



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 674

Part II of II

674 894

SEVERN

TRENT

SERVICES

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ANALYTICAL REPORT

PROJECT NO. UXB 7512-060

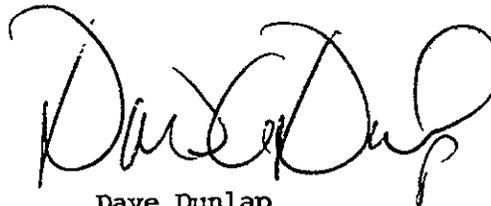
Dunn Field, Def Depot Memphis

Lot #: COK150188

Frank Johnson

UXB International

SEVERN TRENT LABORATORIES, INC.



Dave Dunlap
Project Manager

December 11, 2000

674 895

CASE NARRATIVE
UXB International Inc.
Dunn Field

LOT # C0K150188

Sample Receiving:

STL Pittsburgh received a sample on November 15, 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:

For the continuing calibration standards analyzed on the DB608 column on November 21, 2000 at 15:16 and 15:44 several compounds had %D's that were outside of the +/- 15%D criteria. The average %D of all of the compounds in the continuing calibration standards was 11.9%. There were no compounds detected in the sample. All data was reported.

For the continuing calibration standards analyzed on the DB608 column on November 21, 2000 at 19:26 and 19:53 several compounds had %D's that were outside of the +/- 15%D criteria. The average %D of all of the compounds in the continuing calibration standards was 11.6%. There were no compounds detected in the sample. All data was reported.

For the continuing calibration standards analyzed on the DB1701 column on November 21, 2000 at 19:26 and 19:53 several compounds had the %D's that were outside of the +/- 15%D criteria. The average %D of all of the compounds in the continuing calibration standards was 9.9%. There were no compounds detected in the samples. All data was reported.

The form 8's do not reflect that the retention times for the surrogates were updated from the continuing calibration standards.

Herbicides:

There were no problems associated with the analysis.

Metals:

There were no problems associated with the analysis.

TCLP Metals:

The matrix spike and matrix spike duplicate were outside of the control limits for silver. All associated results are flagged with an "N" qualifier.

**CASE NARRATIVE
UXB International Inc.
Dunn Field**

674 896

LOT # C0K150188

The relative percent difference between the matrix spike and the matrix spike duplicate was outside of the control limits for silver. All associated results are flagged with an “*” qualifier.

General Chemistry:

The reactive cyanide and reactive sulfide analyses were performed at STL North Canton. All data is provided in the data package.

METHODS SUMMARY

COK150188

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

References:

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

674 898

SAMPLE SUMMARY

COK150188

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
DPWNF	001	DF/24-A/0319/CVS/013	11/14/00	11:30

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 filler test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight

Client: UKB Project: _____ Quote: _____

Cooler Rec'd & Opened for Temp. Check on: 11/15/00

Coolers Opened and Unpacked on: 11/15/00 By: [Signature]
(Signature)

STL Pittsburgh Lot Number: 0010150188

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

DATA SUMMARY PACKAGE

674 905

GC/MS VOLATILE SUMMARY

Lab Name: Severn Trent Laboratories, Inc. SDG Number:
 Matrix: (soil/water) SOLID Lab Sample ID: COK150188 001
 Method: SW846 8260B
 Volatile Organics, GC/MS (8260B)

 Sample WT/Vol: 5 / mL Date Received: 11/15/00
 Work Order: DPWNF1AC Date Extracted: 11/22/00
 Dilution factor: 1 Date Analyzed: 11/22/00
 Moisture %: 19

 QC Batch: 0327161
 Client Sample Id: DF/24-A/0319/CVS/013

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

674 907

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COK150188 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/15/00
Work Order: DPWNF1CM Date Extracted: 11/22/00
Dilution factor: 1 Date Analyzed: 11/22/00
Moisture %: 19

QC Batch: 0327161

Client Sample Id: DF/24-A/0319/CVS/013

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.482	
78-93-3	2-Butanone	0.487	
56-23-5	Carbon tetrachloride	0.419	
108-90-7	Chlorobenzene	0.474	
67-66-3	Chloroform	0.461	
107-06-2	1,2-Dichloroethane	0.507	
75-35-4	1,1-Dichloroethene	0.488	
127-18-4	Tetrachloroethene	0.432	
79-01-6	Trichloroethene	0.450	
75-01-4	Vinyl chloride	0.508	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COK150188 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/15/00
Work Order: DPWNF1CN Date Extracted: 11/22/00
Dilution factor: 1 Date Analyzed: 11/22/00
Moisture %: 19

QC Batch: 0327161

Client Sample Id: DF/24-A/0319/CVS/013

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	mg/L	
71-43-2	Benzene	0.488		
78-93-3	2-Butanone	0.466		
56-23-5	Carbon tetrachloride	0.438		
108-90-7	Chlorobenzene	0.481		
67-66-3	Chloroform	0.467		
107-06-2	1,2-Dichloroethane	0.501		
75-35-4	1,1-Dichloroethene	0.528		
127-18-4	Tetrachloroethene	0.458		
79-01-6	Trichloroethene	0.461		
75-01-4	Vinyl chloride	0.577		

674 909

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COK220000 161
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/15/00
Work Order: DQAAT1AA Date Extracted: 11/22/00
Dilution factor: 1 Date Analyzed: 11/22/00
Moisture %: NA

QC Batch: 0327161

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
71-43-2	Benzene	0.475	Q
78-93-3	2-Butanone	0.499	
56-23-5	Carbon tetrachloride	0.436	
108-90-7	Chlorobenzene	0.471	
67-66-3	Chloroform	0.469	
107-06-2	1,2-Dichloroethane	0.527	
75-35-4	1,1-Dichloroethene	0.520	
127-18-4	Tetrachloroethene	0.446	
79-01-6	Trichloroethene	0.448	
75-01-4	Vinyl chloride	0.511	

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0K150188

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
01	DF/24-A/0319/CVS/013	104	112	109	100	00
02	METHOD BLK. DP64H1AA	99	110	103	97	00
03	LCS DQAAT1AA	101	110	107	102	00
04	DF/24-A/0319/CVS/013 D	99	105	109	100	00
05	DF/24-A/0319/CVS/013 S	98	108	108	100	00

SURROGATES

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

QC LIMITS

(60-143)
 (61-130)
 (47-158)
 (59-138)

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

FORM II

674 911

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPTIT

SDG No:

Lot #: C0K220000

WO #: DQAAT1AA

BATCH: 0327161

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	0.500	0.520	104	55 - 142	
Trichloroethene	0.500	0.448	90	70 - 131	
Chlorobenzene	0.500	0.471	94	75 - 127	
Benzene	0.500	0.475	95	75 - 129	
2-Butanone	0.500	0.499	100	20 - 155	
Carbon tetrachloride	0.500	0.436	87	66 - 141	
Chloroform	0.500	0.469	94	77 - 125	
1,2-Dichloroethane	0.500	0.527	105	76 - 127	
Tetrachloroethene	0.500	0.446	89	68 - 136	
Vinyl chloride	0.500	0.511	102	41 - 138	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

Lab Name Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIIT

SDG No:

Matrix Spike ID: DF/24-A/0319/CVS/013

Level: (low/med) LOW

Lot #: COK150188

WO #: DPWNF1CM

BATCH: 0327161

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	0.500	ND	0.488	98	43 - 147	
Trichloroethene	0.500	ND	0.450	90	46 - 143	
Benzene	0.500	ND	0.482	96	55 - 138	
Chlorobenzene	0.500	ND	0.474	95	49 - 139	
2-Butanone	0.500	ND	0.487	97	10 - 187	
Carbon tetrachloride	0.500	ND	0.419	84	39 - 149	
Chloroform	0.500	ND	0.461	92	52 - 140	
1,2-Dichloroethane	0.500	ND	0.507	101	44 - 145	
Tetrachloroethene	0.500	ND	0.432	86	39 - 154	
Vinyl chloride	0.500	ND	0.508	102	29 - 150	

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:

674 913

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPTT

SDG No:

Matrix Spike ID: DF/24-A/0319/CVS/013

Level: (low/med) LOW

Lot #: C0K150188

WO #: DPWNF1CN

BATCH: 0327161

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
1,1-Dichloroethene	0.500	0.528	106	8.0	27	43 - 147	
Trichloroethene	0.500	0.461	92	2.5	23	46 - 143	
Benzene	0.500	0.488	98	1.2	20	55 - 138	
Chlorobenzene	0.500	0.481	96	1.3	22	49 - 139	
2-Butanone	0.500	0.466	93	4.6	47	10 - 187	
Carbon tetrachloride	0.500	0.438	88	4.6	55	39 - 149	
Chloroform	0.500	0.467	93	1.3	20	52 - 140	
1,2-Dichloroethane	0.500	0.501	100	1.1	41	44 - 145	
Tetrachloroethene	0.500	0.458	92	5.8	22	39 - 154	
Vinyl chloride	0.500	0.577	115	13	43	29 - 150	

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:

SW846 8260B METHOD BLANK SUMMARY

DP64H1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIT

SDG Number:

Lab File ID: 4112201.D

Lot Number: COK150188

Date Analyzed: 11/22/00

Time Analyzed: 07:37

Matrix: SOLID

Date Extracted: 11/22/00

GC Column: RTX-624 ID: .18

Extraction Method: 1311/5030B

Instrument ID: HP4

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	DF/24-A/0319/CVS/013	DPWNFIAC	4112204.D	11/22/00	08:58
02	DF/24-A/0319/CVS/013	DPWNF1CM S	4112205.D	11/22/00	09:23
03	DF/24-A/0319/CVS/013	DPWNF1CN D	4112206.D	11/22/00	09:48
04	CHECK SAMPLE	DQAAT1AA C	4112203.D	11/22/00	08:33
05					
06					
07					
08					
09					
10					
11					
12					
13					
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22					
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24					
25					
26					
27					
28					
29					
30					

COMMENTS:

674 915

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COK200000 263
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/07/00
Work Order: DP64H1AA Date Extracted: 11/22/00
Dilution factor: 1 Date Analyzed: 11/22/00
Moisture %: NA

QC Batch: 0327161

Client Sample Id: INTRA-LAB BLANK

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

674 916

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0K150188

Lab File ID (Standard): CC41122

Date Analyzed: 11/22/00

Instrument ID: HP4

Time Analyzed: 0638

GC Column: DB 624 ID: 0.18 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DCB) AREA #	RT #	IS3 AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	140672	10.12	205235	12.46	553396	7.00
UPPER LIMIT	281344	10.32	410470	12.66	1106792	7.20
LOWER LIMIT	70336	9.92	102618	12.26	276698	6.80
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	134282	10.12	207351	12.46	580559	7.01
02 INTRA-LAB CH	133851	10.12	216284	12.46	558421	7.00
03 DF/24-A/0319	127297	10.12	205336	12.46	558813	7.00
04 DF/24-A/0319	134791	10.12	218203	12.46	521920	7.00
05 DF/24-A/0319	136181	10.12	221299	12.46	531965	7.00
06						
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.

674 917

GC/MS SEMIVOLATILE SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK150188 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/15/00

Work Order: DPWNF1AD

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/22/00

Moisture %: 19

QC Batch: 0325189

Client Sample Id: DF/24-A/0319/CVS/013

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

674 919

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK150188 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/15/00

Work Order: DPWNF1CK

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/22/00

Moisture %: 19

QC Batch: 0325189

Client Sample Id: DF/24-A/0319/CVS/013

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.179	
121-14-2	2,4-Dinitrotoluene	0.202	
118-74-1	Hexachlorobenzene	0.228	
87-68-3	Hexachlorobutadiene	0.161	
67-72-1	Hexachloroethane	0.172	
98-95-3	Nitrobenzene	0.211	
87-86-5	Pentachlorophenol	0.182	
110-86-1	Pyridine	0.181	
95-95-4	2,4,5-Trichlorophenol	0.207	
88-06-2	2,4,6-Trichlorophenol	0.209	
1319-77-3	Cresols (total)	0.667	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

674 920

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK150188 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/15/00

Work Order: DPWNF1CL

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/22/00

Moisture %: 19

QC Batch: 0325189

Client Sample Id: DF/24-A/0319/CVS/013

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
106-46-7	1,4-Dichlorobenzene	0.183	
121-14-2	2,4-Dinitrotoluene	0.206	
118-74-1	Hexachlorobenzene	0.238	
87-68-3	Hexachlorobutadiene	0.166	
67-72-1	Hexachloroethane	0.179	
98-95-3	Nitrobenzene	0.218	
87-86-5	Pentachlorophenol	0.188	
110-86-1	Pyridine	0.180	
95-95-4	2,4,5-Trichlorophenol	0.216	
88-06-2	2,4,6-Trichlorophenol	0.212	
1319-77-3	Cresols (total)	0.683	

674 921

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK200000 189

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/15/00

Work Order: DP6VL1AC

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/22/00

Moisture %: NA

QC Batch: 0325189

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
106-46-7	1,4-Dichlorobenzene	0.184	
121-14-2	2,4-Dinitrotoluene	0.188	
118-74-1	Hexachlorobenzene	0.220	
87-68-3	Hexachlorobutadiene	0.185	
67-72-1	Hexachloroethane	0.186	
98-95-3	Nitrobenzene	0.202	
87-86-5	Pentachlorophenol	0.220	
110-86-1	Pyridine	0.199	
95-95-4	2,4,5-Trichlorophenol	0.207	
88-06-2	2,4,6-Trichlorophenol	0.199	
1319-77-3	Cresols (total)	0.655	

FORM I

Lab Name: Severn Trent Laboratories, Inc

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: COK150188

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
01	DF/24-A/0319/CVS/013	74	66	90	69	79	82	00
02	METHOD BLK. DP6VL1AA	74	74	79	77	82	79	00
03	LCS DP6VL1AC	75	76	84	75	82	83	00
04	DF/24-A/0319/CVS/013 D	79	74	93	71	83	87	00
05	DF/24-A/0319/CVS/013 S	77	72	90	69	81	86	00

SURROGATES		QC LIMITS
SRG01	= Nitrobenzene-d5	(32-112)
SRG02	= 2-Fluorobiphenyl	(30-110)
SRG03	= Terphenyl-d14	(10-144)
SRG04	= 2-Fluorophenol	(13-110)
SRG05	= Phenol-d5	(10-113)
SRG06	= 2,4,6-Tribromophenol	(21-122)

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

FORM II

674 923

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No.

Lot #: COK200000

WO #: DP6VL1AC

BATCH: 0325189

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	0.184	74	28 - 110	
2,4-Dinitrotoluene	0.250	0.188	75	47 - 131	
Hexachlorobenzene	0.250	0.220	88	57 - 128	
Hexachlorobutadiene	0.250	0.185	74	36 - 116	
Hexachloroethane	0.250	0.186	74	30 - 110	
Nitrobenzene	0.250	0.202	81	45 - 130	
Pentachlorophenol	0.250	0.220	88	10 - 140	
Pyridine	0.250	0.199	80	10 - 148	
2,4,5-Trichlorophenol	0.250	0.207	83	41 - 125	
2,4,6-Trichlorophenol	0.250	0.199	80	46 - 135	
Cresols (total)	0.750	0.655	87	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

674 924

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/24-A/0319/CVS/013

Level: (low/med) LOW

Lot #: COK150188

WO #: DPWNF1CK

BATCH: 0325189

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	ND	0.179	72	18 - 110	
2,4-Dinitrotoluene	0.250	ND	0.202	81	31 - 131	
Hexachlorobenzene	0.250	ND	0.228	91	36 - 132	
Hexachlorobutadiene	0.250	ND	0.161	64	18 - 116	
Hexachloroethane	0.250	ND	0.172	69	18 - 110	
Nitrobenzene	0.250	ND	0.211	84	10 - 211	
Pentachlorophenol	0.250	ND	0.182	73	10 - 140	
Pyridine	0.250	ND	0.181	72	10 - 148	
2,4,5-Trichlorophenol	0.250	ND	0.207	83	24 - 143	
2,4,6-Trichlorophenol	0.250	ND	0.209	84	36 - 135	
Cresols (total)	0.750	ND	0.667	89	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:

674 925

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/24-A/0319/CVS/013

Level: (low/med) LOW

Lot #: COK150188

WO #: DPWNF1CL

BATCH: 0325189

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
1,4-Dichlorobenzene	0.250	0.183	73	2.2	36	18 - 110	
2,4-Dinitrotoluene	0.250	0.206	82	2.0	32	31 - 131	
Hexachlorobenzene	0.250	0.238	95	4.3	22	36 - 132	
Hexachlorobutadiene	0.250	0.166	66	3.0	32	18 - 116	
Hexachloroethane	0.250	0.179	72	4.0	33	18 - 110	
Nitrobenzene	0.250	0.218	87	3.3	50	10 - 211	
Pentachlorophenol	0.250	0.188	75	3.2	56	10 - 140	
Pyridine	0.250	0.180	72	0.55	65	10 - 148	
2,4,5-Trichlorophenol	0.250	0.216	86	4.2	22	24 - 143	
2,4,6-Trichlorophenol	0.250	0.212	85	1.4	27	36 - 135	
Cresols (total)	0.750	0.683	91	2.4	33	25 - 144	

NOTES (S) :

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

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

COMMENTS:

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DP6VL1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

Lab File ID: F1122001.

Date Analyzed: 11/22/00

Matrix: SOLID

GC Column: HP5MS ID: .25

Instrument ID: 722

SDG Number:

674 926

Lot Number: C0K150188

Time Analyzed: 13:46

Date Extracted: 11/20/00

Extraction Method: 1311/3520C

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/24-A/0319/CVS/013	DPWNF1AD	F1122005.	11/22/00	16:04
02	DF/24-A/0319/CVS/013	DPWNF1CK S	F1122003.	11/22/00	14:55
03	DF/24-A/0319/CVS/013	DPWNF1CL D	F1122004.	11/22/00	15:29
04	CHECK SAMPLE	DP6VL1AC C	F1122002.	11/22/00	14:21
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
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19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

674 927

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COK200000 189
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL Date Received: 11/15/00
Work Order: DP6VL1AA Date Extracted: 11/20/00
Dilution factor: 1 Date Analyzed: 11/22/00
Moisture %: NA

QC Batch: 0325189

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

674 928

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: COK150188

Lab File ID (Standard): F11220C2

Date Analyzed: 11/22/00

Instrument ID: 722

Time Analyzed: 1024

	IS1 (DCB)	RT #	IS2 (NPT)	RT #	IS3 (ANT)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	109403	5.17	390965	6.73	210764	9.81
UPPER LIMIT	218806	5.67	781930	7.23	421528	10.31
LOWER LIMIT	54702	4.67	195483	6.23	105382	9.31
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	100806	5.16	373323	6.73	201332	9.80
02 INTRA-LAB CH	96597	5.17	355397	6.73	194265	9.81
* 03 DF/24-A/0319	99135	5.16	372649	6.72	199007	9.80
* 04 DF/24-A/0319	94012	5.17	349848	6.73	188740	9.80
05 DF/24-A/0319	98330	5.17	376040	6.73	203151	9.80
06						
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.

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: COK150188

Lab File ID (Standard): F11220C2

Date Analyzed: 11/22/00

Instrument ID: 722

Time Analyzed: 1024

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	362041	13.13	412891	19.79	403296	23.17
UPPER LIMIT	724082	13.63	825782	20.29	806592	23.67
LOWER LIMIT	181021	12.63	206446	19.29	201648	22.67
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	326671	13.13	332118	19.78	361566	23.16
02 INTRA-LAB CH	324017	13.13	330207	19.79	349035	23.17
* 03 DF/24-A/0319	325003	13.12	318013	19.78	329503	23.15
04 DF/24-A/0319	308363	13.13	305447	19.78	313977	23.16
05 DF/24-A/0319	322895	13.13	318030	19.79	319151	23.16
06						
07						
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11						
12						
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17						
18						
19						
20						
21						
22						

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

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

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

PESTICIDE SUMMARY

674 931

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK150188 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/15/00

Work Order: DPWNF1AE

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/21/00

Moisture %: 19

QC Batch: 0325582

Client Sample Id: DF/24-A/0319/CVS/013

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

FORM I

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

674 932

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK200000 582

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/08/00

Work Order: DP8AF1AC

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/21/00

Moisture %: NA

QC Batch: 0325582

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
72-20-8	Endrin	0.00232	Q
76-44-8	Heptachlor	0.00257	
1024-57-3	Heptachlor epoxide	0.00246	
58-89-9	Lindane	0.00249	
72-43-5	Methoxychlor	0.00208	

674 933

SW846 8081A SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: COK150188

	CLIENT ID.	SRG01	SRG02	TOT OUT
	=====	=====	=====	=====
01	INTRA-LAB QC	94	93	00
02	DF/24-A/0319/CVS/013	91	92	00
03	METHOD BLK. DP8AF1AA	98	102	00
04	LCS DP8AF1AC	94	96	00
05	LAB MS/MSD D	92	88	00
06	LAB MS/MSD S	93	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: STLPIT

SDG No:

Lot #: COK200000

WO #: DP8AF1AC

BATCH: 0325582

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
Lindane	0.00250	0.00249	100	49 - 137	
Heptachlor	0.00250	0.00257	103	57 - 124	
Heptachlor epoxide	0.00250	0.00246	98	53 - 135	
Endrin	0.00250	0.00232	93	46 - 137	
Methoxychlor	0.00250	0.00208	83	12 - 154	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

674 935

SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: COK090223

WO #: DPLF21A0

BATCH: 0325582

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
Lindane	0.00250	ND	0.00237	95	30 - 148	
Heptachlor	0.00250	ND	0.00242	97	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00238	95	38 - 138	
Endrin	0.00250	ND	0.00220	88	28 - 148	
Methoxychlor	0.00250	ND	0.00207	83	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: STLPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0K090223

WO #: DPLF21A1

BATCH: 0325582

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
Lindane	0.00250	0.00240	96	1.3	22	30 - 148	
Heptachlor	0.00250	0.00245	98	1.2	32	25 - 135	
Heptachlor epoxide	0.00250	0.00238	95	0.29	31	38 - 138	
Endrin	0.00250	0.00223	89	1.4	40	28 - 148	
Methoxychlor	0.00250	0.00208	83	0.67	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:

PBLK

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0K150188

Lab Sample ID: DP8AF1AA

Lab File ID: D-A8371

Matrix (soil/water) WATER

Extraction: (SepF/Cont/Sonc) SW1311

Sulfur Cleanup (Y/N) N

Date Extracted: 11/20/00

Date Analyzed (1): 11/21/00

Date Analyzed (2): 11/21/00

Time Analyzed (1): 1830

Time Analyzed (2): 1830

Instrument ID (1): GC4

Instrument ID (2): GC4

GC Column (1): DB608

ID: 0.53 (mm)

GC Column (2): DB1701

ID: 0.53 (mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	DF/24-A/0319	DPWNF1AE	11/21/00	11/21/00
02	LCS	DP8AF1AC	11/21/00	11/21/00
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK200000 582

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/08/00

Work Order: DP8AF1AA

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/21/00

Moisture %: NA

QC Batch: 0325582

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

674 939

HERBICIDE SUMMARY

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

Matrix: (soil/water) SOLID Lab Sample ID: COK150188 001
 Method: SW846 8151A
 Herbicides (8151A)

Sample WT/Vol: 100 / mL Date Received: 11/15/00
 Work Order: DPWNF1AF Date Extracted: 11/20/00
 Dilution factor: 1 Date Analyzed: 11/21/00
 Moisture %: 19

QC Batch: 0325583

Client Sample Id: DF/24-A/0319/CVS/013

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

674 941

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COK200000 583
Method: SW846 8151A
Herbicides (8151A)

Sample WT/Vol: 100 / mL Date Received: 11/08/00
Work Order: DP8AG1AC Date Extracted: 11/20/00
Dilution factor: 1 Date Analyzed: 11/21/00
Moisture %: NA

QC Batch: 0325583

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
94-75-7	2,4-D	0.105	
93-72-1	2,4,5-TP (Silvex)	0.0271	

Lab Name Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: COK150188

	CLIENT ID.	SRG01	TOT OUT	
	=====	=====	=====	
01	INTRA LAB QC	169*	01	<i>num</i>
02	DF/24-A/0319/CVS/013	76	00	<i>11-22-00</i>
03	METHOD BLK. DP8AG1AA	86	00	
04	LCS DP8AG1AC	78	00	
05	LAB MS/MSD D	148*	01	<i>num</i>
06	LAB MS/MSD C	173*	01	<i>11-22-00</i>

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

674 943

SW846 8151A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: COK200000

WO #: DP8AG1AC

BATCH: 0325583

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
2,4-D	0.160	0.105	66	28 - 136	
2,4,5-TP (Silvex)	0.0400	0.0271	68	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 #: C0K090223

WO #: DPLF21A2

BATCH: 0325583

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
2,4-D	0.160	ND	0.113	71	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0306	77	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:

674 945

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 #: COK090223

WO #: DPLF21A3

BATCH: 0325583

COMPOUND	SPIKE	MSD	MSD	QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD REC	
2,4-D	0.160	0.113	71	0.0	20	35 - 133
2,4,5-TP (Silvex)	0.0400	0.0305	76	0.32	20	50 - 131

NOTES(S) :

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

* Values outside of QC limits

RPD: 0 out of 2 outside limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

SW846 8151A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

674 946

DP8AG1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: A-A80283.

Lot Number: COK150188

Matrix: SOLID

Extraction Method:

Date Extracted: 11/20/00

Date Analyzed(1): 11/21/00

Date Analyzed(2): N/A

Time Analyzed(1): 20:46

Time Analyzed(2): N/A

Instrument ID(1): A/B

Instrument ID(2): N/A

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

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

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED (1)	DATE ANALYZED (2)
01	INTRA-LAB QC	DPLF21AG	11/21/00	N/A
02	LAB MS/MSD	DPLF21A2 S	11/21/00	N/A
03	LAB MS/MSD	DPLF21A3 D	11/21/00	N/A
04	DF/24-A/0319/CVS/013	DPWNF1AF	11/21/00	N/A
05	CHECK SAMPLE	DP8AG1AC C	11/21/00	N/A
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

mm
11-22-00

COMMENTS:

674 947

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK200000 583

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 11/08/00

Work Order: DP8AG1AA

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/21/00

Moisture %: NA

QC Batch: 0325583

Client Sample Id: INTRA-LAB BLANK

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

FORM I

METALS SUMMARY

Metals Data Reporting Form

Sample Results

Lab Sample ID: DPWNF Client ID: DF/24-A/0319/CVS/013
 Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107
 Weight: 0.5 Volume: 50 Percent Moisture: 19.08

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.32	1.2	13.0		1	ICPST	11/20/00	17:30

Comments: Lot #: C0K150188 Sample #: 1

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST

Units: ug/L

Chart Number: T01120X.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 11/20/00 5:07 PM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q								
Arsenic	189.042	10	2.6	U								

674 951

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST

Units: ug/L

Chart Number: T01120X.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/20/00 5:51 PM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q								
Arsenic	189.042	10	2.6	U								

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DP5NKBMatrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107Weight: 0.5 Volume: 50 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	11/20/00	17:22

Comments: Lot #: C0K150188

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: DPWNFS
 Original Sample ID: DPWNF Client ID: DF/24-A/0319/CVS/013S
 Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107
 Weight: 0.5 Volume: 50 Percent Moisture: 19.08

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	13.0		227		247.16	86.4	1	1	ICPST	11/20/00	17:30	11/20/00	17:38

Comments: Lot #: C0K150188 Sample #: 1

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

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DPWNFD
 Original Sample ID: DPWNF Client ID: DF/24-A/0319/CVS/013D
 Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107
 Weight: 0.5 Volume: 50 Percent Moisture: 19.08

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	13.0		225		247.16	85.9	1	1	ICPST	11/20/00	17:30	11/20/00	17:42

Comments: Lot #: C0K150188 Sample #: 1

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

674 955 STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DPWNFD

Matrix Spike Sample ID: DPWNFS Client ID: DF/24-A/0319/CVS/013D

Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107

Weight: 0.5 Volume: 50 Percent Moisture: 19.08

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	227		225		0.7 %	1	1	ICPST	11/20/00	17:38	11/20/00	17:42

Comments: Lot #: C0K150188 Sample #: 1

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: DP5NKC

Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107

Weight: 0.5 Volume: 50 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	200	196	97.9		80-120	1	ICPST	11/20/00	17:26

Comments. Lot #: C0K150188

674 957

TCLP METALS SUMMARY

Metals Data Reporting Form

Sample Results

Lab Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013
 Matrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115
 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	0.18	B	1	ICP	11/20/00	17:03
Barium	493.41	0.00041	10.0	0.37	B	1	ICP	11/20/00	17:03
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	11/20/00	17:03
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	11/20/00	17:03
Lead	220.35	0.025	0.50	0.025	U	1	ICP	11/20/00	17:03
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	11/20/00	17:03
Silver	328.07	0.0031	0.50	0.0031	UN*	1	ICP	11/20/00	17:03

Comments: C0K150188001

Version 4.10.2

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

Form 1 Equivalent

674 959

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013
 Matrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135
 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	0.000053	B	1	CVAA	11/20/00	14:33

Comments: _____

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA

Units: ug/L

Chart Number: 1120HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 11/20/00 2:19 PM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q								
Mercury	253.7	0.2	0.0	U								

674 961 STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICP

Units: ug/L

Chart Number: J01120B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICBI 11/20/00 4:35 PM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q								
Arsenic	193.696	500	-42.0	B								
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: CVAA

Units: ug/L

Chart Number: 1120HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/20/00 2:22 PM		CCB2 11/20/00 2:43 PM		Found	Q	Found	Q
			Found	Q	Found	Q				
Mercury	253.7	0.2	0.0	U	0.0	U				

674 963

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J01120B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/20/00 5:12 PM		CCB2 11/20/00 5:50 PM					
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U	-36.0	B				
Barium	493.409	10000	0.4	U	0.4	U				
Cadmium	228.802	100	2.8	U	2.8	U				
Chromium	267.716	500	3.8	U	3.8	U				
Lead	220.353	500	24.6	U	24.6	U				
Selenium	196.026	250	67.4	U	67.4	U				
Silver	328.068	500	3.1	U	3.1	U				

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DP6A2BTMatrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115Weight: 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	0.13	B	1	ICP	11/20/00	16:44
Barium	493.409	0.00041	10.0	0.0012	B	1	ICP	11/20/00	16:44
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	11/20/00	16:44
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	11/20/00	16:44
Lead	220.353	0.025	0.50	0.025	U	1	ICP	11/20/00	16:44
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	11/20/00	16:44
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	11/20/00	16:44

Comments: _____

Version 4.10.2

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

Form 3 Equivalent

674 965

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DP6J2BTMatrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115Weight: 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	-0.036	B	1	ICP	11/20/00	16:47
Barium	493.409	0.00041	10.0	-0.00054	B	1	ICP	11/20/00	16:47
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	11/20/00	16:47
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	11/20/00	16:47
Lead	220.353	0.025	0.50	0.025	U	1	ICP	11/20/00	16:47
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	11/20/00	16:47
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	11/20/00	16:47

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

Preparation Blank Results

Lab Sample ID: DP6A2BTMatrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135Weight: 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	11/20/00	14:23

Comments: _____

674 967

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DP6QKBTMatrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135Weight: 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	0.000054	B	1	CVAA	11/20/00	14:25

Comments: _____

Version 4 10 2

U Result is less than the MDL

Form 3 Equivalent

B Result is between MDL and RL

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DPWNFST
 Original Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013S
 Matrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	193.7	0.18	B	5.2		5	100.4	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Barium	493.4	0.37	B	46.8		50	92.8	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Cadmium	228.8	0.0028	U	0.98		1	98.2	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Chromium	267.7	0.0038	U	4.8		5	95.0	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Lead	220.4	0.025	U	4.8		5	96.1	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Selenium	196.0	0.067	U	1.1		1	106.8	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Silver	328.1	0.0031	U	0.19	B N	1	19.1	1	1	ICP	11/20/00	17:03	11/20/00	17:15

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

674 969

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DPWNFDT
 Original Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013SD
 Matrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.7	0.18	B	5.3		5	103.3	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Barium	493.4	0.37	B	47.3		50	93.8	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Cadmium	228.8	0.0028	U	0.99		1	98.5	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Chromium	267.7	0.0038	U	4.8		5	95.5	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Lead	220.4	0.025	U	4.8		5	95.3	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Selenium	196.0	0.067	U	1.1		1	108.9	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Silver	328.1	0.0031	UN	0.14	N*	1	14.2	1	1	ICP	11/20/00	17:03	11/20/00	17:18

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

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DPWNFST
 Original Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013S
 Matrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.000053	B	0.0052		0.005	102.7	1	1	CVAA	11/20/00	14:33	11/20/00	14:35

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

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DPWNFDT
 Original Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013SD
 Matrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.000053	B	0.0052		0.005	102.3	1	1	CVAA	11/20/00	14:33	11/20/00	14:36

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

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DPWNFDTMatrix Spike Sample ID: DPWNFST Client ID: DF/24-A/0319/CVS/013SDMatrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.696	5.2		5.3		2.9 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Barium	493.409	46.8		47.3		1.1 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Cadmium	228.802	0.98		0.99		0.3 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Chromium	267.716	4.8		4.8		0.4 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Lead	220.353	4.8		4.8		0.8 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Selenium	196.026	1.1		1.1		1.9 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Silver	328.068	0.19	BN	0.14	BN*	29.1 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18

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

674 973

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DPWNFDT

Matrix Spike Sample ID: DPWNFST Client ID: DF/24-A/0319/CVS/013SD

Matrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135

Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.0052		0.0052		0.4 %	1	1	CVAA	11/20/00	14:35	11/20/00	14:36

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

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DP6J2CTMatrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115Weight: 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	108.5		80-120	1	ICP	11/20/00	16:50
Barium	493.409	2.0	1.9	92.8	B	80-120	1	ICP	11/20/00	16:50
Cadmium	228.802	0.050	0.046	91.8	B	80-120	1	ICP	11/20/00	16:50
Chromium	267.716	0.20	0.19	94.5	B	80-120	1	ICP	11/20/00	16:50
Lead	220.353	0.50	0.49	97.0	B	80-120	1	ICP	11/20/00	16:50
Selenium	196.026	2.0	2.2	107.7		80-120	1	ICP	11/20/00	16:50
Silver	328.068	0.050	0.049	98.6	B	80-120	1	ICP	11/20/00	16:50

Comments: _____

Version 4 10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

674 975

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DP6QKCT

Matrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135

Weight: 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	0.0024	94.0		80-120	1	CVAA	11/20/00	14:27

Comments: _____

GENERAL CHEMISTRY SUMMARY

674 977

UXB INTERNATIONAL

Client Sample ID: DF/24-A/0319/CVS/013

General Chemistry

Lot-Sample #...: COK150188-001 Work Order #...: DPWNF Matrix.....: SOLID
Date Sampled...: 11/14/00 Date Received...: 11/15/00
% Moisture.....: 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH	5.0		No Units	SW846 9045C	11/16/00	0321381
			Dilution Factor: 1	MS Run #. 0321207		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	11/21/00	0326120
			Dilution Factor: 1	MS Run #.. . . . : 0326021		
Percent Solids	80.9		%	MCAWW 160.3 MOD	11/16-11/17/00	0321255
			Dilution Factor: 1	MS Run # : 0321094		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	11/19/00	0324146
			Dilution Factor: 1	MS Run #. : 0324043		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	11/19/00	0324147
			Dilution Factor: 1	MS Run #.....: 0324044		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: COK150188

Matrix.....: SOLID

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Reactive Cyanide	ND	Work Order #: DP6M01AA 200	mg/kg	MB Lot-Sample #: A0K190000-146 SW846 7.3.3	11/19/00	0324146
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DP6M11AA 200	mg/kg	MB Lot-Sample #: A0K190000-147 SW846 7.3.4	11/19/00	0324147
		Dilution Factor: 1				

NOTE(S) :

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

674 979

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0K150188

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	(85 - 115)	SW846 9045C	11/16/00	0321381

Work Order #: DP1G91AA LCS Lot-Sample#: C0K160000-381
Dilution Factor: 1

NOTE(S) :

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

674 982

GC/MS VOLATILE DATA

674 983

GC/MS VOLATILE
QC SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT QESSDG.

Lot #: COK150188

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
01	DF/24-A/0319/CVS/013	104	112	109	100	00
02	METHOD BLK. DP64H1AA	99	110	103	97	00
03	LCS DQAAT1AA	101	110	107	102	00
04	DF/24-A/0319/CVS/013 D	99	105	109	100	00
05	DF/24-A/0319/CVS/013 S	98	108	108	100	00

<u>SURROGATES</u>		<u>QC LIMITS</u>
SRG01	= Toluene-d8	(60-143)
SRG02	= 1,2-Dichloroethane-d4	(61-130)
SRG03	= 4-Bromofluorobenzene	(47-158)
SRG04	= Dibromofluoromethane	(59-138)

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

FORM II

674 985

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0K220000

WO #: DQAAT1AA

BATCH: 0327161

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	0.500	0.520	104	55 - 142	
Trichloroethene	0.500	0.448	90	70 - 131	
Benzene	0.500	0.475	95	75 - 129	
Toluene	0.500	0.490	98	71 - 130	
Chlorobenzene	0.500	0.471	94	75 - 127	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/24-A/0319/CVS/013

Level: (low/med) LOW

Lot #: COK150188

WO #: DPWNF1CM

BATCH: 0327161

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	0.500	ND	0.488	98	43 - 147	
Trichloroethene	0.500	ND	0.450	90	46 - 143	
Benzene	0.500	ND	0.482	96	55 - 138	
Toluene	0.500	0.046	0.516	94	46 - 147	
Chlorobenzene	0.500	ND	0.474	95	49 - 139	

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:

674 987

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/24-A/0319/CVS/013

Level: (low/med) LOW

Lot #: COK150188

WO #: DPWNF1CN

BATCH: 0327161

COMPOUND	SPIKE	MSD	MSD	QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD REC	
1,1-Dichloroethene	0.500	0.528	106	8.0	27	43 - 147
Trichloroethene	0.500	0.461	92	2.5	23	46 - 143
Benzene	0.500	0.488	98	1.2	20	55 - 138
Toluene	0.500	0.529	96	2.5	24	46 - 147
Chlorobenzene	0.500	0.481	96	1.3	22	49 - 139

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:

BLANK WORKORDER NO.

DP64H1AA

SW846 8260B METHOD BLANK SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

Lab File ID: 4112201.D

Date Analyzed: 11/22/00

Matrix: SOLID

GC Column: RTX-624 ID: .18

Instrument ID: HP4

SDG Number:

Lot Number: COK150188

Time Analyzed: 07:37

Date Extracted: 11/22/00

Extraction Method: 1311/5030B

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/24-A/0319/CVS/013	DPWNF1AC	4112204.D	11/22/00	08:58
02	DF/24-A/0319/CVS/013	DPWNF1CM S	4112205.D	11/22/00	09:23
03	DF/24-A/0319/CVS/013	DPWNF1CN D	4112206.D	11/22/00	09:48
04	CHECK SAMPLE	DQAAT1AA C	4112203.D	11/22/00	08:33
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

674 989

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
 BROMOFLUOROBENZENE (BFB)

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: METHODS

Lab File ID: BF41113

BFB Injection Date: 11/13/00

Instrument ID: HP4

BFB Injection Time: 0533

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	19.8
75	30.0 - 60.0% of mass 95	40.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.3 (0.3)1
174	50.0 - 100.0% of mass 95	88.0
175	5.0 - 9.0% of mass 174	6.2 (7.1)1
176	95.0 - 101.0% of mass 174	84.7 (96.3)1
177	5.0 - 9.0% of mass 176	5.7 (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	VSTD20	VSTD20	1B41113	11/13/00	0626
02	VSTD50	VSTD50	2C41113	11/13/00	0652
03	VSTD100	VSTD100	1D41113	11/13/00	0717
04	VSTD200	VSTD200	1E41113	11/13/00	0742
05	VSTD5	VSTD5	2A41113	11/13/00	0852
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

674 991

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-PITTSBURGH Contract:
 Lab Code: Case No.: SAS No.: SDG No.: C0K150188
 Lab File ID (Standard): CC41122 Date Analyzed: 11/22/00
 Instrument ID: HP4 Time Analyzed: 0638
 GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DCB) AREA #	RT #	IS3 AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	140672	10.12	205235	12.46	553396	7.00
UPPER LIMIT	281344	10.32	410470	12.66	1106792	7.20
LOWER LIMIT	70336	9.92	102618	12.26	276698	6.80
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	134282	10.12	207351	12.46	580559	7.01
02 INTRA-LAB CH	133851	10.12	216284	12.46	558421	7.00
03 DF/24-A/0319	127297	10.12	205336	12.46	558813	7.00
04 DF/24-A/0319	134791	10.12	218203	12.46	521920	7.00
05 DF/24-A/0319	136181	10.12	221299	12.46	531965	7.00
06						
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 VOLATILE
SAMPLE DATA**

674 993

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK150188 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 11/15/00

Work Order: DPWNFLAC

Date Extracted: 11/22/00

Dilution factor: 1

Date Analyzed: 11/22/00

QC Batch: 0327161

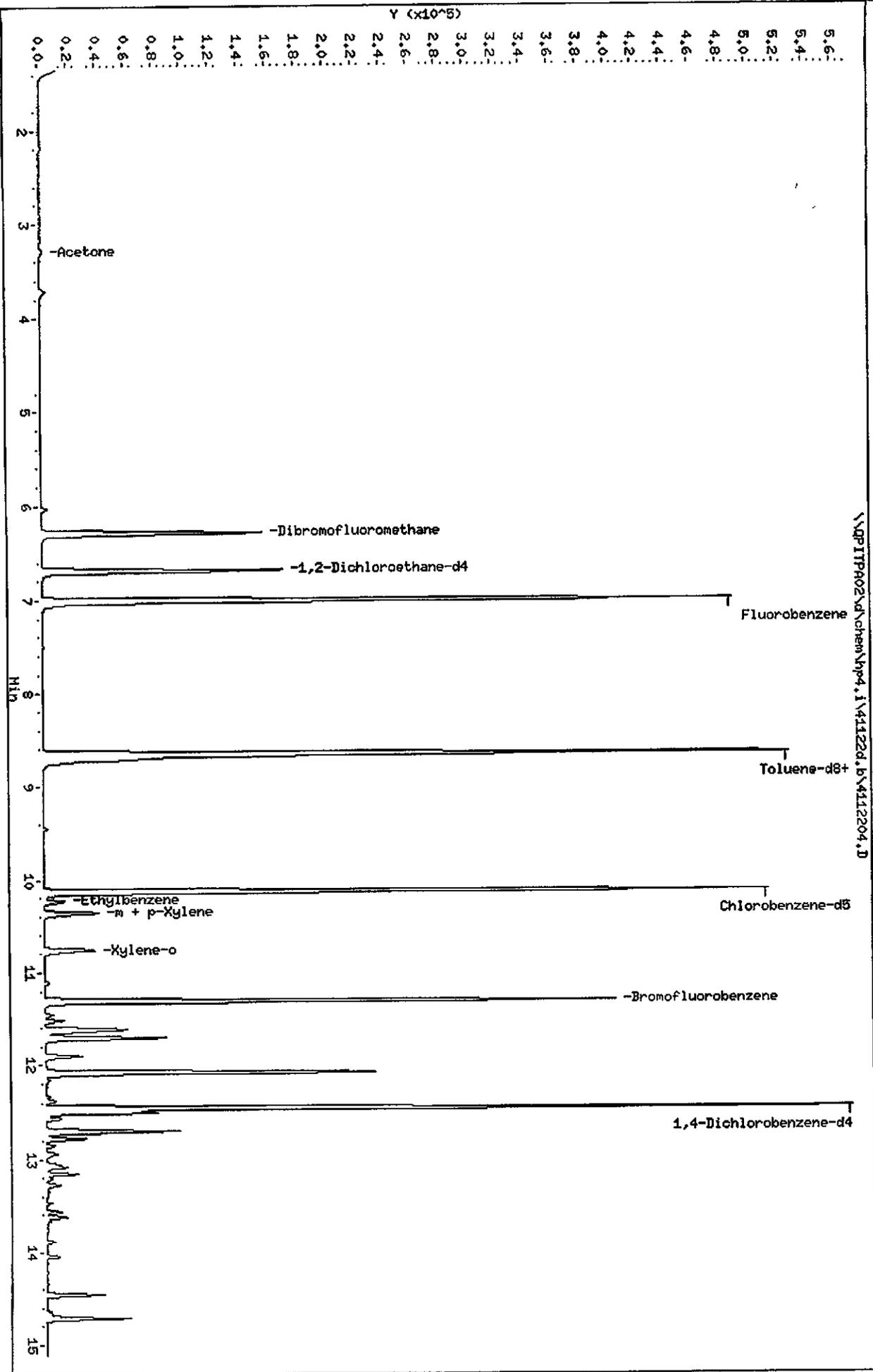
Client Sample Id: DF/24-A/0319/CVS/013

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
108-88-3	Toluene	0.046	J
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: \\QPITP002\chem\hp4.i\41122d.b\4112204.D
 Date: 22-Nov-2000 08:58
 Client ID:
 Sample Info: 004150188-001 (1mL/10mL)/5mL
 Volume Injected (uL): 5.0
 Column phase: DB 624

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

\\QPITP002\chem\hp4.i\41122d.b\4112204.D



674 995

Data File: \\QPITPA02\d\chem\hp4.i\41122d.b\4112204.D
Report Date: 22-Nov-2000 09:41

STL-Pittsburgh

VOLATILE REPORT SW-846 Method
Data file : \\QPITPA02\d\chem\hp4.i\41122d.b\4112204.D
Lab Smp Id: vstd50 bonus
Inj Date : 22-NOV-2000 08:58
Operator : 16328 Inst ID: hp4.i
Smp Info : c0k150188-001 (1ml/10ml)/5ml
Misc Info : vstd50 bonus,41122d.b,8260bh2o.M, *Kv.11/21/0*
Comment :
Method : \\QPITPA02\d\chem\hp4.i\41122d.b\8260bh2o.m
Meth Date : 22-Nov-2000 09:19 dudeckk Quant Type: ISTD
Cal Date : 13-NOV-2000 08:52 Cal File: 2A41113.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-tcl.sub
Target Version: 4.04
Processing Host: PITPC077

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

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

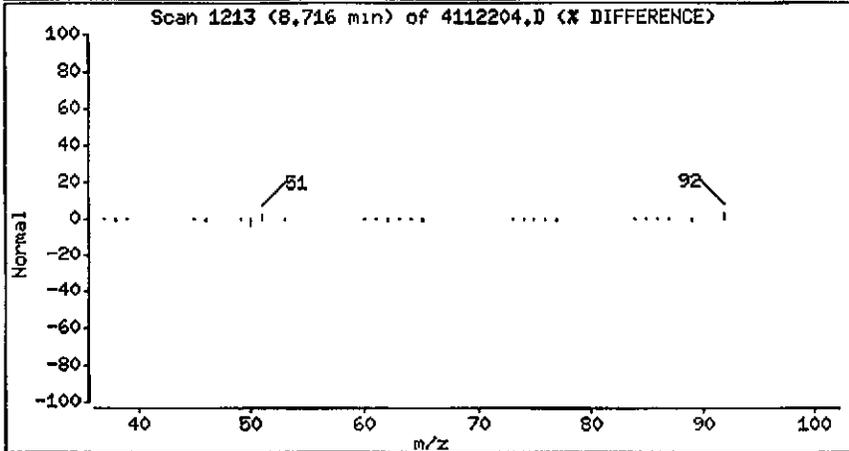
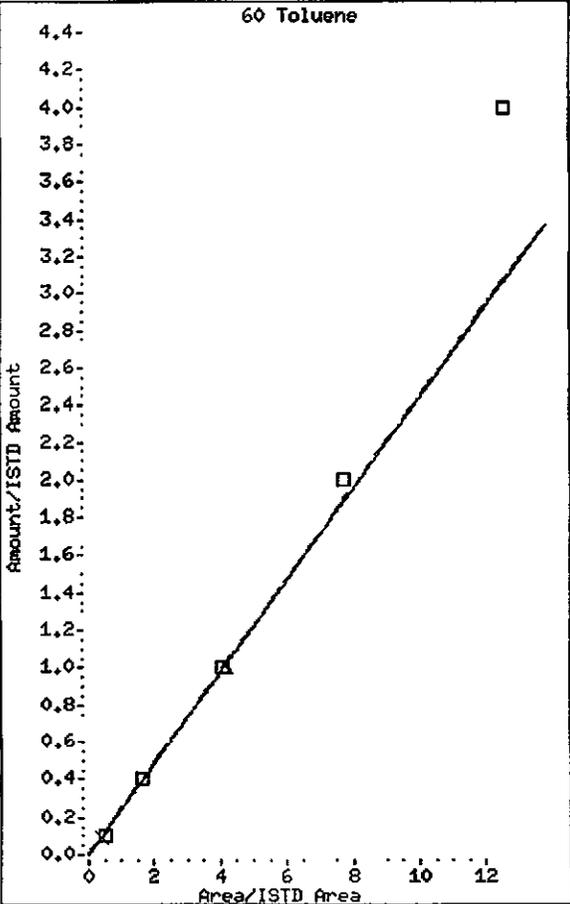
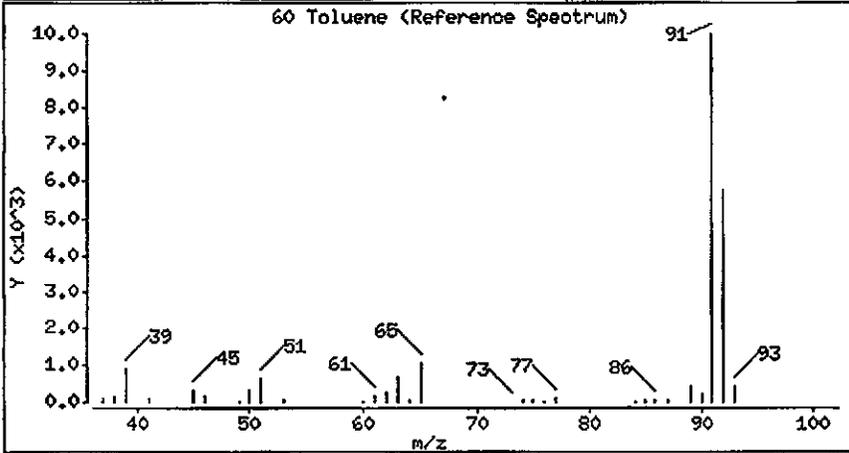
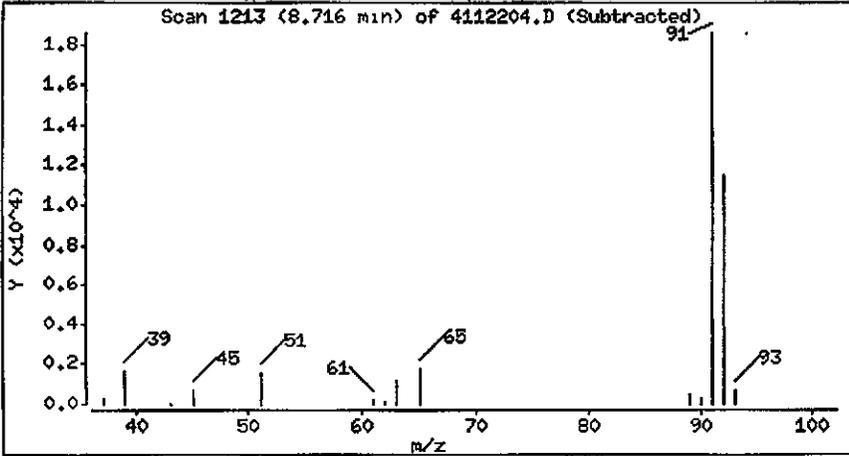
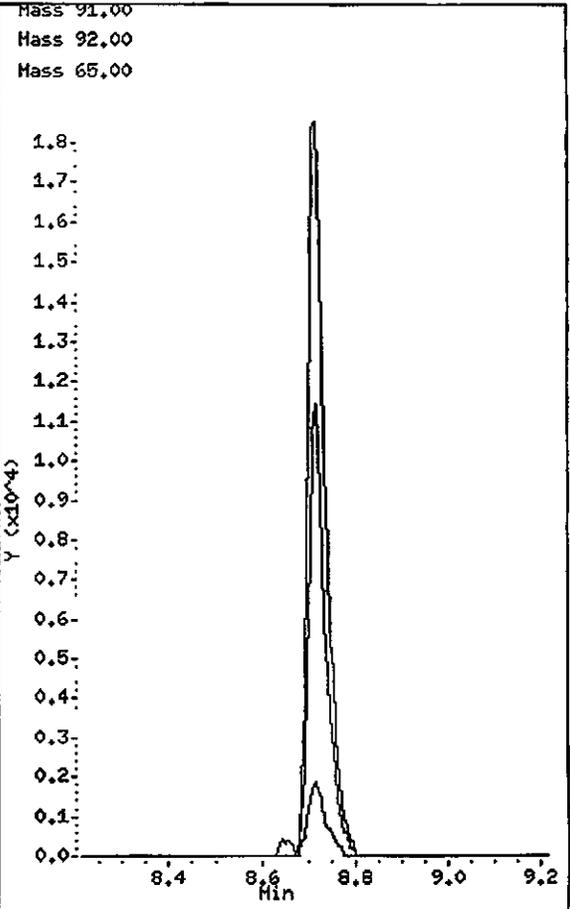
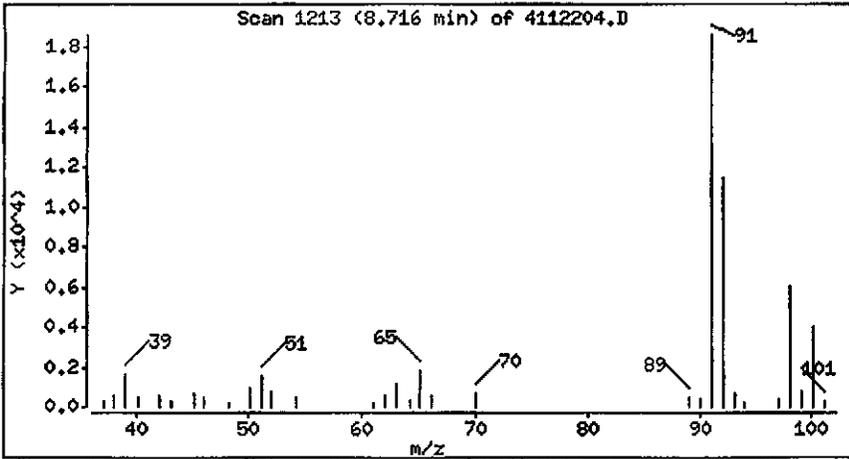
Compounds	QUANT	SIG	CONCENTRATIONS					
			ON-COLUMN	FINAL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(UG/L)	
* 46 Fluorobenzene	96	7.001	6.998	(1.000)	558813	250.000		
* 69 Chlorobenzene-d5	119	10.121	10.124	(1.000)	127297	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.456	12.459	(1.000)	205336	250.000		
\$ 39 Dibromofluoromethane	113	6.289	6.287	(0.898)	121121	250.418	50.08	
\$ 43 1,2-Dichloroethane-d4	65	6.685	6.682	(0.955)	128393	280.352	56.07	
\$ 59 Toluene-d8	98	8.649	8.646	(0.855)	504299	259.998	52.00	
\$ 80 Bromofluorobenzene	95	11.307	11.310	(1.117)	172215	272.932	54.59	
1 Dichlorodifluoromethane	85	Compound Not Detected.						
2 Chloromethane	50	Compound Not Detected.						
3 Vinyl Chloride	62	Compound Not Detected.						
4 Bromomethane	94	Compound Not Detected.						
5 Chloroethane	64	Compound Not Detected.						
6 Trichlorofluoromethane	101	Compound Not Detected.						
11 Acrolein	56	Compound Not Detected.						
12 1,1-Dichloroethene	96	Compound Not Detected.						

Data File: \\QPITPA02\d\chem\hp4.i\41122d.b\4112204.D
 Report Date: 22-Nov-2000 09:41

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
15 Carbon Disulfide	76				Compound Not Detected.		
13 Acetone	43	3.285	3.307	(0.469)	3973	15.2688	3.054
18 Methylene Chloride	84				Compound Not Detected.		
19 trans-1,2-Dichloroethene	96				Compound Not Detected.		
20 Methyl tert-butyl ether	73				Compound Not Detected.		
22 Acrylonitrile	53				Compound Not Detected.		
24 1,1-Dichloroethane	63				Compound Not Detected.		
28 cis-1,2-dichloroethene	96				Compound Not Detected.		
M 29 1,2-Dichloroethene (total)	100				Compound Not Detected.		
30 Bromochloromethane	128				Compound Not Detected.		
31 2-Butanone	43				Compound Not Detected.		
37 Chloroform	83				Compound Not Detected.		
38 1,1,1-Trichloroethane	97				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.		
49 1,2-Dichloropropane	63				Compound Not Detected.		
50 Dibromomethane	93				Compound Not Detected.		
53 Bromodichloromethane	83				Compound Not Detected.		
56 2-Chloroethyl vinyl ether	63				Compound Not Detected.		
57 cis-1,3-Dichloropropene	75				Compound Not Detected.		
58 4-Methyl-2-Pentanone	43				Compound Not Detected.		
60 Toluene	91	8.716	8.713	(0.861)	48301	23.0571	4.611
61 trans-1,3-Dichloropropene	75				Compound Not Detected.		
64 1,1,2-Trichloroethane	97				Compound Not Detected.		
65 Tetrachloroethene	164				Compound Not Detected.		
66 2-Hexanone	43				Compound Not Detected.		
67 Dibromochloromethane	129				Compound Not Detected.		
68 1,2-Dibromoethane	107				Compound Not Detected.		
70 Chlorobenzene	112				Compound Not Detected.		
71 1,1,1,2-Tetrachloroethane	131				Compound Not Detected.		
72 Ethylbenzene	106	10.236	10.233	(1.011)	5190	7.00235	1.400
73 m + p-Xylene	106	10.352	10.355	(1.023)	19533	23.0463	4.609
74 Xylene-o	106	10.753	10.756	(1.062)	16579	19.6441	3.929
M 75 Xylenes (total)	106				36112	42.7884	8.558
76 Styrene	104				Compound Not Detected.		
77 Bromoform	173				Compound Not Detected.		
78 Isopropylbenzene	105				Compound Not Detected.		
83 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
91 1,3-Dichlorobenzene	146				Compound Not Detected.		
93 1,4-Dichlorobenzene	146				Compound Not Detected.		
95 1,2-Dichlorobenzene	146				Compound Not Detected.		

674 997

60 Toluene



**GC/MS VOLATILE
CALIBRATION DATA**

674 999

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: Case No.: SAS No.: SDG No.: METHODS

Instrument ID: HP4 Calibration Date(s): 11/13/00 11/13/00

Heated Purge: (Y/N) N Calibration Time(s): 0626 0852

GC Column: DB 624 ID: 0.18 (mm)

LAB FILE ID:	RRF5 =2A41113	RRF20 =1B41113			RRF200 =1E41113		%
RRF50 =2C41113	RRF100=1D41113					RRF	RSD
COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
Dichlorodifluoromethane	0.152	0.118	0.133	0.147	0.148	0.140	10.0
Chloromethane*	0.323	0.229	0.260	0.280	0.292	0.277	12.7*
Vinyl Chloride	0.260	0.206	0.230	0.249	0.256	0.240	9.3
Bromomethane	0.025	0.020	0.027	0.033	0.035	0.028	22.1
Chloroethane	0.035	0.028	0.031	0.032	0.035	0.032	9.1
Trichlorofluoromethane	0.089	0.068	0.078	0.143	0.100	0.096	30.2
1,1-Dichloroethene	0.121	0.098	0.110	0.119	0.124	0.114	9.4
Methylene Chloride	0.145	0.111	0.144	0.140	0.143	0.137	10.4
trans-1,2-Dichloroethene	0.222	0.177	0.202	0.210	0.215	0.205	8.4
1,1-Dichloroethane*	0.439	0.350	0.380	0.398	0.408	0.395	8.4*
cis-1,2-dichloroethene	0.298	0.235	0.256	0.264	0.262	0.263	8.6
Chloroform	0.398	0.316	0.335	0.342	0.336	0.345	8.9
Bromochloromethane	0.145	0.113	0.125	0.124	0.126	0.127	9.2
1,1,1-Trichloroethane	0.334	0.261	0.290	0.309	0.302	0.299	8.9
Carbon Tetrachloride	0.262	0.223	0.252	0.271	0.269	0.255	7.7
1,2-Dichloroethane	0.307	0.234	0.240	0.230	0.207	0.244	15.5
Benzene	1.136	0.868	0.918	0.865	0.835	0.924	13.2
Trichloroethene	0.314	0.244	0.266	0.270	0.281	0.275	9.3
1,2-Dichloropropane	0.301	0.227	0.244	0.246	0.255	0.255	10.9
Bromodichloromethane	0.259	0.207	0.238	0.244	0.247	0.239	8.2
cis-1,3-Dichloropropene	0.368	0.296	0.343	0.356	0.376	0.348	9.0
Toluene	5.381	4.084	4.095	3.865	3.145	4.114	19.6
trans-1,3-Dichloropropene	1.246	0.981	1.133	1.171	1.015	1.109	9.9
1,1,2-Trichloroethane	1.086	0.790	0.825	0.807	0.702	0.842	17.2
Tetrachloroethene	1.114	0.815	0.855	0.863	0.743	0.878	16.0
Dibromochloromethane	0.834	0.674	0.792	0.816	0.778	0.779	8.0
Chlorobenzene*	3.745	2.750	2.825	2.753	2.522	2.919	16.3*
Ethylbenzene	1.844	1.462	1.449	1.382	1.140	1.455	17.4
Styrene	3.585	2.919	2.788	2.469	1.773	2.707	24.4
Bromoform*	0.452	0.406	0.460	0.459	0.382	0.432	8.3*
1,1,2,2-Tetrachloroethane*	0.708	0.557	0.595	0.582	0.646	0.618	9.7*
1,3-Dichlorobenzene	1.824	1.398	1.433	1.314	1.244	1.443	15.7
1,4-Dichlorobenzene	1.795	1.349	1.394	1.317	1.302	1.431	14.4
1,2-Dichlorobenzene	1.648	1.240	1.326	1.287	1.371	1.374	11.7
Dibromomethane	0.150	0.113	0.124	0.125	0.123	0.127	10.7
1,2-Dibromoethane	1.003	0.751	0.812	0.785	0.696	0.809	14.4
1,1,1,2-Tetrachloroethane	1.081	0.798	0.868	0.812	0.686	0.849	17.1

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

6741001

INITIAL CALIBRATION REPORT

Instrument ID: hp4.1
Lab File ID: 2A41113.D
Analysis Type: SOIL

Injection Date: 13-NOV-2000 08:52
Lab Sample ID: vstd5
Method File: \\QPITPA02\d\chem\hp4.1\41113d.b\

COMPOUND	%RSD
Xylenes (total)	19.7
1,2-Dichloroethene (total)	8.3
Dichlorodifluoromethane	10.0
Chloromethane	12.7
Vinyl Chloride	9.3
Bromomethane	22.1
Chloroethane	9.1
Trichlorofluoromethane	30.2
1,1-Dichloroethene	9.4
Carbon Disulfide	11.7
Acetone	67.7
Methylene Chloride	10.4
trans-1,2-Dichloroethene	8.4
Methyl tert-butyl ether	7.0
1,1-Dichloroethane	8.4
2,2-Dichloropropane	10.1
cis-1,2-dichloroethene	8.6
2-Butanone	9.5
Bromochloromethane	9.2
Chloroform	8.9
1,1,1-Trichloroethane	8.9
Dibromofluoromethane	9.6
Carbon Tetrachloride	7.7
1,1-Dichloropropene	7.4
Benzene	13.2
1,2-Dichloroethane-d4	16.4
1,2-Dichloroethane	15.5
Trichloroethene	9.3
1,2-Dichloropropane	10.9
Dibromomethane	10.7
Bromodichloromethane	8.2
cis-1,3-Dichloropropene	9.0
4-Methyl-2-Pentanone	9.7
Toluene-d8	14.9
Toluene	19.6
trans-1,3-Dichloropropene	9.9
1,1,2-Trichloroethane	17.2
Tetrachloroethene	16.0
1,3-Dichloropropane	16.1

INITIAL CALIBRATION REPORT

Instrument ID: hp4.i
Lab File ID: 2A41113.D
Analysis Type: SOIL

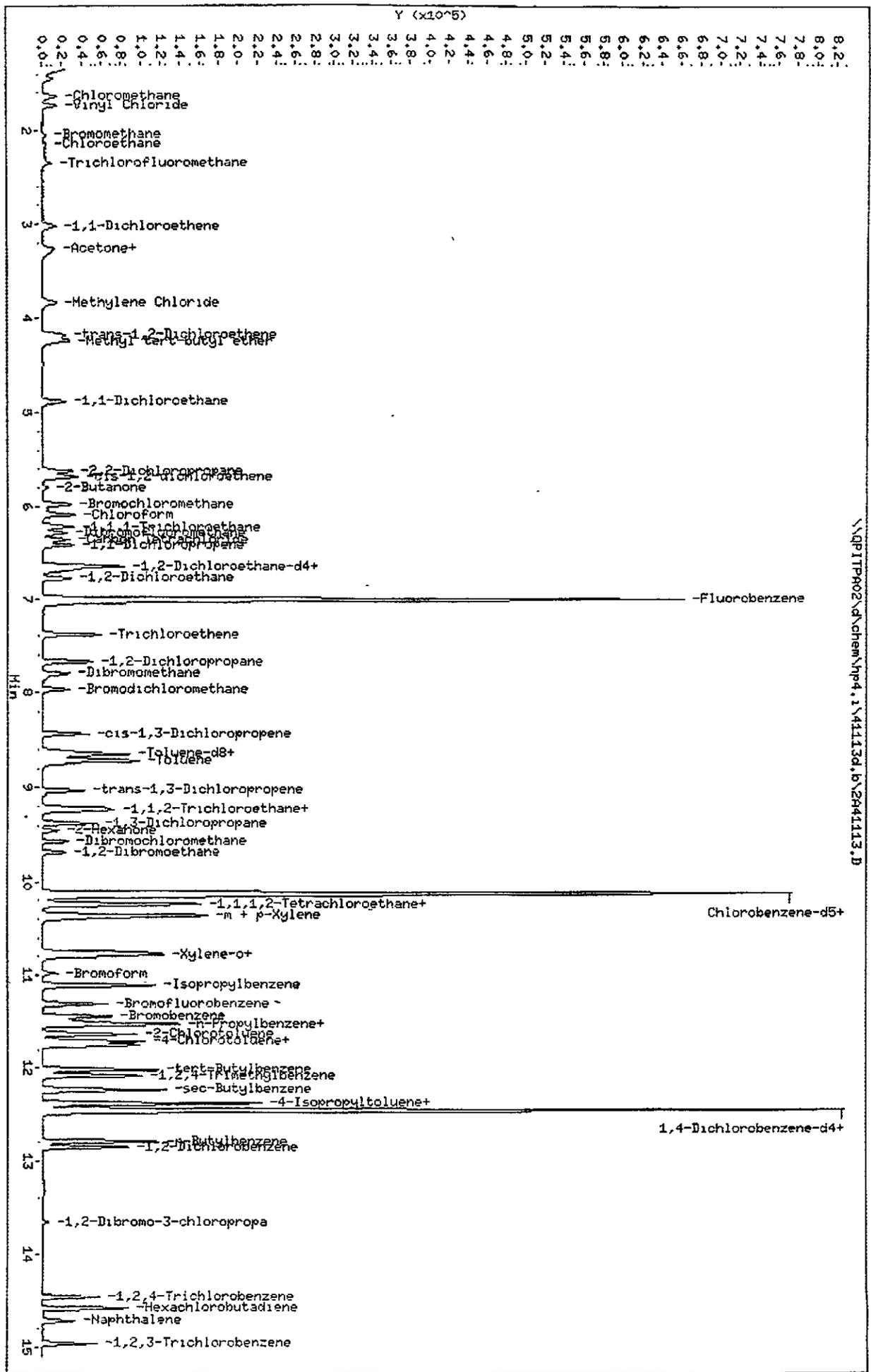
Injection Date: 13-NOV-2000 08:52
Lab Sample ID: vstd5
Method File: \\QPITPA02\d\chem\hp4.i\41113d.b\

COMPOUND	%RSD
2-Hexanone	9.6
Dibromochloromethane	8.0
1,2-Dibromoethane	14.4
Chlorobenzene	16.3
Ethylbenzene	17.4
1,1,1,2-Tetrachloroethane	17.1
m + p-Xylene	26.0
Xylene-o	19.7
Styrene	24.4
Bromoform	8.3
Isopropylbenzene	20.5
Bromofluorobenzene	23.6
Bromobenzene	10.5
1,1,2,2-Tetrachloroethane	9.7
n-Propylbenzene	8.0
1,2,3-Trichloropropane	11.5
2-Chlorotoluene	10.9
1,3,5-Trimethylbenzene	11.5
4-Chlorotoluene	17.8
tert-Butylbenzene	8.8
1,2,4-Trimethylbenzene	10.4
sec-Butylbenzene	12.4
4-Isopropyltoluene	12.3
1,3-Dichlorobenzene	15.7
1,4-Dichlorobenzene	14.4
n-Butylbenzene	8.0
1,2-Dichlorobenzene	11.7
1,2-Dibromo-3-chloropropane	33.9
1,2,4-Trichlorobenzene	27.2
Hexachlorobutadiene	27.1
Napthalene	24.5
1,2,3-Trichlorobenzene	30.8

The average of all %RSD's in the initial calibration is 14.7

Data File: \\QPI1TP02\chem\mp4.1\44113d.b\244113.D
Date: 13-NOV-2000 09:52
Client ID: vsta05
Sample Info: vsta05 5ml
Volume Injected (ul): 5.0
Column phase: DB 624

Instrument: mp4.1
Operator: 16328
Column diameter: 0.18



674 1004

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VOLATILE REPORT SW-846 Method
 Data file : \\QPITPA02\d\chem\hp4.i\41113d.b\2A41113.D
 Lab Smp Id: vstd5 Client Smp ID: vstd5
 Inj Date : 13-NOV-2000 08:52
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd5 5ml
 Misc Info : vstd5,41113d.b, K u | 10 | w
 Comment :
 Method : \\QPITPA02\d\chem\hp4.i\41113d.b\med500.m
 Meth Date : 13-Nov-2000 10:55 dudeckk Quant Type: ISTD
 Cal Date : 13-NOV-2000 08:52 Cal File: 2A41113.D
 Als bottle: 8 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 4.04
 Processing Host: PITPC077

Concentration Formula: Amt * DF * /Vi*Vo/Ws*Vt/Va

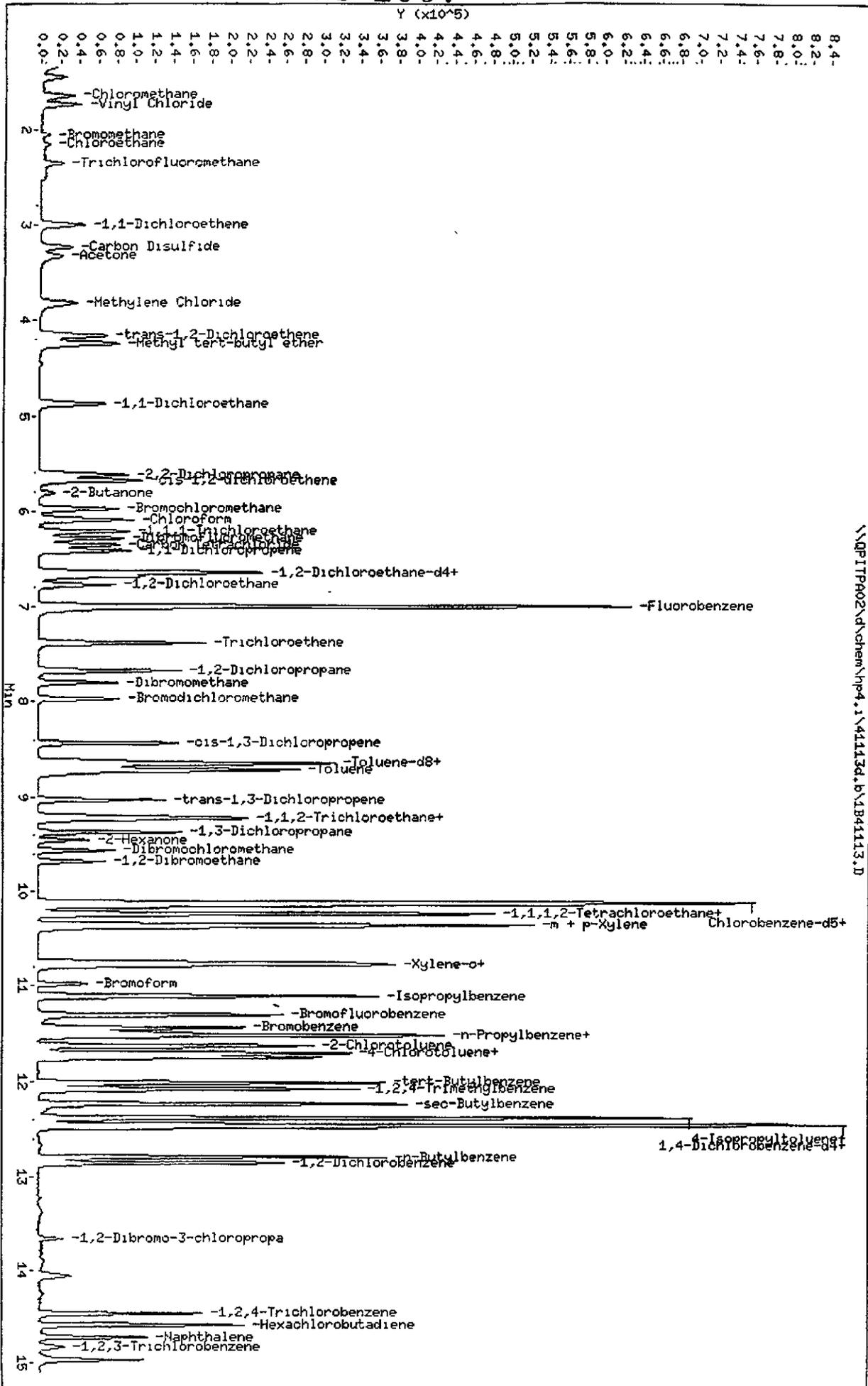
Name	Value	Description
DF	1.000	Dilution Factor
Vi	5.000	Injection Volume
Vo	5.000	Extraction Solvent Volume
Ws	5.000	Sample Weight
Vt	5.000	Final Volume
Va	0.100	Aliquot Volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	7.001	6.999	(1.000)	811184	250.000	
* 69 Chlorobenzene-d5	119	10.121	10.125	(1.000)	196516	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.456	12.454	(1.000)	298609	250.000	
\$ 39 Dibromofluoromethane	113	6.284	6.288	(0.898)	19698	25.0000	28.06
\$ 43 1,2-Dichloroethane-d4	65	6.685	6.683	(0.955)	19837	25.0000	29.84
\$ 59 Toluene-d8	98	8.643	8.647	(0.854)	87990	25.0000	29.38
\$ 80 Bromofluorobenzene	95	11.307	11.305	(2.117)	29894	25.0000	30.69
1 Dichlorodifluoromethane	85	1.449	1.447	(0.207)	12326	25.0000	27.21
2 Chloromethane	50	1.638	1.642	(0.234)	26221	25.0000	29.18
3 Vinyl Chloride	62	1.741	1.739	(0.249)	21123	25.0000	27.08
4 Bromomethane	94	2.051	2.055	(0.293)	2062	25.0000	22.59
5 Chloroethane	64	2.154	2.158	(0.308)	2860	25.0000	27.29
6 Trichlorofluoromethane	101	2.355	2.353	(0.336)	7214	25.0000	23.25

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
12 1,1-Dichloroethene	96	3.030	3.022	(0.433)	9825	25.0000	26.42
13 Acetone	43	3.310	3.314	(0.473)	16465	25.0000	43.59
15 Carbon Disulfide	76	3.267	3.259	(0.467)	24348	25.0000	24.93
18 Methylene Chloride	84	3.827	3.831	(0.547)	11776	25.0000	26.52
19 trans-1,2-Dichloroethene	96	4.180	4.177	(0.597)	17999	25.0000	27.02
20 Methyl tert-butyl ether	73	4.240	4.232	(0.606)	40796	25.0000	27.30
24 1,1-Dichloroethane	63	4.879	4.883	(0.697)	35640	25.0000	27.79
27 2,2-Dichloropropane	77	5.621	5.625	(0.803)	23515	25.0000	25.84
28 cis-1,2-dichloroethene	96	5.682	5.680	(0.812)	24140	25.0000	28.32
M 29 1,2-Dichloroethene (total)	96				42139	50.0000	55.50
30 Bromochloromethane	128	5.986	5.978	(0.855)	11787	25.0000	28.64
31 2-Butanone	43	5.797	5.795	(0.828)	10269	25.0000	29.02
37 Chloroform	83	6.089	6.087	(0.870)	32291	25.0000	28.80
38 1,1,1-Trichloroethane	97	6.217	6.221	(0.888)	27101	25.0000	27.91
40 1,1-Dichloropropene	75	6.417	6.415	(0.917)	18584	25.0000	27.97
41 Carbon Tetrachloride	117	6.357	6.361	(0.908)	21266	25.0000	25.66
42 Benzene	78	6.642	6.646	(0.949)	92144	25.0000	30.72
45 1,2-Dichloroethane	62	6.776	6.774	(0.968)	24922	25.0000	31.53
47 Trichloroethene	130	7.378	7.382	(1.054)	25501	25.0000	28.54
49 1,2-Dichloropropane	63	7.670	7.674	(1.096)	24390	25.0000	29.53
50 Dibromomethane	93	7.798	7.796	(1.114)	12159	25.0000	29.48
53 Bromodichloromethane	83	7.968	7.966	(1.138)	21023	25.0000	27.10
57 cis-1,3-Dichloropropene	75	8.436	8.434	(1.205)	29825	25.0000	26.43
58 4-Methyl-2-Pentanone	43	8.613	8.611	(0.851)	18760	25.0000	28.62
60 Toluene	91	8.716	8.714	(0.861)	105753	25.0000	32.70
61 trans-1,3-Dichloropropene	75	9.032	9.030	(0.892)	24492	25.0000	28.09
63 1,3-Dichloropropane	76	9.373	9.377	(0.926)	34755	25.0000	31.77
64 1,1,2-Trichloroethane	97	9.209	9.207	(0.910)	21351	25.0000	32.26
65 Tetrachloroethene	164	9.233	9.237	(0.912)	21890	25.0000	31.72
66 2-Hexanone	43	9.452	9.450	(0.934)	12290	25.0000	28.70
67 Dibromochloromethane	129	9.561	9.566	(0.945)	16397	25.0000	26.78
68 1,2-Dibromoethane	107	9.683	9.681	(0.957)	19707	25.0000	30.98
70 Chlorobenzene	112	10.151	10.149	(1.003)	73603	25.0000	32.08
71 1,1,1,2-Tetrachloroethane	131	10.243	10.241	(1.012)	21241	25.0000	31.82
72 Ethylbenzene	106	10.230	10.234	(1.011)	36246	25.0000	31.68
73 m + p-Xylene	106	10.358	10.356	(1.023)	89619	50.0000	68.49
74 Xylene-o	106	10.753	10.751	(1.062)	41658	25.0000	31.97
M 75 Xylenes (total)	106				131277	25.0000	100.8
76 Styrene	104	10.784	10.782	(1.065)	70444	25.0000	33.11
77 Bromoform	173	10.985	10.982	(1.085)	8882	25.0000	26.16
78 Isopropylbenzene	105	11.106	11.110	(1.097)	104780	25.0000	32.08
79 Bromobenzene	156	11.447	11.445	(0.919)	28872	25.0000	27.70
81 n-Propylbenzene	120	11.520	11.524	(0.925)	32368	25.0000	27.98
82 2-Chlorotoluene	126	11.629	11.627	(0.934)	27445	25.0000	29.68
83 1,1,2,2-Tetrachloroethane	83	11.483	11.487	(0.922)	21152	25.0000	28.67
84 1,2,3-Trichloropropane	110	11.538	11.536	(0.926)	7203	25.0000	30.06
85 4-Chlorotoluene	126	11.745	11.749	(0.943)	28529	25.0000	32.21

674 1006

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
86 1,3,5-Trimethylbenzene	105	11 702	11 706	{0 939}	82906	25.0000	29.95
87 tert-Butylbenzene	119	12 018	12 016	{0 965}	77957	25.0000	28.60
88 1,2,4-Trimethylbenzene	105	12 079	12 077	{0 970}	78314	25.0000	29.44
89 sec-Butylbenzene	105	12 237	12 235	{0.982}	115169	25 0000	30.27
90 4-Isopropyltoluene	119	12.383	12 381	{0 994}	94922	25 0000	29.98
91 1,3 Dichlorobenzene	146	12 383	12 381	{0 994}	54483	25.0000	31.62
93 1,4-Dichlorobenzene	146	12 481	12.478	{1 002}	53602	25 0000	31.35
94 n-Butylbenzene	91	12.797	12 795	{1.027}	78108	25 0000	27.17
95 1,2-Dichlorobenzene	146	12.858	12.856	{1.032}	49221	25 0000	29.98
96 1,2-Dibromo-3-chloropropane	157	13.660	13.658	{1.097}	2224	25 0000	18.23
97 1,2,4-Trichlorobenzene	180	14.457	14 461	{1 161}	23596	25 0000	24.38
98 Hexachlorobutadiene	225	14 579	14.577	{1.170}	20510	25.0000	26.92
99 Naphthalene	128	14 706	14 710	{1 181}	33712	25 0000	22.84
100 1,2,3-Trichlorobenzene	180	14 956	14 960	{1 201}	22068	25 0000	32.15



Data File: \\QPITP002\chem\hp4.1\41113d.b\B41113.D
 Date: 13-NOV-2000 06:26
 Client ID: vstd20
 Sample Info: vstd20 5ml
 Volume Injected (ul): 5.0
 Column phase: DB 624

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

\\QPITP002\chem\hp4.1\41113d.b\B41113.D

674 1008

STL-Pittsburgh

VOLATILE REPORT SW-846 Method
 Data file : \\QPITPA02\d\chem\hp4.i\41113d.b\1B41113.D
 Lab Smp Id: vstd20 Client Smp ID: vstd20
 Inj Date : 13-NOV-2000 06:26
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd20 5ml
 Misc Info : vstd20,41113d.b,
 Comment :
 Method : \\QPITPA02\d\chem\hp4.i\41113d.b\med500.m
 Meth Date : 13-Nov-2000 10:54 dudeckk Quant Type: ISTD
 Cal Date : 13-NOV-2000 08:52 Cal File: 2A41113.D
 Als bottle: 3 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 4.04
 Processing Host: PITPC077

K. 11/13/00

Concentration Formula: Amt * DF * /V1*Vo/Ws*Vt/Va

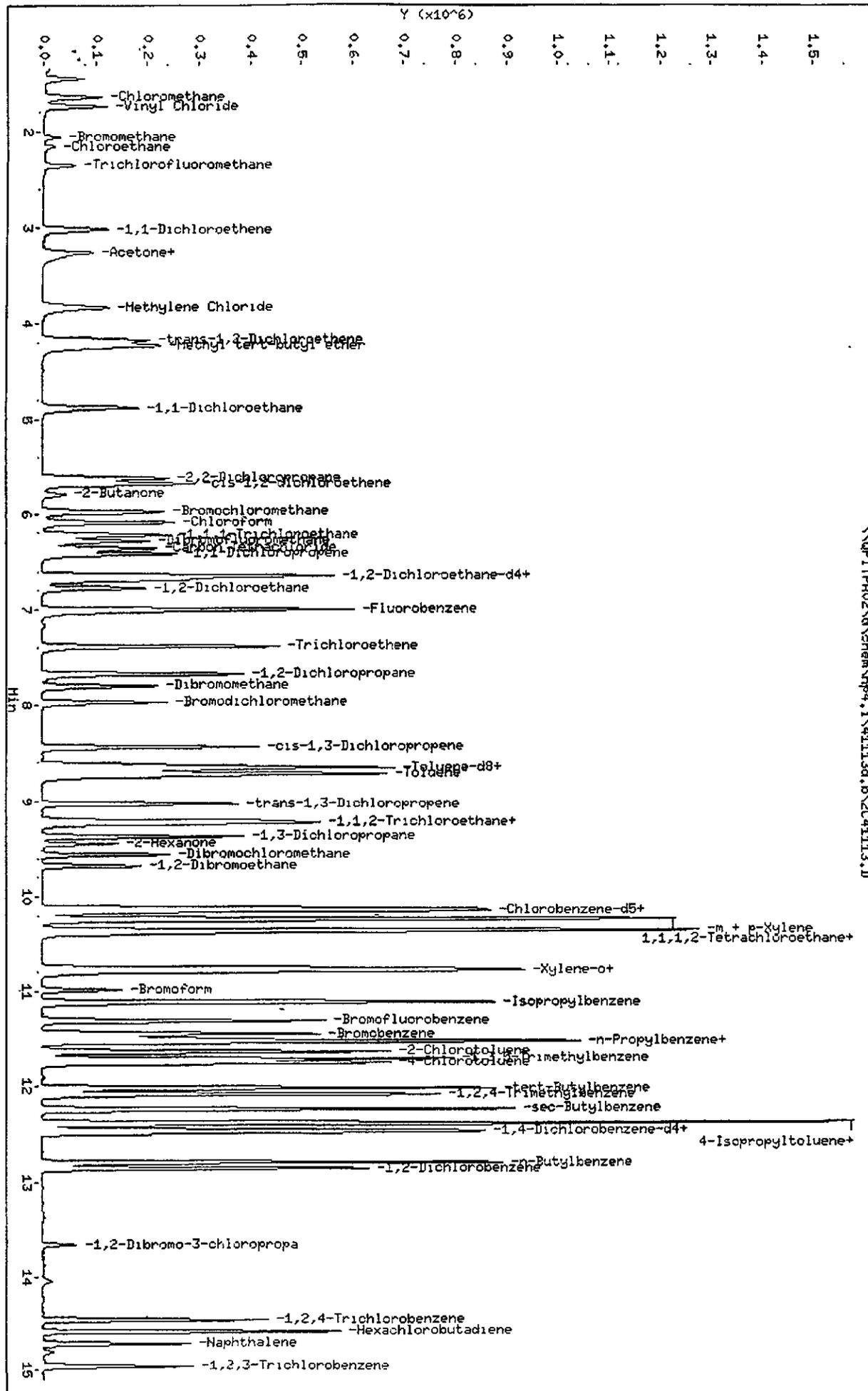
Name	Value	Description
DF	1.000	Dilution Factor
Vi	5.000	Injection Volume
Vo	5.000	Extraction Solvent Volume
Ws	5.000	Sample Weight
Vt	5.000	Final Volume
Va	0.100	Aliquot Volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.995	6.999	(1.000)	746434	250.000	
* 69 Chlorobenzene-d5	119	10.121	10.125	(1.000)	184753	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.456	12.454	(1.000)	287289	250.000	
\$ 39 Dibromofluoromethane	113	6.284	6.288	(0.898)	67389	100.000	104.3
\$ 43 1,2-Dichloroethane-d4	65	6.679	6.683	(0.955)	67254	100.000	109.9
\$ 59 Toluene-d8	98	8.643	8.647	(0.854)	303793	100.000	107.9
\$ 80 Bromofluorobenzene	95	11.307	11.305	(1.117)	108303	100.000	118.3
1 Dichlorodifluoromethane	85	1.449	1.447	(0.207)	35307	100.000	84.69
2 Chloromethane	50	1.650	1.642	(0.236)	68467	100.000	82.80
3 Vinyl Chloride	62	1.735	1.739	(0.248)	61667	100.000	85.93
4 Bromomethane	94	2.057	2.055	(0.294)	5853	100.000	69.69
5 Chloroethane	64	2.155	2.158	(0.308)	8379	100.000	86.87
6 Trichlorofluoromethane	101	2.355	2.353	(0.337)	20378	100.000	71.36

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL AMT (ng)	ON-COL (ng)
12 1,1-Dichloroethene	96	2.994	3.022	(0.428)	29172	100.000	85.27
13 Acetone	43	3.328	3.314	(0.476)	59223	100.000	170.4
15 Carbon Disulfide	76	3.237	3.259	(0.463)	73721	100.000	82.03
18 Methylene Chloride	84	3.821	3.831	(0.546)	33287	100.000	81.48
19 trans-1,2-Dichloroethene	96	4.161	4.177	(0.595)	52942	100.000	86.37
20 Methyl tert-butyl ether	73	4.240	4.232	(0.606)	123133	100.000	89.53
24 1,1-Dichloroethane	63	4.873	4.883	(0.697)	104623	100.000	88.65
27 2,2-Dichloropropane	77	5.615	5.625	(0.803)	70633	100.000	84.33
28 cis-1,2-dichloroethene	96	5.676	5.680	(0.811)	70089	100.000	89.35
M 29 1,2-Dichloroethene (total)	96				123031	200.000	176.1
30 Bromochloromethane	128	5.974	5.978	(0.854)	33760	100.000	89.15
31 2-Butanone	43	5.809	5.795	(0.830)	29637	100.000	91.03
37 Chloroform	83	6.089	6.087	(0.870)	94498	100.000	91.60
38 1,1,1-Trichloroethane	97	6.211	6.221	(0.888)	78034	100.000	87.34
40 1,1-Dichloropropene	75	6.411	6.415	(0.917)	55936	100.000	91.49
41 Carbon Tetrachloride	117	6.351	6.361	(0.908)	66552	100.000	87.28
42 Benzene	78	6.643	6.646	(0.950)	259084	100.000	93.86
45 1,2-Dichloroethane	62	6.770	6.774	(0.968)	69730	100.000	95.88
47 Trichloroethene	130	7.378	7.382	(1.055)	72928	100.000	88.72
49 1,2-Dichloropropane	63	7.670	7.674	(1.096)	67722	100.000	89.10
50 Dibromomethane	93	7.792	7.796	(1.114)	33881	100.000	89.28
53 Bromodichloromethane	83	7.968	7.966	(1.139)	61812	100.000	86.60
57 cis-1,3-Dichloropropene	75	8.431	8.434	(1.205)	88408	100.000	85.14
58 4-Methyl-2-Pentanone	43	8.613	8.611	(0.851)	54564	100.000	88.53
60 Toluene	91	8.716	8.714	(0.861)	301823	100.000	99.27
61 trans-1,3-Dichloropropene	75	9.026	9.030	(0.892)	72533	100.000	88.48
63 1,3-Dichloropropane	76	9.373	9.377	(0.926)	95950	100.000	93.30
64 1,1,2-Trichloroethane	97	9.203	9.207	(0.909)	58346	100.000	93.78
65 Tetrachloroethene	164	9.233	9.237	(0.912)	60203	100.000	92.79
66 2-Hexanone	43	9.452	9.450	(0.934)	38767	100.000	96.30
67 Dibromochloromethane	129	9.568	9.566	(0.945)	49840	100.000	86.57
68 1,2-Dibromoethane	107	9.677	9.681	(0.956)	55489	100.000	92.78
70 Chlorobenzene	112	10.152	10.149	(1.003)	203214	100.000	94.20
71 1,1,1,2-Tetrachloroethane	131	10.243	10.241	(1.012)	58991	100.000	94.01
72 Ethylbenzene	106	10.231	10.234	(1.011)	108016	100.000	100.4
73 m + p-Xylene	106	10.358	10.356	(1.023)	260809	200.000	212.0
74 Xylene-o	106	10.754	10.751	(1.062)	127413	100.000	104.0
M 75 Xylenes (total)	106				388222	100.000	316.9
76 Styrene	104	10.784	10.782	(1.065)	215742	100.000	107.8
77 Bromoform	173	10.979	10.982	(1.085)	29984	100.000	93.95
78 Isopropylbenzene	105	11.106	11.110	(1.097)	319155	100.000	103.9
79 Bromobenzene	156	11.447	11.445	(0.919)	86843	100.000	86.59
81 n-Propylbenzene	120	11.520	11.524	(0.925)	100411	100.000	90.24
82 2-Chlorotoluene	126	11.629	11.627	(0.934)	81779	100.000	91.94
83 1,1,2,2-Tetrachloroethane	83	11.483	11.487	(0.922)	64064	100.000	90.25
84 1,2,3-Trichloropropane	110	11.532	11.536	(0.926)	21959	100.000	95.24
85 4-Chlorotoluene	126	11.751	11.749	(0.943)	81424	100.000	95.56

674 1010

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
86 1,3,5-Trimethylbenzene	105	11.708	11.706	(0.940)	251041	100.000	94.26
87 tert-Butylbenzene	119	12.018	12.016	(0.965)	236892	100.000	90.35
88 1,2,4-Trimethylbenzene	105	12.079	12.077	(0.970)	244522	100.000	95.56
89 sec-Butylbenzene	105	12.237	12.235	(0.982)	344508	100.000	94.11
90 4-Isopropyltoluene	119	12.383	12.381	(0.994)	290348	100.000	95.33
91 1,3-Dichlorobenzene	146	12.383	12.381	(0.994)	160623	100.000	96.88
93 1,4-Dichlorobenzene	146	12.481	12.478	(1.002)	155059	100.000	94.27
94 n-Butylbenzene	91	12.791	12.795	(1.027)	245544	100.000	88.79
95 1,2-Dichlorobenzene	146	12.858	12.856	(1.032)	142498	100.000	90.22
96 1,2-Dibromo-3-chloropropane	157	13.660	13.658	(1.097)	8609	100.000	73.36
97 1,2,4-Trichlorobenzene	180	14.457	14.461	(1.161)	66094	100.000	71.00
98 Hexachlorobutadiene	225	14.579	14.577	(1.170)	49313	100.000	67.28
99 Naphthalene	128	14.713	14.710	(1.181)	109138	100.000	76.85
100 1,2,3-Trichlorobenzene	180	14.956	14.960	(1.201)	41143	100.000	62.31



Data File: \\NP1TPA02\nd\chem\hpa4.1\41113d.b\2C41113.D
 Date : 13-NOV-2000 06:52
 Client ID: vstd50
 Sample Info: vstd50 fm1
 Volume Injected (uL): 5.0
 Column phase: DB 624

Instrument: hpa4.1
 Operator: 16328
 Column diameter: 0.18

674 1012

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\41113d.b\2C41113.D
 Lab Smp Id: vstd50 Client Smp ID: vstd50
 Inj Date : 13-NOV-2000 06:52
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd50 5ml
 Misc Info : vstd50,41113d.b,
 Comment :
 Method : \\QPITPA02\d\chem\hp4.i\41113d.b\med500.m
 Meth Date : 13-Nov-2000 10:54 dudeckk Quant Type: ISTD
 Cal Date : 13-NOV-2000 08:52 Cal File: 2A41113.D
 Als bottle: 4 Calibration Sample, Level: 3
 Dil Factor: 1.00000 Compound Sublist: 2-padep.sub
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC077

K u|D|

Concentration Formula: Amt * DF * /Vi*Vo/Ws*Vt/Va

Name	Value	Description
DF	1.000	Dilution Factor
Vi	5.000	Injection Volume
Vo	5.000	Extraction Solvent Volume
Ws	5.000	Sample Weight
Vt	5.000	Final Volume
Va	0.100	Aliquot Volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.999	6.999	(1.000)	739937	250.000	
* 69 Chlorobenzene-d5	119	10.125	10.125	(1.000)	186836	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.454	12.454	(1.000)	252408	250.000	
\$ 39 Dibromofluoromethane	113	6.288	6.288	(0.898)	158139	250.000	246.9
\$ 43 1,2-Dichloroethane-d4	65	6.683	6.683	(0.955)	151914	250.000	250.5
\$ 59 Toluene-d8	98	8.647	8.647	(0.854)	709581	250.000	249.2
\$ 80 Bromofluorobenzene	95	11.305	11.305	(1.117)	238281	250.000	257.3
1 Dichlorodifluoromethane	85	1.447	1.447	(0.207)	98377	250.000	238.0
2 Chloromethane	50	1.642	1.642	(0.235)	192374	250.000	234.7
3 Vinyl Chloride	62	1.739	1.739	(0.248)	169969	250.000	238.9
4 Bromomethane	94	2.055	2.055	(0.294)	20219	250.000	242.9
5 Chloroethane	64	2.158	2.158	(0.308)	22904	250.000	239.6
6 Trichlorofluoromethane	101	2.353	2.353	(0.336)	57846	250.000	204.4

674 1013

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
12 1,1-Dichloroethene	96	3.022	3.022	(0.432)	81715	250 000	240.9
13 Acetone	43	3.314	3.314	(0.474)	65325	250 000	189.6
15 Carbon Disulfide	76	3.259	3.259	(0.466)	217164	250 000	243.8
18 Methylene Chloride	84	3.831	3.831	(0.547)	106327	250 000	262.5
19 trans-1,2-Dichloroethene	96	4.177	4.177	(0.597)	149607	250.000	246.2
20 Methyl tert-butyl ether	73	4.232	4.232	(0.605)	337736	250.000	247.7
24 1,1-Dichloroethane	63	4.883	4.883	(0.698)	281351	250 000	240.5
27 2,2-Dichloropropane	77	5.625	5.625	(0.804)	199959	250 000	240.8
28 cis-1,2-dichloroethene	96	5.680	5.680	(0.811)	189207	250 000	243.3
M 29 1,2-Dichloroethene (total)	96				338814	500 000	489.2
30 Bromochloromethane	128	5.978	5.978	(0.854)	92236	250 000	245.7
31 2-Butanone	43	5.795	5.795	(0.828)	80073	250 000	248.1
37 Chloroform	83	6.087	6.087	(0.870)	248068	250 000	242.6
38 1,1,1-Trichloroethane	97	6.221	6.221	(0.889)	214630	250 000	242.3
40 1,1-Dichloropropene	75	6.415	6.415	(0.917)	148368	250.000	244.8
41 Carbon Tetrachloride	117	6.361	6.361	(0.909)	186320	250 000	246.5
42 Benzene	78	6.646	6.646	(0.950)	679435	250 000	248.3
45 1,2-Dichloroethane	62	6.774	6.774	(0.968)	177576	250 000	246.3
47 Trichloroethene	130	7.382	7.382	(1.055)	197186	250 000	242.0
49 1,2-Dichloropropane	63	7.674	7.674	(1.096)	180826	250 000	240.0
50 Dibromomethane	93	7.796	7.796	(1.114)	91984	250 000	244.5
53 Bromodichloromethane	83	7.966	7.966	(1.138)	176002	250 000	248.8
57 cis-1,3-Dichloropropene	75	8.434	8.434	(1.205)	253669	250 000	246.4
58 4-Methyl-2-Pentanone	43	8.611	8.611	(0.850)	156937	250 000	251.8
60 Toluene	91	8.714	8.714	(0.861)	765094	250 000	248.8
61 trans-1,3-Dichloropropene	75	9.030	9.030	(0.892)	211660	250 000	255.3
63 1,3-Dichloropropane	76	9.377	9.377	(0.926)	256390	250 000	246.5
64 1,1,2-Trichloroethane	97	9.207	9.207	(0.909)	154079	250 000	244.9
65 Tetrachloroethene	164	9.237	9.237	(0.912)	159700	250 000	243.4
66 2-Hexanone	43	9.450	9.450	(0.933)	103824	250 000	255.0
67 Dibromochloromethane	129	9.566	9.566	(0.945)	148006	250 000	254.2
68 1,2-Dibromoethane	107	9.681	9.681	(0.956)	151743	250 000	250.9
70 Chlorobenzene	112	10.149	10.149	(1.002)	527747	250 000	241.9
71 1,1,1,2-Tetrachloroethane	131	10.241	10.241	(1.011)	162236	250.000	255.7
72 Ethylbenzene	106	10.234	10.234	(1.011)	270750	250.000	248.9
73 m + p-Xylene	106	10.356	10.356	(1.023)	627931	500.000	504.8
74 Xylene-o	106	10.751	10.751	(1.062)	314012	250 000	253.5
M 75 Xylenes (total)	106				941943	250 000	760.4
76 Styrene	104	10.782	10.782	(1.065)	520847	250 000	257.5
77 Bromoform	173	10.982	10.982	(1.085)	86039	250 000	266.6
78 Isopropylbenzene	105	11.110	11.110	(1.097)	795037	250 000	256.0
79 Bromobenzene	156	11.445	11.445	(0.919)	211458	250 000	240.0
81 n-Propylbenzene	120	11.524	11.524	(0.925)	239384	250 000	244.8
82 2-Chlorotoluene	126	11.627	11.627	(0.934)	195166	250 000	249.7
83 1,1,2,2 Tetrachloroethane	83	11.487	11.487	(0.922)	150193	250 000	240.8
84 1,2,3-Trichloropropane	110	11.536	11.536	(0.926)	49482	250 000	244.3
85 4-Chlorotoluene	126	11.749	11.749	(0.943)	191179	250 000	255.4

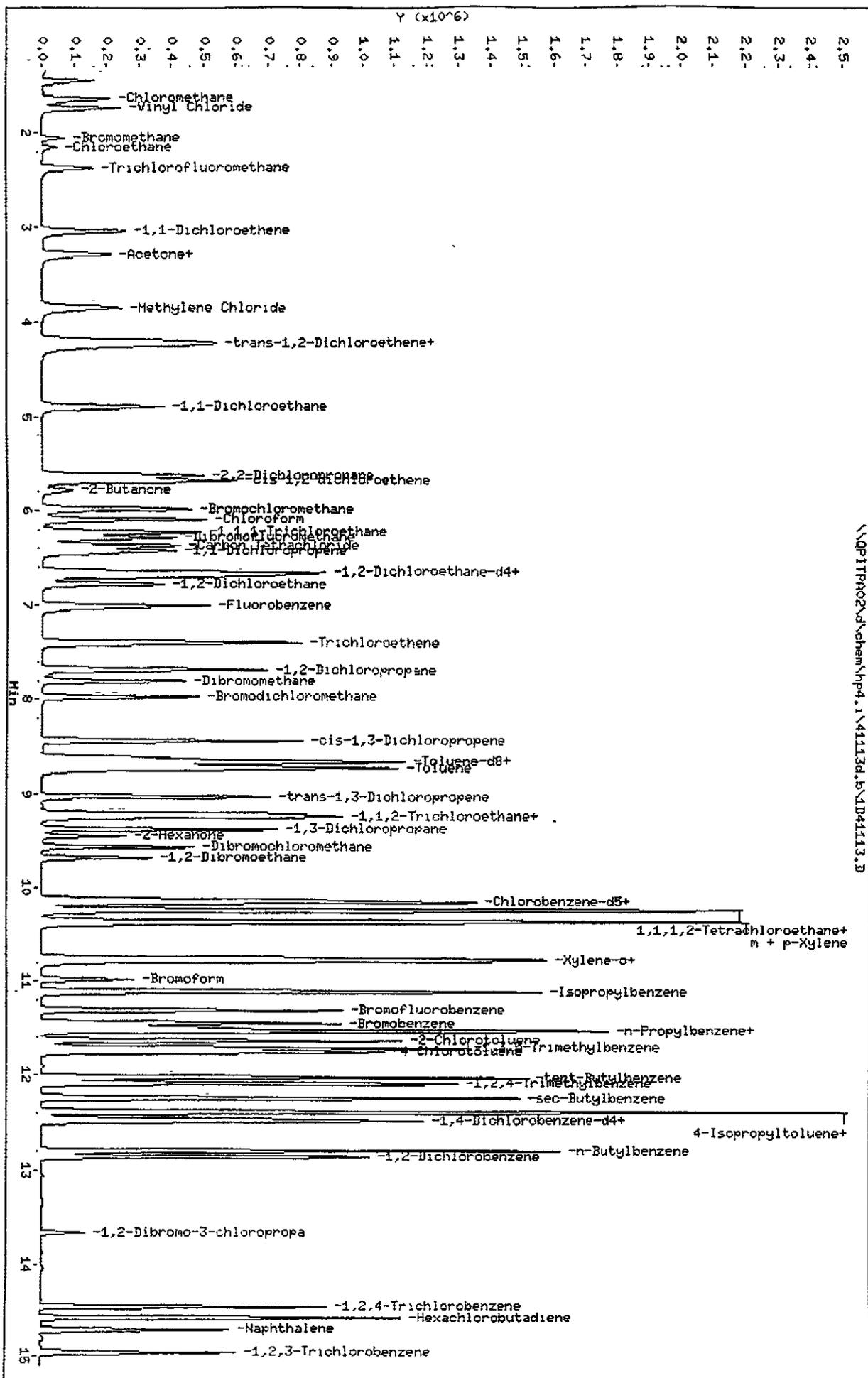
674 1014

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
86 1,3,5-Trimethylbenzene	105	11.706	11.706	(0.940)	583194	250.000	249.2
87 tert-Butylbenzene	119	12.016	12.016	(0.965)	566273	250.000	245.8
88 1,2,4-Trimethylbenzene	105	12.077	12.077	(0.970)	560026	250.000	249.1
89 sec-Butylbenzene	105	12.235	12.235	(0.982)	798465	250.000	248.3
90 4-Isopropyltoluene	119	12.381	12.381	(0.994)	674676	250.000	252.1
91 1,3-Dichlorobenzene	146	12.381	12.381	(0.994)	361721	250.000	248.3
93 1,4-Dichlorobenzene	146	12.478	12.478	(1.002)	351761	250.000	243.4
94 n-Butylbenzene	91	12.795	12.795	(1.027)	582711	250.000	239.8
95 1,2-Dichlorobenzene	146	12.856	12.856	(1.032)	334695	250.000	241.2
96 1,2-Dibromo-3-chloropropane	157	13.658	13.658	(1.097)	23373	250.000	226.7
97 1,2,4-Trichlorobenzene	180	14.461	14.461	(1.161)	177085	250.000	216.5
98 Hexachlorobutadiene	225	14.577	14.577	(1.170)	137128	250.000	213.0
99 Naphthalene	128	14.710	14.710	(1.181)	271922	250.000	217.9
100 1,2,3-Trichlorobenzene	180	14.960	14.960	(1.201)	115363	250.000	198.8

Data File: \\QP11P002\chem\hp4.1\41113d.b\1D41113.D
Date: 13-NOV-2000 07:17
Client ID: vstd100
Sample Info: vstd100 5ml
Volume Injected (ul): 5.0
Column phase: DB 624

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

\\QP11P002\chem\hp4.1\41113d.b\1D41113.D



674 1016

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\41113d.b\1D41113.D
 Lab Smp Id: vstd100 Client Smp ID: vstd100
 Inj Date : 13-NOV-2000 07:17
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd100 5ml
 Misc Info : vstd100,41113d.b,
 Comment :
 Method : \\QPITPA02\d\chem\hp4.i\41113d.b\med500.m
 Meth Date : 13-Nov-2000 10:54 dudeck Quant Type: ISTD
 Cal Date : 13-NOV-2000 08:52 Cal File: 2A41113.D
 Als bottle: 5 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 4.04
 Processing Host: PITPC077

K #113

Concentration Formula: Amt * DF * /Vi*Vo/Ws*Vt/Va

Name	Value	Description
DF	1.000	Dilution Factor
Vi	5.000	Injection Volume
Vo	5.000	Extraction Solvent Volume
Ws	5.000	Sample Weight
Vt	5.000	Final Volume
Va	0.100	Aliquot Volume

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	-	7.004	6.999	(1.000)	726875	250.000	
* 69 Chlorobenzene-d5	119		10.124	10.125	(1.000)	174170	250.000	
* 92 1,4-Dichlorobenzene-d4	152		12.459	12.454	(1.000)	215476	250.000	
\$ 39 Dibromofluoromethane	113		6.286	6.288	(0.898)	310854	500.000	494.1
\$ 43 1,2-Dichloroethane-d4	65		6.688	6.683	(0.955)	281415	500.000	472.4
\$ 59 Toluene-d8	98		8.652	8.647	(0.855)	1291720	500.000	486.7
\$ 80 Bromofluorobenzene	95		11.310	11.305	(1.117)	397376	500.000	460.3
1 Dichlorodifluoromethane	85		1.452	1.447	(0.207)	213588	500.000	526.1
2 Chloromethane	50		1.640	1.642	(0.234)	406828	500.000	505.2
3 Vinyl Chloride	62		1.744	1.739	(0.249)	362494	500.000	518.7
4 Bromomethane	94		2.060	2.055	(0.294)	48074	500.000	587.8
5 Chloroethane	64		2.157	2.158	(0.308)	47353	500.000	504.2
6 Trichlorofluoromethane	101		2.376	2.353	(0.339)	207395	500.000	745.8

