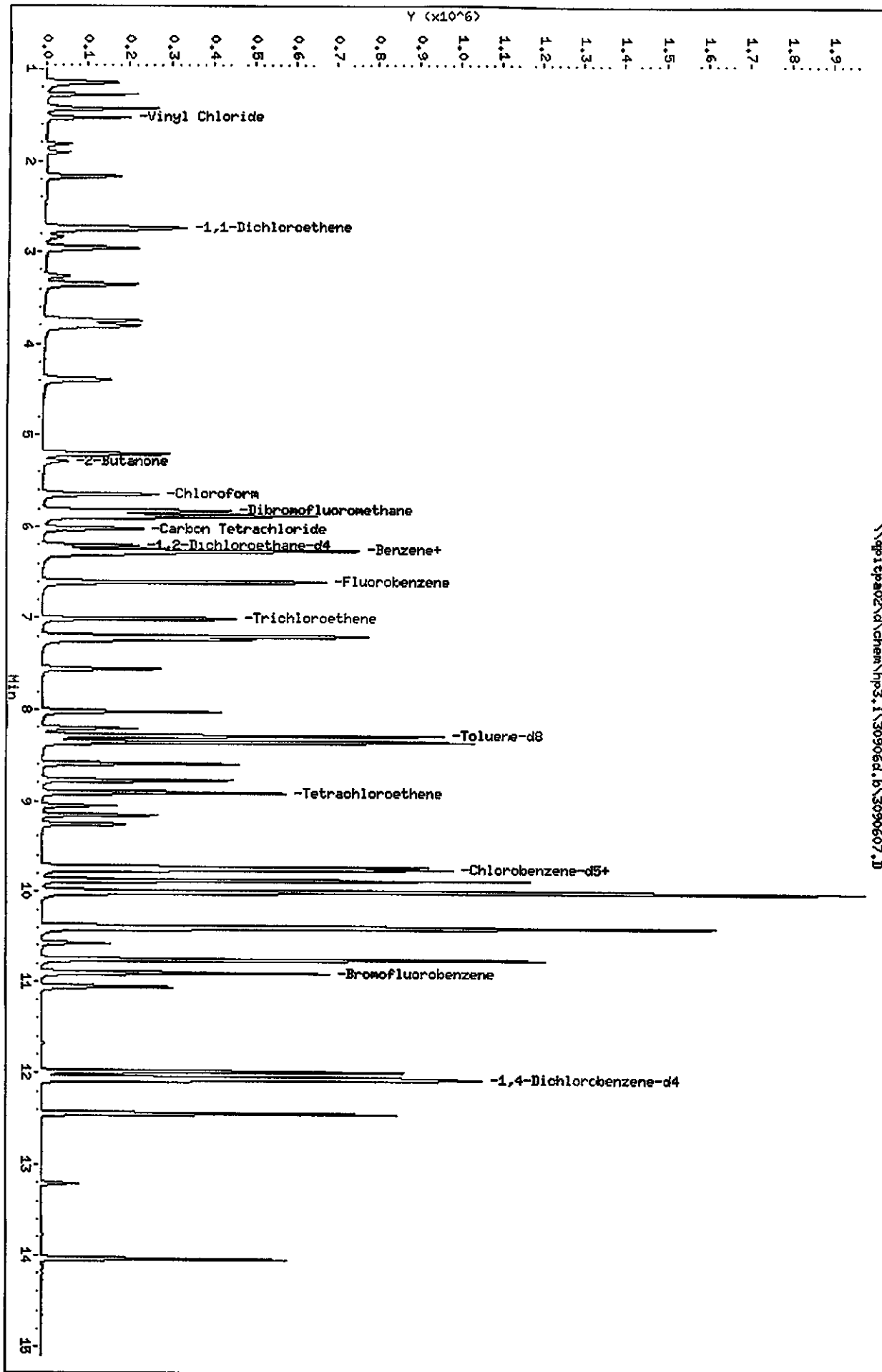
Dilution factor: 1 Date Analyzed: 09/06/00

Moisture %: NA

QC Batch: 0250140

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.490	
78-93-3	2-Butanone	0.286	
56-23-5	Carbon tetrachloride	0.472	
108-90-7	Chlorobenzene	0.487	
67-66-3	Chloroform	0.466	
107-06-2	1,2-Dichloroethane	0.428	
75-35-4	1,1-Dichloroethene	0.525	
127-18-4	Tetrachloroethene	0.429	
79-01-6	Trichloroethene	0.445	
75-01-4	Vinyl chloride	0.418	



Data File: \\qip202\chem\hp3.i\30906d.b\3090607.D
 Date : 06-SEP-2000 08:52
 Client ID: INTR-LAB CHECK
 Sample Info: BLANK HS (1ML/10ML)/5ML
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: hp3.i
 Operator: 10099
 Column diameter: 0.18

Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\3090607.D
Report Date: 06-Sep-2000 09:30

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30906d.b\3090607.D
Lab Smp Id: DJX28101 Client Smp ID: INTRA-LAB CHECK
Inj Date : 06-SEP-2000 08:52 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : BLANK MS (1ML/10ML)/5ML
Misc Info : djx28101,30906d.b,8260bh2o.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30906d.b\8260bh2o.m
Meth Date : 06-Sep-2000 06:09 gordonk Quant Type: ISTD
Cal Date : 10-AUG-2000 09:06 Cal File: 1E30810.D
Als bottle: 10 QC Sample: METHOD SPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tclp.sub
Target Version: 4.04
Processing Host: PITPC063

KLG
9/16/00

Concentration Formula: Amt * DF * 1/Vo*Vt

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	(ng)	(UG/L)
*****	----	==	-----	-----	-----	-----	-----	-----	-----
* 46 Fluorobenzene	96	6.604	6.593	(1.000)	636344	250.000			
* 69 Chlorobenzene-d5	119	9.731	9.732	(1.000)	159316	250.000			
* 92 1,4-Dichlorobenzene-d4	152	12.048	12.050	(1.000)	249702	250.000			
\$ 39 Dibromofluoromethane	113	5.831	5.826	(0.883)	138947	234.129	46.82		
\$ 43 1,2-Dichloroethane-d4	65	6.208	6.204	(0.940)	145584	212.785	42.56		
\$ 59 Toluene-d8	98	8.289	8.284	(0.852)	630715	263.271	52.65		
\$ 80 Bromofluorobenzene	95	10.905	10.900	(1.121)	248682	249.738	49.95		
3 Vinyl Chloride	62	1.530	1.525	(0.232)	189460	208.769	41.75		
12 1,1-Dichloroethene	96	2.729	2.718	(0.413)	108046	262.351	52.47		
31 2-Butanone	43	5.290	5.297	(0.801)	87521	143.230	28.65		
37 Chloroform	83	5.643	5.638	(0.854)	234010	232.744	46.55		
41 Carbon Tetrachloride	117	6.020	6.015	(0.912)	166639	236.042	47.21		
42 Benzene	78	6.263	6.258	(0.948)	659462	245.123	49.02		
45 1,2-Dichloroethane	62	6.300	6.295	(0.954)	203194	213.737	42.75		
47 Trichloroethene	130	7.011	7.007	(1.062)	157166	222.496	44.50		
65 Tetrachloroethene	164	8.909	8.905	(0.916)	133681	214.488	42.90		

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Data File: \\qpitpa02\d\chem\hp3.i\30906d.b\3090607.D
Report Date: 06-Sep-2000 09:30

Page 2

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(UG/L)
=====	----	--	=====	=====	=====	=====	=====
70 Chlorobenzene	112	9.761	9.756	(1.003)	505953	243.486	48.70

GC/MS VOLATILE
MISCELLANEOUS

GCMS Volatile Run Log

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



Method: Std 013 Inst. ID HP3

Analyst YLG

Reviewed by:

Date:

Std: 192-188-2BFB Std: 192-187-5Int

Std: 192-188-11V0A Std: 192-186-6 Ketones

Std: 192-186-7 M186132 Std: 192-187-4MS

Std: _____ Std: _____

Std: _____

Date	File ID	Lot No. / Sample No.	Vol. / Wt.	pH	Port#	Comments
8/10/00	1. BF30810	BFB	50ng			0630
	2. 0030810	VS050	5ml			
	3. 1A30810	VS05	5ml			
	4. 1B30810	VS020	5ml			
	5. 1D30810	VS0100	5ml			
	6. 1E30810	VS0200	5ml			
	7.					
	8.					
	9.					
	10					
	11.					
	12.					
	13.					
	14.					
	15.					
	16					
	17					
	18					
	19					
	20					
	21					
	22.					

ZHE Leachate Worksheet
(Method 1311)

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

P025001



672 179

Lab Sample ID #	Client ID	Weight (gm)	Vessel	Extraction Fluid No. / Volume	pH	On		Off	
						Date	Time	Date	Time
1. COH310206	BLANK	-	G	TECP 1	4.91	9-5-00	11:00	9-6-00	06:00
2.	001	25.03	N		5.86				
3.	002	25.03	AA		5.44				
4.	003	25.03	F		5.26				
5.	004	25.03	L		5.35				
6. COX010228	001	25.03	SS		5.00				
7.	002	25.03	XX		5.07				
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									

Extract(s)			Extract(s) Received			Extract(s) Relinquished		
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst	Location
All Above	9/6/2000	07:00	B. Trout	Org Prep	9/6/2000	07:05	B. Trout	CLP-01
All Above	9/6/00	0705	Larry Gaden	CLP 1'	9/6/00	1150	Larry Gaden	NY-01

• = Sample determined to have free-liquid, % solid determination was performed <5 = Extraction Fluid No. 1 5.7 mL Glacial Acetic Acid dil 500mL + 64.3 mL of 1 N Na OH dil to 1 L (pH 4.93+ 0.05)	Room Temp: 19	Tumbler RPMs: 30	(30±2)
			(10)
	PH Calibration		
	Date 9-5-00	4.00	7.01
	Date 9/6/2000		10.05

Reviewed by: J. M. M. M.	Date: 8-6-00	Comments

GCMS Volatile

Run Log

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



Method: 8210B

Inst. ID HP3

Analyst KLG

Reviewed by:

Date:

Std: 192-189-5BFB Std: 192-189-11nd

Std: 192-188-10MTBE

Std: 192-187-4MS

Std:

Std:

Std:

Date	File ID	Lot No. /Sample No.	Vol. /Wt.	pH	Port#	Comments
9/6/00	1. BF30906	BFB	500g			0522
	2. CC30906	VSD50	5ml			
	3. MB30906	VBLK	100µl/5ml			
	4. 3090601	Blank MS	100µl/5ml			
	5. 3090602	Blank MS	100µl/5ml			
	6. 3090603	TLP Prep Blank 9/1/00	(1ml/10ml)/5ml	5		
	7. 3090604	CO1010228-002	100µl(1.2g/5ml)/5ml			
	8. 3090605	Blank MS	(1ml/10ml)/5ml	5		gds
	9. 3090606	CO1010228-001	(1ml/10ml)/5ml	5		
	10. 3090607	CO1010228-002 Blank MS	(1ml/10ml)/5ml	5		
	11. 3090608	Blank MS CO1010228-001	(1ml/10ml)/5ml	5		
	12. 3090609	CO1010228-001 MSD	(1ml/10ml)/5ml	5		
	13. 3090610	CO1010228-002 MSD	(1ml/10ml)/5ml	5		
	14. 3090611	CO1010228-001	(1ml/10ml)/5ml	5		
	15. 3090612	CO1010228-002	(1ml/10ml)/5ml	5		
	16. 3090613	CO1010228-003	(1ml/10ml)/5ml	5		
	17. 3090614	CO1010228-004	(1ml/10ml)/5ml	5		
	18. 3090615	CO1010228-005	100µl(2.40g/5ml)/5ml			
	19.					
	20.					
	21.					
	22.					

PSR024 9/05/00 8:26:13 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: GEEHRINK

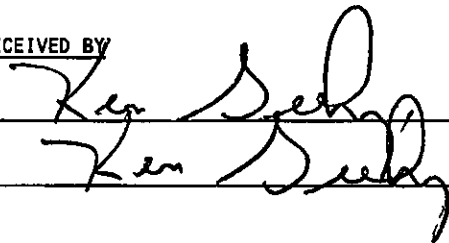
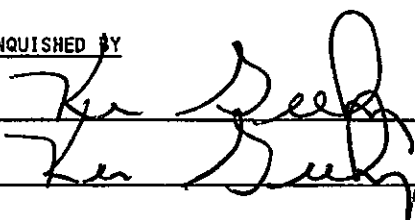
METHOD: QK Volatile Organics, GC/MS (8260B)

<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>
5B,C CLP1	DJP8W-1-02	___	262485	399411	A-58-QK	COH310206	001		SOLID	0	3
5B,C CLP1	DJP90-1-02	___	262486	399411	A-58-QK	COH310206	002		SOLID	0	3
5B,C CLP1	DJP91-1-02	___	262487	399411	A-58-QK	COH310206	003		SOLID	0	3
5B,C CLP1	DJP92-1-02	___	262488	399411	A-58-QK	COH310206	004		SOLID	0	3
6A,B,C, CLP1	DJRHV-1-0A	___	262489	419910	A-4D-QK	COI010228	001		SOLID	0	22
6A,B,C, CLP1	DJRJP-1-05	___	262490	419910	A-4D-QK	COI010228	002		SOLID	0	6

RELINQUISHED BY

RECEIVED BY

DATE/TIME

9-5-00 10:30
9-5-00 11:00

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

672-182

GC/MS SEMIVOLATILE DATA

**GC/MS SEMIVOLATILE
QC SUMMARY**

672 184

SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: COH310206

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	DF/S1/242/SDC/031	63	52	67	49	59	64	00
02	DF/S1/242/SDC/033	69	58	70	54	62	68	00
03	DF/S1/242/SDC/034	63	53	66	50	59	63	00
04	DF/S1/242/SDC/035	62	53	67	50	59	67	00
05	INTRA-LAB QC	56	47	64	40	46	65	00
06	METHOD BLK. DK5F6101	82	74	72	71	79	81	00
07	LCS DK5F6102	74	66	63	62	67	69	00
08	LAB MS/MSD D	70	58	70	55	62	70	00
09	LAB MS/MSD S	66	54	66	52	58	66	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 CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0I110000

WO #: DK5F6102

BATCH: 0255104

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	0.176	70	47- 131	
Hexachlorobenzene	0.250	0.166	66	57- 128	
Hexachlorobutadiene	0.250	0.166	66	36- 116	
Hexachloroethane	0.250	0.171	68	30- 110	
Nitrobenzene	0.250	0.174	70	45- 130	
Pentachlorophenol	0.250	0.168	67	10- 140	
Pyridine	0.250	0.181	72	10- 148	
2,4,5-Trichlorophenol	0.250	0.162	65	41- 125	
2,4,6-Trichlorophenol	0.250	0.159	64	46- 135	
Cresols (total)	0.750	0.506	67	29- 144	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

672 186 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: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV13D

BATCH: 0255104

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.250	ND	0.139	56	18- 110	
2,4-Dinitrotoluene	0.250	ND	0.172	69	31- 131	
Hexachlorobenzene	0.250	ND	0.176	70	36- 132	
Hexachlorobutadiene	0.250	ND	0.130	52	18- 116	
Hexachloroethane	0.250	ND	0.133	53	18- 110	
Nitrobenzene	0.250	ND	0.164	66	10- 211	
Pentachlorophenol	0.250	ND	0.163	65	10- 140	
Pyridine	0.250	ND	0.147	59	10- 148	
2,4,5-Trichlorophenol	0.250	ND	0.155	62	24- 143	
2,4,6-Trichlorophenol	0.250	ND	0.155	62	36- 135	
Cresols (total)	0.750	ND	0.464	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: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV13E

BATCH: 0255104

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
1,4-Dichlorobenzene	0.250	0.149	60	6.9	36	18- 110	
2,4-Dinitrotoluene	0.250	0.188	75	8.9	32	31- 131	
Hexachlorobenzene	0.250	0.188	75	6.6	22	36- 132	
Hexachlorobutadiene	0.250	0.137	55	5.2	32	18- 116	
Hexachloroethane	0.250	0.140	56	5.1	33	18- 110	
Nitrobenzene	0.250	0.174	70	5.9	50	10- 211	
Pentachlorophenol	0.250	0.176	70	7.7	56	10- 140	
Pyridine	0.250	0.155	62	5.3	65	10- 148	
2,4,5-Trichlorophenol	0.250	0.167	67	7.4	22	24- 143	
2,4,6-Trichlorophenol	0.250	0.166	66	6.8	27	36- 135	
Cresols (total)	0.750	0.501	67	7.7	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:

672 188

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DK5F6101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: F0912001.

Lot Number: COH310206

Date Analyzed: 09/12/00

Time Analyzed: 09:53

Matrix: SOLID

Date Extracted: 09/07/00

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/S1/242/SDC/031	DJP8W103	F0912003.	09/12/00	11:02
02	DF/S1/242/SDC/033	DJP90103	F0912004.	09/12/00	11:36
03	DF/S1/242/SDC/034	DJP91103	F0912005.	09/12/00	12:10
04	DF/S1/242/SDC/035	DJP92103	F0912006.	09/12/00	12:44
05	INTRA-LAB QC	DJRHV13C	F0912007.	09/12/00	13:18
06	LAB MS/MSD	DJRHV13D S	F0912008.	09/12/00	13:53
07	LAB MS/MSD	DJRHV13E D	F0912009.	09/12/00	14:27
08	CHECK SAMPLE	DK5F6102 C	F0912002.	09/12/00	10:27
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)

672 189

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Lab File ID: F0908DF1

DFTPP Injection Date: 09/08/00

Instrument ID: 722

DFTPP Injection Time: 0602

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.0
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	44.7
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	54.6
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	23.1
365	Greater than 1.0% of mass 198	2.8
441	Present, but less than mass 443	10.6
442	40.0 - 100.0% of mass 198	70.3
443	17.0 - 23.0% of mass 442	13.8 (19.6)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020	SSTD020	F09080C1	09/08/00	0621
02	SSTD050	SSTD050	F09080C2	09/08/00	0655
03	SSTD080	SSTD080	F09080C3	09/08/00	0729
04	SSTD120	SSTD120	F09080C4	09/08/00	0803
05	SSTD160	SSTD160	F09080C5	09/08/00	0837
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

672 190

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0H310206

Lab File ID: F0912DF1

DFTPP Injection Date: 09/12/00

Instrument ID: 722

DFTPP Injection Time: 0754

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	37.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	40.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	50.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	23.2
365	Greater than 1.0% of mass 198	3.16
441	Present, but less than mass 443	11.9
442	40.0 - 100.0% of mass 198	75.8
443	17.0 - 23.0% of mass 442	14.6 (19.3)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	SSTD050	F09120C1	09/12/00	0811
02	INTRA-LAB BL	DK5F6101	F0912001	09/12/00	0953
03	INTRA-LAB CH	DK5F6102	F0912002	09/12/00	1027
04	DF/S1/242/SD	DJP8W103	F0912003	09/12/00	1102
05	DF/S1/242/SD	DJP90103	F0912004	09/12/00	1136
06	DF/S1/242/SD	DJP91103	F0912005	09/12/00	1210
07	DF/S1/242/SD	DJP92103	F0912006	09/12/00	1244
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

672 191

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: COH310206

Lab File ID (Standard): F09120C1

Date Analyzed: 09/12/00

Instrument ID: 722

Time Analyzed: 0811

	IS1 (DCB)	RT #	IS2 (NPT)	RT #	IS3 (ANT)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	121248	4.95	437244	6.48	226205	9.47
UPPER LIMIT	242496	5.45	874488	6.98	452410	9.97
LOWER LIMIT	60624	4.45	218622	5.98	113103	8.97
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	113322	4.94	431026	6.46	227226	9.45
02 INTRA-LAB CH	122265	4.96	469524	6.47	252325	9.47
03 DF/S1/242/SD	120504	4.95	457238	6.47	242756	9.47
04 DF/S1/242/SD	114935	4.96	436678	6.47	231332	9.47
05 DF/S1/242/SD	112589	4.95	428837	6.47	225950	9.46
06 DF/S1/242/SD	123068	4.95	471814	6.46	250902	9.46
07						
08						
09						
10						
11						
12						
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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.

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0H310206

Lab File ID (Standard): F09120C1

Date Analyzed: 09/12/00

Instrument ID: 722

Time Analyzed: 0811

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	370517	12.76	419673	19.40	475500	22.76
UPPER LIMIT	741034	13.26	839346	19.90	951000	23.26
LOWER LIMIT	185259	12.26	209837	18.90	237750	22.26
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	359230	12.74	381930	19.37	407275	22.73
02 INTRA-LAB CH	408619	12.76	443736	19.39	474689	22.75
03 DF/S1/242/SD	376845	12.75	398154	19.38	414435	22.75
04 DF/S1/242/SD	363872	12.75	393028	19.38	407683	22.75
05 DF/S1/242/SD	350629	12.75	380750	19.38	394960	22.74
06 DF/S1/242/SD	390238	12.75	421844	19.38	432157	22.74
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**

672 194

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/31/00

Work Order: DJP8W103

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: 16

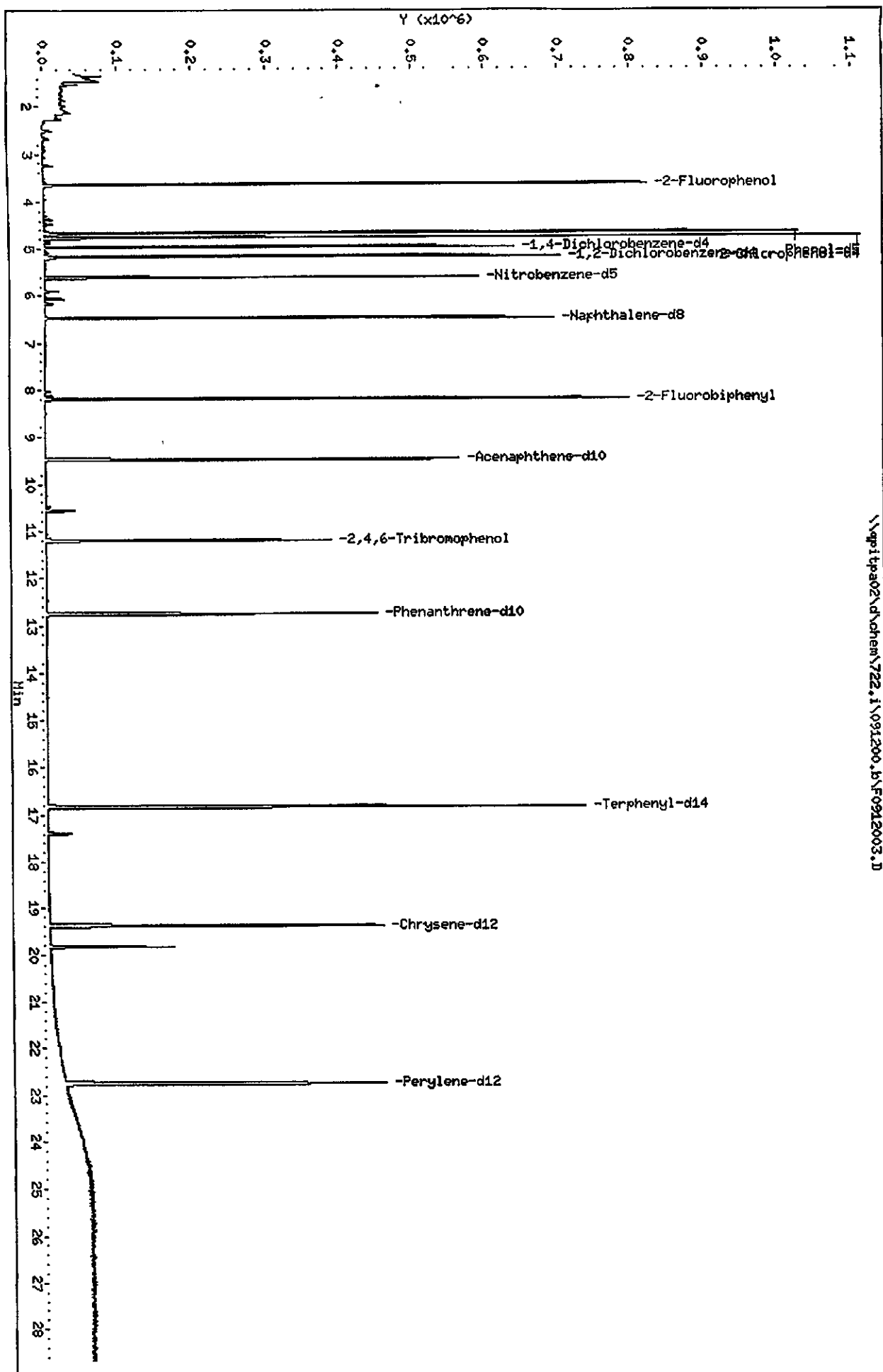
QC Batch: 0255104

Client Sample Id: DF/S1/242/SDC/031

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
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: \\ppitpa02\chem\722.1\091200.b\F0912003.D
Date: 12-SEP-2000 11:02
Client ID: DF/S1/242/SDC/031
Sample Info: CMH10206-001 9/07/00 TCLP (0255104)
Volume Injected (uL): 2.0
Column phase: HP5-MS

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



STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\091200.b\F0912003.D
 Lab Smp Id: DJP8W103 Client Smp ID: DF/S1/242/SDC/031
 Inj Date : 12-SEP-2000 11:02 MS Autotune Date: 07-SEP-2000 08:23
 Operator : 007062 Inst ID: 722.i
 Smp Info : C0H310206-001 9/07/00 TCLP (0255104)
 Misc Info : djp8w103,091200.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\091200.b\8270b.m
 Meth Date : 12-Sep-2000 08:47 bungardf Quant Type: ISTD
 Cal Date : 08-SEP-2000 08:37 Cal File: F09080C5.D
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062

Handwritten:
 9/12/00

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

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)
gpc	1.000	gpc correction factor

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (NG)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	4.952	4.952	(1.000)	120504	40.0000		
* 2 Naphthalene-d8	136	6.470	6.475	(1.000)	457238	40.0000		
* 3 Acenaphthene-d10	164	9.467	9.471	(1.000)	242756	40.0000		
* 4 Phenanthrene-d10	188	12.752	12.762	(1.000)	376845	40.0000		
* 5 Chrysene-d12	240	19.382	19.397	(1.000)	398154	40.0000		
* 6 Perylene-d12	264	22.747	22.757	(1.000)	414435	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.			

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
-----	----	--	-----	-----	-----	-----	-----
35 Nitrobenzene	77				Compound Not Detected.		
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	5.604	5.609	(0.866)	257881	62.9809	0.157 (a)
\$ 155 2-Fluorobiphenyl	172	8.190	8.195	(0.865)	414831	51.9622	0.130 (a)
\$ 156 Terphenyl-d14	244	16.828	16.833	(0.868)	580233	67.0973	0.168 (a)
\$ 157 Phenol-d5	99	4.664	4.669	(0.942)	473957	88.3986	0.221 (a)
\$ 158 2-Fluorophenol	112	3.644	3.638	(0.736)	309412	73.8468	0.185 (a)
\$ 159 2,4,6-Tribromophenol	330	11.197	11.208	(0.878)	77556	95.8603	0.240 (a)
\$ 186 2-Chlorophenol-d4	132	4.760	4.760	(0.961)	369592	95.6032	0.239 (a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.161	5.160	(1.042)	130890	47.9811	0.120 (a)

QC Flag Legend

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

672 198

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 002

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/31/00

Work Order: DJP90103

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: 6.8

QC Batch: 0255104

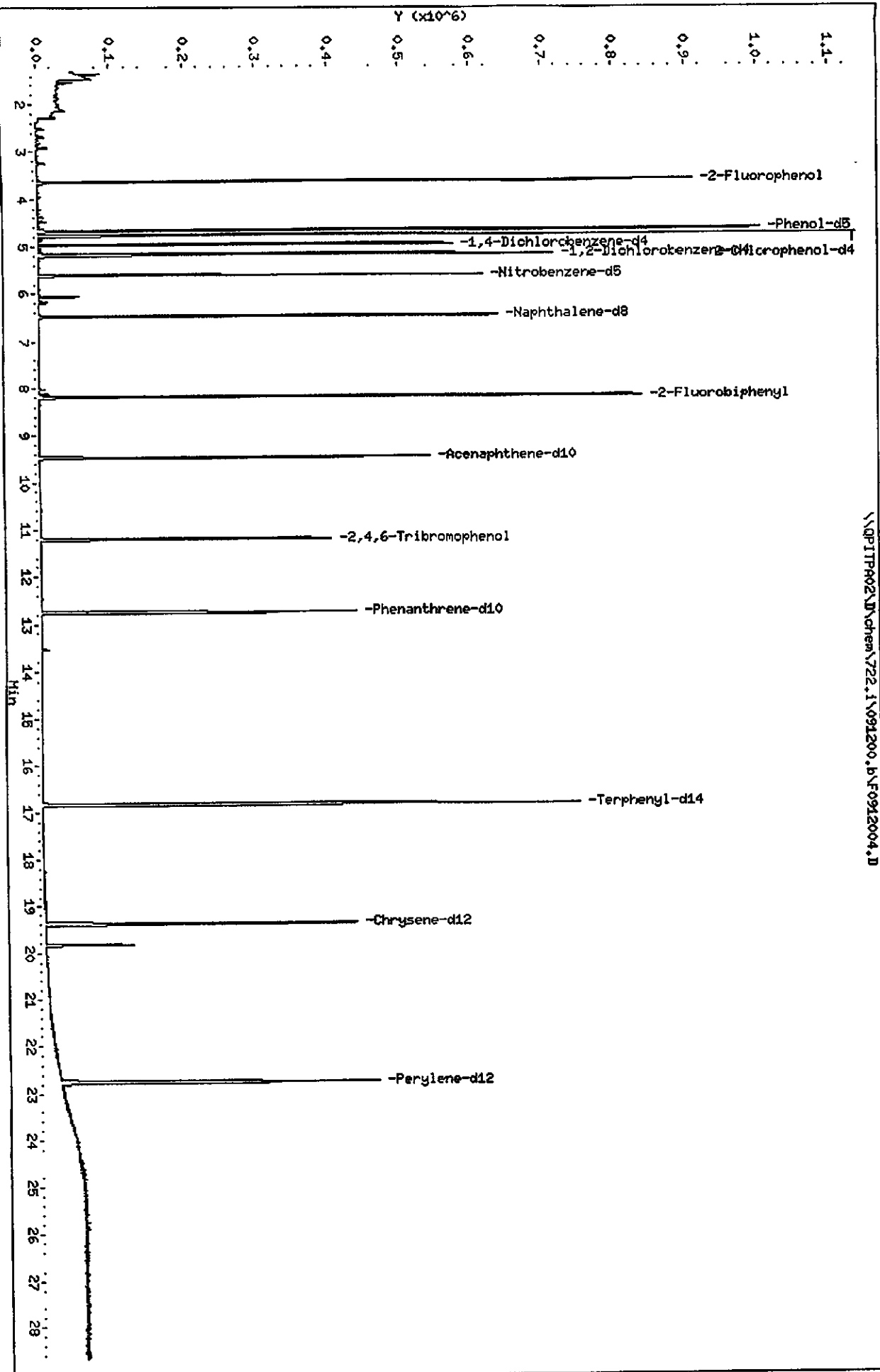
Client Sample Id: DF/S1/242/SDC/033

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 I

Data File: \\QPITPA02\chem\722.1\091200.b\F0912004.D
 Date: 12-SEP-2000 11:36
 Client ID: DF/SL/242/SDC/033
 Sample Info: COH310206-002 9/07/00 TCLP (0255104)
 Volume Injected (uL): 2.0
 Column phase: Hp5-HS

Instrument: 722.1
 Operator: 007062
 Column diameter: 0.25



STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\091200.b\F0912004.D
 Lab Smp Id: DJP90103 Client Smp ID: DF/S1/242/SDC/033
 Inj Date : 12-SEP-2000 11:36 MS Autotune Date: 07-SEP-2000 08:23
 Operator : 007062 Inst ID: 722.i
 Smp Info : C0H310206-002 9/07/00 TCLP (0255104)
 Misc Info : djp90103,091200.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\091200.b\8270b.m
 Meth Date : 12-Sep-2000 08:47 bungardf Quant Type: ISTD
 Cal Date : 08-SEP-2000 08:37 Cal File: F09080C5.D
 Als bottle: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062

Handwritten:
 9/12/00

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

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)
gpc	1.000	gpc correction factor

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	4.956	4.952 (1.000)	114935	40.0000	(Q)	
* 2 Naphthalene-d8	136	6.468	6.475 (1.000)	436678	40.0000		
* 3 Acenaphthene-d10	164	9.465	9.471 (1.000)	231332	40.0000		
* 4 Phenanthrene-d10	188	12.750	12.762 (1.000)	363872	40.0000		
* 5 Chrysene-d12	240	19.380	19.397 (1.000)	393028	40.0000		
* 6 Perylene-d12	264	22.750	22.757 (1.000)	407683	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.					

Data File: \\qpitpa02\d\chem\722.i\091200.b\F0912004.D
Report Date: 12-Sep-2000 12:09

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
35 Nitrobenzene	77				Compound Not Detected.		
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	5.608	5.609	(0.867)	268812	68.7415	0.172 (a)
\$ 155 2-Fluorobiphenyl	172	8.193	8.195	(0.866)	444436	58.4198	0.146 (a)
\$ 156 Terphenyl-d14	244	16.831	16.833	(0.869)	593620	69.5407	0.174 (a)
\$ 157 Phenol-d5	99	4.662	4.669	(0.941)	477886	93.4501	0.234 (a)
\$ 158 2-Fluorophenol	112	3.642	3.638	(0.735)	324771	81.2682	0.203 (a)
\$ 159 2,4,6-Tribromophenol	330	11.201	11.208	(0.878)	80166	102.619	0.256 (a)
\$ 186 2-Chlorophenol-d4	132	4.758	4.760	(0.960)	380410	103.169	0.258 (a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.164	5.160	(1.042)	141237	54.2827	0.136 (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

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 003

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/31/00

Work Order: DJP91103

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: 9.2

QC Batch: 0255104

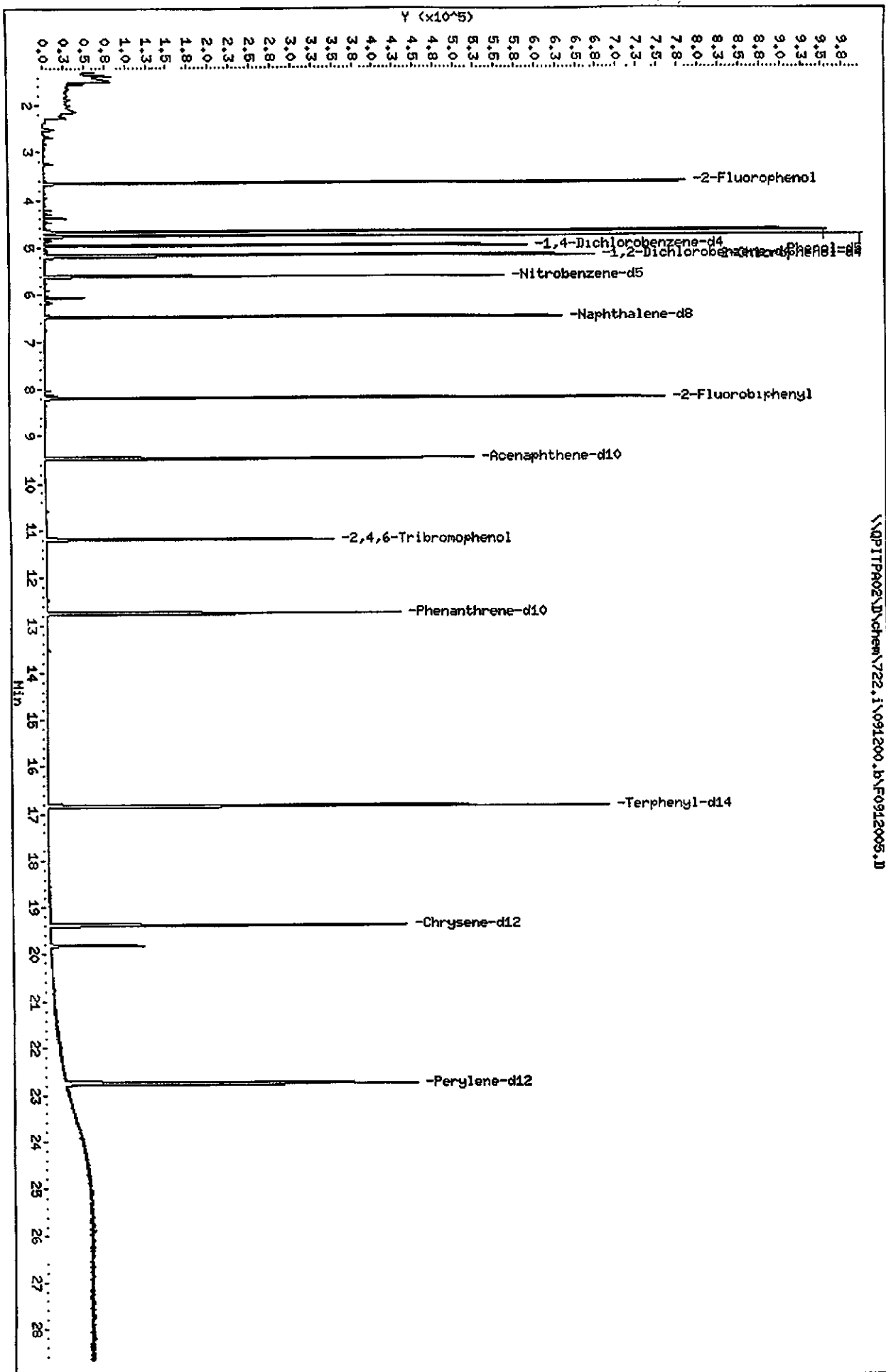
Client Sample Id: DF/S1/242/SDC/034

CONCENTRATION UNITS:

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

Data File: \\QPI7PA02\chem\722.i\091200.b\F0912005.D
 Date: 12-SEP-2000 12:10
 Client ID: DF/SL/242/SDC/034
 Sample Info: COH10206-003 9/07/00 TCLP (0255104)
 Volume Injected (uL): 2.0
 Column phase: Hp5-MS

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



STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\091200.b\F0912005.D
 Lab Smp Id: DJP91103 Client Smp ID: DF/S1/242/SDC/034
 Inj Date : 12-SEP-2000 12:10 MS Autotune Date: 07-SEP-2000 08:23
 Operator : 007062 Inst ID: 722.i
 Smp Info : C0H310206-003 9/07/00 TCLP (0255104)
 Misc Info : djp91103,091200.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\091200.b\8270b.m
 Meth Date : 12-Sep-2000 08:47 bungardf Quant Type: ISTD
 Cal Date : 08-SEP-2000 08:37 Cal File: F09080C5.D
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062

ABB
9/12/00

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

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)
gpc	1.000	gpc correction factor

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (NG)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4		152	4.954	4.952	(1.000)	112589	40.0000	(Q)
* 2 Naphthalene-d8		136	6.472	6.475	(1.000)	428837	40.0000	
* 3 Acenaphthene-d10		164	9.463	9.471	(1.000)	225950	40.0000	
* 4 Phenanthrene-d10		188	12.754	12.762	(1.000)	350629	40.0000	
* 5 Chrysene-d12		240	19.384	19.397	(1.000)	380750	40.0000	
* 6 Perylene-d12		264	22.744	22.757	(1.000)	394960	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.					

Data File: \\qpitpa02\d\chem\722.i\091200.b\F0912005.D
Report Date: 12-Sep-2000 12:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
35 Nitrobenzene	77				Compound Not Detected.		
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	5.606	5.609	(0.866)	241297	62.8335	0.157(a)
\$ 155 2-Fluorobiphenyl	172	8.192	8.195	(0.866)	395507	53.2265	0.133(a)
\$ 156 Terphenyl-d14	244	16.830	16.833	(0.868)	550493	66.5680	0.166(a)
\$ 157 Phenol-d5	99	4.666	4.669	(0.942)	444061	88.6450	0.222(a)
\$ 158 2-Fluorophenol	112	3.646	3.638	(0.736)	295772	75.5539	0.189(a)
\$ 159 2,4,6-Tribromophenol	330	11.199	11.208	(0.878)	70890	94.1723	0.235(a)
\$ 186 2-Chlorophenol-d4	132	4.762	4.760	(0.961)	345121	95.5491	0.239(a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.163	5.160	(1.042)	126148	49.4937	0.124(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

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 004

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/31/00

Work Order: DJP92103

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: 12

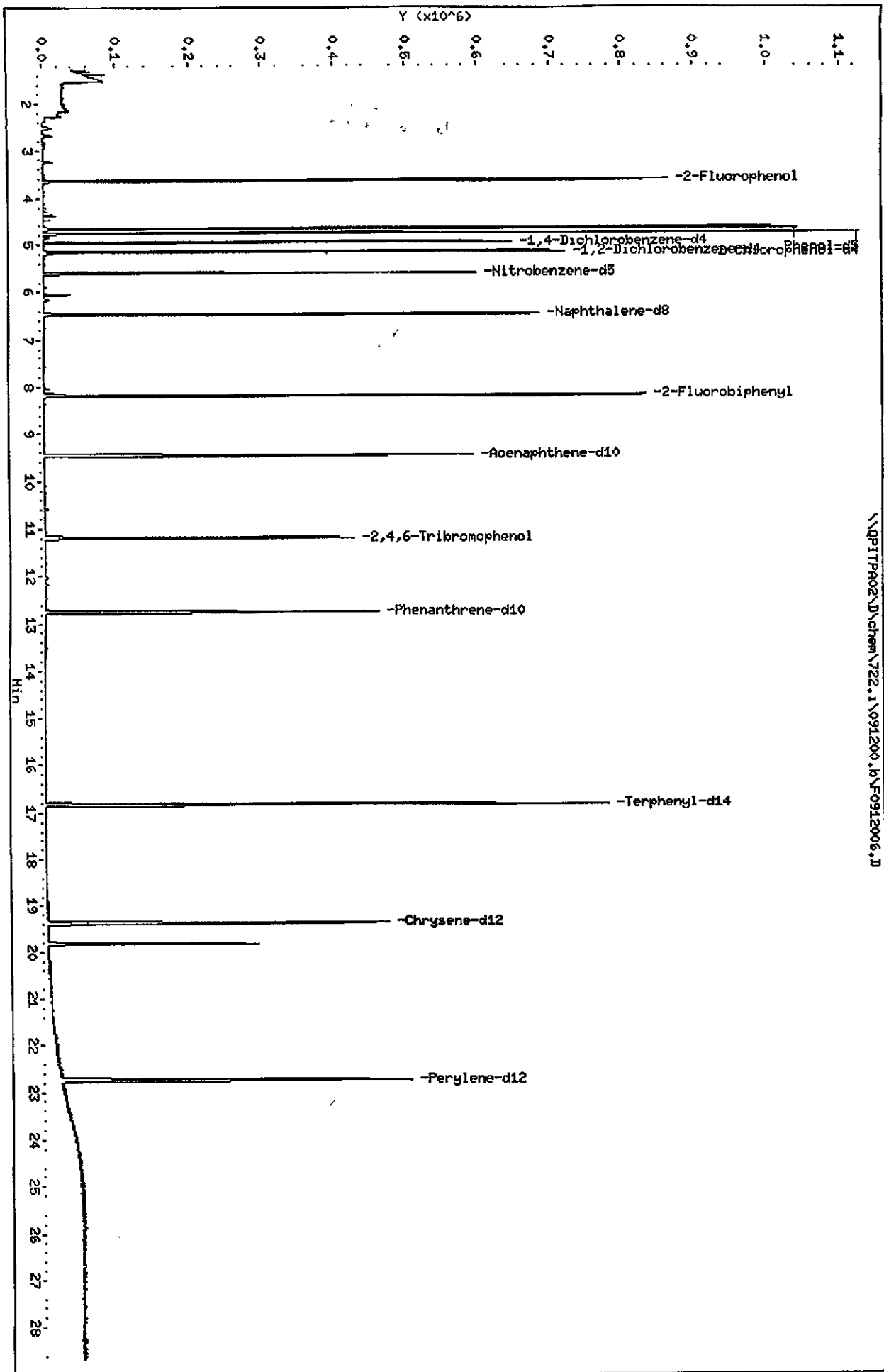
QC Batch: 0255104

Client Sample Id: DF/S1/242/SDC/035

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: \\QPITPA02\chem\722.1\091200.b\F0912006.D
Date: 12-SEP-2000 12:44
Client ID: DF/SL/242/SLC/035
Sample Info: COH310206-004 9/07/00 TCLP (0255104)
Volume Injected (uL): 2.0
Column phase: Hp5-HS

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



672.208

Data File: \\qpitpa02\d\chem\722.i\091200.b\F0912006.D
Report Date: 12-Sep-2000 13:16

Page 1

STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\091200.b\F0912006.D
 Lab Smp Id: DJP92103 Client Smp ID: DF/S1/242/SDC/035
 Inj Date : 12-SEP-2000 12:44 MS Autotune Date: 07-SEP-2000 08:23
 Operator : 007062 Inst ID: 722.i
 Smp Info : C0H310206-004 9/07/00 TCLP (0255104)
 Misc Info : djp92103,091200.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\091200.b\8270b.m
 Meth Date : 12-Sep-2000 08:47 bungardf Quant Type: ISTD
 Cal Date : 08-SEP-2000 08:37 Cal File: F09080C5.D
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062


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

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)
gpc	1.000	gpc correction factor

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (NG)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	4.952	4.952	(1.000)	123068	40.0000		
* 2 Naphthalene-d8	136	6.464	6.475	(1.000)	471814	40.0000		
* 3 Acenaphthene-d10	164	9.461	9.471	(1.000)	250902	40.0000		
* 4 Phenanthrene-d10	188	12.746	12.762	(1.000)	390238	40.0000		
* 5 Chrysene-d12	240	19.376	19.397	(1.000)	421844	40.0000		
* 6 Perylene-d12	264	22.742	22.757	(1.000)	432157	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.			

Data File: \\qpitpa02\d\chem\722.i\091200.b\F0912006.D
 Report Date: 12-Sep-2000 13:16

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
-----	----	--	-----	-----	-----	-----	-----
35 Nitrobenzene	77				Compound Not Detected.		
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	5.604	5.609	(0.867)	263772	62.4294	0.156 (a)
\$ 155 2-Fluorobiphenyl	172	8.190	8.195	(0.866)	439751	53.2953	0.133 (a)
\$ 156 Terphenyl-d14	244	16.828	16.833	(0.868)	616565	67.2947	0.168 (a)
\$ 157 Phenol-d5	99	4.664	4.669	(0.942)	484047	88.3996	0.221 (a)
\$ 158 2-Fluorophenol	112	3.638	3.638	(0.735)	318032	74.3227	0.186 (a)
\$ 159 2,4,6-Tribromophenol	330	11.192	11.208	(0.878)	84020	100.286	0.251 (a)
\$ 186 2-Chlorophenol-d4	132	4.755	4.760	(0.960)	375635	95.1420	0.238 (a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.161	5.160	(1.042)	137035	49.1872	0.123 (a)

QC Flag Legend

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

672-210

**GC/MS SEMIVOLATILE
CALIBRATION DATA**

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Instrument ID: 722

Calibration Date(s): 09/08/00

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

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:		RRF1	=F09080C1.D	RRF2	=F09080C2.D			
RRF3		=F09080C3.D	RRF4	=F09080C4.D	RRF5	=F09080C5.D		
COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	$\overline{RRF}$	% RSD
Phenol	*	2.027	1.879	1.913	1.904	1.859	1.916	3.4*
bis(2-Chloroethyl) ether		1.546	1.441	1.488	1.473	1.449	1.479	2.8
2-Chlorophenol		1.478	1.380	1.417	1.399	1.380	1.411	2.9
1,3-Dichlorobenzene		1.605	1.519	1.558	1.514	1.486	1.536	3.0
1,4-Dichlorobenzene	*	1.631	1.546	1.581	1.538	1.505	1.560	3.1*
1,2-Dichlorobenzene		1.506	1.418	1.455	1.416	1.370	1.433	3.5
2-Methylphenol		1.284	1.200	1.225	1.257	1.214	1.236	2.8
2,2'-oxybis(1-Chloropropane		1.739	1.577	1.598	1.560	1.478	1.590	6.0
4-Methylphenol		1.343	1.224	1.268	1.339	1.307	1.296	3.9
Hexachloroethane		0.609	0.576	0.593	0.578	0.565	0.584	2.9
Nitrobenzene		0.362	0.362	0.382	0.379	0.378	0.373	2.6
Isophorone		0.684	0.644	0.668	0.677	0.669	0.668	2.2
2-Nitrophenol	*	0.130	0.151	0.166	0.176	0.186	0.162	13.6*
2,4-Dimethylphenol		0.358	0.338	0.350	0.351	0.349	0.349	2.0
bis(2-Chloroethoxy)methane		0.456	0.426	0.441	0.438	0.435	0.439	2.5
N-Nitroso-di-n-propylamine	#	0.987	0.932	0.958	0.990	0.989	0.971	2.6#
2,4-Dichlorophenol	*	0.279	0.272	0.282	0.284	0.285	0.280	1.9*
1,2,4-Trichlorobenzene		0.315	0.300	0.310	0.299	0.298	0.304	2.5
Naphthalene		1.134	1.054	1.091	1.058	1.038	1.075	3.6
4-Chloroaniline		0.442	0.418	0.431	0.434	0.432	0.431	2.0
Hexachlorobutadiene	*	0.168	0.162	0.167	0.160	0.160	0.163	2.3*
4-Chloro-3-Methylphenol	*	0.285	0.282	0.297	0.313	0.316	0.299	5.2*
2-Methylnaphthalene		0.721	0.676	0.701	0.706	0.701	0.701	2.4
Hexachlorocyclopentadiene	#	0.315	0.316	0.356	0.350	0.359	0.339	6.4#
2,4,6-Trichlorophenol	*	0.344	0.330	0.361	0.362	0.364	0.352	4.3*
2,4,5-Trichlorophenol		0.362	0.354	0.392	0.386	0.400	0.379	5.2
2-Chloronaphthalene		1.240	1.111	1.183	1.136	1.111	1.156	4.8
2-Nitroaniline		0.247	0.287	0.327	0.351	0.365	0.315	15.3
Dimethylphthalate		1.335	1.253	1.348	1.345	1.354	1.327	3.2
Acenaphthylene		1.914	1.760	1.890	1.844	1.839	1.849	3.2
2,6-Dinitrotoluene		0.154	0.201	0.244	0.269	0.288	0.231	23.5
3-Nitroaniline		0.224	0.276	0.317	0.344	0.358	0.304	18.0
Acenaphthene	*	1.218	1.107	1.184	1.179	1.172	1.172	3.4*
2,4-Dinitrophenol	#	0.022	0.053	0.075	0.106	0.133	0.078	55.7#<-
4-Nitrophenol	#	0.135	0.168	0.195	0.204	0.209	0.182	16.7#
Dibenzofuran		1.690	1.542	1.651	1.621	1.619	1.625	3.3
2,4-Dinitrotoluene		0.179	0.269	0.331	0.371	0.398	0.310	28.3

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

672 212

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument ID: 722

Calibration Date(s): 09/08/00

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

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:		RRF1 =F09080C1.D	RRF2 =F09080C2.D				
RRF3 =F09080C3.D		RRF4 =F09080C4.D	RRF5 =F09080C5.D				
COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	$\overline{RRF}$	% RSD
Diethylphthalate	1.352	1.284	1.384	1.380	1.362	1.352	3.0
4-Chlorophenyl-phenylether	0.643	0.590	0.636	0.635	0.641	0.629	3.5
Fluorene	1.384	1.281	1.377	1.376	1.372	1.358	3.2
4-Nitroaniline	0.250	0.308	0.355	0.378	0.390	0.336	17.1
4,6-Dinitro-2-methylphenol	0.030	0.058	0.079	0.098	0.114	0.076	43.3
N-Nitrosodiphenylamine (1)	0.594	0.551	0.567	0.558	0.561	0.566	2.9*
4-Bromophenyl-phenylether	0.209	0.191	0.201	0.196	0.200	0.199	3.3
Hexachlorobenzene	0.225	0.200	0.213	0.208	0.213	0.212	4.3
Pentachlorophenol	0.077	0.103	0.124	0.130	0.140	0.115	21.7#
Phenanthrene	1.195	1.060	1.112	1.066	1.064	1.099	5.2
Anthracene	1.214	1.093	1.158	1.103	1.107	1.135	4.5
Carbazole	1.142	1.066	1.123	1.071	1.069	1.094	3.3
Di-n-Butylphthalate	1.429	1.343	1.402	1.313	1.275	1.352	4.7
Fluoranthene	1.295	1.213	1.275	1.186	1.175	1.229	4.4*
Pyrene	1.146	1.063	1.115	1.117	1.112	1.111	2.7
Butylbenzylphthalate	0.618	0.589	0.618	0.607	0.594	0.605	2.2
3,3'-Dichlorobenzidine	0.444	0.423	0.467	0.451	0.456	0.448	3.7
Benzo(a)Anthracene	1.198	1.124	1.174	1.138	1.129	1.153	2.8
Chrysene	1.138	1.059	1.108	1.072	1.060	1.087	3.2
bis(2-ethylhexyl)Phthalate	0.898	0.840	0.872	0.837	0.815	0.852	3.8
Di-n-octylphthalate	1.578	1.404	1.416	1.286	1.176	1.372	11.0*
Benzo(b)fluoranthene	1.258	1.137	1.228	1.138	1.193	1.191	4.5
Benzo(k)fluoranthene	1.357	1.097	1.055	1.038	0.862	1.082	16.5
Benzo(a)pyrene	1.224	1.097	1.129	1.058	1.020	1.106	7.1*
Indeno(1,2,3-cd)pyrene	1.568	1.408	1.490	1.417	1.390	1.455	5.1
Dibenz(a,h)anthracene	1.390	1.223	1.275	1.182	1.159	1.246	7.4
Benzo(g,h,i)perylene	1.364	1.235	1.325	1.275	1.245	1.289	4.3
Pyridine	1.505	1.400	1.480	1.409	1.348	1.428	4.5
N-Nitrosodimethylamine	0.927	0.883	0.901	0.865	0.835	0.882	4.0
Aniline	1.998	1.857	1.940	1.886	1.839	1.904	3.4
Benzyl Alcohol	0.965	0.925	0.988	0.998	0.989	0.973	3.0
Benzoic Acid	0.078	0.151	0.168	0.179	0.198	0.155	30.0
2,3,4,6-Tetrachlorophenol	0.265	0.282	0.323	0.325	0.332	0.305	9.8
2,3,5,6-Tetrachlorophenol	0.251	0.268	0.313	0.325	0.336	0.299	12.4
1,2-Diphenylhydrazine	0.908	0.797	0.833	0.793	0.800	0.826	5.9

(1) Cannot be separated from Diphenylamine

Contract:

Lab Code:

Case No. :

SAS No. :

SDG No. :

Instrument ID: 722

Calibration Date(s) : 09/08/00

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

Max %RSD for CCC(*) = 30.0%

[illegible]

672 214

Data File: \\qpitpa02\d\chem\722.i\090800.b\F09080C5.D
Report Date: 09/08/2000

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
Lab File ID: F09080C5.D
Analysis Type: NONE

Injection Date: 08-SEP-2000 08:37
Lab Sample ID: sstd160
Method File: \\QPITPA02\D\chem\722.i\090800.b\

COMPOUND	%RSD
=====	=====
7,12-dimethylbenz[a]anthracen	7.2
Benzo(k)fluoranthene	16.5
Benzo(a)pyrene	7.1
Indeno(1,2,3-cd)pyrene	5.1
Dibenz(a,h)anthracene	7.4
Benzo(g,h,i)perylene	4.3

The average of all %RSD's in the initial calibration is 7.1

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
 Lab File ID: F09080C5.D
 Analysis Type: NONE

Injection Date: 08-SEP-2000 08:37
 Lab Sample ID: sstd160
 Method File: \\QPITPA02\D\chem\722.i\090800.b\

COMPOUND	%RSD
Pyridine	4.5
N-Nitrosodimethylamine	4.0
Methyl methanesulfonate	2.3
2-Fluorophenol	3.3
Aniline	3.4
Phenol-d5	3.6
Phenol	3.4
bis(2-Chloroethyl)ether	2.8
2-Chlorophenol-d4	3.0
2-Chlorophenol	2.9
1,3-Dichlorobenzene	3.0
1,4-Dichlorobenzene	3.1
Benzyl Alcohol	3.0
1,2-Dichlorobenzene-d4	3.7
1,2-Dichlorobenzene	3.5
2-Methylphenol	2.8
2,2'-oxybis(1-Chloropropane)	6.0
4-Methylphenol	3.9
N-Nitroso-di-n-propylamine	2.6
Hexachloroethane	2.9
Nitrobenzene-d5	4.9
Nitrobenzene	2.6
Isophorone	2.2
2-Nitrophenol	13.6
2,4-Dimethylphenol	2.0
bis(2-Chloroethoxy)methane	2.5
Benzoic Acid	30.0
2,4-Dichlorophenol	1.9
1,2,4-Trichlorobenzene	2.5
Naphthalene	3.6
4-Chloroaniline	2.0
Hexachlorobutadiene	2.3
4-Chloro-3-Methylphenol	5.2
2-Methylnaphthalene	2.4
1-Methylnaphthalene	3.2
Hexachlorocyclopentadiene	6.4
2,4,6-Trichlorophenol	4.3
2,4,5-Trichlorophenol	5.2
2-Fluorobiphenyl	3.8

Data File: \\qpitpa02\d\chem\722.i\090800.b\F09080C5.D
 Report Date: 09/08/2000

INITIAL CALIBRATION REPORT

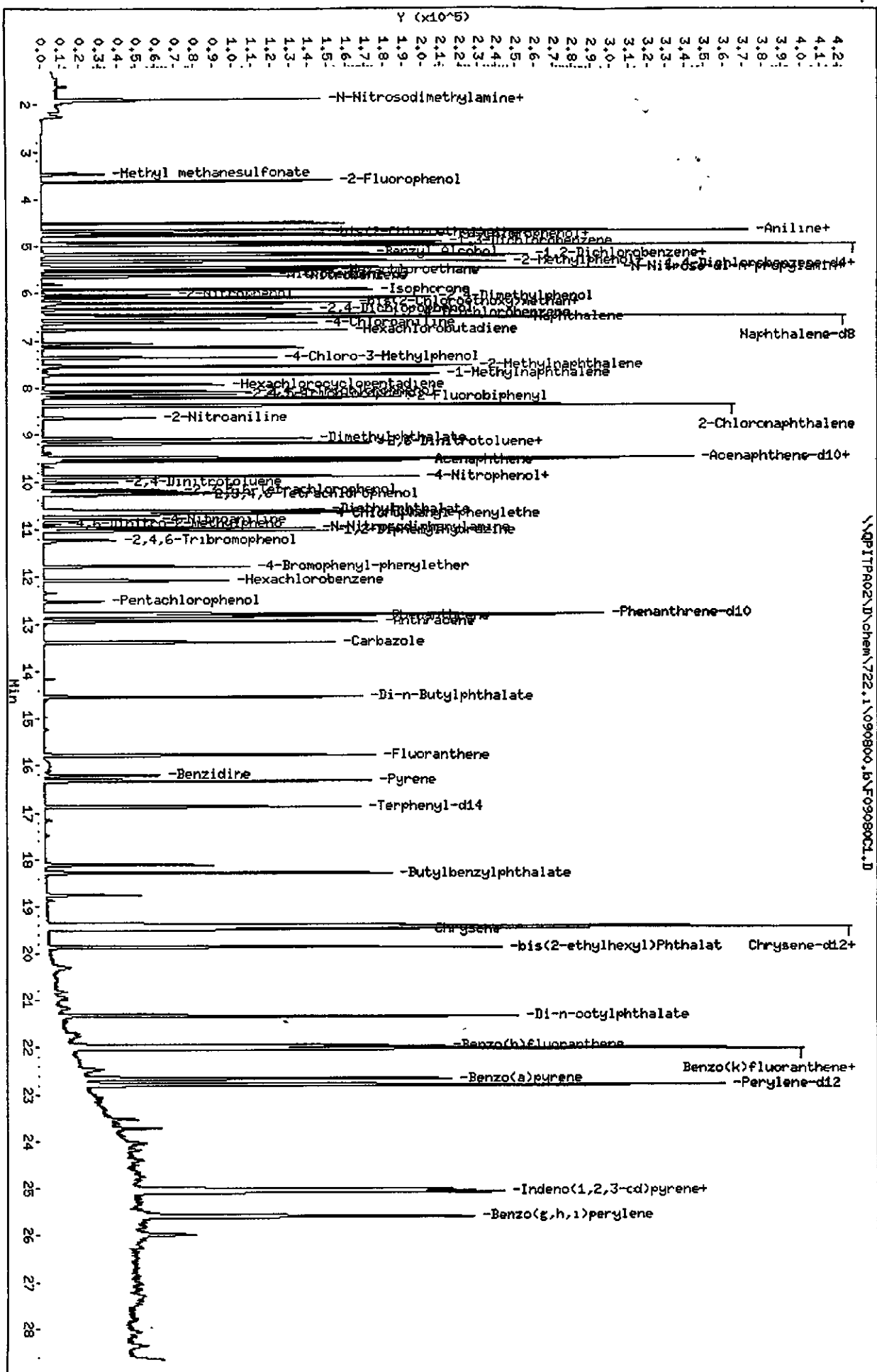
Instrument ID: 722.i
 Lab File ID: F09080C5.D
 Analysis Type: NONE

Injection Date: 08-SEP-2000 08:37
 Lab Sample ID: sstd160
 Method File: \\QPITPA02\D\chem\722.i\090800.b\

COMPOUND	%RSD
-----	-----
2-Chloronaphthalene	4.8
2-Nitroaniline	15.3
Dimethylphthalate	3.2
Acenaphthylene	3.2
2,6-Dinitrotoluene	23.5
3-Nitroaniline	18.0
Acenaphthene	3.4
2,4-Dinitrophenol	55.7
Dibenzofuran	3.3
4-Nitrophenol	16.7
2,4-Dinitrotoluene	28.3
2,3,5,6-Tetrachlorophenol	12.4
2,3,4,6-Tetrachlorophenol	9.8
Diethylphthalate	3.0
Fluorene	3.2
4-Chlorophenyl-phenylether	3.5
4-Nitroaniline	17.1
4,6-Dinitro-2-methylphenol	43.3
N-Nitrosodiphenylamine	2.9
1,2-Diphenylhydrazine	5.9
2,4,6-Tribromophenol	9.0
4-Bromophenyl-phenylether	3.3
Hexachlorobenzene	4.3
Pentachlorophenol	21.7
Phenanthrene	5.2
Anthracene	4.5
Carbazole	3.3
Di-n-Butylphthalate	4.7
Fluoranthene	4.4
Benzidine	6.1
Pyrene	2.7
Terphenyl-d14	3.1
Butylbenzylphthalate	2.2
Benzo(a)Anthracene	2.8
3,3'-Dichlorobenzidine	3.7
Chrysene	3.2
bis(2-ethylhexyl)Phthalate	3.8
Di-n-octylphthalate	11.0
Benzo(b)fluoranthene	4.5

Data File: \\QPIITPA02\J\chem\722.1\090800.b\F0908001.D
 Date : 08-SEP-2000 06:12
 Client ID:
 Sample Info: SST020 (10ppb) 194-188-3
 Volume Injected (uL): 2.0
 Column phase: Hp5-MS

Instrument: 722.1
 Operator: 007062
 Column diameter: 0.25



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STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\090800.b\F09080C1.D
Lab Smp Id: sstd020 Client Smp ID: SSTD020
Inj Date : 08-SEP-2000 06:21 MS Autotune Date: 07-SEP-2000 08:23
Operator : 007062 Inst ID: 722.i
Smp Info : SSTD020 (10ppb) 194-188-3
Misc Info : sstd020,090800.b,8270b.m,2-root.sub,1,1
Comment :
Method : \\QPITPA02\D\chem\722.i\090800.b\8270b.m
Meth Date : 08-Sep-2000 06:56 bungardf Quant Type: ISTD
Cal Date : 08-SEP-2000 06:21 Cal File: F09080C1.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC062

FBD
9/8/00

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(NG)	(NG)
*****	***	==	*****	*****	*****	*****	*****
* 1 1,4-Dichlorobenzene-d4	152	4.964	4.964	(1.000)	79964	40.0000	
* 2 Naphthalene-d8	136	6.492	6.492	(1.000)	291238	40.0000	
* 3 Acenaphthene-d10	164	9.494	9.494	(1.000)	147893	40.0000	
* 4 Phenanthrene-d10	188	12.790	12.790	(1.000)	247466	40.0000	
* 5 Chrysene-d12	240	19.420	19.420	(1.000)	291141	40.0000	
* 6 Perylene-d12	264	22.785	22.785	(1.000)	307324	40.0000	
10 N-Nitrosodimethylamine	74	1.897	1.897	(0.382)	37082	20.0000	38.2
9 Pyridine	79	1.897	1.897	(0.382)	60159	20.0000	37.4
16 Methyl methanesulfonate	80	3.473	3.473	(0.700)	15691	20.0000	19.6
21 Aniline	93	4.665	4.665	(0.940)	79894	20.0000	26.4
22 Phenol	94	4.675	4.675	(0.942)	81028	20.0000	27.2
23 bis(2-Chloroethyl)ether	93	4.734	4.734	(0.954)	61824	20.0000	26.5
24 2-Chlorophenol	128	4.782	4.782	(0.963)	59106	20.0000	22.8
26 1,3-Dichlorobenzene	146	4.926	4.926	(0.992)	64168	20.0000	20.9
27 1,4-Dichlorobenzene	146	4.980	4.980	(1.003)	65222	20.0000	20.7
28 1,2-Dichlorobenzene	146	5.188	5.188	(1.045)	60235	20.0000	21.1
29 Benzyl Alcohol	108	5.151	5.151	(1.038)	38590	20.0000	22.3
30 2-Methylphenol	108	5.306	5.306	(1.069)	51356	20.0000	23.8
31 2,2'-oxybis(1-Chloropropane)-	45	5.322	5.322	(1.072)	69535	20.0000	29.9
32 N-Nitroso-di-n-propylamine	70	5.471	5.471	(1.102)	39461	20.0000	24.5
192 4-Methylphenol	108	5.466	5.466	(1.101)	53692	20.0000	24.2
34 Hexachloroethane	117	5.530	5.530	(1.114)	24363	20.0000	20.6
35 Nitrobenzene	77	5.637	5.637	(0.868)	52801	20.0000	19.3
41 Isophorone	82	5.915	5.915	(0.911)	99612	20.0000	22.6
42 2-Nitrophenol	139	6.027	6.027	(0.928)	18978	20.0000	14.1
43 2,4-Dimethylphenol	107	6.086	6.086	(0.937)	52119	20.0000	19.8

Data File: \\qpitpa02\d\chem\722.i\090800.b\F09080C1.D
Report Date: 08-Sep-2000 06:56

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
44 bis(2-Chloroethoxy)methane	93	6.198	6.198	(0.955)	66420	20.0000	25.0
48 2,4-Dichlorophenol	162	6.326	6.326	(0.974)	40683	20.0000	19.1
49 Benzoic Acid	122	6.209	6.209	(0.956)	11299	20.0000	9.16
50 1,2,4-Trichlorobenzene	180	6.433	6.433	(0.991)	45862	20.0000	18.5
51 Naphthalene	128	6.513	6.513	(1.003)	165113	20.0000	21.0
52 4-Chloroaniline	127	6.625	6.625	(1.021)	64330	20.0000	21.9
56 Hexachlorobutadiene	225	6.770	6.770	(1.043)	24467	20.0000	15.3
59 4-Chloro-3-Methylphenol	107	7.357	7.357	(1.133)	41504	20.0000	17.7
62 2-Methylnaphthalene	142	7.544	7.544	(1.162)	105053	20.0000	19.3
205 1-Methylnaphthalene	142	7.720	7.720	(1.189)	98475	20.0000	19.3
64 Hexachlorocyclopentadiene	237	7.929	7.929	(0.835)	23306	20.0000	15.4
66 2,4,6-Trichlorophenol	196	8.078	8.078	(0.851)	25423	20.0000	18.7
67 2,4,5-Trichlorophenol	196	8.148	8.148	(0.858)	26780	20.0000	18.5
70 2-Chloronaphthalene	162	8.383	8.383	(0.883)	91670	20.0000	21.2
73 2-Nitroaniline	65	8.645	8.645	(0.911)	18280	20.0000	15.6
76 Dimethylphthalate	163	9.083	9.083	(0.957)	98697	20.0000	19.0
78 2,6-Dinitrotoluene	165	9.206	9.206	(0.970)	11364	20.0000	11.1
79 Acenaphthylene	152	9.179	9.179	(0.967)	141572	20.0000	21.0
81 3-Nitroaniline	138	9.467	9.467	(0.997)	16536	20.0000	14.3
82 Acenaphthene	153	9.558	9.558	(1.007)	90083	20.0000	21.1
83 2,4-Dinitrophenol	184	9.681	9.681	(1.020)	1669	20.0000	2.80 (M)
85 4-Nitrophenol	109	9.884	9.884	(1.041)	10004	20.0000	9.79
86 Dabenzofuran	168	9.889	9.889	(1.042)	124973	20.0000	19.6
87 2,4-Dinitrotoluene	165	10.012	10.012	(1.055)	13256	20.0000	9.07
91 2,3,5,6-Tetrachlorophenol	232	10.178	10.178	(1.072)	18560	20.0000	14.5
88 2,3,4,6-Tetrachlorophenol	232	10.274	10.274	(1.082)	19617	20.0000	15.8
93 Diethylphthalate	149	10.605	10.605	(1.117)	99971	20.0000	18.1
94 Fluorene	166	10.637	10.637	(1.120)	102345	20.0000	19.7
95 4-Chlorophenyl-phenylether	204	10.680	10.680	(1.125)	47565	20.0000	18.9
96 4-Nitroaniline	138	10.797	10.797	(1.137)	18505	20.0000	15.2
98 4,6-Dinitro-2-methylphenol	198	10.894	10.894	(0.852)	3779	20.0000	5.10
99 N-Nitrosodiphenylamine	169	10.968	10.968	(0.858)	73444	20.0000	22.5
100 1,2-Diphenylhydrazine	77	11.027	11.027	(0.862)	112377	20.0000	24.9
106 4-Bromophenyl-phenylether	248	11.786	11.786	(0.921)	25820	20.0000	20.2
107 Hexachlorobenzene	284	12.085	12.085	(0.945)	27817	20.0000	20.2
111 Pentachlorophenol	266	12.534	12.534	(0.980)	9553	20.0000	12.3
115 Phenanthrene	178	12.838	12.838	(1.004)	147862	20.0000	21.4
116 Anthracene	178	12.945	12.945	(1.012)	150235	20.0000	21.7
119 Carbazole	167	13.394	13.394	(1.047)	141346	20.0000	22.0
120 Di-n-Butylphthalate	149	14.542	14.542	(1.137)	176875	20.0000	21.3
123 Fluoranthene	202	15.776	15.776	(1.233)	160225	20.0000	20.6
124 Benzidine	184	16.209	16.209	(0.835)	64041	20.0000	22.7
125 Pyrene	202	16.316	16.316	(0.840)	166795	20.0000	20.8
131 Butylbenzylphthalate	149	18.276	18.276	(0.941)	89999	20.0000	22.1
135 3,3'-Dichlorobenzidine	252	19.436	19.436	(1.001)	64649	20.0000	19.9
136 Benzo(a)Anthracene	228	19.377	19.377	(0.998)	174343	20.0000	20.7
137 Chrysene	228	19.484	19.484	(1.003)	165606	20.0000	22.6

Report Date: 08-Sep-2000 06:56

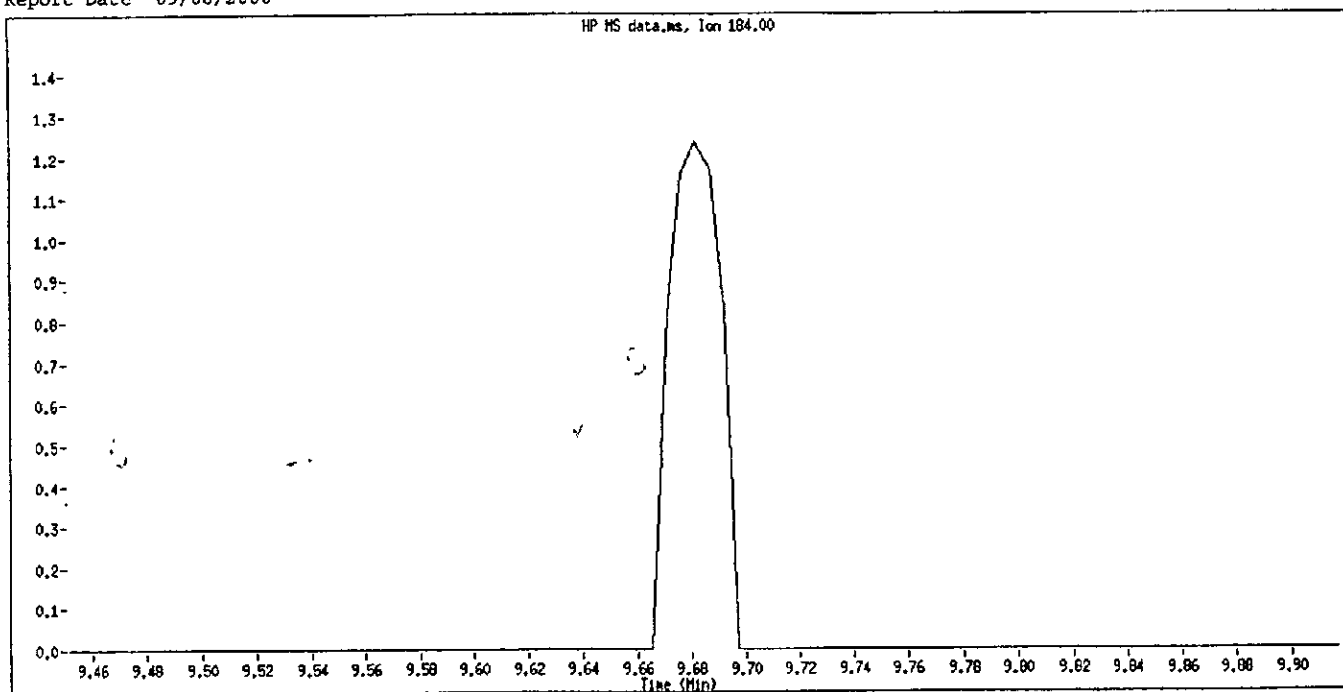
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							(NG)	(NG)
=====	====	==	=====	=====	=====	=====	=====	=====
139 bis(2-ethylhexyl)Phthalate	149	19.858	19.858	(1.023)	130738	20.0000	24.9	
140 Di-n-octylphthalate	149	21.327	21.327	(0.936)	242437	20.0000	17.4	
141 Benzo(b)fluoranthene	252	21.963	21.963	(0.964)	193374	20.0000	15.5	
142 Benzo(k)fluoranthene	252	22.016	22.016	(0.966)	208587	20.0000	17.9	
143 7,12-dimethylbenz[a]anthracen	256	22.016	22.016	(0.966)	87346	20.0000	15.2	
146 Benzo(a)pyrene	252	22.652	22.652	(0.994)	188110	20.0000	18.3	
149 Indeno(1,2,3-cd)pyrene	276	25.018	25.018	(1.098)	241011	20.0000	21.6	
150 Dibenzo(a,h)anthracene	278	25.066	25.066	(1.100)	213635	20.0000	22.0	
151 Benzo(g,h,i)perylene	276	25.595	25.595	(1.123)	209635	20.0000	22.7	
\$ 154 Nitrobenzene-d5	82	5.616	5.616	(0.865)	48904	20.0000	18.2	
\$ 155 2-Fluorobiphenyl	172	8.212	8.212	(0.865)	101891	20.0000	20.8	
\$ 156 Terphenyl-d14	244	16.861	16.861	(0.868)	130575	20.0000	19.8	
\$ 157 Phenol-d5	99	4.665	4.665	(0.940)	74391	20.0000	25.5	
\$ 158 2-Fluorophenol	112	3.639	3.639	(0.733)	57341	20.0000	24.4	
\$ 159 2,4,6-Tribromophenol	330	11.230	11.230	(0.878)	9607	20.0000	16.4	
\$ 186 2-Chlorophenol-d4	132	4.766	4.766	(0.960)	53279	20.0000	22.0	
\$ 187 1,2-Dichlorobenzene-d4	152	5.172	5.172	(1.042)	38003	20.0000	20.3	

QC Flag Legend

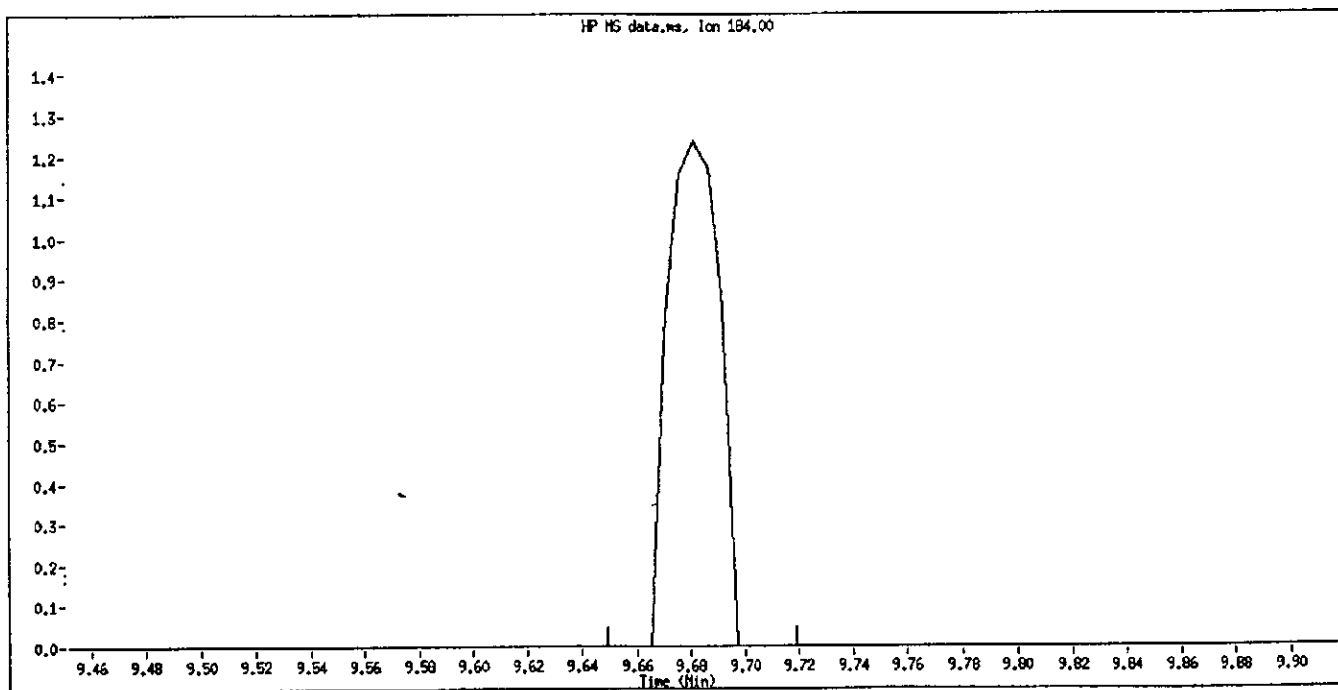
M - Compound response manually integrated.

Data File Name: F09080C1.D
Inj. Date and Time: 08-SEP-2000 06:21
Instrument ID: 722.1
Client ID: SST020
Compound Name: 2,4-Dinitrophenol
CAS #: 51-28-5
Report Date: 09/08/2000

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Original Integration



Manual Integration

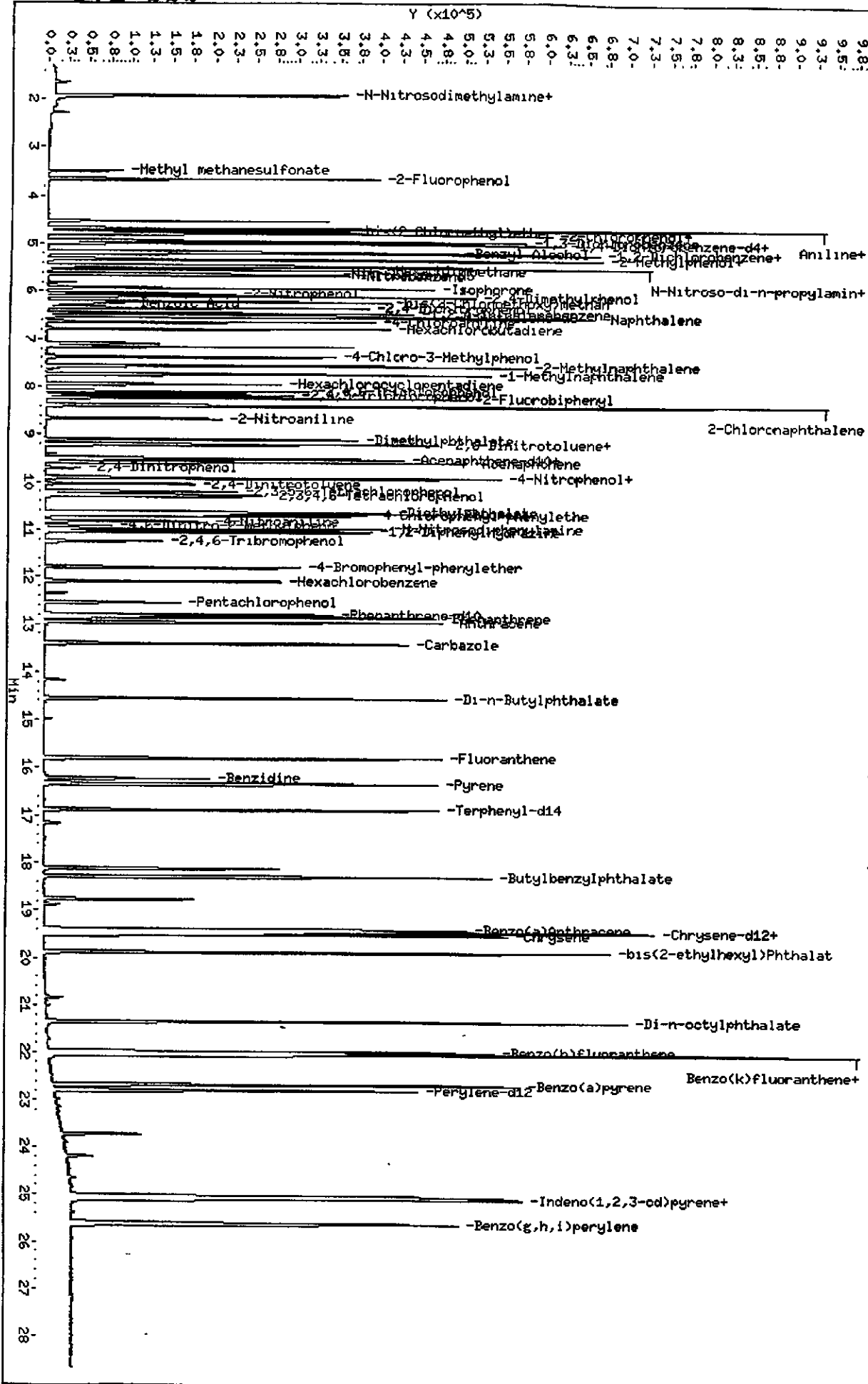
Manually Integrated By: BungardF
Manual Integration Reason: Unknown

$$Y \text{ (}\times 10^5\text{)}$$

Data File: \\QPIFFA02\JNchen\722.1\090800.b\F09080C2.L
Date : 08-SEP-2000 06:55
Client ID:
Sample Info: SSTD050 (289pb) 194-184-8
Volume Injected (uL): 2.0
Column phase: H₂O-MS

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

Page 2



STL - Pittsburgh

Semivolatiles REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\090800.b\F09080C2.D
Lab Smp Id: sstd050 Client Smp ID: SSTD050
Inj Date : 08-SEP-2000 06:55 MS Autotune Date: 07-SEP-2000 08:23
Operator : 007062 Inst ID: 722.i
Smp Info : SSTD050 (25ppb) 194-184-8
Misc Info : sstd050,090800.b,8270b.m,2-root.sub,1,2
Comment :
Method : \\QPITPA02\D\chem\722.i\090800.b\8270b.m
Meth Date : 08-Sep-2000 07:36 bungardf Quant Type: ISTD
Cal Date : 08-SEP-2000 06:55 Cal File: F09080C2.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC062

LAB
9/8/00

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(NG)	(NG)
*****	====	==	=====	=====	=====	=====	=====
* 1 1,4-Dichlorobenzene-d4	152	4.977	4.977	(1.000)	88862	40.0000	
* 2 Naphthalene-d8	136	6.504	6.504	(1.000)	320482	40.0000	
* 3 Acenaphthene-d10	164	9.507	9.507	(1.000)	169887	40.0000	
* 4 Phenanthrene-d10	188	12.798	12.798	(1.000)	300936	40.0000	
* 5 Chrysene-d12	240	19.438	19.438	(1.000)	358333	40.0000	
* 6 Perylene-d12	264	22.798	22.798	(1.000)	405474	40.0000	
10 N-Nitrosodimethylamine	74	1.926	1.926	(0.387)	98134	50.0000	48.8
9 Pyridine	79	1.921	1.921	(0.386)	155472	50.0000	48.2
16 Methyl methanesulfonate	80	3.486	3.486	(0.701)	41401	50.0000	48.7
21 Aniline	93	4.683	4.683	(0.941)	206317	50.0000	48.2
22 Phenol	94	4.694	4.694	(0.943)	208707	50.0000	48.1
23 bis(2-Chloroethyl) ether	93	4.747	4.747	(0.954)	160078	50.0000	48.2
24 2-Chlorophenol	128	4.795	4.795	(0.964)	153286	50.0000	48.3
26 1,3-Dichlorobenzene	146	4.939	4.939	(0.992)	168751	50.0000	48.6
27 1,4-Dichlorobenzene	146	4.998	4.998	(1.004)	171725	50.0000	48.6
28 1,2-Dichlorobenzene	146	5.201	5.201	(1.045)	157539	50.0000	48.5
29 Benzyl Alcohol	108	5.164	5.164	(1.038)	102744	50.0000	48.9
30 2-Methylphenol	108	5.324	5.324	(1.070)	133303	50.0000	48.3
31 2,2'-oxybis(1-Chloropropane)	45	5.335	5.335	(1.072)	175168	50.0000	47.6
32 N-Nitroso-di-n-propylamine	70	5.489	5.489	(1.103)	103528	50.0000	48.6
192 4-Methylphenol	108	5.479	5.479	(1.101)	135976	50.0000	47.7
34 Hexachloroethane	117	5.543	5.543	(1.114)	64005	50.0000	48.6
35 Nitrobenzene	77	5.655	5.655	(0.869)	144987	50.0000	50.0
41 Isophorone	82	5.928	5.928	(0.911)	258190	50.0000	48.5
42 2-Nitrophenol	139	6.040	6.040	(0.929)	60359	50.0000	53.6
43 2,4-Dimethylphenol	107	6.098	6.098	(0.938)	135490	50.0000	48.6

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Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
=====	=====	=====	=====	=====	=====	=====	=====
44 bis (2-Chloroethoxy)methane	93	6.216	6.216	(0.956)	170764	50.0000	48.3
48 2,4-Dichlorophenol	162	6.344	6.344	(0.975)	108927	50.0000	49.3
49 Benzoic Acid	122	6.259	6.259	(0.962)	60486	50.0000	66.0
50 1,2,4-Trichlorobenzene	180	6.451	6.451	(0.992)	120145	50.0000	48.8
51 Naphthalene	128	6.531	6.531	(1.004)	422093	50.0000	48.2
52 4-Chloroaniline	127	6.638	6.638	(1.021)	167474	50.0000	48.6
56 Hexachlorobutadiene	225	6.782	6.782	(1.043)	64832	50.0000	49.1
59 4-Chloro-3-Methylphenol	107	7.370	7.370	(1.133)	113197	50.0000	49.8
62 2-Methylnaphthalene	142	7.557	7.557	(1.162)	270614	50.0000	48.4
205 1-Methylnaphthalene	142	7.733	7.733	(1.189)	251059	50.0000	48.1
64 Hexachlorocyclopentadiene	237	7.942	7.942	(0.835)	67058	50.0000	50.0
66 2,4,6-Trichlorophenol	196	8.091	8.091	(0.851)	70008	50.0000	49.0
67 2,4,5-Trichlorophenol	196	8.166	8.166	(0.859)	75221	50.0000	49.4
70 2-Chloronaphthalene	162	8.396	8.396	(0.883)	235992	50.0000	47.3
73 2-Nitroaniline	65	8.657	8.657	(0.911)	60987	50.0000	53.7
76 Dimethylphthalate	163	9.095	9.095	(0.957)	266010	50.0000	48.4
78 2,6-Dinitrotoluene	165	9.224	9.224	(0.970)	42612	50.0000	56.6
79 Acenaphthylene	152	9.197	9.197	(0.967)	373729	50.0000	47.9
81 3-Nitroaniline	138	9.485	9.485	(0.998)	58575	50.0000	55.2
82 Acenaphthene	153	9.571	9.571	(1.007)	235181	50.0000	47.6
83 2,4-Dinitrophenol	184	9.699	9.699	(1.020)	11192	50.0000	70.0
85 4-Nitrophenol	109	9.897	9.897	(1.041)	35793	50.0000	55.5
86 Dibenzofuran	168	9.907	9.907	(1.042)	327546	50.0000	47.7
87 2,4-Dinitrotoluene	165	10.030	10.030	(1.055)	57143	50.0000	60.0
91 2,3,5,6-Tetrachlorophenol	232	10.191	10.191	(1.072)	56982	50.0000	51.7
88 2,3,4,6-Tetrachlorophenol	232	10.287	10.287	(1.082)	59899	50.0000	51.5
93 Diethylphthalate	149	10.623	10.623	(1.117)	272768	50.0000	48.7
94 Fluorene	166	10.650	10.650	(1.120)	272115	50.0000	48.1
95 4-Chlorophenyl-phenylether	204	10.693	10.693	(1.125)	125264	50.0000	47.8
96 4-Nitroaniline	138	10.816	10.816	(1.138)	65423	50.0000	55.2
98 4,6-Dinitro-2-methylphenol	198	10.917	10.917	(0.853)	21924	50.0000	65.6
99 N-Nitrosodiphenylamine	169	10.981	10.981	(0.858)	207229	50.0000	48.1
100 1,2-Diphenylhydrazine	77	11.040	11.040	(0.863)	299778	50.0000	46.7
106 4-Bromophenyl-phenylether	248	11.799	11.799	(0.922)	71765	50.0000	47.8
107 Hexachlorobenzene	284	12.098	12.098	(0.945)	75079	50.0000	47.0
111 Pentachlorophenol	266	12.546	12.546	(0.980)	38874	50.0000	57.2
115 Phenanthrene	178	12.856	12.856	(1.005)	398770	50.0000	47.0
116 Anthracene	178	12.963	12.963	(1.013)	411247	50.0000	47.4
119 Carbazole	167	13.407	13.407	(1.048)	400988	50.0000	48.3
120 Di-n-Butylphthalate	149	14.550	14.550	(1.137)	505263	50.0000	48.4
123 Fluoranthene	202	15.789	15.789	(1.234)	456304	50.0000	48.4
124 Benzidine	184	16.216	16.216	(0.834)	181615	50.0000	48.0
125 Pyrene	202	16.334	16.334	(0.840)	476336	50.0000	48.1
131 Butylbenzylphthalate	149	18.289	18.289	(0.941)	264040	50.0000	48.8
135 3,3'-Dichlorobenzidine	252	19.448	19.448	(1.001)	189414	50.0000	48.8
136 Benzo(a)Anthracene	228	19.395	19.395	(0.998)	503544	50.0000	48.4
137 Chrysene	228	19.502	19.502	(1.003)	474201	50.0000	48.2

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	====	==	=====	=====	=====	=====	=====
139 bis(2-ethylhexyl) Phthalate	149	19.871	19.871	(1.022)	376417	50.0000	48.3
140 Di-n-octylphthalate	149	21.340	21.340	(0.936)	711728	50.0000	47.1
141 Benzo(b)fluoranthene	252	21.981	21.981	(0.964)	576351	50.0000	47.5
142 Benzo(k)fluoranthene	252	22.034	22.034	(0.966)	555941	50.0000	44.7
143 7,12-dimethylbenz(a)anthracen	256	22.039	22.039	(0.967)	242827	50.0000	45.7
146 Benzo(a)pyrene	252	22.675	22.675	(0.995)	555822	50.0000	47.2
149 Indeno(1,2,3-cd)pyrene	276	25.047	25.047	(1.099)	713898	50.0000	47.3
150 Dibenz(a,h)anthracene	278	25.095	25.095	(1.101)	619875	50.0000	46.8
151 Benzo(g,h,i)perylene	276	25.629	25.629	(1.124)	625885	50.0000	47.5
\$ 154 Nitrobenzene-d5	82	5.634	5.634	(0.866)	137735	50.0000	50.6
\$ 155 2-Fluorobiphenyl	172	8.230	8.230	(0.866)	265320	50.0000	47.6
\$ 156 Terphenyl-d14	244	16.874	16.874	(0.868)	369716	50.0000	47.9
\$ 157 Phenol-d5	99	4.683	4.683	(0.941)	192097	50.0000	48.2
\$ 158 2-Fluorophenol	112	3.657	3.657	(0.735)	151204	50.0000	48.7
\$ 159 2,4,6-Tribromophenol	330	11.243	11.243	(0.879)	29257	50.0000	50.0
\$ 186 2-Chlorophenol-d4	132	4.779	4.779	(0.960)	137855	50.0000	48.2
\$ 187 1,2-Dichlorobenzene-d4	152	5.185	5.185	(1.042)	99124	50.0000	48.4

Date: 08-SEP-2000 07:29

Client ID:

Sample Info: SST080 (40ppb) 194-188-5

Volume Injected (ul): 2.0

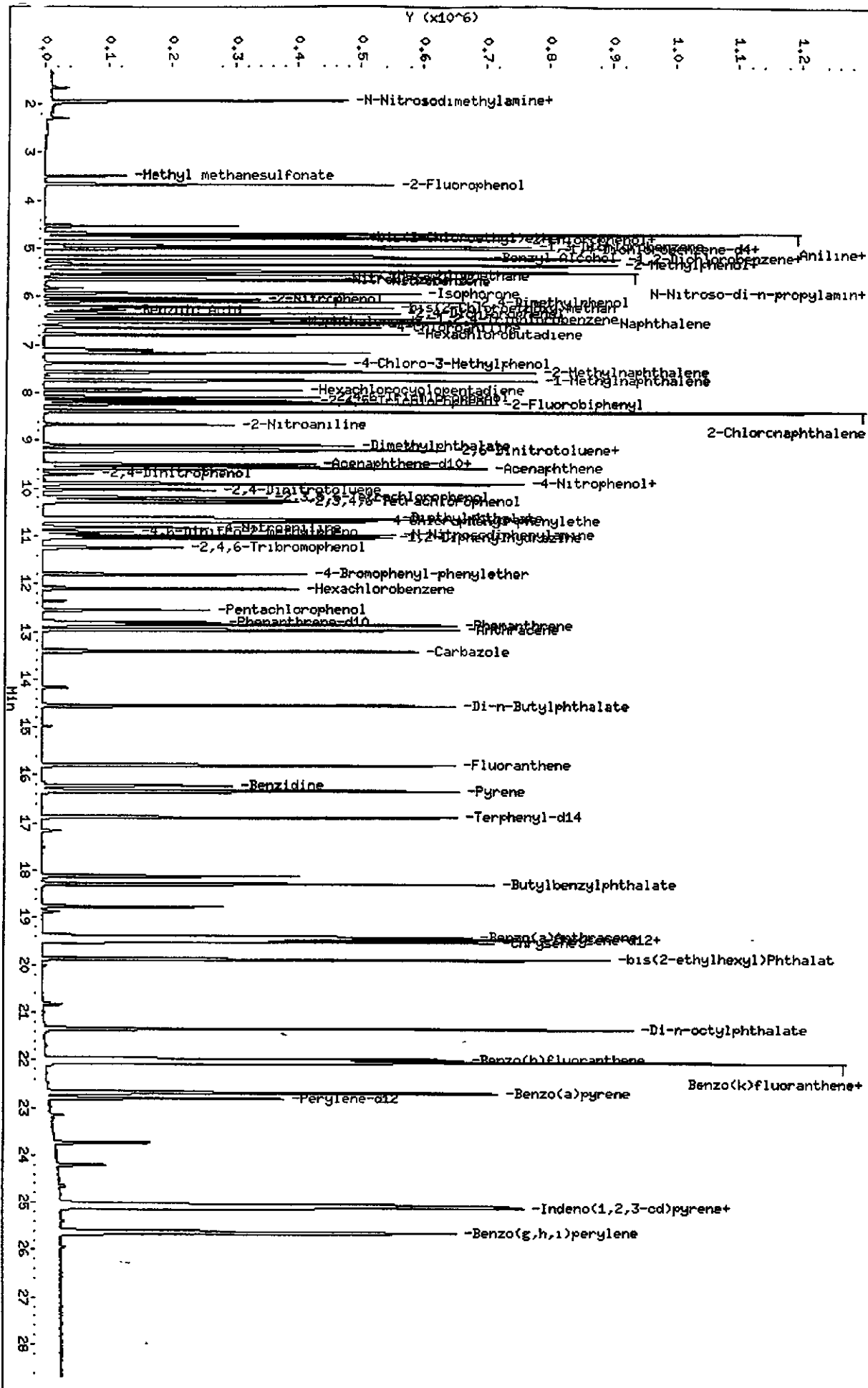
Column phase: HP5-MS

Instrument: 722.1

Operator: 007062

Column diameter: 0.25

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922 229

Report Date: 08-Sep-2000 08:21

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
-----	----	--	-----	-----	-----	-----	-----
44 bis(2-Chloroethoxy)methane	93	6.215	6.215 (0.956)		234471	80.0000	80.0
48 2,4-Dichlorophenol	162	6.343	6.343 (0.975)		149827	80.0000	81.2
49 Benzoic Acid	122	6.274	6.274 (0.965)		89039	80.0000	102
50 1,2,4-Trichlorobenzene	180	6.450	6.450 (0.992)		164695	80.0000	80.4
51 Naphthalene	128	6.530	6.530 (1.004)		579868	80.0000	79.9
52 4-Chloroaniline	127	6.637	6.637 (1.021)		228992	80.0000	80.1
56 Hexachlorobutadiene	225	6.781	6.781 (1.043)		88525	80.0000	80.5
59 4-Chloro-3-Methylphenol	107	7.374	7.374 (1.134)		157782	80.0000	82.4
62 2-Methylnaphthalene	142	7.556	7.556 (1.162)		372523	80.0000	80.2
205 1-Methylnaphthalene	142	7.737	7.737 (1.190)		358274	80.0000	81.8
64 Hexachlorocyclopentadiene	237	7.940	7.940 (0.835)		96803	80.0000	86.5
66 2,4,6-Trichlorophenol	196	8.095	8.095 (0.852)		98367	80.0000	83.8
67 2,4,5-Trichlorophenol	196	8.165	8.165 (0.859)		106754	80.0000	84.9
70 2-Chloronaphthalene	162	8.395	8.395 (0.883)		321970	80.0000	80.3
73 2-Nitroaniline	65	8.662	8.662 (0.911)		89040	80.0000	91.1
76 Dimethylphthalate	163	9.100	9.100 (0.957)		366814	80.0000	82.2
78 2,6-Dinitrotoluene	165	9.223	9.223 (0.970)		66400	80.0000	97.9
79 Acenaphthylene	152	9.196	9.196 (0.967)		514248	80.0000	81.5
81 3-Nitroaniline	138	9.490	9.490 (0.998)		86354	80.0000	93.2
82 Acenaphthene	153	9.575	9.575 (1.007)		322177	80.0000	81.0
83 2,4-Dinitrophenol	184	9.698	9.698 (1.020)		20498	80.0000	120
85 4-Nitrophenol	109	9.901	9.901 (1.042)		52974	80.0000	93.7
86 Dibenzofuran	168	9.906	9.906 (1.042)		449246	80.0000	81.1
87 2,4-Dinitrotoluene	165	10.029	10.029 (1.055)		90125	80.0000	102
91 2,3,5,6-Tetrachlorophenol	232	10.190	10.190 (1.072)		85256	80.0000	90.3
88 2,3,4,6-Tetrachlorophenol	232	10.286	10.286 (1.082)		87997	80.0000	89.1
93 Diethylphthalate	149	10.622	10.622 (1.117)		376540	80.0000	82.6
94 Fluorene	166	10.654	10.654 (1.121)		374645	80.0000	81.7
95 4-Chlorophenyl-phenylether	204	10.692	10.692 (1.125)		173025	80.0000	81.6
96 4-Nitroaniline	138	10.825	10.825 (1.139)		96666	80.0000	93.3
98 4,6-Dinitro-2-methylphenol	198	10.921	10.921 (0.853)		38866	80.0000	113
99 N-Nitrosodiphenylamine	169	10.985	10.985 (0.858)		279426	80.0000	79.5
100 1,2-Diphenylhydrazine	77	11.044	11.044 (0.863)		410607	80.0000	78.8
106 4-Bromophenyl-phenylether	248	11.797	11.797 (0.922)		99166	80.0000	80.4
107 Hexachlorobenzene	284	12.097	12.097 (0.945)		104929	80.0000	80.2
111 Pentachlorophenol	266	12.540	12.540 (0.980)		61065	80.0000	97.7
115 Phenanthrene	178	12.855	12.855 (1.005)		547857	80.0000	79.2
116 Anthracene	178	12.962	12.962 (1.013)		570762	80.0000	80.2
119 Carbazole	167	13.411	13.411 (1.048)		553157	80.0000	80.9
120 Di-n-Butylphthalate	149	14.554	14.554 (1.137)		690841	80.0000	80.6
123 Fluoranthene	202	15.793	15.793 (1.234)		628364	80.0000	80.9
124 Benzidine	184	16.221	16.221 (0.835)		274450	80.0000	86.0
125 Pyrene	202	16.333	16.333 (0.840)		647865	80.0000	80.5
131 Butylbenzylphthalate	149	18.288	18.288 (0.941)		359149	80.0000	81.2
135 3,3'-Dichlorobenzidine	252	19.453	19.453 (1.001)		271332	80.0000	84.0
136 Benzo(a)Anthracene	228	19.394	19.394 (0.998)		681982	80.0000	80.6
137 Chrysene	228	19.506	19.506 (1.004)		643607	80.0000	80.4