674 1017

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
12 1,1-Dichloroethene	96	3.045	3.022	(0.435)	173312	500.000	520.2
13 Acetone	43	3.300	3.314	(0.471)	67785	500.000	200.3
15 Carbon Disulfide	76	3.282	3.259	(0.469)	474579	500.000	542.3
18 Methylene Chloride	84	3.848	3.831	(0.549)	204230	500.000	513.3
19 trans-1,2-Dichloroethene	96	4.188	4.177	(0.598)	305934	500.000	512.5
20 Methyl tert-butyl ether	73	4.231	4.232	(0.604)	676103	500.000	504.8
24 1,1-Dichloroethane	63	4.888	4.883	(0.698)	578522	500.000	503.4
27 2,2-Dichloropropane	77	5.630	5.625	(0.804)	431998	500.000	529.7
28 cis-1,2-dichloroethene	96	5.684	5.680	(0.812)	383132	500.000	501.6
M 29 1,2-Dichloroethene (total)	96				689066	1000.00	1013
30 Bromochloromethane	128	5.982	5.978	(0.854)	181085	500.000	491.0
31 2-Butanone	43	5.788	5.795	(0.826)	154608	500.000	487.6
37 Chloroform	83	6.092	6.087	(0.870)	497058	500.000	494.8
38 1,1,1-Trichloroethane	97	6.226	6.221	(0.889)	449328	500.000	516.5
40 1,1-Dichloropropene	75	6.426	6.415	(0.918)	298454	500.000	501.3
41 Carbon Tetrachloride	117	6.371	6.361	(0.910)	393600	500.000	530.1
42 Benzene	78	6.651	6.646	(0.950)	1257778	500.000	467.9
45 1,2-Dichloroethane	62	6.773	6.774	(0.967)	333936	500.000	471.5
47 Trichloroethene	130	7.387	7.382	(1.055)	393380	500.000	491.4
49 1,2-Dichloropropane	63	7.679	7.674	(1.096)	357722	500.000	483.3
50 Dibromomethane	93	7.801	7.796	(1.114)	181623	500.000	491.5
53 Bromodichloromethane	83	7.971	7.966	(1.138)	355204	500.000	511.0
57 cis-1,3-Dichloropropene	75	8.439	8.434	(1.205)	518249	500.000	512.5
58 4-Methyl-2-Pentanone	43	8.609	8.611	(0.850)	295652	500.000	508.9
60 Toluene	91	8.719	8.714	(0.861)	1346315	500.000	469.7
61 trans-1,3-Dichloropropene	75	9.029	9.030	(0.892)	407788	500.000	527.7
63 1,3-Dichloropropane	76	9.376	9.377	(0.926)	469445	500.000	484.2
64 1,1,2-Trichloroethane	97	9.205	9.207	(0.909)	280986	500.000	479.0
65 Tetrachloroethene	164	9.242	9.237	(0.913)	300711	500.000	491.6
66 2-Hexanone	43	9.449	9.450	(0.933)	186034	500.000	490.2
67 Dibromochloromethane	129	9.564	9.566	(0.945)	284074	500.000	523.4
68 1,2-Dibromoethane	107	9.680	9.681	(0.956)	273500	500.000	485.1
70 Chlorobenzene	112	10.154	10.149	(1.003)	959062	500.000	471.6
71 1,1,1,2-Tetrachloroethane	131	10.239	10.241	(1.011)	282837	500.000	478.2
72 Ethylbenzene	106	10.233	10.234	(1.011)	481501	500.000	474.8
73 m + p-Xylene	106	10.361	10.356	(1.023)	1052987	1000.00	908.0
74 Xylene-o	106	10.756	10.751	(1.062)	538875	500.000	466.7
M 75 Xylenes (total)	106				1591862	500.000	1378
76 Styrene	104	10.780	10.782	(1.065)	860216	500.000	456.1
77 Bromoform	173	10.981	10.982	(1.085)	159846	500.000	531.3
78 Isopropylbenzene	105	11.109	11.110	(1.097)	1362343	500.000	470.6
79 Bromobenzene	156	11.443	11.445	(0.918)	360725	500.000	479.6
81 n-Propylbenzene	120	11.522	11.524	(0.925)	405954	500.000	486.4
82 2-Chlorotoluene	126	11.632	11.627	(0.934)	316723	500.000	474.7
83 1,1,1,2,2-Tetrachloroethane	83	11.486	11.487	(0.922)	250939	500.000	471.3
84 1,2,3-Trichloropropane	110	11.535	11.536	(0.926)	81571	500.000	471.7
85 4-Chlorotoluene	126	11.747	11.749	(0.943)	293657	500.000	459.5

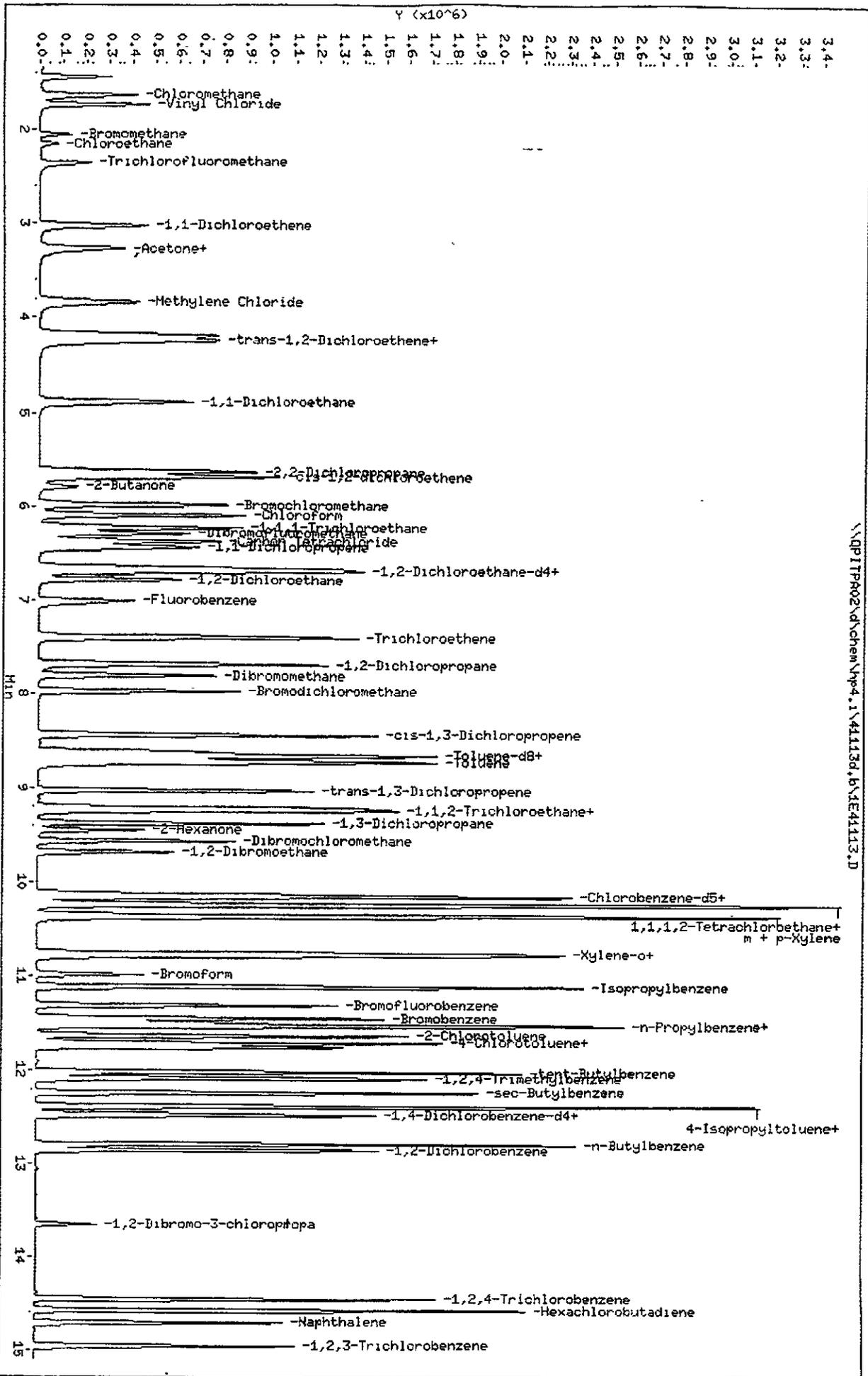
674 1018

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
86 1,3,5-Trimethylbenzene	105	11.705	11.706	(0.939)	953478	500.000	477.3
87 tert-Butylbenzene	119	12.015	12.016	(0.964)	964394	500.000	490.4
88 1,2,4-Trimethylbenzene	105	12.082	12.077	(0.970)	924256	500.000	481.6
89 sec-Butylbenzene	105	12.240	12.235	(0.982)	1323472	500.000	482.0
90 4-Isopropyltoluene	119	12.386	12.381	(0.994)	1108867	500.000	485.4
91 1,3-Dichlorobenzene	146	12.386	12.381	(0.994)	566126	500.000	455.3
93 1,4-Dichlorobenzene	146	12.483	12.478	(1.002)	567494	500.000	460.0
94 n-Butylbenzene	91	12.793	12.795	(1.027)	1039993	500.000	501.4
95 1,2-Dichlorobenzene	146	12.854	12.856	(1.032)	554517	500.000	468.1
96 1,2-Dibromo-3-chloropropane	157	13.657	13.658	(1.096)	47586	500.000	540.6
97 1,2,4-Trichlorobenzene	180	14.460	14.461	(1.161)	352512	500.000	504.8
98 Hexachlorobutadiene	225	14.581	14.577	(1.170)	274767	500.000	499.8
99 Naphthalene	128	14.709	14.710	(1.181)	556548	500.000	522.5
100 1,2,3-Trichlorobenzene	180	14.958	14.960	(1.201)	237565	500.000	479.7

Data File: \\NPITP002\chem\hpd.1\41113d.b\1E4113.D
Date: 13-NOV-2000 07:42
Client ID: vstd200
Sample Info: vstd200 Bml
Volume Injected (ul): 5.0
Column phase: DB 624

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

\\NPITP002\chem\hpd.1\41113d.b\1E4113.D



674 1020

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\41113d.b\1E41113.D
 Lab Smp Id: vstd200 Client Smp ID: vstd200
 Inj Date : 13-NOV-2000 07:42
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd200 5ml
 Misc Info : vstd200,41113d.b, *K_u113*
 Comment :
 Method : \\QPITPA02\d\chem\hp4.i\41113d.b\med500.m
 Meth Date : 13-Nov-2000 10:55 dudeckk Quant Type: ISTD
 Cal Date : 13-NOV-2000 08:52 Cal File: 2A41113.D
 Als bottle: 6 Calibration Sample, Level: 5
 Dil Factor: 1.00000 Compound Sublist: 2-padep.sub
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC077

Concentration Formula: Amt * DF * /Vi*Vo/Ws*Vt/Va

Name	Value	Description
DF	1.000	Dilution Factor
Vi	5.000	Injection Volume
Vo	5.000	Extraction Solvent Volume
Ws	5.000	Sample Weight
Vt	5.000	Final Volume
Va	0.100	Aliquot Volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	CN-COL (ng)
* 46 Fluorobenzene	96	7.005	6.999	(1.000)	639683	250.000	
* 69 Chlorobenzene-d5	119	10.124	10.125	(1.000)	169954	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.460	12.454	(1.000)	148207	250.000	
\$ 39 Dibromofluoromethane	113	6.287	6.288	(0.898)	475523	1000.00	858.8
\$ 43 1,2-Dichloroethane-d4	65	6.689	6.683	(0.955)	398516	1000.00	760.2
\$ 59 Toluene-d8	98	8.653	8.647	(0.855)	2006720	1000.00	774.9
\$ 80 Bromofluorobenzene	95	11.310	11.305	(1.117)	539188	1000.00	640.0
1 Dichlorodifluoromethane	85	1.446	1.447	(0.207)	378839	1000.00	1060
2 Chloromethane	50	1.641	1.642	(0.234)	748192	1000.00	1056
3 Vinyl Chloride	62	1.738	1.739	(0.248)	654555	1000.00	1064
4 Bromomethane	94	2.055	2.055	(0.293)	90101	1000.00	1252
5 Chloroethane	64	2.158	2.158	(0.308)	88703	1000.00	1073
6 Trichlorofluoromethane	101	2.359	2.353	(0.337)	256274	1000.00	1047

674 1021

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
12 1,1-Dichloroethene	96		3.028	3.022	{0.432}	318396	1000.00	1086	
13 Acetone	43		3.307	3.314	{0.472}	117203	1000.00	393.5	
15 Carbon Disulfide	76		3.265	3.259	{0.466}	864796	1000.00	1123	
18 Methylene Chloride	84		3.836	3.831	{0.548}	366746	1000.00	1047	
19 trans-1,2-Dichloroethene	96		4.183	4.177	{0.597}	549226	1000.00	1046	
20 Methyl tert-butyl ether	73		4.232	4.232	{0.604}	1192865	1000.00	1012	
24 1,1-Dichloroethane	63		4.882	4.883	{0.697}	1045088	1000.00	1033	
27 2,2-Dichloropropane	77		5.630	5.625	{0.804}	789918	1000.00	1100	
28 cis-1,2-dichloroethene	96		5.685	5.680	{0.812}	670542	1000.00	997.4	
M 29 1,2-Dichloroethene (total)	96					1219768	2000.00	2037	
30 Bromochloromethane	128		5.983	5.978	{0.854}	323854	1000.00	997.9	
31 2-Butanone	43		5.788	5.795	{0.826}	268132	1000.00	961.0	
37 Chloroform	83		6.093	6.087	{0.870}	859346	1000.00	972.0	
38 1,1,1-Trichloroethane	97		6.220	6.221	{0.888}	771530	1000.00	1008	
40 1,1-Dichloropropene	75		6.433	6.415	{0.918}	515904	1000.00	984.6	
41 Carbon Tetrachloride	117		6.366	6.361	{0.909}	689145	1000.00	1054	
42 Benzene	78		6.652	6.646	{0.950}	2137384	1000.00	903.6	
45 1,2-Dichloroethane	62		6.774	6.774	{0.967}	530707	1000.00	851.5	
47 Trichloroethene	130		7.394	7.382	{1.056}	718657	1000.00	1020	
49 1,2-Dichloropropane	63		7.680	7.674	{1.096}	652373	1000.00	1001	
50 Dibromomethane	93		7.801	7.796	{1.114}	314345	1000.00	966.6	
53 Bromodichloromethane	83		7.972	7.966	{1.138}	631698	1000.00	1033	
57 cis-1,3-Dichloropropene	75		8.440	8.434	{1.205}	961475	1000.00	1080	
58 4-Methyl-2-Pentanone	43		8.610	8.611	{0.850}	535797	1000.00	945.1	
60 Toluene	91		8.720	8.714	{0.861}	2138002	1000.00	764.4	
61 trans-1,3-Dichloropropene	75		9.030	9.030	{0.892}	689735	1000.00	914.8	
63 1,3-Dichloropropane	76		9.376	9.377	{0.926}	795842	1000.00	841.3	
64 1,1,1-Trichloroethane	97		9.206	9.207	{0.909}	477350	1000.00	834.0	
65 Tetrachloroethene	164		9.243	9.237	{0.913}	505206	1000.00	846.4	
66 2-Hexanone	43		9.449	9.450	{0.933}	328998	1000.00	888.4	
67 Dibromochloromethane	129		9.565	9.566	{0.945}	529293	1000.00	999.4	
68 1,2-Dibromoethane	107		9.681	9.681	{0.956}	472849	1000.00	859.4	
70 Chlorobenzene	112		10.155	10.149	{1.003}	1714551	2000.00	864.0	
71 1,1,1,2-Tetrachloroethane	131		10.240	10.241	{1.011}	466267	1000.00	807.8	
72 Ethylbenzene	106		10.234	10.234	{1.011}	775394	1000.00	783.6	
73 m + p-Xylene	106		10.362	10.356	{1.023}	1476519	2000.00	1305	
74 Xylene-o	106		10.757	10.751	{1.062}	826515	1000.00	733.5	
M 75 Xylenes (total)	106					2303034	1000.00	2044	
76 Styrene	104		10.781	10.782	{1.065}	1205446	1000.00	655.1	
77 Bromoform	173		10.982	10.982	{1.085}	259844	1000.00	885.0	
78 Isopropylbenzene	105		11.110	11.110	{1.097}	2012677	1000.00	712.5	
79 Bromobenzene	156		11.444	11.445	{0.918}	572759	1000.00	1107	
81 n-Propylbenzene	120		11.523	11.524	{0.925}	588953	1000.00	1026	
82 2-Chlorotoluene	126		11.633	11.627	{0.934}	433508	1000.00	944.7	
83 1,1,1,2,2-Tetrachloroethane	83		11.487	11.487	{0.922}	382678	1000.00	1045	
84 1,2,3-Trichloropropane	110		11.535	11.536	{0.926}	110017	1000.00	924.9	
85 4-Chlorotoluene	126		11.748	11.749	{0.943}	358529	1000.00	815.6	

674 1022

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
86 1,3,5-Trimethylbenzene	105	11.706	11.706	(0.939)	1247100	1000.00	907.7
87 tert-Butylbenzene	119	12.016	12.016	(0.964)	1336888	1000.00	988.3
88 1,2,4-Trimethylbenzene	105	12.083	12.077	(0.970)	1197386	1000.00	907.1
89 sec-Butylbenzene	105	12.235	12.235	(0.982)	1682726	1000.00	891.0
90 4-Isopropyltoluene	119	12.387	12.381	(0.994)	1363619	1000.00	867.9
91 1,3-Dichlorobenzene	146	12.381	12.381	(0.994)	737653	1000.00	862.5
93 1,4-Dichlorobenzene	146	12.484	12.478	(1.002)	771834	1000.00	909.6
94 n-Butylbenzene	91	12.794	12.795	(1.027)	1516729	1000.00	1063
95 1,2-Dichlorobenzene	146	12.855	12.856	(1.032)	812949	1000.00	997.7
96 1,2-Dibromo-3-chloropropane	157	13.658	13.658	(1.096)	93777	1000.00	1549
97 1,2,4-Trichlorobenzene	180	14.460	14.461	(1.161)	691018	1000.00	1439
98 Hexachlorobutadiene	225	14.582	14.577	(1.170)	528785	1000.00	1398
99 Naphthalene	128	14.710	14.710	(1.181)	1026604	1000.00	1401
100 1,2,3-Trichlorobenzene	180	14.959	14.960	(1.201)	455141	1000.00	1336

674 1023

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: METHODS

Instrument ID: HP4

Calibration Date: 11/22/00

Time: 0638

Lab File ID: CC41122

Init. Calib. Date(s): 11/13/00

11/13/00

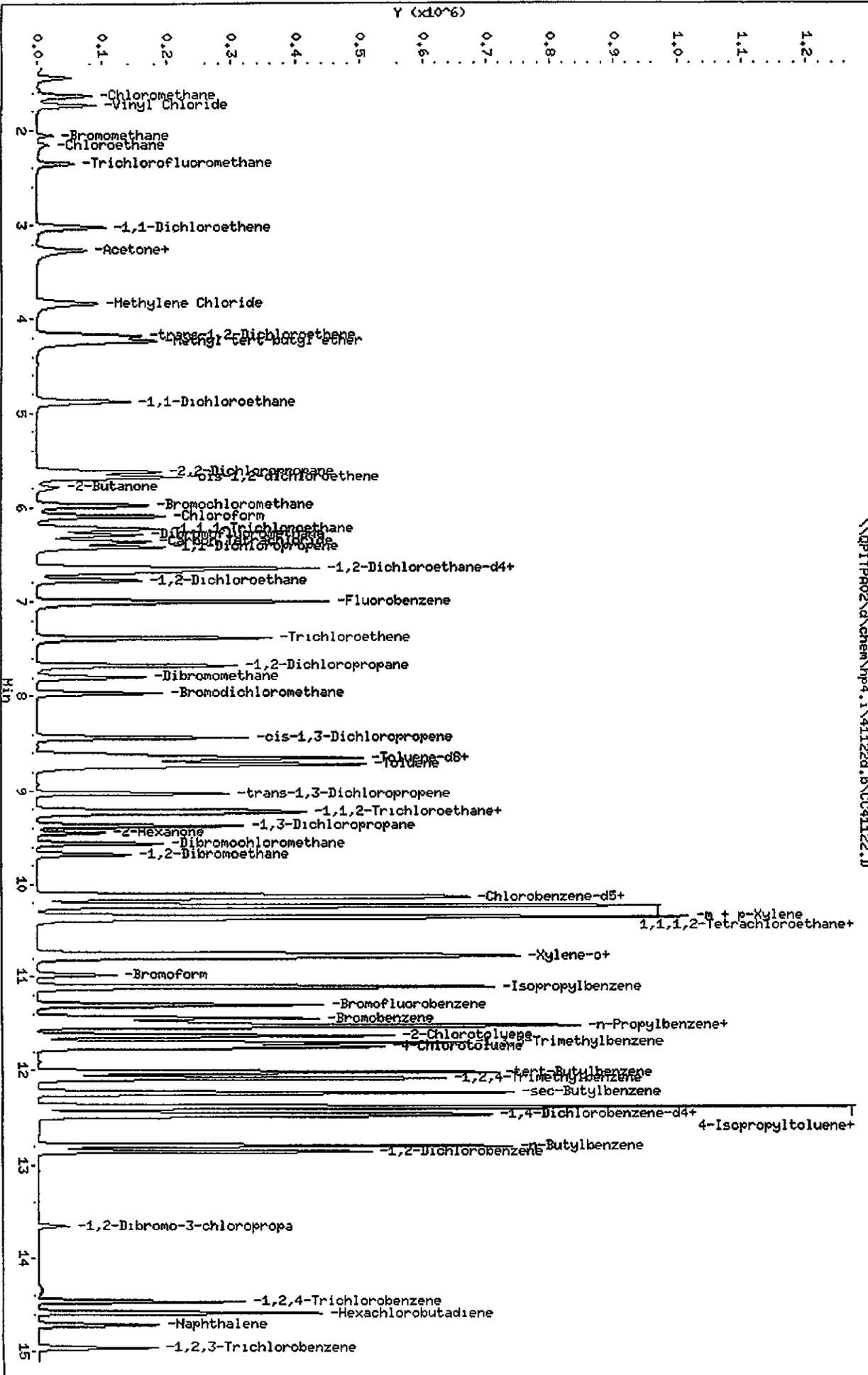
Heated Purge: (Y/N) N

Init. Calib. Times: 0626

0852

GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.140	0.121	0.01	13.6	50.0
Chloromethane	0.277	0.261	0.1	5.8	50.0
Vinyl Chloride	0.240	0.234	0.01	2.5	20.0
Bromomethane	0.028	0.030	0.01	7.1	50.0
Chloroethane	0.032	0.036	0.01	12.5	50.0
Trichlorofluoromethane	0.096	0.098	0.01	2.1	50.0
1,1-Dichloroethene	0.114	0.123	0.01	7.9	20.0
Methylene Chloride	0.137	0.144	0.01	5.1	50.0
trans-1,2-Dichloroethene	0.205	0.208	0.01	1.5	50.0
1,1-Dichloroethane	0.395	0.394	0.1	0.2	50.0
cis-1,2-dichloroethene	0.263	0.256	0.01	2.7	50.0
Chloroform	0.345	0.340	0.01	1.4	20.0
Bromochloromethane	0.127	0.122	0.01	3.9	50.0
1,1,1-Trichloroethane	0.299	0.298	0.01	0.3	50.0
Carbon Tetrachloride	0.255	0.253	0.01	0.8	50.0
1,2-Dichloroethane	0.244	0.253	0.01	3.7	50.0
Benzene	0.924	0.932	0.01	0.9	50.0
Trichloroethene	0.275	0.273	0.01	0.7	50.0
1,2-Dichloropropane	0.255	0.253	0.01	0.8	20.0
Bromodichloromethane	0.239	0.246	0.01	2.9	50.0
cis-1,3-Dichloropropene	0.348	0.347	0.01	0.3	50.0
Toluene	4.114	4.174	0.01	1.4	20.0
trans-1,3-Dichloropropene	1.109	1.148	0.01	3.5	50.0
1,1,2-Trichloroethane	0.842	0.845	0.01	0.4	50.0
Tetrachloroethene	0.878	0.869	0.01	1.0	50.0
Dibromochloromethane	0.779	0.801	0.01	2.8	50.0
Chlorobenzene	2.919	2.884	0.3	1.2	50.0
Ethylbenzene	1.455	1.514	0.01	4.0	20.0
Styrene	2.707	2.954	0.01	9.1	50.0
Bromoform	0.432	0.472	0.1	9.2	50.0
1,1,2,2-Tetrachloroethane	0.618	0.572	0.3	7.4	50.0
1,3-Dichlorobenzene	1.443	1.434	0.01	0.6	50.0
1,4-Dichlorobenzene	1.431	1.396	0.01	2.4	50.0
1,2-Dichlorobenzene	1.374	1.322	0.01	3.8	50.0
Dibromomethane	0.127	0.127	0.01	0.0	50.0
1,2-Dibromoethane	0.809	0.815	0.01	0.7	50.0
1,1,1,2-Tetrachloroethane	0.849	0.896	0.01	5.5	50.0



Data File: \\QPITPA02\chem\hp4.1\41122d.b\CC41122.D
 Date: 22-NOV-2000 06:38
 Client ID: vstd50
 Sample Info: vstd50 Sm1
 Volume Injected (uL): 5.0
 Column phase: DB 624

\\QPITPA02\chem\hp4.1\41122d.b\CC41122.D

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

STL-Pittsburgh

VOLATILE REPORT SW-846 Method
 Data file : \\QPITPA02\d\chem\hp4.i\41122d.b\CC41122.D
 Lab Smp Id: vstd50 Client Smp ID: vstd50
 Inj Date : 22-NOV-2000 06:38
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd50 5ml
 Misc Info : vstd50,41122d.b,8260bh2o.M, ! 5 11/22/00
 Comment :
 Method : \\QPITPA02\D\chem\hp4.i\41122d.b\8260bh2o.m
 Meth Date : 22-Nov-2000 07:05 dudeck Quant Type: ISTD
 Cal Date : 13-NOV-2000 08:52 Cal File: 2A41113.D
 Als bottle: 4 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 4.04
 Processing Host: PITPC077

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.998	6.998	(1.000)	553396	250.000		
* 69 Chlorobenzene-d5	119	10.124	10.124	(1.000)	140672	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.459	12.459	(1.000)	205235	250.000		
\$ 39 Dibromofluoromethane	113	6.287	6.287	(0.898)	121204	250.000	253.0	
\$ 43 1,2-Dichloroethane-d4	65	6.682	6.682	(0.955)	120312	250.000	265.3	
\$ 59 Toluene-d8	98	8.646	8.646	(0.854)	535079	250.000	249.6	
\$ 80 Bromofluorobenzene	95	11.310	11.310	(1.117)	183337	250.000	262.9	
1 Dichlorodifluoromethane	85	1.446	1.446	(0.207)	67062	250.000	217.0	
2 Chloromethane	50	1.634	1.634	(0.234)	144346	250.000	235.4	
3 Vinyl Chloride	62	1.738	1.738	(0.248)	129276	250.000	243.0	
4 Bromomethane	94	2.054	2.054	(0.294)	16469	250.000	264.5	
5 Chloroethane	64	2.157	2.157	(0.308)	19888	250.000	278.1	
6 Trichlorofluoromethane	101	2.352	2.352	(0.336)	54176	250.000	255.9	
12 1,1-Dichloroethene	96	3.021	3.021	(0.432)	67879	250.000	267.6	
13 Acetone	43	3.307	3.307	(0.473)	35078	250.000	136.1	

674 1027

Data File: \\QPITPA02\d\chem\hp4.i\41122d.b\CC41122.D
Report Date: 22-Nov-2000 07:05

Page 2

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
-----	----	==	=====	=====	-----	-----	-----
15 Carbon Disulfide	76	3.264	3 264	(0.466)	175174	250.000	262.9
18 Methylene Chloride	84	3.830	3.830	(0.547)	79597	250.000	262.8
19 trans-1,2-Dichloroethene	96	4.176	4 176	(0.597)	115204	250 000	253 5
20 Methyl tert-butyl ether	73	4.225	4.225	(0.604)	260289	250.000	255 3
24 1,1-Dichloroethane	63	4 882	4.882	(0.698)	218319	250.000	249.5
27 2,2-Dichloropropane	77	5.624	5.624	(0.804)	149865	250.000	241.4
28 cis-1,2-dichloroethene	96	5.679	5.679	(0.811)	141789	250.000	243.8
M 29 1,2-Dichloroethene (total)	100				256993	500.000	496.1
30 Bromochloromethane	128	5.977	5.977	(0 854)	67422	250.000	240.2
31 2-Butanone	43	5.788	5.788	(0.827)	57413	250 000	237.9
37 Chloroform	83	6.086	6.086	(0.870)	188447	250 000	246.4
38 1,1,1-Trichloroethane	97	6.220	6.220	(0 889)	164798	250.000	248.8
40 1,1 Dichloropropane	75	6.414	6.414	(0.917)	112702	250.000	248.6
41 Carbon Tetrachloride	117	6.360	6 360	(0.909)	140273	250.000	248.1
42 Benzene	78	6.645	6.645	(0.950)	515629	250.000	252.0
45 1,2-Dichloroethane	62	6.773	6.773	(0.968)	139946	250.000	259.6
47 Trichloroethene	130	7.381	7 381	(1.055)	151290	250.000	248.2
49 1,2-Dichloropropane	63	7.673	7.673	(1.096)	139911	250 000	248.3
50 Dibromomethane	93	7.795	7.795	(1.114)	70500	250 000	250.6
53 Bromodichloromethane	83	7.965	7.965	(1.138)	136328	250 000	257.6
57 cis-1,3-Dichloropropene	75	8 433	8.433	(1.205)	192189	250 000	249.6
58 4-Methyl-2-Pentanone	43	8.610	8.610	(0.850)	116735	250 000	248.8
60 Toluene	91	8.713	8.713	(0.861)	587109	250 000	253.6
61 trans-1,3-Dichloropropene	75	9.029	9.029	(0.892)	161465	250 000	258.7
63 1,3-Dichloropropane	76	9.376	9.376	(0.926)	194709	250.000	248.7
64 1,1,2-Trichloroethane	97	9.206	9.206	(0.909)	118880	250 000	250.9
65 Tetrachloroethene	164	9.236	9.236	(0.912)	122291	250.000	247.5
66 2-Hexanone	43	9.449	9.449	(0.933)	73128	250.000	238 6
67 Dibromochloromethane	129	9.565	9.565	(0.945)	112663	250.000	257 0
68 1,2-Dibromoethane	107	9.680	9.680	(0 956)	114673	250.000	251.8
70 Chlorobenzene	112	10.148	10 148	(1.002)	405634	250.000	247 0
71 1,1,1,2-Tetrachloroethane	131	10.240	10 240	(1.011)	125975	250.000	263.7
72 Ethylbenzene	106	10.233	10.233	(1.011)	212962	250.000	260.0
73 m + p-Xylene	106	10.355	10.355	(1.023)	497356	500 000	531.0
74 Xylene-o	106	10.756	10.756	(1.062)	248410	250.000	266.3
M 75 Xylenes (total)	106				745766	250.000	799.6
76 Styrene	104	10.781	10.781	(1.065)	415539	250 000	272.8
77 Bromoform	173	10.981	10.981	(1.085)	66351	250 000	273.0
78 Isopropylbenzene	105	11.109	11.109	(1.097)	634158	250.000	271.2
79 Bromobenzene	156	11.444	11.444	(0.918)	164982	250.000	230.3
81 n-Propylbenzene	120	11.523	11.523	(0.925)	189490	250.000	238.4
82 2-Chlorotoluene	126	11.632	11.632	(0.934)	154693	250.000	243.4
83 1,1,2,2-Tetrachloroethane	83	11.486	11.486	(0.922)	117468	250 000	231.6
84 1,2,3-Trichloropropane	110	11.535	11.535	(0.926)	39201	250 000	238.0
85 4-Chlorotoluene	126	11.748	11.748	(0.943)	153605	250 000	252.3
86 1,3,5-Trimethylbenzene	105	11.705	11.705	(0.939)	468147	250.000	246.1
87 tert-Butylbenzene	119	12.015	12.015	(0.964)	459308	250 000	245.2

Data File: \\QPITPA02\d\chem\hp4.i\41122d.b\CC41122.D
Report Date: 22-Nov-2000 07:05

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
88 1,2,4-Trimethylbenzene	105	12.076	12.076	(0.969)	453294	250.000	248.0
89 sec-Butylbenzene	105	12.234	12.234	(0.982)	651416	250.000	249.1
90 4-Isopropyltoluene	119	12.386	12.386	(0.994)	547661	250.000	251.7
91 1,3-Dichlorobenzene	146	12.380	12.380	(0.994)	294346	250.000	248.5
93 1,4-Dichlorobenzene	146	12.484	12.484	(1.002)	286432	250.000	243.8
94 n-Butylbenzene	91	12.794	12.794	(1.027)	469287	250.000	237.5
95 1,2-Dichlorobenzene	146	12.855	12.855	(1.032)	271329	250.000	240.5
96 1,2-Dibromo-3-chloropropane	157	13.663	13.663	(1.097)	16887	250.000	201.4
97 1,2,4-Trichlorobenzene	180	14.460	14.460	(1.161)	125340	250.000	188.5
98 Hexachlorobutadiene	225	14.582	14.582	(1.170)	103947	250.000	198.5
99 Naphthalene	128	14.709	14.709	(1.181)	180669	250.000	178.1
100 1,2,3-Trichlorobenzene	180	14.959	14.959	(1.201)	72084	250.000	152.8

674 1029

GC/MS VOLATILE
QC DATA

Data File: \\QPITPA02\D\chem\hp4.1\41113d.b\BF41113.D

Date : 13-NOV-2000 05:33

Client ID: 50NGBFB

Instrument: hp4.1

Sample Info: bfb 1ul inj

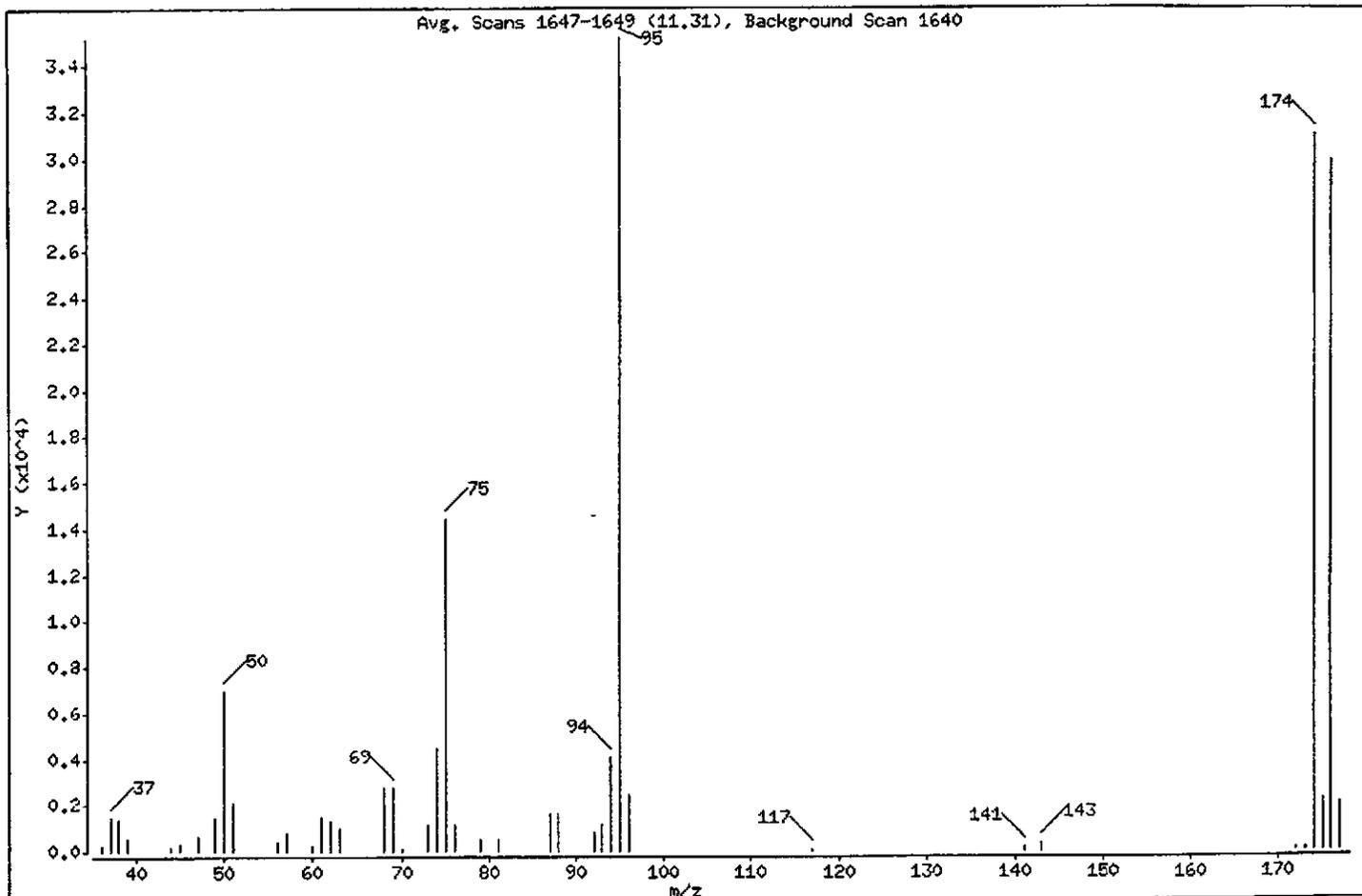
Volume Injected (uL): 1.0

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.81
75	30.00 - 60.00% of mass 95	40.89
96	5.00 - 9.00% of mass 95	6.92
173	Less than 2.00% of mass 174	0.26 (0.30)
174	50.00 - 100.00% of mass 95	87.99
175	5.00 - 9.00% of mass 174	6.24 (7.10)
176	95.00 - 101.00% of mass 174	84.71 (96.27)
177	5.00 - 9.00% of mass 176	5.72 (6.75)

674 1031

Data File: \\QPITPA02\ND\chem\hp4.1\41113d.b\BF41113.D

Page 3

Date : 13-NOV-2000 05:33

Client ID: 50NCBFB

Instrument: hp4.1

Sample Info: bfb 1ul inj

Volume Injected (uL): 1.0

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

Data File: BF41113.D							
Spectrum: Avg. Scans 1647-1649 (11.31), Background Scan 1640							
Location of Maximum: 95.00							
Number of points: 41							
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	276	57.00	801	76.00	1162	141.00	192
37.00	1432	60.00	248	79.00	491	143.00	285
38.00	1384	61.00	1475	81.00	486	172.00	97
39.00	591	62.00	1300	87.00	1612	173.00	93
44.00	191	63.00	934	88.00	1642	174.00	30944
45.00	307	68.00	2720	92.00	775	175.00	2196
47.00	684	69.00	2740	93.00	1145	176.00	29792
49.00	1494	70.00	80	94.00	4037	177.00	2011
50.00	6967	73.00	1123	95.00	35168		
51.00	2094	74.00	4427	96.00	2433		
56.00	389	75.00	14383	117.00	70		

Data File: \\QP1TPA02\chem\hp4.1\4113d.B\F4113.D
Date: 13-NOV-2000 05:33

Client ID: 50MGFB

Sample Info: bfb tul mj

Volume Injected (uL): 1.0

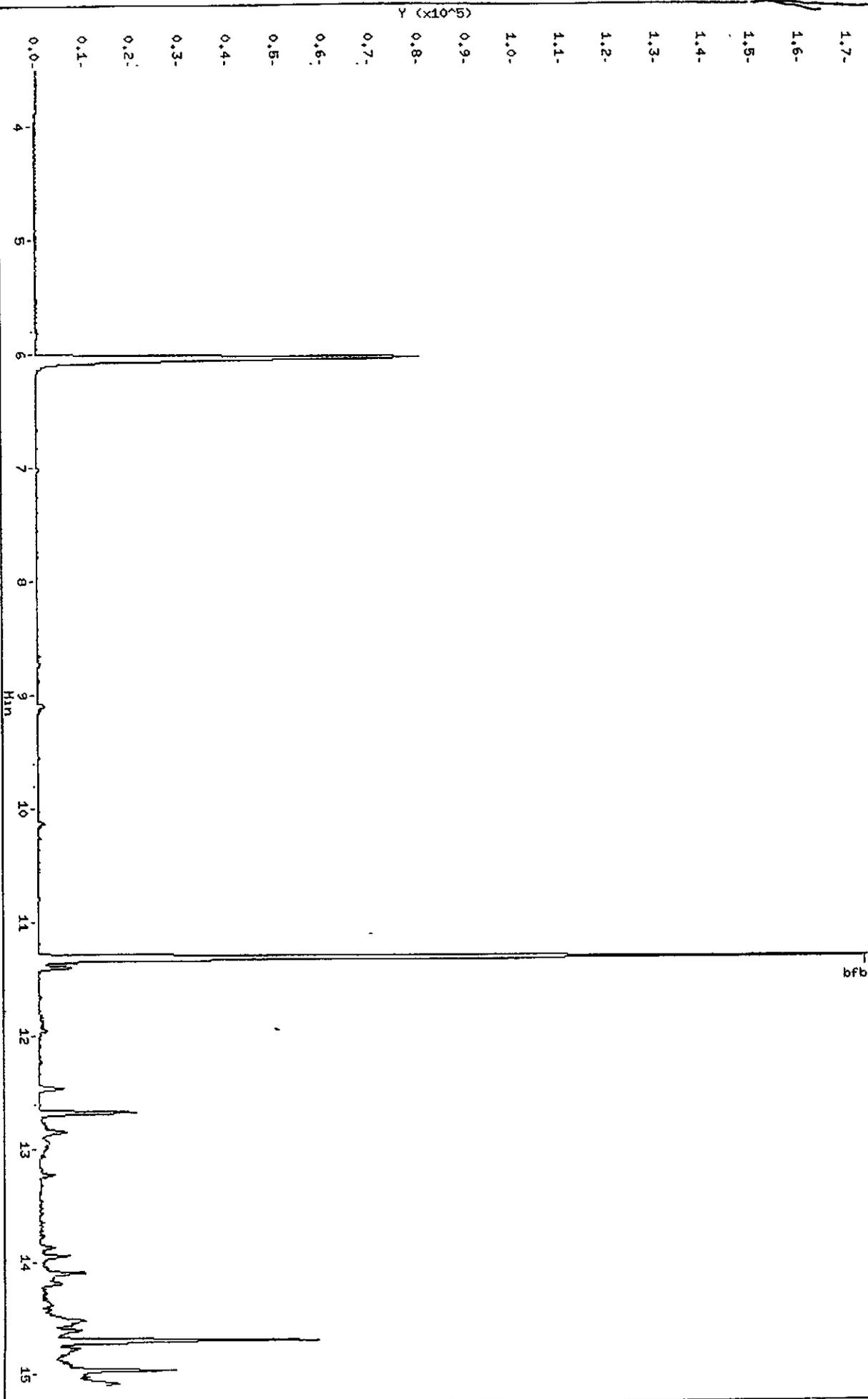
Column Phase: DB624 20m

Instrument: hp4.i

Operator: 16328

Column diameter: 0.18

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6741032

674 1033

Data File: \\QPITPA02\d\chem\hp4.1\41122d.b\BF41122.D

Page 2

Date : 22-NOV-2000 06:09

Client ID: 50NGBFB

Instrument: hp4.i

Sample Info: bfb 1ul inj

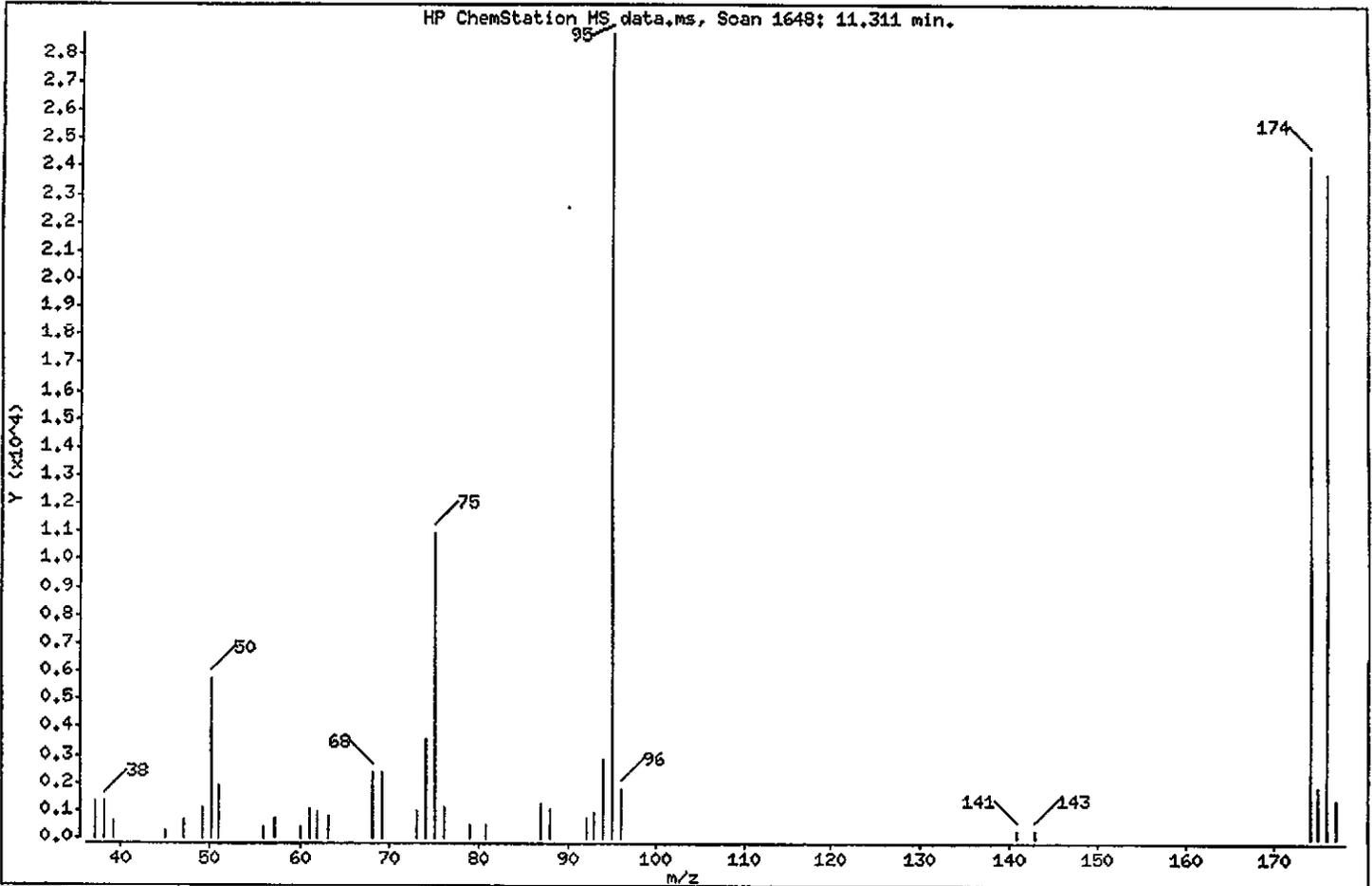
Volume Injected (uL): 1.0

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

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	19.95
75	30.00 - 60.00% of mass 95	38.22
96	5.00 - 9.00% of mass 95	6.16
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	85.04
175	5.00 - 9.00% of mass 174	6.48 (7.62)
176	95.00 - 101.00% of mass 174	82.81 (97.38)
177	5.00 - 9.00% of mass 176	4.84 (5.85)

Data File: \\QPITPA02\d\chem\hp4,i\41122d,b\BF41122.D

Page 3

Date : 22-NOV-2000 06:09

Client ID: 50NCBFB

Instrument: hp4.1

Sample Info: bfb 1ul inj

Volume Injected (uL): 1.0

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

Data File: BF41122.D

Spectrum: HP ChemStation HS data.ms, Scan 1648; 11.311 min.

Location of Maximum: 95.05

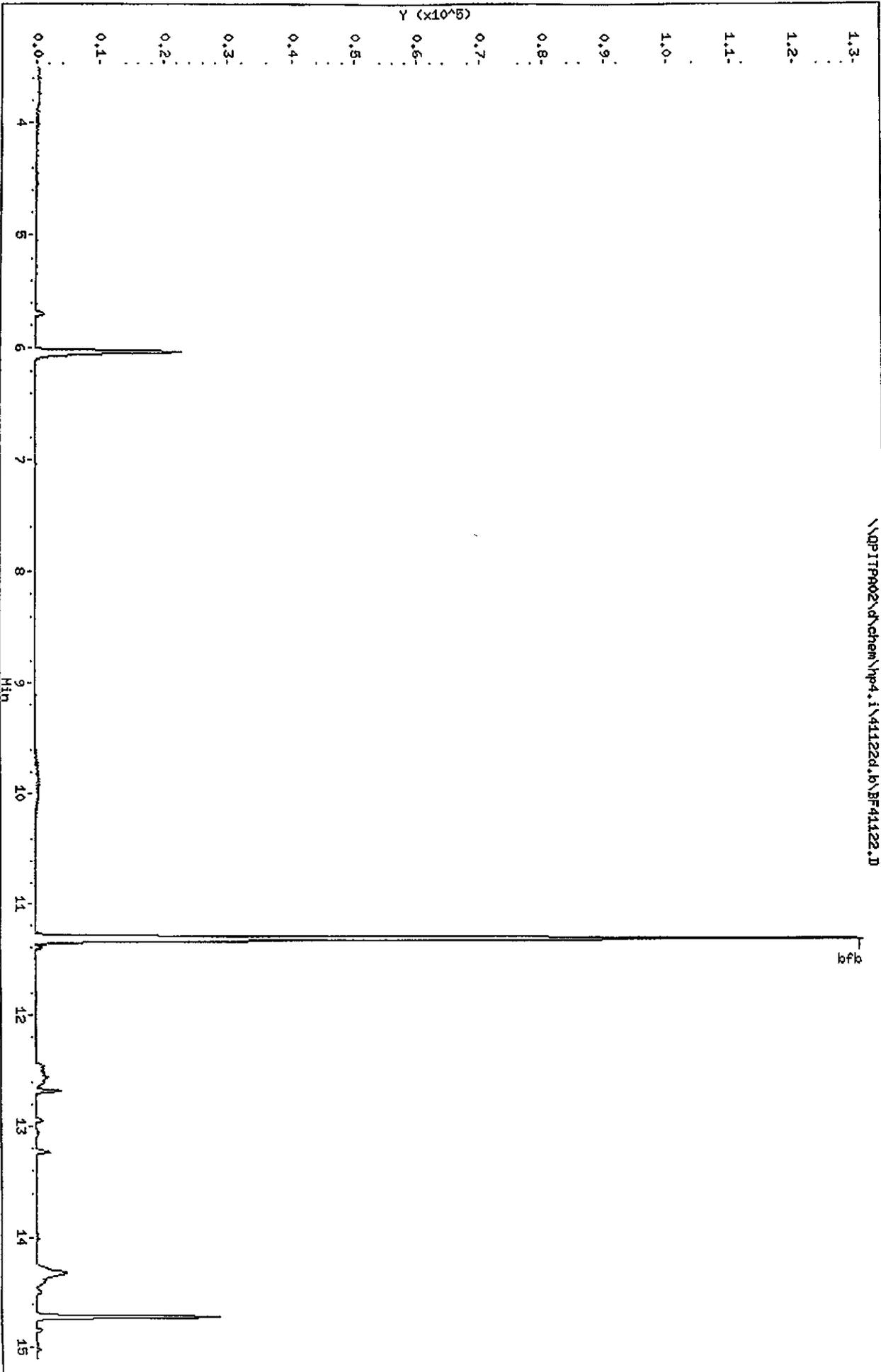
Number of points: 35

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.15	1295	57.05	756	75.05	10975	95.05	28712
38.15	1346	60.05	365	76.05	1097	96.05	1770
39.15	624	61.05	1066	78.95	495	140.95	236
45.05	269	61.95	893	80.85	467	142.95	268
47.05	646	63.05	774	86.95	1229	173.95	24416
49.05	1130	68.05	2398	87.95	1061	174.95	1861
50.05	5729	69.05	2388	92.05	703	175.95	23776
51.05	1896	73.05	994	93.05	943	176.95	1391
55.95	402	74.05	3581	94.05	2814		

Data File: \QPITP902\chem\hp4.1\41122d.b\BF41122.D
 Date : 22-NOV-2000 06:09
 Client ID: 50NGBFB
 Sample Info: bfb 1ul inj
 Volume Injected (uL): 1.0
 Column phase: DB624 20m

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

\QPITP902\chem\hp4.1\41122d.b\BF41122.D



UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK200000 263

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 11/07/00

Work Order: DP64H1AA

Date Extracted: 11/22/00

Dilution factor: 1

Date Analyzed: 11/22/00

QC Batch: 0327161

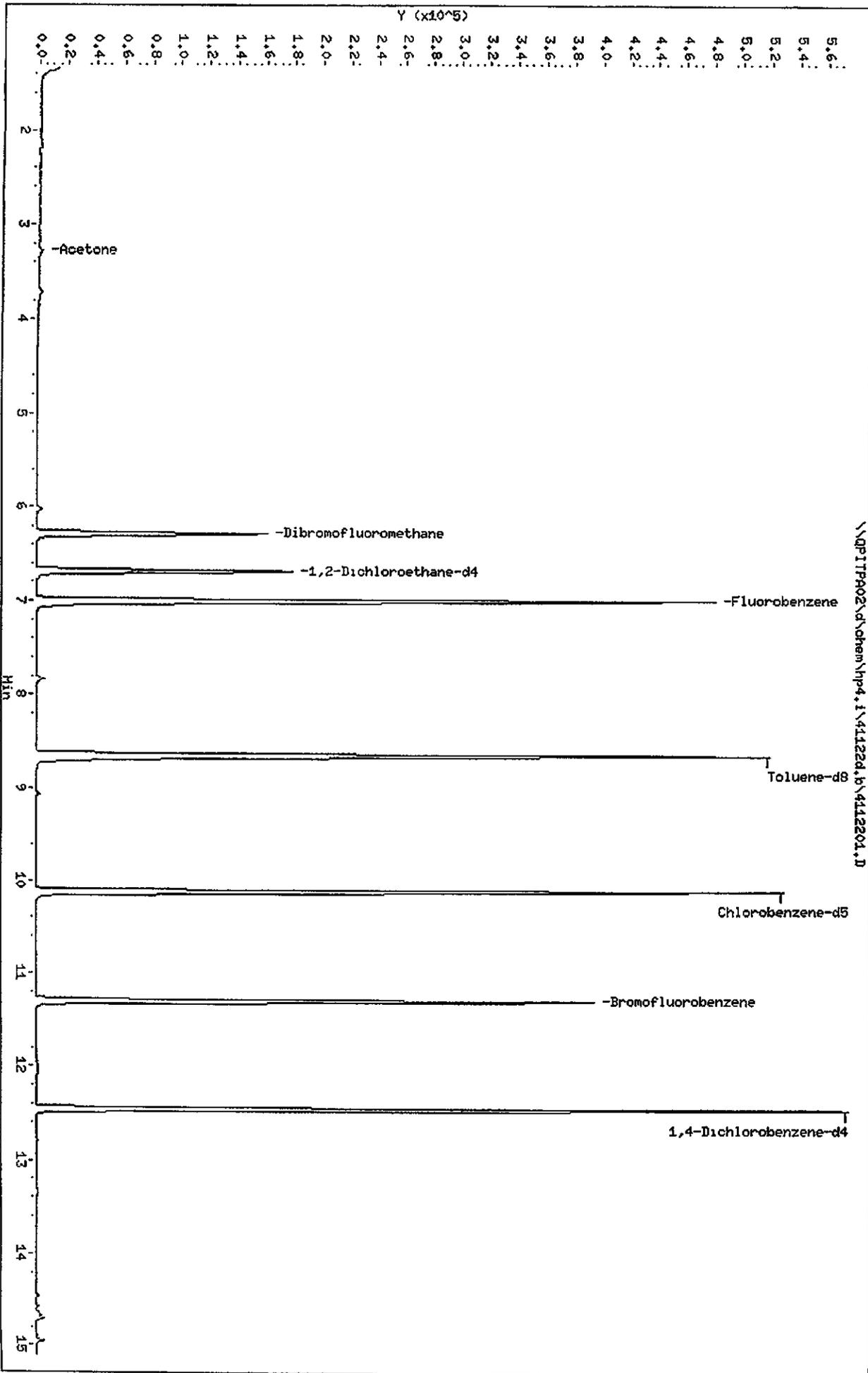
Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L Q
71-43-2	Benzene	0.050	U
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

674 1037

Data File: \\QPI1TPA02\chem\hpa4.i\411224.b\4112201.D
Date: 22-NOV-2000 07:37
Client ID:
Sample Info: pb blk (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column phase: DB 624

Instrument: hpa4.i
Operator: 16328
Column diameter: 0.18



STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\41122d.b\4112201.D
 Lab Smp Id: vstd50 bonus
 Inj Date : 22-NOV-2000 07:37
 Operator : 16328 Inst ID: hp4.i
 Smp Info : pb blk (1ml/10ml)/5ml
 Misc Info : vstd50 bonus,41122d.b,8260bh2o.M,
 Comment : *K₁₁ 24.0*
 Method : \\QPITPA02\d\chem\hp4.i\41122d.b\8260bh2o.m
 Meth Date : 22-Nov-2000 09:19 dudeckk Quant Type: ISTD
 Cal Date : 13-NOV-2000 08:52 Cal File: 2A41113.D
 Als bottle: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 1-tcl.sub
 Target Version: 4.04
 Processing Host: PITPC077

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

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

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	7.005	6.998	(1.000)	580559	250.000	
* 69 Chlorobenzene-d5	119	10.118	10.124	(1.000)	134282	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.460	12.459	(1.000)	207351	250.000	
\$ 39 Dibromofluoromethane	113	6.287	6.287	(0.898)	121544	241.880	48.38
\$ 43 1,2-Dichloroethane-d4	65	6.688	6.682	(0.955)	131315	275.992	55.20
\$ 59 Toluene-d8	98	8.647	8.646	(0.855)	506804	247.698	49.54
\$ 80 Bromofluorobenzene	95	11.304	11.310	(1.117)	171223	257.244	51.45
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected.					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected.					
11 Acrolein	56	Compound Not Detected.					
12 1,1-Dichloroethene	96	Compound Not Detected.					

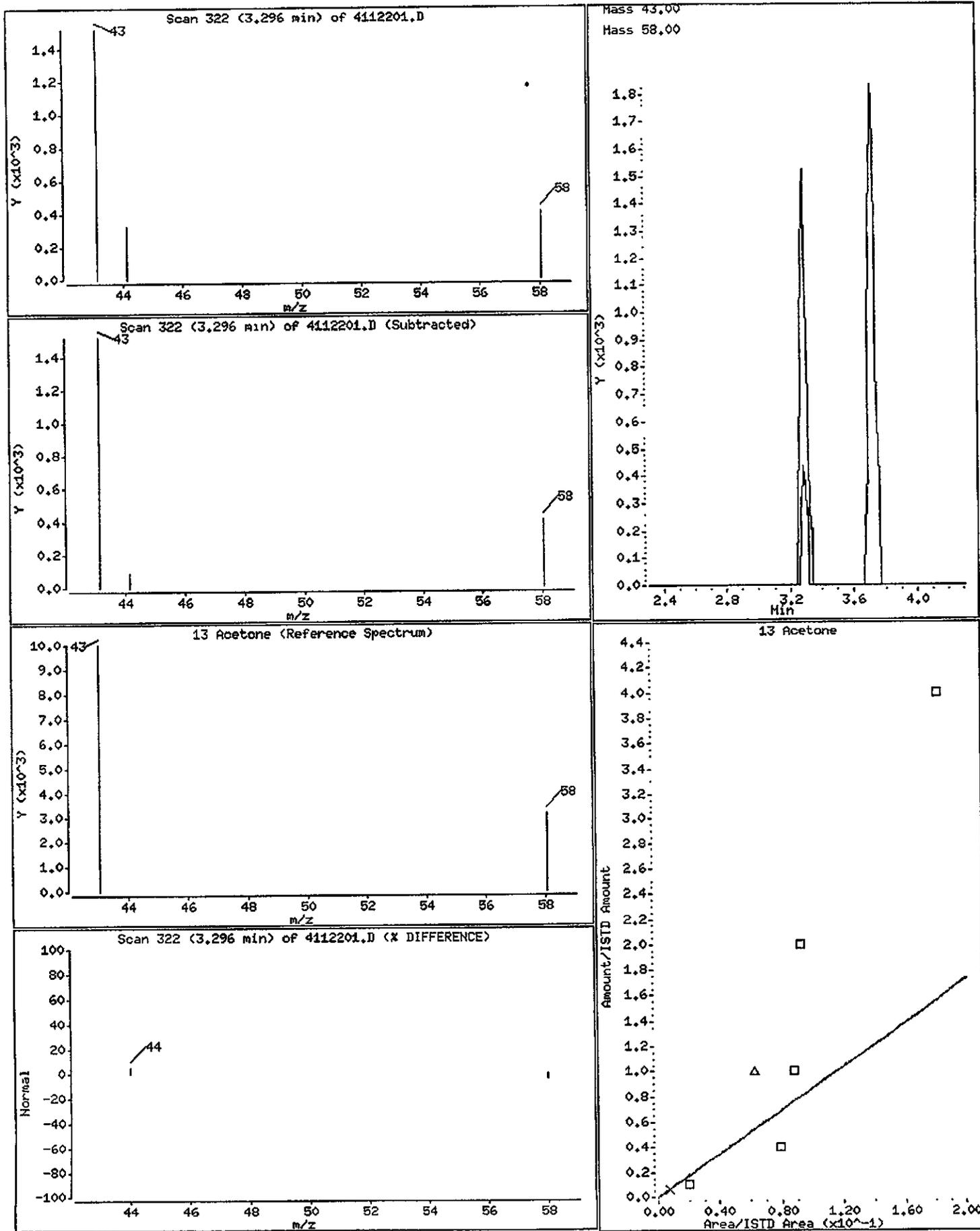
674 1039

Data File: \\QPITPA02\d\chem\hp4.i\41122d.b\4112201.D
 Report Date: 22-Nov-2000 09:26

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
15 Carbon Disulfide	76						
13 Acetone	43	3.295	3.307	(0.470)	4223	15.6217	3.124
18 Methylene Chloride	84						
19 trans-1,2-Dichloroethene	96						
20 Methyl tert-butyl ether	73						
22 Acrylonitrile	53						
24 1,1-Dichloroethane	63						
28 cis-1,2-dichloroethene	96						
M 29 1,2-Dichloroethene (total)	100						
30 Bromochloromethane	128						
31 2-Butanone	43						
37 Chloroform	83						
38 1,1,1-Trichloroethane	97						
41 Carbon Tetrachloride	117						
42 Benzene	78						
45 1,2-Dichloroethane	62						
47 Trichloroethene	130						
49 1,2-Dichloropropane	63						
50 Dibromomethane	93						
53 Bromodichloromethane	83						
56 2-Chloroethyl vinyl ether	63						
57 cis-1,3-Dichloropropene	75						
58 4-Methyl-2-Pentanone	43						
60 Toluene	91						
61 trans-1,3-Dichloropropene	75						
64 1,1,2-Trichloroethane	97						
65 Tetrachloroethene	164						
66 2-Hexanone	43						
67 Dibromochloromethane	129						
68 1,2-Dibromoethane	107						
70 Chlorobenzene	112						
71 1,1,1,2-Tetrachloroethane	131						
72 Ethylbenzene	106						
73 m + p-Xylene	106						
74 Xylene-o	106						
M 75 Xylenes (total)	106						
76 Styrene	104						
77 Bromoform	173						
78 Isopropylbenzene	105						
83 1,1,2,2-Tetrachloroethane	83						
91 1,3-Dichlorobenzene	146						
93 1,4-Dichlorobenzene	146						
95 1,2-Dichlorobenzene	146						

13 Acetone



674 1041

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

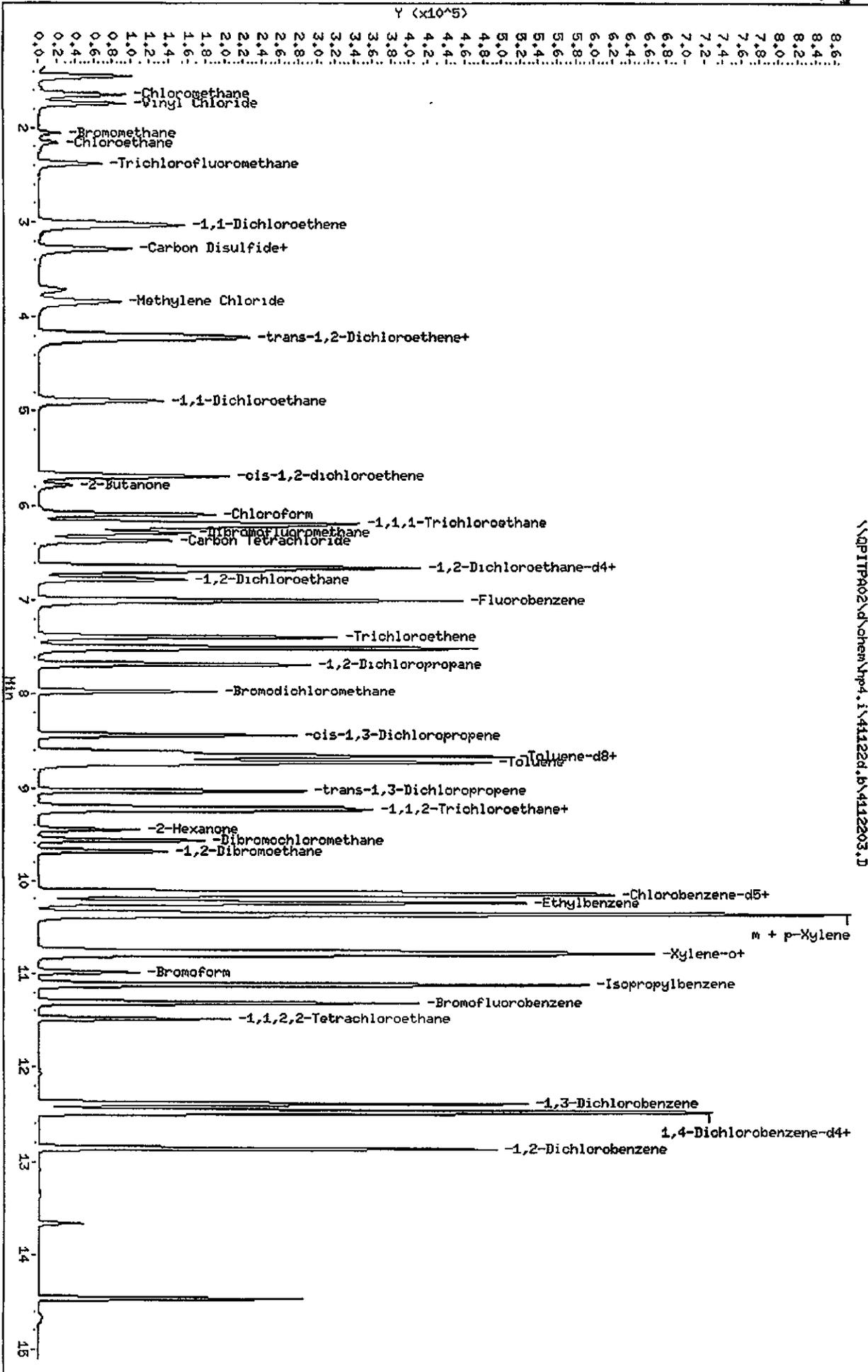
Matrix: (soil/water) SOLID Lab Sample ID: C0K220000 161
Method: SW846 8260B
 Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/15/00
Work Order: DQAAT1AA Date Extracted: 11/22/00
Dilution factor: 1 Date Analyzed: 11/22/00

QC Batch: 0327161

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L Q
71-43-2	Benzene	0.475	
108-90-7	Chlorobenzene	0.471	
108-88-3	Toluene	0.490	
75-35-4	1,1-Dichloroethene	0.520	
79-01-6	Trichloroethene	0.448	



Data File: \\QPITP902\chem\hpd4.i\41122d.b\4112203.D
 Date: 22-NOV-2000 08:33
 Client ID:
 Sample Info: pb blk ms (Am1/10ml)/5ml
 Volume Injected (uL): 5.0
 Column Phase: DB 624

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

\\QPITP902\chem\hpd4.i\41122d.b\4112203.D

674 1043

Data File: \\QPITPA02\d\chem\hp4.i\41122d.b\4112203.D
Report Date: 22-Nov-2000 09:38

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\41122d.b\4112203.D
 Lab Smp Id: vstd50 bonus
 Inj Date : 22-NOV-2000 08:33
 Operator : 16328
 Smp Info : pb blk ms (1ml/10ml)/5ml
 Misc Info : vstd50 bonus,41122d.b,8260bh2o.M,
 Comment :
 Method : \\QPITPA02\D\chem\hp4.i\41122d.b\8260bh2o.m
 Meth Date : 22-Nov-2000 09:19 dudeckk
 Cal Date : 13-NOV-2000 08:52
 Als bottle: 8
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC077

Inst ID: hp4.i
 Quant Type: ISTD
 Cal File: 2A41113.D
 Compound Sublist: 1-tcl.sub

K. [initials]

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

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

Compounds	QUANT	SIG	CONCENTRATIONS					
			ON-COLUMN	FINAL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(UG/L)	
* 46 Fluorobenzene	96	7.000	6.998	(1.000)	558421	250.000		
* 69 Chlorobenzene-d5	119	10.120	10.124	(1.000)	133851	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.455	12.459	(1.000)	216284	250.000		
\$ 39 Dibromofluoromethane	113	6.289	6.287	(0.898)	122989	254.459	50.89	
\$ 43 1,2-Dichloroethane-d4	65	6.684	6.682	(0.955)	125978	275.272	55.05	
\$ 59 Toluene-d8	98	8.648	8.646	(0.855)	514945	252.487	50.50	
\$ 80 Bromofluorobenzene	95	11.306	11.310	(1.117)	176756	266.412	53.28	
1 Dichlorodifluoromethane	85	1.448	1.446	(0.207)	131448	421.466	84.29	
2 Chloromethane	50	1.643	1.634	(0.235)	176796	285.781	57.16	
3 Vinyl Chloride	62	1.740	1.738	(0.249)	137261	255.659	51.13	
4 Bromomethane	94	2.056	2.054	(0.294)	16182	257.574	51.51	
5 Chloroethane	64	2.153	2.157	(0.308)	20448	283.392	56.68	
6 Trichlorofluoromethane	101	2.378	2.352	(0.340)	87292	408.632	81.73	
11 Acrolein	56	Compound Not Detected						
12 1,1-Dichloroethene	96	3.041	3.021	(0.434)	66486	259.771	51.95	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ng)	FINAL (UG/L)	
15 Carbon Disulfide	76	3.285	3.264	(0.469)	203240	302.291	60.46	
13 Acetone	43	3.291	3.307	(0.470)	28294	108.814	21.76	
18 Methylene Chloride	84	3.838	3.830	(0.548)	72479	237.135	47.43	
19 trans-1,2-Dichloroethene	96	4.191	4.176	(0.599)	112451	245.222	49.04	
20 Methyl tert-butyl ether	73	4.221	4.225	(0.603)	262623	255.259	51.05	
22 Acrylonitrile	53	Compound Not Detected.						
24 1,1-Dichloroethane	63	4.884	4.882	(0.698)	210471	238.378	47.68	
28 cis-1,2-dichloroethene	96	5.687	5.679	(0.812)	134540	229.256	45.85	
M 29 1,2-Dichloroethene (total)	100				246991	472.518	94.50	
30 Bromochloromethane	128	Compound Not Detected.						
31 2-Butanone	43	5.784	5.788	(0.826)	60730	249.336	49.87	
37 Chloroform	83	6.088	6.086	(0.870)	180851	234.330	46.87	
38 1,1,1-Trichloroethane	97	6.222	6.220	(0.889)	146212	218.758	43.75	
41 Carbon Tetrachloride	117	6.368	6.360	(0.910)	124403	218.076	43.62	
42 Benzene	78	6.648	6.645	(0.950)	490081	237.327	47.46	
45 1,2-Dichloroethane	62	6.775	6.773	(0.968)	143463	263.684	52.74	
47 Trichloroethene	130	7.383	7.381	(1.055)	137643	223.822	44.76	
49 1,2-Dichloropropane	63	7.675	7.673	(1.096)	134147	235.904	47.18	
50 Dibromomethane	93	Compound Not Detected.						
53 Bromodichloromethane	83	7.967	7.965	(1.138)	129314	242.175	48.44	
56 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
57 cis-1,3-Dichloropropene	75	8.435	8.433	(1.205)	164568	211.851	42.37	
58 4-Methyl-2-Pentanone	43	8.606	8.610	(0.850)	130929	293.228	58.64	
60 Toluene	91	8.715	8.713	(0.861)	539383	244.873	48.97	
61 trans-1,3-Dichloropropene	75	9.025	9.029	(0.892)	160077	269.549	53.91	
64 1,1,2-Trichloroethane	97	9.208	9.206	(0.910)	115792	256.885	51.38	
65 Tetrachloroethene	164	9.238	9.236	(0.913)	104745	222.835	44.57	
66 2-Hexanone	43	9.445	9.449	(0.933)	77699	266.414	53.28	
67 Dibromochloromethane	129	9.567	9.565	(0.945)	105216	252.264	50.45	
68 1,2-Dibromoethane	107	9.682	9.680	(0.957)	110595	255.234	51.05	
70 Chlorobenzene	112	10.150	10.148	(1.003)	368236	235.616	47.12	
71 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
72 Ethylbenzene	106	10.236	10.233	(1.011)	186750	239.626	47.92	
73 m + p-Xylene	106	10.357	10.355	(1.023)	448713	503.497	100.7	
74 Xylene-o	106	10.752	10.756	(1.062)	224965	253.505	50.70	
M 75 Xylenes (total)	106				673678	759.143	151.8	
76 Styrene	104	10.783	10.781	(1.065)	375637	259.190	51.84	
77 Bromoform	173	10.984	10.981	(1.085)	61986	268.081	53.62	
78 Isopropylbenzene	105	11.105	11.109	(1.097)	548037	246.324	49.26	
83 1,1,2,2-Tetrachloroethane	83	11.482	11.486	(0.922)	115720	216.534	43.31	
91 1,3-Dichlorobenzene	146	12.382	12.380	(0.994)	287189	230.100	46.02	
93 1,4-Dichlorobenzene	146	12.480	12.484	(1.002)	284891	230.062	46.01	
95 1,2-Dichlorobenzene	146	12.857	12.855	(1.032)	262058	220.381	44.08	

674 1045

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

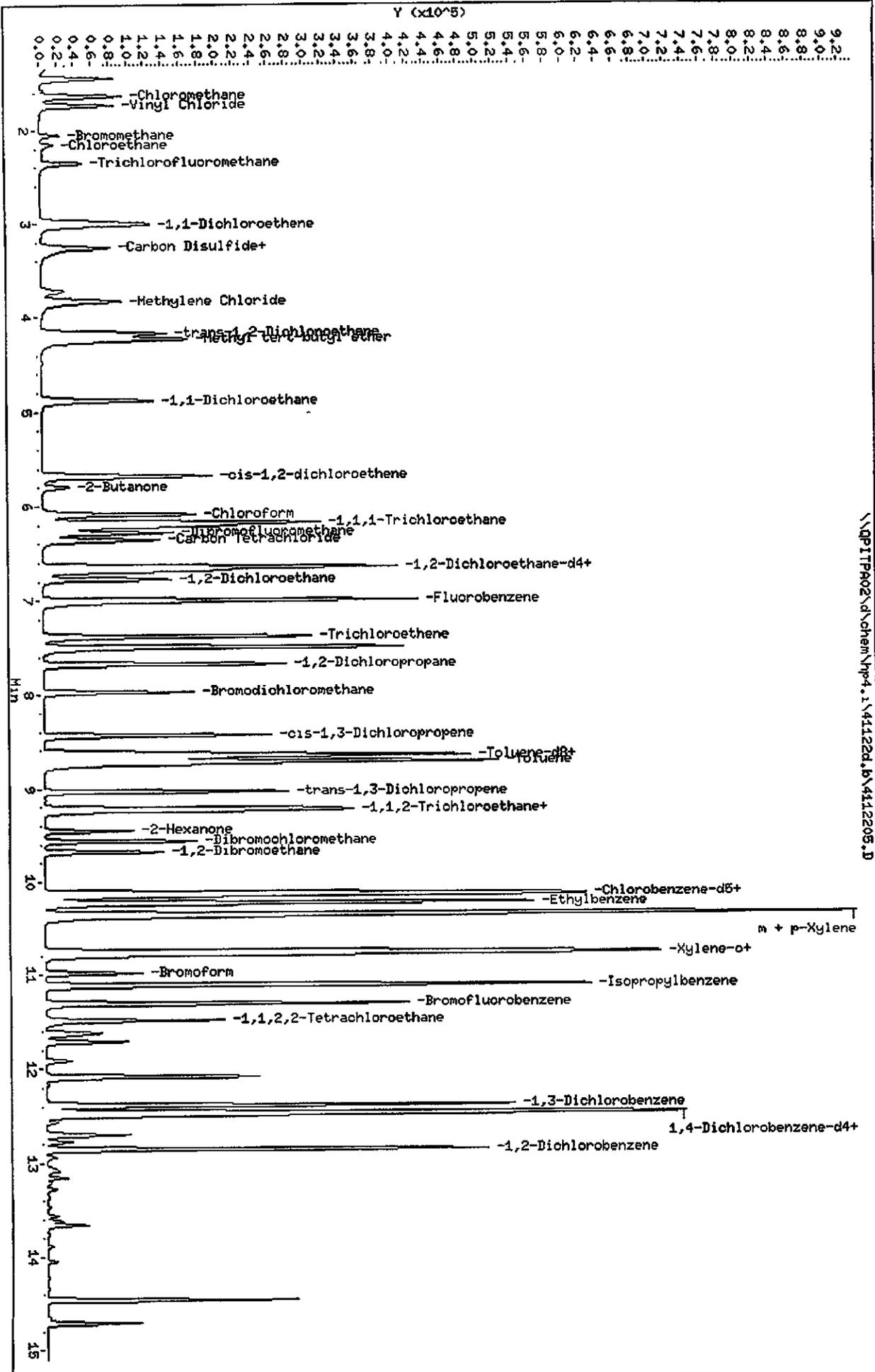
Lab Name: Severn Trent Laboratories, Inc. SDG Number:
Matrix: (soil/water) SOLID Lab Sample ID: C0K150188 001
Method: SW846 8260B
 Volatile Organics, GC/MS (8260B)
Sample WT/Vol: 5 / mL Date Received: 11/15/00
Work Order: DPWNF1CM Date Extracted: 11/22/00
Dilution factor: 1 Date Analyzed: 11/22/00
 QC Batch: 0327161
Client Sample Id: DF/24-A/0319/CVS/013

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
71-43-2	Benzene	0.482	Q
108-90-7	Chlorobenzene	0.474	
108-88-3	Toluene	0.516	
75-35-4	1,1-Dichloroethene	0.488	
79-01-6	Trichloroethene	0.450	

Data File: \\QPI1P002\chem\hp4.1\41122d.b\4112205.D
Date: 22-NOV-2000 09:23
Client ID:
Sample Info: c04150188-001ms (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column Phase: DB 624

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

\\QPI1P002\chem\hp4.1\41122d.b\4112205.D



STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\41122d.b\4112205.D
 Lab Smp Id: vstd50 bonus
 Inj Date : 22-NOV-2000 09:23
 Operator : 16328
 Smp Info : c0k150188-001ms (1ml/10ml)/5ml
 Misc Info : vstd50 bonus,41122d.b,8260bh2o.M,
 Comment :
 Method : \\QPITPA02\D\chem\hp4.i\41122d.b\8260bh2o.m
 Meth Date : 22-Nov-2000 09:19 dudeckk
 Cal Date : 13-NOV-2000 08:52
 Als bottle: 10
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: QPITPA02

Inst ID: hp4.i

4/11/22/0

Quant Type: ISTD
 Cal File: 2A41113.D

Compound Sublist: 1-tcl.sub

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

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

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ng)	FINAL (UG/L)	
* 46 Fluorobenzene	96	6.998	6.998	(1.000)	521920	250.000		
* 69 Chlorobenzene-d5	119	10.124	10.124	(1.000)	134791	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.459	12.459	(1.000)	218203	250.000		
\$ 39 Dibromofluoromethane	113	6.280	6.287	(0.897)	112817	249.737	49.95	
\$ 43 1,2-Dichloroethane-d4	65	6.682	6.682	(0.955)	115981	271.151	54.23	
\$ 59 Toluene-d8	98	8.646	8.646	(0.854)	502139	244.491	48.90	
\$ 80 Bromofluorobenzene	95	11.304	11.310	(1.117)	180123	269.593	53.92	
1 Dichlorodifluoromethane	85	1.446	1.446	(0.207)	112204	384.924	76.98	
2 Chloromethane	50	1.634	1.634	(0.234)	165130	285.592	57.12	
3 Vinyl Chloride	62	1.738	1.738	(0.248)	127570	254.226	50.84	
4 Bromomethane	94	2.054	2.054	(0.294)	14672	249.871	49.97	
5 Chloroethane	64	2.151	2.157	(0.307)	18614	276.016	55.20	
6 Trichlorofluoromethane	101	2.358	2.352	(0.337)	44568	223.223	44.64	
11 Acrolein	56	Compound Not Detected.						
12 1,1-Dichloroethene	96	3.015	3.021	(0.431)	58374	244.027	48.80	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
15 Carbon Disulfide	76	3.252	3.264	(0.465)	177576	282.591	56.52
13 Acetone	43	3.307	3.307	(0.473)	32213	132.550	26.51
18 Methylene Chloride	84	3.824	3.830	(0.546)	80707	282.522	56.50
19 trans-1,2-Dichloroethene	96	4.170	4.176	(0.596)	107432	250.662	50.13
20 Methyl tert-butyl ether	73	4.231	4.225	(0.605)	245263	255.058	51.01
22 Acrylonitrile	53	Compound Not Detected					
24 1,1-Dichloroethane	63	4.876	4.882	(0.697)	194493	235.687	47.14
28 cis-1,2-dichloroethene	96	5.678	5.679	(0.811)	126786	231.152	46.23
M 29 1,2-Dichloroethene (total)	100				234218	479.419	95.88
30 Bromochloromethane	128	Compound Not Detected.					
31 2-Butanone	43	5.794	5.788	(0.828)	55464	243.641	48.73
37 Chloroform	83	6.086	6.086	(0.870)	166256	230.485	46.10
38 1,1,1-Trichloroethane	97	6.220	6.220	(0.889)	132629	212.313	42.46
41 Carbon Tetrachloride	117	6.360	6.360	(0.909)	111598	209.310	41.86
42 Benzene	78	6.645	6.645	(0.950)	464970	240.914	48.18
45 1,2-Dichloroethane	62	6.773	6.773	(0.968)	128829	253.347	50.67
47 Trichloroethene	130	7.381	7.381	(1.055)	129270	224.908	44.98
49 1,2-Dichloropropane	63	7.673	7.673	(1.096)	126116	237.292	47.46
50 Dibromomethane	93	Compound Not Detected.					
53 Bromodichloromethane	83	7.965	7.965	(1.138)	120183	240.816	48.16
56 2-Chloroethyl vinyl ether	63	Compound Not Detected.					
57 cis-1,3-Dichloropropene	75	8.433	8.433	(1.205)	152303	209.774	41.95
58 4-Methyl-2-Pentanone	43	8.610	8.610	(0.850)	122097	271.541	54.31
60 Toluene	91	8.713	8.713	(0.861)	571704	257.737	51.55
61 trans-1,3-Dichloropropene	75	9.029	9.029	(0.892)	148650	248.562	49.71
64 1,1,2-Trichloroethane	97	9.206	9.206	(0.909)	109384	240.976	48.20
65 Tetrachloroethene	164	9.236	9.236	(0.912)	102222	215.951	43.19
66 2-Hexanone	43	9.449	9.449	(0.933)	75403	256.738	51.35
67 Dibromochloromethane	129	9.564	9.565	(0.945)	101695	242.122	48.42
68 1,2-Dibromoethane	107	9.680	9.680	(0.956)	107784	247.012	49.40
70 Chlorobenzene	112	10.148	10.148	(1.002)	373268	237.171	47.43
71 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
72 Ethylbenzene	106	10.233	10.233	(1.011)	195573	249.197	49.84
73 m + p-Xylene	106	10.355	10.355	(1.023)	476361	530.793	106.2
74 Xylene-o	106	10.750	10.756	(1.062)	250151	279.920	55.98
M 75 Xylenes (total)	106				726512	812.970	162.6
76 Styrene	104	10.781	10.781	(1.065)	387472	265.492	53.10
77 Bromoform	173	10.981	10.981	(1.085)	61033	262.118	52.42
78 Isopropylbenzene	105	11.109	11.109	(1.097)	566090	252.664	50.53
83 1,1,2,2-Tetrachloroethane	83	11.486	11.486	(0.922)	113837	211.137	42.23
91 1,3-Dichlorobenzene	146	12.380	12.380	(0.994)	296178	235.215	47.04
93 1,4-Dichlorobenzene	146	12.483	12.484	(1.002)	287189	229.879	45.98
95 1,2-Dichlorobenzene	146	12.854	12.855	(1.032)	267019	222.578	44.52

674 1049

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COK150188 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/15/00
Work Order: DPWNF1CN Date Extracted: 11/22/00
Dilution factor: 1 Date Analyzed: 11/22/00

QC Batch: 0327161

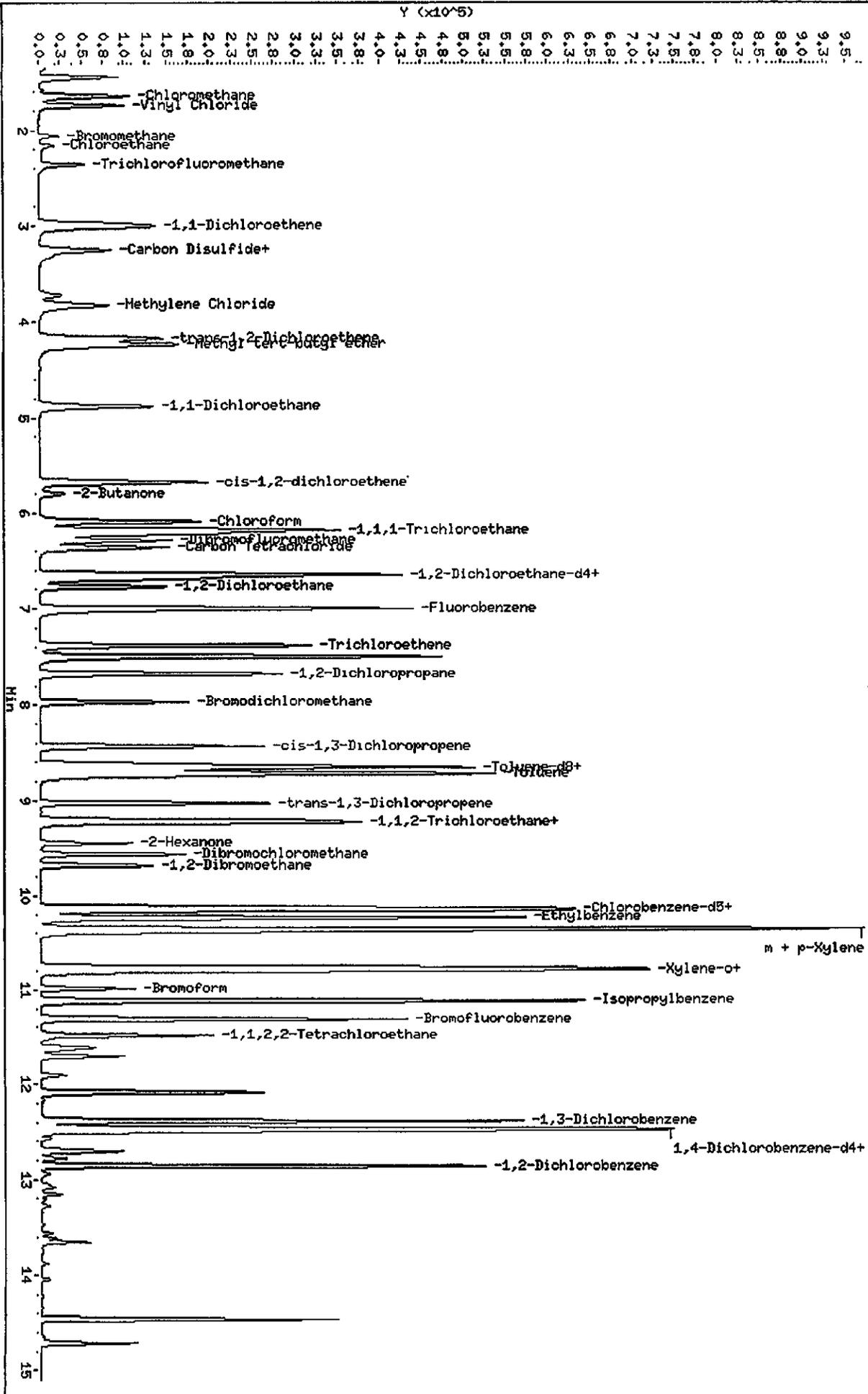
Client Sample Id: DF/24-A/0319/CVS/013

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
71-43-2	Benzene	0.488	Q
108-90-7	Chlorobenzene	0.481	
108-88-3	Toluene	0.529	
75-35-4	1,1-Dichloroethene	0.528	
79-01-6	Trichloroethene	0.461	

Data File: \\NPITPA02\chem\hp4.i\412206.b\412206.D
 Date: 22-NOV-2000 09:48
 Client ID:
 Sample Info: c041E0488-001msd (1ml/10ml)/5ml
 Volume Injected (ul): 5.0
 Column phase: DB 624

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

\\NPITPA02\chem\hp4.i\412206.b\412206.D



674 1051

Data File: \\QPITPA02\d\chem\hp4.i\41122d.b\4112206.D
Report Date: 22-Nov-2000 10:06

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\41122d.b\4112206.D

Lab Smp Id: vstd50 bonus

Inj Date : 22-NOV-2000 09:48

Operator : 16328

Inst ID: hp4.i

Smp Info : c0k150188-001msd (1ml/10ml)/5ml

Misc Info : vstd50 bonus,41122d.b,8260bh2o.M,

K₂ 11/22/00

Comment :

Method : \\QPITPA02\D\chem\hp4.i\41122d.b\8260bh2o.m

Meth Date : 22-Nov-2000 09:19 dudeckk Quant Type: ISTD

Cal Date : 13-NOV-2000 08:52

Cal File: 2A41113.D

Als bottle: 11

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: 1-tcl.sub

Target Version: 4.04

Processing Host: QPITPA02

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.999	6.998	(1.000)	531965	250.000		
* 69 Chlorobenzene-d5	119	10.119	10.124	(1.000)	136181	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.460	12.459	(1.000)	221299	250.000		
\$ 39 Dibromofluoromethane	113	6.282	6.287	(0.897)	114891	249.526	49.90	
\$ 43 1,2-Dichloroethane-d4	65	6.683	6.682	(0.955)	114730	263.162	52.63	
\$ 59 Toluene-d8	98	8.647	8.646	(0.855)	515316	248.346	49.67	
\$ 80 Bromofluorobenzene	95	11.305	11.310	(1.117)	184383	273.153	54.63	
1 Dichlorodifluoromethane	85	1.447	1.446	(0.207)	124598	419.371	83.87	
2 Chloromethane	50	1.642	1.634	(0.235)	183822	311.916	62.38	
3 Vinyl Chloride	62	1.739	1.738	(0.248)	147637	288.661	57.73	
4 Bromomethane	94	2.055	2.054	(0.294)	16050	268.178	53.64	
5 Chloroethane	64	2.152	2.157	(0.308)	19822	288.379	57.68	
6 Trichlorofluoromethane	101	2.353	2.352	(0.336)	48665	239.141	47.83	
11 Acrolein	56	Compound Not Detected.						
12 1,1-Dichloroethene	96	3.010	3.021	(0.430)	64431	264.262	52.85	

Data File: \\QPITPA02\d\chem\hp4.i\41122d.b\4112206.D
 Report Date: 22-Nov-2000 10:06

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS		
						ON-COLUMN (ng)	FINAL (UG/L)	
15 Carbon Disulfide	76	3.247	3.264	(0.464)	190479	297.401	59.48	
13 Acetone	43	3.320	3.307	(0.474)	31260	126.200	25.24	
18 Methylene Chloride	84	3.825	3.830	(0.546)	69431	238.460	47.69	
19 trans-1,2-Dichloroethene	96	4.165	4.176	(0.595)	108820	249.106	49.82	
20 Methyl tert-butyl ether	73	4.232	4.225	(0.605)	241132	246.027	49.20	
22 Acrylonitrile	53	Compound Not Detected.						
24 1,1-Dichloroethane	63	4.877	4.882	(0.697)	199457	237.139	47.43	
28 cis-1,2-dichloroethene	96	5.680	5.679	(0.811)	129205	231.114	46.22	
M 29 1,2-Dichloroethene (total)	100				238025	478.012	95.60	
30 Bromochloromethane	128	Compound Not Detected.						
31 2-Butanone	43	5.795	5.788	(0.828)	54000	232.731	46.55	
37 Chloroform	83	6.087	6.086	(0.870)	171693	233.528	46.70	
38 1,1,1-Trichloroethane	97	6.215	6.220	(0.888)	140609	220.837	44.17	
41 Carbon Tetrachloride	117	6.361	6.360	(0.909)	119096	219.155	43.83	
42 Benzene	78	6.640	6.645	(0.949)	479576	243.790	48.76	
45 1,2-Dichloroethane	62	6.768	6.773	(0.967)	129845	250.523	50.10	
47 Trichloroethene	130	7.382	7.381	(1.055)	135096	230.606	46.12	
49 1,2-Dichloropropane	63	7.674	7.673	(1.096)	129542	239.135	47.83	
50 Dibromomethane	93	Compound Not Detected.						
53 Bromodichloromethane	83	7.966	7.965	(1.138)	120832	237.544	47.51	
56 2-Chloroethyl vinyl ether	63	Compound Not Detected.						
57 cis-1,3-Dichloropropene	75	8.434	8.433	(1.205)	154085	208.221	41.64	
58 4-Methyl-2-Pentanone	43	8.611	8.610	(0.851)	119172	262.331	52.47	
60 Toluene	91	8.714	8.713	(0.861)	592330	264.310	52.86	
61 trans-1,3-Dichloropropene	75	9.030	9.029	(0.892)	145400	240.646	48.13	
64 1,1,2-Trichloroethane	97	9.207	9.206	(0.910)	108066	235.643	47.13	
65 Tetrachloroethene	164	9.237	9.236	(0.913)	109446	228.853	45.77	
66 2-Hexanone	43	9.450	9.449	(0.934)	76736	258.610	51.72	
67 Dibromochloromethane	129	9.566	9.565	(0.945)	100451	236.719	47.34	
68 1,2-Dibromoethane	107	9.675	9.680	(0.956)	104475	236.985	47.40	
70 Chlorobenzene	112	10.149	10.148	(1.003)	382120	240.317	48.06	
71 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
72 Ethylbenzene	106	10.234	10.233	(1.011)	204627	258.072	51.61	
73 m + p-Xylene	106	10.356	10.355	(1.023)	494207	545.058	109.0	
74 Xylene-o	106	10.751	10.756	(1.063)	256920	284.560	56.91	
M 75 Xylenes (total)	106				751127	831.935	166.4	
76 Styrene	104	10.782	10.781	(1.066)	393792	267.068	53.41	
77 Bromoform	173	10.982	10.981	(1.085)	61161	259.987	52.00	
78 Isopropylbenzene	105	11.104	11.109	(1.097)	591250	261.200	52.24	
83 1,1,2,2-Tetrachloroethane	83	11.487	11.486	(0.922)	113421	207.423	41.48	
91 1,3-Dichlorobenzene	146	12.381	12.380	(0.994)	310351	243.023	48.60	
93 1,4-Dichlorobenzene	146	12.479	12.484	(1.001)	297948	235.154	47.03	
95 1,2-Dichlorobenzene	146	12.856	12.855	(1.032)	276603	227.341	45.47	

674 1053

GC/MS VOLATILE
MISCELLANEOUS

Method

82600

Inst ID:

HP-4

Analyst:

KWD

Reviewed by:

ACEVE

Date:

Standard: 192-192-2 GFB
Standard: 192-194-6 JST

Standard: 192-194-7 SWR
Standard: 192-195-2 No A

Standard: 192-194-10 APPLX
Standard: 192-196-3 A-A

Standard: 192-194-2 ACEVE

Standard: Standard

Date: 11/13/00

File ID

Lot No./Sample No.

Vol /Wt

PH

Port #

Comments

Date	File ID	Lot No./Sample No.	Vol /Wt	PH	Port #	Comments
11/13/00	1. BF41113	BFB	1.0			S33
	2. 1A41113	VSD5	S-D			
	3. 1B41113	VSD20	S-D			
	4. 2C41113	VSD5	S-D			
	5. 1D41113	VSD10	S-D			
	6. 1E41113	VSD20	S-D			
	7. 3C41113	VSD5 Dms	S-D			
	8. 2A41113	VSD5	S-D			
	9.					
	10.					
	11.					
	12.					
	13.					
	14.					
	15.					
	16.					
	17.					
	18.					
	19.					
	20.					
	21.					
	22.					

Method: 8260D		Inst ID: HP-4		Analyst: KWD		Reviewed by:		Date:	
Date	File ID	Lot No./Sample No.	Vol/Wt	pH	Port #	Comments	Standard:	Standard:	Standard:
11/22/00	1. BF41122	BFB	lul				192-194-7 Sum	192-196-3 A+A	
	2 CC41122	VSTD50	Sul				Standard:	Standard:	
	3. 1C41122	VSTD50 Bms	Sul				192-194-2 ACEVE	192-192-8 MS	
	4. 4112201	PB BLK	(1.0/10.0)/5.0	S					
	5. 4112202	VBLK	Sul						
	6. 4112203	BLK M)	(1.0/10.0)/5.0	S					
	7. 4112204	COK 150188-001	(1.0/10.0)/5.0	S					
	8. 4112205	-001 M)	(1.0/10.0)/5.0	S					
	9. 4112206	-001 MSD	(1.0/10.0)/5.0	S					
	10.								
	11.								
	12.								
	13.								
	14.								
	15.								
	16.								
	17.								
	18.								
	19.								
	20.								
	21.								
	22.								

REQUESTED BY: TROUTB

674 1057

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

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
17A,B CLP1	DPGPH-1-A7	---	286631	009072	A-58-QK	COK070217	001		SOLID	0	10 1
17A,B CLP1	DPGPL-1-A7	---	286632	009072	A-58-QK	COK070217	002		SOLID	0	10 1
17A,B CLP1	DPGPT-1-AJ	---	286633	009072	A-58-QK	COK070217	003		SOLID	0	10 1
18C CLP1	DPH6J-1-A7	---	286628	009072	A-58-QK	COK080214	001		SOLID	0	10 1
20A	DPLF2-1-AD	---	286629	422326	A-58-QK	COK090223	001		SOLID	0	7 1
22C CLP1	DPWNF-1-AC	---	286630	399411	A-58-QK	COK150188	001	---	SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

[Signature]

B Trout

[Signature] B Trout

11/20/2000 07:10

11/20/2000 11:20

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

674 1058

GC/MS SEMIVOLATILE DATA

674 1059

**GC/MS SEMIVOLATILE
QC SUMMARY**

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT QESSDG:

Lot #: COK150188

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
01	DF/24-A/0319/CVS/013	74	66	90	69	79	82	00
02	METHOD BLK. DP6VL1AA	74	74	79	77	82	79	00
03	LCS DP6VL1AC	75	76	84	75	82	83	00
04	DF/24-A/0319/CVS/013 D	79	74	93	71	83	87	00
05	DF/24-A/0319/CVS/013 S	77	72	90	69	81	86	00

<u>SURROGATES</u>	<u>QC LIMITS</u>
SRG01 = Nitrobenzene-d5	(32-112)
SRG02 = 2-Fluorobiphenyl	(30-110)
SRG03 = Terphenyl-d14	(10-144)
SRG04 = 2-Fluorophenol	(13-110)
SRG05 = Phenol-d5	(10-113)
SRG06 = 2,4,6-Tribromophenol	(21-122)

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

FORM II

674 1061

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: COK200000

WO #: DP6VL1AC

BATCH: 0325189

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	0.184	74	28- 110	
2,4-Dinitrotoluene	0.250	0.188	75	47- 131	
Hexachlorobenzene	0.250	0.220	88	57- 128	
Hexachlorobutadiene	0.250	0.185	74	36- 116	
Hexachloroethane	0.250	0.186	74	30- 110	
Nitrobenzene	0.250	0.202	81	45- 130	
Pentachlorophenol	0.250	0.220	88	10- 140	
Pyridine	0.250	0.199	80	10- 148	
2,4,5-Trichlorophenol	0.250	0.207	83	41- 125	
2,4,6-Trichlorophenol	0.250	0.199	80	46- 135	
Cresols (total)	0.750	0.655	87	29- 144	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/24-A/0319/CVS/013

Level: (low/med) LOW

Lot #: COK150188

WO #: DPWNFLCK

BATCH: 0325189

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	ND	0.179	72	18 - 110	
2,4-Dinitrotoluene	0.250	ND	0.202	81	31 - 131	
Hexachlorobenzene	0.250	ND	0.228	91	36 - 132	
Hexachlorobutadiene	0.250	ND	0.161	64	18 - 116	
Hexachloroethane	0.250	ND	0.172	69	18 - 110	
Nitrobenzene	0.250	ND	0.211	84	10 - 211	
Pentachlorophenol	0.250	ND	0.182	73	10 - 140	
Pyridine	0.250	ND	0.181	72	10 - 148	
2,4,5-Trichlorophenol	0.250	ND	0.207	83	24 - 143	
2,4,6-Trichlorophenol	0.250	ND	0.209	84	36 - 135	
Cresols (total)	0.750	ND	0.667	89	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:

674 1063

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/24-A/0319/CVS/013

Level: (low/med) LOW

Lot #: COK150188

WO #: DPWNF1CL

BATCH: 0325189

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
1,4-Dichlorobenzene	0.250	0.183	73	2.2	36	18 - 110	
2,4-Dinitrotoluene	0.250	0.206	82	2.0	32	31 - 131	
Hexachlorobenzene	0.250	0.238	95	4.3	22	36 - 132	
Hexachlorobutadiene	0.250	0.166	66	3.0	32	18 - 116	
Hexachloroethane	0.250	0.179	72	4.0	33	18 - 110	
Nitrobenzene	0.250	0.218	87	3.3	50	10 - 211	
Pentachlorophenol	0.250	0.188	75	3.2	56	10 - 140	
Pyridine	0.250	0.180	72	0.55	65	10 - 148	
2,4,5-Trichlorophenol	0.250	0.216	86	4.2	22	24 - 143	
2,4,6-Trichlorophenol	0.250	0.212	85	1.4	27	36 - 135	
Cresols (total)	0.750	0.683	91	2.4	33	25 - 144	

NOTES (S) :

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

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

COMMENTS:

SW846 8270C METHOD BLANK SUMMARY

674 1064

DP6VL1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: F1122001.

Lot Number: COK150188

Date Analyzed: 11/22/00

Time Analyzed: 13:46

Matrix: SOLID

Date Extracted: 11/20/00

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/24-A/0319/CVS/013	DPWNF1AD	F1122005.	11/22/00	16:04
02	DF/24-A/0319/CVS/013	DPWNF1CK S	F1122003.	11/22/00	14:55
03	DF/24-A/0319/CVS/013	DPWNF1CL D	F1122004.	11/22/00	15:29
04	CHECK SAMPLE	DP6VL1AC C	F1122002.	11/22/00	14:21
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

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

674 1065

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Lab File ID: F1122DF1

DFTPP Injection Date: 11/22/00

Instrument ID: 722

DFTPP Injection Time: 0932

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	48.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	51.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	56.9
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	27.6
365	Greater than 1.0% of mass 198	4.8
441	Present, but less than mass 443	13.5
442	40.0 - 100.0% of mass 198	85.1
443	17.0 - 23.0% of mass 442	16.7 (19.7)2

1-Value is % of mass 69

2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD050	F11220C2	11/22/00	1024
02	SSTD080	SSTD080	F11220C3	11/22/00	1058
03	SSTD120	SSTD120	F11220C4	11/22/00	1133
04	SSTD160	SSTD160	F11220C5	11/22/00	1208
05	SSTD020	SSTD020	F11220C6	11/22/00	1312
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

674 1066

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0K150188

Lab File ID: F1122DF1

DFTPP Injection Date: 11/22/00

Instrument ID: 722

DFTPP Injection Time: 0932

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	48.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	51.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	56.9
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	27.6
365	Greater than 1.0% of mass 198	4.78
441	Present, but less than mass 443	13.5
442	40.0 - 100.0% of mass 198	85.1
443	17.0 - 23.0% of mass 442	16.7 (19.7)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	F11220C2	11/22/00	1024
02	SSTD080	SSTD080	F11220C3	11/22/00	1058
03	SSTD120	SSTD120	F11220C4	11/22/00	1133
04	SSTD160	SSTD160	F11220C5	11/22/00	1208
05	SSTD020	SSTD020	F11220C6	11/22/00	1312
06	INTRA-LAB BL	DP6VL1AA	F1122001	11/22/00	1346
07	INTRA-LAB CH	DP6VL1AC	F1122002	11/22/00	1421
MS 08	DF/24-A/0319	DPWNF1CK	F1122003	11/22/00	1455
MSD 09	DF/24-A/0319	DPWNF1CL	F1122004	11/22/00	1529
10	DF/24-A/0319	DPWNF1AD	F1122005	11/22/00	1604
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

674 1067

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0K150188

Lab File ID (Standard): F11220C2

Date Analyzed: 11/22/00

Instrument ID: 722

Time Analyzed: 1024

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	109403	5.17	390965	6.73	210764	9.81
UPPER LIMIT	218806	5.67	781930	7.23	421528	10.31
LOWER LIMIT	54702	4.67	195483	6.23	105382	9.31
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	100806	5.16	373323	6.73	201332	9.80
02 INTRA-LAB CH	96597	5.17	355397	6.73	194265	9.81
<i>MS</i> 03 DF/24-A/0319	99135	5.16	372649	6.72	199007	9.80
<i>MS</i> 04 DF/24-A/0319	94012	5.17	349848	6.73	188740	9.80
05 DF/24-A/0319	98330	5.17	376040	6.73	203151	9.80
06						
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

674 1068

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: COK150188

Lab File ID (Standard): F11220C2

Date Analyzed: 11/22/00

Instrument ID: 722

Time Analyzed: 1024

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	362041	13.13	412891	19.79	403296	23.17
UPPER LIMIT	724082	13.63	825782	20.29	806592	23.67
LOWER LIMIT	181021	12.63	206446	19.29	201648	22.67
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	326671	13.13	332118	19.78	361566	23.16
02 INTRA-LAB CH	324017	13.13	330207	19.79	349035	23.17
* 03 DF/24-A/0319	325003	13.12	318013	19.78	329503	23.15
* 04 DF/24-A/0319	308363	13.13	305447	19.78	313977	23.16
05 DF/24-A/0319	322895	13.13	318030	19.79	319151	23.16
06						
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.

674 1069

**GC/MS SEMIVOLATILE
SAMPLE DATA**

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK150188 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/15/00

Work Order: DPWNFLAD

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/22/00

Moisture %: 19

QC Batch: 0325189

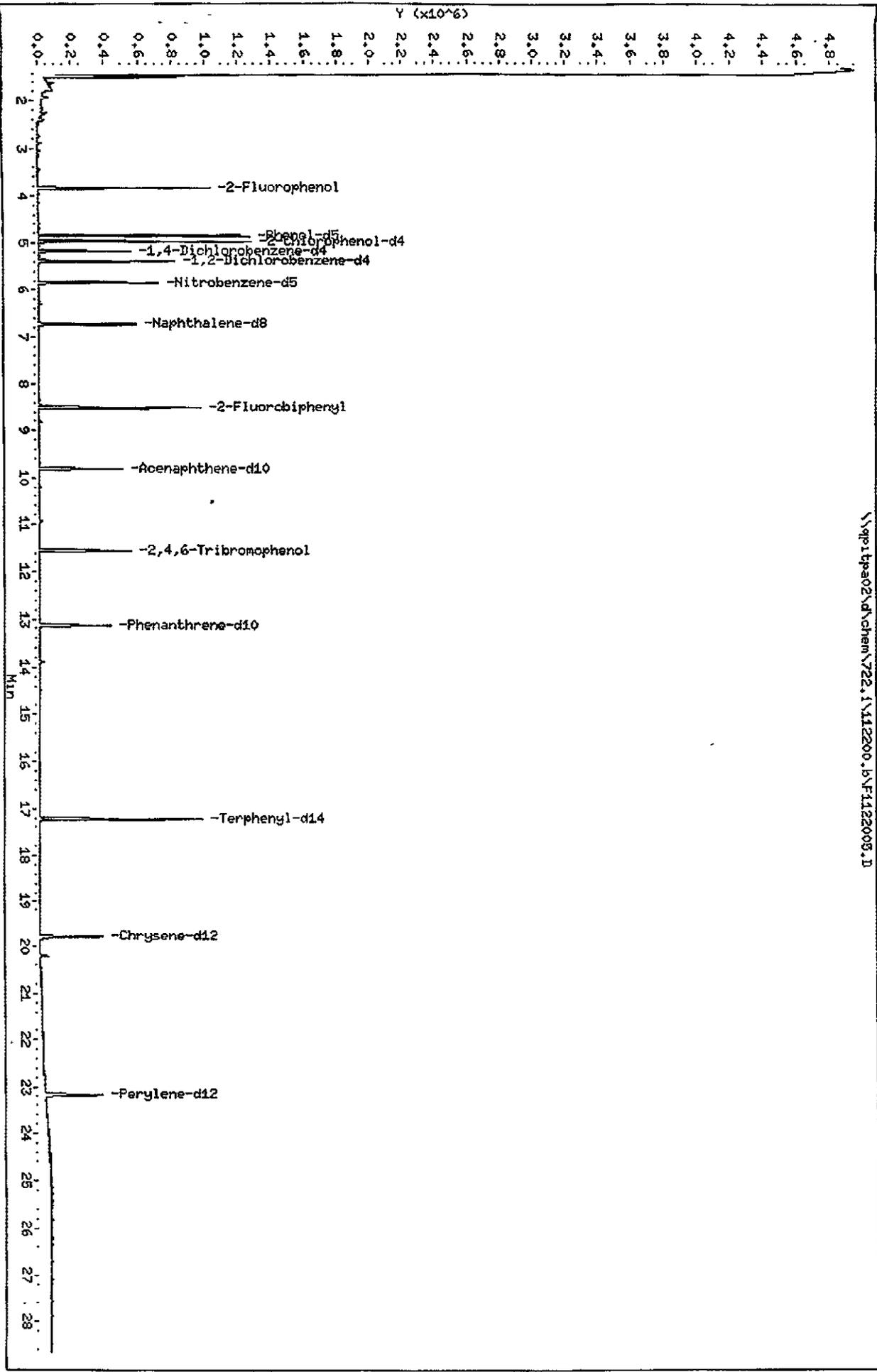
Client Sample Id: DF/24-A/0319/CVS/013

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: \\pp1tpa02\chem\722.1\112200.b\F1122005.D
Date: 22-NOV-2000 16:04
Client ID: DF/24-R/0319/CVS/01
Sample Info: COKLS0188-001 11/20/00 TCLP (0325189)
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 722.1
Operator: 007062
Column diameter: 0.25

\\pp1tpa02\chem\722.1\112200.b\F1122005.D



674 1072

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\112200.b\F1122005.D
 Lab Smp Id: DPWNF1AD Client Smp ID: DF/24-A/0319/CVS/01
 Inj Date : 22-NOV-2000 16:04
 Operator : 007062 Inst ID: 722.i
 Smp Info : COK150188-001 11/20/00 TCLP (0325189)
 Misc Info : dpwnflad,112200.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\112200.b\8270b.m
 Meth Date : 22-Nov-2000 13:51 BungardF Quant Type: ISTD
 Cal Date : 22-NOV-2000 13:12 Cal File: F11220C6.D
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC062

Compound Sublist: tclp.sub

Handwritten: 11/22/00

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		5.167	5.166	(1.000)	98330	40.0000	(Q)
* 2 Naphthalene-d8	136		6.727	6.731	(1.000)	376040	40.0000	
* 3 Acenaphthene-d10	164		9.804	9.808	(1.000)	203151	40.0000	
* 4 Phenanthrene-d10	188		13.126	13.131	(1.000)	322895	40.0000	
* 5 Chrysene-d12	240		19.788	19.793	(1.000)	318030	40.0000	
* 6 Perylene-d12	264		23.164	23.169	(1.000)	319151	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.