Data File: \\qpitpa02\d\chem\722.i\090800.b\F09080C3.D
Report Date: 08-Sep-2000 08:21

STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270
Data file : \\qpitpa02\d\chem\722.i\090800.b\F09080C3.D
Lab Smp Id: sstd080 Client Smp ID: SSTD080
Inj Date : 08-SEP-2000 07:29 MS Autotune Date: 07-SEP-2000 08:23
Operator : 007062 Inst ID: 722.i
Smp Info : SSTD080 (40ppb) 194-188-5
Misc Info : sstd080,090800.b,8270b.m,2-root.sub,1,3
Comment :
Method : \\QPITPA02\D\chem\722.i\090800.b\8270b.m
Meth Date : 08-Sep-2000 08:21 bungardf Quant Type: ISTD
Cal Date : 08-SEP-2000 07:29 Cal File: F09080C3.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC062

FBB
9/8/00

QUANT SIG						AMOUNTS	
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
* 1 1,4-Dichlorobenzene-d4	152	4.976	4.976	(1.000)	74044	40.0000	
* 2 Naphthalene-d8	136	6.503	6.503	(1.000)	265676	40.0000	
* 3 Acenaphthene-d10	164	9.506	9.506	(1.000)	136065	40.0000	
* 4 Phenanthrene-d10	188	12.796	12.796	(1.000)	246346	40.0000	
* 5 Chrysene-d12	240	19.437	19.437	(1.000)	290538	40.0000	
* 6 Perylene-d12	264	22.797	22.797	(1.000)	335469	40.0000	
10 N-Nitrosodimethylamine	74	1.925	1.925	(0.387)	133395	80.0000	79.7
9 Pyridine	79	1.920	1.920	(0.386)	219177	80.0000	81.0
16 Methyl methanesulfonate	80	3.485	3.485	(0.700)	58420	80.0000	81.6
21 Aniline	93	4.682	4.682	(0.941)	287285	80.0000	80.3
22 Phenol	94	4.698	4.698	(0.944)	283273	80.0000	78.9
23 bis(2-Chloroethyl)ether	93	4.751	4.751	(0.955)	220317	80.0000	79.8
24 2-Chlorophenol	128	4.799	4.799	(0.965)	209857	80.0000	79.5
26 1,3-Dichlorobenzene	146	4.938	4.938	(0.992)	230678	80.0000	79.8
27 1,4-Dichlorobenzene	146	4.997	4.997	(1.004)	234165	80.0000	79.8
28 1,2-Dichlorobenzene	146	5.200	5.200	(1.045)	215528	80.0000	79.7
29 Benzyl Alcohol	108	5.168	5.168	(1.039)	146274	80.0000	82.4
30 2-Methylphenol	108	5.323	5.323	(1.070)	181475	80.0000	79.3
31 2,2'-oxybis(1-Chloropropane)	45	5.333	5.333	(1.072)	236695	80.0000	78.0
32 N-Nitroso-di-n-propylamine	70	5.494	5.494	(1.104)	141819	80.0000	79.9
192 4-Methylphenol	108	5.483	5.483	(1.102)	187737	80.0000	79.3
34 Hexachloroethane	117	5.542	5.542	(1.114)	87840	80.0000	80.0
35 Nitrobenzene	77	5.654	5.654	(0.869)	202764	80.0000	82.8
41 Isophorone	82	5.926	5.926	(0.911)	354761	80.0000	80.3
42 2-Nitrophenol	139	6.039	6.039	(0.929)	88332	80.0000	89.2
43 2,4-Dimethylphenol	107	6.103	6.103	(0.938)	185738	80.0000	80.2

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
*****	****	**	*****	*****	*****	*****	*****
139 bis (2-ethylhexyl) Phthalate	149	19.869	19.869	(1.022)	506467	80.0000	80.1
140 Di-n-octylphthalate	149	21.344	21.344	(0.936)	949836	80.0000	77.3
141 Benzo(b)fluoranthene	252	21.985	21.985	(0.964)	823846	80.0000	81.3
142 Benzo(k)fluoranthene	252	22.049	22.049	(0.967)	708115	80.0000	72.2
143 7,12-dimethylbenz[a]anthracen	256	22.049	22.049	(0.967)	336007	80.0000	77.6
146 Benzo(a)pyrene	252	22.679	22.679	(0.995)	757553	80.0000	78.5
149 Indeno(1,2,3-cd)pyrene	276	25.051	25.051	(1.099)	999701	80.0000	80.0
150 Dibenz(a,h)anthracene	278	25.105	25.105	(1.101)	855768	80.0000	78.7
151 Benzo(g,h,i)perylene	276	25.634	25.634	(1.124)	889285	80.0000	81.0
\$ 154 Nitrobenzene-d5	82	5.633	5.633	(0.866)	194302	80.0000	84.0
\$ 155 2-Fluorobiphenyl	172	8.229	8.229	(0.866)	366733	80.0000	81.4
\$ 156 Terphenyl-d14	244	16.873	16.873	(0.868)	505232	80.0000	80.5
\$ 157 Phenol-d5	99	4.682	4.682	(0.941)	269955	80.0000	80.8
\$ 158 2-Fluorophenol	112	3.656	3.656	(0.735)	213962	80.0000	81.8
\$ 159 2,4,6-Tribromophenol	330	11.242	11.242	(0.879)	43886	80.0000	87.4
\$ 186 2-Chlorophenol-d4	132	4.783	4.783	(0.961)	194309	80.0000	81.0
\$ 187 1,2-Dichlorobenzene-d4	152	5.184	5.184	(1.042)	137053	80.0000	80.2

Date: 08-SEP-2000 08:03

Client ID:

Sample Info: SST120 (60pb) 194-188-6

Volume Injected (uL): 2.0

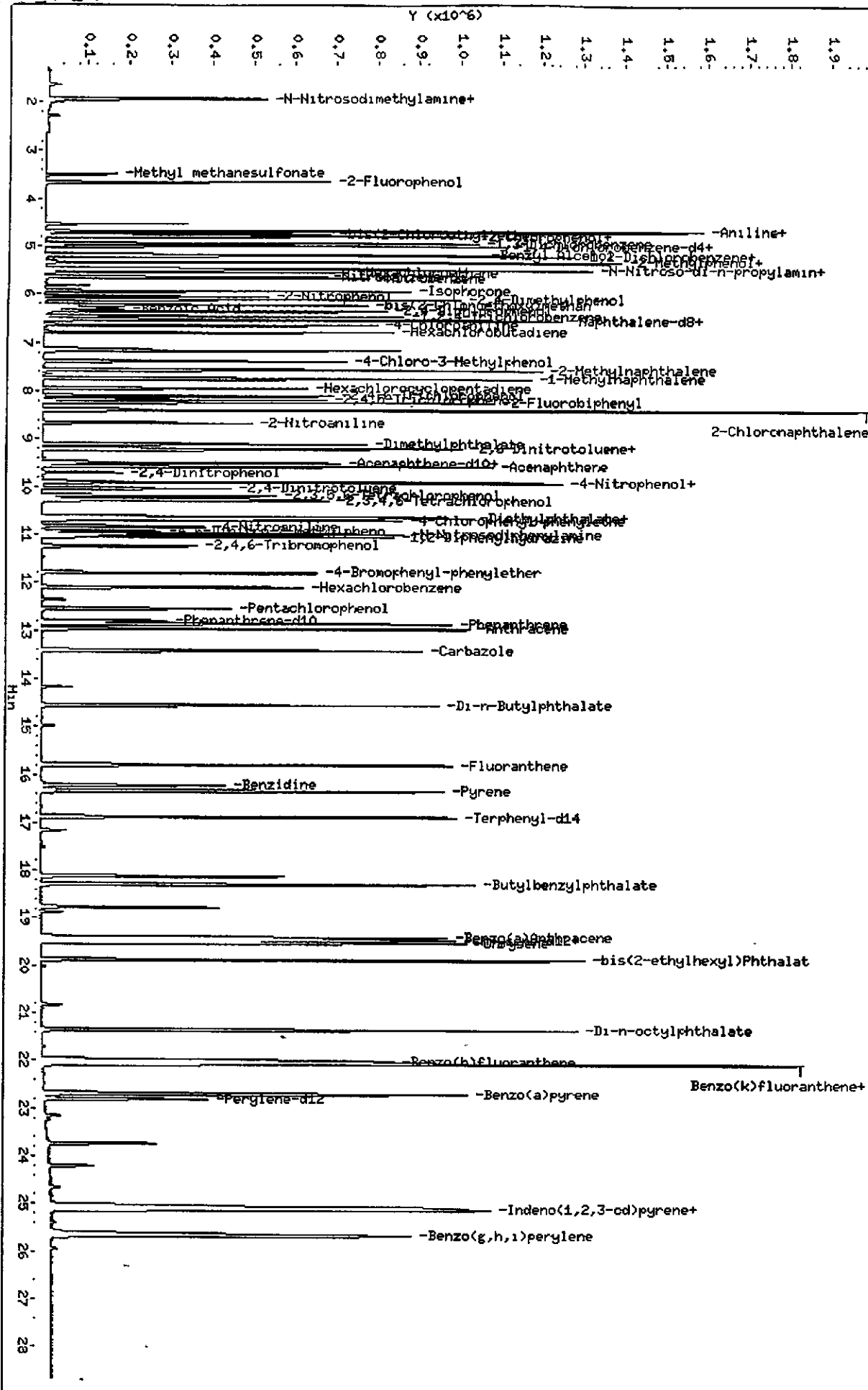
Column phase: Hp5-HS

Instrument: 722.1

Operator: 007062

Column diameter: 0.25

\\NPITPA02\chem\722.1\090800.b\F09080C4.D



672 230

STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\090800.b\F09080C4.D
Lab Smp Id: sstd120 Client Smp ID: SSTD120
Inj Date : 08-SEP-2000 08:03 MS Autotune Date: 07-SEP-2000 08:23
Operator : 007062 Inst ID: 722.i
Smp Info : SSTD120 (60ppb) 194-188-6
Misc Info : sstd120,090800.b,8270b.m,2-root.sub,1,4
Comment :
Method : \\QPITPA02\D\chem\722.i\090800.b\8270b.m
Meth Date : 08-Sep-2000 08:38 bungardf Quant Type: ISTD
Cal Date : 08-SEP-2000 08:03 Cal File: F09080C4.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC062

9/8/00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
*****	=====	==	=====	=====	=====	=====	=====
* 1 1,4-Dichlorobenzene-d4	152	4.981	4.981	(1.000)	71820	40.0000	
* 2 Naphthalene-d8	136	6.504	6.504	(1.000)	268566	40.0000	
* 3 Acenaphthene-d10	164	9.512	9.512	(1.000)	146285	40.0000	
* 4 Phenanthrene-d10	188	12.802	12.802	(1.000)	273761	40.0000	
* 5 Chrysene-d12	240	19.437	19.437	(1.000)	299442	40.0000	
* 6 Perylene-d12	264	22.808	22.808	(1.000)	353789	40.0000	
10 N-Nitrosodimethylamine	74	1.931	1.931	(0.388)	186334	120.000	116
9 Pyridine	79	1.920	1.920	(0.386)	303669	120.000	117
16 Methyl methanesulfonate	80	3.491	3.491	(0.701)	83389	120.000	120
21 Aniline	93	4.682	4.682	(0.940)	406462	120.000	118
22 Phenol	94	4.698	4.698	(0.943)	410205	120.000	118
23 bis(2-Chloroethyl)ether	93	4.752	4.752	(0.954)	317476	120.000	119
24 2-Chlorophenol	128	4.800	4.800	(0.964)	301536	120.000	118
26 1,3-Dichlorobenzene	146	4.939	4.939	(0.991)	326323	120.000	117
27 1,4-Dichlorobenzene	146	4.997	4.997	(1.003)	331480	120.000	117
28 1,2-Dichlorobenzene	146	5.206	5.206	(1.045)	305139	120.000	117
29 Benzyl Alcohol	108	5.168	5.168	(1.038)	215026	120.000	124
30 2-Methylphenol	108	5.329	5.329	(1.070)	270842	120.000	121
31 2,2'-oxybis(1-Chloropropane)	45	5.334	5.334	(1.071)	336172	120.000	116
32 N-Nitroso-di-n-propylamine	70	5.500	5.500	(1.104)	213291	120.000	123
192 4-Methylphenol	108	5.489	5.489	(1.102)	288441	120.000	124
34 Hexachloroethane	117	5.542	5.542	(1.113)	124459	120.000	118
35 Nitrobenzene	77	5.660	5.660	(0.870)	305552	120.000	122
41 Isophorone	82	5.932	5.932	(0.912)	545298	120.000	122
42 2-Nitrophenol	139	6.039	6.039	(0.929)	141968	120.000	136
43 2,4-Dimethylphenol	107	6.103	6.103	(0.938)	283021	120.000	121

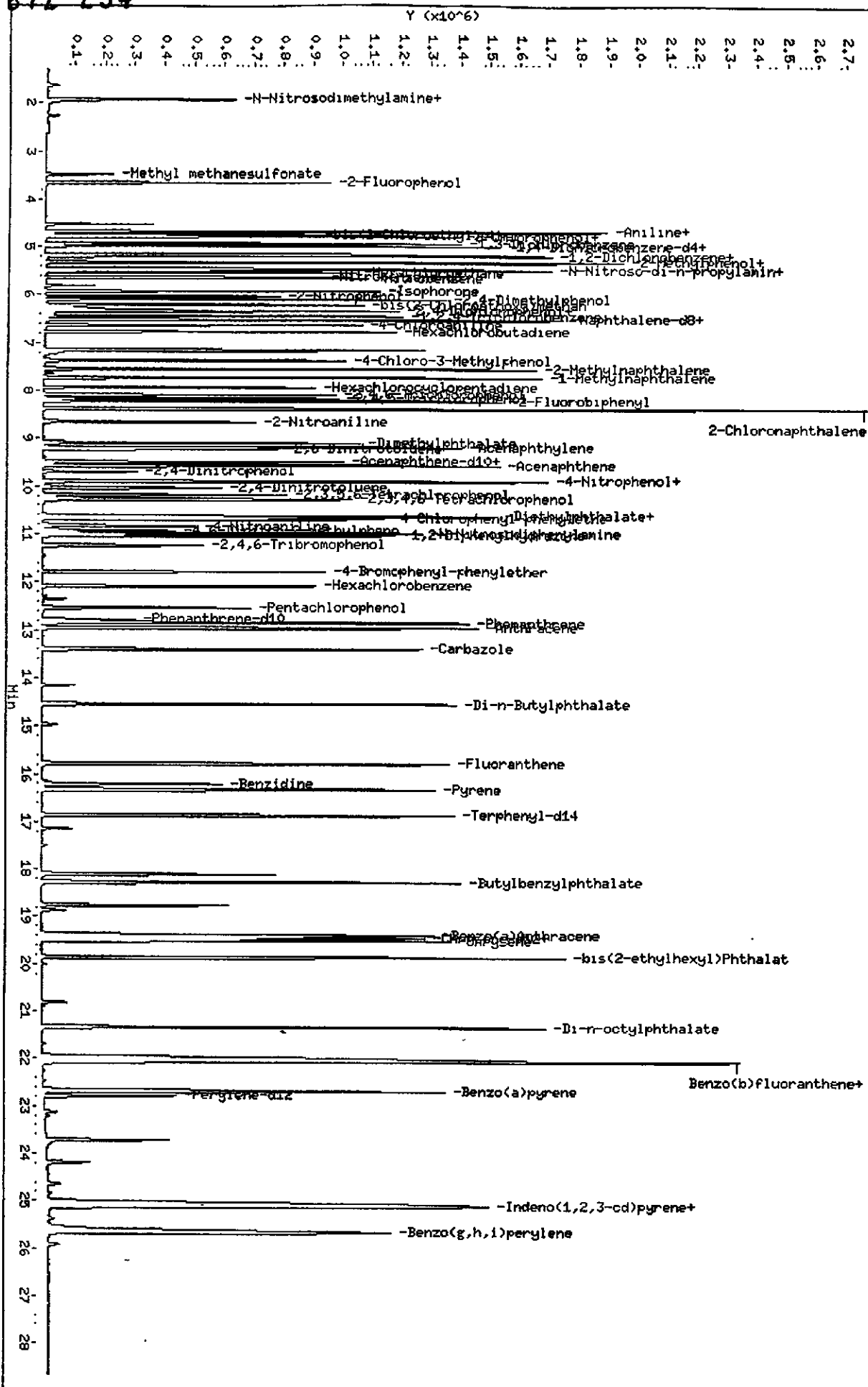
672 232

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	----	--	-----	-----	-----	-----	-----
44 bis (2-Chloroethoxy) methane	93	6.221	6.221 (0.956)		352976	120.000	119
43 2,4-Dichlorophenol	162	6.349	6.349 (0.976)		228835	120.000	122
49 Benzoic Acid	122	6.301	6.301 (0.969)		144338	120.000	149
50 1,2,4-Trichlorobenzene	180	6.450	6.450 (0.992)		241296	120.000	117
51 Naphthalene	128	6.536	6.536 (1.005)		852269	120.000	117
52 4-Chloroaniline	127	6.637	6.637 (1.021)		350135	120.000	121
56 Hexachlorobutadiene	225	6.782	6.782 (1.043)		128630	120.000	117
59 4-Chloro-3-Methylphenol	107	7.380	7.380 (1.135)		252460	120.000	128
62 2-Methylnaphthalene	142	7.562	7.562 (1.163)		568853	120.000	121
205 1-Methylnaphthalene	142	7.738	7.738 (1.190)		546083	120.000	122
64 Hexachlorocyclopentadiene	237	7.941	7.941 (0.835)		153452	120.000	126
66 2,4,6-Trichlorophenol	196	8.096	8.096 (0.851)		158992	120.000	124
67 2,4,5-Trichlorophenol	196	8.171	8.171 (0.859)		169260	120.000	124
70 2-Chloronaphthalene	162	8.400	8.400 (0.883)		498327	120.000	117
73 2-Nitroaniline	65	8.667	8.667 (0.911)		153929	120.000	139
76 Dimethylphthalate	163	9.105	9.105 (0.957)		590424	120.000	122
78 2,6-Dinitrotoluene	165	9.228	9.228 (0.970)		117978	120.000	149
79 Acenaphthylene	152	9.202	9.202 (0.967)		809354	120.000	119
81 3-Nitroaniline	138	9.495	9.495 (0.998)		151018	120.000	142
82 Acenaphthene	153	9.581	9.581 (1.007)		517488	120.000	121
83 2,4-Dinitrophenol	184	9.709	9.709 (1.021)		46772	120.000	199 (A)
85 4-Nitrophenol	109	9.912	9.912 (1.042)		89325	120.000	139
86 Dibenzofuran	168	9.912	9.912 (1.042)		711579	120.000	120
87 2,4-Dinitrotoluene	165	10.040	10.040 (1.056)		162939	120.000	155
91 2,3,5,6-Tetrachlorophenol	232	10.195	10.195 (1.072)		142613	120.000	135
88 2,3,4,6-Tetrachlorophenol	232	10.291	10.291 (1.082)		142590	120.000	130
93 Diethylphthalate	149	10.628	10.628 (1.117)		605592	120.000	123
94 Fluorene	166	10.660	10.660 (1.121)		603738	120.000	122
95 4-Chlorophenyl-phenylether	204	10.697	10.697 (1.125)		278743	120.000	122
96 4-Nitroaniline	138	10.842	10.842 (1.140)		165934	120.000	140
98 4,6-Dinitro-2-methylphenol	198	10.933	10.933 (0.854)		80837	120.000	178 (A)
99 N-Nitrosodiphenylamine	169	10.997	10.997 (0.859)		458240	120.000	118
100 1,2-Diphenylhydrazine	77	11.050	11.050 (0.863)		651611	120.000	114
106 4-Bromophenyl-phenylether	248	11.803	11.803 (0.922)		161457	120.000	118
107 Hexachlorobenzene	284	12.102	12.102 (0.945)		170702	120.000	118
111 Pentachlorophenol	266	12.546	12.546 (0.980)		106829	120.000	144
115 Phenanthrene	178	12.861	12.861 (1.005)		875871	120.000	115
116 Anthracene	178	12.968	12.968 (1.013)		905607	120.000	116
119 Carbazole	167	13.417	13.417 (1.048)		879331	120.000	117
120 Di-n-Butylphthalate	149	14.554	14.554 (1.137)		1078267	120.000	115
123 Fluoranthene	202	15.799	15.799 (1.234)		974346	120.000	114
124 Benzidine	184	16.227	16.227 (0.835)		420266	120.000	126
125 Pyrene	202	16.344	16.344 (0.841)		1003189	120.000	121
131 Butylbenzylphthalate	149	18.294	18.294 (0.941)		545166	120.000	120
135 3,3'-Dichlorobenzidine	252	19.464	19.464 (1.001)		405127	120.000	121
136 Benzo (a) Anthracene	228	19.405	19.405 (0.998)		1022087	120.000	118
137 Chrysene	228	19.512	19.512 (1.004)		962850	120.000	118

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	(NG)	(NG)	(NG)	(NG)	(NG)	(NG)	(NG)
139 bis(2-ethylhexyl) Phthalate	149	19.875	19.875	(1.023)	751947	120.000	116
140 Di-n-octylphthalate	149	21.350	21.350	(0.936)	1364609	120.000	108
141 Benzo(b)fluoranthene	252	22.001	22.001	(0.965)	1207579	120.000	115
142 Benzo(k)fluoranthene	252	22.066	22.066	(0.967)	1101942	120.000	110
143 7,12-dimethylbenz[a]anthracen	256	22.066	22.066	(0.967)	513506	120.000	114
146 Benzo(a)pyrene	252	22.696	22.696	(0.995)	1122990	120.000	113
149 Indeno(1,2,3-cd)pyrene	276	25.068	25.068	(1.099)	1504015	120.000	116
150 Dibenz(a,h)anthracene	278	25.121	25.121	(1.101)	1254867	120.000	112
151 Benzo(g,h,i)perylene	276	25.661	25.661	(1.125)	1353284	120.000	118
\$ 154 Nitrobenzene-d5	82	5.638	5.638	(0.867)	297700	120.000	125
\$ 155 2-Fluorobiphenyl	172	8.235	8.235	(0.866)	572743	120.000	119
\$ 156 Terphenyl-d14	244	16.878	16.878	(0.868)	781600	120.000	121
\$ 157 Phenol-d5	99	4.688	4.688	(0.941)	383333	120.000	119
\$ 158 2-Fluorophenol	112	3.662	3.662	(0.735)	296013	120.000	117
\$ 159 2,4,6-Tribromophenol	330	11.248	11.248	(0.879)	74062	120.000	129
\$ 186 2-Chlorophenol-d4	132	4.784	4.784	(0.960)	274957	120.000	119
\$ 187 1,2-Dichlorobenzene-d4	152	5.190	5.190	(1.042)	192773	120.000	117

QC Flag Legend

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



Data File: \\QPIITPA02\J\chem\722.1\090800.b\F0908005.D
 Date: 08-SEP-2000 08:37
 Client ID:
 Sample Info: SSTDL60 (80ppb) 194-188-7
 Volume Injected (uL): 2.0
 Column phase: Hp5-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\090800.b\F09080C5.D
Lab Smp Id: sstd160 Client Smp ID: SSTD160
Inj Date : 08-SEP-2000 08:37 MS Autotune Date: 07-SEP-2000 08:23
Operator : 007062 Inst ID: 722.i
Smp Info : SSTD160 (80ppb) 194-188-7
Misc Info : sstd160,090800.b,8270b.m,2-root.sub,1,5
Comment :
Method : \\QPITPA02\D\chem\722.i\090800.b\8270b.m
Meth Date : 08-Sep-2000 09:10 bungardf Quant Type: ISTD
Cal Date : 08-SEP-2000 08:37 Cal File: F09080C5.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC062

Handwritten: 9/15/00

						AMOUNTS		
		QUANT SIG					CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(NG)	(NG)
=====		****	**	*****	*****	*****	*****	*****
*	1 1,4-Dichlorobenzene-d4	152	4.973	4.973	(1.000)	76670	40.0000	
*	2 Naphthalene-d8	136	6.495	6.495	(1.000)	289069	40.0000	
*	3 Acenaphthene-d10	164	9.498	9.498	(1.000)	157700	40.0000	
*	4 Phenanthrene-d10	188	12.788	12.788	(1.000)	292213	40.0000	
*	5 Chrysene-d12	240	19.429	19.429	(1.000)	315215	40.0000	
*	6 Perylene-d12	264	22.789	22.789	(1.000)	392968	40.0000	
	10 N-Nitrosodimethylamine	74	1.923	1.923	(0.387)	255992	160.000	151
	9 Pyridine	79	1.912	1.912	(0.385)	413340	160.000	151
	16 Methyl methanesulfonate	80	3.482	3.482	(0.700)	116920	160.000	158
	21 Aniline	93	4.674	4.674	(0.940)	564048	160.000	154
	22 Phenol	94	4.695	4.695	(0.944)	570166	160.000	155
	23 bis(2-Chloroethyl)ether	93	4.749	4.749	(0.955)	444525	160.000	157
	24 2-Chlorophenol	128	4.797	4.797	(0.965)	423211	160.000	156
	26 1,3-Dichlorobenzene	146	4.930	4.930	(0.991)	455684	160.000	155
	27 1,4-Dichlorobenzene	146	4.989	4.989	(1.003)	461510	160.000	154
	28 1,2-Dichlorobenzene	146	5.197	5.197	(1.045)	420218	160.000	153
	29 Benzyl Alcohol	108	5.165	5.165	(1.039)	303228	160.000	163 (A)
	30 2-Methylphenol	108	5.320	5.320	(1.070)	372348	160.000	157
	31 2,2'-oxybis(1-Chloropropane)	45	5.331	5.331	(1.072)	453266	160.000	149
	32 N-Nitroso-di-n-propylamine	70	5.496	5.496	(1.105)	303294	160.000	163 (A)
192	4-Methylphenol	108	5.480	5.480	(1.102)	400899	160.000	161 (A)
	34 Hexachloroethane	117	5.534	5.534	(1.113)	173394	160.000	155
	35 Nitrobenzene	77	5.651	5.651	(0.870)	437705	160.000	162 (A)
	41 Isophorone	82	5.929	5.929	(0.913)	773721	160.000	160 (A)
	42 2-Nitrophenol	139	6.031	6.031	(0.928)	215118	160.000	184 (A)
	43 2,4-Dimethylphenol	107	6.100	6.100	(0.939)	403365	160.000	160

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Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
44 bis (2-Chloroethoxy)methane	93	6.212	6.212	(0.956)	503445	160.000	158
48 2,4-Dichlorophenol	162	6.341	6.341	(0.976)	329859	160.000	163 (A)
49 Benzoic Acid	122	6.319	6.319	(0.973)	228734	160.000	205 (A)
50 1,2,4-Trichlorobenzene	180	6.442	6.442	(0.992)	344652	160.000	157
51 Naphthalene	128	6.522	6.522	(1.004)	1200346	160.000	154
52 4-Chloroaniline	127	6.634	6.634	(1.021)	499269	160.000	160 (A)
56 Hexachlorobutadiene	225	6.773	6.773	(1.043)	185134	160.000	157
59 4-Chloro-3-Methylphenol	107	7.377	7.377	(1.136)	365745	160.000	169 (A)
62 2-Methylnaphthalene	142	7.548	7.548	(1.162)	810565	160.000	160
205 1-Methylnaphthalene	142	7.729	7.729	(1.190)	774306	160.000	161 (A)
64 Hexachlorocyclopentadiene	237	7.932	7.932	(0.835)	226431	160.000	169 (A)
66 2,4,6-Trichlorophenol	196	8.087	8.087	(0.852)	229741	160.000	165 (A)
67 2,4,5-Trichlorophenol	196	8.162	8.162	(0.859)	252461	160.000	169 (A)
70 2-Chloronaphthalene	162	8.392	8.392	(0.884)	700722	160.000	154
73 2-Nitroaniline	65	8.659	8.659	(0.912)	230511	160.000	185 (A)
76 Dimethylphthalate	163	9.097	9.097	(0.958)	854318	160.000	163 (A)
78 2,6-Dinitrotoluene	165	9.220	9.220	(0.971)	181731	160.000	200 (A)
79 Acenaphthylene	152	9.188	9.188	(0.967)	1160051	160.000	159
81 3-Nitroaniline	138	9.492	9.492	(0.999)	225589	160.000	188 (A)
82 Acenaphthene	153	9.567	9.567	(1.007)	739589	160.000	160 (A)
83 2,4-Dinitrophenol	184	9.701	9.701	(1.021)	83772	160.000	272 (A)
85 4-Nitrophenol	109	9.909	9.909	(1.043)	131645	160.000	183 (A)
86 Dibenzofuran	168	9.904	9.904	(1.043)	1021166	160.000	159
87 2,4-Dinitrotoluene	165	10.037	10.037	(1.057)	251264	160.000	206 (A)
91 2,3,5,6-Tetrachlorophenol	232	10.181	10.181	(1.072)	212311	160.000	180 (A)
88 2,3,4,6-Tetrachlorophenol	232	10.288	10.288	(1.083)	209312	160.000	174 (A)
93 Diethylphthalate	149	10.625	10.625	(1.119)	858841	160.000	161 (A)
94 Fluorene	166	10.646	10.646	(1.121)	865407	160.000	162 (A)
95 4-Chlorophenyl-phenylether	204	10.689	10.689	(1.125)	404363	160.000	163 (A)
96 4-Nitroaniline	138	10.844	10.844	(1.142)	246053	160.000	186 (A)
98 4,6-Dinitro-2-methylphenol	198	10.929	10.929	(0.855)	133191	160.000	240 (A)
99 N-Nitrosodiphenylamine	169	10.988	10.988	(0.859)	655427	160.000	158
100 1,2-Diphenylhydrazine	77	11.042	11.042	(0.863)	935668	160.000	155
106 4-Bromophenyl-phenylether	248	11.789	11.789	(0.922)	234256	160.000	161 (A)
107 Hexachlorobenzene	284	12.089	12.089	(0.945)	248982	160.000	161 (A)
111 Pentachlorophenol	266	12.537	12.537	(0.980)	163486	160.000	195 (A)
115 Phenanthrene	178	12.853	12.853	(1.005)	1243608	160.000	155
116 Anthracene	178	12.959	12.959	(1.013)	1293665	160.000	156
119 Carbazole	167	13.403	13.403	(1.048)	1249089	160.000	156
120 Di-n-Butylphthalate	149	14.546	14.546	(1.137)	1490451	160.000	151
123 Fluoranthene	202	15.791	15.791	(1.235)	1373607	160.000	153
124 Benzidine	184	16.213	16.213	(0.834)	580675	160.000	164 (A)
125 Pyrene	202	16.330	16.330	(0.841)	1402440	160.000	160 (A)
131 Butylbenzylphthalate	149	18.286	18.286	(0.941)	749359	160.000	157
135 3,3'-Dichlorobenzidine	252	19.450	19.450	(1.001)	574536	160.000	163 (A)
136 Benzo(a)Anthracene	228	19.391	19.391	(0.998)	1423491	160.000	157
137 Chrysene	228	19.509	19.509	(1.004)	1337079	160.000	156

Compounds	QUANT SIG		. RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS						CAL-AMT (NG)	ON-COL (NG)
*****	****		==	*****	*****	*****	*****	*****
139 bis(2-ethylhexyl) Phthalate	149		19.861	19.861	(1.022)	1027739	160.000	153
140 Di-n-octylphthalate	149		21.341	21.341	(0.936)	1849101	160.000	137
141 Benzo(b)fluoranthene	252		22.004	22.004	(0.966)	1875934	160.000	160(A)
142 Benzo(k)fluoranthene	252		22.068	22.068	(0.968)	1355129	160.000	127
143 7,12-dimethylbenz[a]anthracen	256		22.062	22.062	(0.968)	774300	160.000	156
146 Benzo(a)pyrene	252		22.693	22.693	(0.996)	1602601	160.000	148
149 Indeno(1,2,3-cd)pyrene	276		25.065	25.065	(1.100)	2184735	160.000	153
150 Dibenz(a,h)anthracene	278		25.118	25.118	(1.102)	1821941	160.000	149
151 Benzo(g,h,i)perylene	276		25.663	25.663	(1.126)	1957324	160.000	154
\$ 154 Nitrobenzene-d5	82		5.630	5.630	(0.867)	434978	160.000	168(A)
\$ 155 2-Fluorobiphenyl	172		8.221	8.221	(0.866)	818286	160.000	158
\$ 156 Terphenyl-d14	244		16.865	16.865	(0.868)	1111980	160.000	162(A)
\$ 157 Phenol-d5	99		4.684	4.684	(0.942)	523358	160.000	153
\$ 158 2-Fluorophenol	112		3.653	3.653	(0.735)	410914	160.000	154
\$ 159 2,4,6-Tribromophenol	330		11.239	11.239	(0.879)	110703	160.000	176(A)
\$ 186 2-Chlorophenol-d4	132		4.775	4.775	(0.960)	384672	160.000	156
\$ 187 1,2-Dichlorobenzene-d4	152		5.181	5.181	(1.042)	265121	160.000	153

QC Flag Legend

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

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FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: QT 310206

Instrument ID: 722

Calibration Date: 09/12/00 Time: 0811

Lab File ID: F09120C1

Init. Calib. Date(s): 09/08/00 09/08/00

Init. Calib. Times: 0621 0837

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

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.916	1.861	0.01	2.9	20.0
bis(2-Chloroethyl) ether	1.479	1.431	0.01	3.2	50.0
2-Chlorophenol	1.411	1.397	0.01	1.0	50.0
1,3-Dichlorobenzene	1.536	1.509	0.01	1.8	50.0
1,4-Dichlorobenzene	1.560	1.530	0.01	1.9	20.0
1,2-Dichlorobenzene	1.433	1.416	0.01	1.2	50.0
2-Methylphenol	1.236	1.188	0.01	3.9	50.0
2,2'-oxybis(1-Chloropropane)	1.590	1.450	0.01	8.8	50.0
4-Methylphenol	1.296	1.259	0.01	2.8	50.0
Hexachloroethane	0.584	0.576	0.01	1.4	50.0
Nitrobenzene	0.373	0.377	0.01	1.1	50.0
Isophorone	0.668	0.621	0.01	7.0	50.0
2-Nitrophenol	0.162	0.187	0.01	15.4	20.0
2,4-Dimethylphenol	0.349	0.335	0.01	4.0	50.0
bis(2-Chloroethoxy)methane	0.439	0.419	0.01	4.6	50.0
N-Nitroso-di-n-propylamine	0.971	0.887	0.05	8.6	50.0
2,4-Dichlorophenol	0.280	0.273	0.01	2.5	20.0
1,2,4-Trichlorobenzene	0.304	0.304	0.01	0.0	50.0
Naphthalene	1.075	1.049	0.01	2.4	50.0
4-Chloroaniline	0.431	0.410	0.01	4.9	50.0
Hexachlorobutadiene	0.163	0.167	0.01	2.4	20.0
4-Chloro-3-Methylphenol	0.299	0.276	0.01	7.7	20.0
2-Methylnaphthalene	0.701	0.676	0.01	3.6	50.0
Hexachlorocyclopentadiene	0.339	0.358	0.05	5.6	50.0
2,4,6-Trichlorophenol	0.352	0.348	0.01	1.1	20.0
2,4,5-Trichlorophenol	0.379	0.367	0.01	3.2	50.0
2-Chloronaphthalene	1.156	1.129	0.01	2.3	50.0
2-Nitroaniline	0.315	0.317	0.01	0.6	50.0
Dimethylphthalate	1.327	1.210	0.01	8.8	50.0
Acenaphthylene	1.849	1.727	0.01	6.6	50.0
2,6-Dinitrotoluene	0.231	0.259	0.01	12.1	50.0
3-Nitroaniline	0.304	0.312	0.01	2.6	50.0
Acenaphthene	1.172	1.103	0.01	5.9	20.0
2,4-Dinitrophenol	0.078	0.103	0.05	32.0	50.0
4-Nitrophenol	0.182	0.165	0.05	9.3	50.0
Dibenzofuran	1.625	1.515	0.01	6.8	50.0
2,4-Dinitrotoluene	0.310	0.341	0.01	10.0	50.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

672 239

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C01310206

Instrument ID: 722

Calibration Date: 09/12/00 Time: 0811

Lab File ID: F09120C1

Init. Calib. Date(s): 09/08/00 09/08/00

Init. Calib. Times: 0621 0837

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

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.352	1.189	0.01	12.0	50.0
4-Chlorophenyl-phenylether	0.629	0.588	0.01	6.5	50.0
Fluorene	1.358	1.238	0.01	8.8	50.0
4-Nitroaniline	0.336	0.322	0.01	4.2	50.0
4,6-Dinitro-2-methylphenol	0.076	0.100	0.01	31.6	50.0
N-Nitrosodiphenylamine	0.566	0.552	0.01	2.5	20.0
4-Bromophenyl-phenylether	0.199	0.195	0.01	2.0	50.0
Hexachlorobenzene	0.212	0.204	0.01	3.8	50.0
Pentachlorophenol	0.115	0.106	0.05	7.8	20.0
Phenanthrene	1.099	1.050	0.01	4.4	50.0
Anthracene	1.135	1.084	0.01	4.5	50.0
Carbazole	1.094	1.025	0.01	6.3	50.0
Di-n-Butylphthalate	1.352	1.276	0.01	5.6	50.0
Fluoranthene	1.229	1.161	0.01	5.5	20.0
Pyrene	1.111	1.063	0.01	4.3	50.0
Butylbenzylphthalate	0.605	0.582	0.01	3.8	50.0
3,3'-Dichlorobenzidine	0.448	0.430	0.01	4.0	50.0
Benzo(a) Anthracene	1.153	1.121	0.01	2.8	50.0
Chrysene	1.087	1.046	0.01	3.8	50.0
bis(2-ethylhexyl) Phthalate	0.852	0.830	0.01	2.6	50.0
Di-n-octylphthalate	1.372	1.376	0.01	0.3	20.0
Benzo(b) fluoranthene	1.191	1.114	0.01	6.5	50.0
Benzo(k) fluoranthene	1.082	1.096	0.01	1.3	50.0
Benzo(a) pyrene	1.106	1.086	0.01	1.8	20.0
Indeno(1,2,3-cd) pyrene	1.455	1.377	0.01	5.4	50.0
Dibenz(a,h) anthracene	1.246	1.188	0.01	4.6	50.0
Benzo(g,h,i) perylene	1.289	1.208	0.01	6.3	50.0
Pyridine	1.428	1.292	0.01	9.5	50.0
N-Nitrosodimethylamine	0.882	0.813	0.01	7.8	50.0
Aniline	1.904	1.821	0.01	4.4	50.0
Benzyl Alcohol	0.973	0.923	0.01	5.1	50.0
Benzoic Acid	0.155	0.150	0.01	3.2	50.0
2,3,4,6-Tetrachlorophenol	0.305	0.277	0.01	9.2	50.0
2,3,5,6-Tetrachlorophenol	0.299	0.271	0.01	9.4	50.0
1,2-Diphenylhydrazine	0.826	0.794	0.01	3.9	50.0
Benzidine	0.449	0.404	0.01	10.0	50.0
Methyl methanesulfonate	0.385	0.354	0.01	8.0	50.0

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FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: COI310206

Instrument ID: 722

Calibration Date: 09/12/00 Time: 0811

Lab File ID: F09120C1

Init. Calib. Date(s): 09/08/00 09/08/00

Init. Calib. Times: 0621 0837

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

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
7,12-dimethylbenz [a] anthrace	0.505	0.477	0.01	5.5	50.0
1-Methylnaphthalene	0.665	0.629	0.01	5.4	50.0
=====	=====	=====	=====	=====	=====
Nitrobenzene-d5	0.358	0.376	0.01	5.0	50.0
2-Fluorobiphenyl	1.315	1.276	0.01	3.0	50.0
Terphenyl-d14	0.869	0.822	0.01	5.4	50.0
Phenol-d5	1.780	1.710	0.01	3.9	50.0
2-Fluorophenol	1.391	1.360	0.01	2.2	50.0
2,4,6-Tribromophenol	0.086	0.085	0.01	1.2	50.0
2-Chlorophenol-d4	1.283	1.253	0.01	2.3	50.0
1,2-Dichlorobenzene-d4	0.905	0.897	0.01	0.9	50.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 722.i
Lab File ID: F09120C1.D
Analysis Type: NONE

Injection Date: 12-SEP-2000 08:11
Lab Sample ID: sstd050
Method File: \\QPITPA02\D\chem\722.i\091200.b\

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
67 N-Nitrosodimethylamine	50.0000	46.0710	7.9	50.0
66 Pyridine	50.0000	45.2397	9.5	50.0
87 Methylmethanesulfonate	50.0000	45.8558	8.3	50.0
185 2-Fluorophenol	50.0000	48.9026	2.2	50.0
68 Aniline	50.0000	47.8095	4.4	50.0
184 Phenol-d5	50.0000	48.0520	3.9	50.0
1 Phenol	50.0000	48.5606	2.9	20.0
2 bis(2-Chloroethyl)ether	50.0000	48.3612	3.3	50.0
187 2-Chlorophenol-d4	50.0000	48.8179	2.4	50.0
3 2-Chlorophenol	50.0000	49.5135	1.0	50.0
4 1,3-Dichlorobenzene	50.0000	49.0981	1.8	50.0
11 1,4-Dichlorobenzene-d4	40.0000	40.0000	0.0	50.0
5 1,4-Dichlorobenzene	50.0000	49.0416	1.9	20.0
69 Benzyl Alcohol	50.0000	47.4193	5.2	50.0
188 1,2-Dichlorobenzene-d4	50.0000	49.5167	1.0	50.0
6 1,2-Dichlorobenzene	50.0000	49.3914	1.2	50.0
7 2-Methylphenol	50.0000	48.0313	3.9	50.0
8 2,2'-oxybis(1-Chloropropane)	50.0000	45.5995	8.8	50.0
9 4-Methylphenol	50.0000	48.5639	2.9	50.0
18 N-Nitroso-di-n-propylamine	50.0000	45.6585	8.7	50.0
12 Hexachloroethane	50.0000	49.2517	1.5	50.0
181 Nitrobenzene-d5	50.0000	52.4382	4.9	50.0
13 Nitrobenzene	50.0000	50.6002	1.2	50.0
14 Isophorone	50.0000	46.4359	7.1	50.0
15 2-Nitrophenol	50.0000	57.8551	15.7	20.0
16 2,4-Dimethylphenol	50.0000	47.9348	4.1	50.0
17 bis(2-Chloroethoxy)methane	50.0000	47.6471	4.7	50.0
71 Benzoic Acid	50.0000	48.6326	2.7	50.0
18 2,4-Dichlorophenol	50.0000	48.6661	2.7	20.0
19 1,2,4-Trichlorobenzene	50.0000	50.0203	0.0	50.0
32 Naphthalene-d8	40.0000	40.0000	0.0	50.0
20 Naphthalene	50.0000	48.7793	2.4	50.0
21 4-Chloroaniline	50.0000	47.5513	4.9	50.0
22 Hexachlorobutadiene	50.0000	51.1196	2.2	20.0
23 4-Chloro-3-Methylphenol	50.0000	46.1520	7.7	20.0
24 2-Methylnaphthalene	50.0000	48.2048	3.6	50.0
205 1-Methylnaphthalene	50.0000	47.3017	5.4	50.0
25 Hexachlorocyclopentadiene	50.0000	52.7880	5.6	50.0
26 2,4,6-Trichlorophenol	50.0000	49.4512	1.1	20.0

672.242

Data File: \\qpitpa02\d\chem\722.i\091200.b\F09120C1.D

Report Date: 09/12/2000

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORTInstrument ID: 722.i
Lab File ID: F09120C1.D
Analysis Type: NONEInjection Date: 12-SEP-2000 08:11
Lab Sample ID: sstd050
Method File: \\QPITPA02\D\chem\722.i\091200.b\

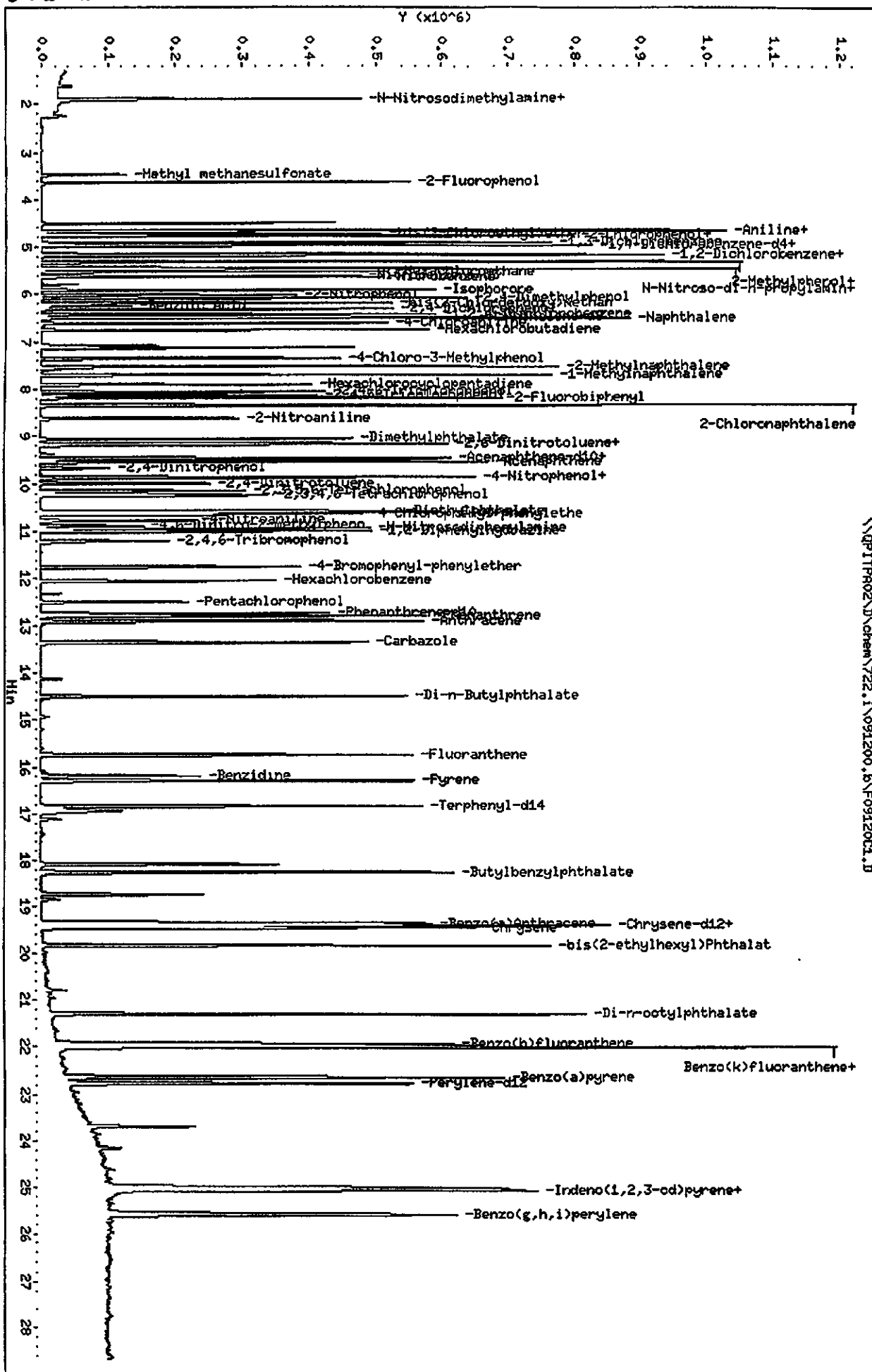
COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 2,4,5-Trichlorophenol	50.0000	48.4897	3.0	50.0
182 2-Fluorobiphenyl	50.0000	48.5147	3.0	50.0
28 2-Chloronaphthalene	50.0000	48.8124	2.4	50.0
29 2-Nitroaniline	50.0000	50.1688	0.3	50.0
30 Dimethylphthalate	50.0000	45.6062	8.8	50.0
31 Acenaphthylene	50.0000	46.6916	6.6	50.0
32 2,6-Dinitrotoluene	50.0000	55.9712	11.9	50.0
33 3-Nitroaniline	50.0000	51.2855	2.6	50.0
52 Acenaphthene-d10	40.0000	40.0000	0.0	50.0
34 Acenaphthene	50.0000	47.0675	5.9	20.0
35 2,4-Dinitrophenol	50.0000	66.1679	32.3	50.0
37 Dibenzofuran	50.0000	46.6311	6.7	50.0
36 4-Nitrophenol	50.0000	45.1854	9.6	50.0
38 2,4-Dinitrotoluene	50.0000	55.0470	10.1	50.0
77 2,3,5,6-Tetrachlorophenol	50.0000	45.2884	9.4	50.0
76 2,3,4,6-Tetrachlorophenol	50.0000	45.2737	9.5	50.0
39 Diethylphthalate	50.0000	43.9641	12.1	50.0
41 Fluorene	50.0000	45.5979	8.8	50.0
40 4-Chlorophenyl-phenylether	50.0000	46.7036	6.6	50.0
42 4-Nitroaniline	50.0000	47.9484	4.1	50.0
43 4,6-Dinitro-2-methylphenol	50.0000	65.7068	31.4	50.0
44 N-Nitrosodiphenylamine	50.0000	48.7884	2.4	20.0
78 1,2-Diphenylhydrazine	50.0000	48.0698	3.9	50.0
186 2,4,6-Tribromophenol	50.0000	49.4917	1.0	50.0
45 4-Bromophenyl-phenylether	50.0000	48.8810	2.2	50.0
46 Hexachlorobenzene	50.0000	48.3037	3.4	50.0
47 Pentachlorophenol	50.0000	46.2691	7.5	20.0
78 Phenanthrene-d10	40.0000	40.0000	0.0	50.0
48 Phenanthrene	50.0000	47.7724	4.5	50.0
49 Anthracene	50.0000	47.7623	4.5	50.0
50 Carbazole	50.0000	46.8602	6.3	50.0
51 Di-n-Butylphthalate	50.0000	47.1553	5.7	50.0
52 Fluoranthene	50.0000	47.2474	5.5	20.0
79 Benzidine	50.0000	45.0224	10.0	50.0
53 Pyrene	50.0000	47.8657	4.3	50.0
183 Terphenyl-d14	50.0000	47.3184	5.4	50.0
54 Butylbenzylphthalate	50.0000	48.0758	3.8	50.0
56 Benzo(a)Anthracene	50.0000	48.6201	2.8	50.0
90 Chrysene-d12	40.0000	40.0000	0.0	50.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 722.i
Lab File ID: F09120C1.D
Analysis Type: NONE

Injection Date: 12-SEP-2000 08:11
Lab Sample ID: sstd050
Method File: \\QPITPA02\D\chem\722.i\091200.b\

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
55 3,3'-Dichlorobenzidine	50.0000	47.9398	4.1	50.0
57 Chrysene	50.0000	48.1114	3.8	50.0
58 bis(2-ethylhexyl)Phthalate	50.0000	48.6676	2.7	50.0
59 Di-n-octylphthalate	50.0000	50.1500	0.3	20.0
60 Benzo(b)fluoranthene	50.0000	46.7950	6.4	50.0
61 Benzo(k)fluoranthene	50.0000	50.6399	1.3	50.0
143 7,12-dimethylbenz[a]anthracen	50.0000	47.2034	5.6	50.0
62 Benzo(a)pyrene	50.0000	49.1124	1.8	20.0
101 Perylene-d12	40.0000	40.0000	0.0	50.0
63 Indeno(1,2,3-cd)pyrene	50.0000	47.3218	5.4	50.0
64 Dibenzo(a,h)anthracene	50.0000	47.6753	4.6	50.0
65 Benzo(g,h,i)perylene	50.0000	46.8698	6.3	50.0



Data File: \\QPI1P002\chem\722.1\091200.b\F0912001.D
 Date: 12-SEP-2000 08:11
 Client ID:
 Sample Info: SST050 (25ppb) 194-184-8
 Volume Injected (uL): 2.0
 Column phase: He5-MS

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

Data File: \\gpitpa02\d\chem\722.i\091200.b\F09120C1.D
Report Date: 12-Sep-2000 08:47

STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\gpitpa02\d\chem\722.i\091200.b\F09120C1.D
Lab Smp Id: sstd050 Client Smp ID: SST050
Inj Date : 12-SEP-2000 08:11 MS Autotune Date: 07-SEP-2000 08:23
Operator : 007062 Inst ID: 722.i
Smp Info : SST050 (25ppb) 194-184-8
Misc Info : sstd050,091200.b,8270b.m,2-root.sub,2,2
Comment :
Method : \\QPITPA02\D\chem\722.i\091200.b\8270b.m
Meth Date : 12-Sep-2000 08:47 bungardf Quant Type: ISTD
Cal Date : 08-SEP-2000 08:37 Cal File: F09080C5.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: PITPC062

10/12/00

AMOUNTS

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
MASS							
*****	****	..	*****	*****	*****	*****	*****
* 1 1,4-Dichlorobenzene-d4	152	4.952	4.952	(1.000)	121248	40.0000	
* 2 Naphthalene-d8	136	6.475	6.475	(1.000)	437244	40.0000	
* 3 Acenaphthene-d10	164	9.471	9.471	(1.000)	226205	40.0000	
* 4 Phenanthrene-d10	188	12.762	12.762	(1.000)	370517	40.0000	
* 5 Chrysene-d12	240	19.397	19.397	(1.000)	419673	40.0000	
* 6 Perylene-d12	264	22.757	22.757	(1.000)	475500	40.0000	
10 N-Nitrosodimethylamine	74	1.896	1.896	(0.383)	123207	50.0000	46.1
9 Pyridine	79	1.902	1.902	(0.384)	195865	50.0000	45.2
16 Methyl methanesulfonate	80	3.467	3.467	(0.700)	53596	50.0000	45.8
21 Aniline	93	4.658	4.658	(0.941)	275966	50.0000	47.8
22 Phenol	94	4.680	4.680	(0.945)	282071	50.0000	48.6
23 bis(2-Chloroethyl) ether	93	4.728	4.728	(0.955)	216902	50.0000	48.4
24 2-Chlorophenol	128	4.776	4.776	(0.964)	211767	50.0000	49.5
26 1,3-Dichlorobenzene	146	4.915	4.915	(0.992)	228664	50.0000	49.1
27 1,4-Dichlorobenzene	146	4.973	4.973	(1.004)	231957	50.0000	49.0
28 1,2-Dichlorobenzene	146	5.176	5.176	(1.045)	214592	50.0000	49.4
29 Benzyl Alcohol	108	5.144	5.144	(1.039)	139846	50.0000	47.4
30 2-Methylphenol	108	5.305	5.305	(1.071)	179987	50.0000	48.0
31 2,2'-oxybis(1-Chloropropane)	45	5.310	5.310	(1.072)	219847	50.0000	45.6
32 N-Nitroso-di-n-propylamine	70	5.470	5.470	(1.105)	134402	50.0000	45.6
192 4-Methylphenol	108	5.460	5.460	(1.102)	190802	50.0000	48.6
34 Hexachloroethane	117	5.513	5.513	(1.113)	87239	50.0000	49.2
35 Nitrobenzene	77	5.630	5.630	(0.870)	206191	50.0000	50.6
41 Isophorone	82	5.903	5.903	(0.912)	339294	50.0000	46.4
42 2-Nitrophenol	139	6.010	6.010	(0.928)	102387	50.0000	57.8
43 2,4-Dimethylphenol	107	6.079	6.079	(0.939)	182954	50.0000	47.9

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
-----	----	--	-----	-----	-----	-----	-----
44 bis (2-Chloroethoxy)methane	93	6.186	6.186	(0.955)	228872	50.0000	47.6
48 2,4-Dichlorophenol	162	6.320	6.320	(0.976)	149225	50.0000	48.7
49 Benzoic Acid	122	6.245	6.245	(0.965)	82199	50.0000	48.6
50 1,2,4-Trichlorobenzene	180	6.421	6.421	(0.992)	166479	50.0000	50.0
51 Naphthalene	128	6.501	6.501	(1.004)	573174	50.0000	48.8
52 4-Chloroaniline	127	6.608	6.608	(1.021)	224252	50.0000	47.6
56 Hexachlorobutadiene	225	6.752	6.752	(1.043)	91220	50.0000	51.1
59 4-Chloro-3-Methylphenol	107	7.351	7.351	(1.135)	150761	50.0000	46.2
62 2-Methylnaphthalene	142	7.527	7.527	(1.163)	369387	50.0000	48.2
205 1-Methylnaphthalene	142	7.703	7.703	(1.190)	343809	50.0000	47.3
64 Hexachlorocyclopentadiene	237	7.906	7.906	(0.835)	101217	50.0000	52.8
66 2,4,6-Trichlorophenol	196	8.061	8.061	(0.851)	98518	50.0000	49.4
67 2,4,5-Trichlorophenol	196	8.136	8.136	(0.859)	103904	50.0000	48.5
70 2-Chloronaphthalene	162	8.360	8.360	(0.883)	319129	50.0000	48.8
73 2-Nitroaniline	65	8.627	8.627	(0.911)	89526	50.0000	50.2
76 Dimethylphthalate	163	9.060	9.060	(0.957)	342245	50.0000	45.6
78 2,6-Dinitrotoluene	165	9.188	9.188	(0.970)	73134	50.0000	56.0
79 Acenaphthylene	152	9.156	9.156	(0.967)	488348	50.0000	46.7
81 3-Nitroaniline	138	9.455	9.455	(0.998)	88082	50.0000	51.3
82 Acenaphthene	153	9.536	9.536	(1.007)	312020	50.0000	47.1
83 2,4-Dinitrophenol	184	9.664	9.664	(1.020)	29185	50.0000	66.2
85 4-Nitrophenol	109	9.877	9.877	(1.043)	46544	50.0000	45.2
86 Dibenzofuran	168	9.867	9.867	(1.042)	428446	50.0000	46.6
87 2,4-Dinitrotoluene	165	9.995	9.995	(1.055)	96449	50.0000	55.0
91 2,3,5,6-Tetrachlorophenol	232	10.155	10.155	(1.072)	76534	50.0000	45.3
88 2,3,4,6-Tetrachlorophenol	232	10.251	10.251	(1.082)	78214	50.0000	45.3
93 Diethylphthalate	149	10.588	10.588	(1.118)	336214	50.0000	44.0
94 Fluorene	166	10.615	10.615	(1.121)	350165	50.0000	45.6
95 4-Chlorophenyl-phenylether	204	10.652	10.652	(1.125)	166134	50.0000	46.7
96 4-Nitroaniline	138	10.786	10.786	(1.139)	91201	50.0000	47.9
98 4,6-Dinitro-2-methylphenol	198	10.882	10.882	(0.853)	46267	50.0000	65.7
99 N-Nitrosodiphenylamine	169	10.946	10.946	(0.858)	255816	50.0000	48.8
100 1,2-Diphenylhydrazine	77	11.005	11.005	(0.862)	368008	50.0000	48.1
106 4-Bromophenyl-phenylether	248	11.758	11.758	(0.921)	90351	50.0000	48.9
107 Hexachlorobenzene	284	12.057	12.057	(0.945)	94698	50.0000	48.3
111 Pentachlorophenol	266	12.506	12.506	(0.980)	49239	50.0000	46.3
115 Phenanthrene	178	12.816	12.816	(1.004)	486540	50.0000	47.8
116 Anthracene	178	12.922	12.922	(1.013)	502176	50.0000	47.8
119 Carbazole	167	13.371	13.371	(1.048)	474897	50.0000	46.9
120 Di-n-Butylphthalate	149	14.509	14.509	(1.137)	590801	50.0000	47.2
123 Fluoranthene	202	15.748	15.748	(1.234)	537859	50.0000	47.2
124 Benzidine	184	16.181	16.181	(0.834)	212195	50.0000	45.0
125 Pyrene	202	16.293	16.293	(0.840)	557763	50.0000	47.9
131 Butylbenzylphthalate	149	18.249	18.249	(0.941)	305366	50.0000	48.1
135 3,3'-Dichlorobenzidine	252	19.413	19.413	(1.001)	225392	50.0000	47.9
136 Benzo(a)Anthracene	228	19.354	19.354	(0.998)	587880	50.0000	48.6
137 Chrysene	228	19.456	19.456	(1.003)	548814	50.0000	48.1

Data File: \\qpitpa02\d\chem\722.i\091200.b\F09120C1.D
Report Date: 12-Sep-2000 08:47

Page 3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
-----	----	--	-----	-----	-----	-----	-----
139 bis(2-ethylhexyl) Phthalate	149	19.830	19.830	(1.022)	435271	50.0000	48.7
140 Di-n-octylphthalate	149	21.304	21.304	(0.936)	817896	50.0000	50.1
141 Benzo(b)fluoranthene	252	21.940	21.940	(0.964)	662488	50.0000	46.8
142 Benzo(k)fluoranthene	252	21.999	21.999	(0.967)	651352	50.0000	50.6
143 7,12-dimethylbenz[a]anthracen	256	21.999	21.999	(0.967)	283342	50.0000	47.2
146 Benzo(a)pyrene	252	22.634	22.634	(0.995)	645420	50.0000	49.1
149 Indeno(1,2,3-cd)pyrene	276	25.001	25.001	(1.099)	818371	50.0000	47.3
150 Dibenz(a,h)anthracene	278	25.049	25.049	(1.101)	706180	50.0000	47.7
151 Benzo(g,h,i)perylene	276	25.578	25.578	(1.124)	718166	50.0000	46.9
\$ 154 Nitrobenzene-d5	82	5.609	5.609	(0.866)	205324	50.0000	52.4
\$ 155 2-Fluorobiphenyl	172	8.195	8.195	(0.865)	360902	50.0000	48.5
\$ 156 Terphenyl-d14	244	16.833	16.833	(0.868)	431308	50.0000	47.3
\$ 157 Phenol-d5	99	4.669	4.669	(0.943)	259226	50.0000	48.0
\$ 158 2-Fluorophenol	112	3.638	3.638	(0.735)	206163	50.0000	48.9
\$ 159 2,4,6-Tribromophenol	330	11.208	11.208	(0.878)	39369	50.0000	49.5
\$ 186 2-Chlorophenol-d4	132	4.760	4.760	(0.961)	189890	50.0000	48.8
\$ 187 1,2-Dichlorobenzene-d4	152	5.160	5.160	(1.042)	135913	50.0000	49.5

672 248

**GC/MS SEMIVOLATILE
QC DATA**

Data File: \\QPITPA02\chem\722.i\091200.b\F0912DF1.D

Date : 12-SEP-2000 07:54

Client ID: DFTPP02

Instrument: 722.i

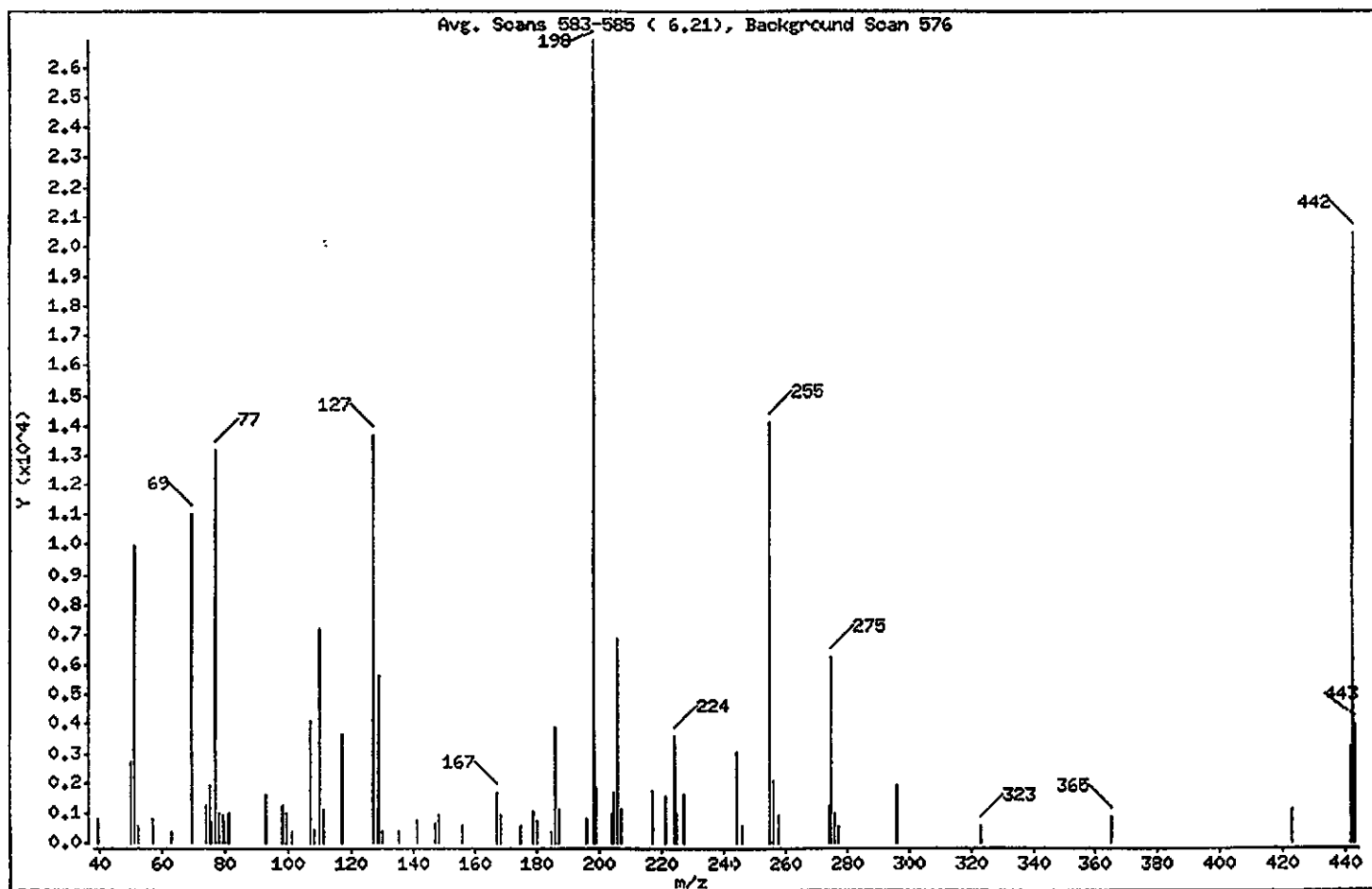
Sample Info: DFTPP050 (25ppb) 194-175-8

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	37.12
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	40.95
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	50.72
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.83
275	10.00 - 30.00% of mass 198	23.21
365	Greater than 1.00% of mass 198	3.16
441	Present, but less than mass 443	11.86
442	40.00 - 100.00% of mass 198	75.77
443	17.00 - 23.00% of mass 442	14.61 (19.28)

672 250

Data File: \\QPITPA02\ID\chem\722.i\091200.b\F0912DF1.D

Page 4

Date : 12-SEP-2000 07:54

Client ID: DFTPP02

Instrument: 722.i

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

Operator: 007062

Column phase:

Column diameter: 2.00

Data File: F0912DF1.D
 Spectrum: Avg. Scans 583-585 (6.21), Background Scan 576
 Location of Maximum: 198.00
 Number of points: 69

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	817	101.00	368	179.00	1063	246.00	576
50.00	2716	107.00	4095	180.00	716	255.00	14134
51.00	9993	108.00	429	185.00	391	256.00	2065
52.00	563	110.00	7188	186.00	3904	258.00	913
57.00	802	111.00	1138	187.00	1133	274.00	1207
63.00	341	117.00	3644	196.00	823	275.00	6249
69.00	11023	127.00	13655	198.00	26920	276.00	991
74.00	1246	128.00	1141	199.00	1838	277.00	560
75.00	1927	129.00	5631	204.00	1018	296.00	1895
76.00	666	130.00	353	205.00	1675	323.00	558
77.00	13166	135.00	391	206.00	6867	365.00	852
78.00	960	141.00	738	207.00	1104	423.00	1117
79.00	922	147.00	622	217.00	1756	441.00	3194
80.00	673	148.00	953	221.00	1553	442.00	20392
81.00	1006	156.00	578	224.00	3600	443.00	3933
93.00	1600	167.00	1644	225.00	1005		
98.00	1267	168.00	902	227.00	1586		
99.00	969	175.00	553	244.00	3038		

Data File: \\QPITPA02\chem\722.1\091200.b\F0912DF1.D
Date: 12-SEP-2000 07:54
Client ID: DFTPP02
Sample Info: DFTPP050 (25ppb) 194-175-8

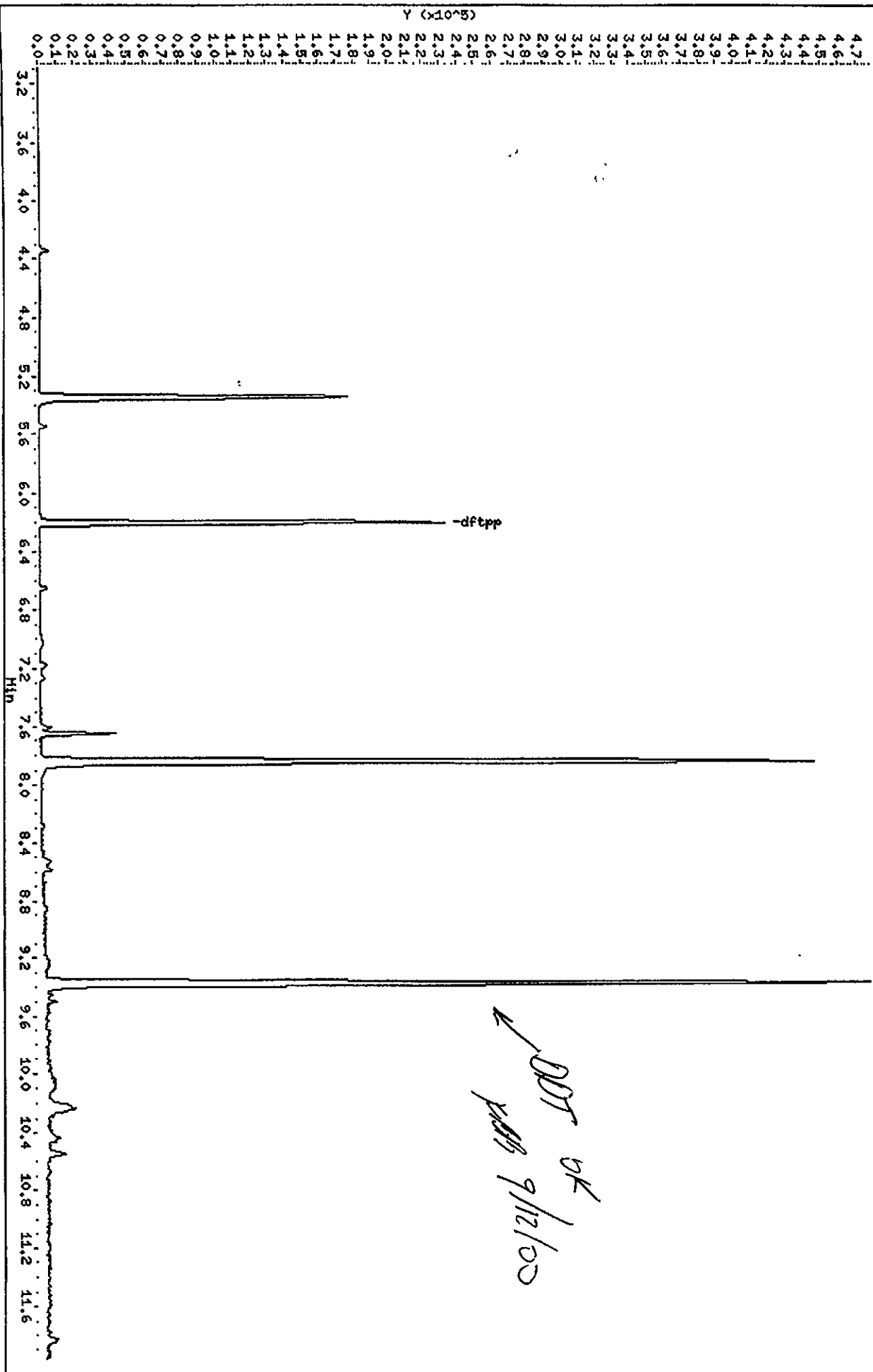
Instrument: 722.1

Operator: 007062

Column diameter: 2.00

Column phase:

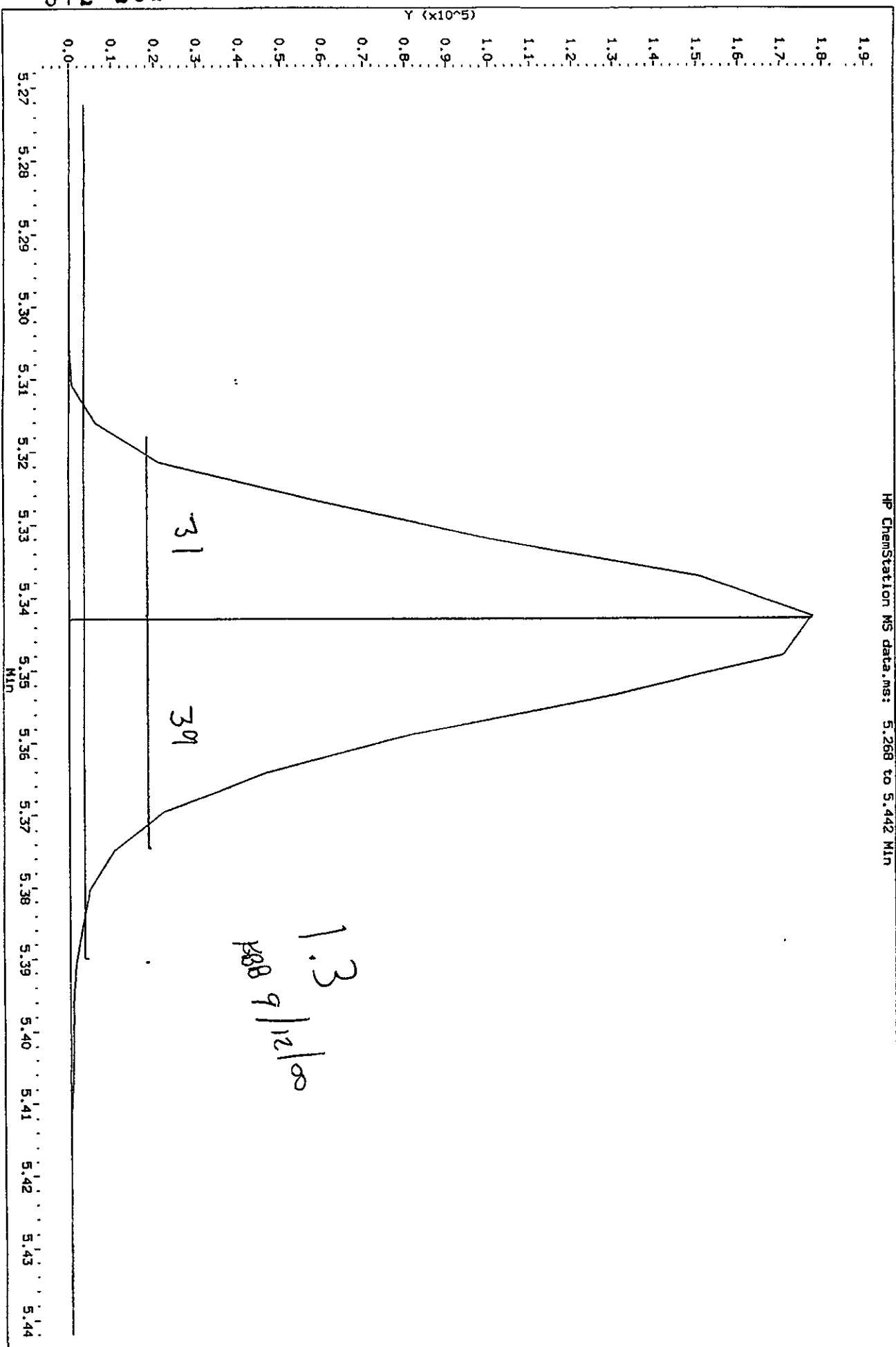
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672 252

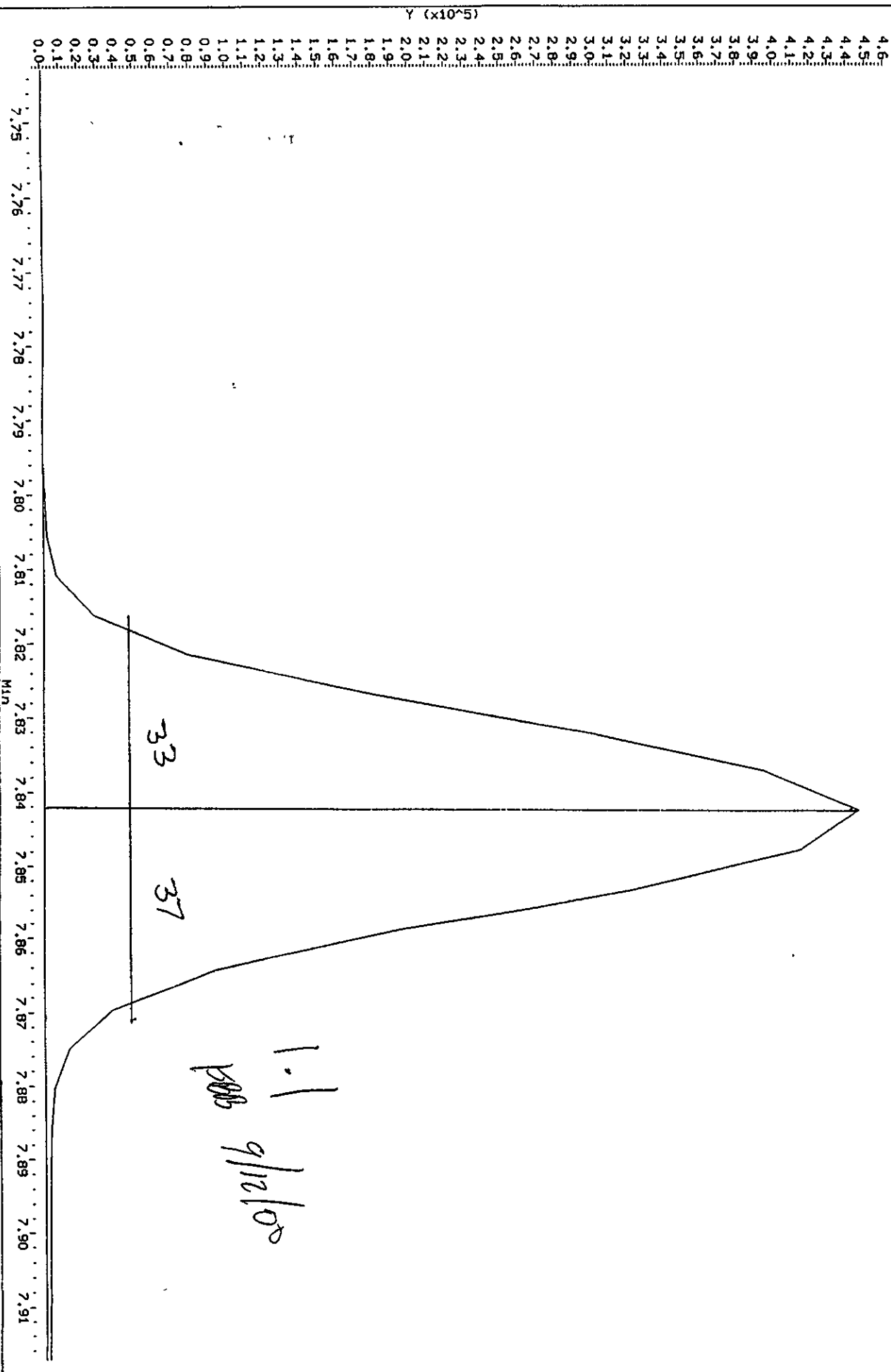
Data File: \\qpltpa02\d\chem\722.1\091200.b\F0912DF1.D
 Injection Date: 12-SEP-2000 07:54
 Instrument: 722.1
 Client Sample ID: DTFP02

HP ChemStation MS data.ms: 5.268 to 5.442 Min



Data File: \\qpltpa02\chem\722.1\091200.b\F0912DF1.D
 Injection Date: 12-SEP-2000 07:54
 Instrument: 722.1
 Client Sample ID: DF1P02

HP ChemStation MS data.ms: 7.743 to 7.917 Min



UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0I110000 104
Method: SW846 8270C
 Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL Date Received: 09/01/00
Work Order: DK5F6101 Date Extracted: 09/07/00
Dilution factor: 1 Date Analyzed: 09/12/00
Moisture %: NA

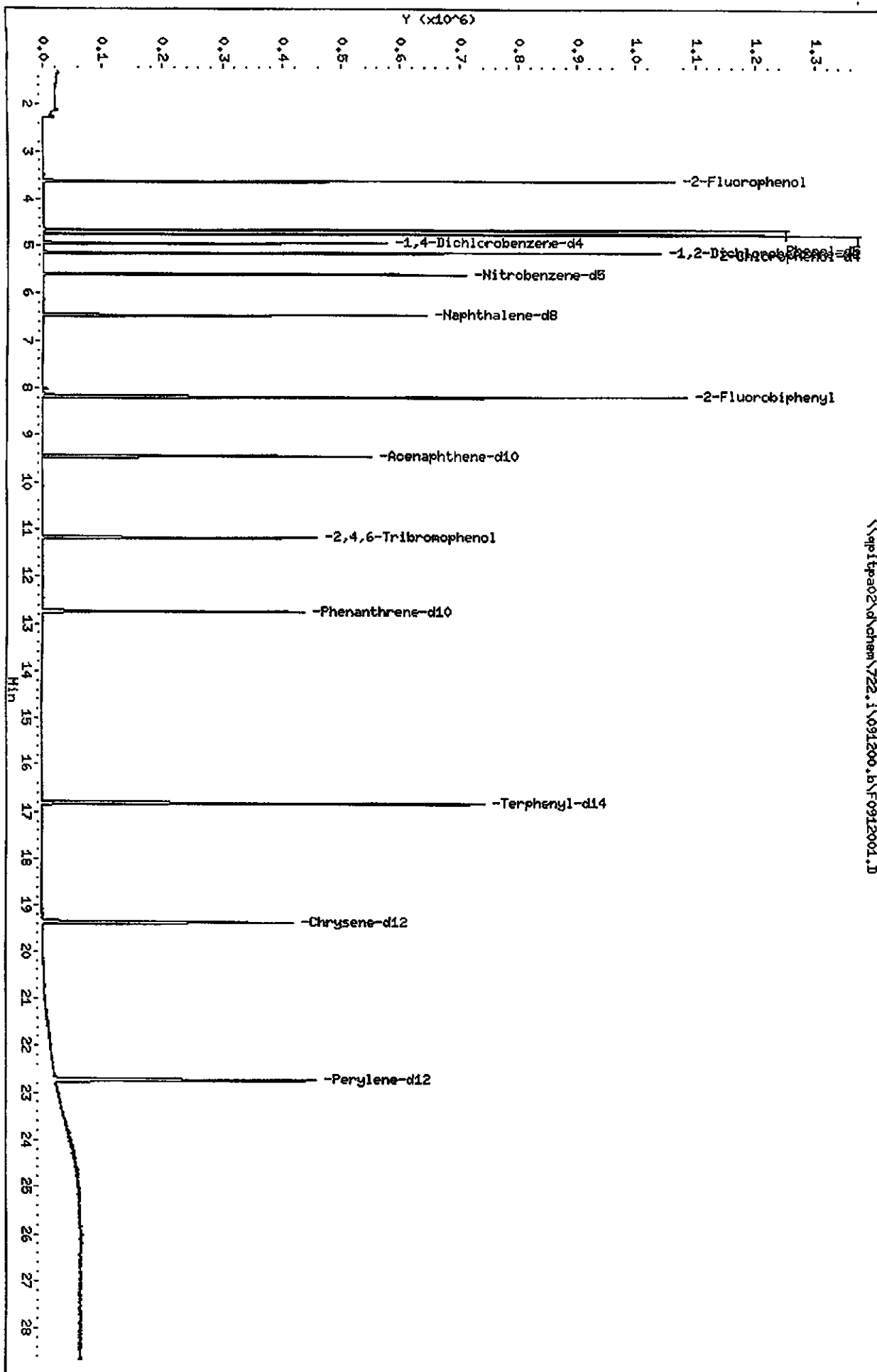
 QC Batch: 0255104

Client Sample Id: INTRA-LAB BLANK

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

Data File: \\ppitpa02\chem\722.1\091200.1\F0912001.D
Date: 12-SEP-2000 09:53
Client ID: INTRA-LAB BLANK
Sample Info: COH310206-BLK 9/07/00 TCLP (0255104)
Volume Injected (uL): 2.0
Column phase: Hp5-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\091200.b\F0912001.D
 Lab Smp Id: DK5F6101 Client Smp ID: INTRA-LAB BLANK
 Inj Date : 12-SEP-2000 09:53 MS Autotune Date: 07-SEP-2000 08:23
 Operator : 007062 Inst ID: 722.i
 Smp Info : C0H310206-BLK 9/07/00 TCLP (0255104)
 Misc Info : dk5f6101,091200.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\091200.b\8270b.m
 Meth Date : 12-Sep-2000 08:47 bungardf Quant Type: ISTD
 Cal Date : 08-SEP-2000 08:37 Cal File: F09080C5.D
 Als bottle: 5 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062

Handwritten:
 9/12/00

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

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)
gpc	1.000	gpc correction factor

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	4.942	4.952	(1.000)	113322	40.0000	(Q)
* 2 Naphthalene-d8	136	6.459	6.475	(1.000)	431026	40.0000	
* 3 Acenaphthene-d10	164	9.451	9.471	(1.000)	227226	40.0000	
* 4 Phenanthrene-d10	188	12.736	12.762	(1.000)	359230	40.0000	
* 5 Chrysene-d12	240	19.366	19.397	(1.000)	381930	40.0000	
* 6 Perylene-d12	264	22.732	22.757	(1.000)	407275	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.					

Data File: \\qpitpa02\d\chem\722.i\091200.b\F0912001.D
 Report Date: 12-Sep-2000 10:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
-----	----	--	-----	-----	-----	-----	-----
35 Nitrobenzene	77				Compound Not Detected.		
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	5.594	5.609	(0.866)	315853	81.8301	0.204 (a)
\$ 155 2-Fluorobiphenyl	172	8.180	8.195	(0.865)	556801	74.5124	0.186 (a)
\$ 156 Terphenyl-d14	244	16.812	16.833	(0.868)	597806	72.0660	0.180 (a)
\$ 157 Phenol-d5	99	4.659	4.669	(0.943)	594829	117.974	0.295 (a)
\$ 158 2-Fluorophenol	112	3.633	3.638	(0.735)	418190	106.134	0.265 (a)
\$ 159 2,4,6-Tribromophenol	330	11.187	11.208	(0.878)	93503	121.238	0.303 (a)
\$ 186 2-Chlorophenol-d4	132	4.750	4.760	(0.961)	464199	127.685	0.319 (a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.151	5.160	(1.042)	195198	76.0898	0.190 (a)

QC Flag Legend

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

672 258

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0I110000 104

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 09/01/00

Work Order: DK5F6102

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/12/00

Moisture %: NA

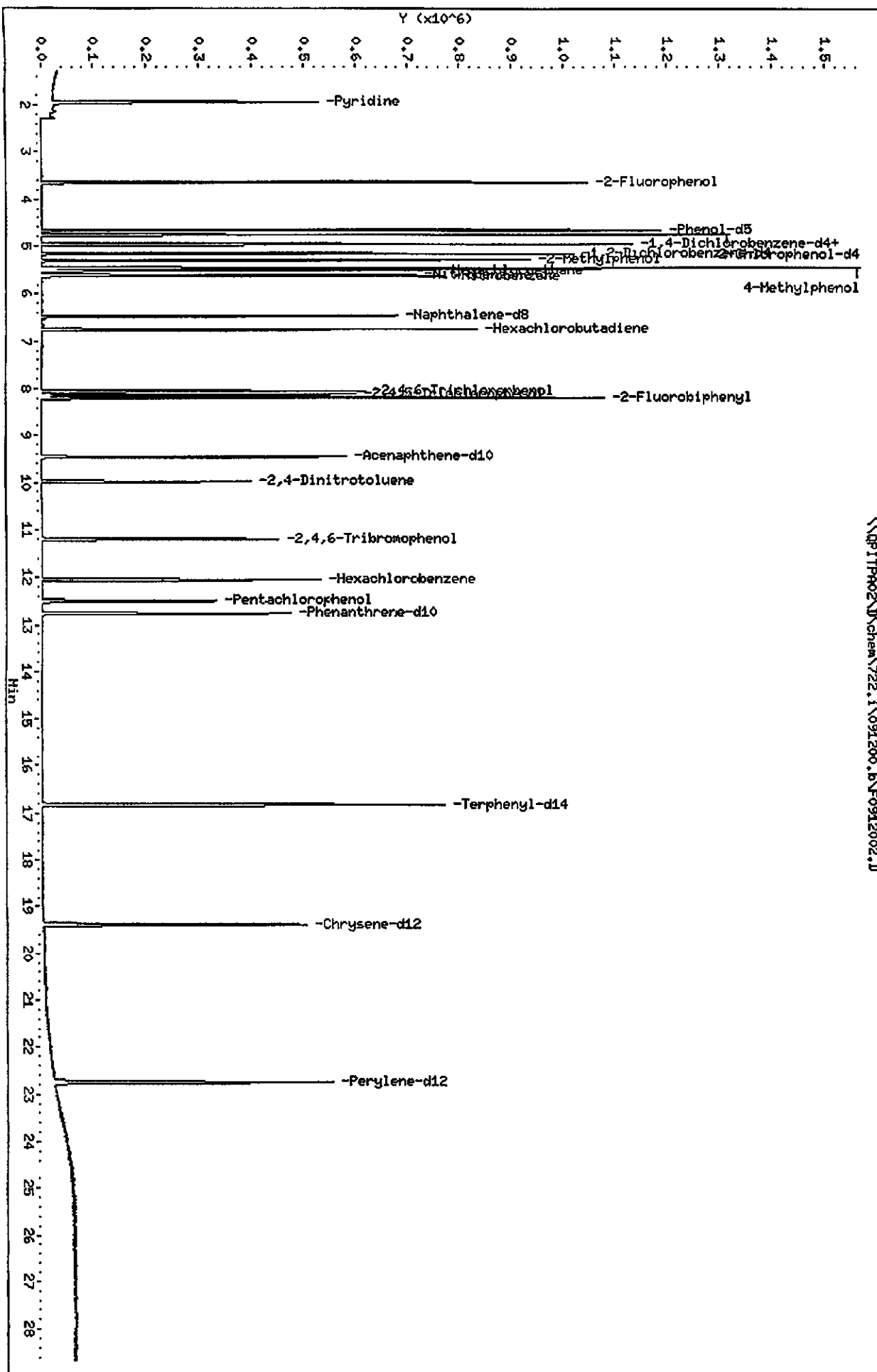
QC Batch: 0255104

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	0.176	
118-74-1	Hexachlorobenzene	0.166	
87-68-3	Hexachlorobutadiene	0.166	
67-72-1	Hexachloroethane	0.171	
98-95-3	Nitrobenzene	0.174	
87-86-5	Pentachlorophenol	0.168	
110-86-1	Pyridine	0.181	
95-95-4	2,4,5-Trichlorophenol	0.162	
88-06-2	2,4,6-Trichlorophenol	0.159	
1319-77-3	Cresols (total)	0.506	

Data File: \\QPI\TP02\chem\722.1\091200.b\F0912002.D
 Date: 12-SEP-2000 10:27
 Client ID: INTRA-LAB CHECK
 Sample Info: CMH310206-LCS 9/07/00 TCLP (0255104)
 Volume Injected (uL): 2.0
 Column phase: Hp5-HS

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



STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\091200.b\F0912002.D
 Lab Smp Id: DK5F6102 Client Smp ID: INTRA-LAB CHECK
 Inj Date : 12-SEP-2000 10:27 MS Autotune Date: 07-SEP-2000 08:23
 Operator : 007062 Inst ID: 722.i
 Smp Info : C0H310206-LCS 9/07/00 TCLP (0255104)
 Misc Info : dk5f6102,091200.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\091200.b\8270b.m
 Meth Date : 12-Sep-2000 08:47 bungardf Quant Type: ISTD
 Cal Date : 08-SEP-2000 08:37 Cal File: F09080C5.D
 Als bottle: 6 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062

POB
9/12/00

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

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)
gpc	1.000	gpc correction factor

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (NG)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	4.956	4.952	(1.000)	122265	40.0000		
* 2 Naphthalene-d8	136	6.473	6.475	(1.000)	469524	40.0000		
* 3 Acenaphthene-d10	164	9.470	9.471	(1.000)	252325	40.0000		
* 4 Phenanthrene-d10	188	12.755	12.762	(1.000)	408619	40.0000		
* 5 Chrysene-d12	240	19.385	19.397	(1.000)	443736	40.0000		
* 6 Perylene-d12	264	22.750	22.757	(1.000)	474689	40.0000		
9 Pyridine	79	1.932	1.902	(0.390)	315554	72.2784	0.181	
27 1,4-Dichlorobenzene	146	4.972	4.973	(1.003)	323273	67.7796	0.169	
M 195 Cresols, total	100				789535	202.421	0.506	
30 2-Methylphenol	108	5.303	5.305	(1.070)	256384	67.8495	0.170	
192 4-Methylphenol	108	5.468	5.460	(1.103)	533151	134.572	0.336	
193 3-Methylphenol	108	Compound Not Detected.						
34 Hexachloroethane	117	5.516	5.513	(1.113)	122357	68.5033	0.171	

Data File: \\qpitpa02\d\chem\722.i\091200.b\F0912002.D
 Report Date: 12-Sep-2000 11:09

Page 2

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
35 Nitrobenzene	77	5.629	5.630	(0.870)	303913	69.4541	0.174
56 Hexachlorobutadiene	225	6.750	6.752	(1.043)	127334	66.4520	0.166
66 2,4,6-Trichlorophenol	196	8.059	8.061	(0.851)	141648	63.7402	0.159
67 2,4,5-Trichlorophenol	196	8.129	8.136	(0.858)	154621	64.6886	0.162
87 2,4-Dinitrotoluene	165	9.988	9.995	(1.055)	137306	70.2534	0.176
107 Hexachlorobenzene	284	12.055	12.057	(0.945)	143921	66.5661	0.166
111 Pentachlorophenol	266	12.504	12.506	(0.980)	78958	67.2771	0.168
\$ 154 Nitrobenzene-d5	82	5.613	5.609	(0.867)	312949	74.4299	0.186 (a)
\$ 155 2-Fluorobiphenyl	172	8.193	8.195	(0.865)	550201	66.3052	0.166 (a)
\$ 156 Terphenyl-d14	244	16.831	16.833	(0.868)	611315	63.4299	0.158 (a)
\$ 157 Phenol-d5	99	4.667	4.669	(0.942)	548040	100.744	0.252 (a)
\$ 158 2-Fluorophenol	112	3.652	3.638	(0.737)	395280	92.9819	0.232 (a)
\$ 159 2,4,6-Tribromophenol	330	11.200	11.208	(0.878)	91394	104.180	0.260 (a)
\$ 186 2-Chlorophenol-d4	132	4.763	4.760	(0.961)	433713	110.574	0.276 (a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.164	5.160	(1.042)	193136	69.7793	0.174 (a)

QC Flag Legend

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

672.262

**GC/MS SEMIVOLATILE
MISCELLANEOUS**

TCLP (Method 1311)

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



QUA-4181

By

Project Number
Jamael Murphy

Date

9-5-00

Lot Number

601020118

Checked by

Jamael Murphy

Client Codes

File Lot # 830701W

Data

9600

pH Instrument

Accumant A125

Probe

SN0051607

Balance

2.94817

Serial Number

091

Log Book Number

96-MT-526

Solution Number 1 - Log Book Number

004497-12

Solution Number 2 - Log Book Number

TCLP Extraction

Fluid Determination

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
1. D5TTP	/	/	/	/	Tal	1. D5TTP	100.0g	200mL	5.47
2. D5TTP	/	/	/	/	↓	2. D5TTP	↓	↓	4.57
3.	/	/	/	/	/	3.	/	/	/
4.	/	/	/	/	/	4.	/	/	/
5.	/	/	/	/	/	5.	/	/	/
6.	/	/	/	/	/	6.	/	/	/
7.	/	/	/	/	/	7.	/	/	/
8.	/	/	/	/	/	8.	/	/	/
9.	/	/	/	/	/	9.	/	/	/
10.	/	/	/	/	/	10.	/	/	/
11.	/	/	/	/	/	11.	/	/	/
12.	/	/	/	/	/	12.	/	/	/
13.	/	/	/	/	/	13.	/	/	/

Extract(s)

(Record line number from above)

All above

Extract(s) Received

Analyst

Jamael Murphy

Location

Metals Bldg

Date

9-6-00

Time

13:15

Extract(s) Relinquished

Analyst

Jamael

Location

19E

* = 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)

Temp° = 22°C E.F. 4.97

Date/Time On

9-5-00-13:00

Date/Time Off

9-6-00 7:00

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ± 2

Date

9-5-00

Date

9-6-00

pH Calibration

(4.0)

Agitation Apparatus RPMs

30 ±

Continuous L-L Extraction Worksheet

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



TCLP

Began 9/7/2000 Time 14:05

Change over 9/8/2000 Time 11:10

Completed 9/11/2000 Time 1310

Solvent Lot NaSO4 Lot Number

T13272 T29628

Clean up Method

NA

Lot Number	Sample ID	Client ID	Extract Vol (mL)	Final Volume mL	pH	Surrrogate Lot #	Surr Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	Cleanup Inhibit
1. COT010238	BK	NA	200	1.0	5/2/11	194-183-12	0.5	NA	NA	NA
2. LCS					5/2/11			194-178-3	0.5	
3. MS (001)					5/2/11					
4. MSD (001)					5/2/11			194-178-3	0.5	
5. 001					5/2/11			NA	NA	
6. 002					5/2/11					
7. COH310206					7/2/11					
8. 002					6/2/11					
9. 003					7/2/11					
10. 004					5/2/11					
11. COH310232		NA	200		7/2/11					
12. 002					5/2/11					
13. COT010153					5/2/11					
14. COT020118					5/2/11					
15. 002					5/2/11					
16. 003					5/2/11					
17.					5/2/11					
18.										
19.										
20.										
21.										
22.										
23.										
Prep Analyst:	WT	WT	WT	KG/SM	WT	SM/WT	SM/WT	SM/WT	SM/WT	WT

Extract(s) Relinquished

(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst	Location
ALL Above	9-9-00	0900	James M. Mella	MSB, MSB	9-11-00	0805	James M. Mella	REF12-EXT
ALL Above	9-11-00	0900	James M. Mella	REF12-EXT	9-11-00	1315	James M. Mella	REF1-BM4
ALL Above	9-12-00	0800	James M. Mella	REF12-EXT	9-12-00	0900	James M. Mella	REF12-BM4
Batch Number:	0255104				Reviewed By		James M. Mella	Date 9-11-00

Instrument Name: GC/MS Instrument #1

Sequence File: D:\HPCHEM\1\SEQUENCE\091200.S

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

Operator: 007062

Data Path: d:\HPCHEM\1\DATA\091200.b\

Method Path: D:\HPCHEM\1\METHODS\

Line	Type	Vial	DataFile	Method	Sample Name
1)	Sample	(754) 1	F0912DF1	DFTPP	DFTPP050 (25ppb) 194-175-8
2)	Sample	AOC 2	F09120C1	72EARLY	SSTD050 (25ppb) 194-184-8
3)	Sample	AOC 3	F09120C2	72EARLY	Appix SST050 (25ppb) 194-185-3
4)	Sample	AOC 4	F09120C3	72EARLY	Amoco SST050 (25ppb) 194-177-1
5)	Sample	AOC 5	F0912001	72EARLY	C0H310206-BLK 9/07/00 TCLP (0255
6)	Sample	AOC 6	F0912002	72EARLY	C0H310206-LCS 9/07/00 TCLP (0255
7)	Sample	AOC 7	F0912003	72EARLY	C0H310206-001 9/07/00 TCLP (0255
8)	Sample	AOC 8	F0912004	72EARLY	C0H310206-002 9/07/00 TCLP (0255
9)	Sample	AOC 9	F0912005	72EARLY	C0H310206-003 9/07/00 TCLP (0255
10)	Sample	AOC 10	F0912006	72EARLY	C0H310206-004 9/07/00 TCLP (0255
11)	Sample	AOC 11	F0912007	72EARLY	C0I010228-001 9/07/00 TCLP (0255
12)	Sample	AOC 12	F0912008	72EARLY	C0I010228-001S 9/07/00 TCLP (025
13)	Sample	AOC 13	F0912009	72EARLY	C0I010228-001D 9/07/00 TCLP (025
14)	Sample	BAD INS 14	F0912010	72EARLY	C0I010228-002 9/07/00 TCLP (0255
15)	Sample	AOC 15	F0912011	72EARLY	C0H310243-005 x2 9/01/00 Soil (0
16)	Sample	AOC 16	F0912012	72EARLY	C0H310243-BLK 9/06/00 Soil (0250
17)	Sample	AOC 14	F0912018	72EARLY	C0I010228-002 9/07/00 TCLP (0255
18)	Sample	17	F0912013	72EARLY	C0H310243-LCS 9/06/00 Soil (0250
19)	Sample	18	F0912014	72EARLY	C0H310243-009S 9/06/00 Soil (025
20)	Sample	19	F0912015	72EARLY	C0H310243-009D 9/06/00 Soil (025
21)	Sample	20	F0912016	72EARLY	C0H310243-009 9/06/00 Soil (0250
22)	Sample	21	F0912017	72EARLY	C0H310243-011 9/06/00 Soil (0250

Bytes Needed: 1117789 Space on drive D: 1023932928

Sequence Verification Done!

REQUESTED BY: TROUTB

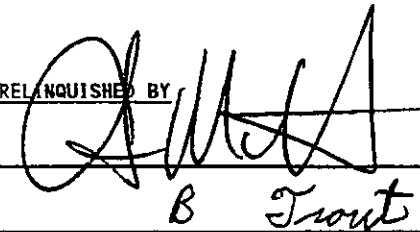
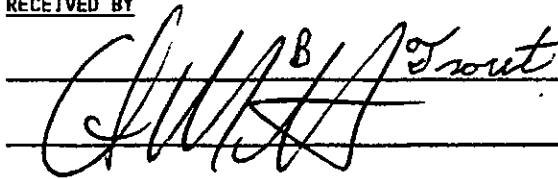
METHOD: QL Base/Neutrals and Acids (8270C)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
5B,C CLP1 19E	DJP8W-1-03	— — —	262937	399411	A-59-QL	COH310206	001		SOLID	0	3 1
5B,C CLP1	DJP90-1-03	— — —	262938	399411	A-59-QL	COH310206	002		SOLID	0	3 1
5B,C CLP1	DJP91-1-03	— — —	262939	399411	A-59-QL	COH310206	003		SOLID	0	3 1
5B,C CLP1	DJP92-1-03	— — —	262940	399411	A-59-QL	COH310206	004		SOLID	0	3 1
5C,D CLP1	DJPHK-1-02	— — —	262941	051465	A-59-QL	COH310232	001		SOLID	0	4 1
5C,D CLP1	DJPHL-1-02	— — —	262942	051465	A-59-QL	COH310232	002		SOLID	0	4 1
5E CLP1	DJQTD-1-02	— — —	262943	051465	A-59-QL	COI010153	001		SOLID	0	4 1
6A,B,C, CLP1	DJRHV-1-0H	— — —	262935	419910	A-3J-QL	COI010228	001	QC	SOLID	0	22 1
6A,B,C, CLP1	DJRJP-1-07	— — —	262936	419910	A-3J-QL	COI010228	002		SOLID	0	6 1
6B,C CLP1	DJT TN-1-02	— — —	262944	051465	A-59-QL	COI020118	001		SOLID	0	4 1
6B,C CLP1	DJT TP-1-02	— — —	262945	051465	A-59-QL	COI020118	002		SOLID	0	3 1
6B,C CLP1	DJT TQ-1-02	— — —	262946	051465	A-59-QL	COI020118	003		SOLID	0	4 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME


B Trout
B Trout

9/7/2000 08:45

9/7/2000 13:40

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

672 268

PESTICIDE DATA

**PESTICIDE
QC SUMMARY**

672 270

SW846 8081A SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: COH310206

	CLIENT ID.	SRG01	SRG02	TOT OUT
	=====	=====	=====	=====
01	DF/S1/242/SDC/031	99	75	00
02	DF/S1/242/SDC/033	101	90	00
03	DF/S1/242/SDC/034	103	91	00
04	DF/S1/242/SDC/035	100	88	00
05	~~INTRA LAB QC~~ <i>DEG-1100</i>	102	90	00
06	METHOD BLK. DK2C8101	103	90	00
07	LCS DK2C8102	103	90	00
08	~~LAB MG/MSD D~~	96	85	00
09	~~LAB MS/MSD S~~ <i>DEG-1100</i>	98	87	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

SW846 8081A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0I070000

WO #: DK2C8102

BATCH: 0251502

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Lindane	0.00250	0.00145	58	49 - 137	
Heptachlor	0.00250	0.00235	94	57 - 124	
Heptachlor epoxide	0.00250	0.00238	95	53 - 135	
Endrin	0.00250	0.00242	97	46 - 137	
Methoxychlor	0.00250	0.00264	106	12 - 154	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

672 272

SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV13G

BATCH: 0251502

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
Lindane	0.00250	ND	0.00143	57	30 - 148	
Heptachlor	0.00250	ND	0.00226	91	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00224	90	38 - 138	
Endrin	0.00250	ND	0.00255	102	28 - 148	
Methoxychlor	0.00250	ND	0.00260	104	13 - 154	

NOTES (S) :

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

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

COMMENTS:

FORM III

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0I010228

WO #: DJRHV13H

BATCH: 0251502

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
Lindane	0.00250	0.00139	56	2.5	22	30 - 148	
Heptachlor	0.00250	0.00221	89	2.2	32	25 - 135	
Heptachlor epoxide	0.00250	0.00222	89	0.94	31	38 - 138	
Endrin	0.00250	0.00241	96	5.7	40	28 - 148	
Methoxychlor	0.00250	0.00252	101	3.4	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:

672 274

SW846 8081A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DK2C8101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: D-B6081.d

Lot Number: C0H310206

Matrix: SOLID

Extraction Method: 1311/3510

Date Extracted: 09/07/00

Date Analyzed(1): 09/08/00

Date Analyzed(2): N/A

Time Analyzed(1): 22:40

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/S1/242/SDC/031	DJP8W104	09/08/00	N/A
02	DF/S1/242/SDC/033	DJP90104	09/08/00	N/A
03	DF/S1/242/SDC/034	DJP91104	09/08/00	N/A
04	DF/S1/242/SDC/035	DJP92104	09/08/00	N/A
05	~~INTRA-LAB QC~~	DJRHV13F	09/08/00	N/A
06	~~LAB MS/MSD~~ <i>DE</i>	DJRHV13G S	09/08/00	N/A
07	~~LAB MS/MSD~~ <i>DE</i>	DJRHV13H D	09/08/00	N/A
08	CHECK SAMPLE	DK2C8102 C	09/08/00	N/A
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

**PESTICIDE
SAMPLE DATA**

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP8W104

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: 16

QC Batch: 0251502

Client Sample Id: DF/S1/242/SDC/031

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

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6074.d
 Report Date: 11-Sep-2000 10:32

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6074.d
 Lab Smp Id: DJP8W104 Client Smp ID: DF/S1/242/SDC/031
 Inj Date : 08-SEP-2000 19:26
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJP8W104,6050-G.b,,PEST.sub,,,
 Misc Info : 310206001
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 11-Sep-2000 10:25 matkol Quant Type: ESTD
 Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC044

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	37925	0.01507	0.001507(aR)
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
11 Aldrin				Compound Not Detected.		
7 beta-BHC				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin				Compound Not Detected.		
20 Endrin				Compound Not Detected.		

672 278

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6074.d
Report Date: 11-Sep-2000 10:32

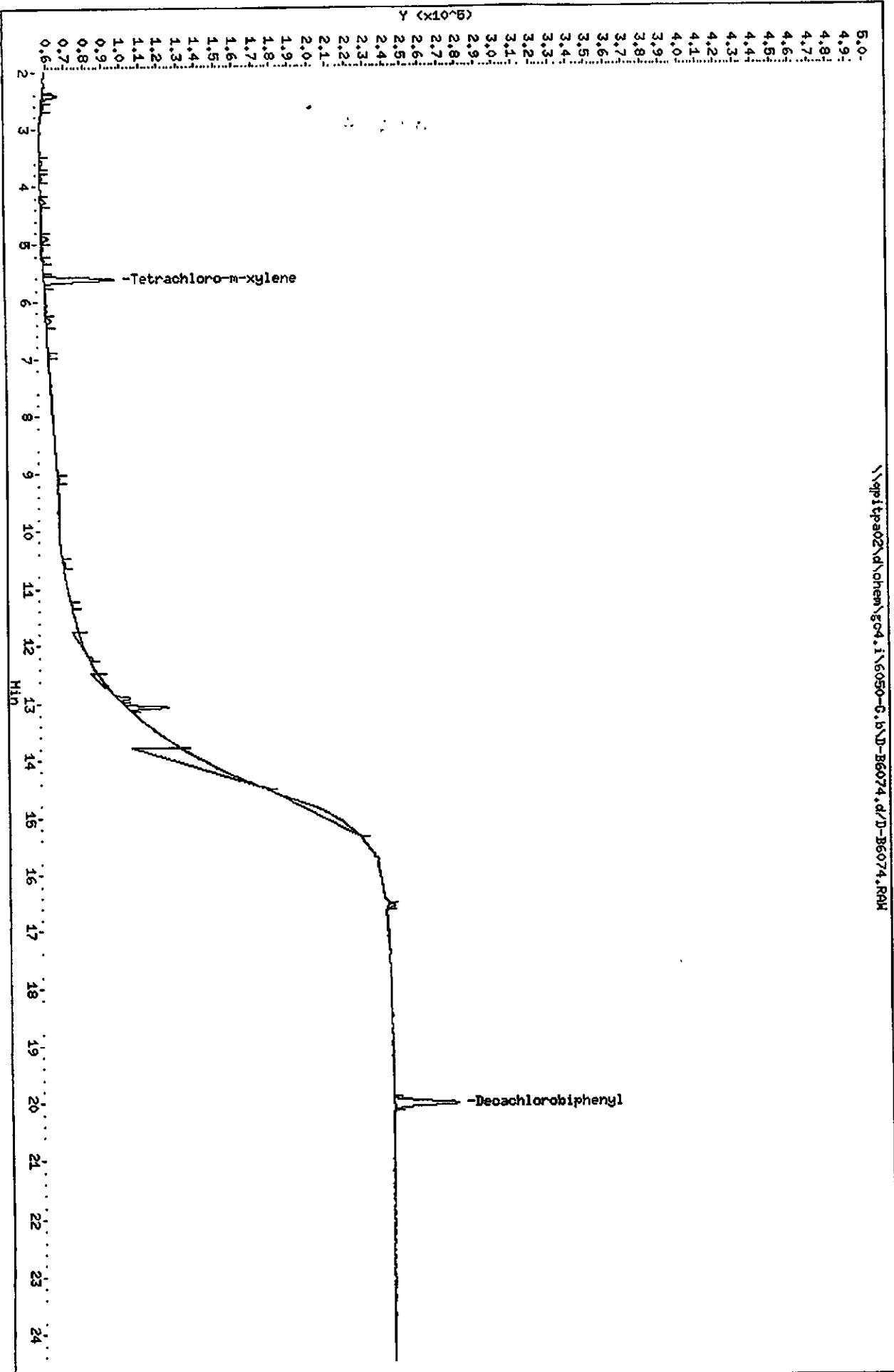
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
18 Toxaphene				Compound Not Detected.		
21 4,4'-DDD				Compound Not Detected		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected		
\$ 30 Decachlorobiphenyl	20.013	20.020	-0 007	34800	0.01979	0.001979(aR)

QC Flag Legend

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

Data File: \\pp1tpa02\chem\gc4.1\6050-G.b.D-B6074.d
Date : 08-SEP-2000 19:26
Client ID: DF/SL/242/SDC/031
Sample Info: DJF8M104.6050-G.b.,PEST,sub,,,
Volume Injected (uL): 1.0
Column phase: DB1701

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: C0H310206 002

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP90104

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: 6.8

QC Batch: 0251502

Client Sample Id: DF/S1/242/SDC/033

		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: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6075.d
 Report Date: 11-Sep-2000 10:32

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6075.d
 Lab Smp Id: DJP90104 Client Smp ID: DF/S1/242/SDC/033
 Inj Date : 08-SEP-2000 19:54
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJP90104,6050-G.b,,PEST.sub,,,
 Misc Info : 310206002
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 11-Sep-2000 10:25 matkol Quant Type: ESTD
 Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC044

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	45404	0.01804	0.001804 (aR)
5 alpha-BHC				Compound Not Detected		
6 gamma-BHC (Lindane)				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
11 Aldrin				Compound Not Detected.		
7 beta-BHC				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin	14.486	14.480	0.006	2248	<0.0	0.00006166(a)
20 Endrin				Compound Not Detected.		

672 282

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6075.d
Report Date: 11-Sep-2000 10:32

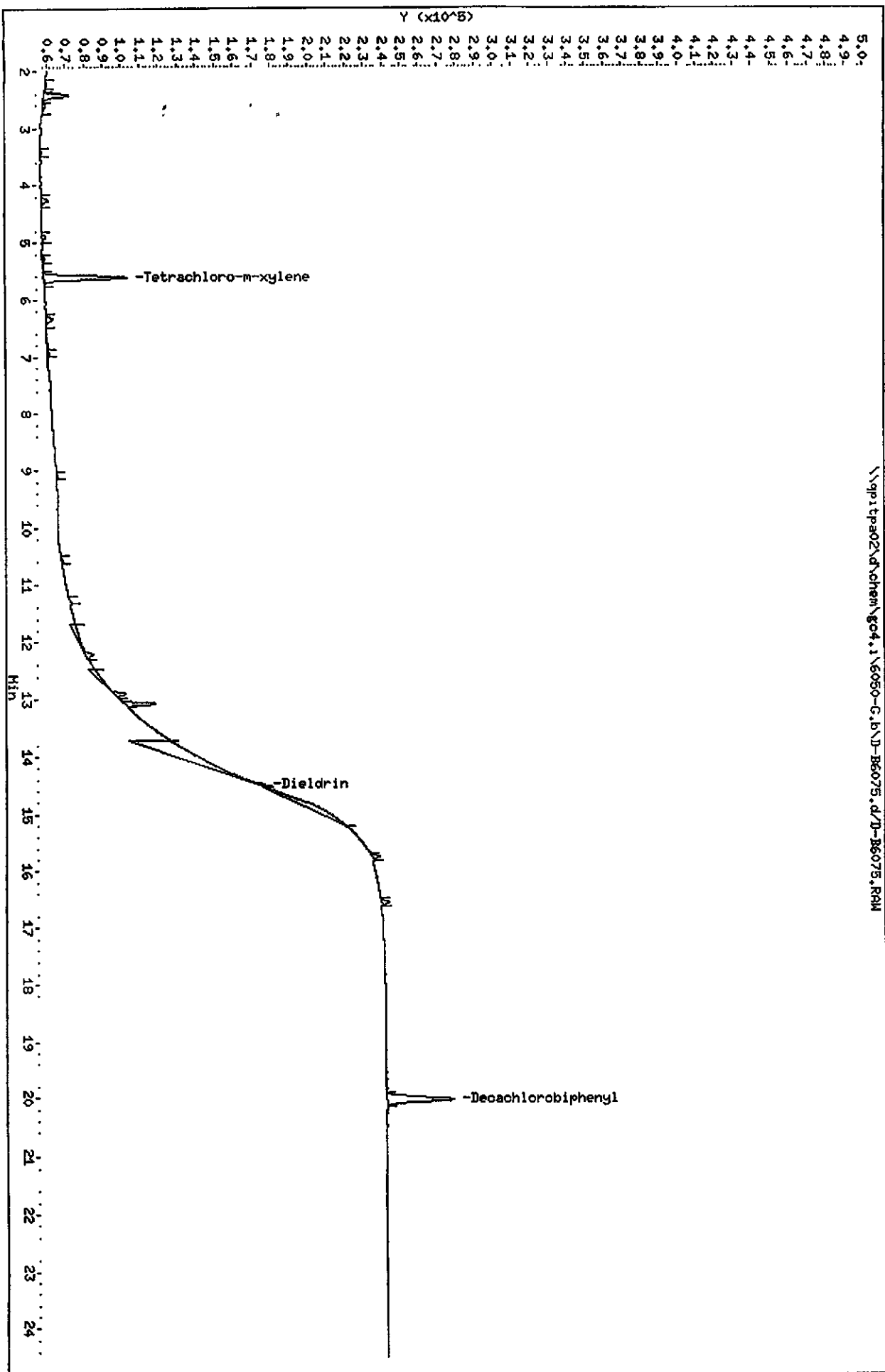
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
18 Toxaphene				Compound Not Detected.		
21 4,4'-DDD				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	20.013	20.020	-0.007	35668	0.02028	0.002028 (aR)

QC Flag Legend

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

Data File: \\qpi1tpa02\chem\gc4.i\6050-G.b\B-6075.d
Date: 08-SEP-2000 19:54
Client ID: DF/SI/242/SDC/033
Sample Info: DJP0104,6050-G.b,PEST.sub,,,
Volume injected (uL): 1.0
Column phase: DB1701

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



672 284

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 003

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP91104

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: 9.2

QC Batch: 0251502

Client Sample Id: DF/S1/242/SDC/034

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

FORM I

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6076.d
 Report Date: 11-Sep-2000 10:32

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6076.d
 Lab Smp Id: DJP91104 Client Smp ID: DF/S1/242/SDC/034
 Inj Date : 08-SEP-2000 20:22
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJP91104,6050-G.b,,PEST.sub,,,
 Misc Info : 310206003
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 11-Sep-2000 10:25 matkol Quant Type: ESTD
 Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC044

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	45614	0.01812	0.001812(aR)
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
11 Aldrin				Compound Not Detected.		
7 beta-BHC	12.086	12.126	-0.040	722	<0.0	0.00004289(a)
8 delta-BHC				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin				Compound Not Detected.		
20 Endrin				Compound Not Detected.		

672 286

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6076.d
Report Date: 11-Sep-2000 10:32

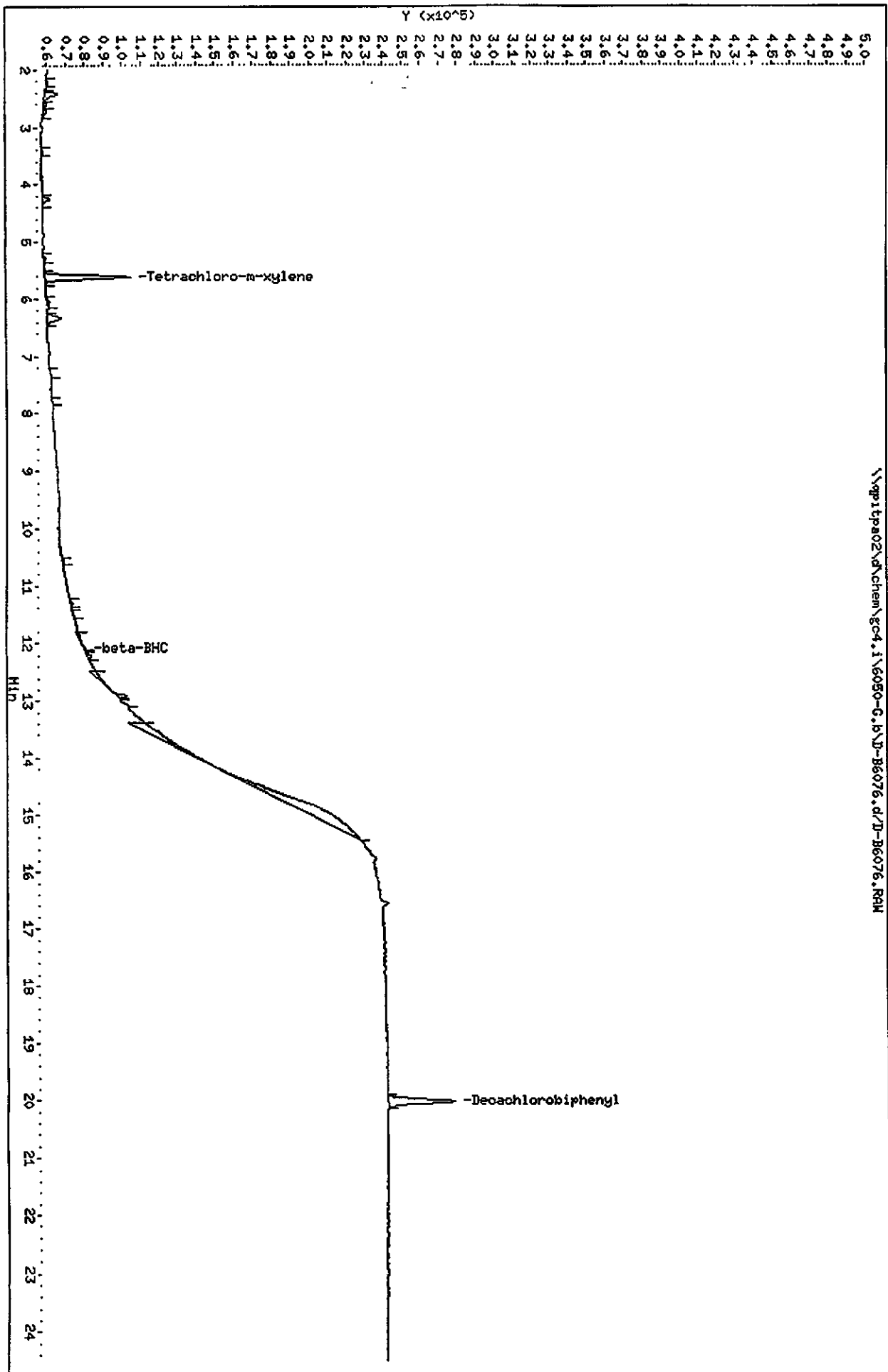
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
18 Toxaphene				Compound Not Detected		
21 4,4'-DDD				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	20 013	20.020	-0 007	36371	0.02068	0.002068 (aR)

QC Flag Legend

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

Data File: \\pp1tpa02\chem\gc4.1\6050-G.b\B-86076.d
Date: 08-SEP-2000 20:22
Client ID: DF/S1/242/SDC/034
Sample Info: DDP1104,6050-G.b,,PEST,sub,,
Volume Injected (uL): 1.0
Column phase: DB1701

Instrument: gc4.1
Operator: 1591
Column diameter: 0.53



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 004

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP92104

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: 12

QC Batch: 0251502

Client Sample Id: DF/S1/242/SDC/035

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

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6077.d
 Report Date: 11-Sep-2000 10:32

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6077.d
 Lab Smp Id: DJP92104 Client Smp ID: DF/S1/242/SDC/035
 Inj Date : 08-SEP-2000 20:50
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJP92104,6050-G.b,,PEST.sub,,,
 Misc Info : 310206004
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 11-Sep-2000 10:25 matkol Quant Type: ESTD
 Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC044

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.606	5.613	-0.007	44156	0.01754	0.001754 (aR)
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
11 Aldrin				Compound Not Detected.		
7 beta-BHC				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin				Compound Not Detected.		
20 Endrin				Compound Not Detected.		

672 290

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6077.d
 Report Date: 11-Sep-2000 10:32

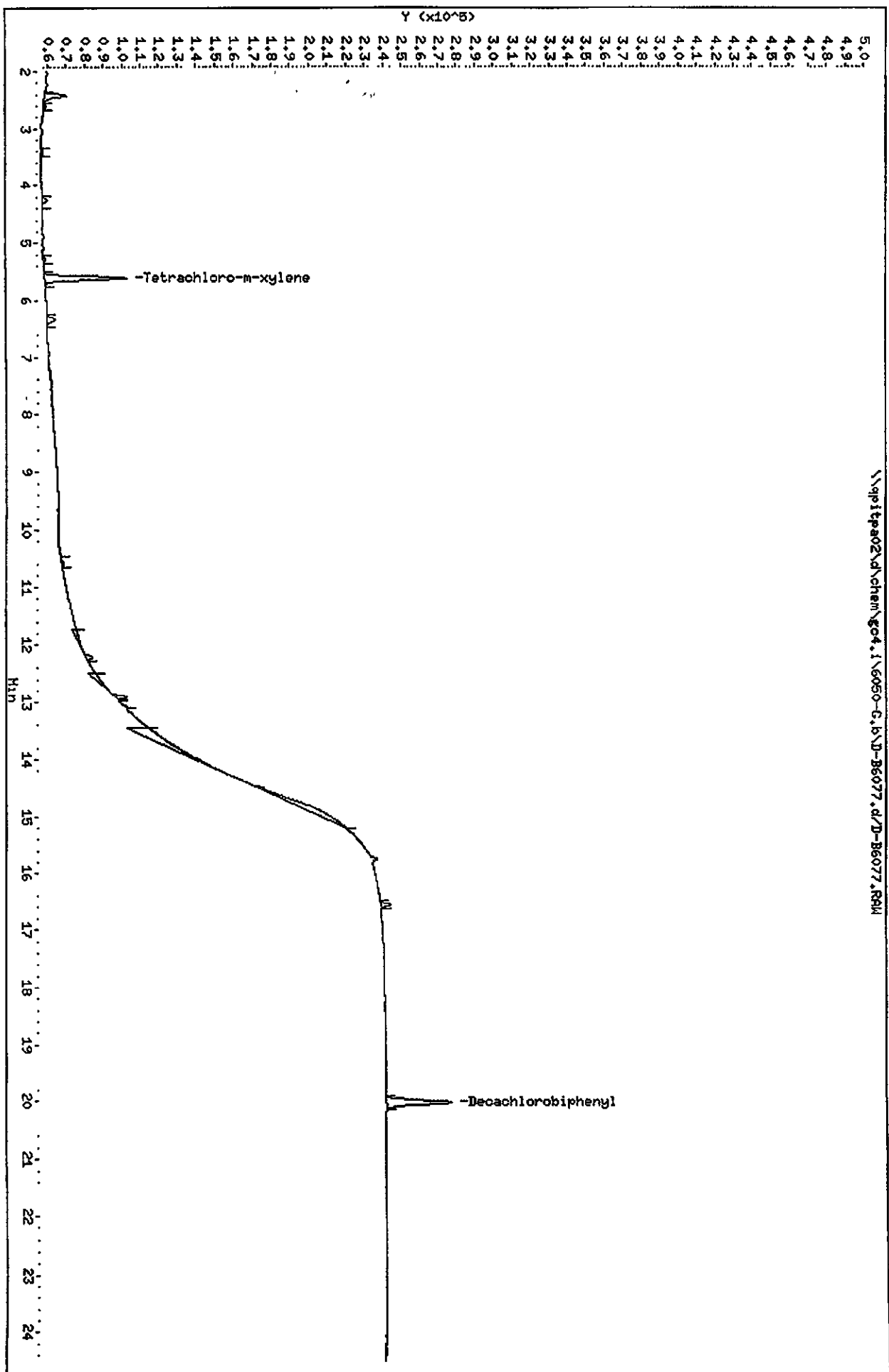
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
18 Toxaphene				Compound Not Detected.		
21 4,4'-DDD				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	20 013	20.020	-0.007	35072	0.01994	0.001994 (aR)

QC Flag Legend

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

Data File: \\ppitpa02\chem\gc4.i\6050-G.b\B-86077.d
Date: 08-SEP-2000 20:50
Client ID: DF/SJ/242/SDC/036
Sample Info: DUP92104,6050-G.b,,PEST,sub,,,
Volume Injected (uL): 1.0
Column phase: DB1701

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



**PESTICIDE
CALIBRATION DATA**

Report Date : 08-Sep-2000 10:43

20
587046
DB1201

672,293

STL - Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Quant Method : ESTD Target Version : 4.04
Last Update : 08-Sep-2000 10:42 Number of Cpnds : 31
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
-----	-----
Initial:Start Threshold	90.000000
Initial:End Threshold	45.000000
Initial:Area Threshold	900.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	1.000000
Initial:Negative Peaks	OFF
Initial:Tension	0.000000
15.000:Start Threshold	672.000000
15.000:End Threshold	336.000000
15.000:Area Threshold	6720.000000

Compound	RT	RT Window	RF
\$ 1 Tetrachloro-m-xylene	5.613	5.563-5.663	2.52e+006
58 MIREX	16.827	16.777-16.877	
2 Diallate A	7.087	7.037-7.137	
3 Diallate B	7.667	7.617-7.717	
4 HEXACHLOROBENZENE	6.987	6.937-7.037	
5 alpha-BHC	8.333	8.283-8.383	3.33e+006
6 gamma-BHC (Lindane)	9.707	9.657-9.757	2.93e+006
7 beta-BHC	12.127	12.077-12.177	1.68e+006
8 delta-BHC	12.813	12.763-12.863	3.42e+006
9 Chlordane	10.060	10.010-10.110	8.89e+004
	10.653	10.603-10.703	1.84e+005
	13.947	13.897-13.997	3.26e+005
	14.053	14.003-14.103	4.47e+005
10 Heptachlor	10.647	10.597-10.697	3.15e+006
11 Aldrin	11.620	11.570-11.670	3.09e+006
12 Heptachlor epoxide	13.327	13.277-13.377	3.58e+006
13 gamma-Chlordane	13.940	13.890-13.990	3.52e+006
14 alpha-Chlordane	14.040	13.990-14.090	3.55e+006
15 Endosulfan I	13.880	13.830-13.930	3.40e+006
16 4,4'-DDE	14.200	14.150-14.250	3.56e+006
17 Dieldrin	14.480	14.430-14.530	3.65e+006

672 294

Report Date : 08-Sep-2000 10:43

6D
589048
06/17/01

STL - Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m

Compound	RT	RT Window	RF
18 Toxaphene	15.233	15.183-15.283	2.58e+004
	15.540	15.490-15.590	3.65e+004
	16.000	15.950-16.050	3.52e+004
	16.733	16.683-16.783	2.75e+004
19 Isodrin	12.807	12.757-12.857	
20 Endrin	14.800	14.750-14.850	3.18e+006
21 4,4'-DDD	15.340	15.290-15.390	2.49e+006
22 Endosulfan II	15.493	15.443-15.543	2.98e+006
23 4,4'-DDT	15.640	15.590-15.690	2.55e+006
24 Endrin aldehyde	16.147	16.097-16.197	1.39e+006
25 Methoxychlor	16.673	16.623-16.723	1.18e+006
26 Endosulfan sulfate	16.727	16.677-16.777	1.68e+006
27 Endrin ketone	17.687	17.637-17.737	2.10e+006
28 Chlorobenzilate	15.133	15.083-15.183	
29 Kepone	17.753	17.703-17.803	
\$ 30 Decachlorobiphenyl	20.020	19.970-20.070	1.76e+006

Report Date : 06-Sep-2000 09:46

6E
HP58904H
DB1721

672 295

STL - Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 05-SEP-2000 10:29
End Cal Date : 05-SEP-2000 15:34
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Cal Date : 06-Sep-2000 09:45 eppingerd
Curve Type : Average

Calibration File Names:

Level 1: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6011.d
Level 2: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6012.d
Level 3: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6013.d
Level 4: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6014.d
Level 5: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6015.d

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
58 MIREX	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Diallylate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Diallylate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 HEXACHLORO BENZENE	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 alpha-BHC	2968400	3144700	3397360	3547460	3603690	3332322	8.105
6 gamma-BHC (Lindane)	2673400	2835400	2938600	3092060	3123650	2932622	6.347
7 beta-BHC	1634400	1801100	1656720	1686340	1638990	1683510	4.088
8 delta-BHC	2986800	3378200	3335400	3629940	3748120	3415692	8.638
9 Chlordane(1)	+++++	+++++	88872	+++++	+++++	88872	0.000
(2)	+++++	+++++	184280	+++++	+++++	184280	0.000
(3)	+++++	+++++	326456	+++++	+++++	326456	0.000
(4)	+++++	+++++	447104	+++++	+++++	447104	0.000
10 Heptachlor	3065600	3147700	3185440	3222540	3146510	3153558	1.849
11 Aldrin	2848800	3103400	3020040	3222960	3235030	3086046	5.172
12 Heptachlor epoxide	3385600	3685000	3538600	3653800	3621850	3576970	3.357
13 gamma-Chlordane	3372800	3641200	3472360	3586500	3549980	3524568	2.970
14 alpha-Chlordane	3492200	3701100	3502680	3584540	3489260	3553956	2.564
15 Endosulfan I	3314200	3425000	3436160	3445600	3380460	3400284	1.594
16 4,4'-DDE	3407600	3631700	3475040	3636960	3636320	3557524	3.057
17 Dieldrin	3464400	3643600	3696200	3698320	3725410	3645586	2.895
18 Toxaphene(1)	+++++	+++++	25789	+++++	+++++	25789	0.000
(2)	+++++	+++++	36504	+++++	+++++	36504	0.000
(3)	+++++	+++++	35159	+++++	+++++	35159	0.000
(4)	+++++	+++++	27471	+++++	+++++	27471	0.000
19 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 Endrin	3177600	3162900	3138320	3214400	3207110	3180066	0.989

672 296

Report Date : 06-Sep-2000 09:46

6E
HP58504H
031721

STL - Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 05-SEP-2000 10:29
 End Cal Date : 05-SEP-2000 15:34
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\gpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Cal Date : 06-Sep-2000 09:45 eppingerd
 Curve Type : Average

	0.00500	0.01000	0.02500	0.05000	0.10000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
21 4,4'-DDD	2429400	2524900	2509240	2499120	2505310	2493594	1.489
22 Endosulfan II	2980400	3201600	2826720	2971080	2904870	2976934	4.699
23 4,4'-DDT	2507800	2569500	2560760	2575340	2560670	2554814	1.057
24 Endrin aldehyde	1292800	1412100	1356720	1420200	1451260	1386616	4.511
25 Methoxychlor	1138600	1194200	1198740	1191130	1179310	1180396	2.071
26 Endosulfan sulfate	1497400	1703800	1651160	1768000	1783110	1680694	6.856
27 Endrin ketone	2002800	2144700	2067680	2169080	2136020	2104056	3.230
28 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++
=====							
\$ 1 Tetrachloro-m-xylene	2666200	2675800	2542320	2429780	2269620	2516744	6.793
\$ 30 Decachlorobiphenyl	1713600	1803700	1794800	1781260	1700210	1758714	2.741

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

672.297

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 4140-G
 GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 09/05/00 09/05/00

EPA Sample No. (PIBLK): _____ Date Analyzed : _____
 Lab Sample ID (PIBLK): _____ Time Analyzed : _____
 EPA Sample No. (PEM): _____ Date Analyzed : 09/05/00
 Lab Sample ID (PEM): EVALB Time Analyzed : 1001

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	14.81	14.76	14.86	0.02392	0.02500	-4.3
4,4'-DDT	15.65	15.59	15.69	0.02387	0.02500	-4.5

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

672 298

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: 4140-G
GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 09/05/00 09/05/00

EPA Sample No. (PIBLK): Date Analyzed :

Lab Sample ID (PIBLK): Time Analyzed :

EPA Sample No. (PEM): Date Analyzed : 09/05/00

Lab Sample ID (PEM): EVALB Time Analyzed : 1657

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
=====	=====	=====	=====	=====	=====	=====
Endrin	14.81	14.76	14.86	0.02388	0.02500	-4.5
4,4'-DDT	15.64	15.59	15.69	0.02411	0.02500	-3.6

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

Combined % breakdown (1):

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

672 299

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 4140-G

GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 09/05/00 09/05/00

EPA Sample No. (PIBLK): _____ Date Analyzed : _____

Lab Sample ID (PIBLK): _____ Time Analyzed : _____

EPA Sample No. (PEM): _____ Date Analyzed : 09/08/00

Lab Sample ID (PEM): EVALB Time Analyzed : 1545

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	14.80	14.75	14.85	0.02485	0.02500	-0.6
4,4'-DDT	15.63	15.59	15.69	0.02463	0.02500	-1.5

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

Combined % breakdown (1): _____

672 300

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6064.d
 Report Date: 11-Sep-2000 10:21

7L
 589048
 DB/101

STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 08-SEP-2000 14:49
 Lab File ID: D-B6064.d Init. Cal. Date(s): 05-SEP-2000 05-SEP-2000
 Analysis Type: Init. Cal. Times: 10:29 15:34
 Lab Sample ID: MEDA Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN	MAX
\$ 1 Tetrachloro-m-xylene	2516744	2623560	0.000	4.2 15.0
5 alpha-BHC	3332322	3471920	0.010	4.2 15.0
6 gamma-BHC (Lindane)	2932622	3054200	0.010	4.1 15.0
10 Heptachlor	3153558	3279400	0.010	4.0 15.0
15 Endosulfan I	3400284	3516400	0.010	3.4 15.0
17 Dieldrin	3645586	3802640	0.010	4.3 15.0
20 Endrin	3180066	3306040	0.010	4.0 15.0
21 4,4'-DDD	2493594	2517440	0.010	1.0 15.0
23 4,4'-DDT	2554814	2652280	0.010	3.8 15.0
25 Methoxychlor	1180396	1204360	0.010	2.0 15.0
\$ 30 Decachlorobiphenyl	1758714	1855880	0.010	5.5 15.0

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6065.d
 Report Date: 11-Sep-2000 10:21

7E
 589048
 DB179

672 301

STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 08-SEP-2000 15:17
 Lab File ID: D-B6065.d Init. Cal. Date(s): 05-SEP-2000 05-SEP-2000
 Analysis Type: Init. Cal. Times: 10:29 15:34
 Lab Sample ID: MEDB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN	MAX
-----	-----	-----	-----	-----
11 Aldrin	3086046	3126400	0.010	1.3 15.0
7 beta-BHC	1683510	1702480	0.010	1.1 15.0
8 delta-BHC	3415692	3406560	0.010	-0.3 15.0
12 Heptachlor epoxide	3576970	3606800	0.010	0.8 15.0
13 gamma-Chlordane	3524568	3572560	0.010	1.4 15.0
14 alpha-Chlordane	3553956	3575520	0.010	0.6 15.0
16 4,4'-DDE	3557524	3587320	0.010	0.8 15.0
22 Endosulfan II	2976934	2954960	0.010	-0.7 15.0
24 Endrin aldehyde	1386616	1407320	0.010	1.5 15.0
26 Endosulfan sulfate	1680694	1762920	0.010	4.9 15.0
27 Endrin ketone	2104056	2213480	0.010	5.2 15.0

672 302

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6083.d
 Report Date: 11-Sep-2000 10:25

7E
 589048
 DB1701

STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 08-SEP-2000 23:36
 Lab File ID: D-B6083.d Init. Cal. Date(s): 05-SEP-2000 05-SEP-2000
 Analysis Type: Init. Cal. Times: 10:29 15:34
 Lab Sample ID: MEDA Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN	MAX
1 Tetrachloro-m-xylene	2516744	2632880	0.000	4.6
5 alpha-BHC	3332322	3505840	0.010	5.2
6 gamma-BHC (Lindane)	2932622	3046800	0.010	3.9
10 Heptachlor	3153558	3265360	0.010	3.5
15 Endosulfan I	3400284	3503560	0.010	3.0
17 Dieldrin	3645586	3814600	0.010	4.6
20 Endrin	3180066	3287080	0.010	3.4
21 4,4'-DDD	2493594	2571120	0.010	3.1
23 4,4'-DDT	2554814	2731720	0.010	6.9
25 Methoxychlor	1180396	1296840	0.010	9.9
30 Decachlorobiphenyl	1758714	1894840	0.010	7.7

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6084.d
Report Date: 11-Sep-2000 10:25

72
589046 672 303
03/701

STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 09-SEP-2000 00:03
Lab File ID: D-B6084.d Init. Cal. Date(s): 05-SEP-2000 05-SEP-2000
Analysis Type: Init. Cal. Times: 10:29 15:34
Lab Sample ID: MEDB Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN	MAX
			RRF	%D
11 Aldrin	3086046	3062120	0.010	-0.8
7 beta-BHC	1683510	1648080	0.010	-2.1
8 delta-BHC	3415692	3439360	0.010	0.7
12 Heptachlor epoxide	3576970	3530200	0.010	-1.3
13 gamma-Chlordane	3524568	3508120	0.010	-0.5
14 alpha-Chlordane	3553956	3452640	0.010	-2.9
16 4,4'-DDE	3557524	3512320	0.010	-1.3
22 Endosulfan II	2976934	2912960	0.010	-2.1
24 Endrin aldehyde	1386616	1375680	0.010	-0.8
26 Endosulfan sulfate	1680694	1748920	0.010	4.1
27 Endrin ketone	2104056	2187960	0.010	4.0

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0H310206

GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 09/05/00 09/05/00

Instrument ID: GC4

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
TCX: 5.61			DCB: 20.02		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	EVALB	09/05/00	1001	5.62	20.03
02	MEDTOX	09/05/00	1029	5.62	20.03
03	MEDCHLOR	09/05/00	1057	5.62	20.03
04	LOWA	09/05/00	1124	5.61	20.03
05	MLOWA	09/05/00	1152	5.61	20.03
06	MEDA	09/05/00	1220	5.61	20.03
07	MHIGA	09/05/00	1248	5.61	20.03
08	HIGA	09/05/00	1315	5.61	20.03
09	LOWB	09/05/00	1343		
10	MLOWB	09/05/00	1411		
11	MEDB	09/05/00	1438		
12	MHIGHB	09/05/00	1506		
13	HIGHB	09/05/00	1534		
14	2ND A	09/05/00	1601	5.61	20.03
15	2ND B	09/05/00	1629		
16	EVALB	09/05/00	1657	5.61	20.03
17	MEDA	09/08/00	1449	5.61	20.02
18	MEDB	09/08/00	1517		
19	EVALB	09/08/00	1545	5.61	20.02
20	DF/S1/242/SD DJP8W104	09/08/00	1926	5.61	20.01
21	DF/S1/242/SD DJP90104	09/08/00	1954	5.61	20.01
22	DF/S1/242/SD DJP91104	09/08/00	2022	5.61	20.01
23	DF/S1/242/SD DJP92104	09/08/00	2050	5.61	20.01
24	PBLK1 DK2C8101	09/08/00	2240	5.61	20.01
25	LCS1 DK2C8102	09/08/00	2308	5.61	20.01
26	MEDA	09/08/00	2336	5.61	20.01
27	MEDB	09/09/00	0003		
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.

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6003.d
Lab Smp Id: EVALB
Inj Date : 05-SEP-2000 10:01
Operator : 1891 Inst ID: gc4.i
Smp Info : EVALB,6050-G.b,,EVALBR.sub,,3,1
Misc Info : 190-88-8
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:52 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: EVALBR.sub
Target Version: 4.04
Processing Host: PITPC061

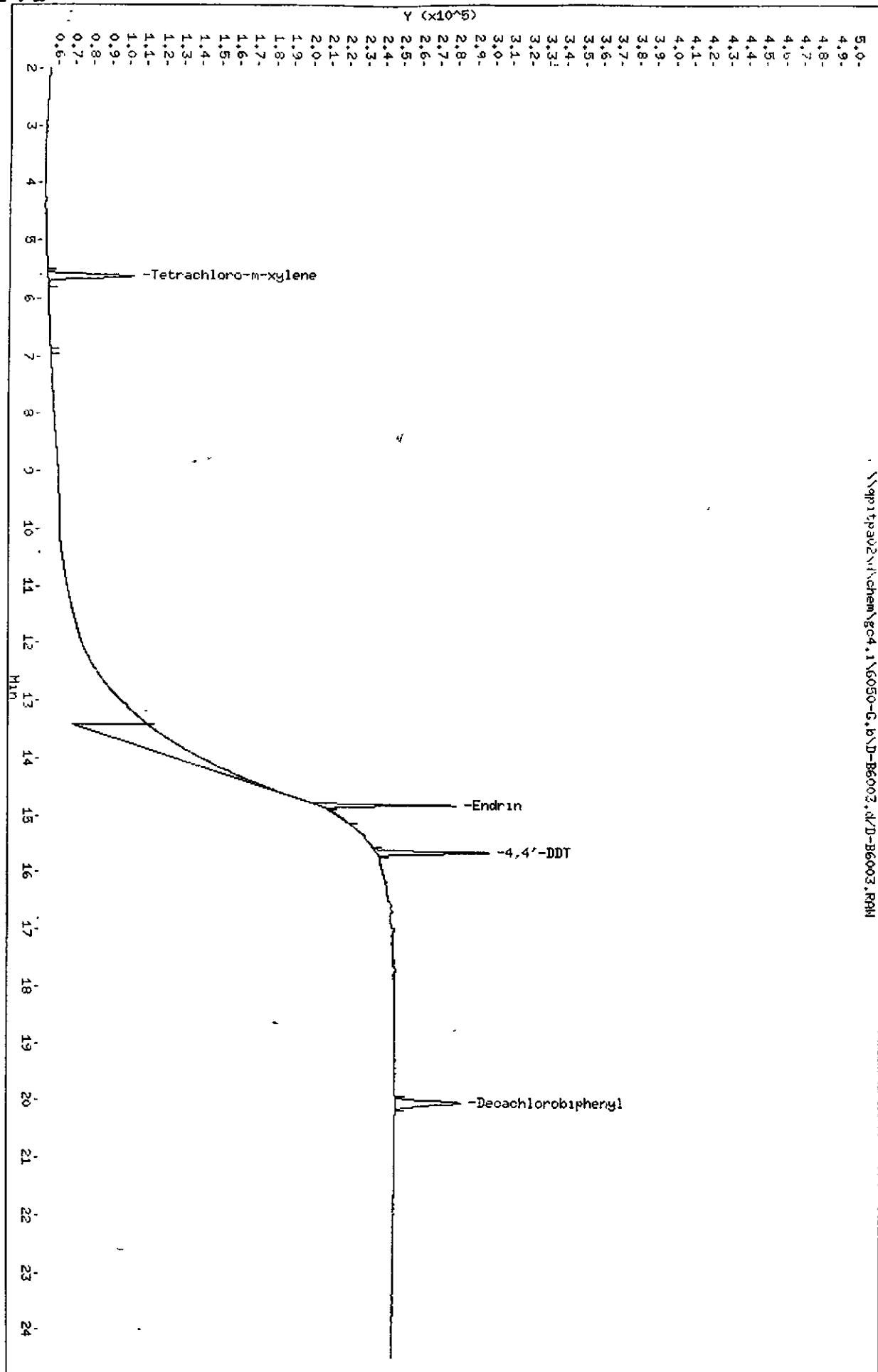
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ng)
\$ 1 Tetrachloro-m-xylene	5.620	5.613	0.007	47897	0.01903	0.01903(R)
16 4,4'-DDE	Compound Not Detected					
20 Endrin	14.806	14.806	0.000	76071	0.02392	0.02392
21 4,4'-DDD	Compound Not Detected					
23 4,4'-DDT	15.646	15.640	0.006	60975	0.02387	0.02387
24 Endrin aldehyde	Compound Not Detected					
27 Endrin ketone	Compound Not Detected					
\$ 30 Decachlorobiphenyl	20.033	20.033	0.000	34960	0.01988	0.01988(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\pp1p302\chem\gc4.1\6050-G.b\B-B6003.d
Date: 05-SEP-2000 10:01
Client ID:
Sample Info: EVAL.B.6050-G.b., EVAL.FR.sub., 3.1
Column phase: DB1701

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



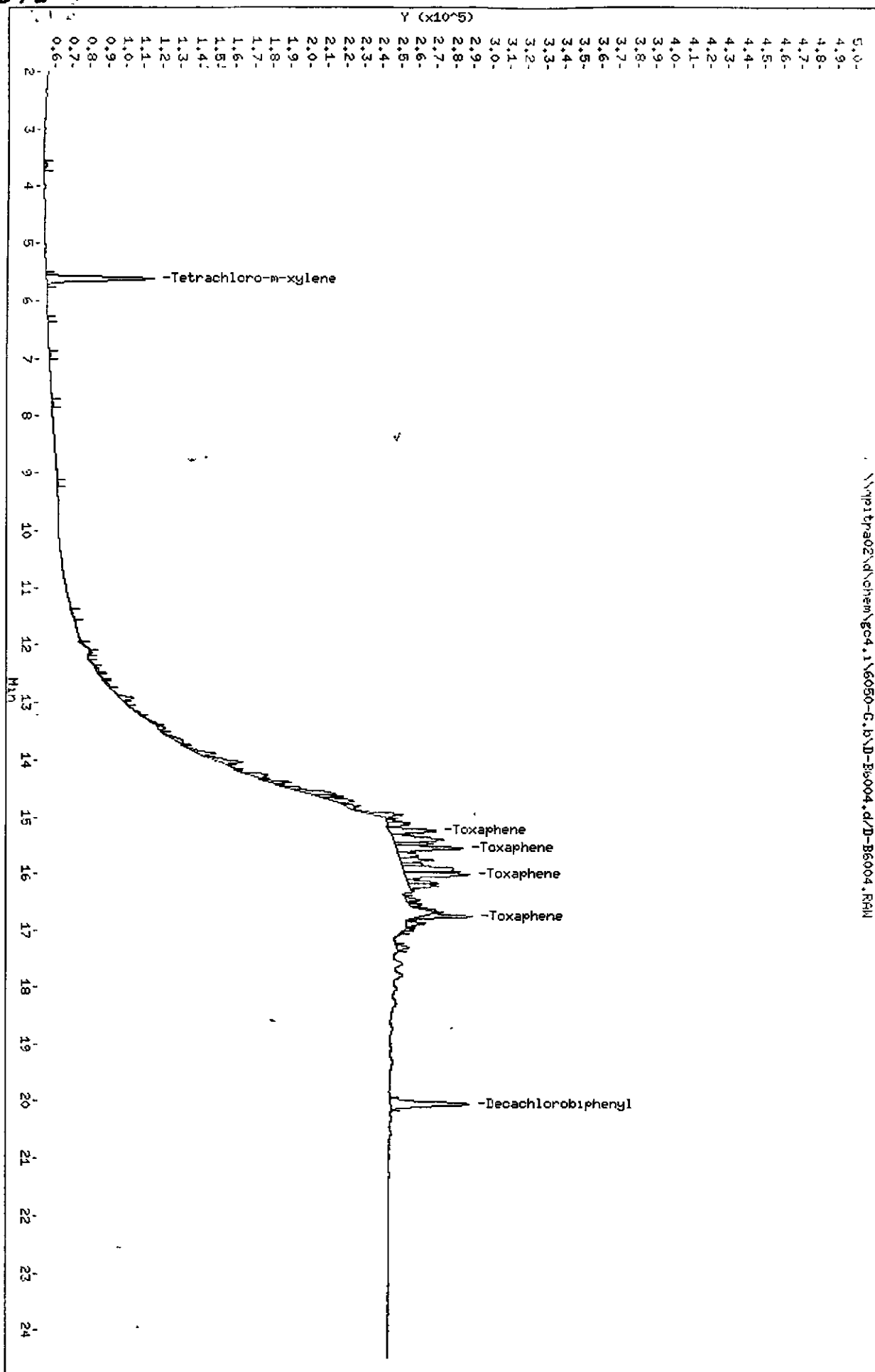
STL - Pittsburgh

Data file : \\qp1tpa02\d\chem\gc4.i\6050-G.b\D-B6004.d
Lab Smp Id: MEDTOX
Inj Date : 05-SEP-2000 10:29
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDTOX,6050-G.b,,1-TOX.sub,,1,3
Misc Info : 190-98-12
Comment :
Method : \\qp1tpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:54 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-TOX.sub
Target Version: 4.04
Processing Host: PITPC061

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL AMT (ng)	ON-COL (ng)
18 Toxaphene	15 233	15 233	0 000	25789	1 00000	1 000
\$ 1 Tetrachloro-m-xylene	5 620	5 613	0 007	59590	0 02500	0 02398
\$ 30 Decachlorobiphenyl	20 033	20 033	0 000	43366	0 02500	0 02483

Data File: \\np1tpa02\chem\gc4.1\6050-G.b\B-B6004.d
Date : 05-SEP-2000 10:29
Client ID:
Sample Info: MEDTON\6050-G.b.1-TOX.sub.1.3
Column phase: DB1701

Instrument: 804.1
Operator: LS91
Column diameter: 0.53



STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6005.d
Lab Smp Id: MEDCHLOR
Inj Date : 05-SEP-2000 10:57
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDCHLOR,6050-G.b,,2-CHLO.sub,,1,3
Misc Info : 190-90-4
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:54 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-CHLO.sub
Target Version: 4.04
Processing Host: PITPC061

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
9 Chlordane	10 060	10 060	0.000	22218	0.25000	0 2500
S 1 Tetrachloro m xylene	5 620	5.613	0.007	62243	0.02500	0 02484
S 20 Decachlorobiphenyl	20 026	20 033	-0 007	44139	0 02500	0 02518

Data File: \\sp1tpa02\chem\gc4.1\6050-G.b\B6005.d

Date : 05-SEP-2000 10:57

Client ID:

Sample Info: MEDCHLOR,6050-G.b,2-CHLO,sub,1,3

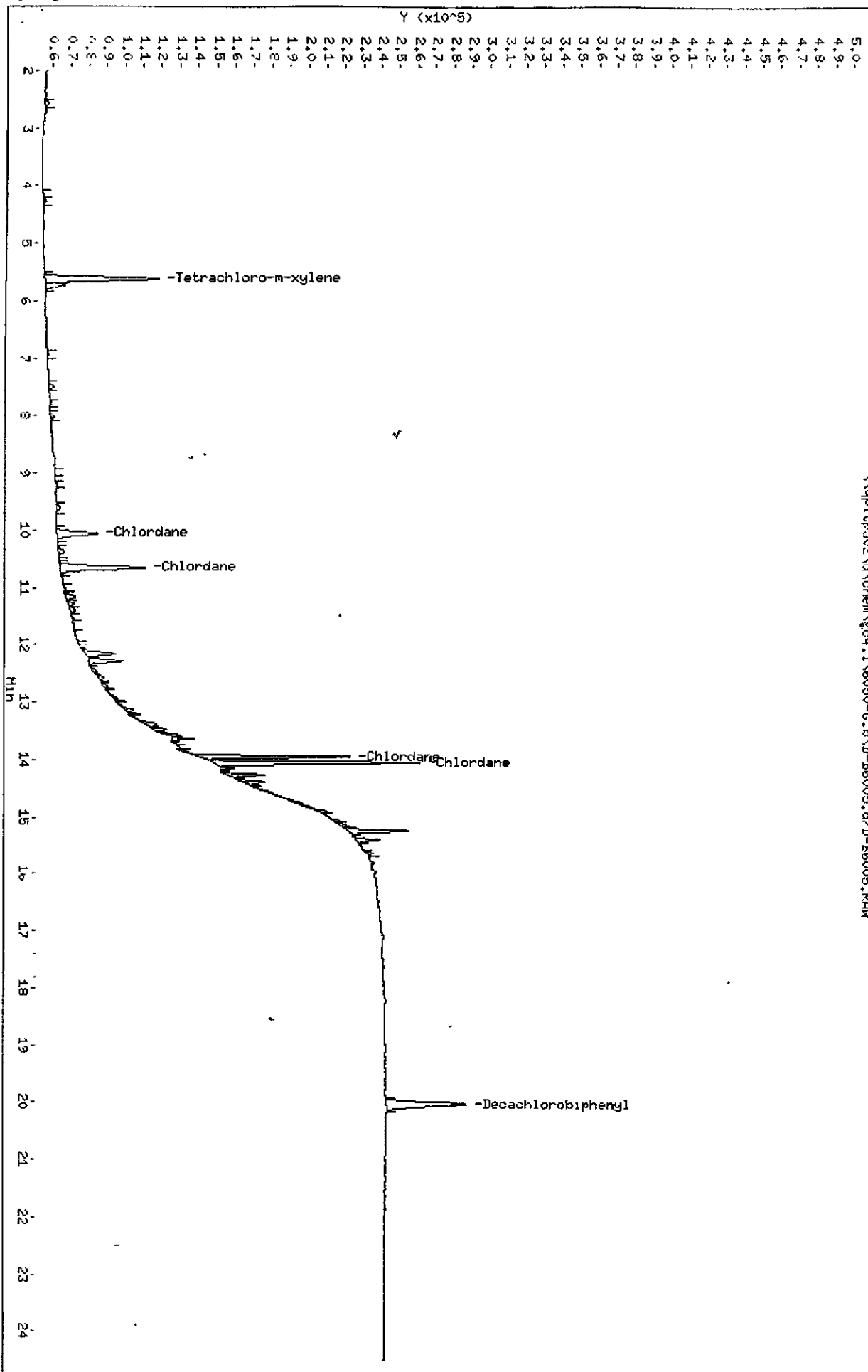
Column phase: DB1701

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53

\\sp1tpa02\chem\gc4.1\6050-G.b\B6005.d\B6005.PRM

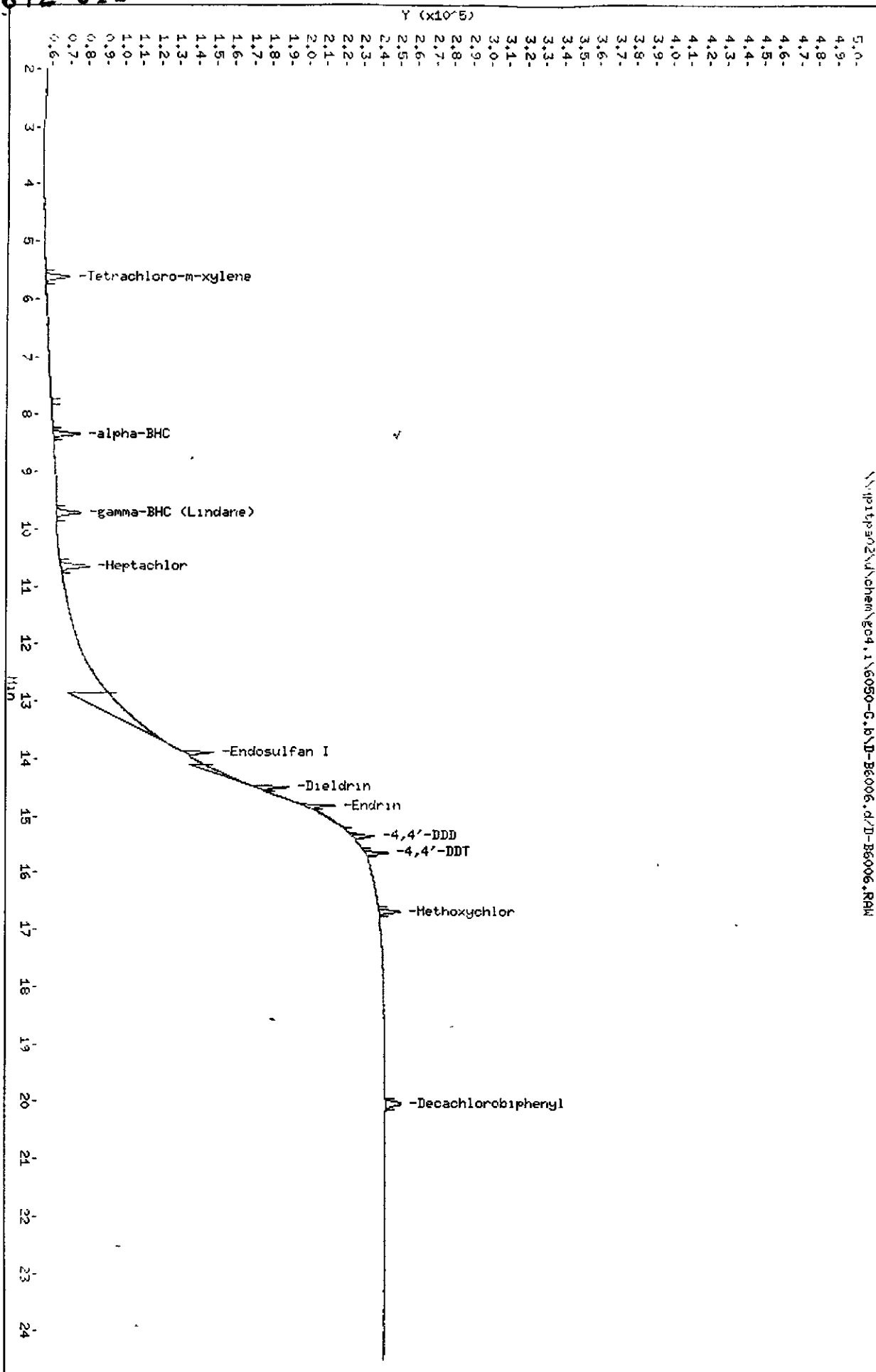


STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6006.d
Lab Smp Id: LOWA
Inj Date : 05-SEP-2000 11:24
Operator : 1891 Inst ID: gc4.i
Smp Info : LOWA,6050-G.b,,3-INDA.sub,,1,1
Misc Info : 190-100-6
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:54 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC061

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5 613	5 613	0.000	13331	0 00500	0 005319
5 alpha BHC	8 340	8 340	0 000	14842	0 00500	0 004454
6 gamma-BHC (Lindane)	9 720	9.720	0 000	13367	0 00500	0 004558
10 Heptachlor	10 653	10 653	0 000	15328	0.00500	0 004860
15 Endosulfan I	13 886	13 886	0 000	16571	0 00500	0 004873
17 Dieldrin	14 486	14 486	0 000	17322	0 00500	0 004751
20 Endrin	14 806	14 806	0 000	15888	0.00500	0 004996
21 4,4'-DDD	15 346	15 346	0 000	12147	0.00500	0 004871
23 4,4' DDT	15 640	15 640	0 000	12539	0 00500	0 004908
25 Methoxychlor	16 680	16 673	0 007	11386	0 01000	0 009646
\$ 30 Decachlorobiphenyl	20 033	20 033	0 000	8568	0.00500	0 004888

672 312



Data File: \\p1tpa02\chem\g04.1\6050-G.b.D-B6006.d
Date : 05-SEP-2000 11:24
Client ID:
Sample Info: LOMA-6050-G.b./2-INDA.sub.1.1
Column Phase: DB1701

Instrument: g04.1
Operator: 1891
Column diameter: 0.53

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6007.d
Lab Smp Id: MLOWA
Inj Date : 05-SEP-2000 11:52
Operator : 1891 Inst ID: gc4.i
Smp Info : MLOWA,6050-G.b,,3-INDA.sub,,1,2
Misc Info : 190-100-7
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:54 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC061

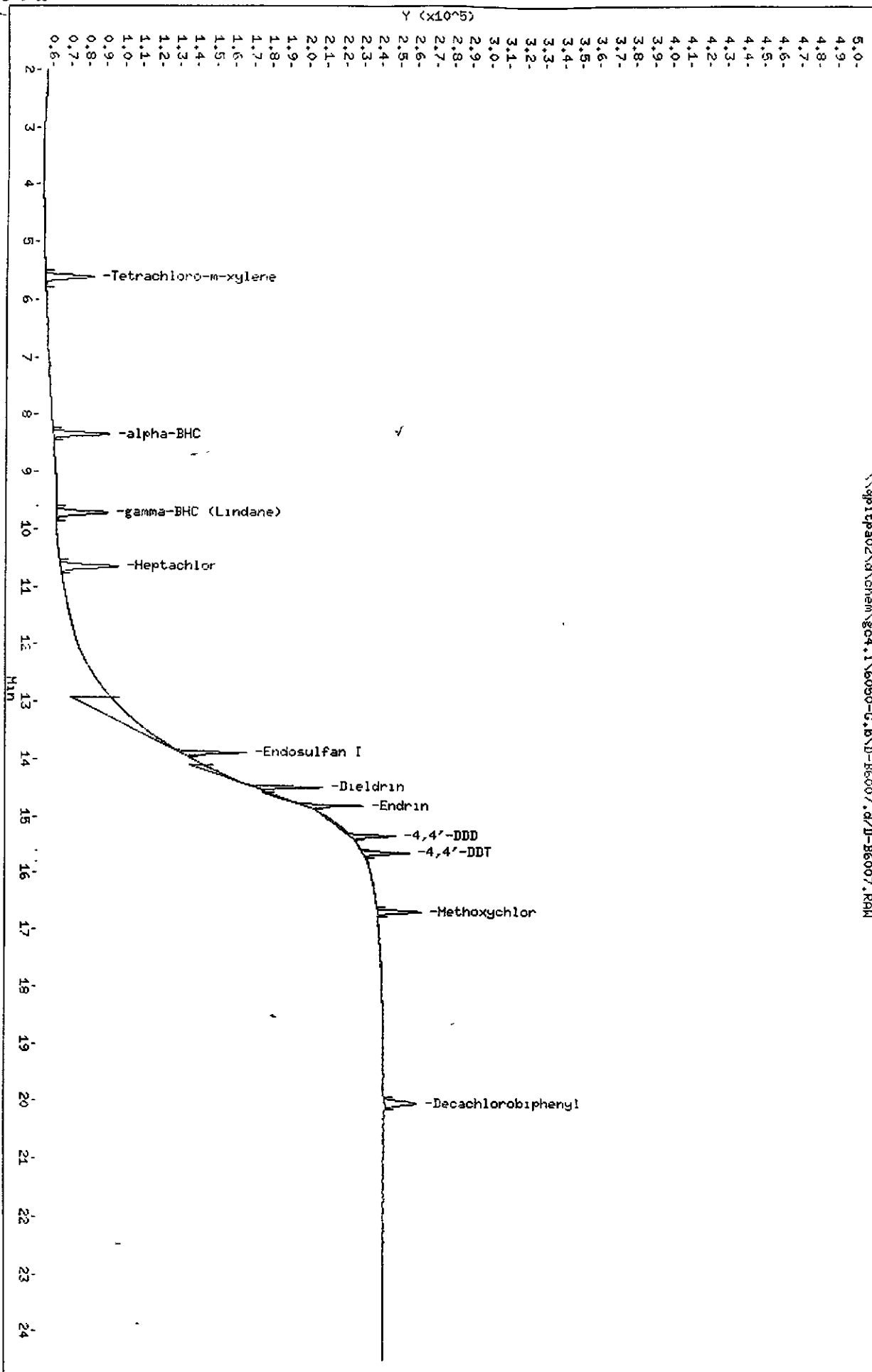
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
\$ 1 Tetrachloro-m-xylene	5 613	5 613	0 000	26758	0 01000	0 01068
5 alpha BHC	8 340	8 340	0.000	31447	0 01000	0 009437
6 gamma-BHC (Lindane)	9 720	9 720	0.000	28354	0 01000	0.009668
10 Heptachlor	10 653	10 653	0 000	31477	0 01000	0 009981
15 Endosulfan I	13 886	13 886	0 000	34250	0 01000	0 01000
17 Dieldrin	14 486	14 486	0 000	36436	0 01000	0 009994
20 Endrin	14 806	14 806	0 000	31629	0 01000	0 009946
21 4,4'-DDD	15 346	15 346	0 000	25249	0 01000	0.01012
23 4,4'-DDT	15 640	15 640	0 000	25695	0 01000	0 01006
25 Methoxychlor	16 680	16 673	0 007	23884	0.02000	0 02023
\$ 30 Decachlorobiphenyl	20 033	20.033	0.000	18037	0 01000	0 01029

Data File: \\npitpa02\chem\gc4,1\6050-G.b\D-B6007.d
Date: 06-SEP-2000 11:52
Client ID:
Sample Info: HL010, 0050-G.b, 3-INDA, sub, 1, 2

Column phase: DB1701

Instrument: gc4.1
Operator: 1501
Column diameter: 0.53

\\npitpa02\chem\gc4,1\6050-G.b\D-B6007.d\B6007.RAW



STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6008.d
Lab Smp Id: MEDA
Inj Date : 05-SEP-2000 12:20
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDA,6050-G.b,,3-INDA.sub,,1,3
Misc Info : 190-100-8
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:55 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC061

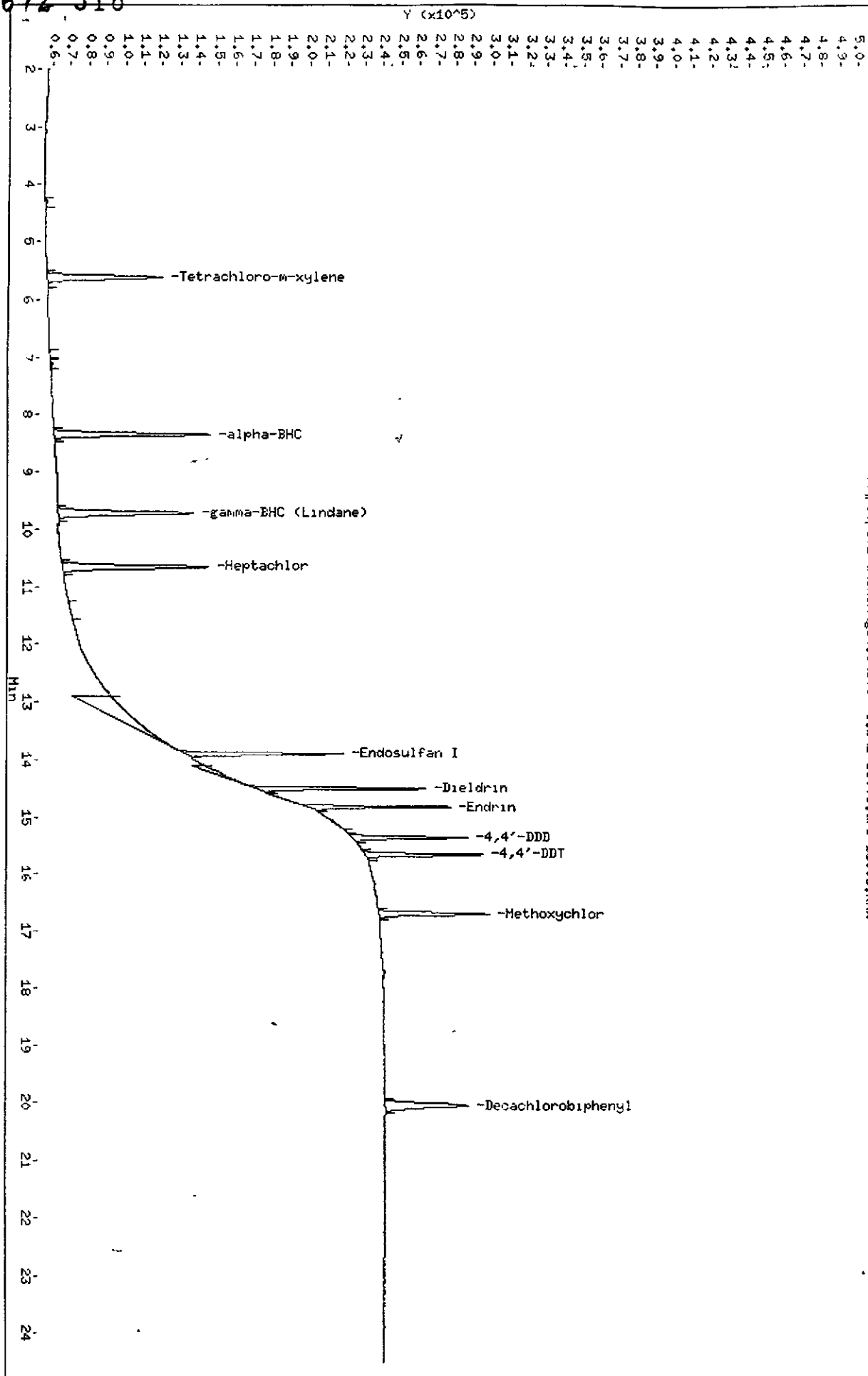
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON COL (ng)
*****	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	63558	0.02500	0.02525
5 alpha-BHC	8.340	8.340	0.000	84934	0.02500	0.02549
6 gamma BHC (Lindane)	9.720	9.720	0.000	73465	0.02500	0.02505
10 Heptachlor	10.653	10.653	0.000	79636	0.02500	0.02525
15 Endosulfan I	13.886	13.886	0.000	85904	0.02500	0.02526
17 Dieldrin	14.486	14.486	0.000	92405	0.02500	0.02535
20 Endrin	14.806	14.806	0.000	78458	0.02500	0.02467
21 4,4' DDD	15.346	15.346	0.000	62731	0.02500	0.02516
23 4,4'-DDT	15.640	15.640	0.000	64019	0.02500	0.02506
25 Methoxychlor	16.673	16.673	0.000	59937	0.05000	0.05078
\$ 30 Decachlorobiphenyl	20.033	20.033	0.000	44870	0.02500	0.02551

672 316

Data File: \\npitpa02\chem\gc4,1\6050-Q.b\D-B6008.d
Date: 05-SEP-2000 12:20
Client ID:
Sample Info: MEDA,6050-Q.b\3-INDA.su1,1.3
Column phase: DB1701

Instrument: 804.1
Operator: 1891
Column diameter: 0.53

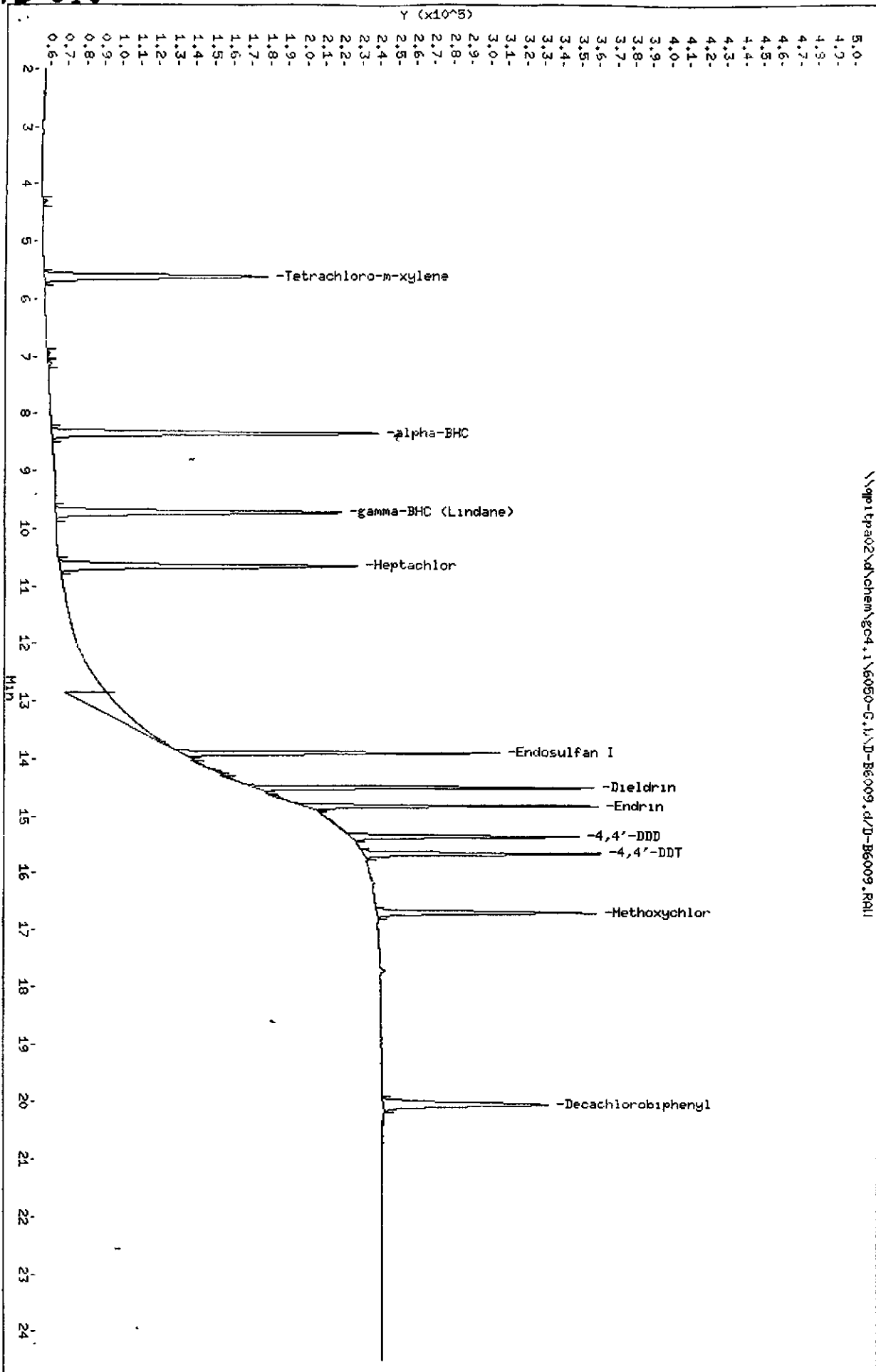
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STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6009.d
Lab Smp Id: MHIGHA
Inj Date : 05-SEP-2000 12:48
Operator : 1891 Inst ID: gc4.i
Smp Info : MHIGHA,6050-G.b,,3-INDA.sub,,1,4
Misc Info : 190-100-9
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:55 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC061

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON COL (ng)
\$ 1 Tetrachloro m xylene	5.613	5.613	0.000	121489	0.05000	0.04827
5 alpha BHC	8.340	8.340	0.000	177373	0.05000	0.05323
6 gamma-BHC (Lindane)	9.720	9.720	0.000	154603	0.05000	0.05272
10 Heptachlor	10.653	10.653	0.000	161127	0.05000	0.05109
15 endosulfan I	13.886	13.886	0.000	172280	0.05000	0.05067
17 Dieldrin	14.486	14.486	0.000	184916	0.05000	0.05072
20 Endrin	14.806	14.806	0.000	160720	0.05000	0.05054
21 4,4'-DDD	15.346	15.346	0.000	124956	0.05000	0.05011
23 4,4'-DDT	15.640	15.640	0.000	128767	0.05000	0.05040
25 Methoxychlor	16.680	16.673	0.007	119113	0.10000	0.10009
\$ 30 Decachlorobiphenyl	20.033	20.033	0.000	89063	0.05000	0.05064



Data File: \\pp1tpa02\chem\gc4.1\6050-G.i\D-B6009.d
Date: 05-SEP-2000 12:48
Client ID:
Sample Info: MHICR, 6050-G.b, 3-INDR, sil, 1,4
Column phase: DB1701

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

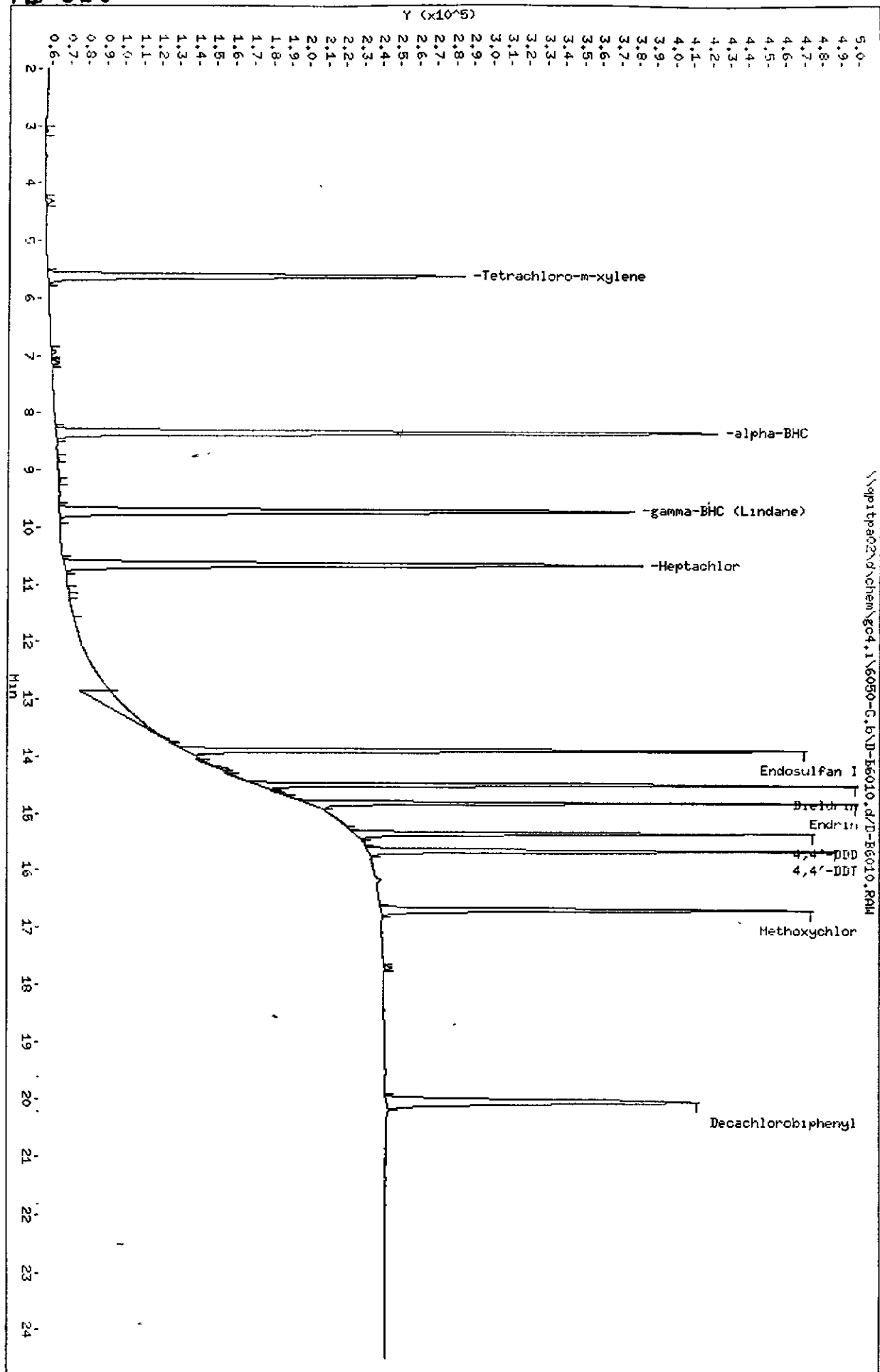
STL - Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\6050-G.b\D-B6010.d
Lab Smp Id: HIGHA
Inj Date : 05-SEP-2000 13:15
Operator : 1891 Inst ID: gc4.i
Smp Info : HIGHA,6050-G.b,,3-INDA.sub,,1,5
Misc Info : 190-100-10
Comment :
Method : \\gpitpa02\d\chem\gc4.i\6050-G b\PESTB.m
Meth Date : 06-Sep-2000 09:55 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013 d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC061

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON COL (ng)
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	226962	0.10000	0.09018
5 alpha-BHC	8.340	8.340	0.000	360369	0.10000	0.1081(A)
6 gamma-BHC (Lindane)	9.720	9.720	0.000	312365	0.10000	0.1065(A)
10 Heptachlor	10.660	10.653	0.007	314651	0.10000	0.09978
15 Endosulfan I	13.886	13.886	0.000	338046	0.10000	0.09942
17 Dieldrin	14.486	14.486	0.000	372541	0.10000	0.1022(A)
20 Endrin	14.806	14.806	0.000	320711	0.10000	0.1008(A)
21 4,4'-DDD	15.346	15.346	0.000	250531	0.10000	0.1005(A)
23 4,4' DDT	15.640	15.640	0.000	256067	0.10000	0.1002(A)
25 Methoxychlor	16.680	16.673	0.007	235862	0.20000	0.1998
\$ 30 Decachlorodiphenyl	20.033	20.033	0.000	170021	0.10000	0.09667

QC Flag Legend

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



Data File: \\pp1pao2\nd\chem\gc4.1\6050-G.b\D-B6010.d
Date: 05-SEP-2000 13:15
Client ID:
Sample Info: HIGH,6050-G.b\3-11DD,3.H,1.5
Column phase: DB1701

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

Data File: \\gpitpa02\d\chem\gc4.i\6050-G.b\D-B6011.d
 Report Date: 06-Sep-2000 09:56

STL - Pittsburgh

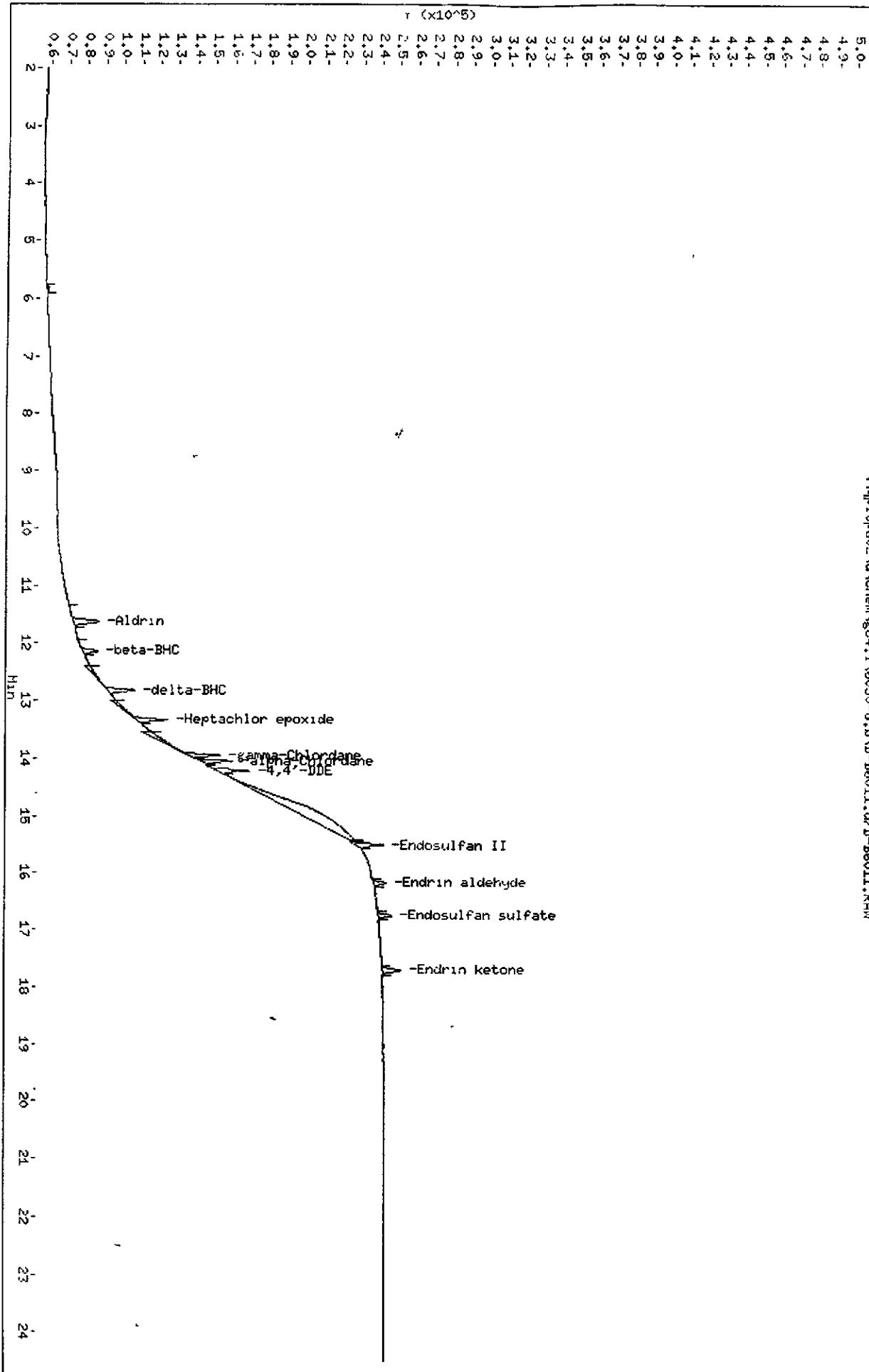
Data file : \\gpitpa02\d\chem\gc4.i\6050-G.b\D-B6011.d
 Lab Smp Id: LOWB
 Inj Date : 05-SEP-2000 13:43
 Operator : 1891
 Smp Info : LOWB,6050-G.b,,4-INDB.sub,,1,1
 Misc Info : 190-100-12
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 06-Sep-2000 09:55 eppingerd Quant Type: ESTD
 Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013.d
 Als bottle: 1 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 4-INDB.sub
 Target Version: 4.04
 Processing Host: PITPC061

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.626	11.633	-0.007	14244	0.00500	0.004616
7 beta BHC	12.140	12.140	0.000	8172	0.00500	0.004854
8 delta-BHC	12.820	12.820	0.000	14934	0.00500	0.004372
12 Heptachlor epoxide	13.333	13.333	0.000	16928	0.00500	0.004732
13 gamma Chlordane	13.946	13.946	0.000	16864	0.00500	0.004785
14 alpha Chlordane	14.046	14.046	0.000	17461	0.00500	0.004913
16 4,4'-DDE	14.206	14.206	0.000	17038	0.00500	0.004789
22 Endosulfan II	15.500	15.500	0.000	14902	0.00500	0.005006
24 Endrin aldehyde	16.160	16.160	0.000	6464	0.00500	0.004662
26 Endosulfan sulfate	16.740	16.740	0.000	7487	0.00500	0.004455
27 Endrin ketone	17.700	17.700	0.000	10014	0.00500	0.004759

Data File: \\pptpao2\chem\gc4.1\6050-G.b\D-B6011.d
Date : 05-SEP-2000 13:45
Client ID:
Sample Info: LQWB,6050-G.b,4-INDB,sub,1,1
Column phase: DB1701

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

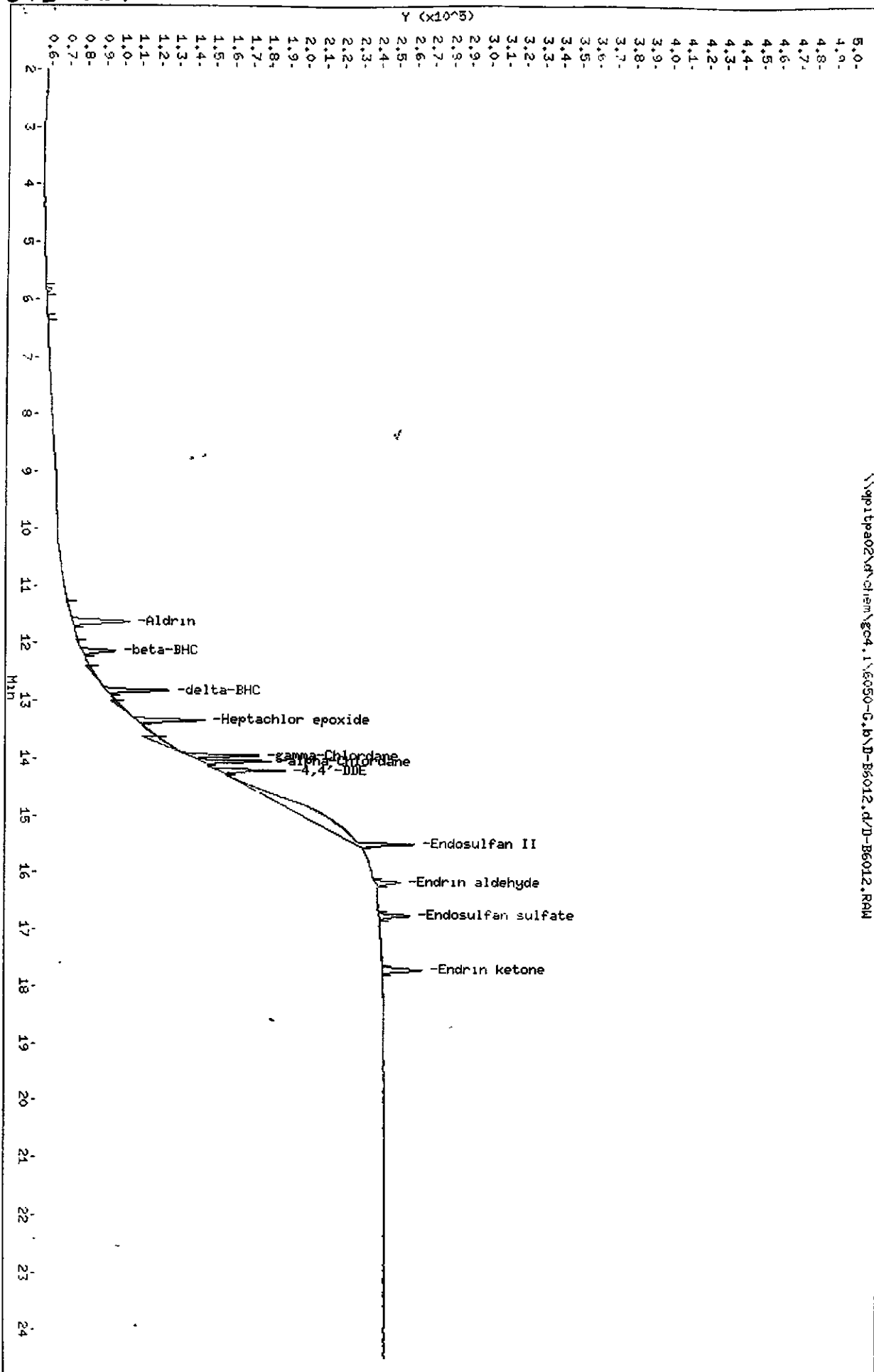
\\pptpao2\chem\gc4.1\6050-G.b\D-B6011.d\D-B6011.RAW



STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6012.d
Lab Smp Id: MLOWB
Inj Date : 05-SEP-2000 14:11
Operator : 1891 Inst ID: gc4.i
Smp Info : MLOWB,6050-G.b,,4-INDB.sub,,1,2
Misc Info : 190-100-13
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:56 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC061

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.633	11.633	0.000	31034	0.01000	0.01006
7 beta BHC	12.140	12.140	0.000	18011	0.01000	0.01070
8 delta-BHC	12.820	12.820	0.000	33782	0.01000	0.009890
12 heptachlor epoxide	13.333	13.333	0.000	36850	0.01000	0.01030
13 gamma-Chlordane	13.946	13.946	0.000	36412	0.01000	0.01033
14 alpha-Chlordane	14.046	14.046	0.000	37011	0.01000	0.01041
16 4,4'-DDE	14.206	14.206	0.000	36317	0.01000	0.01021
22 Endosulfan II	15.493	15.500	0.007	32016	0.01000	0.01075
24 Endrin aldehyde	16.153	16.160	-0.007	14121	0.01000	0.01018
26 Endosulfan sulfate	16.740	16.740	0.000	17038	0.01000	0.01014
27 Endrin ketone	17.700	17.700	0.000	21447	0.01000	0.01019



Data File: \\p1tpa02\chem\gc4.1\6050-G.b\4-IND.B6012.RAW
Date: 05-SEP-2000 14:11
Client ID:
Sample Info: HLC01B.6050-G.b,4-IND.B,sub,1.1.2
Column Phase: DB1701

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

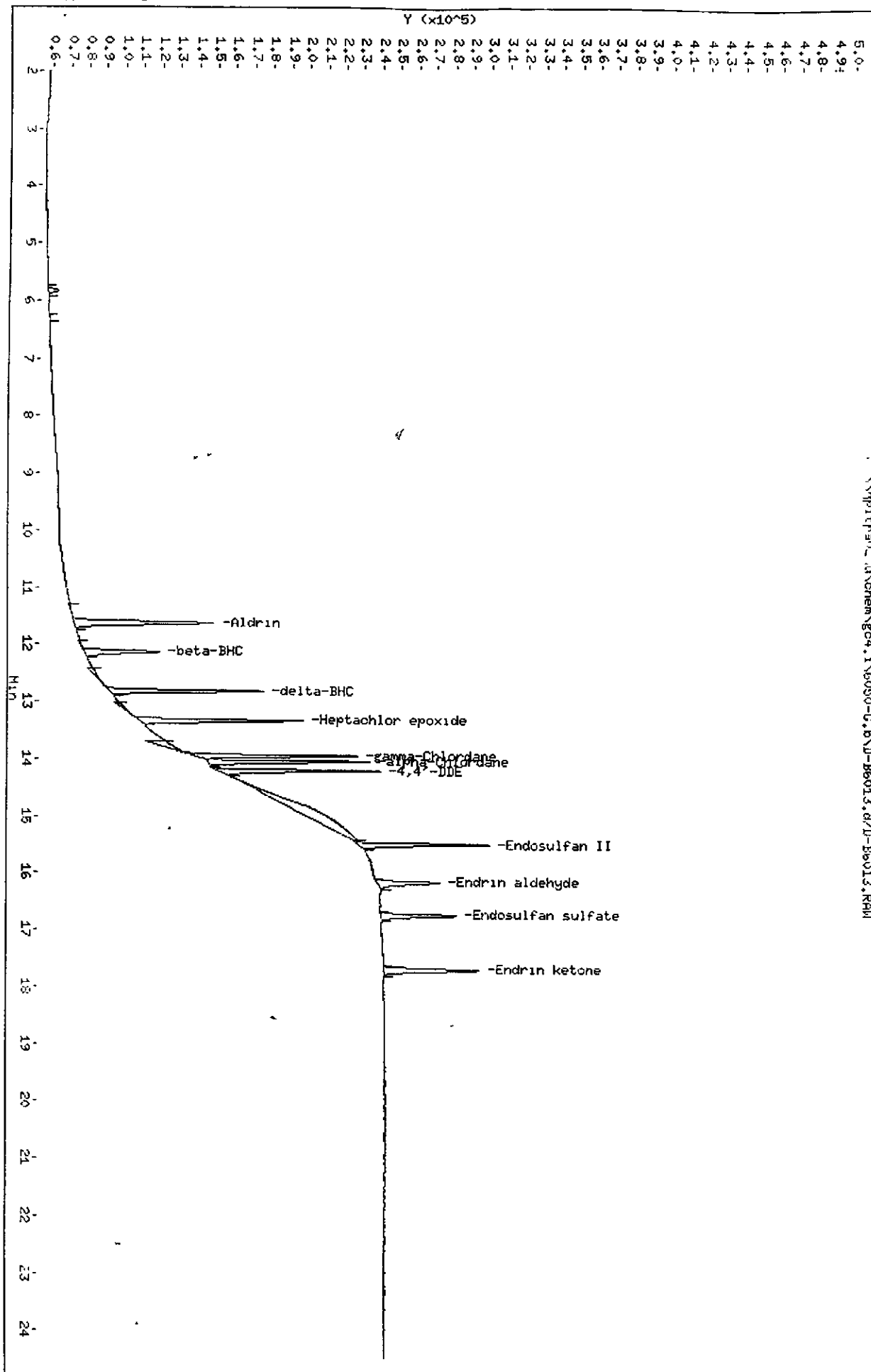
STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6013.d
Lab Smp Id: MEDB
Inj Date : 05-SEP-2000 14:38
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDB,6050-G.b,,4-INDB.sub,,1,3
Misc Info : 190-100-14
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:56 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC061

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.633	11.633	0.000	75501	0.02500	0.02446
7 beta-BHC	12.140	12.140	0.000	41418	0.02500	0.02460
8 delta BHC	12.820	12.820	0.000	83385	0.02500	0.02441
12 Heptachlor epoxide	13.333	13.333	0.000	88465	0.02500	0.02473
13 gamma-Chlordane	13.946	13.946	0.000	86809	0.02500	0.02463
14 alpha Chlordane	14.046	14.046	0.000	87567	0.02500	0.02464
16 4,4'-DDE	14.206	14.206	0.000	86876	0.02500	0.02442
22 Endosulfan II	15.500	15.500	0.000	70668	0.02500	0.02374
24 Endrin aldehyde	16.160	16.160	0.000	33918	0.02500	0.02446
26 Endosulfan sulfate	16.740	16.740	0.000	41279	0.02500	0.02456
27 Endrin ketone	17.700	17.700	0.000	51692	0.02500	0.02457

Data File: \\p1tpa02\chem\gc4.1\6050-G.b\D-B6013.d
Date : 05-SEP-2000 14:38
Client ID:
Sample Info: HEDB,6050-G.b,4-INDS.sub,1,3
Column phase: DB1701