674 1073

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	5.834	5.834	(0.867)	313870	73.4510	0.184 (a)
\$ 155 2-Fluorobiphenyl	172	8.500	8.499	(0.867)	469551	66.0830	0.165 (a)
\$ 156 Terphenyl-d14	244	17.219	17.212	(0.870)	624639	89.4165	0.224 (a)
\$ 157 Phenol-d5	99	4.841	4.835	(0.937)	499224	119.113	0.298 (a)
\$ 158 2-Fluorophenol	112	3.831	3.825	(0.742)	321005	103.582	0.259 (a)
\$ 159 2,4,6-Tribromophenol	330	11.556	11.555	(0.880)	108314	122.268	0.306 (a)
\$ 186 2-Chlorophenol-d4	132	4.964	4.958	(0.961)	396955	129.783	0.324 (a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.380	5.380	(1.041)	139391	58.8749	0.147 (a)

QC Flag Legend

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

674 1074

**GC/MS SEMIVOLATILE
CALIBRATION DATA**

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Instrument ID: 722

Calibration Date(s): 11/22/00

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

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:	RRF1	=F11220C6.D	RRF2	=F11220C2.D	RRF3	=F11220C3.D	RRF4	=F11220C4.D	RRF5	=F11220C5.D		
COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	\overline{RRF}	% RSD					
Phenol	* 1.937	1.992	1.891	1.902	1.848	1.914	2.8*					
bis(2-Chloroethyl) ether	1.404	1.446	1.372	1.376	1.343	1.388	2.8					
2-Chlorophenol	1.377	1.404	1.329	1.336	1.317	1.353	2.7					
1,3-Dichlorobenzene	1.537	1.590	1.511	1.519	1.520	1.535	2.1					
1,4-Dichlorobenzene	* 1.578	1.616	1.544	1.564	1.542	1.569	1.9*					
1,2-Dichlorobenzene	1.442	1.490	1.428	1.448	1.463	1.454	1.6					
2-Methylphenol	1.201	1.243	1.173	1.179	1.167	1.193	2.6					
2,2'-oxybis(1-Chloropropane	2.033	2.069	1.919	1.863	1.759	1.929	6.5					
4-Methylphenol	1.244	1.322	1.250	1.274	1.269	1.272	2.4					
Hexachloroethane	0.600	0.631	0.601	0.609	0.600	0.608	2.2					
Nitrobenzene	0.448	0.470	0.442	0.445	0.443	0.450	2.5					
Isophorone	0.689	0.736	0.696	0.713	0.705	0.708	2.6					
2-Nitrophenol	* 0.193	0.205	0.198	0.203	0.204	0.201	2.5*					
2,4-Dimethylphenol	0.346	0.391	0.366	0.377	0.379	0.372	4.5					
bis(2-Chloroethoxy)methane	0.430	0.457	0.431	0.438	0.434	0.438	2.6					
N-Nitroso-di-n-propylamine	# 1.035	1.092	1.029	1.032	1.022	1.042	2.7#					
2,4-Dichlorophenol	* 0.284	0.303	0.289	0.298	0.300	0.295	2.7*					
1,2,4-Trichlorobenzene	0.316	0.332	0.315	0.323	0.326	0.322	2.2					
Naphthalene	1.105	1.151	1.083	1.080	1.074	1.099	2.9					
4-Chloroaniline	0.402	0.430	0.409	0.419	0.419	0.416	2.5					
Hexachlorobutadiene	* 0.192	0.204	0.196	0.207	0.214	0.203	4.2*					
4-Chloro-3-Methylphenol	* 0.307	0.336	0.322	0.334	0.335	0.327	3.8*					
2-Methylnaphthalene	0.673	0.710	0.675	0.690	0.696	0.689	2.2					
Hexachlorocyclopentadiene	# 0.405	0.445	0.441	0.465	0.478	0.447	6.2#					
2,4,6-Trichlorophenol	* 0.353	0.370	0.360	0.372	0.375	0.366	2.5*					
2,4,5-Trichlorophenol	0.373	0.391	0.382	0.395	0.398	0.388	2.7					
2-Chloronaphthalene	1.186	1.222	1.164	1.215	1.232	1.204	2.3					
2-Nitroaniline	0.410	0.447	0.437	0.452	0.450	0.439	4.0					
Dimethylphthalate	1.268	1.350	1.302	1.337	1.333	1.318	2.5					
Acenaphthylene	1.889	1.962	1.900	1.933	1.911	1.919	1.5					
2,6-Dinitrotoluene	0.275	0.304	0.298	0.315	0.314	0.301	5.5					
3-Nitroaniline	0.309	0.341	0.334	0.353	0.357	0.339	5.7					
Acenaphthene	* 1.199	1.230	1.183	1.209	1.202	1.205	1.4*					
2,4-Dinitrophenol	# 0.106	0.156	0.179	0.207	0.217	0.173	25.6#					
4-Nitrophenol	# 0.205	0.237	0.242	0.269	0.275	0.246	11.4#					
Dibenzofuran	1.637	1.701	1.619	1.655	1.650	1.652	1.9					
2,4-Dinitrotoluene	0.365	0.411	0.403	0.428	0.428	0.407	6.3					

6C
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

674 1076

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Instrument ID: 722

Calibration Date(s): 11/22/00

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

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:	RRF1 =F11220C6.D	RRF2 =F11220C2.D	RRF3 =F11220C3.D	RRF4 =F11220C4.D	RRF5 =F11220C5.D		
COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	\overline{RRF}	% RSD
Diethylphthalate	1.282	1.390	1.345	1.410	1.414	1.368	4.1
4-Chlorophenyl-phenylether	0.626	0.665	0.642	0.669	0.681	0.657	3.4
Fluorene	1.315	1.403	1.360	1.407	1.411	1.379	3.0
4-Nitroaniline	0.298	0.342	0.335	0.359	0.360	0.339	7.5
4,6-Dinitro-2-methylphenol	0.101	0.124	0.132	0.148	0.152	0.131	15.8
N-Nitrosodiphenylamine (1) *	0.588	0.526	0.563	0.585	0.572	0.567	4.4*
4-Bromophenyl-phenylether	0.216	0.229	0.222	0.230	0.233	0.226	3.2
Hexachlorophenol	0.243	0.255	0.246	0.257	0.260	0.252	2.9
Pentachlorophenol #	0.067	0.089	0.109	0.132	0.142	0.108	28.5#
Phenanthrene	1.113	1.151	1.104	1.129	1.121	1.124	1.6
Anthracene	1.111	1.177	1.128	1.167	1.152	1.147	2.4
Carbazole	0.982	1.053	1.024	1.074	1.067	1.040	3.6
Di-n-Butylphthalate	1.205	1.331	1.304	1.357	1.344	1.308	4.6
Fluoranthene *	1.116	1.225	1.208	1.275	1.275	1.220	5.4*
Pyrene	1.055	1.074	0.999	0.959	0.918	1.001	6.5
Butylbenzylphthalate	0.501	0.536	0.516	0.511	0.495	0.512	3.2
3,3'-Dichlorobenzidine	0.389	0.415	0.420	0.429	0.427	0.416	3.9
Benzo (a) Anthracene	1.026	1.069	1.020	1.017	1.001	1.027	2.5
Chrysene	0.994	1.010	0.962	0.946	0.922	0.967	3.7
bis (2-ethylhexyl) Phthalate	0.710	0.760	0.721	0.719	0.700	0.722	3.1
Di-n-octylphthalate *	1.198	1.347	1.297	1.318	1.278	1.288	4.4*
Benzo (b) fluoranthene	1.138	1.176	1.189	1.300	1.468	1.254	10.7
Benzo (k) fluoranthene	1.255	1.368	1.292	1.260	1.159	1.267	6.0
Benzo (a) pyrene *	1.071	1.158	1.116	1.159	1.159	1.133	3.4*
Indeno (1,2,3-cd) pyrene	1.522	1.552	1.543	1.657	1.711	1.597	5.2
Dibenz (a,h) anthracene	1.321	1.351	1.336	1.438	1.492	1.388	5.3
Benzo (g,h,i) perylene	1.345	1.345	1.338	1.427	1.449	1.381	3.8
Pyridine	1.344	1.308	1.360	1.346	1.287	1.329	2.3
N-Nitrosodimethylamine	0.769	0.785	0.751	0.736	0.719	0.752	3.5
Aniline	2.239	2.132	2.263	2.253	2.182	2.214	2.5
Benzyl Alcohol	0.827	0.930	0.912	0.926	0.921	0.903	4.8
Benzoic Acid	0.020	0.078	0.090	0.129	0.144	0.092	52.9 <-
2,3,4,6-Tetrachlorophenol	0.278	0.307	0.314	0.343	0.353	0.319	9.3
2,3,5,6-Tetrachlorophenol	0.263	0.301	0.307	0.334	0.347	0.310	10.5
1,2-Diphenylhydrazine	0.991	1.014	0.967	0.963	0.933	0.974	3.1

(1) Cannot be separated from Diphenylamine

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
Lab File ID: F11220C2.D
Analysis Type: NONE

Injection Date: 22-NOV-2000 10:24
Lab Sample ID: sstd050
Method File: \\QPITPA02\D\chem\722.i\112200.b\

COMPOUND	%RSD
Benzo(b)fluoranthene	10.7
Benzo(k)fluoranthene	6.0
7,12-dimethylbenz(a)anthracen	10.4
Benzo(a)pyrene	3.4
Indeno(1,2,3-cd)pyrene	5.2
Dibenz(a,h)anthracene	5.3
Benzo(g,h,i)perylene	3.8

The average of all %RSD's in the initial calibration is 5.5

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
Lab File ID: F11220C2.D
Analysis Type: NONE

Injection Date: 22-NOV-2000 10:24
Lab Sample ID: sstd050
Method File: \\QPITPA02\D\chem\722.i\112200.b\

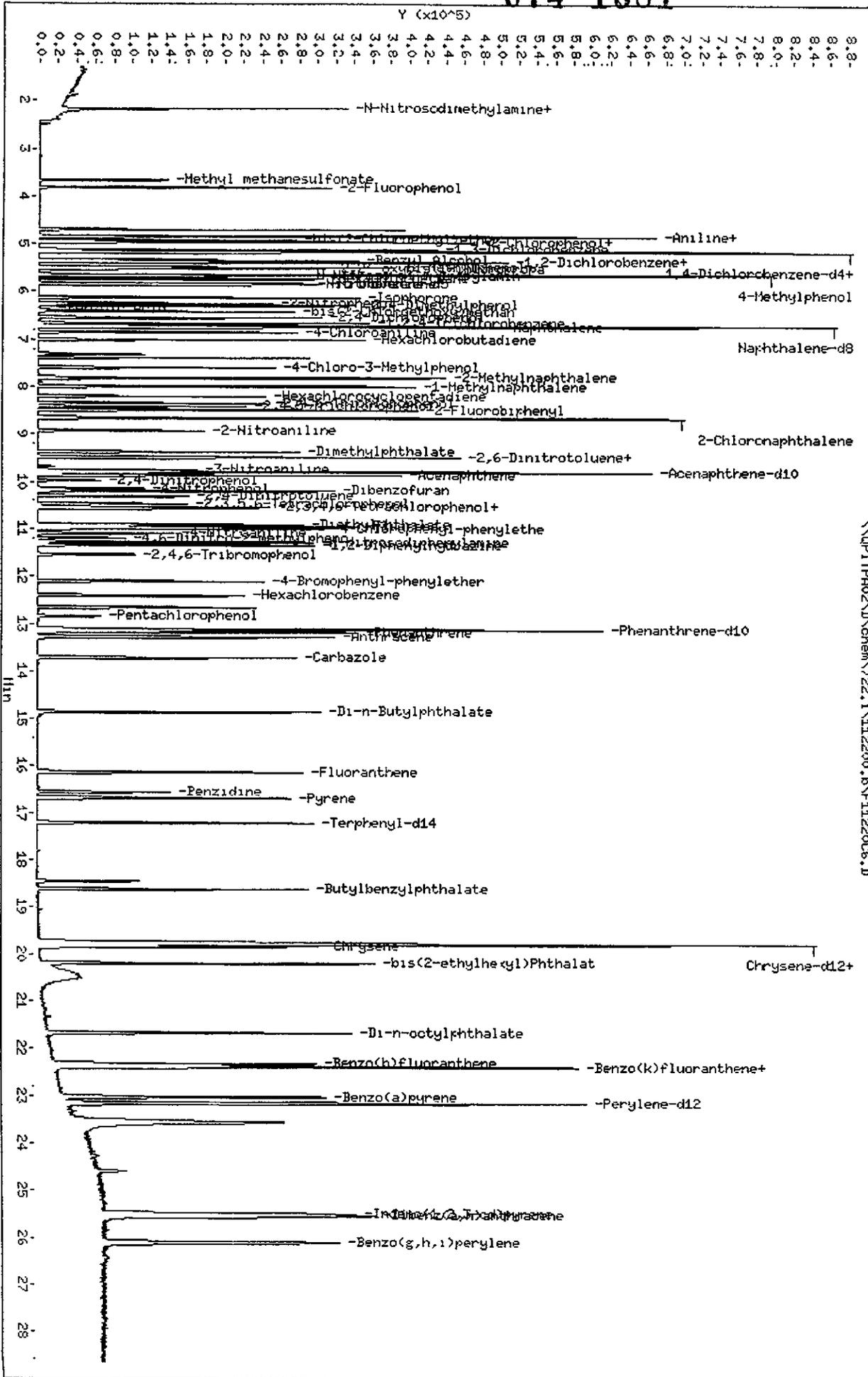
COMPOUND	%RSD
N-Nitrosodimethylamine	3.5
Pyridine	2.3
Methyl methanesulfonate	23.3
2-Fluorophenol	2.4
Phenol-d5	2.1
Phenol	2.8
Aniline	2.5
bis(2-Chloroethyl) ether	2.8
2-Chlorophenol-d4	1.3
2-Chlorophenol	2.7
1,3-Dichlorobenzene	2.1
1,4-Dichlorobenzene	1.9
Benzyl Alcohol	4.8
1,2-Dichlorobenzene-d4	2.1
1,2-Dichlorobenzene	1.6
2-Methylphenol	2.6
2,2'-oxybis(1-Chloropropane)	6.5
4-Methylphenol	2.4
N-Nitroso-di-n-propylamine	2.7
Hexachloroethane	2.2
Nitrobenzene-d5	3.4
Nitrobenzene	2.5
Isophorone	2.6
2-Nitrophenol	2.5
2,4-Dimethylphenol	4.5
bis(2-Chloroethoxy)methane	2.6
Benzoic Acid	52.9
2,4-Dichlorophenol	2.7
1,2,4-Trichlorobenzene	2.2
Naphthalene	2.9
4-Chloroaniline	2.5
Hexachlorobutadiene	4.2
4-Chloro-3-Methylphenol	3.8
2-Methylnaphthalene	2.2
1-Methylnaphthalene	3.1
Hexachlorocyclopentadiene	6.2
2,4,6-Trichlorophenol	2.5
2,4,5-Trichlorophenol	2.7
2-Fluorobiphenyl	2.7

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
Lab File ID: F11220C2.D
Analysis Type: NONE

Injection Date: 22-NOV-2000 10:24
Lab Sample ID: sstd050
Method File: \\QPITPA02\D\chem\722.i\112200.b\

COMPOUND	%RSD
2-Chloronaphthalene	2.3
2-Nitroaniline	4.0
Dimethylphthalate	2.5
Acenaphthylene	1.5
2,6-Dinitrotoluene	5.5
3-Nitroaniline	5.7
Acenaphthene	1.4
2,4-Dinitrophenol	25.6
4-Nitrophenol	11.4
Dibenzofuran	1.9
2,4-Dinitrotoluene	6.3
2,3,5,6-Tetrachlorophenol	10.5
2-Naphthylamine	7.8
2,3,4,6-Tetrachlorophenol	9.3
Diethylphthalate	4.1
Fluorene	3.0
4-Chlorophenyl-phenylether	3.4
4-Nitroaniline	7.5
4,6-Dinitro-2-methylphenol	15.8
N-Nitrosodiphenylamine	4.4
1,2-Diphenylhydrazine	3.1
2,4,6-Tribromophenol	7.6
4-Bromophenyl-phenylether	3.2
Hexachlorobenzene	2.9
Pentachlorophenol	28.5
Phenanthrene	1.6
Anthracene	2.4
Carbazole	3.6
Di-n-Butylphthalate	4.6
Fluoranthene	5.4
Benzidine	10.2
Pyrene	6.5
Terphenyl-d14	5.9
Butylbenzylphthalate	3.2
Benzo(a)Anthracene	2.5
3,3'-Dichlorobenzidine	3.9
Chrysene	3.7
bis(2-ethylhexyl) Phthalate	3.1
Di-n-octylphthalate	4.4



Data File: \NQPI7P02\Nchem\722.1\112200.b\F1122006.D
 Date: 22-Nov-2000 13:12
 Client ID:
 Sample Info: SST020 (10ppb) 77-01-05
 Volume Injected (uL): 2.0
 Column phase: Hp5-HS

Instrument: 722.1
 Operator: 007062
 Column diameter: 0.25

NQPI7P02\Nchem\722.1\112200.b\F1122006.D

Data File: \\qpitpa02\d\chem\722.i\112200.b\F11220C6.D
 Report Date: 22-Nov-2000 13:46

STL-Pittsburgh

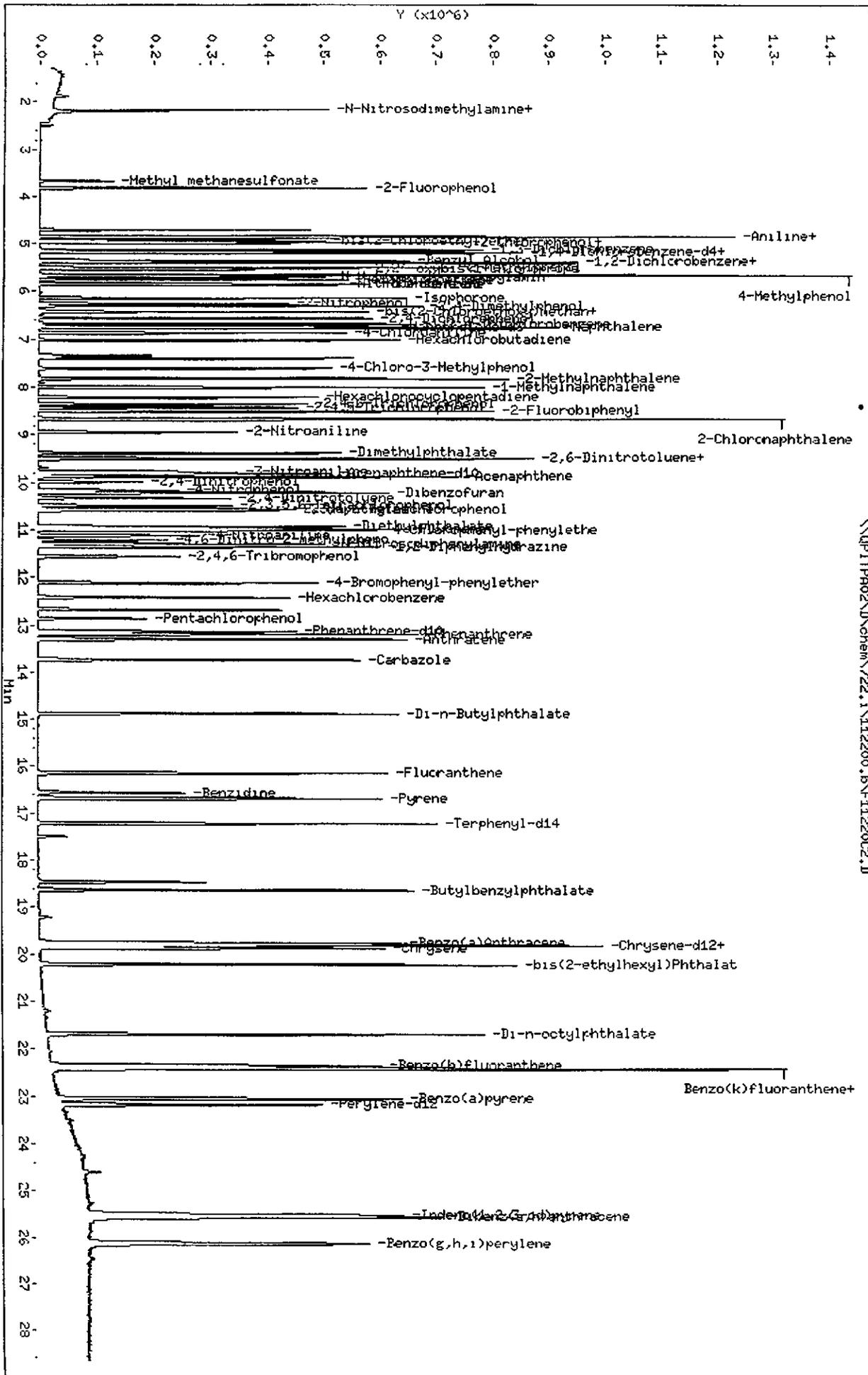
Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\112200.b\F11220C6.D
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 Inj Date : 22-NOV-2000 13:12
 Operator : 007062 Inst ID: 722.i
 Smp Info : SSTD020 (10ppb) 77-01-05
 Misc Info : sstd020,112200.b,8270b.m,2-root.sub,1,1
 Comment :
 Method : \\QPITPA02\D\chem\722.i\112200.b\8270b.m
 Meth Date : 22-Nov-2000 13:46 BungardF Quant Type: ISTD
 Cal Date : 22-NOV-2000 13:12 Cal File: F11220C6.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

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
	MASS						(NG)	(NG)
=====	=====		==	=====	=====	=====	=====	=====
* 1 1,4-Dichlorobenzene-d4	152		5 161	5 161	(1 000)	155130	40 0000	
* 2 Naphthalene-d8	136		6 721	6 721	(1 000)	552636	40 0000	
* 3 Acenaphthene-d10	164		9 798	9 798	(1 000)	285209	40 0000	
* 4 Phenanthrene-d10	188		13 121	13 121	(1 000)	470003	40.0000	
* 5 Chrysene-d12	240		19.783	19 783	(1 000)	501815	40 0000	
* 6 Perylene-d12	264		23 164	23 164	(1.000)	507904	40 0000	
10 N-Nitrosodimethylamine	74		2 165	2 165	(0 419)	59628	20 0000	20 4
9 Pyridine	79		2 165	2 165	(0 419)	104238	20 0000	20 2
16 Methyl methanesulfonate	80		3.666	3 666	(0 710)	63671	20 0000	22 7
21 Aniline	93		4 852	4 852	(0 940)	173643	20.0000	20 2
22 Phenol	94		4 841	4 841	(0 938)	150266	20.0000	20 2
23 bis(2-Chloroethyl)ether	93		4.921	4 921	(0 953)	108907	20 0000	20 2
24 2-Chlorophenol	128		4.969	4 969	(0 963)	106786	20 0000	20 4
26 1,3-Dichlorobenzene	146		5.119	5 119	(0 992)	119220	20 0000	20 0
27 1,4-Dichlorobenzene	146		5.177	5 177	(1 003)	122388	20 0000	20 1
28 1,2-Dichlorobenzene	146		5 391	5 391	(1 045)	111845	20 0000	19 8
29 Benzyl Alcohol	108		5 338	5 338	(1 034)	64155	20 0000	18 3
30 2-Methylphenol	108		5 487	5 487	(1 063)	93136	20 0000	20 1
31 2,2'-oxybis(1-Chloropropane)	45		5 519	5.519	(1.069)	157707	20 0000	21 1
32 N-Nitroso-di-n-propylamine	70		5.674	5 674	(1 099)	80307	20.0000	19 9
192 4-Methylphenol	108		5 648	5 648	(1 094)	96534	20.0000	19 6
34 Hexachloroethane	117		5 738	5 738	(1 112)	46584	20.0000	19 7
35 Nitrobenzene	77		5.845	5 845	(0 870)	123799	20.0000	19 9
41 Isophorone	82		6 128	6 128	(0 912)	190315	20 0000	19 4
42 2-Nitrophenol	139		6 241	6 241	(0 928)	53255	20 0000	19 2
43 2,4-Dimethylphenol	107		6 289	6 289	(0 936)	95602	20 0000	18 6

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
44 bis(2-Chloroethoxy)methane	93	6 417	6 417	(0 955)	118964	20 0000	19.6
48 2,4-Dichlorophenol	162	6 545	6 545	(0 974)	78592	20 0000	19.3
49 Benzoic Acid	122	6.379	6 379	(0 949)	5465	20.0000	4 30
50 1,2,4-Trichlorobenzene	180	6 663	6 663	(0 991)	87356	20.0000	19.6
51 Naphthalene	128	6 748	6 748	(1 004)	305404	20 0000	20.1
52 4-Chloroaniline	127	6.855	6 855	(1.020)	111147	20 0000	19.4
56 Hexachlorobutadiene	225	7.010	7 010	(1.043)	53173	20 0000	19.0
59 4-Chloro-3-Methylphenol	107	7 592	7 592	(1 130)	84963	20 0000	18.8
62 2-Methylnaphthalene	142	7 806	7 806	(1.161)	185957	20 0000	19.5
205 1-Methylnaphthalene	142	7 993	7 993	(1 189)	173502	20.0000	19.0
64 Hexachlorocyclopentadiene	237	8 201	8 201	(0 837)	57782	20 0000	18.1
66 2,4,6-Trichlorophenol	196	8 345	8 345	(0 852)	50337	20 0000	19.3
67 2,4,5-Trichlorophenol	196	8 415	8 415	(0.859)	53177	20.0000	19.2
70 2-Chloronaphthalene	162	8 661	8 661	(0 884)	169199	20 0000	19.7
73 2-Nitroaniline	65	8 922	8 922	(0.911)	58402	20 0000	18.6
76 Dimethylphthalate	163	9 371	9 371	(0.956)	180804	20.0000	19.2
78 2,6-Dinitrotoluene	165	9 494	9 494	(0.969)	39187	20.0000	18.2
79 Acenaphthylene	152	9 478	9 478	(0.967)	269410	20.0000	19.7
81 3-Nitroaniline	138	9 761	9 761	(0.996)	44037	20 0000	18.2
82 Acenaphthene	153	9.863	9 863	(1.007)	170961	20 0000	19.9
83 2,4-Dinitrophenol	184	9 969	9 969	(1.017)	15165	20 0000	12.3
85 4-Nitrophenol	109	10 146	10 146	(1.035)	29192	20 0000	16.7
86 Dibenzofuran	168	10 199	10 199	(1.041)	233438	20 0000	19.8
87 2,4-Dinitrotoluene	165	10 311	10 311	(1.052)	52112	20 0000	18.0
91 2,3,5,6-Tetrachlorophenol	232	10 472	10 472	(1.069)	37462	20 0000	16.9
88 2,3,4,6-Tetrachlorophenol	232	10 573	10 573	(1.079)	39711	20.0000	17.5
92 2-Naphthylamine	143	10 541	10 541	(1.076)	151370	20.0000	21.7
93 Diethylphthalate	149	10 910	10 910	(1 113)	182817	20 0000	18.7
94 Fluorene	166	10 952	10 952	(1 118)	187594	20 0000	19.1
95 4-Chlorophenyl-phenylether	204	10 990	10 990	(1.122)	89215	20 0000	19.0
96 4-Nitroaniline	138	11 097	11 097	(1 132)	42476	20 0000	17.6
98 4,6-Dinitro-2-methylphenol	198	11 198	11 198	(0 853)	23685	20 0000	15.3
99 N-Nitrosodiphenylamine	169	11 278	11 278	(0 860)	138266	20 0000	20.8
100 1,2-Diphenylhydrazine	77	11 342	11 342	(0 864)	232922	20 0000	20.4
106 4-Bromophenyl-phenylether	248	12 106	12 106	(0 923)	50660	20 0000	19.1
107 Hexachlorobenzene	284	12.411	12 411	(0 946)	57050	20 0000	19.3
111 Pentachlorophenol	266	12.849	12 849	(0 979)	15759	20 0000	12.4
115 Phenanthrene	178	13 175	13 175	(1 004)	261654	20 0000	19.8
116 Anthracene	178	13 282	13 282	(1.012)	261172	20 0000	19.4
119 Carbazole	167	13 714	13 714	(1 045)	230784	20 0000	18.9
120 Di-n-Butylphthalate	149	14.863	14 863	(1.133)	283230	20 0000	18.4
123 Fluoranthene	202	16 124	16 124	(1 229)	262296	20 0000	18.3
124 Benzidine	184	16 546	16 546	(0 836)	112642	20 0000	18.9
125 Pyrene	202	16 674	16 674	(0 843)	264744	20 0000	21.1
131 Butylbenzylphthalate	149	18 613	18 613	(0.941)	125669	20 0000	19.6
135 3,3'-Dichlorobenzidine	252	19 783	19 783	(1 000)	97717	20 0000	18.7
136 Benzo(a)Anthracene	228	19.740	19 740	(0 998)	257414	20.0000	20.0

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
137 Chrysene	228	19.842	19.842	(1.003)	249328	20.0000	20.6
139 bis(2-ethylhexyl)Phthalate	149	20.194	20.194	(1.021)	178026	20.0000	19.6
140 Di-n-octylphthalate	149	21.669	21.669	(0.935)	304338	20.0000	18.6
141 Benzo(b)fluoranthene	252	22.326	22.326	(0.964)	288988	20.0000	18.1
142 Benzo(k)fluoranthene	252	22.390	22.390	(0.967)	318819	20.0000	19.8
143 7,12-dimethylbenz[a]anthracen	256	22.390	22.390	(0.967)	126131	20.0000	16.8
146 Benzo(a)pyrene	252	23.031	23.031	(0.994)	272089	20.0000	18.9
149 Indeno(1,2,3-cd)pyrene	276	25.488	25.488	(1.100)	386544	20.0000	19.1
150 Dibenz(a,h)anthracene	278	25.536	25.536	(1.102)	335390	20.0000	19.0
151 Benzo(g,h,i)perylene	276	26.103	26.103	(1.127)	341515	20.0000	19.5
\$ 154 Nitrobenzene-d5	82	5.824	5.824	(0.866)	123567	20.0000	19.7
\$ 155 2-Fluorobiphenyl	172	8.490	8.490	(0.866)	200359	20.0000	20.1
\$ 156 Terphenyl-d14	244	17.197	17.197	(0.869)	226566	20.0000	20.6
\$ 157 Phenol-d5	99	4.830	4.830	(0.936)	130450	20.0000	19.7
\$ 158 2-Fluorophenol	112	3.821	3.821	(0.740)	95661	20.0000	19.6
\$ 159 2,4,6-Tribromophenol	330	11.545	11.545	(0.880)	22842	20.0000	17.7
\$ 186 2-Chlorophenol-d4	132	4.953	4.953	(0.960)	95688	20.0000	19.8
\$ 187 1,2-Dichlorobenzene-d4	152	5.375	5.375	(1.041)	73634	20.0000	19.7



Data File: \\QP1TPA02\Nchem\722.1\112200.b\F1122002.D
 Date: 22-NOV-2000 10:24
 Client ID:
 Sample Info: SST050 (25ppb) 77-05-09
 Volume Injected (uL): 2.0
 Column phase: Hp5-MS

Instrument: 722.1
 Operator: 007062
 Column diameter: 0.25

\\QP1TPA02\Nchem\722.1\112200.b\F1122002.D

Data File: \\qpitpa02\d\chem\722.i\112200.b\F11220C2.D
Report Date: 22-Nov-2000 11:20

STL-Pittsburgh

Semivolatiles REPORT SW-846 Method 8270

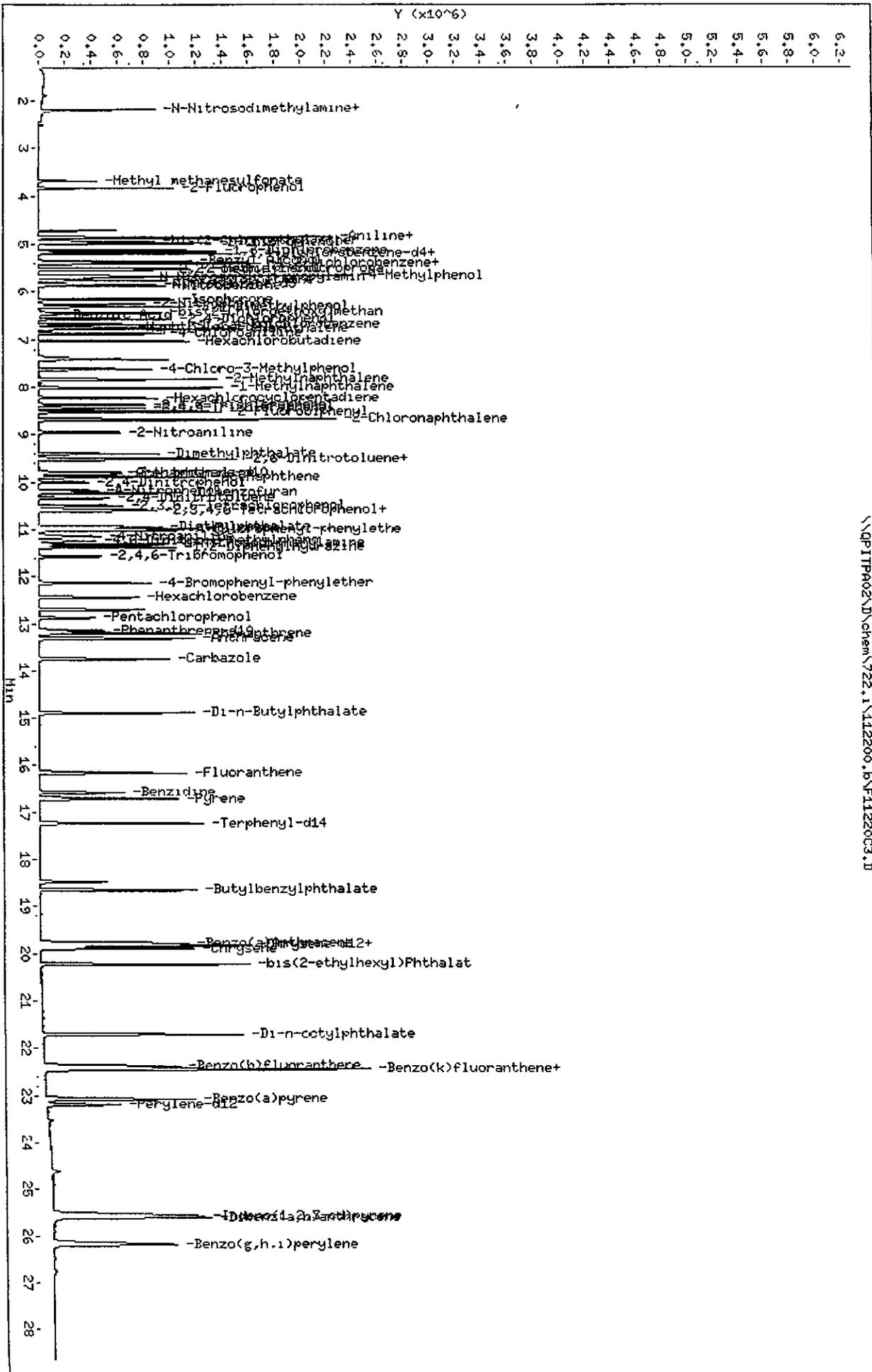
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Lab Smp Id: sstd050 Client Smp ID: SSTD050
Inj Date : 22-NOV-2000 10:24
Operator : 007062 Inst ID: 722.i
Smp Info : SSTD050 (25ppb) 77-05-09
Misc Info : sstd050,112200.b,8270b.m,2-root.sub,1,2
Comment :
Method : \\QPITPA02\D\chem\722.i\112200.b\8270b.m
Meth Date : 22-Nov-2000 11:20 BungardF Quant Type: ISTD
Cal Date : 22-NOV-2000 10:24 Cal File: F11220C2.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

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Table with columns: Compounds, QUANT SIG (MASS, RT, EXP RT, REL RT), RESPONSE, AMOUNTS (CAL-AMT (NG), ON-COL (NG)). Lists various chemical compounds and their corresponding data points.

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
44 bis(2-Chloroethoxy)methane	93	6.427	6.427	(0.955)	223499	50.0000	51.5
48 2,4-Dichlorophenol	162	6.555	6.555	(0.974)	148156	50.0000	51.0
49 Benzoic Acid	122	6.437	6.437	(0.956)	37901	50.0000	73.7
50 1,2,4-Trichlorobenzene	180	6.672	6.672	(0.991)	162300	50.0000	50.6
51 Naphthalene	128	6.758	6.758	(1.004)	562664	50.0000	50.9
52 4-Chloroaniline	127	6.859	6.859	(1.019)	209959	50.0000	51.3
56 Hexachlorobutadiene	225	7.020	7.020	(1.043)	99461	50.0000	50.4
59 4-Chloro-3-Methylphenol	107	7.602	7.602	(1.129)	164361	50.0000	51.9
62 2-Methylnaphthalene	142	7.816	7.816	(1.161)	347255	50.0000	51.1
205 1-Methylnaphthalene	142	7.997	7.997	(1.188)	329049	50.0000	51.4
64 Hexachlorocyclopentadiene	237	8.211	8.211	(0.837)	117291	50.0000	51.1
66 2,4,6-Trichlorophenol	196	8.355	8.355	(0.852)	97551	50.0000	50.3
67 2,4,5-Trichlorophenol	196	8.425	8.425	(0.859)	103129	50.0000	50.4
70 2-Chloronaphthalene	162	8.670	8.670	(0.884)	321964	50.0000	50.7
73 2-Nitroaniline	65	8.932	8.932	(0.911)	117682	50.0000	51.7
76 Dimethylphthalate	163	9.381	9.381	(0.956)	355720	50.0000	51.2
78 2,6-Dinitrotoluene	165	9.504	9.504	(0.969)	80140	50.0000	51.9
79 Acenaphthylene	152	9.493	9.493	(0.968)	517009	50.0000	50.9
81 3-Nitroaniline	138	9.776	9.776	(0.997)	89841	50.0000	51.5
82 Acenaphthene	153	9.872	9.872	(1.007)	324184	50.0000	50.6
83 2,4-Dinitrophenol	184	9.984	9.984	(1.018)	41128	50.0000	59.6
85 4-Nitrophenol	109	10.155	10.155	(1.035)	62419	50.0000	53.4
86 Dibenzofuran	168	10.209	10.209	(1.041)	448190	50.0000	50.9
87 2,4-Dinitrotoluene	165	10.321	10.321	(1.052)	108397	50.0000	52.7
91 2,3,5,6-Tetrachlorophenol	232	10.487	10.487	(1.069)	79279	50.0000	53.6
88 2,3,4,6-Tetrachlorophenol	232	10.583	10.583	(1.079)	80835	50.0000	52.5
92 2-Naphthylamine	143	10.556	10.556	(1.076)	268130	50.0000	48.0
93 Diethylphthalate	149	10.925	10.925	(1.114)	366133	50.0000	51.9
94 Fluorene	166	10.967	10.967	(1.118)	369698	50.0000	51.2
95 4-Chlorophenyl-phenylether	204	10.999	10.999	(1.121)	175201	50.0000	51.0
96 4-Nitroaniline	138	11.117	11.117	(1.133)	90119	50.0000	52.6
98 4,6-Dinitro-2-methylphenol	198	11.213	11.213	(0.854)	56086	50.0000	55.2
99 N-Nitrosodiphenylamine	169	11.288	11.288	(0.860)	238212	50.0000	47.0
100 1,2-Diphenylhydrazine	77	11.352	11.352	(0.865)	459052	50.0000	50.9
106 4-Bromophenyl-phenylether	248	12.116	12.116	(0.923)	103566	50.0000	50.6
107 Hexachlorobenzene	284	12.420	12.420	(0.946)	115457	50.0000	50.3
111 Pentachlorophenol	266	12.859	12.859	(0.979)	40209	50.0000	60.8
115 Phenanthrene	178	13.184	13.184	(1.004)	521026	50.0000	50.8
116 Anthracene	178	13.291	13.291	(1.012)	532767	50.0000	51.2
119 Carbazole	167	13.729	13.729	(1.046)	476758	50.0000	51.7
120 Di-n-Butylphthalate	149	14.873	14.873	(1.133)	602551	50.0000	52.4
123 Fluoranthene	202	16.133	16.133	(1.229)	554329	50.0000	52.3
124 Benzidine	184	16.555	16.555	(0.836)	209416	50.0000	41.8
125 Pyrene	202	16.684	16.684	(0.843)	554122	50.0000	49.9
131 Butylbenzylphthalate	149	18.628	18.628	(0.941)	276890	50.0000	51.0
135 3,3'-Dichlorobenzidine	252	19.798	19.798	(1.000)	214148	50.0000	50.0
136 Benzo(a)Anthracene	228	19.755	19.755	(0.998)	551886	50.0000	50.7

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
137 Chrysene	228	19.862	19.862	(1.004)	521146	50.0000	50.4
139 bis(2-ethylhexyl)Phthalate	149	20.204	20.204	(1.021)	392008	50.0000	51.6
140 Di-n-octylphthalate	149	21.678	21.678	(0.936)	679209	50.0000	51.7
141 Benzo(b)fluoranthene	252	22.346	22.346	(0.964)	592683	50.0000	51.2
142 Benzo(k)fluoranthene	252	22.405	22.405	(0.967)	689818	50.0000	51.2
143 7,12-dimethylbenz[a]anthracen	256	22.410	22.410	(0.967)	295881	50.0000	53.4
146 Benzo(a)pyrene	252	23.051	23.051	(0.995)	584018	50.0000	51.6
149 Indeno(1,2,3-cd)pyrene	276	25.514	25.514	(1.101)	782443	50.0000	51.2
150 Dibenz(a,h)anthracene	278	25.562	25.562	(1.103)	680906	50.0000	51.5
151 Benzo(g,h,i)perylene	276	26.128	26.128	(1.128)	678189	50.0000	50.8
\$ 154 Nitrobenzene-d5	82	5.834	5.834	(0.867)	235318	50.0000	52.0
\$ 155 2-Fluorobiphenyl	172	8.499	8.499	(0.867)	385379	50.0000	50.9
\$ 156 Terphenyl-d14	244	17.212	17.212	(0.870)	490729	50.0000	50.6
\$ 157 Phenol-d5	99	4.835	4.835	(0.936)	241263	50.0000	51.3
\$ 158 2-Fluorophenol	112	3.825	3.825	(0.740)	179142	50.0000	51.4
\$ 159 2,4,6-Tribromophenol	330	11.555	11.555	(0.880)	48976	50.0000	51.7
\$ 186 2-Chlorophenol-d4	132	4.958	4.958	(0.960)	173892	50.0000	51.0
\$ 187 1,2-Dichlorobenzene-d4	152	5.380	5.380	(1.041)	136331	50.0000	51.2



Data File: \\QPIITP02\chem\722.1\112200.b\F1122003.D
 Date: 22-NOV-2000 10:58
 Client ID:
 Sample Info: SST0080 (40ppb) 77-01-07
 Volume Injected (uL): 2.0
 Column phase: Hp5-MS

Instrument: 722.1
 Operator: 007062
 Column diameter: 0.25

\\QPIITP02\chem\722.1\112200.b\F1122003.D

Data File: \\qpitpa02\d\chem\722.i\112200.b\F11220C3.D
Report Date: 22-Nov-2000 11:45

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\112200.b\F11220C3.D
Lab Smp Id: sstd080 Client Smp ID: SSTD080
Inj Date : 22-NOV-2000 10:58
Operator : 007062 Inst ID: 722.i
Smp Info : SSTD080 (40ppb) 77-01-07
Misc Info : sstd080,112200.b,8270b.m,2-root.sub,1,3
Comment :
Method : \\QPITPA02\D\chem\722.i\112200.b\8270b.m
Meth Date : 22-Nov-2000 11:45 BungardF Quant Type: ISTD
Cal Date : 22-NOV-2000 10:58 Cal File: F11220C3.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

Handwritten signature and date: 11/22/00

Table with columns: Compounds, QUANT SIG, MASS, RT, EXP RT, REL RT, RESPONSE, AMOUNTS (CAL-AMT, ON-COL), (NG), (NG). Lists various chemical compounds and their detection data.

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
-----	----	==	=====	=====	-----	-----	-----
44 bis (2-Chloroethoxy)methane	93	6.435	6.435	(0.955)	388906	80.0000	78.4
48 2,4-Dichlorophenol	162	6.563	6.563	(0.974)	261045	80.0000	78.5
49 Benzoic Acid	122	6.478	6.478	(0.961)	81370	80.0000	111
50 1,2,4-Trichlorobenzene	180	6.686	6.686	(0.992)	284677	80.0000	78.0
51 Naphthalene	128	6.772	6.772	(1.005)	977592	80.0000	77.7
52 4-Chloroaniline	127	6.873	6.873	(1.020)	368964	80.0000	78.7
56 Hexachlorobutadiene	225	7.028	7.028	(1.043)	177420	80.0000	78.5
59 4-Chloro-3-Methylphenol	107	7.616	7.616	(1.130)	290166	80.0000	79.6
62 2-Methylnaphthalene	142	7.829	7.829	(1.162)	609264	80.0000	78.4
205 1-Methylnaphthalene	142	8.011	8.011	(1.189)	590915	80.0000	80.0
64 Hexachlorocyclopentadiene	237	8.219	8.219	(0.837)	214639	80.0000	80.6
66 2,4,6-Trichlorophenol	196	8.369	8.369	(0.852)	175460	80.0000	78.9
67 2,4,5-Trichlorophenol	196	8.438	8.438	(0.859)	186125	80.0000	79.1
70 2-Chloronaphthalene	162	8.684	8.684	(0.884)	567161	80.0000	78.2
73 2-Nitroaniline	65	8.951	8.951	(0.911)	213117	80.0000	80.6
76 Dimethylphthalate	163	9.395	9.395	(0.956)	634490	80.0000	79.4
78 2,6-Dinitrotoluene	165	9.523	9.523	(0.970)	145190	80.0000	80.9
79 Acenaphthylene	152	9.507	9.507	(0.968)	925552	80.0000	79.2
81 3-Nitroaniline	138	9.790	9.790	(0.997)	162848	80.0000	80.5
82 Acenaphthene	153	9.891	9.891	(1.007)	576262	80.0000	78.6
83 2,4-Dinitrophenol	184	10.004	10.004	(1.018)	87281	80.0000	97.5
85 4-Nitrophenol	109	10.180	10.180	(1.036)	117789	80.0000	84.7
86 Dibenzofuran	168	10.223	10.223	(1.041)	788616	80.0000	78.3
87 2,4-Dinitrotoluene	165	10.346	10.346	(1.053)	196228	80.0000	81.6
91 2,3,5,6-Tetrachlorophenol	232	10.500	10.500	(1.069)	149745	80.0000	84.9
88 2,3,4,6-Tetrachlorophenol	232	10.602	10.602	(1.079)	152851	80.0000	83.9
92 2-Naphthylamine	143	10.575	10.575	(1.077)	488124	80.0000	77.0
93 Diethylphthalate	149	10.944	10.944	(1.114)	655041	80.0000	80.2
94 Fluorene	166	10.981	10.981	(1.118)	662320	80.0000	79.6
95 4-Chlorophenyl-phenylether	204	11.019	11.019	(1.122)	312977	80.0000	79.3
96 4-Nitroaniline	138	11.142	11.142	(1.134)	163393	80.0000	81.6
98 4,6-Dinitro-2-methylphenol	198	11.238	11.238	(0.855)	111508	80.0000	89.0
99 N-Nitrosodiphenylamine	169	11.307	11.307	(0.860)	474727	80.0000	80.3
100 1,2-Diphenylhydrazine	77	11.371	11.371	(0.865)	814800	80.0000	78.4
106 4-Bromophenyl-phenylether	248	12.130	12.130	(0.923)	187155	80.0000	79.0
107 Hexachlorobenzene	284	12.440	12.440	(0.946)	207393	80.0000	78.4
111 Pentachlorophenol	266	12.878	12.878	(0.980)	91665	80.0000	102
115 Phenanthrene	178	13.204	13.204	(1.004)	930421	80.0000	78.6
116 Anthracene	178	13.310	13.310	(1.013)	950567	80.0000	79.0
119 Carbazole	167	13.748	13.748	(1.046)	862869	80.0000	80.2
120 Di-n-Butylphthalate	149	14.886	14.886	(1.132)	1099193	80.0000	81.4
123 Fluoranthene	202	16.158	16.158	(1.229)	1017831	80.0000	81.7
124 Benzidine	184	16.574	16.574	(0.836)	533691	80.0000	84.4
125 Pyrene	202	16.703	16.703	(0.843)	1012358	80.0000	76.1
131 Butylbenzylphthalate	149	18.647	18.647	(0.941)	523233	80.0000	79.0
135 3,3'-Dichlorobenzidine	252	19.817	19.817	(1.000)	425856	80.0000	80.6
136 Benzo(a)Anthracene	228	19.774	19.774	(0.998)	1033995	80.0000	78.3

674 1092

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
137 Chrysene	228	19.881	19.881	(1.003)	975386	80.0000	77.8
139 bis(2-ethylhexyl)Phthalate	149	20.218	20.218	(1.020)	731097	80.0000	78.9
140 Di-n-octylphthalate	149	21.698	21.698	(0.936)	1298883	80.0000	79.8
141 Benzo(b)fluoranthene	252	22.376	22.376	(0.965)	1190397	80.0000	81.9
142 Benzo(k)fluoranthene	252	22.435	22.435	(0.967)	1293386	80.0000	78.2
143 7,12-dimethylbenz[a]anthracen	256	22.435	22.435	(0.967)	585314	80.0000	83.3
146 Benzo(a)pyrene	252	23.071	23.071	(0.995)	1117130	80.0000	79.6
149 Indeno(1,2,3-cd)pyrene	276	25.549	25.549	(1.102)	1545404	80.0000	81.0
150 Dibenz(a,h)anthracene	278	25.597	25.597	(1.104)	1338409	80.0000	81.0
151 Benzo(g,h,i)perylene	276	26.174	26.174	(1.129)	1340119	80.0000	80.5
\$ 154 Nitrobenzene-d5	82	5.842	5.842	(0.867)	406219	80.0000	78.4
\$ 155 2-Fluorobiphenyl	172	8.513	8.513	(0.867)	675282	80.0000	78.1
\$ 156 Terphenyl-d14	244	17.232	17.232	(0.870)	889222	80.0000	76.4
\$ 157 Phenol-d5	99	4.848	4.848	(0.937)	427844	80.0000	79.1
\$ 158 2-Fluorophenol	112	3.833	3.833	(0.741)	318956	80.0000	79.4
\$ 159 2,4,6-Tribromophenol	330	11.569	11.569	(0.880)	91557	80.0000	82.0
\$ 186 2-Chlorophenol-d4	132	4.966	4.966	(0.960)	312383	80.0000	79.5
\$ 187 1,2-Dichlorobenzene-d4	152	5.388	5.388	(1.041)	239939	80.0000	78.6

Data File: \\qpitpa02\d\chem\722.i\112200.b\F11220C4.D
 Report Date: 22-Nov-2000 12:37

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STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\112200.b\F11220C4.D
 Lab Smp Id: sstd120 Client Smp ID: SSTD120
 Inj Date : 22-NOV-2000 11:33
 Operator : 007062 Inst ID: 722.i
 Smp Info : SSTD120 (60ppb) 77-01-08
 Misc Info : sstd120,112200.b,8270b.m,2-root.sub,1,4
 Comment :
 Method : \\QPITPA02\D\chem\722.i\112200.b\8270b.m
 Meth Date : 22-Nov-2000 12:36 BungardF Quant Type: ISTD
 Cal Date : 22-NOV-2000 11:33 Cal File: F11220C4.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

11/22/00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
* 1 1,4-Dichlorobenzene-d4	152	5.174	5.174	(1.000)	138641	40.0000	
* 2 Naphthalene-d8	136	6.744	6.744	(1.000)	490435	40.0000	
* 3 Acenaphthene-d10	164	9.821	9.821	(1.000)	269151	40.0000	
* 4 Phenanthrene-d10	188	13.149	13.149	(1.000)	477569	40.0000	
* 5 Chrysene-d12	240	19.822	19.822	(1.000)	629964	40.0000	
* 6 Perylene-d12	264	23.198	23.198	(1.000)	607056	40.0000	
10 N-Nitrosodimethylamine	74	2.182	2.182	(0.422)	306046	120.000	117
9 Pyridine	79	2.171	2.171	(0.420)	559912	120.000	120
16 Methyl methanesulfonate	80	3.683	3.683	(0.712)	330400	120.000	135
21 Aniline	93	4.869	4.869	(0.941)	937145	120.000	122
22 Phenol	94	4.869	4.869	(0.941)	791028	120.000	118
23 bis(2-Chloroethyl)ether	93	4.944	4.944	(0.956)	572110	120.000	118
24 2-Chlorophenol	128	4.987	4.987	(0.964)	555475	120.000	118
26 1,3-Dichlorobenzene	146	5.136	5.136	(0.993)	631969	120.000	118
27 1,4-Dichlorobenzene	146	5.195	5.195	(1.004)	650320	120.000	119
28 1,2-Dichlorobenzene	146	5.403	5.403	(1.044)	602146	120.000	120
29 Benzyl Alcohol	108	5.361	5.361	(1.036)	385134	120.000	123
30 2-Methylphenol	108	5.516	5.516	(1.066)	490373	120.000	118
31 2,2'-oxybis(1-Chloropropane)	45	5.537	5.537	(1.070)	775063	120.000	114
32 N-Nitroso-di-n-propylamine	70	5.708	5.708	(1.103)	429328	120.000	119
192 4-Methylphenol	108	5.676	5.676	(1.097)	529784	120.000	120
34 Hexachloroethane	117	5.756	5.756	(1.113)	253415	120.000	120
35 Nitrobenzene	77	5.873	5.873	(0.871)	654619	120.000	118
41 Isophorone	82	6.157	6.157	(0.913)	1048669	120.000	121
42 2-Nitrophenol	139	6.263	6.263	(0.929)	298592	120.000	121
43 2,4-Dimethylphenol	107	6.311	6.311	(0.936)	555007	120.000	122

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
44 bis(2-Chloroethoxy)methane	93	6.445	6.445	(0.956)	644068	120.000	120
48 2,4-Dichlorophenol	162	6.573	6.573	(0.975)	439020	120.000	121
49 Benzoic Acid	122	6.514	6.514	(0.966)	189573	120.000	191(A)
50 1,2,4-Trichlorobenzene	180	6.685	6.685	(0.991)	475567	120.000	120
51 Naphthalene	128	6.771	6.771	(1.004)	1588959	120.000	117
52 4-Chloroaniline	127	6.872	6.872	(1.019)	615933	120.000	121
56 Hexachlorobutadiene	225	7.027	7.027	(1.042)	304281	120.000	123
59 4-Chloro-3-Methylphenol	107	7.626	7.626	(1.131)	491472	120.000	123
62 2-Methylnaphthalene	142	7.829	7.829	(1.161)	1015877	120.000	120
205 1-Methylnaphthalene	142	8.016	8.016	(1.189)	992991	120.000	123
64 Hexachlorocyclopentadiene	237	8.224	8.224	(0.837)	375637	120.000	126
66 2,4,6-Trichlorophenol	196	8.374	8.374	(0.853)	300394	120.000	122
67 2,4,5-Trichlorophenol	196	8.448	8.448	(0.860)	319278	120.000	122
70 2-Chloronaphthalene	162	8.694	8.694	(0.885)	981051	120.000	122
73 2-Nitroaniline	65	8.956	8.956	(0.912)	365118	120.000	124
76 Dimethylphthalate	163	9.405	9.405	(0.958)	1079869	120.000	122
78 2,6-Dinitrotoluene	165	9.533	9.533	(0.971)	254355	120.000	126
79 Acenaphthylene	152	9.506	9.506	(0.968)	1560758	120.000	121
81 3-Nitroaniline	138	9.800	9.800	(0.998)	285083	120.000	126
82 Acenaphthene	153	9.896	9.896	(1.008)	976227	120.000	120
83 2,4-Dinitrophenol	184	10.014	10.014	(1.020)	167490	120.000	154
85 4-Nitrophenol	109	10.195	10.195	(1.038)	217102	120.000	135
86 Dibenzofuran	168	10.233	10.233	(1.042)	1336061	120.000	120
87 2,4-Dinitrotoluene	165	10.355	10.355	(1.054)	345305	120.000	127
91 2,3,5,6-Tetrachlorophenol	232	10.505	10.505	(1.070)	269816	120.000	133
88 2,3,4,6-Tetrachlorophenol	232	10.612	10.612	(1.080)	276680	120.000	132
92 2-Naphthylamine	143	10.585	10.585	(1.078)	761747	120.000	111
93 Diethylphthalate	149	10.948	10.948	(1.115)	1138782	120.000	125
94 Fluorene	166	10.986	10.986	(1.119)	1136125	120.000	123
95 4-Chlorophenyl-phenylether	204	11.023	11.023	(1.122)	540567	120.000	123
96 4-Nitroaniline	138	11.167	11.167	(1.137)	290057	120.000	128
98 4,6-Dinitro-2-methylphenol	198	11.253	11.253	(0.856)	212442	120.000	141
99 N-Nitrosodiphenylamine	169	11.322	11.322	(0.861)	837957	120.000	124
100 1,2-Diphenylhydrazine	77	11.376	11.376	(0.865)	1379283	120.000	118
106 4-Bromophenyl-phenylether	248	12.134	12.134	(0.923)	330145	120.000	122
107 Hexachlorobenzene	284	12.444	12.444	(0.946)	367883	120.000	122
111 Pentachlorophenol	266	12.882	12.882	(0.980)	189146	120.000	164(A)
115 Phenanthrene	178	13.214	13.214	(1.005)	1618063	120.000	120
116 Anthracene	178	13.320	13.320	(1.013)	1672275	120.000	122
119 Carbazole	167	13.753	13.753	(1.046)	1538228	120.000	124
120 Di-n-Butylphthalate	149	14.891	14.891	(1.132)	1943635	120.000	125
123 Fluoranthene	202	16.162	16.162	(1.229)	1826402	120.000	127
124 Benzidine	184	16.579	16.579	(0.836)	960794	120.000	122
125 Pyrene	202	16.713	16.713	(0.843)	1812248	120.000	112
131 Butylbenzylphthalate	149	18.652	18.652	(0.941)	966357	120.000	118
135 3,3'-Dichlorobenzidine	252	19.822	19.822	(1.000)	811264	120.000	123
136 Benzo(a)Anthracene	228	19.784	19.784	(0.998)	1922408	120.000	118

Data File: \\qpitpa02\d\chem\722.i\112200.b\F11220C4.D
Report Date: 22-Nov-2000 12:37

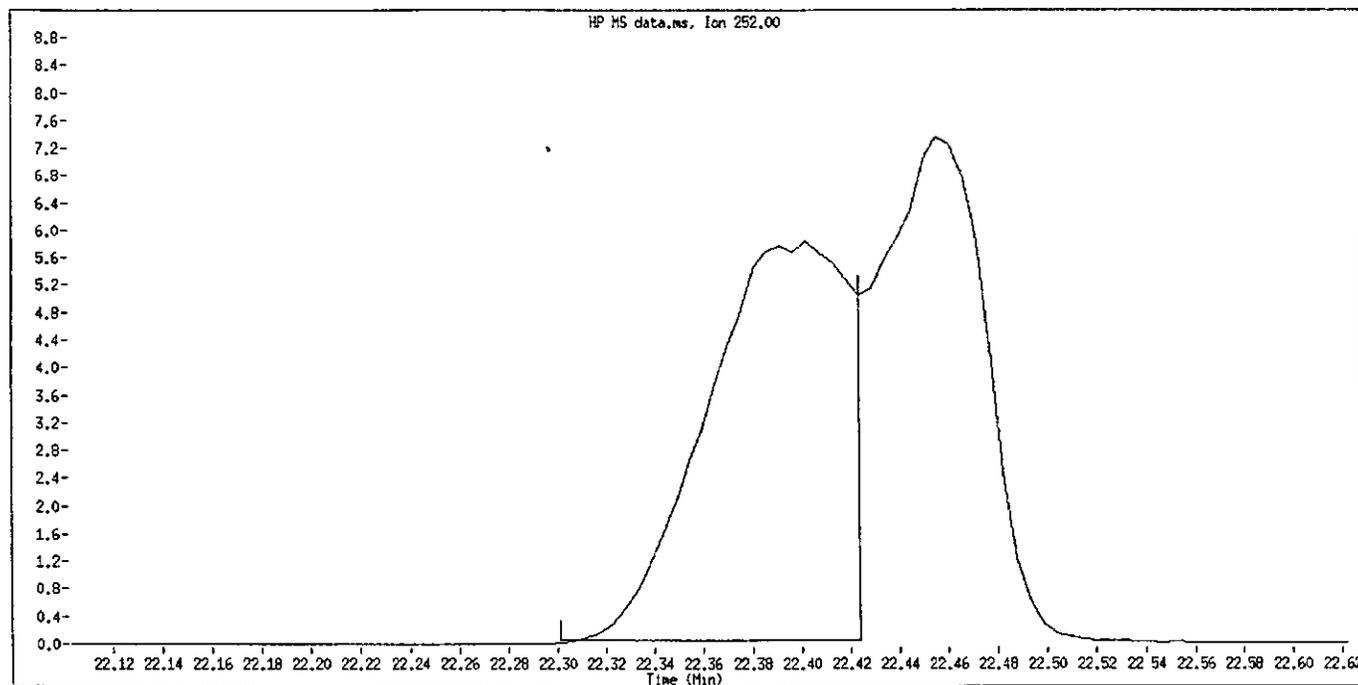
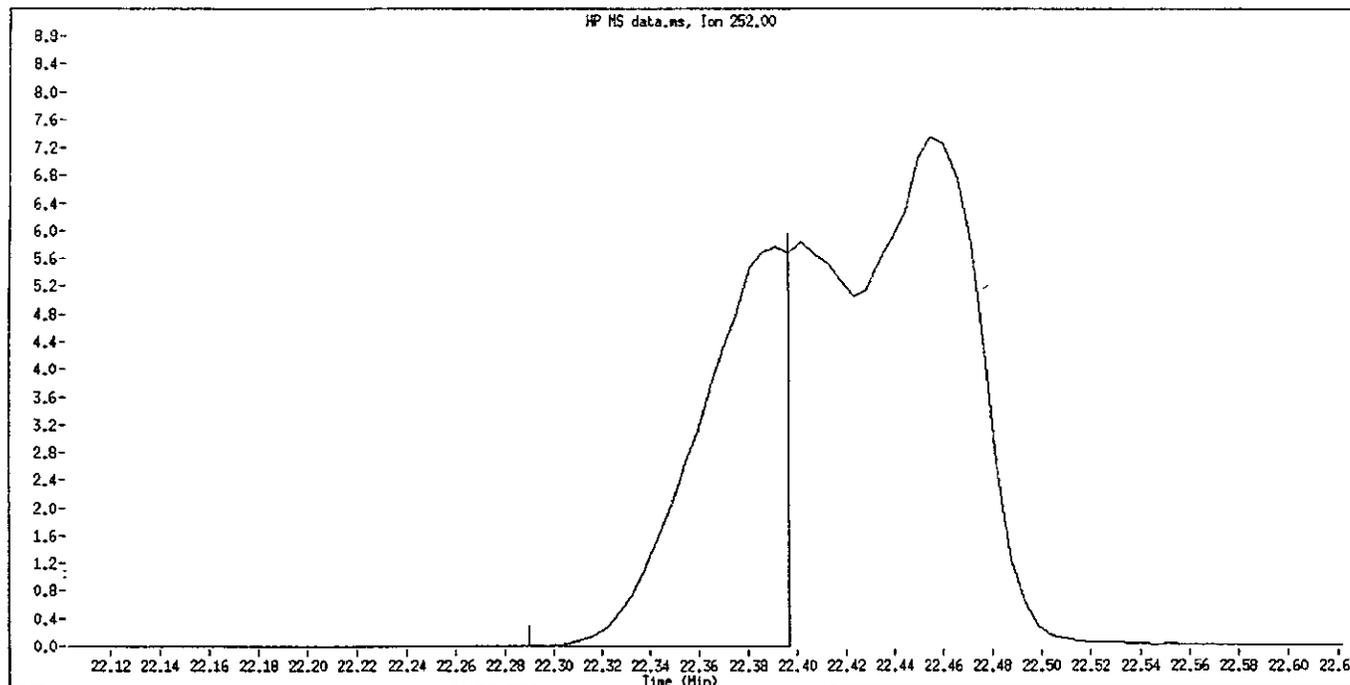
Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
137 Chrysene	228	19.891	19.891	(1.004)	1788887	120.000	116
139 bis(2-ethylhexyl)Phthalate	149	20.222	20.222	(1.020)	1358972	120.000	118
140 Di-n-octylphthalate	149	21.702	21.702	(0.936)	2400707	120.000	121
141 Benzo(b)fluoranthene	252	22.402	22.402	(0.966)	2368327	120.000	130(M)
142 Benzo(k)fluoranthene	252	22.455	22.455	(0.968)	2295335	120.000	116
143 7,12-dimethylbenz[a]anthracen	256	22.455	22.455	(0.968)	1148502	120.000	131
146 Benzo(a)pyrene	252	23.091	23.091	(0.995)	2110216	120.000	123
149 Indeno(1,2,3-cd)pyrene	276	25.565	25.565	(1.102)	3016978	120.000	128
150 Dibenz(a,h)anthracene	278	25.618	25.618	(1.104)	2619660	120.000	128
151 Benzo(g,h,i)perylene	276	26.206	26.206	(1.130)	2598657	120.000	126
\$ 154 Nitrobenzene-d5	82	5.852	5.852	(0.868)	661122	120.000	118
\$ 155 2-Fluorobiphenyl	172	8.518	8.518	(0.867)	1109807	120.000	117
\$ 156 Terphenyl-d14	244	17.236	17.236	(0.870)	1596339	120.000	112
\$ 157 Phenol-d5	99	4.853	4.853	(0.938)	710319	120.000	120
\$ 158 2-Fluorophenol	112	3.833	3.833	(0.741)	522845	120.000	119
\$ 159 2,4,6-Tribromophenol	330	11.579	11.579	(0.881)	167274	120.000	129
\$ 186 2-Chlorophenol-d4	132	4.971	4.971	(0.961)	516347	120.000	120
\$ 187 1,2-Dichlorobenzene-d4	152	5.387	5.387	(1.041)	397694	120.000	119

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

674 1097

Data File Name F11220C4 D
Inj Date and Time 22-NOV-2000 11.33
Instrument ID. 722 i
Client ID SSTDI20
Compound Name Benzo(b)fluoranthene
CAS # 205-99-2
Report Date. 11/22/2000



Manually Integrated By BungardF
Manual Integration Reason Unknown

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\112200.b\F11220C5.D
 Lab Smp Id: sstd160 Client Smp ID: SSTD160
 Inj Date : 22-NOV-2000 12:08
 Operator : 007062 Inst ID: 722.i
 Smp Info : SSTD160 (80ppb) 77-01-09
 Misc Info : sstd160,112200.b,8270b.m,2-root.sub,1,5
 Comment :
 Method : \\QPITPA02\D\chem\722.i\112200.b\8270b.m
 Meth Date : 22-Nov-2000 12:45 BungardF Quant Type: ISTD
 Cal Date : 22-NOV-2000 12:08 Cal File: F11220C5.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 signature/initials
11/22/00

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
* 1 1,4-Dichlorobenzene-d4	152	5 168	5 168	(1.000)	141841	40.0000	
* 2 Naphthalene-d8	136	6 733	6 733	(1.000)	494393	40.0000	
* 3 Acenaphthene-d10	164	9 810	9.810	(1.000)	274532	40.0000	
* 4 Phenanthrene-d10	188	13 138	13 138	(1.000)	490720	40.0000	
* 5 Chrysene-d12	240	19 810	19 810	(1.000)	679750	40.0000	
* 6 Perylene-d12	264	23 187	23 187	(1.000)	651523	40.0000	
10 N-Nitrosodimethylamine	74	2.176	2 176	(0.421)	407789	160.000	154
9 Pyridine	79	2 165	2.165	(0.419)	730029	160.000	154
16 Methyl methanesulfonate	80	3 677	3.677	(0.712)	434405	160.000	171(A)
21 Aniline	93	4 863	4.863	(0.941)	1237981	160.000	158
22 Phenol	94	4.863	4 863	(0.941)	1048210	160.000	155
23 bis(2-Chloroethyl)ether	93	4 938	4 938	(0.956)	762148	160.000	155
24 2-Chlorophenol	128	4 981	4 981	(0.964)	747394	160.000	156
26 1,3-Dichlorobenzene	146	5 125	5.125	(0.992)	862338	160.000	158
27 1,4-Dichlorobenzene	146	5.184	5.184	(1.003)	874600	160.000	157
28 1,2-Dichlorobenzene	146	5.397	5 397	(1.044)	829837	160.000	161(A)
29 Benzyl Alcohol	108	5.354	5 354	(1.036)	522618	160.000	163(A)
30 2-Methylphenol	108	5 504	5 504	(1.065)	662318	160.000	157
31 2,2'-oxybis(1-Chloropropane)	45	5 525	5 525	(1.069)	997982	160.000	146
32 N-Nitroso-di-n-propylamine	70	5 707	5 707	(1.104)	579844	160.000	157
192 4-Methylphenol	108	5 670	5 670	(1.097)	719865	160.000	160
34 Hexachloroethane	117	5.744	5.744	(1.112)	340453	160.000	158
35 Nitrobenzene	77	5 867	5.867	(0.871)	875632	160.000	158
41 Isophorone	82	6 150	6 150	(0.914)	1394586	160.000	160
42 2-Nitrophenol	139	6.252	6 252	(0.929)	402553	160.000	162(A)
43 2,4-Dimethylphenol	107	6 305	6 305	(0.937)	748784	160.000	162(A)

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
44 bis (2-Chloroethoxy)methane	93	6.434	6.434	(0.956)	857314	160.000	158
48 2,4-Dichlorophenol	162	6.562	6.562	(0.975)	594406	160.000	162 (A)
49 Benzoic Acid	122	6.530	6.530	(0.970)	284642	160.000	246 (A)
50 1,2,4-Trichlorobenzene	180	6.674	6.674	(0.991)	644688	160.000	161 (A)
51 Naphthalene	128	6.765	6.765	(1.005)	2124784	160.000	156
52 4-Chloroaniline	127	6.866	6.866	(1.020)	828732	160.000	161 (A)
56 Hexachlorobutadiene	225	7.016	7.016	(1.042)	423603	160.000	168 (A)
59 4-Chloro-3-Methylphenol	107	7.620	7.620	(1.132)	663439	160.000	164 (A)
62 2-Methylnaphthalene	142	7.817	7.817	(1.161)	1375617	160.000	161 (A)
205 1-Methylnaphthalene	142	8.004	8.004	(1.189)	1335489	160.000	163 (A)
64 Hexachlorocyclopentadiene	237	8.207	8.207	(0.837)	524749	160.000	170 (A)
66 2,4,6-Trichlorophenol	196	8.362	8.362	(0.852)	411812	160.000	163 (A)
67 2,4,5-Trichlorophenol	196	8.437	8.437	(0.860)	437061	160.000	163 (A)
70 2-Chloronaphthalene	162	8.677	8.677	(0.885)	1352578	160.000	164 (A)
73 2-Nitroaniline	65	8.950	8.950	(0.912)	493878	160.000	163 (A)
76 Dimethylphthalate	163	9.393	9.393	(0.958)	1464224	160.000	161 (A)
78 2,6-Dinitrotoluene	165	9.521	9.521	(0.971)	345189	160.000	166 (A)
79 Acenaphthylene	152	9.495	9.495	(0.968)	2098317	160.000	159
81 3-Nitroaniline	138	9.794	9.794	(0.998)	392519	160.000	168 (A)
82 Acenaphthene	153	9.885	9.885	(1.008)	1319620	160.000	160
83 2,4-Dinitrophenol	184	10.002	10.002	(1.020)	238209	160.000	200 (A)
85 4-Nitrophenol	109	10.189	10.189	(1.039)	301652	160.000	179 (A)
86 Dibenzofuran	168	10.216	10.216	(1.041)	1812325	160.000	160
87 2,4-Dinitrotoluene	165	10.349	10.349	(1.055)	470356	160.000	168 (A)
91 2,3,5,6-Tetrachlorophenol	232	10.494	10.494	(1.070)	380945	160.000	179 (A)
88 2,3,4,6-Tetrachlorophenol	232	10.600	10.600	(1.081)	387275	160.000	177 (A)
92 2-Naphthylamine	143	10.579	10.579	(1.078)	950318	160.000	140
93 Diethylphthalate	149	10.942	10.942	(1.115)	1552718	160.000	165 (A)
94 Fluorene	166	10.974	10.974	(1.119)	1549135	160.000	163 (A)
95 4-Chlorophenyl-phenylether	204	11.006	11.006	(1.122)	748084	160.000	165 (A)
96 4-Nitroaniline	138	11.167	11.167	(1.138)	395837	160.000	169 (A)
98 4,6-Dinitro-2-methylphenol	198	11.252	11.252	(0.856)	299071	160.000	185 (A)
99 N-Nitrosodiphenylamine	169	11.311	11.311	(0.861)	1123703	160.000	161 (A)
100 1,2-Diphenylhydrazine	77	11.370	11.370	(0.865)	1832144	160.000	154
106 4-Bromophenyl-phenylether	248	12.123	12.123	(0.923)	458141	160.000	164 (A)
107 Hexachlorobenzene	284	12.427	12.427	(0.946)	509758	160.000	164 (A)
111 Pentachlorophenol	266	12.866	12.866	(0.979)	278165	160.000	214 (A)
115 Phenanthrene	178	13.202	13.202	(1.005)	2199836	160.000	160
116 Anthracene	178	13.309	13.309	(1.013)	2261632	160.000	160 (A)
119 Carbazole	167	13.747	13.747	(1.046)	2094408	160.000	164 (A)
120 Di-n-Butylphthalate	149	14.880	14.880	(1.133)	2637840	160.000	164 (A)
123 Fluoranthene	202	16.151	16.151	(1.229)	2503647	160.000	167 (A)
124 Benzidine	184	16.568	16.568	(0.836)	1333765	160.000	157
125 Pyrene	202	16.701	16.701	(0.843)	2495630	160.000	146
131 Butylbenzylphthalate	149	18.640	18.640	(0.941)	1344912	160.000	154
135 3,3'-Dichlorobenzidine	252	19.816	19.816	(1.000)	1162334	160.000	162 (A)
136 Benzo (a) Anthracene	228	19.773	19.773	(0.998)	2721869	160.000	156

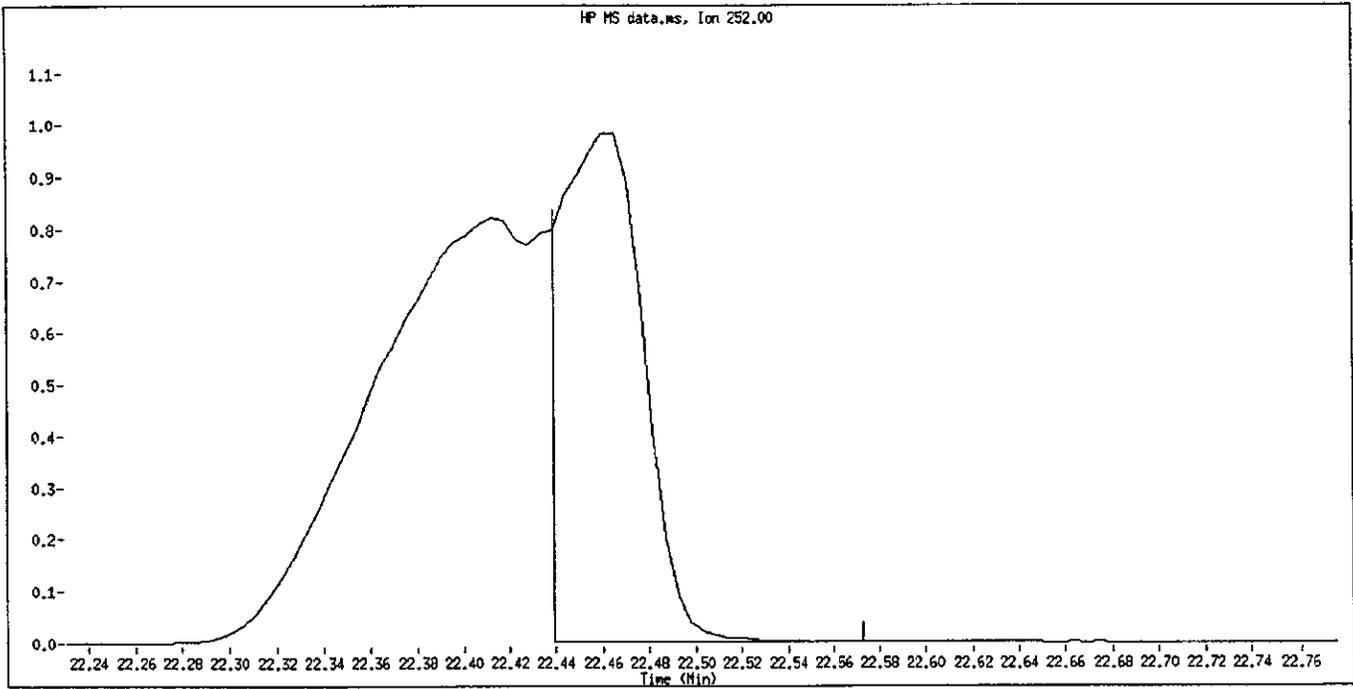
Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
137 Chrysene	228	19.885	19.885	{1.004}	2506233	160.000	152
139 bis (2-ethylhexyl) Phthalate	149	20.211	20.211	{1.020}	1904462	160.000	155
140 Di-n-octylphthalate	149	21.691	21.691	{0.935}	3329916	160.000	157
141 Benzo(b)fluoranthene	252	22.412	22.412	{0.967}	3825287	160.000	188(A)
142 Benzo(k)fluoranthene	252	22.460	22.460	{0.969}	3019964	160.000	145(M)
143 7,12-dimethylbenz(a)anthracen	256	22.455	22.455	{0.968}	1714301	160.000	177(A)
146 Benzo(a)pyrene	252	23.085	23.085	{0.996}	3020063	160.000	163(A)
149 Indeno(1,2,3-cd)pyrene	276	25.580	25.580	{1.103}	4460132	160.000	172(A)
150 Dibenz(a,h)anthracene	278	25.617	25.617	{1.105}	3889256	160.000	173(A)
151 Benzo(g,h,i)perylene	276	26.205	26.205	{1.130}	3776413	160.000	169(A)
\$ 154 Nitrobenzene-d5	82	5.841	5.841	{0.868}	879160	160.000	157
\$ 155 2-Fluorobiphenyl	172	8.506	8.506	{0.867}	1500906	160.000	156
\$ 156 Terphenyl-d14	244	17.219	17.219	{0.869}	2221954	160.000	148
\$ 157 Phenol-d5	99	4.852	4.852	{0.939}	952149	160.000	158
\$ 158 2-Fluorophenol	112	3.827	3.827	{0.741}	704167	160.000	157
\$ 159 2,4,6-Tribromophenol	330	11.567	11.567	{0.880}	231418	160.000	171(A)
\$ 186 2-Chlorophenol-d4	132	4.965	4.965	{0.961}	702715	160.000	160
\$ 187 1,2-Dichlorobenzene-d4	152	5.381	5.381	{1.041}	546890	160.000	160(A)

QC Flag Legend

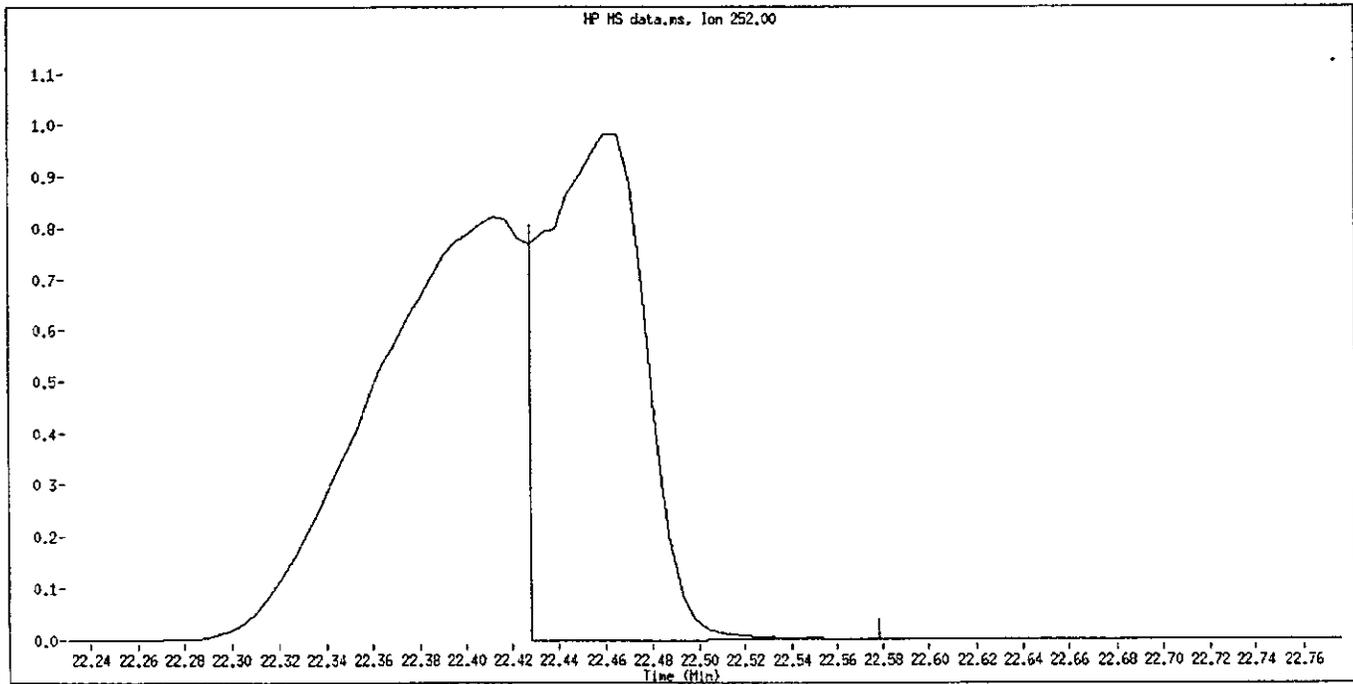
- A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File Name F11220C5 D
Inj. Date and Time. 22-NOV-2000 12 08
Instrument ID 722 1
Client ID SSTD160
Compound Name Benzo(k)fluoranthene
CAS # 207-08-9
Report Date 11/22/2000

674 1102



Original Integration



Manual Integration

Manually Integrated By: BungardF
Manual Integration Reason: Unknown

674 1103

**GC/MS SEMIVOLATILE
QC DATA**

Data File: \\QPITPA02\D\chem\722.1\112200n.b\F1122DF1.D

Date : 22-NOV-2000 09:32

Client ID: DFTPP02

Instrument: 722.1

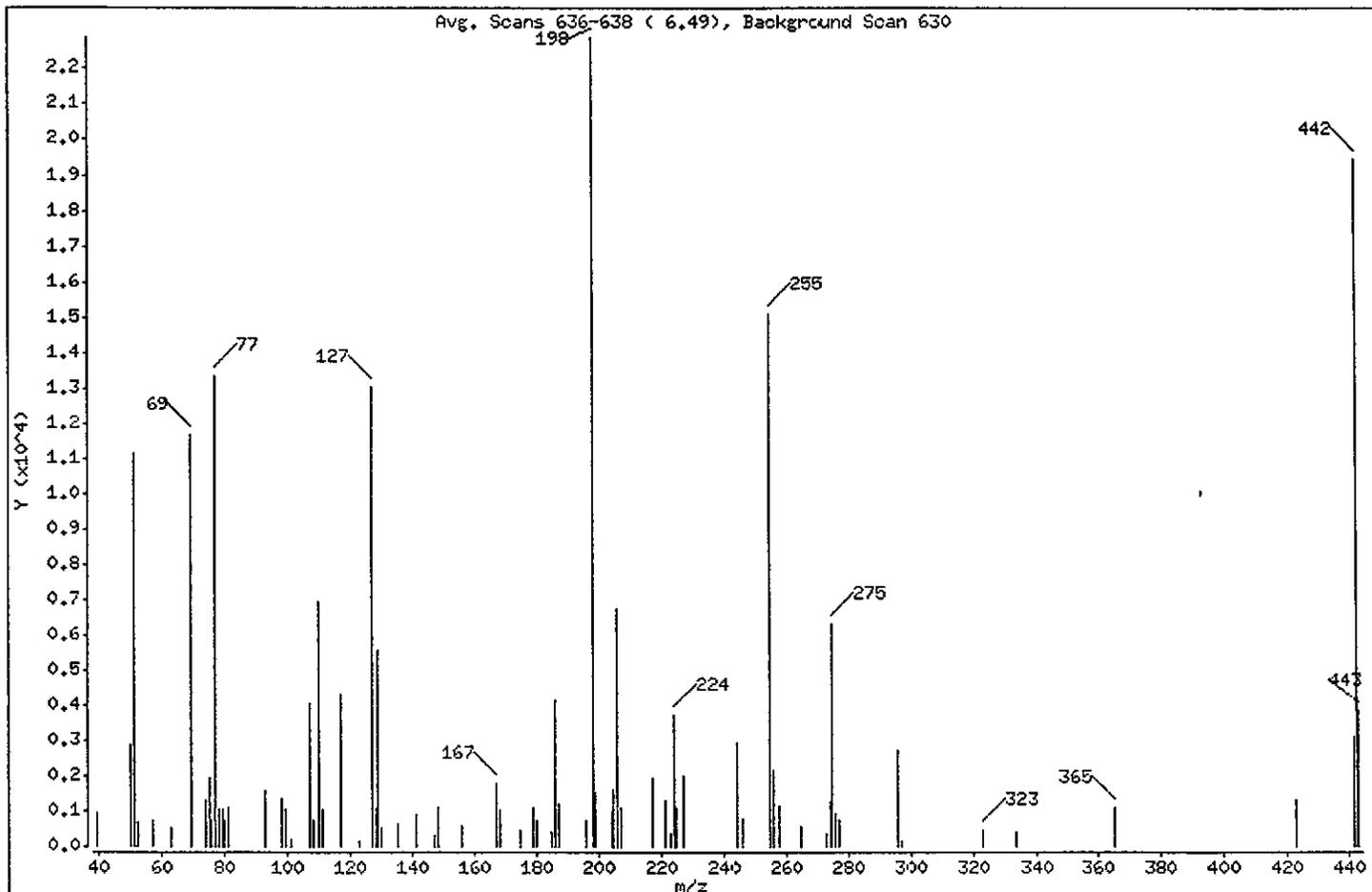
Sample Info: DFTPP050 (25ppb) 194-175-8

Operator: 007062

Column phase:

Column diameter: 2.00

1 dftpp



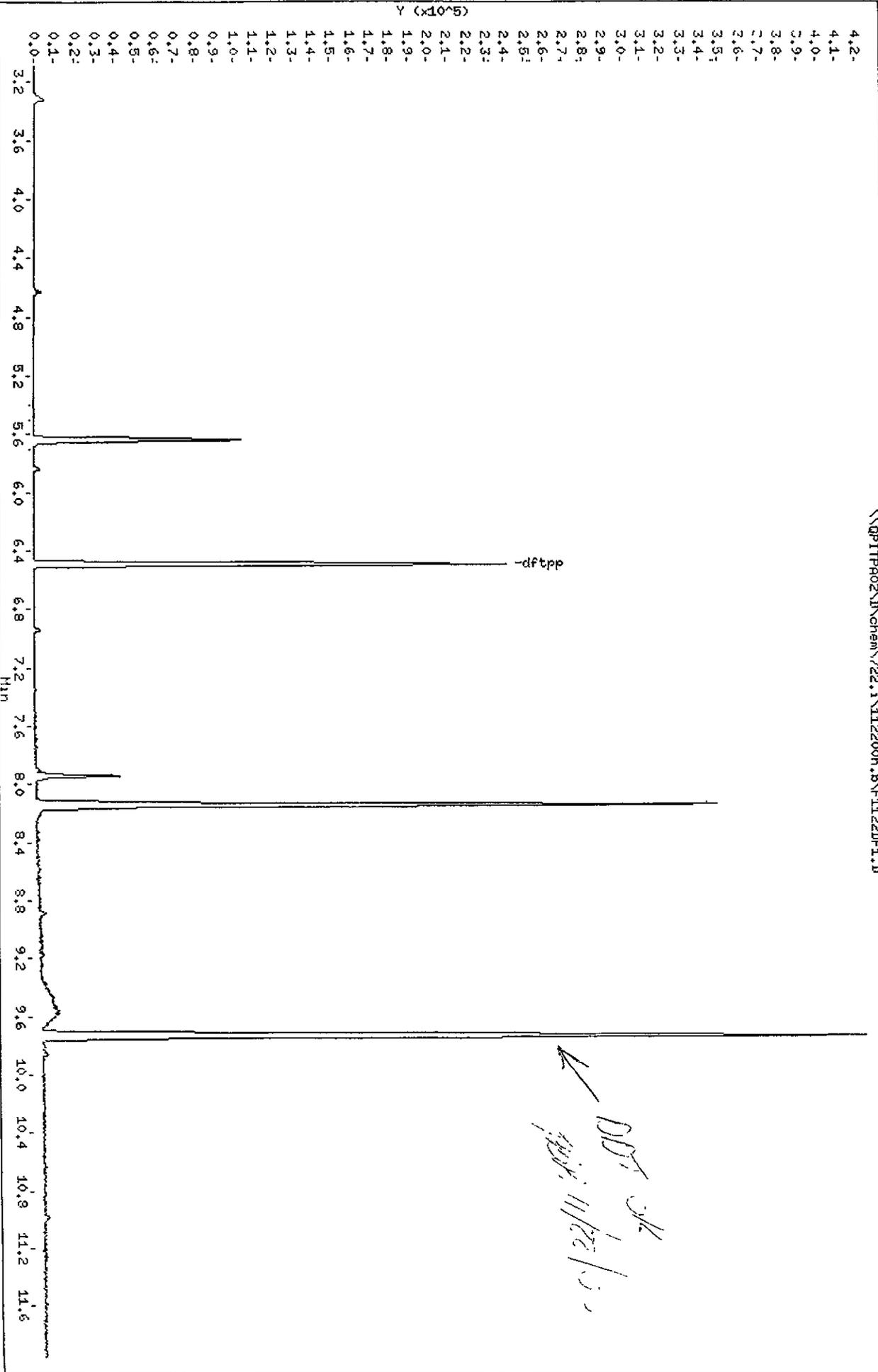
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1		
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	48.65
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	50.95
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	56.93
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.78
275	10.00 - 30.00% of mass 198	27.65
365	Greater than 1.00% of mass 198	4.78
441	Present, but less than mass 443	13.46
442	40.00 - 100.00% of mass 198	85.10
443	17.00 - 23.00% of mass 442	16.73 (19.66)

Data File: \\GPITPA02\Nchem\722.1\112200n.b\F1122DF1.D
Date: 22-NOV-2000 09:32
Client ID: DFTPP02
Sample Info: DFTPP050 (25ppb) 194-175-8

Instrument: 722.1
Operator: 007062
Column diameter: 2.00

Column phase:

\\GPITPA02\Nchem\722.1\112200n.b\F1122DF1.D



*DDT spike
11/22/00*

Data File: \\QPITPA02\D\chem\722.1\112200n.b\F1122DF1.D

Date : 22-NOV-2000 09:32

Client ID: DFTPP02

Instrument: 722.1

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

Operator: 007062

Column phase:

Column diameter: 2.00

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Spectrum: Avg. Scans 636-638 (6.49), Background Scan 630

Location of Maximum: 198.00

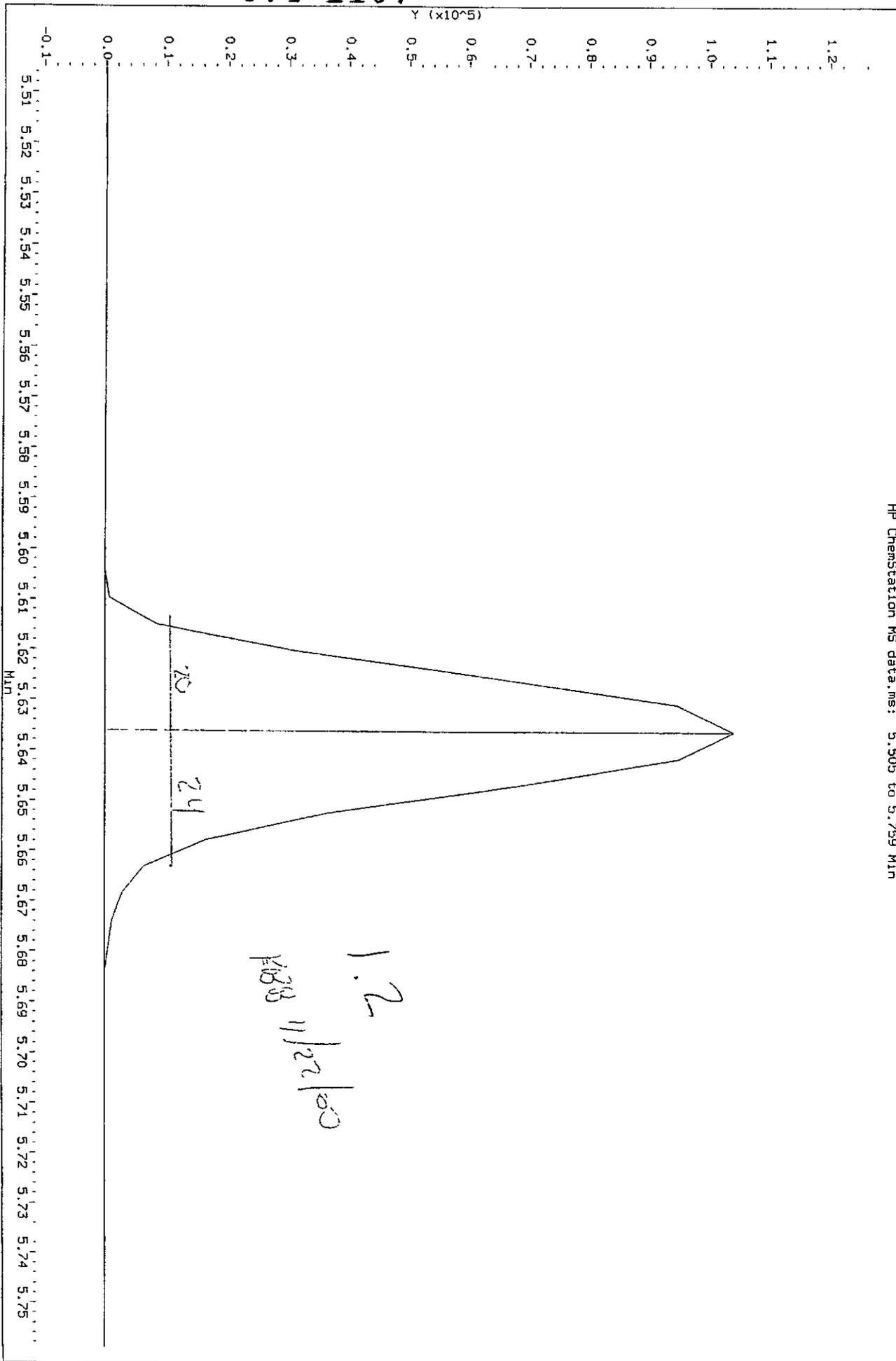
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57.00	711	117.00	4325	196.00	741	273.00	369
63.00	551	123.00	178	198.00	22864	274.00	1257
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74.00	1332	128.00	1088	204.00	990	276.00	948
75.00	1935	129.00	5546	205.00	1648	277.00	754
76.00	743	130.00	526	206.00	6706	296.00	2726
77.00	13346	135.00	650	207.00	1098	297.00	170
78.00	1034	141.00	899	217.00	1953	323.00	467
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674 1107

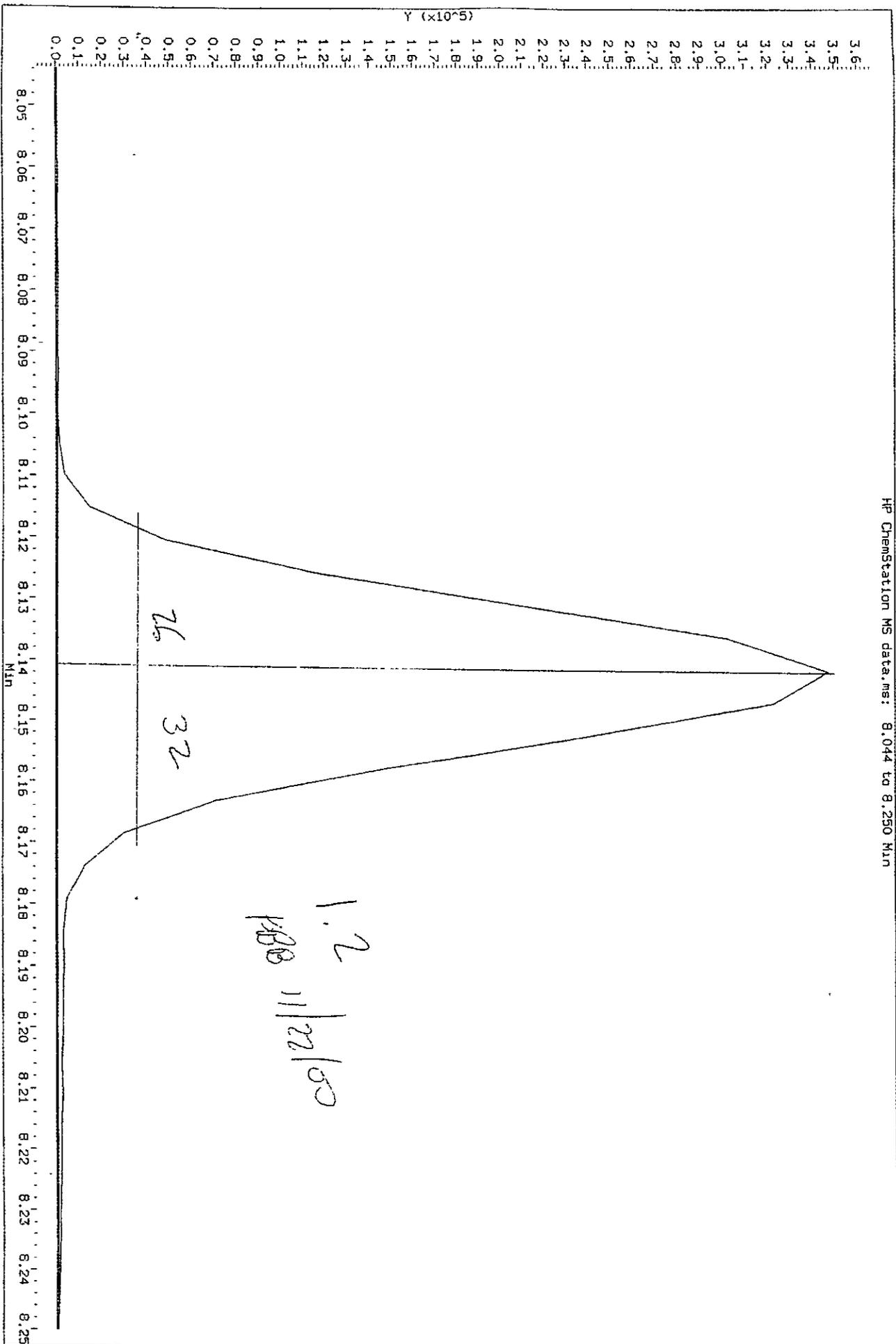
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Injection Date: 22-NOV-2000 09:32
Instrument: 722.1
Client Sample ID: DFTP02

HP ChemStation MS_data.ms: 5.505 to 5.759 Min



Data File: \\pp1tpa02\chem\722.1\112200.B\F1122DF1.D
Injection Date: 22-NOV-2000 09:32
Instrument: 722.1
Client Sample ID: DF1PP02

HP ChemStation MS data.ms: 8.044 to 8.250 Min



UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK200000 189

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/15/00

Work Order: DP6VL1AA

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/22/00

Moisture %: NA

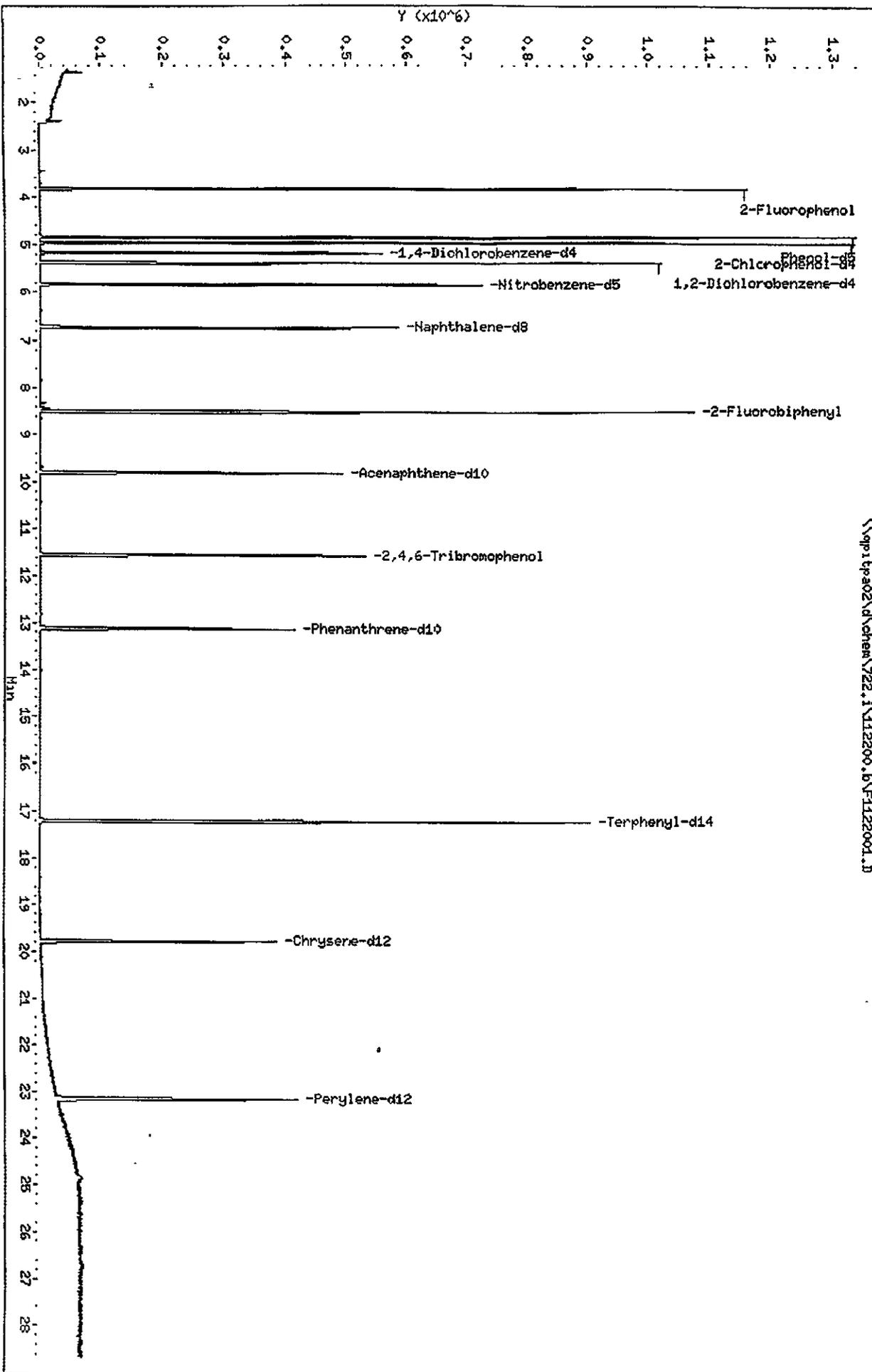
QC Batch: 0325189

Client Sample Id: INTRA-LAB BLANK

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

Data File: \\pp1tpa02\chem\722.1\112200.b\F1122001.D
Date: 22-NOV-2000 13:46
Client ID: INTRA-LAB BLANK
Sample Info: COK150188-BLK 11/20/00 TCLP (0325189)
Volume Injected (uL): 2.0
Column phase: HPS-HS

Instrument: 722.1
Operator: 007062
Column diameter: 0.25



674 1111

STL-Pittsburgh

Semivolatle REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\112200.b\F1122001.D
 Lab Smp Id: DP6VL1AA Client Smp ID: INTRA-LAB BLANK
 Inj Date : 22-NOV-2000 13:46
 Operator : 007062 Inst ID: 722.i
 Smp Info : C0K150188-BLK 11/20/00 TCLP (0325189)
 Misc Info : dp6vl1aa,112200.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\112200.b\8270b.m
 Meth Date : 22-Nov-2000 13:51 BungardF Quant Type: ISTD
 Cal Date : 22-NOV-2000 13:12 Cal File: F11220C6.D
 Als bottle: 7 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062

Handwritten: 11/22/00

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	5 161	5.166	(1.000)	100906	40.0000	(Q)
* 2 Naphthalene-d8		136	6.726	6.731	(1.000)	373323	40.0000	
* 3 Acenaphthene-d10		164	9.803	9.808	(1.000)	201332	40.0000	
* 4 Phenanthrene-d10		188	13.126	13.131	(1.000)	326671	40.0000	
* 5 Chrysene-d12		240	19.782	19.793	(1.000)	332118	40.0000	
* 6 Perylene-d12		264	23.164	23.169	(1.000)	361566	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: \\gpitpa02\d\chem\722.i\112200.b\F1122001.D
 Report Date: 22-Nov-2000 14:21

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
-----	----	==	-----	-----	-----	-----	-----
35 Nitrobenzene	77						
56 Hexachlorobutadiene	224						
66 2,4,6-Trichlorophenol	196						
67 2,4,5-Trichlorophenol	196						
87 2,4-Dinitrotoluene	165						
107 Hexachlorobenzene	283						
111 Pentachlorophenol	265						
\$ 154 Nitrobenzene-d5	82	5.829	5.834	(0.867)	315684	74.4132	0.186(a)
\$ 155 2-Fluorobiphenyl	172	8.494	8.499	(0.866)	522872	74.2521	0.186(a)
\$ 156 Terphenyl-d14	244	17.213	17.212	(0.870)	575142	78.8387	0.197(a)
\$ 157 Phenol-d5	99	4.835	4.835	(0.937)	530825	123.542	0.309(a)
\$ 158 2-Fluorophenol	112	3.825	3.825	(0.741)	365746	115.121	0.288(a)
\$ 159 2,4,6-Tribromophenol	330	11.550	11.555	(0.880)	105876	118.134	0.295(a)
\$ 186 2-Chlorophenol-d4	132	4.958	4.958	(0.961)	418427	133.443	0.334(a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.375	5.380	(1.041)	177718	73.2195	0.183(a)

QC Flag Legend

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

674 1113

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK200000 189

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/15/00

Work Order: DP6VL1AC

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/22/00

Moisture %: NA

QC Batch: 0325189

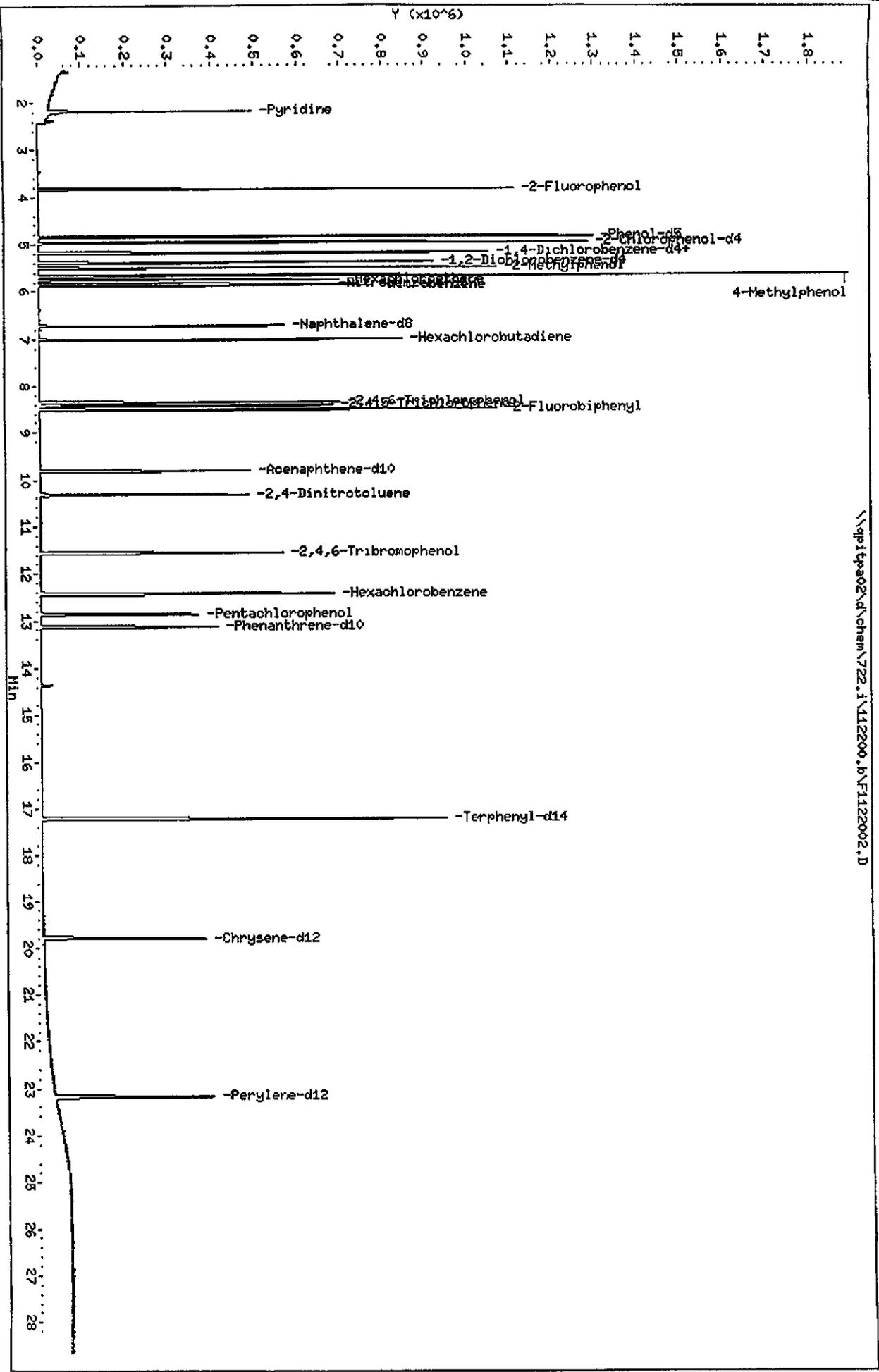
Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
106-46-7	1,4-Dichlorobenzene	0.184	
121-14-2	2,4-Dinitrotoluene	0.188	
118-74-1	Hexachlorobenzene	0.220	
87-68-3	Hexachlorobutadiene	0.185	
67-72-1	Hexachloroethane	0.186	
98-95-3	Nitrobenzene	0.202	
87-86-5	Pentachlorophenol	0.220	
110-86-1	Pyridine	0.199	
95-95-4	2,4,5-Trichlorophenol	0.207	
88-06-2	2,4,6-Trichlorophenol	0.199	
1319-77-3	Cresols (total)	0.655	

Data File: \\qip1tpa02\chem\722.i\112200.b\F1122002.D
 Date: 22-NOV-2000 14:21
 Client ID: INTRA-LAB CHECK
 Sample Info: COK150188-LCS 11/20/00 TCLP (0325189)
 Volume Injected (uL): 2.0
 Column phase: Hp5-MS

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

\\qip1tpa02\chem\722.i\112200.b\F1122002.D



674 1115

Data File: \\qpitpa02\d\chem\722.i\112200.b\F1122002.D
Report Date: 22-Nov-2000 14:57

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\112200.b\F1122002.D
 Lab Smp Id: DP6VL1AC Client Smp ID: INTRA-LAB CHECK
 Inj Date : 22-NOV-2000 14:21
 Operator : 007062 Inst ID: 722.i
 Smp Info : C0K150188-LCS 11/20/00 TCLP (0325189)
 Misc Info : dp6vllac,112200.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\112200.b\8270b.m
 Meth Date : 22-Nov-2000 13:51 BungardF Quant Type: ISTD
 Cal Date : 22-NOV-2000 13:12 Cal File: F11220C6.D
 Als bottle: 8 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062

[Handwritten signature]
11/22/00

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	5.168	5.166	(1.000)	96597	40 0000		
* 2 Naphthalene-d8	136	6.728	6.731	(1.000)	355397	40 0000		
* 3 Acenaphthene-d10	164	9.805	9.808	(1.000)	194265	40.0000		
* 4 Phenanthrene-d10	188	13.133	13 131	(1.000)	324017	40.0000		
* 5 Chrysene-d12	240	19.790	19.793	(1.000)	330207	40.0000		
* 6 Perylene-d12	264	23.166	23.169	(1.000)	349035	40 0000		
9 Pyridine	79	2.166	2.164	(0.419)	256042	79.7779	0 199	
27 1,4-Dichlorobenzene	146	5.184	5 182	(1.003)	279500	73 7912	0.184 (R)	
M 195 Cresols, total	100				788447	262.103	0 655	
30 2-Methylphenol	108	5 494	5.497	(1.063)	250338	86 9166	0 217	
192 4-Methylphenol	108	5.665	5.657	(1.096)	538109	175.186	0.438 (AQ)	
193 3-Methylphenol	108	Compound Not Detected.						
34 Hexachloroethane	117	5 745	5.743	(1.112)	109605	74.5996	0.186	

Data File: \\qpitpa02\d\chem\722.i\112200.b\F1122002.D
 Report Date: 22-Nov-2000 14:57

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
35 Nitrobenzene	77	5.857	5.855	(0.871)	322668	80.7929	0.202
56 Hexachlorobutadiene	225	7.017	7.020	(1.043)	133479	74.1105	0.185
66 2,4,6-Trichlorophenol	196	8.352	8.355	(0.852)	141273	79.4562	0.199
67 2,4,5-Trichlorophenol	196	8.416	8.425	(0.858)	156063	82.8262	0.207
87 2,4-Dinitrotoluene	165	10.323	10.321	(1.053)	148576	75.1410	0.188 (R)
107 Hexachlorobenzene	284	12.423	12.420	(0.946)	180128	88.2106	0.220
111 Pentachlorophenol	266	12.855	12.859	(0.979)	76621	87.8417	0.220 (R)
\$ 154 Nitrobenzene-d5	82	5.836	5.834	(0.867)	303486	75.1462	0.188 (a)
\$ 155 2-Fluorobiphenyl	172	8.502	8.499	(0.867)	513004	75.5009	0.189 (a)
\$ 156 Terphenyl-d14	244	17.215	17.212	(0.870)	610630	84.1877	0.210 (a)
\$ 157 Phenol-d5	99	4.837	4.835	(0.936)	509214	123.677	0.309 (a)
\$ 158 2-Fluorophenol	112	3.827	3.825	(0.741)	343951	112.978	0.282 (a)
\$ 159 2,4,6-Tribromophenol	330	11.557	11.555	(0.880)	111010	124.877	0.312 (a)
\$ 186 2-Chlorophenol-d4	132	4.960	4.958	(0.960)	396696	132.025	0.330 (a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.382	5.380	(1.041)	160093	68.8320	0.172 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation (BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.