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



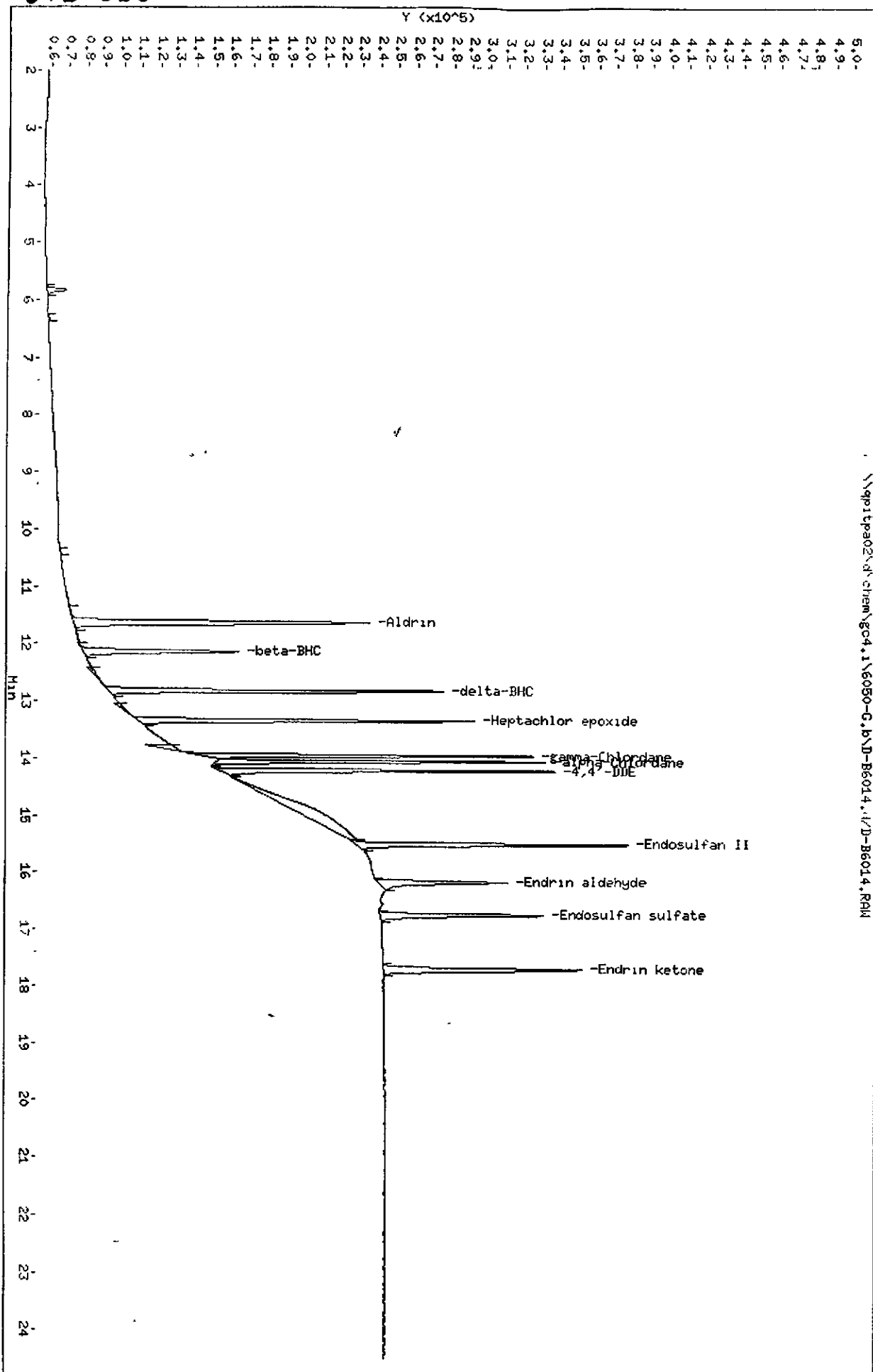
STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6014.d
Lab Smp Id: MHIGHB
Inj Date : 05-SEP-2000 15:06
Operator : 1891 Inst ID: gc4.i
Smp Info : MHIGHB,6050-G.b,,4-INDB.sub,,1,4
Misc Info : 190-101-1
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:56 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 14:38 Cal File: D-B6013.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC061

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COI. (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.633	11.633	0.000	161148	0.05000	0.05222
7 beta-BHC	12.140	12.140	0.000	84317	0.05000	0.05008
8 delta BHC	12.820	12.820	0.000	181497	0.05000	0.05314
12 Heptachlor epoxide	13.333	13.333	0.000	182690	0.05000	0.05107
13 gamma-Chloroane	13.946	13.946	0.000	179325	0.05000	0.05088
14 alpha-Chlordane	14.016	14.046	0.000	179227	0.05000	0.05043
16 4,4' DDE	14.206	14.206	0.000	181848	0.05000	0.05112
22 Endosulfan II	15.493	15.500	0.007	148554	0.05000	0.04990
24 Endrin aldehyde	16.153	16.160	-0.007	71010	0.05000	0.05121
26 Endosulfan sulfate	16.740	16.740	0.000	88400	0.05000	0.05260
27 Endrin ketone	17.700	17.700	0.000	108454	0.05000	0.05154

Data File: \\np1tpa02\chem\gc4.1\6050-G.b\B-6014.r
 Date : 08-SEP-2000 15:06
 Client ID:
 Sample Info: MHIGHB,6050-G.b,,4-INDB.sub,,1,4
 Column phase: DB1701

Instrument: GC4.1
 Operator: 1891
 Column diameter: 0.53



Data File: \\qp1tpa02\d\chem\gc4.i\6050-G.b\D-B6015.d
 Report Date: 06-Sep-2000 09:57

STL - Pittsburgh

Data file : \\qp1tpa02\d\chem\gc4.i\6050-G.b\D-B6015.d
 Lab Smp Id: HIGHB
 Inj Date : 05-SEP-2000 15:34
 Operator : 1891 Inst ID: gc4.1
 Smp Info : HIGHB,6050-G.b,,4-INDB.sub,,1,5
 Misc Info : 190-101-2
 Comment :
 Method : \\qp1tpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 06-Sep-2000 09:56 eppingerd Quant Type: ESTD
 Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
 Als bottle: 1 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 4-INDB.sub
 Target Version: 4.04
 Processing Host: PITPC061

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.633	11.633	0.000	323503	0.10000	0.1048(A)
7 beta-BHC	12.140	12.140	0.000	163899	0.10000	0.09736
8 alpha-BHC	12.820	12.820	0.000	374812	0.10000	0.1097(A)
12 Heptachlor epoxide	13.333	13.333	0.000	362185	0.10000	0.1012(A)
13 gamma-Chlordane	13.946	13.946	0.000	354998	0.10000	0.1007(A)
14 alpha-Chlordane	14.046	14.046	0.000	348926	0.10000	0.09818
16 4,4' DDE	14.200	14.206	0.006	361632	0.10000	0.1022(A)
22 Endosulfar II	15.493	15.500	-0.007	290487	0.10000	0.09758
24 Endrin aldehyde	16.153	16.160	-0.007	145126	0.10000	0.1047(A)
26 Endosulfan sulfate	16.740	16.740	0.000	178311	0.10000	0.1061(A)
27 Endrin ketone	17.700	17.700	0.000	213602	0.10000	0.1015(A)

QC Flag Legend

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

Data File: \\pptpav2\chem\gc4,1\6050-G.b\ND-B6015.d
Date: 05-SEP-2000 15:34

Client ID:

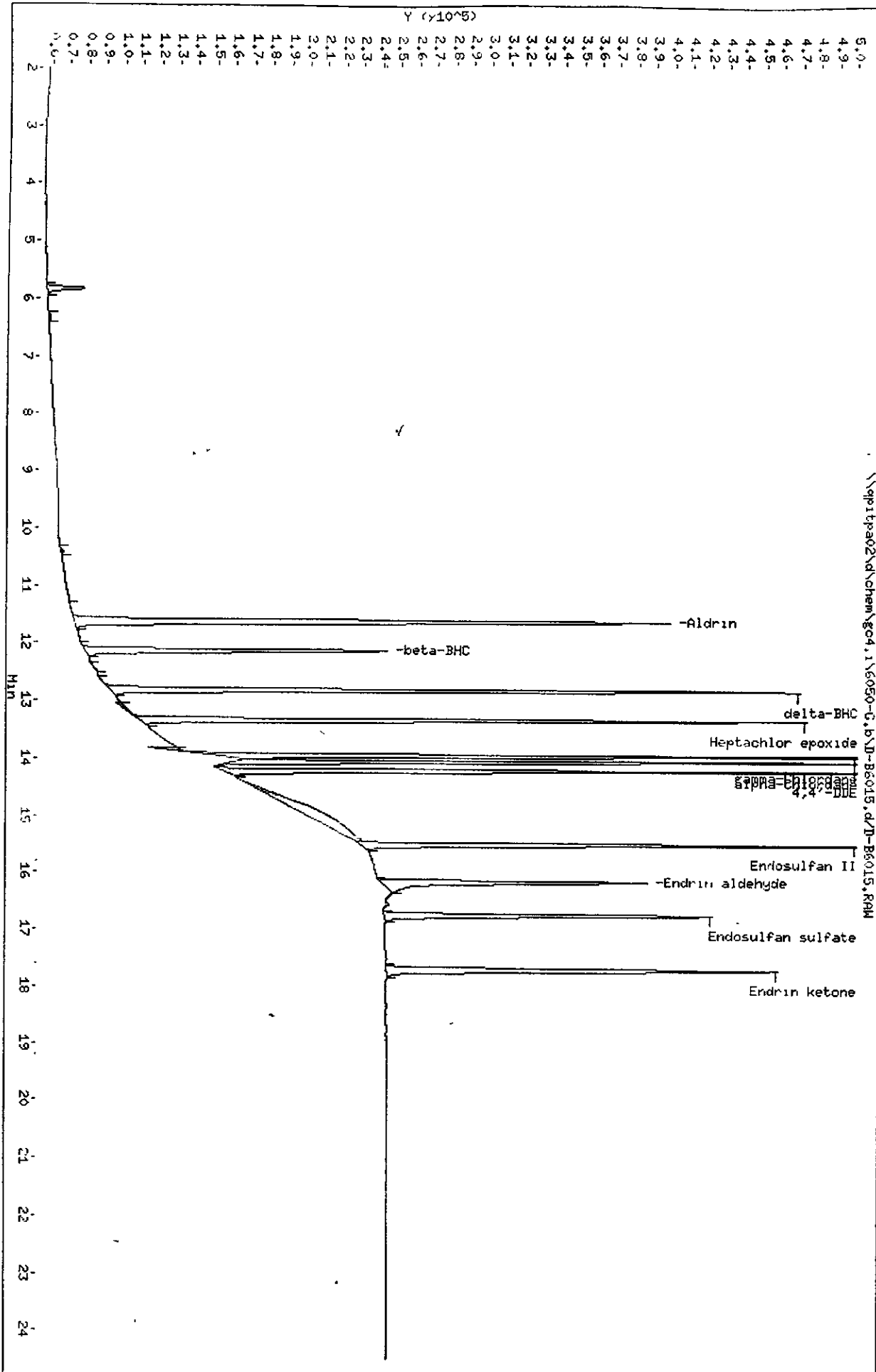
Sample Info: HICB,6050-G.b.,4-INDB,sub,1,5

Column Phase: DB1701

Instrument: gc4,1

Operator: 1891

Column diameter: 0.53



STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6016.d
Lab Smp Id: 2ND A
Inj Date : 05-SEP-2000 16:01
Operator : 1891 Inst ID: gc4.i
Smp Info : 2ND A,6050-G.b,,INDA.sub,,2,3
Misc Info : 190-82-2
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:57 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 4.04
Processing Host: PITPC061

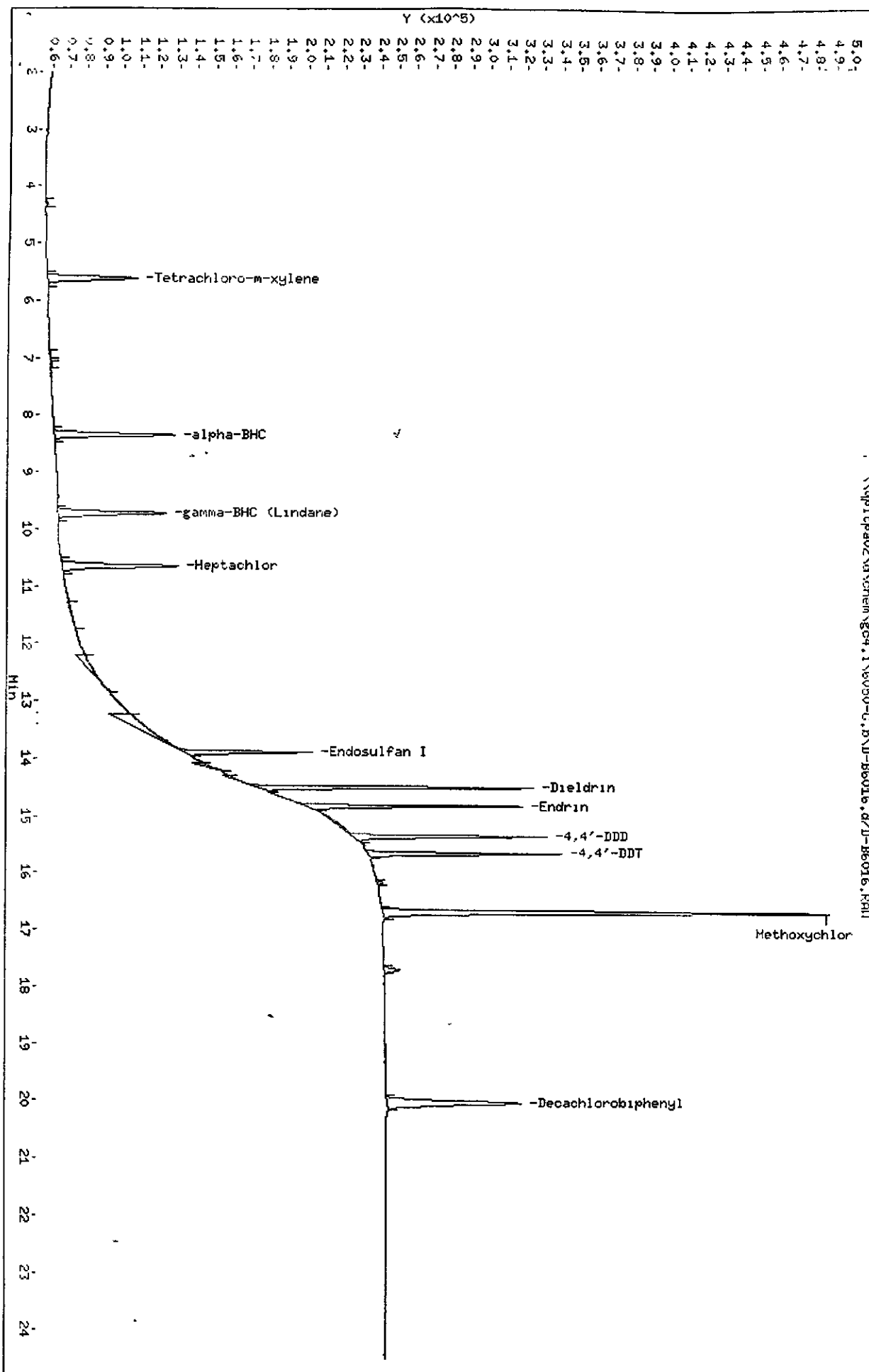
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	49827	0.02500	0.01980
5 alpha-BHC	8.340	8.340	0.000	65646	0.02500	0.01970
6 gamma-BHC (Lindane)	9.720	9.720	0.000	59010	0.02500	0.02012
10 Heptachlor	10.653	10.653	0.000	63403	0.02500	0.02010
15 Endosulfan I	13.886	13.886	0.000	69231	0.02500	0.02036
17 Dieldrin	14.486	14.486	0.000	150686	0.02500	0.04133
20 Endrin	14.806	14.806	0.000	118319	0.02500	0.03721
21 4,4'-DDD	15.346	15.346	0.000	106034	0.02500	0.04252
23 4,4' DDT	15.640	15.640	0.000	105891	0.02500	0.04145
25 Methoxychlor	16.673	16.673	0.000	243867	0.05000	0.0066(A)
\$ 30 Decachlorobiphenyl	20.033	20.033	0.000	73066	0.02500	0.06154

QC Flag Legend

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

Data File: \\np1tpa02\chem\gc4.1\6050-G.b\D-P601G.d
Date: 05-SEP-2000 16:01
Client ID:
Sample Intro: 2ND A,6050-G.b, 11DA, sub., 2,3
Column phase: DB1701

Instrument: gc4.1
Operator: 1871
Column diameter: 0.53

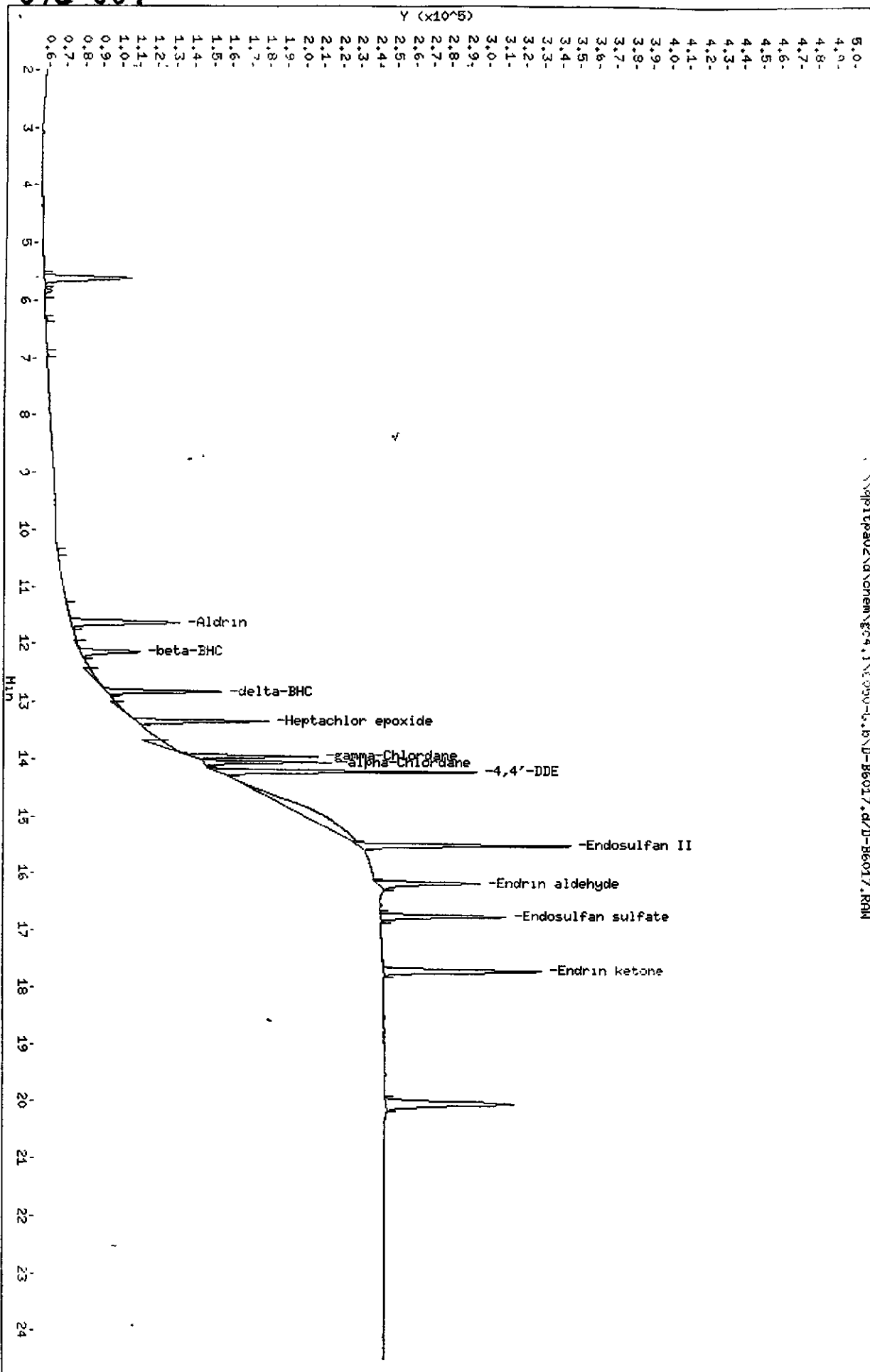


STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6017.d
Lab Smp Id: 2ND B
Inj Date : 05-SEP-2000 16:29
Operator : 1891 Inst ID: gc4.i
Smp Info : 2ND B,6050-G.b,,INDB.sub,,2,3
Misc Info : 190-82-5
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:57 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDB.sub
Target Version: 4.04
Processing Host: PITPC061

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11 626	11 633	0 007	58687	0 02500	0.01902
7 beta-BHC	12 140	12 140	0.000	32106	0 02500	0 01907
8 delta BHC	12 820	12.820	0.000	62215	0 02500	0 01821
12 Heptachlor epoxide	13 333	13 333	0.000	70728	0 02500	0 01977
13 gamma Chlordane	13 940	13 946	-0.006	68239	0 02500	0 01936
14 alpha-Chlordane	14 046	14.046	0.000	68272	0 02500	0 01971
16 4,4' DDE	14 200	14 206	-0 006	140571	0 02500	0.03951
22 Endosulfan II	15.493	15 500	-0.007	115964	0 02500	0.03895
24 Endrin aldehyde	16.153	16 160	-0 007	55765	0 02500	0 04022
26 Endosulfan sulfate	16 740	16 740	0 000	67542	0 02500	0.04019
27 Endrin ketone	17 700	17 700	0 000	85420	0.02500	0 04060

672 334



Data File: \\p1tpa02\chem\g04.1\6050-G.b\B6017.d
Date : 05-SEP-2000 16:27
Client ID:
Sample Info: 2HD B,6050-G,b, IHDE,sub.,2,2
Column Phase: DB1701

Instrument: 804.1
Operator: 1891
Column diameter: 0.53

STL - Pittsburgh

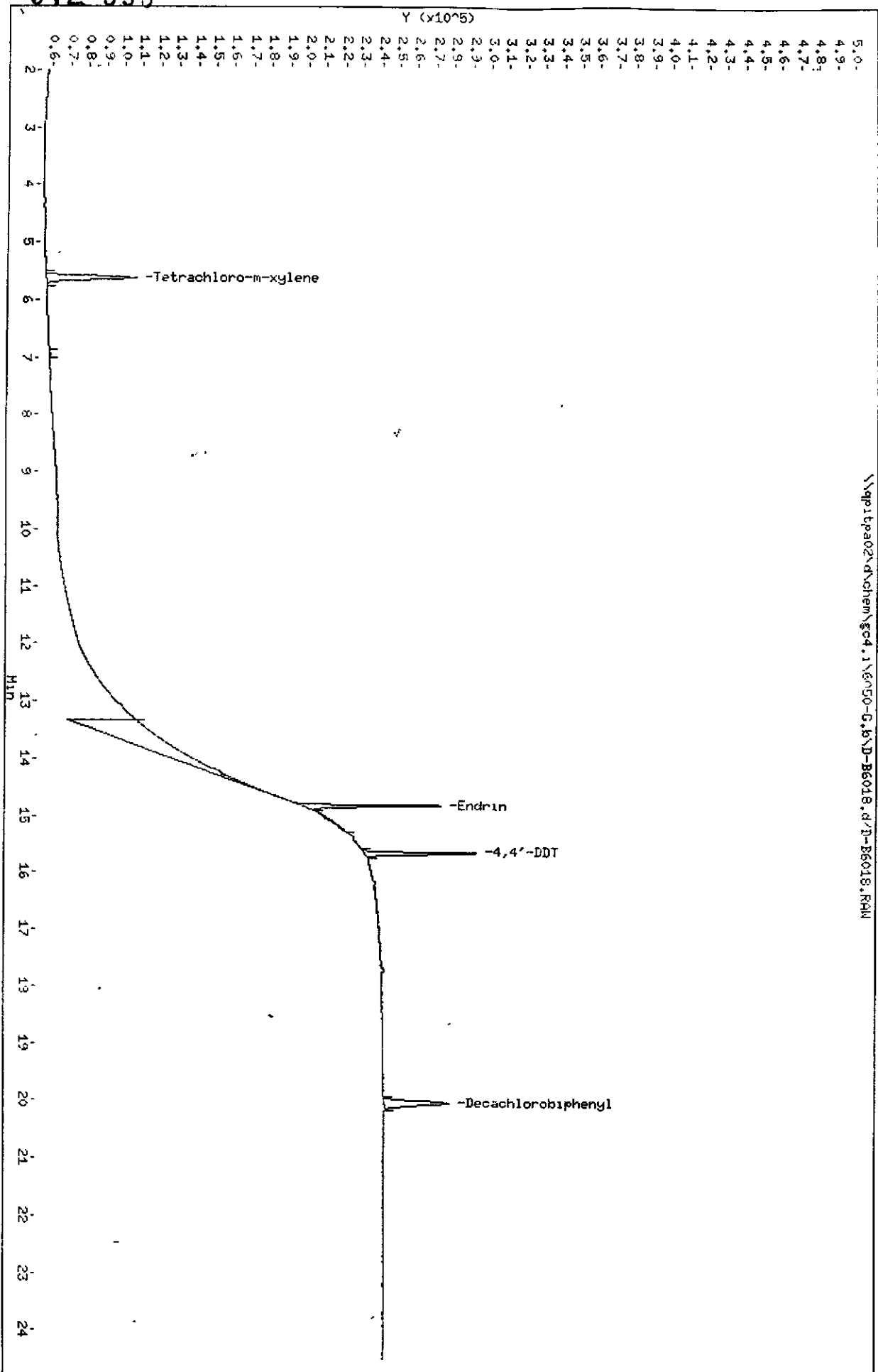
Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6018.d
Lab Smp Id: EVALB
Inj Date : 05-SEP-2000 16:57
Operator : 1891 Inst ID: gc4.i
Smp Info : EVALB,6050-G.b,,EVALBR.sub,,3,1
Misc Info : 190-88-8
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 06-Sep-2000 09:57 eppingerd Quant Type: ESTD
Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: EVALBR.sub
Target Version: 4.04
Processing Host: PITPC061

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ng)
-----	---	-----	-----	-----	-----	-----
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	49494	0.01967	0.01966(R)
16 4,4'-DDE	Compound Not Detected					
20 Endrin	14.806	14.806	0.000	75930	0.02388	0.02388
21 4,4'-DDD	Compound Not Detected					
23 4,4'-DDT	15.640	15.640	0.000	61588	0.02411	0.02411
24 Endrin aldehyde	Compound Not Detected.					
27 Endrin ketone	Compound Not Detected					
\$ 30 Decachlorobiphenyl	20.033	20.033	0.000	35284	0.02006	0.02006(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

672 336



Data File: \\p1tpa02\chem\gc4.1\6050-G.b\B-6018.d
Date: 05-SEP-2000 16:57
Client ID:
Sample Info: EVALB.6050-G.b, EVALBR.sub, 3,1
Column Phase: DB1701

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

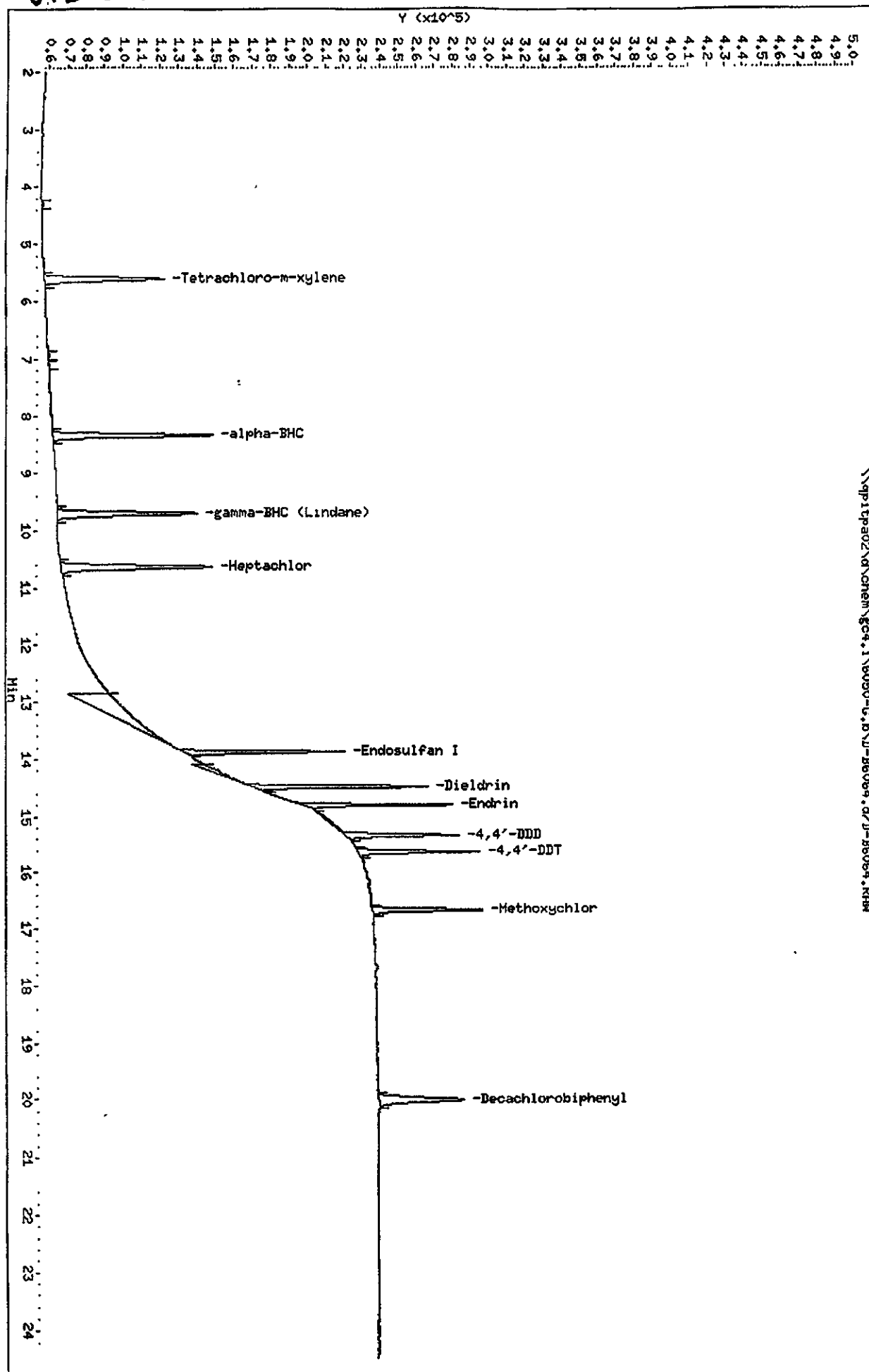
Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6064.d
 Report Date: 11-Sep-2000 10:30

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6064.d
 Lab Smp Id: MEDA
 Inj Date : 08-SEP-2000 14:49
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDA,6050-G.b,,INDA.sub,,2,3
 Misc Info : 190-100-8
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 11-Sep-2000 10:25 matkol Quant Type: ESTD
 Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: INDA.sub
 Target Version: 4.04
 Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
-----	---	-----	-----	-----	-----	-----
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	65589	0.02500	0.02606
5 alpha-BHC	8.333	8.333	0.000	86798	0.02500	0.02605
6 gamma-BHC (Lindane)	9.706	9.706	0.000	76355	0.02500	0.02604
10 Heptachlor	10.646	10.646	0.000	81985	0.02500	0.02600
15 Endosulfan I	13.880	13.880	0.000	87910	0.02500	0.02585
17 Dieldrin	14.480	14.480	0.000	95066	0.02500	0.02608
20 Endrin	14.800	14.800	0.000	82651	0.02500	0.02599
21 4,4'-DDD	15.340	15.340	0.000	62936	0.02500	0.02524
23 4,4'-DDT	15.633	15.640	-0.007	66307	0.02500	0.02595
25 Methoxychlor	16.666	16.673	-0.007	60218	0.05000	0.05102
\$ 30 Decachlorobiphenyl	20.020	20.020	0.000	46397	0.02500	0.02638

672 338



Data File: \\ppitpa02\chem\gc4.1\6050-G.b\D-B6064.d
Date: 08-SEP-2000 14:49
Client ID:
Sample Info: HEDR,6050-G.b,,INDR,sub,,2,3
Column phase: DB1701

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

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6065.d
 Report Date: 11-Sep-2000 10:30

STL - Pittsburgh

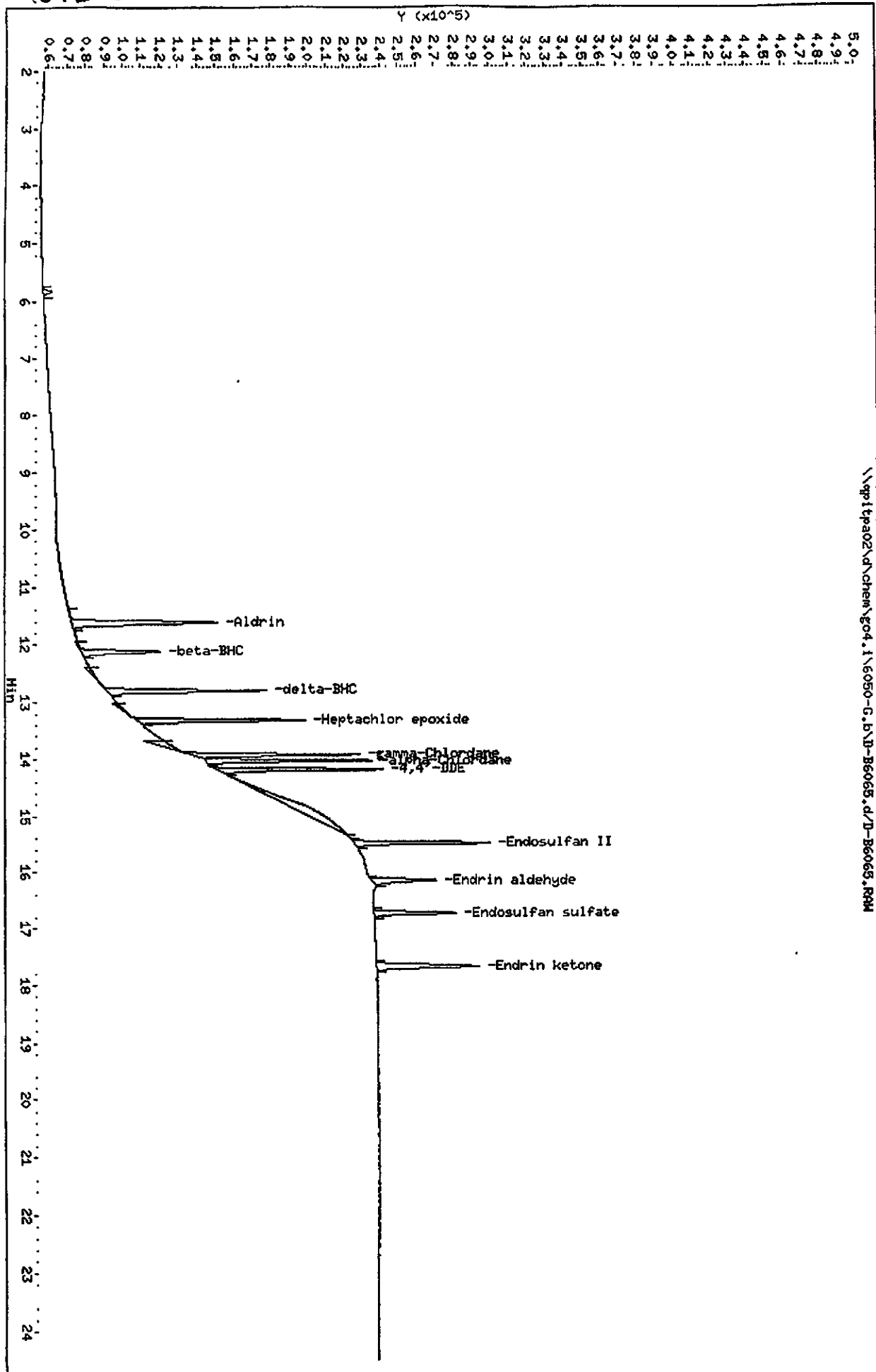
Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6065.d
 Lab Smp Id: MEDB
 Inj Date : 08-SEP-2000 15:17
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDB,6050-G.b,,INDB.sub,,2,3
 Misc Info : 190-100-14
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 11-Sep-2000 10:25 matkol Quant Type: ESTD
 Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: INDB.sub
 Target Version: 4.04
 Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.626	11.620	0.006	78160	0.02500	0.02533
7 beta-BHC	12.126	12.126	0.000	42562	0.02500	0.02528
8 delta-BHC	12.813	12.813	0.000	85164	0.02500	0.02493
12 Heptachlor epoxide	13.326	13.326	0.000	90170	0.02500	0.02521
13 gamma-Chlordane	13.940	13.940	0.000	89314	0.02500	0.02534
14 alpha-Chlordane	14.040	14.040	0.000	89388	0.02500	0.02515
16 4,4'-DDE	14.200	14.200	0.000	89683	0.02500	0.02521
22 Endosulfan II	15.486	15.493	-0.007	73874	0.02500	0.02482
24 Endrin aldehyde	16.146	16.146	0.000	35183	0.02500	0.02537
26 Endosulfan sulfate	16.726	16.726	0.000	44073	0.02500	0.02622
27 Endrin ketone	17.686	17.686	0.000	55337	0.02500	0.02630

672 340

Data File: \\ppltpa02\chem\gc4.1\6050-G.b\B-6065.d
Date: 08-SEP-2000 15:17
Client ID:
Sample Info: MEDB,6050-G.b,,INDB,sub,,2,3
Column phase: DB1701

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



Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6066.d
 Report Date: 11-Sep-2000 10:30

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6066.d
 Lab Smp Id: EVALB
 Inj Date : 08-SEP-2000 15:45
 Operator : 1891 Inst ID: gc4.i
 Smp Info : EVALB,6050-G.b,,EVALBR.sub,,3,1
 Misc Info : 190-88-8
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 11-Sep-2000 10:25 matkol Quant Type: ESTD
 Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
 Als bottle: 1 QC Sample: PEM
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: EVALBR.sub
 Target Version: 4.04
 Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ng)
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	51406	0.02043	0.02042(R)
16 4,4'-DDE	Compound Not Detected					
20 Endrin	14.800	14.800	0.000	79020	0.02485	0.02485
21 4,4'-DDD	Compound Not Detected.					
23 4,4'-DDT	15.633	15.640	-0.007	62915	0.02463	0.02463
24 Endrin aldehyde	Compound Not Detected.					
27 Endrin ketone	Compound Not Detected.					
\$ 30 Decachlorobiphenyl	20.020	20.020	0.000	36725	0.02088	0.02088(R)

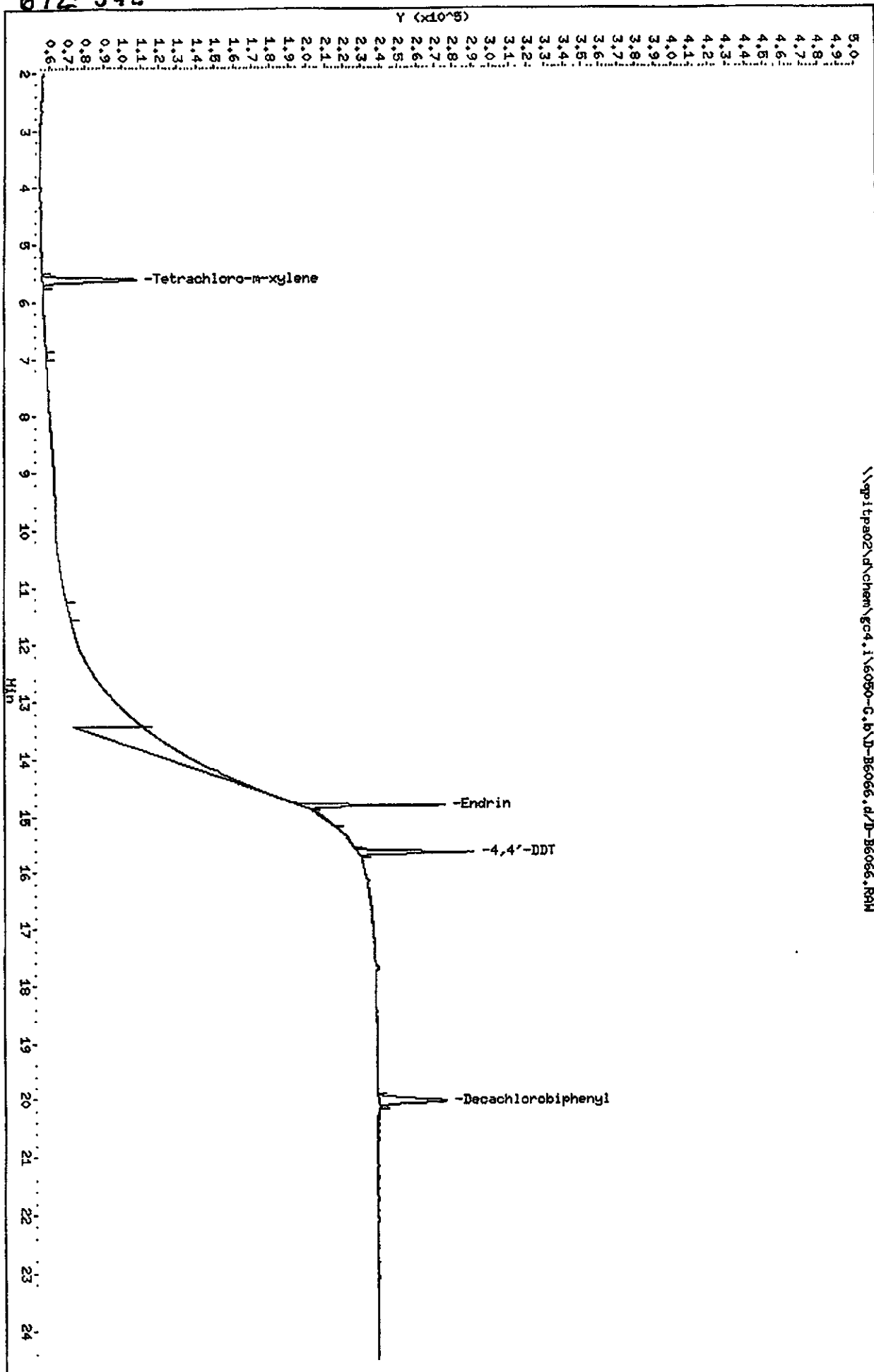
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

672 342

Data File: \\sp1tpa02\chem\gc4.i\6050-G.b\D-B6066.d
Date: 08-SEP-2000 15:45
Client ID:
Sample Info: EVALB,6050-G.b, EVALBR,sub,,3,1
Column phase: DB1701

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



Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6083.d
 Report Date: 11-Sep-2000 10:34

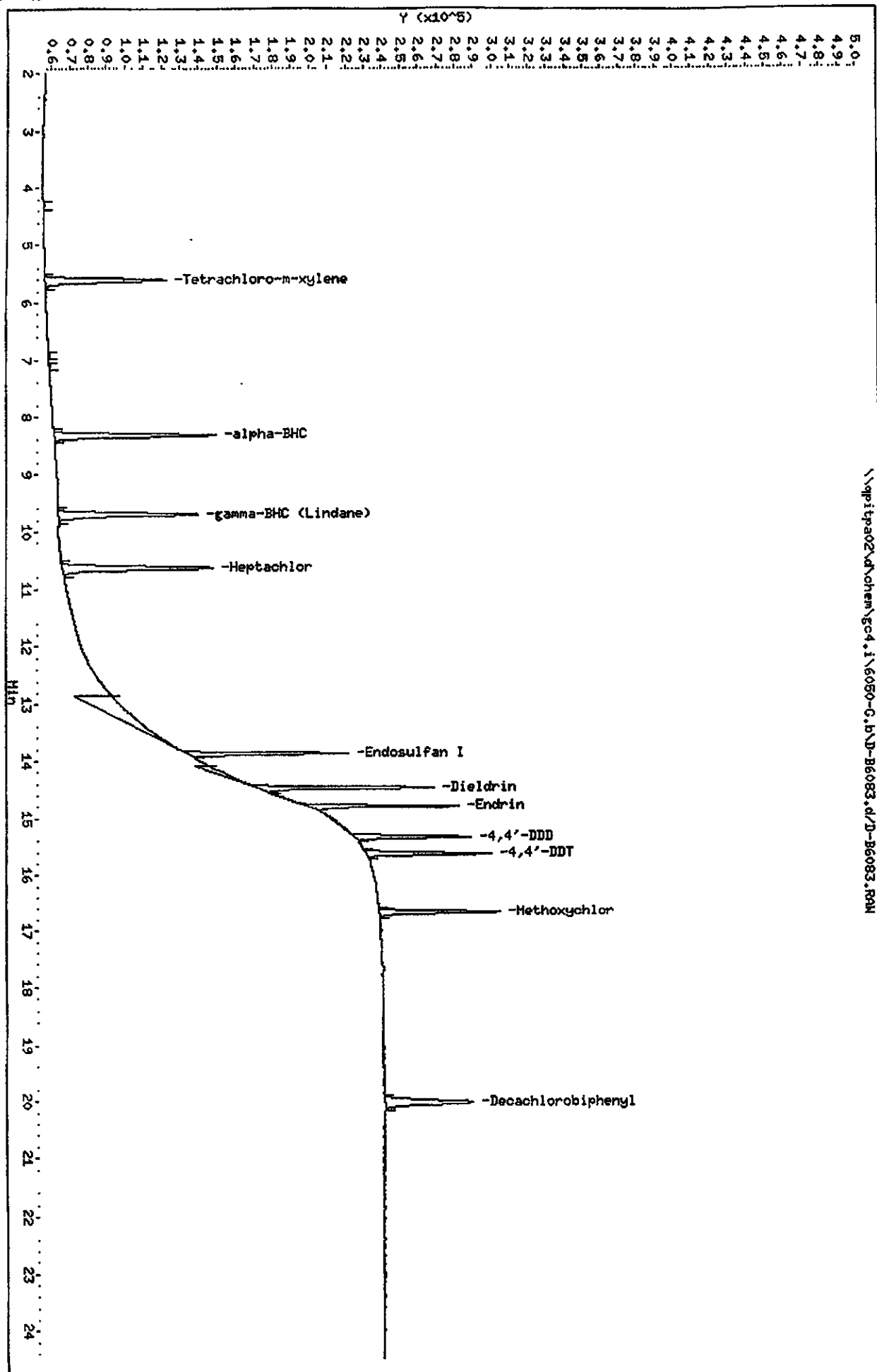
STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6083.d
 Lab Smp Id: MEDA
 Inj Date : 08-SEP-2000 23:36
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDA,6050-G.b,,INDA.sub,,2,3
 Misc Info : 190-100-8
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 11-Sep-2000 10:25 matkol Quant Type: ESTD
 Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: INDA.sub
 Target Version: 4.04
 Processing Host: PITPC044

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
-----	--	-----	-----	-----	-----	-----
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	65822	0.02500	0.02615
5 alpha-BHC	8.326	8.333	-0.007	87646	0.02500	0.02630
6 gamma-BHC (Lindane)	9.706	9.706	0.000	76170	0.02500	0.02597
10 Heptachlor	10.640	10.646	-0.006	81634	0.02500	0.02589
15 Endosulfan I	13.880	13.880	0.000	87589	0.02500	0.02576
17 Dieldrin	14.480	14.480	0.000	95365	0.02500	0.02616
20 Endrin	14.800	14.800	0.000	82177	0.02500	0.02584
21 4,4'-DDD	15.340	15.340	0.000	64278	0.02500	0.02578
23 4,4'-DDT	15.633	15.640	-0.007	68293	0.02500	0.02673
25 Methoxychlor	16.666	16.673	-0.007	64842	0.05000	0.05493
\$ 30 Decachlorobiphenyl	20.013	20.020	-0.007	47371	0.02500	0.02694

Data File: \\pittpa02\chem\gc4.i\6050-G.b\B6083.d
Date: 08-SEP-2000 23:36
Client ID:
Sample Info: HEDA,6050-G.b,INDR,sub,,2,3
Column Phase: DB1701

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



Data File: \\gpitpa02\d\chem\gc4.i\6050-G.b\D-B6084.d
 Report Date: 11-Sep-2000 10:34

STL - Pittsburgh

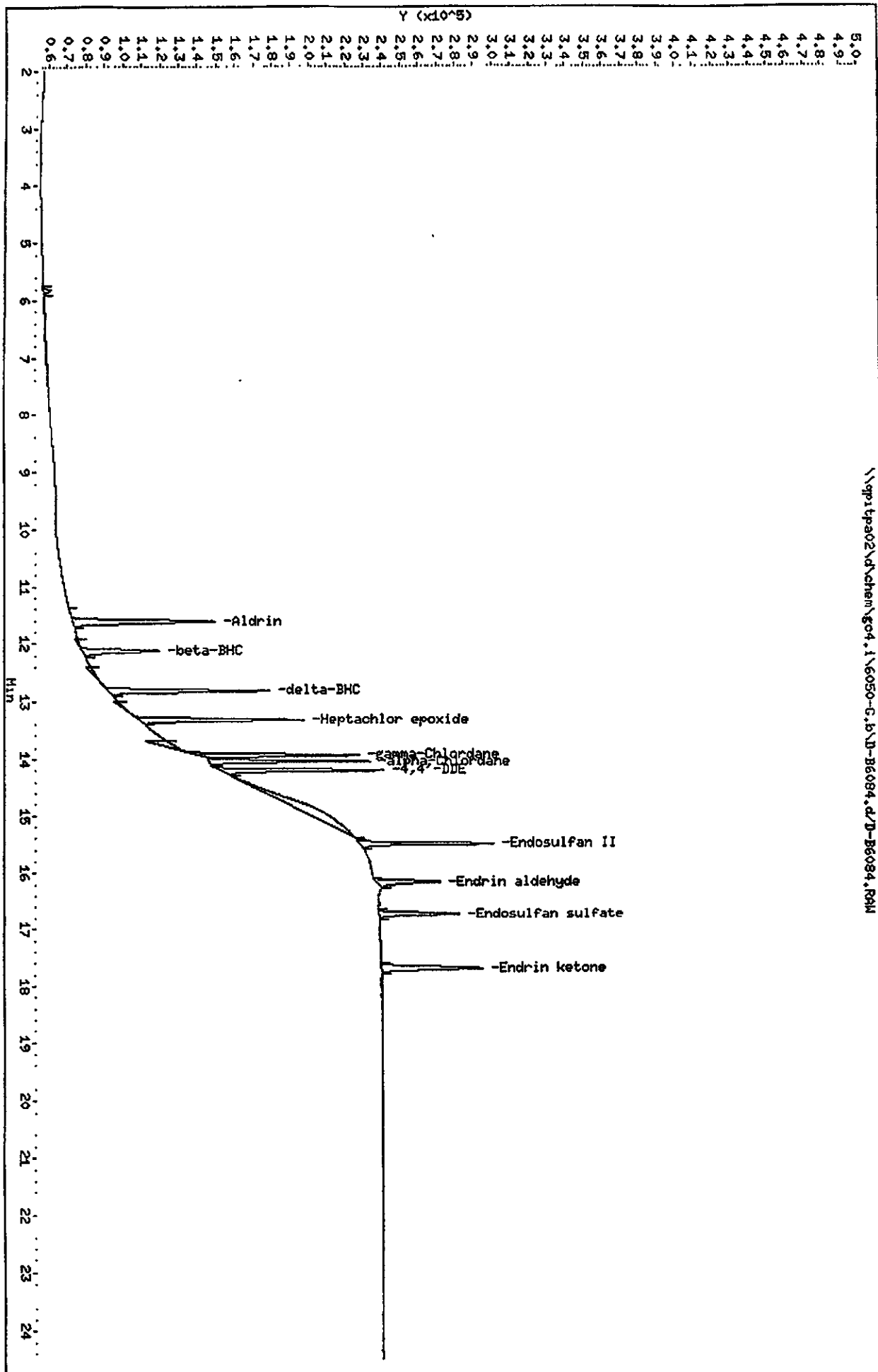
Data file : \\gpitpa02\d\chem\gc4.i\6050-G.b\D-B6084.d
 Lab Smp Id: MEDB
 Inj Date : 09-SEP-2000 00:03
 Operator : 1891
 Smp Info : MEDB, 6050-G.b,, INDB.sub,, 2,3
 Misc Info : 190-100-14
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
 Meth Date : 11-Sep-2000 10:25 matkol
 Cal Date : 05-SEP-2000 15:34
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC044

Inst ID: gc4.i
 Quant Type: ESTD
 Cal File: D-B6015.d
 Continuing Calibration Sample
 Compound Sublist: INDB.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
-----	--	-----	-----	-----	-----	-----
11 Aldrin	11.620	11.620	0.000	76553	0.02500	0.02481
7 beta-BHC	12.126	12.126	0.000	41202	0.02500	0.02447
8 delta-BHC	12.806	12.813	-0.007	85984	0.02500	0.02517
12 Heptachlor epoxide	13.326	13.326	0.000	88255	0.02500	0.02467
13 gamma-Chlordane	13.933	13.940	-0.007	87703	0.02500	0.02488
14 alpha-Chlordane	14.040	14.040	0.000	86316	0.02500	0.02429
16 4,4'-DDE	14.200	14.200	0.000	87808	0.02500	0.02468
22 Endosulfan II	15.486	15.493	-0.007	72824	0.02500	0.02446
24 Endrin aldehyde	16.146	16.146	0.000	34392	0.02500	0.02480
26 Endosulfan sulfate	16.726	16.726	0.000	43723	0.02500	0.02601
27 Endrin ketone	17.686	17.686	0.000	54699	0.02500	0.02600

Data File: \\pp1tpa02\ndchem\gc04.1\6050-G.b.D-B6084.d
Date : 09-SEP-2000 00:03
Client ID:
Sample Info: HEDB,6050-G.b., INDB.sub,2,3
Column phase: DB1701

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



**PESTICIDE
QC DATA**

672 348

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0I070000 502

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 09/01/00

Work Order: DK2C8101

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: NA

QC Batch: 0251502

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

FORM I

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6081.d
Report Date: 11-Sep-2000 10:33

672 349

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6081.d
Lab Smp Id: DK2C8101 Client Smp ID: PBLK1
Inj Date : 08-SEP-2000 22:40
Operator : 1891 Inst ID: gc4.i
Smp Info : DK2C8101,6050-G.b,,PEST.sub,,3,
Misc Info : 010228BLK
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 11-Sep-2000 10:25 matkol Quant Type: ESTD
Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC044

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	45556	0.01810	0.001810(aR)
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
11 Aldrin				Compound Not Detected.		
7 beta-BHC				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin				Compound Not Detected.		
20 Endrin				Compound Not Detected.		

672 350

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6081.d
Report Date: 11-Sep-2000 10:33

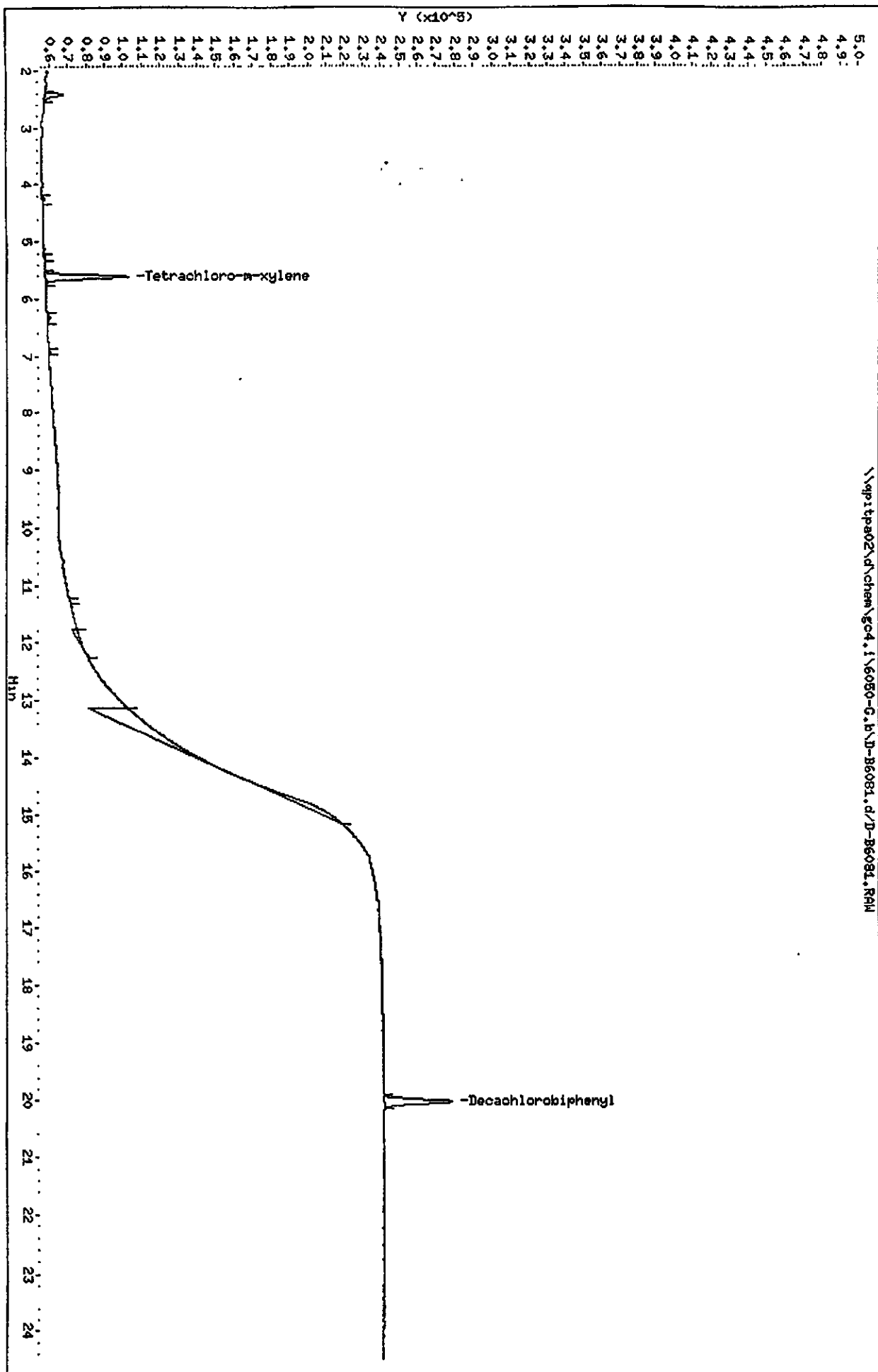
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
18 Toxaphene				Compound Not Detected.		
21 4,4'-DDD				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	20.013	20.020	-0.007	36185	0.02057	0.002057(aR)

QC Flag Legend

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

Data File: \\mpitpa02\chem\gc4.i\6050-C.b\B-86081.d
Date: 08-SEP-2000 22:40
Client ID: PRLK1
Sample Info: DKZC8101,6050-C.b.,PEST,sub,3,
Volume Injected (ul): 1.0
Column phase: DB1701

Instrument: gc4.i
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: C0I070000 502

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 09/01/00

Work Order: DK2C8102

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

Moisture %: NA

QC Batch: 0251502

Client Sample Id: CHECK SAMPLE

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00242	
76-44-8	Heptachlor	0.00235	
1024-57-3	Heptachlor epoxide	0.00238	
58-89-9	Lindane	0.00145	
72-43-5	Methoxychlor	0.00264	

STL - Pittsburgh :

Data file : \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6082.d
Lab Smp Id: DK2C8102 Client Smp ID: LCS1
Inj Date : 08-SEP-2000 23:08
Operator : 1891 Inst ID: gc4.i
Smp Info : DK2C8102,6050-G.b,,PEST.sub,,3,
Misc Info : 010228LCS
Comment :
Method : \\qpitpa02\d\chem\gc4.i\6050-G.b\PESTB.m
Meth Date : 11-Sep-2000 10:25 matkol Quant Type: ESTD
Cal Date : 05-SEP-2000 15:34 Cal File: D-B6015.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC044

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.613	5.613	0.000	101706	0.04041	0.004041(aR)
5 alpha-BHC	8.326	8.333	-0.007	36957	0.01109	0.001109(a)
6 gamma-BHC (Lindane)	9.706	9.706	0.000	42611	0.01453	0.001453(aR)
9 Chlordane	Compound Not Detected.					
10 Heptachlor	10.640	10.646	-0.006	73995	0.02346	0.002346(aR)
11 Aldrin	11.620	11.620	0.000	72760	0.02358	0.002358(aR)
7 beta-BHC	12.126	12.126	0.000	39776	0.02363	0.002363(a)
8 delta-BHC	Compound Not Detected.					
12 Heptachlor epoxide	13.326	13.326	0.000	85232	0.02383	0.002383(a)
15 Endosulfan I	13.880	13.880	0.000	62229	0.01830	0.001830(a)
13 gamma-Chlordane	13.933	13.940	-0.007	71283	0.02022	0.002022(a)
14 alpha-Chlordane	14.040	14.040	0.000	84104	0.02366	0.002366(a)
16 4,4'-DDE	14.200	14.200	0.000	93748	0.02635	0.002635(a)
17 Dieldrin	14.480	14.480	0.000	87801	0.02408	0.002408(aR)
20 Endrin	14.800	14.800	0.000	76878	0.02417	0.002417(aR)
18 Toxaphene	Compound Not Detected.					

672 354

Data File: \\qpitpa02\d\chem\gc4.i\6050-G.b\D-B6082.d
Report Date: 11-Sep-2000 10:33

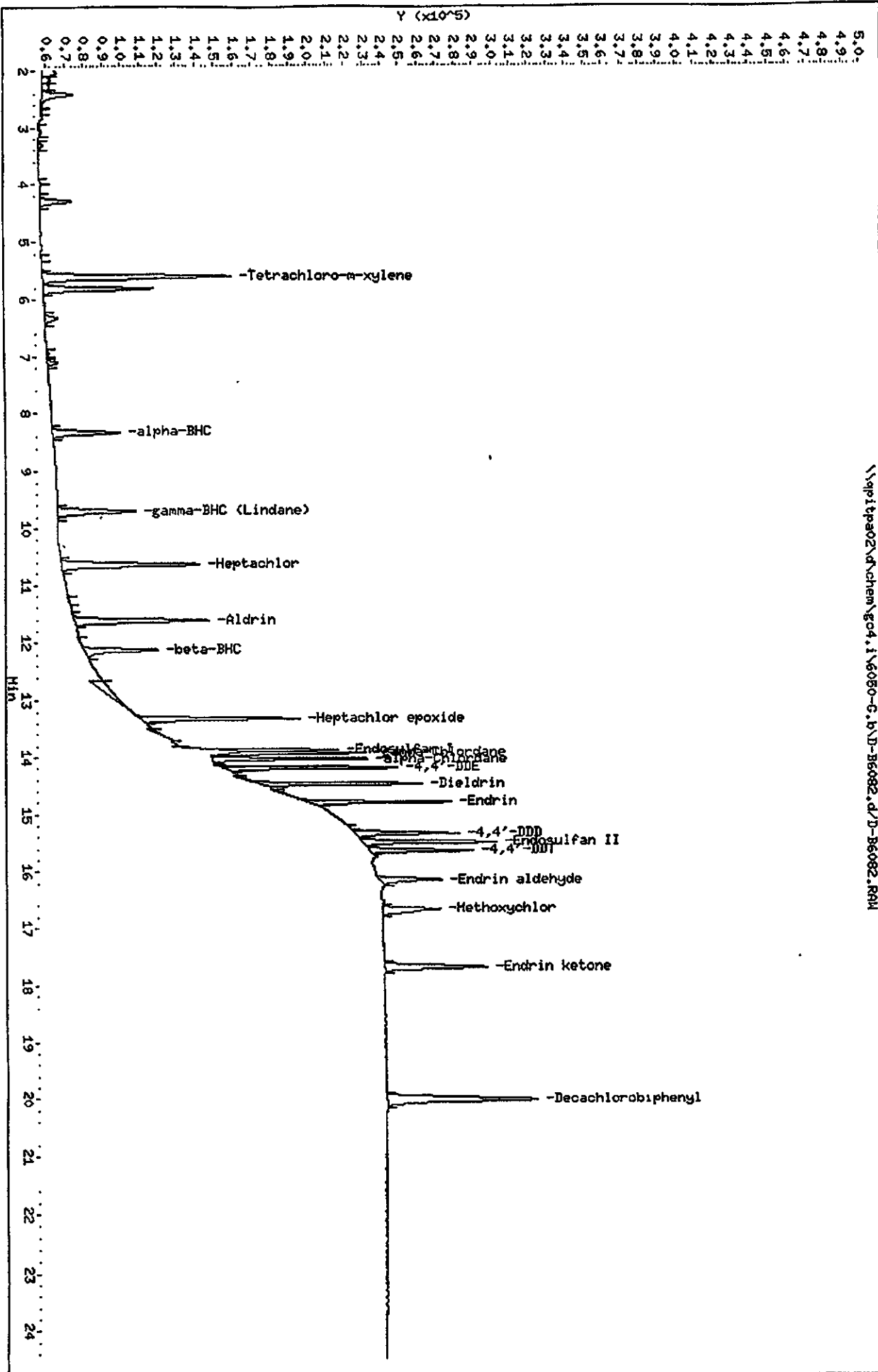
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
-----	--	-----	-----	-----	-----	-----
21 4,4'-DDD	15.340	15.340	0.000	56933	0.02283	0.002283(a)
22 Endosulfan II	15.486	15.493	-0.007	72691	0.02442	0.002442(a)
23 4,4'-DDT	15.633	15.640	-0.007	55846	0.02186	0.002186(aR)
24 Endrin aldehyde	16.146	16.146	0.000	33734	0.02433	0.002433(a)
25 Methoxychlor	16.666	16.673	-0.007	31213	0.02644	0.002644(a)
26 Endosulfan sulfate	Compound Not Detected.					
27 Endrin ketone	17.686	17.686	0.000	55752	0.02650	0.002650(a)
\$ 30 Decachlorobiphenyl	20.013	20.020	-0.007	81277	0.04621	0.004621(aR)

QC Flag Legend

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

Data File: \\pp1tpa02\chem\gc04.i\6050-G.b\D-86082.d
 Date : 08-SEP-2000 23:08
 Client ID: LCS1
 Sample Info: DK2C8102,6050-G.b,PEST,sub,3,
 Volume Injected (uL): 1.0
 Column phase: DB1701

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



**PESTICIDE
MISCELLANEOUS**

Separatory Funnel
Extraction Worksheet

B#0251502

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



(TCLP)

Hexane T03268

Sample ID	Lot Number	Date Completed	Extraction Began	Extraction(s)	Sample Volume (mL)	pH	Method	Client ID	Surrogate Number	Surrogate Volume (mL)	Solvent	Solvent Lot	Solvent Mfg.	Matrix Spike No.	Matrix Spike Volume (mL)	Cleanup Date
1. PDI 010 228		9-8-00	9-7-00	1	100	5	3510	NA	190-99-11	1.0	MECL7	T19271	BAKER	NA	NA	NA
2. L15						5								190-98-10	1.0	NA
3. 001 MS						5										
4. 001 MS D						5										
5. 001						5										
6. 002						5										
7. PDI 020 118						26										
8. 002						5										
9. 003						5										
10. POH 310 206						5										
11. 001						5										
12. 002						5										
13. 003						5										
14. POH 310 230						5										
15. 001						5										
16. POE 010 153						5										
17. 001						5										
18.																
19.																
20.																
21.																
22.																
23.																
24.																

P. Jundinski
9-7-00

Extraction(s)	Date	Time	Location	Analyst	Extract(s) Retained	Time	Location	Analyst	Extract(s) Relinquished	Time	Location
APR Above	9-7-00	1930	Pittsburgh, PA	P. Jundinski	9-7-00	1940	Pittsburgh, PA	P. Jundinski	9-7-00	1940	Pittsburgh, PA
APR Above	9-8-00	0700	Pittsburgh, PA	P. Jundinski	9-8-00	1045	Pittsburgh, PA	P. Jundinski	9-8-00	1045	Pittsburgh, PA
APR Above	9-8-00	1500	Pittsburgh, PA	P. Jundinski	9-8-00	1515	Pittsburgh, PA	P. Jundinski	9-8-00	1515	Pittsburgh, PA

Sodium Sulfate Mfg.	BAKER	Lot Number	T23625	Reviewed By	K. Jundinski	Date	9-8-00

672 358

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\6050-G.SEQ

Created by : DE11/02/98 on : 9/5/00 14:47

Edited by : DE09/05/00 on : 9/5/00 14:58

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 : 26

Instrument Type : 760 / 900 Series Intelligent Interface

Injection Type : SINGLE

~~6050H.PDF~~
6050H.PDF
9/6/00

Sequence Sample Descriptions - Channel B											
Row	Type	Sample Name	Sample Number	Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Norm. factor
1	Std Check	EVALB, 6050-G.b.,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	100.000
2	Cal:Replace	MEDTOX, 6050-G.b	190-98-12		1.000	1.000	1.000	1.000	333.000	1.000	100.000
3	Cal:Replace	MEDCHLOR, 6050-G	190-90-4		1.000	1.000	1.000	1.000	333.000	1.000	100.000
4	Cal:Replace	LOWA, 6050-G.b.,	190-100-6		1.000	1.000	1.000	1.000	1.000	1.000	100.000
5	Cal:Replace	MLOWA, 6050-G.b.,	190-100-7		1.000	1.000	1.000	1.000	1.000	1.000	100.000
6	Cal:Replace	MEDA, 6050-G.b.,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	100.000
7	Cal:Replace	MHIGHA, 6050-G.b	190-100-9		1.000	1.000	1.000	1.000	1.000	1.000	100.000
8	Cal:Replace	HIGHA, 6050-G.b.,	190-100-10		1.000	1.000	1.000	1.000	1.000	1.000	100.000
9	Cal:Replace	LOWB, 6050-G.b.,	190-100-12		1.000	1.000	1.000	1.000	1.000	1.000	100.000
10	Cal:Replace	MLOWB, 6050-G.b.,	190-100-13		1.000	1.000	1.000	1.000	1.000	1.000	100.000
11	Cal:Replace	MEDB, 6050-G.b.,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	100.000
12	Cal:Replace	MHIGHB, 6050-G.b	190-101-1		1.000	1.000	1.000	1.000	1.000	1.000	100.000
13	Cal:Replace	HIGHB, 6050-G.b.,	190-101-2		1.000	1.000	1.000	1.000	1.000	1.000	100.000
14	Std Check	2ND A, 6050-G.b.,	190-82-2		1.000	1.000	1.000	1.000	1.000	1.000	100.000
15	Std Check	2ND B, 6050-G.b.,	190-82-3		1.000	1.000	1.000	1.000	1.000	1.000	100.000
16	Std Check	EVALB, 6050-G.b.,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	100.000
17	Sample	DJL8W101, 6050-G	300123001		1.000	1.000	1.000	1.000	1.000	1.000	100.000
18	Sample	DJPQ0101, 6050-G	300123BLK		1.000	1.000	1.000	1.000	1.000	1.000	100.000
19	Sample	DJPQ0102, 6050-G	300123LCS		1.000	1.000	1.000	1.000	1.000	1.000	100.000
20	Sample	DJPQ0103, 6050-G	300123LCD		1.000	1.000	1.000	1.000	1.000	1.000	100.000
21	Sample	DJP5F108, 6050-G	310194001		1.000	1.000	1.000	1.000	1.000	1.000	100.000
22	Sample	DJRVG101, 6050-G	310194BLK		1.000	1.000	1.000	1.000	1.000	1.000	100.000
23	Sample	DJRVG102, 6050-G	310194LCS		1.000	1.000	1.000	1.000	1.000	1.000	100.000
24	Sample	DJRVG103, 6050-G	310194LCD		1.000	1.000	1.000	1.000	1.000	1.000	100.000
25	Std Check	MEDA, 6050-G.b.,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	100.000
26	Std Check	MEDB, 6050-G.b.,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	100.000

Sequence Process Information - Channel B													
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
1	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6003	D-B6003		D-B6003	-	-
2	-	1	2	GEN4C	GEN4B	122190A	TOX	D-B6004	D-B6004		D-B6004	N	MED
3	-	1	2	GEN4C	GEN4B	122190A	TOX	D-B6005	D-B6005		D-B6005	N	MED
4	-	1	4	GEN4C	GEN4B	122190A	INDA	D-B6006	D-B6006		D-B6006	N	LOW
5	-	1	5	GEN4C	GEN4B	122190A	INDA	D-B6007	D-B6007		D-B6007	N	MLOW
6	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B6008	D-B6008		D-B6008	N	MLOW
7	-	1	7	GEN4C	GEN4B	122190A	INDA	D-B6009	D-B6009		D-B6009	N	MLOW
8	-	1	8	GEN4C	GEN4B	122190A	INDA	D-B6010	D-B6010		D-B6010	N	MLOW
9	-	1	9	GEN4C	GEN4B	122190A	INDA	D-B6011	D-B6011		D-B6011	N	LOW
10	-	1	10	GEN4C	GEN4B	122190A	INDA	D-B6012	D-B6012		D-B6012	N	MLOW
11	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B6013	D-B6013		D-B6013	N	MLOW
12	-	1	12	GEN4C	GEN4B	122190A	INDA	D-B6014	D-B6014		D-B6014	N	MLOW
13	-	1	13	GEN4C	GEN4B	122190A	INDA	D-B6015	D-B6015		D-B6015	N	MLOW
14	-	1	23	GEN4C	GEN4B	122190A	INDA	D-B6016	D-B6016		D-B6016	-	-
15	-	1	24	GEN4C	GEN4B	122190A	INDA	D-B6017	D-B6017		D-B6017	-	-
16	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6018	D-B6018		D-B6018	-	-
17	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6019	D-B6019		D-B6019	-	-
18	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6020	D-B6020		D-B6020	-	-
19	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6021	D-B6021		D-B6021	-	-
20	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6022	D-B6022		D-B6022	-	-
21	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6023	D-B6023		D-B6023	-	-
22	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6024	D-B6024		D-B6024	-	-
23	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6025	D-B6025		D-B6025	-	-
24	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6026	D-B6026		D-B6026	-	-
25	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B6027	D-B6027		D-B6027	-	-
26	-	1	1	GEN4C	GEN4B	122190A	INDA	D-B6028	D-B6028		D-B6028	-	-

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\6080-G.SEQ
Created by : DE11/02/98 on : 9/8/00 08:39
Edited by : LM09/08/00 on : 9/11/00 09:49
Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
REVIEWED BY:

672 359

H

Number of Times Edited : 3

Sequence File Header Information:

✓ OF
9-11-00

Number of Rows : 34
Instrument Type : 760 / 900 Series Intelligent Interface
Injection Type : SINGLE

Sequence Sample Descriptions - Channel 3												
Row	Type	Sample Name	Sample Number	Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend	Norm. factor
1	Std Check	EVALB, 6050-G.b.,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Std Check	MEDB, 6050-G.b.,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
3	Std Check	MEDB, 6050-G.b.,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
4	Sample	DJX9L103, 6050-G	060135001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Sample	DJX9N103, 6050-G	060135002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Sample	DJX9L12G, 6050-G	060135001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Sample	DJX9L12H, 6050-G	060135001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Sample	DK27E101, 6050-G	060135BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Sample	DK27E102, 6050-G	060135LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Sample	DJX9R102, 6050-G	060135003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Sample	DK2K9101, 6050-G	060135BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Sample	DK2K9102, 6050-G	060135LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Sample	DK2K9103, 6050-G	060135LCD		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Std Check	MEDB, 6050-G.b.,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Std Check	MEDB, 6050-G.b.,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
16	Std Check	EVALB, 6050-G.b.,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
17	Sample	DJRHV10L, 6050-G	010228001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
18	Sample	DJRHV13G, 6050-G	010228001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
19	Sample	DJRHV13H, 6050-G	010228001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
20	Sample	DJRJP108, 6050-G	010228002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Sample	DJTTN103, 6050-G	020118001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
22	Sample	DJTTF103, 6050-G	020118002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
23	Sample	DJTTQ103, 6050-G	020118003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
24	Sample	DJP8W104, 6050-G	310206001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
25	Sample	DJP90104, 6050-G	310206002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
26	Sample	DJP91104, 6050-G	310206003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
27	Sample	DJP92104, 6050-G	310206004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
28	Sample	DJPHK103, 6050-G	310232001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
29	Sample	DJPHL103, 6050-G	310232002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
30	Sample	DJQTD103, 6050-G	010153001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
31	Sample	DK2C8101, 6050-G	010228BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
32	Sample	DK2C8102, 6050-G	010228LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
33	Std Check	MEDB, 6050-G.b.,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
34	Std Check	MEDB, 6050-G.b.,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

Sequence Process Information - Channel B															
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	GEN4B	122190A	EVAL	D-B6051	D-B6051		D-B6051	-	-	-	LPT1:
2	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B6052	D-B6052		D-B6052	-	-	-	LPT1:
3	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B6053	D-B6053		D-B6053	-	-	-	LPT1:
4	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6054	D-B6054		D-B6054	-	-	-	LPT1:
5	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6055	D-B6055		D-B6055	-	-	-	LPT1:
6	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6056	D-B6056		D-B6056	-	-	-	LPT1:
7	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6057	D-B6057		D-B6057	-	-	-	LPT1:
8	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6058	D-B6058		D-B6058	-	-	-	LPT1:
9	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6059	D-B6059		D-B6059	-	-	-	LPT1:
10	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6060	D-B6060		D-B6060	-	-	-	LPT1:
11	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6061	D-B6061		D-B6061	-	-	-	LPT1:
12	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6062	D-B6062		D-B6062	-	-	-	LPT1:
13	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6063	D-B6063		D-B6063	-	-	-	LPT1:
14	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B6064	D-B6064		D-B6064	-	-	-	LPT1:
15	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B6065	D-B6065		D-B6065	-	-	-	LPT1:
16	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6066	D-B6066		D-B6066	-	-	-	LPT1:
17	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6067	D-B6067		D-B6067	-	-	-	LPT1:
18	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6068	D-B6068		D-B6068	-	-	-	LPT1:

672 360

20	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6069	D-B6069	D-B6069	-	-	-	LPT1:
21	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6070	D-B6070	D-B6070	-	-	-	LPT1:
22	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6071	D-B6071	D-B6071	-	-	-	LPT1:
23	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6072	D-B6072	D-B6072	-	-	-	LPT1:
24	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6073	D-B6073	D-B6073	-	-	-	LPT1:
25	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6074	D-B6074	D-B6074	-	-	-	LPT1:
26	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6075	D-B6075	D-B6075	-	-	-	LPT1:
27	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6076	D-B6076	D-B6076	-	-	-	LPT1:
28	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6077	D-B6077	D-B6077	-	-	-	LPT1:
29	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6078	D-B6078	D-B6078	-	-	-	LPT1:
30	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6079	D-B6079	D-B6079	-	-	-	LPT1:
31	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6080	D-B6080	D-B6080	-	-	-	LPT1:
32	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B6081	D-B6081	D-B6081	-	-	-	LPT1:
33	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B6082	D-B6082	D-B6082	-	-	-	LPT1:
34	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B6083	D-B6083	D-B6083	-	-	-	LPT1:
								D-B6084	D-B6084	D-B6084	-	-	-	LPT1:

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
5B,C CLP1	DJP8W-1-04	___	263237	399411	A-36-QJ	COH310206	001		SOLID	0	3
5B,C CLP1	DJP90-1-04	___	263238	399411	A-36-QJ	COH310206	002		SOLID	0	3
5B,C CLP1	DJP91-1-04	___	263239	399411	A-36-QJ	COH310206	003		SOLID	0	3
5B,C CLP1	DJP92-1-04	___	263240	399411	A-36-QJ	COH310206	004		SOLID	0	3
5C,D CLP1	DJPHK-1-03	___	263241	051465	A-36-QJ	COH310232	001		SOLID	0	4
5C,D CLP1	DJPHL-1-03	___	263242	051465	A-36-QJ	COH310232	002		SOLID	0	4
5E CLP1	DJQTD-1-03	___	263243	051465	A-36-QJ	COI010153	001		SOLID	0	4
6A,B,C, CLP1	DJRHV-1-0L	___	263232	419910	A-3J-QJ	COI010228	001	QC	SOLID	0	22
6A,B,C, CLP1	DJRJP-1-08	___	263233	419910	A-3J-QJ	COI010228	002		SOLID	0	6
6B,C CLP1	DJT TN-1-03	___	263244	051465	A-36-QJ	COI020118	001		SOLID	0	4
6B,C CLP1	DJT TP-1-03	___	263245	051465	A-36-QJ	COI020118	002		SOLID	0	3
6B,C CLP1	DJT TQ-1-03	___	263246	051465	A-36-QJ	COI020118	003		SOLID	0	4

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>P. Yushinski</i>	<i>P. Yushinski</i>	9-7-00 1540
<i>P. Yushinski</i>	<i>P. Yushinski</i>	9-7-00 2200

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

672 362

HERBICIDE DATA

**HERBICIDE
QC SUMMARY**

672 364

SW846 8151A SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0H310206

	CLIENT ID.	SRG01	TOT OUT
	=====	=====	=====
01	DF/S1/242/SDC/031	70	00
02	DF/S1/242/SDC/033	70	00
03	DF/S1/242/SDC/034	74	00
04	DF/S1/242/SDC/035	62	00
05	~~INTRA LAB QC~~	~~95~~	~~00~~
06	METHOD BLK. DK2EF101	73	00
07	LCS DK2EF102	73	00
08	~~LAB MS/MSD D~~	~~82~~	~~00~~
09	~~LAB MS/MSD S~~	~~73~~	~~00~~

LM
9/12/00SURROGATES

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

SW846 8151A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0I070000

WO #: DK2EF102

BATCH: 0251520

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
2,4-D	0.160	0.121	76	28 - 136	
2,4,5-TP (Silvex)	0.0400	0.0292	73	50 - 128	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

672 366 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: LAB MS/MSD

Lot #: C0I010228

WO #: DJRHV13K

BATCH: 0251520

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
2,4-D	0.160	ND	0.133	83	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0327	82	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

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: LAB MS/MSD

Lot #: C0I010228

WO #: DJRHV13L

BATCH: 0251520

COMPOUND	SPIKE	MSD	MSD			QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD		RPD	REC	
2,4-D	0.160	0.154	96	14		20	35 - 133	
2,4,5-TP (Silvex)	0.0400	0.0367	92	11		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

672 368

BLANK WORKORDER NO.

SW846 8151A METHOD BLANK SUMMARY

DK2EF101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: A-B60037.

Lot Number: C0H310206

Matrix: SOLID

Extraction Method:

Date Extracted: 09/07/00

Date Analyzed(1): 09/08/00

Date Analyzed(2): N/A

Time Analyzed(1): 23:29

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/S1/242/SDC/031	DJP8W105	09/08/00	N/A
02	DF/S1/242/SDC/033	DJP90105	09/08/00	N/A
03	DF/S1/242/SDC/034	DJP91105	09/08/00	N/A
04	DF/S1/242/SDC/035	DJP92105	09/08/00	N/A
05	INTRA-LAB OC	DJRHV13J	09/08/00	N/A
06	LAB MS/MSD	DJRHV13K S	09/08/00	N/A
07	LAB MS/MSD	DJRHV13L D	09/08/00	N/A
08	CHECK SAMPLE	DK2EF102 C	09/08/00	N/A
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

un 9/12/00

COMMENTS:

FORM IV

**HERBICIDE
SAMPLE DATA**

672 370

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP8W105

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

Client Sample Id: DF/S1/242/SDC/031

		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

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60022.D
 Lab Smp Id: DJP8W105 Client Smp ID: DF/S1/242/SDC/031
 Inj Date : 08-SEP-2000 16:14
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJP8W105,5240A.b
 Misc Info : 310206001
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 08-Sep-2000 11:13 morganw Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON						
\$ 2 DCAA	11.356	11.359	-0.003	1126082	0 03484	0 06968(a)
3 DICAMBA						
4 MCPP						
5 MCPA						
6 DICHLOROPROP						
7 2,4-D						
8 PENTACHLOROPHENOL						
9 2,4,5-TP(SILVEX)						
10 2,4,5-T						
11 2,4-DB						
12 DINOSEB						

672 372

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60022.D
Report Date: 08-Sep-2000 16:52

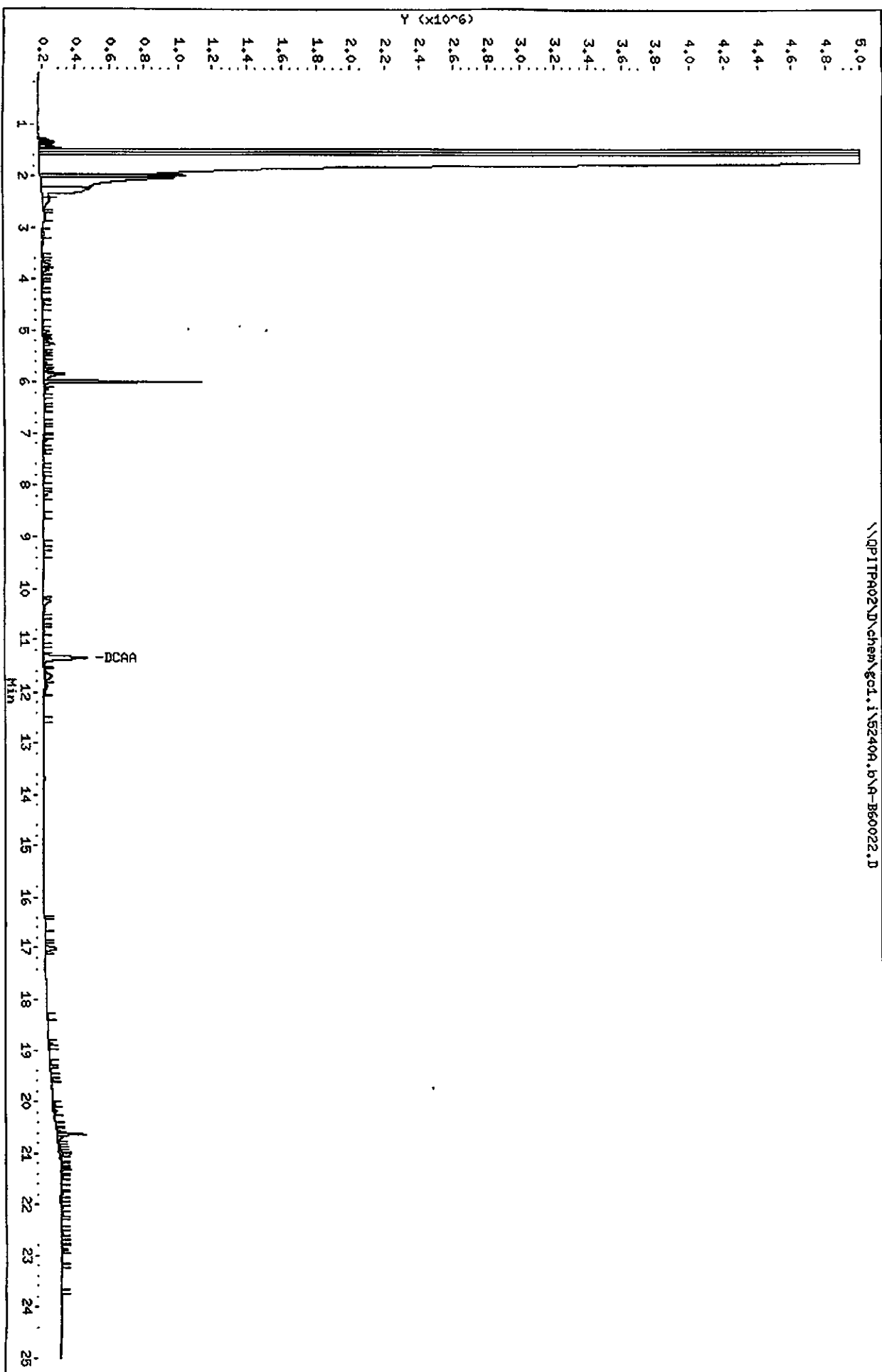
QC Flag Legend

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

612 373

Data File: \\QPITPA02\N\chem\gcl.i\5240A.b\A-B60022.D
 Date: 08-SEP-2000 16:14
 Client ID: DF/S1/242/SDC/031
 Sample Info: DJP8M105,5240A.b
 Volume Injected (uL): 1.0
 Column phase: DB1701

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



672 374

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 002

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP90105

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

Client Sample Id: DF/S1/242/SDC/033

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

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60023.D
 Report Date: 08-Sep-2000 17:14

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60023.D
 Lab Smp Id: DJP90105 Client Smp ID: DF/S1/242/SDC/033
 Inj Date : 08-SEP-2000 16:43
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJP90105,5240A.b
 Misc Info : 310206002
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 08-Sep-2000 11:13 morganw Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	4.308	4.344	-0.036	23693	0.00166	0.003313 (a)
\$ 2 DCAA	11.351	11.359	-0.008	1137036	0.03518	0.07036 (a)
3 DICAMBA				Compound Not Detected.		
4 MCPP				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 2,4-DB	19.289	19.249	0.040	8821	<0.0	0.001892 (a)
12 DINOSEB				Compound Not Detected.		

672,376

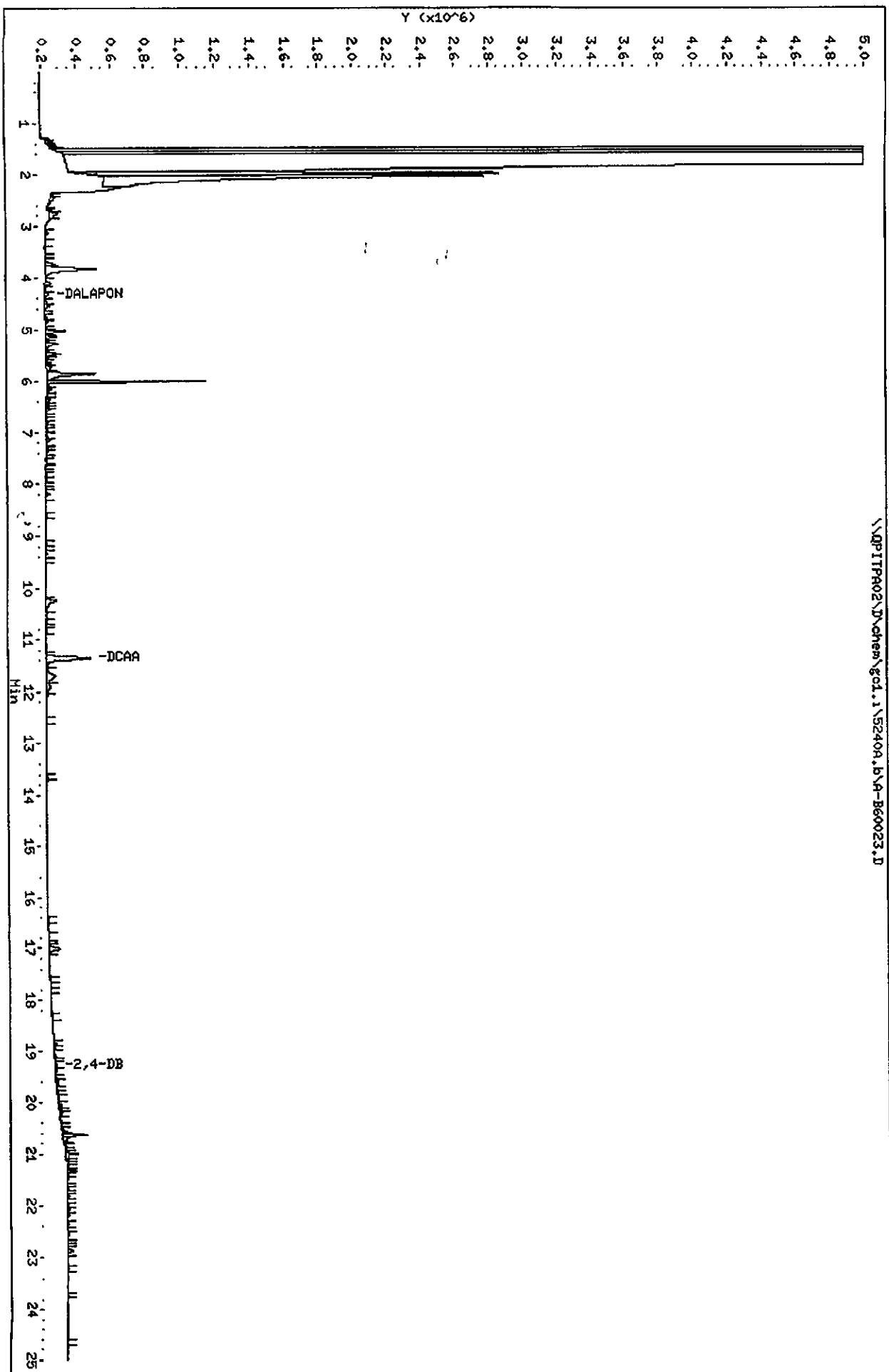
Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60023.D
Report Date: 08-Sep-2000 17:14

QC Flag Legend

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

Data File: \\QPI1P02\Drchem\gc1.1\5240A.b\A-B60023.D
Date: 08-SEP-2000 16:43
Client ID: DF/S1/242/SDC/033
Sample Info: DJP90105,5240A.b
Volume Injected (uL): 1.0
Column phase: DB1.701

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



672 378

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH310206 003

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP91105

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

Client Sample Id: DF/S1/242/SDC/034

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

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60024.D
 Report Date: 11-Sep-2000 10:32

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60024.D
 Lab Smp Id: DJP91105 Client Smp ID: DF/S1/242/SDC/034
 Inj Date : 08-SEP-2000 17:12
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJP91105,5240A.b
 Misc Info : 310206003
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 11-Sep-2000 09:38 MORGANW Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	4.311	4.344	-0.033	18542	0.00130	0.002593(a)
\$ 2 DCAA	11.355	11.359	-0.004	1191277	0.03686	0.07371(a)
3 DICAMBA				Compound Not Detected.		
4 MCPP				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 2,4-DB				Compound Not Detected.		
12 DINOSEB				Compound Not Detected.		

672.380

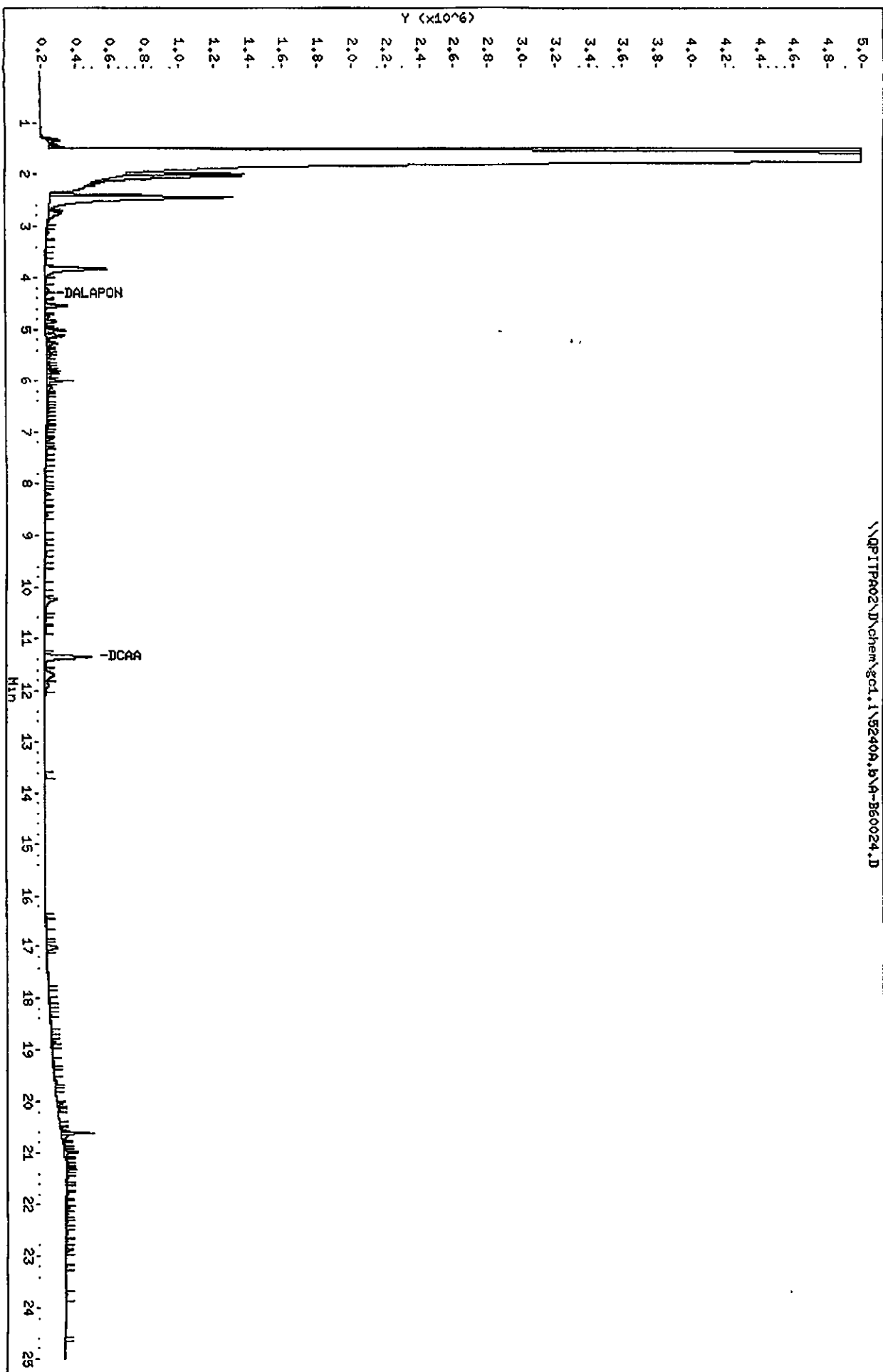
Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60024.D
Report Date: 11-Sep-2000 10:32

QC Flag Legend

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

Data File: \\QPITPA02\DJ\chem\gcl.1\5240A.b\A-B60024.D
Date: 08-SEP-2000 17:12
Client ID: DF/S1/242/SDC/034
Sample info: DJP91405,5240A.b
Volume injected (uL): 1.0
Column phase: DB1701

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



672 382

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H310206 004

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/31/00

Work Order: DJP92105

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

Client Sample Id: DF/S1/242/SDC/035

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: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60025.D
 Report Date: 11-Sep-2000 10:33

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60025.D
 Lab Smp Id: DJP92105 Client Smp ID: DF/S1/242/SDC/035
 Inj Date : 08-SEP-2000 17:41
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJP92105,5240A.b
 Misc Info : 310206004
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 11-Sep-2000 09:38 MORGANW Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 6
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON						
\$ 2 DCAA	11.356	11.359	-0.003	996002	0.03082	0.06163(a)
3 DICAMBA						
4 MCPP						
5 MCPA						
6 DICHLOROPROP						
7 2,4-D						
8 PENTACHLOROPHENOL						
9 2,4,5-TP(SILVEX)						
10 2,4,5-T						
11 2,4-DB						
12 DINOSEB						

672 384

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60025.D
Report Date: 11-Sep-2000 10:33

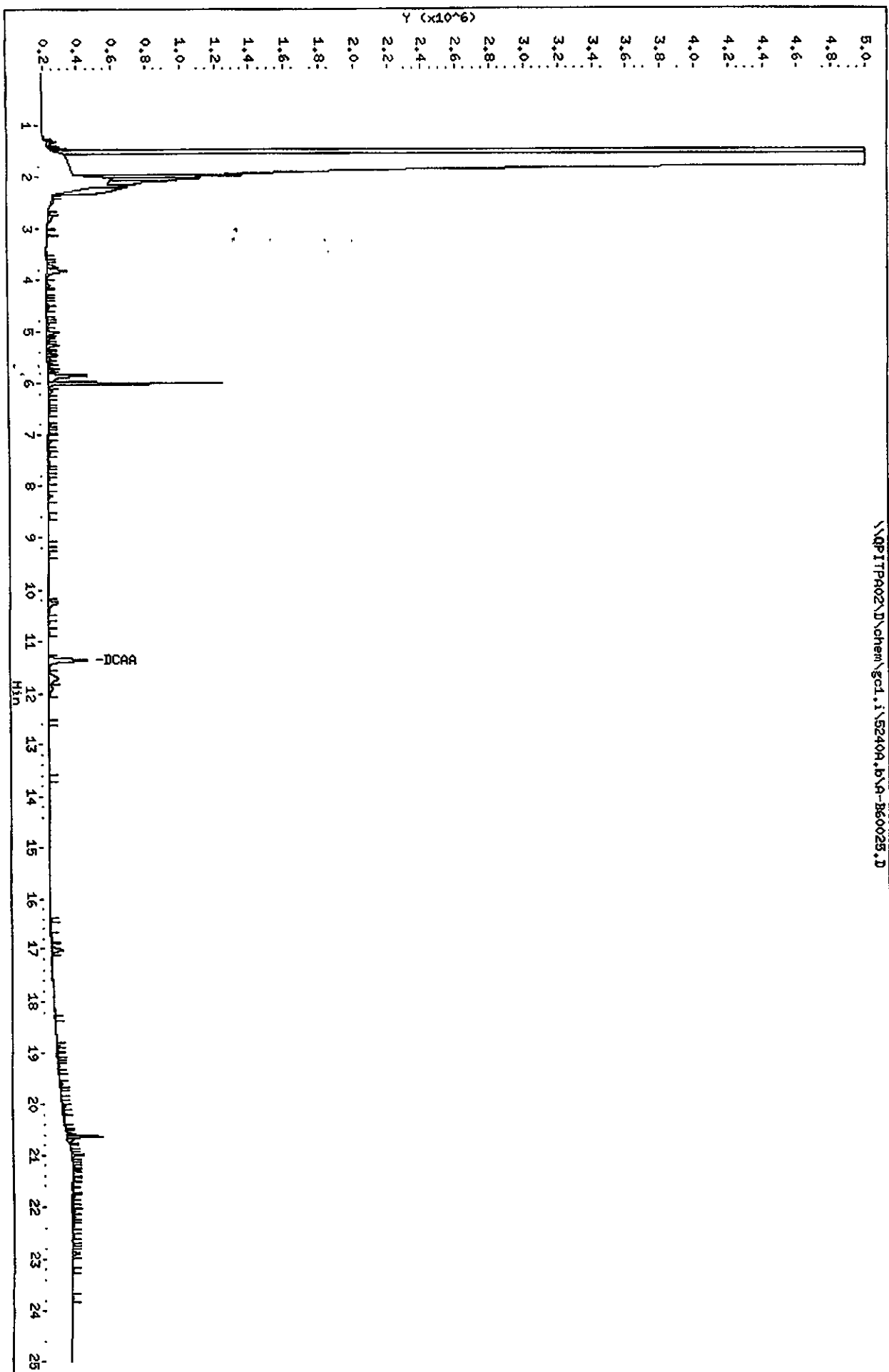
QC Flag Legend

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

672 385

Data File: \\QPI1P002\\D\\chem\\gcl.i\\5240A.b\\A-B60025.D
Date: 08-SEP-2000 17:44
Client ID: DF/SL/242/SDC/035
Sample Info: DJP92105,5240A.b
Volume Injected (uL): 1.0
Column phase: DB1701

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



672 386

**HERBICIDE
CALIBRATION DATA**

Report Date : 08-Sep-2000 11:13

689018
DB1701

672 387

STL - Pittsburgh

COMPOUND LISTING

Method file : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
Quant Method : ESTD Target Version : 4.04
Last Update : 08-Sep-2000 11:12 Number of Cpnds : 12
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	449.000000
Initial:End Threshold	224.500000
Initial:Area Threshold	4490.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	8.000000
Initial:Negative Peaks	ON
Initial:Tension	0.200000

Compound	RT	RT Window	RF
1 DALAPON	4.344	4.274-4.414	1.43e+007
\$ 2 DCAA	11.359	11.289-11.429	3.23e+007
3 DICAMBA	11.974	11.904-12.044	2.50e+007
4 MCPP	12.427	12.357-12.497	1.85e+004
5 MCPA	13.333	13.263-13.403	2.76e+004
6 DICHLOROPROP	14.509	14.439-14.579	5.09e+006
7 2,4-D	16.044	15.974-16.114	5.15e+006
8 PENTACHLOROPHENOL	16.430	16.360-16.500	8.12e+007
9 2,4,5-TP(SILVEX)	17.954	17.884-18.024	5.99e+007
10 2,4,5-T	18.689	18.619-18.759	6.51e+007
11 2,4-DB	19.249	19.179-19.319	9.32e+006
12 DINOSEB	19.948	19.878-20.018	6.03e+007

672 388

Report Date : 24-Aug-2000 14:20

u
68901B
DB/70/

STL - Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 24-AUG-2000 07:43
 End Cal Date : 24-AUG-2000 09:39
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Cal Date : 24-Aug-2000 14:19 colussyj
 Curve Type : Average

Calibration File Names:

Level 1: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50212.D
 Level 2: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50213.D
 Level 3: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50214.D
 Level 4: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50215.D
 Level 5: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50216.D

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 DALAPON	16396455	15106000	14329021	12910159	12767199	14301767	10.677
3 DICAMBA	28908585	26215305	24941200	22620094	22137829	24964603	11.080
4 MCPP	21349	20178	19061	16626	15286	18500	13.537
5 MCPA	33948	30941	27487	23448	21963	27558	18.187
6 DICHLOROPROP	5770660	5505778	5164080	4599176	4423171	5092573	11.311
7 2,4-D	5441611	5393224	5263831	4863718	4771024	5146681	6.010
8 PENTACHLOROPHENOL	84353008	82470113	81541353	78102303	79708155	81234986	2.983
9 2,4,5-TP (SILVEX)	62250476	61462762	60697536	57452304	57571393	59886894	3.735
10 2,4,5-T	64259772	65590857	66095498	63703081	65948649	65119571	1.648
11 2,4-DB	9447441	9411635	9316994	8931935	9501962	9321993	2.448
12 DINOSBB	59660883	60804409	61311654	59453268	60414035	60328850	1.287
\$ 2 DCAA	38637559	34304306	35066545	28398029	25201600	32321608	16.765

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60020.D
 Report Date: 08-Sep-2000 11:12

15
 689013 672-389
 DB1701

STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 08-SEP-2000 10:38
 Lab File ID: A-B60020.D Init. Cal. Date(s): 24-AUG-2000 24-AUG-2000
 Analysis Type: Init. Cal. Times: 07:43 09:39
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m

COMPOUND	RRF	RFO	MIN	MAX
1 DALAPON	14301767	14026059	0.010	-1.9 15.0
2 DCAA	32321608	28615452	0.010	-11.5 15.0
3 DICAMBA	24964603	23763624	0.010	-4.8 15.0
4 MCPP	18500	21440	0.010	15.9 15.0 <-
5 MCPA	27558	29146	0.010	5.8 15.0
6 DICHLOROPROP	5092573	5097347	0.010	0.1 15.0
7 2,4-D	5146681	5224736	0.010	1.5 15.0
8 PENTACHLOROPHENOL	81234986	79893233	0.010	-1.7 15.0
9 2,4,5-TP(SILVEX)	59886894	58842133	0.010	-1.7 15.0
10 2,4,5-T	65119571	64738009	0.010	-0.6 15.0
11 2,4-DB	9321993	9321562	0.010	-0.0 15.0
12 DINOSEB	60328850	62560551	0.010	3.7 15.0

4.1 %
 AVG

672-390

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60038.D
Report Date: 11-Sep-2000 09:311E
68901B
DB1701

STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 08-SEP-2000 23:58
 Lab File ID: A-B60038.D Init. Cal. Date(s): 24-AUG-2000 24-AUG-2000
 Analysis Type: Init. Cal. Times: 07:43 09:39
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m

COMPOUND	RRF	RFO	MIN	MAX	
			RRF	%D	%D
1 DALAPON	14301767	14497107	0.010	1.4	15.0
\$ 2 DCAA	32321608	29558790	0.010	-8.5	15.0
3 DICAMBA	24964603	24850447	0.010	-0.5	15.0
4 MCPP	18500	20929	0.010	13.1	15.0
5 MCPA	27558	29004	0.010	5.2	15.0
6 DICHLOROPROP	5092573	5358031	0.010	5.2	15.0
7 2,4-D	5146681	5559788	0.010	8.0	15.0
8 PENTACHLOROPHENOL	81234986	82640695	0.010	1.7	15.0
9 2,4,5-TP(SILVEX)	59886894	61636825	0.010	2.9	15.0
10 2,4,5-T	65119571	68038152	0.010	4.5	15.0
11 2,4-DB	9321993	9757396	0.010	4.7	15.0
12 DINOSEB	60328850	63148268	0.010	4.7	15.0

8D
PESTICIDE ANALYTICAL SEQUENCE

672 391

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: C0H310206
GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 08/24/00 08/24/00
Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 11.36					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	LHERB	08/24/00	0743	11.36	
02	MLHERB	08/24/00	0812	11.36	
03	MHERB	08/24/00	0841	11.35	
04	MHHERB	08/24/00	0910	11.36	
05	HHERB	08/24/00	0939	11.35	
06	MHERB	09/08/00	1038	11.36	
07	DF/S1/242/SD DJP8W105	09/08/00	1614	11.36	
08	DF/S1/242/SD DJP90105	09/08/00	1643	11.35	
09	DF/S1/242/SD DJP91105	09/08/00	1712	11.36	
10	DF/S1/242/SD DJP92105	09/08/00	1741	11.36	
11	LCS DK2EF102	09/08/00	2300	11.36	
12	BLK DK2EF101	09/08/00	2329	11.36	
13	MHERB	09/08/00	2358	11.36	
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.

672 392

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50212.D
 Report Date: 24-Aug-2000 14:29

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50212.D
 Lab Smp Id: Lherb
 Inj Date : 24-AUG-2000 07:43
 Operator : 01797
 Smp Info : Lherb,5240A.b
 Misc Info : 190-94-1
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 24-Aug-2000 14:28 colussyj
 Cal Date : 24-AUG-2000 07:43
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

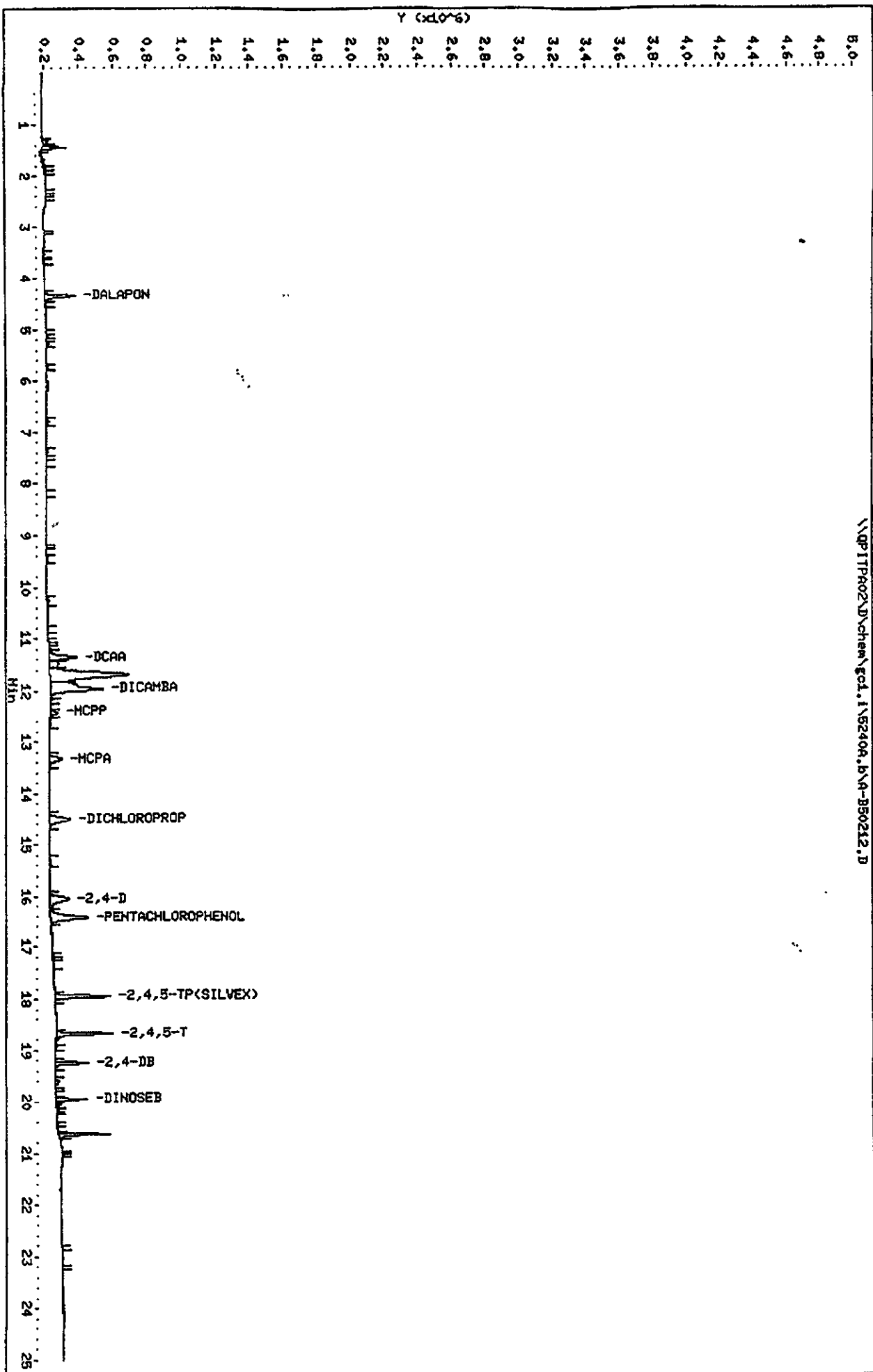
Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B50212.D
 Calibration Sample, Level: 1
 Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	16.424	16.427	-0.003	224379	0.00266	0.0004368
1 DALAPON	4.340	4.342	-0.002	180361	0.01100	0.002058
2 DCAA	11.356	11.352	0.004	822980	0.02130	0.004274
3 DICAMBA	11.966	11.971	-0.005	306431	0.01060	0.002006
4 MCPP	12.419	12.420	-0.001	45259	2.12000	0.3983
5 MCPA	13.330	13.327	0.003	72649	2.14000	0.4399
6 DICHLOROPROP	14.507	14.507	0.000	122338	0.02120	0.003913
7 2,4-D	16.046	16.039	0.007	114818	0.02110	0.003566
9 2,4,5-TP(SILVEX)	17.950	17.951	-0.001	326815	0.00525	0.0008648
10 2,4,5-T	18.688	18.688	0.000	338649	0.00527	0.0008132
11 2,4-DB	19.250	19.247	0.003	199341	0.02110	0.003353
12 DINOSEB	19.945	19.945	0.000	189125	0.00317	0.0004906

672 393

Date File: \\QP1TPro2\chem\col.1\B2408.b\A-B50212.D
Date: 24-AUG-2000 07:43
Client ID:
Sample Info: Lherb, B2408.b
Column phase: DB1701

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



672 394

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50213.D

Report Date: 24-Aug-2000 14:29

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50213.D

Lab Smp Id: MLherb

Inj Date : 24-AUG-2000 08:12

Operator : 01797

Inst ID: gc1.i

Smp Info : MLherb,5240A.b

Misc Info : 190-94-2

Comment :

Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m

Meth Date : 24-Aug-2000 14:28 colussyj Quant Type: ESTD

Cal Date : 24-AUG-2000 07:43

Cal File: A-B50212.D

Als bottle: 3

Calibration Sample, Level: 2

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 1-all.sub

Target Version: 4.04

Processing Host: PITPC085

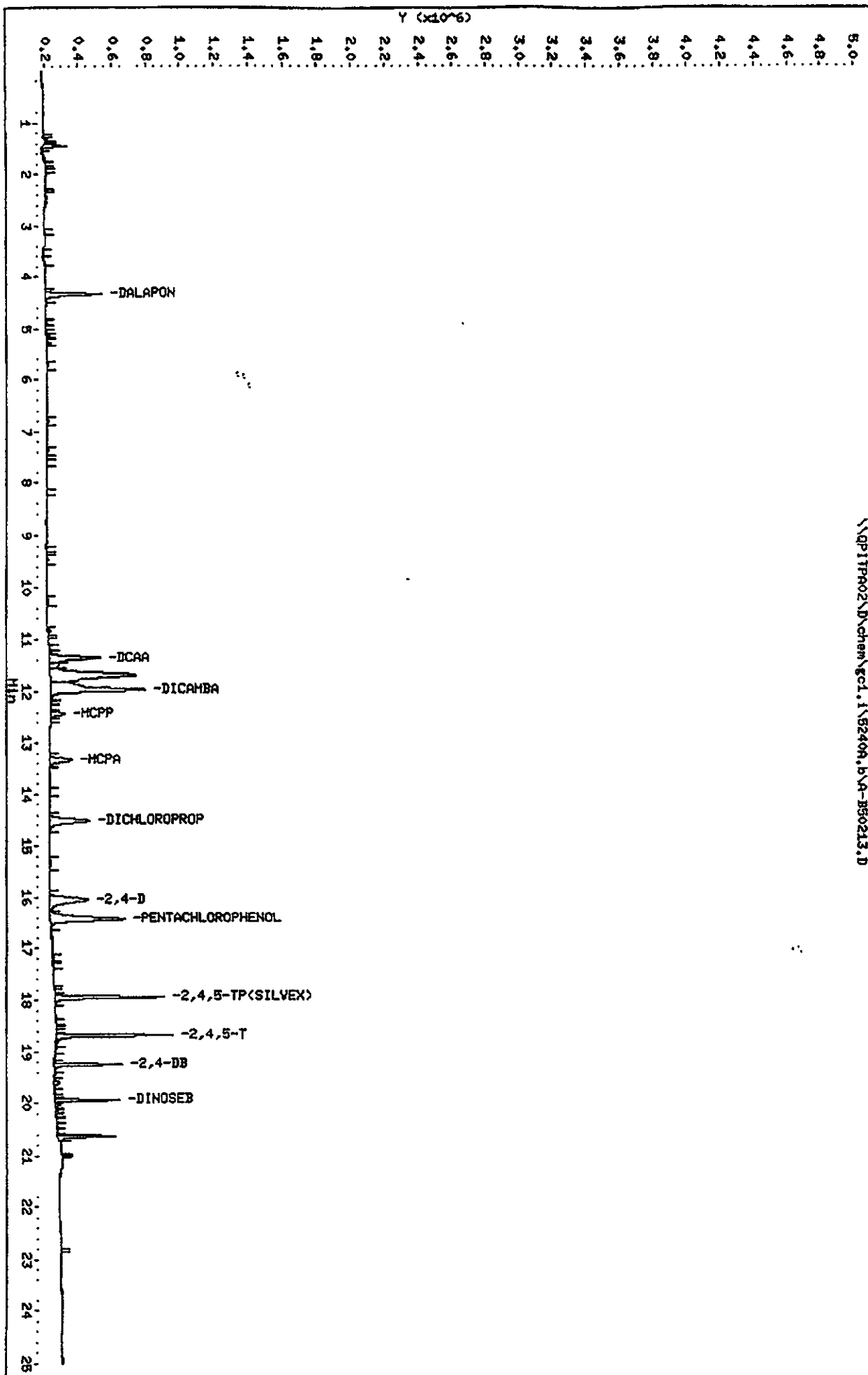
AMOUNTS

Compounds	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	16.432	16.427	0.005	438741	0.00532	0.001201
1 DALAPON	4.341	4.342	-0.001	332332	0.02200	0.005491
\$ 2 DCAA	11.357	11.352	0.005	1457933	0.04250	0.01131
3 DICAMBA	11.973	11.971	0.002	558386	0.02130	0.005291
4 MCPP	12.426	12.420	0.006	85960	4.26000	1.132
5 MCPA	13.332	13.327	0.005	132428	4.28000	1.211
6 DICHLOROPROP	14.507	14.507	0.000	233445	0.04240	0.01094
7 2,4-D	16.052	16.039	0.013	229212	0.04250	0.01019
9 2,4,5-TP(SILVEX)	17.952	17.951	0.001	645359	0.01050	0.002418
10 2,4,5-T	18.689	18.688	0.001	688704	0.01050	0.002306
11 2,4-DB	19.250	19.247	0.003	397171	0.04220	0.009344
12 DINOSEB	19.947	19.945	0.002	386108	0.00635	0.001399

672 395

Data File: \\NP17P02\\D\\chem\\col.1\\5240A.b\\A-B50213.D
Date: 24-ALC-2000 08112
Client ID:
Sample Info: HHerb, 5240A.b
Column Phase: DB1.701

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



672 396

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50214.D
Report Date: 24-Aug-2000 14:29

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50214.D

Lab Smp Id: Mherb

Inj Date : 24-AUG-2000 08:41

Operator : 01797

Inst ID: gc1.i

Smp Info : Mherb,5240A.b

Misc Info : 190-94-3

Comment :

Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m

Meth Date : 24-Aug-2000 14:28 colussyj Quant Type: ESTD

Cal Date : 24-AUG-2000 09:39

Cal File: A-B50216.D

Als bottle: 4

Calibration Sample, Level: 3

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 1-all.sub

Target Version: 4.04

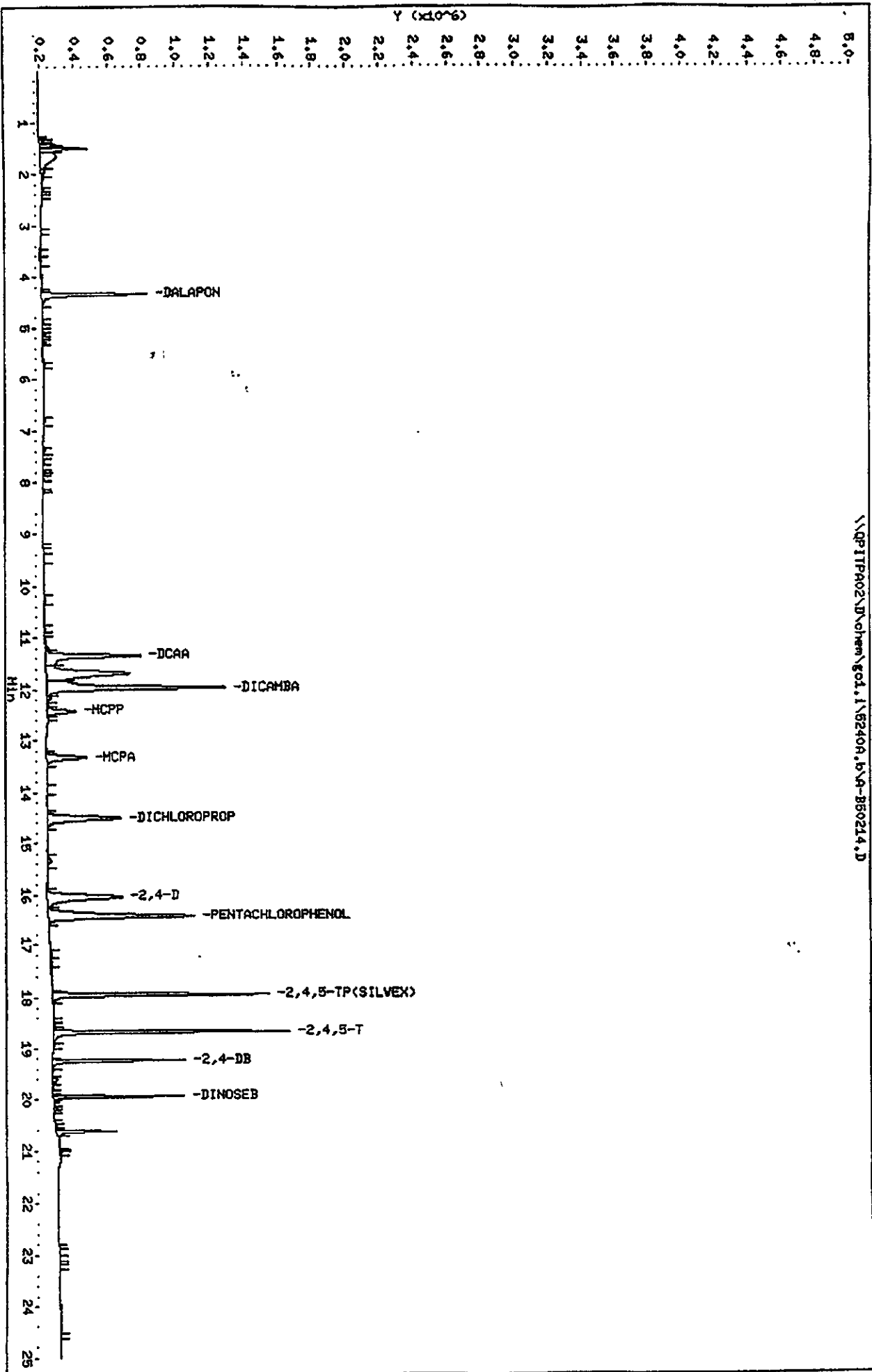
Processing Host: PITPC085

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	16.427	16.427	0.000	867600	0.01064	0.001303
1 DALAPON	4.342	4.342	0.000	629044	0.04390	0.005369
\$ 2 DCAA	11.352	11.352	0.000	2984163	0.08510	0.01104
3 DICAMBA	11.971	11.971	0.000	1060001	0.04250	0.005114
4 MCPP	12.420	12.420	0.000	162401	8.52000	1.021
5 MCPA	13.327	13.327	0.000	235291	8.56000	1.040
6 DICHLOROPROP	14.507	14.507	0.000	437914	0.08480	0.01050
7 2,4-D	16.039	16.039	0.000	447952	0.08510	0.01066
9 2,4,5-TP(SILVEX)	17.951	17.951	0.000	1280718	0.02110	0.002614
10 2,4,5-T	18.688	18.688	0.000	1394615	0.02110	0.002621
11 2,4-DB	19.247	19.247	0.000	787286	0.08450	0.01030
12 DINOSEB	19.945	19.945	0.000	778658	0.01270	0.001580

672 397

Data File: \\QP1TPA02\J\chem\gol.1\B240A.b\A-B50214.D
 Date: 24-MAR-2000 08:41
 Client ID:
 Sample Info: Herb, B240A.b
 Column Phase: DB1701

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



672 398
 Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50215.D
 Report Date: 24-Aug-2000 14:29

STL - Pittsburgh

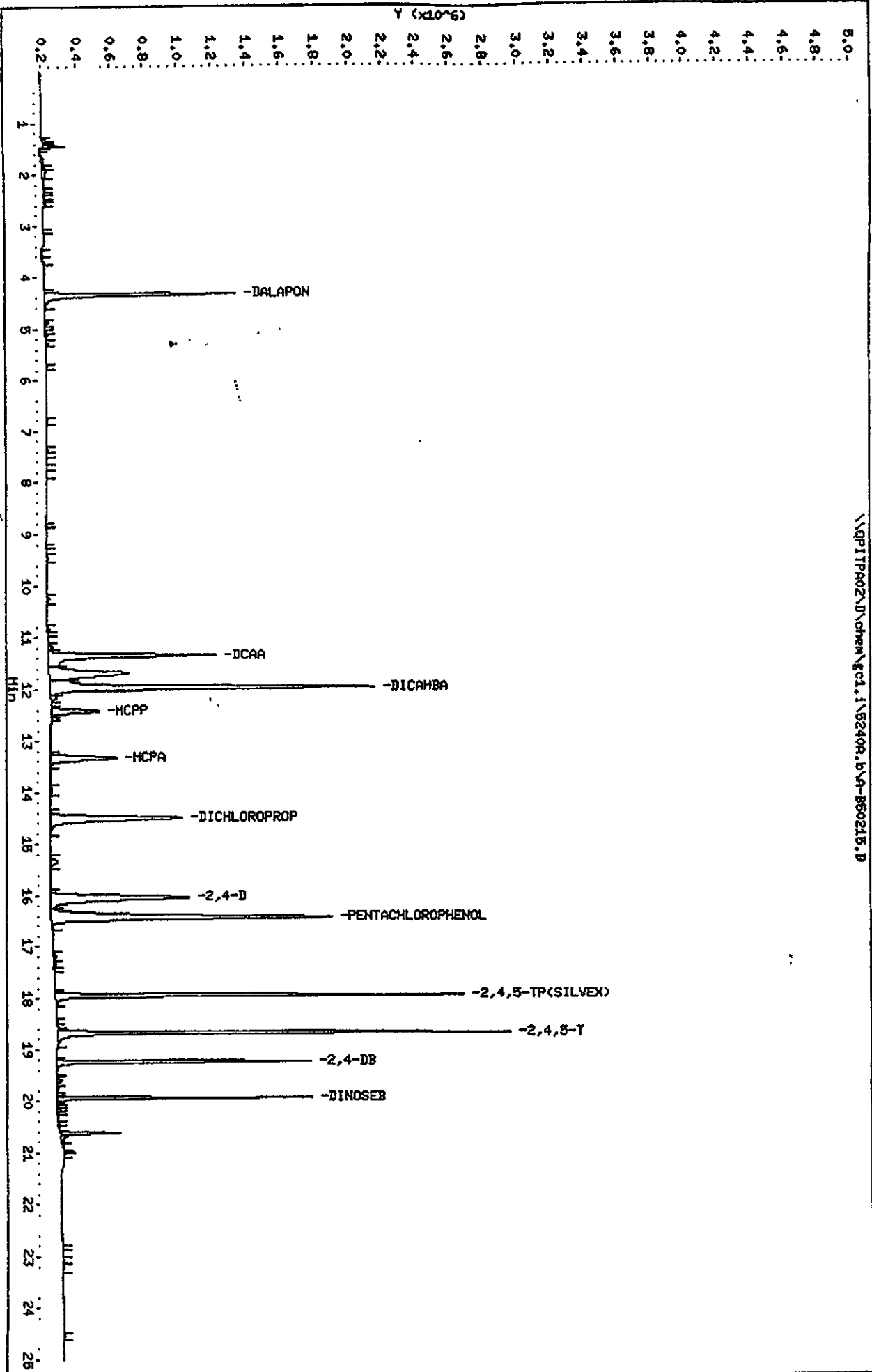
Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50215.D
 Lab Smp Id: MHherb
 Inj Date : 24-AUG-2000 09:10
 Operator : 01797
 Smp Info : MHherb,5240A.b
 Misc Info : 190-94-4
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 24-Aug-2000 14:28 colussyj
 Cal Date : 24-AUG-2000 07:43
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B50212.D
 Calibration Sample, Level: 4
 Compound Sublist: 1-all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	16.431	16.427	0.004	1662017	0.02128	0.007396
1 DALAPON	4.343	4.342	0.001	1133512	0.08780	0.03040
2 DCAA	11.356	11.352	0.004	4827665	0.17000	0.06214
3 DICAMBA	11.973	11.971	0.002	1924970	0.08510	0.02970
4 MCPP	12.427	12.420	0.007	282643	17.0000	6.142
5 MCPA	13.332	13.327	0.005	400969	17.1000	5.976
6 DICHLOROPROP	14.508	14.507	0.001	781860	0.17000	0.05989
7 2,4-D	16.038	16.039	-0.001	826832	0.17000	0.06020
9 2,4,5-TP(SILVEX)	17.952	17.951	0.001	2418742	0.04210	0.01479
10 2,4,5-T	18.687	18.688	-0.001	2688270	0.04220	0.01462
11 2,4-DB	19.247	19.247	0.000	1509497	0.16900	0.05712
12 DINOSEB	19.947	19.945	0.002	1510113	0.02540	0.008932

Data File: \\QPI17P002\\D\\chem\\col.1\\52406.b\\A-B50215.D
Date: 24-AUG-2000 09:10
Client ID:
Sample Info: Herbicide, 52406.b
Column Phase: DB1701

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



672 400

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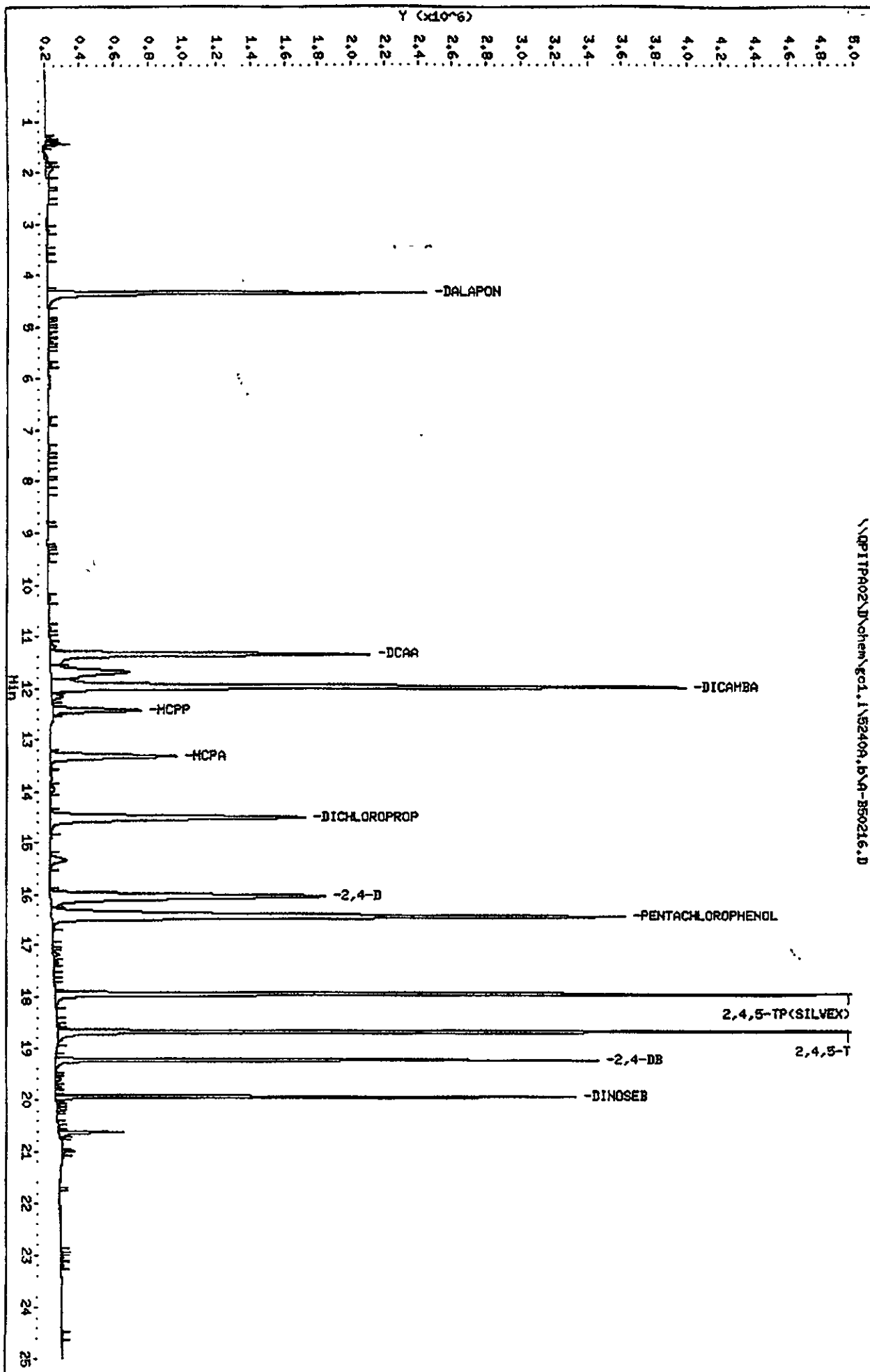
Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50216.D
Lab Smp Id: Hherb
Inj Date : 24-AUG-2000 09:39
Operator : 01797
Smp Info : Hherb,5240A.b
Misc Info : 190-94-5
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
Meth Date : 24-Aug-2000 14:28 colussyj
Cal Date : 24-AUG-2000 09:39
Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B50216.D
Calibration Sample, Level: 5
Compound Sublist: 1-all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	16.430	16.427	0.003	3391582	0.04255	0.04175
1 DALAPON	4.342	4.342	0.000	2247027	0.17600	0.1571
2 DCAA	11.353	11.352	0.001	8568544	0.34000	0.2651
3 DICAMBA	11.971	11.971	0.000	3763411	0.17000	0.1508
4 MCPP	12.426	12.420	0.006	521263	34.1000	28.18
5 MCPA	13.330	13.327	0.003	746732	34.0000	27.10
6 DICHLOROPROP	14.505	14.507	-0.002	1499455	0.33900	0.2944
7 2,4-D	16.034	16.039	-0.005	1622148	0.34000	0.3152
9 2,4,5-TP(SILVEX)	17.952	17.951	0.001	4835997	0.08400	0.08075
10 2,4,5-T	18.685	18.688	-0.003	5566066	0.08440	0.08547
11 2,4-DB	19.246	19.247	-0.001	3211663	0.33800	0.3445
12 DINOSEB	19.946	19.945	0.001	3069033	0.05080	0.05087

Data File: \\NPITPA02\J\chem\col.1\52409.b\A-B50216.D
Date: 24-AUG-2000 09:39
Client ID:
Sample Info: Herb, 52409.b
Column phase: DB1701

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



672 402

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60020.D

Report Date: 08-Sep-2000 11:13

STL - Pittsburgh

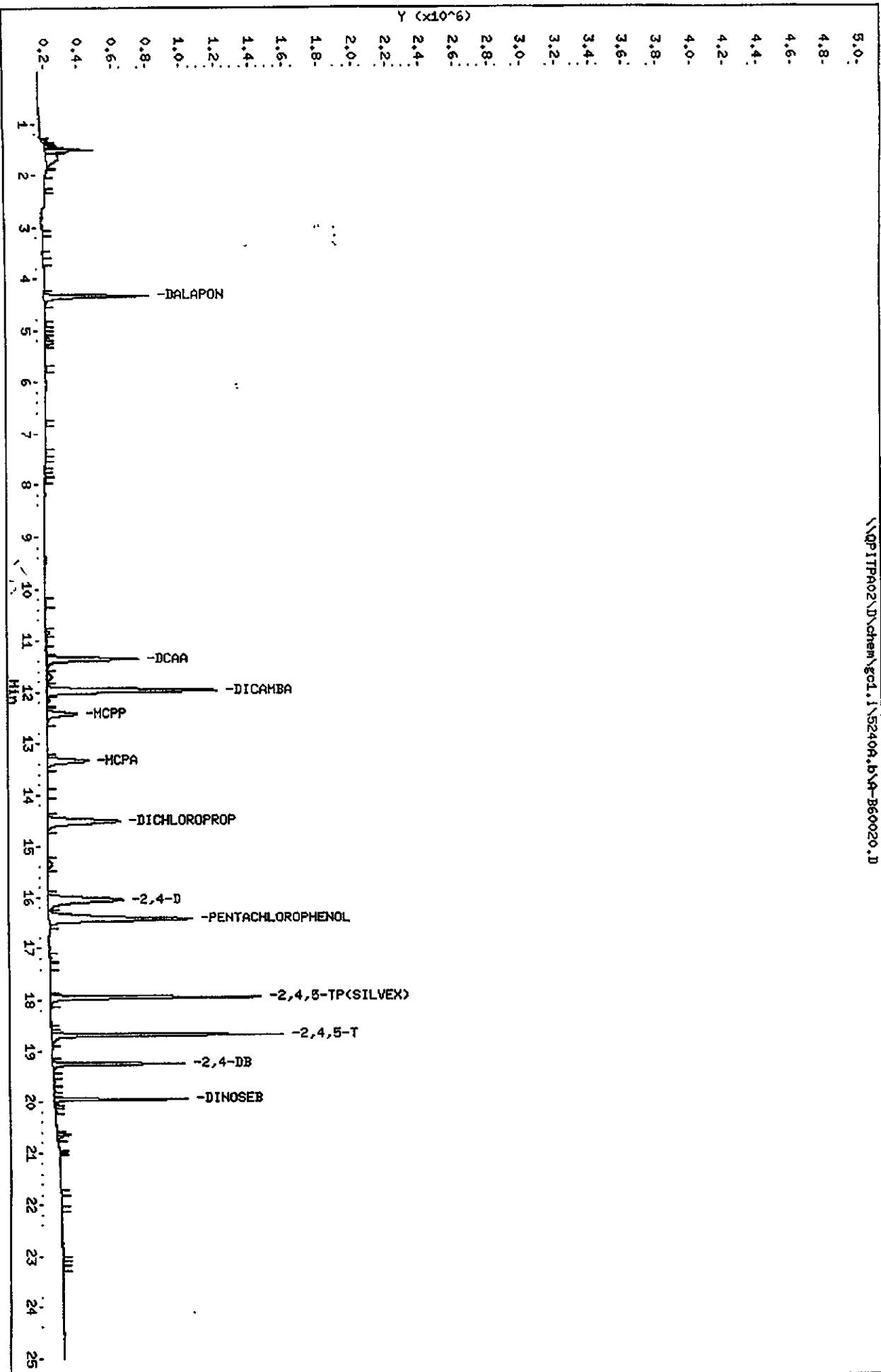
Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60020.D
Lab Smp Id: MHERB
Inj Date : 08-SEP-2000 10:38
Operator : 01797
Smp Info : MHERB,5240A.b
Misc Info : 190-94-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
Meth Date : 08-Sep-2000 11:12 MORGANW
Cal Date : 24-AUG-2000 09:39
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B50216.D
Continuing Calibration Sample
Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.344	4.344	0.000	615744	0.04390	0.04305
\$ 2 DCAA	11.359	11.359	0.000	2435175	0.08510	0.07534
3 DICAMBA	11.974	11.974	0.000	1009954	0.04250	0.04046
4 MCPP	12.426	12.426	0.000	182671	8.52000	9.874
5 MCPA	13.332	13.332	0.000	249486	8.56000	9.053
6 DICHLOROPROP	14.508	14.508	0.000	432255	0.08480	0.08488
7 2,4-D	16.044	16.044	0.000	444625	0.08510	0.08639
8 PENTACHLOROPHENOL	16.430	16.430	0.000	850064	0.01064	0.01046
9 2,4,5-TP(SILVEX)	17.953	17.953	0.000	1241569	0.02110	0.02073
10 2,4,5-T	18.689	18.689	0.000	1365972	0.02110	0.02098
11 2,4-DB	19.249	19.249	0.000	787672	0.08450	0.08450
12 DINOSEB	19.947	19.947	0.000	794519	0.01270	0.01317

Data File: \\QPI1P402\Jchem\gcl.1\5240A.b\A-B60020.D
Date: 08-SEP-2000 10:38
Client ID:
Sample Info: HHERB,5240A.b
Column phase: DB1701

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



672 404

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60038.D
 Report Date: 11-Sep-2000 09:39

STL - Pittsburgh

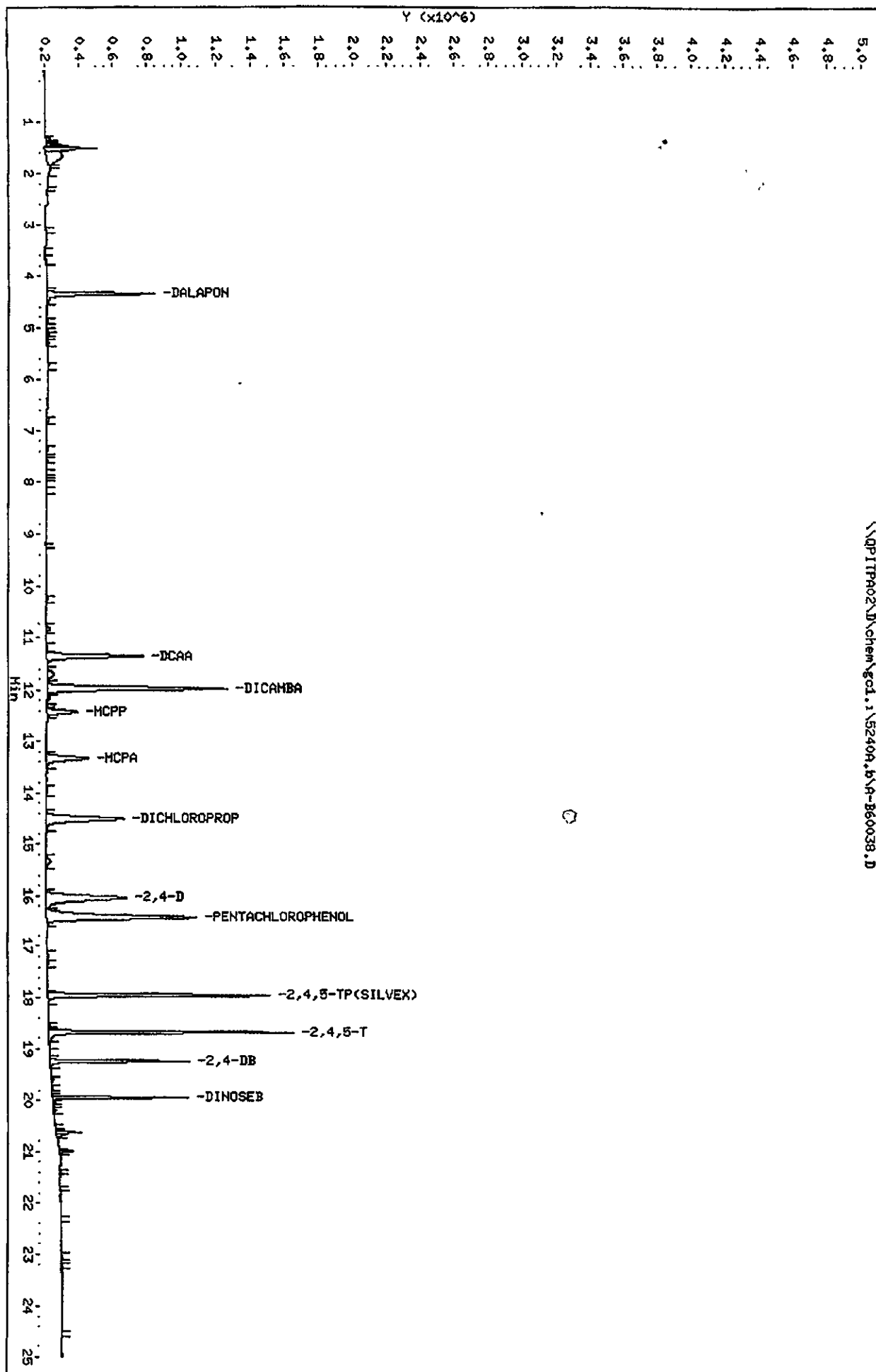
Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60038.D
 Lab Smp Id: MHERB
 Inj Date : 08-SEP-2000 23:58
 Operator : 01797
 Smp Info : MHERB,5240A.b
 Misc Info : 190-94-3
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 11-Sep-2000 09:38 MORGANW
 Cal Date : 24-AUG-2000 09:39
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B50216.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	4.344	4.344	0.000	636423	0.04390	0.04450
\$ 2 DCAA	11.356	11.359	-0.003	2515453	0.08510	0.07782
3 DICAMBA	11.973	11.974	-0.001	1056144	0.04250	0.04230
4 MCPP	12.426	12.426	0.000	178313	8.52000	9.638
5 MCPA	13.331	13.332	-0.001	248272	8.56000	9.009
6 DICHLOROPROP	14.506	14.508	-0.002	454361	0.08480	0.08922
7 2,4-D	16.037	16.044	-0.007	473138	0.08510	0.09193
8 PENTACHLOROPHENOL	16.430	16.430	0.000	879297	0.01064	0.01082
9 2,4,5-TP(SILVEX)	17.950	17.953	-0.003	1300537	0.02110	0.02172
10 2,4,5-T	18.685	18.689	-0.004	1435605	0.02110	0.02204
11 2,4-DB	19.246	19.249	-0.003	824500	0.08450	0.08845
12 DINOSEB	19.945	19.947	-0.002	801983	0.01270	0.01329

Data File: \\GPITPA02\chem\ec1.1\52409.b\A-B60038.D
Date: 08-SEP-2000 23:58
Client ID:
Sample Info: HHERB,52409.b
Column phase: DB1701

Instrument: ec1.i
Operator: 01797
Column diameter: 0.53



672 406

**HERBICIDE
QC DATA**

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0I070000 520

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 09/01/00

Work Order: DK2EF101

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

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

672 408

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60037.D

Report Date: 11-Sep-2000 10:37

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60037.D
 Lab Smp Id: DK2EF101 Client Smp ID: BLK
 Inj Date : 08-SEP-2000 23:29
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DK2EF101,5240A.b
 Misc Info : 010228BLK
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 11-Sep-2000 09:38 MORGANW Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 18 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON				Compound Not Detected		
2 DCAA	11.355	11.359	-0.004	1184580	0.03665	0.07330(a)
3 DICAMBA				Compound Not Detected.		
4 MCPFP				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 2,4-DB				Compound Not Detected.		
12 DINOSEB				Compound Not Detected		

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60037.D
Report Date: 11-Sep-2000 10:37

672 409

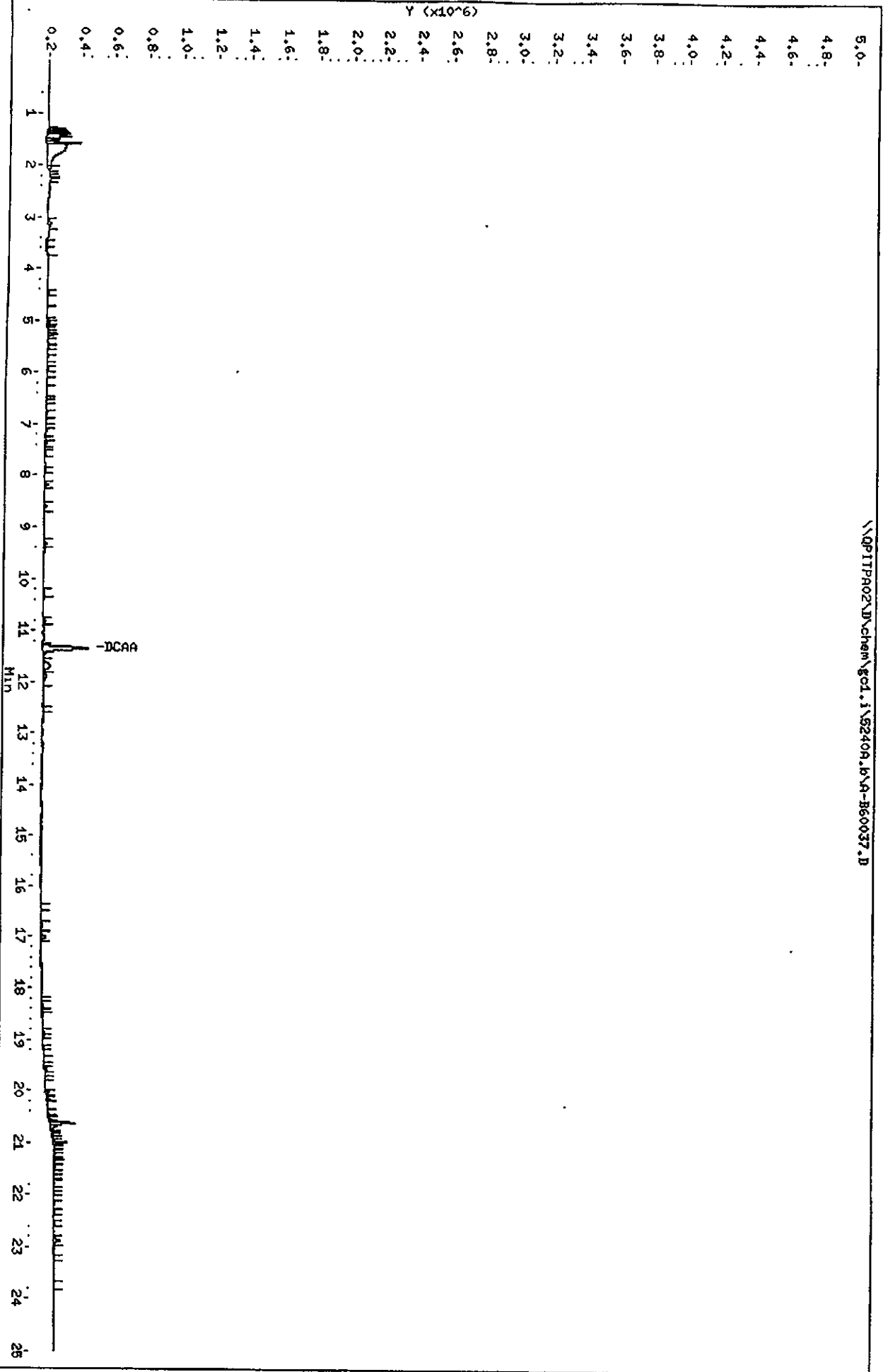
QC Flag Legend

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

Data File: \\QPITPA02\N\chem\gc1.1\5240A.b\A-B60037.D
 Date: 08-SEP-2000 23:29
 Client ID: BLK
 Sample Info: DK2EF101.5240A.b
 Volume Injected (uL): 1.0
 Column phase: DB1701

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

\\QPITPA02\N\chem\gc1.1\5240A.b\A-B60037.D



UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0I070000 520

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 09/01/00

Work Order: DK2EP102

Date Extracted: 09/07/00

Dilution factor: 1

Date Analyzed: 09/08/00

QC Batch: 0251520

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.121	
93-72-1	2,4,5-TP (Silvex)	0.0292	

672 412

Data File: \\QPITPA02\D\chem\gcl.i\5240A.b\A-B60036.D
 Report Date: 11-Sep-2000 10:36

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gcl.i\5240A.b\A-B60036.D
 Lab Smp Id: DK2EF102 Client Smp ID: LCS
 Inj Date : 08-SEP-2000 23:00
 Operator : 01797 Inst ID: gcl.i
 Smp Info : DK2EF102,5240A.b
 Misc Info : 010228LCS
 Comment :
 Method : \\QPITPA02\D\chem\gcl.i\5240A.b\LONGHB.m
 Meth Date : 11-Sep-2000 09:38 MORGANW Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 17 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	4.343	4.344	-0.001	337140	0.02357	0.04715(aR)
2 DCAA	11.355	11.359	-0.004	1183523	0.03662	0.07323(a)
3 DICAMBA	11.972	11.974	-0.002	750925	0.03008	0.06016(a)
4 MCPP	12.426	12.426	0.000	133425	7.21212	14.42
5 MCPA	13.329	13.332	-0.003	187615	6.80812	13.62
6 DICHLOROPROP	14.505	14.508	-0.003	319757	0.06279	0.1256(a)
7 2,4-D	16.036	16.044	-0.008	310835	0.06040	0.1208(aR)
8 PENTACHLOROPHENOL	16.429	16.430	-0.001	619301	0.00762	0.01525(a)
9 2,4,5-TP(SILVEX)	17.950	17.953	-0.003	874648	0.01460	0.02921(aR)
10 2,4,5-T	18.685	18.689	-0.004	957716	0.01471	0.02941(aR)
11 2,4-DB	19.246	19.249	-0.003	549477	0.05894	0.1179(a)
12 DINOSEB	19.945	19.947	-0.002	278661	0.00462	0.009238(a)

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B60036.D
Report Date: 11-Sep-2000 10:36

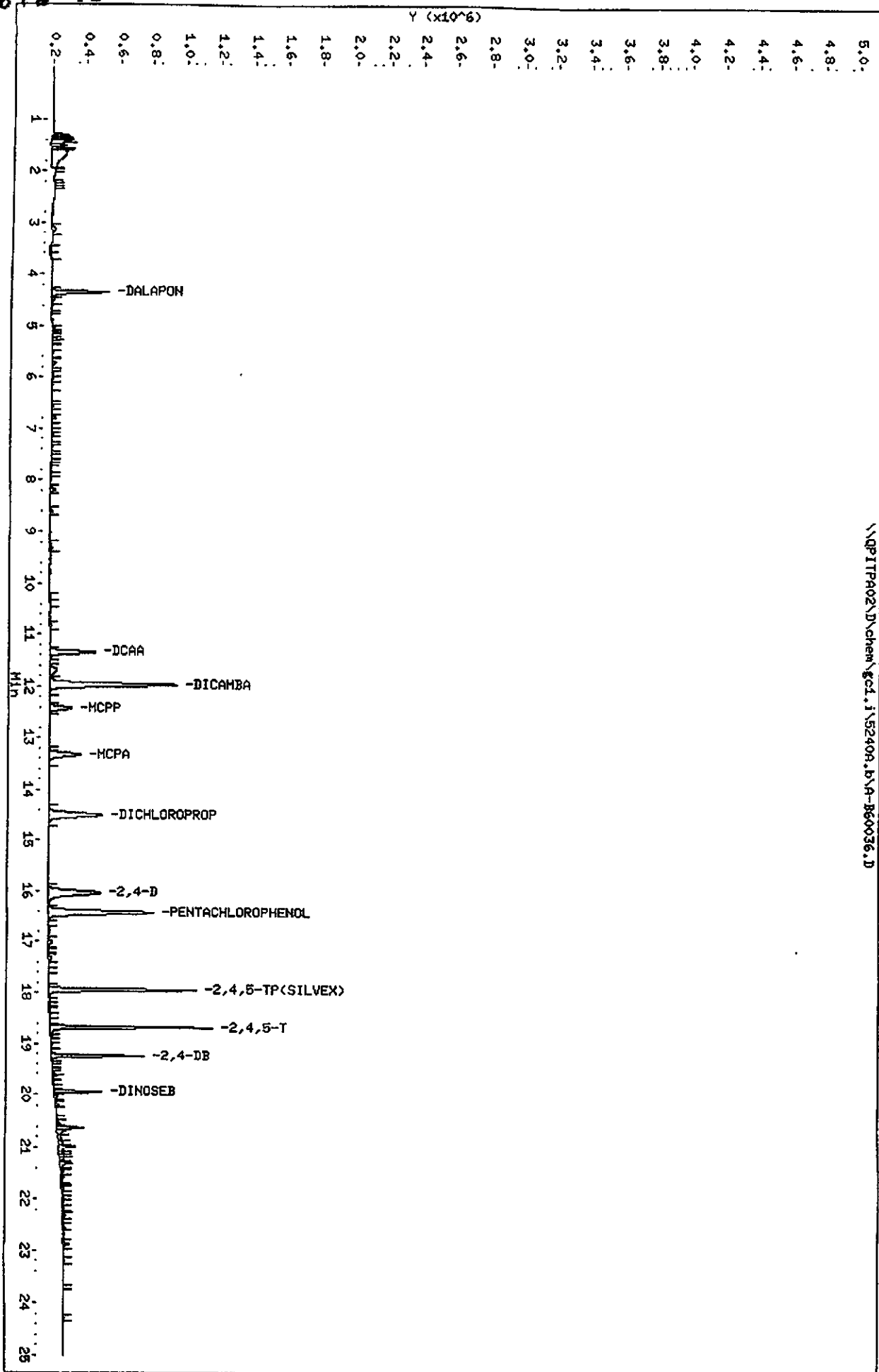
QC Flag Legend

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

672 414

Date File: \\QPITPA02\chem\gc1.i\52408.b\A-B60036.D
Date : 08-SEP-2000 23:00
Client ID: LCS
Sample Info: DK2EF102,52408.b
Volume Injected (uL): 1.0
Column Phase: DB1701

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



**HERBICIDE
MISCELLANEOUS**

672 416

Separatory Funnel Extraction Worksheet



**STL Pittsburgh
450 William Pitt
Pittsburgh, PA 15222
412-820-8380**

HEXANE T03268

Committed To Your Success
BAKER

[illegible]

Line Vial Vial Information

26 26 09013306 20XDL

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	HERB	1	Sample		
2	2	Lherb, 5240.b	HERB	1	Sample		
3	3	MLherb, 5240.b	HERB	1	Sample		
4	4	Mherb, 5240.b	HERB	1	Sample		
5	5	MHherb, 5240.b	HERB	1	Sample		
6	6	Hherb, 5240.b	HERB	1	Sample		
7	7	DJ7CX103, 5240.b	HERB	1	Sample		
8	8	DJ7D2103, 5240.b	HERB	1	Sample		
9	9	DJ7D2105, 5240.b	HERB	1	Sample		
10	10	DJ7D2106, 5240.b	HERB	1	Sample		
11	11	DJ7CM102, 5240.b	HERB	1	Sample		
12	12	DJ831101, 5240.b	HERB	1	Sample		
13	13	DJ831102, 5240.b	HERB	1	Sample		
14	14	DHK3611D, 5240.b	HERBA	1	Sample		
15	15	DH96H11D, 5240.b	HERBA	1	Sample		
16	16	DHV7M112, 5240.b	HERBA	1	Sample		
17	17	DHK1C101, 5240.b	HERBA	1	Sample		
18	18	DHK1E101, 5240.b	HERBA	1	Sample		
19	19	DJ0KL102, 5240.b	HERBA	1	Sample		
20	20	DJ0KL103, 5240.b	HERBA	1	Sample		
21	21	DJ0KL101, 5240.b	HERBA	1	Sample		
22	22	MHERB, 5240.b	HERBA	1	Sample		
23	23	DHK1C101, 5240.b	HERB	1	Sample		
24	24	DHK1E101, 5240.b	HERB	1	Sample		
25	25	MHERB, 5240.b	HERB	1	Sample		
26	26	RINSE	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line Vial Vial Information

1	100	8151 HERB ANALYSIS
2	1	RINSE
3	2	190-94-1 212
4	3	190-94-2 213
5	4	190-94-3 214
6	5	190-94-4 215
7	6	190-94-5 216

created: wwm 8-24-00

✓ OK
8-25-00

Line	Vial	Vial Information		672 418
====	====	=====	=====	=====
8	7	220143001	217 ✓	
9	8	220143002	218 ✓	
10	9	220143002S	219 ✓	
11	10	220143002D	220 ✓	
12	11	220142001	221 ✓	
13	12	220143BLK	222 ✓	
14	13	220143LCS	223 ✓	
~~15~~	~~14~~	~~09014201~~	224	
~~16~~	~~15~~	~~03014201 10XDL~~	225	
17	16	15014601 10XDL	226 A+B	
~~18~~	~~17~~	~~09013304 4XDL~~	227	
~~19~~	~~18~~	~~09013306 10XDL~~	228	
20	19	150146LCS	229 ✓	
21	20	150146LCSD	230 ✓	
22	21	150146BLK	231 ✓	
23	22	190-94-3 ~~150146BLK~~ WUM 8-15-00	232 ✓	
24	23	09013304 10XDL	233 A+B (b)	
25	24	09013306 20XDL	234 A+B	
26	25	190-94-3 ~~09013304 10XDL~~	235	

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
1	100	HEXANE	HERBA	1	Sample		
2	1	HEXANE	HERBA	1	Sample		
3	2	Lherb, 5240A.b	HERBA	1	Sample		
4	3	MLherb, 5240A.b	HERBA	1	Sample		
5	4	Mherb, 5240A.b	HERBA	1	Sample		
6	5	MHherb, 5240A.b	HERBA	1	Sample		
7	6	Hherb, 5240A.b	HERBA	1	Sample		
8	7	DJ7CX103, 5240A.b	HERBA	1	Sample		
9	8	DJ7D2103, 5240A.b	HERBA	1	Sample		
10	9	DJ7D2105, 5240A.b	HERBA	1	Sample		
11	10	DJ7D2106, 5240A.b	HERBA	1	Sample		
12	11	DJ7CM102, 5240A.b	HERBA	1	Sample		
13	12	DJ831101, 5240A.b	HERBA	1	Sample		

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
14	13	DJ831102,5240A.b	HERBA	1	Sample		
15	14	DHK3611D,5240A.b	HERBA	1	Sample		
16	15	DH96H11D,5240A.b	HERBA	1	Sample		
17	16	DHV7M112,5240A.b	HERBA	1	Sample		
18	17	DHK1C101,5240A.b	HERBA	1	Sample		
19	18	DHK1E101,5240A.b	HERBA	1	Sample		
20	19	DJ0KL102,5240A.b	HERBA	1	Sample		
21	20	DJ0KL103,5240A.b	HERBA	1	Sample		
22	21	DJ0KL101,5240A.b	HERBA	1	Sample		
23	22	MHERB,5240A.b	HERBA	1	Sample		
24	23	DHK1C101,5240A.b	HERBA	1	Sample		
25	24	DHK1E101,5240A.b	HERBA	1	Sample		
26	25	MHERB,5240A.b	HERBA	1	Sample		

672 420

Line	Vial	Vial Information	
=====	=====	=====	=====
1	100	8151/515 HERB ANALYSIS	
2	1	8151 HERB ANALYSIS	
3	2	190-94-3	020 ✓
4	2	8151 HERB ANALYSIS	
5	3	310206001	022 ✓
6	4	310206002	023 ✓
7	5	310206003	024 ✓
8	6	310206004	025 ✓
9	7	310232001	026 ✓
10	8	310232002	027 ✓
11	9	010153001	028 ✓
12	10	010228001 TCLP	029 ✓
13	11	010228002 TCLP	030 ✓
14	12	020118001	031 ✓
15	13	020118002	032 ✓
16	14	020118003	033 ✓
17	15	010228001MS TCLP	034 ✓
18	16	010228001MSD TCLP	035 ✓
19	17	010228LCS TCLP	036 ✓
20	18	010228BLK TCLP	00037 ✓
21	19	190-94-3	038 ✓
22	20	01022801	039 ✓
23	21	010228002	040 ✓
24	22	060135001	041 ✓
25	23	060135002	042 ✓
26	24	020124001	043 ✓
~~27~~	~~25~~	~~010228001MS~~	~~044~~ Rerun
28	26	010228001MSD	045 ✓

29	27	010228LCS	046 ✓
30	28	010228BLK	047 ✓
31	29	020124LCS	048 ✓
32	30	020124LCSD	049 ✓
33	31	020124BLK	050 ✓
34	32	190-94-3	051 ✓

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
1	100	HEXANE	HERBA	1	Sample		
2	1	HEXANE	HERBA	1	Sample		
3	2	MHERB,5240A.b	HERBA	1	Sample		
4	2	HEXANE	HERBA	1	Sample		
5	3	DJP8W105,5240A.b	HERBA	1	Sample		
6	4	DJP90105,5240A.b	HERBA	1	Sample		
7	5	DJP91105,5240A.b	HERBA	1	Sample		
8	6	DJP89205,5240A.b	HERBA	1	Sample		
9	7	DJPHK104,5240A.b	HERBA	1	Sample		
10	8	DJPHL104,5240A.b	HERBA	1	Sample		
11	9	DJQTD104,5240A.b	HERBA	1	Sample		
12	10	DJRHV13J,5240A.b	HERBA	1	Sample		
13	11	DJRJP118,5240A.b	HERBA	1	Sample		
14	12	DJT TN104,5240A.b	HERBA	1	Sample		
15	13	DJT TP104,5240A.b	HERBA	1	Sample		
16	14	DJT TQ104,5240A.b	HERBA	1	Sample		
17	15	DJRHV13K,5240A.b	HERBA	1	Sample		
18	16	DJRHV13L,5240A.b	HERBA	1	Sample		
19	17	DK2EF102,5240A.b	HERBA	1	Sample		
20	18	DK2EF101,5240A.b	HERBA	1	Sample		
21	19	MHERB,5240A.b	HERBA	1	Sample		
22	20	DJRHV131,5240A.b	HERBA	1	Sample		
23	21	DJRJP112,5240A.b	HERBA	1	Sample		
24	22	DJX9L104,5240A.b	HERBA	1	Sample		
25	23	DJX9N104,5240A.b	HERBA	1	Sample		
26	24	DJTVR101,5240A.b	HERBA	1	Sample		
27	25	DJRHV132,5240A.b	HERBA	1	Sample		
28	26	DJRHV133,5240A.b	HERBA	1	Sample		
29	27	DK27A102,5240A.b	HERBA	1	Sample		
30	28	DK27A101,5240A.b	HERBA	1	Sample		
31	29	DK2EE102,5240A.b	HERBA	1	Sample		
32	30	DK2EE103,5240A.b	HERBA	1	Sample		
33	31	DK2EE101,5240A.b	HERBA	1	Sample		
34	32	MHERB,5240A.b	HERBA	1	Sample		

REQUESTED BY: YUSHINSC

METHOD: QS Herbicides (8151A)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	
		CNTR#								RCVD	REQD
5B,C CLP1	DJP8W-1-05	— — —	263219	399411	A-64-QS	COH310206	001		SOLID	0	3
5B,C CLP1	DJP90-1-05	— — —	263220	399411	A-64-QS	COH310206	002		SOLID	0	3
5B,C CLP1	DJP91-1-05	— — —	263221	399411	A-64-QS	COH310206	003		SOLID	0	3
5B,C CLP1	DJP92-1-05	— — —	263222	399411	A-64-QS	COH310206	004		SOLID	0	3
5C,D CLP1	DJPHK-1-04	— — —	263223	051465	A-64-QS	COH310232	001		SOLID	0	4
5C,D CLP1	DJPHL-1-04	— — —	263224	051465	A-64-QS	COH310232	002		SOLID	0	4
5E CLP1	DJQTD-1-04	— — —	263225	051465	A-64-QS	COI010153	001		SOLID	0	4
6A,B,C, CLP1	DJRHV-1-31	— — —	263217	419910	A-0V-QS	COI010228	001	QC	SOLID	0	22
6A,B,C, CLP1	DJRJP-1-12	— — —	263218	419910	A-0V-QS	COI010228	002		SOLID	0	6
6B,C CLP1	DJTTN-1-04	— — —	263226	051465	A-64-QS	COI020118	001		SOLID	0	4
6B,C CLP1	DJTTP-1-04	— — —	263227	051465	A-64-QS	COI020118	002		SOLID	0	3
6B,C CLP1	DJTQ-1-04	— — —	263228	051465	A-64-QS	COI020118	003		SOLID	0	4

RELINQUISHED BY

[Signature]
[Signature]

RECEIVED BY

[Signature]
[Signature]

DATE/TIME

9-7-00 1540
9-7-00 2200

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

METALS DATA

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
DF/S1/242/SDC/031	DJP8W
DF/S1/242/SDC/031D	DJP8WD
DF/S1/242/SDC/031S	DJP8WS
DF/S1/242/SDC/033	DJP90
DF/S1/242/SDC/034	DJP91
DF/S1/242/SDC/035	DJP92

Comments: UXB DUNN FIELD
C0H310206
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: _____
Date: _____

Name: _____
Title: _____

REVIEWED BY: <u>STW</u> DATE: <u>9-7-00</u>

**METALS
RESULTS**

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP8W **Client ID:** DF/S1/242/SDC/031
Matrix: Soil **Units:** mg/kg **Prep Date:** 9/5/00 **Prep Batch:** 0249152
Weight: 1.00 **Volume:** 100 **Percent Moisture:** 16.4

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.31	1.2	9.0		1	ICPST	9/6/00	11:52

Comments: COH310206001

Version 4.10.2

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: DJP90 Client ID: DF/S1/242/SDC/033
Matrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152
Weight: 1.00 Volume: 100 Percent Moisture: 6.77

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.28	1.1	7.6		1	ICPST	9/6/00	12:09

Comments: C0H310206002

Version 4.10.2

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

Form 1 Equivalent

672 428

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP91 **Client ID:** DF/S1/242/SDC/034
Matrix: Soil **Units:** mg/kg **Prep Date:** 9/5/00 **Prep Batch:** 0249152
Weight: 1.00 **Volume:** 100 **Percent Moisture:** 9.17

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.28	1.1	10.2		1	ICPST	9/6/00	12:13

Comments: C0H310206003

Version 4.10.2

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: DJP92 **Client ID:** DF/S1/242/SDC/035
Matrix: Soil **Units:** mg/kg **Prep Date:** 9/5/00 **Prep Batch:** 0249152
Weight: 1.00 **Volume:** 100 **Percent Moisture:** 12.04

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.29	1.1	14.8		1	ICPST	9/6/00	12:17

Comments: C0H310206004

Version 4.10.2

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

Form 1 Equivalent

672 430

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPSTUnits: ug/LChart Number: T00906A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-022-8 ⁰⁵³⁻¹ ₄₋₇₋₀₀

Element	WL/ Mass	True Conc	ICV3-1 9/6/00 8:31 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	250.0	253.74	101.5								

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPSTUnits: ug/LChart Number: T00906A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-040-1

Element	WL/ Mass	True Conc	CCV3-1 9/6/00 9:23 AM		CCV3-2 9/6/00 10:13 AM		CCV3-3 9/6/00 11:02 AM		CCV3-4 9/6/00 11:36 AM		CCV3-5 9/6/00 12:21 PM	
			% Found Rec		% Found Rec		% Found Rec		% Found Rec		% Found Rec	
			Found	Rec	Found	Rec	Found	Rec	Found	Rec	Found	Rec
Arsenic	189.042	500.0	523.68	104.7	515.45	103.1	526.44	105.3	526.64	105.3	536.44	107.3

672 432

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00906A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 9/6/00 8:35 AM				
			Found Q	Found Q	Found Q	Found Q	Found Q
Arsenic	189.042	10	2.6 U				

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00906A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 9/6/00 9:27 AM	CCB2 9/6/00 10:17 AM	CCB3 9/6/00 11:07 AM	CCB4 9/6/00 11:40 AM	CCB5 9/6/00 12:25 PM
			Found Q	Found Q	Found Q	Found Q	Found Q
Arsenic	189.042	10	2.6 U	2.6 U	2.6 U	2.6 U	2.6 U

672 434

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results**Lab Sample ID:** DJVGEB**Matrix:** Soil **Units:** mg/kg **Prep Date:** 9/5/00 **Prep Batch:** 0249152**Weight:** 1.00 **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	9/6/00	11:44

Comments: _____

Version 4.10.2

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: ICPSTUnits: ug/LChart Number: T00906A.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0057-011-1

				ICSA 9/6/00 8:39 AM				
Element	WL/ Mass	Reporting Limit	True Conc	Found	Found	Found	Found	Found
Arsenic	189.042	10		0				

STL-Pittsburgh

672 436

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPSTUnits: ug/LChart Number: T00906A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-197-7

Element	WL/ Mass	True Conc	ICSAB 9/6/00 8:43 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	1084.3	108.4								

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DJP8WS

Original Sample ID: DJP8W Client ID: DF/S1/242/SDC/031S

Matrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152

Weight: 1.00 Volume: 100 Percent Moisture: 16.4

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	189.0	9.0		253		239.23	101.9	1	1	ICPST	9/6/00	11:52	9/6/00	12:01

Comments: _____

Version 4.10.2

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

672 438

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DJP8WD
Original Sample ID: DJP8W Client ID: DF/S1/242/SDC/031D
Matrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152
Weight: 1.00 Volume: 100 Percent Moisture: 16.4

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
Arsenic	189.0	9.0		253		239.23	102.1	1	1	ICPST	9/6/00	11:52	9/6/00	12:05

Comments: _____

Version 4.10.2

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 Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DJP8WDMatrix Spike Sample ID: DJP8WS Client ID: DF/S1/242/SDC/031DMatrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152Weight: 1.00 Volume: 100 Percent Moisture: 16.4

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	189.042	253		253		0.2 %	1	1	ICPST	9/6/00	12:01	9/6/00	12:05

Comments: _____

Version 4.10.2

- 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

672 440

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJVGECMatrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152Weight: 1.00 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	216	107.8		80-120	1	ICPST	9/6/00	11:48

Comments: _____

Version 4.10.2

STL Pittsburgh

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

5018

STL-Pittsburgh

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DJP8WPOriginal Sample ID: DJP8W Client ID: DF/S1/242/SDC/031Matrix: Soil Units: mg/kg Prep Date: 9/5/00 Prep Batch: 0249152Weight: 1.00 Volume: 100 Percent Moisture: 16.4

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	9.0		9.1			1	5	ICPST	9/6/00	11:52	9/6/00	11:56

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 9 Equivalent

B Result is between MDL and RL

E Serial dilution percent difference not within limits

672 442'

STL-Pittsburgh
Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST

Units: ppb

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

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPSTDate of IEC's: 9/1/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(0.00055), Se(0.00001), Tl(-0.00002)
Aluminum	308.215	Pb(-0.000197), Se(0.000011)
Chromium	267.716	Sb(0.007006)
Chromium	267.716	As(-0.002615), Sb(0.012173)
Cobalt	228.616	Se(-0.000381)
Cobalt	228.616	Cd(-0.00009), Fe(0.089705), Ni(-0.00066), Pb(0.000077), Se(0.000351), Tl(0.002179)
Iron	271.441	Cd(0.000088), Pb(0.000086), Sb(0.000019), Se(-0.000016), Tl(-0.000034), V(-0.000349), Zn(0.000127)
Iron	271.441	Pb(0.000047), Sb(0.000021), Se(-0.000334)
Magnesium	279.078	Fe(-0.000306)
Manganese	257.61	Se(0.000579), Tl(-0.004577)
Molybdenum	202.03	Pb(-0.00087), Sb(-0.010184)
Molybdenum	202.03	Al(0.011136), As(-0.000847), Cr(-0.000312), Pb(-0.000331), Sb(-0.003352)
Nickel	231.604	Pb(0.000274), Sb(-0.000886), Zn(0.004694)
Nickel	231.604	Pb(0.000086)
Vanadium	292.402	Al(0.019591), Be(-0.00787), Cr(-0.000183), Fe(0.007812), Sb(-0.008005), Se(0.000216), Tl(0.001386)
Vanadium	292.402	Pb(-0.000428), Se(0.000099)

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STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189.04	10000	6/15/00

Metals Data Reporting Form

Preparation Log

Preparation Batch: 0249152 Instrument: ICP Matrix: Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJVGE B	9/5/00	1.00	100	NA
DJVGE C	9/5/00	1.00	100	NA
DJP8W	9/5/00	1.00	100	16.4
DJP8WD	9/5/00	1.00	100	16.4
DJP8WS	9/5/00	1.00	100	16.4
DJP90	9/5/00	1.00	100	6.77
DJP91	9/5/00	1.00	100	9.17
DJP92	9/5/00	1.00	100	12.04

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPSTChart Number: T00906A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		9/6/00	7:56
ZZZZZZ		9/6/00	8:00
ZZZZZZ		9/6/00	8:04
ZZZZZZ		9/6/00	8:08
STD1		9/6/00	8:19
STD6		9/6/00	8:23
STD7		9/6/00	8:27
ICV3-1		9/6/00	8:31
ICB1		9/6/00	8:35
ICSA		9/6/00	8:39
ICSAB		9/6/00	8:43
ZZZZZZ		9/6/00	8:50
ZZZZZZ		9/6/00	8:54
ZZZZZZ		9/6/00	8:58
ZZZZZZ		9/6/00	9:02
ZZZZZZ		9/6/00	9:06
ZZZZZZ		9/6/00	9:10
ZZZZZZ		9/6/00	9:14
ZZZZZZ		9/6/00	9:19
CCV3-1		9/6/00	9:23
CCB1		9/6/00	9:27
ZZZZZZ		9/6/00	9:31
ZZZZZZ		9/6/00	9:35
ZZZZZZ		9/6/00	9:39
ZZZZZZ		9/6/00	9:43
ZZZZZZ		9/6/00	9:48
ZZZZZZ		9/6/00	9:52
ZZZZZZ		9/6/00	9:56
ZZZZZZ		9/6/00	10:00
ZZZZZZ		9/6/00	10:04
ZZZZZZ		9/6/00	10:08
CCV3-2		9/6/00	10:13
CCB2		9/6/00	10:17
ZZZZZZ		9/6/00	10:21
ZZZZZZ		9/6/00	10:25
ZZZZZZ		9/6/00	10:29
ZZZZZZ		9/6/00	10:33
ZZZZZZ		9/6/00	10:37
ZZZZZZ		9/6/00	10:42

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPSTChart Number: T00906A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		9/6/00	10:46
ZZZZZZ		9/6/00	10:50
ZZZZZZ		9/6/00	10:54
ZZZZZZ		9/6/00	10:58
CCV3-3		9/6/00	11:02
CCB3		9/6/00	11:07
ZZZZZZ		9/6/00	11:11
ZZZZZZ		9/6/00	11:15
ZZZZZZ		9/6/00	11:19
ZZZZZZ		9/6/00	11:23
ZZZZZZ		9/6/00	11:27
ZZZZZZ		9/6/00	11:31
CCV3-4		9/6/00	11:36
CCB4		9/6/00	11:40
DJVGEB		9/6/00	11:44
DJVGEC		9/6/00	11:48
DJP8W	DF/S1/242/SDC/031	9/6/00	11:52
DJP8WP	DF/S1/242/SDC/031	9/6/00	11:56
DJP8WS	DF/S1/242/SDC/031S	9/6/00	12:01
DJP8WD	DF/S1/242/SDC/031D	9/6/00	12:05
DJP90	DF/S1/242/SDC/033	9/6/00	12:09
DJP91	DF/S1/242/SDC/034	9/6/00	12:13
DJP92	DF/S1/242/SDC/035	9/6/00	12:17
CCV3-5		9/6/00	12:21
CCB5		9/6/00	12:25

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**METALS
RAW DATA**

COH310206

Analysis Report ~~COH3~~ Averages

09/06/00 12:33:35 PM

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Sample Name AS

1	STD1	-.00704
2	STD6	5.12145
3	STD7	
4	ICV3-1 0057-053-1	.25374
5	ICB1	-.00090
6	ICSA 0057-011-1	-.00036
7	ICSAB 0014-197-7	1.0843
8	DJNEJB	-.00001
9	DJNEJC	2.1909
10	DJ1Q4	.09034
11	DJ1Q7	.07840
12	DJ1Q8	.06374
13	DJ1Q8P5	.01347
14	DJ1Q8S	1.8600
15	DJ1Q8D	1.9276
16	CCV3-1 0057-040-1	.52368
17	CCB1	-.00013
18	DJ1QF	.04915
19	DJ1QG	.04148
20	DJ1QJ	.05079
21	DJ4MP	.07851
22	DJ4MR	.01346
23	DJL2CB	-.00033
24	DJL2CC	2.1090
25	DJ1RT	.01472
26	DJ1WG	.00124
27	DJ1X0	.00089
28	CCV3-2	.51545
29	CCB2	-.00042
30	DJ1X3	.06973
31	DJ4NE	.00132
32	DJ4NEP5	.00052
33	DJ4NES	2.1428
34	DJ4NED	2.1113
35	DJ4NN	.00036
36	DJ4NQ	.00141
37	DJ4P1	.01072
38	DJ4P2	.00200
39	DJ4P6	.00934
40	CCV3-3	.52644
41	CCB3	-.00136
42	DJ4P8	.00024
43	DJ4PA	.00255
44	DJ4PD	.00131
45	DJ4PF	.00098
46	DJ4PL	.00827
47	DJ4PM	.00158
48	CCV3-4	.52664
49	CCB4	-.00089
50	DJVGEB	.00015
51	DJVGE C	2.1569
52	DJP8W	.07495
53	DJP8WP5	.01517

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Analysis Report

Averages

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#	Sample Name	AS
54	DJP8WS	2.1136
55	DJP8WD	2.1177
56	DJP90	.07062
57	DJP91	.09271
58	DJP92	.13024
59	CCV3-5	.53644
60	CCB5	-.00085

R69600

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T00906A	METTRA	09/06/00	08:19		X	IR
2	STD6	T00906A	METTRA	09/06/00	08:23		X	IR
3	STD7	T00906A	METTRA	09/06/00	08:27		X	IR
4	ICV3-1 0057-053-1	T00906A	METTRA	09/06/00	08:31	RJG	S	CONC
5	ICB1	T00906A	METTRA	09/06/00	08:35	RJG	S	CONC
6	ICSA 0057-011-1	T00906A	METTRA	09/06/00	08:39	RJG	Q	CONC
7	ICSAB 0014-197-7	T00906A	METTRA	09/06/00	08:43	RJG	Q	CONC
8	DJNEJB	T00906A	METTRA	09/06/00	08:50	RJG	S	CONC
9	DJNEJC	T00906A	METTRA	09/06/00	08:54	RJG	S	CONC
10	DJ1Q4	T00906A	METTRA	09/06/00	08:58	RJG	S	CONC
11	DJ1Q7	T00906A	METTRA	09/06/00	09:02	RJG	S	CONC
12	DJ1Q8	T00906A	METTRA	09/06/00	09:06	RJG	S	CONC
13	DJ1Q8P5	T00906A	METTRA	09/06/00	09:10	RJG	S	CONC
14	DJ1Q8S	T00906A	METTRA	09/06/00	09:14	RJG	S	CONC
15	DJ1Q8D	T00906A	METTRA	09/06/00	09:19	RJG	S	CONC
16	CCV3-1 0057-040-1	T00906A	METTRA	09/06/00	09:23	RJG	S	CONC
17	CCB1	T00906A	METTRA	09/06/00	09:27	RJG	S	CONC
18	DJ1QF	T00906A	METTRA	09/06/00	09:31	RJG	S	CONC
19	DJ1QG	T00906A	METTRA	09/06/00	09:35	RJG	S	CONC
20	DJ1QJ	T00906A	METTRA	09/06/00	09:39	RJG	S	CONC
21	DJ4MP	T00906A	METTRA	09/06/00	09:43	RJG	S	CONC
22	DJ4MR	T00906A	METTRA	09/06/00	09:48	RJG	S	CONC
23	DJL2CB	T00906A	METTRA	09/06/00	09:52	RJG	S	CONC
24	DJL2CC	T00906A	METTRA	09/06/00	09:56	RJG	S	CONC
25	DJ1RT	T00906A	METTRA	09/06/00	10:00	RJG	S	CONC
26	DJ1WG	T00906A	METTRA	09/06/00	10:04	RJG	S	CONC
27	DJ1X0	T00906A	METTRA	09/06/00	10:08	RJG	S	CONC
28	CCV3-2	T00906A	METTRA	09/06/00	10:13	RJG	S	CONC
29	CCB2	T00906A	METTRA	09/06/00	10:17	RJG	S	CONC
30	DJ1X3	T00906A	METTRA	09/06/00	10:21	RJG	S	CONC
31	DJ4NE	T00906A	METTRA	09/06/00	10:25	RJG	S	CONC
32	DJ4NEP5	T00906A	METTRA	09/06/00	10:29	RJG	S	CONC
33	DJ4NES	T00906A	METTRA	09/06/00	10:33	RJG	S	CONC
34	DJ4NED	T00906A	METTRA	09/06/00	10:37	RJG	S	CONC
35	DJ4NN	T00906A	METTRA	09/06/00	10:42	RJG	S	CONC
36	DJ4NQ	T00906A	METTRA	09/06/00	10:46	RJG	S	CONC
37	DJ4P1	T00906A	METTRA	09/06/00	10:50	RJG	S	CONC
38	DJ4P2	T00906A	METTRA	09/06/00	10:54	RJG	S	CONC
39	DJ4P6	T00906A	METTRA	09/06/00	10:58	RJG	S	CONC
40	CCV3-3	T00906A	METTRA	09/06/00	11:02	RJG	S	CONC
41	CCB3	T00906A	METTRA	09/06/00	11:07	RJG	S	CONC
42	DJ4P8	T00906A	METTRA	09/06/00	11:11	RJG	S	CONC
43	DJ4PA	T00906A	METTRA	09/06/00	11:15	RJG	S	CONC
44	DJ4PD	T00906A	METTRA	09/06/00	11:19	RJG	S	CONC
45	DJ4PF	T00906A	METTRA	09/06/00	11:23	RJG	S	CONC
46	DJ4PL	T00906A	METTRA	09/06/00	11:27	RJG	S	CONC
47	DJ4PM	T00906A	METTRA	09/06/00	11:31	RJG	S	CONC
48	CCV3-4	T00906A	METTRA	09/06/00	11:36	RJG	S	CONC
49	CCB4	T00906A	METTRA	09/06/00	11:40	RJG	S	CONC
50	DJVGEB	T00906A	METTRA	09/06/00	11:44	RJG	S	CONC
51	DJVGECE	T00906A	METTRA	09/06/00	11:48	RJG	S	CONC
52	DJP8W	T00906A	METTRA	09/06/00	11:52	RJG	S	CONC
53	DJP8WP5	T00906A	METTRA	09/06/00	11:56	RJG	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DJP8WS	T00906A	METTRA	09/06/00	12:01	RJG	S	CONC
55	DJP8WD	T00906A	METTRA	09/06/00	12:05	RJG	S	CONC
56	DJP90	T00906A	METTRA	09/06/00	12:09	RJG	S	CONC
57	DJP91	T00906A	METTRA	09/06/00	12:13	RJG	S	CONC
58	DJP92	T00906A	METTRA	09/06/00	12:17	RJG	S	CONC
59	CCV3-5	T00906A	METTRA	09/06/00	12:21	RJG	S	CONC
60	CCB5	T00906A	METTRA	09/06/00	12:25	RJG	S	CONC

Method: METTRA Standard: STD1
Run Time: 09/06/00 08:19:04

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	.00071	.03215	-.00705	.00127	-.05433	.00533	.00167
SDev	.00146	.00562	.01182	.00009	.00062	.00017	.00032
%RSD	205.44	17.491	167.71	6.9543	1.1459	3.1744	19.004

#1	.00174	.03612	-.01540	.00121	-.05477	.00521	.00145
#2	-.00032	.02817	.00131	.00134	-.05389	.00545	.00190

Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00032	.00106	.01863	-.00127	-.00074	.00098	.00175
SDev	.00015	.00001	.00102	.00001	.00001	.00010	.00021
%RSD	46.192	1.0639	5.4947	1.0640	1.0639	10.409	11.801

#1	-.00042	.00105	.01790	-.00126	-.00074	.00105	.00190
#2	-.00021	.00107	.01935	-.00128	-.00075	.00091	.00160

Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00090	.00860	-.00505	-.05605	.01550	-.11024	.08036
SDev	.00031	.01465	.00245	.00518	.00152	.00369	.00387
%RSD	34.279	170.44	48.578	9.2433	9.7772	3.3440	4.8184

#1	.00068	.01896	-.00332	-.05972	.01443	-.10764	.08310
#2	.00112	-.00176	-.00679	-.05239	.01657	-.11285	.07762

Elem	TL	V	ZN
Avge	-.04696	.00042	-.00024
SDev	.00624	.00052	.00000
%RSD	13.287	123.49	1.0639

#1	-.04255	.00079	-.00024
#2	-.05137	.00005	-.00024

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Standardization Rpt.

09/06/00 08:23:10 AM

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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	18848	--	--	--	--	--	--
SDev	200.5352	--	--	--	--	--	--
%RSD	1.063949	--	--	--	--	--	--
#1	18990	--	--	--	--	--	--
#2	18706	--	--	--	--	--	--

Method: METTRA Standard: STD6
Run Time: 09/06/00 08:23:15

0057.023.10

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	10.716	5.1215	12.380	5.4113	6.6490	8.6883	6.3427
SDev	.104	.0657	.146	.0650	.0783	.1108	.0660
%RSD	.97137	1.2833	1.1772	1.2006	1.1773	1.2751	1.0407

#1	10.790	5.1679	12.483	5.4573	6.7043	8.7666	6.3894
#2	10.643	5.0750	12.277	5.3654	6.5936	8.6100	6.2960

Elem	SE/1	SE/2	TL
Avge	4.8621	4.7015	3.9526
SDev	.0352	.0556	.0493
%RSD	.72366	1.1830	1.2482

#1	4.8869	4.7408	3.9875
#2	4.8372	4.6622	3.9177

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18666	--	--	--	--	--	--
SDev	161.2563	--	--	--	--	--	--
%RSD	.8639071	--	--	--	--	--	--

#1	18552	--	--	--	--	--	--
#2	18780	--	--	--	--	--	--

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Standardization Rpt.