674 1117

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK150188 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/15/00

Work Order: DPWNF1CK

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/22/00

Moisture %: 19

QC Batch: 0325189

Client Sample Id: DF/24-A/0319/CVS/013

CONCENTRATION UNITS:

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
106-46-7	1,4-Dichlorobenzene	0.179	
121-14-2	2,4-Dinitrotoluene	0.202	
118-74-1	Hexachlorobenzene	0.228	
87-68-3	Hexachlorobutadiene	0.161	
67-72-1	Hexachloroethane	0.172	
98-95-3	Nitrobenzene	0.211	
87-86-5	Pentachlorophenol	0.182	
110-86-1	Pyridine	0.181	
95-95-4	2,4,5-Trichlorophenol	0.207	
88-06-2	2,4,6-Trichlorophenol	0.209	
1319-77-3	Cresols (total)	0.667	

674 1119

Data File: \\qpitpa02\d\chem\722.i\112200.b\F1122003.D
Report Date: 22-Nov-2000 15:31

STL-Pittsburgh

Semivolatle REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\112200.b\F1122003.D
Lab Smp Id: DPWNF1CK Client Smp ID: DF/24-A/0319/CVS/01
Inj Date : 22-NOV-2000 14:55
Operator : 007062 Inst ID: 722.i
Smp Info : COK150188-001S 11/20/00 TCLP (0325189)
Misc Info : dpwnf1ck,112200.b,8270b.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\722.i\112200.b\8270b.m
Meth Date : 22-Nov-2000 13:51 BungardF Quant Type: ISTD
Cal Date : 22-NOV-2000 13:12 Cal File: F11220C6.D
Als bottle: 9 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tclp.sub
Target Version: 4.04
Processing Host: PITPC062

Handwritten signature and date 11/22/00

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

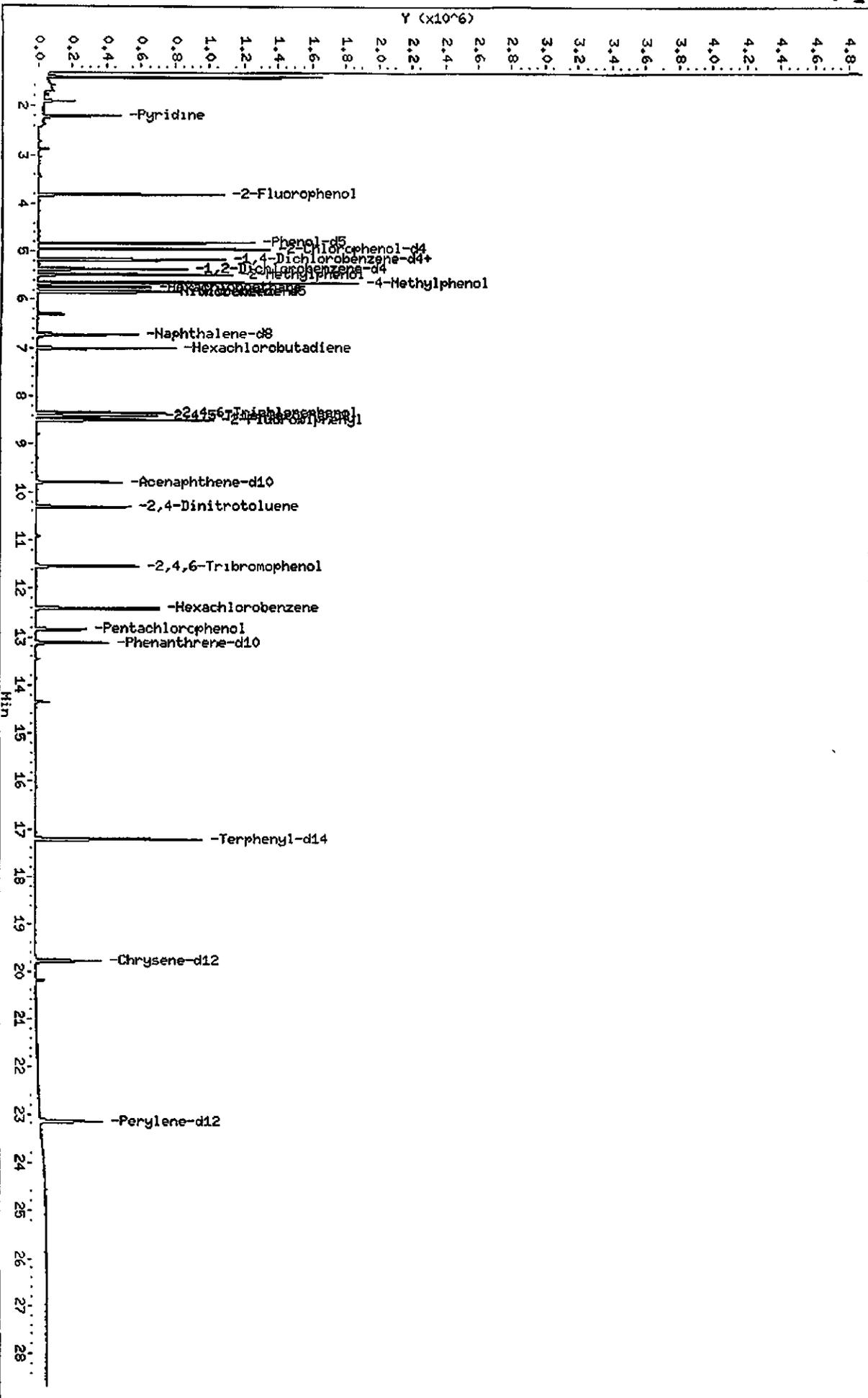
Table with 3 columns: Name, Value, Description. Rows include DF (Dilution Factor), Uf (ng unit correction factor), Vt (Volume of final extract), Vo (Volume of sample extracted), Vi (Volume injected), and gpc (gpc correction factor).

Table with 8 columns: Compounds, QUANT SIG, MASS, RT, EXP RT, REL RT, RESPONSE, ON-COLUMN (NG), FINAL (mg/L). Lists various compounds like 1,4-Dichlorobenzene-d4, Naphthalene-d8, Acenaphthene-d10, etc., with their respective mass, retention times, and concentrations.

Data File: \\np1tpa02\chem\722.i\112200.j\F1122003.D
Date: 22-NOV-2000 14:55
Client ID: DF/24-A/0319/CVS/01
Sample Info: COK150188-001S 11/20/00 TCLP (0325189)
Volume Injected (uL): 2.0
Column phase: Hp5-MS

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

\\np1tpa02\chem\722.i\112200.j\F1122003.D



Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
35 Nitrobenzene	77	5.850	5.855	(0.870)	352958	84.2857	0.211
56 Hexachlorobutadiene	225	7.010	7.020	(1.043)	121833	64.5128	0.161
66 2,4,6-Trichlorophenol	196	8.345	8.355	(0.852)	152050	83.4798	0.209
67 2,4,5-Trichlorophenol	196	8.409	8.425	(0.858)	160092	82.9399	0.207
87 2,4-Dinitrotoluene	165	10.311	10.321	(1.052)	163304	80.6216	0.202
107 Hexachlorobenzene	284	12.416	12.420	(0.946)	187075	91.3346	0.228
111 Pentachlorophenol	266	12.848	12.859	(0.979)	63845	72.9727	0.182
\$ 154 Nitrobenzene-d5	82	5.829	5.834	(0.867)	325807	76.9383	0.192(a)
\$ 155 2-Fluorobiphenyl	172	8.495	8.499	(0.867)	501954	72.1143	0.180(a)
\$ 156 Terphenyl-d14	244	17.208	17.212	(0.870)	630896	90.3170	0.226(a)
\$ 157 Phenol-d5	99	4.835	4.835	(0.937)	515566	122.014	0.305(a)
\$ 158 2-Fluorophenol	112	3.826	3.825	(0.741)	324803	103.957	0.260(a)
\$ 159 2,4,6-Tribromophenol	330	11.545	11.555	(0.880)	115260	129.265	0.323(a)
\$ 186 2-Chlorophenol-d4	132	4.953	4.958	(0.960)	404446	131.159	0.328(a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.375	5.380	(1.041)	148593	62.2520	0.156(a)

QC Flag Legend

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

674 1121 .

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK150188 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/15/00

Work Order: DPWNF1CL

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/22/00

Moisture %: 19

QC Batch: 0325189

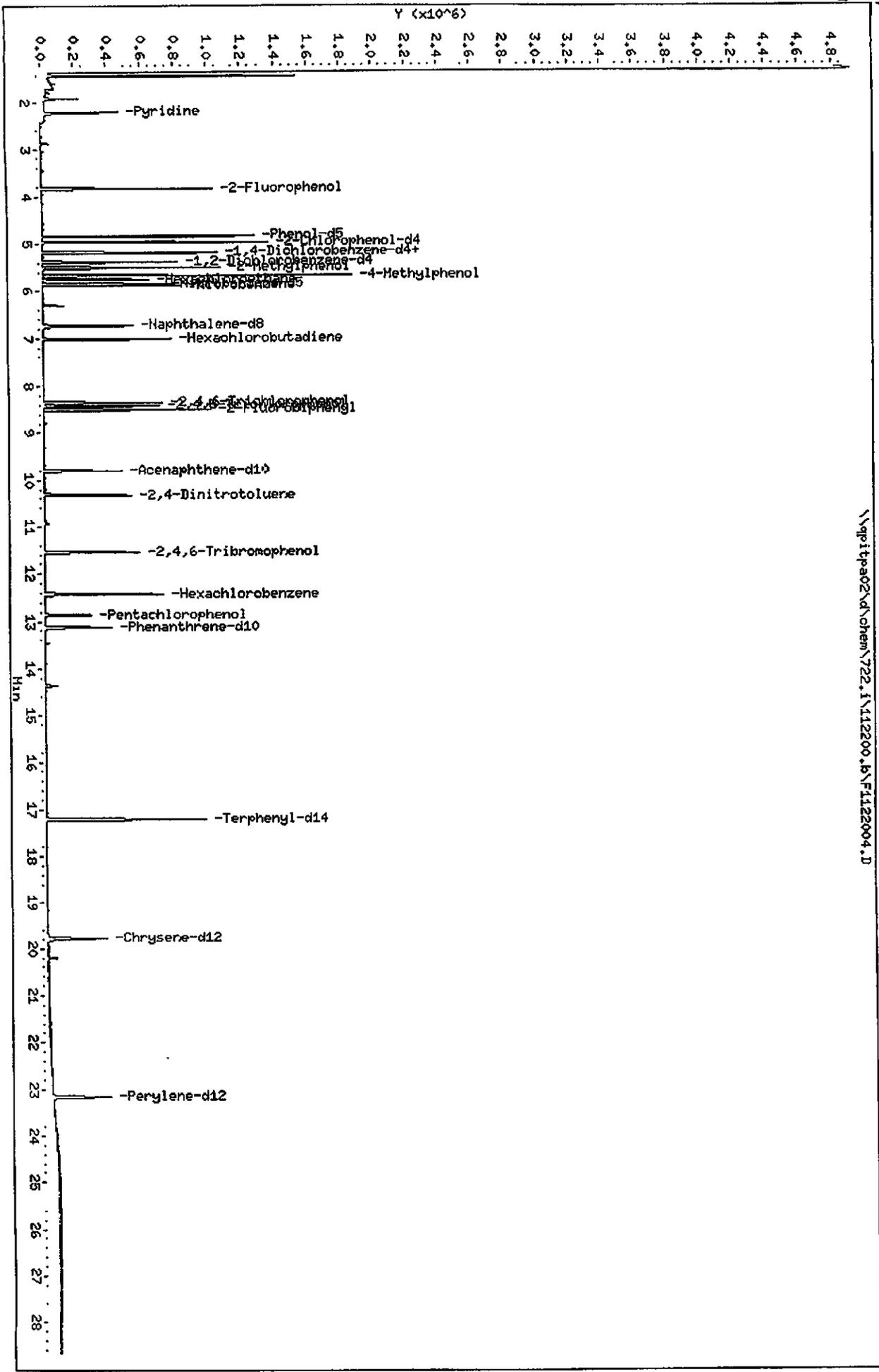
Client Sample Id: DF/24-A/0319/CVS/013

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
106-46-7	1,4-Dichlorobenzene	0.183	
121-14-2	2,4-Dinitrotoluene	0.206	
118-74-1	Hexachlorobenzene	0.238	
87-68-3	Hexachlorobutadiene	0.166	
67-72-1	Hexachloroethane	0.179	
98-95-3	Nitrobenzene	0.218	
87-86-5	Pentachlorophenol	0.188	
110-86-1	Pyridine	0.180	
95-95-4	2,4,5-Trichlorophenol	0.216	
88-06-2	2,4,6-Trichlorophenol	0.212	
1319-77-3	Cresols (total)	0.683	

Data File: \\sp1tpa02\chem\722.i\112200.b\F1122004.D
 Date: 22-NOV-2000 15:29
 Client ID: DF/24-A/0319/C/S/01
 Sample Info: COK150188-001D 11/20/00 TCLP (0325189)
 Volume Injected (UL): 2.0
 Column phase: He5-MS

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

\\sp1tpa02\chem\722.i\112200.b\F1122004.D



674 1123

Data File: \\qpitpa02\d\chem\722.i\112200.b\F1122004.D
Report Date: 22-Nov-2000 16:17

STL-Pittsburgh

Semivolatiles REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\112200.b\F1122004.D
 Lab Smp Id: DPWNF1CL Client Smp ID: DF/24-A/0319/CVS/01
 Inj Date : 22-NOV-2000 15:29
 Operator : 007062 Inst ID: 722.i
 Smp Info : COK150188-001D 11/20/00 TCLP (0325189)
 Misc Info : dpwnf1cl,112200.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\D\chem\722.i\112200.b\8270b.m
 Meth Date : 22-Nov-2000 13:51 BungardF Quant Type: ISTD
 Cal Date : 22-NOV-2000 13:12 Cal File: F11220C6.D
 Als bottle: 10 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062

Handwritten signature/initials

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	5.166	5.166	(1.000)	94012	40.0000		
* 2 Naphthalene-d8	136	6.726	6.731	(1.000)	349848	40.0000		
* 3 Acenaphthene-d10	164	9.803	9.808	(1.000)	188740	40.0000		
* 4 Phenanthrene-d10	188	13.125	13.131	(1.000)	308363	40.0000		
* 5 Chrysene-d12	240	19.782	19.793	(1.000)	305447	40.0000		
* 6 Perylene-d12	264	23.158	23.169	(1.000)	313977	40.0000		
9 Pyridine	79	2.201	2.164	(0.426)	225270	72.1199	0.180	
27 1,4-Dichlorobenzene	146	5.182	5.182	(1.003)	270461	73.3681	0.183	
M 195 Cresols, total	100				799825	273.170	0.683	
30 2-Methylphenol	108	5.492	5.497	(1.063)	252751	90.1674	0.225	
192 4-Methylphenol	108	5.663	5.657	(1.096)	547074	183.002	0.458 (AQ)	
193 3-Methylphenol	108	Compound Not Detected.						
34 Hexachloroethane	117	5.743	5.743	(1.112)	102224	71.4890	0.179	

Compounds	QUANT SIG		CONCENTRATIONS				
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (NG)	FINAL (mg/L)
35 Nitrobenzene	77	5.855	5.855	(0.871)	343618	87.4032	0.218
56 Hexachlorobutadiene	225	7.014	7.020	(1.043)	117606	66.3332	0.166
66 2,4,6-Trichlorophenol	196	8.350	8.355	(0.852)	146349	84.7206	0.212
67 2,4,5-Trichlorophenol	196	8.414	8.425	(0.858)	158076	86.3504	0.216
87 2,4-Dinitrotoluene	165	10.315	10.321	(1.052)	158456	82.4836	0.206
107 Hexachlorobenzene	284	12.420	12.420	(0.946)	185052	95.2223	0.238
111 Pentachlorophenol	266	12.853	12.859	(0.979)	62576	75.3818	0.188
\$ 154 Nitrobenzene-d5	82	5.833	5.834	(0.867)	315689	79.4076	0.198 (a)
\$ 155 2-Fluorobiphenyl	172	8.494	8.499	(0.866)	485941	73.6115	0.184 (a)
\$ 156 Terphenyl-d14	244	17.212	17.212	(0.870)	623065	92.8655	0.232 (a)
\$ 157 Phenol-d5	99	4.834	4.835	(0.936)	502275	125.346	0.313 (a)
\$ 158 2-Fluorophenol	112	3.830	3.825	(0.741)	316952	106.972	0.267 (a)
\$ 159 2,4,6-Tribromophenol	330	11.550	11.555	(0.880)	111084	131.304	0.328 (a)
\$ 186 2-Chlorophenol-d4	132	4.957	4.958	(0.960)	397590	135.961	0.340 (a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.379	5.380	(1.041)	144813	63.9744	0.160 (a)

QC Flag Legend

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

674 1125

**GC/MS SEMIVOLATILE
MISCELLANEOUS**

Continuous L-L Extraction Worksheet

STL - Pittsburgh
Logbook ID: OP5

674 1127

Lot Number	Sample ID	Client ID	Extract Volume (mL)	NaOH	H2SO4	Surrogate Lot #	Solvent	Solvent Lot	NaSO4 Lot	Cleanup Method
Prep Analyst	Date	Time	Extract(s) Received	Analyst	Location	Date	Time	Extract(s) Relinquished	Analyst	Location
1. COK150189	B4K	NA	200	1.0	MS/2	BAKER	T-30295	T-41633	NA	NA
2.	LCS									
3.	MS (col)									
4.	MSD (col)									
5.	col									
6. COK090223	col	NA	200	1.0	MS/2	BAKER	T-30295	T-41633	NA	NA
7. COK140226	col	NA	200	1.0	MS/2	BAKER	T-30295	T-41633	NA	NA
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
16.										
17.										
18.										
19.										
20.										
21.										
22.										
23.										
24.										
Prep Analyst	JM	JM	JM	JM	JM	JM	JM	JM	JM	JM
Extract(s) (record line # from above)	11-22-00	0905	Ken Derby	Ken Derby	Ken Derby	Ken Derby	Ken Derby	Ken Derby	Ken Derby	Ken Derby
	11-22-00	11:00	Franklyn	Franklyn	Franklyn	Franklyn	Franklyn	Franklyn	Franklyn	Franklyn

Batch Number: 0325189
 Date: 11-22-00
 Time: 12:00
 Reviewed by: Ken Derby
 Date: 11-22-00

Instrument Name: GC/MS Instrument #1

674 1128

Sequence File: D:\HPCHEM\1\SEQUENCE\112200.S

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

Operator: 007062

Data Path: d:\HPCHEM\1\DATA\112200.b\

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

Line	Type	Vial	DataFile	Method	Sample Name
1)	Sample	100	F11220W1	72EARLY	Warm UP Shot
2)	Sample	1	F1122DF1	DFTPP	DFTPP050 (25ppb) 194-175-8
3)	Sample	2	F11220C1	72EARLY	SSTD050 (25ppb) 77-05-09
4)	Sample	3	F11220C2	72EARLY	SSTD050 (25ppb) 77-05-09
5)	Sample	4	F11220C3	72EARLY	SSTD080 (40ppb) 77-01-07
6)	Sample	5	F11220C4	72EARLY	SSTD120 (60ppb) 77-01-08
7)	Sample	6	F11220C5	72EARLY	SSTD160 (80ppb) 77-01-09
8)	Sample	2	F11220C6	72EARLY	SSTD020 (10ppb) 77-01-05
9)	Sample	7	F1122001	72EARLY	C0K150188-BLK 11/20/00 TCLP (032
10)	Sample	8	F1122002	72EARLY	C0K150188-LCS 11/20/00 TCLP (032
11)	Sample	9	F1122003	72EARLY	C0K150188-001S 11/20/00 TCLP (03
12)	Sample	10	F1122004	72EARLY	C0K150188-001D 11/20/00 TCLP (03
13)	Sample	11	F1122005	72EARLY	C0K150188-001 11/20/00 TCLP (032
14)	Sample	12	F1122006	72EARLY	C0K090223-001 11/20/00 TCLP (032
15)	Sample	13	F1122007	72EARLY	C0K140226-001 11/20/00 TCLP (032
16)	Sample	14	F1122008	72EARLY	C0K070143-BLK 11/15/00 SOIL (032
17)	Sample	15	F1122009	72EARLY	C0K070143-LCS 11/15/00 SOIL (032
18)	Sample	16	F1122010	72EARLY	C0K040170-001 11/15/00 SOIL (032
19)	Sample	17	F1122011	72EARLY	C0K070143-001 11/15/00 SOIL (032
20)	Sample	18	F1122012	72EARLY	C0K070143-002 11/15/00 SOIL (032
21)	Sample	19	F1122013	72EARLY	C0K070143-003 11/15/00 SOIL (032
22)	Sample	20	F1122014	72EARLY	C0K070143-004 11/15/00 SOIL (032
23)	Sample	21	F1122015	72EARLY	C0K070143-005 11/15/00 SOIL (032
24)	Sample	100	F10170B2	72EARLY	Blank
25)	Sample	100	F10170B3	72EARLY	Blank
26)	Sample	100	F10170B4	72EARLY	Blank
27)	Sample	100	F10170B5	72EARLY	Blank
28)	Sample	100	F10170B6	72EARLY	Blank

Bytes Needed: 1400000 Space on drive D: 1023932928

Sequence Verification Done!

674 1129

Instrument Name: GC/MS Instrument #1

Sequence File: D:\HPCHEM\1\SEQUENCE\112200.S

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

Operator: 007062

Data Path: d:\HPCHEM\1\DATA\112200.b\

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

S270
11/22/00
FBB

Line Type	Vial	DataFile	Method	Sample Name
1) Sample	100	F11220W1	72EARLY	Warm UP Shot
2) Sample	(1932)	F1122DF1	DFTPP	DFTPP050 (25ppb) 194-175-8
3) Sample	2	F11220C1	72EARLY	SSTD050 (25ppb) 77-05-09
4) Sample	3	F11220C2	72EARLY	SSTD050 (25ppb) 77-05-09
5) Sample	4	F11220C3	72EARLY	SSTD080 (40ppb) 77-01-07
6) Sample	5	F11220C4	72EARLY	SSTD120 (60ppb) 77-01-08
7) Sample	6	F11220C5	72EARLY	SSTD160 (80ppb) 77-01-09
8) Sample	2	F11220C6	72EARLY	SSTD020 (10ppb) 77-01-05
9) Sample	7	F1122001	72EARLY	COK150188-BLK 11/20/00 TCLP (032
10) Sample	8	F1122002	72EARLY	COK150188-LCS 11/20/00 TCLP (032
11) Sample	9	F1122003	72EARLY	COK150188-001S 11/20/00 TCLP (03
12) Sample	10	F1122004	72EARLY	COK150188-001D 11/20/00 TCLP (03
13) Sample	11	F1122005	72EARLY	COK150188-001 11/20/00 TCLP (032
14) Sample	12	F1122006	72EARLY	COK090223-001 11/20/00 TCLP (032
15) Sample	13	F1122007	72EARLY	COK140226-001 11/20/00 TCLP (032
16) Sample	14	F1122008	72EARLY	COK070143-BLK 11/15/00 SOIL (032
17) Sample	15	F1122009	72EARLY	COK070143-LCS 11/15/00 SOIL (032
18) Sample	16	F1122010	72EARLY	COK040170-001 11/15/00 SOIL (032
19) Sample	17	F1122011	72EARLY	COK070143-001 11/15/00 SOIL (032
20) Sample	18	F1122012	72EARLY	COK070143-002 11/15/00 SOIL (032
21) Sample	19	F1122013	72EARLY	COK070143-003 11/15/00 SOIL (032
22) Sample	20	F1122014	72EARLY	COK070143-004 11/15/00 SOIL (032
23) Sample	21	F1122015	72EARLY	COK070143-005 11/15/00 SOIL (032
24) Sample	100	F10170B2	72EARLY	Blank
25) Sample	100	F10170B3	72EARLY	Blank
26) Sample	100	F10170B4	72EARLY	Blank
27) Sample	100	F10170B5	72EARLY	Blank
28) Sample	100	F10170B6	72EARLY	Blank

Bytes Needed: 1400000 Space on drive D: 1023932928

Sequence Verification Done!

REQUESTED BY: MILLERJ

674 1130

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

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX DESCRIPTION</u>	<u>QTY RCVD</u>	<u>QTY REQD</u>
20A	DPLF2-1-AC	---	286552	422326	A-12-QL	COK090223	001		SOLID	0	7 1
22A CLP1	DPT5F-1-AC	---	286551	002532	A-59-QL	COK140226	001		SOLID	0	6 1
22C CLP1	DPWNF-1-AD	---	286550	399411	A-59-QL	COK150188	001		SOLID	0	3 1

5M 11-20-00

~~DUMPED 1 LITER EMPTY JARS~~

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Ken Seely
Janice Miller

Janice Miller
Ken Seely

11-20-00 0530
11-20-00 1040

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

674 1131

PSR024 11/17/00 13:48:05 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: MURPHYJ

METHOD: QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
20A	DPLF2	___	286007	422326	A-34-QO	COK090223	001	X	SOLID	0	7 1
22A CLP1	DPT5F	___	286008	002532	A-34-QO	COK140226	001	*	SOLID	0	6 1
22C CLP1	DPWNF	___	286006	399411	A-34-QO	COK150188	001	*	SOLID	0	3 1
22C	DPWPK	___	286001	413315	A-34-QO	COK150194	001		SOLID	0	1 1
22C	DPNPW	___	286002	413315	A-34-QO	COK150194	002		SOLID	0	1 1
22C	DPWPO	___	286003	413315	A-34-QO	COK150194	003		SOLID	0	1 1
1D	DP0D0	___	286004	413315	A-34-QO	COK160164	001		SOLID	0	1 1
1D	DP0ED	___	286005	413315	A-34-QO	COK160164	002		SOLID	0	1 1
2B	DP21T	___	286009	413315	A-34-QO	COK170126	001		SOLID	0	1 1

} Plastic

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>Edmund Faust</i>	<i>Paul Karl</i>	11/17/00 16:00
<i>Paul Karl</i>	<i>Edmund Faust</i>	11/17/00 17:30

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

674 1132

PESTICIDE DATA

674 1133

PESTICIDE
QC SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: C0K150188

	CLIENT ID.	SRG01	SRG02	TOT OUT
01	INTRA-LAB QC	94	93	00
02	DF/24-A/0319/CVS/013	91	92	00
03	METHOD BLK. DP8AF1AA	98	102	00
04	LCS DP8AF1AC	94	96	00
05	LAB MS/MSD D	92	88	00
06	LAB MS/MSD S	93	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

674 1135

SW846 8081A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: COK200000

WO #: DP8AF1AC

BATCH: 0325582

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
Lindane	0.00250	0.00249	100	49 - 137	
Heptachlor	0.00250	0.00257	103	57 - 124	
Heptachlor epoxide	0.00250	0.00246	98	53 - 135	
Endrin	0.00250	0.00232	93	46 - 137	
Methoxychlor	0.00250	0.00208	83	12 - 154	

NOTES(S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

674 1136

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0K090223

WO #: DPLF21A0

BATCH: 0325582

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
Lindane	0.00250	ND	0.00237	95	30 - 148	
Heptachlor	0.00250	ND	0.00242	97	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00238	95	38 - 138	
Endrin	0.00250	ND	0.00220	88	28 - 148	
Methoxychlor	0.00250	ND	0.00207	83	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:

674 1137

SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: COK090223

WO #: DPLF21A1

BATCH: 0325582

COMPOUND	SPIKE	MSD	MSD	QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD REC	
Lindane	0.00250	0.00240	96	1.3	22	30 - 148
Heptachlor	0.00250	0.00245	98	1.2	32	25 - 135
Heptachlor epoxide	0.00250	0.00238	95	0.29	31	38 - 138
Endrin	0.00250	0.00223	89	1.4	40	28 - 148
Methoxychlor	0.00250	0.00208	83	0.67	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:

4C
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

674 1138

PBLK

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: COK150188

Lab Sample ID: DP8AF1AA Lab File ID: D-A8371

Matrix (soil/water) WATER Extraction: (SepF/Cont/Sonc) SW1311

Sulfur Cleanup (Y/N) N Date Extracted: 11/20/00

Date Analyzed (1): 11/21/00 Date Analyzed (2): 11/21/00

Time Analyzed (1): 1830 Time Analyzed (2): 1830

Instrument ID (1): GC4 Instrument ID (2): GC4

GC Column (1): DB608 ID: 0.53 (mm) GC Column (2): DB1701 ID: 0.53 (mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	DF/24-A/0319	DPWNF1AE	11/21/00	11/21/00
02	LCS	DP8AF1AC	11/21/00	11/21/00
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

674 1139

**PESTICIDE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK150188 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/15/00

Work Order: DPWNF1AE

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/21/00

Moisture %: 19

QC Batch: 0325582

Client Sample Id: DF/24-A/0319/CVS/013

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

674 1141

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8370.d
Report Date: 22-Nov-2000 11:29

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8370.d
Lab Smp Id: DPWNF1AE Client Smp ID: DF/24-A/0319/CVS/01
Inj Date : 21-NOV-2000 18:02
Operator : 1891 Inst ID: gc4.i
Smp Info : DPWNF1AE,8080-G.b,,PEST.sub,,
Misc Info : 150188001
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 22-Nov-2000 11:08 eppingerd Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC061

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 (ug/L)
§ 1 Tetrachloro-m-xylene	5.406	5.406	0.000	79074	0.01843	0.001843 (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	11 346	11 300	0.046	2023	<0.0	0.00003951 (a)
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.		

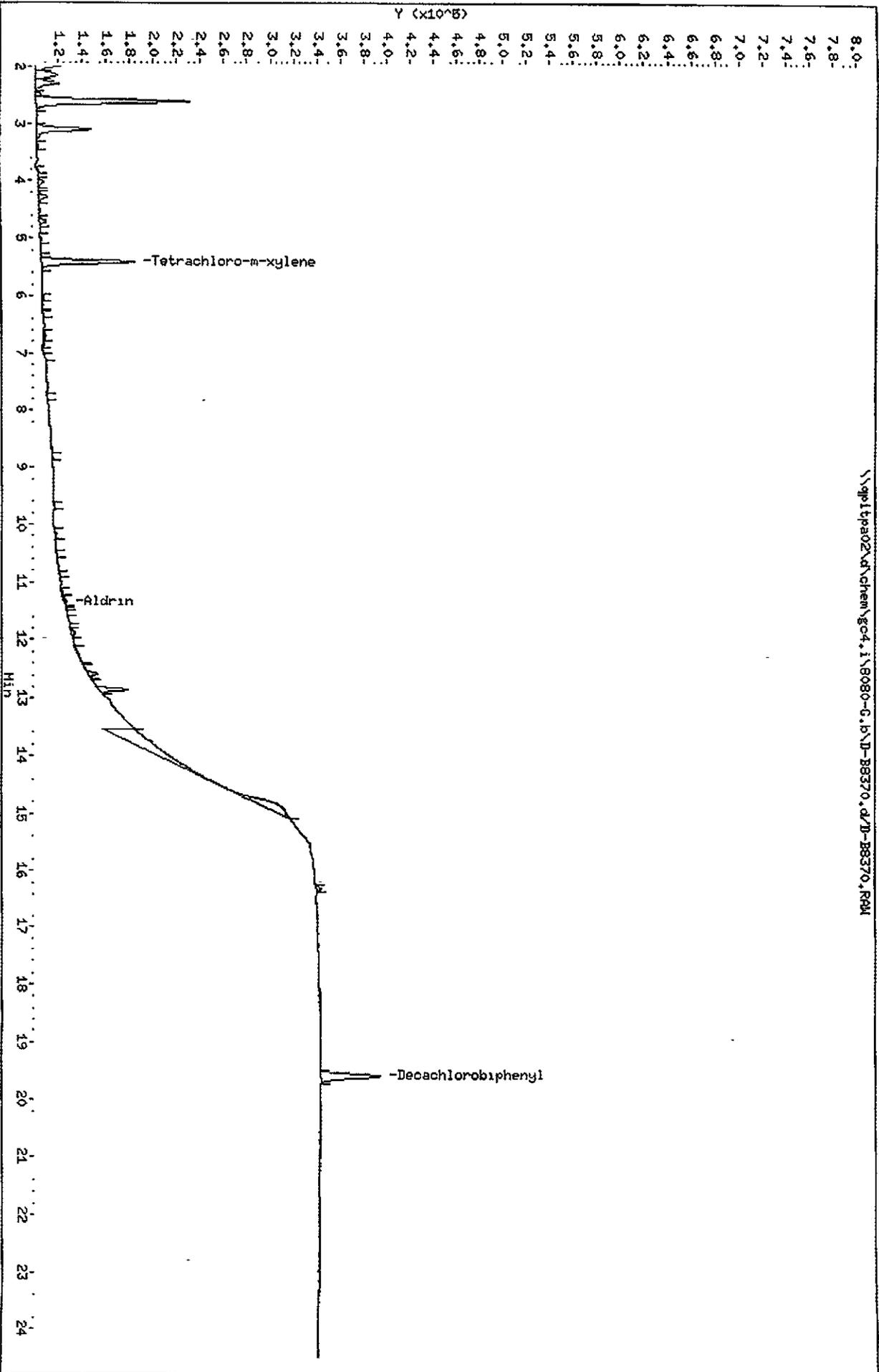
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
18 Toxaphene				Compound Not Detected.		
21 4,4'-DDD				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
§ 30 Decachlorobiphenyl	19.593	19.593	0.000	50958	0 01836	0 001836(aR)

QC Flag Legend

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

Data File: \\gpltpa02\chem\gc4\18080-G.b\D-B8370.d
Date: 21-NOV-2000 18:02
Client ID: DF/24-0/0319/CVS/01
Sample Info: DPMNF1AE.8080-G.b,,PEST,sub,,
Volume Injected (uL): 1.0
Column phase: DB1701

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



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8370.d
 Lab Smp Id: DPWNF1AE Client Smp ID: DF/24-A/0319/CVS/01
 Inj Date : 21-NOV-2000 18:02
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DPWNF1AE,8080-G.b,,PEST.sub,,,
 Misc Info : 150188001
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 22-Nov-2000 10:30 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC061

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 (ug/L)
§ 1 Tetrachloro-m-xylene	5.166	5.166	0.000	120605	0.01943	0.001943 (aR)
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)				Compound Not Detected.		
7 beta-BHC				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
11 Aldrin				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
16 4,4'-DDE	14.040	14.046	-0.006	2010	<0.0	0.00004007(a)
17 Dieldrin				Compound Not Detected.		
20 Endrin				Compound Not Detected.		

674 1145

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8370.d
 Report Date: 22-Nov-2000 10:56

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
21 4,4'-DDD				Compound Not Detected.		
18 Toxaphene				Compound Not Detected.		
22 Endosulfan II	15.013	15.033	-0.020	1247	<0.0	0.00002945(a)
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
§ 30 Decachlorobiphenyl	20.800	20.800	0.000	42046	0 01823	0.001823(aR)

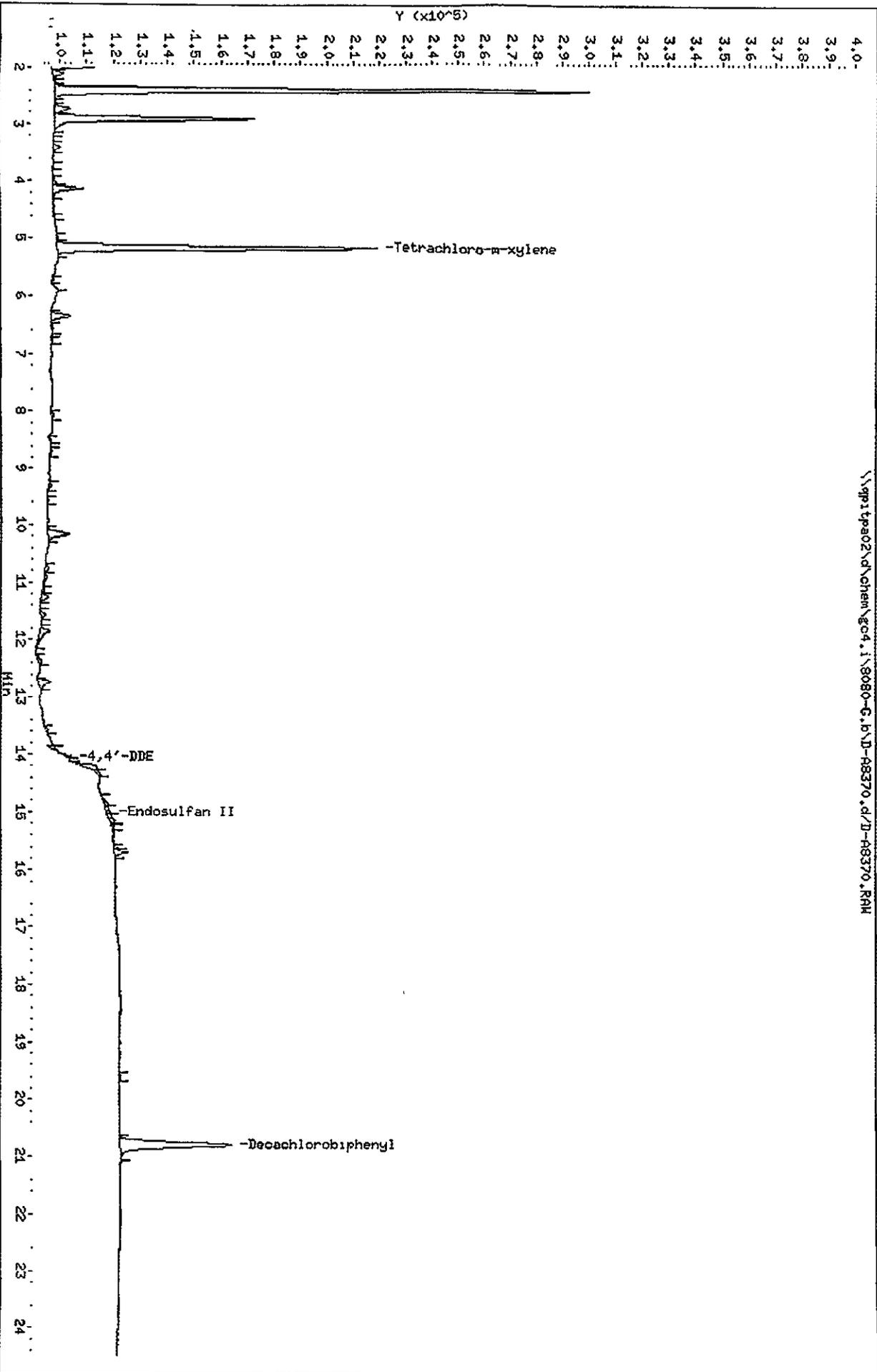
QC Flag Legend

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

Data File: \\ppitpa02\chem\g04.i\8080-G.b.D-48370.d
Date: 21-NOV-2000 18:02
Client ID: DF/24-A/0319/CVS/01
Sample Info: DPMN-14E,8080-G.b.,PEST,sub,,
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: g04.i
Operator: LBP1
Column diameter: 0.53

\\ppitpa02\chem\g04.i\8080-G.b.D-48370.d/D-48370.RAW



674 1147

**PESTICIDE
CALIBRATION DATA**

Report Date : 22-Nov-2000 10:27

GD
HP589046
DB608

674 1148

STL-Pittsburgh

COMPOUND LISTING

Method file : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Quant Method : ESTD Target Version : 4.04
Last Update : 22-Nov-2000 10:26 Number of Cpnds : 31
Data Type : GC MULTI COMP

Global Integrator : Falcon

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

Compound	RT	RT Window	RF
\$ 1 Tetrachloro-m-xylene	5.167	5.117-5.217	6.21e+006
2 Diallate A	6.360	6.310-6.410	1.78e+005
3 Diallate B	6.633	6.583-6.683	4.58e+004
4 HEXACHLORO BENZENE	7.193	7.143-7.243	
5 alpha-BHC	7.347	7.297-7.397	7.61e+006
6 gamma-BHC (Lindane)	8.700	8.650-8.750	6.82e+006
7 beta-BHC	8.987	8.937-9.037	3.67e+006
8 delta-BHC	10.380	10.330-10.430	5.82e+006
9 Chlordane	9.293	9.243-9.343	1.98e+005
	9.887	9.837-9.937	2.36e+005
	13.227	13.177-13.277	5.42e+005
	13.560	13.510-13.610	4.43e+005
10 Heptachlor	9.893	9.843-9.943	5.27e+006
11 Aldrin	11.127	11.077-11.177	4.97e+006
12 Heptachlor epoxide	12.847	12.797-12.897	5.15e+006
13 gamma-Chlordane	13.227	13.177-13.277	5.18e+006
14 alpha-Chlordane	13.560	13.510-13.610	5.07e+006
15 Endosulfan I	13.607	13.557-13.657	4.63e+006
16 4,4'-DDE	14.047	13.997-14.097	5.02e+006
17 Dieldrin	14.167	14.117-14.217	4.78e+006
18 Toxaphene	14.927	14.877-14.977	4.75e+004
	15.067	15.017-15.117	6.99e+004
	15.427	15.377-15.477	3.82e+004
	16.507	16.457-16.557	4.85e+004

674 1149

Report Date : 22-Nov-2000 10:27

6D
HP589046
DB608

STL-Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m

Compound	RT	RT Window	RF
19 Isodrin	12.520	12.470-12.570	4.00e+006
20 Endrin	14.753	14.703-14.803	4.31e+006
21 4,4'-DDD	14.920	14.870-14.970	3.93e+006
22 Endosulfan II	15.033	14.983-15.083	4.23e+006
23 4,4'-DDT	15.387	15.337-15.437	3.73e+006
24 Endrin aldehyde	15.560	15.510-15.610	3.09e+006
25 Methoxychlor	16.993	16.943-17.043	1.62e+006
26 Endosulfan sulfate	15.780	15.730-15.830	2.72e+006
27 Endrin ketone	17.360	17.310-17.410	3.17e+006
28 MIREX	17.773	17.723-17.823	
29 Kepone	14.847	14.797-14.897	5.61e+005
58 CHLOROBENZILATE	14.600	14.550-14.650	6.44e+005
\$ 30 Decachlorobiphenyl	20.800	20.750-20.850	2.31e+006

Report Date : 08-Nov-2000 11:54

6E
JB904A
DB608

674 1150

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 07-NOV-2000 15:49
End Cal Date : 07-NOV-2000 23:13
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Cal Date : 08-Nov-2000 11:46 matkol
Curve Type : Average

Calibration File Names:

Level 1: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8193.d
Level 2: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8194.d
Level 3: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8195.d
Level 4: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8196.d
Level 5: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8197.d

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5		
2 Diallylate A	237450	204932	162342	143716	141749	178038	23.487
3 Diallylate B	56510	51796	42776	39203	38832	45823	17.317
4 HEXACHLOROBENZENE	++++	++++	++++	++++	++++	++++	++++
5 alpha-BHC	7359200	7741100	7797480	7683200	7446680	7605532	2.522
6 gamma-BHC (Lindane)	6783400	7022100	6969040	6766180	6544290	6817002	2.776
7 beta-BHC	3876400	4092300	3590680	3541040	3224620	3665008	9.071
8 delta-BHC	5397400	5998400	5735720	6098160	5893380	5824612	4.703
9 Chlordane(1)	++++	++++	198064	++++	++++	198064	0.000
(2)	++++	++++	236224	++++	++++	236224	0.000
(3)	++++	++++	542248	++++	++++	542248	0.000
(4)	++++	++++	442504	++++	++++	442504	0.000
10 Heptachlor	5327400	5414300	5252280	5253560	5097250	5268958	2.216
11 Aldrin	4705800	5089600	4870720	5214540	4970970	4970326	3.945
12 Heptachlor epoxide	4938400	5375500	5011600	5316240	5102300	5148808	3.694
13 gamma-Chlordane	5027400	5396200	5045880	5372880	5081430	5184758	3.541
14 alpha-Chlordane	4893200	5307300	4991360	5173340	4968520	5066744	3.342
15 Endosulfan I	4498400	4687800	4645720	4668420	4672260	4634520	1.674
16 4,4'-DDE	4635000	5109600	4910400	5272720	5150830	5015710	4.976
17 Dieldrin	4392800	4643800	4823880	4941420	5073720	4775124	5.566
18 Toxaphene(1)	++++	++++	47488	++++	++++	47488	0.000
(2)	++++	++++	69865	++++	++++	69865	0.000
(3)	++++	++++	38188	++++	++++	38188	0.000
(4)	++++	++++	48450	++++	++++	48450	0.000
19 Isodrin	4313600	4288720	3858920	3679227	3846330	3997359	7.165
20 Endrin	4099200	4131700	4355480	4471560	4506990	4312986	4.386
21 4,4'-DDD	4156600	3731300	3914320	3934080	3937890	3934838	3.834

674 1151

6E
58904A
DB608

Report Date : 08-Nov-2000 11:54

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 07-NOV-2000 15:49
 End Cal Date : 07-NOV-2000 23:13
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Cal Date : 08-Nov-2000 11:46 matkol
 Curve Type : Average

Compound	0.00500 Level 1	0.01000 Level 2	0.02500 Level 3	0.05000 Level 4	0.10000 Level 5	RRF	% RSD
22 Endosulfan II	4390000	4258900	3868880	4333780	4321600	4234632	4.952
23 4,4'-DDT	3588000	3552500	3788560	3811680	3886540	3725456	3.940
24 Endrin aldehyde	3032000	3136700	2981920	3164480	3120270	3087074	2.491
25 Methoxychlor	1566900	1658350	1606120	1616020	1629580	1615394	2.073
26 Endosulfan sulfate	2381400	2682400	2645960	2879840	3002750	2718470	8.764
27 Endrin ketone	2917800	3267700	3080840	3315720	3292200	3174852	5.390
28 MIREX	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Kepone	186320	361152	396158	812329	1047003	560592	63.499 <-
58 CHLOROBENZILATE	759200	956300	673800	487040	342450	643758	37.026 <-
\$ 1 Tetrachloro-m-xylene	6868400	6799200	6257960	5776640	5329980	6206436	10.642
\$ 30 Decachlorobiphenyl	2360200	2399000	2331560	2238040	2202220	2306204	3.604

AVZ=9.13

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

674 1152

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 4140-G
 GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 11/07/00 11/07/00

EPA Sample No. (PIBLK): _____ Date Analyzed : _____
 Lab Sample ID (PIBLK): _____ Time Analyzed : _____
 EPA Sample No. (PEM): _____ Date Analyzed : 11/07/00
 Lab Sample ID (PEM): EVALB Time Analyzed : 1521

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
=====	=====	=====	=====	=====	=====	=====
Endrin	14.77	14.72	14.82	0.02493	0.02500	-0.3
4,4'-DDT	15.40	15.35	15.45	0.02518	0.02500	0.7

4,4'-DDT % breakdown (1): ~~5.85~~ 7.0 Endrin % breakdown (1): ~~6.00~~
 Combined % breakdown (1): ~~12.85~~ 11.2 4.2
 um
 11/8/00

674 1153

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 4140-G

GC Column: DB608

ID: 0.53

(mm)

Init. Calib. Date(s): 11/07/00 11/07/00

EPA Sample No. (PIBLK): _____

Date Analyzed : _____

Lab Sample ID (PIBLK): _____

Time Analyzed : _____

EPA Sample No. (PEM):

Date Analyzed : 11/08/00

Lab Sample ID (PEM): EVALB

Time Analyzed : 0838

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
Endrin	14.77	14.72	14.82	0.02408	0.02500	-3.7
4,4'-DDT	15.40	15.35	15.45	0.02464	0.02500	-1.4

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

~~1.48~~ 2.0

Endrin % breakdown (1):

~~4.92~~

Combined % breakdown (1):

~~6.40~~ 5.6

3.6

11/11/00

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY **674 1154**

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 4140-G
 GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 11/07/00 11/07/00

EPA Sample No. (PIBLK): _____ Date Analyzed : _____
 Lab Sample ID (PIBLK): _____ Time Analyzed : _____
 EPA Sample No. (PEM): _____ Date Analyzed : 11/21/00
 Lab Sample ID (PEM): EVALB Time Analyzed : 1352

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
===== Endrin	14.75	14.70	14.80	0.02509	0.02500	0.4
4,4'-DDT	15.39	15.34	15.44	0.02162	0.02500	-13.5

4,4'-DDT % breakdown (1): ~~8.18~~ ^{10.4} Endrin % breakdown (1): ~~9.54~~ ^{6.5}
 Combined % breakdown (1): ~~17.73~~ ^{16.9} *OK 11-22-00*

674 1155

7E HP589046
DB608

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8362.d
Report Date: 22-Nov-2000 10:20

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 14:20
Lab File ID: D-A8362.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
Analysis Type: Init. Cal. Times: 15:49 23:13
Lab Sample ID: MEDTOX Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m

COMPOUND	RRF	RFO	MIN	RRF	%D	MAX
18 Toxaphene (1)	47488	55473	0.010	16.8	15.0	<-
(2)	69865	76296	0.010	9.2	15.0	
(3)	38188	41135	0.010	7.7	15.0	
(4)	48450	52241	0.010	7.8	15.0	
\$ 1 Tetrachloro-m-xylene	6206436	7315280	0.000	17.9	15.0	<-
\$ 30 Decachlorobiphenyl	2306204	2285720	0.010	-0.9	15.0	

} Avg 10.47 = D

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8363.d
Report Date: 22-Nov-2000 10:20

72 HP585046
DBlog

STL-Pittsburgh

674 1156

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 14:48
Lab File ID: D-A8363.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
Analysis Type: Init. Cal. Times: 15:49 23:13
Lab Sample ID: MEDCHLOR Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m

COMPOUND	RRF	RFO	MIN RRF	%D	MAX %D
9 Chlordane (1)	198064	249992	0.010	26.2	15.0
(2)	236224	284916	0.010	20.6	15.0
(3)	542248	627280	0.010	15.7	15.0
(4)	442504	505392	0.010	14.2	15.0
\$ 1 Tetrachloro-m-xylene	6206436	7108000	0.000	14.5	15.0
\$ 30 Decachlorobiphenyl	2306204	2304200	0.010	-0.1	15.0

} Avg 19.29.D

674 1157

7E HPS8904G
DB608

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8364.d
Report Date: 22-Nov-2000 10:20

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 15:16
Lab File ID: D-A8364.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
Analysis Type: Init. Cal. Times: 15:49 23:13
Lab Sample ID: MEDA Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m

COMPOUND	RRF	RPO	MIN RRF	%D	MAX %D
\$ 1 Tetrachloro-m-xylene	6206436	7515080	0.000	21.1	15.0
5 alpha-BHC	7605532	9372160	0.010	23.2	15.0
6 gamma-BHC (Lindane)	6817002	8286000	0.010	21.5	15.0
10 Heptachlor	5268958	6241320	0.010	18.5	15.0
15 Endosulfan I	4634520	5104480	0.010	10.1	15.0
17 Dieldrin	4775124	5191080	0.010	8.7	15.0
20 Endrin	4312986	4466360	0.010	3.6	15.0
21 4,4'-DDD	3934838	3493320	0.010	-11.2	15.0
23 4,4'-DDT	3725456	3314280	0.010	-11.0	15.0
25 Methoxychlor	1615394	1321200	0.010	-18.2	15.0
\$ 30 Decachlorobiphenyl	2306204	2359280	0.010	2.3	15.0

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8365.d
Report Date: 22-Nov-2000 10:21

7E HP589046
03608

STL-Pittsburgh

674 1158

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 15:44
Lab File ID: D-A8365.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
Analysis Type: Init. Cal. Times: 15:49 23:13
Lab Sample ID: MEDB Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m

COMPOUND	RRF	RFO	MIN RRF	%D	MAX %D
11 Aldrin	4970326	5998280	0.010	20.7	15.0 <-
7 beta-BHC	3665008	4345080	0.010	18.6	15.0 <-
8 delta-BHC	5824612	5980400	0.010	2.7	15.0
12 Heptachlor epoxide	5148808	5867920	0.010	14.0	15.0
13 gamma-Chlordane	5184758	5782320	0.010	11.5	15.0
14 alpha-Chlordane	5066744	5579680	0.010	10.1	15.0
16 4,4'-DDE	5015710	5223280	0.010	4.1	15.0
22 Endosulfan II	4234632	4155680	0.010	-1.9	15.0
24 Endrin aldehyde	3087074	3094800	0.010	0.3	15.0
26 Endosulfan sulfate	2718470	2024560	0.010	-25.5	15.0 <-
27 Endrin ketone	3174852	3243920	0.010	2.2	15.0

A-5 11-97.D

674 1159

7E HP589046
DBW8

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8373.d
Report Date: 22-Nov-2000 10:30

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 19:26
Lab File ID: D-A8373.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
Analysis Type: Init. Cal. Times: 15:49 23:13
Lab Sample ID: MEDA Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m

COMPOUND	RRF	RFO	MIN RRF	%D	MAX %D
1 Tetrachloro-m-xylene	6206436	7479360	0.000	20.5	15.0
5 alpha-BHC	7605532	9380560	0.010	23.3	15.0
6 gamma-BHC (Lindane)	6817002	8390640	0.010	23.1	15.0
10 Heptachlor	5268958	6340280	0.010	20.3	15.0
15 Endosulfan I	4634520	5155840	0.010	11.2	15.0
17 Dieldrin	4775124	5226880	0.010	9.5	15.0
20 Endrin	4312986	4580600	0.010	6.2	15.0
21 4,4'-DDD	3934838	3593600	0.010	-8.7	15.0
23 4,4'-DDT	3725456	3492680	0.010	-6.2	15.0
25 Methoxychlor	1615394	1431000	0.010	-11.4	15.0
30 Decachlorobiphenyl	2306204	2386640	0.010	3.5	15.0

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8374.d
 Report Date: 22-Nov-2000 10:30

7E HP589046
 DB608

STL-Pittsburgh

674 1160

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 19:53
 Lab File ID: D-A8374.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
 Analysis Type: Init. Cal. Times: 15:49 23:13
 Lab Sample ID: MEDB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m

COMPOUND	RRF	RFO	MIN RRF	MIN %D	MAX %D
11 Aldrin	4970326	5999480	0.010	20.7	15.0
7 beta-BHC	3665008	4348640	0.010	18.7	15.0
8 delta-BHC	5824612	6387520	0.010	9.7	15.0
12 Heptachlor epoxide	5148808	5856120	0.010	13.7	15.0
13 gamma-Chlordane	5184758	5763040	0.010	11.2	15.0
14 alpha-Chlordane	5066744	5583800	0.010	10.2	15.0
16 4,4'-DDE	5015710	5285680	0.010	5.4	15.0
22 Endosulfan II	4234632	4250560	0.010	0.4	15.0
24 Endrin aldehyde	3087074	3188520	0.010	3.3	15.0
26 Endosulfan sulfate	2718470	2386440	0.010	-12.2	15.0
27 Endrin ketone	3174852	3334360	0.010	5.0	15.0

Aug 11.6720

674 1161

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: Contract:
 Lab Code: Case No.: SAS No.: SDG No.: C0K150188
 GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 11/07/00 11/07/00
 Instrument ID: GC4

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION						
TCX: 5.17 DCB: 20.80						
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT #
01	EVALB	11/07/00	1521	5.19		20.85*
02	MEDTOX	11/07/00	1549	5.19		20.85*
03	MEDCHLOR	11/07/00	1617	5.19		20.85*
04	LOWA	11/07/00	1903	5.19		20.85
05	MLOWA	11/07/00	1931	5.19		20.85
06	MEDA	11/07/00	1959	5.19		20.85
07	MHIGHA	11/07/00	2027	5.19		20.85
08	HIGHA	11/07/00	2054	5.19		20.85
09	LOWB	11/07/00	2122			
10	MLOWB	11/07/00	2150			
11	MEDB	11/07/00	2218			
12	MHIGHB	11/07/00	2245			
13	HIGHB	11/07/00	2313			
14	2ND A	11/07/00	2341	5.19		20.85
15	2ND B	11/08/00	0009			
16	EVALB	11/08/00	0838	5.19		20.85
17	EVALB	11/21/00	1352	5.17		20.81
18	MEDTOX	11/21/00	1420	5.17		20.80
19	MEDCHLOR	11/21/00	1448	5.17		20.81
20	MEDA	11/21/00	1516	5.17		20.80
21	MEDB	11/21/00	1544			
22	DF/24-A/0319 DPWNF1AE	11/21/00	1802	5.17		20.80
23	PBLK DP8AF1AA	11/21/00	1830	5.17		20.80
24	LCS DP8AF1AC	11/21/00	1858	5.17		20.80
25	MEDA	11/21/00	1926	5.17		20.81
26	MEDB	11/21/00	1953			
27						
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.

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8180.d
Report Date: 08-Nov-2000 12:05

674 1162

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8180.d
Lab Smp Id: EVALB
Inj Date : 07-NOV-2000 15:21
Operator : 1891 Inst ID: gc4.i
Smp Info : EVALB,8080-G.b,,EVALBR.sub,,3,1
Misc Info : 190-102-10
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.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	5.193	5.186	0.007	121213	0.01953	0.01953 (R)
16 4,4'-DDE	14.066	14.060	0.006	1532	<0.0	0.0003054
20 Endrin	14.773	14.773	0.000	107525	0.02493	0.02493
21 4,4'-DDD	14.940	14.933	0.007	5536	0.00141	0.001407
23 4,4'-DDT	15.400	15.400	0.000	93797	0.02518	0.02518
24 Endrin aldehyde	15.586	15.580	0.006	2626	<0.0	0.0008506
27 Endrin ketone	17.393	17.386	0.007	2061	<0.0	0.0006492
§ 30 Decachlorobiphenyl	20.853	20.846	0.007	45317	0.01965	0.01965 (R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

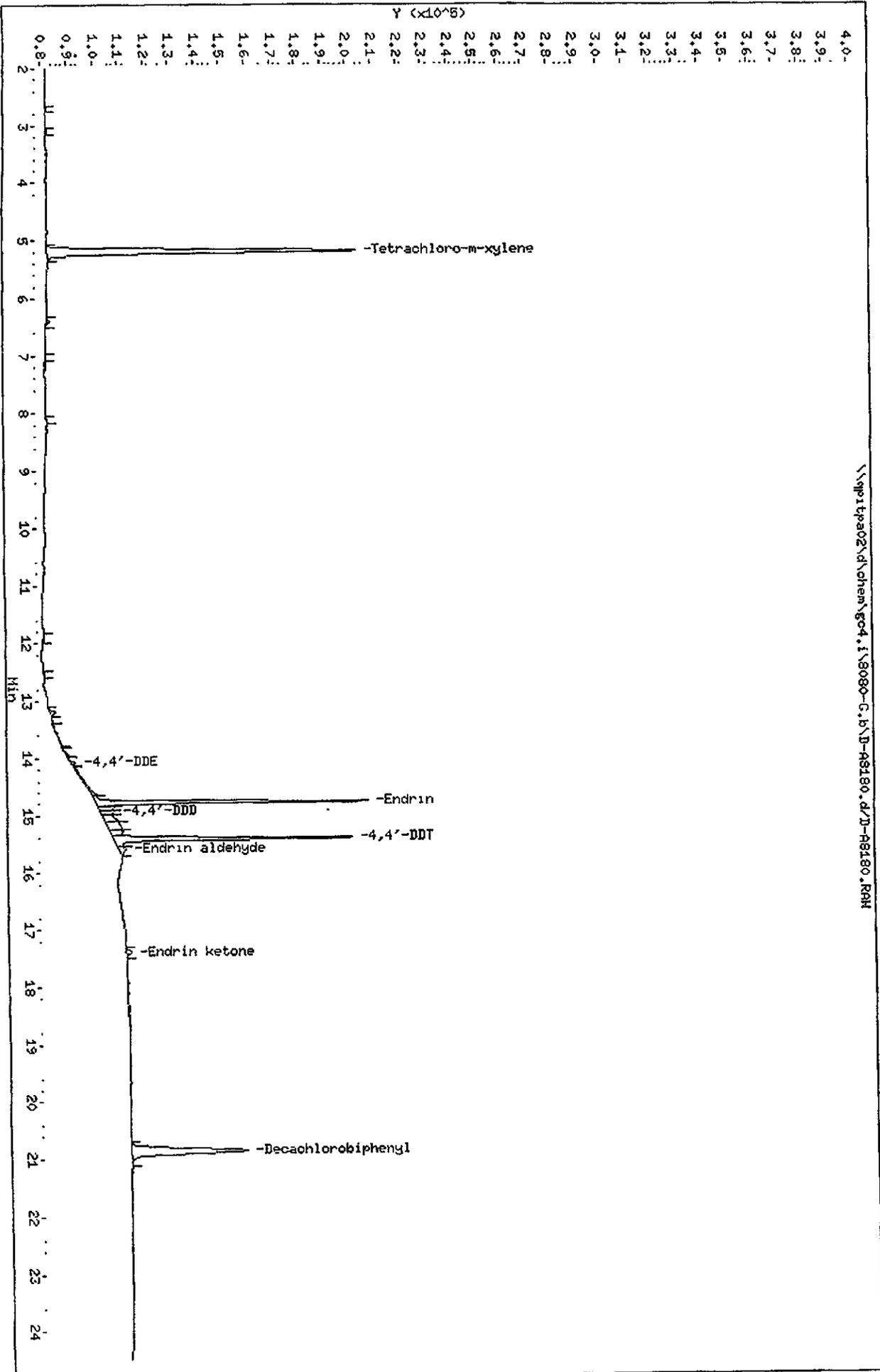
DDT = 7.0
Endrin = 4.2

674 1163

Data File: \\spitpa02\chem\gc4.i\8080-G.b\D-88180.d
Date: 07-NOV-2000 15:21
Client ID:
Sample Info: EVAL.B, 8080-G.b, EVAL.BR, sub., 3.1
Column phase: DB608

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

\\spitpa02\chem\gc4.i\8080-G.b\D-88180.d\D-88180.RAW



Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8181.d
Report Date: 08-Nov-2000 12:06

674 1164

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8181.d
Lab Smp Id: MEDTOX
Inj Date : 07-NOV-2000 15:49
Operator : 1891
Smp Info : MEDTOX,8080-G.b,,1-TOX.sub,,1,3
Misc Info : 190-98-12
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol
Cal Date : 07-NOV-2000 15:49
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC044

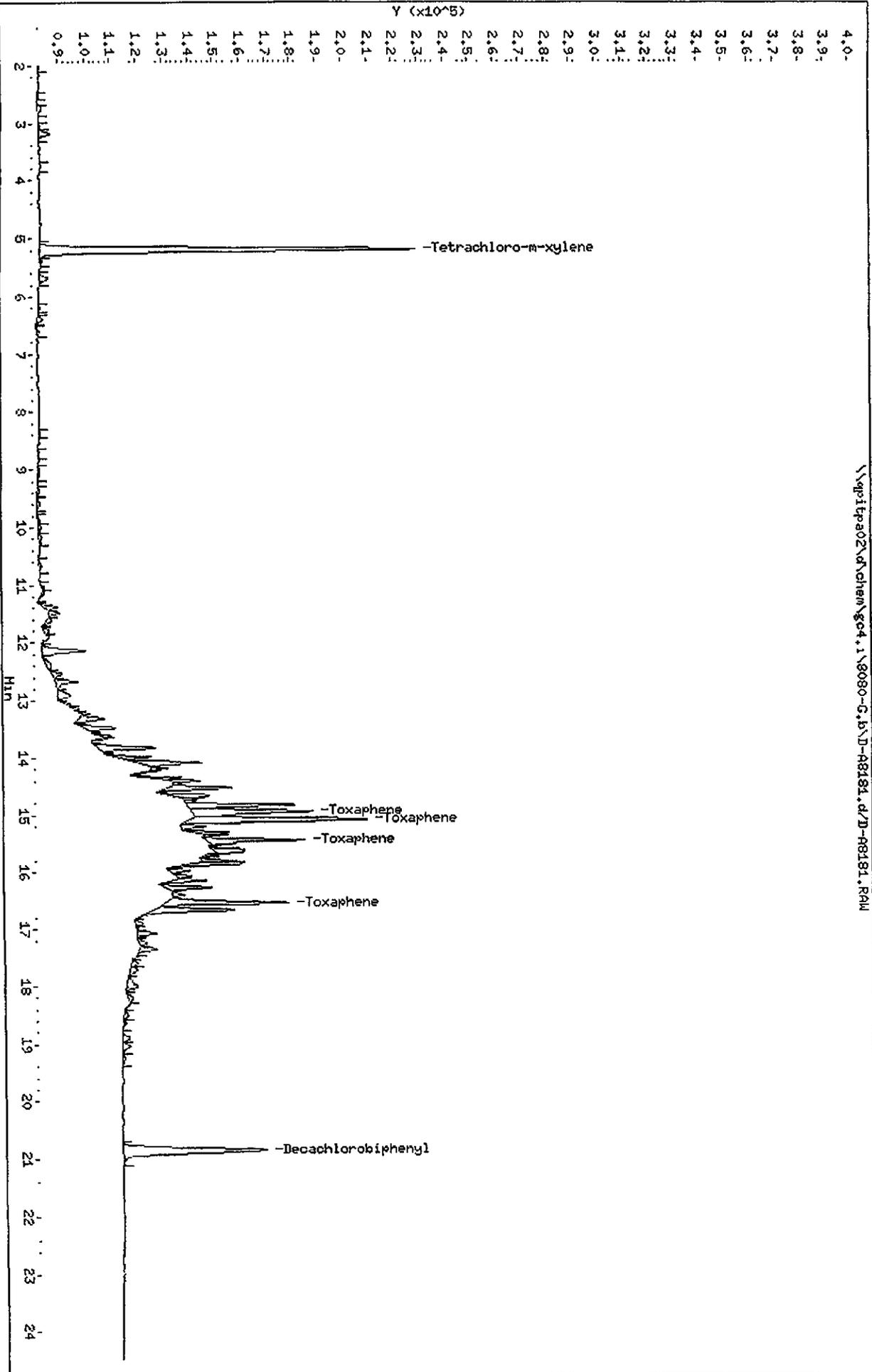
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
18 Toxaphene	14.946	14.946	0.000	47488	1.00000	1.000
\$ 1 Tetrachloro-m-xylene	5.193	5.186	0.007	146416	0.02500	0.02500
\$ 30 Decachlorobiphenyl	20.853	20.846	0.007	55782	0.02500	0.02500

674 1165

Data File: \\xp1tpa02\chem\gc4.1\8080-G.b\D-A8181.d
Date: 07-NOV-2000 15:49
Client ID:
Sample Info: METOX,8080-G.b,1-TOX.sub,1,3
Column phase: DB608

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

\\xp1tpa02\chem\gc4.1\8080-G.b\D-A8181.d\1-A8181.RAW



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8182.d
Lab Smp Id: MEDCHLOR
Inj Date : 07-NOV-2000 16:17
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDCHLOR, 8080-G.b,, 2-CHLO.sub,, 1,3
Misc Info : 190-102-9
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 16:17 Cal File: D-A8182.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: PITPC044

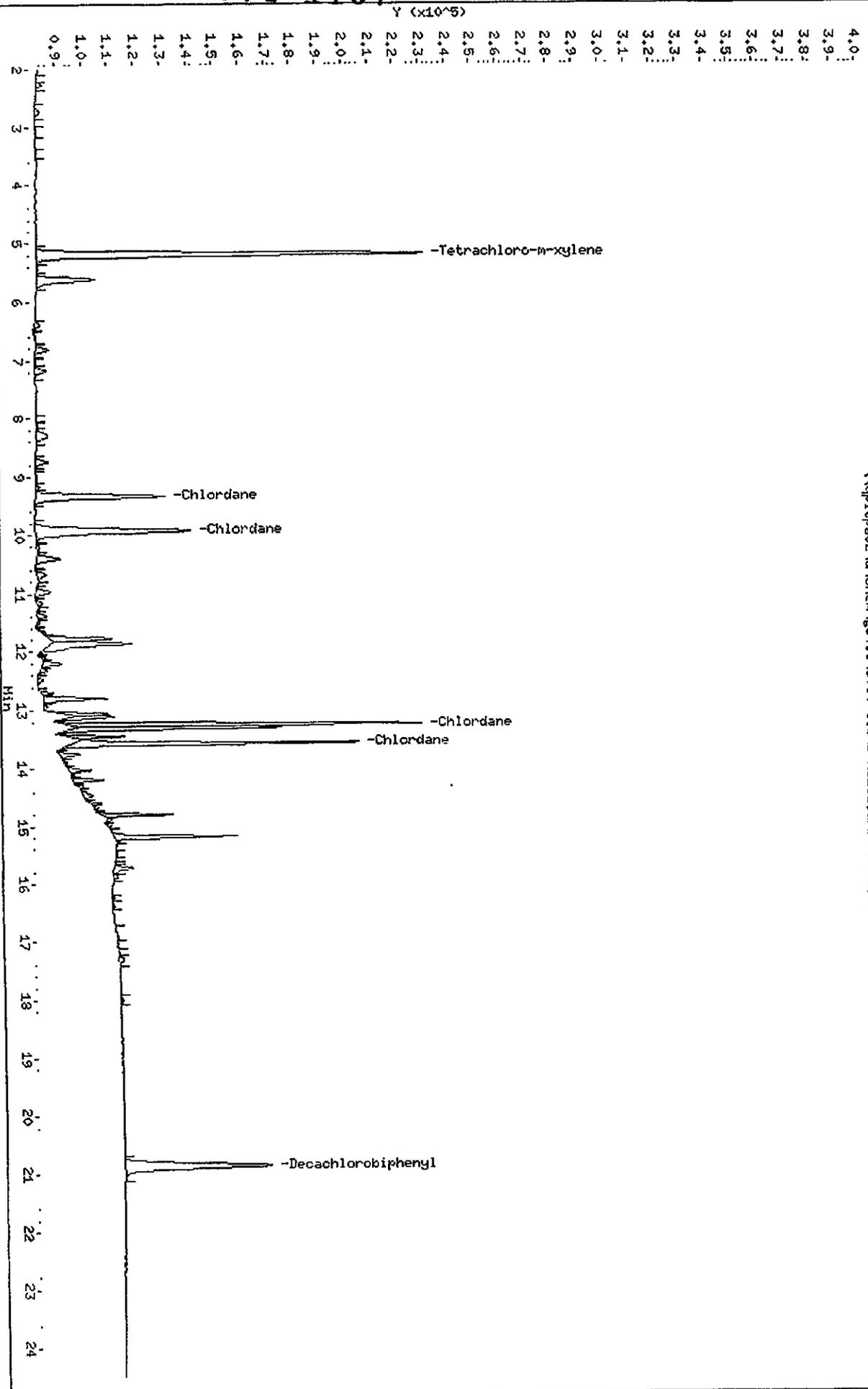
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
9 Chlordane	9.333	9.333	0.000	49516	0.25000	0.2500
\$ 1 Tetrachloro-m-xylene	5.193	5.186	0.007	148405	0.02500	0.02500
\$ 30 Decachlorobiphenyl	20.853	20.846	0.007	56460	0.02500	0.02500

674 1167

Data File: \\qpltpa02\dl\chem\gc4.1\8080-G.b\D-88182.d
Date: 07-NOV-2000 16:17
Client ID:
Sample Info: HEDCHLOR,8080-G,b,,2-CHL0,sub,,1,3
Column phase: DB608

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

\\qpltpa02\dl\chem\gc4.1\8080-G.b\D-88182.d\D-88182.RAW



STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\8080-G.b\D-A8188.d
 Lab Smp Id: LOWA
 Inj Date : 07-NOV-2000 19:03
 Operator : 1891 Inst ID: gc4.i
 Smp Info : LOWA,8080-G.b,,3-INDA.sub,,1,1
 Misc Info : 190-100-6
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 22:18 Cal File: D-A8195.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: PITPC044

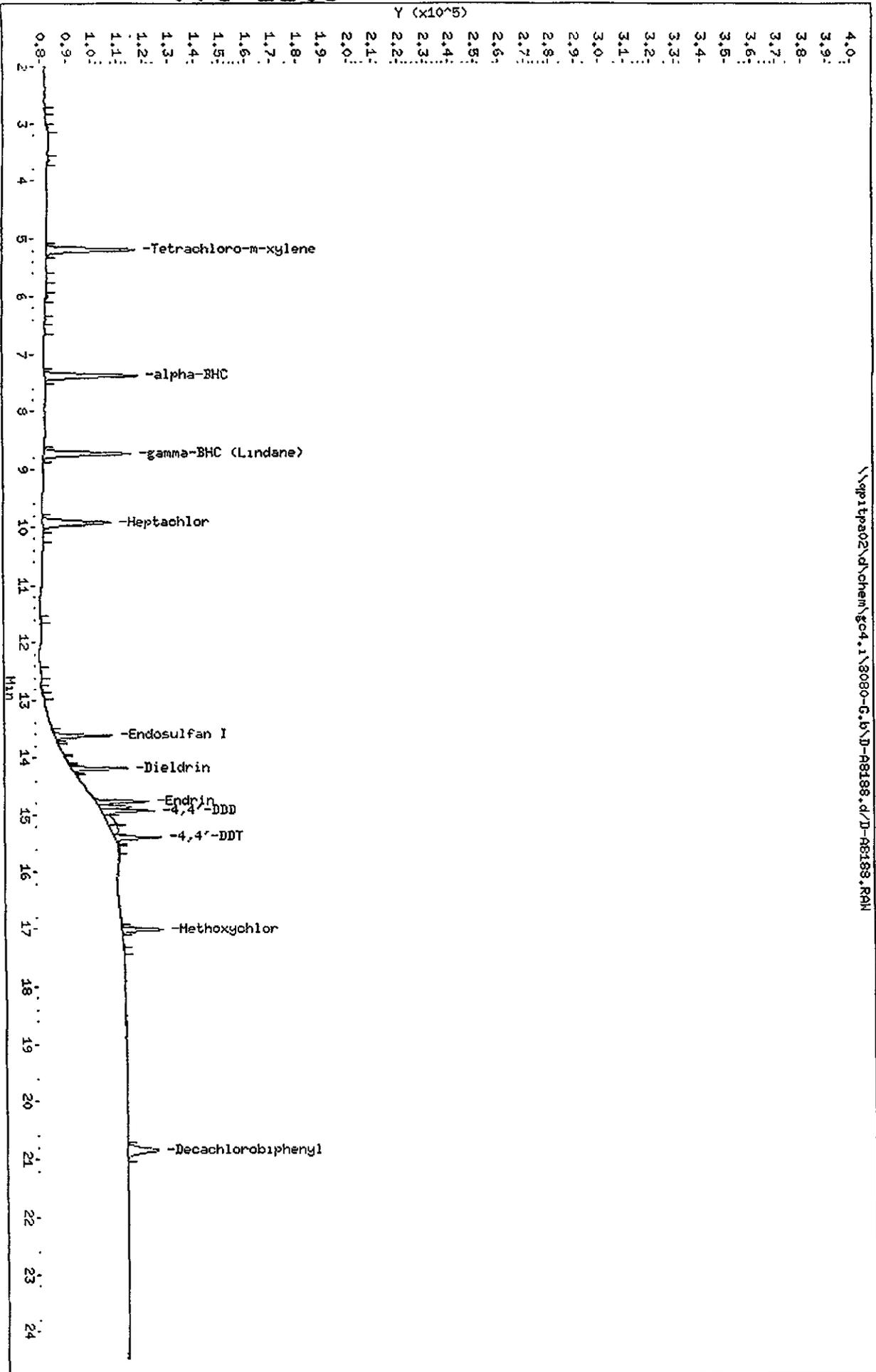
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.186	5.186	0.000	34342	0.00500	0.005232
5 alpha-BHC	7.373	7.373	0.000	36796	0.00500	0.004855
6 gamma-BHC (Lindane)	8.733	8.733	0.000	33917	0.00500	0.004932
10 Heptachlor	9.926	9.926	0.000	26637	0.00500	0.005036
15 Endosulfan I	13.626	13.626	0.000	22492	0.00500	0.004919
17 Dieldrin	14.186	14.186	0.000	21964	0.00500	0.004766
20 Endrin	14.773	14.773	0.000	20496	0.00500	0.004848
21 4,4'-DDD	14.933	14.933	0.000	20783	0.00500	0.005150
23 4,4'-DDT	15.400	15.400	0.000	17940	0.00500	0.004864
25 Methoxychlor	17.020	17.020	0.000	15669	0.01000	0.009876
§ 30 Decachlorobiphenyl	20.846	20.846	0.000	11801	0.00500	0.005030

674 1169

Date File: \\spitpa02\chem\gc4.1\8080-G.b\D-88188.d
Date : 07-NOV-2000 19:03
Client ID:
Sample Info: LOMR,8080-G.b,,3-INDA,sub,,1,1
Column phase: DB608

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

\\spitpa02\chem\gc4.1\8080-G.b\D-88188.d\I-88188.RAW



Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8189.d
Report Date: 08-Nov-2000 12:07

674 1170

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8189.d
Lab Smp Id: MLOWA
Inj Date : 07-NOV-2000 19:31
Operator : 1891 Inst ID: gc4.i
Smp Info : MLOWA,8080-G.b,,3-INDA.sub,,1,2
Misc Info : 190-100-7
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 22:18 Cal File: D-A8195.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: PITPC044

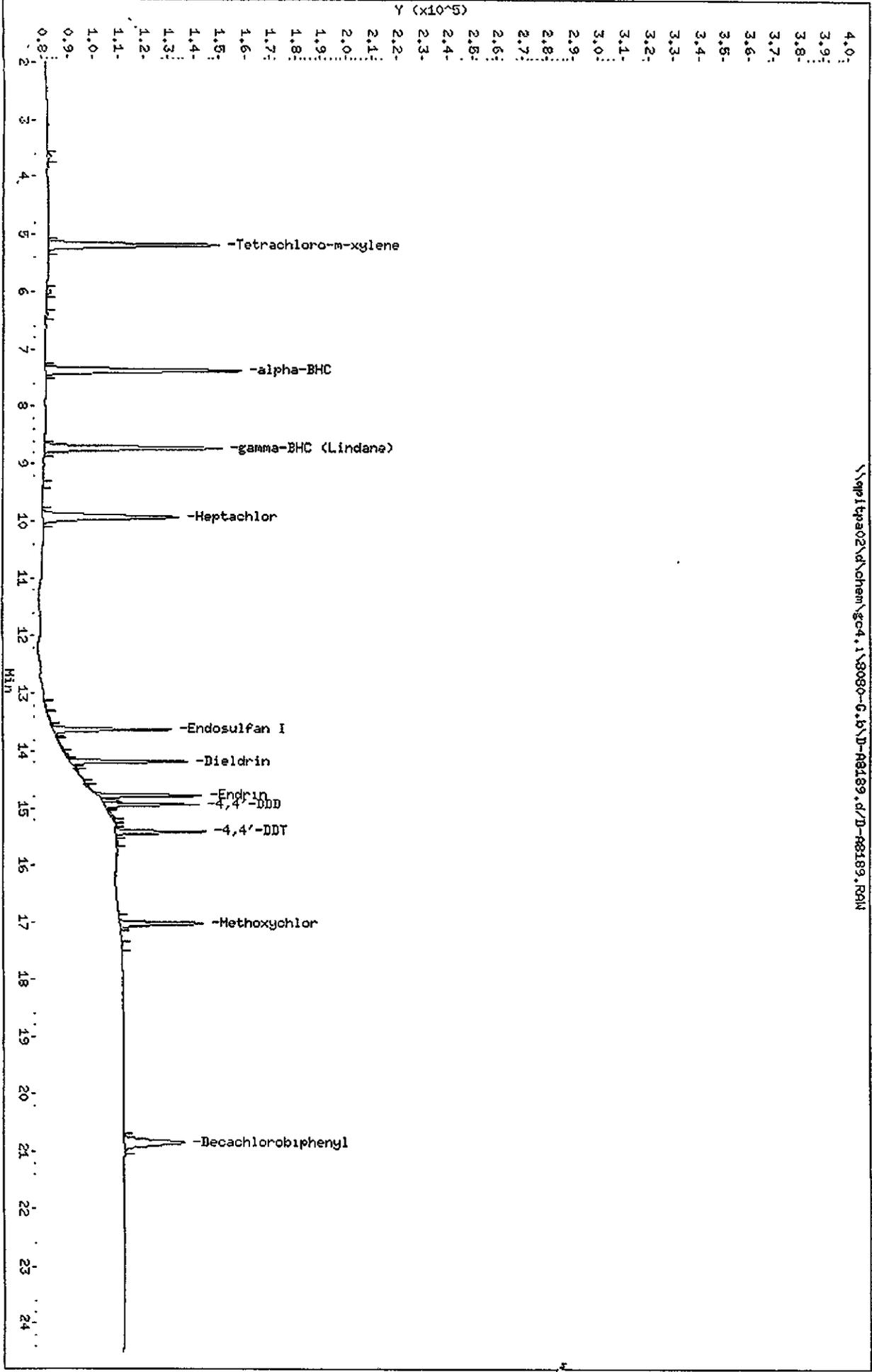
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.186	5.186	0.000	67992	0.01000	0.01024
5 alpha-BHC	7.373	7.373	0.000	77411	0.01000	0.01014
6 gamma-BHC (Lindane)	8.733	8.733	0.000	70221	0.01000	0.01014
10 Heptachlor	9.926	9.926	0.000	54143	0.01000	0.01016
15 Endosulfan I	13.626	13.626	0.000	46878	0.01000	0.01017
17 Dieldrin	14.186	14.186	0.000	46438	0.01000	0.01005
20 Endrin	14.773	14.773	0.000	41317	0.01000	0.009848
21 4,4'-DDD	14.933	14.933	0.000	37313	0.01000	0.009484
23 4,4'-DDT	15.400	15.400	0.000	35525	0.01000	0.009752
25 Methoxychlor	17.020	17.020	0.000	33167	0.02000	0.02059
§ 30 Decachlorobiphenyl	20.846	20.846	0.000	23990	0.01000	0.01015

674 1171

Data File: \\ppl1tpa02\chem\gc4.1\8080-G.b\D-88189.d
Date: 07-NOV-2000 19:31
Client ID:
Sample Info: HLOHA,8080-G.b,3-INDA,sub,1,2
Column phase: DB608

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

\\ppl1tpa02\chem\gc4.1\8080-G.b\D-88189.d\D-88189.RAW



Data File: \\gpitpa02\d\chem\gc4.i\8080-G.b\D-A8190.d
Report Date: 08-Nov-2000 12:07

674 1172

STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\8080-G.b\D-A8190.d
Lab Smp Id: MEDA
Inj Date : 07-NOV-2000 19:59
Operator : 1891
Smp Info : MEDA,8080-G.b,,3-INDA.sub,,1,3
Misc Info : 190-100-8
Comment :
Method : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol
Cal Date : 07-NOV-2000 19:59
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-A8190.d

Calibration Sample, Level: 3

Compound Sublist: 3-INDA.sub

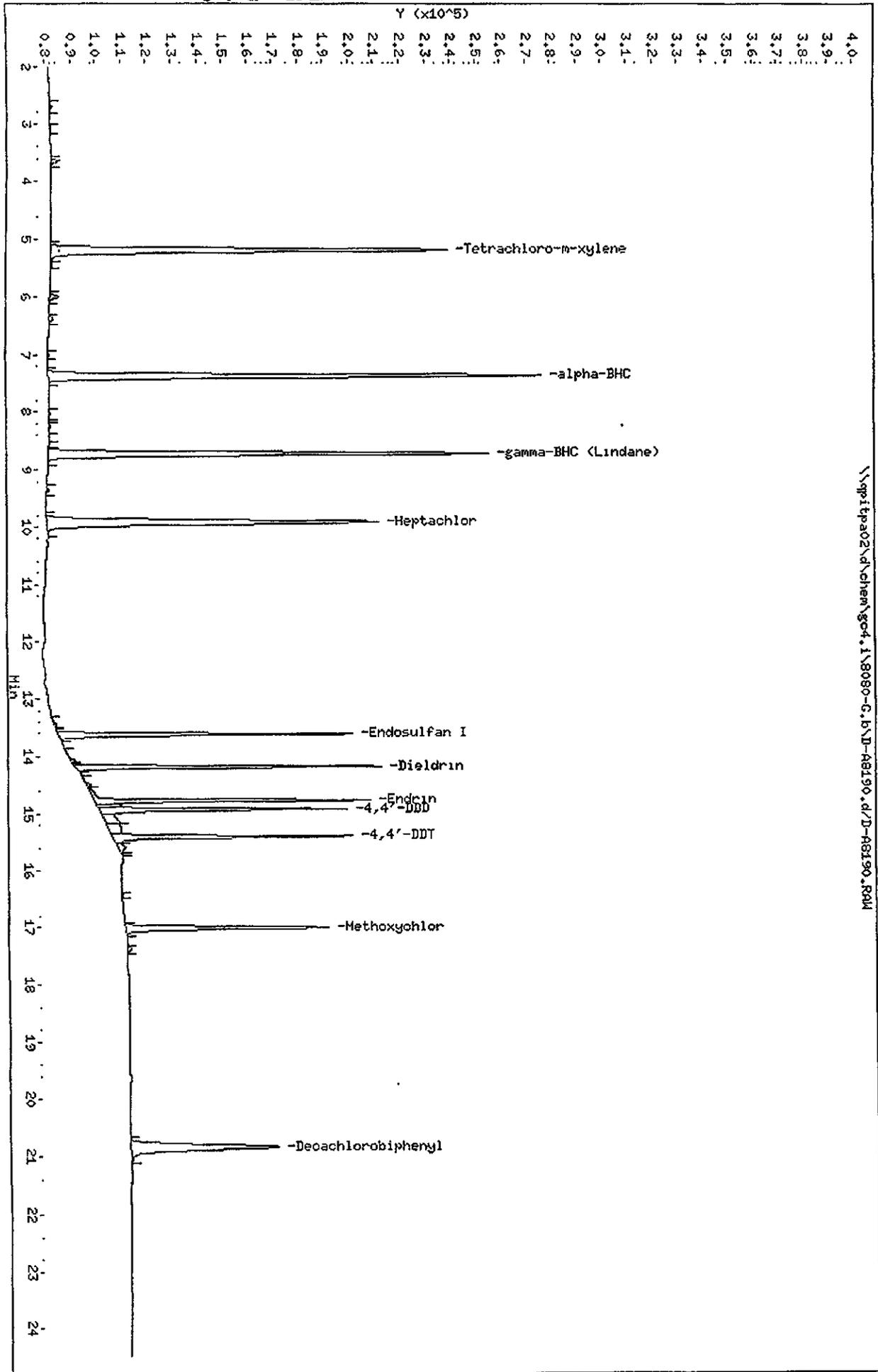
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.186	5.186	0.000	156449	0.02500	0.02500
5 alpha-BHC	7.373	7.373	0.000	194937	0.02500	0.02500
6 gamma-BHC (Lindane)	8.733	8.733	0.000	174226	0.02500	0.02500
10 Heptachlor	9.926	9.926	0.000	131307	0.02500	0.02500
15 Endosulfan I	13.626	13.626	0.000	116143	0.02500	0.02500
17 Dieldrin	14.186	14.186	0.000	120597	0.02500	0.02500
20 Endrin	14.773	14.773	0.000	108887	0.02500	0.02500
21 4,4'-DDD	14.933	14.933	0.000	97858	0.02500	0.02500
23 4,4'-DDT	15.400	15.400	0.000	94714	0.02500	0.02500
25 Methoxychlor	17.020	17.020	0.000	80306	0.05000	0.05000
§ 30 Decachlorobiphenyl	20.846	20.846	0.000	58289	0.02500	0.02500

674 1i73

Data File: \\spitpa02\chem\scf.1\8080-G.b\D-88190.d
Date: 07-NDV-2000 19:59
Client ID:
Sample Info: HEDR,8080-G,b,3-INDR,sub,1,3
Column phase: DB608

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

\\spitpa02\chem\scf.1\8080-G.b\D-88190.d\D-88190.RAW



Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8191.d
Report Date: 08-Nov-2000 12:07

674 1174

STL-Pittsburgh

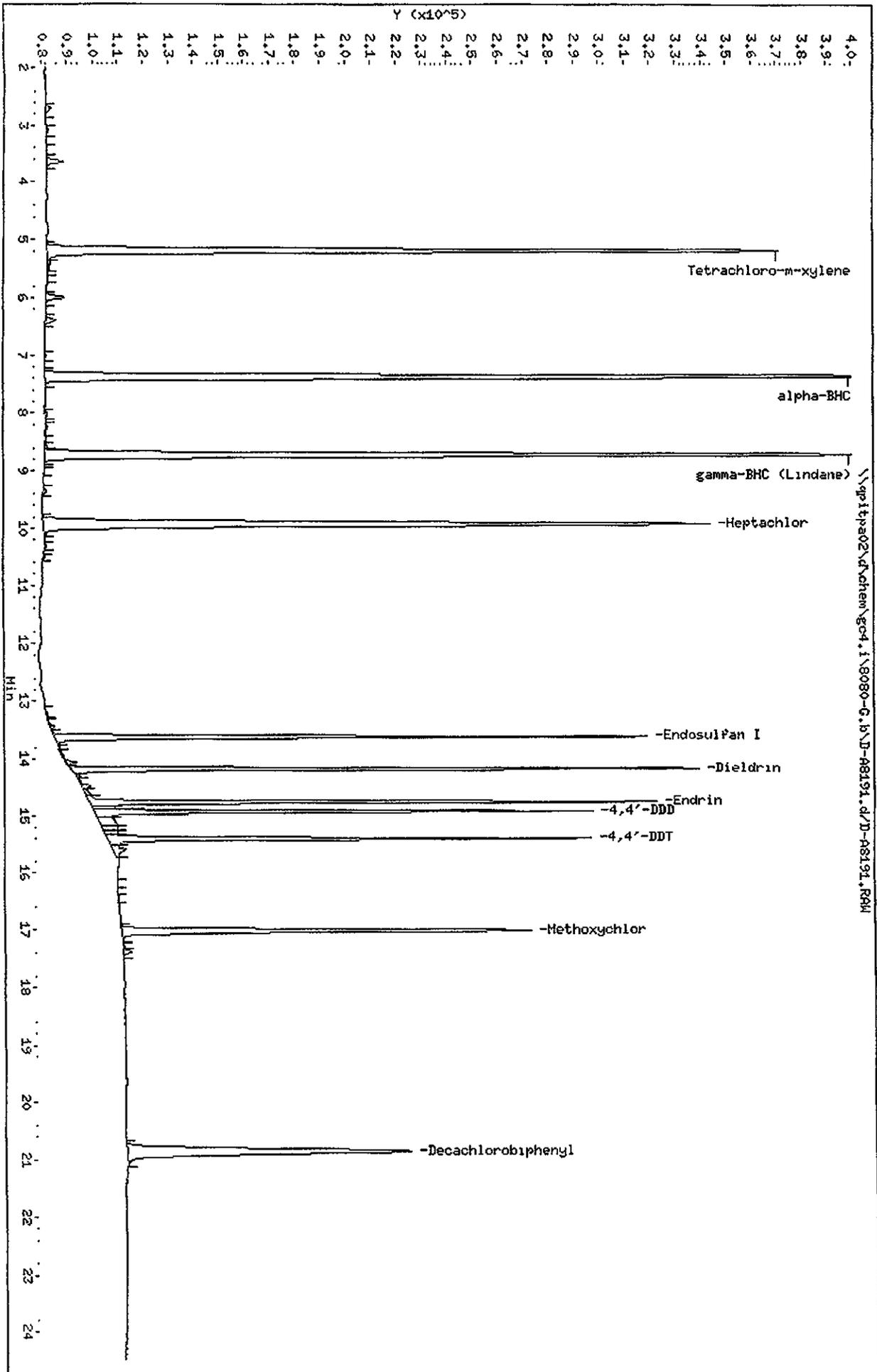
Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8191.d
Lab Smp Id: MHIGHA
Inj Date : 07-NOV-2000 20:27
Operator : 1891 Inst ID: gc4.i
Smp Info : MHIGHA,8080-G.b,,3-INDA.sub,,1,4
Misc Info : 190-100-9
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 22:18 Cal File: D-A8195.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.186	5.186	0.000	288832	0.05000	0.04495
5 alpha-BHC	7.373	7.373	0.000	384160	0.05000	0.05025
6 gamma-BHC (Lindane)	8.733	8.733	0.000	338309	0.05000	0.04914
10 Heptachlor	9.926	9.926	0.000	262678	0.05000	0.04945
15 Endosulfan I	13.626	13.626	0.000	233421	0.05000	0.05047
17 Dieldrin	14.186	14.186	0.000	247071	0.05000	0.05256
20 Endrin	14.773	14.773	0.000	223578	0.05000	0.05243
21 4,4'-DDD	14.933	14.933	0.000	196704	0.05000	0.05000
23 4,4'-DDT	15.400	15.400	0.000	190584	0.05000	0.05172
25 Methoxychlor	17.020	17.020	0.000	161602	0.10000	0.1002
§ 30 Decachlorobiphenyl	20.846	20.846	0.000	111902	0.05000	0.04798

674 1175

Data File: \\spitpa02\chem\gc4.1\8080-G.b\D-88191.d
Date : 07-NOV-2000 20:27
Client ID:
Sample Info: H1GH4,8080-G.b,3-IND0,sub,1,4
Column phase: DB608

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



674 1176

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8192.d
 Lab Smp Id: HIGHA
 Inj Date : 07-NOV-2000 20:54
 Operator : 1891 Inst ID: gc4.i
 Smp Info : HIGHA,8080-G.b,,3-INDA.sub,,1,5
 Misc Info : 190-100-10
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 22:18 Cal File: D-A8195.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.186	5.186	0.000	532998	0.10000	0.08588
5 alpha-BHC	7.373	7.373	0.000	744668	0.10000	0.09791
6 gamma-BHC (Lindane)	8.726	8.733	-0.007	654429	0.10000	0.09600
10 Heptachlor	9.926	9.926	0.000	509725	0.10000	0.09674
15 Endosulfan I	13.626	13.626	0.000	467226	0.10000	0.1008 (A)
17 Dieldrin	14.186	14.186	0.000	507372	0.10000	0.1062 (A)
20 Endrin	14.773	14.773	0.000	450699	0.10000	0.1045 (A)
21 4,4'-DDD	14.933	14.933	0.000	393789	0.10000	0.1001 (A)
23 4,4'-DDT	15.400	15.400	0.000	388654	0.10000	0.1043 (A)
25 Methoxychlor	17.020	17.020	0.000	325916	0.20000	0.2018 (A)
§ 30 Decachlorobiphenyl	20.846	20.846	0.000	220222	0.10000	0.09549

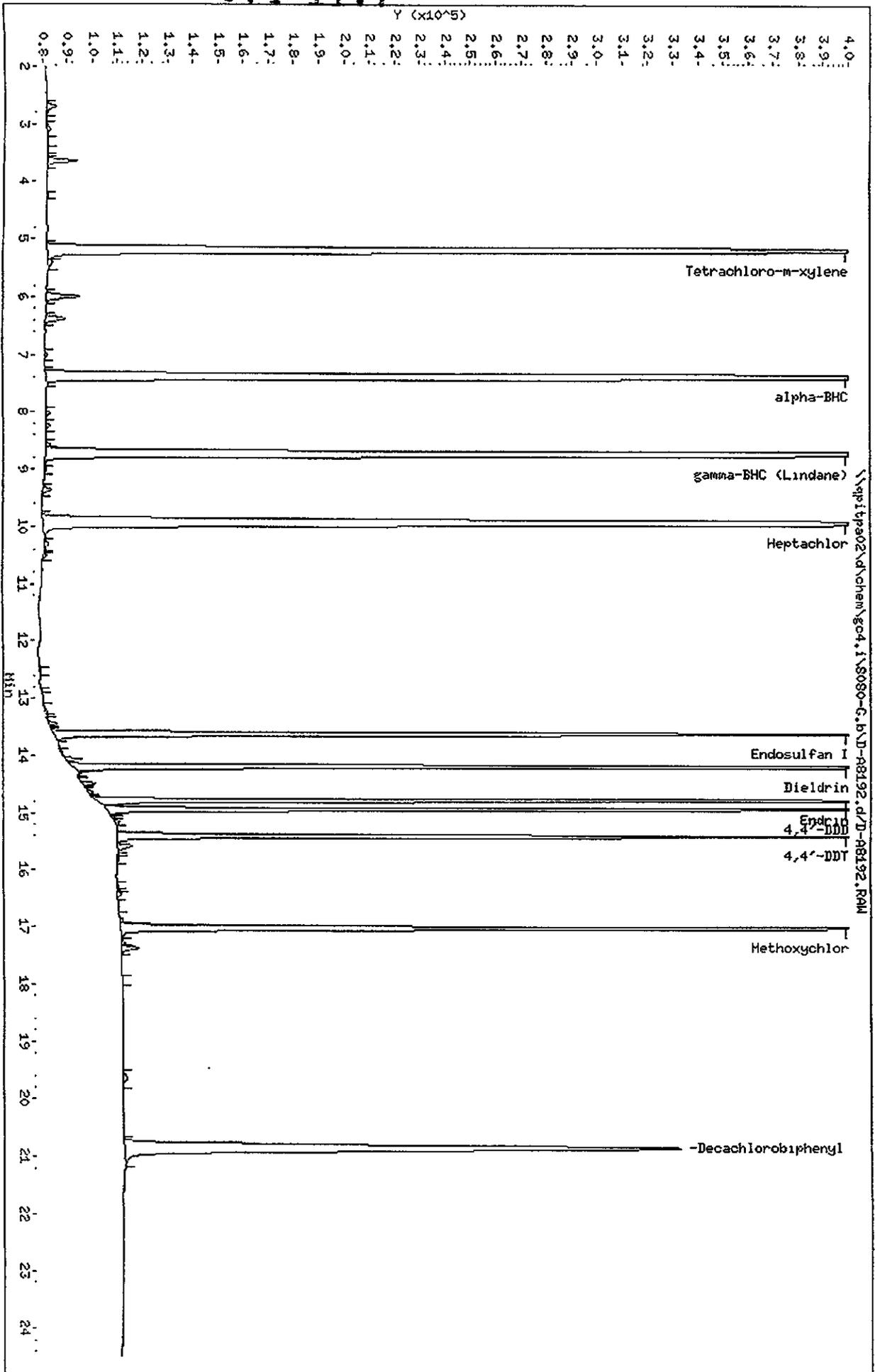
QC Flag Legend

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

674 1177

Data File: \\xp1tpa02\chem\gc4.1\8080-G.b\D-88192.d
Date : 07-NOV-2000 20:54
Client ID:
Sample Info: HIGH,8080-G,b,3-INDA,sub,1,5
Column phase: DB608

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



STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\8080-G.b\D-A8193.d
 Lab Smp Id: LOWB
 Inj Date : 07-NOV-2000 21:22
 Operator : 1891 Inst ID: gc4.i
 Smp Info : LOWB,8080-G.b,,4-INDB.sub,,1,1
 Misc Info : 190-100-12
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 22:18 Cal File: D-A8195.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.153	11.153	0.000	23529	0.00500	0.004914
7 beta-BHC	9.013	9.013	0.000	19382	0.00500	0.005191
8 delta-BHC	10.413	10.413	0.000	26987	0.00500	0.004848
12 Heptachlor epoxide	12.866	12.866	0.000	24692	0.00500	0.004963
13 gamma-Chlordane	13.246	13.246	0.000	25137	0.00500	0.004991
14 alpha-Chlordane	13.580	13.580	0.000	24466	0.00500	0.004950
16 4,4'-DDE	14.060	14.060	0.000	23175	0.00500	0.004856
22 Endosulfan II	15.046	15.046	0.000	21950	0.00500	0.005315
24 Endrin aldehyde	15.580	15.580	0.000	15160	0.00500	0.005042
26 Endosulfan sulfate	15.793	15.800	-0.007	11907	0.00500	0.004737
27 Endrin ketone	17.386	17.386	0.000	14589	0.00500	0.004864

674 1180

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8194.d
Lab Smp Id: MLOWB
Inj Date : 07-NOV-2000 21:50
Operator : 1891 Inst ID: gc4.i
Smp Info : MLOWB,8080-G.b,,4-INDB.sub,,1,2
Misc Info : 190-100-13
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 22:18 Cal File: D-A8195.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: PITPC044

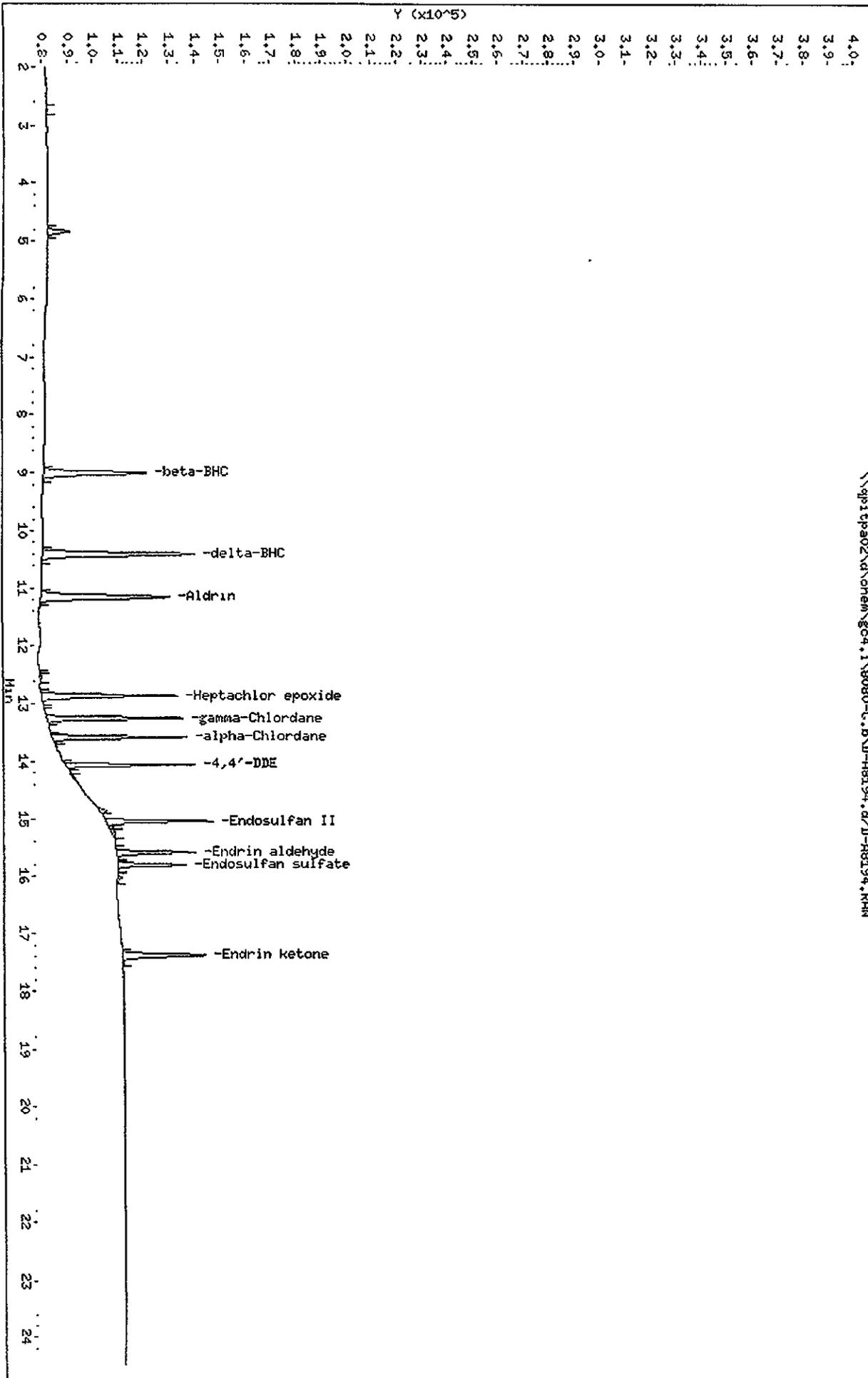
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
-----	--	-----	-----	-----	-----	-----
11 Aldrin	11.153	11.153	0.000	50896	0.01000	0.01041
7 beta-BHC	9.006	9.013	-0.007	40923	0.01000	0.01062
8 delta-BHC	10.413	10.413	0.000	59984	0.01000	0.01050
12 Heptachlor epoxide	12.866	12.866	0.000	53755	0.01000	0.01052
13 gamma-Chlordane	13.246	13.246	0.000	53962	0.01000	0.01046
14 alpha-Chlordane	13.580	13.580	0.000	53073	0.01000	0.01048
16 4,4'-DDE	14.060	14.060	0.000	51096	0.01000	0.01046
22 Endosulfan II	15.046	15.046	0.000	42589	0.01000	0.01021
24 Endrin aldehyde	15.580	15.580	0.000	31367	0.01000	0.01028
26 Endosulfan sulfate	15.800	15.800	0.000	26824	0.01000	0.01044
27 Endrin ketone	17.386	17.386	0.000	32677	0.01000	0.01058

674 1181

Data File: \\spitpa02\chem\gc4.1\9080-G.b\D-A8194.d
Date: 07-NOV-2000 21:50
Client ID:
Sample Info: MLDIB,8080-G.b,4-INDB.sub,1,2
Column phase: DB608

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

\\spitpa02\chem\gc4.1\9080-G.b\D-A8194.d\1-A8194.RAW



674 1182

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8195.d
Lab Smp Id: MEDB
Inj Date : 07-NOV-2000 22:18
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDB,8080-G.b,,4-INDB.sub,,1,3
Misc Info : 190-100-14
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 22:18 Cal File: D-A8195.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: PITPC044

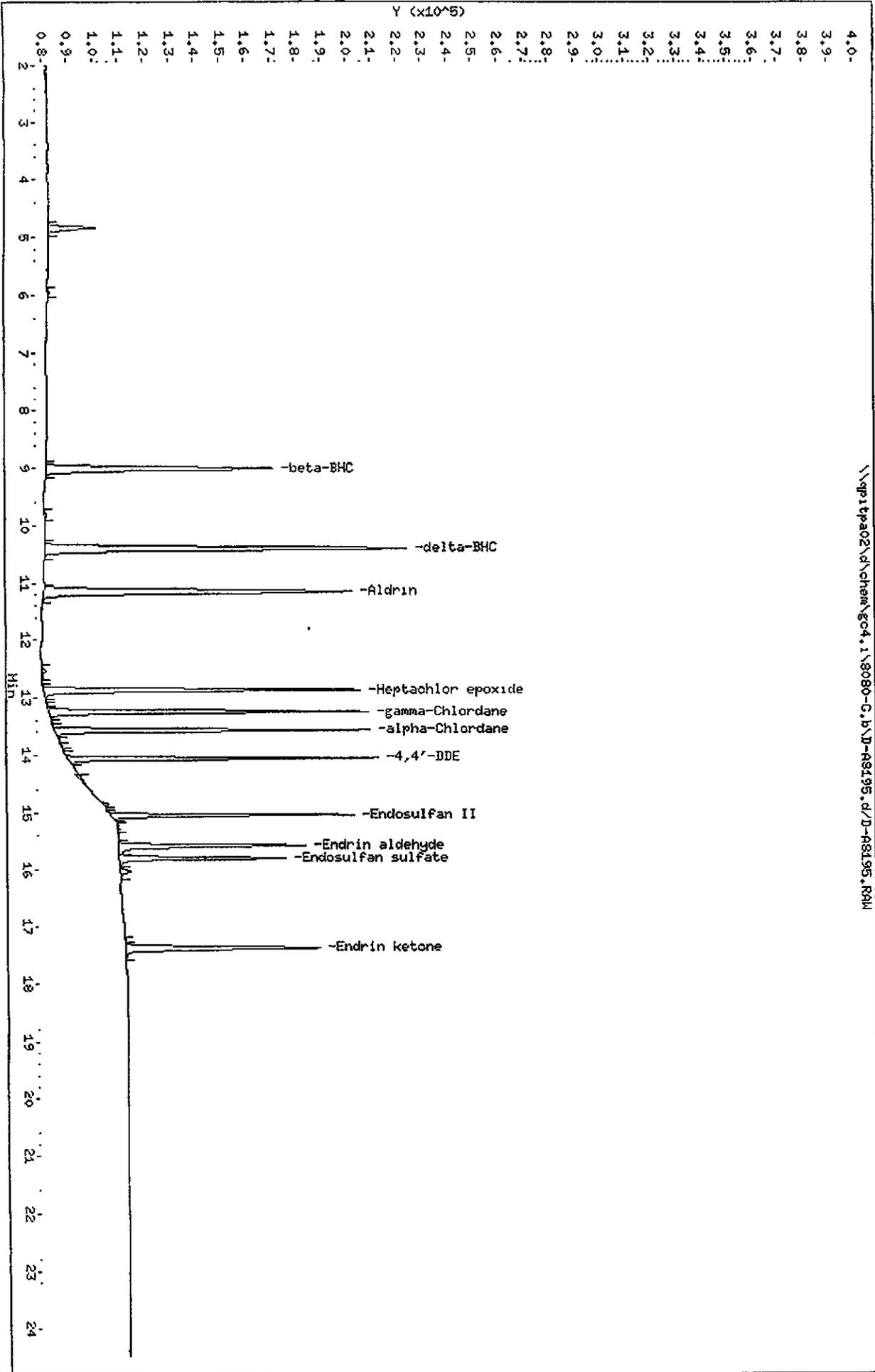
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.153	11.153	0.000	121768	0.02500	0.02500
7 beta-BHC	9.013	9.013	0.000	89767	0.02500	0.02500
8 delta-BHC	10.413	10.413	0.000	143393	0.02500	0.02500
12 Heptachlor epoxide	12.866	12.866	0.000	125290	0.02500	0.02500
13 gamma-Chlordane	13.246	13.246	0.000	126147	0.02500	0.02500
14 alpha-Chlordane	13.580	13.580	0.000	124784	0.02500	0.02500
16 4,4'-DDE	14.060	14.060	0.000	122760	0.02500	0.02500
22 Endosulfan II	15.046	15.046	0.000	96722	0.02500	0.02500
24 Endrin aldehyde	15.580	15.580	0.000	74548	0.02500	0.02500
26 Endosulfan sulfate	15.800	15.800	0.000	66149	0.02500	0.02500
27 Endrin ketone	17.386	17.386	0.000	77021	0.02500	0.02500

674 1183

Data File: \\pp1tpa02\chem\gc4.1\8080-G.b\D-R8195.d
Date: 07-NOV-2000 22:18
Client ID:
Sample Info: HEDB,8080-G,b,4-INDB.sub,1,3
Column phase: DB608

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

\\pp1tpa02\chem\gc4.1\8080-G.b\D-R8195.d\D-R8195.RAW



STL-Pittsburgh

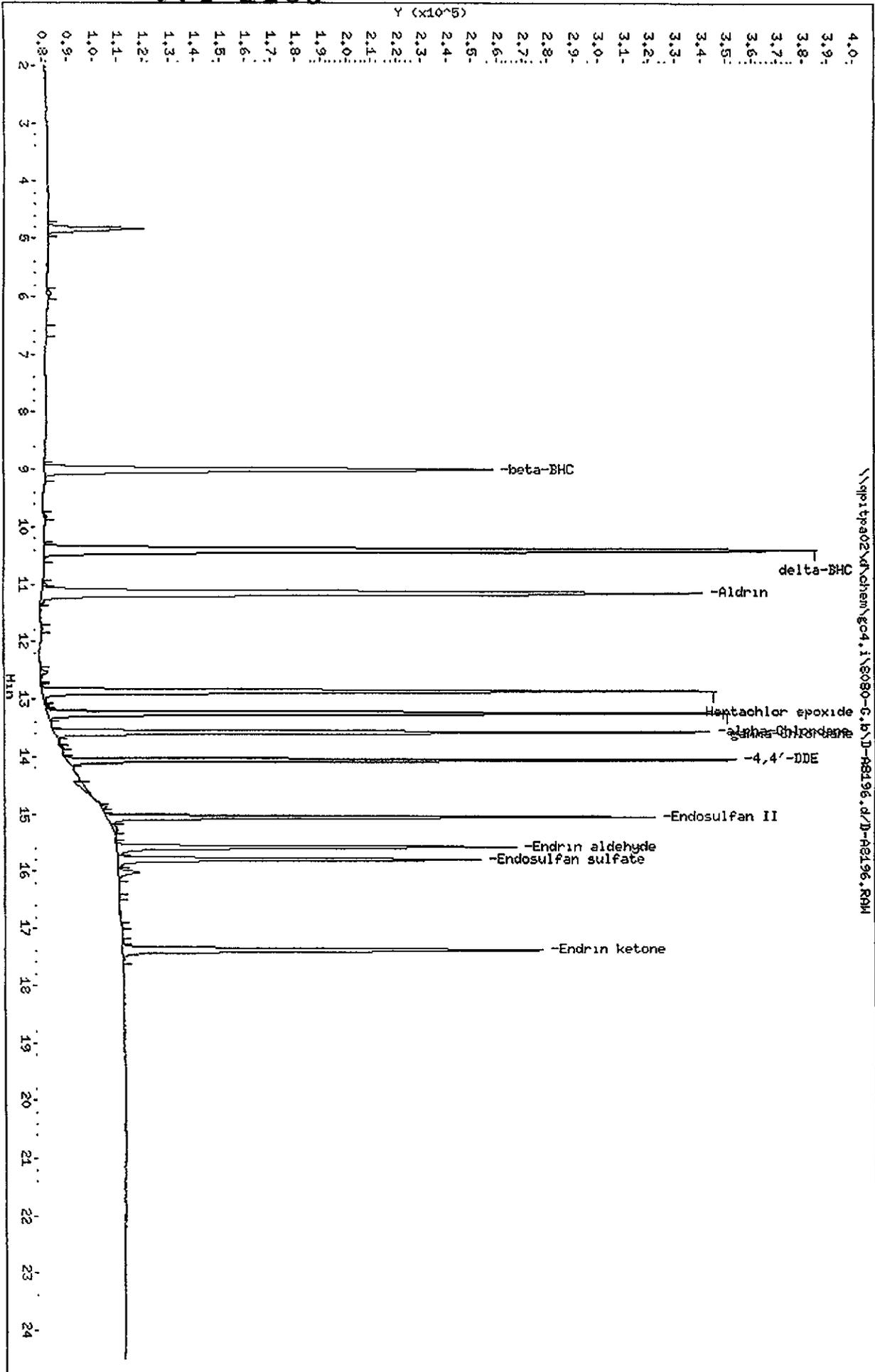
Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8196.d
Lab Smp Id: MHIGHB
Inj Date : 07-NOV-2000 22:45
Operator : 1891 Inst ID: gc4.i
Smp Info : MHIGHB,8080-G.b,,4-INDB.sub,,1,4
Misc Info : 190-101-1
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 22:45 Cal File: D-A8196.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.160	11.153	0.007	260727	0.05000	0.05246
7 beta-BHC	9.013	9.013	0.000	177052	0.05000	0.04690
8 delta-BHC	10.413	10.413	0.000	304908	0.05000	0.05250
12 Heptachlor epoxide	12.866	12.866	0.000	265812	0.05000	0.05151
13 gamma-Chlordane	13.246	13.246	0.000	268644	0.05000	0.05156
14 alpha-Chlordane	13.580	13.580	0.000	258667	0.05000	0.05080
16 4,4'-DDE	14.060	14.060	0.000	263636	0.05000	0.05292
22 Endosulfan II	15.053	15.046	0.007	216689	0.05000	0.05143
24 Endrin aldehyde	15.580	15.580	0.000	158224	0.05000	0.05139
26 Endosulfan sulfate	15.800	15.800	0.000	143992	0.05000	0.05439
27 Endrin ketone	17.386	17.386	0.000	165786	0.05000	0.05270

674 1185

Data File: \\qpltpa02\chem\god.1\5050-G.b\D-A8196.d
Date: 07-NOV-2000 22:45
Client ID:
Sample Info: HHCHR, B080-G.b, 4-INDB.sub, 1.4
Column Phase: DB608

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



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8197.d
Lab Smp Id: HIGHB
Inj Date : 07-NOV-2000 23:13
Operator : 1891 Inst ID: gc4.i
Smp Info : HIGHB,8080-G.b,,4-INDB.sub,,1,5
Misc Info : 190-101-2
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.160	11.153	0.007	497097	0.10000	0.1000(A)
7 beta-BHC	9.013	9.013	0.000	322462	0.10000	0.0879B
8 delta-BHC	10.413	10.413	0.000	589338	0.10000	0.1012(A)
12 Heptachlor epoxide	12.866	12.866	0.000	510230	0.10000	0.09910
13 gamma-Chlordane	13.246	13.246	0.000	508143	0.10000	0.09801
14 alpha-Chlordane	13.580	13.580	0.000	496852	0.10000	0.09806
16 4,4'-DDE	14.060	14.060	0.000	515083	0.10000	0.1027(A)
22 Endosulfan II	15.053	15.046	0.007	432160	0.10000	0.1020(A)
24 Endrin aldehyde	15.580	15.580	0.000	312027	0.10000	0.1011(A)
26 Endosulfan sulfate	15.800	15.800	0.000	300275	0.10000	0.1104(A)
27 Endrin ketone	17.386	17.386	0.000	329220	0.10000	0.1037(A)

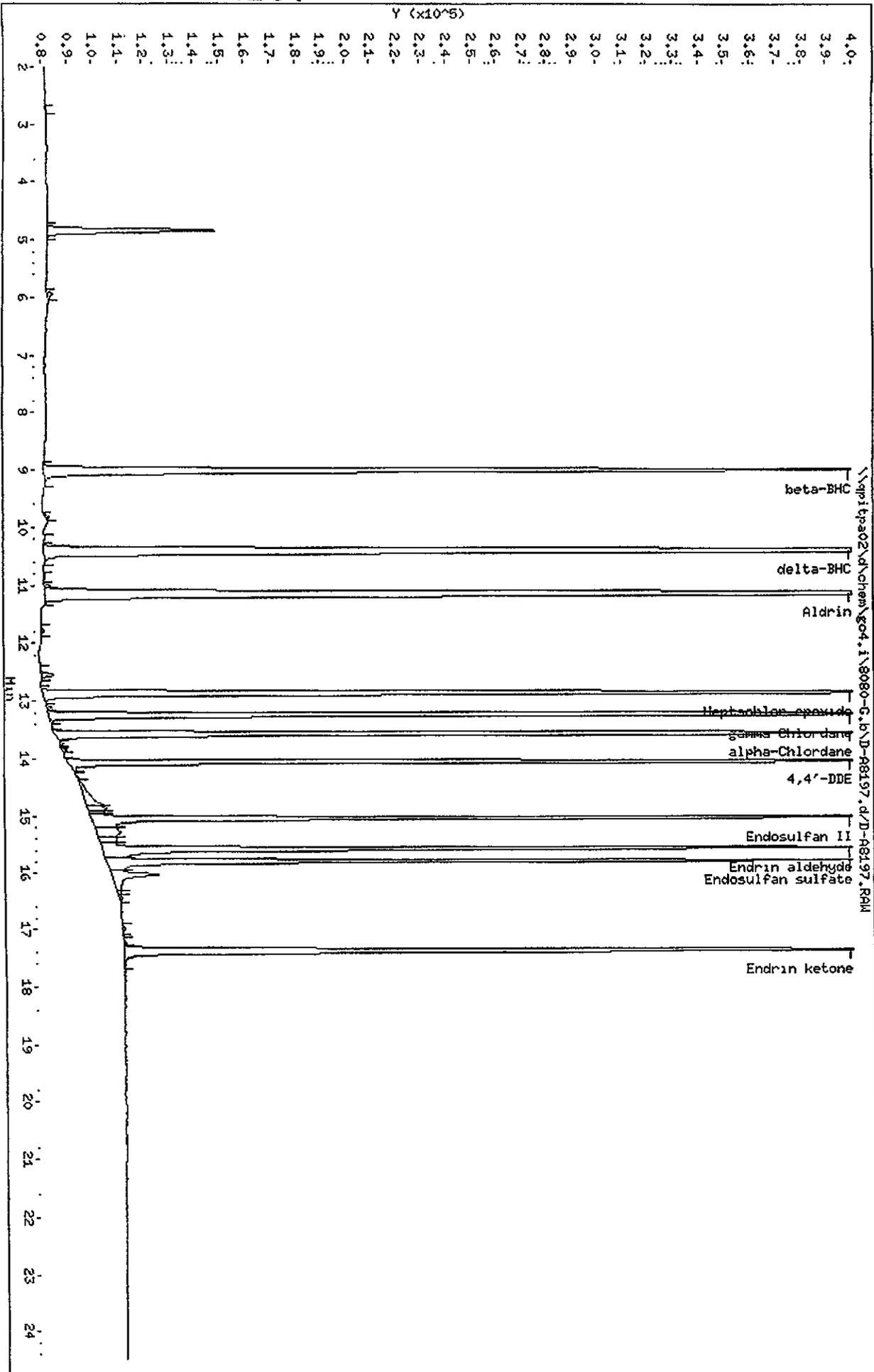
QC Flag Legend

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

674 1187

Data File: \\qpi1tpa02\chem\g04.1\8080-G.b\D-88197.d
Date: 07-NOV-2000 23:13
Client ID:
Sample Info: HICHB,8080-G.b,,4-INDB.sub,,1,5
Column phase: DB608

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



STL-Pittsburgh

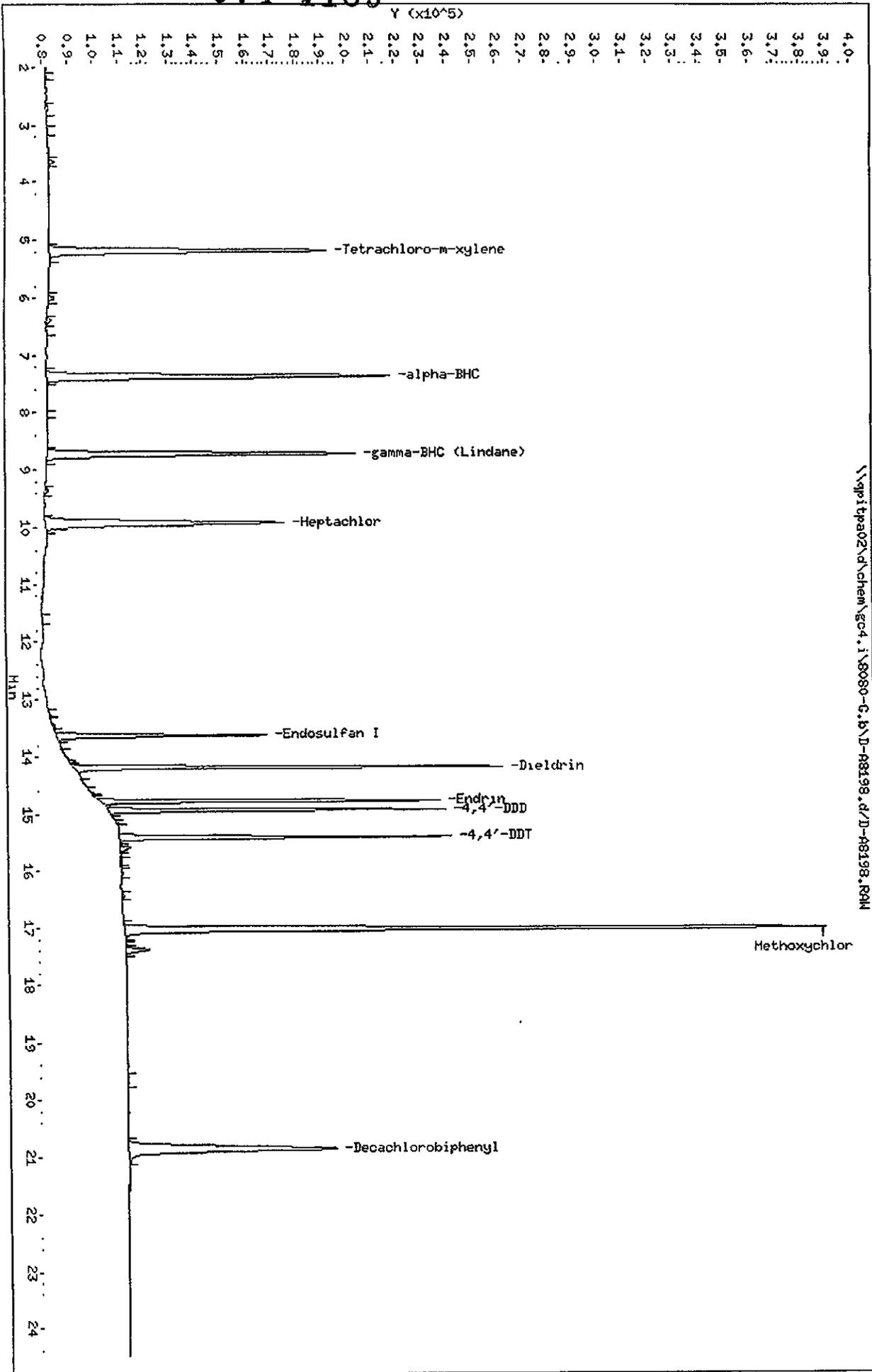
Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8198.d
Lab Smp Id: 2ND A
Inj Date : 07-NOV-2000 23:41
Operator : 1891 Inst ID: gc4.i
Smp Info : 2ND A,8080-G.b,,INDA.sub,,2,3
Misc Info : 190-101-7
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.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	5.186	5.186	0.000	110374	0.02500	0.01778
5 alpha-BHC	7.373	7.373	0.000	136728	0.02500	0.01798
6 gamma-BHC (Lindane)	8.733	8.733	0.000	122821	0.02500	0.01802
10 Heptachlor	9.926	9.926	0.000	94722	0.02500	0.01798
15 Endosulfan I	13.626	13.626	0.000	83187	0.02500	0.01795
17 Dieldrin	14.186	14.186	0.000	170462	0.02500	0.03570
20 Endrin	14.773	14.773	0.000	135389	0.02500	0.03139
21 4,4'-DDD	14.933	14.933	0.000	134147	0.02500	0.03409
23 4,4'-DDT	15.400	15.400	0.000	132293	0.02500	0.03551
25 Methoxychlor	17.020	17.020	0.000	278138	0.05000	0.1722
\$ 30 Decachlorobiphenyl	20.846	20.846	0.000	82579	0.02500	0.03581

674 1189

Data File: \\qpi1tpa02\chem\gc4.1\8080-G.b\J-88198.d
Date: 07-NOV-2000 23:41
Client ID:
Sample Info: 2ND A,8080-G.b,,INDR,sub,,2,3
Column phase: DB608

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



STL-Pittsburgh

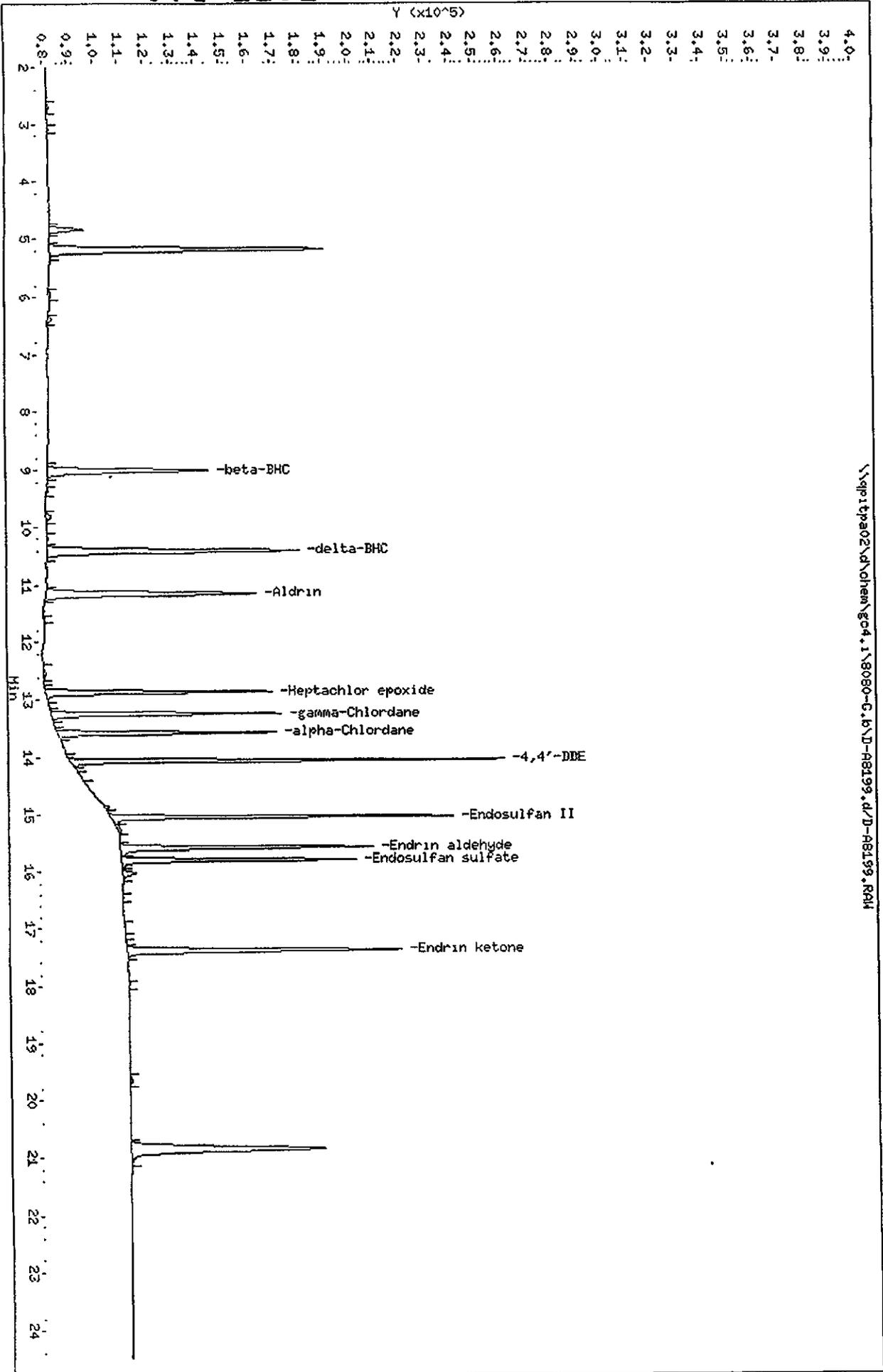
Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8199.d
Lab Smp Id: 2ND B
Inj Date : 08-NOV-2000 00:09
Operator : 1891 Inst ID: gc4.i
Smp Info : 2ND B,8080-G.b,,INDB.sub,,2,3
Misc Info : 190-101-10
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.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	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
-----	==	=====	=====	=====	=====	=====
11 Aldrin	11.153	11.153	0.000	82761	0.02500	0.01665
7 beta-BHC	9.013	9.013	0.000	63536	0.02500	0.01734
8 delta-BHC	10.413	10.413	0.000	99801	0.02500	0.01713
12 Heptachlor epoxide	12.866	12.866	0.000	89143	0.02500	0.01731
13 gamma-Chlordane	13.246	13.246	0.000	91063	0.02500	0.01756
14 alpha-Chlordane	13.580	13.580	0.000	86163	0.02500	0.01700
16 4,4'-DDE	14.060	14.060	0.000	171507	0.02500	0.03419
22 Endosulfan II	15.046	15.046	0.000	136139	0.02500	0.03215
24 Endrin aldehyde	15.580	15.580	0.000	100506	0.02500	0.03256
26 Endosulfan sulfate	15.800	15.800	0.000	93103	0.02500	0.03425
27 Endrin ketone	17.386	17.386	0.000	108919	0.02500	0.03431

674 1191

Data File: \\qpi1tpa02\chem\gc4\18080-G.b\D-AS199.d
Date: 08-NOV-2000 00:09
Client ID:
Sample Info: 2ND P,8080-G.b,,INDB,sub,,2,3
Column phase: JB508

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



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8200.d
 Lab Smp Id: EVALB
 Inj Date : 08-NOV-2000 08:38
 Operator : 1891 Inst ID: gc4.i
 Smp Info : EVALB,8080-G.b,,EVALBR.sub,,3,1
 Misc Info : 190-102-10
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 08-Nov-2000 12:05 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.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	5.186	5.186	0.000	125462	0.02021	0.02021 (R)
16 4,4'-DDE	14.066	14.060	0.006	1850	<0.0	0.0003688
20 Endrin	14.773	14.773	0.000	103838	0.02408	0.02408
21 4,4'-DDD	Compound Not Detected.					
23 4,4'-DDT	15.400	15.400	0.000	91811	0.02464	0.02464
24 Endrin aldehyde	15.586	15.580	0.006	1421	0.00046	0.0004603
27 Endrin ketone	17.386	17.386	0.000	2446	0.00077	0.0007704
\$ 30 Decachlorobiphenyl	20.846	20.846	0.000	46541	0.02018	0.02018 (R)

QC Flag Legend

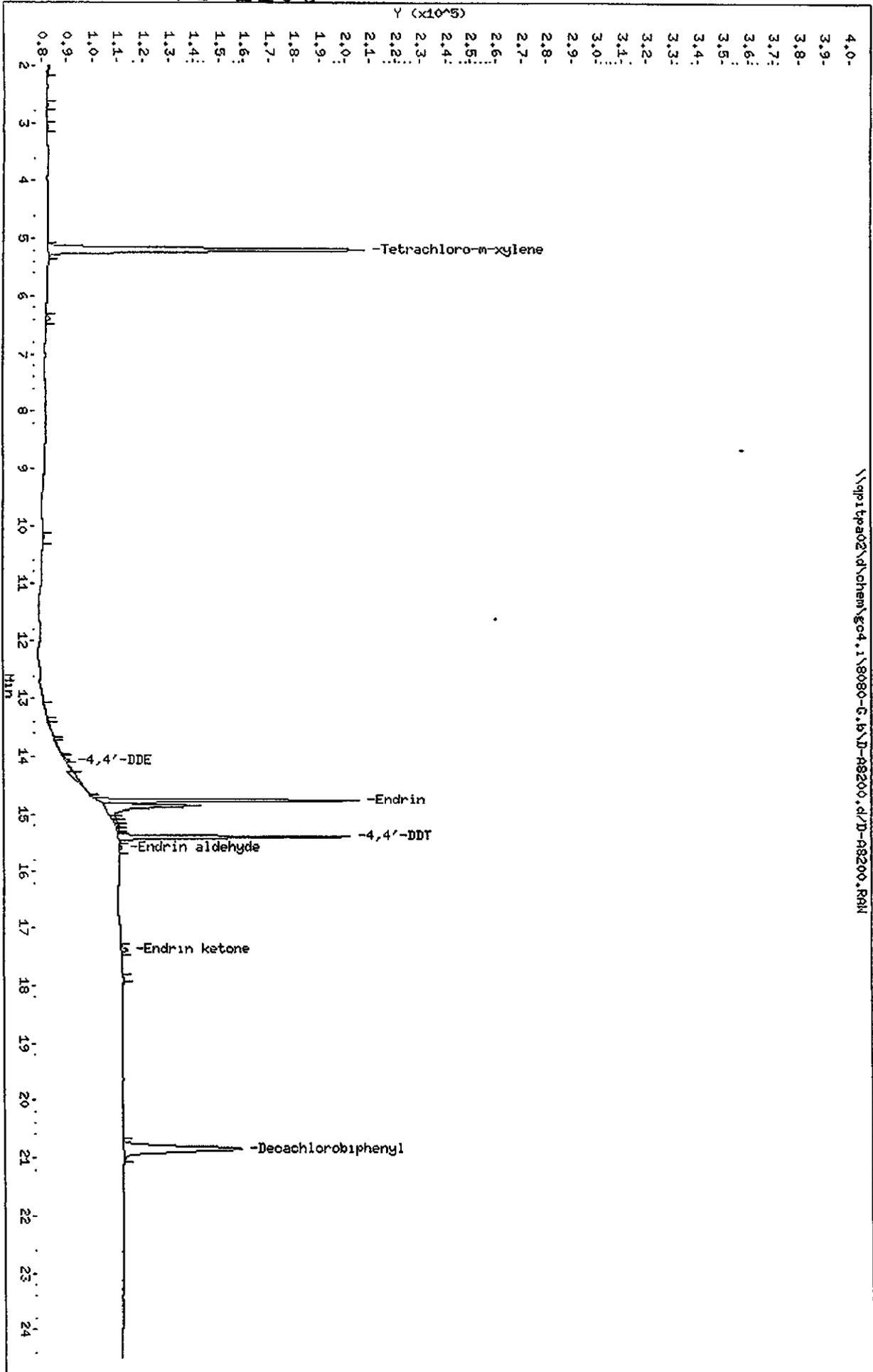
R - Spike/Surrogate failed recovery limits.

DDT = 2.0
 Endrin = 3.4

674 1193

Date File: \\sp1tpa02\chem\gc4.1\8080-G.b\D-88200.d
Date: 08-NOV-2000 08:38
Client ID:
Sample Info: EVALB,8080-G.b,EVALBR,sub,3.1
Column phase: DB608

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



STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\8080-G.b\D-A8361.d
 Lab Smp Id: EVALB
 Inj Date : 21-NOV-2000 13:52
 Operator : 1891 Inst ID: gc4.i
 Smp Info : EVALB,8080-G.b,,EVALBR.sub,,3,1
 Misc Info : 190-102-10
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 22-Nov-2000 10:30 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.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	5.166	5.166	0.000	152332	0.02454	0.02454(R)
16 4,4'-DDE	14.046	14.046	0.000	5912	0.00118	0.001179
20 Endrin	14.753	14.753	0.000	108212	0.02509	0.02509(M)
21 4,4'-DDD	14.920	14.920	0.000	3414	<0.0	0.0008676(M)
23 4,4'-DDT	15.386	15.386	0.000	80531	0.02162	0.02162(M)
24 Endrin aldehyde	15.566	15.560	0.006	3845	0.00125	0.001246(M)
27 Endrin ketone	17.360	17.360	0.000	3620	0.00114	0.001140
\$ 30 Decachlorobiphenyl	20.806	20.800	0.006	46276	0.02007	0.02006(R)

QC Flag Legend

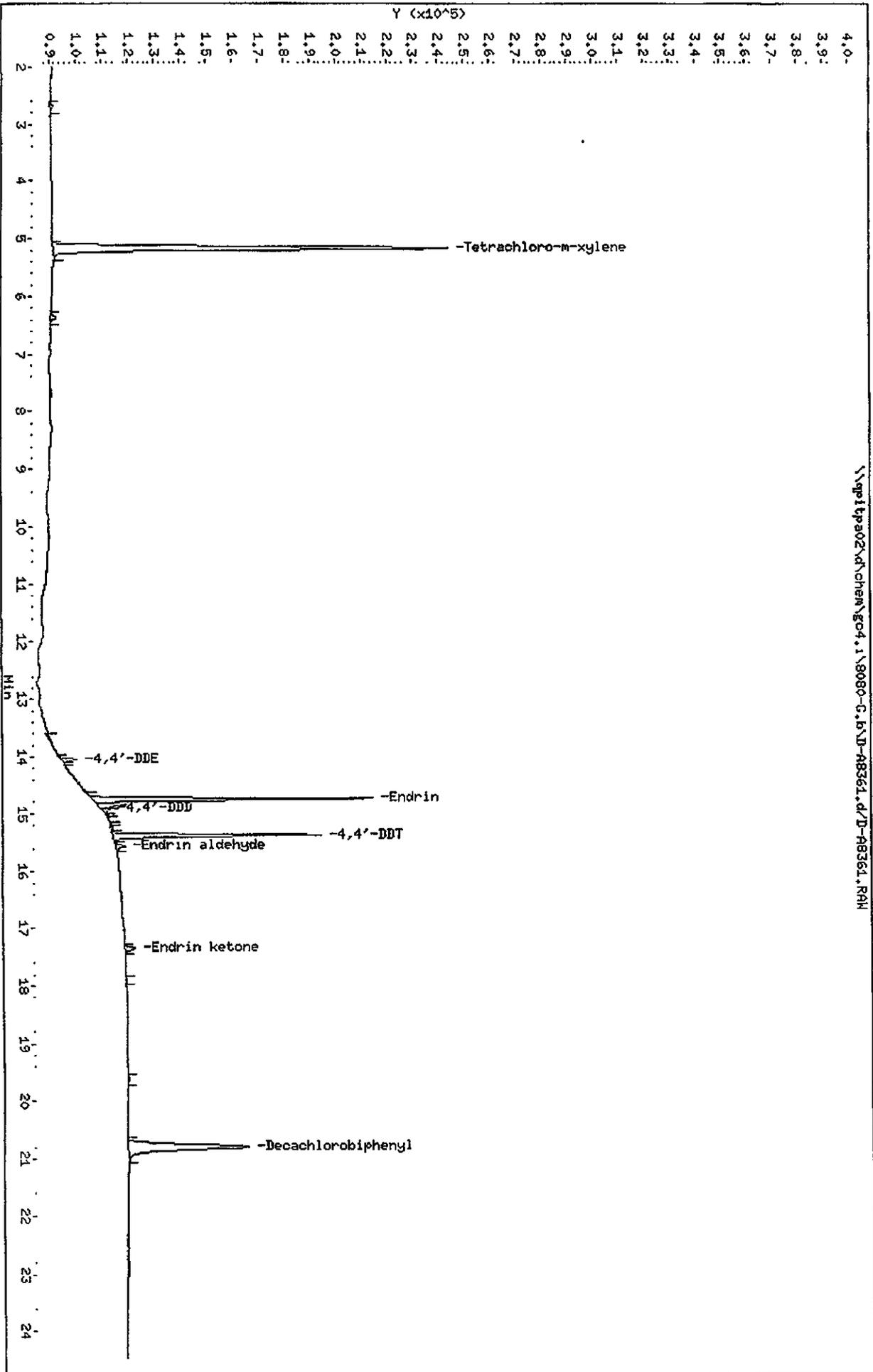
R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

DDT 10.4%
ENDRIN 6.5%

674 1195

Data File: \\qptipa02\chem\gc4.1\8080-G.b\1-A8361.d
Date: 21-NOV-2000 13:52
Client ID:
Sample Info: EVALB,8080-G,b,EVALBR,sub,3,4
Column phase: DB608

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



Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8362.d
Report Date: 22-Nov-2000 10:26

674 1196

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8362.d
Lab Smp Id: MEDTOX
Inj Date : 21-NOV-2000 14:20
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDTOX,8080-G.b,,1-TOX.sub,,2,3
Misc Info : 190-98-12
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 22-Nov-2000 10:26 eppingerd Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-TOX.sub
Target Version: 4.04
Processing Host: PITPC061

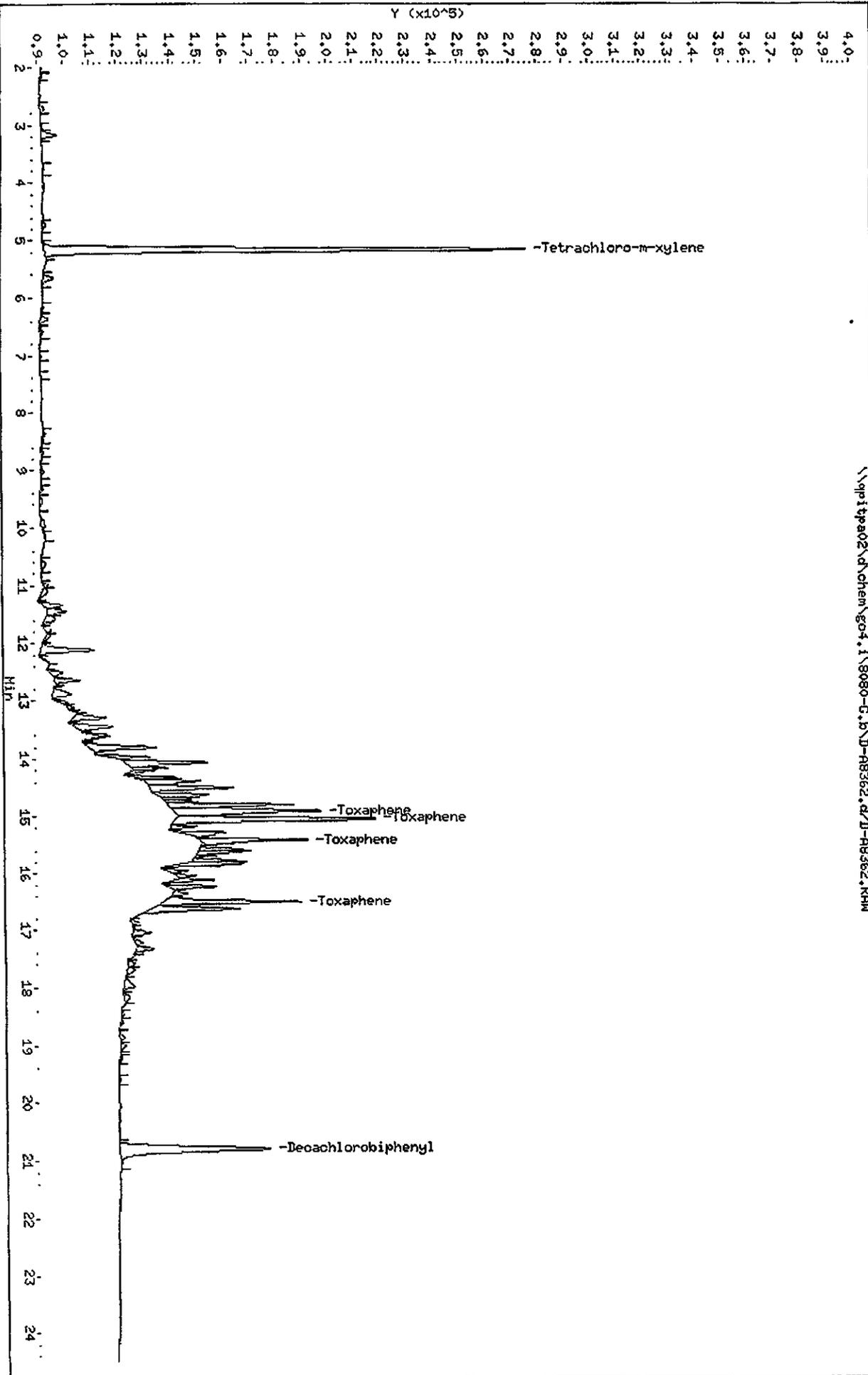
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
18 Toxaphene	14.926	14.926	0.000	55473	1.00000	1.168
\$ 1 Tetrachloro-m-xylene	5.166	5.166	0.000	182882	0.02500	0.02947
\$ 30 Decachlorobiphenyl	20.800	20.800	0.000	57143	0.02500	0.02478

674 1197

Data File: \\qpi1tpa02\chem\gc4.i\8080-G.b.D-A8362.d
Date: 21-NOV-2000 14:20
Client ID:
Sample Info: HEDTOX, 8080-G.b., 1-TDX.sub., 2,3
Column phase: DB608

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

\\qpi1tpa02\chem\gc4.i\8080-G.b.D-A8362.d\A8362.PRM



Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8363.d
Report Date: 22-Nov-2000 10:26

674 1198

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8363.d
Lab Smp Id: MEDCHLOR
Inj Date : 21-NOV-2000 14:48
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDCHLOR,8080-G.b,,2-CHLO.sub,,2,3
Misc Info : 190-102-9
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 22-Nov-2000 10:26 eppingerd Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-CHLO.sub
Target Version: 4.04
Processing Host: PITPC061

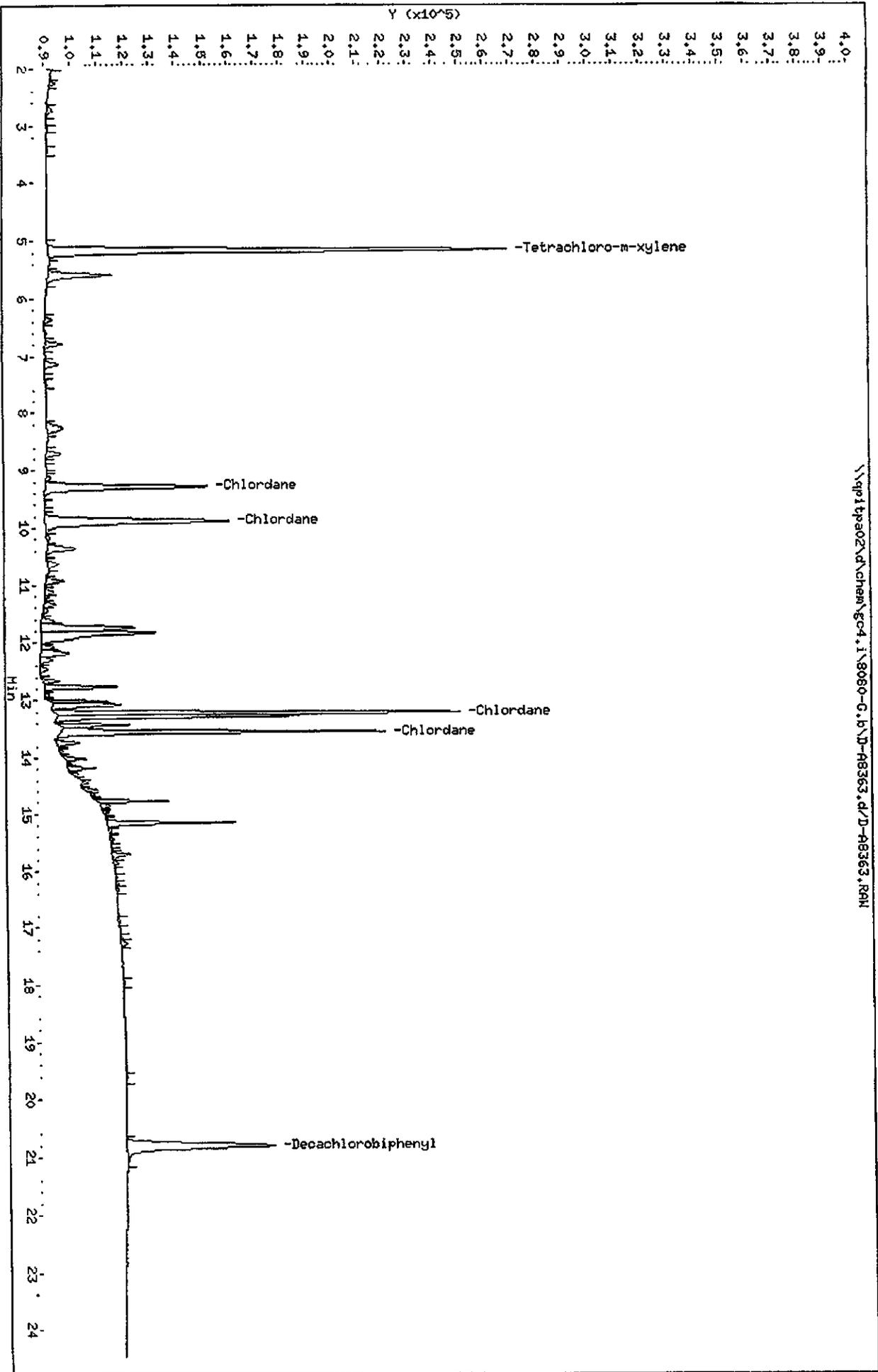
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
9 Chlordane	9.293	9.293	0.000	62498	0.25000	0.3155
\$ 1 Tetrachloro-m-xylene	5.166	5.166	0.000	177700	0.02500	0.02863
\$ 30 Decachlorobiphenyl	20.806	20.806	0.000	57605	0.02500	0.02498

674 1199

Data File: \\sqpitpa02\chem\gc4.1\8080-G.b\1D-A8363.d
Date: 21-NOV-2000 14:48
Client ID:
Sample Info: HEDCHLOR,8080-G,b,,2-CHL0,sub,,2,3
Column phase: DB608

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

\\sqpitpa02\chem\gc4.1\8080-G.b\1D-A8363.d\1D-A8363.RAW



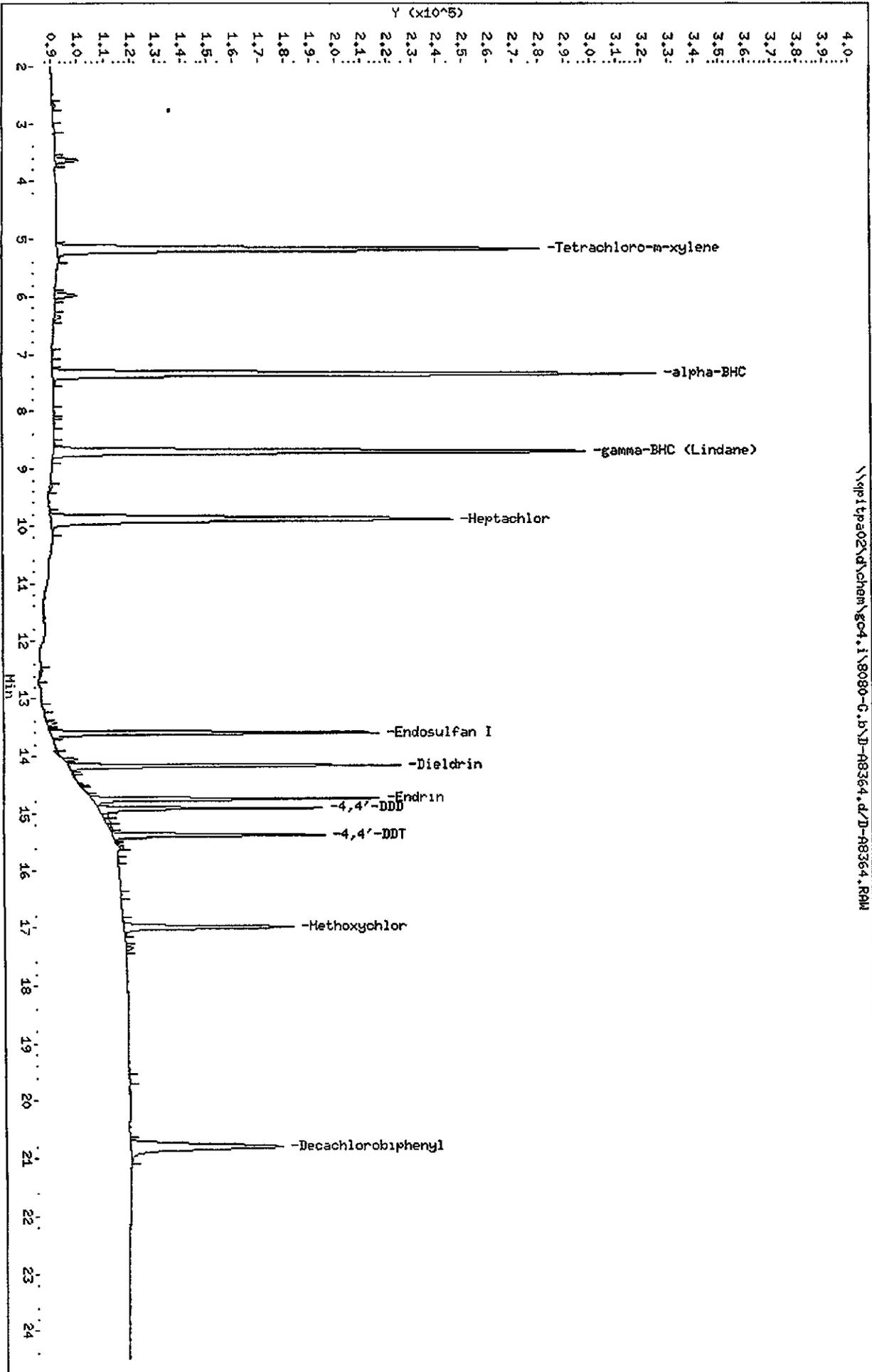
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 Report Date: 22-Nov-2000 10:26

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8364.d
 Lab Smp Id: MEDA
 Inj Date : 21-NOV-2000 15:16
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDA,8080-G.b,,INDA.sub,,2,3
 Misc Info : 190-100-8
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 22-Nov-2000 10:26 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.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	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.166	5.166	0.000	187877	0.02500	0.03027
5 alpha-BHC	7.346	7.346	0.000	234304	0.02500	0.03081
6 gamma-BHC (Lindane)	8.700	8.700	0.000	207150	0.02500	0.03039
10 Heptachlor	9.893	9.893	0.000	156033	0.02500	0.02961
15 Endosulfan I	13.606	13.606	0.000	127612	0.02500	0.02754
17 Dieldrin	14.166	14.166	0.000	129777	0.02500	0.02718
20 Endrin	14.753	14.753	0.000	111659	0.02500	0.02589
21 4,4'-DDD	14.920	14.920	0.000	87333	0.02500	0.02219
23 4,4'-DDT	15.386	15.386	0.000	82857	0.02500	0.02224
25 Methoxychlor	16.993	16.993	0.000	66060	0.05000	0.04089
§ 30 Decachlorobiphenyl	20.800	20.800	0.000	58982	0.02500	0.02558

674 1201



Data File: \\sp1tpa02\dl\chem\gc4.1\8080-G.b\D-48364.d
Date: 21-NOV-2000 15:16
Client ID:
Sample Info: HEDA,8080-G,b,,INBA,sub,,2,3
Column phase: DB608

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

\\sp1tpa02\dl\chem\gc4.1\8080-G.b\D-48364.d\T-48364.RAW

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8365.d
Lab Smp Id: MEDB
Inj Date : 21-NOV-2000 15:44
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDB, 8080-G.b, , INDB.sub, , 2, 3
Misc Info : 190-100-14
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
Meth Date : 22-Nov-2000 10:26 eppingerd Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDB.sub
Target Version: 4.04
Processing Host: PITPC061

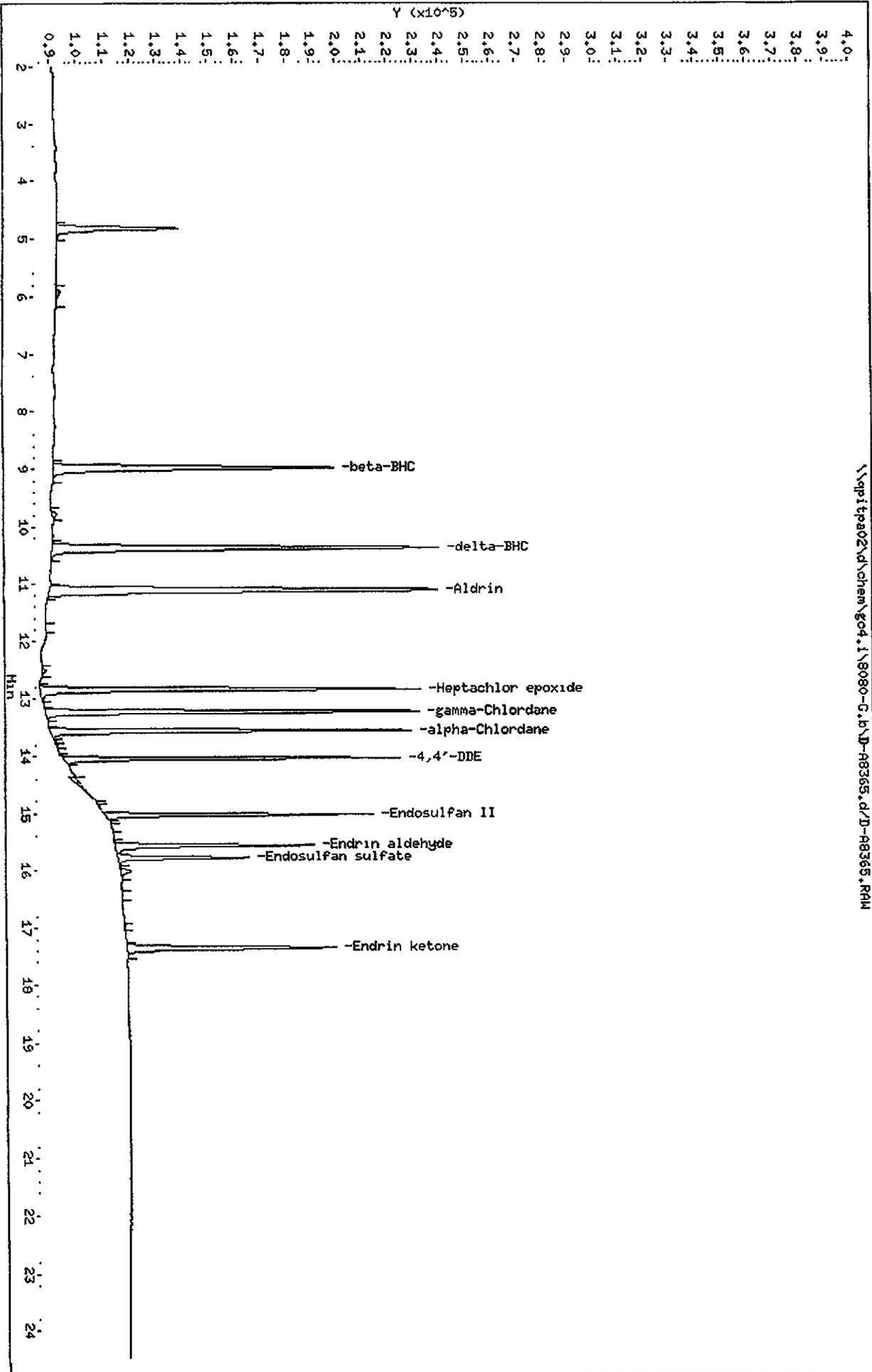
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.126	11.126	0.000	149957	0.02500	0.03017
7 beta-BHC	8.986	8.986	0.000	108627	0.02500	0.02964
8 delta-BHC	10.380	10.380	0.000	149510	0.02500	0.02567
12 Heptachlor epoxide	12.846	12.846	0.000	146698	0.02500	0.02849
13 gamma-Chlordane	13.226	13.226	0.000	144558	0.02500	0.02788
14 alpha-Chlordane	13.560	13.560	0.000	139492	0.02500	0.02753
16 4,4'-DDE	14.046	14.046	0.000	130582	0.02500	0.02603
22 Endosulfan II	15.033	15.033	0.000	103892	0.02500	0.02453
24 Endrin aldehyde	15.560	15.560	0.000	77370	0.02500	0.02506
26 Endosulfan sulfate	15.780	15.780	0.000	50614	0.02500	0.01862
27 Endrin ketone	17.360	17.360	0.000	81098	0.02500	0.02554

674 1203

Data File: \\pfitpa02\chem\gc4.1\8080-G.b\1D-88365.d
Date: 21-NOV-2000 15:44
Client ID:
Sample Info: HEDB, 8080-G.b, 1IND, sub, 2,3
Column phase: DB608

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

\\pfitpa02\chem\gc4.1\8080-G.b\1D-88365.d\1D-88365.RAW



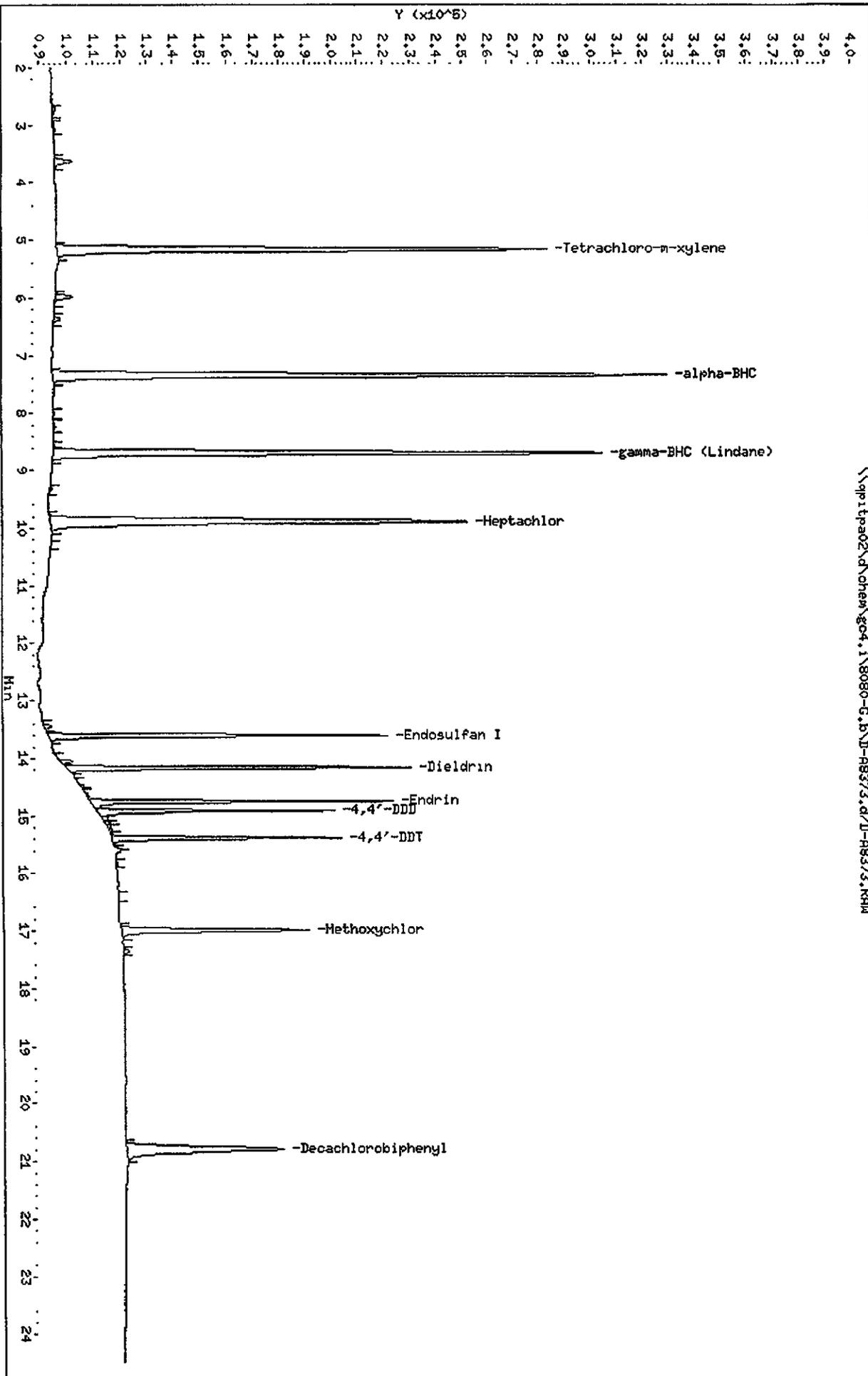
Data File: \\gpitpa02\d\chem\gc4.i\8080-G.b\D-A8373.d
 Report Date: 22-Nov-2000 10:32

STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\8080-G.b\D-A8373.d
 Lab Smp Id: MEDA
 Inj Date : 21-NOV-2000 19:26
 Operator : 1891
 Smp Info : MEDA,8080-G.b,, INDA.sub,,2,3
 Misc Info : 190-100-8
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 22-Nov-2000 10:30 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.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	5.166	5.166	0.000	186984	0.02500	0.03013
5 alpha-BHC	7.346	7.346	0.000	234514	0.02500	0.03083
6 gamma-BHC (Lindane)	8.700	8.700	0.000	209766	0.02500	0.03077
10 Heptachlor	9.893	9.893	0.000	158507	0.02500	0.03008
15 Endosulfan I	13.606	13.606	0.000	128896	0.02500	0.02781
17 Dieldrin	14.166	14.166	0.000	130672	0.02500	0.02736
20 Endrin	14.753	14.753	0.000	114515	0.02500	0.02655
21 4,4'-DDD	14.920	14.920	0.000	89840	0.02500	0.02283
23 4,4'-DDT	15.386	15.386	0.000	87317	0.02500	0.02344
25 Methoxychlor	16.993	16.993	0.000	71550	0.05000	0.04429
\$ 30 Decachlorobiphenyl	20.806	20.800	0.006	59666	0.02500	0.02587

674 1205



Data File: \\pp1tpa02\chem\g04.1\8080-G.B\D-88373.d
Date: 21-NOV-2000 19:26
Client ID:
Sample Info: HEDA, 8080-G.b, INDA, sub, 2,3
Column phase: DB608

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

\\pp1tpa02\chem\g04.1\8080-G.B\D-88373.d\I-88373.RAW

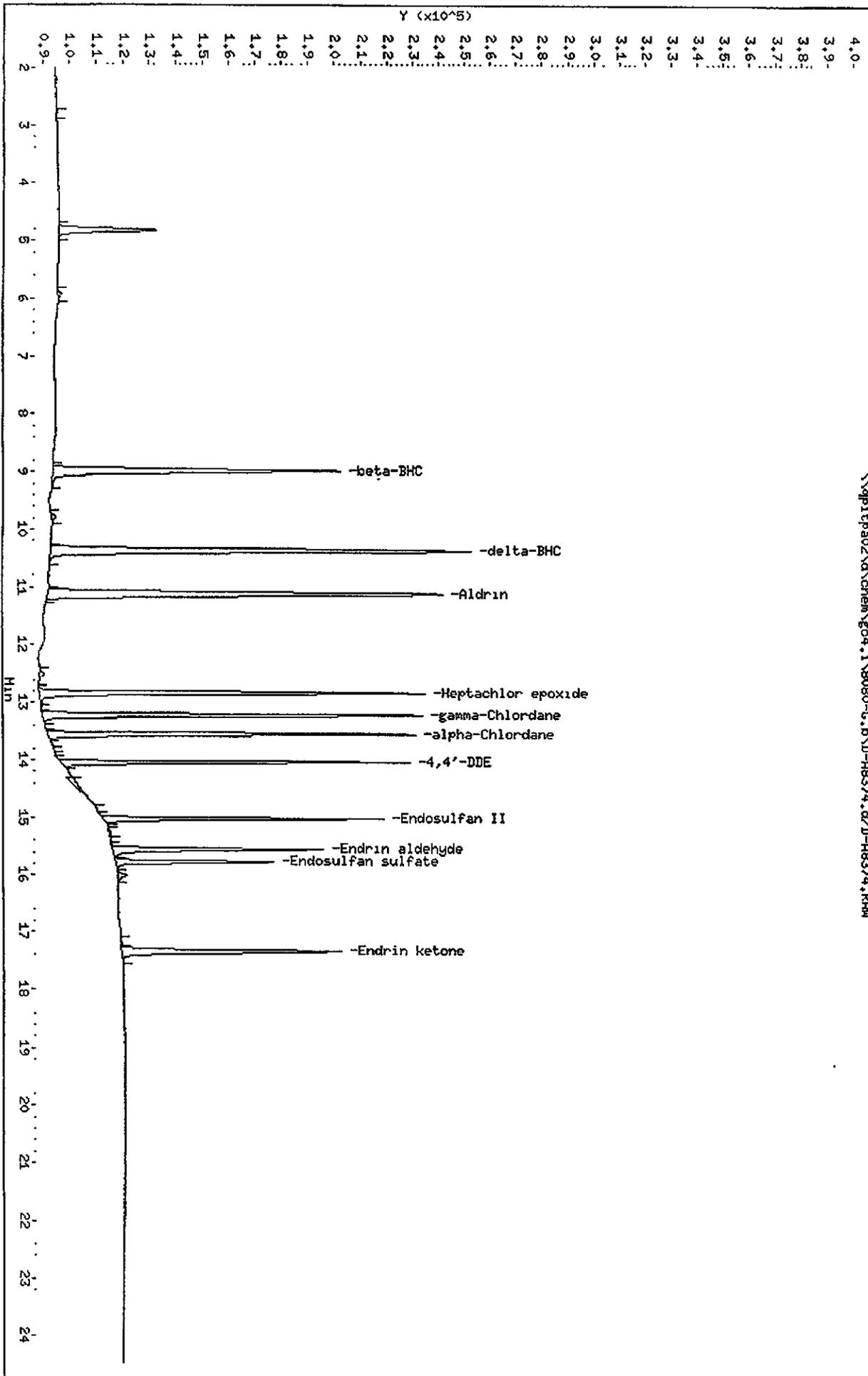
Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8374.d
 Report Date: 22-Nov-2000 10:32

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8374.d
 Lab Smp Id: MEDB
 Inj Date : 21-NOV-2000 19:53
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDB,8080-G.b,,INDB.sub,,2,3
 Misc Info : 190-100-14
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 22-Nov-2000 10:30 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.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	11.120	11.126	-0.006	149987	0.02500	0.03018
7 beta-BHC	8.986	8.986	0.000	108716	0.02500	0.02966
8 delta-BHC	10.380	10.380	0.000	159688	0.02500	0.02742
12 Heptachlor epoxide	12.846	12.846	0.000	146403	0.02500	0.02843
13 gamma-Chlordane	13.226	13.226	0.000	144076	0.02500	0.02779
14 alpha-Chlordane	13.560	13.560	0.000	139595	0.02500	0.02755
16 4,4'-DDE	14.046	14.046	0.000	132142	0.02500	0.02634
22 Endosulfan II	15.033	15.033	0.000	106264	0.02500	0.02509
24 Endrin aldehyde	15.560	15.560	0.000	79713	0.02500	0.02582
26 Endosulfan sulfate	15.780	15.780	0.000	59661	0.02500	0.02195
27 Endrin ketone	17.360	17.360	0.000	83359	0.02500	0.02626

674 1207



Data File: \\pp1tpa02\nd\chem\g04.1\8080-G.b\D-88374.d
Date: 21-NDV-2000 19:53
Client ID:
Sample Info: HEDB,8080-G.b, INDB.sub,,2,3
Column phases: DB608

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

\\pp1tpa02\nd\chem\g04.1\8080-G.b\D-88374.d\D-88374.F04

GD
HP58904H
DB1721

674 1208

Report Date : 22-Nov-2000 11:05

STL-Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Quant Method : ESTD Target Version : 4.04
Last Update : 22-Nov-2000 11:04 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	5.407	5.357-5.457	4.29e+006
58 MIREX	16.827	16.777-16.877	
2 Diallate A	6.747	6.697-6.797	1.27e+005
3 Diallate B	7.273	7.223-7.323	2.51e+004
4 HEXACHLOROBENZENE	6.987	6.937-7.037	
5 alpha-BHC	8.000	7.950-8.050	5.80e+006
6 gamma-BHC (Lindane)	9.327	9.277-9.377	5.10e+006
7 beta-BHC	11.747	11.697-11.797	2.59e+006
8 delta-BHC	12.507	12.457-12.557	5.15e+006
9 Chlordane	9.680	9.630-9.730	1.66e+005
	10.287	10.237-10.337	2.29e+005
	13.720	13.670-13.770	5.44e+005
	13.833	13.783-13.883	7.48e+005
10 Heptachlor	10.287	10.237-10.337	5.20e+006
11 Aldrin	11.300	11.250-11.350	5.12e+006
12 Heptachlor epoxide	13.087	13.037-13.137	5.43e+006
13 gamma-Chlordane	13.720	13.670-13.770	5.43e+006
14 alpha-Chlordane	13.833	13.783-13.883	5.32e+006
15 Endosulfan I	13.673	13.623-13.723	5.12e+006
16 4,4'-DDE	14.007	13.957-14.057	5.38e+006
17 Dieldrin	14.287	14.237-14.337	5.42e+006

674 1209

6D
H058904H
031721

Report Date : 22-Nov-2000 11:05

STL-Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m

Compound	RT	RT Window	RF
18 Toxaphene	15.027	14.977-15.077	4.42e+004
	15.313	15.263-15.363	4.89e+004
	15.747	15.697-15.797	4.67e+004
	16.447	16.397-16.497	5.11e+004
19 Isodrin	12.487	12.437-12.537	4.19e+006
20 Endrin	14.613	14.563-14.663	4.44e+006
21 4,4'-DDD	15.140	15.090-15.190	3.85e+006
22 Endosulfan II	15.273	15.223-15.323	4.47e+006
23 4,4'-DDT	15.427	15.377-15.477	3.93e+006
24 Endrin aldehyde	15.880	15.830-15.930	2.07e+006
25 Methoxychlor	16.407	16.357-16.457	1.88e+006
26 Endosulfan sulfate	16.427	16.377-16.477	2.48e+006
27 Endrin ketone	17.327	17.277-17.377	3.28e+006
28 Chlorobenzilate	14.900	14.850-14.950	2.13e+005
29 Kepone	14.893	14.843-14.943	2.13e+004
\$ 30 Decachlorobiphenyl	19.593	19.543-19.643	2.78e+006

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 07-NOV-2000 15:49
 End Cal Date : 07-NOV-2000 23:13
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Cal Date : 08-Nov-2000 13:00 matkol
 Curve Type : Average

Calibration File Names:

Level 1: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8193.d
 Level 2: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8194.d
 Level 3: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8195.d
 Level 4: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8196.d
 Level 5: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8197.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	151430	143020	119212	109727	110529	126784	15.190
3 Diallylate B	26290	27416	24218	23257	24211	25078	6.832
4 HEXACHLOROBENZENE	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 alpha-BHC	5277000	5714300	5903120	6040720	6076570	5802342	5.624
6 gamma-BHC (Lindane)	4755000	5071900	5139200	5296120	5260020	5104448	4.217
7 beta-BHC	2496600	2766600	2531320	2628720	2504540	2585556	4.412
8 delta-BHC	4484000	5151100	5115080	5511380	5508020	5153916	8.137
9 Chlordane(1)	+++++	+++++	165568	+++++	+++++	165568	0.000
(2)	+++++	+++++	228936	+++++	+++++	228936	0.000
(3)	+++++	+++++	544356	+++++	+++++	544356	0.000
(4)	+++++	+++++	747904	+++++	+++++	747904	0.000
10 Heptachlor	5066000	5299200	5231400	5232680	5182610	5202378	1.668
11 Aldrin	4789200	5248000	5033360	5367720	5163930	5120442	4.330
12 Heptachlor epoxide	5163200	5700100	5314760	5596520	5390450	5433006	3.976
13 gamma-Chlordane	5189000	5575300	5280680	5603560	5483930	5426494	3.379
14 alpha-Chlordane	5034600	5567500	5231520	5429340	5354800	5323552	3.799
15 Endosulfan I	5023800	5227100	5132520	5134460	5096460	5122868	1.435
16 4,4'-DDE	5057200	5530500	5261840	5615880	5435170	5380118	4.151
17 Dieldrin	5136800	5393000	5467680	5498220	5606320	5420404	3.249
18 Toxaphene(1)	+++++	+++++	44158	+++++	+++++	44158	0.000
(2)	+++++	+++++	48900	+++++	+++++	48900	0.000
(3)	+++++	+++++	46725	+++++	+++++	46725	0.000
(4)	+++++	+++++	51050	+++++	+++++	51050	0.000
19 Isodrin	4523200	4514040	4024540	3847173	4047420	4191275	7.366
20 Endrin	4140800	4421500	4466280	4526260	4628510	4436670	4.117

674 1211

68
58904B
DB1701

Report Date : 08-Nov-2000 13:08

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 07-NOV-2000 15:49
 End Cal Date : 07-NOV-2000 23:13
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Cal Date : 08-Nov-2000 13:00 matkol
 Curve Type : Average

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5		
21 4,4'-DDD	3819200	3884700	3825080	3821000	3913150	3852626	1.129
22 Endosulfan II	4445600	4647800	4157600	4602040	4475130	4465634	4.295
23 4,4'-DDT	3864400	3987700	3910920	3888160	4018120	3933860	1.678
24 Endrin aldehyde	1935600	2076900	2004880	2204000	2148260	2073928	5.191
25 Methoxychlor	1817000	1920700	1864440	1868370	1919010	1877904	2.306
26 Endosulfan sulfate	2244200	2489500	2399280	2609600	2635770	2475670	6.487
27 Endrin ketone	3034800	3406900	3189320	3418140	3332820	3276396	4.975
28 Chlorobenzilate	169400	236760	228700	213600	218120	213316	12.265
29 Kepone	16940	23676	22870	21360	21812	21332	12.265
\$ 1 Tetrachloro-m-xylene	4599200	4599600	4329720	4088240	3835900	4290532	7.730
\$ 30 Decachlorobiphenyl	2817000	2871400	2777440	2748440	2665070	2775870	2.782

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY :

674 1212

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 4140-G
 GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 11/07/00 11/07/00

EPA Sample No. (PIBLK): _____ Date Analyzed : _____
 Lab Sample ID (PIBLK): _____ Time Analyzed : _____
 EPA Sample No. (PEM): _____ Date Analyzed : 11/07/00
 Lab Sample ID (PEM): EVALB Time Analyzed : 1521

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
Endrin	14.63	14.58	14.68	0.02488	0.02500	-0.5
4,4'-DDT	15.44	15.39	15.49	0.02484	0.02500	-0.6

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

674 1213

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): 11/07/00 11/07/00

EPA Sample No. (PIBLK): _____

Date Analyzed : _____

Lab Sample ID (PIBLK): _____

Time Analyzed : _____

EPA Sample No. (PEM):

Date Analyzed : 11/08/00

Lab Sample ID (PEM): EVALB

Time Analyzed : 0838

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
=====	=====	=====	=====	=====	=====	=====
Endrin	14.63	14.58	14.68	0.02472	0.02500	-1.1
4,4'-DDT	15.44	15.39	15.49	0.02460	0.02500	-1.6

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

Endrin % breakdown (1): 0.00

Combined % breakdown (1): _____

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

674 1214

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 4140-G
 GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 11/07/00 11/07/00

EPA Sample No. (PIBLK): _____ Date Analyzed : _____
 Lab Sample ID (PIBLK): _____ Time Analyzed : _____
 EPA Sample No. (PEM): _____ Date Analyzed : 11/21/00
 Lab Sample ID (PEM): EVALB Time Analyzed : 1352

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
=====	=====	=====	=====	=====	=====	=====
Endrin	14.61	14.56	14.66	0.02140	0.02500	-14.4
4,4'-DDT	15.43	15.38	15.48	0.02197	0.02500	-12.1

4,4'-DDT % breakdown (1): 5.2
~~3.49~~
 Combined % breakdown (1): 14.10
~~12.1~~

Endrin % breakdown (1): 6.9
~~10.60~~
DE 11-22-00

674 1215

7E HP58904H

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8362.d
Report Date: 22-Nov-2000 11:04

DB1701

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 14:20
Lab File ID: D-B8362.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
Analysis Type: Init. Cal. Times: 15:49 23:13
Lab Sample ID: MEDTOX Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN RRF	%D	MAX %D
18 Toxaphene(1)	44158	39581	0.010	-10.4	15.0
(2)	48900	57534	0.010	17.7	15.0
(3)	46725	51294	0.010	9.8	15.0
(4)	51050	51573	0.010	1.0	15.0
\$ 1 Tetrachloro-m-xylene	4290532	4034520	0.000	-6.0	15.0
\$ 30 Decachlorobiphenyl	2775870	2595560	0.010	-6.5	15.0

DE-112200
AUG 7 9.77J

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8363.d
Report Date: 22-Nov-2000 11:02

72 HP58904H
DB72

STL-Pittsburgh

674 1216

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 14:48
Lab File ID: D-B8363.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
Analysis Type: Init. Cal. Times: 15:49 23:13
Lab Sample ID: MEDCHLOR Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m

COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
9 Chlordane(1)	165568	177136	0.010	7.0	15.0
(2)	228936	239388	0.010	4.6	15.0
(3)	544356	562516	0.010	3.3	15.0
(4)	747904	741580	0.010	-0.8	15.0
\$ 1 Tetrachloro-m-xylene	4290532	4122760	0.000	-3.9	15.0
\$ 30 Decachlorobiphenyl	2775870	2695200	0.010	-2.9	15.0

674 1217

7E HPS8904H

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8364.d
Report Date: 22-Nov-2000 11:02

03170

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 15:16
Lab File ID: D-B8364.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
Analysis Type: Init. Cal. Times: 15:49 23:13
Lab Sample ID: MEDA Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN RRF	%D	MAX %D
1 Tetrachloro-m-xylene	4290532	4463040	0.000	4.0	15.0
5 alpha-BHC	5802342	5973520	0.010	3.0	15.0
6 gamma-BHC (Lindane)	5104448	5290240	0.010	3.6	15.0
10 Heptachlor	5202378	5513000	0.010	6.0	15.0
15 Endosulfan I	5122868	5436400	0.010	6.1	15.0
17 Dieldrin	5420404	5744720	0.010	6.0	15.0
20 Endran	4436670	4208640	0.010	-5.1	15.0
21 4,4'-DDD	3852626	3401000	0.010	-11.7	15.0
23 4,4'-DDT	3933860	3697240	0.010	-6.0	15.0
25 Methoxychlor	1877904	1648260	0.010	-12.2	15.0
30 Decachlorobiphenyl	2775870	2761400	0.010	-0.5	15.0

Data File: \\gpitpa02\d\chem\gc4.i\8080-G.b\D-B8365.d
Report Date: 22-Nov-2000 11:03

72 HPS8904H
031721

674 1218

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 15:44
Lab File ID: D-B8365.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
Analysis Type: Init. Cal. Times: 15:49 23:13
Lab Sample ID: MEDB Quant Type: ESTD
Method: \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN	MAX
11 Aldrin	5120442	5636440	0.010	15.0
7 beta-BHC	2585556	2717960	0.010	15.0
8 delta-BHC	5153916	4590920	0.010	15.0
12 Heptachlor epoxide	5433006	5920560	0.010	15.0
13 gamma-Chlordane	5426494	5840280	0.010	15.0
14 alpha-Chlordane	5323552	5599840	0.010	15.0
16 4,4'-DDE	5380118	5434400	0.010	15.0
22 Endosulfan II	4465634	4406000	0.010	15.0
24 Endrin aldehyde	2073928	2068040	0.010	15.0
26 Endosulfan sulfate	2475670	1766840	0.010	15.0
27 Endrin ketone	3276396	3198160	0.010	15.0

Avg 6.69.D

674 1219

7E HP58904H

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8373.d DB172(
Report Date: 22-Nov-2000 11:11

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 19:26
Lab File ID: D-B8373.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
Analysis Type: Init. Cal. Times: 15:49 23:13
Lab Sample ID: MEDA Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN RRF	MAX RRF
1 Tetrachloro-m-xylene	4290532	4917120	0.000	15.0
5 alpha-BHC	5802342	6760360	0.010	15.0
6 gamma-BHC (Lindane)	5104448	5946960	0.010	15.0
10 Heptachlor	5202378	6140960	0.010	15.0
15 Endosulfan I	5122868	5815680	0.010	15.0
17 Dieldrin	5420404	6070000	0.010	15.0
20 Endrin	4436670	4556680	0.010	15.0
21 4,4'-DDD	3852626	3611160	0.010	15.0
23 4,4'-DDT	3933860	3992280	0.010	15.0
25 Methoxychlor	1877904	1777220	0.010	15.0
30 Decachlorobiphenyl	2775870	2923800	0.010	15.0

Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8374.d
 Report Date: 22-Nov-2000 11:11

7E HP58904H
 DB1721

STL-Pittsburgh

674 1220

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 21-NOV-2000 19:53
 Lab File ID: D-B8374.d Init. Cal. Date(s): 07-NOV-2000 07-NOV-2000
 Analysis Type: Init. Cal. Times: 15:49 23:13
 Lab Sample ID: MEDB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN	MAX
11 Aldrin	5120442	6023280	0.010	17.6 15.0 <-
7 beta-BHC	2585556	2897640	0.010	12.1 15.0
8 delta-BHC	5153916	5203960	0.010	1.0 15.0
12 Heptachlor epoxide	5433006	6240720	0.010	14.9 15.0
13 gamma-Chlordane	5426494	6122400	0.010	12.8 15.0
14 alpha-Chlordane	5323552	5963840	0.010	12.0 15.0
16 4,4'-DDE	5380118	5783240	0.010	7.5 15.0
22 Endosulfan II	4465634	4564200	0.010	2.2 15.0
24 Endrin aldehyde	2073928	2223320	0.010	7.2 15.0
26 Endosulfan sulfate	2475670	2135480	0.010	-13.7 15.0
27 Endrin ketone	3276396	3416440	0.010	4.3 15.0

Avg 9.907.D

674 1221

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0K150188

GC Column: DB1701

ID: 0.53 (mm) Init. Calib. Date(s): 11/07/00 11/07/00

Instrument ID: GC4

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
		TCX: 5.41		DCB: 19.59	
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	EVALB	11/07/00	1521	5.42	19.63
02	MEDTOX	11/07/00	1549	5.42	19.62
03	MEDCHLOR	11/07/00	1617	5.42	19.62
04	LOWA	11/07/00	1903	5.41	19.62
05	MLOWA	11/07/00	1931	5.41	19.62
06	MEDA	11/07/00	1959	5.41	19.62
07	MHIGHA	11/07/00	2027	5.41	19.62
08	HIGHA	11/07/00	2054	5.41	19.62
09	LOWB	11/07/00	2122		
10	MLOWB	11/07/00	2150		
11	MEDB	11/07/00	2218		
12	MHIGHB	11/07/00	2245		
13	HIGHB	11/07/00	2313		
14	2ND A	11/07/00	2341	5.41	19.62
15	2ND B	11/08/00	0009		
16	EVALB	11/08/00	0838	5.41	19.62
17	EVALB	11/21/00	1352	5.41	19.59
18	MEDTOX	11/21/00	1420	5.41	19.59
19	MEDCHLOR	11/21/00	1448	5.41	19.59
20	MEDA	11/21/00	1516	5.41	19.59
21	MEDB	11/21/00	1544		
22	DF/24-A/0319 DPWNF1AE	11/21/00	1802	5.41	19.59
23	PBLK DP8AF1AA	11/21/00	1830	5.41	19.59
24	LCS DP8AF1AC	11/21/00	1858	5.41	19.59
25	MEDA	11/21/00	1926	5.41	19.59
26	MEDB	11/21/00	1953		
27					
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\8080-G.b\D-B8180.d
Lab Smp Id: EVALB
Inj Date : 07-NOV-2000 15:21
Operator : 1891 Inst ID: gc4.i
Smp Info : EVALB,8080-G.b,,EVALBR.sub,,3,1
Misc Info : 190-102-10
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.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	5.420	5.413	0.007	83069	0.01936	0.01936(R)
16 4,4'-DDE	Compound Not Detected.					
20 Endrin	14.626	14.626	0.000	110380	0.02488	0.02488
21 4,4'-DDD	Compound Not Detected.					
23 4,4'-DDT	15.440	15.440	0.000	97727	0.02484	0.02484
24 Endrin aldehyde	Compound Not Detected.					
27 Endrin ketone	Compound Not Detected.					
§ 30 Decachlorobiphenyl	19.626	19.620	0.006	54991	0.01981	0.01981(R)

QC Flag Legend

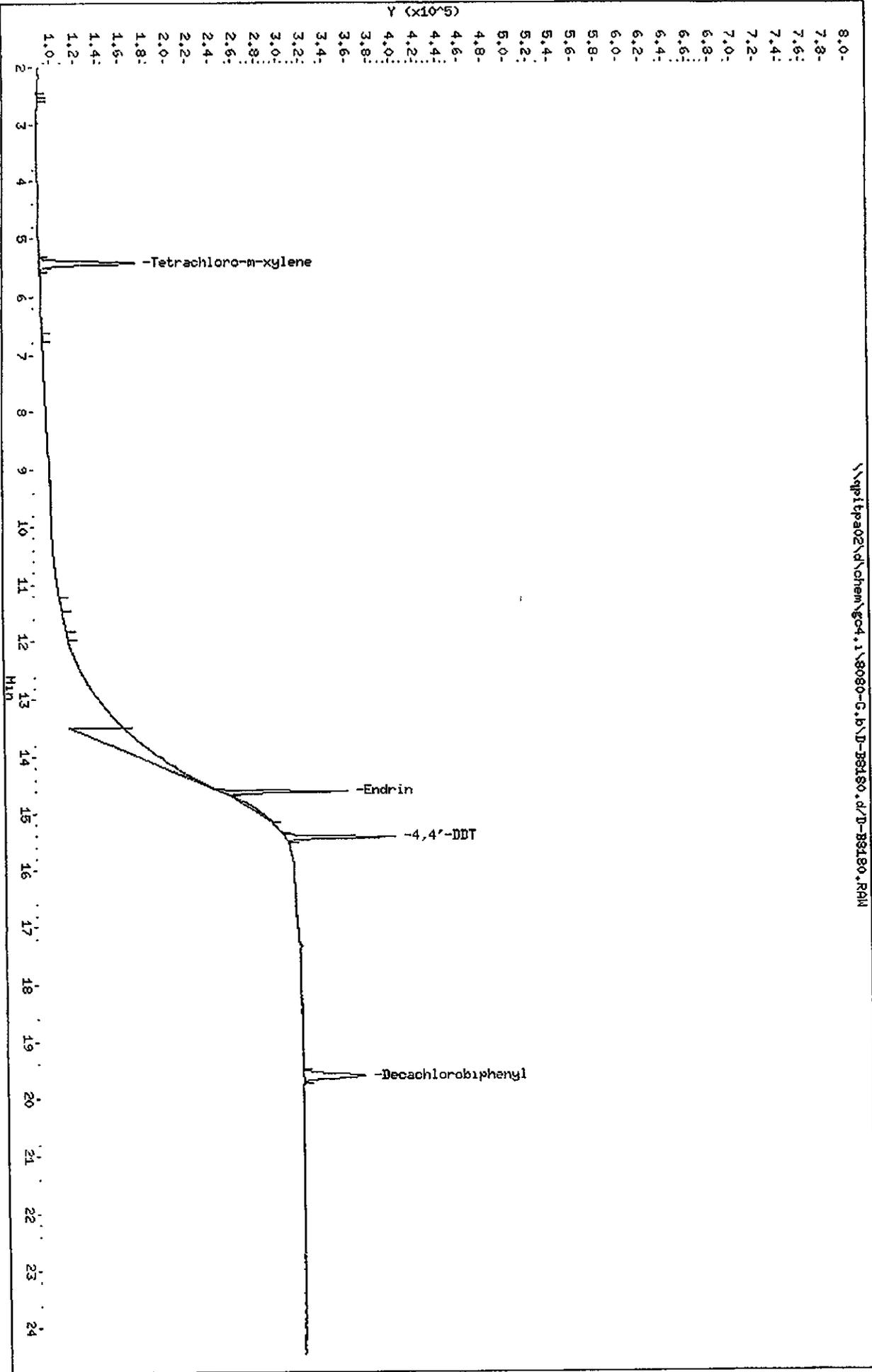
R - Spike/Surrogate failed recovery limits.

674 1223

Data File: \\vp1tpa02\chem\gc4.1\8080-G.b\D-B8180.d
Date: 07-NOV-2000 15:21
Client ID:
Sample Info: EWALB,8080-G.b,EWALBR,sub,,3,1
Column phase: DB1701

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

\\vp1tpa02\chem\gc4.1\8080-G.b\D-B8180.d\D-B8180.RAW



Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8181.d
Report Date: 08-Nov-2000 13:51

674 1224

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8181.d
Lab Smp Id: MEDTOX
Inj Date : 07-NOV-2000 15:49
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDTOX,8080-G.b,,1-TOX.sub,,1,3
Misc Info : 190-98-12
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 15:49 Cal File: D-B8181.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: PITPC044

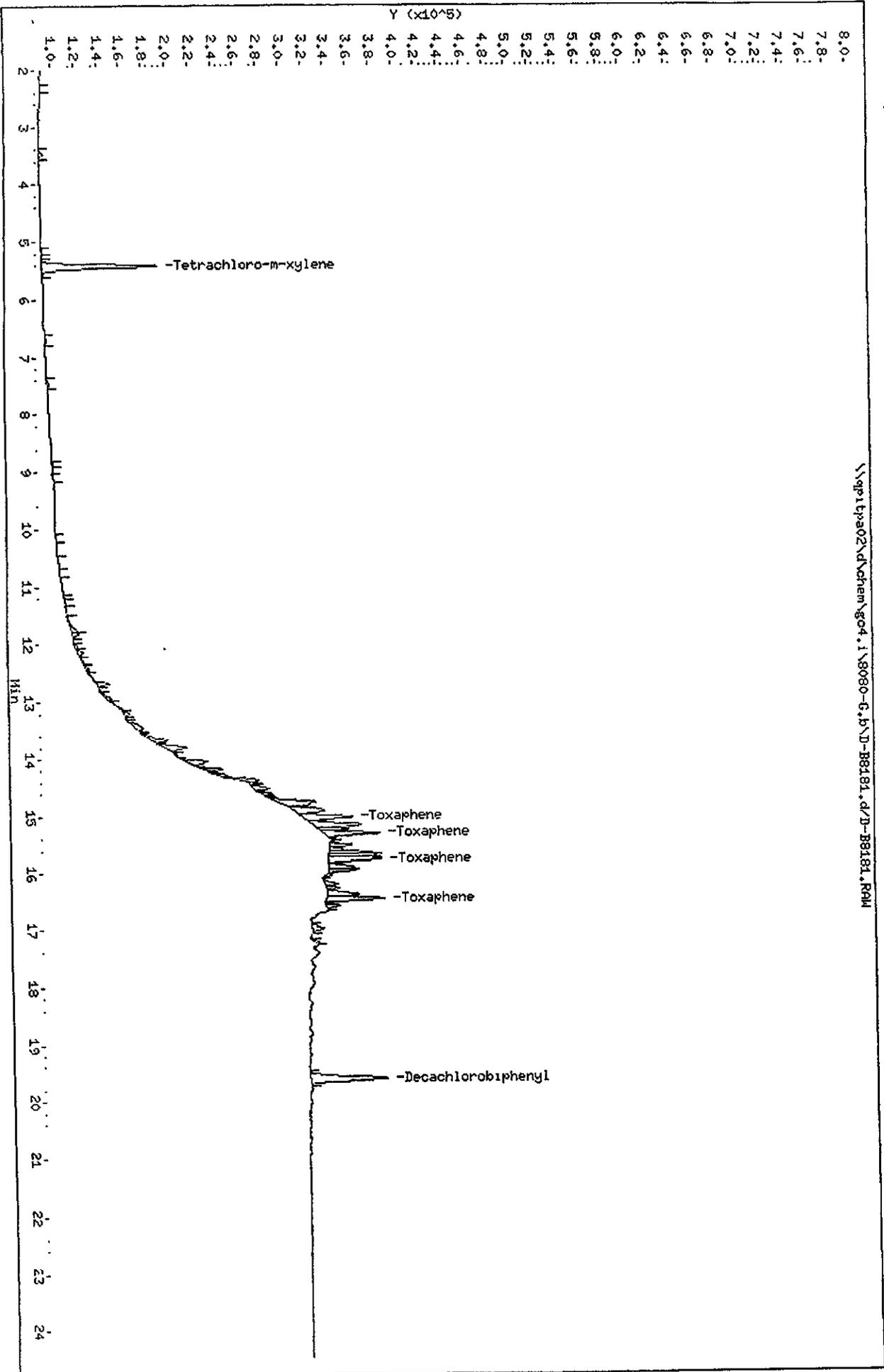
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
18 Toxaphene	15.040	15.040	0.000	44158	1.00000	1.000
\$ 1 Tetrachloro-m-xylene	5.420	5.413	0.007	101205	0.02500	0.02500
\$ 30 Decachlorobiphenyl	19.620	19.620	0.000	67061	0.02500	0.02500

674 1225

Data File: \\sp1tpa02\chem\gc4.1\8080-G,b\D-B8181.d
Date: 07-NOV-2000 15:49
Client ID:
Sample Info: HEDTOX,8080-G,b,,1-TOX,sub,,1,3
Column phase: DB1701

Instrument: gc4.i
Operator: 1894
Column diameter: 0.53

\\sp1tpa02\chem\gc4.1\8080-G,b\D-B8181.d\B-B8181.RAW



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8182.d
Lab Smp Id: MEDCHLOR
Inj Date : 07-NOV-2000 16:17
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDCHLOR,8080-G.b,,2-CHLO.sub,,1,3
Misc Info : 190-102-9
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 16:17 Cal File: D-B8182.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: PITPC044

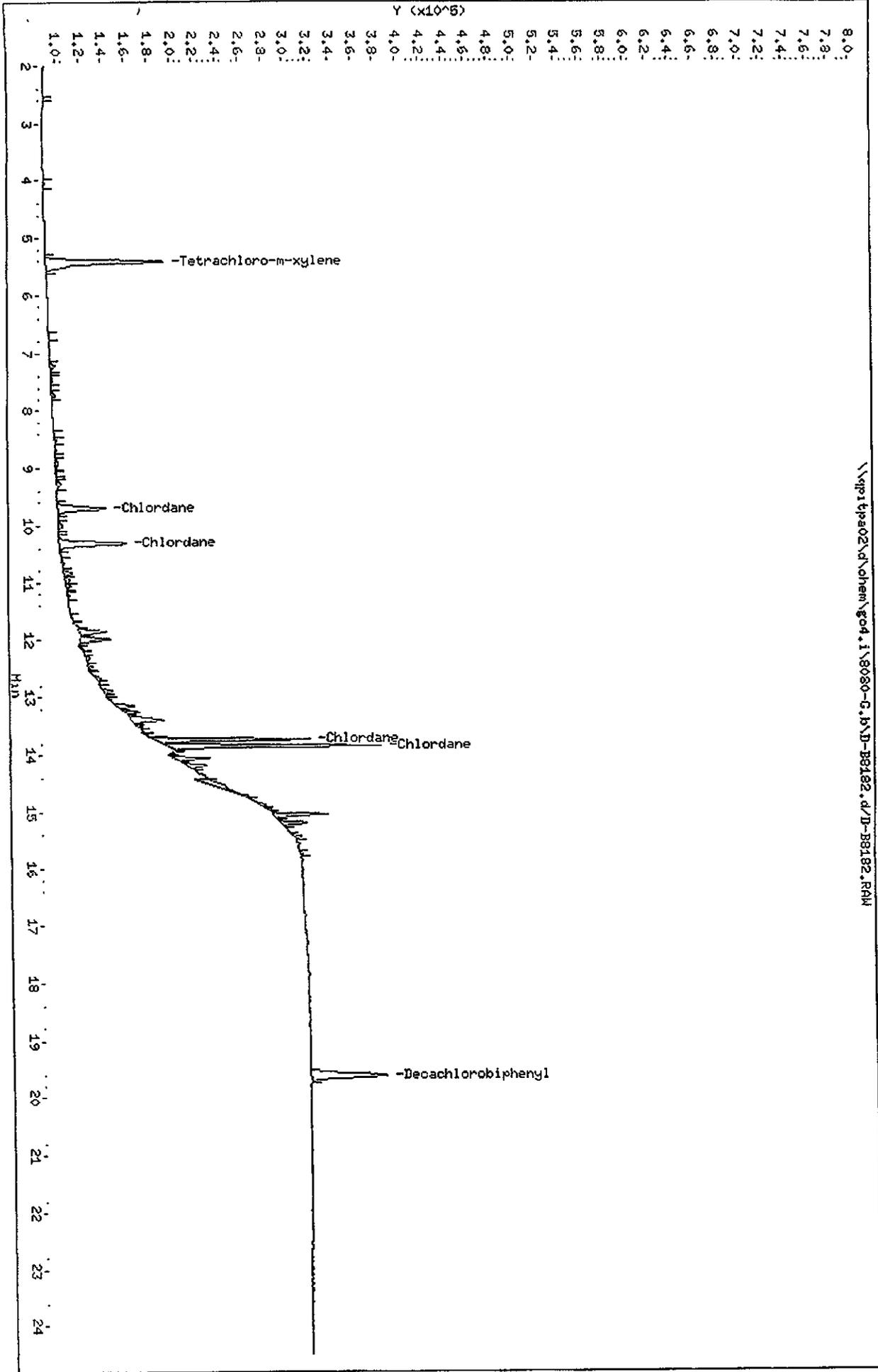
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
9 Chlordane	9.706	9.706	0.000	41392	0.25000	0.2500
§ 1 Tetrachloro-m-xylene	5.420	5.413	0.007	102876	0.02500	0.02500
§ 30 Decachlorobiphenyl	19.620	19.620	0.000	67706	0.02500	0.02500

674 1227

Data File: \\sp1tpa02\chem\g04.1\8080-G.b\D-B8182.d
Date: 07-NOV-2000 16:17
Client ID:
Sample Info: HEDCHLOR,8080-G.b,2-CHL0.sub,1,3
Column phase: DB1701

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

\\sp1tpa02\chem\g04.1\8080-G.b\D-B8182.d\D-B8182.RAW



STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\8080-G.b\D-B8188.d
 Lab Smp Id: LOWA
 Inj Date : 07-NOV-2000 19:03
 Operator : 1891 Inst ID: gc4.i
 Smp Info : LOWA,8080-G.b,,3-INDA.sub,,1,1
 Misc Info : 190-100-6
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 22:18 Cal File: D-B8195.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: PITPC044

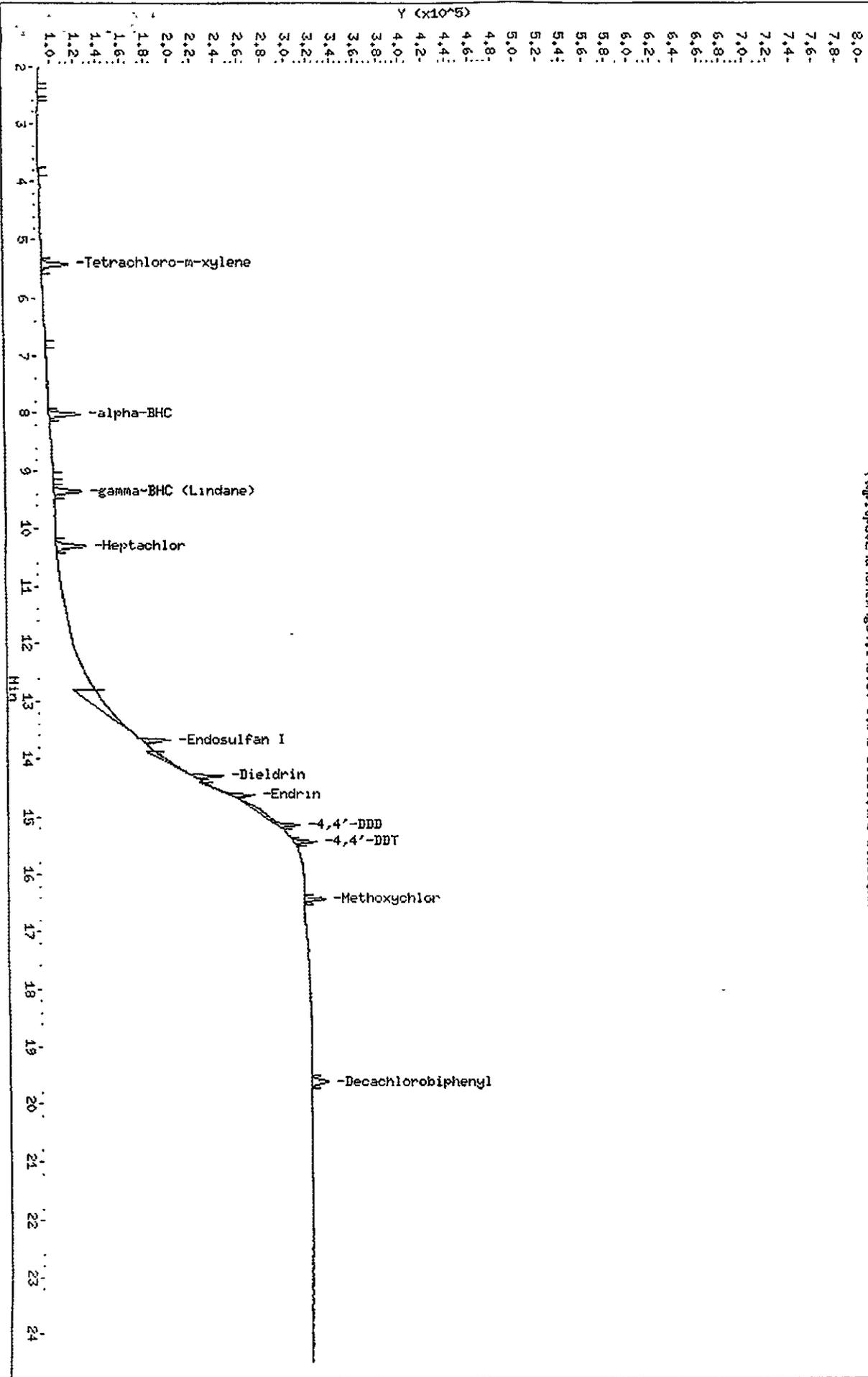
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.413	5.413	0.000	22996	0.00500	0.005151
5 alpha-BHC	8.020	8.020	0.000	26385	0.00500	0.004720
6 gamma-BHC (Lindane)	9.353	9.353	0.000	23775	0.00500	0.004806
10 Heptachlor	10.306	10.306	0.000	25330	0.00500	0.004920
15 Endosulfan I	13.686	13.686	0.000	25119	0.00500	0.004946
17 Dieldrin	14.300	14.300	0.000	25684	0.00500	0.004844
20 Endrin	14.626	14.626	0.000	20704	0.00500	0.004811
21 4,4'-DDD	15.153	15.146	0.007	19096	0.00500	0.004996
23 4,4'-DDT	15.440	15.440	0.000	19322	0.00500	0.004970
25 Methoxychlor	16.420	16.420	0.000	18170	0.01000	0.009871
§ 30 Decachlorobiphenyl	19.620	19.620	0.000	14085	0.00500	0.005035

6741229

Data File: \\spitpa02\chem\gc4.1\8080-G.b\J-88188.d
Date: 07-NOV-2000 19:03
Client ID:
Sample Info: LQIA,8080-G.b,3-INDA,sub,1,1
Column phase: DB1701