09/06/00 08:31:02 AM

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Method: METTRA Standard: STD7
Run Time: 09/06/00 08:27:26

0051.024.1

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	8.1574	15.098	10.338	4.4025	3.0585	12.002	3.6612
SDev	.0897	.095	.114	.0571	.0420	.169	.0259
%RSD	1.0995	.63090	1.1053	1.2963	1.3749	1.4093	.70633

#1	8.2208	15.166	10.419	4.4429	3.0882	12.121	3.6795
#2	8.0940	15.031	10.257	4.3622	3.0287	11.882	3.6429

Elem	FE	MG	MN	MO	NI	V	ZN
Avge	3.9838	12.684	10.009	2.1304	2.4624	.84324	2.9315
SDev	.0457	.134	.119	.0213	.0269	.00809	.0395
%RSD	1.1461	1.0553	1.1869	.99789	1.0917	.95952	1.3464

#1	4.0161	12.778	10.093	2.1454	2.4815	.84896	2.9594
#2	3.9516	12.589	9.9250	2.1154	2.4434	.83752	2.9036

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17898	--	--	--	--	--	--
SDev	241.3361	--	--	--	--	--	--
%RSD	1.348386	--	--	--	--	--	--

#1	17728	--	--	--	--	--	--
#2	18069	--	--	--	--	--	--

Standardization

Report

09/06/00 08:31:03 AM

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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	.186642	-.000132	09/06/00 08:27:26
AL	308.215	STD7	STD1	6.16881	-.198316	09/06/00 08:27:26
AS	189.042	STD6	STD1	.194989	.001374	09/06/00 08:27:26
BA	493.409	STD7	STD1	.264952	-.000337	09/06/00 08:27:26
BE	313.042	STD7	STD1	.381875	.020746	09/06/00 08:27:26
CA	317.933	STD7	STD1	22.7418	-.121282	09/06/00 08:27:26
CD	226.502	STD6	STD1	.080787	-.000135	09/06/00 08:27:26
CO	228.616	STD7	STD1	1.30771	.000415	09/06/00 08:27:26
CR	267.716	STD7	STD1	.333156	-.000354	09/06/00 08:27:26
CU	324.753	STD7	STD1	1.09813	-.020456	09/06/00 08:27:26
FE	271.441	STD7	STD1	12.6369	.016092	09/06/00 08:27:26
MG	279.078	STD7	STD1	7.88371	.005856	09/06/00 08:27:26
MN	257.610	STD7	STD1	.399681	-.000392	09/06/00 08:27:26
MO	202.030	STD7	STD1	1.87913	-.003288	09/06/00 08:27:26
NI	231.604	STD7	STD1	1.62392	-.001467	09/06/00 08:27:26
PB/1	220.351	STD6	STD1	.185091	-.001591	09/06/00 08:27:26
PB/2	220.352	STD6	STD1	.150285	.000759	09/06/00 08:27:26
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.114359	.006410	09/06/00 08:27:26
SB/2	206.832	STD6	STD1	.158048	-.002450	09/06/00 08:27:26
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.201114	.022171	09/06/00 08:27:26
SE/2	196.022	STD6	STD1	.216398	-.017389	09/06/00 08:27:26
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.500058	.023483	09/06/00 08:27:26
V	292.402	STD7	STD1	4.72525	-.001993	09/06/00 08:27:26
ZN	213.856	STD7	STD1	1.37295	.000328	09/06/00 08:27:26

Method: METTRA Sample Name: ICV3-1 0057-053-1 Operator: RJG
Run Time: 09/06/00 08:31:06
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Khurqyed
9600

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50343	11.553	.25374	.98525	.98956	24.902	.24826
SDev	.00675	.213	.00367	.00074	.02447	.578	.00447
%RSD	1.3418	1.8466	1.4467	.07496	2.4723	2.3203	1.7990
#1	.49865	11.402	.25115	.98473	1.0069	25.311	.24510
#2	.50821	11.704	.25634	.98577	.97226	24.494	.25142
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
Avge	.97780	.99038	.94937	12.161	24.050	.97021	.99176
SDev	.02382	.02036	.00007	.097	.393	.00320	.02917
%RSD	2.4363	2.0561	.00705	.80136	1.6342	.32953	2.9413
#1	.96096	.97599	.94932	12.092	24.328	.96795	.97113
#2	.99465	1.0048	.94942	12.230	23.772	.97247	1.0124
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
Avge	.99853	.25768	.25190	.25383	.25956	.25277	.25503
SDev	.01994	.00187	.00102	.00130	.00452	.00743	.00345
%RSD	1.9968	.72412	.40505	.51291	1.7431	2.9397	1.3526
#1	1.0126	.25636	.25118	.25291	.26276	.24751	.25259
#2	.98443	.25900	.25262	.25475	.25636	.25802	.25747
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	
Avge	.25085	.26049	.25728	.52202	.99469	1.0209	
SDev	.00992	.00118	.00409	.00001	.01779	.0045	
%RSD	3.9557	.45348	1.5906	.00233	1.7881	.43627	
#1	.24383	.25965	.25438	.52201	1.0073	1.0177	
#2	.25787	.26132	.26017	.52203	.98212	1.0240	
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	18731	--	--	--	--	--	--
SDev	471.6761	--	--	--	--	--	--
%RSD	2.518121	--	--	--	--	--	--
#1	19065	--	--	--	--	--	--
#2	18398	--	--	--	--	--	--

Method: METTRA Sample Name: ICB1

Operator: RJG

Run Time: 09/06/00 08:35:16

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	.00001	-.01894	-.00091	.00030	.00024	.01627	-.00006
SDev	.00019	.00362	.00039	.00013	.00016	.00515	.00000
%RSD	1387.2	19.092	42.919	42.681	67.291	31.635	5.2557

#1	-.00012	-.01638	-.00118	.00021	.00012	.01263	-.00006
#2	.00015	-.02150	-.00063	.00038	.00035	.01991	-.00006

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	-.00011	.00029	.00104	.00212	.00309	.00032	.00432
SDev	.00010	.00057	.00016	.00049	.00753	.00018	.00072
%RSD	87.510	199.93	15.144	22.848	243.84	57.103	16.681

#1	-.00019	-.00012	.00093	.00247	-.00224	.00019	.00483
#2	-.00004	.00069	.00115	.00178	.00841	.00045	.00381

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	-.00015	.00027	-.00061	-.00032	.00037	-.00156	-.00092
SDev	.00025	.00097	.00051	.00002	.00124	.00086	.00016
%RSD	163.63	360.95	83.799	5.0174	333.55	55.359	17.724

#1	.00002	.00096	-.00097	-.00033	-.00051	-.00095	-.00080
#2	-.00033	-.00042	-.00025	-.00031	.00125	-.00217	-.00103

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	-.00289	.00013	-.00088	.00248	-.00148	.00131
SDev	.00191	.00241	.00224	.00280	.00036	.00024
%RSD	65.931	1853.7	255.25	112.98	24.331	18.060

#1	-.00155	.00183	.00071	.00050	-.00174	.00114
#2	-.00424	-.00157	-.00246	.00445	-.00123	.00148

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	18517	--	--	--	--	--	--
SDev	8.662058	--	--	--	--	--	--
%RSD	.0467777	--	--	--	--	--	--
#1	18511	--	--	--	--	--	--
#2	18524	--	--	--	--	--	--

Method: METTRA Sample Name: ICSA 0057-011-1 Operator: RJG
Run Time: 09/06/00 08:39:26
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	.00014	502.90	-.00036	.00151	-.00212	473.06	.00096
SDev	.00007	.34	.00043	.00002	.00000	2.73	.00042
%RSD	50.329	.06799	118.61	1.5119	.06447	.57711	43.951
#1	.00009	502.66	-.00067	.00152	-.00212	474.99	.00066
#2	.00019	503.14	-.00006	.00149	-.00212	471.13	.00126
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	-.00033	.00324	.00343	202.21	510.17	.00836	-.00306
SDev	.00028	.00010	.00020	.16	2.42	.00002	.00159
%RSD	84.498	2.9880	5.9370	.08133	.47355	.22409	51.804
#1	-.00013	.00317	.00329	202.33	511.88	.00837	-.00194
#2	-.00052	.00330	.00357	202.09	508.46	.00834	-.00419
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	.00343	-.04342	.02063	-.00070	.00118	-.00307	-.00166
SDev	.00048	.00181	.00126	.00024	.00187	.00353	.00173
%RSD	14.031	4.1594	6.0837	33.625	158.68	115.07	104.75
#1	.00377	-.04215	.01974	-.00087	-.00014	-.00057	-.00043
#2	.00309	-.04470	.02152	-.00053	.00250	-.00557	-.00288
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	-.00308	-.00550	-.00469	.00066	-.00080	.00664	
SDev	.00063	.00204	.00157	.00210	.00284	.00013	
%RSD	20.364	37.038	33.389	320.73	353.88	1.9364	
#1	-.00353	-.00693	-.00580	-.00083	.00120	.00673	
#2	-.00264	-.00406	-.00358	.00214	-.00281	.00654	
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	16746	--	--	--	--	--	--
SDev	3.535534	--	--	--	--	--	--
%RSD	.0211123	--	--	--	--	--	--
#1	16744	--	--	--	--	--	--
#2	16749	--	--	--	--	--	--

Method: METTRA Sample Name: ICSAB 0014-197-7 Operator: RJG
 Run Time: 09/06/00 08:43:36
 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	1.1428	510.38	1.0843	.53104	.50025	481.82	.97384
SDev	.0005	1.80	.0018	.00072	.00372	4.18	.00234
%RSD	.04601	.35311	.16988	.13521	.74301	.86711	.24015
#1	1.1424	509.11	1.0856	.53053	.50288	484.77	.97550
#2	1.1432	511.66	1.0830	.53154	.49762	478.86	.97219
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	.50383	.51240	.55463	206.26	517.70	.51473	1.0258
SDev	.00115	.00002	.00101	.11	2.33	.00127	.0042
%RSD	.22899	.00313	.18239	.05367	.44961	.24664	.40985
#1	.50301	.51239	.55391	206.34	519.35	.51563	1.0229
#2	.50464	.51241	.55534	206.18	516.06	.51383	1.0288
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	1.0069	1.0529	1.0627	1.0594	1.1071	1.1055	1.1061
SDev	.0044	.0001	.0034	.0023	.0014	.0071	.0052
%RSD	.44094	.00741	.31773	.21503	.12461	.64036	.46845
#1	1.0100	1.0530	1.0651	1.0611	1.1081	1.1105	1.1097
#2	1.0038	1.0529	1.0603	1.0578	1.1062	1.1005	1.1024
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	1.0707	1.0938	1.0861	1.1387	.51427	1.0966	
SDev	.0042	.0018	.0026	.0042	.00286	.0024	
%RSD	.38886	.16725	.24001	.37122	.55614	.21750	
#1	1.0736	1.0951	1.0879	1.1357	.51630	1.0983	
#2	1.0677	1.0925	1.0843	1.1417	.51225	1.0949	
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	16646	--	--	--	--	--	--
SDev	.4239879	--	--	--	--	--	--
%RSD	.0025471	--	--	--	--	--	--
#1	16646	--	--	--	--	--	--
#2	16646	--	--	--	--	--	--

Method: METTRA Sample Name: DJNEJB

Operator: RJG

Run Time: 09/06/00 08:50:02

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	-.00028	.00597	-.00002	.00023	.00009	.06666	-.00006
SDev	.00064	.00367	.00007	.00003	.00022	.00054	.00010
%RSD	229.88	61.415	455.36	11.281	239.73	.80950	174.13

#1	-.00073	.00857	.00004	.00022	.00025	.06628	-.00013
#2	.00017	.00338	-.00007	.00025	-.00006	.06704	.00001

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	-.00055	-.00019	.00107	.01885	.02550	.00037	-.00060
SDev	.00010	.00063	.00043	.00281	.00714	.00009	.00057
%RSD	17.167	321.75	40.414	14.885	28.021	24.851	95.239

#1	-.00062	-.00064	.00076	.01686	.02044	.00031	-.00100
#2	-.00049	.00025	.00137	.02083	.03055	.00044	-.00020

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	-.00043	-.00197	.00079	-.00013	-.00016	-.00044	-.00035
SDev	.00122	.00594	.00289	.00005	.00322	.00203	.00028
%RSD	281.25	300.90	364.25	38.944	2066.1	459.11	81.878

#1	-.00130	-.00618	.00284	-.00016	.00212	-.00188	-.00055
#2	.00043	.00223	-.00125	-.00009	-.00243	.00099	-.00015

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	.00325	-.00094	.00046	.00615	-.00223	.00506
SDev	.00076	.00183	.00097	.00124	.00460	.00006
%RSD	23.322	195.95	211.39	20.098	206.42	1.1656

#1	.00272	.00036	.00114	.00702	-.00548	.00501
#2	.00379	-.00223	-.00023	.00528	.00102	.00510

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	18877	--	--	--	--	--	--
SDev	54.19863	--	--	--	--	--	--
%RSD	.2871181	--	--	--	--	--	--
#1	18915	--	--	--	--	--	--
#2	18838	--	--	--	--	--	--

Method: METTRA Sample Name: DJNEJC Operator: RJG
 Run Time: 09/06/00 08:54:11
 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	.05447	2.2260	2.1909	2.0715	.05000	52.464	.05171
SDev	.00087	.0398	.0419	.0273	.00084	1.174	.00109
%RSD	1.5897	1.7895	1.9122	1.3180	1.6706	2.2377	2.1081
#1	.05508	2.2541	2.2205	2.0908	.05060	53.294	.05248
#2	.05386	2.1978	2.1613	2.0522	.04941	51.634	.05094
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52706	.21011	.25646	.97558	50.919	.51706	1.0537
SDev	.00833	.00394	.00269	.02735	.895	.00891	.0110
%RSD	1.5808	1.8766	1.0474	2.8032	1.7576	1.7234	1.0454
#1	.53295	.21290	.25836	.99492	51.552	.52336	1.0615
#2	.52117	.20732	.25456	.95624	50.286	.51076	1.0459
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52426	.55733	.54852	.55146	.54520	.54062	.54215
SDev	.01215	.00702	.01228	.01053	.01458	.00543	.00848
%RSD	2.3168	1.2596	2.2392	1.9095	2.6747	1.0038	1.5633
#1	.53284	.56230	.55721	.55890	.55552	.54446	.54814
#2	.51567	.55237	.53984	.54401	.53489	.53678	.53615
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.2152	2.2398	2.2316	2.3077	.51823	.57055	
SDev	.0247	.0587	.0473	.0456	.01187	.01139	
%RSD	1.1137	2.6195	2.1218	1.9772	2.2913	1.9966	
#1	2.2326	2.2813	2.2651	2.3399	.52663	.57861	
#2	2.1977	2.1983	2.1981	2.2754	.50984	.56250	
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	18104	--	--	--	--	--	--
SDev	265.3418	--	--	--	--	--	--
%RSD	1.465667	--	--	--	--	--	--
#1	17916	--	--	--	--	--	--
#2	18291	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1Q4

Operator: RJG

Run Time: 09/06/00 08:58:20

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	.00151	116.72	.09035	.52539	.00725	87.838	.00207
SDev	.00059	.01	.00073	.00210	.00021	.983	.00060
%RSD	39.159	.01011	.81321	.39959	2.8898	1.1187	29.050
#1	.00109	116.71	.09087	.52688	.00740	88.532	.00165
#2	.00193	116.73	.08983	.52391	.00711	87.143	.00250
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	.14476	.18602	.34538	307.16	67.728	5.2379	.00839
SDev	.00007	.00020	.00099	.99	.598	.0310	.00009
%RSD	.04558	.10961	.28702	.32147	.88333	.59277	1.1239
#1	.14481	.18616	.34608	307.85	68.151	5.2598	.00833
#2	.14472	.18587	.34468	306.46	67.305	5.2159	.00846
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	.34615	.16753	.18346	.17815	.00301	-.00004	.00098
SDev	.00195	.00010	.00019	.00016	.00240	.00072	.00128
%RSD	.56393	.05697	.10169	.08769	79.707	1966.9	130.72
#1	.34753	.16760	.18359	.17826	.00470	.00047	.00188
#2	.34477	.16746	.18333	.17804	.00131	-.00054	.00007
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	.00622	.00110	.00281	.01100	.18042	.94037	
SDev	.00359	.00209	.00019	.00145	.00287	.00406	
%RSD	57.762	189.11	6.9483	13.230	1.5905	.43194	
#1	.00368	.00258	.00295	.01203	.18245	.94324	
#2	.00876	-.00037	.00267	.00997	.17839	.93749	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	20270	--	--	--	--	--	--
SDev	163.6952	--	--	--	--	--	--
%RSD	.8075639	--	--	--	--	--	--
#1	20386	--	--	--	--	--	--
#2	20154	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1Q7

Operator: RJG

Run Time: 09/06/00 09:02:28

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
Avge	.00149	112.72	.07840	.49652	.00664	66.967	.00197
SDev	.00037	.47	.00102	.00083	.00001	.624	.00066
%RSD	25.145	.41421	1.3038	.16786	.08318	.93246	33.509
#1	.00175	112.39	.07912	.49593	.00664	67.409	.00151
#2	.00122	113.05	.07768	.49711	.00663	66.526	.00244
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	.12599	.17282	.30704	274.59	58.109	4.1737	.00471
SDev	.00112	.00094	.00091	.34	.259	.0111	.00085
%RSD	.88640	.54496	.29741	.12501	.44593	.26713	18.005
#1	.12678	.17349	.30639	274.83	58.292	4.1815	.00531
#2	.12520	.17216	.30768	274.35	57.926	4.1658	.00411
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	.28941	.14919	.15830	.15527	-.00042	-.00035	-.00037
SDev	.00202	.00175	.00049	.00091	.00079	.00023	.00042
%RSD	.69925	1.1726	.30991	.58593	189.37	66.226	112.03
#1	.29084	.15042	.15865	.15591	-.00097	-.00052	-.00067
#2	.28797	.14795	.15795	.15462	.00014	-.00019	-.00008
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	.00191	-.00132	-.00024	.00786	.18301	.81376	
SDev	.00296	.00193	.00030	.00084	.00038	.00230	
%RSD	155.10	146.23	123.11	10.660	.20555	.28210	
#1	.00400	-.00268	-.00046	.00845	.18327	.81538	
#2	-.00018	.00004	-.00003	.00726	.18274	.81214	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19856	--	--	--	--	--	--
SDev	55.36563	--	--	--	--	--	--
%RSD	.2788414	--	--	--	--	--	--
#1	19895	--	--	--	--	--	--
#2	19816	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1Q8

Operator: RJG

Run Time: 09/06/00 09:06:37

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	.00067	89.905	.06375	.41945	.00626	29.213	.00103
SDev	.00018	.527	.00044	.00003	.00001	.158	.00055
%RSD	27.539	.58594	.68726	.00591	.16293	.54184	53.395
#1	.00054	89.533	.06406	.41944	.00626	29.325	.00064
#2	.00079	90.278	.06344	.41947	.00627	29.101	.00142
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	.11577	.14095	.24452	231.19	40.952	3.7888	.00265
SDev	.00021	.00038	.00055	.14	.130	.0004	.00054
%RSD	.17908	.26775	.22350	.06119	.31780	.01176	20.394
#1	.11562	.14068	.24414	231.09	41.044	3.7891	.00227
#2	.11591	.14122	.24491	231.29	40.860	3.7885	.00303
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	.22083	.16531	.17195	.16974	-.00289	-.00002	-.00097
SDev	.00044	.00312	.00010	.00110	.00177	.00087	.00117
%RSD	.20123	1.8872	.05718	.65066	61.313	5312.5	119.98
#1	.22114	.16310	.17188	.16896	-.00164	.00060	-.00015
#2	.22051	.16751	.17202	.17052	-.00414	-.00063	-.00180
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	-.00230	.00592	.00318	.00178	.17346	.56171	
SDev	.00017	.00110	.00079	.00312	.00219	.00034	
%RSD	7.5391	18.600	24.899	175.50	1.2636	.06006	
#1	-.00242	.00514	.00262	-.00043	.17501	.56194	
#2	-.00218	.00670	.00374	.00399	.17191	.56147	
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	19304	--	--	--	--	--	--
SDev	33.44671	--	--	--	--	--	--
%RSD	.1732662	--	--	--	--	--	--
#1	19280	--	--	--	--	--	--
#2	19327	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1Q8P5 Operator: RJG
 Run Time: 09/06/00 09:10:46
 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	-.00015	18.149	.01348	.08771	.00134	6.1951	.00003
SDev	.00023	.076	.00034	.00004	.00015	.0289	.00011
%RSD	157.82	.41977	2.5326	.04088	11.213	.46596	376.74
#1	-.00031	18.095	.01324	.08773	.00144	6.2155	.00010
#2	.00002	18.203	.01372	.08768	.00123	6.1747	-.00005

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02333	.02975	.04988	48.669	8.5469	.79154	-.00025
SDev	.00003	.00023	.00017	.128	.0129	.00009	.00023
%RSD	.14914	.76206	.33232	.26270	.15077	.01134	93.828
#1	.02336	.02959	.04977	48.578	8.5561	.79160	-.00041
#2	.02331	.02991	.05000	48.759	8.5378	.79147	-.00008

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04578	.03477	.03576	.03543	-.00278	-.00260	-.00266
SDev	.00003	.00461	.00156	.00050	.00022	.00102	.00061
%RSD	.06121	13.265	4.3528	1.4051	7.9998	39.456	22.935
#1	.04576	.03151	.03686	.03508	-.00262	-.00332	-.00309
#2	.04580	.03804	.03466	.03578	-.00294	-.00187	-.00223

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00004	.00357	.00239	.00329	.03367	.11864
SDev	.00332	.00175	.00006	.00104	.00035	.00048
%RSD	8048.5	49.049	2.5492	31.524	1.0491	.40081
#1	-.00231	.00480	.00244	.00403	.03342	.11831
#2	.00239	.00233	.00235	.00256	.03392	.11898

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	18859	--	--	--	--	--	--
SDev	132.7593	--	--	--	--	--	--
%RSD	.7039619	--	--	--	--	--	--
#1	18953	--	--	--	--	--	--
#2	18765	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1Q8S

Operator: RJG

Run Time: 09/06/00 09:14:54

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	.04708	150.65	1.8600	2.4555	.05004	71.039	.04132
SDev	.00156	2.91	.0191	.0032	.00166	1.884	.00396
%RSD	3.3246	1.9285	1.0275	.12834	3.3116	2.6520	9.5808
#1	.04598	148.60	1.8465	2.4578	.05121	72.371	.03852
#2	.04819	152.71	1.8736	2.4533	.04886	69.707	.04412
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	.54128	.36999	.45524	252.29	94.897	5.0796	.83635
SDev	.01148	.00766	.00049	.75	1.885	.0071	.02778
%RSD	2.1209	2.0697	.10859	.29555	1.9868	.14045	3.3214
#1	.53317	.36457	.45489	251.76	96.230	5.0746	.81671
#2	.54940	.37540	.45559	252.82	93.564	5.0846	.85599
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	.69499	.56986	.58736	.58153	.22444	.21110	.21554
SDev	.01288	.01379	.00748	.00040	.01428	.00464	.00166
%RSD	1.8535	2.4198	1.2732	.06816	6.3624	2.1979	.77040
#1	.70410	.56011	.59265	.58181	.23454	.20782	.21671
#2	.68588	.57961	.58207	.58125	.21434	.21438	.21437
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	1.7736	1.8741	1.8406	1.8880	.70343	1.1248	
SDev	.0685	.0440	.0065	.0057	.01211	.0000	
%RSD	3.8639	2.3461	.35343	.30176	1.7214	.00173	
#1	1.7252	1.9052	1.8452	1.8920	.71199	1.1247	
#2	1.8221	1.8430	1.8360	1.8840	.69486	1.1248	
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	20111	--	--	--	--	--	--
SDev	473.8679	--	--	--	--	--	--
%RSD	2.356277	--	--	--	--	--	--
#1	20446	--	--	--	--	--	--
#2	19776	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1Q8D Operator: RJG
 Run Time: 09/06/00 09:19:03
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04906	128.11	1.9276	2.3873	.05087	79.352	.04560
SDev	.00017	.87	.0009	.0075	.00030	.337	.00044
%RSD	.34929	.67887	.04466	.31414	.59174	.42444	.97168
#1	.04894	127.50	1.9282	2.3820	.05108	79.591	.04529
#2	.04918	128.73	1.9270	2.3926	.05066	79.114	.04591
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	.55861	.35008	.43517	225.72	86.440	4.0023	.90555
SDev	.00248	.00188	.00109	.84	.200	.0052	.00671
%RSD	.44336	.53756	.25084	.37287	.23154	.12997	.74147
#1	.55686	.34875	.43440	225.12	86.582	3.9986	.90080
#2	.56036	.35141	.43595	226.31	86.299	4.0060	.91029
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	.67002	.58980	.58862	.58901	.23999	.23696	.23797
SDev	.00097	.00509	.00127	.00254	.00289	.00081	.00042
%RSD	.14556	.86308	.21563	.43152	1.2024	.33984	.17811
#1	.67071	.58620	.58772	.58722	.24203	.23639	.23827
#2	.66933	.59340	.58952	.59081	.23795	.23753	.23767
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	1.8399	1.8665	1.8577	1.9515	.69337	1.0533	
SDev	.0131	.0038	.0019	.0067	.00115	.0013	
%RSD	.71201	.20163	.09971	.34311	.16525	.12534	
#1	1.8307	1.8692	1.8564	1.9468	.69418	1.0523	
#2	1.8492	1.8639	1.8590	1.9562	.69256	1.0542	
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	19171	--	--	--	--	--	--
SDev	112.3954	--	--	--	--	--	--
%RSD	.5862639	--	--	--	--	--	--
#1	19251	--	--	--	--	--	--
#2	19092	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-1 0057-040-1 Operator: RJG
 Run Time: 09/06/00 09:23:12
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0427	24.218	.52368	2.0060	2.0234	50.672	.50364
SDev	.0030	.019	.00332	.0117	.0162	.338	.00050
%RSD	.28467	.07676	.63474	.58527	.80156	.66606	.09961
#1	1.0448	24.231	.52603	2.0143	2.0349	50.911	.50399
#2	1.0406	24.205	.52133	1.9977	2.0119	50.433	.50328
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	2.0260	2.0334	1.9675	24.995	49.341	2.0047	2.0331
SDev	.0019	.0017	.0130	.021	.334	.0072	.0112
%RSD	.09550	.08381	.65863	.08279	.67632	.35926	.54960
#1	2.0273	2.0346	1.9767	25.010	49.577	2.0098	2.0252
#2	2.0246	2.0322	1.9584	24.980	49.106	1.9996	2.0410
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	2.0136	.52701	.52143	.52329	.52672	.51949	.52190
SDev	.0113	.00040	.00269	.00192	.00118	.00148	.00059
%RSD	.56301	.07486	.51522	.36754	.22359	.28472	.11389
#1	2.0216	.52729	.52333	.52465	.52755	.51844	.52148
#2	2.0056	.52674	.51953	.52193	.52589	.52053	.52232
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	.52566	.53551	.53223	1.0571	2.0187	2.0439	
SDev	.00206	.00337	.00293	.0010	.0152	.0061	
%RSD	.39132	.62887	.55075	.09198	.75253	.29830	
#1	.52421	.53312	.53015	1.0564	2.0294	2.0482	
#2	.52712	.53789	.53430	1.0578	2.0079	2.0396	
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	

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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	18198	--	--	--	--	--	--
SDev	10.46435	--	--	--	--	--	--
%RSD	.0575017	--	--	--	--	--	--
#1	18206	--	--	--	--	--	--
#2	18191	--	--	--	--	--	--

Method: METTRA Sample Name: CCB1

Operator: RJG

Run Time: 09/06/00 09:27:21

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	-.01098	-.00014	.00061	.00052	.02296	.00020
SDev	.00016	.00141	.00162	.00045	.00054	.01311	.00010
%RSD	49.673	12.879	1189.8	74.082	104.31	57.084	49.931
#1	.00021	-.01198	.00101	.00029	.00014	.01369	.00026
#2	.00044	-.00998	-.00128	.00093	.00090	.03223	.00013
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	-.00055	.00034	.00130	.01885	.01897	.00085	.00561
SDev	.00033	.00049	.00060	.00957	.01013	.00051	.00119
%RSD	59.390	145.67	46.227	50.767	53.370	59.834	21.187
#1	-.00078	-.00001	.00087	.01208	.01181	.00049	.00645
#2	-.00032	.00068	.00172	.02561	.02613	.00121	.00477
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	.00071	.00142	-.00093	-.00015	-.00326	-.00074	-.00158
SDev	.00085	.00022	.00003	.00009	.00132	.00064	.00087
%RSD	119.74	15.631	3.2469	64.326	40.532	86.748	55.001
#1	.00011	.00126	-.00095	-.00021	-.00232	-.00029	-.00096
#2	.00132	.00158	-.00091	-.00008	-.00419	-.00120	-.00219
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	.00145	.00128	.00134	.00412	-.00059	.00084	
SDev	.00195	.00164	.00044	.00291	.00018	.00030	
%RSD	133.79	127.62	33.118	70.613	29.872	36.439	
#1	.00008	.00244	.00165	.00207	-.00071	.00062	
#2	.00283	.00013	.00103	.00618	-.00046	.00105	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18600	--	--	--	--	--	--
SDev	93.37400	--	--	--	--	--	--
%RSD	.5020209	--	--	--	--	--	--
#1	18534	--	--	--	--	--	--
#2	18666	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1QF

Operator: RJG

Run Time: 09/06/00 09:31:30

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	.00345	86.370	.04916	.43826	.00495	96.359	.00321
SDev	.00021	.645	.00011	.00178	.00000	.229	.00076
%RSD	5.9596	.74732	.22587	.40542	.05024	.23770	23.574
#1	.00360	85.914	.04923	.43700	.00495	96.521	.00268
#2	.00330	86.827	.04908	.43952	.00495	96.197	.00375
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	.08729	.14308	.29212	209.11	44.353	4.1731	.00439
SDev	.00016	.00095	.00049	.73	.005	.0141	.00082
%RSD	.18517	.66445	.16826	.34696	.01099	.33759	18.611
#1	.08717	.14241	.29177	208.60	44.356	4.1632	.00496
#2	.08740	.14376	.29246	209.63	44.349	4.1831	.00381
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	.20588	.20385	.20287	.20319	-.00107	.00136	.00055
SDev	.00172	.00142	.00018	.00059	.00100	.00202	.00168
%RSD	.83719	.69511	.08826	.29100	93.746	148.64	304.38
#1	.20710	.20285	.20274	.20278	-.00177	-.00007	-.00064
#2	.20466	.20485	.20299	.20361	-.00036	.00279	.00174
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	-.00227	.00470	.00238	.00337	.15540	.79091	
SDev	.00189	.00047	.00032	.00097	.00164	.00217	
%RSD	83.441	9.9300	13.412	28.782	1.0569	.27483	
#1	-.00093	.00437	.00261	.00269	.15656	.78937	
#2	-.00361	.00503	.00215	.00406	.15424	.79245	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19095	--	--	--	--	--	--
SDev	46.17324	--	--	--	--	--	--
%RSD	.2418068	--	--	--	--	--	--
#1	19128	--	--	--	--	--	--
#2	19062	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1QG

Operator: RJG

Run Time: 09/06/00 09:35:39

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	85.959	.04148	.49863	.00684	14.040	.00121
SDev	.00000	.212	.00108	.00188	.00001	.119	.00040
%RSD	.38864	.24668	2.6039	.37623	.08279	.84970	33.056
#1	.00047	86.109	.04225	.49996	.00684	14.124	.00093
#2	.00047	85.809	.04072	.49730	.00684	13.955	.00150
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	.10849	.13520	.18378	215.57	39.830	1.6157	.00107
SDev	.00006	.00025	.00101	.92	.331	.0064	.00032
%RSD	.05909	.18228	.54857	.42736	.83065	.39732	29.645
#1	.10844	.13502	.18449	216.22	40.064	1.6202	.00085
#2	.10853	.13537	.18307	214.92	39.596	1.6111	.00130
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	.24501	.09549	.10100	.09916	-.00119	.00064	.00003
SDev	.00178	.00219	.00074	.00122	.00052	.00143	.00113
%RSD	.72671	2.2945	.72833	1.2306	43.331	224.01	3713.1
#1	.24627	.09394	.10048	.09830	-.00083	.00165	.00083
#2	.24375	.09704	.10152	.10002	-.00156	-.00037	-.00077
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	-.00340	.00326	.00104	.00301	.17980	.48259	
SDev	.00158	.00021	.00038	.00233	.00348	.00249	
%RSD	46.436	6.5331	36.842	77.397	1.9362	.51652	
#1	-.00452	.00341	.00077	.00136	.18226	.48435	
#2	-.00228	.00311	.00131	.00465	.17734	.48083	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	20029	--	--	--	--	--	--
SDev	60.84709	--	--	--	--	--	--
%RSD	.3037983	--	--	--	--	--	--
#1	19986	--	--	--	--	--	--
#2	20072	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1QJ

Operator: RJG

Run Time: 09/06/00 09:39:49

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	.00054	76.889	.05079	.33775	.00469	197.46	.00161
SDev	.00032	.212	.00007	.00221	.00005	1.20	.00038
%RSD	59.757	.27549	.14847	.65405	1.1022	.60745	23.487
#1	.00031	77.038	.05074	.33931	.00473	198.31	.00134
#2	.00077	76.739	.05084	.33619	.00466	196.61	.00188
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	.07010	.11746	.17782	190.19	80.853	3.0243	.00134
SDev	.00035	.00070	.00065	.46	.564	.0064	.00047
%RSD	.50319	.59530	.36579	.24011	.69798	.21141	35.141
#1	.06985	.11696	.17828	190.52	81.252	3.0288	.00168
#2	.07035	.11795	.17736	189.87	80.454	3.0198	.00101
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	.16403	.11783	.12174	.12044	-.00129	.00116	.00034
SDev	.00015	.00016	.00215	.00149	.00093	.00173	.00146
%RSD	.09400	.13514	1.7672	1.2355	71.926	149.33	428.56
#1	.16414	.11772	.12022	.11939	-.00063	.00238	.00137
#2	.16392	.11794	.12326	.12149	-.00195	-.00006	-.00069
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	-.00203	.00110	.00006	.00183	.14594	.49336	
SDev	.00398	.00030	.00112	.00017	.00153	.00142	
%RSD	195.43	27.582	1986.6	9.0465	1.0495	.28691	
#1	.00078	.00089	.00085	.00195	.14702	.49436	
#2	-.00485	.00132	-.00074	.00172	.14485	.49236	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19272	--	--	--	--	--	--
SDev	44.47591	--	--	--	--	--	--
%RSD	.2307781	--	--	--	--	--	--
#1	19304	--	--	--	--	--	--
#2	19241	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4MP

Operator: RJG

Run Time: 09/06/00 09:43:58

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	.00185	119.11	.07851	.56038	.00682	137.83	.00292
SDev	.00028	1.45	.00010	.00898	.00007	2.27	.00052
%RSD	15.290	1.2143	.12337	1.6018	.98514	1.6463	17.801
#1	.00165	120.13	.07844	.56672	.00677	139.44	.00255
#2	.00205	118.08	.07858	.55403	.00687	136.23	.00329
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	.14531	.20850	.32635	298.91	84.572	5.2194	.00670
SDev	.00111	.00120	.00480	3.59	1.339	.0603	.00080
%RSD	.76204	.57736	1.4698	1.2002	1.5838	1.1551	11.965
#1	.14609	.20936	.32974	301.44	85.519	5.2620	.00727
#2	.14453	.20765	.32295	296.37	83.625	5.1767	.00613
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	.35595	.14527	.15558	.15215	-.00094	-.00028	-.00050
SDev	.00382	.00123	.00209	.00098	.00099	.00207	.00105
%RSD	1.0742	.84919	1.3435	.64636	105.10	737.33	209.37
#1	.35865	.14614	.15410	.15145	-.00164	.00118	.00024
#2	.35324	.14439	.15706	.15284	-.00024	-.00174	-.00124
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	-.00909	.00654	.00134	-.00198	.19910	.71755	
SDev	.00190	.00017	.00052	.00436	.00580	.00827	
%RSD	20.901	2.5901	38.938	220.39	2.9141	1.1529	
#1	-.00775	.00642	.00170	.00110	.20321	.72340	
#2	-.01044	.00666	.00097	-.00506	.19500	.71170	
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	19102	--	--	--	--	--	--
SDev	69.40281	--	--	--	--	--	--
%RSD	.3633260	--	--	--	--	--	--
#1	19053	--	--	--	--	--	--
#2	19151	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4MR

Operator: RJG

Run Time: 09/06/00 09:48:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00029	31.929	.01347	.15659	.00288	10.614	.00038
SDev	.00008	.083	.00056	.00032	.00003	.042	.00047
%RSD	28.731	.25957	4.1472	.20257	1.1342	.39614	125.23

#1	-.00023	31.871	.01386	.15681	.00285	10.644	.00004
#2	-.00035	31.988	.01307	.15636	.00290	10.585	.00071

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	.02631	.04283	.06244	75.174	9.6654	.61653	.00002
SDev	.00009	.00013	.00019	.044	.0341	.00053	.00013
%RSD	.35842	.31399	.31167	.05909	.35317	.08640	612.07

#1	.02637	.04273	.06230	75.205	9.6895	.61615	.00011
#2	.02624	.04292	.06258	75.143	9.6412	.61690	-.00007

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	.05347	.03134	.02969	.03024	-.00116	-.00132	-.00127
SDev	.00020	.00008	.00151	.00098	.00367	.00028	.00103
%RSD	.37649	.24541	5.0763	3.2395	314.97	21.345	81.344

#1	.05362	.03140	.02862	.02955	-.00376	-.00112	-.00200
#2	.05333	.03129	.03075	.03093	.00143	-.00152	-.00054

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	-.00401	.00277	.00051	.00278	.08691	.16245
SDev	.00092	.00006	.00027	.00029	.00016	.00014
%RSD	22.850	2.1001	51.852	10.566	.18638	.08723

#1	-.00337	.00273	.00070	.00257	.08679	.16235
#2	-.00466	.00282	.00033	.00299	.08702	.16255

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	19307	--	--	--	--	--	--
SDev	54.69443	--	--	--	--	--	--
%RSD	.2832819	--	--	--	--	--	--
#1	19346	--	--	--	--	--	--
#2	19269	--	--	--	--	--	--

Method: METTRA Sample Name: DJL2CB

Operator: RJG

Run Time: 09/06/00 09:52:17

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	-.00045	-.01223	-.00033	-.00007	-.00028	.03752	-.00006
SDev	.00023	.00278	.00005	.00003	.00009	.00618	.00000
%RSD	51.109	22.753	13.892	45.971	31.380	16.461	2.0533

#1	-.00061	-.01026	-.00030	-.00009	-.00035	.03315	-.00006
#2	-.00029	-.01420	-.00036	-.00005	-.00022	.04189	-.00006

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	-.00096	-.00090	.00100	.03895	-.00057	.00044	-.00078
SDev	.00017	.00056	.00044	.00887	.00969	.00019	.00006
%RSD	17.615	62.703	43.914	22.781	1711.3	43.431	7.4707

#1	-.00108	-.00130	.00069	.03268	-.00742	.00030	-.00074
#2	-.00084	-.00050	.00132	.04523	.00629	.00057	-.00082

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	.00026	-.00128	.00188	.00083	.00146	-.00104	-.00021
SDev	.00032	.00302	.00071	.00053	.00299	.00074	.00050
%RSD	124.20	236.20	37.817	63.628	204.59	71.215	243.11

#1	.00003	-.00341	.00239	.00046	.00358	-.00156	.00015
#2	.00049	.00086	.00138	.00121	-.00065	-.00052	-.00056

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	-.00778	.00355	-.00023	.00203	-.00030	.00233
SDev	.00111	.00200	.00096	.00138	.00238	.00003
%RSD	14.323	56.316	423.19	67.906	802.83	1.5205

#1	-.00857	.00496	.00045	.00301	-.00198	.00230
#2	-.00700	.00213	-.00091	.00106	.00139	.00235

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	18333	--	--	--	--	--	--
SDev	105.4293	--	--	--	--	--	--
%RSD	.5750843	--	--	--	--	--	--
#1	18407	--	--	--	--	--	--
#2	18258	--	--	--	--	--	--

Method: METTRA Sample Name: DJL2CC

Operator: RJG

Run Time: 09/06/00 09:56:25

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	.05303	2.0307	2.1090	2.0049	.04985	51.211	.05052
SDev	.00035	.0002	.0133	.0004	.00006	.019	.00032
%RSD	.66628	.00829	.63075	.02116	.12036	.03722	.64288
#1	.05278	2.0308	2.0996	2.0052	.04989	51.197	.05030
#2	.05328	2.0306	2.1184	2.0046	.04981	51.224	.05075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51620	.20685	.25054	.96017	49.596	.50800	1.0339
SDev	.00487	.00203	.00070	.00319	.040	.00292	.0145
%RSD	.94346	.97933	.27871	.33246	.07995	.57467	1.4056
#1	.51276	.20542	.25004	.95792	49.568	.50594	1.0236
#2	.51964	.20828	.25103	.96243	49.624	.51007	1.0441
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50676	.54416	.53218	.53617	.53072	.52378	.52609
SDev	.00171	.00440	.00161	.00254	.00063	.00480	.00341
%RSD	.33677	.80876	.30267	.47371	.11929	.91632	.64858
#1	.50556	.54104	.53104	.53437	.53027	.52038	.52367
#2	.50797	.54727	.53332	.53796	.53116	.52717	.52850
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0934	2.1312	2.1186	2.1950	.51107	.53353	
SDev	.0309	.0031	.0124	.0034	.00008	.00172	
%RSD	1.4747	.14673	.58367	.15506	.01507	.32169	
#1	2.0716	2.1290	2.1099	2.1974	.51102	.53232	
#2	2.1152	2.1334	2.1274	2.1926	.51113	.53475	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18003	--	--	--	--	--	--
SDev	139.5127	--	--	--	--	--	--
%RSD	.7749351	--	--	--	--	--	--
#1	18102	--	--	--	--	--	--
#2	17904	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1RT

Operator: RJG

Run Time: 09/06/00 10:00:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00051	1.3261	.01473	.04459	-.00046	245.61	.00024
SDev	.00025	.0005	.00022	.00027	.00005	.88	.00009
%RSD	48.024	.03607	1.5067	.61295	10.090	.35896	36.738
#1	.00034	1.3264	.01488	.04440	-.00049	246.24	.00017
#2	.00069	1.3258	.01457	.04478	-.00043	244.99	.00030
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	.00007	.00184	.06791	3.7591	49.387	1.2575	.00214
SDev	.00013	.00006	.00040	.0160	.065	.0020	.00051
%RSD	172.34	3.4829	.59495	.42530	.13171	.16021	23.813
#1	-.00002	.00188	.06763	3.7704	49.433	1.2560	.00250
#2	.00016	.00179	.06820	3.7478	49.341	1.2589	.00178
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	.00536	.00936	.00318	.00524	-.00220	.00115	.00003
SDev	.00031	.00219	.00176	.00045	.00189	.00062	.00104
%RSD	5.8250	23.371	55.385	8.5434	85.987	54.448	3244.7
#1	.00559	.00782	.00443	.00556	-.00086	.00159	.00077
#2	.00514	.01091	.00194	.00493	-.00353	.00070	-.00071
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	-.00149	.00418	.00229	.00271	.00322	.01963	
SDev	.00115	.00026	.00020	.00059	.00037	.00041	
%RSD	76.629	6.3425	8.9344	21.631	11.538	2.1051	
#1	-.00230	.00437	.00215	.00313	.00348	.01933	
#2	-.00068	.00399	.00243	.00230	.00296	.01992	
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	18183	--	--	--	--	--	--
SDev	8.449373	--	--	--	--	--	--
%RSD	.0464687	--	--	--	--	--	--
#1	18189	--	--	--	--	--	--
#2	18177	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1WG

Operator: RJG

Run Time: 09/06/00 10:04:43

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
Avge	.00057	1.9005	.00125	.02429	-.00129	217.55	.00006
SDev	.00037	.0133	.00011	.00024	.00002	.09	.00010
%RSD	65.020	.69736	8.9869	1.0038	1.6420	.04313	171.20

#1	.00084	1.8911	.00133	.02412	-.00130	217.48	.00013
#2	.00031	1.9098	.00117	.02446	-.00127	217.62	-.00001

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	.00184	.00308	.01070	2.2536	85.833	2.9371	.00032
SDev	.00033	.00014	.00063	.0037	.245	.0183	.00081
%RSD	17.957	4.4742	5.8928	.16215	.28576	.62249	254.86

#1	.00161	.00299	.01025	2.2510	85.659	2.9242	.00089
#2	.00207	.00318	.01115	2.2562	86.006	2.9500	-.00025

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	.00505	.00494	.00018	.00177	-.00278	-.00093	-.00154
SDev	.00060	.00396	.00170	.00018	.00355	.00119	.00039
%RSD	11.901	80.205	924.14	10.470	127.74	128.18	25.346

#1	.00547	.00774	-.00102	.00190	-.00529	-.00009	-.00182
#2	.00462	.00214	.00139	.00164	-.00027	-.00176	-.00127

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	-.00352	.00377	.00134	-.00187	.00353	.01410
SDev	.00022	.00145	.00089	.00106	.00015	.00018
%RSD	6.3077	38.538	66.742	56.690	4.2025	1.2912

#1	-.00337	.00274	.00071	-.00261	.00364	.01397
#2	-.00368	.00480	.00197	-.00112	.00343	.01423

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17449	--	--	--	--	--	--
SDev	153.7253	--	--	--	--	--	--
%RSD	.8810052	--	--	--	--	--	--
#1	17558	--	--	--	--	--	--
#2	17340	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1X0

Operator: RJG

Run Time: 09/06/00 10:08:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00052	2.5793	.00089	.02894	-.00090	241.42	.00005
SDev	.00049	.0141	.00227	.00013	.00011	1.74	.00027
%RSD	94.463	.54487	254.43	.45072	12.496	.72265	519.85

#1	.00017	2.5892	-.00071	.02903	-.00098	242.65	-.00014
#2	.00087	2.5693	.00249	.02885	-.00082	240.18	.00024

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	.00119	.00402	.00970	2.8346	114.06	2.1285	.00016
SDev	.00042	.00036	.00010	.0143	.83	.0074	.00052
%RSD	35.152	9.0506	1.0346	.50297	.72665	.34574	324.98

#1	.00089	.00376	.00963	2.8446	114.64	2.1337	.00053
#2	.00149	.00428	.00977	2.8245	113.47	2.1233	-.00021

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	.00596	.00444	.00074	.00197	-.00242	-.00043	-.00109
SDev	.00040	.00092	.00045	.00061	.00039	.00070	.00033
%RSD	6.6736	20.710	61.350	30.869	16.312	160.72	30.379

#1	.00568	.00379	.00042	.00154	-.00214	-.00092	-.00133
#2	.00624	.00509	.00106	.00240	-.00270	.00006	-.00086

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	-.00516	.00214	-.00029	-.00167	.00754	.02469
SDev	.00003	.00209	.00139	.00026	.00001	.00016
%RSD	.50160	97.613	475.70	15.304	.06379	.66246

#1	-.00515	.00066	-.00127	-.00149	.00753	.02481
#2	-.00518	.00362	.00069	-.00185	.00754	.02457

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	17709	--	--	--	--	--	--
SDev	20.29341	--	--	--	--	--	--
%RSD	.1145954	--	--	--	--	--	--
#1	17723	--	--	--	--	--	--
#2	17694	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-2

Operator: RJG

Run Time: 09/06/00 10:13:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG ✓	AL	AS ✓	BA	BE	CA	CD ✓
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0257	23.606	.51545	1.9509	2.0277	50.816	.50215
SDev	.0473	1.186	.02553	.0893	.0808	2.103	.02212
%RSD	4.6128	5.0236	4.9523	4.5785	3.9872	4.1393	4.4058
#1	.99225	22.767	.49740	1.8877	1.9705	49.329	.48650
#2	1.0592	24.445	.53350	2.0140	2.0849	52.303	.51779
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR ✓	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0124	2.0193	1.9199	24.682	49.202	2.0003	2.0106
SDev	.0951	.0980	.0908	1.075	2.154	.0921	.1079
%RSD	4.7280	4.8510	4.7316	4.3537	4.3780	4.6060	5.3663
#1	1.9451	1.9500	1.8556	23.922	47.679	1.9351	1.9343
#2	2.0797	2.0885	1.9841	25.442	50.725	2.0654	2.0869
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB ✓ ✓	SB/1	SB/2	SB ✓
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9865	.52210	.51907	.52008	.52836	.51263	.51787
SDev	.0796	.02733	.01659	.02017	.01536	.02429	.02132
%RSD	4.0054	5.2353	3.1970	3.8784	2.9061	4.7388	4.1162
#1	1.9303	.50277	.50734	.50582	.51750	.49546	.50280
#2	2.0428	.54143	.53081	.53435	.53922	.52981	.53294
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE ✓	TL ✓	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.51904	.53340	.52862	1.0336	2.0056	2.0133	
SDev	.02258	.02214	.02228	.0502	.0864	.0848	
%RSD	4.3507	4.1499	4.2156	4.8531	4.3073	4.2103	
#1	.50307	.51775	.51286	.99817	1.9445	1.9534	
#2	.53501	.54905	.54438	1.0691	2.0667	2.0733	
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	

NOTE: reported result - RSD < 5% 26.9600

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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	18772	--	--	--	--	--	--
SDev	710.7845	--	--	--	--	--	--
%RSD	3.786388	--	--	--	--	--	--
#1	19275	--	--	--	--	--	--
#2	18270	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2

Operator: RJG

Run Time: 09/06/00 10:17:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00002	-.01795	-.00043	.00046	.00055	.02677	.00011
SDev	.00025	.00551	.00023	.00014	.00078	.01470	.00014
%RSD	1023.6	30.700	54.635	29.665	141.77	54.888	126.49

#1	.00020	-.01406	-.00026	.00036	-.00000	.01638	.00022
#2	-.00015	-.02185	-.00059	.00056	.00110	.03717	.00001

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	-.00052	.00036	.00097	-.00003	.01949	.00067	.00546
SDev	.00038	.00042	.00034	.00254	.00602	.00028	.00185
%RSD	72.335	114.38	34.928	7792.9	30.908	42.214	33.885

#1	-.00026	.00066	.00121	.00176	.01523	.00047	.00677
#2	-.00079	.00007	.00073	-.00183	.02375	.00087	.00415

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	.00062	.00259	-.00080	.00033	-.00181	-.00011	-.00068
SDev	.00016	.00162	.00055	.00017	.00085	.00103	.00041
%RSD	25.653	62.605	69.027	52.241	46.958	946.43	60.187

#1	.00073	.00373	-.00119	.00045	-.00241	.00062	-.00039
#2	.00050	.00144	-.00041	.00021	-.00121	-.00084	-.00096

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	-.00007	.00020	.00547	.00018	.00003
SDev	.00331	.00027	.00128	.00322	.00271	.00026
%RSD	442.38	373.52	641.20	58.903	1548.2	901.96

#1	-.00159	-.00027	-.00071	.00775	.00209	-.00016
#2	.00309	.00012	.00111	.00319	-.00174	.00022

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

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18724	--	--	--	--	--	--
SDev	313.7082	--	--	--	--	--	--
%RSD	1.675440	--	--	--	--	--	--
#1	18502	--	--	--	--	--	--
#2	18946	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1X3

Operator: RJG

Run Time: 09/06/00 10:21:19

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	-.00003	4.5082	.06973	.11438	.00122	123.01	-.00002
SDev	.00028	.0274	.00186	.00067	.00034	1.63	.00008
%RSD	832.70	.60732	2.6708	.58561	27.581	1.3268	404.26
#1	.00016	4.5276	.07105	.11486	.00099	124.17	-.00008
#2	-.00023	4.4889	.06841	.11391	.00146	121.86	.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00096	.00687	.00525	49.986	28.149	.79962	.00039
SDev	.00023	.00048	.00001	.527	.290	.00655	.00025
%RSD	24.494	6.9258	.16834	1.0537	1.0313	.81939	63.761
#1	.00079	.00721	.00526	50.359	28.354	.80425	.00057
#2	.00113	.00653	.00525	49.614	27.944	.79499	.00022
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	.00455	.00338	.00167	.00224	-.00260	-.00093	-.00149
SDev	.00089	.00042	.00015	.00024	.00182	.00103	.00008
%RSD	19.591	12.387	8.8552	10.631	70.002	111.14	5.6091
#1	.00392	.00308	.00156	.00207	-.00388	-.00020	-.00143
#2	.00518	.00367	.00177	.00240	-.00131	-.00166	-.00154
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	-.00002	.00339	.00225	-.00148	.01225	.01534	
SDev	.00063	.00109	.00094	.00015	.00020	.00028	
%RSD	2721.0	32.284	41.746	9.9034	1.6443	1.8385	
#1	.00042	.00416	.00292	-.00137	.01211	.01554	
#2	-.00047	.00261	.00159	-.00158	.01239	.01514	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	19156	--	--	--	--	--	--
SDev	218.0016	--	--	--	--	--	--
%RSD	1.138030	--	--	--	--	--	--
#1	19002	--	--	--	--	--	--
#2	19310	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4NE

Operator: RJG

Run Time: 09/06/00 10:25:28

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
Avge	-.00039	.68760	.00132	.02501	-.00102	94.185	-.00013
SDev	.00062	.01009	.00158	.00012	.00002	.811	.00012
%RSD	158.59	1.4671	119.48	.47639	2.0413	.86091	95.146

#1	-.00083	.69474	.00020	.02509	-.00104	94.758	-.00021
#2	.00005	.68047	.00244	.02492	-.00101	93.611	-.00004

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00141	-.00007	.00440	.50274	2.7277	.13059	.00452
SDev	.00065	.00019	.00071	.00718	.0119	.00012	.00039
%RSD	45.965	268.44	16.074	1.4285	.43731	.09455	8.6527

#1	-.00187	-.00020	.00390	.50782	2.7362	.13067	.00424
#2	-.00095	.00006	.00490	.49766	2.7193	.13050	.00480

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	.00445	.00037	.00004	.00015	-.00040	-.00006	-.00017
SDev	.00086	.00201	.00137	.00024	.00217	.00230	.00081
%RSD	19.222	545.05	3387.2	162.63	541.24	3996.9	471.35

#1	.00385	-.00106	.00101	.00032	.00113	-.00168	-.00075
#2	.00506	.00179	-.00093	-.00002	-.00194	.00157	.00040

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	-.00263	.00463	.00221	-.00213	-.00128	.00236
SDev	.00144	.00045	.00018	.00036	.00038	.00003
%RSD	54.665	9.7490	8.0148	17.157	29.338	1.1174

#1	-.00365	.00495	.00209	-.00238	-.00155	.00238
#2	-.00161	.00431	.00234	-.00187	-.00102	.00234

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	17693	--	--	--	--	--	--
SDev	35.10675	--	--	--	--	--	--
%RSD	.1984242	--	--	--	--	--	--
#1	17718	--	--	--	--	--	--
#2	17668	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4NEP5 Operator: RJG
 Run Time: 09/06/00 10:29:37
 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	.00006	.10525	.00053	.00466	~.00024	18.122	.00000
SDev	.00030	.00586	.00007	.00001	.00012	.125	.00016
%RSD	497.14	5.5652	12.923	.30451	51.743	.69237	13099.
#1	.00027	.10939	.00057	.00467	-.00032	18.211	.00011
#2	-.00015	.10111	.00048	.00465	-.00015	18.033	-.00011

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00126	.00014	.00141	.09715	.51901	.02525	-.00007
SDev	.00015	.00026	.00001	.00636	.00322	.00004	.00051
%RSD	12.039	189.00	.34043	6.5418	.62106	.16037	747.68
#1	-.00115	.00032	.00141	.09266	.52129	.02528	-.00043
#2	-.00136	-.00005	.00141	.10164	.51674	.02523	.00029

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00078	.00213	-.00029	.00051	~.00126	~.00036	-.00066
SDev	.00044	.00307	.00170	.00011	.00240	.00016	.00069
%RSD	55.782	144.36	583.96	22.057	190.35	43.595	105.25
#1	.00048	.00430	-.00150	.00043	-.00296	-.00025	-.00115
#2	.00109	-.00004	.00091	.00059	.00044	-.00047	-.00017

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00068	.00147	.00075	.00418	-.00119	.00041
SDev	.00090	.00034	.00053	.00400	.00072	.00013
%RSD	133.48	23.425	70.353	95.686	61.026	31.889
#1	-.00004	.00171	.00113	.00702	-.00068	.00031
#2	-.00131	.00122	.00038	.00135	-.00170	.00050

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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	18382	--	--	--	--	--	--
SDev	4.031337	--	--	--	--	--	--
%RSD	.0219310	--	--	--	--	--	--
#1	18385	--	--	--	--	--	--
#2	18379	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4NES

Operator: RJG

Run Time: 09/06/00 10:33:46

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	.05479	2.9399	2.1428	2.0354	.04954	143.34	.05067
SDev	.00047	.0035	.0100	.0008	.00005	.18	.00035
%RSD	.85646	.11797	.46570	.04110	.10335	.12310	.68689
#1	.05446	2.9375	2.1357	2.0360	.04957	143.21	.05042
#2	.05512	2.9424	2.1499	2.0348	.04950	143.46	.05091
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	.52206	.21057	.26039	1.4613	53.645	.64549	1.0532
SDev	.00444	.00240	.00083	.0122	.076	.00353	.0144
%RSD	.85019	1.1390	.32048	.83311	.14123	.54707	1.3715
#1	.51892	.20888	.25980	1.4527	53.592	.64300	1.0430
#2	.52520	.21227	.26098	1.4699	53.699	.64799	1.0634
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	.50948	.56111	.53244	.54199	.54171	.53666	.53834
SDev	.00241	.00574	.00500	.00525	.00430	.00264	.00319
%RSD	.47283	1.0236	.93938	.96842	.79276	.49180	.59265
#1	.50778	.55705	.52891	.53828	.53868	.53479	.53608
#2	.51119	.56517	.53598	.54570	.54475	.53852	.54060
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.1320	2.1607	2.1511	2.2168	.51774	.54005	
SDev	.0163	.0257	.0226	.0067	.00018	.00223	
%RSD	.76628	1.1906	1.0506	.30328	.03502	.41253	
#1	2.1205	2.1425	2.1352	2.2121	.51787	.53847	
#2	2.1436	2.1789	2.1671	2.2216	.51761	.54162	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17341	--	--	--	--	--	--
SDev	128.9406	--	--	--	--	--	--
%RSD	.7435455	--	--	--	--	--	--
#1	17432	--	--	--	--	--	--
#2	17250	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4NED

Operator: RJG

Run Time: 09/06/00 10:37:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05362	2.9136	2.1113	2.0155	.04916	140.76	.04959
SDev	.00076	.0109	.0031	.0013	.00001	.46	.00052
%RSD	1.4095	.37493	.14580	.06498	.01500	.32937	1.0416
#1	.05308	2.9059	2.1091	2.0146	.04917	140.43	.04923
#2	.05415	2.9214	2.1135	2.0165	.04916	141.09	.04996
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	.51423	.20655	.25821	1.4320	53.039	.63624	1.0464
SDev	.00599	.00334	.00138	.0020	.156	.00522	.0164
%RSD	1.1646	1.6180	.53521	.14107	.29498	.82098	1.5698
#1	.51000	.20419	.25723	1.4334	52.929	.63255	1.0348
#2	.51847	.20891	.25919	1.4306	53.150	.63993	1.0580
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	.49891	.55250	.52383	.53338	.54276	.52956	.53396
SDev	.00148	.00925	.00410	.00582	.00554	.00645	.00615
%RSD	.29660	1.6749	.78327	1.0908	1.0206	1.2189	1.1517
#1	.49786	.54596	.52093	.52926	.53885	.52500	.52961
#2	.49995	.55904	.52673	.53749	.54668	.53413	.53831
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0962	2.1241	2.1148	2.1881	.51242	.53060	
SDev	.0312	.0201	.0238	.0026	.00012	.00281	
%RSD	1.4890	.94653	1.1256	.11706	.02284	.53046	
#1	2.0742	2.1098	2.0980	2.1863	.51234	.52861	
#2	2.1183	2.1383	2.1316	2.1899	.51250	.53259	
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	17672	--	--	--	--	--	--
SDev	160.0879	--	--	--	--	--	--
%RSD	.9058766	--	--	--	--	--	--
#1	17785	--	--	--	--	--	--
#2	17559	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4NN

Operator: RJG

Run Time: 09/06/00 10:42:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00044	.36468	.00037	.05046	-.00124	214.28	-.00021
SDev	.00084	.00091	.00128	.00017	.00016	.21	.00007
%RSD	189.01	.24882	351.02	.34130	12.803	.09982	31.528
#1	-.00104	.36404	-.00054	.05034	-.00113	214.44	-.00026
#2	.00015	.36532	.00127	.05058	-.00135	214.13	-.00016
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	-.00178	.00069	.00393	.41566	53.090	.03547	.00280
SDev	.00031	.00099	.00048	.01490	.013	.00006	.00121
%RSD	17.567	142.68	12.155	3.5850	.02475	.16618	43.102
#1	-.00200	-.00001	.00359	.40513	53.081	.03542	.00365
#2	-.00156	.00139	.00427	.42620	53.100	.03551	.00195
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	.00361	.00158	-.00044	.00023	-.00279	.00009	-.00087
SDev	.00055	.00029	.00119	.00089	.00294	.00119	.00018
%RSD	15.296	18.501	268.65	388.95	105.26	1300.4	20.950
#1	.00322	.00178	.00040	.00086	-.00071	-.00075	-.00074
#2	.00400	.00137	-.00129	-.00040	-.00487	.00094	-.00100
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	-.00254	.00193	.00044	.00133	.00308	.00240	
SDev	.00131	.00011	.00051	.00079	.00273	.00017	
%RSD	51.514	5.4725	113.70	59.299	88.691	7.1759	
#1	-.00161	.00201	.00080	.00188	.00115	.00228	
#2	-.00346	.00186	.00009	.00077	.00501	.00253	
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	17282	--	--	--	--	--	--
SDev	67.81181	--	--	--	--	--	--
%RSD	.3923840	--	--	--	--	--	--
#1	17330	--	--	--	--	--	--
#2	17234	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4NQ

Operator: RJG

Run Time: 09/06/00 10:46:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	3.6623	.00142	.02375	-.00075	10.160	.00012
SDev	.00023	.0549	.00049	.00031	.00032	.190	.00004
%RSD	786.92	1.4999	34.586	1.2893	43.472	1.8689	37.126
#1	-.00013	3.7011	.00176	.02397	-.00098	10.294	.00015
#2	.00019	3.6234	.00107	.02354	-.00052	10.026	.00009
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	-.00019	.00411	.01019	3.2639	5.2095	.03036	.00053
SDev	.00012	.00015	.00024	.0617	.0938	.00040	.00066
%RSD	63.218	3.5145	2.4017	1.8899	1.7997	1.3220	124.55
#1	-.00011	.00401	.01036	3.3075	5.2758	.03064	.00099
#2	-.00028	.00421	.01002	3.2203	5.1432	.03008	.00006
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	.00457	.00360	.00228	.00272	-.00044	.00031	.00006
SDev	.00035	.00017	.00231	.00149	.00062	.00113	.00096
%RSD	7.6580	4.8063	101.76	54.752	139.68	368.27	1653.3
#1	.00482	.00347	.00391	.00377	-.00001	.00111	.00074
#2	.00432	.00372	.00064	.00166	-.00088	-.00049	-.00062
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	-.00276	.00547	.00273	.00068	.00766	.01781	
SDev	.00476	.00363	.00084	.00072	.00015	.00045	
%RSD	172.44	66.380	30.712	105.79	1.9614	2.5423	
#1	-.00612	.00804	.00333	.00017	.00777	.01813	
#2	.00061	.00290	.00214	.00120	.00756	.01749	
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	17756	--	--	--	--	--	--
SDev	268.4879	--	--	--	--	--	--
%RSD	1.512135	--	--	--	--	--	--
#1	17566	--	--	--	--	--	--
#2	17945	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4P1

Operator: RJG

Run Time: 09/06/00 10:50:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00021	5.0594	.01072	.03947	-.00052	38.077	.00003
SDev	.00026	.0153	.00060	.00010	.00005	.126	.00006
%RSD	126.28	.30187	5.6079	.25837	9.0271	.33003	182.35

#1	.00002	5.0486	.01030	.03955	-.00056	38.166	-.00001
#2	.00040	5.0702	.01115	.03940	-.00049	37.988	.00008

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00116	.00661	.01514	5.3079	15.847	.09709	.00222
SDev	.00013	.00063	.00043	.0104	.015	.00019	.00031
%RSD	11.242	9.5789	2.8119	.19525	.09287	.19527	13.945

#1	.00107	.00616	.01484	5.3152	15.858	.09695	.00200
#2	.00125	.00706	.01544	5.3006	15.837	.09722	.00244

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	.00923	.00692	.00418	.00509	-.00045	.00032	.00006
SDev	.00060	.00162	.00064	.00011	.00126	.00175	.00158
%RSD	6.5492	23.372	15.341	2.1788	276.57	547.02	2579.5

#1	.00965	.00806	.00373	.00517	-.00134	-.00092	-.00106
#2	.00880	.00578	.00463	.00501	.00043	.00155	.00118

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	-.00201	.00437	.00224	-.00035	.01124	.02162
SDev	.00054	.00026	.00001	.00381	.00058	.00007
%RSD	26.590	5.9067	.27785	1101.1	5.1988	.30591

#1	-.00163	.00418	.00225	.00235	.01082	.02167
#2	-.00239	.00455	.00224	-.00304	.01165	.02158

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	18069	--	--	--	--	--	--
SDev	52.53721	--	--	--	--	--	--
%RSD	.2907556	--	--	--	--	--	--
#1	18106	--	--	--	--	--	--
#2	18032	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4P2

Operator: RJG

Run Time: 09/06/00 10:54:32

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	.00007	7.3533	.00200	.06027	-.00097	77.989	.00231
SDev	.00008	.4475	.00037	.00352	.00103	3.702	.00001
%RSD	119.67	6.0853	18.456	5.8391	106.16	4.7469	.35981
#1	.00012	7.0369	.00174	.05779	-.00024	75.371	.00231
#2	.00001	7.6697	.00227	.06276	-.00170	80.607	.00230
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	.00201	.00996	.03577	8.2415	31.086	.35102	.01298
SDev	.00014	.00040	.00316	.4416	1.622	.01883	.00074
%RSD	6.8433	4.0446	8.8321	5.3584	5.2193	5.3647	5.7126
#1	.00211	.00968	.03353	7.9292	29.938	.33770	.01246
#2	.00191	.01025	.03800	8.5537	32.233	.36433	.01350
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	.01140	.00826	.00580	.00662	-.00183	-.00106	-.00132
SDev	.00124	.00027	.00183	.00131	.00082	.00061	.00013
%RSD	10.871	3.2656	31.587	19.819	44.677	57.524	10.231
#1	.01053	.00807	.00451	.00569	-.00241	-.00063	-.00122
#2	.01228	.00845	.00710	.00755	-.00125	-.00149	-.00141
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	-.00142	.00421	.00234	.00043	.01228	.70454	
SDev	.00218	.00044	.00043	.00142	.00104	.03518	
%RSD	153.78	10.441	18.480	327.38	8.4434	4.9932	
#1	.00012	.00390	.00264	-.00057	.01302	.67967	
#2	-.00295	.00452	.00203	.00144	.01155	.72942	
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	17576	--	--	--	--	--	--
SDev	801.1161	--	--	--	--	--	--
%RSD	4.557979	--	--	--	--	--	--
#1	18143	--	--	--	--	--	--
#2	17010	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4P6

Operator: RJG

Run Time: 09/06/00 10:58:42

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	.00007	10.656	.00934	.16142	-.00092	109.33	.00027
SDev	.00042	.032	.00107	.00077	.00014	1.21	.00016
%RSD	636.57	.29933	11.439	.47928	15.118	1.1098	59.413
#1	-.00023	10.678	.00859	.16197	-.00102	110.19	.00039
#2	.00036	10.633	.01010	.16087	-.00083	108.47	.00016
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	.00588	.01716	.02313	16.544	32.542	1.3798	.00678
SDev	.00008	.00012	.00003	.124	.273	.0066	.00010
%RSD	1.4222	.70217	.11451	.75075	.83911	.47846	1.4341
#1	.00594	.01707	.02311	16.632	32.736	1.3844	.00671
#2	.00582	.01724	.02315	16.456	32.349	1.3751	.00685
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	.02164	.02638	.02199	.02345	.00011	.00154	.00107
SDev	.00106	.00270	.00047	.00059	.00295	.00248	.00067
%RSD	4.9094	10.253	2.1419	2.5009	2744.7	160.84	63.221
#1	.02089	.02447	.02233	.02304	.00219	-.00021	.00059
#2	.02239	.02829	.02166	.02387	-.00198	.00330	.00154
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	-.00365	.00443	.00174	-.00261	.01943	.06992
SDev	.00223	.00349	.00307	.00322	.00237	.00036
%RSD	60.952	78.726	176.28	123.41	12.209	.51445
#1	-.00208	.00690	.00391	-.00489	.01775	.07017
#2	-.00523	.00197	-.00043	-.00033	.02111	.06966
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

09/06/00 11:02:47 AM

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17359	--	--	--	--	--	--
SDev	96.34330	--	--	--	--	--	--
%RSD	.5550057	--	--	--	--	--	--
#1	17291	--	--	--	--	--	--
#2	17427	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3

Operator: RJG

Run Time: 09/06/00 11:02:51

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	1.0558	24.297	.52645	1.9720	2.0608	51.426	.50783
SDev	.0029	.112	.00125	.0131	.0140	.389	.00168
%RSD	.27698	.46076	.23713	.66220	.67747	.75641	.33113
#1	1.0578	24.376	.52733	1.9812	2.0707	51.702	.50902
#2	1.0537	24.218	.52557	1.9628	2.0510	51.151	.50664
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	2.0511	2.0567	1.9731	25.276	50.660	2.0472	2.0564
SDev	.0036	.0032	.0101	.168	.340	.0073	.0139
%RSD	.17627	.15465	.50977	.66439	.67021	.35551	.67709
#1	2.0537	2.0589	1.9802	25.395	50.900	2.0523	2.0465
#2	2.0486	2.0544	1.9660	25.157	50.420	2.0421	2.0662
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	1.9820	.53299	.52510	.52773	.54660	.52199	.53019
SDev	.0146	.00061	.00228	.00172	.00576	.00332	.00030
%RSD	.73781	.11413	.43461	.32682	1.0534	.63613	.05611
#1	1.9923	.53342	.52672	.52895	.55068	.51964	.52998
#2	1.9716	.53256	.52349	.52651	.54253	.52434	.53040
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	.53112	.53948	.53670	1.0387	2.0399	2.0454	
SDev	.00101	.00469	.00279	.0053	.0152	.0099	
%RSD	.19032	.86887	.51982	.50978	.74511	.48279	
#1	.53040	.54279	.53867	1.0425	2.0506	2.0524	
#2	.53183	.53617	.53472	1.0350	2.0291	2.0384	
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	18149	--	--	--	--	--	--
SDev	43.98149	--	--	--	--	--	--
%RSD	.2423403	--	--	--	--	--	--
#1	18180	--	--	--	--	--	--
#2	18118	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3

Operator: RJG

Run Time: 09/06/00 11:07:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	-.01129	-.00137	.00036	.00002	.01167	.00004
SDev	.00017	.00019	.00024	.00026	.00041	.01215	.00003
%RSD	141.14	1.7047	17.682	69.991	2254.3	104.09	63.890
#1	.00024	-.01116	-.00154	.00018	-.00027	.00308	.00002
#2	.00000	-.01143	-.00120	.00054	.00031	.02026	.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00064	.00033	.00183	-.00214	.01145	.00049	.00601
SDev	.00063	.00004	.00007	.00631	.00243	.00023	.00270
%RSD	99.021	11.202	3.7112	294.67	21.217	46.849	44.907
#1	-.00109	.00030	.00188	-.00660	.00974	.00033	.00791
#2	-.00019	.00036	.00179	.00232	.01317	.00066	.00410
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00031	.00259	-.00016	.00075	.00070	-.00159	-.00083
SDev	.00075	.00360	.00172	.00005	.00053	.00029	.00002
%RSD	245.19	139.07	1059.1	6.7239	74.748	18.302	2.3031
#1	-.00022	.00514	-.00138	.00079	.00033	-.00139	-.00081
#2	.00084	.00004	.00106	.00072	.00108	-.00180	-.00084
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00039	.00060	.00053	.00494	-.00096	.00001	
SDev	.00260	.00184	.00209	.00002	.00037	.00029	
%RSD	661.80	309.33	396.74	.42031	38.112	3761.8	
#1	.00223	.00190	.00201	.00492	-.00122	-.00020	
#2	-.00145	-.00071	-.00095	.00495	-.00070	.00021	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18302	--	--	--	--	--	--
SDev	21.07233	--	--	--	--	--	--
%RSD	.1151390	--	--	--	--	--	--
#1	18287	--	--	--	--	--	--
#2	18317	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4P8

Operator: RJG

Run Time: 09/06/00 11:11:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00005	.19026	.00024	.02265	-.00149	119.64	-.00014
SDev	.00052	.00157	.00061	.00029	.00025	.74	.00030
%RSD	958.91	.82689	249.13	1.2984	16.562	.61436	213.67

#1	-.00032	.18914	.00067	.02244	-.00131	119.12	-.00035
#2	.00042	.19137	-.00019	.02286	-.00166	120.16	.00007

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00141	.00017	.00536	.96328	57.962	.32558	.00124
SDev	.00020	.00012	.00062	.02595	.408	.00325	.00012
%RSD	13.986	67.542	11.524	2.6937	.70355	.99678	9.8649

#1	-.00154	.00009	.00492	.94494	57.673	.32328	.00115
#2	-.00127	.00025	.00580	.98163	58.250	.32787	.00132

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	.00051	.00344	-.00003	.00112	-.00207	-.00073	-.00118
SDev	.00069	.00105	.00069	.00011	.00028	.00009	.00003
%RSD	133.44	30.579	2124.9	9.6681	13.329	12.942	2.4228

#1	.00003	.00419	-.00052	.00105	-.00187	-.00080	-.00116
#2	.00100	.00270	.00045	.00120	-.00226	-.00067	-.00120

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	-.00418	.00390	.00121	-.00085	.00246	.00188
SDev	.00184	.00305	.00265	.00289	.00083	.00007
%RSD	44.066	78.221	219.05	340.74	33.546	3.5430

#1	-.00548	.00174	-.00066	.00120	.00188	.00183
#2	-.00288	.00606	.00308	-.00289	.00305	.00192

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	17231	--	--	--	--	--	--
SDev	171.5438	--	--	--	--	--	--
%RSD	.9955795	--	--	--	--	--	--
#1	17352	--	--	--	--	--	--
#2	17109	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4PA

Operator: RJG

Run Time: 09/06/00 11:15:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00011	2.1067	.00256	.04816	-.00083	18.248	.00014
SDev	.00054	.0360	.00144	.00074	.00006	.092	.00010
%RSD	515.80	1.7109	56.378	1.5384	6.7773	.50390	73.147
#1	.00049	2.0812	.00358	.04764	-.00079	18.183	.00007
#2	-.00028	2.1321	.00154	.04869	-.00087	18.313	.00021
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	-.00057	.00247	.00671	2.7437	6.5226	.12590	.00090
SDev	.00037	.00040	.00014	.0237	.0587	.00149	.00056
%RSD	64.450	16.265	2.1414	.86372	.89931	1.1816	62.746
#1	-.00031	.00275	.00681	2.7270	6.4812	.12484	.00130
#2	-.00083	.00219	.00660	2.7605	6.5641	.12695	.00050
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	.00432	.00430	.00190	.00270	-.00098	-.00228	-.00184
SDev	.00099	.00175	.00050	.00025	.00077	.00133	.00114
%RSD	22.807	40.636	26.457	9.1191	78.524	58.359	61.915
#1	.00502	.00553	.00154	.00287	-.00043	-.00134	-.00104
#2	.00363	.00306	.00226	.00252	-.00152	-.00322	-.00265
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	-.00440	.00366	.00098	-.00278	.00634	.02359	
SDev	.00206	.00029	.00088	.00145	.00032	.00013	
%RSD	46.683	8.0009	90.038	52.135	4.9701	.55978	
#1	-.00295	.00387	.00160	-.00176	.00656	.02349	
#2	-.00586	.00346	.00036	-.00381	.00612	.02368	
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	17941	--	--	--	--	--	--
SDev	119.5715	--	--	--	--	--	--
%RSD	.6664854	--	--	--	--	--	--
#1	18025	--	--	--	--	--	--
#2	17856	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4PD

Operator: RJG

Run Time: 09/06/00 11:19:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00040	.01067	.00131	.02306	-.00104	77.188	-.00023
SDev	.00041	.00594	.00065	.00013	.00012	.346	.00002
%RSD	102.02	55.661	49.679	.56288	11.623	.44852	10.079
#1	-.00069	.01487	.00178	.02315	-.00113	77.433	-.00025
#2	-.00011	.00647	.00085	.02297	-.00096	76.943	-.00022
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	-.00102	-.00071	.00520	-.02555	10.954	.00961	.00099
SDev	.00020	.00048	.00003	.00339	.037	.00004	.00038
%RSD	20.133	67.180	.61777	13.269	.33323	.38395	38.672
#1	-.00116	-.00104	.00517	-.02795	10.980	.00959	.00072
#2	-.00087	-.00037	.00522	-.02315	10.928	.00964	.00126
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	.00173	.00361	-.00299	-.00079	-.00407	-.00039	-.00162
SDev	.00039	.00005	.00138	.00093	.00047	.00068	.00061
%RSD	22.827	1.4039	45.990	117.76	11.522	174.64	37.845
#1	.00145	.00357	-.00397	-.00145	-.00440	-.00087	-.00205
#2	.00200	.00365	-.00202	-.00013	-.00374	.00009	-.00118
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	-.00434	.00241	.00016	.00054	.00012	.00156	
SDev	.00138	.00087	.00012	.00128	.00001	.00016	
%RSD	31.836	36.077	74.541	235.32	4.6088	10.490	
#1	-.00532	.00302	.00024	.00145	.00012	.00167	
#2	-.00337	.00179	.00008	-.00036	.00013	.00144	
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	17798	--	--	--	--	--	--
SDev	37.40622	--	--	--	--	--	--
%RSD	.2101733	--	--	--	--	--	--
#1	17824	--	--	--	--	--	--
#2	17771	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4PF

Operator: RJG

Run Time: 09/06/00 11:23:37

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	.00014	.06120	.00098	.01569	-.00154	21.763	-.00007
SDev	.00060	.00375	.00036	.00002	.00013	.028	.00019
%RSD	416.84	6.1295	36.996	.10870	8.6180	.12817	259.96

#1	-.00028	.06386	.00124	.01567	-.00144	21.743	-.00021
#2	.00057	.05855	.00072	.01570	-.00163	21.782	.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
Avge	-.00068	.00003	.00639	.23835	8.3350	.03641	-.00026
SDev	.00010	.00071	.00077	.01172	.0191	.00028	.00003
%RSD	14.317	2089.5	12.116	4.9161	.22926	.75668	10.483

#1	-.00075	-.00047	.00584	.23007	8.3214	.03622	-.00027
#2	-.00061	.00054	.00693	.24664	8.3485	.03661	-.00024

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	.00228	.00714	-.00208	.00099	-.00290	.00029	-.00077
SDev	.00083	.00050	.00112	.00091	.00194	.00100	.00002
%RSD	36.287	7.0421	53.762	91.991	66.965	345.11	2.4189

#1	.00170	.00749	-.00129	.00164	-.00428	.00100	-.00076
#2	.00287	.00678	-.00287	.00035	-.00153	-.00042	-.00079

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	-.00433	.00390	.00116	-.00119	.00204	.00090
SDev	.00068	.00351	.00257	.00188	.00023	.00008
%RSD	15.624	90.006	220.91	157.47	11.342	9.3264

#1	-.00385	.00639	.00298	-.00253	.00188	.00096
#2	-.00481	.00142	-.00065	.00014	.00220	.00084

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

09/06/00 11:27:42 AM

672.541
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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	17349	--	--	--	--	--	--
SDev	152.9118	--	--	--	--	--	--
%RSD	.8814086	--	--	--	--	--	--
#1	17457	--	--	--	--	--	--
#2	17240	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4PL

Operator: RJG

Run Time: 09/06/00 11:27:46

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	.00016	10.540	.00827	.13962	-.00065	17.893	.00004
SDev	.00021	.027	.00048	.00144	.00008	.090	.00009
%RSD	129.09	.25840	5.8155	1.0287	11.620	.50432	213.30
#1	.00001	10.559	.00793	.14063	-.00070	17.957	.00010
#2	.00031	10.520	.00861	.13860	-.00060	17.830	-.00002
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	.00451	.01906	.02800	14.776	7.5473	.21404	.00088
SDev	.00020	.00051	.00015	.082	.0408	.00008	.00010
%RSD	4.4822	2.6605	.54944	.55702	.54076	.03585	10.789
#1	.00437	.01870	.02789	14.834	7.5762	.21409	.00082
#2	.00466	.01942	.02811	14.717	7.5185	.21399	.00095
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	.01515	.03111	.02522	.02718	-.00188	.00004	-.00060
SDev	.00060	.00158	.00019	.00065	.00073	.00059	.00015
%RSD	3.9549	5.0882	.75821	2.4082	38.922	1399.2	25.170
#1	.01473	.03222	.02536	.02765	-.00239	.00046	-.00049
#2	.01558	.02999	.02509	.02672	-.00136	-.00037	-.00070
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	-.00115	.00492	.00290	-.00533	.02017	.23277	
SDev	.00416	.00200	.00005	.00040	.00006	.00003	
%RSD	361.72	40.722	1.6967	7.5219	.27702	.01208	
#1	.00179	.00350	.00293	-.00561	.02013	.23275	
#2	-.00409	.00634	.00286	-.00504	.02021	.23279	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17789	--	--	--	--	--	--
SDev	88.52921	--	--	--	--	--	--
%RSD	.4976613	--	--	--	--	--	--
#1	17852	--	--	--	--	--	--
#2	17726	--	--	--	--	--	--

Method: METTRA Sample Name: DJ4PM

Operator: RJG

Run Time: 09/06/00 11:31:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00014	.94810	.00159	.01795	-.00119	7.7800	-.00006
SDev	.00001	.00426	.00041	.00011	.00006	.0104	.00004
%RSD	5.4049	.44878	25.737	.61073	4.8756	.13306	62.138

#1	-.00013	.94509	.00188	.01787	-.00115	7.7727	-.00008
#2	-.00014	.95110	.00130	.01803	-.00123	7.7873	-.00003

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00043	.00105	.01145	1.6339	3.0863	.17402	-.00102
SDev	.00044	.00002	.00026	.0228	.0061	.00074	.00009
%RSD	101.42	1.7949	2.2708	1.3930	.19649	.42479	8.4984

#1	.00012	.00106	.01127	1.6178	3.0820	.17349	-.00108
#2	.00075	.00103	.01164	1.6500	3.0906	.17454	-.00096

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	.00509	.00478	.00216	.00303	-.00177	-.00079	-.00112
SDev	.00055	.00175	.00120	.00022	.00460	.00063	.00111
%RSD	10.822	36.580	55.492	7.1473	260.65	79.496	99.658

#1	.00470	.00602	.00131	.00288	-.00502	-.00035	-.00190
#2	.00548	.00355	.00301	.00319	.00149	-.00124	-.00033

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	-.00486	.00439	.00131	-.00138	-.00063	.01933
SDev	.00629	.00067	.00165	.00048	.00001	.00013
%RSD	129.46	15.310	125.55	34.705	1.9552	.65179

#1	-.00041	.00392	.00247	-.00172	-.00064	.01924
#2	-.00930	.00487	.00015	-.00104	-.00062	.01942

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17828	--	--	--	--	--	--
SDev	96.62642	--	--	--	--	--	--
%RSD	.5419962	--	--	--	--	--	--
#1	17896	--	--	--	--	--	--
#2	17760	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-4

Operator: RJG

Run Time: 09/06/00 11:36:05

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	1.0560	24.230	.52664	1.9788	2.0877	52.010	.50792
SDev	.0010	.027	.00209	.0094	.0143	.332	.00018
%RSD	.09149	.11208	.39741	.47547	.68494	.63767	.03615
#1	1.0553	24.249	.52812	1.9854	2.0978	52.245	.50805
#2	1.0567	24.211	.52516	1.9721	2.0776	51.776	.50779
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	2.0428	2.0508	1.9814	25.407	51.212	2.0555	2.0499
SDev	.0024	.0040	.0050	.192	.214	.0012	.0212
%RSD	.11859	.19588	.25262	.75612	.41691	.05713	1.0337
#1	2.0410	2.0479	1.9849	25.543	51.363	2.0563	2.0349
#2	2.0445	2.0536	1.9779	25.271	51.061	2.0546	2.0649
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	1.9901	.53853	.52582	.53006	.55032	.52490	.53337
SDev	.0215	.00403	.00501	.00200	.00083	.00390	.00288
%RSD	1.0792	.74803	.95320	.37763	.15027	.74375	.53984
#1	2.0053	.53568	.52937	.53147	.54974	.52214	.53133
#2	1.9750	.54138	.52228	.52864	.55091	.52766	.53540
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	.52994	.54388	.53924	1.0461	2.0545	2.0520	
SDev	.00885	.00213	.00437	.0103	.0096	.0116	
%RSD	1.6708	.39215	.81060	.98564	.46892	.56531	
#1	.52368	.54237	.53615	1.0534	2.0613	2.0602	
#2	.53620	.54539	.54233	1.0389	2.0476	2.0438	
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	18178	--	--	--	--	--	--
SDev	74.98785	--	--	--	--	--	--
%RSD	.4125238	--	--	--	--	--	--
#1	18231	--	--	--	--	--	--
#2	18125	--	--	--	--	--	--

Method: METTRA Sample Name: CCB4

Operator: RJG

Run Time: 09/06/00 11:40:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00008	.00772	-.00089	.00041	.00043	.00355	.00021
SDev	.00087	.00402	.00174	.00049	.00079	.01626	.00014
%RSD	1073.7	52.080	195.44	118.43	182.35	457.50	68.372
#1	-.00069	.01057	-.00212	.00007	-.00012	-.00794	.00011
#2	.00053	.00488	.00034	.00076	.00099	.01505	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00065	.00021	.00039	-.00206	.01231	.00052	.00614
SDev	.00033	.00059	.00051	.00963	.01690	.00054	.00191
%RSD	50.528	285.05	133.14	467.07	137.24	102.61	31.106
#1	-.00088	-.00021	.00002	-.00887	.00036	.00014	.00749
#2	-.00042	.00062	.00075	.00475	.02426	.00090	.00479
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	.00078	.00283	-.00014	.00085	-.00102	-.00030	-.00054
SDev	.00170	.00197	.00021	.00080	.00227	.00103	.00007
%RSD	218.50	69.773	156.34	94.000	222.83	344.58	12.824
#1	-.00042	.00143	-.00029	.00028	.00059	-.00103	-.00049
#2	.00198	.00422	.00001	.00141	-.00262	.00043	-.00059
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	.00027	-.00135	-.00081	.00298	-.00149	.00003	
SDev	.00163	.00076	.00105	.00119	.00107	.00041	
%RSD	604.37	56.495	129.56	40.058	71.575	1350.8	
#1	-.00088	-.00189	-.00155	.00382	-.00225	-.00026	
#2	.00142	-.00081	-.00007	.00213	-.00074	.00032	
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	18755	--	--	--	--	--	--
SDev	133.2192	--	--	--	--	--	--
%RSD	.7103054	--	--	--	--	--	--
#1	18661	--	--	--	--	--	--
#2	18849	--	--	--	--	--	--

Method: METTRA Sample Name: DJVGEB Operator: RJG
Run Time: 09/06/00 11:44:24
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	.00044	.01199	.00016	.00021	-.00107	.20912	.00005
SDev	.00106	.00883	.00225	.00005	.00005	.00497	.00025
%RSD	240.54	73.624	1407.6	24.519	5.1160	2.3782	514.40

#1	-.00031	.01823	.00175	.00017	-.00103	.20561	-.00013
#2	.00119	.00575	-.00143	.00024	-.00111	.21264	.00022

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	-.00090	.00058	.00146	.00878	.00279	.00034	.00108
SDev	.00051	.00080	.00046	.00640	.00622	.00008	.00040
%RSD	56.465	137.14	31.117	72.959	223.12	25.077	37.247

#1	-.00126	.00002	.00114	.00425	-.00161	.00028	.00079
#2	-.00054	.00115	.00178	.01331	.00719	.00039	.00136

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	.00090	.00605	-.00042	.00174	-.00409	-.00068	-.00182
SDev	.00182	.00417	.00052	.00104	.00337	.00009	.00118
%RSD	201.39	68.902	124.73	59.932	82.466	13.130	65.102

#1	-.00038	.00310	-.00005	.00100	-.00171	-.00062	-.00098
#2	.00219	.00899	-.00079	.00247	-.00648	-.00075	-.00265

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	-.00650	.00521	.00131	-.00225	-.00133	.00480
SDev	.00183	.00007	.00056	.00158	.00057	.00001
%RSD	28.176	1.4094	42.813	70.461	42.828	.11923

#1	-.00780	.00526	.00091	-.00337	-.00173	.00480
#2	-.00521	.00516	.00171	-.00113	-.00092	.00480

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

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17862	--	--	--	--	--	--
SDev	122.8598	--	--	--	--	--	--
%RSD	.6878152	--	--	--	--	--	--
#1	17949	--	--	--	--	--	--
#2	17775	--	--	--	--	--	--

Method: METTRA Sample Name: DJVGEC Operator: RJG
Run Time: 09/06/00 11:48:33
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	.05348	1.9071	2.1569	2.0421	.05237	L.01204	.05352
SDev	.00140	.0267	.0342	.0235	.00029	.00155	.00093
%RSD	2.6245	1.3979	1.5860	1.1523	.56187	12.860	1.7380
#1	.05249	1.8882	2.1327	2.0254	.05216	L.01094	.05286
#2	.05447	1.9259	2.1811	2.0587	.05258	L.01313	.05417
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	.53557	.21600	.25339	1.0605	L-.00102	.53231	L-.00006
SDev	.00890	.00440	.00327	.0013	.00212	.00760	.00049
%RSD	1.6615	2.0360	1.2895	.12332	207.98	1.4284	806.62
#1	.52928	.21289	.25108	1.0595	L-.00252	.52694	L.00028
#2	.54187	.21911	.25570	1.0614	L.00048	.53769	L-.00040
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	.52632	.54745	.53083	.53636	.00053	-.00135	L-.00072
SDev	.00522	.01097	.00755	.00869	.00339	.00003	.00111
%RSD	.99261	2.0038	1.4227	1.6202	637.03	2.4193	153.05
#1	.52263	.53969	.52549	.53022	.00293	-.00137	L.00006
#2	.53002	.55521	.53617	.54251	-.00186	-.00133	L-.00150
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0911	2.1306	2.1175	2.1137	.53002	.54337	
SDev	.0390	.0446	.0428	.0296	.00655	.00702	
%RSD	1.8671	2.0947	2.0199	1.3991	1.2359	1.2924	
#1	2.0635	2.0991	2.0872	2.0928	.52539	.53841	
#2	2.1187	2.1622	2.1477	2.1347	.53466	.54834	
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	17742	--	--	--	--	--	--
SDev	206.0153	--	--	--	--	--	--
%RSD	1.161197	--	--	--	--	--	--
#1	17887	--	--	--	--	--	--
#2	17596	--	--	--	--	--	--

Method: METTRA Sample Name: DJP8W

Operator: RJG

Run Time: 09/06/00 11:52:43

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
Avge	.00366	171.12	.07496	2.2012	.00388	593.91	.00242
SDev	.00068	1.46	.00126	.0263	.00011	6.59	.00042
%RSD	18.605	.85572	1.6829	1.1949	2.7830	1.1096	17.264
#1	.00318	172.16	.07585	2.2198	.00395	598.57	.00213
#2	.00415	170.09	.07406	2.1826	.00380	589.25	.00272
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	.05519	.19987	.36235	151.12	29.426	3.0643	.00308
SDev	.00046	.00056	.00367	1.18	.328	.0260	.00017
%RSD	.83385	.28118	1.0122	.78390	1.1143	.84721	5.5793
#1	.05486	.20027	.36495	151.96	29.658	3.0827	.00320
#2	.05551	.19948	.35976	150.28	29.195	3.0460	.00295
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	.11797	.61074	.59869	.60270	.01717	.01113	.01314
SDev	.00090	.00258	.00480	.00234	.00577	.00039	.00218
%RSD	.76076	.42275	.80117	.38817	33.579	3.4970	16.589
#1	.11860	.60891	.60208	.60436	.02125	.01140	.01468
#2	.11733	.61257	.59530	.60105	.01309	.01085	.01160
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	-.00643	.00687	.00244	.01235	.31440	1.0170	
SDev	.00335	.00168	.00000	.00267	.00586	.0081	
%RSD	52.121	24.466	.17604	21.631	1.8645	.79675	
#1	-.00880	.00805	.00244	.01046	.31854	1.0228	
#2	-.00406	.00568	.00244	.01424	.31025	1.0113	
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	18014	--	--	--	--	--	--
SDev	68.12946	--	--	--	--	--	--
%RSD	.3781939	--	--	--	--	--	--
#1	17966	--	--	--	--	--	--
#2	18063	--	--	--	--	--	--

Method: METTRA Sample Name: DJP8WP5 Operator: RJG
 Run Time: 09/06/00 11:56:52
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00065	33.446	.01518	.44944	.00033	129.89	.00032
SDev	.00057	.053	.00152	.00137	.00016	1.23	.00003
%RSD	86.758	.15957	10.012	.30452	48.211	.94979	7.7383

#1	.00106	33.483	.01625	.45041	.00022	130.77	.00030
#2	.00025	33.408	.01410	.44847	.00045	129.02	.00034

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01081	.04095	.06978	30.721	5.9591	.62268	.00013
SDev	.00011	.00051	.00001	.202	.0426	.00311	.00007
%RSD	1.0374	1.2434	.01347	.65798	.71465	.50012	50.513

#1	.01073	.04059	.06977	30.864	5.9893	.62488	.00009
#2	.01089	.04131	.06978	30.578	5.9290	.62048	.00018

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02414	.12329	.12359	.12349	.00387	.00103	.00198
SDev	.00078	.00154	.00324	.00165	.00055	.00031	.00039
%RSD	3.2404	1.2520	2.6218	1.3339	14.257	29.932	19.703

#1	.02470	.12220	.12588	.12465	.00426	.00125	.00225
#2	.02359	.12438	.12130	.12232	.00348	.00081	.00170

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00046	.00088	.00043	.00392	.06127	.20787
SDev	.00029	.00046	.00021	.00295	.00359	.00220
%RSD	62.739	51.850	48.000	75.155	5.8595	1.0575

#1	-.00026	.00056	.00029	.00600	.06381	.20942
#2	-.00066	.00120	.00058	.00184	.05873	.20631

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18395	--	--	--	--	--	--
SDev	23.90076	--	--	--	--	--	--
%RSD	.1299325	--	--	--	--	--	--
#1	18378	--	--	--	--	--	--
#2	18412	--	--	--	--	--	--

Method: METTRA Sample Name: DJP8WS Operator: RJG
 Run Time: 09/06/00 12:01:02
 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	.05472	178.30	2.1137	3.5886	.05468	418.09	.04941
SDev	.00089	1.81	.0088	.0208	.00002	2.08	.00118
%RSD	1.6233	1.0171	.41662	.57970	.02721	.49787	2.3959
#1	.05409	177.02	2.1074	3.5739	.05469	416.62	.04857
#2	.05535	179.59	2.1199	3.6033	.05467	419.56	.05025
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	.54479	.39068	.53848	175.11	26.487	3.7363	.00498
SDev	.00616	.00467	.00426	1.46	.164	.0329	.00120
%RSD	1.1314	1.1959	.79204	.83488	.61857	.88080	24.055
#1	.54043	.38738	.53546	174.08	26.371	3.7130	.00582
#2	.54915	.39399	.54149	176.15	26.603	3.7595	.00413
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	.62088	.93701	.90537	.91591	.00975	.00923	.00940
SDev	.00032	.00758	.01223	.01068	.00066	.00028	.00040
%RSD	.05119	.80877	1.3511	1.1664	6.7237	2.9897	4.2793
#1	.62065	.93165	.89672	.90835	.00929	.00903	.00912
#2	.62110	.94237	.91402	.92346	.01021	.00942	.00969
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	1.9507	2.0293	2.0031	2.0797	.84328	1.2170	
SDev	.0244	.0351	.0315	.0088	.00370	.0088	
%RSD	1.2511	1.7292	1.5742	.42320	.43902	.72469	
#1	1.9334	2.0045	1.9808	2.0735	.84067	1.2108	
#2	1.9680	2.0541	2.0254	2.0859	.84590	1.2232	
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	17837	--	--	--	--	--	--
SDev	149.3059	--	--	--	--	--	--
%RSD	.8370348	--	--	--	--	--	--
#1	17943	--	--	--	--	--	--
#2	17732	--	--	--	--	--	--

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Method: METTRA Sample Name: DJP8WD

Operator: RJG

Run Time: 09/06/00 12:05:11

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	.05536	190.98	2.1177	3.9943	.05345	515.99	.04914
SDev	.00080	2.34	.0157	.0369	.00007	2.94	.00111
%RSD	1.4443	1.2262	.74159	.92272	.13657	.56916	2.2485
#1	.05480	189.32	2.1066	3.9683	.05340	513.91	.04835
#2	.05593	192.63	2.1288	4.0204	.05350	518.06	.04992
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	.55367	.42313	.57401	167.38	24.170	4.9637	.00346
SDev	.00513	.00478	.00634	1.76	.180	.0501	.00014
%RSD	.92599	1.1289	1.1038	1.0516	.74396	1.0100	4.0151
#1	.55004	.41975	.56953	166.13	24.042	4.9282	.00337
#2	.55730	.42650	.57849	168.62	24.297	4.9991	.00356
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	.60998	1.0391	1.0126	1.0214	.01771	.00898	.01189
SDev	.00493	.0160	.0089	.0113	.00302	.00199	.00032
%RSD	.80891	1.5369	.88384	1.1051	17.055	22.152	2.7018
#1	.60649	1.0278	1.0063	1.0134	.01985	.00758	.01166
#2	.61347	1.0504	1.0190	1.0294	.01558	.01039	.01212
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	1.9671	2.0498	2.0222	2.0950	.85539	1.3079	
SDev	.0238	.0152	.0181	.0243	.00422	.0117	
%RSD	1.2078	.74178	.89274	1.1615	.49343	.89435	
#1	1.9503	2.0390	2.0095	2.0778	.85241	1.2996	
#2	1.9839	2.0605	2.0350	2.1122	.85838	1.3161	
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	17950	--	--	--	--	--	--
SDev	173.0285	--	--	--	--	--	--
%RSD	.9639201	--	--	--	--	--	--
#1	18073	--	--	--	--	--	--
#2	17828	--	--	--	--	--	--

Method: METTRA Sample Name: DJP90

Operator: RJG

Run Time: 09/06/00 12:09:21

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	.02357	170.10	.07062	4.6313	.00502	H1071.1	.02012
SDev	.00038	.36	.00044	.0107	.00012	5.3	.00008
%RSD	1.6074	.21321	.62378	.23141	2.3051	.49726	.40837
#1	.02383	169.84	.07093	4.6389	.00510	H1074.9	.02018
#2	.02330	170.35	.07031	4.6237	.00494	H1067.3	.02006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	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	.05333	.64272	2.4578	170.50	20.950	3.2624	.00942
SDev	.00069	.00082	.0054	.07	.090	.0048	.00222
%RSD	1.2867	.12720	.21927	.03822	.43135	.14591	23.575
#1	.05381	.64330	2.4616	170.46	21.014	3.2657	.01098
#2	.05284	.64214	2.4539	170.55	20.887	3.2590	.00785
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	.15338	7.6970	7.2704	H7.4124	.27770	.26253	.26758
SDev	.00134	.0030	.0560	.0384	.00841	.00178	.00161
%RSD	.87565	.03841	.77070	.51748	3.0274	.67697	.60326
#1	.15432	7.6949	7.2307	H7.3853	.27176	.26378	.26644
#2	.15243	7.6991	7.3100	H7.4395	.28365	.26127	.26872
Errors	LC Pass	NOCHECK	NOCHECK	LC High	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	-.00083	.00500	.00306	.01109	.26032	H5.4266	
SDev	.00063	.00415	.00256	.00035	.00145	.0135	
%RSD	76.850	82.982	83.532	3.1551	.55638	.24785	
#1	-.00038	.00207	.00125	.01134	.26134	H5.4361	
#2	-.00127	.00793	.00487	.01084	.25929	H5.4171	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC High	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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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	18048	--	--	--	--	--	--
SDev	15.59088	--	--	--	--	--	--
%RSD	.0863853	--	--	--	--	--	--
#1	18037	--	--	--	--	--	--
#2	18059	--	--	--	--	--	--

Method: METTRA Sample Name: DJP91

Operator: RJG

Run Time: 09/06/00 12:13:30

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	.01543	195.33	.09272	3.2733	.00615	H681.31	.01323
SDev	.00038	1.11	.00092	.0048	.00005	.10	.00069
%RSD	2.4677	.56725	.98874	.14658	.73196	.01498	5.2427
#1	.01516	194.55	.09337	3.2700	.00619	H681.24	.01274
#2	.01570	196.12	.09207	3.2767	.00612	H681.38	.01372
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	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	.06774	.51993	1.8153	197.87	24.506	3.7866	.00804
SDev	.00029	.00279	.0058	.49	.034	.0157	.00084
%RSD	.42767	.53716	.31909	.24742	.13884	.41574	10.374
#1	.06754	.51795	1.8112	197.53	24.482	3.7755	.00864
#2	.06795	.52190	1.8194	198.22	24.530	3.7977	.00745
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	.17290	4.5559	4.3402	4.4120	.12802	.11719	.12080
SDev	.00120	.0111	.0083	.0092	.00027	.00010	.00015
%RSD	.69091	.24456	.19084	.20932	.21301	.08097	.12757
#1	.17374	4.5480	4.3343	4.4055	.12783	.11712	.12069
#2	.17205	4.5638	4.3461	4.4186	.12821	.11726	.12091
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	-.00425	.00349	.00091	.01175	.35685	3.3799	
SDev	.00199	.00108	.00139	.00286	.00137	.0054	
%RSD	46.834	31.093	152.64	24.392	.38530	.16055	
#1	-.00284	.00425	.00189	.00972	.35782	3.3760	
#2	-.00566	.00272	-.00007	.01377	.35588	3.3837	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18403	--	--	--	--	--	--
SDev	51.72375	--	--	--	--	--	--
%RSD	.2810573	--	--	--	--	--	--
#1	18440	--	--	--	--	--	--
#2	18367	--	--	--	--	--	--

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Method: METTRA Sample Name: DJP92

Operator: RJG

Run Time: 09/06/00 12:17:40

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	.01592	205.31	.13025	2.8235	.00497	465.70	.01454
SDev	.00010	1.22	.00229	.0074	.00001	1.02	.00104
%RSD	.65495	.59480	1.7616	.26201	.27492	.21800	7.1493
#1	.01599	204.45	.12863	2.8183	.00498	466.42	.01381
#2	.01585	206.18	.13187	2.8287	.00496	464.99	.01528
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	.07991	.64193	1.8043	285.54	28.121	4.2992	.01100
SDev	.00085	.00287	.0069	.66	.001	.0181	.00084
%RSD	1.0657	.44772	.38134	.23178	.00479	.42160	7.5947
#1	.07931	.63990	1.7994	285.07	28.120	4.2864	.01159
#2	.08051	.64396	1.8091	286.01	28.122	4.3120	.01041
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	.19794	6.6331	6.3333	H6.4331	.11990	.11386	.11587
SDev	.00009	.0294	.0471	.0412	.00445	.00052	.00183
%RSD	.04723	.44274	.74314	.64000	3.7130	.46091	1.5816
#1	.19801	6.6123	6.3000	H6.4040	.11676	.11349	.11457
#2	.19787	6.6539	6.3666	H6.4622	.12305	.11423	.11717
Errors	LC Pass	NOCHECK	NOCHECK	LC High	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	-.00564	.00015	-.00178	.01091	.39523	4.1912	
SDev	.00678	.00032	.00247	.00469	.00016	.0047	
%RSD	120.22	216.87	138.59	42.936	.04031	.11182	
#1	-.00085	.00037	-.00004	.01423	.39534	4.1878	
#2	-.01044	-.00008	-.00353	.00760	.39512	4.1945	
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	18145	--	--	--	--	--	--
SDev	54.80078	--	--	--	--	--	--
%RSD	.3020166	--	--	--	--	--	--
#1	18184	--	--	--	--	--	--
#2	18106	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-5 Operator: RJG
Run Time: 09/06/00 12:21:49
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	1.0681	24.451	.53645	2.0084	2.1504	53.469	.51669
SDev	.0075	.132	.00532	.0123	.0349	.840	.00562
%RSD	.70347	.54062	.99270	.61054	1.6234	1.5707	1.0874
#1	1.0734	24.545	.54022	2.0171	2.1751	54.063	.52066
#2	1.0628	24.358	.53268	1.9997	2.1257	52.875	.51272
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	2.0693	2.0806	2.0125	26.065	52.484	2.0879	2.0692
SDev	.0205	.0214	.0124	.297	.606	.0220	.0033
%RSD	.98847	1.0303	.61703	1.1413	1.1554	1.0540	.15820
#1	2.0837	2.0957	2.0213	26.275	52.913	2.1034	2.0715
#2	2.0548	2.0654	2.0037	25.854	52.055	2.0723	2.0669
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	2.0485	.54236	.53688	.53870	.56221	.53169	.54185
SDev	.0310	.00729	.01005	.00913	.01013	.00717	.00815
%RSD	1.5132	1.3436	1.8727	1.6953	1.8009	1.3477	1.5043
#1	2.0704	.54752	.54398	.54516	.56937	.53675	.54761
#2	2.0266	.53721	.52977	.53225	.55505	.52662	.53608
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	.53284	.55043	.54457	1.0747	2.1012	2.0855	
SDev	.00299	.01429	.01053	.0084	.0290	.0262	
%RSD	.56030	2.5963	1.9329	.78032	1.3785	1.2562	
#1	.53495	.56054	H.55202	1.0806	2.1217	2.1040	
#2	.53073	.54033	.53713	1.0687	2.0807	2.0670	
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	18176	--	--	--	--	--	--
SDev	172.3228	--	--	--	--	--	--
%RSD	.9480863	--	--	--	--	--	--
#1	18054	--	--	--	--	--	--
#2	18298	--	--	--	--	--	--

Method: METTRA Sample Name: CCB5

Operator: RJG

Run Time: 09/06/00 12:25:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	.02322	-.00085	.00050	.00013	.03261	.00005
SDev	.00025	.00361	.00125	.00015	.00008	.00609	.00002
%RSD	70.247	15.548	147.19	29.417	62.999	18.667	43.588
#1	.00018	.02066	-.00174	.00039	.00007	.02831	.00006
#2	.00053	.02577	.00003	.00060	.00019	.03692	.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	-.00077	.00051	.00035	.00671	.01029	.00061	.00661
SDev	.00030	.00049	.00049	.01723	.00447	.00015	.00192
%RSD	38.410	95.799	137.47	256.77	43.509	24.740	28.957
#1	-.00056	.00017	.00001	-.00547	.00712	.00051	.00797
#2	-.00098	.00086	.00070	.01889	.01345	.00072	.00526
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	.00062	.00342	-.00001	.00113	.00107	.00078	.00088
SDev	.00049	.00069	.00039	.00003	.00072	.00083	.00032
%RSD	79.744	20.191	2659.6	2.9056	67.541	106.75	36.013
#1	.00027	.00293	.00026	.00115	.00158	.00019	.00065
#2	.00097	.00391	-.00029	.00111	.00056	.00137	.00110
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	.00251	-.00031	.00063	.00697	-.00073	.00029	
SDev	.00192	.00056	.00101	.00006	.00036	.00015	
%RSD	76.326	182.71	160.43	.89420	50.126	52.643	
#1	.00116	-.00070	-.00008	.00702	-.00098	.00018	
#2	.00387	.00009	.00135	.00693	-.00047	.00039	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

09/06/00 12:30:04 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	18694	--	--	--	--	--	--
SDev	8.026767	--	--	--	--	--	--
%RSD	.0429382	--	--	--	--	--	--
#1	18699	--	--	--	--	--	--
#2	18688	--	--	--	--	--	--

Metals Preparation Log



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

Method: 3050 B Matrix: 50.1 Start Time: 0840 SDG: Balance: 04617

Analyst: O. Grant Date: 9-5-00 Lot Number: COH310 206 Lab Lot No. (book, page, line): 0057-233-1 MS: 819 EV

Review By: Skillman & Hays Date: 9-5-00

Sample ID	Init Wt/Vol g/mL	Final Vol mL	Comments	Color		Clarity		Texture		Artifacts	Artifact Codes
				Pre	Post	Pre	Post	Pre	Post		
1. DIF80	1.00g	1.00 mL	GF-4.5-00								S=Stones
2. DIF80			GF-4.5-00								O=Organic (plant mat)
3. DIF80			GF-4.5-00								W=free H2O
4. DIF80			GF-4.5-00								G=Glass
5. DIF80			GF-4.5-00								M=Metal Fingrils
6. DIF80			GF-4.5-00								R=Rubber/Plastic
7. DIF80			GF-4.5-00								C=Cloth
8. DIF80			GF-4.5-00								P=Paper
9. DIF80			GF-4.5-00								I=Insects
10. DIF80			GF-4.5-00								
11. DIF80			GF-4.5-00								
12. DIF80			GF-4.5-00								
13. DIF80			GF-4.5-00								
14. DIF80			GF-4.5-00								
15. DIF80			GF-4.5-00								
16. DIF80			GF-4.5-00								
17. DIF80			GF-4.5-00								
18. DIF80			GF-4.5-00								
19. DIF80			GF-4.5-00								
20. DIF80			GF-4.5-00								
21. DIF80			GF-4.5-00								
22. DIF80			GF-4.5-00								
23. DIF80			GF-4.5-00								
24. DIF80			GF-4.5-00								

Digestate(s) Date: 9-5-00 Time: 1330 Analyst: Skillman & Hays Location: METAL 9-5-00 1335 Analyst: Skillman & Hays Location: METAL 9-5-00 1335

Hot plate /Block Temp: 250 Correction Factor: -0.70

Texture: F=Fine M=Medium C=Coarse Clarity: C=Clear CL=Cloudy O=Opaque Color: R=Red BL=Blue BR=Brown BLK=Black Y=Yellow O=Orange V=Violet P=Pink W=White GY=Gray GN=Green C=Colorless

672 573

PSR024 9/05/00 5:12:25 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 003

REQUESTED BY: FAUSTG

METHOD: QM Inductively Coupled Plasma (6010B Trace)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
5B,C CLP1	DJP8W	___	262323	399411	A-46-QM	COH310206	001		SOLID	0	3
5B,C CLP1	DJP90	___	262324	399411	A-46-QM	COH310206	002		SOLID	0	3
5B,C CLP1	DJP91	___	262325	399411	A-46-QM	COH310206	003		SOLID	0	3
5B,C CLP1	DJP92	___	262326	399411	A-46-QM	COH310206	004		SOLID	0	3
5D,E CLP1	DJPWA	___	262335	357464	I-05-QM	COH310279	001		WATER	0	8
5D,E CLP1	DJPWF	___	262336	357464	I-05-QM	COH310279	002		WATER	0	8
5D,E CLP1	DJPWG	___	262337	357464	I-05-QM	COH310279	003		WATER	0	8
5D,E CLP1	DJPWK	___	262338	357464	I-05-QM	COH310279	004		WATER	0	6
5D,E CLP1	DJPWM	___	262339	357464	I-05-QM	COH310279	005		WATER	0	8
5D,E CLP1	DJPWQ	___	262340	357464	I-05-QM	COH310279	006		WATER	0	7
5D,E CLP1	DJPWT	___	262341	357464	I-05-QM	COH310279	007		WATER	0	8
5D,E CLP1	DJPWW	___	262342	357464	I-05-QM	COH310279	008		WATER	0	20

RELINQUISHED BY

Geoffrey O. Braust
Geoffrey O. Braust

RECEIVED BY

Geoffrey O. Braust
Geoffrey O. Braust

DATE/TIME

9-5-00 0720
9-5-00 0845

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

672 574

**TCLP
METALS DATA**

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
DF/S1/242/SDC/031	DJP8WT
DF/S1/242/SDC/033	DJP90T
DF/S1/242/SDC/034	DJP91T
DF/S1/242/SDC/035	DJP92T

Comments: UXB, DUNN FIELD TCLP'S
C0H310206
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: _____

672 576

**TCLP
METALS
RESULTS**

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP8WT **Client ID:** DF/S1/242/SDC/031
Matrix: Water **Units:** mg/L **Prep Date:** 9/7/00 **Prep Batch:** 0251095
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	9/7/00	9:53

Comments: Lot#: C0H310206 Sample#: 1

Version 4.10.2

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

Form 1 Equivalent

672 578

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP90T Client ID: DF/S1/242/SDC/033
Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095
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	9/7/00	9:55