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

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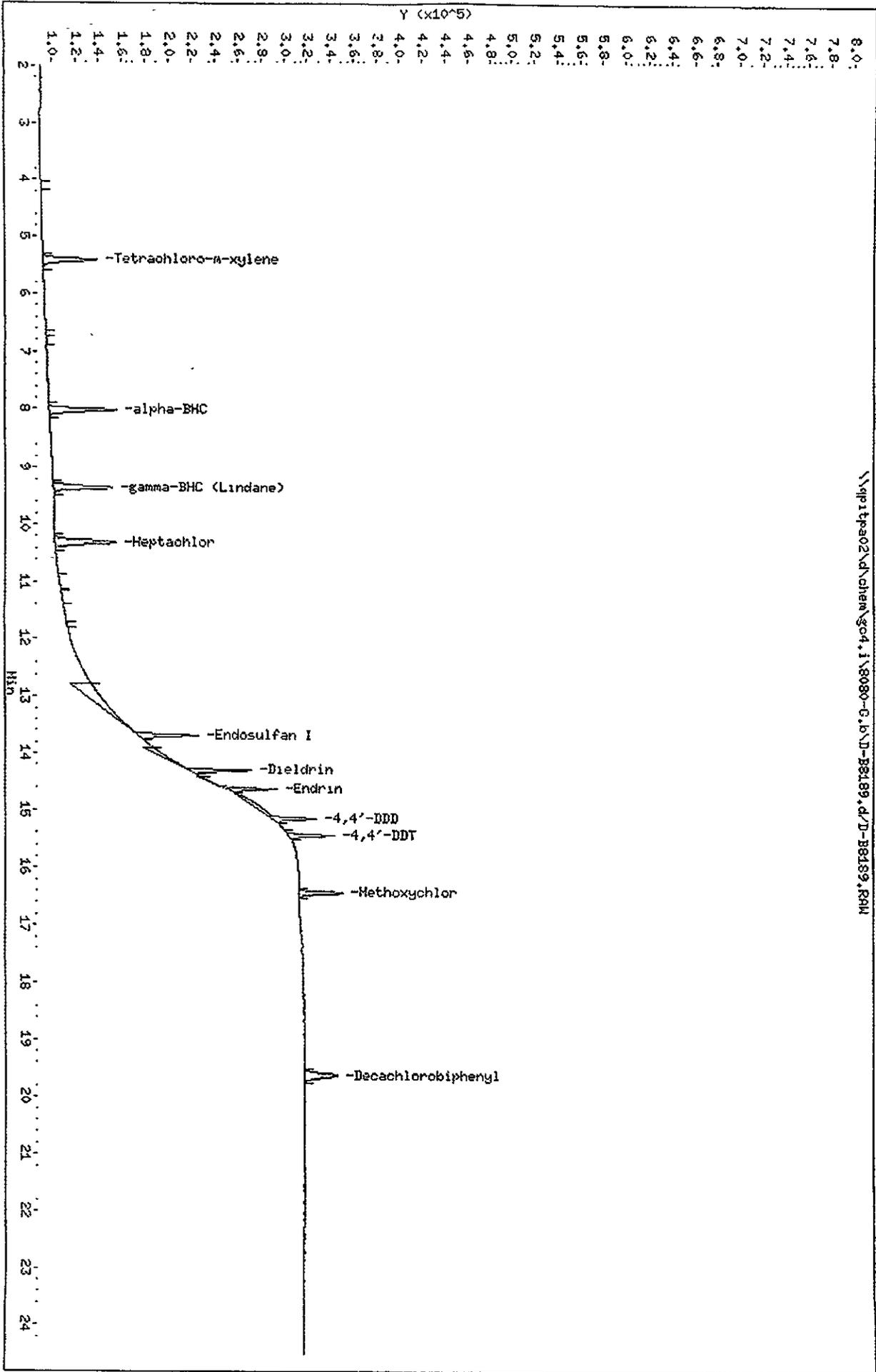
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 Lab Smp Id: MLOWA
 Inj Date : 07-NOV-2000 19:31
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MLOWA,8080-G.b,,3-INDA.sub,,1,2
 Misc Info : 190-100-7
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 22:18 Cal File: D-B8195.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
\$ 1 Tetrachloro-m-xylene	5.413	5.413	0.000	45996	0.01000	0.01020
5 alpha-BHC	8.020	8.020	0.000	57143	0.01000	0.01015
6 gamma-BHC (Lindane)	9.353	9.353	0.000	50719	0.01000	0.01017
10 Heptachlor	10.306	10.306	0.000	52992	0.01000	0.01019
15 Endosulfan I	13.686	13.686	0.000	52271	0.01000	0.01019
17 Dieldrin	14.300	14.300	0.000	53930	0.01000	0.01011
20 Endrin	14.626	14.626	0.000	44215	0.01000	0.01018
21 4,4'-DDD	15.146	15.146	0.000	38847	0.01000	0.01011
23 4,4'-DDT	15.440	15.440	0.000	39877	0.01000	0.01017
25 Methoxychlor	16.420	16.420	0.000	38414	0.02000	0.02057
\$ 30 Decachlorobiphenyl	19.620	19.620	0.000	28714	0.01000	0.01018

Data File: \\sp1tpa02\chem\gc4.1\8080-G.b\D-B8189.d
Date: 07-NOV-2000 19:31
Client ID:
Sample Info: HL048,8080-G.b,,3-INDR,sub,,1,2
Column Phase: DB1701

Instrument: gc4.i
Operator: 1891
Column diameter: 0.83

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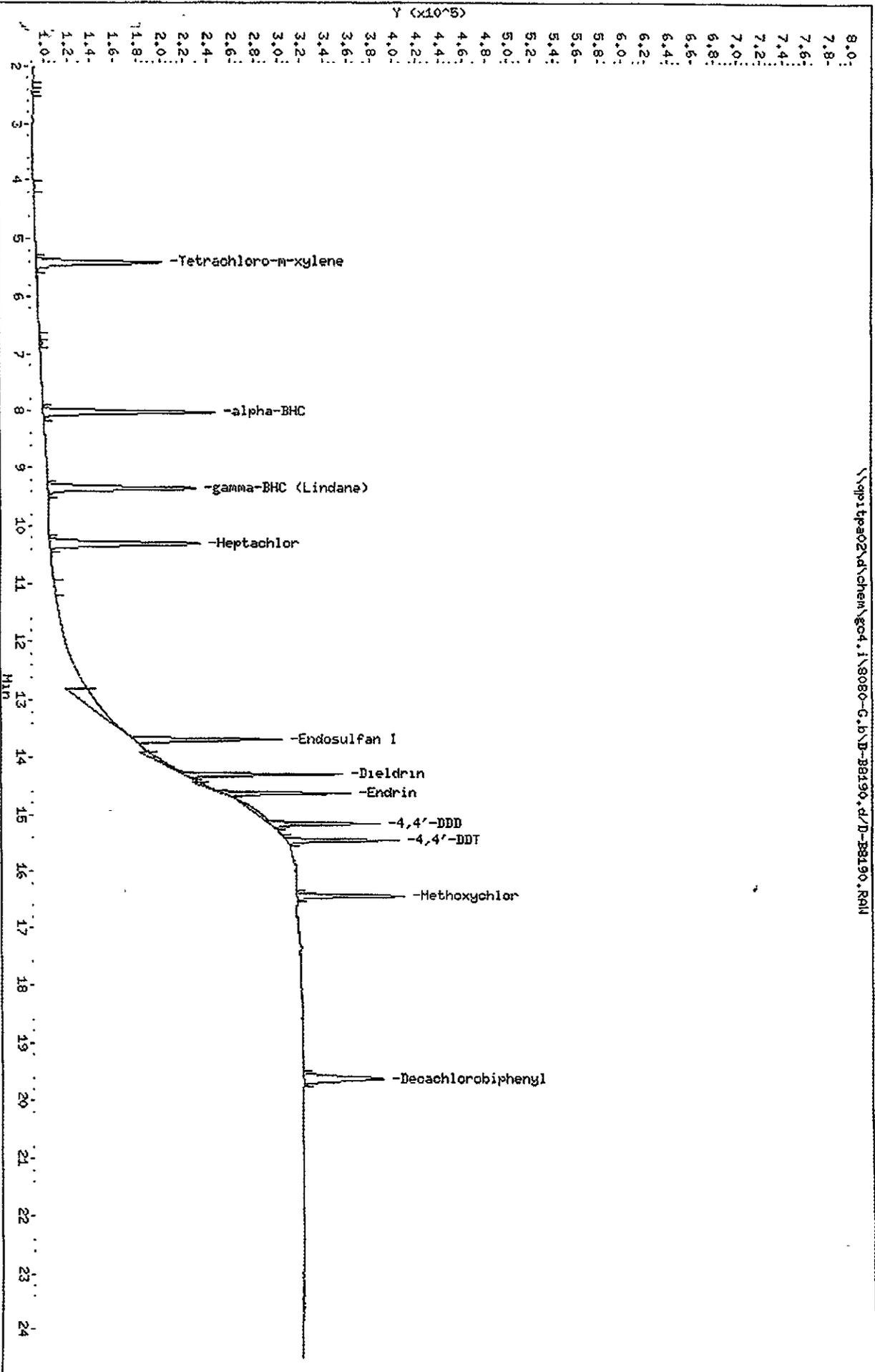
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Lab Smp Id: MEDA
Inj Date : 07-NOV-2000 19:59
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDA,8080-G.b,,3-INDA.sub,,1,3
Misc Info : 190-100-8
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 19:59 Cal File: D-B8190.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.413	5.413	0.000	108243	0.02500	0.02500
5 alpha-BHC	8.020	8.020	0.000	147578	0.02500	0.02500
6 gamma-BHC (Lindane)	9.353	9.353	0.000	128480	0.02500	0.02500
10 Heptachlor	10.306	10.306	0.000	130785	0.02500	0.02500
15 Endosulfan I	13.686	13.686	0.000	128313	0.02500	0.02500
17 Dieldrin	14.300	14.300	0.000	136692	0.02500	0.02500
20 Endrin	14.626	14.626	0.000	111657	0.02500	0.02500
21 4,4'-DDD	15.146	15.146	0.000	95627	0.02500	0.02500
23 4,4'-DDT	15.440	15.440	0.000	97773	0.02500	0.02500
25 Methoxychlor	16.420	16.420	0.000	93222	0.05000	0.05000
§ 30 Decachlorobiphenyl	19.620	19.620	0.000	69436	0.02500	0.02500

Data File: \\pp1tpa02\chem\gc4.1\8080-G.b\D-B8190.d
Date: 07-NOV-2000 19:59
Client ID:
Sample Info: HEDR,8080-G.b,3-INDR,sub,1,3
Column phase: DB1701

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

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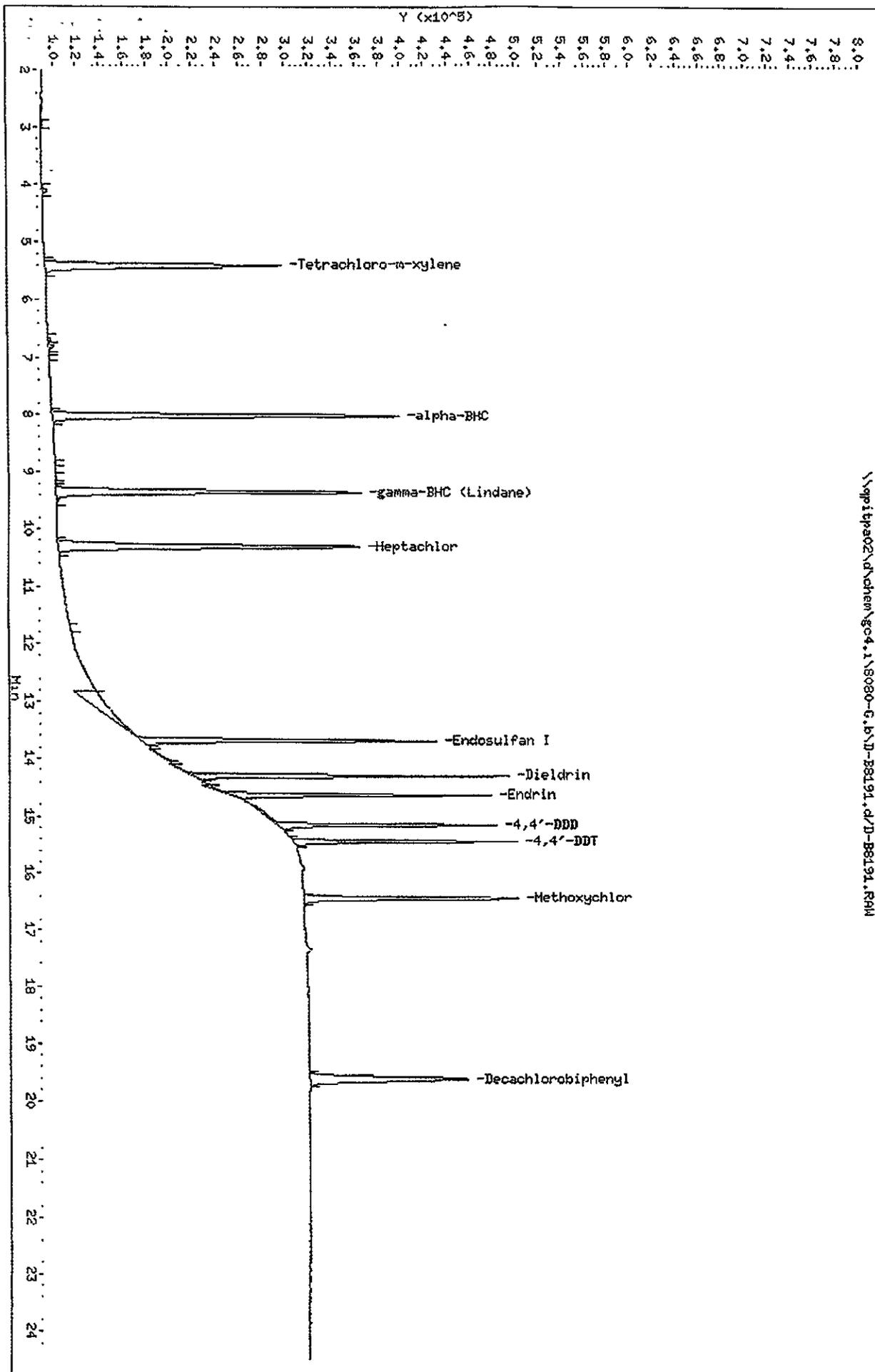
STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8191.d
 Lab Smp Id: MHIGHA
 Inj Date : 07-NOV-2000 20:27
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MHIGHA,8080-G.b,,3-INDA.sub,,1,4
 Misc Info : 190-100-9
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 22:18 Cal File: D-B8195.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.413	5.413	0.000	204412	0.05000	0.04641
5 alpha-BHC	8.020	8.020	0.000	302036	0.05000	0.05268
6 gamma-BHC (Lindane)	9.353	9.353	0.000	264806	0.05000	0.05228
10 Heptachlor	10.306	10.306	0.000	261634	0.05000	0.05024
15 Endosulfan I	13.686	13.686	0.000	256723	0.05000	0.05005
17 Dieldrin	14.300	14.300	0.000	274911	0.05000	0.05116
20 Endrin	14.626	14.626	0.000	226313	0.05000	0.05157
21 4,4'-DDD	15.146	15.146	0.000	191050	0.05000	0.04978
23 4,4'-DDT	15.440	15.440	0.000	194408	0.05000	0.04968
25 Methoxychlor	16.420	16.420	0.000	186837	0.10000	0.10000
§ 30 Decachlorobiphenyl	19.620	19.620	0.000	137422	0.05000	0.04902

Data File: \\pp1tpa02\chem\gc4.1\8080-G.LND-B8191.L
 Date: 07-NOV-2000 20:27
 Client ID:
 Sample Info: MHISHA,8080-G,b,3-INDA,sub,1,4
 Column phase: DB1701

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



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8192.d
 Lab Smp Id: HIGHA
 Inj Date : 07-NOV-2000 20:54
 Operator : 1891 Inst ID: gc4.i
 Smp Info : HIGHA,8080-G.b,,3-INDA.sub,,1,5
 Misc Info : 190-100-10
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 22:18 Cal File: D-B8195.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: PITPC044

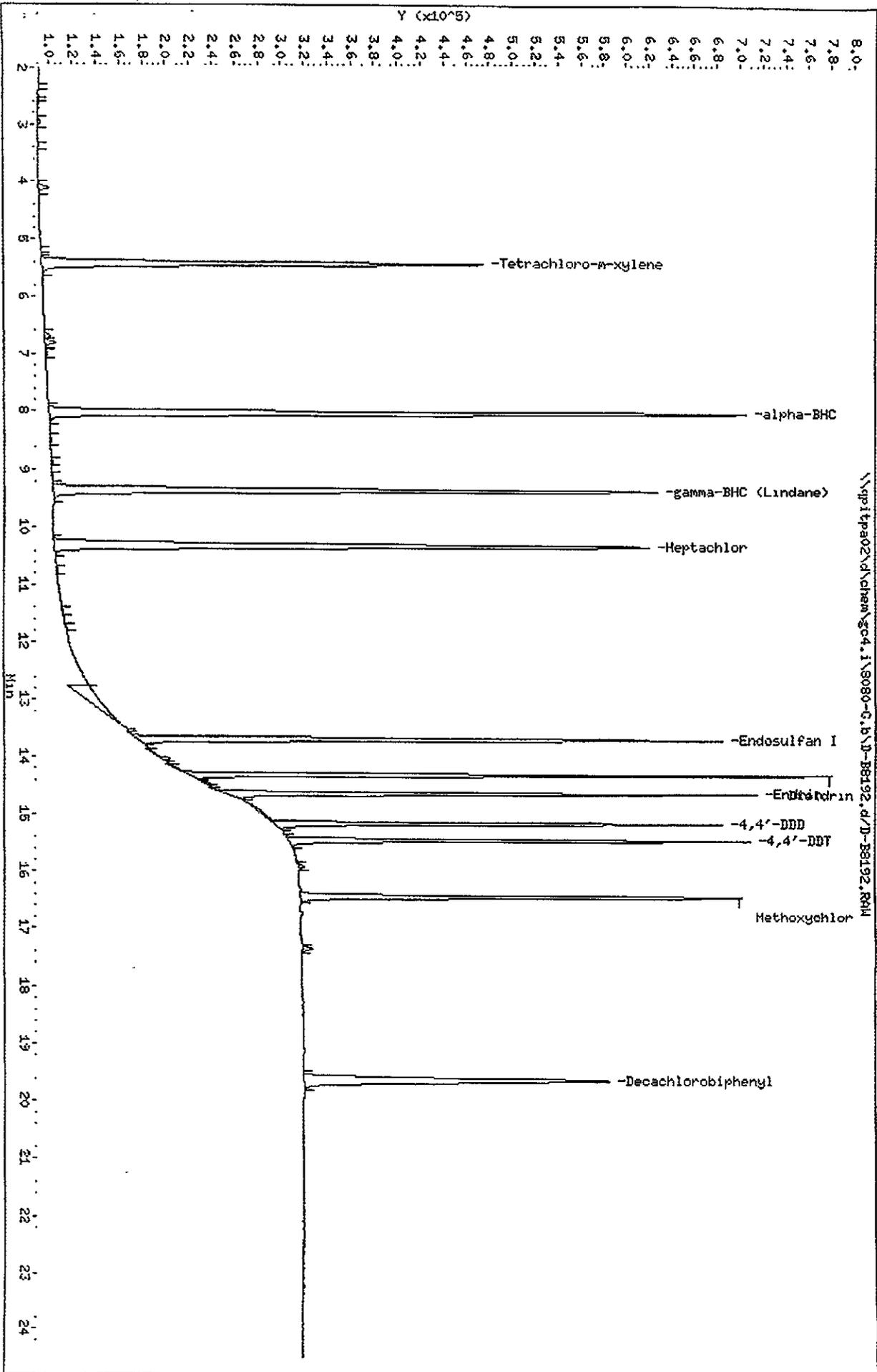
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
\$ 1 Tetrachloro-m-xylene	5.413	5.413	0.000	383590	0.10000	0.08940
5 alpha-BHC	8.020	8.020	0.000	607657	0.10000	0.1047(A)
6 gamma-BHC (Lindane)	9.353	9.353	0.000	526002	0.10000	0.1030(A)
10 Heptachlor	10.306	10.306	0.000	518261	0.10000	0.09962
15 Endosulfan I	13.686	13.686	0.000	509646	0.10000	0.09948
17 Dieldrin	14.300	14.300	0.000	560632	0.10000	0.1034(A)
20 Endrin	14.626	14.626	0.000	462851	0.10000	0.1043(A)
21 4,4'-DDD	15.146	15.146	0.000	391315	0.10000	0.1016(A)
23 4,4'-DDT	15.440	15.440	0.000	401812	0.10000	0.1021(A)
25 Methoxychlor	16.420	16.420	0.000	383802	0.20000	0.2044(A)
\$ 30 Decachlorobiphenyl	19.620	19.620	0.000	266507	0.10000	0.09601

QC Flag Legend

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

Data File: \\sp1tpa02\chem\gc04.i\8080-G.b\D-B8192.d
Date: 07-NOV-2000 20:54
Client ID:
Sample Info: HIGHH,8080-G,b,3-INDA,sub,1,5
Column phase: DB1701

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



STL-Pittsburgh

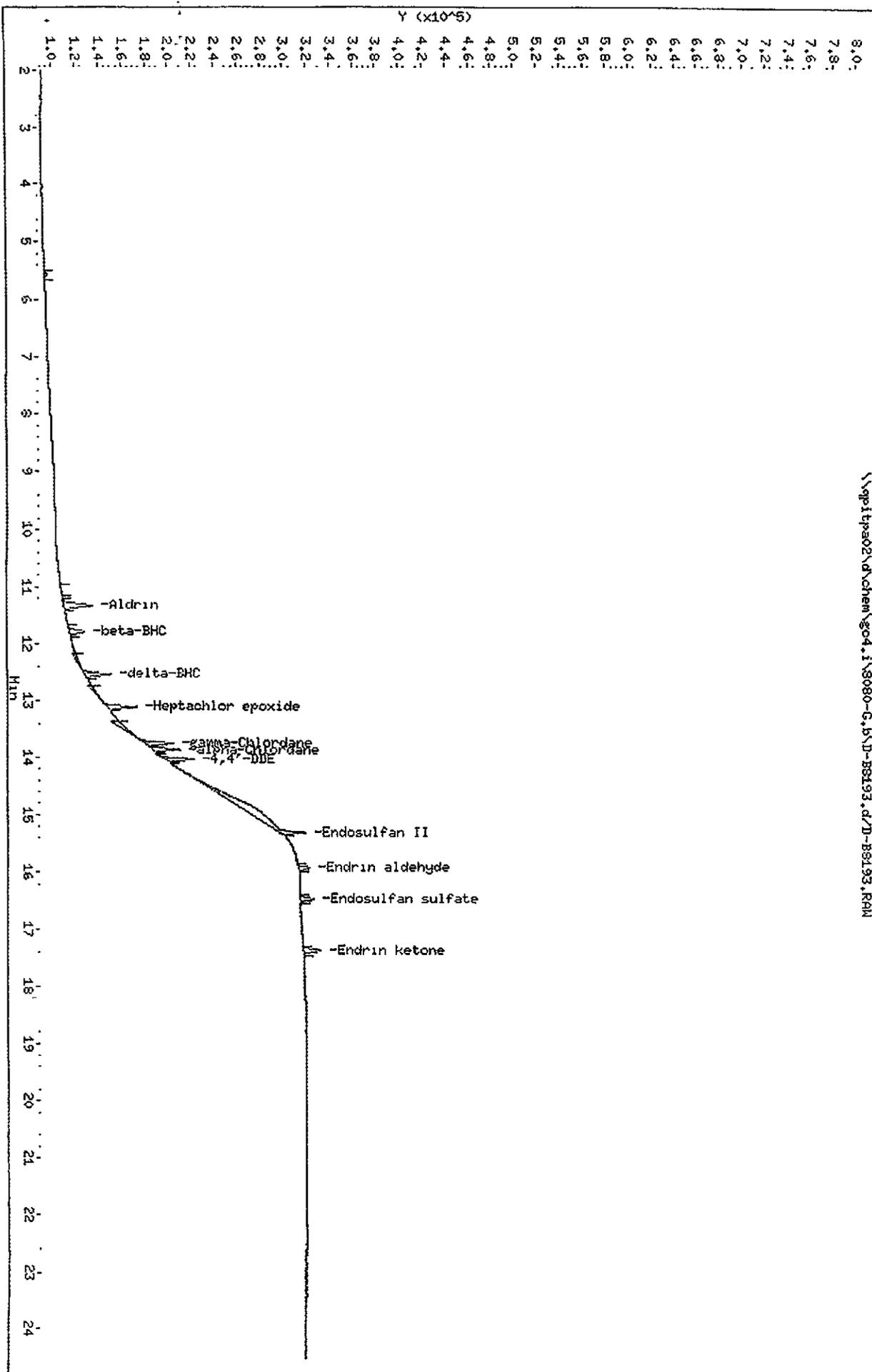
Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8193.d
 Lab Smp Id: LOWB
 Inj Date : 07-NOV-2000 21:22
 Operator : 1891 Inst ID: gc4.i
 Smp Info : LOWB,8080-G.b,,4-INDB.sub,,1,1
 Misc Info : 190-100-12
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 22:18 Cal File: D-B8195.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.320	11.320	0.000	23946	0.00500	0.004876
7 beta-BHC	11.773	11.773	0.000	12483	0.00500	0.004955
8 delta-BHC	12.526	12.526	0.000	22420	0.00500	0.004671
12 Heptachlor epoxide	13.100	13.100	0.000	25816	0.00500	0.004928
13 gamma-Chlordane	13.740	13.740	0.000	25945	0.00500	0.004956
14 alpha-Chlordane	13.846	13.846	0.000	25173	0.00500	0.004904
16 4,4'-DDE	14.020	14.020	0.000	25286	0.00500	0.004901
22 Endosulfan II	15.286	15.286	0.000	22228	0.00500	0.005167
24 Endrin aldehyde	15.893	15.900	-0.007	9678	0.00500	0.004912
26 Endosulfan sulfate	16.446	16.446	0.000	11221	0.00500	0.004833
27 Endrin ketone	17.353	17.353	0.000	15174	0.00500	0.004876

Data File: \\spitpa02\chem\g04.1\8080-G.b\D-B8193.d
Date: 07-NOV-2000 21:22
Client ID:
Sample Info: LONB,8080-G.b,4-INDR,suh,1,1
Column phase: DB1701

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

\\spitpa02\chem\g04.1\8080-G.b\D-B8193.d\I-B8193.RAW



STL-Pittsburgh

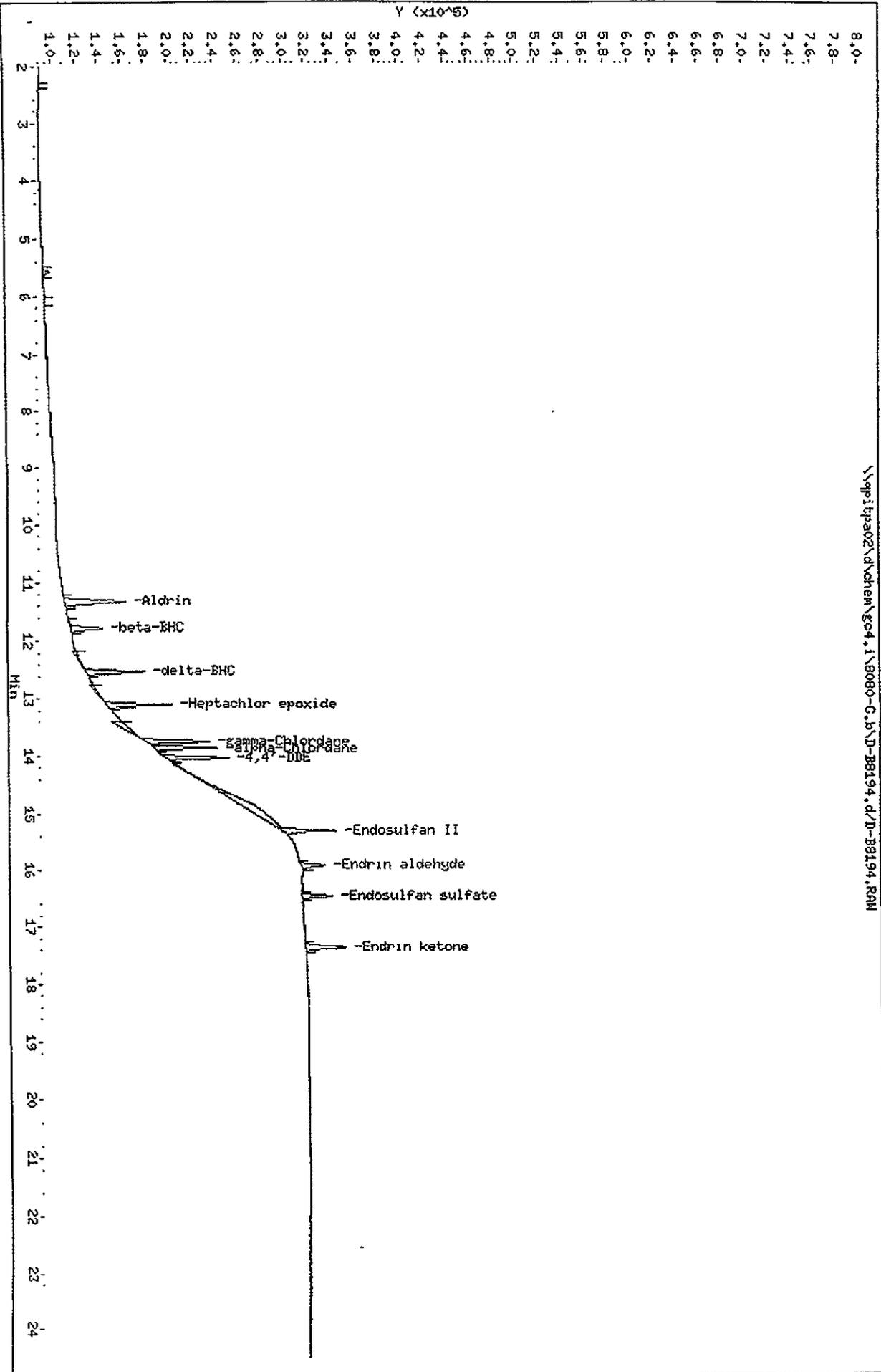
Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8194.d
Lab Smp Id: MLOWB
Inj Date : 07-NOV-2000 21:50
Operator : 1891
Smp Info : MLOWB,8080-G.b,,4-INDB.sub,,1,2
Misc Info : 190-100-13
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 08-Nov-2000 13:49 matkol
Cal Date : 07-NOV-2000 22:18
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSR	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.320	11.320	0.000	52480	0.01000	0.01045
7 beta-BHC	11.773	11.773	0.000	27666	0.01000	0.01065
8 delta-BHC	12.526	12.526	0.000	51511	0.01000	0.01048
12 Heptachlor epoxide	13.100	13.100	0.000	57001	0.01000	0.01057
13 gamma-Chlordane	13.740	13.740	0.000	55753	0.01000	0.01042
14 alpha-Chlordane	13.846	13.846	0.000	55675	0.01000	0.01055
16 4,4'-DDE	14.020	14.020	0.000	55305	0.01000	0.01047
22 Endosulfan II	15.286	15.286	0.000	46478	0.01000	0.01052
24 Endrin aldehyde	15.893	15.900	-0.007	20769	0.01000	0.01035
26 Endosulfan sulfate	16.446	16.446	0.000	24895	0.01000	0.01047
27 Endrin ketone	17.353	17.353	0.000	34069	0.01000	0.01061

Data File: \\pp1tpa02\chem\g04.i\8080-G.b.D-88194.d
Date: 07-NOV-2000 21:50
Client ID:
Sample Info: MLDW,8080-G.b,4-INDB,sub,1,2
Column phases: DB1701

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

\\pp1tpa02\chem\g04.i\8080-G.b.D-88194.d\1-88194.RAW



STL-Pittsburgh

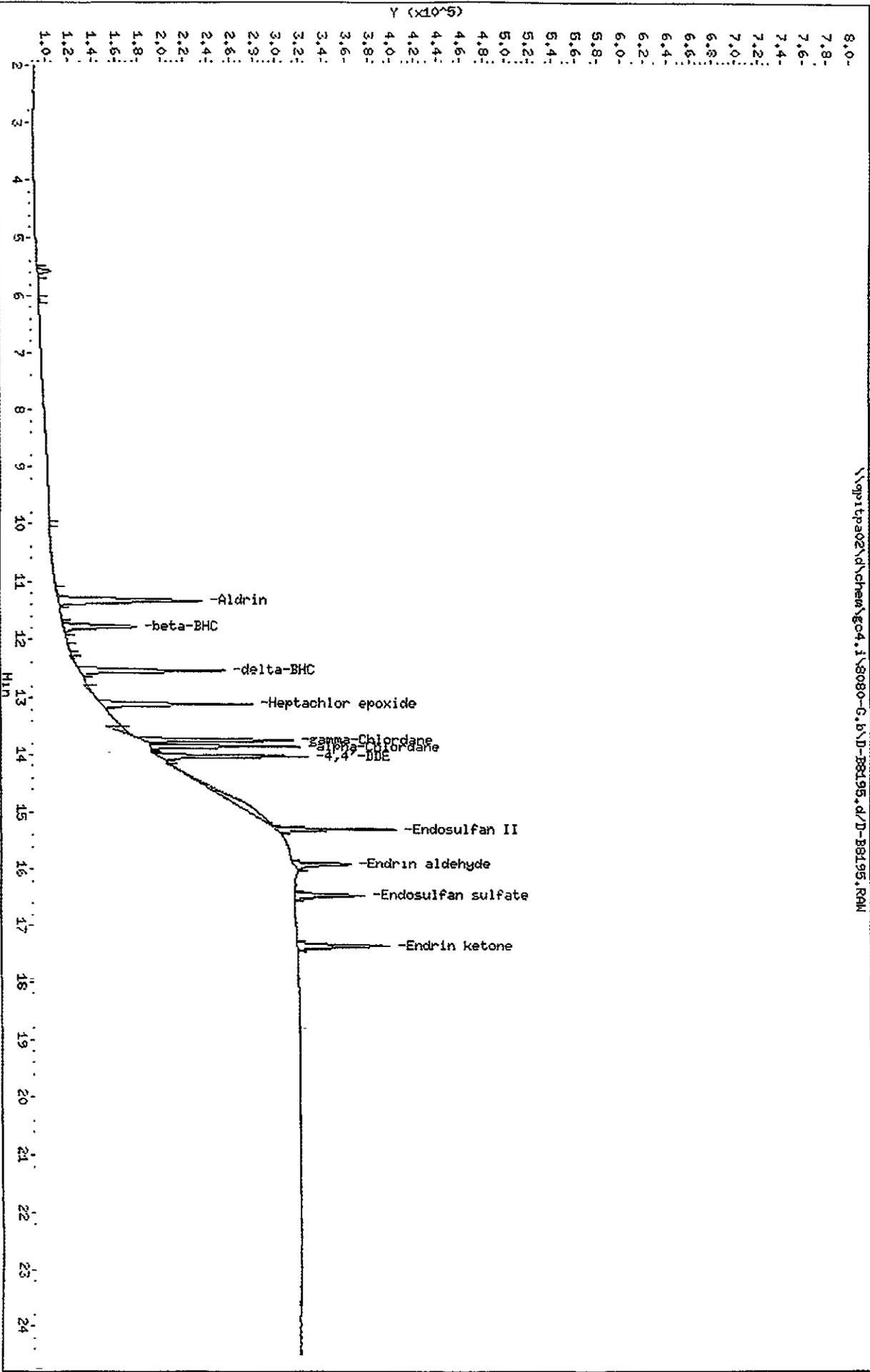
Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8195.d
 Lab Smp Id: MEDB
 Inj Date : 07-NOV-2000 22:18
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDB,8080-G.b,,4-INDB.sub,,1,3
 Misc Info : 190-100-14
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 22:18 Cal File: D-B8195.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.320	11.320	0.000	125834	0.02500	0.02500
7 beta-BHC	11.773	11.773	0.000	63283	0.02500	0.02500
8 delta-BHC	12.526	12.526	0.000	127877	0.02500	0.02500
12 Heptachlor epoxide	13.100	13.100	0.000	132869	0.02500	0.02500
13 gamma-Chlordane	13.740	13.740	0.000	132017	0.02500	0.02500
14 alpha-Chlordane	13.846	13.846	0.000	130788	0.02500	0.02500
16 4,4'-DDE	14.020	14.020	0.000	131546	0.02500	0.02500
22 Endosulfan II	15.286	15.286	0.000	103940	0.02500	0.02500
24 Endrin aldehyde	15.900	15.900	0.000	50122	0.02500	0.02500
26 Endosulfan sulfate	16.446	16.446	0.000	59982	0.02500	0.02500
27 Endrin ketone	17.353	17.353	0.000	79733	0.02500	0.02500

Data File: \\pp1tpa02\chem\gc4.1\8080-G.b\D-B8195.d
Date: 07-NOV-2000 22:18
Client ID:
Sample Info: HEDJ,8080-G.b,4-1\HDB,sdb,1,3
Column phase: DB1.701

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

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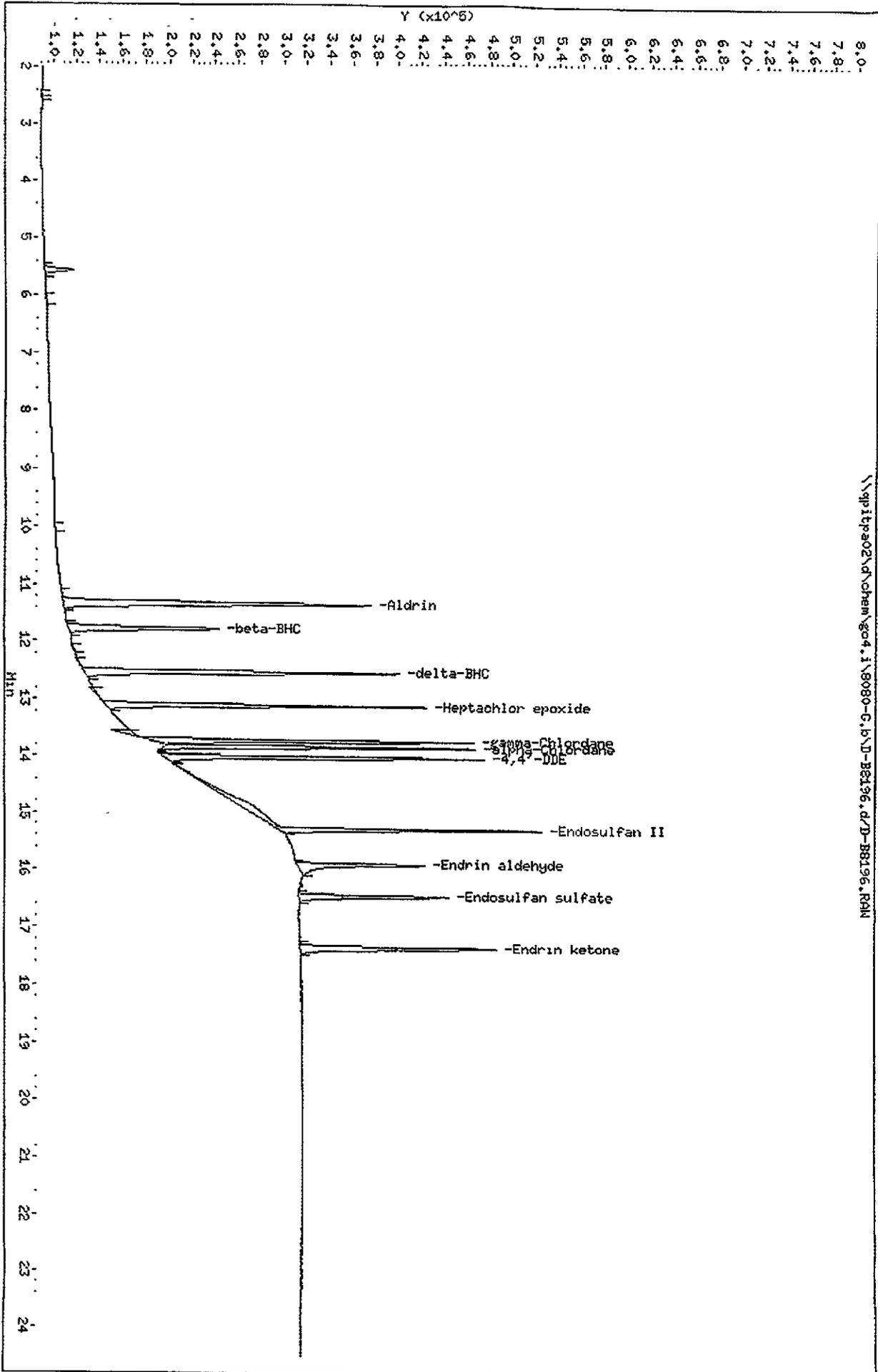
STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8196.d
 Lab Smp Id: MHIGHB
 Inj Date : 07-NOV-2000 22:45
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MHIGHB,8080-G.b,,4-INDB.sub,,1,4
 Misc Info : 190-101-1
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 22:45 Cal File: D-B8196.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: PITPC044

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.326	11.320	0.006	268386	0.05000	0.05253
7 beta-BHC	11.773	11.773	0.000	131436	0.05000	0.05044
8 delta-BHC	12.526	12.526	0.000	275569	0.05000	0.05440
12 Heptachlor epoxide	13.106	13.100	0.006	279826	0.05000	0.05140
13 gamma-Chlordane	13.740	13.740	0.000	280178	0.05000	0.05177
14 alpha-Chlordane	13.846	13.846	0.000	271467	0.05000	0.05107
16 4,4'-DDE	14.020	14.020	0.000	280794	0.05000	0.05232
22 Endosulfan II	15.286	15.286	0.000	230102	0.05000	0.05155
24 Endrin aldehyde	15.900	15.900	0.000	110200	0.05000	0.05362
26 Endosulfan sulfate	16.446	16.446	0.000	130480	0.05000	0.05357
27 Endrin ketone	17.353	17.353	0.000	170907	0.05000	0.05239

Data File: \\sp1tpa02\chem\gc4.1\8080-G.b\B-BE136.d
Date: 07-NOV-2000 22:45
Client ID:
Sample Info: RHIGB,8080-G.b,4-IND,sub,1,4
Column phase: DB1701

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



STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\8080-G.b\D-B8197.d
 Lab Smp Id: HIGHB
 Inj Date : 07-NOV-2000 23:13
 Operator : 1891 Inst ID: gc4.i
 Smp Info : HIGHB,8080-G.b,,4-INDB.sub,,1,5
 Misc Info : 190-101-2
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.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: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.326	11.320	0.006	516393	0.10000	0.1008(A)
7 beta-BHC	11.773	11.773	0.000	250454	0.10000	0.09687
8 delta-BHC	12.526	12.526	0.000	550802	0.10000	0.1069(A)
12 Heptachlor epoxide	13.100	13.100	0.000	539045	0.10000	0.09922
13 gamma-Chlordane	13.740	13.740	0.000	548393	0.10000	0.1010(A)
14 alpha-Chlordane	13.846	13.846	0.000	535480	0.10000	0.1006(A)
16 4,4'-DDE	14.020	14.020	0.000	543517	0.10000	0.1010(A)
22 Endosulfan II	15.286	15.286	0.000	447513	0.10000	0.1002(A)
24 Endrin aldehyde	15.900	15.900	0.000	214826	0.10000	0.1036(A)
26 Endosulfan sulfate	16.446	16.446	0.000	263577	0.10000	0.1065(A)
27 Endrin ketone	17.353	17.353	0.000	333282	0.10000	0.1017(A)

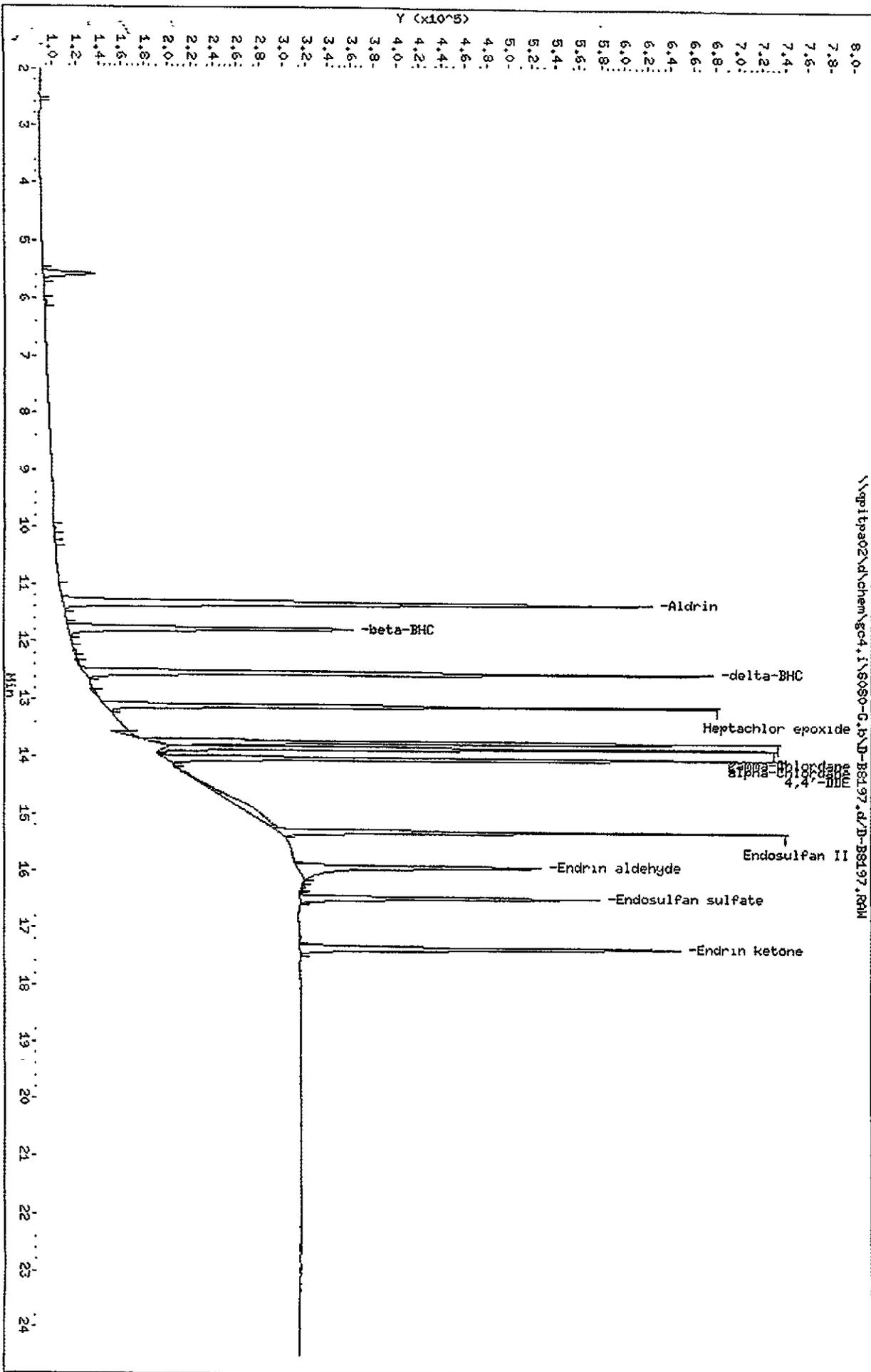
QC Flag Legend

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

6741247

Data File: \\p1tpa02\chem\gc4.i\8080-G.b\ND-B8197.d
Date: 07-NOV-2000 23:13
Client ID:
Sample Info: HIGH,8080-G.b,4-IND,sub,1,5
Column phase: DB1701

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



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8198.d
 Lab Smp Id: 2ND A
 Inj Date : 07-NOV-2000 23:41
 Operator : 1891
 Smp Info : 2ND A,8080-G.b,, INDA.sub,,2,3
 Misc Info : 190-101-7
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 08-Nov-2000 13:49 matkol
 Cal Date : 07-NOV-2000 23:13
 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-B8197.d
 Continuing Calibration Sample

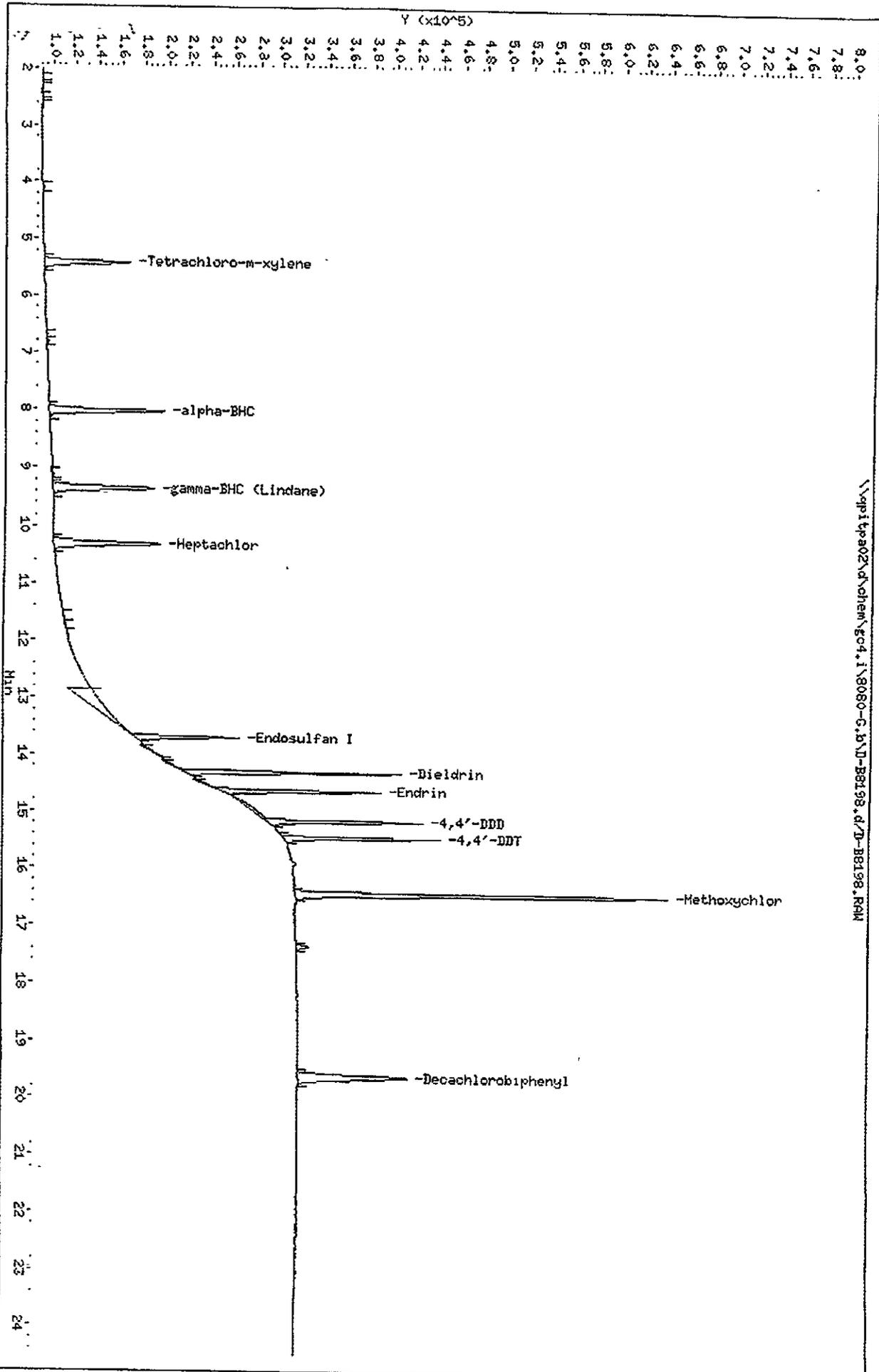
Compound Sublist: INDA.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.413	5.413	0.000	75013	0.02500	0.01748
5 alpha-BHC	8.020	8.020	0.000	100814	0.02500	0.01737
6 gamma-BHC (Lindane)	9.353	9.353	0.000	89158	0.02500	0.01747
10 Heptachlor	10.306	10.306	0.000	92838	0.02500	0.01784
15 Endosulfan I	13.686	13.686	0.000	92508	0.02500	0.01806
17 Dieldrin	14.300	14.300	0.000	191300	0.02500	0.03529
20 Endrin	14.626	14.626	0.000	141572	0.02500	0.03191
21 4,4'-DDD	15.146	15.146	0.000	137659	0.02500	0.03573
23 4,4'-DDT	15.440	15.440	0.000	138057	0.02500	0.03509
25 Methoxychlor	16.420	16.420	0.000	326470	0.05000	0.1738
‡ 30 Decachlorobiphenyl	19.620	19.620	0.000	97384	0.02500	0.03508

Data File: \\vp1tpa02\chem\gc4,1\8080-G,b\D-B8198.d
Date: 07-NOV-2000 23:41
Client ID:
Sample Info: 2ND 8,8080-G,b,,INDA,sub,,2,3
Column phase: DB4701

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

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STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\8080-G.b\D-B8199.d
 Lab Smp Id: 2ND B
 Inj Date : 08-NOV-2000 00:09
 Operator : 1891
 Smp Info : 2ND B,8080-G.b,,INDB.sub,,2,3
 Misc Info : 190-101-10
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 08-Nov-2000 13:49 matkol
 Cal Date : 07-NOV-2000 23:13
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC044

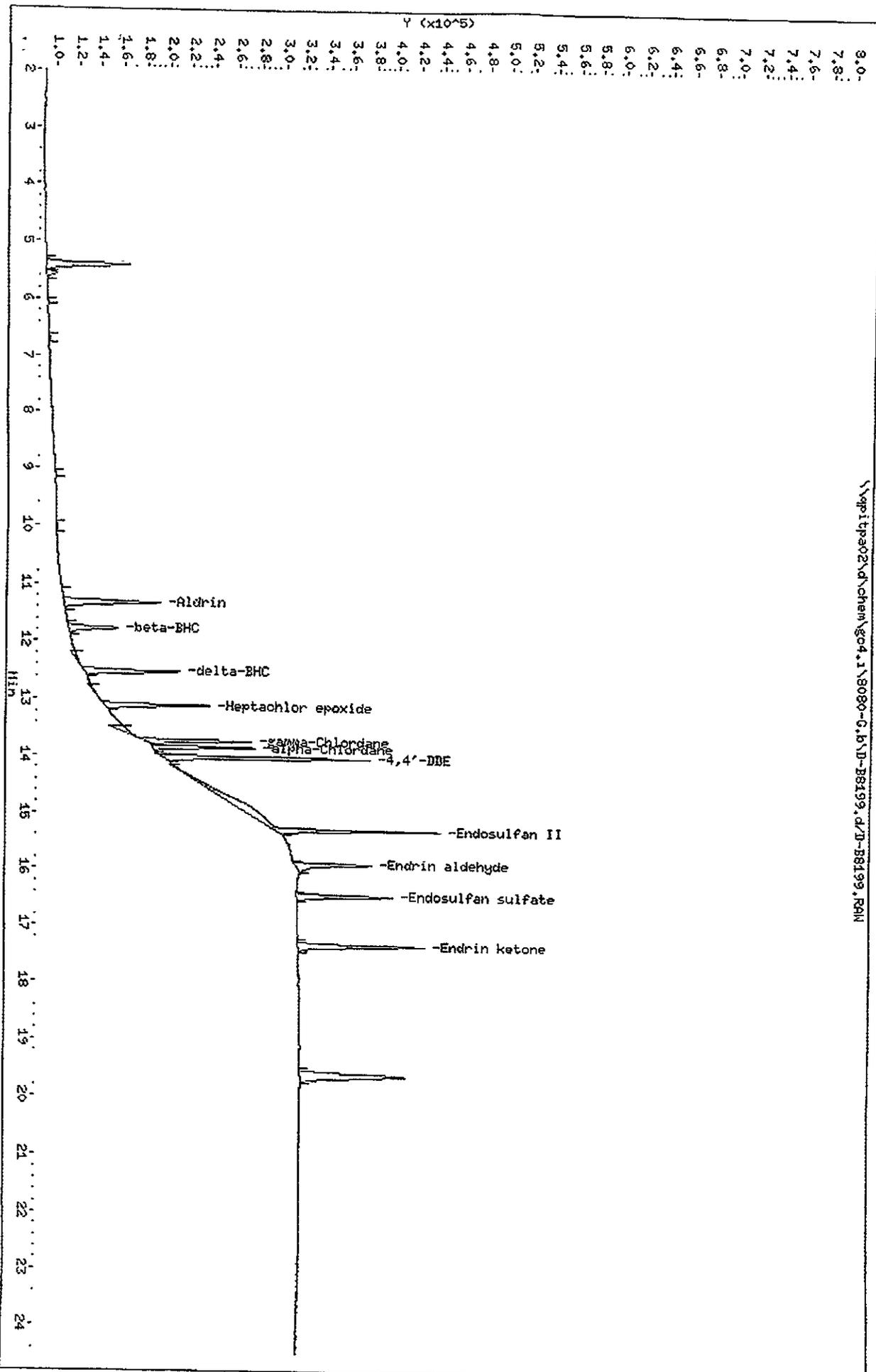
Inst ID: gc4.i
 Quant Type: ESTD
 Cal File: D-B8197.d
 Continuing Calibration Sample
 Compound Sublist: INDB.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.320	11.320	0.000	85334	0.02500	0.01666
7 beta-BHC	11.773	11.773	0.000	43544	0.02500	0.01684
8 delta-BHC	12.526	12.526	0.000	84450	0.02500	0.01638
12 Heptachlor epoxide	13.106	13.100	0.006	92626	0.02500	0.01705
13 gamma-Chlordane	13.740	13.740	0.000	94344	0.02500	0.01738
14 alpha-Chlordane	13.846	13.846	0.000	90348	0.02500	0.01697
16 4,4'-DDE	14.020	14.020	0.000	183153	0.02500	0.03404
22 Endosulfan II	15.286	15.286	0.000	145633	0.02500	0.03261
24 Endrin aldehyde	15.900	15.900	0.000	68246	0.02500	0.03291
26 Endosulfan sulfate	16.446	16.446	0.000	84712	0.02500	0.03422
27 Endrin ketone	17.353	17.353	0.000	112432	0.02500	0.03432

Data File: \\pp1tpa02\chem\gc4,1\8080-G,b\D-B8199.d
Date: 08-NOV-2000 00:09
Client ID:
Sample Info: 2ND B,8080-G,b,INDB,sub,,2,3

Column phase: DB1701

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



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8200.d
Lab Smp Id: EVALB
Inj Date : 08-NOV-2000 08:38
Operator : 1891 Inst ID: gc4.i
Smp Info : EVALB,8080-G.b,,EVALBR.sub,,3,1
Misc Info : 190-102-10
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 08-Nov-2000 13:49 matkol Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.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	CONCENTRATIONS					
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ng)	FINAL (ng)
§ 1 Tetrachloro-m-xylene	5.413	5.413	0.000	84653	0.01973	0.01973 (R)
16 4,4'-DDE	Compound Not Detected.					
20 Endrin	14.626	14.626	0.000	109654	0.02472	0.02472
21 4,4'-DDD	Compound Not Detected.					
23 4,4'-DDT	15.440	15.440	0.000	96792	0.02460	0.02460
24 Endrin aldehyde	Compound Not Detected.					
27 Endrin ketone	Compound Not Detected.					
§ 30 Decachlorobiphenyl	19.620	19.620	0.000	55852	0.02012	0.02012 (R)

QC Flag Legend

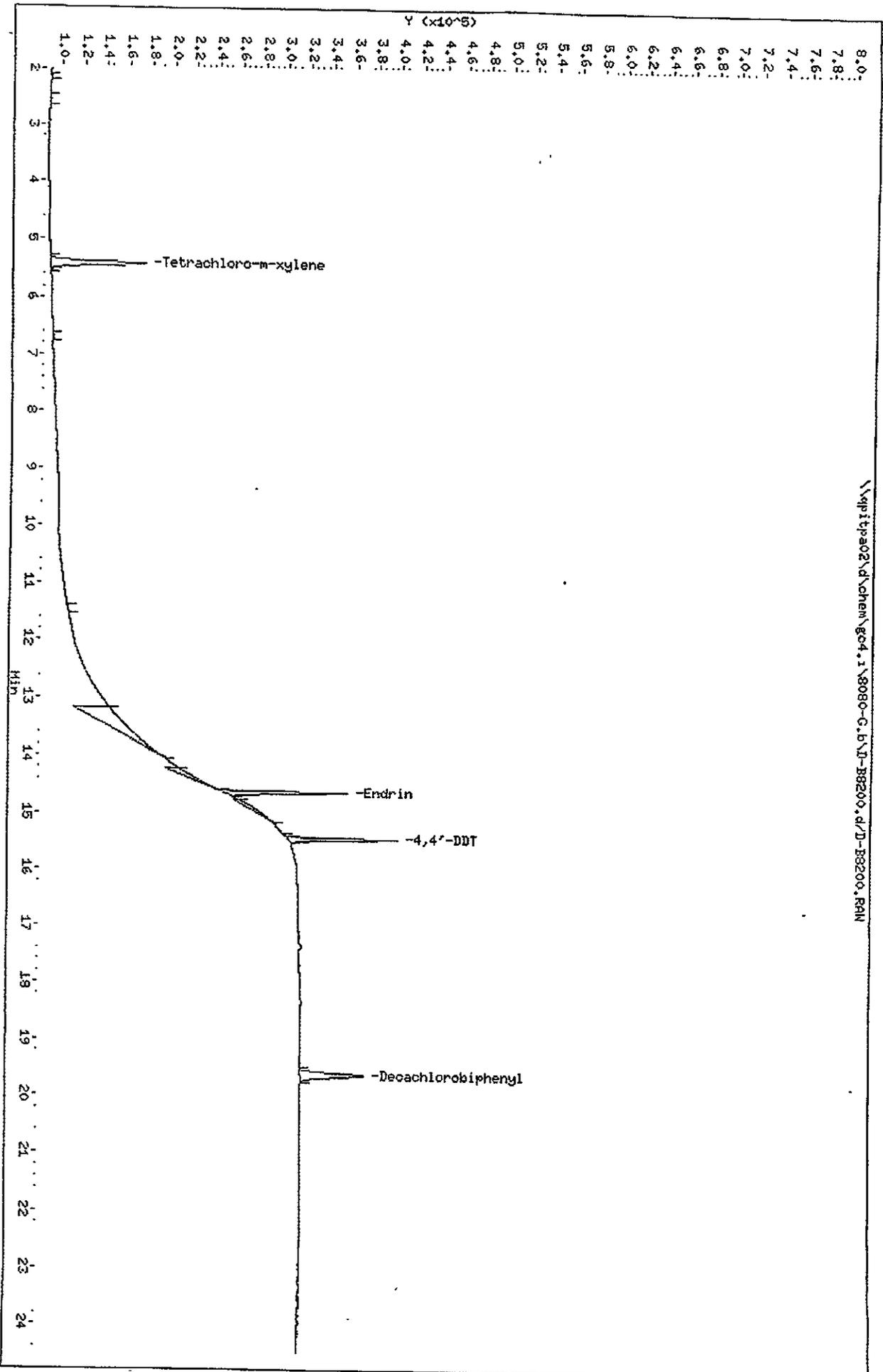
R - Spike/Surrogate failed recovery limits.

6741253

Data File: \\sp1tpa02\chem\gc4.1\8080-G.b\J-B8200.d
Date: 08-NOV-2000 08:38
Client ID:
Sample Info: EWALB,8080-G.b,EWALBR,sub,,3,1
Column phase: DB1704

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

\\sp1tpa02\chem\gc4.1\8080-G.b\J-B8200.d\J-B8200.PRN



STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\8080-G.b\D-B8361.d
Lab Smp Id: EVALB
Inj Date : 21-NOV-2000 13:52
Operator : 1891 Inst ID: gc4.i
Smp Info : EVALB,8080-G.b,,EVALBR.sub,,3,1
Misc Info : 190-102-10
Comment :
Method : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 22-Nov-2000 11:08 eppingerd Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.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	5.406	5.406	0.000	79244	0.01847	0.01847 (R)
16 4,4'-DDE	14.020	14.006	0.014	4697	<0.0	0.0008730 (M)
20 Endrin	14.613	14.613	0.000	94935	0.02140	0.02140
21 4,4'-DDD	15.180	15.140	0.040	0		(M)
23 4,4'-DDT	15.426	15.426	0.000	86430	0.02197	0.02197
24 Endrin aldehyde	15.880	15.880	0.000	2897	0.00140	0.001397 (M)
27 Endrin ketone	17.326	17.326	0.000	4109	0.00125	0.001254 (M)
§ 30 Decachlorobiphenyl	19.593	19.593	0.000	51147	0.01843	0.01842 (R)

QC Flag Legend

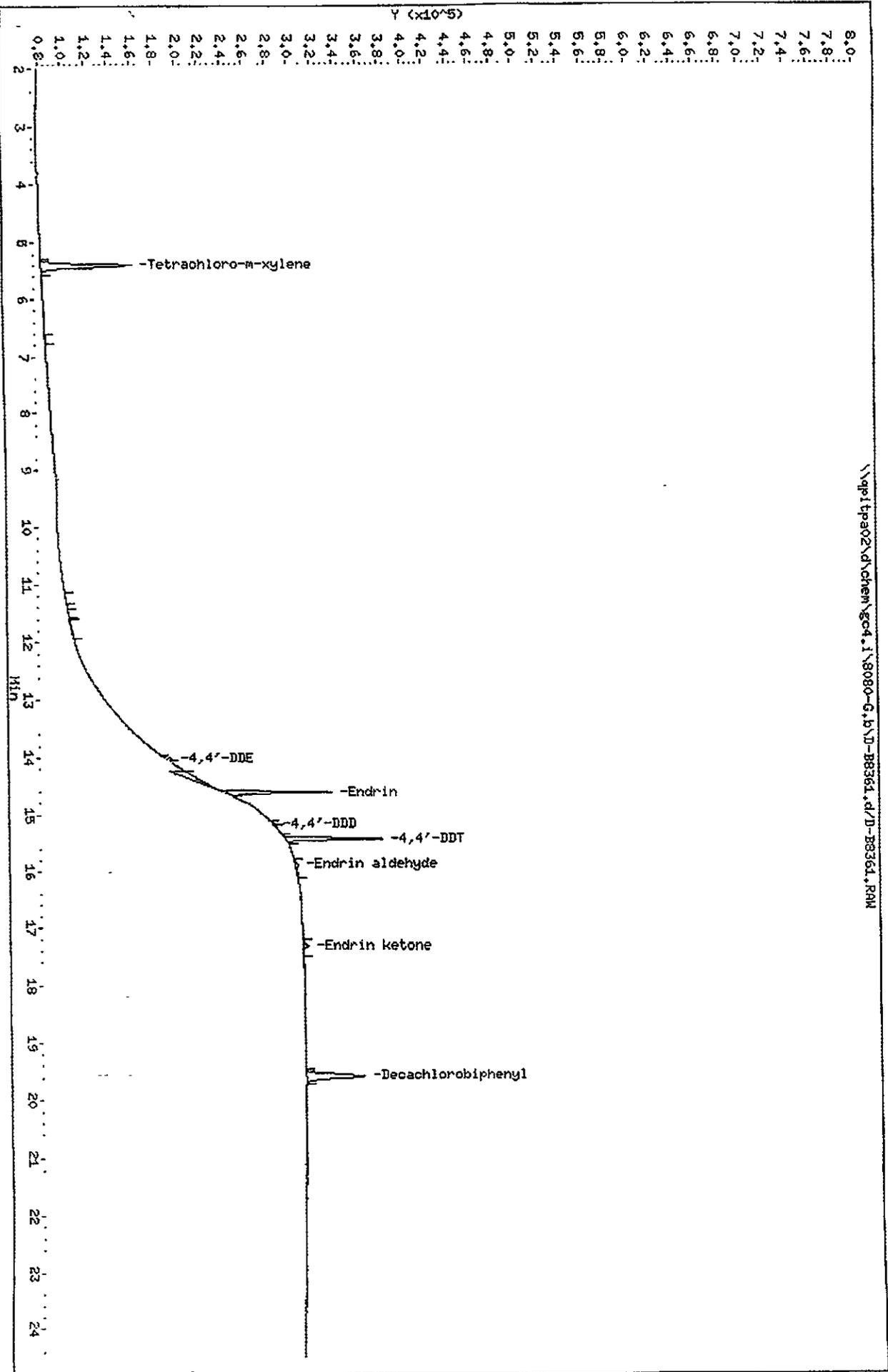
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

DDT 5.2%
ENDRIN 6.9%

Data File: \\qpl1tpa02\chem\gc4.1\8080-G,b\J-D-B8361.d
Date: 21-NOV-2000 13:52
Client ID:
Sample Info: EVAL.B,8080-G,b,EVAL.BR.sub,,3,1
Column phase: DB1701

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

\\qpl1tpa02\chem\gc4.1\8080-G,b\J-D-B8361.d\J-D-B8361.RAW



Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8362.d
Report Date: 22-Nov-2000 11:10

674 1256

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8362.d
Lab Smp Id: MEDTOX
Inj Date : 21-NOV-2000 14:20
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDTOX,8080-G.b,,1-TOX.sub,,2,3
Misc Info : 190-98-12
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 22-Nov-2000 11:08 eppingerd Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.d
Als bottle: 1 Continuing Calibration Sample
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	15.026	15.026	0.000	39581	1.00000	0.8963 (M)
\$ 1 Tetrachloro-m-xylene	5.406	5.406	0.000	100863	0.02500	0.02351
\$ 30 Decachlorobiphenyl	19.593	19.593	0.000	64889	0.02500	0.02338

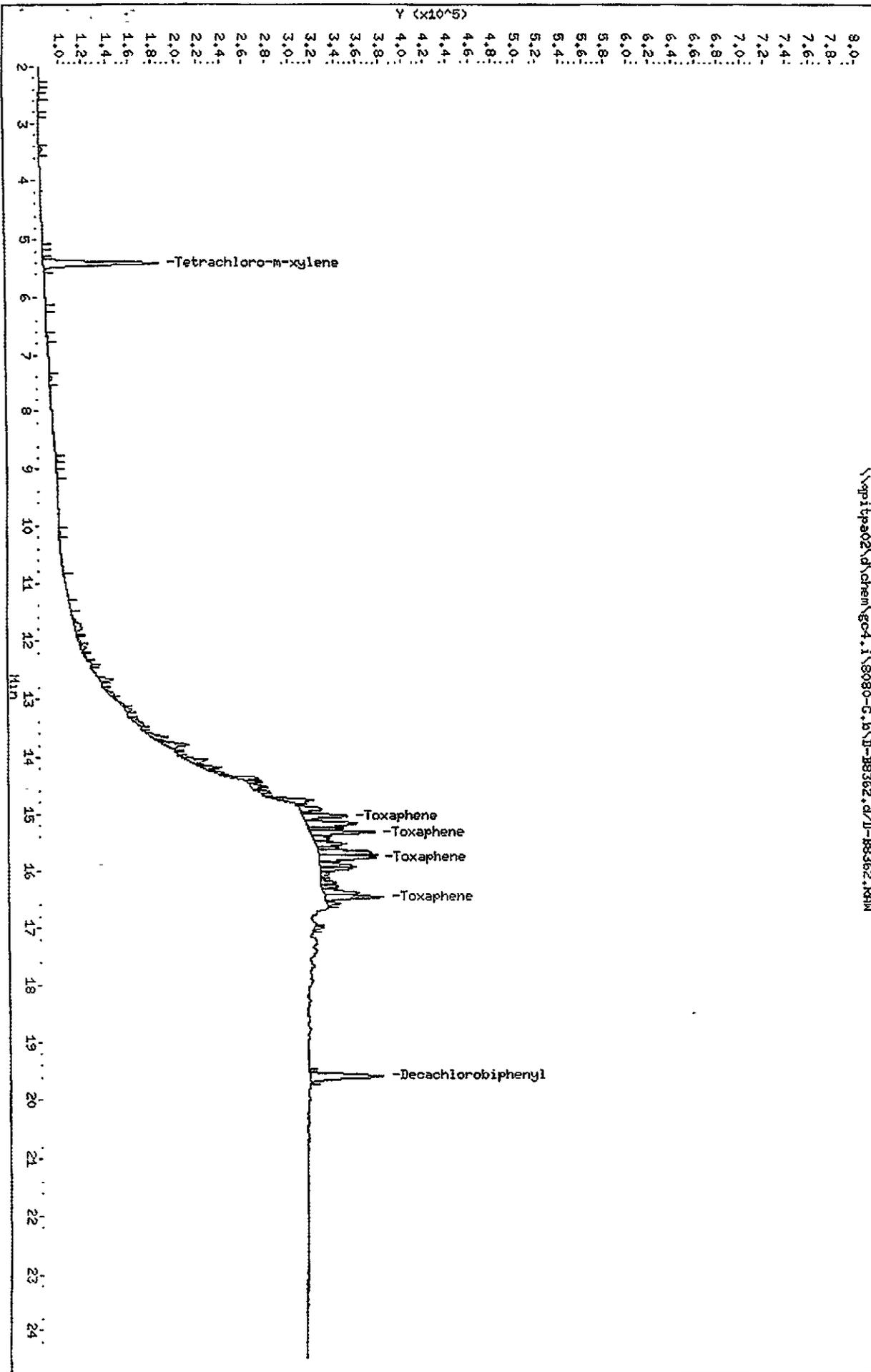
QC Flag Legend

M - Compound response manually integrated.

Data File: \\ypitpa02\chem\gc4.i\8080-G.b\1-D-88362.d
Date: 21-NOV-2000 14:20
Client ID:
Sample Info: HEDTOX, 8080-G.b, 1-TOX, sub, 2, 3
Column phase: DB1701

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

\\ypitpa02\chem\gc4.i\8080-G.b\1-D-88362.d\1-D-88362.RAW



Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8363.d
Report Date: 22-Nov-2000 11:11

674 1258

STL-Pittsburgh

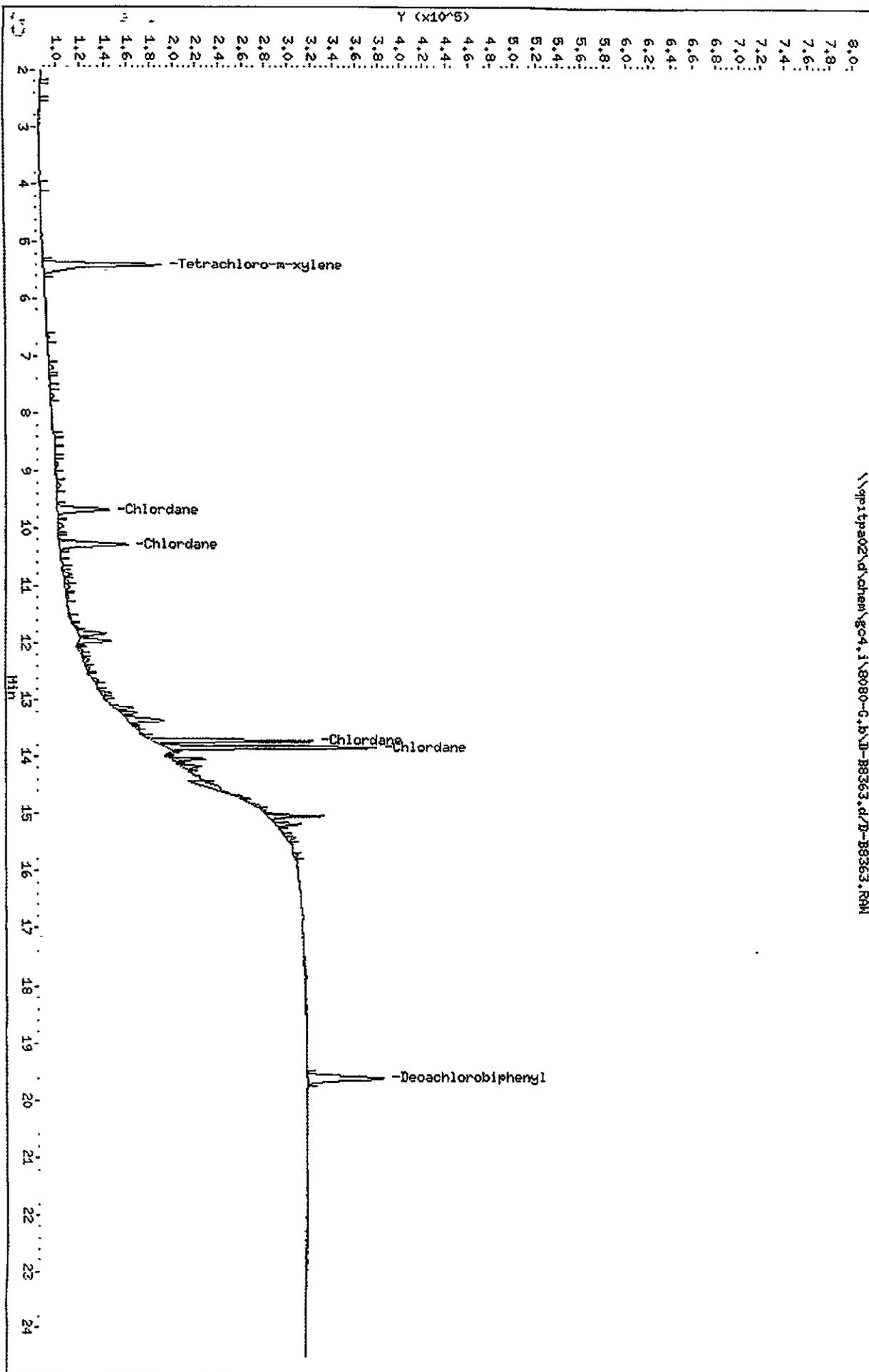
Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8363.d
Lab Smp Id: MEDCHLOR
Inj Date : 21-NOV-2000 14:48
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDCHLOR,8080-G.b,,2-CHLO.sub,,2,3
Misc Info : 190-102-9
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 22-Nov-2000 11:08 eppingerd Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.d
Als bottle: 1 Continuing Calibration Sample
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	9.680	9.680	0.000	44284	0.25000	0.2675
\$ 1 Tetrachloro-m-xylene	5.406	5.406	0.000	103069	0.02500	0.02402
\$ 30 Decachlorobiphenyl	19.593	19.593	0.000	67380	0.02500	0.02427

Data File: \\xp1tpa02\chem\gc4.i\8080-G,b,D-B8363.d
Date: 21-NOV-2000 14:48
Client ID:
Sample Info: HEDCHLDR,8080-G,b,2-CHLO.sub,2,3
Column phase: DB1701

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

\\xp1tpa02\chem\gc4.i\8080-G,b,D-B8363.d\7-B8363.RAW



STL-Pittsburgh

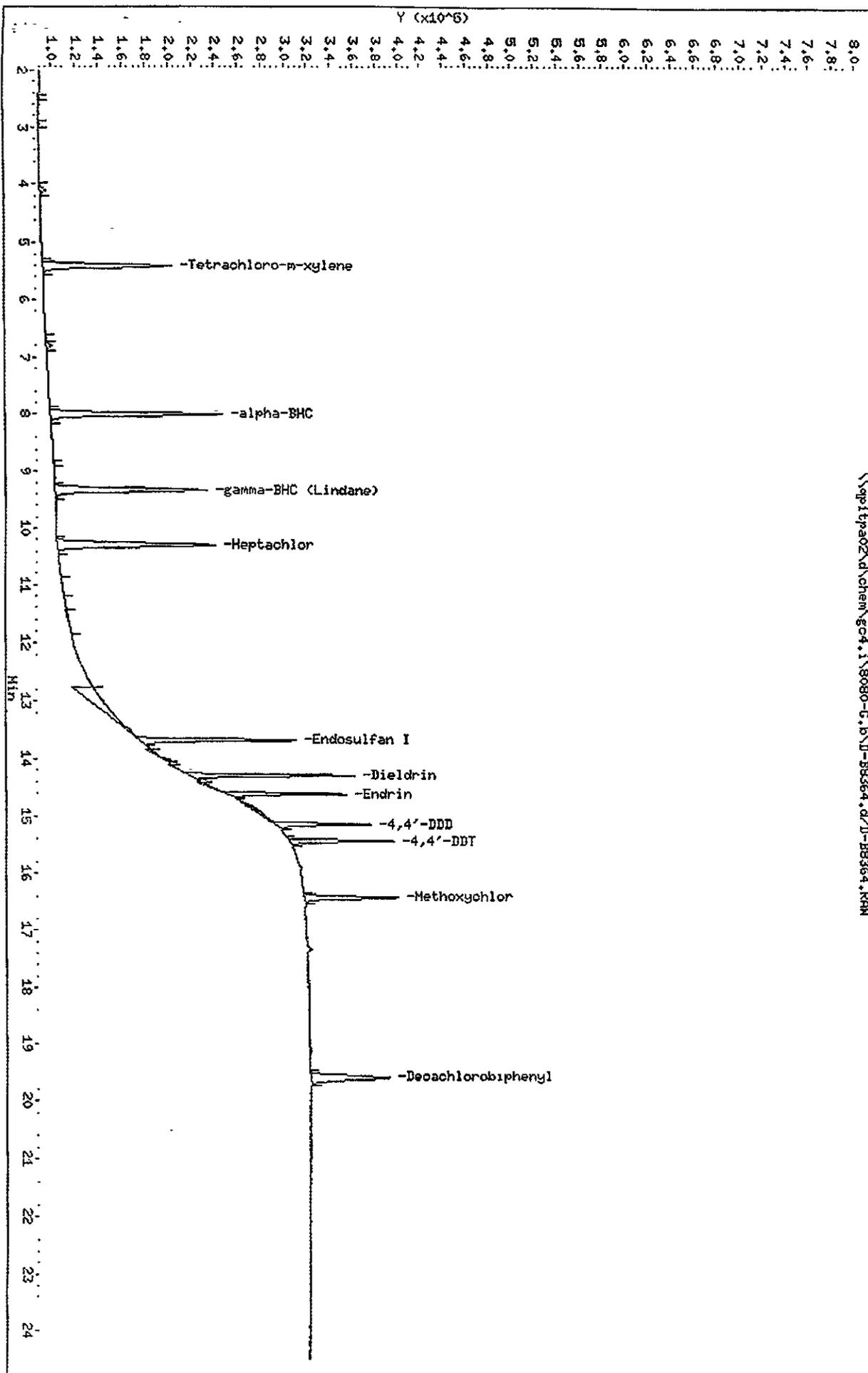
Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8364.d
 Lab Smp Id: MEDA
 Inj Date : 21-NOV-2000 15:16
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDA,8080-G.b,,INDA.sub,,2,3
 Misc Info : 190-100-8
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 22-Nov-2000 11:08 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.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	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.406	5.406	0.000	111576	0.02500	0.02600
5 alpha-BHC	8.000	8.000	0.000	149338	0.02500	0.02574
6 gamma-BHC (Lindane)	9.326	9.326	0.000	132256	0.02500	0.02591
10 Heptachlor	10.286	10.286	0.000	137825	0.02500	0.02649
15 Endosulfan I	13.673	13.673	0.000	135910	0.02500	0.02653
17 Dieldrin	14.286	14.286	0.000	143618	0.02500	0.02650
20 Endrin	14.613	14.613	0.000	105216	0.02500	0.02372
21 4,4'-DDD	15.140	15.140	0.000	85025	0.02500	0.02207
23 4,4'-DDT	15.426	15.426	0.000	92431	0.02500	0.02350
25 Methoxychlor	16.406	16.406	0.000	82413	0.05000	0.04388
§ 30 Decachlorobiphenyl	19.593	19.593	0.000	69035	0.02500	0.02487

Data File: \\ppltpa02\chem\gc4.i\8080-G.b.D-88364.d
Date: 21-NOV-2000 15:16
Client ID:
Sample Info: HEDR,8080-G.b.,INDR,sub,,2,3
Column Phase: DB1701

Instrument: gc4.i
Operator: 1894
Column diameter: 0.53

\\ppltpa02\chem\gc4.i\8080-G.b.D-88364.d\D-88364.RAW



STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\8080-G.b\D-B8365.d
Lab Smp Id: MEDB
Inj Date : 21-NOV-2000 15:44
Operator : 1891
Smp Info : MEDB,8080-G.b,,INDB.sub,,2,3
Misc Info : 190-100-14
Comment :
Method : \\gpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 22-Nov-2000 11:08 eppingerd
Cal Date : 07-NOV-2000 23:13
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC061

Inst ID: gc4.i

Quant Type: ESTD
Cal File: D-B8197.d

Continuing Calibration Sample

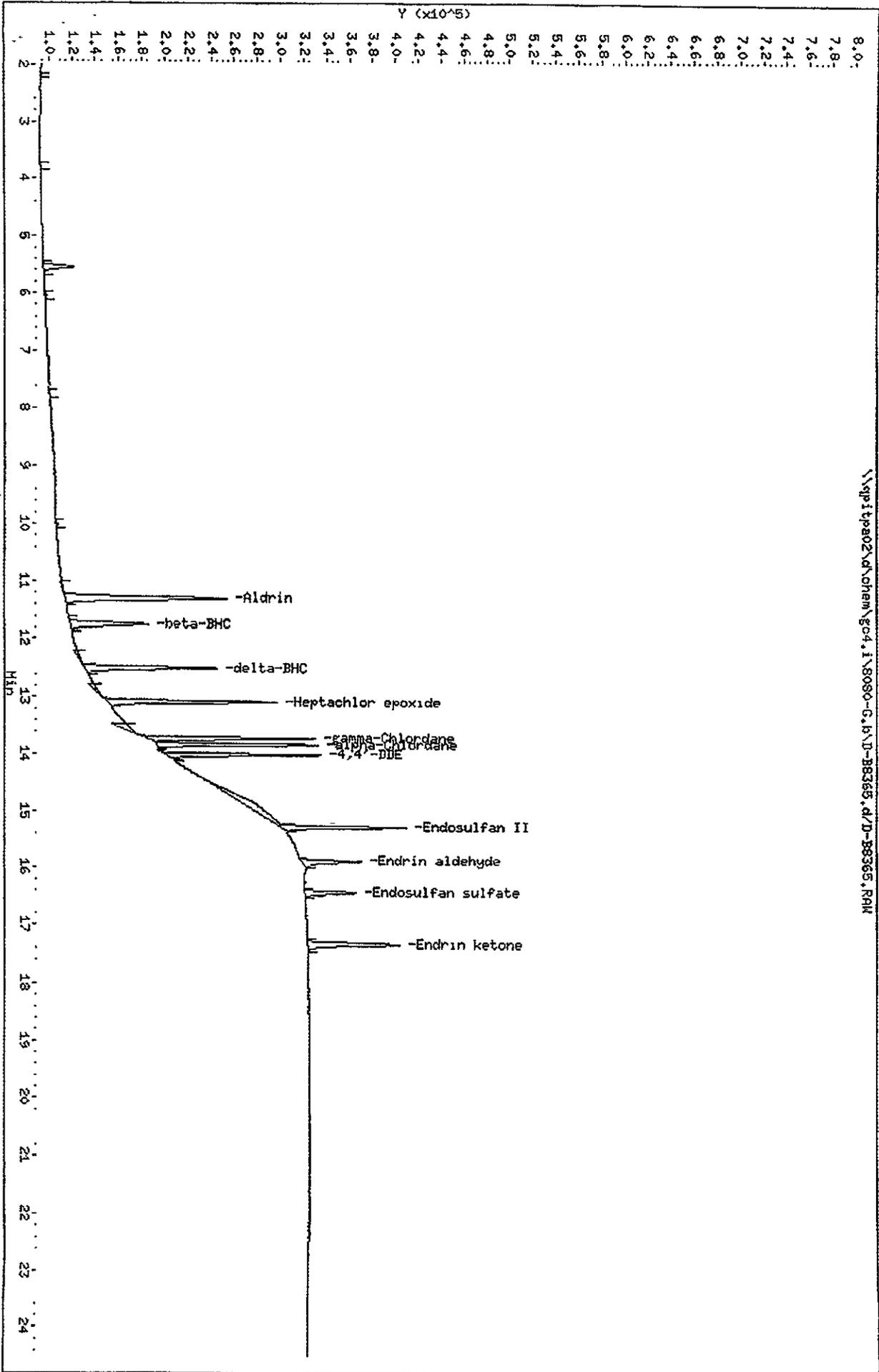
Compound Sublist: INDB.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.300	11.300	0.000	140911	0.02500	0.02752
7 beta-BHC	11.746	11.746	0.000	67949	0.02500	0.02628
8 delta-BHC	12.506	12.506	0.000	114773	0.02500	0.02227
12 Heptachlor epoxide	13.086	13.086	0.000	148014	0.02500	0.02724
13 gamma-Chlordane	13.720	13.720	0.000	146007	0.02500	0.02691
14 alpha-Chlordane	13.833	13.833	0.000	139996	0.02500	0.02630
16 4,4'-DDE	14.006	14.006	0.000	135860	0.02500	0.02525
22 Endosulfan II	15.273	15.273	0.000	110150	0.02500	0.02467
24 Endrin aldehyde	15.880	15.880	0.000	51701	0.02500	0.02493
26 Endosulfan sulfate	16.426	16.426	0.000	44171	0.02500	0.01784
27 Endrin ketone	17.326	17.326	0.000	79954	0.02500	0.02440

6741263

Data File: \\sp1tpa02\chem\gc4.1\8080-G.b\D-88365.d
Date: 21-NOV-2000 15:44
Client ID:
Sample Info: NEDB,8080-G.b, INDB,sub,2,3
Column phase: DB1701

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



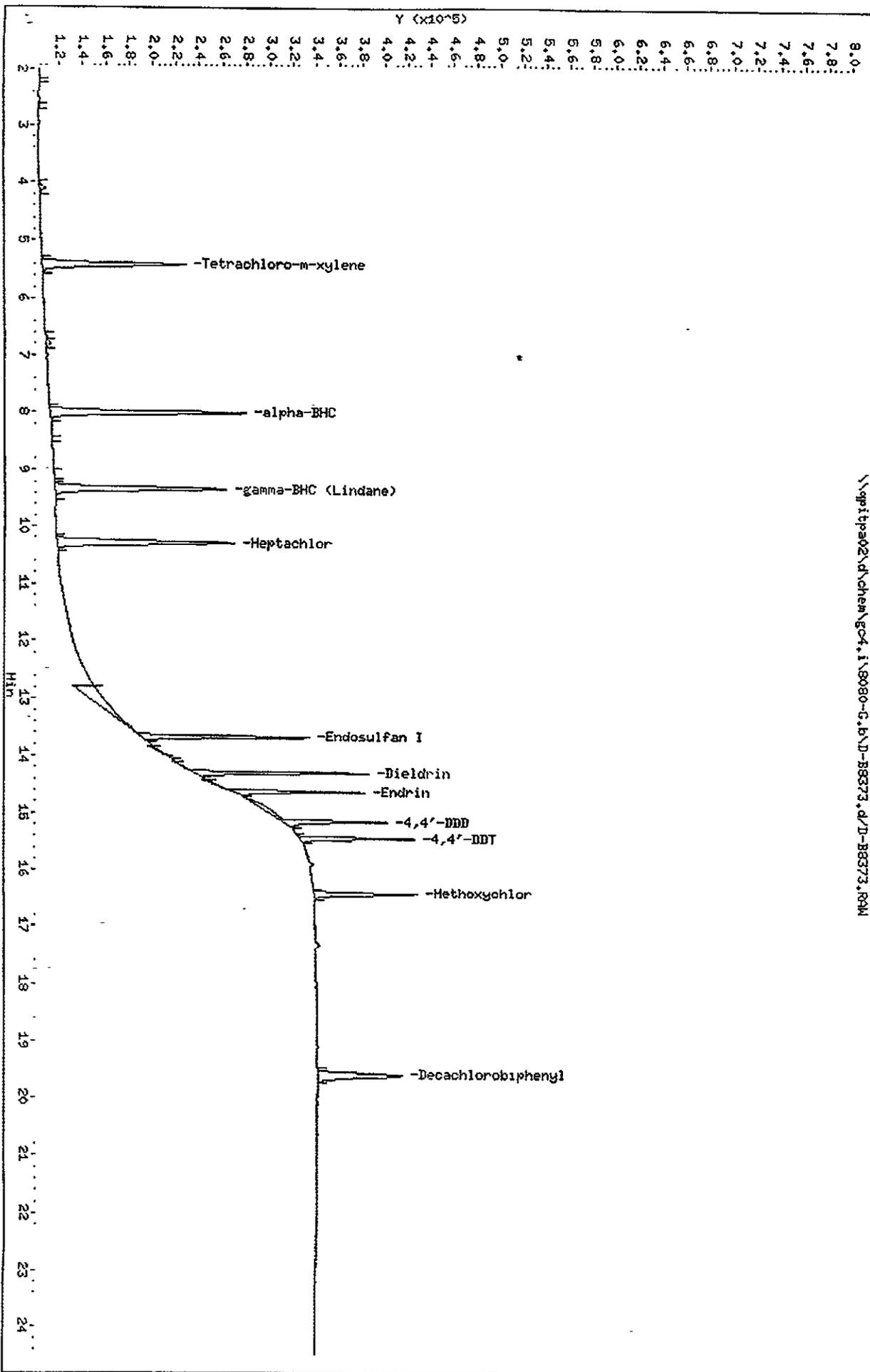
STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8373.d
 Lab Smp Id: MEDA
 Inj Date : 21-NOV-2000 19:26
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDA, 8080-G.b, , INDA.sub, , 2, 3
 Misc Info : 190-100-8
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 22-Nov-2000 11:08 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.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	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
§ 1 Tetrachloro-m-xylene	5.406	5.406	0.000	122928	0.02500	0.02865
5 alpha-BHC	8.000	8.000	0.000	169009	0.02500	0.02913
6 gamma-BHC (Lindane)	9.326	9.326	0.000	148674	0.02500	0.02913
10 Heptachlor	10.286	10.286	0.000	153524	0.02500	0.02951
15 Endosulfan I	13.673	13.673	0.000	145392	0.02500	0.02838
17 Dieldrin	14.286	14.286	0.000	151750	0.02500	0.02800
20 Endrin	14.613	14.613	0.000	113917	0.02500	0.02568
21 4,4'-DDD	15.140	15.140	0.000	90279	0.02500	0.02343
23 4,4'-DDT	15.426	15.426	0.000	99807	0.02500	0.02537
25 Methoxychlor	16.406	16.406	0.000	88861	0.05000	0.04732
§ 30 Decachlorobiphenyl	19.593	19.593	0.000	73095	0.02500	0.02633

Data File: \\pp1tpa02\chem\gc4.i\8080-G.b\D-88373.d
 Date: 24-NOV-2000 19:26
 Client ID:
 Sample Info: HEDA,8080-G.b.,INDA.sub,2,3
 Column phase: DB1701

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



Data File: \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8374.d
Report Date: 22-Nov-2000 11:11

674 1266

STL-Pittsburgh

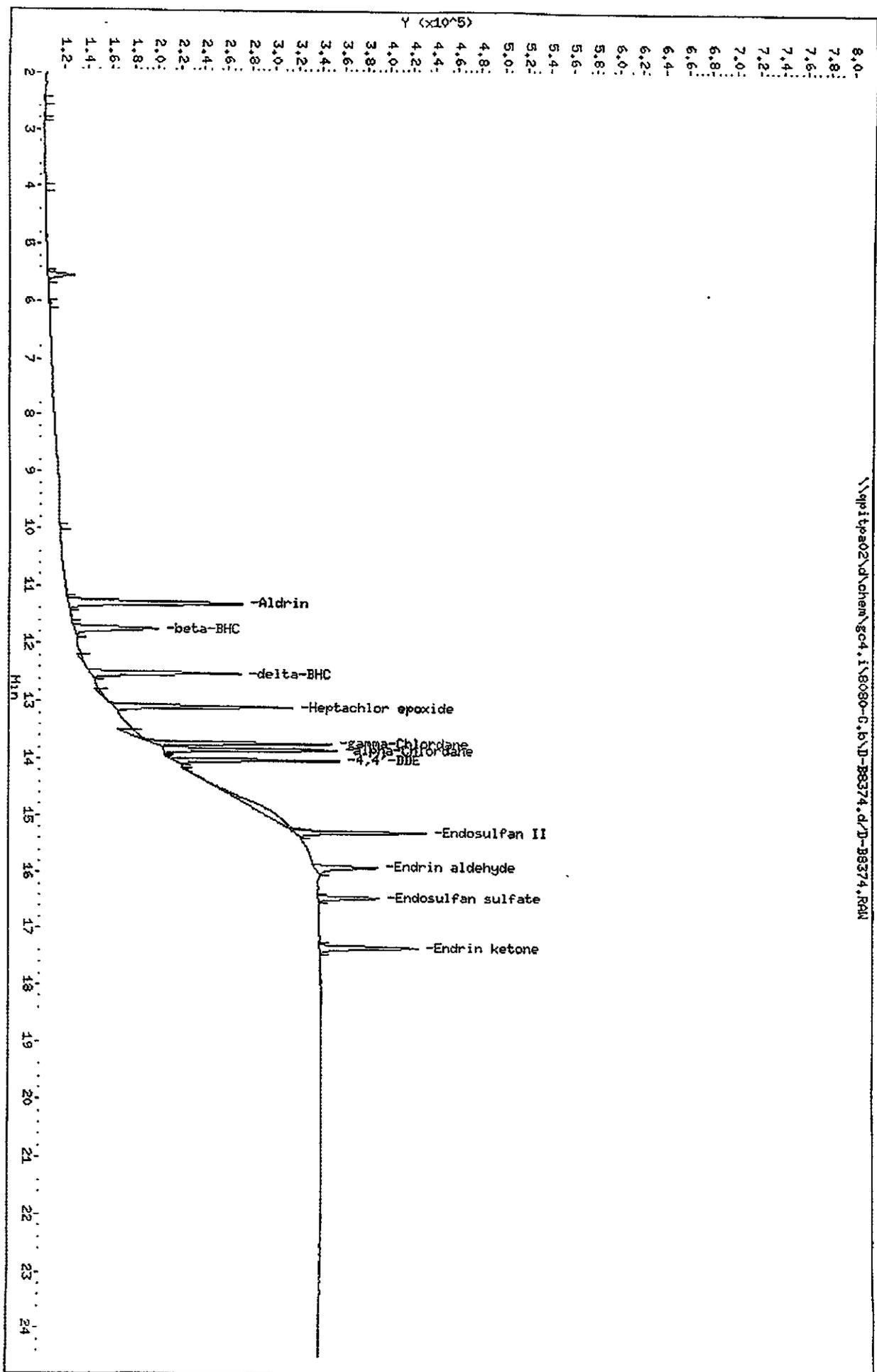
Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8374.d
Lab Smp Id: MEDB
Inj Date : 21-NOV-2000 19:53
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDB, 8080-G.b, , INDB.sub, , 2, 3
Misc Info : 190-100-14
Comment :
Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
Meth Date : 22-Nov-2000 11:08 eppingerd Quant Type: ESTD
Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.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	11.300	11.300	0.000	150582	0.02500	0.02941
7 beta-BHC	11.746	11.746	0.000	72441	0.02500	0.02802
8 delta-BHC	12.506	12.506	0.000	130099	0.02500	0.02524
12 Heptachlor epoxide	13.086	13.086	0.000	156018	0.02500	0.02872
13 gamma-Chlordane	13.720	13.720	0.000	153060	0.02500	0.02821
14 alpha-Chlordane	13.833	13.833	0.000	149096	0.02500	0.02801
16 4,4'-DDE	14.006	14.006	0.000	144581	0.02500	0.02687
22 Endosulfan II	15.273	15.273	0.000	114105	0.02500	0.02555
24 Endrin aldehyde	15.880	15.880	0.000	55583	0.02500	0.02680
26 Endosulfan sulfate	16.426	16.426	0.000	53387	0.02500	0.02156
27 Endrin ketone	17.326	17.326	0.000	85411	0.02500	0.02607

Data File: \\qpltpa02\chem\gc4.1\8080-G.b\1D-B8374.d
Date: 21-NOV-2000 19:53
Client ID:
Sample Info: HEDB, 8080-G.b, INDB, sub, 2,3
Column phase: DB1701

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

\\qpltpa02\chem\gc4.1\8080-G.b\1D-B8374.d\1D-B8374.RAW



674 1268

PESTICIDE
QC DATA

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:
 Matrix: (soil/water) SOLID Lab Sample ID: C0K200000 582
 Method: SW846 8081A
 Pesticides (8081A)
 Sample WT/Vol: 100 / mL Date Received: 11/08/00
 Work Order: DP8AF1AA Date Extracted: 11/20/00
 Dilution factor: 1 Date Analyzed: 11/21/00
 Moisture %: NA
 Client Sample Id: INTRA-LAB BLANK QC Batch: 0325582

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

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8371.d
 Lab Smp Id: DP8AF1AA Client Smp ID: PBLK
 Inj Date : 21-NOV-2000 18:30
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DP8AF1AA,8080-G.b,,PEST.sub,,3,
 Misc Info : 090223BLK
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 22-Nov-2000 11:08 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.d
 Als bottle: 1 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC061

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	5.406	5.406	0.000	87112	0.02030	0.002030 (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.

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	19.593	19.593	0.000	54686	0 01970	0.001970(aR)

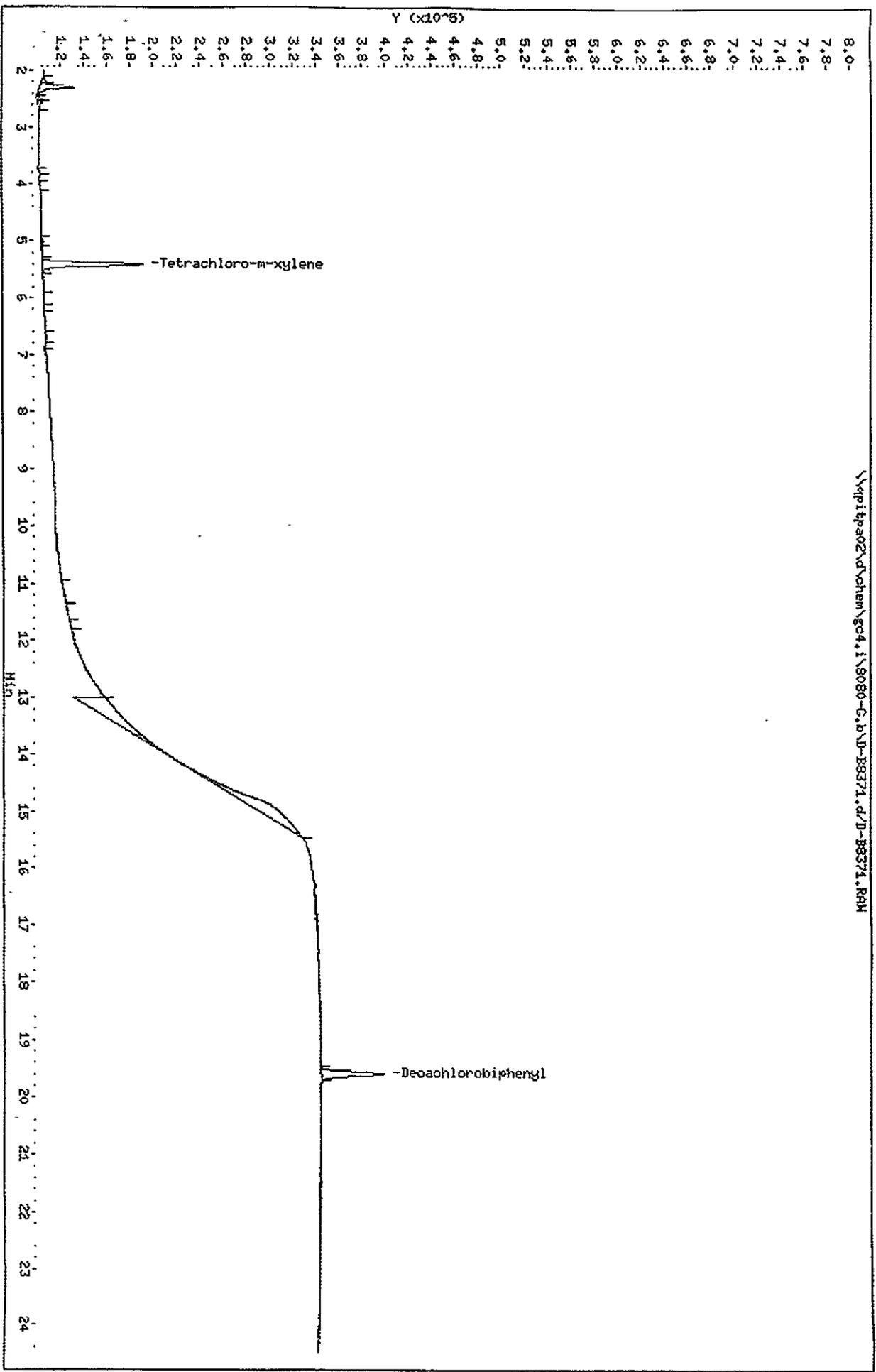
QC Flag Legend

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

Data File: \\qpltpa02\chem\g04\18080-G.b.D-B8371.d
Date: 21-NOV-2000 18:30
Client ID: PBLK
Sample Info: DP99F1A9,8080-G.b.,PEST,sub,3,
Volume Injected (uL): 1.0
Column phase: DB1701

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

\\qpltpa02\chem\g04\18080-G.b.D-B8371.d\B-B8371.RAW



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8371.d
 Lab Smp Id: DP8AF1AA Client Smp ID: PBLK
 Inj Date : 21-NOV-2000 18:30
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DP8AF1AA,8080-G.b,,PEST.sub,,3,
 Misc Info : 090223BLK
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 22-Nov-2000 10:30 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.d
 Als bottle: 1 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC061

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	5.166	5 166	0.000	135279	0.02180	0.002180 (AR)
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)				Compound Not Detected.		
7 beta-BHC				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
11 Aldrin				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin				Compound Not Detected.		
20 Endrin				Compound Not Detected.		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
21 4,4'-DDD						
18 Toxaphene						
22 Endosulfan II						
23 4,4'-DDT						
24 Endrin aldehyde						
26 Endosulfan sulfate						
25 Methoxychlor						
27 Endrin ketone						
\$ 30 Decachlorobiphenyl	20.800	20.800	0.000	45140	0.01957	0.001957 (aR)

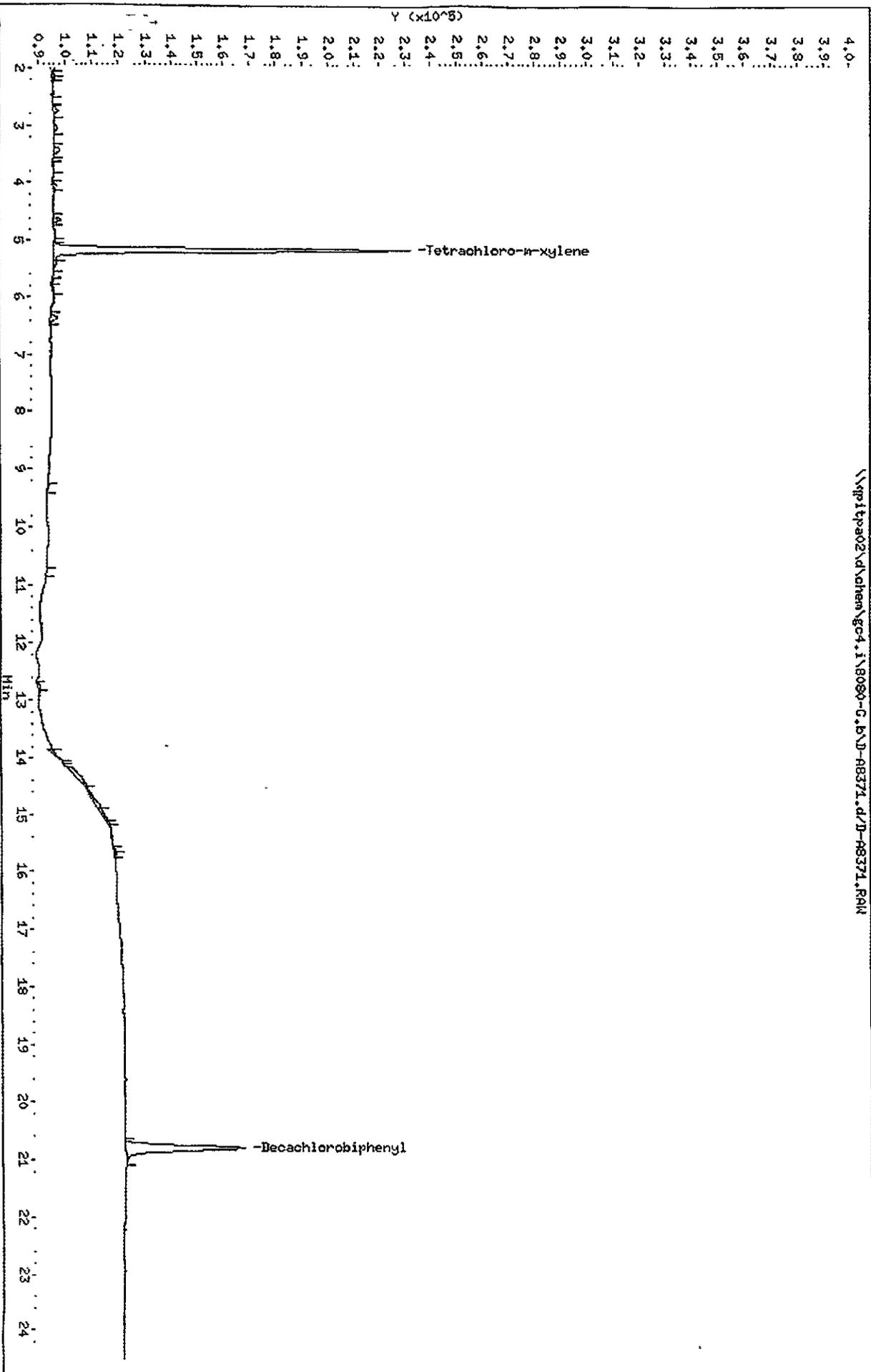
QC Flag Legend

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

Data File: \\p1tpa02\chem\gc4.1\8080-G.b\D-88371.d
Date: 21-NOV-2000 18:30
Client ID: PBLK
Sample Info: JP88F1A8, 8080-G.b, PEST, sub, 3,
Volume Injected (uL): 1.0
Column Phase: DB608

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

\\p1tpa02\chem\gc4.1\8080-G.b\D-88371.d\D-88371.PRM



UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

674 1276

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK200000 582

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/08/00

Work Order: DP8AF1AC

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/21/00

Moisture %: NA

QC Batch: 0325582

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
72-20-8	Endrin	0.00232	Q
76-44-8	Heptachlor	0.00257	
1024-57-3	Heptachlor epoxide	0.00246	
58-89-9	Lindane	0.00249	
72-43-5	Methoxychlor	0.00208	

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-B8372.d
 Lab Smp Id: DP8AF1AC Client Smp ID: LCS
 Inj Date : 21-NOV-2000 18:58
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DP8AF1AC,8080-G.b,,PEST.sub,,3,
 Misc Info : 090223LCS
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTB.m
 Meth Date : 22-Nov-2000 11:08 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-B8197.d
 Als bottle: 1 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC061

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	5.406	5.406	0.000	184520	0.04301	0.004301(aR)
5 alpha-BHC	7.993	8.000	-0.007	142334	0.02453	0.002453(a)
6 gamma-BHC (Lindane)	9.326	9.326	0.000	127167	0.02491	0.002491(aR)
9 Chlordane	Compound Not Detected.					
10 Heptachlor	10.286	10.286	0.000	133711	0.02570	0.002570(aR)
11 Aldrin	11.300	11.300	0.000	130591	0.02550	0.002550(aR)
7 beta-BHC	11.746	11.746	0.000	62313	0.02410	0.002410(a)
8 delta-BHC	12.506	12.506	0.000	111238	0.02158	0.002158(a)
12 Heptachlor epoxide	13.086	13.086	0.000	137986	0.02540	0.002540(a)
15 Endosulfan I	Compound Not Detected.					
13 gamma-Chlordane	13.720	13.720	0.000	140104	0.02582	0.002582(a)
14 alpha-Chlordane	13.833	13.833	0.000	128300	0.02410	0.002410(a)
16 4,4'-DDE	14.006	14.006	0.000	132076	0.02455	0.002455(a)
17 Dieldrin	14.286	14.286	0.000	134372	0.02479	0.002479(aR)
20 Endrin	14.613	14.613	0.000	102956	0.02321	0.002320(aR)
18 Toxaphene	Compound Not Detected					

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
21 4,4'-DDD	15.140	15.140	0.000	85979	0.02232	0.002232 (a)
22 Endosulfan II	15.273	15.273	0.000	75624	0.01693	0.001693 (a)
23 4,4'-DDT	15.426	15.426	0.000	91176	0.02318	0.002318 (aR)
24 Endrin aldehyde	15.880	15.880	0.000	49236	0.02374	0.002374 (a)
25 Methoxychlor	16.413	16.406	0.007	83794	0.04462	0.004462 (a)
26 Endosulfan sulfate	Compound Not Detected.					
27 Endrin ketone	17.326	17.326	0.000	81193	0.02478	0.002478 (a)
\$ 30 Decachlorobiphenyl	19.593	19.593	0.000	119505	0.04305	0.004305 (aR)

QC Flag Legend

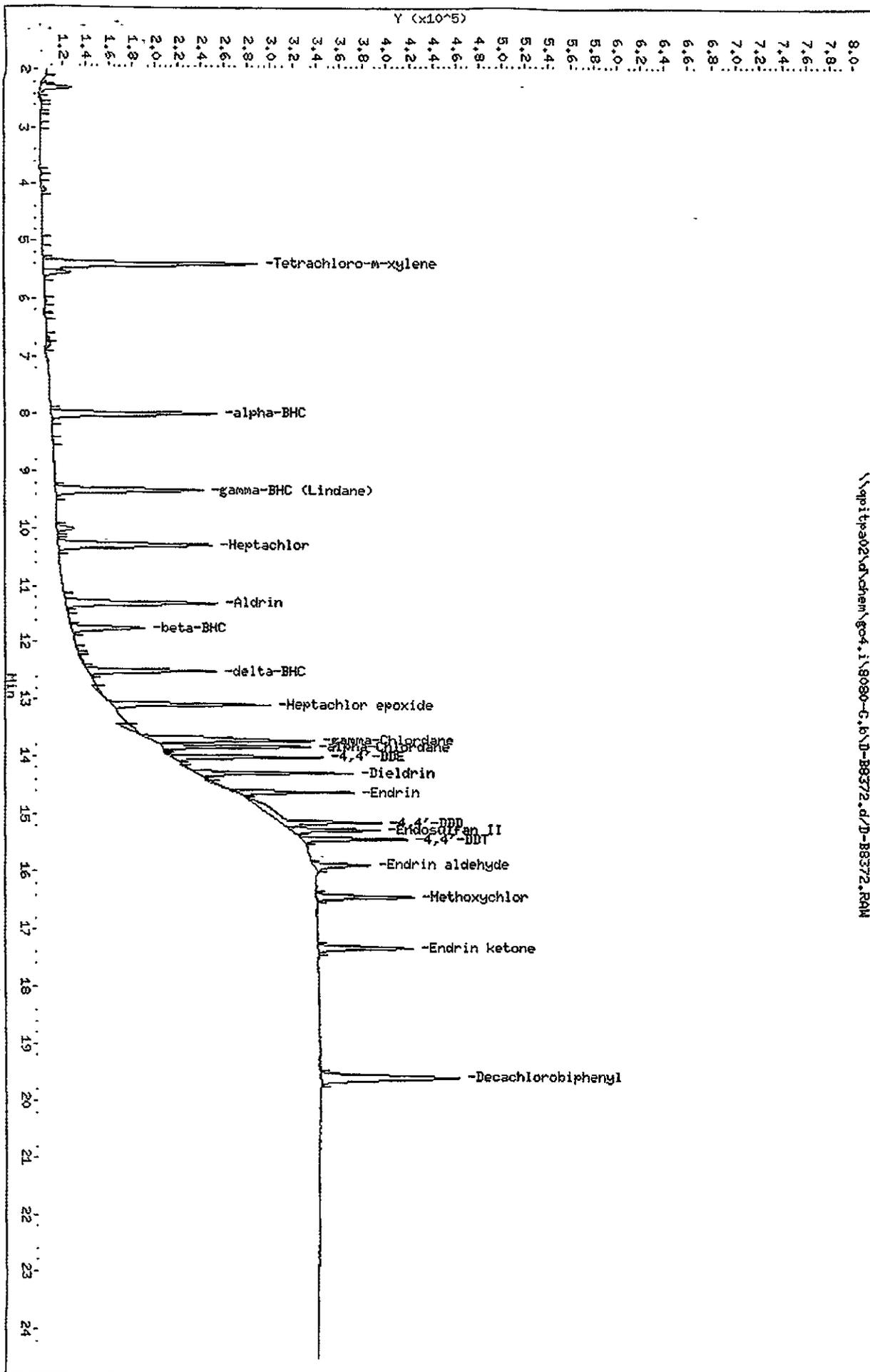
- a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation (BL0Q).
- R - Spike/Surrogate failed recovery limits.

6741279

Data File: \\qpi1pa02\chem\gc4.i\8080-G.b.D-88372.d
Date: 21-NOV-2000 18:58
Client ID: LCS
Sample Info: DP8AF1AC.8080-G.b.,PEST.sub.3,
Volume Injected (uL): 1.0
Column phase: DB1701

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

\\qpi1pa02\chem\gc4.i\8080-G.b.D-88372.d\J-88372.RAW



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\8080-G.b\D-A8372.d
 Lab Smp Id: DP8AF1AC Client Smp ID: LCS
 Inj Date : 21-NOV-2000 18:58
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DP8AF1AC,8080-G.b,,PEST.sub,,3,
 Misc Info : 090223LCS
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\8080-G.b\PESTA.m
 Meth Date : 22-Nov-2000 10:30 eppingerd Quant Type: ESTD
 Cal Date : 07-NOV-2000 23:13 Cal File: D-A8197.d
 Als bottle: 1 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC061

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	5.166	5.166	0.000	276286	0.04452	0.004452 (aR)
5 alpha-BHC	7.346	7.346	0.000	200010	0.02630	0.002630 (a)
6 gamma-BHC (Lindane)	8.700	8.700	0.000	181454	0.02662	0.002662 (aR)
7 beta-BHC	8.986	8.986	0.000	95349	0.02602	0.002602 (a)
9 Chlordane	9.320	9.293	0.027	939	0.27822	0.02782 (a)
10 Heptachlor	9.886	9.893	-0.007	140363	0.02664	0.002664 (aR)
8 delta-BHC	10.380	10.380	0.000	136920	0.02351	0.002351 (a)
11 Aldrin	11.120	11.126	-0.006	129387	0.02603	0.002603 (aR)
12 Heptachlor epoxide	12.840	12.846	-0.006	126395	0.02455	0.002455 (a)
13 gamma-Chlordane	13.226	13.226	0.000	125825	0.02427	0.002427 (a)
14 alpha-Chlordane	13.560	13.560	0.000	124751	0.02462	0.002462 (a)
15 Endosulfan I	Compound Not Detected.					
16 4,4'-DDE	14.046	14.046	0.000	121100	0.02414	0.002414 (a)
17 Dieldrin	14.166	14.166	0.000	116674	0.02443	0.002443 (aR)
20 Endrin	14.753	14.753	0.000	104866	0.02431	0.002431 (aR)

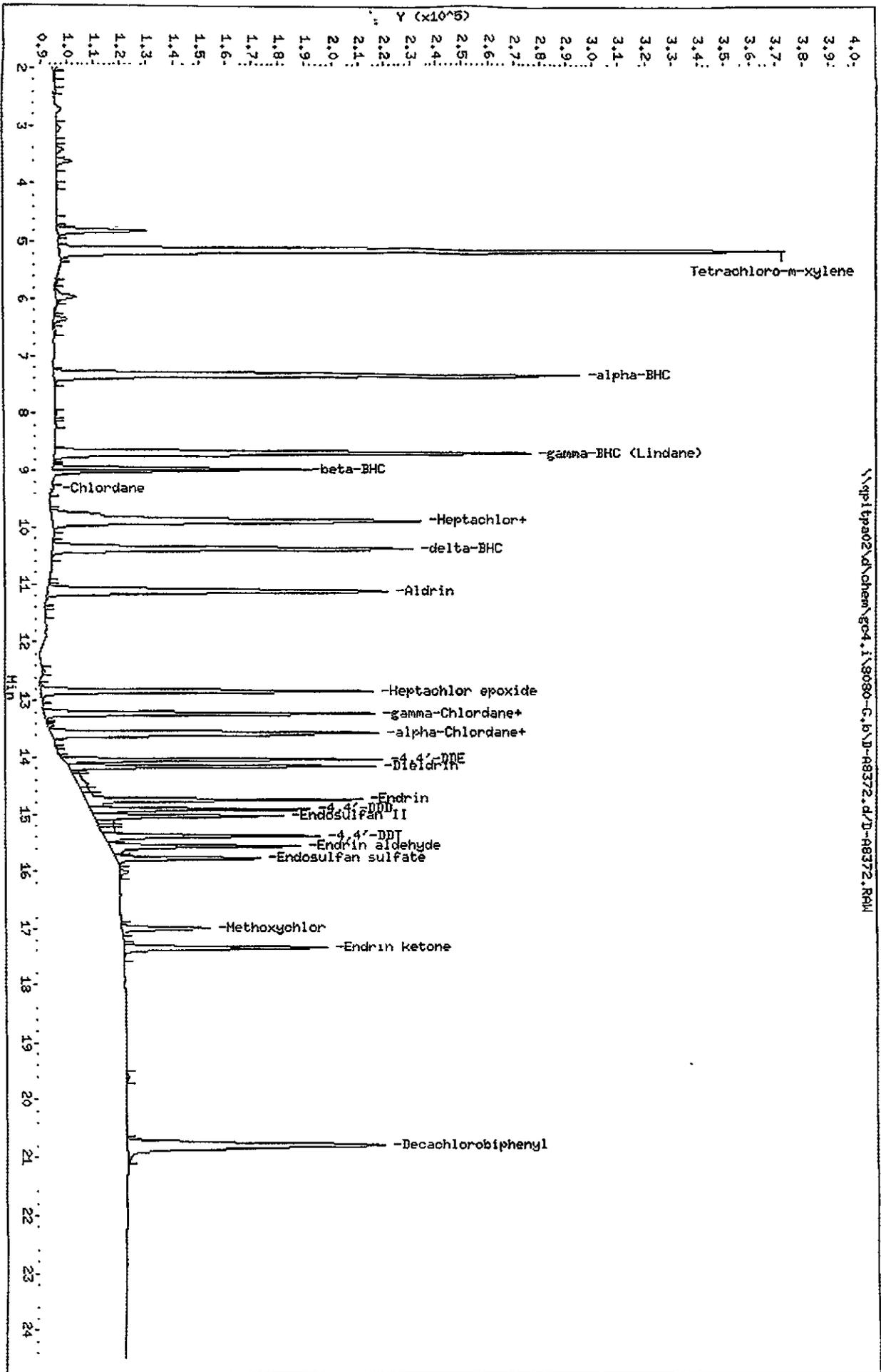
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
*****	**	*****	*****	*****	*****	*****
21 4,4'-DDD	14.920	14.920	0.000	83487	0.02122	0.002122(a)
18 Toxaphene	Compound Not Detected					
22 Endosulfan II	15.033	15.033	0.000	72365	0.01709	0.001709(a)
23 4,4'-DDT	15.380	15.386	-0.006	82046	0.02202	0.002202(aR)
24 Endrin aldehyde	15.560	15.560	0.000	73045	0.02366	0.002366(a)
26 Endosulfan sulfate	15.780	15.780	0.000	55081	0.02026	0.002026(a)
25 Methoxychlor	16.993	16.993	0.000	33628	0.02082	0.002082(a)
27 Endrin ketone	17.360	17.360	0.000	77082	0.02428	0.002428(a)
§ 30 Decachlorobiphenyl	20.800	20.800	0.000	97613	0.04233	0.004233(aR)

QC Flag Legend

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

Data File: \\qpi\tpa02\chem\gc4\1\8080-G.b\D-48372.d
Date: 21-NOV-2000 18:59
Client ID: LCS
Sample Info: DP88F1AC, 8080-G.b,, PEST, sub,, 3,
Volume Injected (uL): 1.0
Column phase: DB608

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



10A
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

674 1283

EPA SAMPLE NO.

LCS

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C0K150188
 Lab Sample ID: DP8AF1AC Date(s) Analyzed: 11/21/00 11/21/00
 Instrument ID (1): GC4 Instrument ID (2): GC4
 GC Column(1): DB608 ID: 0.53 (mm) GC Column(2): DB1701 ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
alpha-BHC	1	7.35	7.30	7.40	0.002630	
	2	7.99	7.95	8.05	0.002453	7.2
beta-BHC	1	8.99	8.94	9.04	0.002602	
	2	11.75	11.70	11.80	0.002410	8.0
delta-BHC	1	10.38	10.33	10.43	0.002351	
	2	12.51	12.46	12.56	0.002158	8.9
gamma-BHC (Lindane)	1	8.70	8.65	8.75	0.002662	
	2	9.33	9.28	9.38	0.002491	6.9
Heptachlor	1	9.89	9.84	9.94	0.002664	
	2	10.29	10.24	10.34	0.002570	3.6
Aldrin	1	11.12	11.08	11.18	0.002603	
	2	11.30	11.25	11.35	0.002550	2.1
Heptachlor epoxide	1	12.84	12.80	12.90	0.002455	
	2	13.09	13.04	13.14	0.002540	3.5
Dieldrin	1	14.17	14.12	14.22	0.002443	
	2	14.29	14.24	14.34	0.002479	1.5

10A
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

674 1284

EPA SAMPLE NO.

LCS

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C0K150188

Lab Sample ID: DP8AF1AC Date(s) Analyzed: 11/21/00 11/21/00

Instrument ID (1): GC4 Instrument ID (2): GC4

GC Column(1): DB608 ID: 0.53 (mm) GC Column(2): DB1701 ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDE	1	14.05	14.00	14.10	0.002414	
	2	14.01	13.96	14.06	0.002455	1.7
Endrin	1	14.75	14.70	14.80	0.002431	
	2	14.61	14.56	14.66	0.002320	4.8
Endosulfan II	1	15.03	14.98	15.08	0.001709	
	2	15.27	15.22	15.32	0.001693	0.9
4,4'-DDD	1	14.92	14.87	14.97	0.002122	
	2	15.14	15.09	15.19	0.002232	5.2
4,4'-DDT	1	15.38	15.34	15.44	0.002202	
	2	15.43	15.38	15.48	0.002318	5.3
Methoxychlor	1	16.99	16.94	17.04	0.002082	
	2	16.41	16.36	16.46	0.004462	114.3
Endrin ketone	1	17.36	17.31	17.41	0.002428	
	2	17.33	17.28	17.38	0.002478	2.0
Endrin aldehyde	1	15.56	15.51	15.61	0.002366	
	2	15.88	15.83	15.93	0.002374	0.3

10A
 PESTICIDE IDENTIFICATION SUMMARY
 FOR SINGLE COMPONENT ANALYTES

674 1285

EPA SAMPLE NO.

LCS

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: COK150188

Lab Sample ID: DP8AF1AC

Date(s) Analyzed: 11/21/00 11/21/00

Instrument ID (1): GC4

Instrument ID (2): GC4

GC Column(1): DB608

ID: 0.53 (mm)

GC Column(2): DB1701

ID: 0.53 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
alpha-Chlordane	1	13.56	13.51	13.61	0.002462	
	2	13.83	13.78	13.88	0.002410	2.2
gamma-Chlordane	1	13.23	13.18	13.28	0.002427	
	2	13.72	13.67	13.77	0.002582	6.4
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

674 1286

PESTICIDE
MISCELLANEOUS

B# 0325582 6741288

(TRUP)

STL - Pittsburgh

Separatory Funnel Extraction Worksheet

Logbook ID: OP4

Start Date	Date Completed	Parameter	Method	Solvent	Solvent Lot	Solvent Mfg	Cleanup Method			
11-20-00	11-21-00	Feat (808M)	3510C	MELC	T03268	Baker	NA			
Lot Number	Sample ID	Client ID	Sample Volume (mL)	Final Volume (mL)	pH	Surrogate #	Surr Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	Cleanup Date
1. POK090223	BRB	NA	100	10.0	5	190-1058	1.0	NA	NA	NA
2.	LLS				5			190-103-10	1.0	
3.	001MS				5					
4.	001MSD				5					
5.	001				5					
6.	POK140226				5					
7.	POK150188			10.0	5					
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
16.										
17.										
18.										
19.										
20.										
21.										
22.										
23.										

P. J. Juchnick
11-20-00

Analyst	Extract(s)	Date	Time	Location
PY	PY	11-20-00	2300	Pittsburgh, Pa
PY	PY	11-21-00	1210	Pittsburgh, Pa
PY	PY	11/21/00	1255	Pittsburgh, Pa

Reviewed by: *K. D. Baker* Date: 11-21-00

Sodium Sulfate Mfg Lot Number: Baker T29628

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\8080-G.SEQ
 Created by : DE11/02/98 on : 11/7/00 14:29
 Edited by : LM11/08/00 on : 11/10/00 11:09
 Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
 REVIEWED BY:

674 1289

G

Number of Times Edited : 4

Sequence File Header Information:

Number of Rows : 137
 Instrument Type : 760 / 900 Series Intelligent Interface
 Injection Type : SINGLE

Row	Type	Sample Name	Sample Number	Sequence Sample Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend	Norm. factor
1	Std Check	EVALB,8080-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Cal:Replace	MEDTOX,8080-G.b	190-98-12		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
3	Cal:Replace	MEDCHLOR,8080-G	190-102-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
4	Cal:Replace	LAPPX9,8080-G.b	190-104-2		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Cal:Replace	MLAPPX9,8080-G.	190-104-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Cal:Replace	MAPPX9,8080-G.b	190-104-4		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Cal:Replace	MHAPPX9,8080-G.	190-104-5		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Cal:Replace	HAPPX9,8080-G.b	190-104-6		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Cal:Replace	LOWA,8080-G.b,,	190-100-6		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Cal:Replace	MLOWA,8080-G b,	190-100-7		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Cal:Replace	MEDA,8080-G b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Cal:Replace	MHIGHA,8080-G.b	190-100-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Cal:Replace	HIGHA,8080-G.b,	190-100-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Cal:Replace	LOWB,8080-G b,,	190-100-12		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Cal:Replace	MLOWB,8080-G.b,	190-100-13		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
16	Cal:Replace	MEDB,8080-G.b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
17	Cal:Replace	MHIGHB,8080-G b	190-101-1		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
18	Cal:Replace	HIGHB,8080-G.b,	190-101-2		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
19	Std Check	2ND A,8080-G.b,	190-101-7		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
20	Std Check	2ND B,8080-G.b,	190-101-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Std Check	EVALB,8080-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
22	Sample	DNQW61AR,8080-G	250234001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
23	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
24	Sample	DNQXF1AX,8080-G	250234003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
25	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
26	Sample	DNQXN1AX,8080-G	250234005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
27	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
28	Sample	DNQXR1AX,8080-G	250234007		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
29	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
30	Sample	DNQXV1AX,8080-G	250234009		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
31	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
32	Sample	DPA331AE,8080-G	030232001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
33	Sample	DPA351CJ,8080-G	030232002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
34	Sample	DPA351CK,8080-G	030232002S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
35	Sample	DPA351CL,8080-G	030232002D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
36	Sample	DPA361CJ,8080-G	030232003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
37	Sample	DPA361CK,8080-G	030232003S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
38	Sample	DPA361CL,8080-G	030232003D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
39	Sample	DN78H1AD,8080-G	020156-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
40	Sample	DPD4L1AA,8080-G	030232BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
41	Sample	DPD4L1AC,8080-G	030232LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
42	Std Check	MEDA,8080-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
43	Std Check	MEDB,8080-G b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
44	Std Check	EVALB,8080-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
45	Sample	DNQX21AX,8080-G	250234011		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
46	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
47	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
48	Sample	DNQUC1AX,8080-G	250234013		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
49	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
50	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
51	Sample	DNQOK1AX,8080-G	250234015		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
52	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
53	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
54	Sample	DNQO21AX,8080-G	250234017		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
55	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
56	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
57	Sample	DNQ1F1AX,8080-G	250234019		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
58	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
59	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

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60	Sample	DNQ1M1AX, 8080-G	250234021	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
61	Sample			1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
62	Sample	DNQG31AA, 8080-G	250234BLK	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
63	Sample	DNQG31AC, 8080-G	250234LCS	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
64	Sample	DNQG31AD, 8080-G	250234LCD	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
65	Std Check	MAPPX9, 8080-G.b	190-104-4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
66	Std Check	MEDA, 8080-G.b,,	190-100-8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
67	Std Check	MEDB, 8080-G.b,,	190-100-14	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
68	Std Check	EVALB, 8080-G.b,	190-102-10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
69	Sample	DNQ1P1AX, 8080-G	250234023	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
70	Sample	DNQ1W1AX, 8080-G	250234025	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
71	Sample	DNQ111AX, 8080-G	250234027	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
72	Sample	DN6Q91AX, 8080-G	010196-1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
73	Sample	DN6R1A9, 8080-G	010196-2	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
74	Sample	DN6R1A9, 8080-G	010196-3	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
75	Sample	DN6R1A9, 8080-G	010196-4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
76	Sample	DN6R1A9, 8080-G	010196-5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
77	Sample	DN6R31A9, 8080-G	010196-6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
78	Sample	DN6R51A9, 8080-G	010196-7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
79	Sample	DN6R81A9, 8080-G	010196-8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
80	Sample	DN6R91A9, 8080-G	010196-9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
81	Sample	DN6TC1A9, 8080-G	010196-10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
82	Sample	DN6TE1A9, 8080-G	010196-11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
83	Sample	DN6TN1A9, 8080-G	010196-13	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
84	Sample	DN8VJ1AD, 8080-G	020216-1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
85	Sample	DN8VP1AL, 8080-G	020216-2	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
86	Sample	DPFF41AA, 8080-G	010196-BLK	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
87	Sample	DPFF41AC, 8080-G	010196-LCS	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
88	Sample	DPFF41AD, 8080-G	010196-LCD	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
89	Std Check	MAPPX9, 8080-G.b	190-104-4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
90	Std Check	MEDA, 8080-G.b,,	190-100-8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
91	Std Check	MEDB, 8080-G.b,,	190-100-14	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
92	Std Check	EVALB, 8080-G.b,	190-102-10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
93	Sample	DPJ881AA, 8080-G	020277BLK	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
94	Sample	DPJ881AC, 8080-G	020277LCS	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
95	Sample	DN9D41CF, 8080-G	020277001S	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
96	Sample	DN9D41CG, 8080-G	020277001D	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
97	Sample	DN9D41AM, 8080-G	020277001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
98	Sample	DN65R1AH, 8080-G	010234001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
99	Sample	DN65X1AK, 8080-G	010234002	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
100	Sample	DN7C61AH, 8080-G	010265-1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
101	Sample	DN7DC1AK, 8080-G	010265-2	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
102	Sample	DN9AJ1AG, 8080-G	020269-1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
103	Sample	DN9AM1AH, 8080-G	020269-2	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
104	Std Check	MEDA, 8080-G.b,,	190-100-8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
105	Std Check	MEDB, 8080-G.b,,	190-100-14	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
106	Std Check	MAPPX9, 8080-G.b	190-104-4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
107	Std Check	EVALB, 8080-G.b,	190-102-10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
108	Sample	DN6RL1A9, 8080-G	test	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
109	Sample	DPAS71A9, 8080-G	030248-1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
110	Sample	DPASQ1AL, 8080-G	030248-2	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
111	Sample	DPAS01AL, 8080-G	030248-3	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
112	Sample	DPAS11AL, 8080-G	030248-4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
113	Sample	DPAS51AL, 8080-G	030248-5	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
114	Sample	DPAS71AL, 8080-G	030248-6	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
115	Sample	DPAS91AL, 8080-G	030248-7	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
116	Sample	DPAS11AL, 8080-G	030248-9	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
117	Sample	DPAS11AL, 8080-G	030248-10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
118	Sample	DPAS11AL, 8080-G	030248-11	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
119	Sample	DPAS11AL, 8080-G	030248-12	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
120	Sample	DPAS11AL, 8080-G	030248-13	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
121	Sample	DPAS11AL, 8080-G	030248-14	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
122	Sample	DPAS11AL, 8080-G	030248-16	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
123	Sample	DPAS11AL, 8080-G	030248-17	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
124	Sample	DPJ8V1AA, 8080-G	030248BLK	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
125	Sample	DPJ8V1AC, 8080-G	030248LCS	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
126	Sample	DPJ8V1AD, 8080-G	030248LCD	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
127	Std Check	MAPPX9, 8080-G.b	190-104-4	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
128	Std Check	MEDA, 8080-G.b,,	190-100-8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
129	Std Check	MEDB, 8080-G.b,,	190-100-14	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
130	Std Check	EVALB, 8080-G.b,	190-102-10	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
131	Sample	DPMCT1AA, 8080-G	300129BLK	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
132	Sample	DPMCT1AC, 8080-G	300129LCS	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
133	Sample	DN2MG1AF, 8080-G	300129001S	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
134	Sample	DN2MG1AG, 8080-G	300129001D	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
135	Sample	DN2MG1AD, 8080-G	300129001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
136	Std Check	MEDA, 8080-G.b,,	190-100-8	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
137	Std Check	MEDB, 8080-G.b,,	190-100-14	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

Sequence Process Information - Channel A

Row	Site	Rack	Vial	Inst Method	Process Method	Calib Method	Report Format	Raw File	Result File	Baseline File	Modified Raw file	Cal Rpt	Level Name	Update RT	Out Dev
1	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8180	D-A8180		D-A8180	-	-	-	LPT1:
2	STL ² Pittsburgh			GEN4C	GEN4A	122190A	TOX	D-A8181	D-A8181		D-A8181	N	MED	N	LPT1: 3159

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90	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A8269	D-A8269	D-A8269	-	-	-	LPT1:
91	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A8270	D-A8270	D-A8270	-	-	-	LPT1:
92	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8271	D-A8271	D-A8271	-	-	-	LPT1:
93	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8272	D-A8272	D-A8272	-	-	-	LPT1:
94	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8273	D-A8273	D-A8273	-	-	-	LPT1:
95	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8274	D-A8274	D-A8274	-	-	-	LPT1:
96	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8275	D-A8275	D-A8275	-	-	-	LPT1:
97	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8276	D-A8276	D-A8276	-	-	-	LPT1:
98	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8277	D-A8277	D-A8277	-	-	-	LPT1:
99	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8278	D-A8278	D-A8278	-	-	-	LPT1:
100	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8279	D-A8279	D-A8279	-	-	-	LPT1:
101	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8280	D-A8280	D-A8280	-	-	-	LPT1:
102	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8281	D-A8281	D-A8281	-	-	-	LPT1:
103	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8282	D-A8282	D-A8282	-	-	-	LPT1:
104	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A8283	D-A8283	D-A8283	-	-	-	LPT1:
105	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A8284	D-A8284	D-A8284	-	-	-	LPT1:
106	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A8285	D-A8285	D-A8285	-	-	-	LPT1:
107	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8286	D-A8286	D-A8286	-	-	-	LPT1:
108	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8287	D-A8287	D-A8287	-	-	-	LPT1:
109	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8288	D-A8288	D-A8288	-	-	-	LPT1:
110	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8289	D-A8289	D-A8289	-	-	-	LPT1:
111	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8290	D-A8290	D-A8290	-	-	-	LPT1:
112	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8291	D-A8291	D-A8291	-	-	-	LPT1:
113	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8292	D-A8292	D-A8292	-	-	-	LPT1:
114	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8293	D-A8293	D-A8293	-	-	-	LPT1:
115	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8294	D-A8294	D-A8294	-	-	-	LPT1:
116	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8295	D-A8295	D-A8295	-	-	-	LPT1:
117	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8296	D-A8296	D-A8296	-	-	-	LPT1:
118	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8297	D-A8297	D-A8297	-	-	-	LPT1:
119	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8298	D-A8298	D-A8298	-	-	-	LPT1:
120	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8299	D-A8299	D-A8299	-	-	-	LPT1:
121	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8300	D-A8300	D-A8300	-	-	-	LPT1:
122	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8301	D-A8301	D-A8301	-	-	-	LPT1:
123	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8302	D-A8302	D-A8302	-	-	-	LPT1:
124	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8303	D-A8303	D-A8303	-	-	-	LPT1:
125	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8304	D-A8304	D-A8304	-	-	-	LPT1:
126	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8305	D-A8305	D-A8305	-	-	-	LPT1:
127	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A8306	D-A8306	D-A8306	-	-	-	LPT1:
128	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A8307	D-A8307	D-A8307	-	-	-	LPT1:
129	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A8308	D-A8308	D-A8308	-	-	-	LPT1:
130	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8309	D-A8309	D-A8309	-	-	-	LPT1:
131	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8310	D-A8310	D-A8310	-	-	-	LPT1:
132	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8311	D-A8311	D-A8311	-	-	-	LPT1:
133	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8312	D-A8312	D-A8312	-	-	-	LPT1:
134	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8313	D-A8313	D-A8313	-	-	-	LPT1:
135	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8314	D-A8314	D-A8314	-	-	-	LPT1:
136	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A8315	D-A8315	D-A8315	-	-	-	LPT1:
137	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A8316	D-A8316	D-A8316	-	-	-	LPT1:

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\8210-G.SEQ
 Created by : DE11/02/98 on : 11/21/00 12:59
 Edited by : LM11/21/00 on : 11/21/00 13:04
 Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
 REVIEWED BY:



Number of Times Edited : 1

vid num 11-27-00

Sequence File Header Information:

Number of Rows : 14
 Instrument Type : 760 / 900 Series Intelligent Interface
 Injection Type : SINGLE

Sequence Sample Descriptions - Channel A												
Row	Type	Sample Name	Sample Number	Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend	Norm. factor
1	Std Check	EVALB,8080-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Cal:Replace	MEDTOX,8080-G.b	190-98-12		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
3	Cal:Replace	MEDCHLOR,8080-G	190-102-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
4	Std Check	MEDA,8080-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Std Check	MEDB,8080-G.b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Sample	DPLF21AF,8080-G	090223001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Sample	DPLF21A0,8080-G	090223001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Sample	DPLF21A1,8080-G	090223001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Sample	DPT5F1AD,8080-G	140226001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Sample	DPWNF1AE,8080-G	150188001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Sample	DP8AF1AA,8080-G	090223BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Sample	DP8AF1AC,8080-G	090223LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Std Check	MEDA,8080-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Std Check	MEDB,8080-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 A															
Row	Site	Rack	Vial	Inst Method	Process Method	Calib Method	Report Format	Raw File	Result File	Baseline File	Modified Raw File	Cal Rpt	Level Name	Update RT	Out Dev
1	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8361	D-A8361		D-A8361	-	-	-	LPT1:
2	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A8362	D-A8362		D-A8362	N	MED	N	LPT1:,LP
3	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A8363	D-A8363		D-A8363	N	MED	N	LPT1:,LP
4	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A8364	D-A8364		D-A8364	-	-	-	LPT1
5	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A8365	D-A8365		D-A8365	-	-	-	LPT1
6	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8366	D-A8366		D-A8366	-	-	-	LPT1:
7	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8367	D-A8367		D-A8367	-	-	-	LPT1:
8	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8368	D-A8368		D-A8368	-	-	-	LPT1:
9	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8369	D-A8369		D-A8369	-	-	-	LPT1:
10	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8370	D-A8370		D-A8370	-	-	-	LPT1:
11	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8371	D-A8371		D-A8371	-	-	-	LPT1:
12	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A8372	D-A8372		D-A8372	-	-	-	LPT1:
13	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A8373	D-A8373		D-A8373	-	-	-	LPT1:
14	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A8374	D-A8374		D-A8374	-	-	-	LPT1:

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Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\8080-G.SEQ
 Created by : DE11/02/98 on : 11/7/00 14:29
 Edited by : LM11/08/00 on : 11/10/00 11:09
 Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
 REVIEWED BY:

Number of Times Edited : 4

Sequence File Header Information:

Number of Rows : 137
 Instrument Type : 760 / 900 Series Intelligent Interface
 Injection Type : SINGLE

Row	Type	Sample Name	Sample Number	Sequence Sample Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend	Norm. factor
1	Std Check	EVALB,8080-G b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Cal:Replace	MEDTOX,8080-G.b	190-98-12		1.000	1.000	1.000	1.000	333.000	1.000	0.000	100.000
3	Cal:Replace	MEDCHLOR,8080-G	190-102-9		1.000	1.000	1.000	1.000	333.000	1.000	0.000	100.000
4	Cal:Replace	LAPPX9,8080-G.b	190-104-2		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Cal:Replace	MLAPPX9,8080-G.	190-104-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Cal:Replace	MAPPX9,8080-G.b	190-104-4		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Cal:Replace	MHAPPX9,8080-G.	190-104-5		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Cal:Replace	HAPPX9,8080-G b	190-104-6		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Cal:Replace	LOWA,8080-G.b,,	190-100-6		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Cal:Replace	MLOWA,8080-G.b,	190-100-7		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Cal:Replace	MEDA,8080-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Cal:Replace	MHIGHA,8080-G.b	190-100-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Cal:Replace	HIGHA,8080-G.b,	190-100-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Cal:Replace	LOWB,8080-G b,,	190-100-12		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Cal:Replace	MLOWB,8080-G.b,	190-100-13		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
16	Cal:Replace	MEDB,8080-G.b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
17	Cal:Replace	MHIGHB,8080-G b	190-101-1		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
18	Cal:Replace	HIGHB,8080-G.b,	190-101-2		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
19	Std Check	2ND A,8080-G.b,	190-101-7		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
20	Std Check	2ND B,8080-G.b,	190-101-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Std Check	EVALB,8080-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
22	Sample	DNQM61AR,8080-G	250234001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
23	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
24	Sample	DNQXF1AX,8080-G	250234003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
25	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
26	Sample	DNQXN1AX,8080-G	250234005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
27	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
28	Sample	DNQXR1AX,8080-G	250234007		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
29	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
30	Sample	DNQXV1AX,8080-G	250234009		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
31	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
32	Sample	DPA331AE,8080-G	030232001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
33	Sample	DPA351CJ,8080-G	030232002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
34	Sample	DPA351CK,8080-G	030232002S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
35	Sample	DPA351CL,8080-G	030232002D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
36	Sample	DPA361CJ,8080-G	030232003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
37	Sample	DPA361CK,8080-G	030232003S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
38	Sample	DPA361CL,8080-G	030232003D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
39	Sample	DN78H1AD,8080-G	020156-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
40	Sample	DPD4L1AA,8080-G	030232BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
41	Sample	DPD4L1AC,8080-G	030232LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
42	Std Check	MEDA,8080-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
43	Std Check	MEDB,8080-G.b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
44	Std Check	EVALB,8080-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
45	Sample	DNQX21AX,8080-G	250234011		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
46	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
47	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
48	Sample	DNQOC1AX,8080-G	250234013		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
49	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
50	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
51	Sample	DNQOK1AX,8080-G	250234015		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
52	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
53	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
54	Sample	DNQOC21AX,8080-G	250234017		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
55	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
56	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
57	Sample	DNQ1F1AX,8080-G	250234019		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
58	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
59	Sample				1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

674 1295

Row	Site	Rack	Vial	Inst	Process	Calib	Report	Raw	Result	Baseline	Modified	Cal	Level	Update	Out	
				Method	Method	Method	Format	File	File	File	Raw File	Rpt	Name	RT	Dev	
60				Sample	DNQ1M1AX, 8080-G	250234021			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
61				Std Check	MEDB, 8080-G.b.,	190-100-8			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
62				Sample	DN0G31AA, 8080-G	250234BLK			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
63				Sample	DN0G31AC, 8080-G	250234LCS			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
64				Sample	DN0G31AD, 8080-G	250234LCD			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
65				Std Check	MAPPX9, 8080-G.b	190-104-4			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
66				Std Check	MEDB, 8080-G.b.,	190-100-8			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
67				Std Check	MEDB, 8080-G.b.,	190-100-14			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
68				Std Check	EVALB, 8080-G.b,	190-102-10			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
69				Sample	DNQ1P1AX, 8080-G	250234023			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
70				Sample	DNQ1W1AX, 8080-G	250234025			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
71				Sample	DNQ111AX, 8080-G	250234027			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
72				Sample	DN6Q91AX, 8080-G	010196-1			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
73				Sample	DN6R11A9, 8080-G	010196-2			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
74				Sample	DN6R11A9, 8080-G	010196-3			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
75				Sample	DN6RQ1A9, 8080-G	010196-4			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
76				Sample	DN6R11A9, 8080-G	010196-5			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
77				Sample	DN6R31A9, 8080-G	010196-6			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
78				Sample	DN6R51A9, 8080-G	010196-7			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
79				Sample	DN6R81A9, 8080-G	010196-8			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
80				Sample	DN6R91A9, 8080-G	010196-9			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
81				Sample	DN6TC1A9, 8080-G	010196-10			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
82				Sample	DN6TE1A9, 8080-G	010196-11			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
83				Sample	DN6TN1A9, 8080-G	010196-13			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
84				Sample	DN8VJ1AD, 8080-G	020216-1			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
85				Sample	DN8VP1AL, 8080-G	020216-2			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
86				Sample	DPFF41AA, 8080-G	010196-BLK			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
87				Sample	DPFF41AC, 8080-G	010196-LCS			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
88				Sample	DPFF41AD, 8080-G	010196-LCD			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
89				Std Check	MAPPX9, 8080-G.b	190-104-4			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
90				Std Check	MEDB, 8080-G.b.,	190-100-8			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
91				Std Check	MEDB, 8080-G.b.,	190-100-14			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
92				Std Check	EVALB, 8080-G.b,	190-102-10			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
93				Sample	DN6R11A9, 8080-G	020277BLK			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
94				Sample	DPJ881AC, 8080-G	020277LCS			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
95				Sample	DN9D41CF, 8080-G	020277001S			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
96				Sample	DN9D41CG, 8080-G	020277001D			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
97				Sample	DN9D41AM, 8080-G	020277001			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
98				Sample	DN65R1AH, 8080-G	010234001			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
99				Sample	DN65X1AK, 8080-G	010234002			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
100				Sample	DN7C61AH, 8080-G	010265-1			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
101				Sample	DN7DC1AK, 8080-G	010265-2			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
102				Sample	DN9A11AG, 8080-G	020269-1			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
103				Sample	DN9A11AH, 8080-G	020269-2			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
104				Std Check	MEDB, 8080-G.b.,	190-100-8			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
105				Std Check	MEDB, 8080-G.b.,	190-100-14			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
106				Std Check	MAPPX9, 8080-G.b	190-104-4			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
107				Std Check	EVALB, 8080-G.b,	190-102-10			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
108				Sample	DN6R11A9, 8080-G	test			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
109				Sample	DPA8F1A9, 8080-G	030248-1			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
110				Sample	DPA8Q1AL, 8080-G	030248-2			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
111				Sample	DPA801AL, 8080-G	030248-3			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
112				Sample	DPA811AL, 8080-G	030248-4			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
113				Sample	DPA851AL, 8080-G	030248-5			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
114				Sample	DPA871AL, 8080-G	030248-6			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
115				Sample	DPA891AL, 8080-G	030248-7			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
116				Sample	DPA9H1AL, 8080-G	030248-9			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
117				Sample	DPA9L1AL, 8080-G	030248-10			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
118				Sample	DPA9N1AL, 8080-G	030248-11			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
119				Sample	DPA9T1AL, 8080-G	030248-12			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
120				Sample	DPA9W1AL, 8080-G	030248-13			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
121				Sample	DPA911AL, 8080-G	030248-14			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
122				Sample	DPCDK1AL, 8080-G	030248-16			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
123				Sample	DPCDP1AL, 8080-G	030248-17			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
124				Sample	DPJ8V1AA, 8080-G	030248BLK			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
125				Sample	DPJ8V1AC, 8080-G	030248LCS			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
126				Sample	DPJ8V1AD, 8080-G	030248LCD			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
127				Std Check	MAPPX9, 8080-G.b	190-104-4			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
128				Std Check	MEDB, 8080-G.b.,	190-100-8			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
129				Std Check	MEDB, 8080-G.b.,	190-100-14			1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
130				Std Check	EVALB, 8080-G.b,	190-102-10			1.000	1.000	1					

674 1297

90	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B8269	D-B8269	D-B8269	-	-	-	LPT1
91	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B8270	D-B8270	D-B8270	-	-	-	LPT1
92	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8271	D-B8271	D-B8271	-	-	-	LPT1
93	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8272	D-B8272	D-B8272	-	-	-	LPT1
94	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8273	D-B8273	D-B8273	-	-	-	LPT1
95	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8274	D-B8274	D-B8274	-	-	-	LPT1
96	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8275	D-B8275	D-B8275	-	-	-	LPT1
97	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8276	D-B8276	D-B8276	-	-	-	LPT1
98	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8277	D-B8277	D-B8277	-	-	-	LPT1
99	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8278	D-B8278	D-B8278	-	-	-	LPT1
100	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8279	D-B8279	D-B8279	-	-	-	LPT1
101	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8280	D-B8280	D-B8280	-	-	-	LPT1
102	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8281	D-B8281	D-B8281	-	-	-	LPT1
103	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8282	D-B8282	D-B8282	-	-	-	LPT1
104	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B8283	D-B8283	D-B8283	-	-	-	LPT1
105	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B8284	D-B8284	D-B8284	-	-	-	LPT1
106	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B8285	D-B8285	D-B8285	-	-	-	LPT1
107	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8286	D-B8286	D-B8286	-	-	-	LPT1
108	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8287	D-B8287	D-B8287	-	-	-	LPT1
109	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8288	D-B8288	D-B8288	-	-	-	LPT1
110	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8289	D-B8289	D-B8289	-	-	-	LPT1
111	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8290	D-B8290	D-B8290	-	-	-	LPT1
112	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8291	D-B8291	D-B8291	-	-	-	LPT1
113	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8292	D-B8292	D-B8292	-	-	-	LPT1
114	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8293	D-B8293	D-B8293	-	-	-	LPT1
115	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8294	D-B8294	D-B8294	-	-	-	LPT1
116	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8295	D-B8295	D-B8295	-	-	-	LPT1
117	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8296	D-B8296	D-B8296	-	-	-	LPT1
118	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8297	D-B8297	D-B8297	-	-	-	LPT1
119	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8298	D-B8298	D-B8298	-	-	-	LPT1
120	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8299	D-B8299	D-B8299	-	-	-	LPT1
121	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8300	D-B8300	D-B8300	-	-	-	LPT1
122	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8301	D-B8301	D-B8301	-	-	-	LPT1
123	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8302	D-B8302	D-B8302	-	-	-	LPT1
124	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8303	D-B8303	D-B8303	-	-	-	LPT1
125	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8304	D-B8304	D-B8304	-	-	-	LPT1
126	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8305	D-B8305	D-B8305	-	-	-	LPT1
127	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B8306	D-B8306	D-B8306	-	-	-	LPT1
128	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B8307	D-B8307	D-B8307	-	-	-	LPT1
129	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B8308	D-B8308	D-B8308	-	-	-	LPT1
130	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8309	D-B8309	D-B8309	-	-	-	LPT1
131	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8310	D-B8310	D-B8310	-	-	-	LPT1
132	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8311	D-B8311	D-B8311	-	-	-	LPT1
133	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8312	D-B8312	D-B8312	-	-	-	LPT1
134	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8313	D-B8313	D-B8313	-	-	-	LPT1
135	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8314	D-B8314	D-B8314	-	-	-	LPT1
136	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B8315	D-B8315	D-B8315	-	-	-	LPT1
137	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B8316	D-B8316	D-B8316	-	-	-	LPT1

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\8210-G.SEQ
 Created by : DE11/02/98 on : 11/21/00 12:59
 Edited by : LM11/21/00 on : 11/21/00 13:04
 Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
 REVIEWED BY:

H

Number of Times Edited : 1

v'd num 11-22-00

Sequence File Header Information:

Number of Rows : 14
 Instrument Type : 760 / 900 Series Intelligent Interface
 Injection Type : SINGLE

Sequence Sample Descriptions - Channel B												
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,8080-G.b.,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Cal:Replace	MEDTOX,8080-G.b	190-98-12		1.000	1.000	1.000	1.000	333.000	1.000	0.000	100.000
3	Cal:Replace	MEDCHLOR,8080-G	190-102-9		1.000	1.000	1.000	1.000	333.000	1.000	0.000	100.000
4	Std Check	MEDA,8080-G.b.,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Std Check	MEDB,8080-G.b.,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Sample	DPLF21AF,8080-G	090223001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Sample	DPLF21A0,8080-G	090223001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Sample	DPLF21A1,8080-G	090223001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Sample	DPT5F1AD,8080-G	140226001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Sample	DPWNF1AE,8080-G	150188001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Sample	DP8AF1AA,8080-G	090223BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Sample	DP8AF1AC,8080-G	090223LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Std Check	MEDA,8080-G.b.,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Std Check	MEDB,8080-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-B8361	D-B8361		D-B8361	-	-	-	LPT1:
2	-	1	2	GEN4C	GEN4B	122190A	TOX	D-B8362	D-B8362		D-B8362	N	MED	N	LPT1:,LP
3	-	1	2	GEN4C	GEN4B	122190A	TOX	D-B8363	D-B8363		D-B8363	N	MED	N	LPT1:,LP
4	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B8364	D-B8364		D-B8364	-	-	-	LPT1:
5	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B8365	D-B8365		D-B8365	-	-	-	LPT1:
6	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8366	D-B8366		D-B8366	-	-	-	LPT1:
7	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8367	D-B8367		D-B8367	-	-	-	LPT1:
8	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8368	D-B8368		D-B8368	-	-	-	LPT1:
9	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8369	D-B8369		D-B8369	-	-	-	LPT1:
10	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8370	D-B8370		D-B8370	-	-	-	LPT1:
11	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8371	D-B8371		D-B8371	-	-	-	LPT1:
12	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B8372	D-B8372		D-B8372	-	-	-	LPT1:
13	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B8373	D-B8373		D-B8373	-	-	-	LPT1:
14	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B8374	D-B8374		D-B8374	-	-	-	LPT1:

674 1299

104

PSR024 11/20/00 13 45.21 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: PINOB

METHOD. QJ Pesticides (8081A)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REOD
20A	DPLF2-1-AF	___	287176	422326	A-36-QJ	COK090223	001		SOLID	0	7 1
22A CLP1	DPTSF-1-AD	___	287175	002532	A-36-QJ	COK140226	001		SOLID	0	6 1
22C CLP1	DPWNF-1-AE	___	287174	399411	A-36-QJ	COK150188	001		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>P. Gershinski</i>	<i>P. Gershinski</i>	11-20-00 1535
<i>P. Gershinski</i>	<i>P. Gershinski</i>	11-20-00 2331

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

674 1300

HERBICIDE DATA

674 1301

**HERBICIDE
QC SUMMARY**

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0K150188

	CLIENT ID.	SRG01	TOT OUT	
01	INTRA LAB QC	169*	01	u-u-m 11-22-00
02	DF/24-A/0319/CVS/013	76	00	
03	METHOD BLK. DP8AG1AA	86	00	
04	LCS DP8AG1AC	78	00	
05	LAB MS/MSD D	148*	01	u-u-m 11-22-00
06	LAB MS/MSD S	173*	01	

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

674 1303

SW846 8151A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: COK200000

WO #: DP8AG1AC

BATCH: 0325583

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
2,4-D	0.160	0.105	66	28 - 136	
2,4,5-TP (Silvex)	0.0400	0.0271	68	50 - 128	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8151A.MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

674 1304

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #: C0K090223

WO #: DPLF21A2

BATCH: 0325583

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
2,4-D	0.160	ND	0.113	71	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0306	77	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:

674 1305

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 #: COK090223

WO #: DPLF21A3

BATCH: 0325583

COMPOUND	SPIKE	MSD	MSD	QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	
2,4-D	0.160	0.113	71	0.0	20	35 - 133
2,4,5-TP (Silvex)	0.0400	0.0305	76	0.32	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:

674 1306

BLANK WORKORDER NO.

DP8AG1AA

SW846 8151A METHOD BLANK SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

Lab File ID: A-A80283.

Matrix: SOLID

SDG Number:

Lot Number: COK150188

Extraction Method:

Date Extracted: 11/20/00

Date Analyzed(1): 11/21/00

Date Analyzed(2): N/A

Time Analyzed(1): 20:46

Time Analyzed(2): N/A

Instrument ID(1): A/B

Instrument ID(2): N/A

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

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

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED (1)	DATE ANALYZED (2)
01	INTRA LAB QC	DPLE21A1	11/21/00	N/A
02	LAB MS/MSD	DPLE21A2 S	11/21/00	N/A
03	LAB MS/MSD	DPLE21A3 D	11/21/00	N/A
04	DF/24-A/0319/CVS/013	DPWNFLAF	11/21/00	N/A
05	CHECK SAMPLE	DP8AG1AC C	11/21/00	N/A
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

*all m
11-22-00*

COMMENTS:

674 1307

HERBICIDE
SAMPLE DATA

674 1308

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID
Method: SW846 8151A
Herbicides (8151A)

Lab Sample ID: COK150188 001

Sample WT/Vol: 100 / mL
Work Order: DPWNF1AF
Dilution factor: 1
Moisture %: 19

Date Received: 11/15/00
Date Extracted: 11/20/00
Date Analyzed: 11/21/00

QC Batch: 0325583

Client Sample Id: DF/24-A/0319/CVS/013

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

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\8100.b\A-A80281.D
 Lab Smp Id: DPWNF1AF Client Smp ID: DF/24-A/0319/CVS/01
 Inj Date : 21-NOV-2000 19:49
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DPWNF1AF,8100.b
 Misc Info : 150188001
 Comment :
 Method : \\qpitpa02\d\chem\gc1.i\8100.b\LONGH.m
 Meth Date : 22-Nov-2000 08:57 eppingerd Quant Type: ESTD
 Cal Date : 10-NOV-2000 12:42 Cal File: A-A80132.D
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC061

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	12.563	12.563	0.000	1577813	0 03805	0.07609(aR)
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected.		
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				Compound Not Detected.		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected.		
9 2,4,5-TP(SILVEX)				Compound Not Detected.		
10 2,4,5-T				Compound Not Detected.		
11 DINOSBB				Compound Not Detected.		
12 2,4-DE	19.734	19.677	0.057	32203	0 00126	0.002520(a)

Data File: \\QPITPA02\D\chem\gc1.i\8100.b\A-A80281.D
Report Date: 22-Nov-2000 09:14

674 1310

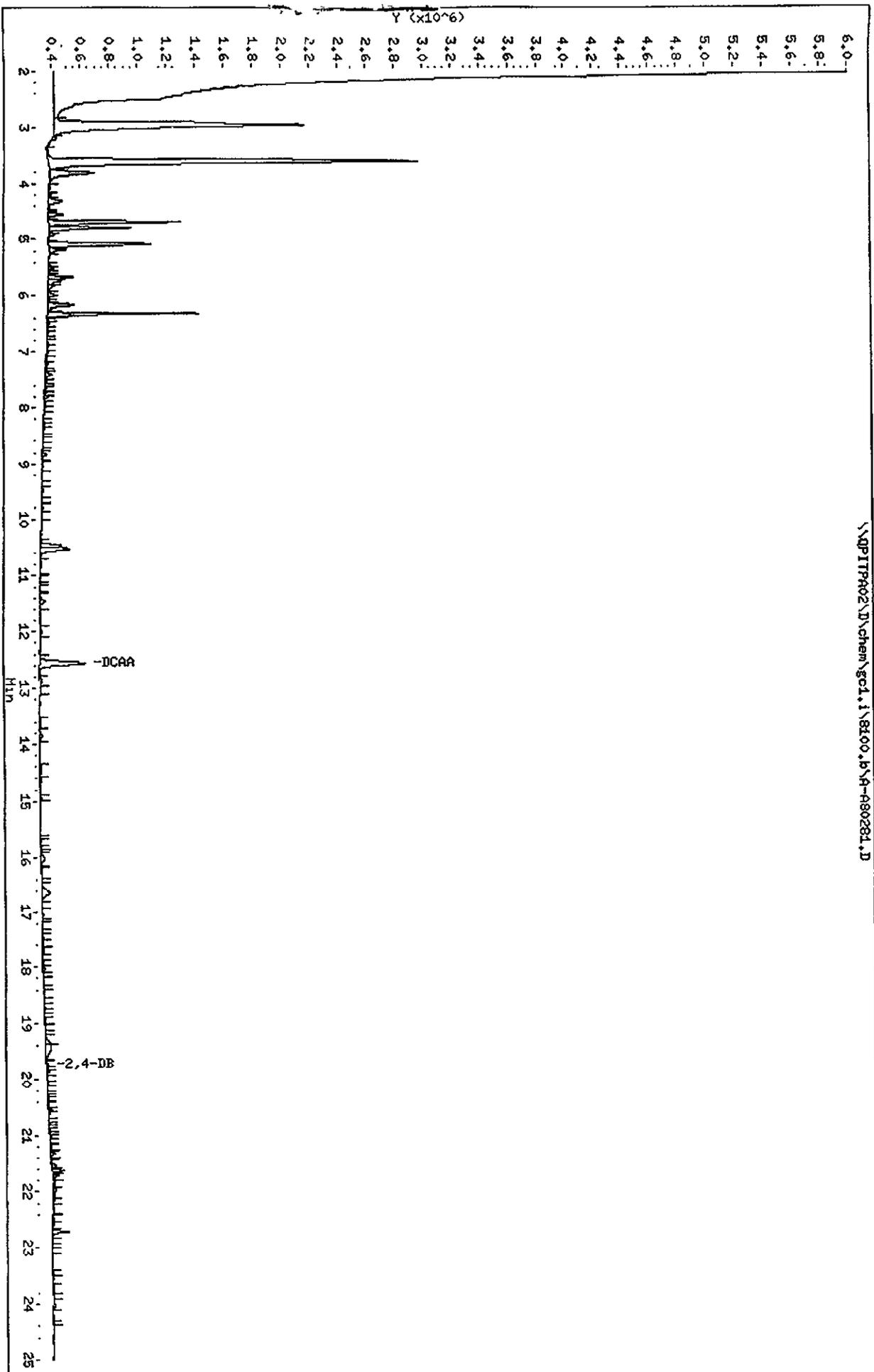
QC Flag Legend

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

Data File: \NPI17402\chem\gd1.1\8100.b\A-880281.D
Date: 21-NOV-2000 19:49
Client ID: DF/24-A/0319/CVS/01
Sample Info: DPMNF19F,8100.b
Volume Injected (uL): 1.0
Column phase: RTX-50

\NPI17402\chem\gd1.1\8100.b\A-880281.D

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



674 1312

HERBICIDE
CALIBRATION DATA

674 1313

Report Date : 22-Nov-2000 08:56

68901A
RTX-50

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COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc1.i\8100.b\LONGH.m
 Quant Method : ESTD Target Version : 4.04
 Last Update : 22-Nov-2000 08:56 Number of Cpnds : 12
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	376.000000
Initial:End Threshold	188.000000
Initial:Area Threshold	3760.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	9.000000
Initial:Negative Peaks	ON
Initial:Tension	0.200000

Compound	RT	RT Window	RF
1 DALAPON	4.414	4.344-4.484	1.63e+007
2 DCAA	12.564	12.494-12.634	4.15e+007
3 MCPP	13.210	13.140-13.280	5.70e+004
4 DICAMBA	13.390	13.320-13.460	2.84e+007
5 MCPA	14.560	14.490-14.630	6.80e+004
6 DICHLOROPROP	15.573	15.503-15.643	6.54e+006
7 2,4-D	17.151	17.081-17.221	1.22e+007
8 PENTACHLOROPHENOL	18.043	17.973-18.113	1.84e+008
9 2,4,5-TP (SILVEX)	18.445	18.375-18.515	2.34e+008
10 2,4,5-T	19.207	19.137-19.277	2.07e+008
11 DINOSEB	19.524	19.454-19.594	1.65e+008
12 2,4-DB	19.677	19.607-19.747	2.56e+007

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INITIAL CALIBRATION DATA

Start Cal Date : 10-NOV-2000 10:45
 End Cal Date : 10-NOV-2000 12:42
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\QPITPA02\D\chem\gc1.i\8100.b\LONGH.m
 Cal Date : 10-Nov-2000 14:53 morganw
 Curve Type : Average

Calibration File Names:

- Level 1: \\QPITPA02\D\chem\gc1.i\8100.b\A-A80128.D
- Level 2: \\QPITPA02\D\chem\gc1.i\8100.b\A-A80129.D
- Level 3: \\QPITPA02\D\chem\gc1.i\8100.b\A-A80130.D
- Level 4: \\QPITPA02\D\chem\gc1.i\8100.b\A-A80131.D
- Level 5: \\QPITPA02\D\chem\gc1.i\8100.b\A-A80132.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	17536455	17787318	16788246	15042107	14582568	16347339	8.917
3 MCPP	86888	71502	56217	40350	29994	56990	40.308<-
4 DICAMBA	30631698	29353239	29432659	26691199	25828629	28387485	7.152
5 MCPA	107203	84657	65097	46979	35839	67955	42.261<-
6 DICHLOROPROP	7452453	7051580	6807901	5934265	5463522	6541944	12.540
7 2,4-D	13866493	12965388	12635229	10973935	10448032	12177816	11.702
8 PENTACHLOROPHENOL	184845489	184091917	190288158	181548919	181686769	184492250	1.924
9 2,4,5-TP(SILVEX)	245470857	238097143	240513175	224581995	222529833	234238601	4.326
10 2,4,5-T	216430171	211574190	213045355	198788057	196937855	207355126	4.276
11 DINOSEB	176861514	170436063	168531181	155397638	152778051	164800889	6.248
12 2,4-DB	28486919	27088175	26085408	23367627	22781157	25561857	9.524
\$ 2 DCAA	47462911	44587765	42917427	37626288	34757185	41470315	12.505

13.5% RSD
AVG.

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674 1315

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcl.i Injection Date: 21-NOV-2000 17:25
Lab File ID: A-A80276.D Init. Cal. Date(s): 10-NOV-2000 10-NOV-2000
Analysis Type: Init. Cal. Times: 10:45 12:42
Lab Sample ID: MHERB Quant Type: ESTD
Method: \\qpitpa02\d\chem\gcl.i\8100.b\LONGH.m

COMPOUND	RRF	RFO	MIN	MAX
1 DALAPON	16347339	17068360	0.010	4 4 15 0
2 DCAA	41470315	44404430	0.010	7 1 15 0
3 MCPP	56990	60109	0.010	5 5 15 0
4 DICAMBA	28387485	30652918	0.010	8 0 15 0
5 MCPA	67955	69078	0.010	1.7 15.0
6 DICHLOROPROP	6541944	6942182	0.010	6.1 15 0
7 2,4-D	12177816	12567145	0.010	3.2 15 0
8 PENTACHLOROPHENOL	184492250	200986090	0.010	8 9 15 0
9 2,4,5-TP(SILVEX)	234238601	252582986	0.010	7 8 15 0
10 2,4,5-T	207355126	223522607	0.010	7.8 15.0
11 DINOSEB	164800889	174589055	0.010	5 9 15.0
12 2,4-DB	25561857	27775479	0.010	8 7 15 0

Data File: \\qpitpa02\d\chem\gcl.i\8100.b\A-A80297.D
Report Date: 22-Nov-2000 08:57

12
68901A
RTX-50

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674 1316

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcl.i Injection Date: 22-NOV-2000 03:29
Lab File ID: A-A80297.D Init. Cal. Date(s): 10-NOV-2000 10-NOV-2000
Analysis Type: Init. Cal. Times: 10:45 12:42
Lab Sample ID: MHERB Quant Type: ESTD
Method: \\qpitpa02\d\chem\gcl.i\8100.b\LONGH.m

COMPOUND	RRF	RFO	MIN RRF	%D	MAX %D
1 DALAPON	16347339	17525444	0.010	7.2	15.0
2 DCAA	41470315	45046627	0.010	8.6	15.0
3 MCPP	56990	60604	0.010	6.3	15.0
4 DICAMBA	28387485	31084941	0.010	9.5	15.0
5 MCPA	67955	69363	0.010	2.1	15.0
6 DICHLOROPROP	6541944	7029776	0.010	7.5	15.0
7 2,4-D	12177816	13157062	0.010	8.0	15.0
8 PENTACHLOROPHENOL	184492250	202725846	0.010	9.9	15.0
9 2,4,5-TP(SILVEX)	234238601	255353744	0.010	9.0	15.0
10 2,4,5-T	207355126	225911469	0.010	8.9	15.0
11 DINOSEB	164800889	174748268	0.010	6.0	15.0
12 2,4-DB	25561857	28775432	0.010	12.6	15.0

674 1317

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CQK150188

GC Column: RTX-50 ID: 0.53 (mm) Init. Calib. Date(s): 11/10/00 11/10/00

Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
S1 : 12.56					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	LHERB	11/10/00	1045	12.57	
02	MLHERB	11/10/00	1114	12.57	
03	MHERB	11/10/00	1143	12.57	
04	MHERB	11/10/00	1212	12.57	
05	HHERB	11/10/00	1242	12.57	
06	MHERB	11/21/00	1725	12.56	
07	DF/24-A/0319 DPWNF1AF	11/21/00	1949	12.56	
08	LCS DP8AG1AC	11/21/00	2018	12.56	
09	BLK DP8AG1AA	11/21/00	2046	12.56	
10	MHERB	11/22/00	0329	12.56	
11					
12					
13					
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.

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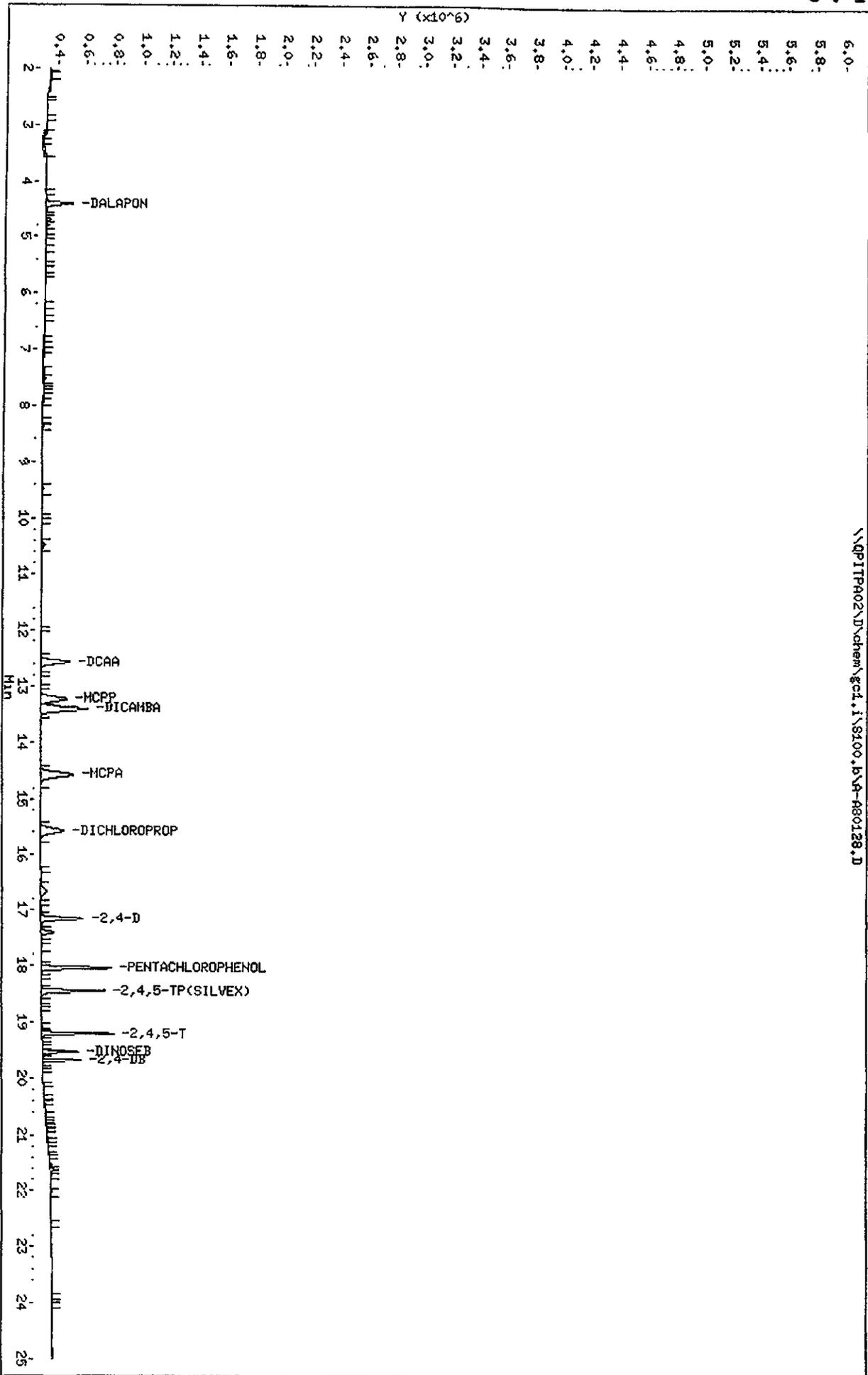
Data file : \\QPITPA02\D\chem\gc1.i\8100.b\A-A80128.D
 Lab Smp Id: LHERB
 Inj Date : 10-NOV-2000 10:45
 Operator : 01797
 Smp Info : LHERB,8100.b
 Misc Info : 190-94-1
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\8100.b\LONGH.m
 Meth Date : 10-Nov-2000 14:53 morganw
 Cal Date : 10-NOV-2000 10:45
 Als 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-A80128.D
 Calibration Sample, Level: 1
 Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.413	4.412	0.001	192901	0.01100	0.01100
2 DCAA	12.573	12.571	0.002	1010960	0.02130	0.02130
3 MCPP	13.220	13.220	0.000	184203	2.12000	2.120
4 DICAMBA	13.402	13.400	0.002	324696	0.01060	0.01060
5 MCEA	14.575	14.572	0.003	229414	2.14000	2.140
6 DICHLOROPROP	15.583	15.583	0.000	157992	0.02120	0.02120
7 2,4-D	17.158	17.157	0.001	292583	0.02110	0.02110
8 PENTACHLOROPHENOL	18.048	18.047	0.001	491689	0.00266	0.002660
9 2,4,5-TP(SILVEX)	18.450	18.448	0.002	1288722	0.00525	0.005250
10 2,4,5-T	19.213	19.212	0.001	1140587	0.00527	0.005270
11 DINOSEB	19.530	19.528	0.002	560651	0.00317	0.003170
12 2,4-DB	19.683	19.681	0.002	601074	0.02110	0.02110

Data File: \\NPITPA02\chem\gcl.i\8100.b\A-880128.D
Date: 10-NOV-2000 10:45
Client ID:
Sample Info: LHERB,8100.b
Column phase: RTX-50

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



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Data file : \\QPITPA02\D\chem\gc1.i\8100.b\A-A80129.D
 Lab Smp Id: MLHERB
 Inj Date : 10-NOV-2000 11:14
 Operator : 01797
 Smp Info : MLHERB,8100.b
 Misc Info : 190-94-2
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\8100.b\LONGH.m
 Meth Date : 10-Nov-2000 14:53 morganw
 Cal Date : 10-NOV-2000 11:14
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A80129.D
 Calibration Sample, Level: 2
 Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.413	4.412	0.001	391321	0.02200	0.02216
2 DCAA	12.571	12.571	0.000	1894980	0.04250	0.04117
3 MCPP	13.220	13.220	0.000	304598	4.26000	3.846
4 DICAMBA	13.400	13.400	0.000	625224	0.02130	0.02085
5 MCPA	14.572	14.572	0.000	362334	4.28000	3.777
6 DICHLOROPROP	15.583	15.583	0.000	298987	0.04240	0.04123
7 2,4-D	17.159	17.157	0.002	551029	0.04250	0.04107
8 PENTACHLOROPHENOL	18.049	18.047	0.002	979369	0.00532	0.005309
9 2,4,5-TP(SILVEX)	18.449	18.448	0.001	2500020	0.01050	0.01034
10 2,4,5-T	19.213	19.212	0.001	2221529	0.01050	0.01038
11 DINOSEB	19.529	19.528	0.001	1082269	0.00635	0.006232
12 2,4-DB	19.681	19.681	0.000	1143121	0.04220	0.04114

Data File: \\QPITPA02\N\chem\gcl.1\8100.b\A-880129.D

Date: 10-NOV-2000 11:14

Client ID:

Sample Info: MLHERB, 8100.b

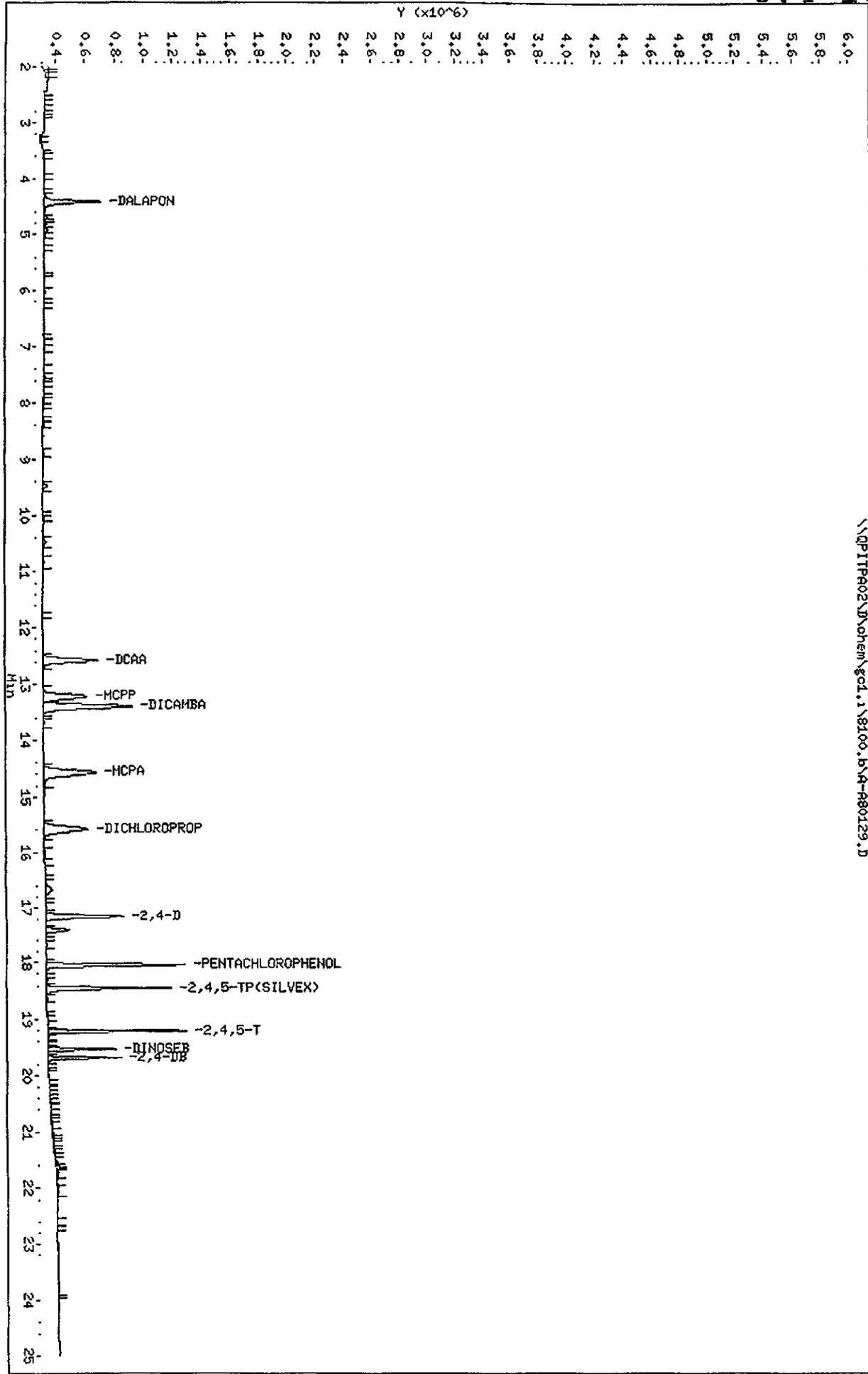
Column phase: RTX-80

Instrument: gcl.i

Operator: 01797

Column diameter: 0.53

\\QPITPA02\N\chem\gcl.1\8100.b\A-880129.D



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Data file : \\QPITPA02\D\chem\gc1.i\8100.b\A-A80130.D
 Lab Smp Id: MHERB
 Inj Date : 10-NOV-2000 11:43
 Operator : 01797
 Smp Info : MHERB,8100.b
 Misc Info : 190-94-3
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\8100.b\LONGH.m
 Meth Date : 10-Nov-2000 14:53 morganw
 Cal Date : 10-NOV-2000 12:42
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

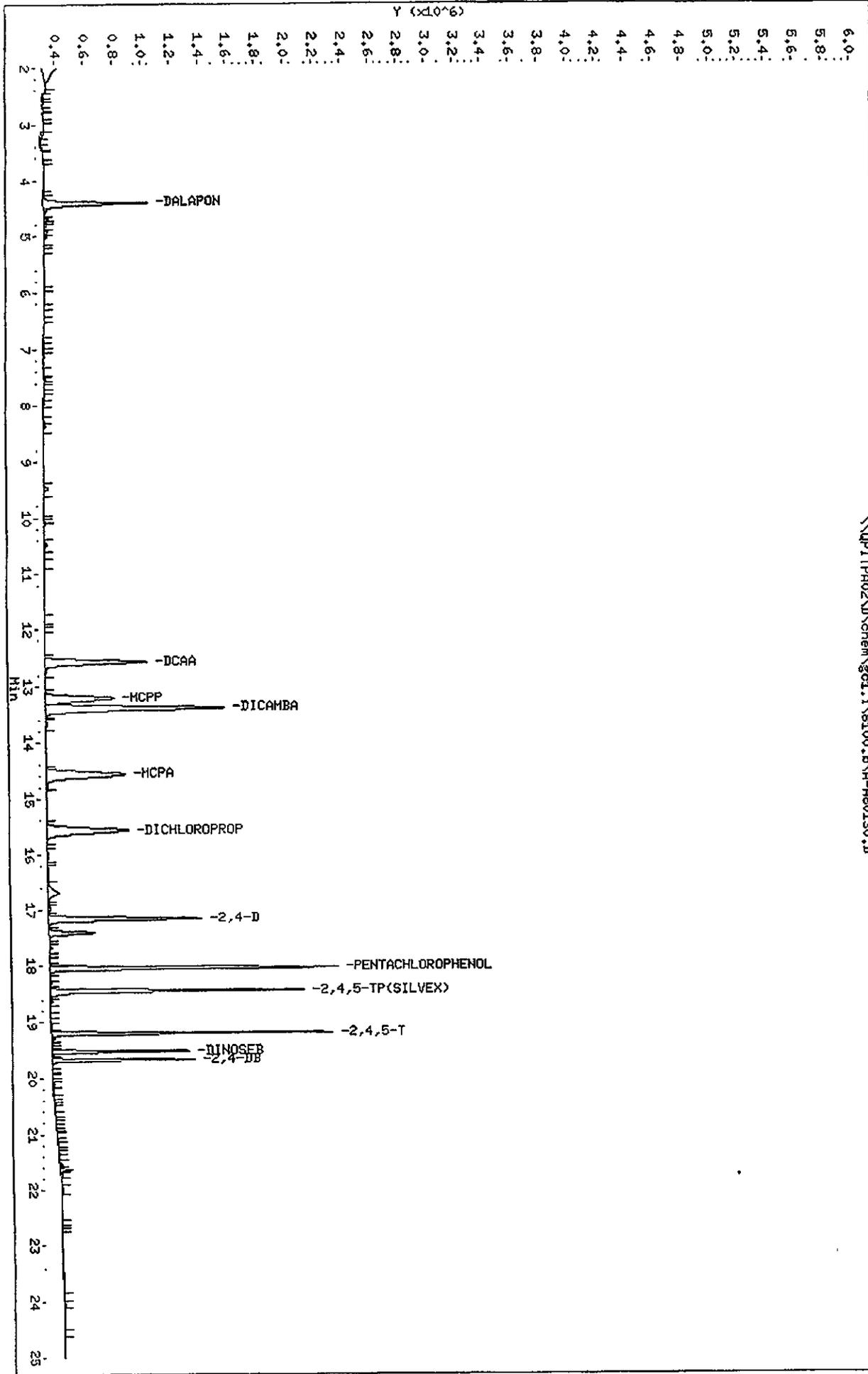
Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A80132.D
 Calibration Sample, Level: 3
 Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	4.412	4.412	0.000	737004	0.04390	0.04508
\$ 2 DCAA	12.571	12.571	0.000	3652273	0.08510	0.08807
3 MCPP	13.220	13.220	0.000	478966	8.52000	8.404
4 DICAMBA	13.400	13.400	0.000	1250888	0.04250	0.04406
5 MCPA	14.572	14.572	0.000	557234	8.56000	8.200
6 DICHLOROPROP	15.583	15.583	0.000	577310	0.08480	0.08825
7 2,4-D	17.157	17.157	0.000	1075258	0.08510	0.08830
8 PENTACHLOROPHENOL	18.047	18.047	0.000	2024666	0.01064	0.01097
9 2,4,5-TP(SILVEX)	18.448	18.448	0.000	5074828	0.02110	0.02166
10 2,4,5-T	19.212	19.212	0.000	4495257	0.02110	0.02168
11 DINOSEB	19.528	19.528	0.000	2140346	0.01270	0.01299
12 2,4-DB	19.681	19.681	0.000	2204217	0.08450	0.08623

Data File: \\QPITPA02\N\chem\gc1.1\8100.b\A-880130.D
Date: 10-NOV-2000 11:43
Client ID:
Sample Info: HHERB, 8100.b
Column phase: RTX-50

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

\\QPITPA02\N\chem\gc1.1\8100.b\A-880130.D



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Data file : \\QPITPA02\D\chem\gc1.i\8100.b\A-A80131.D
 Lab Smp Id: MHHERB
 Inj Date : 10-NOV-2000 12:12
 Operator : 01797
 Smp Info : MHHERB,8100.b
 Misc Info : 190-94-4
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\8100.b\LONGH.m
 Meth Date : 10-Nov-2000 14:53 morganw
 Cal Date : 10-NOV-2000 12:12
 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-A80131.D
 Calibration Sample, Level: 4

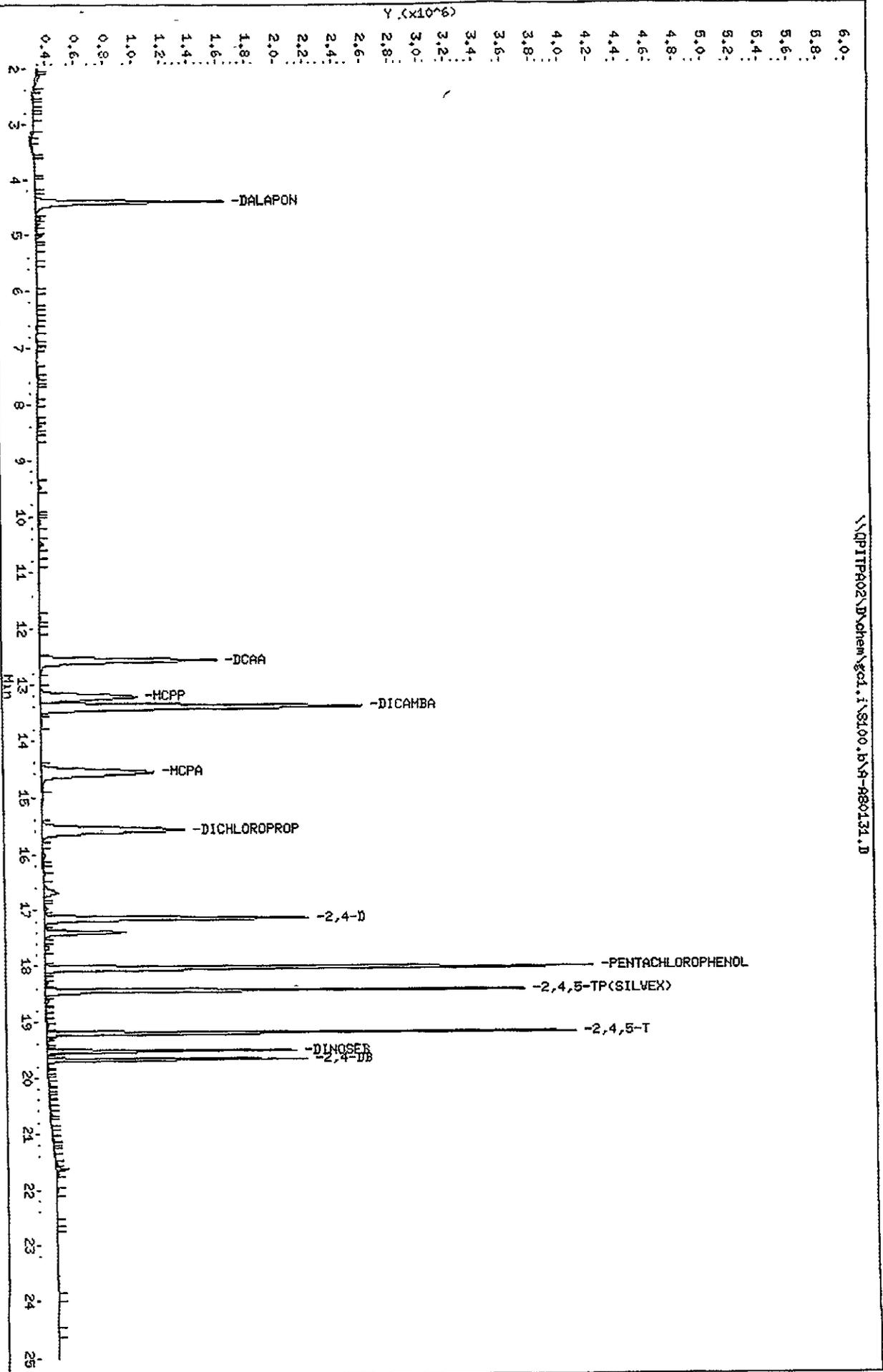
Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.413	4.412	0.001	1320697	0.08780	0.07867
\$ 2 DCAA	12.570	12.571	-0.001	6396469	0.17000	0.1480
3 MCPP	13.218	13.220	-0.002	685949	17.0000	10.35
4 DICAMBA	13.399	13.400	-0.001	2271421	0.08510	0.07862
5 MCPA	14.571	14.572	-0.001	803340	17.1000	10.09
6 DICHLOROPROP	15.586	15.583	0.003	1008825	0.17000	0.1481
7 2,4-D	17.154	17.157	-0.003	1865569	0.17000	0.1480
8 PENTACHLOROPHENOL	18.047	18.047	0.000	3863361	0.02128	0.02105
9 2,4,5-TP(SILVEX)	18.449	18.448	0.001	9454902	0.04210	0.04005
10 2,4,5-T	19.211	19.212	-0.001	8388856	0.04220	0.04015
11 DINOSEB	19.529	19.528	0.001	3947100	0.02540	0.02356
12 2,4-DB	19.680	19.681	-0.001	3949129	0.16900	0.1501

Data File: \\QPITP902\N\chem\sc1.1\8100.b\A-680131.D
Date: 10-NOV-2000 12:12
Client ID:
Sample Info: HHERB,8100.b
Column phase: RTX-50

Instrument: sc1.1
Operator: 01797
Column diameter: 0.53

\\QPITP902\N\chem\sc1.1\8100.b\A-680131.D



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Data file : \\QPITPA02\D\chem\gc1.i\8100.b\A-A80132.D
 Lab Smp Id: HHERB
 Inj Date : 10-NOV-2000 12:42
 Operator : 01797
 Smp Info : HHERB,8100.b
 Misc Info : 190-94-5
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\8100.b\LONGH.m
 Meth Date : 10-Nov-2000 14:53 morganw
 Cal Date : 10-NOV-2000 12:42
 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-A80132.D
 Calibration Sample, Level: 5
 Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.413	4.412	0.001	2566532	0.17600	0.1581
2 DCAA	12.571	12.571	0.000	11817443	0.34000	0.2875
3 MCPP	13.220	13.220	0.000	1022801	34.1000	17.89
4 DICAMBA	13.399	13.400	-0.001	4390867	0.17000	0.1561
5 MCPA	14.575	14.572	0.003	1218513	34.0000	17.74
6 DICHLOROPROP	15.583	15.583	0.000	1852134	0.33900	0.2860
7 2,4-D	17.154	17.157	-0.003	3552331	0.34000	0.2945
8 PENTACHLOROPHENOL	18.049	18.047	0.002	7730772	0.04255	0.04223
9 2,4,5-TP(SILVEX)	18.448	18.448	0.000	18692506	0.08400	0.08034
10 2,4,5-T	19.211	19.212	-0.001	16621555	0.08440	0.08071
11 DINOSEB	19.529	19.528	0.001	7761125	0.05080	0.04736
12 2,4-DB	19.681	19.681	0.000	7700031	0.33800	0.3028

Data File: \NQPIPA02\chem\gcl.1\8100.b\A-680132.D

Date: 10-NOV-2000 12:42

Client ID:

Sample Info: HHERB,8100.b

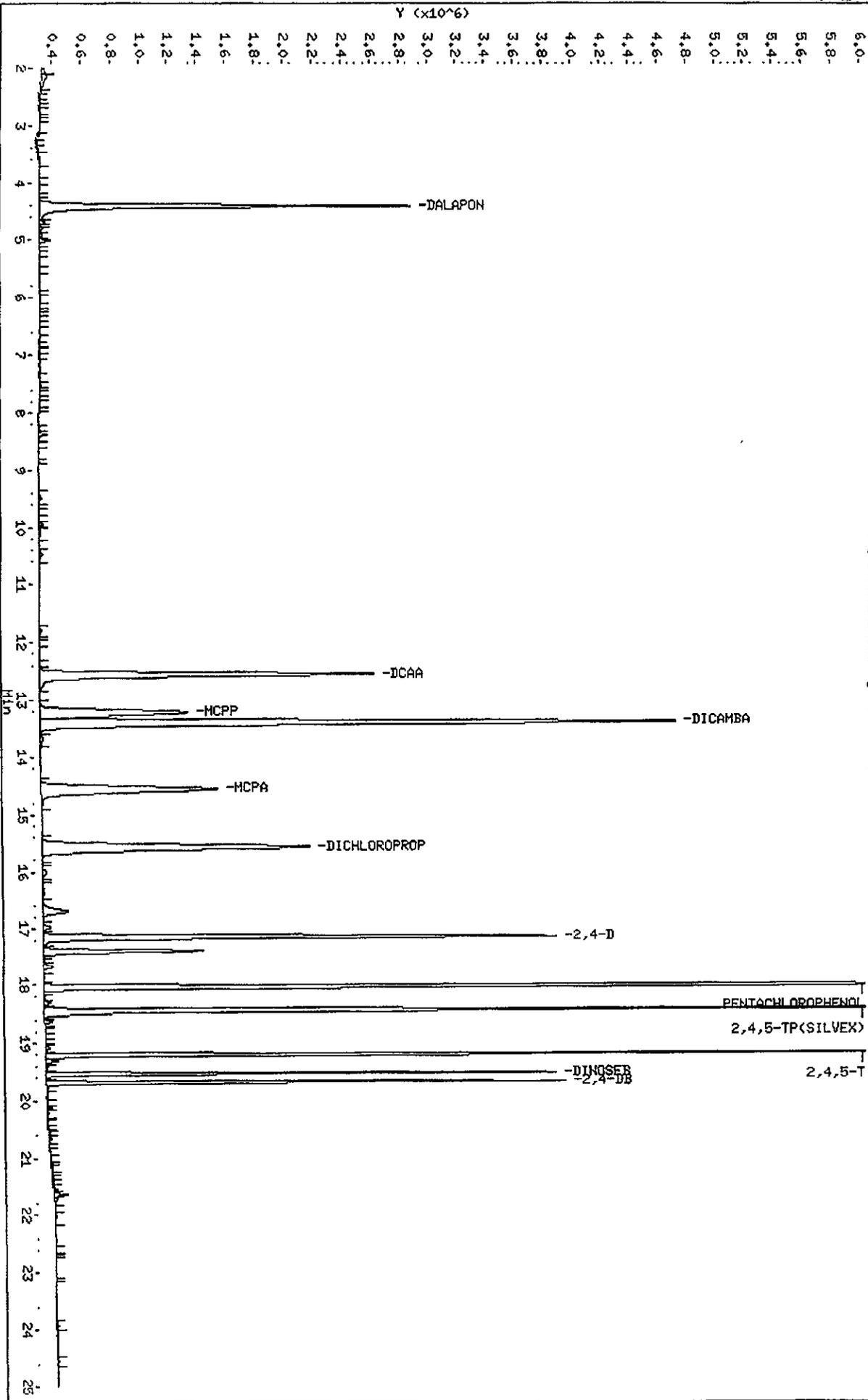
Column phase: RTX-50

Instrument: gcl.1

Operator: 01797

Column diameter: 0.53

\NQPIPA02\chem\gcl.1\8100.b\A-680132.D



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\8100.b\A-A80276.D
 Lab Smp Id: MHERB
 Inj Date : 21-NOV-2000 17:25
 Operator : 01797
 Smp Info : MHERB,8100.b
 Misc Info : 190-94-3
 Comment :
 Method : \\qpitpa02\d\chem\gc1.i\8100.b\LONGH.m
 Meth Date : 22-Nov-2000 08:57 eppingerd Quant Type: ESTD
 Cal Date : 10-NOV-2000 12:42 Cal File: A-A80132.D
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC061

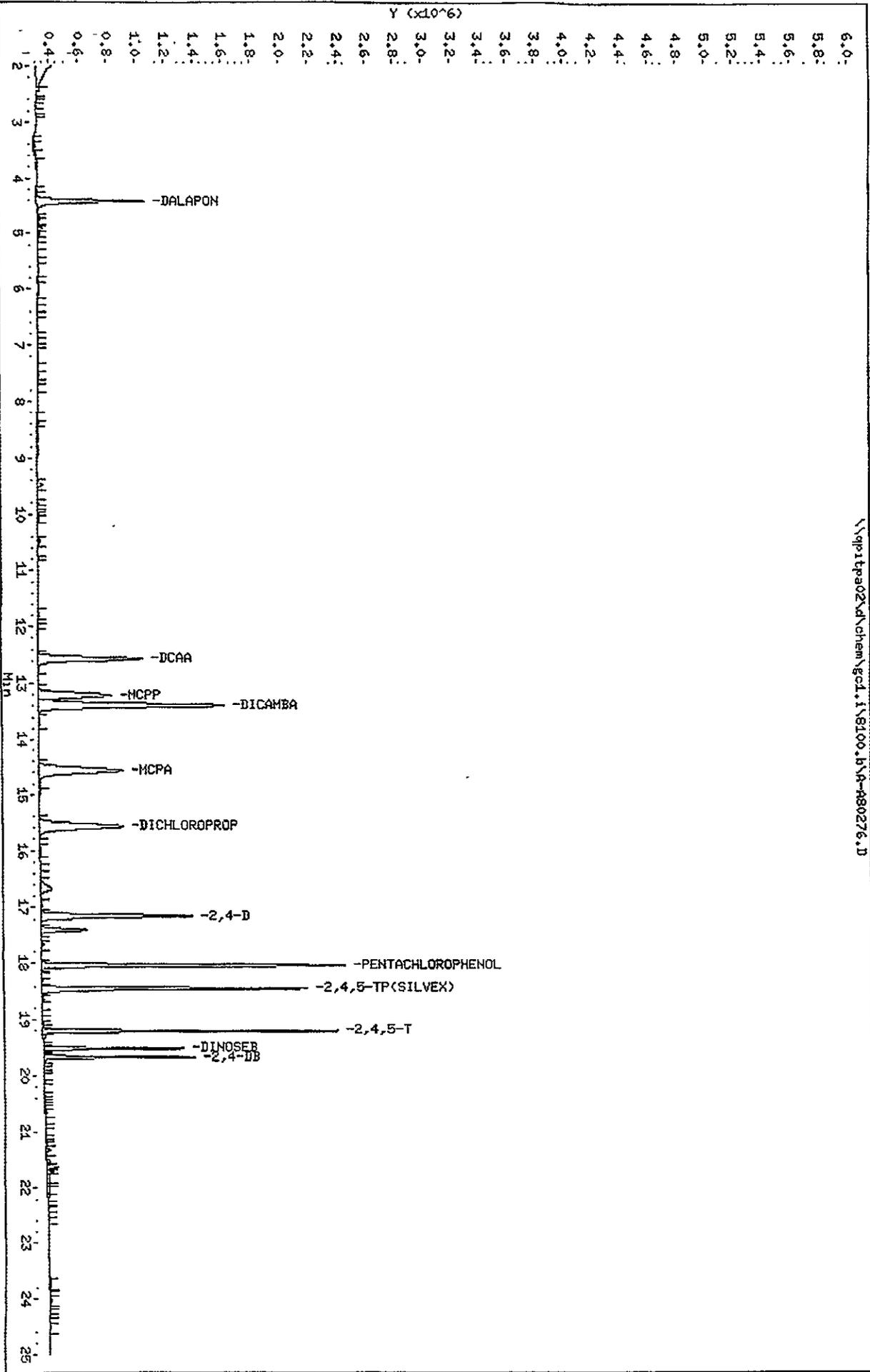
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.413	4.413	0.000	749301	0.04390	0.04584
2 DCAA	12.563	12.563	0.000	3778817	0.08510	0.09112
3 MCPP	13.210	13.210	0.000	512127	8.52000	8.986
4 DICAMBA	13.390	13.390	0.000	1302749	0.04250	0.04589
5 MCPA	14.560	14.560	0.000	591306	8.56000	8.701
6 DICHLOROPROP	15.572	15.572	0.000	588697	0.08480	0.08999
7 2,4-D	17.151	17.151	0.000	1069464	0.08510	0.08782
8 PENTACHLOROPHENOL	18.042	18.042	0.000	2138492	0.01064	0.01159
9 2,4,5-TP(SILVEX)	18.444	18.444	0.000	5329501	0.02110	0.02275
10 2,4,5-T	19.207	19.207	0.000	4716327	0.02110	0.02274
11 DINOSEB	19.523	19.523	0.000	2217281	0.01270	0.01345
12 2,4-DB	19.677	19.677	0.000	2347028	0.08450	0.09182

6741329

Data File: \\pp1tpa02\chem\gcl,1\8100,b\A-890276.D
Date: 21-NOV-2000 17:25
Client ID:
Sample Info: HHERB,8100,b
Column Phase: RTX-50

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

\\pp1tpa02\chem\gcl,1\8100,b\A-890276.D



STL-Pittsburgh

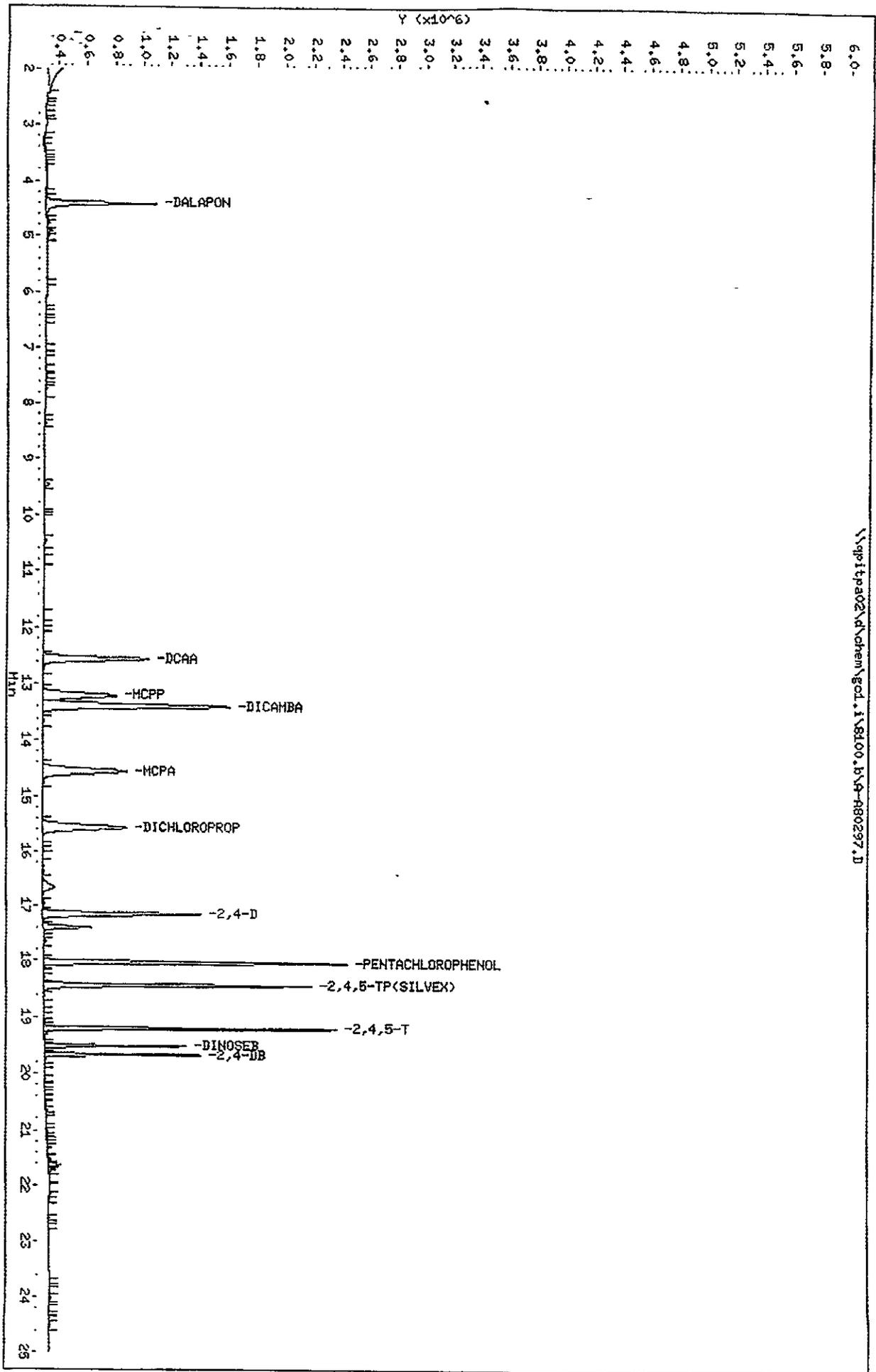
Data file : \\qpitpa02\d\chem\gc1.i\8100.b\A-A80297.D
 Lab Smp Id: MHERB
 Inj Date : 22-NOV-2000 03:29
 Operator : 01797
 Smp Info : MHERB,8100.b
 Misc Info : 190-94-3
 Comment :
 Method : \\qpitpa02\d\chem\gc1.i\8100.b\LONGH.m
 Meth Date : 22-Nov-2000 08:57 eppingerd Quant Type: ESTD
 Cal Date : 10-NOV-2000 12:42 Cal File: A-A80132.D
 Als bottle: 23 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC061

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.412	4.413	-0.001	769367	0.04390	0.04706
§ 2 DCAA	12.560	12.563	-0.003	3833468	0.08510	0.09244
3 MCPP	13.201	13.210	-0.009	516342	8.52000	9.060
4 DICAMBA	13.385	13.390	-0.005	1321110	0.04250	0.04654
5 MCPA	14.557	14.560	-0.003	593744	8.56000	8.737
6 DICHLOROPROP	15.562	15.572	-0.010	596125	0.08480	0.09112
7 2,4-D	17.147	17.151	-0.004	1119666	0.08510	0.09194
8 PENTACHLOROPHENOL	18.039	18.042	-0.003	2157003	0.01064	0.01169
9 2,4,5-TP(SILVEX)	18.441	18.444	-0.003	5387964	0.02110	0.02300
10 2,4,5-T	19.204	19.207	-0.003	4766732	0.02110	0.02299
11 DINOSEB	19.522	19.523	-0.001	2219303	0.01270	0.01347
12 2,4-DB	19.673	19.677	-0.004	2431524	0.08450	0.09512

6741331

Data File: \\spip02\chem\gcd.1\8100.b\A-680297.D
Date: 22-NOV-2000 03:29
Client ID:
Sample Info: HHER3, 8100.b
Column phase: RTX-50

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



HERBICIDE
QC DATA

674 1333

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK200000 583

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 11/08/00

Work Order: DP8AG1AA

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/21/00

Moisture %: NA

QC Batch: 0325583

Client Sample Id: INTRA-LAB BLANK

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

FORM I

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\8100.b\A-A80283.D
 Lab Smp Id: DP8AG1AA Client Smp ID: BLK
 Inj Date : 21-NOV-2000 20:46
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DP8AG1AA,8100.b
 Misc Info : 090223BLK
 Comment :
 Method : \\gpitpa02\d\chem\gc1.i\8100.b\LONGH.m
 Meth Date : 22-Nov-2000 08:57 eppingerd Quant Type: ESTD
 Cal Date : 10-NOV-2000 12:42 Cal File: A-A80132.D
 Als bottle: 9 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC061

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	4.392	4.413	-0.021	77563	0.00474	0.009489 (a)
2 DCAA	12.560	12.563	-0.003	1784728	0.04304	0.08607 (aR)
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected		
5 MCPA				Compound Not Detected		
6 DICHLOROPROP				Compound Not Detected.		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected.		
9 2,4,5-TP(SILVEX)				Compound Not Detected.		
10 2,4,5-T				Compound Not Detected.		
11 DINOSEB				Compound Not Detected.		
12 2,4-DB				Compound Not Detected		

674 1335

Data File: \\QPITPA02\D\chem\gc1.i\8100.b\A-A80283.D
Report Date: 22-Nov-2000 09:15

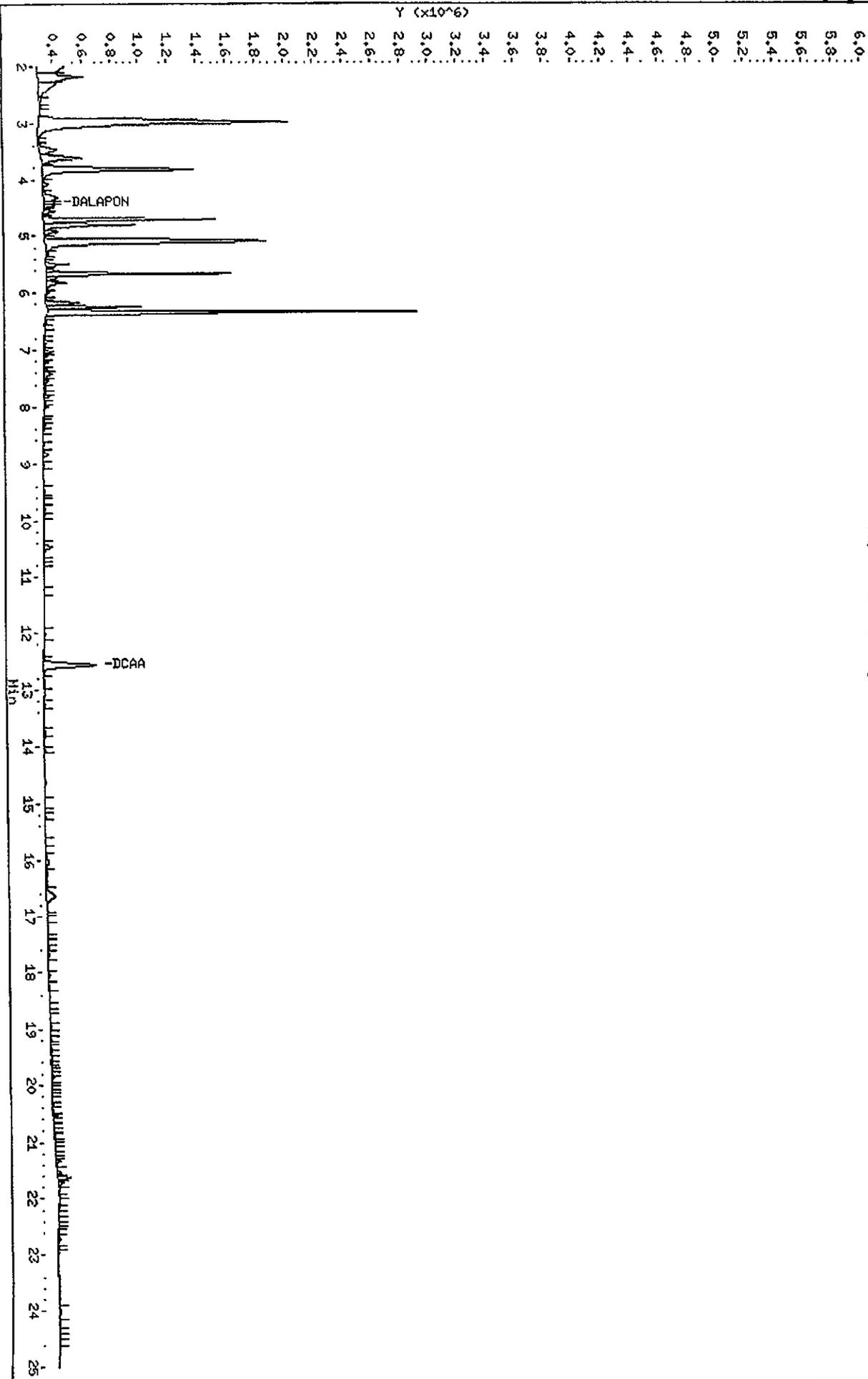
QC Flag Legend

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

Data File: \\QP1TP002\J\chem\gc1.1\8100.b\A-860283.D
Date: 21-NOV-2000 20:46
Client ID: BLK
Sample Infol: DFBAGLAA, 8100.b
Volume Injected (uL): 1.0
Column phase: RTX-90

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

\\QP1TP002\J\chem\gc1.1\8100.b\A-860283.D



674 1337

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK200000 583

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 11/08/00

Work Order: DP8AG1AC

Date Extracted: 11/20/00

Dilution factor: 1

Date Analyzed: 11/21/00

Moisture %: NA

QC Batch: 0325583

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.105	
93-72-1	2,4,5-TP (Silvex)	0.0271	

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\8100.b\A-A80282.D
 Lab Smp Id: DP8AG1AC Client Smp ID: LCS
 Inj Date : 21-NOV-2000 20:18
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DP8AG1AC,8100.b
 Misc Info : 090223LCS
 Comment :
 Method : \\qpitpa02\d\chem\gc1.i\8100.b\LONGH.m
 Meth Date : 22-Nov-2000 08:57 eppingerd Quant Type: ESTD
 Cal Date : 10-NOV-2000 12:42 Cal File: A-A80132.D
 Als bottle: 8 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC061

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	4.410	4.413	-0.003	556963	0.03407	0.06814 (aR)
2 DCAA	12.562	12.563	-0.001	1626747	0.03923	0.07845 (aR)
3 MCPP	13.208	13.210	-0.002	390465	6.85144	13.70
4 DICAMBA	13.387	13.390	-0.003	840970	0.02962	0.05925 (a)
5 MCPA	14.558	14.560	-0.002	442443	6.51082	13.02
6 DICHLOROPROP	15.570	15.572	-0.002	380609	0.05818	0.1164 (a)
7 2,4-D	17.147	17.151	-0.004	639474	0.05251	0.1050 (aR)
8 PENTACHLOROPHENOL	18.039	18.042	-0.003	1398457	0.00758	0.01516 (a)
9 2,4,5-TP (SILVEX)	18.441	18.444	-0.003	3173761	0.01355	0.02710 (aR)
10 2,4,5-T	19.204	19.207	-0.003	2812733	0.01356	0.02713 (aR)
11 DINOSEB	Compound Not Detected.					
12 2,4-DB	19.674	19.677	-0.003	1436058	0.05618	0.1124 (a)

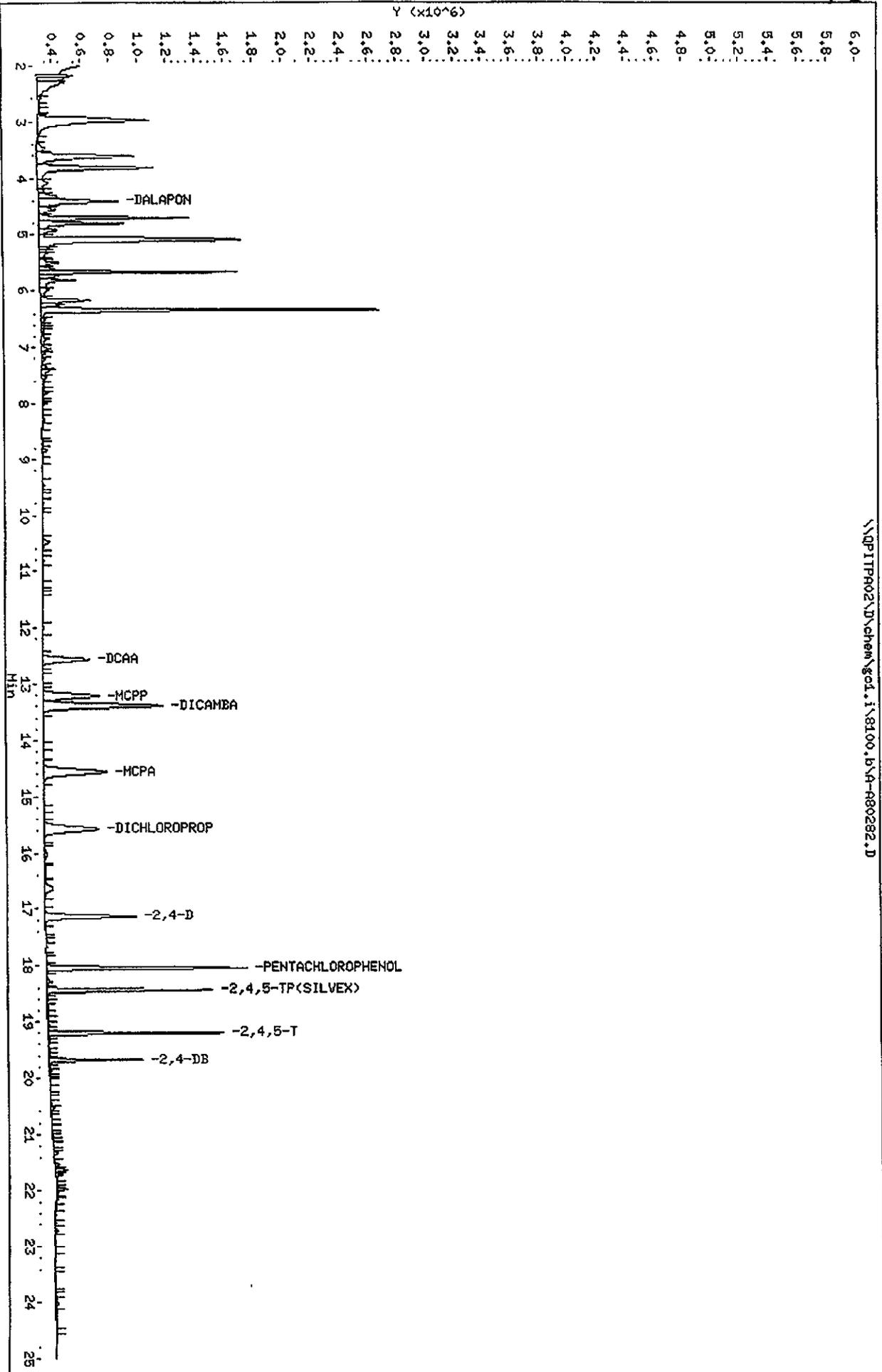
QC Flag Legend

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

Data File: \\QPITPA02\1\chem\gcl.1\8100.b\A-680282.D
Date: 21-NOV-2000 20:18
Client ID: LCS
Sample Info: DP86G1AC.8100.b
Volume Injected (uL): 1.0
Column phase: RTX-50

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

\\QPITPA02\1\chem\gcl.1\8100.b\A-680282.D



674 1341

HERBICIDE
MISCELLANEOUS

B#0325583

TCLP

674 1342

STL - Pittsburgh

Separatory Funnel Leachate Worksheet

Logbook ID: OP4

Start Date	Date Completed	Parameter	Method	Solvent	Surrogate #	Surr Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	Cleanup Method
11-20-00	11-21-00	HexAve	3510C	Methyl Ethyl Ketone	190-104-7	1.0	NA	NA	NA
1. POK090233	BLK	NA	10.0	5.12	190-104-7	1.0	NA	NA	NA
2.	LCS			5.11					
3.	001MS			5.11					
4.	001MSD			5.11					
5.	001			5.11					
6. POK140236	001			5.11					
7. POK150188	001			5.11					
8.									
9.									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
21.									
22.									
23.									