Comments: Lot#: C0H310206 Sample#: 2

Version 4.10.2

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: DJP91T Client ID: DF/S1/242/SDC/034
Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095
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	9/7/00	9:57

Comments: Lot#: C0H310206 Sample#: 3

Version 4.10.2

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

Form 1 Equivalent

672 580

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP92T Client ID: DF/S1/242/SDC/035
Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095
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	9/7/00	9:58

Comments: Lot#: C0H310206 Sample#: 4

Version 4.10.2

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: DJP8WT Client ID: DF/S1/242/SDC/031
 Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130
 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	0.12	B	1	ICP	9/7/00	14:00
Barium	493.41	0.00041	10.0	1.2	B	1	ICP	9/7/00	14:00
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	9/7/00	14:00
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	9/7/00	14:00
Lead	220.35	0.025	0.50	0.025	U	1	ICP	9/7/00	14:00
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	9/7/00	14:00
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	9/7/00	14:00

Comments: Lot#: C0H310206 Sample#: 1

Version 4.10.2

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

Form 1 Equivalent

672 582

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP90T Client ID: DF/S1/242/SDC/033
Matrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130
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	0.11	B	1	ICP	9/7/00	14:03
Barium	493.41	0.00041	10.0	1.5	B	1	ICP	9/7/00	14:03
Cadmium	228.80	0.0028	0.10	0.024	B	1	ICP	9/7/00	14:03
Chromium	267.72	0.0038	0.50	0.0059	B	1	ICP	9/7/00	14:03
Lead	220.35	0.025	0.50	2.0		1	ICP	9/7/00	14:03
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	9/7/00	14:03
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	9/7/00	14:03

Comments: Lot#: C0H310206 Sample#: 2

Version 4.10.2

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: DJP91T **Client ID:** DF/S1/242/SDC/034
Matrix: Water **Units:** mg/L **Prep Date:** 9/7/00 **Prep Batch:** 0251130
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	0.10	B	1	ICP	9/7/00	14:06
Barium	493.41	0.00041	10.0	1.6	B	1	ICP	9/7/00	14:06
Cadmium	228.80	0.0028	0.10	0.017	B	1	ICP	9/7/00	14:06
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	9/7/00	14:06
Lead	220.35	0.025	0.50	1.0		1	ICP	9/7/00	14:06
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	9/7/00	14:06
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	9/7/00	14:06

Comments: Lot#: C0H310206 Sample#: 3

Version 4.10.2

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

Form 1 Equivalent

672 584

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJP92T **Client ID:** DF/S1/242/SDC/035
Matrix: Water **Units:** mg/L **Prep Date:** 9/7/00 **Prep Batch:** 0251130
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	9/7/00	14:09
Barium	493.41	0.00041	10.0	1.3	B	1	ICP	9/7/00	14:09
Cadmium	228.80	0.0028	0.10	0.011	B	1	ICP	9/7/00	14:09
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	9/7/00	14:09
Lead	220.35	0.025	0.50	2.4		1	ICP	9/7/00	14:09
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	9/7/00	14:09
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	9/7/00	14:09

Comments: Lot#: C0H310206 Sample#: 4

Version 4.10.2

U Result is less than the MDL

Form 1 Equivalent

B Result is between MDL and RL

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAAUnits: ug/LChart Number: 0907HGA.PRNAcceptable Range: 90% - 110%Standard Source: UltraStandard ID: 0057-058-5

Element	WL/ Mass	True Conc	ICV5-1 9/7/00 9:42 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.52	100.8								

672 586

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPUnits: ug/LChart Number: J00907C.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-005-2

Element	WL/ Mass	True Conc	ICV2-1 9/7/00 1:26 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000.0	969.44	96.9								
Barium	493.409	1000.0	1004.03	100.4								
Cadmium	228.802	1000.0	1029.64	103.0								
Chromium	267.716	1000.0	1026.84	102.7								
Lead	220.353	1000.0	1022.84	102.3								
Selenium	196.026	1000.0	1054.19	105.4								
Silver	328.068	500.0	512.23	102.4								

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAAUnits: ug/LChart Number: 0907HGA.PRNAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0057-058-6

Element	WL/ Mass	True Conc	CCV5-1 9/7/00 9:45 AM		CCV5-2 9/7/00 10:04 AM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.07	101.4	5.03	100.6				

672 588

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J00907C.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-054-2

Element	WL/ Mass	True Conc	CCV2-1 9/7/00 2:16 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	5000.0	4975.58	99.5								
Barium	493.409	5000.0	4844.64	96.9								
Cadmium	228.802	5000.0	5067.63	101.4								
Chromium	267.716	5000.0	4942.67	98.9								
Lead	220.353	5000.0	5021.92	100.4								
Selenium	196.026	5000.0	5112.65	102.3								
Silver	328.068	1000.0	995.98	99.6								

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0907HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 9/7/00 9:44 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U						

672 590

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00907C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 9/7/00 1:30 PM							
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U						
Barium	493.409	10000	0.4	U						
Cadmium	228.802	100	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						

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0907HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 9/7/00 9:47 AM		CCB2 9/7/00 10:06 AM					
			Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U	0.0	U				

672 592

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00907C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 9/7/00 2:19 PM							
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U						
Barium	493.409	10000	0.4	U						
Cadmium	228.802	100	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						

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results**Lab Sample ID:** DJXV6BT**Matrix:** Water **Units:** mg/L **Prep Date:** 9/7/00 **Prep Batch:** 0251095**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	0.000065	B	1	CVAA	9/7/00	9:52

Comments: _____

672 594

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DK0LPBTMatrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095Weight: 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	9/7/00	9:49

Comments: _____

Version 4.10.2

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: DJXV6BTMatrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130Weight: 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	0.12	B	1	ICP	9/7/00	13:53
Barium	493.409	0.00041	10.0	0.0014	B	1	ICP	9/7/00	13:53
Cadmium	228.802	0.0028	0.10	-0.0035	B	1	ICP	9/7/00	13:53
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	9/7/00	13:53
Lead	220.353	0.025	0.50	0.025	U	1	ICP	9/7/00	13:53
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	9/7/00	13:53
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	9/7/00	13:53

Comments: _____

Version 4.10.2

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: DK0NNBTMatrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130Weight: 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	-0.049	B	1	ICP	9/7/00	13:50
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	9/7/00	13:50
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	9/7/00	13:50
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	9/7/00	13:50
Lead	220.353	0.025	0.50	0.025	U	1	ICP	9/7/00	13:50
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	9/7/00	13:50
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	9/7/00	13:50

Comments: _____

Version 4.10.2

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: J00907C.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0057-057-8

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 9/7/00 1:33 PM				
				Found	Found	Found	Found	Found
Arsenic	193.696	500		-37				
Barium	493.409	10000		2				
Cadmium	228.802	100		-3				
Chromium	267.716	500		-2				
Lead	220.353	500		7				
Selenium	196.026	250		-61				
Silver	328.068	500		-4				

672 598

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPUnits: ug/LChart Number: J00907C.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-187-1

Element	WL/ Mass	True Conc	ICSAB 9/7/00 1:36 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000	827.1	82.7								
Barium	493.409	500	460.5	92.1								
Cadmium	228.802	1000	968.1	96.8								
Chromium	267.716	500	445.6	89.1								
Lead	220.353	1000	940.1	94.0								
Selenium	196.026	1000	895.5	89.5								
Silver	328.068	1000	957.4	95.7								

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DK0LPCTMatrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251095Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0025	0.0027	106.4		80-120	1	CVAA	9/7/00	9:51

Comments: _____

Version 4.10.2

STL Pittsburgh

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

6026

672 600

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DK0NNCTMatrix: Water Units: mg/L Prep Date: 9/7/00 Prep Batch: 0251130Weight: 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	2.2	107.8		80-120	1	ICP	9/7/00	13:57
Barium	493.409	2.0	1.9	93.3	B	80-120	1	ICP	9/7/00	13:57
Cadmium	228.802	0.050	0.051	101.4	B	80-120	1	ICP	9/7/00	13:57
Chromium	267.716	0.20	0.19	95.7	B	80-120	1	ICP	9/7/00	13:57
Lead	220.353	0.50	0.47	94.8	B	80-120	1	ICP	9/7/00	13:57
Selenium	196.026	2.0	2.2	109.6		80-120	1	ICP	9/7/00	13:57
Silver	328.068	0.050	0.049	97.3	B	80-120	1	ICP	9/7/00	13:57

Comments: _____

Version 4.10.2

STL Pittsburgh

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

6027

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

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	193.70	500	30.3	4/1/00
Barium	493.41	10000	0.41	4/1/00
Cadmium	228.80	100	2.8	4/1/00
Chromium	267.72	500	3.8	4/1/00
Lead	220.35	500	24.6	4/1/00
Selenium	196.03	250	67.4	4/1/00
Silver	328.07	500	3.1	4/1/00

STL-Pittsburgh

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPDate of IEC's: 9/6/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(0.008145), Mn(0.000018), Pb(0.000719)
Antimony	206.838	Ni(-0.000528), Pb(-0.001408), Sn(-0.004161)
Arsenic	193.696	Cd(0.011217)
Barium	493.409	Co(0.000449)
Beryllium	313.042	Cd(0.008648)
Cadmium	228.802	Co(0.002996)
Chromium	267.716	Pb(-0.000767), Sb(0.009005), V(-0.002296)
Cobalt	228.616	Al(-0.013948), B(0.00168), Cd(-0.004424), Cu(-0.000974), Pb(-0.026155), Sb(-0.004281), Tl(0.008568)
Copper	324.754	Zn(0.00414)
Iron	259.94	Ag(-0.000242), As(0.001058), B(-0.001884), Cd(-0.000046), Cu(-0.000114), Mn(-0.00029), Mo(-0.000129), Pb(0.00019), Se(-0.002629), Sn(-0.00132), Tl(0.011416), Zn(0.000091)
Manganese	257.61	Ag(0.000185), Tl(-0.007608)
Molybdenum	202.03	Al(0.009881), Cr(-0.000204), Mn(-0.000334), Sb(0.005016), V(-0.013194)
Nickel	231.604	Cd(-0.000482), Sb(-0.01006), Zn(0.00326)
Tin	189.989	Sb(0.002501)
Titanium	334.941	Co(0.001561), Fe(-0.003248), Sb(0.001256), Sn(0.003314)
Vanadium	292.402	Ag(-0.004417), Al(0.014581), As(0.015197), Be(0.002162), Cd(0.000076), Cr(0.000544), Sb(-0.002921), Si(-0.011682), Tl(0.006485), Zn(-0.0046)

672 604

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	1/15/00

STL-Pittsburgh
Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICP**Units:** ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	193.70	100000	7/8/00
Barium	493.41	100000	7/8/00
Cadmium	228.80	100000	7/8/00
Chromium	267.72	100000	7/8/00
Lead	220.35	100000	7/8/00
Selenium	196.03	100000	7/8/00
Silver	328.07	2000	7/8/00

672 606

STL-Pittsburgh
Metals Data Reporting Form

Preparation Log

Preparation Batch: 0251095 Instrument: CVAA Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJXV6BT	9/7/00	NA	100	NA
DK0LPBT	9/7/00	NA	100	NA
DK0LPCT	9/7/00	NA	100	NA
DJP8WT	9/7/00	NA	100	NA
DJP90T	9/7/00	NA	100	NA
DJP91T	9/7/00	NA	100	NA
DJP92T	9/7/00	NA	100	NA

Metals Data Reporting Form

Preparation Log

Preparation Batch: 0251130 Instrument: ICP Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJXV6BT	9/7/00	NA	50	NA
DK0NNBT	9/7/00	NA	50	NA
DK0NNCT	9/7/00	NA	50	NA
DJP8WT	9/7/00	NA	50	NA
DJP90T	9/7/00	NA	50	NA
DJP91T	9/7/00	NA	50	NA
DJP92T	9/7/00	NA	50	NA

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0907HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		9/7/00	9:30
Std2Rep1		9/7/00	9:32
Std3Rep1		9/7/00	9:33
Std4Rep1		9/7/00	9:35
Std5Rep1		9/7/00	9:37
Std6Rep1		9/7/00	9:39
ICV5-1		9/7/00	9:42
ICB1		9/7/00	9:44
CCV5-1		9/7/00	9:45
CCB1		9/7/00	9:47
DK0LPBT		9/7/00	9:49
DK0LPCT		9/7/00	9:51
DJXV6BT		9/7/00	9:52
DJP8WT	DF/S1/242/SDC/031	9/7/00	9:53
DJP90T	DF/S1/242/SDC/033	9/7/00	9:55
DJP91T	DF/S1/242/SDC/034	9/7/00	9:57
DJP92T	DF/S1/242/SDC/035	9/7/00	9:58
ZZZZZZ		9/7/00	9:59
ZZZZZZ		9/7/00	10:01
ZZZZZZ		9/7/00	10:03
CCV5-2		9/7/00	10:04
CCB2		9/7/00	10:06
ZZZZZZ		9/7/00	10:07
ZZZZZZ		9/7/00	10:09
ZZZZZZ		9/7/00	10:10
ZZZZZZ		9/7/00	10:11
ZZZZZZ		9/7/00	10:13
ZZZZZZ		9/7/00	10:14
ZZZZZZ		9/7/00	10:16
ZZZZZZ		9/7/00	10:17
ZZZZZZ		9/7/00	10:19
ZZZZZZ		9/7/00	10:20
ZZZZZZ		9/7/00	10:22
ZZZZZZ		9/7/00	10:24
ZZZZZZ		9/7/00	10:26
ZZZZZZ		9/7/00	10:27
ZZZZZZ		9/7/00	10:29
ZZZZZZ		9/7/00	10:30
ZZZZZZ		9/7/00	10:32

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0907HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		9/7/00	10:33
ZZZZZZ		9/7/00	10:35
ZZZZZZ		9/7/00	10:36
ZZZZZZ		9/7/00	10:38
ZZZZZZ		9/7/00	10:40
ZZZZZZ		9/7/00	10:41
ZZZZZZ		9/7/00	10:43
ZZZZZZ		9/7/00	10:45
ZZZZZZ		9/7/00	10:46
ZZZZZZ		9/7/00	10:48
ZZZZZZ		9/7/00	10:50
ZZZZZZ		9/7/00	10:51
ZZZZZZ		9/7/00	10:53
ZZZZZZ		9/7/00	10:55
ZZZZZZ		9/7/00	10:56
ZZZZZZ		9/7/00	10:57
ZZZZZZ		9/7/00	11:00
ZZZZZZ		9/7/00	11:01
ZZZZZZ		9/7/00	11:03
ZZZZZZ		9/7/00	11:04
ZZZZZZ		9/7/00	11:06
ZZZZZZ		9/7/00	11:07
ZZZZZZ		9/7/00	11:09
ZZZZZZ		9/7/00	11:11
ZZZZZZ		9/7/00	11:12
ZZZZZZ		9/7/00	11:14
ZZZZZZ		9/7/00	11:16

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STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00907C.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		9/7/00	13:17
STD5A		9/7/00	13:20
STD5B		9/7/00	13:23
ICV2-1		9/7/00	13:26
ICB1		9/7/00	13:30
ICSA		9/7/00	13:33
ICSAB		9/7/00	13:36
DK0NNBT		9/7/00	13:50
DJXV6BT		9/7/00	13:53
DK0NNCT		9/7/00	13:57
DJP8WT	DF/S1/242/SDC/031	9/7/00	14:00
DJP90T	DF/S1/242/SDC/033	9/7/00	14:03
DJP91T	DF/S1/242/SDC/034	9/7/00	14:06
DJP92T	DF/S1/242/SDC/035	9/7/00	14:09
ZZZZZZ		9/7/00	14:12
CCV2-1		9/7/00	14:16
CCB1		9/7/00	14:19
ZZZZZZ		9/7/00	14:22
ZZZZZZ		9/7/00	14:25
ZZZZZZ		9/7/00	14:28
ZZZZZZ		9/7/00	14:31
ZZZZZZ		9/7/00	14:34
ZZZZZZ		9/7/00	14:38
ZZZZZZ		9/7/00	14:41
ZZZZZZ		9/7/00	14:44
ZZZZZZ		9/7/00	14:47
ZZZZZZ		9/7/00	14:50
ZZZZZZ		9/7/00	14:53
ZZZZZZ		9/7/00	14:56
ZZZZZZ		9/7/00	15:01
ZZZZZZ		9/7/00	15:05
ZZZZZZ		9/7/00	15:08
ZZZZZZ		9/7/00	15:11
ZZZZZZ		9/7/00	15:14
ZZZZZZ		9/7/00	15:17
ZZZZZZ		9/7/00	15:20
ZZZZZZ		9/7/00	15:23
ZZZZZZ		9/7/00	15:27
ZZZZZZ		9/7/00	15:30

STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00907C.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		9/7/00	15:33

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**TCLP
METALS
RAW DATA**

Michael W. Wenzel 9-8-00

#	Sample Name	AG	AS	BA	CD	CR	PB
1	STD1	-.0005	.00095	0	.00007	.00104	.0007
2	STD5A	.27794	.5475	4.31193	.92654	3.90429	.26104
3	STD5B						
4	ICV2-1 0057-005-2	.51223	.96944	1.0040	1.0296	1.0268	1.0228
5	ICB1	-.00033	-.02328	.00025	-.00028	-.00025	-.00557
6	ICSA 0057-057-8	-.00411	-.03738	.00190	-.00333	-.00179	.00738
7	ICSAB 0014-187-1	.95742	.82709	.46053	.96807	.44561	.94013
8	DK0NNBT	-.00105	-.04929	.00000	.00033	-.00269	-.02238
9	DJXV6BT	-.00210	.11606	.00139	-.00348	-.00076	-.02047
10	DK0NNCT	.04866	2.1557	1.8651	.05068	.19144	.47398
11	DJP8WT	-.00409	.11674	1.1542	-.00172	.00063	-.01170
12	DJP90T	-.00369	.11445	1.4912	.02428	.00589	2.0152
13	DJP91T	-.00349	.10189	1.5457	.01663	-.00192	1.0312
14	DJP92T	-.00451	.14128	1.3058	.01128	.00243	2.3725
15	DJPHKT	-.00460	.15069	.39721	-.00080	-.00397	.02405
16	CCV2-1 0057-054-2	.99598	4.9756	4.8446	5.0676	4.9427	5.0219
17	CCB1	-.00176	-.02968	-.00006	-.00133	-.00179	.00001
18	DJPHLT	-.00456	.17907	.35890	-.00148	-.00243	-.01689
19	DJQTDt	-.00111	.15576	.22590	-.00131	-.00179	-.02092
20	DJRHVT	-.00103	.18522	.10555	.01304	.00256	.02825
21	DJRHVP5T	-.00120	.04059	.02252	.00263	-.00038	-.01111
22	DJRHVST	.90633	5.0623	45.282	.97688	4.5247	4.6204
23	DJRHVDT	.92073	5.1030	45.380	.99692	4.5679	4.6858
24	DJRJPT	-.00274	.17171	.11631	.01306	.00435	.02254
25	DJTTNT	-.00302	.17683	1.1862	.00031	-.00410	.06535
26	DJTTPT	-.00451	.19192	2.6586	.01862	-.00333	2.3608
27	DJTTQT	.00038	.14900	1.2236	.02756	.00204	.74306
28	CCV2-2	.99934	5.1301	4.8577	5.0878	4.9638	4.9755
29	CCB2	-.00035	-.00095	.00011	.00015	-.00179	.01313
30	DK0PXB	-.00140	-.02508	.00025	.00015	-.00217	-.01494
31	DK0PXC	.04690	1.9206	1.9295	.04441	.19214	.47823
32	DJQNW	-.00124	.13571	.36177	.00158	.08246	.15270
33	DJQNWPS	-.00123	.01923	.07509	-.00234	.01677	.03146
34	DJQNWS	.04558	2.0841	2.2522	.04786	.30313	.61932
35	DJQNWD	.04604	2.0234	2.2642	.04413	.28163	.59471
36	DJQP1	-.00177	.09045	.73101	.00162	.06772	.14440
37	DJQP2	-.00338	.11490	.44181	-.00071	.07645	.09433
38	DJQP3	-.00301	.11174	.69199	-.00114	.07529	.11222
39	CCV2-3	1.0034	5.0766	4.9350	5.1349	4.9778	5.0021
40	CCB3	-.00175	-.04178	-.00006	-.00131	-.00102	-.02059

#	Sample Name	SE
1	STD1	-.00054
2	STD5A	.53275
3	STD5B	
4	ICV2-1 0057-005-2	1.0542
5	ICB1	.04689
6	ICSA 0057-057-8	-.06115
7	ICSAB 0014-187-1	.89549
8	DK0NNBT	.02440
9	DJXV6BT	.02815

#	Sample Name	SE
10	DKONNCT	2.1919
11	DJP8WT	.03522
12	DJP90T	.00029
13	DJP91T	.02969
14	DJP92T	.02886
15	DJPHKT	-.01420
16	CCV2-1 0057-054-2	5.1127
17	CCB1	-.00937
18	DJPHLT	.00310
19	DJQTDt	.02833
20	DJRHVT	.02255
21	DJRHVPT	-.00167
22	DJRHVST	1.0763
23	DJRHVDt	1.0885
24	DJRJPT	.00384
25	DJTTNT	.00007
26	DJTTPT	.01989
27	DJTTQT	-.00919
28	CCV2-2	5.2175
29	CCB2	.01875
30	DK0PXB	.03470
31	DK0PXC	1.9350
32	DJQNW	-.03470
33	DJQNWP5	.01078
34	DJQNWS	1.8688
35	DJQNWD	1.8100
36	DJQP1	-.07978
37	DJQP2	-.05228
38	DJQP3	-.11043
39	CCV2-3	5.1513
40	CCB3	.01312

MTW 9-8-00

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J00907C	QUANMET	09/07/00	13:17		X	IR
2	STD5A	J00907C	QUANMET	09/07/00	13:20		X	IR
3	STD5B	J00907C	QUANMET	09/07/00	13:23		X	IR
4	ICV2-1 0057-005-2	J00907C	QUANMET	09/07/00	13:26	MTW	S	CONC
5	ICB1	J00907C	QUANMET	09/07/00	13:30	MTW	S	CONC
6	ICSA 0057-057-8	J00907C	QUANMET	09/07/00	13:33	MTW	Q	CONC
7	ICSAB 0014-187-1	J00907C	QUANMET	09/07/00	13:36	MTW	Q	CONC
8	DK0NNBT	J00907C	QUANMET	09/07/00	13:50	MTW	S	CONC
9	DJXV6BT	J00907C	QUANMET	09/07/00	13:53	MTW	S	CONC
10	DK0NNCT	J00907C	QUANMET	09/07/00	13:57	MTW	S	CONC
11	DJP8WT	J00907C	QUANMET	09/07/00	14:00	MTW	S	CONC
12	DJP90T	J00907C	QUANMET	09/07/00	14:03	MTW	S	CONC
13	DJP91T	J00907C	QUANMET	09/07/00	14:06	MTW	S	CONC
14	DJP92T	J00907C	QUANMET	09/07/00	14:09	MTW	S	CONC
15	DJPHKT	J00907C	QUANMET	09/07/00	14:12	MTW	S	CONC
16	CCV2-1 0057-054-2	J00907C	QUANMET	09/07/00	14:16	MTW	S	CONC
17	CCB1	J00907C	QUANMET	09/07/00	14:19	MTW	S	CONC
18	DJPHLT	J00907C	QUANMET	09/07/00	14:22	MTW	S	CONC
19	DJQTDI	J00907C	QUANMET	09/07/00	14:25	MTW	S	CONC
20	DJRHVT	J00907C	QUANMET	09/07/00	14:28	MTW	S	CONC
21	DJRHPST	J00907C	QUANMET	09/07/00	14:31	MTW	S	CONC
22	DJRHVST	J00907C	QUANMET	09/07/00	14:34	MTW	S	CONC
23	DJRHVDI	J00907C	QUANMET	09/07/00	14:38	MTW	S	CONC
24	DJRJPT	J00907C	QUANMET	09/07/00	14:41	MTW	S	CONC
25	DJTTNT	J00907C	QUANMET	09/07/00	14:44	MTW	S	CONC
26	DJTTPT	J00907C	QUANMET	09/07/00	14:47	MTW	S	CONC
27	DJTTQT	J00907C	QUANMET	09/07/00	14:50	MTW	S	CONC
28	CCV2-2	J00907C	QUANMET	09/07/00	14:53	MTW	S	CONC
29	CCB2	J00907C	QUANMET	09/07/00	14:56	MTW	S	CONC
30	DK0PXB	J00907C	QUANMET	09/07/00	15:01	MTW	S	CONC
31	DK0PXC	J00907C	QUANMET	09/07/00	15:05	MTW	S	CONC
32	DJQNW	J00907C	QUANMET	09/07/00	15:08	MTW	S	CONC
33	DJQNWPS	J00907C	QUANMET	09/07/00	15:11	MTW	S	CONC
34	DJQNWS	J00907C	QUANMET	09/07/00	15:14	MTW	S	CONC
35	DJQNWD	J00907C	QUANMET	09/07/00	15:17	MTW	S	CONC
36	DJQP1	J00907C	QUANMET	09/07/00	15:20	MTW	S	CONC
37	DJQP2	J00907C	QUANMET	09/07/00	15:23	MTW	S	CONC
38	DJQP3	J00907C	QUANMET	09/07/00	15:27	MTW	S	CONC
39	CCV2-3	J00907C	QUANMET	09/07/00	15:30	MTW	S	CONC
40	CCB3	J00907C	QUANMET	09/07/00	15:33	MTW	S	CONC

Method: QUANMET Standard: STD1

Run Time: 09/07/00 13:17:23

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00050	.00915	.00095	.00109	.00000	.00250	.00090
SDev	.00026	.00100	.00115	.00088	.00010	.00012	.00034
%RSD	51.640	10.911	120.79	80.991	.00000	4.6188	37.798

#1	-.00040	.00820	.00100	.00180	.00000	.00260	.00088
#2	-.00020	.01020	.00240	.00180	-.00012	.00240	.00091
#3	-.00080	.00840	-.00040	.00000	.00012	.00240	.00049
#4	-.00060	.00980	.00080	.00074	.00000	.00260	.00133

Elem	CD	CO	CR	CU	FE	K	LI
Avge	.00007	-.00005	.00105	.00050	.00115	-.03045	.00021
SDev	.00017	.00019	.00076	.00012	.00053	.00453	.00022
%RSD	246.08	382.97	71.903	23.094	45.738	14.875	101.94

#1	.00024	.00000	.00160	.00060	.00080	-.02700	.00048
#2	.00020	.00020	.00100	.00060	.00160	-.03060	.00028
#3	-.00012	-.00020	.00000	.00040	.00060	-.03680	.00000
#4	-.00004	-.00020	.00160	.00040	.00160	-.02740	.00008

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	.00025	.00005	.00015	.05810	-.00039	.00070	.00005
SDev	.00057	.00010	.00010	.00164	.00045	.00053	.00038
%RSD	229.78	200.00	66.667	2.8177	115.37	75.593	757.19

#1	.00040	.00000	.00020	.05580	-.00038	.00120	-.00020
#2	.00060	.00020	.00000	.05880	-.00099	.00100	.00060
#3	-.00060	.00000	.00020	.05820	-.00031	.00060	-.00020
#4	.00060	.00000	.00020	.05960	.00011	.00000	.00000

Elem	SE	SI	SN	SR	TI	TL	V
Avge	-.00055	.00005	.00025	.00000	.00205	-.00030	.00000
SDev	.00128	.00010	.00038	.00000	.00038	.00090	.00000
%RSD	232.60	200.00	151.44	.00000	18.468	300.62	.00000

#1	-.00160	.00000	.00000	.00000	.00180	-.00140	.00000
#2	-.00040	.00020	.00000	.00000	.00260	-.00040	.00000
#3	.00120	.00000	.00020	.00000	.00180	-.00020	.00000
#4	-.00140	.00000	.00080	.00000	.00200	.00080	.00000

Elem	ZN
Avge	.00023
SDev	.00009
%RSD	38.943

#1	.00020
#2	.00028
#3	.00032
#4	.00012

Method: QUANMET / Standard: STD5A COM-155-1
Run Time: 09/07/00 13:20:34

Elem	AG	AS	B ₁	BA	BE	CD	CO
Avge	.27795	.54750	.61643	4.3119	16.676	.92654	1.4949
SDev	.00034	.00520	.00252	.0152	.051	.00153	.0046
%RSD	.12289	.95000	.40846	.35148	.30644	.16528	.30635
#1	.27760	.54280	.61272	4.2954	16.609	.92485	1.4900
#2	.27800	.54460	.61726	4.3260	16.719	.92648	1.4990
#3	.27780	.55460	.61832	4.3029	16.664	.92628	1.4920
#4	.27840	.54800	.61742	4.3235	16.714	.92856	1.4986
Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.9043	2.4049	4.5581	2.1120	.42185	1.7792	.26105
SDev	.0079	.0086	.0160	.0043	.00131	.0026	.00261
%RSD	.20269	.35805	.35025	.20427	.31059	.14810	.99965
#1	3.8986	2.3934	4.5358	2.1098	.42140	1.7783	.26060
#2	3.9116	2.4112	4.5733	2.1154	.42120	1.7800	.26240
#3	3.8964	2.4032	4.5593	2.1070	.42100	1.7761	.25760
#4	3.9106	2.4118	4.5640	2.1158	.42380	1.7823	.26360
Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.19795	.53275	.35145	.99370	8.2432	6.4463	.35825
SDev	.00093	.00239	.00128	.00862	.0268	.0166	.00172
%RSD	.46939	.44879	.36401	.86779	.32555	.25768	.48105
#1	.19680	.53080	.34960	1.0052	8.2149	6.4298	.35600
#2	.19860	.53440	.35240	.98920	8.2676	6.4608	.35840
#3	.19760	.53520	.35160	.98540	8.2256	6.4342	.36020
#4	.19880	.53060	.35220	.99500	8.2645	6.4604	.35840
Elem	V ₁	ZN					
Avge	1.6844	1.5458					
SDev	.0043	.0032					
%RSD	.25485	.20944					
#1	1.6812	1.5411					
#2	1.6880	1.5475					
#3	1.6802	1.5483					
#4	1.6882	1.5463					

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Standardization Rpt.

09/07/00 01:26:50 PM

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Method: QUANMET Standard: STD5B 0014-155-2
Run Time: 09/07/00 13:23:44

Elem	AL	CA	FE	K _α	MG	NA
Avge	11.763	26.330	31.659	2.5391	7.8578	49.129
SDev	.058	.082	.127	.0106	.0333	.307
%RSD	.49594	.31158	.40186	.41628	.42438	.62476
#1	11.678	26.226	31.472	2.5236	7.8082	48.744
#2	11.808	26.388	31.747	2.5464	7.8790	49.330
#3	11.771	26.403	31.731	2.5412	7.8754	49.026
#4	11.794	26.304	31.685	2.5452	7.8686	49.418

Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.03062	.003515	09/07/00 01:23:44
AL	308.215	STD5B	STD1	8.50800	-.077848	09/07/00 01:23:44
AS	193.696	STD5A	STD1	18.5746	-.017646	09/07/00 01:23:44
B	249.600	STD5A	STD1	16.2784	-.017667	09/07/00 01:23:44
BA	493.409	STD5A	STD1	2.31914	.000000	09/07/00 01:23:44
BE	313.042	STD5A	STD1	.601038	-.001503	09/07/00 01:23:44
CA	317.933	STD5B	STD1	3.79801	-.003429	09/07/00 01:23:44
CD	228.802	STD5A	STD1	10.9559	-.000773	09/07/00 01:23:44
CO	228.616	STD5A	STD1	6.72267	.000336	09/07/00 01:23:44
CR	267.716	STD5A	STD1	2.56284	-.002691	09/07/00 01:23:44
CU	324.754	STD5A	STD1	4.15499	-.002077	09/07/00 01:23:44
FE	259.940	STD5B	STD1	3.15882	-.003633	09/07/00 01:23:44
K	766.491	STD5B	STD1	38.9173	1.18503	09/07/00 01:23:44
LI	670.789	STD5A	STD1	2.19399	-.000465	09/07/00 01:23:44
MG	279.079	STD5B	STD1	12.7266	-.003182	09/07/00 01:23:44
MN	257.610	STD5A	STD1	4.73338	-.000237	09/07/00 01:23:44
MO	202.030	STD5A	STD1	23.7135	-.003557	09/07/00 01:23:44
NA	588.995	STD5B	STD1	2.03785	-.118399	09/07/00 01:23:44
NI	231.604	STD5A	STD1	5.61641	.002197	09/07/00 01:23:44
PB	220.353	STD5A	STD1	37.3217	-.026125	09/07/00 01:23:44
SB	206.838	STD5A	STD1	50.5566	-.002528	09/07/00 01:23:44
SE	196.026	STD5A	STD1	18.7512	.010313	09/07/00 01:23:44
SI	288.158	STD5A	STD1	28.1251	-.001406	09/07/00 01:23:44
SN	189.989	STD5A	STD1	10.0574	-.002514	09/07/00 01:23:44
SR	409.552	STD5A	STD1	1.21312	.000000	09/07/00 01:23:44
TI	334.941	STD5A	STD1	1.55177	-.003181	09/07/00 01:23:44
TL	190.864	STD5A	STD1	55.9879	.016796	09/07/00 01:23:44
V	292.402	STD5A	STD1	5.84487	.000000	09/07/00 01:23:44
ZN	213.856	STD5A	STD1	6.48809	-.001488	09/07/00 01:23:44

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Michael W. Worsfold 9-7-00

Analysis Report

09/07/00 01:29:59 PM

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Method: QUANMET Sample Name: ICV2-1 0057-005-2 Operator: MTW
 Run Time: 09/07/00 13:26:53
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51223	25.185	.96944	1.0176	1.0040	.99032	25.574
SDev	.00136	.070	.02615	.0179	.0048	.00245	.074
%RSD	.26507	.27599	2.6975	1.7544	.47722	.24692	.29000
#1	.51185	25.099	.94985	1.0293	.99854	.98780	25.510
#2	.51331	25.255	.94465	1.0296	1.0083	.99140	25.660
#3	.51330	25.162	.99745	.99169	1.0015	.98887	25.611
#4	.51048	25.225	.98583	1.0197	1.0078	.99321	25.515
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	27.500	1.1000	1.1000	1.1000	1.1000	27.500
Low	.45000	22.500	.90000	.90000	.90000	.90000	22.500
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0296	1.0198	1.0268	.99701	26.182	24.471	.99993
SDev	.0027	.0057	.0031	.00336	.055	.154	.00621
%RSD	.25838	.55939	.30045	.33692	.20942	.62833	.62129
#1	1.0333	1.0238	1.0242	.99410	26.114	24.388	.99551
#2	1.0271	1.0198	1.0277	.99993	26.244	24.668	1.0031
#3	1.0297	1.0238	1.0308	.99410	26.170	24.512	.99401
#4	1.0284	1.0117	1.0247	.99991	26.201	24.317	1.0071
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	27.500	27.500	1.1000
Low	.90000	.90000	.90000	.90000	22.500	22.500	.90000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.341	1.0199	.99105	24.809	1.0179	1.0228	1.0410
SDev	.117	.0029	.02012	.125	.0096	.0096	.0439
%RSD	.46306	.28873	2.0302	.50272	.94356	.93420	4.2202
#1	25.183	1.0173	1.0053	24.687	1.0266	1.0323	1.0183
#2	25.458	1.0240	1.0053	24.868	1.0228	1.0247	1.0991
#3	25.330	1.0183	.99105	24.725	1.0173	1.0248	.99804
#4	25.392	1.0202	.96260	24.955	1.0047	1.0096	1.0485
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	27.500	1.1000	1.1000	27.500	1.1000	1.1000	1.1000
Low	22.500	.90000	.90000	22.500	.90000	.90000	.90000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0542	1.0819	1.0242	.99982	.99655	4.9817	1.0061
SDev	.0226	.0097	.0257	.00381	.00290	.0883	.0033
%RSD	2.1434	.90032	2.5116	.38111	.29145	1.7722	.33278
#1	1.0353	1.0903	1.0065	.99540	.99368	4.9068	1.0022
#2	1.0806	1.0847	1.0230	1.0035	.99988	5.0957	1.0069

Analysis Report

09/07/00 01:29:59 PM

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#3	1.0654	1.0848	1.0064	.99793	.99461	4.9173	1.0102
#4	1.0355	1.0678	1.0610	1.0024	.99802	5.0067	1.0052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	1.1000	5.5000	1.1000
Low	.90000	.90000	.90000	.90000	.90000	4.5000	.90000

Elem	ZN
Units	ppm
Avge	1.0190
SDev	.0027
%RSD	.26491

#1	1.0159
#2	1.0185
#3	1.0224
#4	1.0193

Errors	LC Pass
High	1.1000
Low	.90000

Method: QUANMET Sample Name: ICB1

Operator: MTW

Run Time: 09/07/00 13:30:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00034	.00293	-.02329	.00499	.00026	.00018	.00761
SDev	.00212	.01291	.02165	.01146	.00046	.00017	.00687
%RSD	623.88	440.16	92.970	229.57	177.50	95.674	90.337
#1	.00073	.02076	-.04391	.01491	.00093	.00041	.01636
#2	.00073	-.00475	-.00283	.01490	.00019	.00005	.00712
#3	.00070	.00387	-.03997	-.00425	.00000	.00018	.00738
#4	-.00351	-.00814	-.00644	-.00560	-.00008	.00006	-.00044
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
Avg	-.00028	.00101	-.00026	-.00062	.00774	-.18875	-.00001
SDev	.00125	.00134	.00193	.00184	.00390	.38012	.00061
%RSD	440.90	133.28	752.26	296.66	50.323	201.39	9413.9
#1	-.00027	.00302	.00192	.00042	.01280	.14983	.00031
#2	.00016	.00033	-.00064	-.00125	.00711	-.27048	.00015
#3	.00097	.00033	.00038	.00125	.00774	.05643	.00041
#4	-.00199	.00034	-.00269	-.00291	.00332	-.69078	-.00090
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
Avg	.01145	.00048	.00237	.01039	.00058	-.00557	.00255
SDev	.01756	.00047	.00454	.00609	.00429	.01542	.01017
%RSD	153.29	99.436	191.41	58.605	739.57	276.72	398.82
#1	.01973	.00072	.00593	.01610	.00359	.01127	.00759
#2	.00700	-.00023	.00119	.01488	-.00011	-.00371	.00763
#3	.02991	.00071	-.00356	.00713	.00405	-.00372	.00768
#4	-.01082	.00071	.00593	.00346	-.00521	-.02613	-.01270
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
Avg	.04690	-.00138	-.00601	.00013	.00039	.02229	.00237
SDev	.05017	.00003	.01001	.00026	.00031	.05668	.00272
%RSD	106.97	2.3114	166.49	193.67	80.000	254.31	114.86
#1	.07785	-.00135	.00156	.00000	.00054	.06139	.00476
#2	-.02717	-.00135	-.01253	.00014	.00054	.03908	.00469

#3	.07784	-.00141	-.01655	.00049	.00054	.05030	-.00005
#4	.05907	-.00141	.00347	-.00010	-.00008	-.06162	.00007

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	.00039
SDev	.00139
%RSD	354.57

#1	-.00018
#2	.00243
#3	.00002
#4	-.00070

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: ICSA 0057-057-8 Operator: MTW
 Run Time: 09/07/00 13:33:10
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00411	489.22	-.03738	-.04245	.00190	.00006	482.01
SDev	.00197	3.50	.06273	.01246	.00010	.00010	1.09
%RSD	47.901	.71613	167.81	29.355	5.0179	163.30	.22515
#1	-.00438	484.31	-.08354	-.03294	.00186	.00018	480.87
#2	-.00259	489.86	.02568	-.05051	.00186	.00006	483.48
#3	-.00269	490.10	-.09854	-.03074	.00205	.00006	481.78
#4	-.00680	492.62	.00687	-.05562	.00186	-.00006	481.92
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	-.00333	.01080	-.00179	-.00057	183.25	-.34636	.00074
SDev	.00240	.00386	.00202	.00103	.74	.28714	.00076
%RSD	72.020	35.716	112.90	181.25	.40375	82.900	102.25
#1	.00006	.01381	-.00269	-.00048	182.18	-.01362	.00085
#2	-.00514	.00576	-.00013	.00052	183.72	-.56625	.00155
#3	-.00333	.01382	-.00013	-.00035	183.35	-.20042	.00085
#4	-.00491	.00979	-.00423	-.00197	183.76	-.60516	-.00028
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	478.09	.00611	.00590	.01029	-.00604	.00739	.00213
SDev	2.42	.00093	.00387	.00353	.01728	.01620	.03150
%RSD	.50690	15.213	65.616	34.279	285.95	219.22	1475.4
#1	474.60	.00613	.00576	.00999	.01534	.00933	-.00272
#2	479.06	.00742	.01070	.01365	-.02470	.00483	-.01328
#3	478.54	.00541	.00591	.01202	-.00082	.02741	.04769
#4	480.17	.00549	.00122	.00550	-.01400	-.01201	-.02315
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	-.06115	.09422	.15648	.01357	-.02041	.47778	.00007
SDev	.09175	.01125	.01072	.00008	.00031	.16185	.00006
%RSD	150.04	11.940	6.8492	.60100	1.5209	33.876	74.601
#1	-.13336	.08859	.16963	.01347	-.02025	.65798	.00007
#2	-.11805	.11109	.15754	.01357	-.02025	.52845	.00014

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#3	.06848	.08859	.15529	.01357	-.02025	.45426	.00008
#4	-.06169	.08859	.14347	.01367	-.02087	.27043	.00001

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	.00216
SDev	.00148
%RSD	68.553

#1	.00051
#2	.00409
#3	.00229
#4	.00177

Errors	NOCHECK
Value	
Range	

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Method: QUANMET Sample Name: ICSAB 0014-187-1 Operator: MTW
 Run Time: 09/07/00 13:36:19
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95743	485.08	.82710	.87227	.46053	.45181	477.46
SDev	.00482	2.51	.22081	.01690	.00320	.00139	2.17
%RSD	.50344	.51820	26.697	1.9380	.69548	.30743	.45414

#1	.95050	481.47	Q.62165	.87041	.45635	.44975	475.20
#2	.95780	487.30	.81075	.89673	.46416	.45227	476.15
#3	.96067	485.59	Q.73900	.86061	.46091	.45274	478.53
#4	.96074	485.95	1.1370	.86133	.46072	.45251	479.94

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	.96808	.45097	.44561	.48165	181.60	9.7332	.98361
SDev	.00260	.00279	.00349	.00279	.68	.3198	.00893
%RSD	.26844	.61811	.78231	.57917	.37339	3.2858	.90803

#1	.96686	.44763	.44421	.47842	180.63	9.7468	.97491
#2	.97007	.45163	.44215	.48519	181.69	9.3032	.99607
#3	.97038	.45433	.44574	.48189	181.84	10.074	.98247
#4	.96500	.45031	.45035	.48110	182.22	9.8091	.98097

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	472.32	.45615	.89020	9.7982	.89067	.94014	.96053
SDev	1.91	.00225	.00473	.0794	.01786	.02084	.03343
%RSD	.40455	.49330	.53191	.81029	2.0050	2.2170	3.4808

#1	469.49	.45380	.89245	9.6930	.89206	.92037	.91758
#2	473.63	.45495	.88310	9.8854	.89917	.95352	.99852
#3	472.89	.45692	.89260	9.8137	.90616	.96222	.96817
#4	473.26	.45891	.89265	9.8006	.86532	.92445	.95787

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	.89550	1.1134	1.0665	.92638	.88435	9.5522	.45230
SDev	.11914	.0348	.0531	.00539	.00455	.2407	.00382
%RSD	13.304	3.1222	4.9747	.58232	.51448	2.5199	.84473

#1	.83390	1.1345	1.0575	.91866	.87760	9.2161	.44765
#2	.89294	1.0839	1.0995	.93114	.88691	9.5399	.45220

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#3	Q.79207	1.0839	1.1136	.92726	.88567	9.7285	.45701
#4	1.0631	1.1514	.99538	.92847	.88723	9.7243	.45235
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 .93467
SDev .00528
%RSD .56538

#1 .92826
#2 .93798
#3 .93256
#4 .93989

Errors QC Pass
Value 1.0000
Range 20.000

Method: QUANMET Sample Name: DKONNBT Operator: MTW
 Run Time: 09/07/00 13:50:49
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00105	.00726	-.04929	.01247	.00000	.00006	.05286
SDev	.00070	.00551	.01785	.00163	.00000	.00000	.00155
%RSD	66.831	75.903	36.215	13.079	.00000	.00000	2.9423
#1	-.00070	.01403	-.06978	.01165	.00000	.00006	.05166
#2	-.00070	.00721	-.03258	.01491	.00000	.00006	.05372
#3	-.00211	.00053	-.03623	.01165	.00000	.00006	.05461
#4	-.00070	.00727	-.05858	.01165	.00000	.00006	.05144
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00033	.00034	-.00269	-.00062	.00995	-.11286	-.00092
SDev	.00165	.00109	.00072	.00042	.00109	.19520	.00046
%RSD	500.14	326.19	26.908	66.812	10.998	172.95	50.109
#1	.00220	.00033	-.00372	-.00124	.01090	-.37944	-.00028
#2	-.00170	-.00100	-.00269	-.00042	.01090	.03308	-.00134
#3	.00093	.00168	-.00218	-.00041	.00900	.03308	-.00090
#4	-.00011	.00034	-.00218	-.00041	.00900	-.13816	-.00116
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00382	.00095	-.00237	.00713	.00314	-.02239	.00259
SDev	.01126	.00047	.00454	.00392	.00310	.00748	.01933
%RSD	295.02	49.991	191.59	55.008	98.793	33.396	746.59
#1	-.01082	.00166	.00119	.00713	.00101	-.02612	.00763
#2	-.01591	.00071	.00119	.01243	.00413	-.02612	.02783
#3	.00445	.00071	-.00830	.00591	.00708	-.01117	-.01247
#4	.00700	.00071	-.00356	.00306	.00034	-.02614	-.01264
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02440	.00141	.00304	.00000	-.00023	.02229	-.00004
SDev	.04009	.00562	.01257	.00000	.00018	.04707	.00006
%RSD	164.27	400.00	413.24	.00000	76.980	211.19	156.73
#1	.01784	.00984	-.00448	.00000	-.00008	.07267	.00001
#2	.07410	-.00141	.01170	.00000	-.00039	-.00571	.00001

Method: QUANMET Sample Name: DJXV6BT Operator: MTW
 Run Time: 09/07/00 13:53:57
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00211	.00217	.11606	.00045	.00139	.00000	.20591
SDev	.00115	.01388	.02735	.00096	.00000	.00007	.00527
%RSD	54.508	641.32	23.567	211.71	.00000	93e6	2.5588
#1	-.00351	-.01825	.13852	-.00098	.00139	-.00006	.19867
#2	-.00211	.00901	.07886	.00093	.00139	-.00006	.20765
#3	-.00211	.01231	.13455	.00094	.00139	.00006	.20613
#4	-.00070	.00559	.11232	.00093	.00139	.00006	.21118
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00349	.00102	-.00077	-.00021	.01232	-.11286	-.00071
SDev	.00330	.00174	.00106	.00042	.00140	.30468	.00062
%RSD	94.822	170.98	137.32	202.61	11.381	269.96	87.096
#1	.00116	.00033	-.00167	-.00041	.01153	-.47285	-.00039
#2	-.00512	.00304	.00038	-.00041	.01090	-.00584	-.00152
#3	-.00357	-.00100	-.00167	-.00042	.01280	-.21599	-.00010
#4	-.00640	.00170	-.00013	.00042	.01406	.24323	-.00083
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02800	.00213	-.00237	S-.11840	.00581	-.02047	.02284
SDev	.00244	.00055	.00237	.00000	.00242	.03248	.02106
%RSD	8.7039	25.633	100.07	.00000	41.606	158.65	92.198
#1	.02991	.00166	-.00356	S-.11840	.00459	-.06340	.01786
#2	.02482	.00261	-.00356	S-.11840	.00308	-.00359	.04808
#3	.02991	.00261	.00119	S-.11840	.00717	-.02612	.02791
#4	.02736	.00166	-.00356	S-.11840	.00841	.01123	-.00250
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02816	.07594	-.00190	.00109	.00000	.06705	-.00003
SDev	.03374	.01160	.02766	.00014	.00047	.04139	.00003
%RSD	119.81	15.271	1455.7	12.830	1600e6	61.727	90.768
#1	.02909	.06609	-.03260	.00097	-.00039	.10626	-.00005
#2	-.01216	.08297	.00172	.00121	-.00039	.01667	-.00005

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#3	.02909	-.00141	-.01060	.00000	-.00008	-.02810	-.00011
#4	-.02342	-.00141	.01555	.00000	-.00039	.05029	-.00005

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00427
SDev	.00057
%RSD	13.331

#1	.00393
#2	.00445
#3	.00498
#4	.00370

Errors	NOCHECK
High	
Low	

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#3	.02535	.08859	-.01043	.00097	.00054	.05027	.00001
#4	.07035	.06609	.03370	.00121	.00023	.09502	-.00005

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.01437
SDev	.00061
%RSD	4.2469

#1	.01483
#2	.01354
#3	.01482
#4	.01428

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DK0NNCT Operator: MTW
 Run Time: 09/07/00 13:57:05
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04866	1.9333	2.1557	.92274	1.8651	.04651	L.20792
SDev	.00268	.0020	.0636	.00067	.0093	.00026	.00284
%RSD	5.5133	.10122	2.9518	.07202	.49998	.54828	1.3669

#1	.04656	1.9350	2.2430	.92241	1.8639	.04675	L.20533
#2	.05216	1.9350	2.0907	.92374	1.8533	.04616	L.20649
#3	.04656	1.9317	2.1501	.92240	1.8676	.04663	L.21185
#4	.04937	1.9315	2.1390	.92241	1.8757	.04651	L.20801

Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05069	.48271	.19144	.24012	1.0116	L-.03697	.94857
SDev	.00469	.00321	.00193	.00142	.0043	.16778	.00454
%RSD	9.2519	.66578	1.0102	.59152	.42958	453.81	.47908

#1	.05235	.48203	.19336	.24199	1.0122	L.00195	.94933
#2	.05405	.48068	.18978	.23866	1.0053	L-.09924	.94414
#3	.04374	.48743	.19285	.24033	1.0148	L.17318	.94623
#4	.05261	.48068	.18977	.23950	1.0141	L-.22377	.95459

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	L.02036	.48212	-.00461	S-.11840	.48650	.47399	L.00916
SDev	.00788	.00142	.00237	.00000	.00850	.02329	.00577
%RSD	38.696	.29461	51.412	.00000	1.7473	4.9147	63.056

#1	L.02736	.48093	-.00343	S-.11840	.49499	.47023	L.00417
#2	L.01973	.48093	-.00343	S-.11840	.47735	.45528	L.01414
#3	L.02482	.48377	-.00817	S-.11840	.48131	.50771	L.01417
#4	L.00954	.48283	-.00343	S-.11840	.49234	.46273	L.00414

Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1919	.08994	.00892	.94370	.00016	1.9333	.47615
SDev	.0634	.00541	.00999	.00384	.00030	.0582	.00233
%RSD	2.8938	6.0143	112.02	.40715	191.49	3.0094	.48939

#1	2.2369	.08855	.00487	.94260	-.00008	1.8829	.47734
#2	2.1318	.08287	-.00314	.93930	.00054	1.9166	.47266

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#3	2.1431	.09417	.01498	.94440	.00023	1.9164	.47728
#4	2.2556	.09417	.01896	.94852	-.00008	2.0172	.47733
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000
Elem	ZN						
Units	ppm						
Avge	.51179						
SDev	.00537						
%RSD	1.0496						
#1	.51812						
#2	.50649						
#3	.51427						
#4	.50829						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DJP8WT

Operator: MTW

Run Time: 09/07/00 14:00:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00409	.64063	.11674	.13885	1.1542	.00002	535.85
SDev	.00081	.00578	.07452	.00163	.0053	.00006	2.46
%RSD	19.781	.90268	63.832	1.1720	.46267	259.54	.45868
#1	-.00481	.64026	.16972	.13966	1.1582	.00006	535.34
#2	-.00338	.63850	.14366	.13966	1.1517	-.00007	534.51
#3	-.00340	.63508	.00631	.13966	1.1589	.00006	534.09
#4	-.00478	.64868	.14727	.13641	1.1478	.00005	539.45
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
Avg	-.00173	.00052	.00064	.00983	.56081	2.0315	.00136
SDev	.00138	.00257	.00136	.00042	.00190	.2452	.00082
%RSD	79.716	498.07	212.20	4.2416	.33849	12.069	60.095
#1	-.00045	.00253	.00243	.01045	.56175	2.1813	.00217
#2	-.00364	-.00015	-.00013	.00962	.55922	2.0179	.00129
#3	-.00174	-.00285	-.00064	.00962	.55923	1.6910	.00026
#4	-.00109	.00253	.00089	.00962	.56302	2.2358	.00173
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
Avg	12.989	.12559	.00007	S-.11840	.00904	-.01171	.03043
SDev	.051	.00047	.00237	.00000	.01179	.02588	.02079
%RSD	.38910	.37654	3271.7	.00000	130.46	221.05	68.335
#1	13.065	.12488	.00126	S-.11840	.00294	.01074	.02780
#2	12.965	.12582	-.00348	S-.11840	.02012	-.04905	.02803
#3	12.960	.12582	.00126	S-.11840	-.00451	-.00429	.05816
#4	12.965	.12582	.00126	S-.11840	.01760	-.00423	.00773
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
Avg	.03523	5.2187	.00644	1.8031	-.01358	.01693	.00263
SDev	.05885	.0413	.02201	.0079	.00106	.02147	.00306
%RSD	167.05	.79154	341.63	.43765	7.8072	126.86	116.24
#1	.01554	5.2186	.01448	1.8088	-.01311	.00011	.00002
#2	.09804	5.2187	.01247	1.7988	-.01497	.04493	.00463

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#3	.06429	5.2692	-.02563	1.8108	-.01373	.02259	.00002
#4	-.03696	5.1681	.02445	1.7943	-.01249	.00007	.00586

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	.07805
SDev	.00108
%RSD	1.3849

#1	.07886
#2	.07646
#3	.07835
#4	.07854

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJP90T

Operator: MTW

Run Time: 09/07/00 14:03:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00370	.52204	.11445	.15690	1.4912	.00032	403.22
SDev	.00115	.01280	.02869	.01826	.0057	.00011	1.97
%RSD	31.055	2.4521	25.064	11.639	.38516	35.410	.48809
#1	-.00371	.53310	.07448	.17270	1.4876	.00030	403.43
#2	-.00228	.53146	.12643	.17270	1.4891	.00041	405.19
#3	-.00369	.51776	.14140	.14014	1.4998	.00017	403.75
#4	-.00510	.50585	.11550	.14206	1.4885	.00041	400.49
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	.02428	.00803	.00589	.35673	.11190	3.7458	.00223
SDev	.00103	.00298	.00153	.00185	.00163	.3946	.00062
%RSD	4.2198	37.118	25.990	.51723	1.4587	10.534	27.625
#1	.02473	.00635	.00756	.35444	.11254	3.5356	.00147
#2	.02288	.01174	.00653	.35860	.11380	4.3373	.00294
#3	.02527	.00904	.00397	.35777	.11127	3.5434	.00243
#4	.02426	.00501	.00551	.35610	.11001	3.5668	.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	11.080	1.2054	-.00117	S-.11840	.01820	2.0152	.02042
SDev	.037	.0050	.00274	.00000	.01073	.0374	.02236
%RSD	.33678	.41315	233.79	.00000	58.939	1.8539	109.50
#1	11.056	1.2059	.00120	S-.11840	.03023	1.9667	.02810
#2	11.135	1.2096	-.00354	S-.11840	.02065	2.0564	.02806
#3	11.059	1.2077	.00120	S-.11840	.00427	2.0116	.03793
#4	11.069	1.1983	-.00354	S-.11840	.01765	2.0263	-.01239
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	.00029	7.3674	.00383	1.5322	-.02359	.05259	.00350
SDev	.04536	.0557	.01901	.0053	.00047	.05214	.00231
%RSD	15419.	.75615	496.33	.34534	1.9737	99.135	66.040
#1	-.01939	7.2943	-.00418	1.5288	-.02304	.12541	.00003
#2	.06687	7.4293	.00386	1.5316	-.02335	.04696	.00464

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#3	-.03440	7.3787	.03005	1.5398	-.02397	.00221	.00470
#4	-.01190	7.3674	-.01441	1.5285	-.02397	.03578	.00464
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 2.3000
 SDev .0091
 %RSD .39556

#1 2.2911
 #2 2.3127
 #3 2.2972
 #4 2.2992

Errors LC Pass
 High 100.00
 Low -.02000

Method: QUANMET Sample Name: DJP91T

Operator: MTW

Run Time: 09/07/00 14:06:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00349	.22099	.10189	.08267	1.5457	.00020	583.13
SDev	.00182	.00609	.02375	.00498	.0097	.00006	1.18
%RSD	51.977	2.7536	23.309	6.0286	.63015	30.042	.20172
#1	-.00561	.21212	.08432	.08554	1.5536	.00029	584.17
#2	-.00420	.22571	.08792	.07521	1.5443	.00017	581.98
#3	-.00139	.22391	.09908	.08497	1.5524	.00017	584.11
#4	-.00279	.22222	.13625	.08497	1.5325	.00017	582.25
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	.01664	.05041	-.00192	.21302	.24153	3.8470	.00262
SDev	.00261	.00169	.00239	.00105	.00181	.1252	.00111
%RSD	15.668	3.3525	123.98	.49154	.75133	3.2540	42.188
#1	.01478	.05209	.00038	.21323	.24137	4.0182	.00372
#2	.01473	.05075	-.00423	.21323	.24390	3.7536	.00305
#3	.02028	.05073	-.00013	.21406	.24137	3.8625	.00111
#4	.01676	.04806	-.00372	.21156	.23947	3.7536	.00261
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	13.483	4.1172	.00003	S-.11840	.04083	1.0312	.02598
SDev	.069	.0140	.00454	.00000	.00512	.0276	.00971
%RSD	.51086	.34073	14545.	.00000	12.530	2.6806	37.371
#1	13.543	4.1311	-.00353	S-.11840	.03974	1.0425	.02845
#2	13.490	4.1141	-.00353	S-.11840	.03407	1.0499	.03868
#3	13.515	4.1245	.00596	S-.11840	.04535	1.0424	.01844
#4	13.385	4.0989	.00122	S-.11840	.04416	.99010	.01834
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	.02970	5.6982	.00206	1.3698	-.03779	.06170	.00467
SDev	.06813	.0414	.03415	.0072	.00054	.01442	.00006
%RSD	229.39	.72709	1657.2	.52506	1.4226	23.370	1.3180
#1	.10095	5.6912	.02219	1.3752	-.03856	.04499	.00463
#2	.05596	5.6743	-.03610	1.3700	-.03763	.07844	.00462

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#3	-.06031	5.7587	-.01608	1.3743	-.03732	.06735	.00475
#4	.02219	5.6687	.03823	1.3595	-.03763	.05600	.00468

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	2.1637
SDev	.0066
%RSD	.30410

#1	2.1718
#2	2.1638
#3	2.1634
#4	2.1557

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJP92T

Operator: MTW

Run Time: 09/07/00 14:09:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00451	1.6059	.14129	.23340	1.3058	.00041	171.92
SDev	.00071	.0115	.02600	.00226	.0072	.00001	.78
%RSD	15.666	.71469	18.402	.96718	.55303	1.2245	.45109
#1	-.00488	1.6118	.10229	.23422	1.3014	.00042	171.14
#2	-.00345	1.5931	.15438	.23096	1.3026	.00041	171.46
#3	-.00486	1.6000	.15432	.23230	1.3024	.00041	172.21
#4	-.00486	1.6187	.15417	.23613	1.3166	.00041	172.87
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	.01129	.00407	.00243	.63766	.63859	3.4325	.00081
SDev	.00202	.00444	.00042	.00374	.00209	.1937	.00005
%RSD	17.930	109.10	17.143	.58709	.32770	5.6443	5.4985
#1	.00867	-.00164	.00192	.63454	.63639	3.4656	.00077
#2	.01289	.00507	.00294	.63787	.63827	3.2554	.00085
#3	.01288	.00373	.00243	.63537	.63827	3.6913	.00085
#4	.01072	.00911	.00243	.64286	.64143	3.3177	.00077
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	10.870	.60366	.00127	S-.11840	.01179	2.3725	.00006
SDev	.028	.00272	.00671	.00000	.00704	.0177	.01285
%RSD	.25535	.45062	528.87	.00000	59.668	.74426	21213.
#1	10.853	.60201	.00601	S-.11840	.00477	2.3985	-.00265
#2	10.855	.60201	.00127	S-.11840	.02150	2.3614	.01794
#3	10.860	.60295	-.00822	S-.11840	.00960	2.3688	-.00239
#4	10.911	.60769	.00601	S-.11840	.01131	2.3614	-.01266
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	.02887	7.8666	.01740	.91397	.01117	.07843	.00353
SDev	.04260	.0453	.03237	.00461	.00142	.06422	.00230
%RSD	147.55	.57631	186.00	.50432	12.704	81.882	65.123
#1	.00074	7.8286	.03850	.91027	.01327	.02532	.00008
#2	.09075	7.8906	-.01772	.91270	.01047	.17078	.00470

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#3	.00074	7.8287	-.00172	.91221	.01016	.07002	.00457
#4	.02325	7.9187	.05054	.92070	.01078	.04758	.00476
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	1.3049
SDev	.0075
%RSD	.57462

#1	1.3061
#2	1.3032
#3	1.2960
#4	1.3142

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJPHKT

Operator: MTW

Run Time: 09/07/00 14:12:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00461	.26499	.15069	.08709	.39721	.00011	H709.72
SDev	.00177	.00934	.07899	.00000	.00216	.00007	2.03
%RSD	38.413	3.5263	52.420	.00308	.54354	62.937	.28632
#1	-.00215	.27602	.04287	.08709	.39420	.00017	H709.04
#2	-.00636	.25566	.23250	.08708	.39930	.00005	H707.41
#3	-.00496	.26924	.15808	.08708	.39745	.00017	H710.21
#4	-.00496	.25906	.16931	.08709	.39791	.00005	H712.24
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	-.00080	.00090	-.00398	.00232	.30421	2.2922	.00218
SDev	.00317	.00233	.00297	.00196	.00150	.4508	.00077
%RSD	395.65	259.83	74.819	84.585	.49431	19.666	35.444
#1	.00184	-.00247	-.00167	.00377	.30264	2.5316	.00323
#2	.00192	.00156	-.00679	-.00038	.30326	1.8155	.00137
#3	-.00432	.00292	-.00116	.00378	.30517	2.7962	.00199
#4	-.00265	.00158	-.00628	.00211	.30579	2.0256	.00214
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	17.945	.70394	-.00233	S-.11840	.00204	.02406	.01780
SDev	.085	.00195	.00237	.00000	.00254	.01657	.02608
%RSD	.47588	.27736	101.69	.00000	124.29	68.887	146.47
#1	17.822	.70228	-.00352	S-.11840	-.00108	.03334	.04812
#2	18.018	.70228	-.00352	S-.11840	.00179	.00351	-.01251
#3	17.980	.70512	.00123	S-.11840	.00234	.04092	.02787
#4	17.959	.70607	-.00352	S-.11840	.00511	.01846	.00774
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	-.01420	1.8029	.01168	.63775	-.04244	.09982	.00464
SDev	.04587	.0168	.01036	.00276	.00093	.06359	.00004
%RSD	322.97	.93167	88.665	.43212	2.1938	63.703	.77645
#1	.00361	1.8099	-.00379	.63382	-.04167	.11945	.00463
#2	.01486	1.8212	.01608	.64027	-.04353	.00744	.00461

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#3	-.08264	1.7987	.01625	.63843	-.04167	.15299	.00469
#4	.00737	1.7818	.01818	.63847	-.04291	.11941	.00462

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	.03150
SDev	.00042
%RSD	1.3201

#1	.03147
#2	.03094
#3	.03191
#4	.03168

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-1 0057-054-2 Operator: MTW
Run Time: 09/07/00 14:16:04
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99598	48.941	4.9756	4.9295	4.8446	4.8945	50.338
SDev	.00068	.170	.0484	.0390	.0249	.0219	.231
%RSD	.06829	.34753	.97228	.79034	.51429	.44655	.45964
#1	.99567	49.096	5.0039	4.9806	4.8690	4.9212	50.208
#2	.99565	48.917	4.9943	4.9140	4.8430	4.8879	50.404
#3	.99700	48.712	4.9033	4.8885	4.8108	4.8690	50.632
#4	.99560	49.040	5.0009	4.9347	4.8557	4.8999	50.109
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
Avg	5.0676	4.9515	4.9427	4.8445	50.703	48.090	4.8318
SDev	.0291	.0130	.0115	.0318	.065	.160	.0483
%RSD	.57335	.26200	.23318	.65700	.12892	.33206	.99986
#1	5.0570	4.9528	4.9496	4.8773	50.766	47.979	4.8753
#2	5.0688	4.9596	4.9424	4.8358	50.721	47.971	4.8141
#3	5.1068	4.9608	4.9522	4.8042	50.714	48.314	4.7717
#4	5.0379	4.9328	4.9265	4.8607	50.612	48.096	4.8662
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
Avg	49.154	4.9377	4.9212	48.124	4.9261	5.0219	4.9771
SDev	.152	.0098	.0155	.418	.0354	.0433	.0568
%RSD	.30918	.19800	.31476	.86805	.71951	.86136	1.1403
#1	49.353	4.9399	4.9212	48.532	4.8909	5.0778	4.9489
#2	49.127	4.9465	4.9402	47.995	4.9732	4.9736	4.9195
#3	48.984	4.9408	4.9022	47.596	4.9092	5.0261	4.9894
#4	49.152	4.9237	4.9212	48.373	4.9311	5.0103	5.0505
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
Avg	5.1127	5.0329	5.0252	4.8581	4.8854	9.8709	4.9275
SDev	.0368	.0071	.0423	.0210	.0118	.1292	.0063
%RSD	.71960	.14028	.84240	.43218	.24132	1.3093	.12871
#1	5.1203	5.0344	5.0151	4.8807	4.9004	9.9821	4.9334
#2	5.0602	5.0344	4.9868	4.8546	4.8864	9.9714	4.9313

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#3	5.1239	5.0398	5.0857	4.8309	4.8719	9.7140	4.9191
#4	5.1462	5.0230	5.0133	4.8660	4.8827	9.8160	4.9263

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	4.9606
SDev	.0152
%RSD	.30631

#1	4.9581
#2	4.9567
#3	4.9818
#4	4.9458

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB1

Operator: MTW

Run Time: 09/07/00 14:19:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00176	-.00250	-.02968	.00617	-.00007	.00000	-.00048
SDev	.00071	.00619	.02919	.00810	.00040	.00012	.00335
%RSD	40.053	247.27	98.348	131.17	590.14	6186.0	697.90

#1	-.00211	-.00641	-.03617	.00091	-.00046	-.00006	.00041
#2	-.00213	-.00118	.00842	.00416	-.00027	-.00005	-.00195
#3	-.00211	-.00808	-.02872	.00149	.00000	-.00006	-.00410
#4	-.00070	.00566	-.06227	.01813	.00046	.00018	.00372

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	-.00134	.00101	-.00179	-.00125	-.00032	-.30550	-.00033
SDev	.00210	.00417	.00147	.00118	.00060	.14775	.00060
%RSD	157.12	412.47	82.046	94.575	191.83	48.363	181.51

#1	-.00256	-.00100	-.00269	-.00125	-.00110	-.26269	-.00083
#2	-.00306	.00034	-.00218	-.00042	-.00047	-.42614	-.00080
#3	-.00137	-.00235	-.00269	-.00291	.00016	-.41836	-.00010
#4	.00163	.00705	.00038	-.00041	.00016	-.11481	.00041

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	-.01018	.00024	-.00237	.00357	-.00165	.00002	-.00507
SDev	.00891	.00055	.00237	.00379	.00684	.04334	.00975
%RSD	87.500	231.55	99.995	106.14	413.18	218670.	192.34

#1	-.00573	-.00024	.00119	-.00020	.00516	.01116	-.01263
#2	-.02354	.00071	-.00356	.00469	-.00501	-.06344	-.00257
#3	-.00573	-.00024	-.00356	.00143	-.00957	.01859	-.01276
#4	-.00573	.00071	-.00356	.00836	.00280	.03378	.00768

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	-.00938	-.00001	.01004	.00000	.00023	.04759	-.00091
SDev	.01921	.00279	.01522	.00000	.00044	.05363	.00176
%RSD	204.93	26859.	151.71	.00000	188.56	112.69	193.47

#1	-.01219	-.00141	.02157	.00000	.00023	.07280	.00001
#2	-.02719	.00418	.00753	.00000	.00054	.02802	-.00356

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#3	.01781	-.00141	.02157	.00000	-.00039	.10639	-.00005
#4	-.01594	-.00141	-.01053	.00000	.00054	-.01685	-.00005

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	-.00007
SDev	.00073
%RSD	1045.0

#1	.00056
#2	-.00072
#3	-.00068
#4	.00056

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DJPHLT

Operator: MTW

Run Time: 09/07/00 14:22:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00456	.11828	.17908	.09859	.35890	.00009	75.912
SDev	.00210	.01195	.08436	.00154	.00241	.00006	.303
%RSD	46.107	10.107	47.108	1.5653	.67176	70.677	.39979
#1	-.00351	.12472	.09639	.09648	.35551	.00006	75.512
#2	-.00632	.11614	.21162	.09841	.36015	.00006	75.937
#3	-.00211	.12980	.12606	.09974	.36100	.00018	76.250
#4	-.00630	.10247	.28224	.09975	.35895	.00005	75.950
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	-.00149	.00019	-.00244	.00354	.10976	10.249	.00274
SDev	.00202	.00245	.00170	.00105	.00082	.231	.00052
%RSD	136.08	1318.7	69.738	29.552	.74371	2.2516	18.923
#1	.00074	.00287	-.00372	.00375	.10881	9.9959	.00261
#2	-.00058	-.00251	-.00372	.00209	.10944	10.113	.00243
#3	-.00217	.00153	-.00218	.00458	.11070	10.416	.00351
#4	-.00394	-.00115	-.00013	.00375	.11007	10.471	.00243
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	9.0448	.12759	-.00354	S-.11840	.00449	-.01690	.00010
SDev	.0632	.00077	.00000	.00000	.01026	.01124	.00959
%RSD	.69859	.60570	.00298	.00000	228.27	66.509	9233.8
#1	8.9538	.12759	-.00354	S-.11840	.00424	-.00379	-.01245
#2	9.0760	.12759	-.00354	S-.11840	-.00824	-.02629	.00756
#3	9.0963	.12854	-.00354	S-.11840	.01686	-.01128	-.00234
#4	9.0531	.12665	-.00354	S-.11840	.00511	-.02624	.00764
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	.00310	1.8788	-.00386	.24225	-.00419	.09489	.00112
SDev	.05571	.0133	.01956	.00192	.00039	.07022	.00234
%RSD	1796.4	.70817	506.13	.79075	9.3208	74.005	209.69
#1	-.06816	1.8774	-.03057	.23946	-.00411	.00530	-.00006
#2	.02560	1.8605	-.00635	.24285	-.00473	.08373	-.00006

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#3	.06311	1.8886	.01172	.24382	-.00380	.17326	-.00005
#4	-.00815	1.8887	.00975	.24285	-.00411	.11726	.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 .25779
SDev .00325
%RSD 1.2616

#1 .25410
#2 .25957
#3 .26131
#4 .25618

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DJQTDI

Operator: MTW

Run Time: 09/07/00 14:25:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00112	.59139	.15577	.04664	.22590	.00033	12.380
SDev	.00135	.00378	.07378	.00733	.00115	.00006	.038
%RSD	120.48	.63847	47.366	15.726	.50797	18.182	.30302
#1	.00064	.58919	.15578	.05449	.22526	.00030	12.392
#2	-.00077	.59268	.09632	.04108	.22507	.00030	12.419
#3	-.00217	.59607	.25975	.03974	.22572	.00030	12.381
#4	-.00217	.58760	.11122	.05123	.22758	.00042	12.330
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	-.00131	.00226	-.00179	.00063	.08023	1.9595	.00283
SDev	.00321	.00173	.00153	.00080	.00255	.2886	.00086
%RSD	244.20	76.597	85.288	125.55	3.1743	14.729	30.533
#1	-.00032	.00158	-.00218	-.00040	.08292	1.7299	.00279
#2	.00165	.00426	.00038	.00126	.07913	2.3370	.00367
#3	L-.00587	.00025	-.00321	.00042	.07723	1.7377	.00165
#4	-.00072	.00293	-.00218	.00126	.08166	2.0334	.00323
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	1.7022	.44661	-.00473	S-.11840	.00594	-.02093	-.01255
SDev	.0116	.00109	.00454	.00000	.00672	.01272	.02024
%RSD	.67979	.24468	95.957	.00000	113.11	60.784	161.30
#1	1.7022	.44566	.00120	S-.11840	-.00091	-.01906	-.00246
#2	1.6869	.44755	-.00355	S-.11840	.01402	-.03392	-.00242
#3	1.7149	.44566	-.00829	S-.11840	.00867	-.02657	-.00241
#4	1.7047	.44755	-.00829	S-.11840	.00198	-.00416	-.04291
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	.02834	1.1616	.00709	.05327	.00023	.06125	-.00007
SDev	.01716	.0084	.02192	.00023	.00025	.05437	.00006
%RSD	60.545	.72639	309.06	.43604	108.87	88.772	91.848
#1	.04053	1.1573	-.02454	.05309	.00054	.07521	.00001
#2	.03677	1.1686	.02574	.05309	.00023	.13124	-.00005

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#3	.00302	1.1686	.01568	.05333	.00023	.03050	-.00012
#4	.03303	1.1517	.01150	.05358	-.00008	.00805	-.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	.02747
SDev	.00038
%RSD	1.3976

#1	.02782
#2	.02776
#3	.02725
#4	.02704

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJRHVT

Operator: MTW

Run Time: 09/07/00 14:28:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00104	.12187	.18523	.23452	.10556	.00032	78.082
SDev	.00070	.00552	.04301	.00923	.00070	.00006	.307
%RSD	67.137	4.5315	23.223	3.9349	.65913	18.286	.39276
#1	-.00139	.11623	.14811	.24022	.10474	.00029	78.130
#2	.00001	.12666	.20380	.23140	.10521	.00030	77.707
#3	-.00139	.12656	.15174	.22298	.10613	.00041	78.453
#4	-.00139	.11803	.23725	.24347	.10613	.00029	78.037
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	.01305	.01606	.00256	.11681	.37683	13.185	.00980
SDev	.00484	.00256	.00159	.00118	.00130	.247	.00048
%RSD	37.059	15.922	61.990	1.0057	.34593	1.8713	4.8944
#1	.01957	.01234	.00397	.11681	.37541	13.226	.00919
#2	.00931	.01775	.00243	.11515	.37794	12.860	.01027
#3	.01388	.01773	.00038	.11765	.37794	13.460	.01007
#4	.00945	.01640	.00346	.11764	.37604	13.195	.00965
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	39.295	4.3020	-.00351	S-.11840	.05389	.02826	.00315
SDev	.185	.0178	.00387	.00000	.01130	.01119	.02677
%RSD	.46991	.41385	110.37	.00000	20.966	39.582	848.98
#1	39.236	4.2968	.00123	S-.11840	.04343	.03377	.00801
#2	39.085	4.2836	-.00825	S-.11840	.05690	.03386	-.02203
#3	39.526	4.3262	-.00351	S-.11840	.04673	.01148	-.01203
#4	39.335	4.3016	-.00351	S-.11840	.06849	.03392	.03866
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	.02255	4.1612	-.00098	.50562	-.00473	.13464	.00376
SDev	.03661	.0450	.01703	.00322	.00036	.06520	.00180
%RSD	162.34	1.0816	1733.7	.63661	7.5718	48.424	47.773
#1	.07130	4.1387	.01815	.50293	-.00504	.17944	.00470
#2	-.01495	4.1386	-.01818	.50323	-.00442	.20168	.00107

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#3	.00756	4.2287	-.01211	.50978	-.00442	.07881	.00463
#4	.02630	4.1387	.00822	.50653	-.00504	.07865	.00464
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 1.6154
SDev .0109
%RSD: .67785

#1 1.6027
#2 1.6097
#3 1.6251
#4 1.6239

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DJRHVP5T Operator: MTW
 Run Time: 09/07/00 14:31:45
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00120	.02346	.04059	.03471	.02252	.00009	16.127
SDev	.00211	.00792	.02069	.00134	.00014	.00006	.115
%RSD	175.40	33.762	50.965	3.8624	.60569	66.667	.71510
#1	.00196	.02937	.01175	.03648	.02245	.00018	16.273
#2	-.00226	.01759	.06014	.03457	.02245	.00006	16.113
#3	-.00226	.01573	.04159	.03456	.02245	.00006	15.992
#4	-.00226	.03114	.04889	.03322	.02273	.00006	16.128
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	.00263	.00435	-.00038	.02245	.07802	2.2864	.00157
SDev	.00260	.00290	.00180	.00108	.00227	.3387	.00045
%RSD	98.849	66.687	468.45	4.7914	2.9109	14.814	28.614
#1	.00003	.00571	.00141	.02287	.07913	2.5705	.00199
#2	.00605	.00434	-.00167	.02203	.07976	2.2280	.00181
#3	.00135	.00032	-.00218	.02120	.07470	1.8311	.00096
#4	.00311	.00704	.00090	.02370	.07849	2.5160	.00155
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	8.3677	.90055	.00001	297.60	.01376	-.01112	-.00239
SDev	.0593	.00640	.00597	1.35	.00768	.01617	.01650
%RSD	.70833	.71048	59178.	.45489	55.837	145.46	691.92
#1	8.4422	.90860	.00594	297.44	.01382	-.01855	-.00240
#2	8.3887	.90197	-.00829	299.42	.00688	-.01114	-.02264
#3	8.3200	.89345	.00120	297.38	.00987	-.02612	.01779
#4	8.3200	.89818	.00120	296.15	.02446	.01134	-.00229
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	-.00167	.85079	.00764	.10658	-.00101	.03392	-.00000
SDev	.04191	.02452	.00695	.00053	.00025	.01294	.00008
%RSD	2509.6	2.8819	90.997	.49732	25.123	38.139	10867.
#1	-.03823	.83672	-.00242	.10691	-.00101	.02276	.00008
#2	-.03448	.84235	.01359	.10715	-.00101	.04511	-.00011

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#3	.01801	.83672	.00973	.10618	-.00132	.04513	.00001
#4	.04802	.88735	.00965	.10608	-.00070	.02267	.00002

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	.33073
SDev	.00138
%RSD	.41838

#1	.32949
#2	.33081
#3	.33264
#4	.32998

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJRHVST Operator: MTW
 Run Time: 09/07/00 14:34:54
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.90633	.09633	5.0623	.19131	45.282	.00027	69.104
SDev	.00372	.01528	.0646	.00001	.404	.00006	.146
%RSD	.41041	15.865	1.2756	.00544	.89222	22.097	.21077
#1	.90281	.08242	5.0819	.19130	45.283	.00030	69.006
#2	.90705	.11118	5.0073	.19131	44.902	.00029	69.283
#3	.90422	.10783	5.0148	.19132	45.101	.00030	68.967
#4	.91124	.08390	5.1450	.19132	45.841	.00018	69.161
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	.97688	.01540	4.5247	.10497	.34020	11.498	.00889
SDev	.00698	.00533	.0114	.00142	.00095	.514	.00048
%RSD	.71482	34.633	.25101	1.3546	.27833	4.4725	5.3655
#1	.96731	.02148	4.5187	.10684	.33940	11.763	.00875
#2	.98051	.01758	4.5228	.10351	.33941	11.654	.00885
#3	.97641	.01347	4.5161	.10517	.34130	11.841	.00955
#4	.98330	.00908	4.5412	.10434	.34067	10.735	.00841
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	35.313	3.8486	-.00114	S-.11840	.05185	4.6204	-.00470
SDev	.198	.0131	.00274	.00000	.00798	.0316	.00518
%RSD	.56123	.33938	239.83	.00000	15.388	.68498	110.22
#1	35.346	3.8434	-.00351	S-.11840	.04263	4.6430	-.00221
#2	35.153	3.8434	.00123	S-.11840	.05730	4.5757	-.00211
#3	35.173	3.8396	-.00351	S-.11840	.05962	4.6204	-.00202
#4	35.580	3.8680	.00123	S-.11840	.04785	4.6427	-.01248
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	1.0763	3.6182	-.02018	.45944	-.00303	.01125	.00219
SDev	.0688	.0358	.01186	.00383	.00082	.06228	.00236
%RSD	6.3935	.98809	58.781	.83346	27.136	553.48	107.59
#1	1.0988	3.5985	-.00810	.45930	-.00349	.05317	.00098
#2	1.0500	3.6717	-.01615	.45611	-.00194	.04197	.00572

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#3	1.1588	3.5985	-.02017	.45752	-.00287	-.08118	.00097
#4	.99752	3.6041	-.03630	.46484	-.00380	.03105	.00109

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	1.4359
SDev	.0063
%RSD	.43988

#1	1.4359
#2	1.4294
#3	1.4338
#4	1.4444

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJRHVDT Operator: MTW
 Run Time: 09/07/00 14:38:02
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.92074	.10392	5.1030	.20844	45.380	.00029	72.115
SDev	.00351	.00660	.0755	.02013	.349	.00010	.408
%RSD	.38152	6.3512	1.4802	9.6583	.76931	34.031	.56567
#1	.91687	.09754	5.0743	.23042	45.281	.00017	71.635
#2	.92109	.10776	5.2153	.19135	45.314	.00029	72.454
#3	.92530	.09919	5.0705	.19136	45.873	.00041	72.454
#4	.91968	.11120	5.0519	.22065	45.051	.00029	71.918
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	.99693	.01765	4.5679	.11058	.36309	12.549	.00948
SDev	.00905	.00213	.0314	.00144	.00255	.161	.00046
%RSD	.90738	12.039	.68723	1.3004	.70294	1.2822	4.8627
#1	.99419	.01602	4.5366	.11016	.36152	12.393	.00911
#2	.98695	.02006	4.5848	.10934	.36341	12.510	.01007
#3	1.0087	.01572	4.6032	.11266	.36657	12.775	.00963
#4	.99793	.01880	4.5469	.11017	.36088	12.518	.00911
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	36.735	3.9972	.00360	S-.11840	.05114	4.6858	-.00261
SDev	.257	.0199	.00274	.00000	.01046	.0378	.01845
%RSD	.69975	.49777	75.985	.00000	20.446	.80680	705.85
#1	36.667	3.9778	.00123	S-.11840	.05261	4.6428	-.01243
#2	36.705	4.0053	.00598	S-.11840	.06139	4.7325	-.02291
#3	37.090	4.0214	.00598	S-.11840	.03656	4.6728	.00701
#4	36.476	3.9844	.00123	S-.11840	.05401	4.6952	.01787
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	1.0885	3.7968	-.00405	.47491	-.00365	.05687	.00586
SDev	.0706	.0404	.00907	.00364	.00031	.04504	.00011
%RSD	6.4903	1.0640	224.31	.76536	8.5106	79.198	1.8310
#1	1.0651	3.7786	-.00208	.47343	-.00349	.10994	.00576
#2	1.1813	3.7786	.00593	.47475	-.00349	.00932	.00593

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#3	1.0126	3.8573	-.00400	.47998	-.00411	.03183	.00597
#4	1.0951	3.7729	-.01603	.47149	-.00349	.07638	.00578

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	1.4880
SDev	.0075
%RSD	.50278

#1	1.4813
#2	1.4857
#3	1.4987
#4	1.4865

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJRJPT

Operator: MTW

Run Time: 09/07/00 14:41:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00275	.18479	.17172	.28013	.11632	.00033	73.295
SDev	.00114	.00381	.04544	.00312	.00062	.00006	.295
%RSD	41.501	2.0599	26.460	1.1123	.53157	19.563	.40184
#1	-.00135	.18270	.14763	.28257	.11653	.00030	72.857
#2	-.00414	.18946	.19579	.27606	.11541	.00029	73.487
#3	-.00274	.18086	.12156	.27932	.11680	.00029	73.441
#4	-.00276	.18614	.22189	.28257	.11653	.00042	73.397
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	.01307	.01369	.00436	.12720	.39168	12.171	.00974
SDev	.00177	.00110	.00106	.00107	.00209	.259	.00088
%RSD	13.571	8.0333	24.254	.84284	.53284	2.1277	9.0287
#1	.01301	.01235	.00448	.12845	.38931	11.950	.00945
#2	.01248	.01370	.00448	.12595	.39121	12.144	.00885
#3	.01549	.01369	.00551	.12762	.39437	12.051	.01094
#4	.01128	.01505	.00295	.12679	.39184	12.541	.00973
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	36.739	4.0256	-.00114	S-.11840	.06185	.02255	.00065
SDev	.103	.0117	.00474	.00000	.01065	.00965	.02398
%RSD	.27914	.29155	417.86	.00000	17.227	42.774	3667.4
#1	36.736	4.0100	-.00351	S-.11840	.06795	.01881	.01845
#2	36.642	4.0242	-.00351	S-.11840	.07370	.03377	.01850
#3	36.881	4.0375	.00598	S-.11840	.05373	.01135	-.00207
#4	36.695	4.0308	-.00351	S-.11840	.05200	.02627	-.03226
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	.00384	4.9796	.00154	.47460	-.00295	.10721	.00233
SDev	.04909	.0323	.02086	.00159	.00069	.03700	.00274
%RSD	1277.6	.64924	1358.5	.33486	23.341	34.516	117.36
#1	.03009	4.9711	-.01398	.47475	-.00318	.13233	-.00004
#2	-.06741	5.0274	-.00393	.47256	-.00194	.05400	.00464

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#3	.04135	4.9599	.03220	.47644	-.00318	.13244	.00477
#4	.01134	4.9599	-.00815	.47465	-.00349	.11005	-.00004

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	1.5697
SDev	.0078
%RSD	.49625

#1	1.5608
#2	1.5694
#3	1.5798
#4	1.5689

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJTTNT

Operator: MTW

Run Time: 09/07/00 14:44:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00303	.05275	.17684	.06114	1.1862	.00008	H752.28
SDev	.00335	.01085	.08794	.01579	.0104	.00006	4.17
%RSD	110.82	20.571	49.729	25.816	.87889	70.651	.55422
#1	-.00655	.04641	.29765	.07029	1.1940	.00005	H750.51
#2	.00050	.06843	.17480	.03772	1.1708	.00016	H758.36
#3	-.00092	.05151	.14529	.07087	1.1894	.00005	H751.30
#4	-.00514	.04465	.08962	.06569	1.1905	.00005	H748.95
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	.00032	.00189	-.00410	.00520	.02938	2.7262	.00540
SDev	.00159	.00339	.00311	.00080	.00110	.3963	.00055
%RSD	499.66	178.84	75.856	15.361	3.7287	14.536	10.186
#1	-.00103	-.00147	-.00526	.00457	.02906	2.3526	.00498
#2	-.00012	.00661	-.00065	.00624	.02907	3.2866	.00604
#3	-.00020	.00122	-.00270	.00541	.03096	2.6328	.00568
#4	.00262	.00121	-.00782	.00457	.02843	2.6328	.00490
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	12.684	1.3381	-.00592	S-.11840	.00923	.06536	.03055
SDev	.068	.0031	.00612	.00000	.00927	.02154	.02248
%RSD	.53307	.23374	103.35	.00000	100.42	32.954	73.580
#1	12.741	1.3403	-.01304	S-.11840	-.00361	.04098	.00771
#2	12.586	1.3412	.00119	S-.11840	.01841	.09348	.03819
#3	12.706	1.3365	-.00830	S-.11840	.01007	.06346	.01791
#4	12.703	1.3346	-.00355	S-.11840	.01207	.06352	.05841
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	.00008	3.0502	.01038	.87975	-.04764	.11337	.00576
SDev	.04668	.0326	.00300	.00647	.00085	.05808	.00241
%RSD	60439.	1.0692	28.865	.73502	1.7940	51.230	41.796
#1	-.04211	3.0868	.00777	.88492	-.04818	.07143	.00449
#2	.03664	3.0081	.01192	.87037	-.04663	.13853	.00937

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#3	-.03836	3.0587	.01385	.88094	-.04725	.06016	.00456
#4	.04414	3.0474	.00798	.88278	-.04849	.18335	.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	.20479
SDev	.00103
%RSD	.50454

#1	.20507
#2	.20425
#3	.20609
#4	.20372

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJTTPT

Operator: MTW

Run Time: 09/07/00 14:47:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00452	.13020	.19193	.19001	2.6586	.00010	406.73
SDev	.00182	.01031	.02813	.00162	.0181	.00006	2.37
%RSD	40.309	7.9160	14.656	.85310	.68132	60.928	.58301
#1	-.00378	.13480	.17414	.19082	2.6359	.00015	407.55
#2	-.00242	.14167	.17793	.18758	2.6521	.00017	409.53
#3	-.00523	.12648	.18178	.19083	2.6744	.00005	403.97
#4	-.00664	.11786	.23386	.19082	2.6719	.00005	405.87
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	.01863	.01123	-.00334	.53601	.07794	7.8846	.01222
SDev	.00231	.00291	.00311	.00368	.00363	.4920	.00052
%RSD	12.377	25.912	93.352	.68712	4.6519	6.2394	4.2834
#1	.02058	.01526	.00038	.53145	.07779	8.3380	.01252
#2	.02014	.00988	-.00218	.53477	.08221	8.1668	.01278
#3	.01827	.00853	-.00680	.53809	.07842	7.2250	.01193
#4	.01551	.01123	-.00474	.53975	.07336	7.8088	.01164
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	15.021	1.8910	.00238	S-.11840	.08201	2.3608	.02118
SDev	.046	.0059	.00711	.00000	.01155	.0255	.02531
%RSD	.30486	.31240	298.73	.00000	14.087	1.0780	119.51
#1	14.973	1.8875	.00594	S-.11840	.08097	2.3852	.01863
#2	15.075	1.8988	.00594	S-.11840	.09863	2.3701	.04902
#3	14.994	1.8856	-.00829	S-.11840	.07324	2.3253	.02877
#4	15.040	1.8922	.00594	S-.11840	.07520	2.3627	-.01172
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	.01989	9.6850	-.00476	1.1297	-.02452	.08894	.00704
SDev	.03630	.0375	.02397	.0066	.00039	.01414	.00471
%RSD	182.45	.38760	503.85	.58860	1.5928	15.896	66.980
#1	-.03073	9.6288	-.00829	1.1211	-.02460	.07484	.01411
#2	.02928	9.7018	.03006	1.1279	-.02397	.10857	.00475

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#3	.05552	9.7018	-.01830	1.1350	-.02460	.08613	.00455
#4	.02551	9.7074	-.02250	1.1350	-.02491	.08622	.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	13.717
SDev	.036
%RSD	.26195

#1	13.696
#2	13.747
#3	13.677
#4	13.748

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJTTQT

Operator: MTW

Run Time: 09/07/00 14:50:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00039	.16484	.14901	.10078	1.2236	.00033	43.268
SDev	.00240	.01277	.02404	.00081	.0074	.00006	.184
%RSD	621.07	7.7469	16.131	.80489	.60652	17.508	.42607
#1	.00005	.15890	.15552	.10097	1.2132	.00041	43.387
#2	.00145	.17078	.11456	.10154	1.2234	.00029	43.324
#3	.00284	.17931	.15542	.10098	1.2281	.00030	43.367
#4	-.00279	.15038	.17052	.09963	1.2297	.00030	42.994
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	.02756	.01853	.00205	.16934	.06712	3.6563	.00388
SDev	.00334	.00190	.00206	.00104	.00186	.2621	.00041
%RSD	12.115	10.243	100.76	.61660	2.7752	7.1676	10.654
#1	.03213	.01852	.00192	.16830	.06712	3.8859	.00330
#2	.02564	.01988	.00500	.16914	.06649	3.7847	.00392
#3	.02789	.01987	.00039	.16914	.06965	3.2866	.00428
#4	.02460	.01585	.00090	.17079	.06522	3.6680	.00400
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.3948	3.7560	.00119	S-.11840	.04802	.74307	.00814
SDev	.0316	.0087	.00387	.00000	.00932	.00858	.02745
%RSD	.58597	.23229	324.24	.00000	19.400	1.1546	337.26
#1	5.3573	3.7534	-.00355	S-.11840	.04615	.73562	.01824
#2	5.4234	3.7581	.00119	S-.11840	.05031	.75058	.01827
#3	5.3802	3.7666	.00594	S-.11840	.05904	.73566	.02845
#4	5.4184	3.7458	.00119	S-.11840	.03661	.75041	-.03240
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	-.00920	4.5985	-.00339	.15333	-.00171	.05003	.00236
SDev	.05209	.0125	.00901	.00066	.00093	.03359	.00267
%RSD	566.24	.27078	265.76	.43296	54.292	67.149	113.11
#1	.02174	4.5887	.00570	.15234	-.00132	.08919	.00463
#2	-.08702	4.5943	-.00637	.15360	-.00194	.02203	.00470

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#3	.01050	4.6167	.00172	.15365	-.00070	.06688	.00008
#4	.01799	4.5942	-.01462	.15374	-.00287	.02202	.00002
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	8.1783
SDev	.0201
%RSD	.24574

#1	8.1554
#2	8.1692
#3	8.2011
#4	8.1876

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-2

Operator: MTW

Run Time: 09/07/00 14:53:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99934	49.259	5.1301	5.0173	4.8577	4.9886	50.483
SDev	.00439	.198	.0722	.0226	.0385	.0092	.283
%RSD	.43983	.40108	1.4080	.45029	.79342	.18403	.56000
#1	.99439	49.366	5.2353	4.9865	4.8752	4.9831	50.237
#2	1.0015	49.429	5.1117	5.0344	4.8916	4.9978	50.468
#3	1.0043	48.982	5.0711	5.0141	4.8030	4.9786	50.883
#4	.99721	49.261	5.1023	5.0341	4.8610	4.9948	50.346
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	5.0878	4.9662	4.9638	4.8961	50.980	48.438	4.8656
SDev	.0215	.0162	.0147	.0319	.085	.119	.0670
%RSD	.42340	.32547	.29625	.65228	.16745	.24511	1.3778
#1	5.0570	4.9488	4.9506	4.9089	50.876	48.415	4.9156
#2	5.1070	4.9661	4.9665	4.9206	51.068	48.454	4.9136
#3	5.0919	4.9877	4.9834	4.8491	51.028	48.586	4.7725
#4	5.0953	4.9621	4.9547	4.9056	50.948	48.298	4.8607
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	49.605	4.9577	4.9592	48.616	4.9693	4.9755	5.0454
SDev	.119	.0143	.0103	.474	.0271	.0347	.0239
%RSD	.24084	.28862	.20671	.97453	.54590	.69688	.47327
#1	49.666	4.9418	4.9591	48.970	5.0041	4.9358	5.0610
#2	49.738	4.9693	4.9639	48.900	4.9684	4.9660	5.0304
#3	49.473	4.9703	4.9687	47.934	4.9379	5.0192	5.0701
#4	49.542	4.9494	4.9449	48.658	4.9670	4.9809	5.0203
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	5.2175	5.0825	5.0454	4.8940	4.9167	9.9403	4.9582
SDev	.0505	.0282	.0520	.0311	.0146	.2341	.0081
%RSD	.96703	.55387	1.0300	.63553	.29667	2.3551	.16320
#1	5.1431	5.0403	5.0337	4.9083	4.9190	10.227	4.9549
#2	5.2449	5.0967	4.9956	4.9212	4.9327	9.7658	4.9702

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#3	5.2523	5.0965	5.1185	4.8498	4.8973	10.035	4.9528
#4	5.2296	5.0965	5.0337	4.8966	4.9178	9.7335	4.9547

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	4.9933
SDev	.0219
%RSD	.43912

#1	4.9818
#2	5.0021
#3	5.0195
#4	4.9700

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB2

Operator: MTW

Run Time: 09/07/00 14:56:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00035	.00300	-.00095	.00919	.00012	.00009	.00238
SDev	.00352	.01697	.01108	.00860	.00023	.00006	.00488
%RSD	1000.1	566.36	1161.7	93.584	200.00	66.667	205.33
#1	-.00492	-.01313	.00475	.00282	.00000	.00006	-.00459
#2	.00070	.01402	.00453	.01814	.00000	.00006	.00443
#3	.00352	.02086	.00447	.01488	.00046	.00018	.00667
#4	-.00070	-.00977	-.01757	.00090	.00000	.00006	.00300
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
Avg	.00016	.00302	-.00179	-.00145	-.00016	-.06811	-.00068
SDev	.00101	.00190	.00294	.00197	.00110	.38432	.00100
%RSD	653.63	62.927	164.00	135.43	697.63	564.30	145.48
#1	.00047	.00168	-.00320	-.00291	-.00111	-.34831	-.00178
#2	.00010	.00302	-.00218	-.00124	.00079	-.20042	-.00116
#3	-.00119	.00572	.00244	.00125	.00079	.50009	.00049
#4	.00124	.00168	-.00423	-.00291	-.00111	-.22377	-.00028
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
Avg	-.00827	.00024	.00237	.01569	.00600	.01313	-.00244
SDev	.02229	.00055	.00454	.00675	.00856	.00720	.02186
%RSD	269.41	230.44	191.49	43.047	142.71	54.801	895.00
#1	-.01591	-.00024	-.00356	.00591	.01044	.00375	-.02259
#2	-.01845	-.00023	.00593	.01651	.01457	.01877	.02799
#3	.02482	.00071	.00593	.02058	-.00507	.01879	-.00264
#4	-.02354	.00071	.00119	.01977	.00404	.01123	-.01253
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
Avg	.01875	.00141	-.00303	.00000	.00023	.01118	.00003
SDev	.02340	.00325	.01184	.00000	.00080	.02664	.00006
%RSD	124.78	230.94	391.05	.00000	344.27	238.42	236.78
#1	.01406	-.00141	.00142	.00000	-.00070	-.02800	-.00005
#2	.03282	.00422	-.01447	.00000	.00054	.01676	.00007

#3	.04032	.00422	.01155	.00000	.00116	.02794	.00008
#4	-.01219	-.00141	-.01061	.00000	-.00008	.02800	.00001
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 .00127
SDev .00121
%RSD 95.389

#1 .00002
#2 .00053
#3 .00265
#4 .00187

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DK0PXB

Operator: MTW

Run Time: 09/07/00 15:01:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00141	.00044	-.02509	.01270	.00026	.00003	.01654
SDev	.00182	.00790	.01997	.00441	.00014	.00006	.00353
%RSD	129.57	1806.4	79.602	34.714	52.631	201.63	21.366
#1	-.00213	-.00625	.00105	.00609	.00019	.00007	.01708
#2	-.00068	.00550	-.02520	.01490	.00046	.00005	.02124
#3	.00070	.00885	-.04744	.01491	.00019	.00006	.01480
#4	-.00351	-.00635	-.02875	.01490	.00019	-.00006	.01306
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	.00016	-.00000	-.00218	-.00021	.00585	-.12064	-.00064
SDev	.00252	.00353	.00093	.00142	.00089	.23084	.00021
%RSD	1625.2	296980.	42.909	684.97	15.286	191.34	33.052
#1	.00142	.00168	-.00166	.00042	.00458	-.00584	-.00065
#2	-.00139	.00034	-.00116	.00125	.00648	-.07589	-.00090
#3	-.00245	-.00504	-.00320	-.00042	.00585	-.45728	-.00062
#4	.00304	.00302	-.00269	-.00207	.00648	.05643	-.00039
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	.00064	.00166	-.00118	.03026	.00604	-.01494	-.00754
SDev	.00986	.00077	.00274	.00491	.00509	.00961	.02404
%RSD	1549.2	46.568	231.09	16.213	84.307	64.327	318.93
#1	.00445	.00260	-.00356	.03036	.01329	-.01865	-.02263
#2	.01209	.00166	-.00356	.03485	.00281	-.00369	.02782
#3	-.01082	.00166	.00119	.03240	.00589	-.01136	-.01263
#4	-.00318	.00071	.00119	.02344	.00219	-.02608	-.02270
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	.03471	.08578	.01607	.00000	.00039	.00834	-.00002
SDev	.01166	.00562	.01010	.00000	.00040	.00563	.00382
%RSD	33.593	6.5578	62.861	.00000	103.28	67.442	18504.
#1	.04408	.08291	.01751	.00000	.00023	.00558	-.00473
#2	.01783	.08302	.02376	.00000	.00054	.00550	.00463

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#3	.03658	.09422	.02158	.00000	.00085	.01679	.00001
#4	.04033	.08297	.00142	.00000	-.00008	.00550	.00001
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 .00145
SDev .00112
%RSD. \ 77.250

#1	-.00003
#2	.00134
#3	.00185
#4	.00263

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DK0PXC

Operator: MTW

Run Time: 09/07/00 15:05:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04691	1.9415	1.9206	.95674	1.9295	.04952	48.859
SDev	.00177	.0142	.0171	.02457	.0042	.00016	.306
%RSD	3.7707	.73045	.89212	2.5678	.21577	.33356	.62644
#1	.04514	1.9254	1.9050	.92107	1.9280	.04940	48.441
#2	.04936	1.9372	1.9086	.97451	1.9243	.04940	49.032
#3	.04655	1.9594	1.9419	.97126	1.9324	.04952	48.830
#4	.04657	1.9440	1.9270	.96015	1.9333	.04975	49.134
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04441	.47717	.19215	.23970	1.0136	47.257	.96372
SDev	.00485	.00256	.00234	.00172	.0057	.457	.00361
%RSD	10.916	.53703	1.2199	.71575	.56358	.96680	.37432
#1	.04331	.47382	.18946	.23783	1.0052	46.975	.96466
#2	.04691	.47918	.19151	.23949	1.0147	46.765	.95945
#3	L.03814	.47652	.19253	.23949	1.0172	47.598	.96807
#4	.04928	.47917	.19510	.24199	1.0173	47.691	.96272
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.292	.48244	.96053	47.840	.48599	.47823	.47609
SDev	.257	.00224	.00810	.198	.01401	.03227	.00967
%RSD	.53291	.46448	.84332	.41285	2.8828	6.7489	2.0312
#1	47.969	.47936	.94986	47.753	.46880	.46321	.46844
#2	48.254	.48410	.96883	47.627	.49305	.44842	.46854
#3	48.355	.48220	.95934	48.087	.48124	.47822	.48867
#4	48.590	.48410	.96409	47.893	.50086	.52307	.47871
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9350	3.9586	1.9101	.97390	.95488	1.9389	.47720
SDev	.0275	.0113	.0122	.00218	.00230	.0844	.00238
%RSD	1.4201	.28445	.64096	.22410	.24031	4.3512	.49792
#1	1.9293	3.9417	1.8924	.97214	.95209	2.0398	.47588
#2	1.8993	3.9642	1.9126	.97190	.95519	1.9725	.47614

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#3	1.9481	3.9642	1.9146	.97554	.95457	1.8941	.47601
#4	1.9631	3.9642	1.9206	.97602	.95768	1.8492	.48076
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000
Elem	ZN						
Units	ppm						
Avge	.48214						
SDev	.00430						
%RSD	.89091						
#1	.47646						
#2	.48492						
#3	.48595						
#4	.48124						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DJQNW

Operator: MTW

Run Time: 09/07/00 15:08:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00125	54.944	.13571	.02698	.36177	.00439	290.46
SDev	.00143	.279	.07078	.01594	.00242	.00007	1.25
%RSD	114.39	.50724	52.151	59.087	.66904	1.5632	.43128
#1	-.00141	55.075	.04742	.01015	.36220	.00445	292.07
#2	-.00030	54.876	.19522	.03905	.36274	.00433	289.08
#3	-.00008	55.235	.10963	.04204	.36386	.00445	290.68
#4	-.00321	54.589	.19057	.01667	.35829	.00433	290.03
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	.00159	.11691	.08246	.18927	192.95	10.226	.10392
SDev	.00268	.00418	.00114	.00189	.75	.264	.00038
%RSD	168.66	3.5723	1.3782	1.0003	.39126	2.5846	.36449
#1	-.00217	.11490	.08387	.18874	193.75	9.8792	.10387
#2	.00193	.11623	.08131	.18860	192.53	10.159	.10433
#3	.00244	.12295	.08182	.19203	193.41	10.440	.10405
#4	.00414	.11355	.08285	.18772	192.13	10.424	.10343
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	146.43	2.3858	.06881	1.0324	.24624	.15270	.02124
SDev	.76	.0103	.00545	.0127	.00607	.02490	.02909
%RSD	.52051	.43045	7.9196	1.2285	2.4634	16.307	136.98
#1	146.84	2.3980	.06417	1.0460	.23828	.12438	-.00154
#2	146.29	2.3778	.06401	1.0285	.25264	.14723	.02899
#3	147.18	2.3904	.07361	1.0383	.24545	.15449	.05913
#4	145.43	2.3768	.07345	1.0167	.24859	.18472	-.00165
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	-.03471	3.1657	.21057	.53902	.59604	.18735	.13641
SDev	.06445	.0383	.03566	.00300	.00352	.09636	.00055
%RSD	185.69	1.2085	16.934	.55661	.59121	51.434	.40046
#1	-.09542	3.1671	.18890	.54030	.59642	.20633	.13664
#2	-.07240	3.1277	.17734	.53836	.59953	.29855	.13663

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#3	.04993	3.2177	.21887	.54224	.59704	.06457	.13676
#4	-.02094	3.1502	.25718	.53520	.59115	.17995	.13559
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	.52429
SDev	.00116
%RSD	.22202

#1	.52457
#2	.52258
#3	.52510
#4	.52492

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJQNWP5 Operator: MTW
 Run Time: 09/07/00 15:11:23
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00123	11.049	.01924	.00083	.07510	.00099	58.802
SDev	.00079	.031	.04187	.00292	.00057	.00011	.524
%RSD	64.319	.28098	217.67	349.61	.75773	11.560	.89134
#1	-.00057	11.072	-.02166	-.00088	.07533	.00084	58.197
#2	-.00191	11.035	-.00679	-.00040	.07468	.00108	59.342
#3	-.00053	11.011	.03437	.00520	.07459	.00096	59.120
#4	-.00194	11.076	.07101	-.00058	.07580	.00108	58.548
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	-.00234	.02264	.01677	.03753	41.196	1.9770	.02072
SDev	.00183	.00298	.00172	.00119	.110	.4364	.00045
%RSD	78.201	13.181	10.287	3.1696	.26643	22.076	2.1824
#1	-.00072	.01894	.01472	.03584	41.043	1.3796	.02132
#2	-.00085	.02432	.01729	.03837	41.304	2.3837	.02026
#3	-.00352	.02163	.01626	.03753	41.226	2.1969	.02078
#4	-.00429	.02567	.01882	.03836	41.209	1.9478	.02052
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	29.640	.49835	.01362	.21173	.05173	.03146	-.00486
SDev	.100	.00213	.00273	.00526	.00662	.02889	.01514
%RSD	.33891	.42744	20.022	2.4851	12.792	91.834	311.40
#1	29.683	.49523	.01598	.21540	.04976	.00337	-.01246
#2	29.548	.50004	.01127	.20643	.05650	.03334	-.02250
#3	29.568	.49907	.01126	.21703	.04323	.01841	.00771
#4	29.762	.49907	.01600	.20806	.05744	.07073	.00780
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	.01078	.69081	.05193	.11152	.12445	.05100	.02857
SDev	.02286	.00796	.00537	.00056	.00220	.04448	.00056
%RSD	212.08	1.1520	10.339	.50243	1.7678	87.211	1.9791
#1	-.02056	.67955	.04718	.11201	.12282	.08915	.02830
#2	.03263	.69644	.05553	.11104	.12251	.08615	.02941

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#3	.02118	.69643	.04750	.11104	.12531	.03107	.02824
#4	.00988	.69080	.05753	.11201	.12717	-.00236	.02831

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	.10786
SDev	.00142
%RSD	1.3186

#1	.10957
#2	.10616
#3	.10750
#4	.10822

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DJQNWS

Operator: MTW

Run Time: 09/07/00 15:14:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04559	91.965	2.0841	1.0271	2.2522	.05299	386.96
SDev	.00073	.225	.0497	.0103	.0085	.00006	1.65
%RSD	1.5929	.24426	2.3852	1.0068	.37525	.11350	.42581
#1	.04606	91.693	2.0495	1.0307	2.2409	.05302	389.37
#2	.04589	92.241	2.0347	1.0238	2.2613	.05302	386.01
#3	.04450	91.938	2.1374	1.0148	2.2525	.05290	386.63
#4	.04589	91.989	2.1148	1.0391	2.2540	.05302	385.81
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	.04786	.56689	.30313	.44044	205.54	67.228	1.0867
SDev	.00397	.00521	.00281	.00310	.36	.196	.0094
%RSD	8.2879	.91809	.92624	.70324	.17328	.29213	.86497
#1	.05108	.57429	.30723	.43656	206.07	67.119	1.0739
#2	.05067	.56621	.30108	.44395	205.32	67.453	1.0963
#3	.04253	.56490	.30160	.43980	205.42	67.321	1.0866
#4	.04716	.56219	.30262	.44145	205.34	67.018	1.0899
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	184.03	3.1682	.96918	48.968	.69499	.61933	.29208
SDev	.30	.0070	.00277	.276	.02790	.01788	.01909
%RSD	.16340	.22074	.28574	.56364	4.0146	2.8873	6.5361
#1	183.61	3.1785	.97162	48.572	.70480	.63829	.29717
#2	184.27	3.1631	.96678	49.195	.72415	.60793	.27720
#3	184.22	3.1660	.97154	48.999	.65777	.60069	.31695
#4	184.03	3.1650	.96678	49.106	.69323	.63040	.27700
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	1.8688	7.1772	2.0296	1.4606	1.9484	2.0969	.69149
SDev	.0569	.0446	.0286	.0046	.0024	.1262	.00004
%RSD	3.0441	.62166	1.4079	.31154	.12157	6.0180	.00584
#1	1.9396	7.2236	2.0485	1.4545	1.9477	2.2365	.69153
#2	1.8889	7.2067	2.0414	1.4655	1.9493	2.0210	.69145

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#3	1.8141	7.1336	2.0417	1.4604	1.9455	1.9639	.69152
#4	1.8326	7.1448	1.9871	1.4619	1.9511	2.1665	.69146

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	.95632
SDev	.00063
%RSD	.06543

#1	.95664
#2	.95638
#3	.95684
#4	.95542

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJQNWD

Operator: MTW

Run Time: 09/07/00 15:17:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04605	81.096	2.0234	.93930	2.2642	.05152	320.40
SDev	.00177	.330	.0453	.02128	.0127	.00029	1.76
%RSD	3.8454	.40634	2.2364	2.2654	.56132	.56031	.54917
#1	.04414	80.947	2.0792	.93605	2.2647	.05159	318.03
#2	.04842	80.705	1.9694	.92437	2.2467	.05110	321.50
#3	.04576	81.418	2.0149	.97029	2.2768	.05171	320.11
#4	.04587	81.312	2.0302	.92648	2.2687	.05170	321.94
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	.04413	.56347	.28163	.40797	188.53	61.215	1.0555
SDev	.00181	.00607	.00310	.00363	.61	.327	.0098
%RSD	4.0955	1.0778	1.1021	.89018	.32302	.53438	.92727
#1	.04240	.56818	.27856	.40790	187.93	61.055	1.0584
#2	.04274	.56685	.28522	.40294	188.13	60.931	1.0411
#3	.04572	.56413	.28317	.41132	188.82	61.678	1.0629
#4	.04567	.55472	.27958	.40970	189.24	61.196	1.0597
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	208.61	3.6069	.94090	47.536	.66731	.59472	.22185
SDev	.80	.0138	.00665	.381	.01165	.02899	.03747
%RSD	.38317	.38260	.70705	.80049	1.7460	4.8745	16.889
#1	208.23	3.5909	.94082	47.622	.65882	.61179	.17621
#2	207.67	3.6042	.95033	46.998	.67531	.60455	.25721
#3	209.38	3.6082	.93619	47.896	.65592	.55151	.20668
#4	209.15	3.6244	.93625	47.626	.67920	.61103	.24730
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	1.8100	7.5956	1.9534	1.4181	1.5619	2.0093	.63291
SDev	.0582	.0439	.0386	.0073	.0043	.1893	.00245
%RSD	3.2180	.57796	1.9786	.51525	.27676	9.4219	.38631
#1	1.8656	7.6335	1.9931	1.4169	1.5598	1.8313	.63027
#2	1.8549	7.5604	1.9776	1.4084	1.5570	1.9186	.63509

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#3	1.7630	7.5548	1.9099	1.4254	1.5663	2.2692	.63139
#4	1.7566	7.6335	1.9328	1.4215	1.5647	2.0182	.63489

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	.96390
SDev	.00755
%RSD	.78303

#1	.95956
#2	.95900
#3	.97506
#4	.96199

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJQP1

Operator: MTW

Run Time: 09/07/00 15:20:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00177	39.197	.09046	.01638	.73101	.00345	401.48
SDev	.00242	.071	.08063	.01255	.00219	.00006	2.98
%RSD	136.27	.18112	89.132	76.615	.30000	1.8755	.74140

#1	.00162	39.152	.15728	.02694	.72865	.00340	399.81
#2	-.00410	39.124	.10968	.00078	.73050	.00350	398.14
#3	-.00229	39.278	.12149	.01166	.73394	.00338	404.04
#4	-.00232	39.233	-.02661	.02615	.73097	.00350	403.94

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	.00162	.10407	.06773	.12326	156.90	8.2699	.06851
SDev	.00541	.00253	.00175	.00078	.82	.2847	.00044
%RSD	333.66	2.4354	2.5833	.63440	.52243	3.4430	.64919

#1	L-.00559	.10375	.06542	.12383	156.51	7.9489	.06832
#2	.00277	.10239	.06850	.12294	155.94	8.1901	.06799
#3	.00181	.10238	.06747	.12230	157.65	8.3069	.06874
#4	.00750	.10775	.06952	.12395	157.51	8.6338	.06899

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	144.82	5.3519	.05704	1.0292	.16767	.14441	.01290
SDev	.59	.0293	.00478	.0086	.01761	.02598	.03160
%RSD	.40424	.54755	8.3764	.83215	10.500	17.993	244.96

#1	144.39	5.3326	.04987	1.0342	.17633	.15760	.03821
#2	144.26	5.3211	.05928	1.0248	.16277	.10543	.02815
#3	145.45	5.3765	.05950	1.0383	.14550	.15716	-.03288
#4	145.19	5.3774	.05949	1.0195	.18609	.15743	.01812

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	-.07978	3.3582	.16749	.42372	.74345	.14574	.12979
SDev	.06082	.0438	.04136	.00086	.00333	.03438	.00416
%RSD	76.232	1.3033	24.694	.20223	.44750	23.590	3.2037

#1	-.11831	3.4201	.20379	.42314	.74415	.17250	.12355
#2	-.08607	3.3245	.10847	.42290	.73857	.10053	.13186

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#3	-.12282	3.3583	.18487	.42474	.74570	.13740	.13187
#4	.00808	3.3301	.17284	.42411	.74539	.17250	.13187

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	.34794
SDev	.00260
%RSD	.74835

#1	.34539
#2	.34683
#3	.34803
#4	.35149

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJQP2

Operator: MTW

Run Time: 09/07/00 15:23:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00338	50.860	.11491	.02766	.44181	.00341	485.85
SDev	.00169	.228	.04584	.00956	.00215	.00006	2.40
%RSD	49.956	.44835	39.889	34.568	.48566	1.7181	.49362
#1	-.00146	50.577	.18302	.02973	.43873	.00344	484.59
#2	-.00546	51.004	.09315	.01361	.44337	.00332	485.07
#3	-.00279	50.779	.09933	.03431	.44197	.00344	484.34
#4	-.00383	51.080	.08413	.03300	.44317	.00343	489.42
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	-.00071	.11729	.07646	.18935	171.64	12.090	.14136
SDev	.00536	.00371	.00136	.00110	.77	.157	.00136
%RSD	751.23	3.1632	1.7740	.57843	.44690	1.3015	.96039
#1	-.00470	.11898	.07774	.18781	170.91	12.292	.13936
#2	-.00057	.11359	.07467	.19040	171.81	11.973	.14235
#3	.00681	.11492	.07723	.18950	171.20	12.136	.14173
#4	-.00439	.12167	.07620	.18967	172.65	11.957	.14199
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	136.77	2.3725	.07791	1.1975	.29596	.09434	-.01610
SDev	.61	.0112	.00278	.0074	.00884	.01501	.04175
%RSD	.44796	.47263	3.5706	.62036	2.9864	15.909	259.26
#1	136.03	2.3631	.07545	1.1879	.28411	.08721	-.05162
#2	136.93	2.3728	.07556	1.1960	.30411	.08671	.02951
#3	136.63	2.3660	.08023	1.2013	.29458	.11685	.00915
#4	137.50	2.3882	.08041	1.2050	.30103	.08659	-.05145
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	-.05229	3.9880	.17189	1.4252	.54576	.24599	.10524
SDev	.02952	.0426	.00757	.0071	.00298	.03904	.00236
%RSD	56.461	1.0680	4.4037	.49476	.54619	15.870	2.2422
#1	-.03545	3.9598	.17480	1.4155	.54863	.20945	.10404
#2	-.08186	3.9598	.16426	1.4306	.54459	.30015	.10404

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#3	-.01969	4.0498	.16741	1.4245	.54211	.22859	.10411
#4	-.07214	3.9824	.18111	1.4303	.54770	.24575	.10878
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	1.0134
SDev	.0083
%RSD	.81455

#1	1.0046
#2	1.0175
#3	1.0087
#4	1.0228

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJQP3

Operator: MTW

Run Time: 09/07/00 15:27:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00301	47.587	.11175	.06483	.69200	.00322	H840.26
SDev	.00311	.290	.05115	.01390	.00575	.00007	5.21
%RSD	103.23	.60935	45.775	21.435	.83137	2.0691	.62037
#1	.00089	47.319	.08779	.08333	.68578	.00316	H847.20
#2	-.00475	47.516	.16799	.04969	.69162	.00328	H841.00
#3	-.00203	47.515	.05323	.06214	.69089	.00317	H837.73
#4	-.00614	47.999	.13799	.06416	.69970	.00328	H835.13
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	-.00115	.07449	.07530	.18538	162.72	11.761	.11657
SDev	.00331	.00109	.00366	.00184	.18	.363	.00229
%RSD	288.53	1.4622	4.8549	.99175	.10822	3.0860	1.9614
#1	.00322	.07449	.07927	.18352	162.83	11.864	.11398
#2	-.00129	.07583	.07722	.18435	162.76	12.175	.11948
#3	-.00480	.07316	.07107	.18597	162.46	11.304	.11592
#4	-.00172	.07450	.07363	.18768	162.82	11.700	.11688
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	352.44	2.3636	.08387	1.4765	.17570	.11223	.00282
SDev	1.38	.0054	.00670	.0141	.01396	.02575	.03448
%RSD	.39129	.23052	7.9879	.95816	7.9425	22.946	1222.3
#1	351.05	2.3703	.08389	1.4626	.17962	.13481	.01790
#2	352.89	2.3655	.07439	1.4679	.16877	.08990	-.00222
#3	351.66	2.3579	.08858	1.4817	.16113	.08995	.03819
#4	354.16	2.3608	.08863	1.4939	.19326	.13424	-.04259
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	-.11044	5.1300	.14713	3.1944	.54320	.39005	.12168
SDev	.06742	.0826	.04240	.0226	.00366	.06258	.00230
%RSD	61.046	1.6093	28.817	.70745	.67361	16.044	1.8936
#1	-.17671	5.2426	.18456	3.1700	.54087	.42520	.12286
#2	-.08688	5.1413	.12603	3.1937	.54863	.44832	.12273

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#3	-.15144	5.0681	.09765	3.1892	.54211	.30623	.11823
#4	-.02672	5.0682	.18027	3.2246	.54118	.38046	.12291

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	.58753
SDev	.00242
%RSD	.41258

#1	.58691
#2	.58802
#3	.58468
#4	.59051

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-3

Operator: MTW

Run Time: 09/07/00 15:30:19

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0034	49.814	5.0766	5.0667	4.9350	5.0612	50.648
SDev	.0036	.127	.0388	.0081	.0221	.0137	.291
%RSD	.35823	.25478	.76477	.15911	.44801	.27058	.57454
#1	1.0045	49.924	5.1146	5.0594	4.9551	5.0644	50.480
#2	1.0074	49.843	5.0518	5.0602	4.9277	5.0704	51.006
#3	1.0030	49.632	5.0355	5.0741	4.9071	5.0410	50.753
#4	.99875	49.859	5.1044	5.0734	4.9502	5.0689	50.353
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	5.1349	4.9975	4.9778	4.9717	51.140	48.796	4.9499
SDev	.0231	.0239	.0179	.0272	.135	.237	.0521
%RSD	.44918	.47916	.36011	.54634	.26309	.48504	1.0519
#1	5.1230	4.9875	4.9690	4.9921	51.142	48.859	4.9920
#2	5.1653	5.0290	5.0019	4.9614	51.329	48.937	4.9127
#3	5.1392	5.0009	4.9798	4.9381	51.039	48.446	4.8975
#4	5.1122	4.9727	4.9603	4.9954	51.048	48.944	4.9972
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	50.186	4.9835	4.9675	49.546	5.0183	5.0021	5.1292
SDev	.154	.0180	.0191	.338	.0307	.0328	.0301
%RSD	.30698	.36021	.38502	.68208	.61151	.65504	.58721
#1	50.231	4.9816	4.9450	49.829	4.9752	5.0186	5.1721
#2	50.229	5.0073	4.9877	49.356	5.0470	4.9973	5.1217
#3	49.964	4.9816	4.9781	49.166	5.0300	5.0341	5.1217
#4	50.320	4.9636	4.9592	49.833	5.0209	4.9585	5.1014
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	5.1513	5.1054	5.1092	4.9634	4.9498	10.008	4.9940
SDev	.0205	.0682	.0414	.0181	.0109	.179	.0127
%RSD	.39852	1.3359	.81104	.36438	.21956	1.7860	.25355
#1	5.1251	5.0464	5.0545	4.9801	4.9566	9.9102	4.9980
#2	5.1593	5.1646	5.1250	4.9623	4.9594	10.076	5.0092

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#3	5.1473	5.0463	5.1046	4.9386	4.9352	10.225	4.9891
#4	5.1736	5.1643	5.1527	4.9727	4.9482	9.8218	4.9795

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	5.0075
SDev	.0242
%RSD	.48299

#1	4.9830
#2	5.0405
#3	5.0073
#4	4.9993

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB3

Operator: MTW

Run Time: 09/07/00 15:33:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00175	-.00261	-.04179	.01082	-.00007	.00018	.00410
SDev	.00241	.01416	.01684	.00911	.00040	.00026	.00996
%RSD	137.49	542.15	40.289	84.200	590.14	143.43	242.98

#1	-.00492	-.02003	-.04348	.00091	-.00027	-.00006	-.00486
#2	-.00211	-.00811	-.02129	.02140	-.00046	.00006	-.00048
#3	-.00070	.00718	-.04000	.01489	.00000	.00018	.00363
#4	.00073	.01051	-.06239	.00609	.00046	.00053	.01811

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	-.00131	-.00134	-.00103	-.00166	-.00000	-.25685	-.00068
SDev	.00319	.00255	.00272	.00108	.00370	.60965	.00121
%RSD	243.28	190.47	265.68	64.657	366960.	237.35	176.20

#1	.00317	-.00505	-.00423	-.00291	-.00427	-.92429	-.00090
#2	-.00363	-.00100	-.00115	-.00208	-.00111	-.30939	-.00178
#3	-.00123	.00034	-.00115	-.00125	.00079	-.34831	-.00108
#4	-.00356	.00035	.00243	-.00041	.00458	.55457	.00103

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	-.00382	.00024	.00237	.00846	-.00006	-.02059	-.02275
SDev	.02143	.00055	.00454	.00357	.00629	.04284	.02866
%RSD	561.41	230.98	191.50	42.266	10211.	208.02	125.97

#1	-.02354	-.00024	-.00356	.00387	-.00441	-.07103	-.00252
#2	-.02100	-.00024	.00119	.00754	.00742	-.01869	-.00249
#3	.01209	.00071	.00593	.01039	.00278	-.02615	-.02270
#4	.01718	.00071	.00593	.01202	-.00603	.03350	L-.06330

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	.01313	-.00139	-.00211	.00000	-.00031	.05039	.00120
SDev	.01992	.00003	.01234	.00000	.00069	.02745	.00237
%RSD	151.80	1.9968	586.06	.00000	221.74	54.472	198.27

#1	.03655	-.00141	-.00856	.00000	-.00101	.08407	-.00006
#2	.00281	-.00141	.01357	.00000	-.00070	.02801	.00001

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#3	.02157	-.00141	-.01468	.00000	-.00008	.02799	.00008
#4	-.00843	-.00135	.00125	.00000	.00054	.06151	.00476

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	.00104
SDev	.00045
%RSD	43.554

#1	.00136
#2	.00109
#3	.00133
#4	.00039

Errors	LC Pass
High	.02000
Low	-.02000

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STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A. Doyle

Date of Analysis: 9-7-00

File ID: 0907 HGA

Matrix: WATER

Lot Number/SDG

Method

<u>COH310206</u>	<u>TCLP</u>	<u>7470A</u>
<u>COH310232</u>		
<u>COI010153</u>		
<u>COI010228</u>		
<u>COI020118</u>	↓	
<u>COH310279</u>		
<u>COI010179</u>		↓

09:30:21 07 Sep 2000

Folder: 0907HGA
Protocol: HGMET

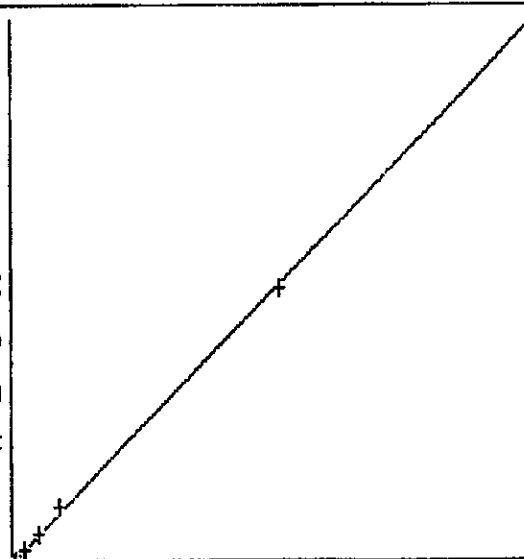
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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0		09:30:21 07 Sep 2000 HG		
Hg	.000	ppb	12858					
*** Standard: 2 Rep: 1				Seq: 1		09:32:00 07 Sep 2000 HG		
Hg	.200	ppb	48692		0057-057-15			
*** Standard: 3 Rep: 1				Seq: 2		09:33:36 07 Sep 2000 HG		
Hg	.500	ppb	95790		0057-058-1			
*** Standard: 4 Rep: 1				Seq: 3		09:35:41 07 Sep 2000 HG		
Hg	1.00	ppb	170682		0057-058-2			
*** Standard: 5 Rep: 1				Seq: 4		09:37:17 07 Sep 2000 HG		
Hg	5.00	ppb	936006		0057-058-3			
*** Standard: 6 Rep: 1				Seq: 5		09:39:24 07 Sep 2000 HG		
Hg	10.0	ppb	1820006		0057-058-4			

RunFold: 0907HGA Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 09:40:02 07 Sep 2000 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGMET

	Hg	Accepted	
	Conc.	Calc.	Dev. ->linear
S1	.000	.031	.031 Quadratic
S2	.200	.227	.027 Wtdlinear
S3	.500	.486	-.014 C
S4	1.00	.897	-.103 Accept o
S5	5.00	5.10	.101 n
S6	10.0	9.96	-.043 c
A	.0000000	r	.999847
B	5.49385e-6	C	-4.81244e-2



	Mean	SD	%RSD
S1	12058	12058	
S2	48692	48692	
S3	95790	95790	
S4	170682	170682	
S5	936006	936006	
S6	1820006	1820006	

New cal coefficients stored

09:42:21 07 Sep 2000

Folder: 0907HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6	09:42:21 07 Sep 2000 HG			
Hg	2.52	ppb	465729		0057-058-5			
*** Sample ID: ICB1				Seq: 7	09:44:16 07 Sep 2000 HG			
Hg	.027	ppb	12282					
*** Sample ID: CCV5-1				Seq: 8	09:45:50 07 Sep 2000 HG			
Hg	5.07	ppb	930447		0057-058-6			
*** Sample ID: CCB1				Seq: 9	09:47:45 07 Sep 2000 HG			
Hg	.027	ppb	12142					
*** Sample ID: DK0LPBT				Seq: 10	09:49:30 07 Sep 2000 HG			
Hg	.039	ppb	14460					
*** Sample ID: DK0LPCT				Seq: 11	09:51:06 07 Sep 2000 HG			
Hg	2.66	ppb	492040		0057-058-7			
*** Sample ID: DJXV6BT				Seq: 12	09:52:31 07 Sep 2000 HG			
Hg	.065	ppb	19069					
*** Sample ID: DJP8WT				Seq: 13	09:53:57 07 Sep 2000 HG			
Hg	.041	ppb	14711					
*** Sample ID: DJP90T				Seq: 14	09:55:36 07 Sep 2000 HG			
Hg	.019	ppb	10823					
*** Sample ID: DJP91T				Seq: 15	09:57:04 07 Sep 2000 HG			
Hg	.043	ppb	15175					
*** Sample ID: DJP92T				Seq: 16	09:58:32 07 Sep 2000 HG			
Hg	.041	ppb	14729					
*** Sample ID: DJPHKT				Seq: 17	09:59:58 07 Sep 2000 HG			
Hg	.039	ppb	14395					

10:01:28 07 Sep 2000				Folder: 0907HGA		Page 293		
				Protocol: HGMET				
Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DJPHLT				Seq: 18	10:01:28 07 Sep 2000 HG			
Hg	.053	ppb	17009					
*** Sample ID: DJQTDY				Seq: 19	10:03:05 07 Sep 2000 HG			
Hg	.037	ppb	14113					
*** Sample ID: CCV5-2				Seq: 20	10:04:34 07 Sep 2000 HG			
Hg	5.03	ppb	922321					
*** Sample ID: CCB2				Seq: 21	10:06:00 07 Sep 2000 HG			
Hg	.000	ppb	7334					
*** Sample ID: DJRHVT				Seq: 22	10:07:36 07 Sep 2000 HG			
Hg	.059	ppb	18018					
*** Sample ID: DJRHVST				Seq: 23	10:09:01 07 Sep 2000 HG			
Hg	5.08	ppb	931564	SP.REC. 100%				
*** Sample ID: DJRHVDT				Seq: 24	10:10:29 07 Sep 2000 HG			
Hg	5.02	ppb	920794	SP.REC. 99%				
*** Sample ID: DJRJPT				Seq: 25	10:11:55 07 Sep 2000 HG			
Hg	.045	ppb	15438					
*** Sample ID: DJTTNT				Seq: 26	10:13:22 07 Sep 2000 HG			
Hg	.066	ppb	19266					
*** Sample ID: DJTTPT				Seq: 27	10:14:54 07 Sep 2000 HG			
Hg	.029	ppb	12549					
*** Sample ID: DJTTQT				Seq: 28	10:16:24 07 Sep 2000 HG			
Hg	.045	ppb	15421					
*** Sample ID: DJXCXB				Seq: 29	10:17:49 07 Sep 2000 HG			
Hg	.045	ppb	15448					

SP. REC.
100%SP. REC.
99%

10:19:16 07 Sep 2000

Folder: 0907HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DJXCXC				Seq: 30	10:19:16 07 Sep 2000	HG		
Hg	2.50	ppb	463105	0057-058-8				
*** Sample ID: DJPWA				Seq: 31	10:20:50 07 Sep 2000	HG		
Hg	.003	ppb	7814					
*** Sample ID: CCV5-3				Seq: 32	10:22:40 07 Sep 2000	HG		
Hg	4.97	ppb	911223					
*** Sample ID: CCB3				Seq: 33	10:24:39 07 Sep 2000	HG		
Hg	.024	ppb	11681					
*** Sample ID: DJPWF				Seq: 34	10:26:07 07 Sep 2000	HG		
Hg	.028	ppb	12420					
*** Sample ID: DJPWG				Seq: 35	10:27:44 07 Sep 2000	HG		
Hg	.022	ppb	11254					
*** Sample ID: DJPWK				Seq: 36	10:29:10 07 Sep 2000	HG		
Hg	.042	ppb	14983					
*** Sample ID: DJPWM				Seq: 37	10:30:35 07 Sep 2000	HG		
Hg	.047	ppb	15816					
*** Sample ID: DJPWQ				Seq: 38	10:32:14 07 Sep 2000	HG		
Hg	.027	ppb	12269					
*** Sample ID: DJPWT				Seq: 39	10:33:53 07 Sep 2000	HG		
Hg	.022	ppb	11322					
*** Sample ID: DJPWV				Seq: 40	10:35:21 07 Sep 2000	HG		
Hg	-.000	ppb	7302					
*** Sample ID: DJPWVS				Seq: 41	10:36:47 07 Sep 2000	HG		
Hg	.094	ppb	24448					

SP.REC.
9%

672 700

Folder: 0907HGA
Protocol: HGMET

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10:38:41 07 Sep 2000

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DJPWVD				Seq: 42	10:38:41 07 Sep 2000	HG		SP.REC. 10%
Hg	.096	ppb	24780					
*** Sample ID: DKOLRB				Seq: 43	10:40:18 07 Sep 2000	HG		
Hg	.028	ppb	12338					
*** Sample ID: CCV5-4				Seq: 44	10:41:50 07 Sep 2000	HG		
Hg	4.89	ppb	897632					
*** Sample ID: CCB4				Seq: 45	10:43:17 07 Sep 2000	HG		
Hg	.011	ppb	9343					
*** Sample ID: DKOLRC				Seq: 46	10:45:34 07 Sep 2000	HG		
Hg	2.38	ppb	440787	0057-058-9				
*** Sample ID: DJR44				Seq: 47	10:46:59 07 Sep 2000	HG		
Hg	.015	ppb	10095					
*** Sample ID: DJR44S				Seq: 48	10:48:55 07 Sep 2000	HG		SP.REC. 64%
Hg	.642	ppb	124194					
*** Sample ID: DJR44D				Seq: 49	10:50:23 07 Sep 2000	HG		SP.REC. 64%
Hg	.641	ppb	124047					
*** Sample ID: DJR47				Seq: 50	10:51:49 07 Sep 2000	HG		
Hg	.038	ppb	14204					
*** Sample ID: DJR4F				Seq: 51	10:53:15 07 Sep 2000	HG		
Hg	.019	ppb	10707					
*** Sample ID: DJR4N				Seq: 52	10:55:01 07 Sep 2000	HG		
Hg	.029	ppb	12584					
*** Sample ID: DJR4T				Seq: 53	10:56:26 07 Sep 2000	HG		
Hg	.031	ppb	12953					

10:57:51 07 Sep 2000

Folder: 0907HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DJR4W				Seq: 54		10:57:51 07 Sep 2000 HG		
Hg	.041	ppb	14818					
*** Sample ID: DJR51				Seq: 55		11:00:18 07 Sep 2000 HG		
Hg	.015	ppb	9951					
*** Sample ID: CCV5-5				Seq: 56		11:01:56 07 Sep 2000 HG		
Hg	4.89	ppb	896826					
*** Sample ID: CCB5				Seq: 57		11:03:23 07 Sep 2000 HG		
Hg	.008	ppb	8751					
*** Sample ID: DJR57				Seq: 58		11:04:50 07 Sep 2000 HG		
Hg	.029	ppb	12537					
*** Sample ID: DJR5A				Seq: 59		11:06:20 07 Sep 2000 HG		
Hg	.216	ppb	46582					
*** Sample ID: DJR5E				Seq: 60		11:07:52 07 Sep 2000 HG		
Hg	.040	ppb	14652					
*** Sample ID: DJR5J				Seq: 61		11:09:21 07 Sep 2000 HG		
Hg	.051	ppb	16667					
*** Sample ID: DJR5N				Seq: 62		11:11:29 07 Sep 2000 HG		
Hg	.046	ppb	15642					
*** Sample ID: DJR5Q				Seq: 63		11:12:55 07 Sep 2000 HG		
Hg	.047	ppb	15820					
*** Sample ID: CCV5-6				Seq: 64		11:14:31 07 Sep 2000 HG		
Hg	4.78	ppb	877230					
*** Sample ID: CCB6				Seq: 65		11:16:41 07 Sep 2000 HG		
Hg	.027	ppb	12177					

END OF ANALYSIS

WAH

9-7-00

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0907HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:31:43 07 Sep 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	CCV5-1	1.0000	1.0000		
4	CCB1	1.0000	1.0000		
5	DKOLPBT	1.0000	1.0000		
6	DKOLFCT	1.0000	1.0000		
7	DJXV6BT	1.0000	1.0000		
8	DJF8WT	1.0000	1.0000		
9	DJP90T	1.0000	1.0000		
10	DJP91T	1.0000	1.0000		
11	DJP92T	1.0000	1.0000		
12	DJPHKT	1.0000	1.0000		
13	DJPHLT	1.0000	1.0000		
14	DJQTDY	1.0000	1.0000		
15	CCV5-2	1.0000	1.0000		

PgDn

Cup 1 ID: ICV5-1

Cell down mode Ins to switch

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0907HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:31:45 07 Sep 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 CCB2 1.0000 1.0000
17 DJRHVT 1.0000 1.0000
18 DJRHVST 1.0000 1.0000
19 DJRHVDT 1.0000 1.0000
20 DJRJPT 1.0000 1.0000
21 DJTTNT 1.0000 1.0000
22 DJTTPT 1.0000 1.0000
23 DJTTQT 1.0000 1.0000
24 DJXCXB 1.0000 1.0000
25 DJXCXC 1.0000 1.0000
26 DJPWA 1.0000 1.0000
27 CCV5-3 1.0000 1.0000
28 CCB3 1.0000 1.0000
29 DJPWF 1.0000 1.0000
30 DJPWG 1.0000 1.0000

PgDn

Cup 16 ID: CCB2

Cell down mode Ins to switch

672 704

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0907HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:31:47 07 Sep 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 DJPWK 1.0000 1.0000
32 DJPWM 1.0000 1.0000
33 DJPWQ 1.0000 1.0000
34 DJPWT 1.0000 1.0000
35 DJPWW 1.0000 1.0000
36 DJPWVS 1.0000 1.0000
37 DJPWVD 1.0000 1.0000
38 DKOLRB 1.0000 1.0000
39 CCV5-4 1.0000 1.0000
40 CCB4 1.0000 1.0000
41 DKOLRC 1.0000 1.0000
42 DJR44 1.0000 1.0000
43 DJR44S 1.0000 1.0000
44 DJR44D 1.0000 1.0000

PgDn

Cup 31 ID: DJPWK

Cell down mode Ins to switch

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0907HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:38:25 07 Sep 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK2

cup ID	Extended id	Weight	Volume	Macro	check macros
1 DJR47		1.0000	1.0000		
2 DJR4F		1.0000	1.0000		
3 DJR4N		1.0000	1.0000		
4 DJR4T		1.0000	1.0000		
5 DJR4W		1.0000	1.0000		
6 DJR51		1.0000	1.0000		
7 CCV5-5		1.0000	1.0000		
8 CCB5		1.0000	1.0000		
9 DJR57		1.0000	1.0000		
10 DJR5A		1.0000	1.0000		
11 DJR5E		1.0000	1.0000		
12 DJR5J		1.0000	1.0000		
13 DJR5N		1.0000	1.0000		
14 DJR5Q		1.0000	1.0000		
15 CCV5-6		1.0000	1.0000		

PgDn

Cup 1 ID: DJR47

Cell down mode Ins to switch

672 706

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0907HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:38:27 07 Sep 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

TCLP (Method 1311)

672 707

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



6134

By James E. Murphy Date 9-5-00 Checked by James E. Murphy File # 8330101W

Serial Number 090 Log Book Number 96-MI-526

Project Number 201-0-053, CATALYTIC CONVERSION, COLD START Client Codes 9600 pH Instrument Accumet AR25 Probe SN005W.07 Balance C94817

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)	Fluid Vol.	Final pH After Tumbling
DJPSW	5.06g / 96.5ml	9.36	1.70	Slut #1	7ml	1 DJPSW 9-5-00	100.0g	2000ml	4.91
DJPSW	9.42	1.58				2. DJPSW			4.92
DJPSW	9.33	1.49				3. DJPSW			5.71
DJPSW	9.41	1.43				4. DJPSW			5.34
DJPSW	9.63	1.47				5. DJPSW			5.75
DJPSW	9.64	1.48				6. DJPSW			5.11
DJPSW	8.18	1.41				7. DJPSW			6.08
DJPSW	7.39	1.57				8. DJPSW			4.97
DJPSW	7.47	1.47				9. DJPSW			4.92
DJPSW	9.37	1.54				10. DJPSW			5.02
DJPSW	8.59	1.91				11. DJPSW			5.04
DJPSW	8.45	1.40				12. DJPSW			5.05
DJPSW						13. DJPSW			6.21

Extract(s)

Extract(s) Received

Extract(s) Relinquished

(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst	Location
All above	9-5-00	13:00	James E. Murphy	Metals Rep	9-6-00	13:15	AME	19E

* = 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)

Temp = 23°C E.F. = 4.97

Date/Time On	Date/Time Off	Agitation Apparatus RPMs
9-5-00	9-4-00	30 ± 2

Date	pH Calibration	1.00	7.00	10.00
9-5-00		1.00	7.00	10.00

Date	4.00	7.00	10.00
9-6-00	4.00	7.00	10.00

Comments

TCLP (Method 1311)

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



6135

OUA-101

By

Project Number

Lot Number

Client Codes

Date

9-5-00

Client Codes

9660

Date

9-6-00

pH Instrument

Account # 25

Probe

510051667

Balance

C94817

Serial Number

091

Log Book Number

96-MT-526

Fluid Determination

TCLP Extraction

Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1, or #2	Conc. HNO3 to Acidity (or Metals)	Sample ID	Wgt (g) Wet/Dry	Fluid Vol.	Final pH After Tumbling
1. DITP	100.0g	200.0ml	9.45	5.47					
2. DITQ									
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									
11.									
12.									
13.									

(Record line number from above)

Extract(s)

Extract(s) Received

Extract(s) Relinquished

(Record line number from above)

Date

Time

Analyst

Location

Date

Time

Analyst

Location

All above

9-6-00

13:00

Janeal Murphy

Metals Bldg

9-6-00

13:15

AW

19E

* = 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)

Temp = 23°C

E.F 4.97

672 708

Date/Time On

9-5-00-13:00

Date/Time Off

9-6-00 7:00

Agitation Apparatus RPMs

30 ± 2 5 W 9-5-00

Date

9-5-00

pH Calibration

(4.0)

(7.0)

10.0

Date

9-6-00

Comments

↓ ↓ ↓

STL Pittsburgh

Metals Preparation Log



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

Submitted To Your Success

Method: <u>Water</u>		Start Time: <u>8:15</u>		SDG: _____		Balance# _____		Reagents: <u>Salconc. HNO₃</u>		62053501 Multi-line with	
Analyst: <u>W. Stewart</u>		Date: <u>9-7-00</u>		Lot Number: <u>COH 310006</u>		Catalog: <u>COH 310006</u>		Lab Lot No. (book page, line): <u>0019-154-2</u>		62053501 Multi-line with	
Reviewer: <u>W. Stewart</u>		Date: <u>9-7-00</u>		Lot Number: <u>COH 310032</u>		Catalog: <u>COH 310032</u>		Lab Lot No. (book page, line): <u>0019-154-2</u>		62053501 Multi-line with	
Sample ID		Init Wt/Vol	Final Vol	Comments		Color	Clarity	Texture	Artifacts	Artifact Codes	
1. DIF90	50 ml	50 ml	G.F. 9-7-00		Pre	Post	Pre	Post		S=Stones	
2. DIF91			G.F. 9-7-00		Pre	Post	Pre	Post		O=Organic	
3. DIF92			G.F. 9-7-00		Pre	Post	Pre	Post		(plant mat)	
4. DIF93			G.F. 9-7-00		Pre	Post	Pre	Post		W=free H ₂ O	
5. DIF94			G.F. 9-7-00		Pre	Post	Pre	Post		G=Glass	
6. DIF95			G.F. 9-7-00		Pre	Post	Pre	Post		M=Metal Fragments	
7. DIF96			G.F. 9-7-00		Pre	Post	Pre	Post		R=Rubber/Plastic	
8. DIF97			G.F. 9-7-00		Pre	Post	Pre	Post		C=Cloth	
9. DIF98			G.F. 9-7-00		Pre	Post	Pre	Post		P=Paper	
10. DIF99			G.F. 9-7-00		Pre	Post	Pre	Post		I=Insects	
11. DIF100			G.F. 9-7-00		Pre	Post	Pre	Post			
12. DIF101			G.F. 9-7-00		Pre	Post	Pre	Post			
13. DIF102			G.F. 9-7-00		Pre	Post	Pre	Post			
14. DIF103			G.F. 9-7-00		Pre	Post	Pre	Post			
15. DIF104			G.F. 9-7-00		Pre	Post	Pre	Post			
16. DIF105			G.F. 9-7-00		Pre	Post	Pre	Post			
17. DIF106			G.F. 9-7-00		Pre	Post	Pre	Post			
18. DIF107			G.F. 9-7-00		Pre	Post	Pre	Post			
19. DIF108			G.F. 9-7-00		Pre	Post	Pre	Post			
20. DIF109			G.F. 9-7-00		Pre	Post	Pre	Post			
21. DIF110			G.F. 9-7-00		Pre	Post	Pre	Post			
22. DIF111			G.F. 9-7-00		Pre	Post	Pre	Post			
23. DIF112			G.F. 9-7-00		Pre	Post	Pre	Post			
24. DIF113			G.F. 9-7-00		Pre	Post	Pre	Post			

Hg Digestion Log

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



QUA-4169

Serial Number 085 Log Book Number 96-MI-580 Start Time 08:00 → 08:15

Sample ID	Date Rec'd	Prep Date	Prepared By	WV/Vol	Sample Type	Run Date	Comments
1. STD0	N/A	9-7-00	WAH	100ml	WATER	9-7-00	N/A
2. STD1							0057-057-15
3. STD2							0057-058-1
4. STD3							0057-058-2
5. STD4							0057-058-3
6. STD5							0057-058-4
7. ICV							0057-058-5
8. TCA							N/A
9. CCV							0057-058-6
10. CCB							N/A
11. DKOLPBT							N/A
12. DKOLPCT							0057-058-7
13. DIXV6BT							N/A
14. DIP8WT	8-31-00						
15. DIP9OT							
16. DIP9/T							
17. DIP93T							
18. DIPAKT							
19. DIPHLT							
20. DIGTDT	9-1-00						
21. DIRHVT							
22. DIRHST							
23. DIRHVDT							+5ml 0057-057-13
24. DIRJPT							+5ml 0057-057-13
25. DITTAAT							N/A
Reagents		Vol (mL)				Ref. Number	Method
HNO3	3.5ml					MALLACKRODT 6423 N35058	7470A AUTOCLAVE 15PSI 120°C
H2SO4	5.0ml					MALLACKRODT 5557 N41A13	SACLA = 0057-033-2
KMNO4	15.0ml					0057-056-1	SACLA = 0057-055-15
K2S2O4	8.0ml					0057-052-7	WAH 9-7-00
Extract(s)			Extract(s) Received				Extract(s) Relinquished
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
			WAH 9-7-00				

Hg Digestion Log

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



CUA-4169

Serial Number 086 Log Book Number 96-MI-580 Start Time 08:00 → 08:15

Sample ID	Date Rec'd	Prep Date	Prepared By	WVVol	Sample Type	Run Date	Comments
1. DITPT	9-1-00	9-7-00	WAH	100ml	WATER	9-7-00	N/A
2. DITPT	N/A						
3. DIXCX8	N/A						
4. DIXCX8	8-31-00						0057-058-8
5. DIPWA							N/A
6. DIPWF							
7. DIPWG							
8. DIPWK							
9. DIPWM							
10. DIPWQ							
11. DIPWT							
12. DIPWV							
13. DIPWVS							+1ml 0057-057-13
14. DIPWVD							+1ml 0057-057-13
15. DKOLR8	N/A						N/A
16. DKOLRC	9-1-00						0057-058-9
17. DIRM44							
18. DIRM45							+1ml 0057-057-13
19. DIRM46							+1ml 0057-057-13
20. DIRM47							N/A
21. DIRM4F							
22. DIRM4M							
23. DIRM4T							
24. DIRM4W							
25. DIRM51							
Reagents		Vol (mL)			Ref. Number		Method
HNO3	2.5ml				MAILBACKRODT 6-23 N35058		7470A AUTOCLAVE 15 PSI 130°C
H2SO4	5.0ml				MAILBACKRODT 5557 N21813		SALTS = 0057-033-2
KMNO4	15.0ml				0057-056-1		NaCl-NH4OH = 0057-055-15
K2S2O4	8.0ml				0057-052-7		WAH 9-7-00
Extract(s)			Extract(s) Received				Extract(s) Relinquished
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
			WAH 9-7-00				

Quanterra
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Environmental Services

Serial Number	087	Log Book Number	96-MT-580	Start Time	08:00 → 08:45

Sample ID	Date Rec'd	Prep Date	Prepared By	WVVol	Sample Type	Run Date	Comments
1. DJSR57	9-6-00	9-7-00	WAH	100ml	Water	9-7-00	N/A
2. DJSR5A							
3. DJSRE							
4. DJSR5T							
5. DJSRW							
6. DJSR5Q							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							
21.							
22.							
23.							
24.							
25.							
Reagents		Vol (mL)		Ref. Number		Method	
HNO ₃	2.5 ml			MALBACKRODT 6623 N35058		7470A Autoclave 15 PSI 120°C	
H ₂ SO ₄	5.0 ml			MALBACKRODT 5557 KJIAI3		SACLA = 0057-033-2	
KMnO ₄	15.0 ml			0057-056-1		MACT-NH ₂ OH = 0057-055-15	
K ₂ S ₂ O ₄	8.0 ml			0057-053-7		WAH 9-1-00	
Extract(s)			Extract(s) Received			Extract(s) Relinquished	
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
			WAH 9-7-00				

STL Pittsburgh

REQUESTED BY: MURPHYJ

METHOD: Q0 Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
5B,C CLP1	DJP8W	— — —	262413	399411	A-34-Q0	COH310206	001		SOLID	0	3 1
5B,C CLP1	DJP90	— — —	262414	399411	A-34-Q0	COH310206	002		SOLID	0	3 1
5B,C CLP1	DJP91	— — —	262415	399411	A-34-Q0	COH310206	003		SOLID	0	3 1
5B,C CLP1	DJP92	— — —	262416	399411	A-34-Q0	COH310206	004		SOLID	0	3 1
5C,D CLP1	DJPHK	— — —	262419	051465	A-34-Q0	COH310232	001		SOLID	0	4 1
5C,D CLP1	DJPHL	— — —	262420	051465	A-34-Q0	COH310232	002		SOLID	0	4 1
5E CLP1	DJQTD	— — —	262421	051465	A-34-Q0	C01010153	001		SOLID	0	4 1
6A,B,C, CLP1	DJRHV	— — —	262417	419910	A-46-Q0	C01010228	001		SOLID	0	22 1
6A,B,C, CLP1	DJRJP	— — —	262418	419910	A-46-Q0	C01010228	002		SOLID	0	6 1
6B,C CLP1	DJTIN	— — —	262422	051465	A-34-Q0	C01020118	001		SOLID	0	4 1
6B,C CLP1	DJTTP	— — —	262423	051465	A-34-Q0	C01020118	002		SOLID	0	3 1
6B,C CLP1	DJTQ	— — —	262424	051465	A-34-Q0	C01020118	003		SOLID	0	4 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

AC

Janaad Murphy

Janaad Murphy

AC

9-5-00 8:00

9-5-00 11:00

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

672 714

PSR024 9/07/00 4:43:03 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: FAUSTG

METHOD: QO Inductively Coupled Plasma (6010B)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
5B,C CLP1	DJP8W	___	262912	399411	A-34-QO	COH310206	001		SOLID	0	3 1
5B,C CLP1	DJP90	___	262913	399411	A-34-QO	COH310206	002		SOLID	0	3 1
5B,C CLP1	DJP91	___	262914	399411	A-34-QO	COH310206	003		SOLID	0	3 1
5B,C CLP1	DJP92	___	262915	399411	A-34-QO	COH310206	004		SOLID	0	3 1
5C,D CLP1	DJPHK	___	262920	051465	A-34-QO	COH310232	001		SOLID	0	4 1
5C,D CLP1	DJPHL	___	262921	051465	A-34-QO	COH310232	002		SOLID	0	4 1

RELINQUISHED BY

Geoffrey O. Braust
Geoffrey O. Braust

RECEIVED BY

Geoffrey O. Braust
Geoffrey O. Braust

DATE/TIME

9-7-00 0705
9-7-00 0815

REQUESTED BY: HOYLEW

METHOD: 08 Mercury (7470A, Cold Vapor) - Liquid

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SEF	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
5B,C CLP1	DJP8W	___	262764	399411	A-OM-08	COH310206	001		SOLID	0	3 1
5B,C CLP1	DJP90	___	262765	399411	A-OM-08	COH310206	002		SOLID	0	3 1
5B,C CLP1	DJP91	___	262766	399411	A-OM-08	COH310206	003		SOLID	0	3 1
5B,C CLP1	DJP92	___	262767	399411	A-OM-08	COH310206	004		SOLID	0	3 1
5C,D CLP1	DJPHK	___	262770	051465	A-OM-08	COH310232	001		SOLID	0	4 1
5C,D CLP1	DJPHL	___	262771	051465	A-OM-08	COH310232	002		SOLID	0	4 1
5E CLP1	DJQTD	___	262772	051465	A-OM-08	CO1010153	001		SOLID	0	4 1
6A,B,C, CLP1	DJRHV	___	262768	419910	A-OM-08	CO1010228	001		SOLID	0	22 1
6A,B,C, CLP1	DJRJP	___	262769	419910	A-OM-08	CO1010228	002		SOLID	0	6 1
6B,C CLP1	DJYTN	___	262773	051465	A-OM-08	CO1020118	001		SOLID	0	4 1
6B,C CLP1	DJTTP	___	262774	051465	A-OM-08	CO1020118	002		SOLID	0	3 1
6B,C CLP1	DJTQ DJXV6B	___	262775	051465	A-OM-08	CO1020118	003		SOLID	0	4 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

William A HoyleWilliam A Hoyle9-7-00 06:00William A HoyleWilliam A Hoyle9-7-00 06:55

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

672 716

GENERAL CHEMISTRY DATA

UXB INTERNATIONAL

Client Sample ID: DF/S1/242/SDC/031

General Chemistry

Lot-Sample #...: C0H310206-001 Work Order #...: DJP8W Matrix.....: SOLID
 Date Sampled...: 08/30/00 Date Received...: 08/31/00
 % Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.9		No Units	SW846 9045C	09/01/00	0245319
				Dilution Factor: 1	MS Run #.....: 0245119	
Ignitability	NO	--	No Units	SW846 SECTION 7.1	09/05/00	0249117
				Dilution Factor: 1	MS Run #.....: 0249018	
Percent Solids	83.6		%	MCAWW 160.3 MOD	09/05-09/06/00	0249296
				Dilution Factor: 1	MS Run #.....: 0249124	
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	09/01/00	0249146
				Dilution Factor: 1	MS Run #.....: 0249054	
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	09/01/00	0249143
				Dilution Factor: 1	MS Run #.....: 0249048	

UXB INTERNATIONAL

Client Sample ID: DF/S1/242/SDC/033

General Chemistry

Lot-Sample #...: C0H310206-002 Work Order #...: DJP90 Matrix.....: SOLID
 Date Sampled...: 08/30/00 Date Received...: 08/31/00
 % Moisture.....: 6.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	09/01/00	0245319
			Dilution Factor: 1	MS Run #.....: 0245119		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	09/05/00	0249117
			Dilution Factor: 1	MS Run #.....: 0249018		
Percent Solids	93.2		%	MCAWW 160.3 MOD	09/05-09/06/00	0249296
			Dilution Factor: 1	MS Run #.....: 0249124		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	09/01/00	0249146
			Dilution Factor: 1	MS Run #.....: 0249054		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	09/01/00	0249143
			Dilution Factor: 1	MS Run #.....: 0249048		

UXB INTERNATIONAL

Client Sample ID: DF/S1/242/SDC/034

General Chemistry

Lot-Sample #...: C0H310206-003 Work Order #...: DJP91 Matrix.....: SOLID
 Date Sampled...: 08/30/00 Date Received...: 08/31/00
 % Moisture.....: 9.2

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	09/01/00	0245319
			Dilution Factor: 1	MS Run #.....: 0245119		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	09/05/00	0249117
			Dilution Factor: 1	MS Run #.....: 0249018		
Percent Solids	90.8		%	MCAWW 160.3 MOD	09/05-09/06/00	0249296
			Dilution Factor: 1	MS Run #.....: 0249124		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	09/01/00	0249146
			Dilution Factor: 1	MS Run #.....: 0249054		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	09/01/00	0249143
			Dilution Factor: 1	MS Run #.....: 0249048		

672 720

UXB INTERNATIONAL

Client Sample ID: DF/S1/242/SDC/035

General Chemistry

Lot-Sample #....: C0H310206-004 Work Order #....: DJP92 Matrix.....: SOLID
 Date Sampled....: 08/30/00 Date Received...: 08/31/00
 % Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.1		No Units	SW846 9045C	09/01/00	0245319
				Dilution Factor: 1	MS Run #.....: 0245119	
Ignitability	NO	--	No Units	SW846 SECTION 7.1	09/05/00	0249117
				Dilution Factor: 1	MS Run #..... : 0249018	
Percent Solids	88.0		%	MCAWW 160.3 MOD	09/05-09/06/00	0249296
				Dilution Factor: 1	MS Run #.....: 0249124	
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	09/01/00	0249146
				Dilution Factor: 1	MS Run #.....: 0249054	
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	09/01/00	0249143
				Dilution Factor: 1	MS Run #.....: 0249048	

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0H310206

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Reactive Cyanide	ND	Work Order #: DJVGH101 200	mg/kg	MB Lot-Sample #: A0I050000-146 SW846 7.3.3	09/01/00	0249146
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DJVG6101 200	mg/kg	MB Lot-Sample #: A0I050000-143 SW846 7.3.4	09/01/00	0249143
		Dilution Factor: 1				

NOTE(S) :

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

672 722

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H310206

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 #: DJR8W101 (85 - 115)	LCS Lot-Sample#: C0I010000-319 SW846 9045C	09/01/00	0245319
		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 #...: C0H310206

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

Matrix.....: SOLID

Date Sampled...: 08/29/00

Date Received..: 08/30/00

% Moisture.....: 7.1

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD</u> <u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Reactive Cyanide						SD Lot-Sample #:	A0H300174-001	
ND	ND		mg/kg	0.0	(0-20)	SW846 7.3.3	09/01/00	0249146

Dilution Factor: 1

Prep Date.....: 0249054 Analysis Date. : Prep Batch #...:

Reactive Sulfide	-
ND	ND

SD Lot-Sample #: A0H300174-001

mg/kg	0	(0-20)	SW846	7.3.4	09/01/00	0249143

Dilution Factor: 1

Prep Date.....: 0249048 Analysis Date...: Prep Batch #...:

672 724

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: COH310206 Work Order #....: DJP8W-SMP Matrix.....: SOLID
Date Sampled....: 08/30/00 Date Received...: 08/31/00
% Moisture.....: 16

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.9	8.1	No Units	2.4	(0-20)	SD Lot-Sample #: COH310206-001 SW846 9045C	09/01/00	0245319

Dilution Factor: 1

Prep Date.....: 0245119 Analysis Date...: Prep Batch #....:

Ignitability

			No Units	0	(0-0.0)	SD Lot-Sample #: COH310206-001 SW846 SECTION 7.1	09/05/00	0249117

Dilution Factor: 1

Prep Date.....: 0249018 Analysis Date...: Prep Batch #....:

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H310206

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

Matrix.....: SOLID

Date Sampled...: 08/30/00

Date Received...: 09/01/00

% Moisture.....: 63

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	36.6	36.3	%	0.79	(0-20)	SD Lot-Sample #: C0I010228-001 MCAWW 160.3 MOD	09/06-09/07/00	0249296

Dilution Factor: 1

Prep Date.....: 0249124

Analysis Date...:

Prep Batch #...:

STL Pittsburgh
pH LOG SHEET

Page _____ of _____

Lot No.	Batch No.	SDG No.
CCH 310206	0245319	2
CCH 010153		

Analyst: PETER GROVE
Date: 9-1-00
Start Time: 10:00

pH Meter Calibration

Reading	Buffer	Manf. Lot No.	Rec'd	Expire
4.00	4.0	LABCHEM 9167-08	5-19-00	6-25-01
7.01	7.0	2062-04	5-19-00	3-1-02
10.04	10.0	0047-16	5-19-00	3-8-02

LCS ID No.: 342-162-3⁴

Relative Percent Difference =

Range = $\pm .05$ pH units

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X₁ =Original Result
X₂ = Duplicate

pH Liquid

[illegible]

pH Solid

Sample ID	pH Reading
LCS	7.02
COH310206-001	7.87 } R
-001 DUP	8.06 } L
-002	8.13
-003	8.14
-004	8.08
COH CoT 010153-001	6.02
LCS	7.01

REQUESTED BY: GROVEP

IOD: OZ pH (9045C) - Non-Aqueous

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
5B,C CLP1	DJP8W-1-0F	___	262157	399411	A-88-OZ	COH310206	001		SOLID	3	1
5B,C CLP1	DJP90-1-0F	___	262158	399411	A-88-OZ	COH310206	002		SOLID	3	1
5B,C CLP1	DJP91-1-0F	___	262159	399411	A-88-OZ	COH310206	003		SOLID	3	1
5B,C CLP1	DJP92-1-0F	___	262160	399411	A-88-OZ	COH310206	004		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

9-1-00 9:30

9-1-00 10:30

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

COC/Sample Request

Quanterra Incorporated
450 William Pitt Way
Building 6, Third Floor
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX 412/826-5571



4186

Project Name

	Site

Lot Number/Sample Number	Analysis	Matrix
1. <u>COT 010153-001</u>	<u>21730.1</u>	<u>52.1</u>
2.		
3.		
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8.		
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28.		
29.		
30.		

[illegible]

IgnitabilityMethod: IGNITABILITY (SWT.1-2)STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238

ANALYST: <u>ERIC L. NESOLOSKI</u>	DATE: <u>9-5-00</u>
BATCH: <u>0249117</u>	TIME: <u>06:40</u>

SAMPLE ID	RESULT
COH310206 - 001	NO
↓ -001 Dup	NO
-002	NO
-003	NO
↓ -004	NO
COH310232 - 001	NO
↓ -002	NO
COI010153 - 001	NO
COI020118 - 001	NO
↓ -002	NO
↓ -003	NO
COH310194 - 001	NO

Reviewed by P. JohnsonDate 9-5-00

WC-00-0060

Page 11 of 100

E. L. Nesoloski
9/5/00

672 150

PSR024 9/05/00 3:44:09 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: MESOLOSE

METHOD: IQ Ignitability (SW7.1.2)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
5B,C	DJP5F-1-03	— — —	262269	367970	A-88-IQ	COH310194	001		SOLID	1	1
5B,C CLP1	DJP8W-1-0G	— — —	262270	399411	A-88-IQ	COH310206	001		SOLID	3	1
5B,C CLP1	DJP90-1-0G	— — —	262271	399411	A-88-IQ	COH310206	002		SOLID	3	1
5B,C CLP1	DJP91-1-0G	— — —	262272	399411	A-88-IQ	COH310206	003		SOLID	3	1
5B,C CLP1	DJP92-1-0G	— — —	262273	399411	A-88-IQ	COH310206	004		SOLID	3	1
5C,D CLP1	DJPHK-1-0H	— — —	262267	051465	A-88-IQ	COH310232	001		SOLID	4	1
5C,D CLP1	DJPHL-1-0H	— — —	262268	051465	A-88-IQ	COH310232	002		SOLID	4	1
5E CLP1	DJQTD-1-0H	— — —	262274	051465	A-88-IQ	CO1010153	001		SOLID	4	1
6B,C CLP1	DJTIN-1-0H	— — —	262275	051465	A-88-IQ	CO1020118	001		SOLID	4	1
6B,C CLP1	DJTTP-1-0H	— — —	262276	051465	A-88-IQ	CO1020118	002		SOLID	3	1
6B,C CLP1	DJTTO-1-0H	— — —	262277	051465	A-88-IQ	CO1020118	003		SOLID	4	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

C. T. Mesolose
C. T. Mesolose

C. T. Mesolose
C. T. Mesolose

8/5/00 (05:45)
9/5/00 (07:30)

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

STL Pittsburgh
TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Lot No.
C0H310239
C0H316206
C0I010224
C0I010145
C0I010256-1-8

Lot No.

Lot No.

Batch No.

Analyst: Peron GrawIn: Date 9-5-00 Time 11:30Out: Date 9-6-00 Time 5:30Balance ID #: 6131Oven Temp: 103°C ± 2°C

C0I010256-1-11
C0I010141
C0H310195

0249296

C0H310243

C0I010145

0249302

C0H310200

C0I010139

0249303

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
C0H310239-061	1A	1.10	6.43	5.83	C0H310195-008	REC	1.11	6.23	5.59
-062	21B	1.10	6.08	5.51	-009	AB	1.11	6.58	5.45
-063	AA	1.09	6.27	5.54	-010	185	1.13	6.08	5.49
-064	153	1.11	6.48	5.82	C0H310243-001	29	1.09	6.39	5.68
-065	88	1.13	6.02	3.95	-003	231	1.11	6.14	5.30
C0H310206-001	27	1.13	6.13	5.31	-005	101	1.10	5.85	5.07
-066	175	1.15	6.03	5.70	-007	216	1.11	6.03	5.39
-067	161	1.11	6.02	5.57	-009	105	1.15	6.07	5.31
-068	131	1.12	6.52	5.87	-011	128	1.15	5.90	5.08
C0I010224-001	66	1.10	6.66	5.90	C0I010145-001	111	1.14	6.41	5.88
C0I010228-001	21E	1.11	5.74	3.55	-001 DIF	1108	1.15	6.61	6.07
-069	119	1.11	5.78	2.85	-002	171	1.13	6.77	5.90
-070	AE	1.12	5.88	2.85	-003	47	1.12	6.15	5.38
C0I010256-001	47	1.08	5.90	5.33	-004	64	1.12	6.16	5.08
-072	21D	1.08	6.29	5.55	-005	120	1.11	6.62	5.47
-073	57	1.12	6.63	5.75	-006	XB	1.16	6.36	5.41
-074	38	1.18	5.69	4.82	-007	35	1.08	6.08	5.45
-075	141	1.18	6.01	5.46	-008	103	1.19	6.22	5.25
-076	25	1.13	6.28	5.66	-009	21E	1.10	5.99	5.23
-077	4B	1.16	6.51	5.77	C0H310200-001	97	1.10	6.01	5.45
-078	1551	1.13	6.12	5.36	-002	139	1.14	6.17	5.46
C0I010256-009	PU	1.14	6.22	5.63	-007	3	1.11	5.78	4.93
-079	1241	1.11	6.33	5.75	-004	X2	1.12	6.50	5.70
-080	28	1.11	6.01	5.44	-005	61	1.12	6.43	5.58
-081	181	1.11	6.10	5.47	-006	118	1.11	6.26	5.50
C0I010141-001	E1	1.11	6.12	5.41	-007	34	1.12	6.02	5.47
-082	196	1.09	6.02	5.46	C0I010139-001	45	1.09	6.01	5.23
-083	21C	1.10	5.60	5.17	-002	44	1.12	5.98	5.16
-084	72	1.10	5.87	5.45					
C0H310195-001	123	1.12	5.65	4.81					
-085	145	1.10	6.22	4.75					
-086	168	1.12	6.21	5.96					
-087	W	1.13	6.74	5.73					
-088	271	1.13	6.25	5.01					
-089	104	1.17	6.43	6.12					
-090	178	1.11	6.29	4.97					

672 732

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM	0009003
TESTED	ELW 9/5/00
CHECKED	<i>enf</i> <i>9-6-00</i>

CREATED	9/5/00 1:36 35 PM
REVISED	9/5/00 2 12 17 PM

COMMENTS

C0H310239/C0H310206/C0I010224/C0I010228/C0I010256/C0I010141/C0H310195/C0H310243/C0I010145/C0H310200/C0I010139

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
C0H310239	001	SMP 1A	1 1	6.43	5.83	11 30	5 30	0.6	11.257	88.743
C0H310239	002	SMP 21B	1 1	6.08	5.51	11 30	5 30	0.57	11.446	88.554
C0H310239	003	SMP AA	1 09	6.27	5.54	11 30	5 30	0.73	14.093	85.907
C0H310239	004	SMP 153	1 11	6.48	5.82	11 30	5 30	0.66	12.29	87.71
C0H310239	005	SMP 88	1 13	6.02	3.95	11 30	5 30	2.07	42.331	57.669
C0H310206	001	SMP 27	1 13	6.13	5.31	11 30	5 30	0.82	16.4	83.6
C0H310206	002	SMP 175	1 15	6.03	5.7	11 30	5 30	0.33	6.762	93.238
C0H310206	003	SMP 161	1 11	6.02	5.57	11 30	5 30	0.45	9.165	90.835
C0H310206	004	SMP 131	1 12	6.52	5.87	11 30	5 30	0.65	12.037	87.963
C0I010224	001	SMP 66	1 1	6.66	5.9	11 30	5 30	0.76	13.669	86.331
C0I010228	001	SMP 21E	1 11	5.74	3.53	11 30	5 30	2.21	47.732	52.268
C0I010228	001 DUP	SMP 119	1 11	5.78	2.85	11 30	5 30	2.93	62.741	37.259
C0I010228	002	SMP AE	1 12	5.88	2.85	11 30	5 30	3.03	63.655	36.345
C0I010256	001	SMP 47	1 08	5.9	5.33	11 30	5 30	0.57	11.826	88.174
C0I010256	002	SMP 21D	1 08	6.29	5.55	11 30	5 30	0.74	14.203	85.797
C0I010256	003	SMP 57	1 12	6.63	5.75	11 30	5 30	0.88	15.971	84.029
C0I010256	004	SMP 38	1 18	5.69	4.82	11 30	5 30	0.87	19.29	80.71
J10256	005	SMP 141	1 18	6.01	5.46	11 30	5 30	0.55	11.387	88.613

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0009003
 TESTED ELW 9/5/00
 CHECKED WLF 9-6-00

CREATED 9/5/00 1 36.35 PM
 REVISED 9/5/00 2 12 17 PM

COMMENTS

C0H3102329/C0H310206/C0I010224/C0I010228/C0I010256/C0I010141/C0H310195/C0H310243/C0I010145/C0H310200/C0I010139

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
C0I010256	006	SMP 25	1 13	6 28	5 66	11 30	5 30	0 62	12 039	87 961
C0I010256	007	SMP HB	1.16	6 51	5 77	11 30	5 30	0 74	13 832	86 168
C0I010256	008	SMP 1551	1 13	6 12	5 36	11 30	5 30	0 76	15 23	84 77
C0I010256	009	SMP PU	1 14	6 22	5 63	11 30	5 30	0 59	11 614	88 386
C0I010256	009 DUP	SMP 1241	1 11	6 33	5 75	11 30	5 30	0 58	11 111	88 889
C0I010256	010	SMP 28	1 11	6 01	5 44	11 30	5 30	0 57	11 633	88 367
C0I010256	011	SMP 181	1.11	6 1	5 47	11 30	5 30	0.63	12 625	87 375
C0I010141	001	SMP E1	1 11	6 12	5 41	11 30	5 30	0 71	14 172	85 828
C0I010141	002	SMP 190	1 09	6 02	5 46	11 30	5 30	0 56	11 359	88 641
C0I010141	003	SMP 21C	1 1	5 6	5.17	11 30	5.30	0 43	9.556	90 444
C0I010141	004	SMP 72	1.1	5 87	5 45	11 30	5 30	0 42	8.805	91.195
C0H310195	001	SMP 123	1 12	5 65	4 81	11 30	5 30	0 84	18 543	81.457
C0H310195	002	SMP 145	1.1	6 22	4 75	11 30	5 30	1 47	28 711	71 289
C0H310195	003	SMP 168	1 12	6 21	5 96	11 30	5 30	0 25	4 912	95 088
C0H310195	004	SMP W	1.13	6 74	5.73	11 30	5 30	1 01	18.004	81 996
C0H310195	005	SMP 271	1.13	6 25	5 01	11 30	5 30	1.24	24 219	75 781
C0H310195	006	SMP 104	1 17	6.43	6 12	11 30	5 30	0 31	5 894	94 106
C0H310195	007	SMP 178	1 11	6 29	4 97	11 30	5 30	1 32	25 483	74 517

672 734

STL - Pittsburgh WATER CONTENT SHEET

HEET NUM	0009003	
ESTED	ELW	9/5/00
CHECKED	Puf	9-600

CREATED	9/5/00 1 36 35 PM	
REVISED	9/5/00 2 12 17 PM	

COMMENTS

C0H3102329/C0H310206/C0I010224/C0I010228/C0I010256/C0I010141/C0H310195/C0H310243/C0I010145/C0H310200/C0I010139

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC
C0H310195	008	SMP C	1.11	6.23	5.59	11 30	5 30	0.64	12.5	87.5
C0H310195	009	SMP AB	1.11	6.58	5.45	11 30	5 30	1.13	20.658	79.342
C0H310195	010	SMP 185	1.13	6.08	5.49	11 30	5 30	0.59	11.919	88.081
C0H310243	001	SMP 29	1.09	6.39	5.68	11 30	5 30	0.71	13.396	86.604
C0H310243	003	SMP 231	1.11	6.14	5.3	11 30	5 30	0.84	16.7	83.3
C0H310243	005	SMP 101	1.1	5.85	5.07	11 30	5 30	0.78	16.421	83.579
C0H310243	007	SMP 21G	1.11	6.03	5.39	11 30	5.30	0.64	13.008	86.992
C0H310243	009	SMP 105	1.15	6.07	5.31	11 30	5 30	0.76	15.447	84.553
C0H310243	011	SMP 128	1.15	5.9	5.08	11 30	5 30	0.82	17.263	82.737
C0I010145	001	SMP 111	1.14	6.41	5.88	11 30	5.30	0.53	10.057	89.943
C0I010145	001 DUP	SMP 1108	1.15	6.61	6.07	11 30	5 30	0.54	9.89	90.11
C0I010145	002	SMP 171	1.13	6.77	5.9	11 30	5 30	0.87	15.426	84.574
C0I010145	003	SMP 47	1.12	6.15	5.38	11 30	5 30	0.77	15.308	84.692
C0I010145	004	SMP 64	1.12	6.16	5.08	11 30	5 30	1.08	21.429	78.571
C0I010145	005	SMP 120	1.11	6.62	5.47	11.30	5 30	1.15	20.871	79.129
C0I010145	006	SMP XB	1.16	6.36	5.41	11 30	5.30	0.95	18.269	81.731
C0I010145	007	SMP 35	1.08	6.08	5.45	11 30	5.30	0.63	12.6	87.4
C0I010145	008	SMP 103	1.1	6.22	5.25	11 30	5 30	0.97	18.945	81.055

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0009003
 TESTED ELW 9/5/00
 CHECKED GUF G-600

CREATED 9/5/00 1 36 35 PM
 REVISED 9/5/00 2 12 17 PM

COMMENTS

C0H3102329/C0H310206/C0I010224/C0I010228/C0I010256/C0I010141/C0H310195/C0H310243/C0I010145/C0H310200/C0I010139

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
C0I010145	009	SMP	21F	1.1	5.99	5.23	11:30	5:30	0.76	15.542	84.458
C0H310200	001	SMP	97	1.1	6.01	5.45	11:30	5:30	0.56	11.405	88.595
C0H310200	002	SMP	139	1.14	6.17	5.46	11:30	5:30	0.71	14.115	85.885
C0H310200	003	SMP	3	1.11	5.78	4.93	11:30	5:30	0.85	18.201	81.799
C0H310200	004	SMP	X2	1.12	6.5	5.7	11:30	5:30	0.8	14.87	85.13
C0H310200	004 DUP	SMP	61	1.12	6.43	5.58	11:30	5:30	0.85	16.008	83.992
.310200	005	SMP	118	1.11	6.26	5.5	11:30	5:30	0.76	14.757	85.243
C0H310200	006	SMP	34	1.12	6.02	5.43	11:30	5:30	0.59	12.041	87.959
C0I010139	001	SMP	45	1.09	6.01	5.23	11:30	5:30	0.78	15.854	84.146
C0I010139	002	SMP	44	1.12	5.98	5.16	11:30	5:30	0.82	16.872	83.128

672 736

PSR024 9/05/00 7:55:09 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: GROVEP

MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
5B,C CLP1	DJP5L-1-01	___	262452	092523	A-88-SM	COH310195	001		SOLID	0	1
5B,C CLP1	DJP5N-1-01	___	262453	092523	A-88-SM	COH310195	002		SOLID	0	1
5B,C CLP1	DJP5Q-1-01	___	262454	092523	A-88-SM	COH310195	003		SOLID	0	1
5B,C CLP1	DJP5W-1-01	___	262455	092523	A-88-SM	COH310195	004		SOLID	0	1
5B,C CLP1	DJP60-1-01	___	262456	092523	A-88-SM	COH310195	005		SOLID	0	1
5B,C CLP1	DJP62-1-01	___	262457	092523	A-88-SM	COH310195	006		SOLID	0	1
5B,C CLP1	DJP64-1-01	___	262458	092523	A-88-SM	COH310195	007		SOLID	0	1
5B,C CLP1	DJP65-1-01	___	262459	092523	A-88-SM	COH310195	008		SOLID	0	1
5B,C CLP1	DJP66-1-01	___	262460	092523	A-88-SM	COH310195	009		SOLID	0	1
5B,C CLP1	DJP68-1-01	___	262461	092523	A-88-SM	COH310195	010		SOLID	0	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

9-5-00 10:00

9-5-00 11:30

REQUESTED BY: GROVEP

MOD: WM Moisture, Percent (160.3)

<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>
4D	DJP6W-1-01	___	262477	413462	A-88-WM	COH310200	001		SOLID	0	1
4D	DJP6X-1-01	___	262478	413462	A-88-WM	COH310200	002		SOLID	0	1
4D	DJP71-1-01	___	262479	413462	A-88-WM	COH310200	003		SOLID	0	1
4D	DJP72-1-01	___	262480	413462	A-88-WM	COH310200	004		SOLID	0	3
4D	DJP73-1-01	___	262481	413462	A-88-WM	COH310200	005		SOLID	0	1
4D	DJP74-1-01	___	262482	413462	A-88-WM	COH310200	006		SOLID	0	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

9-5-00 10:00

9-5-00 11:30

672 738

PSR024 9/05/00 7:55:09 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 003

REQUESTED BY: GROVEP

MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
5B,C CLP1	DJP8W-1-01	___	262430	399411	A-88-SM COH310206	001			SOLID	0	3 1
5B,C CLP1	DJP90-1-01	___	262431	399411	A-88-SM COH310206	002			SOLID	0	3 1
5B,C CLP1	DJP91-1-01	___	262432	399411	A-88-SM COH310206	003			SOLID	0	3 1
5B,C CLP1	DJP92-1-01	___	262433	399411	A-88-SM COH310206	004			SOLID	0	3 1
5C,D	DJPKT-1-01	___	262425	020247	A-88-SM COH310239	001			SOLID	0	4 1
5C,D	DJPKX-1-01	___	262426	020247	A-88-SM COH310239	002			SOLID	0	4 1
5C,D	DJPL0-1-01	___	262427	020247	A-88-SM COH310239	003			SOLID	0	4 1
5C,D	DJPL2-1-01	___	262428	020247	A-88-SM COH310239	004			SOLID	0	4 1
5C,D	DJPL3-1-01	___	262429	020247	A-88-SM COH310239	005			SOLID	0	4 1
5C,D CLP1	DJPLA-1-02	___	262462	364323	A-88-SM COH310243	001			SOLID	0	3 1
CLP1	DJPLJ-1-02	___	262463	364323	A-88-SM COH310243	003			SOLID	0	3 1
5C,D CLP1	DJPLL-1-02	___	262464	364323	A-88-SM COH310243	005			SOLID	0	3 1
5C,D CLP1	DJPLP-1-02	___	262465	364323	A-88-SM COH310243	007			SOLID	0	3 1
5C,D CLP1	DJPLR-1-02	___	262466	364323	A-88-SM COH310243	009			SOLID	0	3 1
5C,D CLP1	DJPLW-1-02	___	262467	364323	A-88-SM COH310243	011			SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

9-5-00 10.00

9-5-00 1130

672 739

PSR024 9/05/00 7:55:09 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 004

REQUESTED BY: GROVEP

METHOD: WM Moisture, Percent (160.3)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
4A	DJQNT-1-01	___	262483	413462	A-88-WM	C01010139	001		SOLID	0	1 1
4A	DJQNV-1-01	___	262484	413462	A-88-WM	C01010139	002		SOLID	0	1 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

9-5-00
9-5-00 10:00
9-5-00 11:30

672 740

PSR024 9/05/00 7:55:09 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 005

ESTED BY: GROVEP

METHOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
5E	DJQNW-1-01	___	262448	064485	A-88-SM	C0I010141	001		SOLID	0	1
5E	DJQP1-1-01	___	262449	064485	A-88-SM	C0I010141	002		SOLID	0	1
5E	DJQP2-1-01	___	262450	064485	A-88-SM	C0I010141	003		SOLID	0	1
5E	DJQP3-1-01	___	262451	064485	A-88-SM	C0I010141	004		SOLID	0	1
5E CLP1	DJQP8-1-01	___	262468	092523	A-88-SM	C0I010145	001		SOLID	0	1
5E CLP1	DJQPC-1-01	___	262469	092523	A-88-SM	C0I010145	002		SOLID	0	1
5E CLP1	DJQPD-1-01	___	262470	092523	A-88-SM	C0I010145	003		SOLID	0	1
5E CLP1	DJQPE-1-01	___	262471	092523	A-88-SM	C0I010145	004		SOLID	0	1
5E CLP1	DJQPF-1-01	___	262472	092523	A-88-SM	C0I010145	005		SOLID	0	1
5E CLP1	DJQPG-1-01	___	262473	092523	A-88-SM	C0I010145	006		SOLID	0	1
5E CLP1	DJQPH-1-01	___	262474	092523	A-88-SM	C0I010145	007		SOLID	0	1
5E CLP1	DJQPJ-1-01	___	262475	092523	A-88-SM	C0I010145	008		SOLID	0	1
5E CLP1	DJQPK-1-01	___	262476	092523	A-88-SM	C0I010145	009		SOLID	0	1
5D	DJRHF-1-01	___	262434	420654	A-88-SM	C0I010224	001		SOLID	0	1
6A,B,C, CLP1	DJRHV-1-01	___	262435	419910	A-88-SM	C0I010228	001		SOLID	0	22
6A,B,C, CLP1	DJRJP-1-01	___	262436	419910	A-88-SM	C0I010228	002		SOLID	0	6
6B,C CLP1	DJRR3-1-01	___	262437	020247	A-88-SM	C0I010256	001		SOLID	0	4
6B,C CLP1	DJRRN-1-01	___	262438	020247	A-88-SM	C0I010256	002		SOLID	0	4
6B,C CLP1	DJRRR-1-01	___	262439	020247	A-88-SM	C0I010256	003		SOLID	0	4
6B,C CLP1	DJRRX-1-01	___	262440	020247	A-88-SM	C0I010256	004		SOLID	0	4
6B,C CLP1	DJRT2-1-01	___	262441	020247	A-88-SM	C0I010256	005		SOLID	0	4
6B,C CLP1	DJRT3-1-01	___	262442	020247	A-88-SM	C0I010256	006		SOLID	0	4
6B,C CLP1	DJRT5-1-01	___	262443	020247	A-88-SM	C0I010256	007		SOLID	0	4
6B,C CLP1	DJRT8-1-01	___	262444	020247	A-88-SM	C0I010256	008		SOLID	0	4
6B,C CLP1	DJRTA-1-01	___	262445	020247	A-88-SM	C0I010256	009		SOLID	0	4
STL Pittsburgh 6B,C CLP1	DJRTC-1-01	___	262446	020247	A-88-SM	C0I010256	010		SOLID	0	7025

672 741

PSR024 9/05/00 7:55:09 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 006

TESTED BY: GROVEP

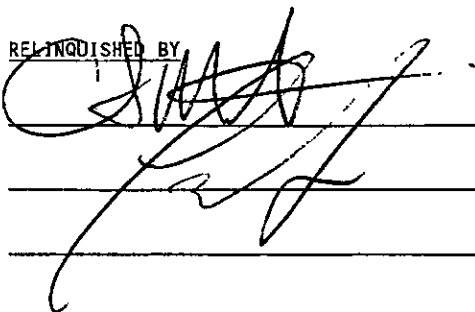
METHOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

<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>
6B,C CLP1	DJRTO-1-01	_____	262447	020247	A-88-SM	C01010256	011		SOLID	0	4 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME



10:00
9-5-00 9-11-00 9-5-00
9-5-00 11:30

7007

672 742

STL Pittsburgh
TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Lot No.	Lot No.	Lot No.	Batch No.	Analyst: <u>CLLOHEYDE</u>
<u>COI050105</u>	<u>COH310166</u>		<u>0250265</u>	In: Date <u>9-6-00</u> Time <u>1130</u>
<u>COI050189</u>	<u>COI010228-1</u>	<u>0249296</u>	<u>0250268</u>	Out: Date <u>9-7-00</u> Time <u>0430</u>
<u>COH310228</u>				Balance ID #: <u>C94817</u>
<u>COH310228</u>				Oven Temp: <u>103°C±2°C</u>
<u>COH310231</u>				

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
COI05010501	21H	1.12	6.14	5.39	COH310166-018	21F	1.13	6.49	2.93
-002	102	1.12	6.71	5.96	-018D	29	1.11	6.69	3.18
-003	21A	1.12	6.32	5.66	-019	W	1.11	6.42	2.05
-004	XX	1.10	6.16	5.26	-020	471	1.15	6.49	2.60
-005	HB	1.15	6.53	5.88	COI040228-001	CA	1.12	6.15	2.96
-006	8X	1.11	6.46	5.70	-001D	1651	1.13	6.20	2.97
-007	54	1.11	7.43	5.83					
-008	157	1.14	6.63	6.07					
-009	14	1.10	6.49	5.61					
-010	50	1.13	6.20	5.52					
COI050189-001	111	1.13	6.58	6.14					
-002	XZ	1.12	7.27	6.51					
-003	231	1.12	6.34	5.71					
-004	128	1.16	6.51	6.00					
-005	34	1.13	6.66	6.28					
-006	120	1.17	6.60	6.01					
COH310228-001	216	1.12	6.35	6.16					
COH310231-001	XB	1.17	6.61	5.89					
-002	139	1.16	6.21	6.02					
-003	103	1.13	6.17	5.91					
COH310166-002	145	1.14	6.23	4.69					
-003	171	1.14	6.46	3.82					
-004	64	1.14	6.30	3.04					
-005	88	1.12	6.11	2.77					
-006	101	1.11	6.69	2.92					
-007	21B	1.12	6.61	3.80					
-008	105	1.16	6.47	4.50					
-009	21E	1.14	6.92	5.30					
-010	1551	1.13	6.43	2.91					
-011	47	1.11	6.34	3.53					
-012	PL	1.12	6.39	3.58					
-013	35	1.11	6.97	4.69					
-014	161	1.11	6.01	2.97					
-015	1108	1.16	5.81	1.98					
-016	181	1.12	6.44	2.46					
-017	3	1.11	6.66	2.16					

COI050189-1 (1.62)

CLLOHEYDE

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0009004
 TESTED CLL 9/6/00
 CHECKED *quf* 9-7-00

CREATED 9/6/00 12 59 44 PM
 REVISED 9/6/00 1 01 51 PM

COMMENTS

COI050105 COI050189 COH310288 COH310231 COH310166 COI010228

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	
COI050105	001		SMP	21H	1 12	6 14	5 39	11 30	5 00	0 75	14 94	85 06
COI050105	001D		SMP	102	1 12	6 71	5 96	11 30	5 00	0 75	13 417	86 583
COI050105	002		SMP	21A	1 12	6 32	5 66	11 30	5 00	0 66	12 692	87 308
COI050105	003		SMP	XX	1 1	6 16	5 26	11 30	5 00	0 9	17 787	82 213
COI050105	004		SMP	HB	1 15	6 53	5 88	11 30	5 00	0 65	12 082	87 918
COI050105	005		SMP	8X	1 11	6 46	5 7	11 30	5 00	0 76	14 206	85 794
COI050105	006		SMP	54	1 11	7 43	5 83	11 30	5 00	1 6	25 316	74 684
COI050105	007		SMP	157	1 14	6 63	6 07	11 30	5 00	0 56	10 2	89 8
COI050105	008		SMP	17	1 1	6 49	5 61	11 30	5 00	0 88	16 327	83 673
COI050105	009		SMP	50	1 13	6 2	5 52	11 30	5 00	0 68	13 412	86 588
COI050189	001		SMP	111	1 13	6 58	6 14	11 30	5 00	0 44	8 073	91 927
COI050189	002		SMP	XZ	1 12	7 27	6 51	11 30	5 00	0 76	12 358	87 642
COI050189	003		SMP	231	1 12	6 34	5 71	11 30	5 00	0 63	12 069	87 931
COI050189	004		SMP	128	1 16	6 51	6	11 30	5 00	0 51	9 533	90 467
COI050189	005		SMP	34	1 13	6 66	6 28	11 30	5 00	0 38	6 872	93 128
COI050189	006		SMP	120	1 17	6 6	6 01	11 30	5 00	0 59	10 866	89 134
COH310288	001-		SMP	21G	1 12	6 35	6 16	11 30	5 00	0 19	3 633	96 367
310231	001		SMP	XB	1 17	6 61	5 89	11 30	5 00	0 72	13 235	86 765

672 744

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM	0009004	
TESTED	CLL	9/6/00
CHECKED	QMF	9700

CREATED	9/6/00 12 59 44 PM
REVISED	9/6/00 1 01 51 PM

COMMENTS

C0I050105 C0I050189 C0H310288 C0H310231 C0H310166 C0I010228

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
C0H310231	002	SMP	139	1 16	6 21	6 02	11 30	5.00	0 19	3 762	96 238
C0H310231	003	SMP	103	1.13	6 17	5 91	11 30	5 00	0 26	5 159	94 841
C0H310166	002	SMP	145	1 14	6.23	4 69	11 30	5.00	1 54	30 255	69 745
C0H310166	003	SMP	171	1 14	6 46	3 82	11 30	5 00	2 64	49 624	50 376
C0H310166	004	SMP	64	1 14	6 3	3 04	11 30	5.00	3 26	63 178	36 822
C0H310166	005	SMP	88	1 12	6 11	2 77	11 30	5 00	3 34	66 934	33 066
C0H310166	006	SMP	101	1 11	6 69	2 92	11 30	5 00	3 77	67.563	32 437
C0H310166	007	SMP	21B	1 12	6 61	3 8	11 30	5 00	2 81	51 184	48 816
C0H310166	008	SMP	105	1.16	6.47	4 5	11 30	5 00	1 97	37 1	62 9
C0H310166	009	SMP	21E	1 14	6 92	5 3	11 30	5 00	1 62	28 028	71 972
C0H310166	010	SMP	1551	1 15	6 43	2 91	11 30	5 00	3.52	66 667	33 333
C0H310166	011	SMP	47	1 11	6 34	3 53	11 30	5 00	2 81	53 728	46 272
C0H310166	012	SMP, PU		1 12	6 39	3 58	11 30	5 00	2 81	53 321	46 679
C0H310166	013	SMP	35	1 11	6 97	4 69	11 30	5 00	2.28	38.908	61 092
C0H310166	014	SMP	161	1 11	6 01	2 97	11 30	5 00	3 04	62 041	37 959
C0H310166	015	SMP	1108	1 16	5 81	1 98	11 30	5 00	3 83	82 366	17 634
C0H310166	016	SMP	181	1 12	6 44	2 46	11 30	5 00	3 98	74 812	25 188
C0H310166	017	SMP	3	1 11	6 66	2 16	11 30	5 00	4 5	81 081	18 919

672 745

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0009004

CREATED 9/6/00 12 59 44 PM

TESTED CLL 9/6/00

CHECKED QUF Q-700

REVISED 9/7/00 10 08 53 AM

COMMENTS

C0I050105 C0I050189 C0H310288 C0H310231 C0H310166 C0I010228

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.
C0H310166	018	SMP	21F	1 13	6 49	2 93	11 30	5 00	3 56	66 418 <i>RAD</i> 33 582 <i>9.9%</i>
C0H310166	018D	SMP	29	1 11	6 69	3 18	11 30	5 00	3 51	62 903 37 097
C0H310166	019	SMP	W	1 11	6 42	2 05	11 30	5 00	4 37	82 298 17 702
C0H310166	020	SMP	471	1 15	6 49	2 6	11 30	5 00	3 89	72 846 27 154
C0I010228	001	SMP	CA	1 12	6 15	2 96	11 30	5 00	3 19	63 419 36 581 <i>RAD</i> <i>1.45%</i>
C0I010228	001D	SMP	1651	1 13	6 2	2 97	11 30	5 00	3 23	63 708 36 292 <i>RAD</i> <i>1.79%</i>

672 746

PSR024 9/06/00 7:49:15 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: LOHEYDEC

MOD: 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>
6D	DJVGK-1-01	___	262716	020247	A-88-SM	C01050105	001		SOLID	4	1
6D	DJVGM-1-01	___	262717	020247	A-88-SM	C01050105	002		SOLID	4	1
6D	DJVGW-1-01	___	262718	020247	A-88-SM	C01050105	003		SOLID	4	1
6D	DJVGP-1-01	___	262719	020247	A-88-SM	C01050105	004		SOLID	4	1
6D	DJVGO-1-01	___	262720	020247	A-88-SM	C01050105	005		SOLID	4	1
6D	DJVGR-1-01	___	262721	020247	A-88-SM	C01050105	006		SOLID	4	1
6D	DJVGT-1-01	___	262722	020247	A-88-SM	C01050105	007		SOLID	4	1
6D	DJGVV-1-01	___	262723	020247	A-88-SM	C01050105	008		SOLID	4	1
6D	DJVGW-1-01	___	262724	020247	A-88-SM	C01050105	009		SOLID	4	1
6E	DJWGA-1-01	___	262725	020247	A-88-SM	C01050189	004		SOLID	4	1
6E	DJWGD-1-01	___	262726	020247	A-88-SM	C01050189	005		SOLID	4	1
6E	DJWGE-1-01	___	262727	020247	A-88-SM	C01050189	006		SOLID	4	1
6E	DJWGO-1-01	___	262728	020247	A-88-SM	C01050189	001		SOLID	4	1
6E	DJWGG-1-01	___	262729	020247	A-88-SM	C01050189	002		SOLID	4	1
6E	DJWGB-1-01	___	262730	020247	A-88-SM	C01050189	003		SOLID	4	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

9-6-00 1000
9-6-00 1145

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

REQUESTED BY: LONEYDEC

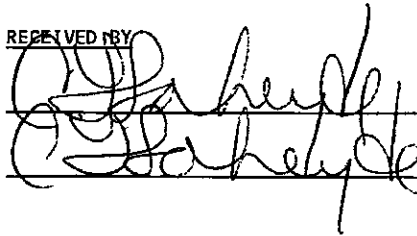
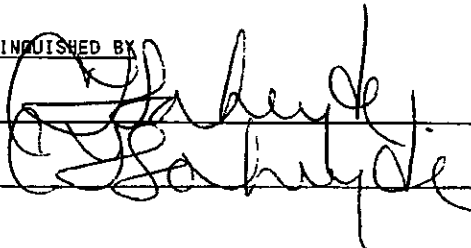
'00: SM Solids, Percent (as TS - 160.3 MOD) - Solids

<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>
5C,D	DJPGM-1-01	___	262759	051465	A-88-SM	C0H310231	001		SOLID	1	1
5C,D	DJPHA-1-01	___	262760	051465	A-88-SM	C0H310231	002		SOLID	1	1
5C,D	DJPHE-1-01	___	262761	051465	A-88-SM	C0H310231	003		SOLID	1	1
5D	DJQ08-1-01	___	262762	105611	A-88-SM	C0H310288	001		SOLID	1	1

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RECEIVED BY

DATE/TIME

9-6-00 1000
9-6-00 1145

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

672 748

PSR024 9/06/00 7:50:06 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: LONEYDEC

MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
5B	DJNXX-1-01	___	262731	002532	A-88-SM	C0H310166	002		SOLID	0	2 1
5B	DJNXM-1-01	___	262732	002532	A-88-SM	C0H310166	003		SOLID	0	2 1
5B	DJNXQ-1-01	___	262733	002532	A-88-SM	C0H310166	004		SOLID	0	2 1
5B	DJNXT-1-01	___	262734	002532	A-88-SM	C0H310166	005		SOLID	0	2 1
5B	DJNXX-1-01	___	262735	002532	A-88-SM	C0H310166	006		SOLID	0	2 1
5B	DJP02-1-01	___	262736	002532	A-88-SM	C0H310166	007		SOLID	0	2 1
5B	DJP05-1-01	___	262737	002532	A-88-SM	C0H310166	008		SOLID	0	2 1
5B	DJP09-1-01	___	262738	002532	A-88-SM	C0H310166	009		SOLID	0	2 1
5B	DJP0C-1-01	___	262739	002532	A-88-SM	C0H310166	010		SOLID	0	2 1
5B	DJP0D-1-01	___	262740	002532	A-88-SM	C0H310166	011		SOLID	0	2 1
5B	DJP0F-1-01	___	262741	002532	A-88-SM	C0H310166	012		SOLID	0	2 1
5B	DJP0G-1-01	___	262742	002532	A-88-SM	C0H310166	013		SOLID	0	2 1
5B	DJP0J-1-01	___	262743	002532	A-88-SM	C0H310166	014		SOLID	0	2 1
5B	DJP0K-1-01	___	262744	002532	A-88-SM	C0H310166	015		SOLID	0	2 1
5B	DJP0L-1-01	___	262745	002532	A-88-SM	C0H310166	016		SOLID	0	2 1
5B	DJP0N-1-01	___	262746	002532	A-88-SM	C0H310166	017		SOLID	0	2 1
5B	DJP0T-1-01	___	262747	002532	A-88-SM	C0H310166	018		SOLID	0	6 2
5B	DJP0X-1-01	___	262748	002532	A-88-SM	C0H310166	019		SOLID	0	2 1
5B	DJP12-1-01	___	262749	002532	A-88-SM	C0H310166	020		SOLID	0	2 1

672,749

PSR024 9/06/00 7:50:06 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 002

REQUESTED BY: LOHEYDEC

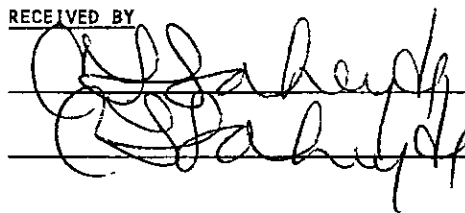
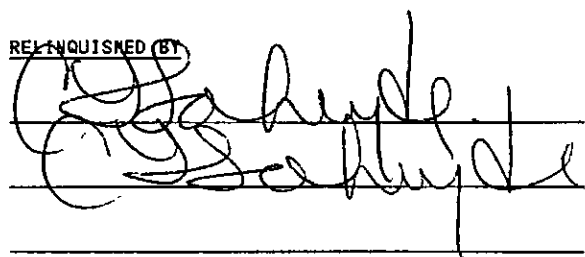
OD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

<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>

RELINQUISHED BY

RECEIVED BY

DATE/TIME

9-6-00 1000
9-6-00 1145

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

672 750

PSR024 9/06/00 9:03:21 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: GROVEP

MOD: 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>
6A,B,C, CLP1	DJRHV-1-01	_____	262763	419910	A-88-SM	C01010228	001		SOLID	0	22 1

RELINQUISHED BY

[Signature]
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RECEIVED BY

[Signature]
[Signature]

DATE/TIME

9-6-00 1110
9-6-00 1145

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

QUANTERRA- NORTH CANTON
TITRIMETRIC LOGSHEET

672.751

Analysis Reactive Sulfide
Prep/ Anal. Date 9/1/00
Analyst Tia A.

Batch Number 0249143
LCS Number
LCS Prep Date
RL 200 mg / kg

Titrant Name Sodium Thiosulfate - Iodine 0.028 2/25/00 BW

Titrant Normality 0.025 N

Titrant Standardization Date/ Initials 8/22/00 / T.A.R

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
Blank	10g		25.6	ND	mg/kg	- 320
DTLPA	10g		27.8	ND		
DTLPA-DUP			27.3	ND		
DJP5F			26.8	ND		
DJP48			26.6	ND		
DJP4A			26.7	ND		
DJP4E			26.8	ND		
DJP4F			27.3	ND		
DJP90			26.1	ND		
DJP91			26.3	ND		
DJP92			26.5	ND		
DJP8W	10g		26.7	ND		
DJP11K	10g					
DJP11L	10g					

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QUANTERRA- NORTH CANTON
TITRIMETRIC LOGSHEETAnalysis Reactive CyanidePrep/ Anal. Date 9/1/00Analyst Tia A.Batch Number 0249146LCS Number LCS Prep Date RL Titrant Name Silver NitrateTitrant Normality 0.0192 NTitrant Standardization Date/ Initials NA / NA

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
Blank	10g		.05	6.25	mg/Kg	
DJLPA			.05	6.25		
DJLPA-DUP			.05	6.25		
DJP5F			.05	6.25		
DJP48			.05	6.25		
DJP4A			.05	6.25		
DJP4E			.05	6.25		
DJP4F			.05	6.25		
DJP90			.04	5.00		
DJP91			.10	12.5		
DJP92			.05	6.25		
DJP8W			.05	6.25		
DJP#K TRA 9/1/00						
DJP#L TRA 9/1/00						

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PART I

ADMINISTRATIVE RECORD

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