P. Yushinskiy
11-20-00

Analyst	Extract(s)	Date	Time	Relinquished	Location
PY	PY	11-21-00	00:30	PY	Pittsburgh
PY	PY	11-21-00	08:00	PY	Pittsburgh
PY	PY	11-21-00	16:00	PY	Pittsburgh

Lot Number	Sample ID	Client ID	Sample Volume (mL)	Final Volume (mL)	pH	Surrogate #	Surr Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	Cleanup Date
ALL ABOVE										
ALL ABOVE										
ALL ABOVE										

Sodium Sulfate Mig/Lot Number: Baker T29628

Reviewed by: Jane Miller Date: 11-21-00

674 1343

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information
1	1	8151 HERB ANALYSIS
2	2	190-94-1 128
3	3	190-94-2 129
4	4	190-94-3 130
5	5	190-94-4 131
6	6	190-94-5 132
7	7	8151/515 HERB ANALYSIS
8	8	8151/515 HERB ANALYSIS

created: 11-10-00 uwm A

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
1	94	8151 HERB ANALYSIS
2	95	190-94-3
3	96	300129001
4	97	300129001MS
5	98	300129001MSD
6	99	300129LCS
7	100	300129BLK
8	93	190-94-3

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information
1	1	8151/515 HERB ANALYSIS
2	2	190-94-3 276
3	3	090223001 277
4	4	090223001MS 278
5	5	090223001MSD 279
6	6	140226001 280
7	7	150188001 281
8	8	090223LCS 282
9	9	090223BLK 283
10	10	100274001 284
11	11	100274003 285
12	12	140182001 286
13	13	140182003 287
14	14	140182005 288
15	15	140182007 289
16	16	140182009 290
17	17	140182011 291
18	18	140182013 292
19	19	140182015 293
20	20	100274LCS 294
21	21	100274LCSD 295
22	22	100274BLK 296
23	23	190-94-3 297

✓ DE 11-22-00

A

Sequence Table (Back Injector):

No entries - empty table!

674 1345 TPLP

PSR024 11/20/00 13:47.11 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: PINOB

METHOD: QS Herbicides (8151A)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SPX	MATRIX DESCRIPTION	QTY	
										RCVD	REQD
20A	DPLF2-1-AG	___	287197	422326	A-64-QS	COK090223	001		SOLID	0	7 1
22A CLP1	DPT5F-1-AE	___	287196	002532	A-64-QS	COK140226	001		SOLID	0	6 1
22C CLP1	DFWNF-1-AF	___	287195	399411	A-64-QS	COK150188	001		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>P. Zushinski</i>	<i>P. Zushinski</i>	<i>11-20-00 15:30</i>
<i>P. Zushinski</i>	<i>P. Zushinski</i>	<i>11-20-00 233</i>

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

674 1346

METALS DATA

674 1347

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

<u>Client ID</u>	<u>Lab Sample ID:</u>
<u>DF/24-A/0319/CVS/013</u>	<u>DPWNF</u>
<u>DF/24-A/0319/CVS/013D</u>	<u>DPWNFD</u>
<u>DF/24-A/0319/CVS/013S</u>	<u>DPWNFS</u>

Comments: UXB, DUNN FIELD
COK150188
6010B

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____
Date: _____ Title: _____

REVIEWED BY: PMG
DATE: 11-27-00

674 1348

METALS
RESULTS

674 1349

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DPWNF Client ID: DF/24-A/0319/CVS/013
Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107
Weight: 0.5 Volume: 50 Percent Moisture: 19.08

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.32	1.2	13.0		1	ICPST	11/20/00	17:30

Comments: Lot #: C0K150188 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

Initial Calibration Verification Standard

Instrument: ICPST

Units: µg/L

Chart Number: T01120X.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0057-124-2

Element	WL/ Mass	True Conc	ICV3-1 11/20/00 5.03 PM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Arsenic	189.042	250.0	257.12	102.8								

674 1351

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST

Units: ug/L

Chart Number: T01120X.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0057-148-5

Element	WL/ Mass	True Conc	CCV3-1 11/20/00 5:47 PM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Arsenic	189.042	500.0	507.90	101.6								

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST

Units: ug/L

Chart Number: T01120X.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICBI 11/20/00 5:07 PM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q								
Arsenic	189.042	10	2.6	U								

674 1353

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST

Units: ug/L

Chart Number: T01120X.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/20/00 5:51 PM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q								
Arsenic	189.042	10	2.6	U								

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DP5NKBMatrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107Weight: 0.5 Volume: 50 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	11/20/00	17.22

Comments: Lot #: COK150188

Version 4.10.2

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

Form 3 Equivalent

674 1355

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST

Units: ug/L

Chart Number: T01120X.ARC

Acceptable Range: 0% - 0%

Standard Source: Inorganic Ventures

Standard ID: 0057-146-2

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 11/20/00 5:11 PM				
				Found	Found	Found	Found	Found
Arsenic	189.042	10		4				

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST

Units: ug/L

Chart Number: T01120X.ARC

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0057-102-1

Element	WL/ Mass	True Conc	ICSAB 11/20/00 5:15 PM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Arsenic	189.042	1000	1024.7	102.5								

674 1357

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DPWNFS
 Original Sample ID: DPWNF Client ID: DF/24-A/0319/CVS/013S
 Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107
 Weight: 0.5 Volume: 50 Percent Moisture: 19.08

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	13.0		227		247.16	86.4	1	1	ICPST	11/20/00	17:30	11/20/00	17.38

Comments: Lot #: COK150188 Sample #: 1

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

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DPWNFD
 Original Sample ID: DPWNF Client ID: DF/24-A/0319/CVS/013D
 Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107
 Weight: 0.5 Volume: 50 Percent Moisture: 19.08

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	13.0		225		247.16	85.9	1	1	ICPST	11/20/00	17:30	11/20/00	17:42

Comments: Lot #: C0K150188 Sample #. 1

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

674 1359

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DPWNFD

Matrix Spike Sample ID: DPWNFS Client ID: DF/24-A/0319/CVS/013D

Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107

Weight: 0.5 Volume: 50 Percent Moisture: 19.08

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	227		225		0.7 %	1	1	ICPST	11/20/00	17:38	11/20/00	17:42

Comments: Lot #: C0K150188 Sample #: 1

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: DP5NKC
 Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107
 Weight: 0.5 Volume: 50 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	200	196	97.9		80-120	1	ICPST	11/20/00	17:26

Comments: Lot #: C0K150188

674 1361 STL-Pittsburgh

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DPWNEP

Original Sample ID: DPWNF Client ID: DF/24-A/0319/CVS/013

Matrix: Soil Units: mg/kg Prep Date: 11/18/00 Prep Batch: 0323107

Weight: 0.5 Volume: 50 Percent Moisture: 19.08

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	13.0		14.8			1	5	ICPST	11/20/00	17:30	11/20/00	17:34

Comments: _____

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

674 1363

STL-Pittsburgh

Metals Data Reporting Form

Inter-Element Correction FactorsInstrument: ICPSTDate of IEC's: 10/13/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(-0.000163)
Aluminum	308.215	Pb(0.000539)
Chromium	267.716	Sb(0.007445)
Chromium	267.716	As(-0.003079), Sb(0.013117)
Cobalt	228.616	Pb(0.000043), Se(-0.000467)
Cobalt	228.616	Cd(-0.000073), Fe(0.086957), Ni(-0.000735), Pb(0.000049), Se(0.000496), Tl(0.002407)
Iron	271.441	Cd(0.000118), Pb(0.000082), Sb(0.000025), Se(-0.00001), Tl(-0.000021), V(-0.000341), Zn(0.000124)
Iron	271.441	Pb(0.000048), Se(-0.000347)
Magnesium	279.078	Fe(-0.00058)
Manganese	257.61	Se(-0.000214), Tl(-0.003614)
Manganese	257.61	Se(0.000533)
Molybdenum	202.03	As(-0.000927), Pb(-0.000446), Sb(-0.002435), Tl(-0.000488)
Molybdenum	202.03	Pb(-0.000742), Sb(-0.011507), Se(0.000246)
Nickel	231.604	Pb(0.000124)
Nickel	231.604	Pb(0.000274), Sb(-0.00125), Zn(0.005251)
Vanadium	292.402	Al(0.020017), Be(-0.008152), Cr(-0.00015), Fe(0.009334), Sb(-0.008099), Se(0.000269), Tl(0.001468)
Vanadium	292.402	Pb(-0.000307), Se(0.000106)

Metals Data Reporting Form.

Linear Dynamic Ranges

Instrument: ICPSTUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189.04	10000	10/5/00

674 1365

STL-Pittsburgh

Metals Data Reporting Form

Preparation Log

Preparation Batch: 0323107 Instrument: ICP Matrix: Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DP5NKB	11/18/00	0.5	50	NA
DP5NKC	11/18/00	0.5	50	NA
DPWNF	11/18/00	0.5	50	19.08
DPWNFD	11/18/00	0.5	50	19.08
DPWNFS	11/18/00	0.5	50	19.08

STL-Pittsburgh
Metals Data Reporting Form

674 1366

Instrument Runlog

Instrument: ICPST

Chart Number: T01120X.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		11/20/00	16:51
STD6		11/20/00	16:55
STD7		11/20/00	16:59
ICV3-1		11/20/00	17:03
ICB1		11/20/00	17:07
ICSA		11/20/00	17:11
ICSAB		11/20/00	17:15
DP5NKB		11/20/00	17:22
DP5NKC		11/20/00	17:26
DPWNF	DF/24-A/0319/CVS/013	11/20/00	17:30
DPWNFP	DF/24-A/0319/CVS/013	11/20/00	17:34
DPWNFS	DF/24-A/0319/CVS/013S	11/20/00	17:38
DPWNFD	DF/24-A/0319/CVS/013D	11/20/00	17:42
CCV3-1		11/20/00	17:47
CCB1		11/20/00	17:51
ZZZZZZ		11/20/00	18:01
ZZZZZZ		11/20/00	18:06
ZZZZZZ		11/20/00	18:10
ZZZZZZ		11/20/00	18:14
ZZZZZZ		11/20/00	18:18
ZZZZZZ		11/20/00	18:22
ZZZZZZ		11/20/00	18:26
ZZZZZZ		11/20/00	18:31
ZZZZZZ		11/20/00	18:35
ZZZZZZ		11/20/00	18:39
ZZZZZZ		11/20/00	18:43
ZZZZZZ		11/20/00	18:47
ZZZZZZ		11/20/00	18:51
ZZZZZZ		11/20/00	18:55
ZZZZZZ		11/20/00	19:00
ZZZZZZ		11/20/00	19:04
ZZZZZZ		11/20/00	19:08
ZZZZZZ		11/20/00	19:12
ZZZZZZ		11/20/00	19:16
ZZZZZZ		11/20/00	19:20
ZZZZZZ		11/20/00	19:25
ZZZZZZ		11/20/00	19:29
ZZZZZZ		11/20/00	19:33
ZZZZZZ		11/20/00	19:37

674 1367

STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: T01120X.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		11/20/00	19:41
ZZZZZZ		11/20/00	19:45
ZZZZZZ		11/20/00	19:50
ZZZZZZ		11/20/00	19:54
ZZZZZZ		11/20/00	19:58
ZZZZZZ		11/20/00	20:02
ZZZZZZ		11/20/00	20:07
ZZZZZZ		11/20/00	20:11
ZZZZZZ		11/20/00	20:15
ZZZZZZ		11/20/00	20:19
ZZZZZZ		11/20/00	20:23
ZZZZZZ		11/20/00	20:27
ZZZZZZ		11/20/00	20:32
ZZZZZZ		11/20/00	20:36
ZZZZZZ		11/20/00	20:40
ZZZZZZ		11/20/00	20:44
ZZZZZZ		11/20/00	20:48
ZZZZZZ		11/20/00	20:52
ZZZZZZ		11/20/00	20:57
ZZZZZZ		11/20/00	21:01
ZZZZZZ		11/20/00	21:05
ZZZZZZ		11/20/00	21:09
ZZZZZZ		11/20/00	21:13
ZZZZZZ		11/20/00	21:17
ZZZZZZ		11/20/00	21:21
ZZZZZZ		11/20/00	21:26
ZZZZZZ		11/20/00	21:30
ZZZZZZ		11/20/00	21:34
ZZZZZZ		11/20/00	21:38
ZZZZZZ		11/20/00	21:42
ZZZZZZ		11/20/00	21:46
ZZZZZZ		11/20/00	21:51
ZZZZZZ		11/20/00	21:55
ZZZZZZ		11/20/00	21:59
ZZZZZZ		11/20/00	22:03
ZZZZZZ		11/20/00	22:07
ZZZZZZ		11/20/00	22:11
ZZZZZZ		11/20/00	22:16
ZZZZZZ		11/20/00	22:20

STL-Pittsburgh
Metals Data Reporting Form

674 1368

Instrument Runlog

Instrument: ICPST

Chart Number: T01120X.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		11/20/00	22:24
ZZZZZZ		11/20/00	22:28
ZZZZZZ		11/20/00	22:32
ZZZZZZ		11/20/00	22:36
ZZZZZZ		11/20/00	22:41
ZZZZZZ		11/20/00	22:45
ZZZZZZ		11/20/00	22:49
ZZZZZZ		11/20/00	22:53
ZZZZZZ		11/20/00	22:57
ZZZZZZ		11/20/00	23:01
ZZZZZZ		11/20/00	23:06
ZZZZZZ		11/20/00	23:10
ZZZZZZ		11/20/00	23:14
ZZZZZZ		11/20/00	23:18
ZZZZZZ		11/20/00	23:22
ZZZZZZ		11/20/00	23:26
ZZZZZZ		11/20/00	23:31
ZZZZZZ		11/20/00	23:35
ZZZZZZ		11/20/00	23:39
ZZZZZZ		11/20/00	23:43
ZZZZZZ		11/20/00	23:47
ZZZZZZ		11/20/00	23:51
ZZZZZZ		11/20/00	23:56
ZZZZZZ		11/21/00	0:00
ZZZZZZ		11/21/00	0:04
ZZZZZZ		11/21/00	0:08
ZZZZZZ		11/21/00	0:12
ZZZZZZ		11/21/00	0:16
ZZZZZZ		11/21/00	0:21
ZZZZZZ		11/21/00	0:25
ZZZZZZ		11/21/00	0:29
ZZZZZZ		11/21/00	0:33
ZZZZZZ		11/21/00	0:37
ZZZZZZ		11/21/00	0:42
ZZZZZZ		11/21/00	0:46
ZZZZZZ		11/21/00	0:50
ZZZZZZ		11/21/00	0:54
ZZZZZZ		11/21/00	0:58
ZZZZZZ		11/21/00	1:02

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: T01120X.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		11/21/00	1:07
ZZZZZZ		11/21/00	1:11
ZZZZZZ		11/21/00	1:15
ZZZZZZ		11/21/00	1:19
ZZZZZZ		11/21/00	1:23
ZZZZZZ		11/21/00	1:27
ZZZZZZ		11/21/00	1:32
ZZZZZZ		11/21/00	1:36
ZZZZZZ		11/21/00	1:40
ZZZZZZ		11/21/00	1:44
ZZZZZZ		11/21/00	1:48
ZZZZZZ		11/21/00	1:53
ZZZZZZ		11/21/00	1:57

674 1370

METALS
RAW DATA

COK45088

674 1371

Analysis Report *WMB* Averages

11/21/00 07:18:34 AM

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Remunited 11/21/00
Sample Name AS

1	STD1	-.01105
2	STD6	5.51406
3	STD7	
4	ICV3-1 0057-124-2	.25712
5	ICB1	-.00049
6	ICSA 0057-146-2	.00367
7	ICSAB 0057-102-1	1.0247
8	DP5NKB	.00091
9	DP5NKC	1.9579
10	DPWNF	.10479
11	DPWNFP5	.02399
12	DPWNFS	1.8336
13	DPWNFD	1.8222
14	CCV3-1 0057-148-5	.50790
15	CCB1	.00098
16	DP5MKB	.00007
17	DP5MKC	1.9698
18	DPM53	.00254
19	DPM6D	.00233
20	DPM65	.00085
21	DPM65P5	.00025
22	DPM65S	1.7380
23	DPM65D	1.7616
24	DPM69	.00110
25	DPX82	.00233
26	CCV3-2	.50741
27	CCB2	.00109
28	DPX85	-.00010
29	DPX9F	.00147
30	DPX9M	.00012
31	DPM65F	.00186
32	DPM65P5F	.00005
33	DPM65SF	1.7198
34	DPM65DF	1.7792
35	DPM69F	.00220
36	DPX82F	.00175
37	DPX85F	.00004
38	CCV3-3	.50955
39	CCB3	.00167
40	DP2MWB	.00088
41	DP2MWCF	1.9722
42	DPL2KF	.00779
43	DPL2KP5F	.00268
44	DPL2KSF	2.0031
45	DPL2KDF	2.0351
46	DPL2QF	.00221
47	DPL2TF	.00417
48	DPL2VF	.00351
49	DPL2WF	.00135
50	CCV3-4	.49785
51	CCB4	-.00018
52	DPL2XF	.07066
53	DPXX4B	.00031

#	Sample Name	AS
54	DPXX4C	1.9918
55	DPXX4L	1.9938
56	DPD0V	.00266
57	DPD0W	-.00034
58	DPD0X	-.00025
59	DPD00	-.00064
60	CCV3-5	.50971
61	CCB5	-.00014
62	DPXXTB	.00030
63	DPXXTC	1.9820
64	DPD0F	.03692
65	DPD0FP5	.00815
66	DPD0FS	1.6988
67	DPD0FD	1.7070
68	DPD0G	.36776
69	DPD0H	.15350
70	DPD0J	.12279
71	DPD0K	.25618
72	CCV3-6	.51469
73	CCB6	.00137
74	DPD0L	.05555
75	DPD0M	.13403
76	DPD0N	.03686
77	DPD0P	.03481
78	DPD0Q	.05671
79	DPD0R	.26036
80	DPD0T	.07076
81	CCV3-7	.50283
82	CCB7	.00027
83	DP2M2B	.00037
84	DP2M2C	1.9707
85	DPL3H	.04990
86	DPL3HP5	.01140
87	DPL3HS	1.6132
88	DPL3HD	1.5015
89	DPL3K	.10481
90	DPL3L	.11718
91	DPL3N	.09729
92	DPL3Q	.08628
93	CCV3-8	.50525
94	CCB8	.00038
95	DPL3R	.09218
96	DPL3W	.12210
97	DPL3X	.10543
98	DPL30	.08910
99	DPL32	.13802
100	DPL34	.13748
101	DPL35	.15418
102	DPL37	.10879
103	DPL38	.10124
104	DPL39	.10267
105	CCV3-9	.51069
106	CCB9	.00051
107	DPL4C	.15127

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#	Sample Name	AS
108	DPL4M	.15755
109	DPL4W	.13697
110	DPL4X	.00789
111	DP5PHB	.00025
112	DP5PHC	1.9936
113	DP5PHL	1.8880
114	DPL4T	.01305
115	DPL4TP5	.00261
116	DP2M5B	.00032
117	CCV3-10	.50755
118	CCB10	.00130
119	DP2M5C	1.9419
120	DPL42	.01457
121	DPL42P5	.00312
122	DPL42S	1.6385
123	DPL42D	1.6400
124	DPL45	.01984
125	DPL46	.01325
126	DPL48	.00699
127	DPL49	.03774
128	DPL5A	.01294
129	CCV3-11	.50516
130	CCB11	-.00038

PB 11-21-00

674 1374

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T01120X	METTRA	11/20/00	16:51		X	IR
2	STD6	T01120X	METTRA	11/20/00	16:55		X	IR
3	STD7	T01120X	METTRA	11/20/00	16:59		X	IR
4	ICV3-1 0057-124-2	T01120X	METTRA	11/20/00	17:03	RJG	S	CONC
5	ICB1	T01120X	METTRA	11/20/00	17:07	RJG	S	CONC
6	ICSA 0057-146-2	T01120X	METTRA	11/20/00	17:11	RJG	Q	CONC
7	ICSAB 0057-102-1	T01120X	METTRA	11/20/00	17:15	RJG	Q	CONC
8	DP5NKB	T01120X	METTRA	11/20/00	17:22	RJG	S	CONC
9	DP5NKC	T01120X	METTRA	11/20/00	17:26	RJG	S	CONC
10	DPWNF	T01120X	METTRA	11/20/00	17:30	RJG	S	CONC
11	DPWNFP5	T01120X	METTRA	11/20/00	17:34	RJG	S	CONC
12	DPWNFS	T01120X	METTRA	11/20/00	17:38	RJG	S	CONC
13	DPWNFD	T01120X	METTRA	11/20/00	17:42	RJG	S	CONC
14	CCV3-1 0057-148-5	T01120X	METTRA	11/20/00	17:47	RJG	S	CONC
15	CCB1	T01120X	METTRA	11/20/00	17:51	RJG	S	CONC
16	DP5MKB	T01120X	METTRA	11/20/00	18:01	RJG	S	CONC
17	DP5MKC	T01120X	METTRA	11/20/00	18:06	RJG	S	CONC
18	DPM53	T01120X	METTRA	11/20/00	18:10	RJG	S	CONC
19	DPM6D	T01120X	METTRA	11/20/00	18:14	RJG	S	CONC
20	DPM65	T01120X	METTRA	11/20/00	18:18	RJG	S	CONC
21	DPM65P5	T01120X	METTRA	11/20/00	18:22	RJG	S	CONC
22	DPM65S	T01120X	METTRA	11/20/00	18:26	RJG	S	CONC
23	DPM65D	T01120X	METTRA	11/20/00	18:31	RJG	S	CONC
24	DPM69	T01120X	METTRA	11/20/00	18:35	RJG	S	CONC
25	DPX82	T01120X	METTRA	11/20/00	18:39	RJG	S	CONC
26	CCV3-2	T01120X	METTRA	11/20/00	18:43	RJG	S	CONC
27	CCB2	T01120X	METTRA	11/20/00	18:47	RJG	S	CONC
28	DPX85	T01120X	METTRA	11/20/00	18:51	RJG	S	CONC
29	DPX9F	T01120X	METTRA	11/20/00	18:55	RJG	S	CONC
30	DPX9M	T01120X	METTRA	11/20/00	19:00	RJG	S	CONC
31	DPM65F	T01120X	METTRA	11/20/00	19:04	RJG	S	CONC
32	DPM65P5F	T01120X	METTRA	11/20/00	19:08	RJG	S	CONC
33	DPM65SF	T01120X	METTRA	11/20/00	19:12	RJG	S	CONC
34	DPM65DF	T01120X	METTRA	11/20/00	19:16	RJG	S	CONC
35	DPM69F	T01120X	METTRA	11/20/00	19:20	RJG	S	CONC
36	DPX82F	T01120X	METTRA	11/20/00	19:25	RJG	S	CONC
37	DPX85F	T01120X	METTRA	11/20/00	19:29	RJG	S	CONC
38	CCV3-3	T01120X	METTRA	11/20/00	19:33	RJG	S	CONC
39	CCB3	T01120X	METTRA	11/20/00	19:37	RJG	S	CONC
40	DP2MWBFB	T01120X	METTRA	11/20/00	19:41	RJG	S	CONC
41	DP2MWCF	T01120X	METTRA	11/20/00	19:45	RJG	S	CONC
42	DPL2KF	T01120X	METTRA	11/20/00	19:50	RJG	S	CONC
43	DPL2KP5F	T01120X	METTRA	11/20/00	19:54	RJG	S	CONC
44	DPL2KSF	T01120X	METTRA	11/20/00	19:58	RJG	S	CONC
45	DPL2KDF	T01120X	METTRA	11/20/00	20:02	RJG	S	CONC
46	DPL2QF	T01120X	METTRA	11/20/00	20:07	RJG	S	CONC
47	DPL2TF	T01120X	METTRA	11/20/00	20:11	RJG	S	CONC
48	DPL2VF	T01120X	METTRA	11/20/00	20:15	RJG	S	CONC
49	DPL2WF	T01120X	METTRA	11/20/00	20:19	RJG	S	CONC
50	CCV3-4	T01120X	METTRA	11/20/00	20:23	RJG	S	CONC
51	CCB4	T01120X	METTRA	11/20/00	20:27	RJG	S	CONC
52	DPL2XF	T01120X	METTRA	11/20/00	20:32	RJG	S	CONC
53	DPXX4B	T01120X	METTRA	11/20/00	20:36	RJG	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DPXX4C	T01120X	METTRA	11/20/00	20:40	RJG	S	CONC
55	DPXX4L	T01120X	METTRA	11/20/00	20:44	RJG	S	CONC
56	DPD0V	T01120X	METTRA	11/20/00	20:48	RJG	S	CONC
57	DPD0W	T01120X	METTRA	11/20/00	20:52	RJG	S	CONC
58	DPD0X	T01120X	METTRA	11/20/00	20:57	RJG	S	CONC
59	DPD00	T01120X	METTRA	11/20/00	21:01	RJG	S	CONC
60	CCV3-5	T01120X	METTRA	11/20/00	21:05	RJG	S	CONC
61	CCB5	T01120X	METTRA	11/20/00	21:09	RJG	S	CONC
62	DPXXTB	T01120X	METTRA	11/20/00	21:13	RJG	S	CONC
63	DPXXTC	T01120X	METTRA	11/20/00	21:17	RJG	S	CONC
64	DPD0F	T01120X	METTRA	11/20/00	21:21	RJG	S	CONC
65	DPD0FP5	T01120X	METTRA	11/20/00	21:26	RJG	S	CONC
66	DPD0FS	T01120X	METTRA	11/20/00	21:30	RJG	S	CONC
67	DPD0FD	T01120X	METTRA	11/20/00	21:34	RJG	S	CONC
68	DPD0G	T01120X	METTRA	11/20/00	21:38	RJG	S	CONC
69	DPD0H	T01120X	METTRA	11/20/00	21:42	RJG	S	CONC
70	DPD0J	T01120X	METTRA	11/20/00	21:46	RJG	S	CONC
71	DPD0K	T01120X	METTRA	11/20/00	21:51	RJG	S	CONC
72	CCV3-6	T01120X	METTRA	11/20/00	21:55	RJG	S	CONC
73	CCB6	T01120X	METTRA	11/20/00	21:59	RJG	S	CONC
74	DPD0L	T01120X	METTRA	11/20/00	22:03	RJG	S	CONC
75	DPD0M	T01120X	METTRA	11/20/00	22:07	RJG	S	CONC
76	DPD0N	T01120X	METTRA	11/20/00	22:11	RJG	S	CONC
77	DPD0P	T01120X	METTRA	11/20/00	22:16	RJG	S	CONC
78	DPD0Q	T01120X	METTRA	11/20/00	22:20	RJG	S	CONC
79	DPD0R	T01120X	METTRA	11/20/00	22:24	RJG	S	CONC
80	DPD0T	T01120X	METTRA	11/20/00	22:28	RJG	S	CONC
81	CCV3-7	T01120X	METTRA	11/20/00	22:32	RJG	S	CONC
82	CCB7	T01120X	METTRA	11/20/00	22:36	RJG	S	CONC
83	DP2M2B	T01120X	METTRA	11/20/00	22:41	RJG	S	CONC
84	DP2M2C	T01120X	METTRA	11/20/00	22:45	RJG	S	CONC
85	DPL3H	T01120X	METTRA	11/20/00	22:49	RJG	S	CONC
86	DPL3HP5	T01120X	METTRA	11/20/00	22:53	RJG	S	CONC
87	DPL3HS	T01120X	METTRA	11/20/00	22:57	RJG	S	CONC
88	DPL3HD	T01120X	METTRA	11/20/00	23:01	RJG	S	CONC
89	DPL3K	T01120X	METTRA	11/20/00	23:06	RJG	S	CONC
90	DPL3L	T01120X	METTRA	11/20/00	23:10	RJG	S	CONC
91	DPL3N	T01120X	METTRA	11/20/00	23:14	RJG	S	CONC
92	DPL3Q	T01120X	METTRA	11/20/00	23:18	RJG	S	CONC
93	CCV3-8	T01120X	METTRA	11/20/00	23:22	RJG	S	CONC
94	CCB8	T01120X	METTRA	11/20/00	23:26	RJG	S	CONC
95	DPL3R	T01120X	METTRA	11/20/00	23:31	RJG	S	CONC
96	DPL3W	T01120X	METTRA	11/20/00	23:35	RJG	S	CONC
97	DPL3X	T01120X	METTRA	11/20/00	23:39	RJG	S	CONC
98	DPL30	T01120X	METTRA	11/20/00	23:43	RJG	S	CONC
99	DPL32	T01120X	METTRA	11/20/00	23:47	RJG	S	CONC
100	DPL34	T01120X	METTRA	11/20/00	23:51	RJG	S	CONC
101	DPL35	T01120X	METTRA	11/20/00	23:56	RJG	S	CONC
102	DPL37	T01120X	METTRA	11/21/00	00:00	RJG	S	CONC
103	DPL38	T01120X	METTRA	11/21/00	00:04	RJG	S	CONC
104	DPL39	T01120X	METTRA	11/21/00	00:08	RJG	S	CONC
105	CCV3-9	T01120X	METTRA	11/21/00	00:12	RJG	S	CONC
106	CCB9	T01120X	METTRA	11/21/00	00:16	RJG	S	CONC
107	DPL4C	T01120X	METTRA	11/21/00	00:21	RJG	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
108	DPL4M	T01120X	METTRA	11/21/00	00:25	RJG	S	CONC
109	DPL4W	T01120X	METTRA	11/21/00	00:29	RJG	S	CONC
110	DPL4X	T01120X	METTRA	11/21/00	00:33	RJG	S	CONC
111	DP5PHB	T01120X	METTRA	11/21/00	00:37	RJG	S	CONC
112	DP5PHC	T01120X	METTRA	11/21/00	00:42	RJG	S	CONC
113	DP5PHL	T01120X	METTRA	11/21/00	00:46	RJG	S	CONC
114	DPL4T	T01120X	METTRA	11/21/00	00:50	RJG	S	CONC
115	DPL4TP5	T01120X	METTRA	11/21/00	00:54	RJG	S	CONC
116	DP2M5B	T01120X	METTRA	11/21/00	00:58	RJG	S	CONC
117	CCV3-10	T01120X	METTRA	11/21/00	01:02	RJG	S	CONC
118	CCB10	T01120X	METTRA	11/21/00	01:07	RJG	S	CONC
119	DP2M5C	T01120X	METTRA	11/21/00	01:11	RJG	S	CONC
120	DPL42	T01120X	METTRA	11/21/00	01:15	RJG	S	CONC
121	DPL42P5	T01120X	METTRA	11/21/00	01:19	RJG	S	CONC
122	DPL42S	T01120X	METTRA	11/21/00	01:23	RJG	S	CONC
123	DPL42D	T01120X	METTRA	11/21/00	01:27	RJG	S	CONC
124	DPL45	T01120X	METTRA	11/21/00	01:32	RJG	S	CONC
125	DPL46	T01120X	METTRA	11/21/00	01:36	RJG	S	CONC
126	DPL48	T01120X	METTRA	11/21/00	01:40	RJG	S	CONC
127	DPL49	T01120X	METTRA	11/21/00	01:44	RJG	S	CONC
128	DPL5A	T01120X	METTRA	11/21/00	01:48	RJG	S	CONC
129	CCV3-11	T01120X	METTRA	11/21/00	01:53	RJG	S	CONC
130	CCB11	T01120X	METTRA	11/21/00	01:57	RJG	S	CONC

Method: METTRA Standard: STD1
Run Time: 11/20/00 16:51:11

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	-.00143	.10162	-.01105	.00005	-.03518	.00286	.00158
SDev	.00119	.00032	.00596	.00008	.00016	.00001	.00291
%RSD	83.207	.31409	53.921	141.42	.44605	.29857	183.97
#1	-.00227	.10184	-.01527	.00011	-.03507	.00286	-.00048
#2	-.00059	.10139	-.00684	.00000	-.03529	.00287	.00364
Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00070	.00249	.00301	-.00000	-.00051	.00062	.00106
SDev	.00010	.00051	.00001	.00031	.00021	.00005	.00005
%RSD	14.591	20.505	.29857	66985.	40.680	8.0213	4.5784
#1	-.00077	.00286	.00300	.00022	-.00037	.00066	.00110
#2	-.00062	.00213	.00301	-.00022	-.00066	.00059	.00103
Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00040	.03126	.00133	-.01630	.00340	-.11241	.06536
SDev	.00026	.00352	.00830	.01432	.00544	.00511	.00811
%RSD	64.045	11.252	622.99	87.848	159.75	4.5446	12.402
#1	.00059	.02877	-.00454	-.02643	.00725	-.10880	.07109
#2	.00022	.03375	.00721	-.00618	-.00044	-.11602	.05963
Elem	TL	V	ZN				
Avge	-.03419	.00000	-.00017				
SDev	.00042	.00000	.00003				
%RSD	1.2189	.00000	16.008				
#1	-.03448	.00000	-.00015				
#2	-.03390	.00000	-.00018				

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13629	--	--	--	--	--	--
SDev	40.69385	--	--	--	--	--	--
%RSD	.2985735	--	--	--	--	--	--
#1	13658	--	--	--	--	--	--
#2	13601	--	--	--	--	--	--

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Standardization Rpt.

11/20/00 04:59:30 PM

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✓

Method: METTRA Standard: STD6
Run Time: 11/20/00 16:55:24

0057.1277

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	9.5080	5.5141	12.394	4.9502	6.7131	8.3538	4.6770
SDev	.1657	.0960	.221	.0831	.0458	.0140	.0830
%RSD	1.7428	1.7402	1.7840	1.6787	.68153	.16728	1.7754

#1	9.6252	5.5819	12.550	5.0090	6.7455	8.3440	4.7357
#2	9.3908	5.4462	12.238	4.8915	6.6808	8.3637	4.6183

Elem	SE/1	SE/2	TL
Avge	4.6754	3.6027	3.4266
SDev	.0583	.0056	.0637
%RSD	1.2467	.15424	1.8599

#1	4.7166	3.5988	3.4717
#2	4.6341	3.6066	3.3815

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13556	--	--	--	--	--	--
SDev	179.2868	--	--	--	--	--	--
%RSD	1.322562	--	--	--	--	--	--
#1	13429	--	--	--	--	--	--
#2	13683	--	--	--	--	--	--

Method: METTRA Standard: STD7
 Run Time: 11/20/00 16:59:35

00571218

674 1380

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	6.0948	12.584	10.608	4.5688	2.6318	10.470	2.9627
SDev	.0089	.031	.006	.0001	.0006	.002	.0068
%RSD	.14656	.24814	.05841	.00257	.02098	.02162	.22818

#1	6.0885	12.562	10.613	4.5689	2.6315	10.468	2.9579
#2	6.1012	12.607	10.604	4.5687	2.6322	10.471	2.9674

Elem	FE	MG	MN	MO	NI	V	ZN
Avge	3.3784	12.708	8.6271	2.3068	2.0183	.78006	2.3717
SDev	.0043	.005	.0004	.0097	.0010	.00099	.0026
%RSD	.12674	.03772	.00507	.41892	.04762	.12641	.11079

#1	3.3754	12.705	8.6268	2.2999	2.0177	.77936	2.3698
#2	3.3814	12.712	8.6274	2.3136	2.0190	.78076	2.3736

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13385	--	--	--	--	--	--
SDev	61.94228	--	--	--	--	--	--
%RSD	.4627583	--	--	--	--	--	--

#1	13342	--	--	--	--	--	--
#2	13429	--	--	--	--	--	--

Method: METTRA

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.210317	.000301	11/20/00 04:59:35
AL	308.215	STD7	STD1	8.35611	-.849131	11/20/00 04:59:35
AS	189.042	STD6	STD1	.180992	.002000	11/20/00 04:59:35
BA	493.409	STD7	STD1	.317854	-.000017	11/20/00 04:59:35
BE	313.042	STD7	STD1	.372747	.013114	11/20/00 04:59:35
CA	317.933	STD7	STD1	21.9015	-.062670	11/20/00 04:59:35
CD	226.502	STD6	STD1	.080694	-.000128	11/20/00 04:59:35
CO	228.616	STD7	STD1	1.51944	.001059	11/20/00 04:59:35
CR	267.716	STD7	STD1	.382088	-.000953	11/20/00 04:59:35
CU	324.753	STD7	STD1	1.35151	-.004066	11/20/00 04:59:35
FE	271.441	STD7	STD1	14.8967	.000007	11/20/00 04:59:35
MG	279.078	STD7	STD1	7.86844	.004044	11/20/00 04:59:35
MN	257.610	STD7	STD1	.463687	-.000289	11/20/00 04:59:35
MO	202.030	STD7	STD1	1.73482	-.001846	11/20/00 04:59:35
NI	231.604	STD7	STD1	1.98076	-.000799	11/20/00 04:59:35
PB/1	220.351	STD6	STD1	.203295	-.006355	11/20/00 04:59:35
PB/2	220.352	STD6	STD1	.148991	-.000199	11/20/00 04:59:35
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.119472	.001948	11/20/00 04:59:35
SB/2	206.832	STD6	STD1	.213968	-.000728	11/20/00 04:59:35
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.208866	.023479	11/20/00 04:59:35
SE/2	196.022	STD6	STD1	.282697	-.018477	11/20/00 04:59:35
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.577901	.019758	11/20/00 04:59:35
V	292.402	STD7	STD1	5.10592	.000000	11/20/00 04:59:35
ZN	213.856	STD7	STD1	1.69790	.000280	11/20/00 04:59:35

Analysis Report

11/20/00 05:07:22 PM

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Method: METTRA Sample Name: ICV3-1 0057-124-2 Operator: RJG
 Run Time: 11/20/00 17:03:15
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Handwritten signature
 11/20/00

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.51360	12.117	.25713	1.0181	1.0180	25.425	.25275
SDev	.00732	.142	.00387	.0151	.0158	.403	.00475
%RSD	1.4255	1.1697	1.5054	1.4877	1.5568	1.5833	1.8779
#1	.51878	12.217	.25987	1.0288	1.0292	25.710	.25610
#2	.50843	12.017	.25439	1.0074	1.0068	25.141	.24939
Errors	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						
Avg	1.0354	1.0338	.98560	12.679	24.644	1.0138	1.0400
SDev	.0137	.0135	.01398	.179	.312	.0132	.0127
%RSD	1.3254	1.3040	1.4183	1.4096	1.2649	1.2978	1.2199
#1	1.0451	1.0434	.99549	12.806	24.864	1.0231	1.0490
#2	1.0257	1.0243	.97572	12.553	24.423	1.0045	1.0310
Errors	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						
Avg	1.0282	.26049	.25694	.25812	.25923	.25930	.25927
SDev	.0205	.00026	.00630	.00412	.00440	.00338	.00372
%RSD	1.9926	.09990	2.4536	1.5955	1.6956	1.3028	1.4336
#1	1.0427	.26031	.26140	.26104	.26234	.26168	.26190
#2	1.0137	.26068	.25248	.25521	.25612	.25691	.25665
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	1.1000			.27500			.27500
Low	.90000			.22500			.22500
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.25878	.26409	.26233	.52456	1.0206	1.0569	
SDev	.00502	.00728	.00653	.01537	.0170	.0171	
%RSD	1.9403	2.7559	2.4879	2.9298	1.6627	1.6203	
#1	.26233	.26924	.26694	.53543	1.0326	1.0690	
#2	.25523	.25895	.25771	.51370	1.0086	1.0448	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.27500	.55000	1.1000	1.1000	
Low			.22500	.45000	.90000	.90000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13303	--	--	--	--	--	--
SDev	139.6184	--	--	--	--	--	--
%RSD	1.049543	--	--	--	--	--	--
#1	13204	--	--	--	--	--	--
#2	13402	--	--	--	--	--	--

Method: METTRA Sample Name: ICBI Operator: RJG
 Run Time: 11/20/00 17:07:25
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00025	.00796	-.00050	.00083	.00052	.00386	.00019
SDev	.00013	.00867	.00100	.00017	.00003	.00246	.00020
%RSD	52.173	108.88	200.08	20.300	5.9130	63.717	104.97
#1	.00035	.00183	-.00121	.00071	.00054	.00212	.00005
#2	.00016	.01409	.00021	.00095	.00050	.00559	.00033
Errors	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						
Avg	-.00007	.00045	.00074	.00223	.01308	.00059	.00529
SDev	.00040	.00038	.00030	.00309	.00291	.00003	.00044
%RSD	595.90	85.506	39.821	138.67	22.224	4.5046	8.2643
#1	-.00035	.00018	.00053	.00004	.01103	.00057	.00560
#2	.00021	.00072	.00095	.00442	.01514	.00061	.00498
Errors	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						
Avg	.00126	.00150	-.00127	-.00035	.00339	.00252	.00281
SDev	.00001	.00352	.00205	.00020	.00033	.00346	.00220
%RSD	.42376	234.81	161.84	56.472	9.7174	137.49	78.375
#1	.00125	.00399	-.00272	-.00048	.00315	.00497	.00436
#2	.00126	-.00099	.00018	-.00021	.00362	.00007	.00125
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	-.00152	.00018	-.00039	-.00137	.00000	.00046	
SDev	.00260	.00616	.00498	.00014	.00000	.00018	
%RSD	171.41	3438.2	1292.3	10.518	138.67	38.483	
#1	-.00335	-.00418	-.00390	-.00126	.00000	.00034	
#2	.00032	.00454	.00313	-.00147	.00000	.00059	
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	13498	--	--	--	--	--	--
SDev	33.05724	--	--	--	--	--	--
%RSD	.2449006	--	--	--	--	--	--
#1	13522	--	--	--	--	--	--
#2	13475	--	--	--	--	--	--

Method: METTRA Sample Name: ICSA 0057-146-2 Operator: RJG
 Run Time: 11/20/00 17:11:35
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	-.00001	520.47	.00367	.00175	-.00060	480.08	-.00016
SDev	.00063	.96	.00183	.00003	.00009	.79	.00011
%RSD	4410.2	.18380	49.893	1.6451	14.226	.16388	70.362
#1	-.00046	519.79	.00238	.00177	-.00054	480.64	-.00008
#2	.00043	521.14	.00497	.00173	-.00066	479.52	-.00024
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						
Avg	.00026	.00149	-.00158	201.94	524.74	.00815	.00074
SDev	.00029	.00001	.00021	.09	.42	.00003	.00117
%RSD	112.65	.37450	13.211	.04531	.07934	.34055	158.23
#1	.00046	.00148	-.00173	201.87	525.03	.00817	.00157
#2	.00005	.00149	-.00143	202.00	524.45	.00813	-.00009
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						
Avg	.00075	-.02735	.01186	-.00119	.00587	.00734	.00685
SDev	.00001	.00068	.00355	.00214	.01691	.00787	.00038
%RSD	1.3330	2.5004	29.958	179.53	288.22	107.18	5.5607
#1	.00076	-.02686	.00935	-.00271	-.00609	.01291	.00658
#2	.00075	-.02783	.01438	.00032	.01782	.00178	.00712
Errors	NOCHECK						
Value							
Range							
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00200	.00241	.00227	-.00530	.01037	.00249	
SDev	.01121	.00677	.00078	.00489	.00101	.00014	
%RSD	560.19	281.26	34.498	92.300	9.7484	5.4763	
#1	.00993	-.00238	.00172	-.00876	.01109	.00258	
#2	-.00593	.00720	.00283	-.00184	.00966	.00239	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value							
Range							

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Analysis Report

QC Standard

11/20/00 05:15:41 PM

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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	12773	--	--	--	--	--	--
SDev	80.85808	--	--	--	--	--	--
%RSD	.6330155	--	--	--	--	--	--
#1	12716	--	--	--	--	--	--
#2	12831	--	--	--	--	--	--

674 1388

Method: METTRA Sample Name: ICSAB 0057-102-1

Operator: RJG

Run Time: 11/20/00 17:15:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	1.0966	526.67	1.0247	.52465	.49953	484.43	.93042
SDev	.0014	.44	.0056	.00168	.00034	.09	.00055
%RSD	.12786	.08405	.54292	.32064	.06727	.01755	.05873
#1	1.0956	526.99	1.0286	.52584	.49929	484.37	.93081
#2	1.0976	526.36	1.0207	.52346	.49977	484.49	.93004
Errors	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						
Avge	.49173	.50841	.54134	204.19	527.11	.51243	1.0025
SDev	.00032	.00042	.00013	.36	.67	.00051	.0011
%RSD	.06446	.08162	.02331	.17812	.12661	.09882	.10985
#1	.49151	.50811	.54125	203.93	526.64	.51207	1.0017
#2	.49195	.50870	.54143	204.45	527.59	.51279	1.0033
Errors	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						
Avge	.98784	.98071	.98997	.98688	1.0354	1.0516	1.0462
SDev	.00016	.00754	.01114	.00994	.0194	.0116	.0142
%RSD	.01661	.76831	1.1253	1.0072	1.8773	1.1049	1.3594
#1	.98796	.97538	.98209	.97986	1.0217	1.0434	1.0361
#2	.98772	.98603	.99785	.99391	1.0492	1.0598	1.0562
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	1.0352	1.0293	1.0312	1.0737	.52779	1.0576	
SDev	.0049	.0212	.0158	.0001	.00026	.0002	
%RSD	.47738	2.0618	1.5322	.00809	.04970	.01526	
#1	1.0317	1.0143	1.0201	1.0738	.52760	1.0575	
#2	1.0387	1.0443	1.0424	1.0737	.52798	1.0577	
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	12701	--	--	--	--	--	--
SDev	43.23917	--	--	--	--	--	--
%RSD	.3404397	--	--	--	--	--	--
#1	12732	--	--	--	--	--	--
#2	12670	--	--	--	--	--	--

674 1390

Method: METTRA Sample Name: DP5NKB

Operator: RJG

Run Time: 11/20/00 17:22:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00049	.03878	.00091	.00180	-.00008	.03828	-.00003
SDev	.00016	.01726	.00184	.00003	.00012	.00484	.00009
%RSD	32.313	44.501	201.36	1.4416	142.16	12.641	263.83
#1	.00060	.05099	.00221	.00179	-.00017	.04171	-.00009
#2	.00038	.02658	-.00039	.00182	.00000	.03486	.00003
Errors	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						
Avge	-.00022	.00108	.00062	.03305	.04445	.00053	.00180
SDev	.00051	.00031	.00026	.01066	.00263	.00009	.00023
%RSD	231.60	28.727	42.078	32.259	5.9128	16.044	12.966
#1	.00014	.00130	.00043	.04059	.04630	.00059	.00196
#2	-.00058	.00086	.00080	.02551	.04259	.00047	.00163
Errors	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						
Avge	.00003	.00473	-.00127	.00073	.00194	.00235	.00222
SDev	.00180	.00416	.00097	.00074	.00009	.00205	.00140
%RSD	6060.8	87.847	76.460	100.98	4.8144	87.075	63.061
#1	.00130	.00767	-.00195	.00125	.00201	.00380	.00320
#2	-.00124	.00179	-.00058	.00021	.00188	.00090	.00123
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	-.00168	.00259	.00117	-.00123	.00001	.00498	
SDev	.00010	.00101	.00071	.00227	.00000	.00005	
%RSD	6.1718	38.782	60.340	184.57	32.259	1.0553	
#1	-.00161	.00331	.00167	-.00284	.00001	.00502	
#2	-.00176	.00188	.00067	.00038	.00001	.00495	
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	13346	--	--	--	--	--	--
SDev	179.5699	--	--	--	--	--	--
%RSD	1.345448	--	--	--	--	--	--
#1	13220	--	--	--	--	--	--
#2	13473	--	--	--	--	--	--

674 1392

Method: METTRA Sample Name: DP5NKC

Operator: RJG

Run Time: 11/20/00 17:26:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.04953	1.8411	1.9579	1.9957	.05110	L.01624	.04855
SDev	.00005	.0111	.0077	.0089	.00009	.00048	.00007
%RSD	.09700	.60045	.39515	.44811	.18291	2.9415	.15229
#1	.04950	1.8489	1.9634	2.0021	.05117	L.01658	.04860
#2	.04956	1.8333	1.9524	1.9894	.05103	L.01590	.04849
Errors	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						
Avg	.51186	.20438	.24399	.99413	L.02148	.49645	L.00187
SDev	.00152	.00088	.00147	.00620	.00303	.00146	.00012
%RSD	.29684	.42921	.60071	.62363	14.104	.29337	6.1385
#1	.51293	.20500	.24503	.99852	L.02362	.49748	L.00195
#2	.51078	.20376	.24296	.98975	L.01933	.49543	L.00178
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						
Avg	.50812	.49974	.48955	.49294	.00249	.00340	L.00309
SDev	.00018	.00296	.00202	.00036	.00266	.00171	.00025
%RSD	.03534	.59164	.41225	.07335	107.06	50.321	8.1910
#1	.50799	.50183	.48812	.49268	.00437	.00219	L.00291
#2	.50824	.49765	.49097	.49320	.00060	.00460	L.00327
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	
Avg	1.8971	1.8798	1.8856	1.9760	.49491	.51103	
SDev	.0053	.0006	.0014	.0122	.00161	.00194	
%RSD	.27886	.03122	.07267	.61815	.32552	.37909	
#1	1.9008	1.8794	1.8866	1.9846	.49377	.51240	
#2	1.8933	1.8803	1.8846	1.9674	.49605	.50966	
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	13323	--	--	--	--	--	--
SDev	80.64608	--	--	--	--	--	--
%RSD	.6053227	--	--	--	--	--	--
#1	13266	--	--	--	--	--	--
#2	13380	--	--	--	--	--	--

Method: METTRA Sample Name: DPWNF
 Run Time: 11/20/00 17:30:30
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

674 1394

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	-.00029	88.281	.10479	1.4754	.00732	10.569	-.00058
SDev	.00016	.672	.00055	.0075	.00011	.029	.00035
%RSD	56.750	.76133	.52039	.50742	1.4352	.27072	59.418
#1	-.00017	87.806	.10518	1.4701	.00739	10.549	-.00083
#2	-.00040	88.757	.10441	1.4807	.00725	10.589	-.00034
Errors	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						
Avge	.07937	.09721	.15707	181.32	19.113	7.1417	.00706
SDev	.00069	.00025	.00088	.70	.060	.0242	.00070
%RSD	.86814	.25302	.56173	.38561	.31459	.33821	9.8578
#1	.07889	.09704	.15645	180.82	19.071	7.1247	.00756
#2	.07986	.09738	.15770	181.81	19.156	7.1588	.00657
Errors	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						
Avge	.15859	.10800	.10179	.10386	.00775	.00979	.00911
SDev	.00076	.00139	.00147	.00052	.00125	.00047	.00010
%RSD	.47904	1.2877	1.4421	.49677	16.142	4.8158	1.1234
#1	.15806	.10899	.10075	.10349	.00687	.01012	.00904
#2	.15913	.10702	.10283	.10422	.00864	.00945	.00918
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	.00100	.00227	.00185	.00919	.22675	.62805	
SDev	.00574	.00303	.00011	.00116	.00097	.00074	
%RSD	572.09	133.42	5.7129	12.587	.42810	.11716	
#1	.00507	.00013	.00177	.00837	.22607	.62753	
#2	-.00306	.00441	.00192	.01001	.22744	.62857	
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	15191	--	--	--	--	--	--
SDev	85.84304	--	--	--	--	--	--
%RSD	.5650840	--	--	--	--	--	--
#1	15130	--	--	--	--	--	--
#2	15252	--	--	--	--	--	--

Method: METTRA Sample Name: DPWNFP5 Operator: RJG
 Run Time: 11/20/00 17:34:39
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

674 1396

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00011	18.574	.02400	.32549	.00182	2.3198	-.00031
SDev	.00041	.001	.00015	.00006	.00002	.0053	.00004
%RSD	375.67	.00486	.63458	.01858	.99562	.22916	12.342
#1	.00018	18.573	.02411	.32553	.00183	2.3160	-.00034
#2	-.00040	18.575	.02389	.32545	.00181	2.3235	-.00029

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm						
Avge	.01726	.02152	.03282	39.666	4.1482	1.5475	.00147
SDev	.00018	.00019	.00004	.002	.0062	.0010	.00017
%RSD	1.0482	.88213	.11040	.00545	.14840	.06455	11.403
#1	.01713	.02166	.03285	39.667	4.1439	1.5468	.00159
#2	.01739	.02139	.03279	39.664	4.1526	1.5483	.00135

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avge	.03514	.02464	.02169	.02267	.00362	.00260	.00294
SDev	.00066	.00234	.00203	.00213	.00142	.00027	.00029
%RSD	1.8758	9.4917	9.3582	9.4065	39.335	10.504	9.9223
#1	.03467	.02298	.02025	.02116	.00261	.00279	.00273
#2	.03560	.02629	.02312	.02418	.00462	.00241	.00314

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00070	.00220	.00170	.00085	.05279	.13867
SDev	.00236	.00056	.00041	.00060	.00032	.00012
%RSD	337.99	25.703	24.173	69.569	.61481	.08890
#1	.00237	.00180	.00199	.00043	.05256	.13858
#2	-.00097	.00260	.00141	.00128	.05302	.13875

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14116	--	--	--	--	--	--
SDev	24.99664	--	--	--	--	--	--
%RSD	.1770842	--	--	--	--	--	--
#1	14133	--	--	--	--	--	--
#2	14098	--	--	--	--	--	--

Method: METTRA Sample Name: DPWNFS

Operator: RJG

Run Time: 11/20/00 17:38:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

674 1398

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.04442	88.251	1.8336	3.1069	.05252	10.467	.04248
SDev	.00043	.017	.0063	.0059	.00009	.029	.00024
%RSD	.95825	.01940	.34121	.18869	.16664	.27796	.55624
#1	.04472	88.238	1.8380	3.1111	.05259	10.487	.04265
#2	.04412	88.263	1.8292	3.1028	.05246	10.446	.04231
Errors	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						
Avg	.52753	.27171	.37973	175.07	18.675	7.9694	.00655
SDev	.00051	.00172	.00106	.32	.045	.0196	.00003
%RSD	.09739	.63202	.27837	.18076	.24354	.24570	.41742
#1	.52789	.27293	.38048	175.30	18.707	7.9833	.00654
#2	.52717	.27050	.37898	174.85	18.643	7.9556	.00657
Errors	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						
Avg	.60532	.54233	.53048	.53442	.00459	.00770	.00666
SDev	.00665	.00555	.00188	.00060	.00224	.00213	.00067
%RSD	1.0983	1.0238	.35447	.11128	48.870	27.612	10.075
#1	.61002	.54626	.52915	.53485	.00300	.00920	.00714
#2	.60062	.53840	.53181	.53400	.00617	.00620	.00619
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.6764	1.6682	1.6710	1.8126	.64753	1.0432	
SDev	.0141	.0090	.0013	.0056	.00513	.0038	
%RSD	.84090	.53897	.07797	.31165	.79255	.36185	
#1	1.6864	1.6619	1.6700	1.8086	.65116	1.0459	
#2	1.6665	1.6746	1.6719	1.8166	.64390	1.0405	
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	14972	--	--	--	--	--	--
SDev	97.26240	--	--	--	--	--	--
%RSD	.6496124	--	--	--	--	--	--
#1	14904	--	--	--	--	--	--
#2	15041	--	--	--	--	--	--

Method: METTRA Sample Name: DPWNFD
 Run Time: 11/20/00 17:42:56
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

674 1400

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.04383	85.828	1.8222	3.3313	.05252	10.322	.04228
SDev	.00060	.267	.0048	.0007	.00007	.034	.00005
%RSD	1.3699	.31131	.26117	.02202	.13566	.32519	.12748
#1	.04341	85.639	1.8189	3.3318	.05257	10.298	.04224
#2	.04426	86.017	1.8256	3.3307	.05247	10.346	.04232
Errors	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						
Avge	.54474	.26872	.38094	174.03	18.386	9.1287	.00665
SDev	.00213	.00120	.00151	.75	.054	.0334	.00075
%RSD	.39003	.44775	.39521	.42865	.29586	.36549	11.345
#1	.54324	.26787	.37988	173.51	18.347	9.1051	.00718
#2	.54624	.26957	.38201	174.56	18.424	9.1523	.00611
Errors	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						
Avge	.60262	.55114	.54065	.54414	.00731	.00712	.00718
SDev	.00063	.00386	.00974	.00778	.00169	.00031	.00035
%RSD	.10520	.70135	1.8011	1.4302	23.103	4.3812	4.9331
#1	.60307	.54840	.53376	.53864	.00611	.00734	.00693
#2	.60217	.55387	.54753	.54964	.00850	.00690	.00743
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	1.6900	1.6817	1.6845	1.7939	.64479	1.0062	
SDev	.0110	.0324	.0252	.0156	.00079	.0037	
%RSD	.64892	1.9255	1.4990	.86736	.12266	.36633	
#1	1.6823	1.6588	1.6666	1.7829	.64535	1.0036	
#2	1.6978	1.7046	1.7023	1.8049	.64423	1.0088	
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	15111	--	--	--	--	--	--
SDev	102.5305	--	--	--	--	--	--
%RSD	.6784998	--	--	--	--	--	--
#1	15184	--	--	--	--	--	--
#2	15039	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-1 0057-148-5 Operator: RJG
 Run Time: 11/20/00 17:47:05
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP **674 1402**
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	1.0294	24.608	.50790	2.0266	2.0381	50.871	.49078
SDev	.0034	.053	.00209	.0028	.0069	.184	.00127
%RSD	.32898	.21700	.41113	.13639	.33756	.36123	.25818
#1	1.0270	24.570	.50643	2.0246	2.0333	50.741	.48989
#2	1.0318	24.645	.50938	2.0286	2.0430	51.001	.49168
Errors	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						
Avg	2.0428	2.0375	1.9933	25.379	49.534	2.0141	2.0346
SDev	.0103	.0078	.0022	.132	.140	.0083	.0117
%RSD	.50510	.38408	.11042	.51956	.28292	.41256	.57575
#1	2.0355	2.0319	1.9917	25.286	49.435	2.0082	2.0263
#2	2.0500	2.0430	1.9948	25.473	49.633	2.0199	2.0429
Errors	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						
Avg	2.0388	.51053	.50316	.50561	.51012	.51613	.51413
SDev	.0066	.00398	.00468	.00445	.00204	.00312	.00276
%RSD	.32608	.77988	.92941	.87914	.40045	.60430	.53694
#1	2.0341	.50772	.49985	.50247	.50868	.51392	.51218
#2	2.0435	.51335	.50646	.50876	.51157	.51833	.51608
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	.52291	.51686	.51887	1.0371	2.0222	2.0598	
SDev	.00162	.00742	.00549	.0026	.0070	.0096	
%RSD	.30919	1.4359	1.0578	.25395	.34732	.46737	
#1	.52176	.51161	.51499	1.0353	2.0172	2.0530	
#2	.52405	.52211	.52275	1.0390	2.0271	2.0667	
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	13478	--	--	--	--	--	--
SDev	111.2637	--	--	--	--	--	--
%RSD	.8255068	--	--	--	--	--	--
#1	13557	--	--	--	--	--	--
#2	13400	--	--	--	--	--	--

Method: METTRA Sample Name: CCB1
 Run Time: 11/20/00 17:51:14
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

674 1404

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00028	.01945	.00099	.00153	.00082	.01152	.00021
SDev	.00030	.00565	.00107	.00058	.00010	.00169	.00014
%RSD	107.17	29.046	108.53	38.258	12.100	14.637	69.992
#1	.00007	.01545	.00023	.00111	.00075	.01032	.00031
#2	.00049	.02344	.00175	.00194	.00089	.01271	.00010
Errors	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						
Avg	.00103	.00041	.00096	.04590	.01937	.00235	.00557
SDev	.00075	.00033	.00017	.02594	.00766	.00121	.00042
%RSD	73.154	79.727	17.793	56.524	39.559	51.447	7.5605
#1	.00050	.00018	.00084	.02755	.01395	.00150	.00586
#2	.00156	.00064	.00108	.06425	.02479	.00321	.00527
Errors	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						
Avg	.00014	-.00012	.00088	.00054	.00274	.00198	.00224
SDev	.00257	.00070	.00017	.00034	.00095	.00063	.00010
%RSD	1836.3	582.71	19.290	63.246	34.598	31.790	4.6652
#1	-.00168	-.00061	.00076	.00030	.00207	.00243	.00231
#2	.00196	.00037	.00099	.00079	.00341	.00154	.00216
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	-.00184	.00327	.00157	.00293	.00002	.00093	
SDev	.00285	.00090	.00155	.00059	.00001	.00029	
%RSD	155.47	27.534	98.614	20.089	56.524	30.940	
#1	.00018	.00391	.00267	.00252	.00001	.00073	
#2	-.00385	.00264	.00048	.00335	.00002	.00113	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13579	--	--	--	--	--	--
SDev	108.9649	--	--	--	--	--	--
%RSD	.8024573	--	--	--	--	--	--
#1	13502	--	--	--	--	--	--
#2	13656	--	--	--	--	--	--

Method: METTRA Sample Name: DP5MKB Operator: RJG
 Run Time: 11/20/00 18:01:56
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00026	.01701	.00008	.00050	.00008	.00001	.00022
SDev	.00039	.00005	.00097	.00014	.00026	.00118	.00006
%RSD	147.92	.32046	1269.7	28.650	334.25	21805.	26.024
#1	-.00001	.01705	-.00061	.00040	.00026	-.00083	.00027
#2	.00054	.01697	.00077	.00060	-.00011	.00084	.00018
Errors	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						
Avge	-.00027	.00079	.00030	.02329	.01369	.00095	.00106
SDev	.00044	.00018	.00007	.01250	.00042	.00024	.00100
%RSD	163.61	22.673	23.981	53.662	3.0513	25.666	95.095
#1	-.00058	.00092	.00025	.01445	.01340	.00078	.00035
#2	.00004	.00067	.00036	.03213	.01399	.00112	.00177
Errors	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						
Avge	.00053	.00355	.00009	.00124	.00358	.00116	.00197
SDev	.00229	.00139	.00076	.00097	.00074	.00081	.00029
%RSD	434.92	39.251	879.57	78.323	20.756	69.442	14.797
#1	-.00109	.00256	-.00045	.00055	.00305	.00173	.00217
#2	.00215	.00453	.00062	.00192	.00410	.00059	.00176
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	-.00385	.00085	-.00071	.00018	.00001	-.00017	
SDev	.00149	.00460	.00257	.00437	.00000	.00008	
%RSD	38.784	540.29	360.13	2467.8	53.662	45.196	
#1	-.00280	-.00240	-.00253	-.00291	.00000	-.00022	
#2	-.00491	.00411	.00111	.00326	.00001	-.00011	
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	13454	--	--	--	--	--	--
SDev	5.975191	--	--	--	--	--	--
%RSD	.0444136	--	--	--	--	--	--
#1	13458	--	--	--	--	--	--
#2	13449	--	--	--	--	--	--

Method: METTRA Sample Name: DP5MKC

Operator: RJG

Run Time: 11/20/00 18:06:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP **674 1408**

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04992	1.8310	1.9698	1.9816	.05026	L-.00097	.04812
SDev	.00042	.0003	.0015	.0047	.00012	.00240	.00006
%RSD	.83694	.01626	.07859	.23837	.24180	249.13	.13174
#1	.04962	1.8308	1.9708	1.9849	.05035	L-.00267	.04807
#2	.05021	1.8312	1.9687	1.9782	.05018	L.00074	.04816
Errors	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	.50875	.20196	.24112	.97941	L.00522	.49116	L-.00011
SDev	.00013	.00094	.00028	.00178	.00660	.00055	.00009
%RSD	.02625	.46389	.11553	.18146	126.57	.11111	86.177
#1	.50865	.20130	.24132	.97815	L.00055	.49077	L-.00018
#2	.50884	.20263	.24093	.98066	L.00988	.49154	L-.00004
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	.50401	.49091	.48698	.48829	.00256	.00105	L.00155
SDev	.00036	.00366	.00336	.00346	.00102	.00007	.00030
%RSD	.07171	.74467	.69031	.70851	39.902	6.4192	19.006
#1	.50427	.48832	.48460	.48584	.00184	.00110	L.00134
#2	.50376	.49349	.48935	.49073	.00328	.00100	L.00176
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9493	1.9437	1.9456	1.9603	.49245	.50951	
SDev	.0098	.0177	.0151	.0122	.00193	.00032	
%RSD	.50073	.91281	.77531	.62483	.39278	.06299	
#1	1.9424	1.9311	1.9349	1.9516	.49108	.50928	
#2	1.9562	1.9562	1.9562	1.9690	.49382	.50973	
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	13488	--	--	--	--	--	--
SDev	23.65217	--	--	--	--	--	--
%RSD	.1753561	--	--	--	--	--	--
#1	13505	--	--	--	--	--	--
#2	13471	--	--	--	--	--	--

Method: METTRA Sample Name: DPM53

Operator: RJG

Run Time: 11/20/00 18:10:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00043	.02464	.00254	.01758	-.00011	550.51	.00005
SDev	.00122	.00393	.00017	.00038	.00002	4.55	.00009
%RSD	284.98	15.962	6.5119	2.1390	17.475	.82627	175.40
#1	-.00044	.02186	.00243	.01731	-.00009	553.73	-.00001
#2	.00130	.02742	.00266	.01784	-.00012	547.29	.00011
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	-.00007	.00069	.00242	L-.10003	46.764	.00178	.00047
SDev	.00037	.00109	.00015	.00371	.488	.00033	.00066
%RSD	523.89	157.68	6.3868	3.7043	1.0425	18.430	140.27
#1	-.00033	-.00008	.00231	-.09741	47.109	.00155	.00000
#2	.00019	.00147	.00253	L-.10265	46.420	.00201	.00093
Errors	LC Pass	LC Pass	LC Pass	LC Low	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	.00018	.00320	-.00176	-.00011	.00134	.00202	.00180
SDev	.00096	.00391	.00178	.00011	.00283	.00163	.00015
%RSD	524.80	122.14	101.51	107.21	210.19	80.614	8.1097
#1	-.00050	.00044	-.00050	-.00019	.00334	.00087	.00169
#2	.00086	.00597	-.00302	-.00003	-.00065	.00317	.00190
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	-.00122	.00133	.00048	.00223	.00230	.00230	
SDev	.00077	.00165	.00136	.00247	.00000	.00018	
%RSD	62.739	124.01	282.26	110.61	.08805	7.8880	
#1	-.00068	.00250	.00144	.00049	.00230	.00217	
#2	-.00176	.00016	-.00048	.00398	.00230	.00243	
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	13120	--	--	--	--	--	--
SDev	18.49112	--	--	--	--	--	--
%RSD	.1409371	--	--	--	--	--	--
#1	13133	--	--	--	--	--	--
#2	13107	--	--	--	--	--	--

Method: METTRA Sample Name: DPM6D Operator: RJG
 Run Time: 11/20/00 18:14:25
 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
Avg	-.00152	.01660	.00233	.01727	.00009	552.32	.00004
SDev	.00175	.00485	.00060	.00047	.00036	6.08	.00042
%RSD	115.42	29.235	25.609	2.7405	400.92	1.1000	1054.4
#1	-.00275	.01317	.00191	.01694	.00034	548.02	-.00026
#2	-.00028	.02004	.00276	.01761	-.00016	556.61	.00033
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	-.00105	-.00072	.00093	L-.11864	46.870	.00109	.00054
SDev	.00069	.00190	.00053	.00283	.550	.00036	.00020
%RSD	65.162	265.05	57.133	2.3825	1.1725	32.676	36.962
#1	-.00154	-.00206	.00056	L-.11664	46.482	.00084	.00040
#2	-.00057	.00063	.00131	L-.12064	47.259	.00134	.00068
Errors	LC Pass	LC Pass	LC Pass	LC Low	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	-.00223	-.00314	.00285	.00085	.00606	.00169	.00314
SDev	.00202	.00653	.00374	.00032	.00222	.00256	.00097
%RSD	90.736	208.16	131.54	37.714	36.597	151.74	30.815
#1	-.00366	-.00776	.00549	.00108	.00763	-.00012	.00246
#2	-.00080	.00148	.00020	.00063	.00449	.00350	.00383
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	-.00686	-.00096	-.00293	.00119	.00055	.00057	
SDev	.00346	.00166	.00005	.00261	.00083	.00017	
%RSD	50.464	172.88	1.6287	220.09	151.75	30.736	
#1	-.00931	.00021	-.00296	.00303	-.00004	.00044	
#2	-.00441	-.00213	-.00289	-.00066	.00113	.00069	
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	13117	--	--	--	--	--	--
SDev	60.13929	--	--	--	--	--	--
%RSD	.4584792	--	--	--	--	--	--
#1	13160	--	--	--	--	--	--
#2	13075	--	--	--	--	--	--

Method: METTRA Sample Name: DPM65 Operator: RJG
 Run Time: 11/20/00 18:18:34
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00004	2.7357	.00085	.03063	.00218	34.445	.00262
SDev	.00082	.0007	.00092	.00010	.00012	.068	.00005
%RSD	2163.1	.02492	108.13	.32692	5.6423	.19671	1.8935
#1	-.00054	2.7362	.00020	.03056	.00226	34.397	.00259
#2	.00062	2.7353	.00151	.03071	.00209	34.493	.00266
Errors	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						
Avge	.03189	.00103	.62691	.93163	11.588	1.4537	.00032
SDev	.00046	.00064	.00027	.01185	.005	.0013	.00064
%RSD	1.4523	62.026	.04362	1.2721	.04017	.08880	200.96
#1	.03156	.00058	.62672	.92325	11.591	1.4546	.00078
#2	.03222	.00148	.62711	.94001	11.585	1.4528	-.00014
Errors	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						
Avge	.01263	.00611	.00366	.00448	.00003	-.00063	-.00041
SDev	.00019	.00026	.00016	.00002	.00159	.00041	.00026
%RSD	1.4743	4.1887	4.3677	.47907	5239.7	63.977	62.536
#1	.01250	.00593	.00378	.00449	.00115	-.00092	-.00023
#2	.01277	.00629	.00355	.00446	-.00109	-.00035	-.00060
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	.00019	-.00001	.00006	.00144	.00032	1.6504	
SDev	.00139	.00107	.00025	.00033	.00000	.0025	
%RSD	718.97	11806.	430.73	22.951	1.2721	.14923	
#1	.00118	-.00077	-.00012	.00168	.00032	1.6522	
#2	-.00079	.00075	.00024	.00121	.00032	1.6487	
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	15215	--	--	--	--	--	--
SDev	2.050886	--	--	--	--	--	--
%RSD	.0134792	--	--	--	--	--	--
#1	15217	--	--	--	--	--	--
#2	15214	--	--	--	--	--	--

Method: METTRA Sample Name: DPM65P5 Operator: RJG
 Run Time: 11/20/00 18:22:44
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00038	.56231	.00025	.00667	.00040	7.4681	.00056
SDev	.00032	.01320	.00226	.00006	.00014	.1098	.00027
%RSD	85.360	2.3478	901.46	.96946	34.658	1.4698	48.018
#1	-.00015	.55297	-.00135	.00662	.00050	7.3904	.00037
#2	-.00061	.57164	.00185	.00671	.00030	7.5457	.00075
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00572	-.00017	.13223	.19946	2.4699	.31444	-.00060
SDev	.00137	.00005	.00107	.00065	.0231	.00272	.00018
%RSD	23.962	31.450	.81070	.32573	.93619	.86654	30.195
#1	.00475	-.00013	.13147	.19992	2.4536	.31252	-.00073
#2	.00668	-.00021	.13299	.19900	2.4863	.31637	-.00047
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00240	.00281	.00028	.00112	.00196	.00022	.00080
SDev	.00008	.00019	.00158	.00112	.00111	.00043	.00009
%RSD	3.4961	6.8761	572.44	99.823	56.771	197.89	10.806
#1	.00246	.00268	-.00084	.00033	.00117	.00052	.00074
#2	.00234	.00295	.00139	.00191	.00275	-.00009	.00086
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00016	.00044	.00024	.00037	.00025	.36234	
SDev	.00122	.00180	.00079	.00023	.00026	.00287	
%RSD	783.50	407.55	327.35	62.198	103.05	.79353	
#1	-.00102	.00171	.00080	.00021	.00043	.36031	
#2	.00071	-.00083	-.00032	.00053	.00007	.36437	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13957	--	--	--	--	--	--
SDev	67.70548	--	--	--	--	--	--
%RSD	.4850892	--	--	--	--	--	--
#1	14005	--	--	--	--	--	--
#2	13909	--	--	--	--	--	--

Method: METTRA Sample Name: DPM65S Operator: RJG
 Run Time: 11/20/00 18:26:53
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.04438	4.3671	1.7380	1.7773	.04686	33.880	.04548
SDev	.00004	.0021	.0060	.0059	.00016	.059	.00052
%RSD	.09523	.04905	.34454	.33367	.34900	.17505	1.1405
#1	.04441	4.3656	1.7422	1.7815	.04697	33.922	.04585
#2	.04435	4.3686	1.7338	1.7731	.04674	33.838	.04512
Errors	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						
Avge	.47720	.17810	.83299	1.7866	11.439	1.8689	-.00042
SDev	.00032	.00034	.00095	.0020	.010	.0032	.00056
%RSD	.06805	.19389	.11357	.11189	.08930	.17051	131.75
#1	.47697	.17834	.83366	1.7880	11.446	1.8712	-.00082
#2	.47743	.17786	.83232	1.7852	11.431	1.8667	-.00003
Errors	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						
Avge	.45629	.44485	.43923	.44110	.00007	.00266	.00180
SDev	.00647	.00049	.00168	.00095	.00154	.00249	.00114
%RSD	1.4181	.11127	.38179	.21621	2176.2	93.460	63.712
#1	.46086	.44520	.43804	.44043	-.00102	.00442	.00261
#2	.45171	.44450	.44042	.44178	.00116	.00090	.00099
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	1.7364	1.7235	1.7278	1.7754	.43775	2.0623	
SDev	.0021	.0054	.0043	.0023	.00339	.0059	
%RSD	.12144	.31272	.24870	.12710	.77474	.28481	
#1	1.7379	1.7273	1.7308	1.7770	.44015	2.0664	
#2	1.7349	1.7197	1.7247	1.7738	.43535	2.0581	
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	15231	--	--	--	--	--	--
SDev	68.58935	--	--	--	--	--	--
%RSD	.4503185	--	--	--	--	--	--
#1	15183	--	--	--	--	--	--
#2	15280	--	--	--	--	--	--

Method: METTRA Sample Name: DPM65D Operator: RJG
 Run Time: 11/20/00 18:31:03
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.04455	4.3615	1.7616	1.8032	.04746	33.445	.04567
SDev	.00026	.0169	.0011	.0040	.00006	.008	.00012
%RSD	.58621	.38799	.06501	.22414	.11906	.02532	.25432
#1	.04474	4.3495	1.7608	1.8003	.04750	33.439	.04559
#2	.04437	4.3734	1.7625	1.8061	.04742	33.451	.04575
Errors	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						
Avg	.48237	.17963	.82999	1.7793	11.313	1.8562	.00053
SDev	.00084	.00003	.00209	.0020	.017	.0020	.00033
%RSD	.17443	.01482	.25150	.11393	.15309	.10928	62.092
#1	.48177	.17964	.82851	1.7779	11.300	1.8548	.00076
#2	.48296	.17961	.83146	1.7808	11.325	1.8577	.00030
Errors	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						
Avg	.46290	.44719	.44314	.44449	-.00003	.00224	.00149
SDev	.00366	.00351	.00024	.00133	.00099	.00119	.00046
%RSD	.79006	.78570	.05413	.29922	3392.2	52.910	30.995
#1	.46549	.44968	.44331	.44543	-.00073	.00308	.00181
#2	.46031	.44471	.44297	.44355	.00067	.00140	.00116
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.7454	1.7405	1.7421	1.8027	.44219	2.0516	
SDev	.0125	.0037	.0066	.0078	.00183	.0011	
%RSD	.71717	.21103	.37989	.43399	.41411	.05125	
#1	1.7542	1.7431	1.7468	1.7972	.44349	2.0509	
#2	1.7365	1.7379	1.7374	1.8082	.44090	2.0524	
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	15332	--	--	--	--	--	--
SDev	63.60439	--	--	--	--	--	--
%RSD	.4148399	--	--	--	--	--	--
#1	15287	--	--	--	--	--	--
#2	15377	--	--	--	--	--	--

Method: METTRA Sample Name: DPM69 Operator: RJG
 Run Time: 11/20/00 18:35:13
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00177	.25016	.00111	.04701	-.00011	65.647	.00060
SDev	.00266	.03221	.00060	.00004	.00092	.814	.00029
%RSD	150.09	12.875	54.704	.09261	848.82	1.2401	47.568
#1	.00365	.27294	.00153	.04704	-.00076	66.223	.00080
#2	-.00011	.22739	.00068	.04698	.00054	65.072	.00040
Errors	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						
Avg	.00590	.00194	.03388	.09553	10.426	1.7590	.00049
SDev	.00235	.00230	.00126	.03148	.101	.0220	.00013
%RSD	39.858	118.55	3.7083	32.953	.96658	1.2503	25.515
#1	.00756	.00356	.03476	.11779	10.497	1.7745	.00058
#2	.00423	.00031	.03299	.07327	10.355	1.7434	.00040
Errors	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						
Avg	.00333	.00586	.00166	.00306	-.00077	.00030	-.00006
SDev	.00200	.00400	.00200	.00000	.00251	.00241	.00077
%RSD	60.136	68.195	120.51	.11439	323.86	811.52	1280.6
#1	.00475	.00869	.00025	.00306	-.00255	.00200	.00048
#2	.00192	.00304	.00308	.00306	.00100	-.00140	-.00060
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	.00187	-.00014	.00053	-.00224	.00043	.22077	
SDev	.00056	.00005	.00015	.00008	.00057	.00310	
%RSD	29.932	36.164	28.869	3.4172	133.19	1.4044	
#1	.00148	-.00010	.00042	-.00229	.00083	.22296	
#2	.00227	-.00017	.00064	-.00218	.00003	.21857	
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	13370	--	--	--	--	--	--
SDev	719.7283	--	--	--	--	--	--
%RSD	5.383229	--	--	--	--	--	--
#1	12861	--	--	--	--	--	--
#2	13879	--	--	--	--	--	--

Method: METTRA Sample Name: DPX82

Operator: RJG

Run Time: 11/20/00 18:39:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00012	2.0424	.00234	.03583	.00232	29.581	.00184
SDev	.00015	.0060	.00072	.00024	.00019	.119	.00004
%RSD	124.19	.29382	30.558	.67917	8.1462	.40273	2.3992
#1	.00002	2.0466	.00284	.03600	.00245	29.666	.00181
#2	.00023	2.0382	.00183	.03566	.00218	29.497	.00187
Errors	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						
Avg	.03360	.00063	.31314	.47066	7.1200	1.5463	-.00005
SDev	.00025	.00046	.00105	.00623	.0245	.0035	.00048
%RSD	.75302	72.369	.33417	1.3242	.34343	.22318	927.53
#1	.03342	.00031	.31388	.46626	7.1373	1.5487	.00028
#2	.03377	.00095	.31240	.47507	7.1028	1.5438	-.00039
Errors	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						
Avg	.01139	.00485	.00547	.00527	.00110	.00291	.00231
SDev	.00037	.00186	.00030	.00082	.00097	.00159	.00138
%RSD	3.2136	38.412	5.4737	15.580	88.433	54.492	59.877
#1	.01113	.00354	.00526	.00469	.00041	.00179	.00133
#2	.01165	.00617	.00569	.00585	.00179	.00403	.00329
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	.00114	-.00104	-.00031	.00150	.00132	1.0892	
SDev	.00278	.00106	.00022	.00333	.00024	.0043	
%RSD	243.23	101.61	70.200	222.93	17.924	.39382	
#1	.00310	-.00179	-.00016	-.00086	.00115	1.0923	
#2	-.00082	-.00029	-.00047	.00385	.00148	1.0862	
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	15469	--	--	--	--	--	--
SDev	4.702536	--	--	--	--	--	--
%RSD	.0303992	--	--	--	--	--	--
#1	15473	--	--	--	--	--	--
#2	15466	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-2 Operator: RJG
 Run Time: 11/20/00 18:43:31
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	1.0272	24.598	.50742	2.0276	2.0332	50.640	.48819
SDev	.0210	.534	.01015	.0428	.0420	1.032	.01061
%RSD	2.0486	2.1711	1.9997	2.1086	2.0677	2.0386	2.1736
#1	1.0123	24.220	.50024	1.9974	2.0035	49.910	.48068
#2	1.0420	24.975	.51459	2.0578	2.0629	51.370	.49569
Errors	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						
Avg	2.0362	2.0323	1.9912	25.159	49.482	2.0112	2.0341
SDev	.0440	.0419	.0445	.542	1.058	.0430	.0498
%RSD	2.1602	2.0617	2.2349	2.1556	2.1378	2.1356	2.4501
#1	2.0051	2.0026	1.9598	24.776	48.734	1.9808	1.9988
#2	2.0673	2.0619	2.0227	25.543	50.230	2.0415	2.0693
Errors	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						
Avg	2.0295	.50517	.50007	.50177	.50374	.50989	.50785
SDev	.0414	.01526	.00894	.01104	.01306	.01218	.01247
%RSD	2.0395	3.0210	1.7868	2.2006	2.5932	2.3879	2.4557
#1	2.0002	.49438	.49375	.49396	.49451	.50129	.49903
#2	2.0588	.51596	.50639	.50958	.51298	.51850	.51666
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	.51629	.51075	.51259	1.0287	2.0206	2.0515	
SDev	.01009	.01043	.01031	.0221	.0413	.0431	
%RSD	1.9540	2.0414	2.0121	2.1480	2.0431	2.1014	
#1	.50915	.50337	.50530	1.0131	1.9915	2.0210	
#2	.52342	.51812	.51988	1.0444	2.0498	2.0820	
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	13489	--	--	--	--	--	--
SDev	216.3035	--	--	--	--	--	--
%RSD	1.603603	--	--	--	--	--	--
#1	13642	--	--	--	--	--	--
#2	13336	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2 Operator: RJG
 Run Time: 11/20/00 18:47:40
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00005	.00555	.00109	.00086	.00072	.01454	.00008
SDev	.00027	.00647	.00064	.00002	.00001	.00197	.00003
%RSD	589.07	116.40	58.693	2.4575	1.1596	13.515	30.596
#1	.00024	.01013	.00064	.00085	.00073	.01315	.00010
#2	-.00015	.00098	.00155	.00088	.00072	.01593	.00006
Errors	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						
Avg	-.00006	.00024	.00055	-.00052	.01445	.00090	.00542
SDev	.00007	.00037	.00054	.00541	.00078	.00004	.00201
%RSD	130.49	155.67	98.854	1047.9	5.3695	4.8057	37.099
#1	-.00000	-.00002	.00017	.00331	.01390	.00087	.00684
#2	-.00011	.00050	.00093	-.00434	.01499	.00093	.00400
Errors	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						
Avg	.00029	.00033	.00107	.00082	.00216	.00123	.00154
SDev	.00072	.00045	.00057	.00023	.00044	.00117	.00063
%RSD	245.83	138.63	53.419	28.129	20.544	94.727	40.902
#1	-.00021	.00001	.00148	.00099	.00247	.00041	.00110
#2	.00080	.00064	.00067	.00066	.00185	.00206	.00199
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	-.00070	.00252	.00145	.00104	-.00000	.00065	
SDev	.00118	.00263	.00215	.00019	.00000	.00008	
%RSD	168.48	104.45	148.53	18.604	1047.9	12.804	
#1	-.00154	.00066	-.00007	.00091	.00000	.00059	
#2	.00013	.00438	.00297	.00118	-.00000	.00071	
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	13614	--	--	--	--	--	--
SDev	54.58809	--	--	--	--	--	--
%RSD	.4009570	--	--	--	--	--	--
#1	13576	--	--	--	--	--	--
#2	13653	--	--	--	--	--	--

Method: METTRA Sample Name: DPX85 Operator: RJG
 Run Time: 11/20/00 18:51:49
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	-.00002	.02012	-.00010	.04106	.00040	61.442	.00009
SDev	.00048	.00279	.00092	.00036	.00007	.008	.00002
%RSD	2152.7	13.856	895.94	.86514	18.887	.01268	22.090
#1	-.00036	.01815	.00055	.04131	.00045	61.447	.00010
#2	.00032	.02209	-.00075	.04081	.00034	61.436	.00007
Errors	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						
Avge	.00022	.00031	.00442	.07202	9.1006	1.3997	.00172
SDev	.00023	.00003	.00033	.01586	.0087	.0011	.00070
%RSD	103.80	10.260	7.5443	22.022	.09597	.07978	40.638
#1	.00006	.00033	.00418	.06081	9.0944	1.3989	.00221
#2	.00039	.00029	.00465	.08324	9.1068	1.4005	.00122
Errors	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						
Avge	-.00058	.00327	-.00130	.00022	.00011	.00237	.00162
SDev	.00072	.00030	.00333	.00212	.00111	.00167	.00148
%RSD	124.79	9.2445	255.94	965.34	997.79	70.269	91.418
#1	-.00109	.00348	-.00366	-.00128	.00089	.00355	.00266
#2	-.00007	.00306	.00105	.00172	-.00067	.00119	.00057
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	-.00214	.00233	.00084	-.00413	.00078	.05487	
SDev	.00106	.00015	.00046	.00279	.00054	.00051	
%RSD	49.764	6.5818	54.103	67.626	69.618	.92820	
#1	-.00289	.00223	.00052	-.00610	.00039	.05451	
#2	-.00139	.00244	.00117	-.00215	.00116	.05523	
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	13622	--	--	--	--	--	--
SDev	84.64082	--	--	--	--	--	--
%RSD	.6213766	--	--	--	--	--	--
#1	13681	--	--	--	--	--	--
#2	13562	--	--	--	--	--	--

Method: METTRA Sample Name: DPX9F Operator: RJG
 Run Time: 11/20/00 18:55:58
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	-.00011	.02769	.00147	.01391	-.00006	526.61	.00003
SDev	.00022	.00031	.00042	.00003	.00007	.48	.00022
%RSD	199.90	1.1303	28.264	.23928	113.72	.09168	643.66
#1	-.00026	.02747	.00177	.01389	-.00011	526.27	.00019
#2	.00005	.02791	.00118	.01394	-.00001	526.95	-.00012
Errors	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						
Avge	-.00030	.00059	.00294	-.07072	26.884	.00121	.00107
SDev	.00011	.00007	.00012	.00548	.105	.00016	.00058
%RSD	37.584	12.155	4.1044	7.7503	.38955	13.581	54.471
#1	-.00022	.00054	.00303	-.07459	26.810	.00110	.00148
#2	-.00038	.00064	.00286	-.06684	26.958	.00133	.00066
Errors	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						
Avge	-.00095	.00089	-.00080	-.00024	.00214	.00278	.00257
SDev	.00064	.00006	.00044	.00031	.00151	.00154	.00052
%RSD	67.528	6.6533	54.356	129.85	70.676	55.274	20.336
#1	-.00050	.00085	-.00111	-.00046	.00321	.00169	.00220
#2	-.00140	.00093	-.00050	-.00002	.00107	.00387	.00294
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	-.00333	.00089	-.00052	-.00230	-.00002	.00020	
SDev	.00023	.00101	.00075	.00359	.00000	.00032	
%RSD	6.8642	114.41	145.05	155.71	7.7503	165.32	
#1	-.00349	.00017	-.00105	.00023	-.00003	-.00003	
#2	-.00317	.00160	.00001	-.00484	-.00002	.00042	
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	13113	--	--	--	--	--	--
SDev	89.66100	--	--	--	--	--	--
%RSD	.6837435	--	--	--	--	--	--
#1	13050	--	--	--	--	--	--
#2	13177	--	--	--	--	--	--

Method: METTRA Sample Name: DPX9M

Operator: RJG

Run Time: 11/20/00 19:00:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00022	.03542	.00013	.01371	-.00026	518.10	.00000
SDev	.00023	.00613	.00098	.00006	.00014	.72	.00004
%RSD	104.88	17.303	757.47	.42051	54.736	.13986	6978.9
#1	.00006	.03976	.00082	.01367	-.00016	518.61	.00003
#2	.00038	.03109	-.00056	.01375	-.00037	517.59	-.00003
Errors	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						
Avge	-.00032	.00088	.00205	-.06925	26.456	.00122	.00084
SDev	.00012	.00008	.00015	.00894	.028	.00000	.00019
%RSD	38.690	9.4532	7.1533	12.906	.10424	.02841	22.600
#1	-.00023	.00082	.00194	-.06293	26.475	.00122	.00070
#2	-.00041	.00094	.00215	-.07557	26.436	.00122	.00097
Errors	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						
Avge	.00073	.00238	-.00192	-.00049	.00126	.00266	.00219
SDev	.00108	.00081	.00292	.00221	.00149	.00013	.00041
%RSD	147.88	34.030	152.17	455.05	118.20	4.8710	18.677
#1	.00150	.00295	.00015	.00108	.00231	.00257	.00248
#2	-.00003	.00180	-.00398	-.00205	.00021	.00275	.00190
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	-.00080	.00354	.00209	-.00282	.00077	.00022	
SDev	.00078	.00129	.00060	.00104	.00056	.00010	
%RSD	97.332	36.510	28.726	36.753	73.309	45.393	
#1	-.00136	.00445	.00251	-.00209	.00116	.00015	
#2	-.00025	.00262	.00167	-.00355	.00037	.00029	
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	12937	--	--	--	--	--	--
SDev	2.969987	--	--	--	--	--	--
%RSD	.0229572	--	--	--	--	--	--
#1	12935	--	--	--	--	--	--
#2	12939	--	--	--	--	--	--

Method: METTRA Sample Name: DPM65F Operator: RJG
 Run Time: 11/20/00 19:04:16
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00049	2.6455	.00186	.02998	.00212	34.443	.00250
SDev	.00017	.0021	.00047	.00010	.00006	.011	.00031
%RSD	34.391	.07924	25.480	.33127	2.5931	.03241	12.322
#1	.00061	2.6440	.00220	.02991	.00208	34.451	.00272
#2	.00037	2.6469	.00153	.03005	.00216	34.435	.00228
Errors	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						
Avge	.03224	.00138	.61861	.65789	11.586	1.4520	.00009
SDev	.00055	.00034	.00060	.00770	.019	.0020	.00018
%RSD	1.7052	24.759	.09630	1.1705	.16483	.13632	198.60
#1	.03263	.00162	.61819	.66334	11.600	1.4534	.00022
#2	.03185	.00114	.61903	.65245	11.573	1.4506	-.00004
Errors	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						
Avge	.01235	.00673	.00438	.00516	.00008	.00243	.00165
SDev	.00024	.00119	.00084	.00096	.00061	.00158	.00085
%RSD	1.9403	17.679	19.231	18.557	768.03	64.996	51.502
#1	.01218	.00757	.00497	.00584	.00051	.00131	.00105
#2	.01252	.00589	.00378	.00448	-.00035	.00354	.00225
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	-.00077	-.00164	-.00135	.00099	.00022	1.6476	
SDev	.00028	.00045	.00039	.00272	.00000	.0076	
%RSD	36.162	27.212	28.906	275.19	1.1705	.46013	
#1	-.00096	-.00195	-.00162	.00291	.00023	1.6530	
#2	-.00057	-.00132	-.00107	-.00094	.00022	1.6422	
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	15240	--	--	--	--	--	--
SDev	148.1036	--	--	--	--	--	--
%RSD	.9718072	--	--	--	--	--	--
#1	15135	--	--	--	--	--	--
#2	15345	--	--	--	--	--	--

Method: METTRA Sample Name: DPM65P5F Operator: RJG
 Run Time: 11/20/00 19:08:25
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00005	.55403	.00006	.00663	.00046	7.5304	.00054
SDev	.00052	.00365	.00007	.00010	.00007	.0093	.00010
%RSD	955.45	.65868	135.10	1.4461	15.682	.12330	17.620

#1	.00042	.55661	.00011	.00670	.00051	7.5370	.00061
#2	-.00031	.55145	.00000	.00656	.00041	7.5238	.00048

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm						
Avge	.00652	.00021	.13258	.13678	2.4952	.31659	.00045
SDev	.00007	.00127	.00036	.00265	.0129	.00186	.00046
%RSD	1.0667	589.59	.26993	1.9366	.51698	.58625	101.10

#1	.00647	.00111	.13283	.13490	2.5044	.31790	.00078
#2	.00657	-.00068	.13232	.13865	2.4861	.31527	.00013

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avge	.00240	.00399	.00065	.00177	.00100	.00085	.00090
SDev	.00033	.00546	.00227	.00030	.00042	.00343	.00215
%RSD	13.657	136.71	346.46	17.234	42.423	402.84	238.09

#1	.00263	.00785	-.00095	.00198	.00070	.00328	.00242
#2	.00217	.00013	.00226	.00155	.00130	-.00157	-.00062

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00199	.00064	-.00023	-.00209	.00244	.36476
SDev	.00170	.00013	.00048	.00121	.00338	.00292
%RSD	85.539	19.811	206.83	58.014	138.67	.80119

#1	-.00078	.00055	.00011	-.00295	.00482	.36682
#2	-.00319	.00073	-.00057	-.00123	.00005	.36269

674 1439

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13974	--	--	--	--	--	--
SDev	117.0262	--	--	--	--	--	--
%RSD	.8374835	--	--	--	--	--	--
#1	13891	--	--	--	--	--	--
#2	14056	--	--	--	--	--	--

Method: METTRA Sample Name: DPM65SF Operator: RJG
 Run Time: 11/20/00 19:12:34
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.04349	4.2746	1.7198	1.7688	.04661	33.555	.04522
SDev	.00017	.0131	.0047	.0015	.00046	.115	.00028
%RSD	.39012	.30594	.27158	.08516	.98461	.34151	.62231
#1	.04337	4.2654	1.7231	1.7698	.04694	33.636	.04542
#2	.04361	4.2838	1.7165	1.7677	.04629	33.474	.04502
Errors	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						
Avg	.47316	.17643	.82272	1.4855	11.333	1.8500	-.00055
SDev	.00274	.00087	.00049	.0073	.007	.0019	.00055
%RSD	.57866	.49484	.05936	.49291	.06361	.10374	99.895
#1	.47510	.17705	.82307	1.4804	11.338	1.8513	-.00094
#2	.47123	.17582	.82238	1.4907	11.328	1.8486	-.00016
Errors	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						
Avg	.45580	.43780	.43196	.43391	.00175	-.00088	-.00001
SDev	.00312	.00119	.00158	.00066	.00225	.00083	.00019
%RSD	.68334	.27144	.36533	.15138	128.06	94.196	3214.3
#1	.45800	.43864	.43085	.43344	.00334	-.00147	.00013
#2	.45360	.43696	.43308	.43437	.00017	-.00030	-.00014
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.7008	1.6797	1.6868	1.7597	.43420	2.0365	
SDev	.0146	.0106	.0022	.0060	.00383	.0044	
%RSD	.86090	.63164	.13085	.34034	.88203	.21544	
#1	1.7112	1.6722	1.6852	1.7555	.43691	2.0396	
#2	1.6905	1.6872	1.6883	1.7640	.43149	2.0334	
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	15423	--	--	--	--	--	--
SDev	53.03301	--	--	--	--	--	--
%RSD	.3438577	--	--	--	--	--	--
#1	15385	--	--	--	--	--	--
#2	15460	--	--	--	--	--	--

Method: METTRA Sample Name: DPM65DF Operator: RJG
 Run Time: 11/20/00 19:16:44
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.04525	4.4260	1.7792	1.8138	.04788	34.974	.04679
SDev	.00059	.0158	.0019	.0029	.00020	.035	.00038
%RSD	1.3071	.35808	.10716	.15965	.41378	.09902	.80410
#1	.04567	4.4148	1.7806	1.8117	.04774	34.949	.04706
#2	.04483	4.4372	1.7779	1.8158	.04802	34.998	.04653
Errors	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						
Avg	.48936	.18203	.85499	1.5458	11.817	1.9227	-.00026
SDev	.00045	.00017	.00090	.0049	.012	.0010	.00015
%RSD	.09256	.09318	.10491	.31533	.10291	.05093	55.686
#1	.48904	.18191	.85436	1.5424	11.808	1.9220	-.00036
#2	.48969	.18215	.85563	1.5493	11.826	1.9234	-.00016
Errors	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						
Avg	.46818	.45452	.44893	.45079	.00175	.00110	.00131
SDev	.00024	.00737	.00101	.00178	.00051	.00115	.00093
%RSD	.05107	1.6219	.22496	.39512	29.039	104.47	71.050
#1	.46835	.45973	.44821	.45205	.00211	.00191	.00197
#2	.46801	.44931	.44964	.44953	.00139	.00029	.00065
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.7697	1.7544	1.7595	1.8169	.44503	2.1189	
SDev	.0091	.0146	.0127	.0005	.00068	.0039	
%RSD	.51159	.83152	.72436	.02802	.15268	.18211	
#1	1.7761	1.7647	1.7685	1.8172	.44551	2.1216	
#2	1.7633	1.7441	1.7505	1.8165	.44455	2.1162	
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	15318	--	--	--	--	--	--
SDev	145.3104	--	--	--	--	--	--
%RSD	.9486347	--	--	--	--	--	--
#1	15215	--	--	--	--	--	--
#2	15421	--	--	--	--	--	--

Method: METTRA Sample Name: DPM69F Operator: RJG
 Run Time: 11/20/00 19:20:54
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00054	.16422	.00221	.04733	.00040	65.243	.00042
SDev	.00047	.01827	.00046	.00055	.00008	.942	.00006
%RSD	87.271	11.127	20.762	1.1630	19.185	1.4439	15.512
#1	.00021	.17714	.00253	.04772	.00034	65.909	.00046
#2	.00088	.15130	.00189	.04694	.00045	64.577	.00037
Errors	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						
Avg	.00441	.00067	.02092	.05010	10.412	1.7437	-.00033
SDev	.00023	.00023	.00002	.00851	.143	.0225	.00016
%RSD	5.2035	34.746	.09732	16.986	1.3700	1.2905	48.027
#1	.00424	.00051	.02093	.04408	10.513	1.7596	-.00044
#2	.00457	.00084	.02090	.05612	10.311	1.7278	-.00022
Errors	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						
Avg	.00201	.00329	-.00073	.00061	.00323	.00104	.00177
SDev	.00109	.00323	.00181	.00014	.00101	.00087	.00024
%RSD	53.950	98.191	247.79	22.231	31.148	83.417	13.780
#1	.00124	.00101	.00055	.00070	.00395	.00043	.00160
#2	.00278	.00557	-.00202	.00051	.00252	.00166	.00194
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	-.00351	.00308	.00089	.00146	.00057	.19216	
SDev	.00002	.00121	.00081	.00312	.00026	.00253	
%RSD	.45629	39.398	90.817	213.23	45.086	1.3146	
#1	-.00350	.00222	.00032	.00367	.00039	.19394	
#2	-.00353	.00394	.00146	-.00074	.00076	.19037	
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	13727	--	--	--	--	--	--
SDev	183.3174	--	--	--	--	--	--
%RSD	1.335454	--	--	--	--	--	--
#1	13597	--	--	--	--	--	--
#2	13857	--	--	--	--	--	--

Method: METTRA Sample Name: DPX82F Operator: RJG
 Run Time: 11/20/00 19:25:03
 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
Avg	-.00014	2.0710	.00175	.03570	.00252	30.325	.00184
SDev	.00047	.0021	.00028	.00000	.00009	.063	.00006
%RSD	336.03	.10216	16.040	.00450	3.7453	.20673	3.3227

#1	.00019	2.0725	.00155	.03570	.00245	30.369	.00188
#2	-.00047	2.0695	.00195	.03570	.00258	30.281	.00179

Errors	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						
Avg	.03408	.00054	.31335	.40160	7.2845	1.5801	.00003
SDev	.00060	.00037	.00035	.01263	.0215	.0014	.00048
%RSD	1.7753	67.729	.11299	3.1440	.29544	.08908	1421.2

#1	.03451	.00081	.31360	.41053	7.2997	1.5811	.00037
#2	.03365	.00028	.31310	.39268	7.2692	1.5791	-.00030

Errors	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						
Avg	.01235	.00519	.00365	.00417	.00146	.00246	.00212
SDev	.00060	.00189	.00004	.00065	.00218	.00050	.00106
%RSD	4.8540	36.387	1.0286	15.712	149.17	20.449	49.961

#1	.01277	.00653	.00368	.00463	-.00008	.00210	.00137
#2	.01192	.00386	.00363	.00370	.00301	.00281	.00288

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	.00089	-.00186	-.00094	-.00298	.00014	1.1162
SDev	.00032	.00082	.00065	.00076	.00092	.0007
%RSD	35.832	43.922	68.922	25.492	663.18	.06023

#1	.00066	-.00244	-.00140	-.00352	.00079	1.1167
#2	.00111	-.00128	-.00048	-.00244	-.00051	1.1157

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	15704	--	--	--	--	--	--
SDev	76.22666	--	--	--	--	--	--
%RSD	.4853903	--	--	--	--	--	--
#1	15650	--	--	--	--	--	--
#2	15758	--	--	--	--	--	--

Method: METTRA Sample Name: DPX85F Operator: RJG
 Run Time: 11/20/00 19:29:13
 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	.00086	.03217	.00005	.04083	.00015	61.410	.00012
SDev	.00021	.00805	.00195	.00013	.00020	.220	.00019
%RSD	23.827	25.024	4083.2	.32244	139.17	.35877	149.18
#1	.00101	.03786	.00143	.04093	.00000	61.566	-.00001
#2	.00072	.02647	-.00133	.04074	.00029	61.254	.00026
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	.00049	.00116	.00286	.06343	9.1124	1.3975	.00028
SDev	.00001	.00009	.00065	.02030	.0274	.0040	.00061
%RSD	1.4387	7.4790	22.886	32.006	.30021	.28838	221.40
#1	.00049	.00122	.00333	.07779	9.1317	1.4004	-.00016
#2	.00050	.00110	.00240	.04908	9.0930	1.3947	.00071
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	.00031	.00177	-.00109	-.00014	.00142	.00223	.00196
SDev	.00012	.00094	.00177	.00149	.00264	.00044	.00059
%RSD	38.593	53.052	162.32	1080.8	185.58	19.784	29.806
#1	.00039	.00244	.00016	.00092	.00329	.00192	.00238
#2	.00022	.00111	-.00234	-.00120	-.00044	.00255	.00155
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	-.00240	.00143	.00015	-.00485	.00154	.04379	
SDev	.00171	.00153	.00159	.00740	.00003	.00021	
%RSD	71.188	106.70	1028.2	152.69	1.6946	.48330	
#1	-.00119	.00251	.00128	L-.01008	.00156	.04364	
#2	-.00361	.00035	-.00097	.00039	.00152	.04394	
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	13469	--	--	--	--	--	--
SDev	169.9535	--	--	--	--	--	--
%RSD	1.261820	--	--	--	--	--	--
#1	13349	--	--	--	--	--	--
#2	13589	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3 Operator: RJG
 Run Time: 11/20/00 19:33:23
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	1.0295	24.586	.50955	2.0292	2.0432	50.929	.49338
SDev	.0058	.095	.00323	.0126	.0175	.369	.00332
%RSD	.56330	.38719	.63293	.62187	.85872	.72396	.67347
#1	1.0336	24.654	.51183	2.0381	2.0556	51.190	.49573
#2	1.0254	24.519	.50727	2.0203	2.0308	50.669	.49103
Errors	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						
Avg	2.0460	2.0397	1.9923	25.264	49.686	2.0175	2.0429
SDev	.0092	.0138	.0085	.111	.276	.0118	.0062
%RSD	.44985	.67900	.42553	.43782	.55618	.58631	.30457
#1	2.0525	2.0495	1.9983	25.343	49.881	2.0259	2.0473
#2	2.0395	2.0299	1.9863	25.186	49.490	2.0091	2.0385
Errors	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						
Avg	2.0491	.51140	.50612	.50788	.51226	.51669	.51521
SDev	.0183	.00449	.00044	.00120	.00663	.00228	.00069
%RSD	.89337	.87787	.08790	.23593	1.2951	.44023	.13431
#1	2.0621	.51457	.50581	.50872	.50756	.51830	.51472
#2	2.0362	.50822	.50644	.50703	.51695	.51508	.51570
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	.51966	.51715	.51799	1.0345	2.0285	2.0681	
SDev	.00120	.00409	.00232	.0089	.0138	.0083	
%RSD	.23082	.78982	.44883	.85628	.67863	.40360	
#1	.52051	.51426	.51634	1.0282	2.0382	2.0740	
#2	.51882	.52004	.51963	1.0408	2.0188	2.0622	
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	13393	--	--	--	--	--	--
SDev	73.15034	--	--	--	--	--	--
%RSD	.5461925	--	--	--	--	--	--
#1	13341	--	--	--	--	--	--
#2	13444	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3 Operator: RJG
 Run Time: 11/20/00 19:37:32
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00070	.00808	.00168	.00096	.00072	.02029	.00012
SDev	.00117	.00078	.00037	.00006	.00000	.00541	.00003
%RSD	168.12	9.6611	21.954	6.3860	.54660	26.659	27.025
#1	.00153	.00863	.00194	.00100	.00072	.01647	.00010
#2	-.00013	.00753	.00142	.00092	.00072	.02412	.00015
Errors	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						
Avg	.00045	.00134	.00076	-.00166	.02055	.00109	.00531
SDev	.00079	.00001	.00023	.00225	.00456	.00016	.00237
%RSD	176.96	.89550	30.066	135.76	22.188	15.025	44.689
#1	.00100	.00133	.00092	-.00007	.02377	.00098	.00698
#2	-.00011	.00135	.00060	-.00325	.01732	.00121	.00363
Errors	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						
Avg	-.00065	.00224	.00168	.00187	.00249	.00282	.00271
SDev	.00020	.00085	.00122	.00110	.00037	.00007	.00008
%RSD	31.398	38.103	72.323	58.649	15.013	2.5519	2.8297
#1	-.00080	.00285	.00254	.00265	.00276	.00277	.00276
#2	-.00051	.00164	.00082	.00109	.00223	.00287	.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	
Avg	-.00156	-.00086	-.00109	-.00139	-.00000	.00078	
SDev	.00249	.00275	.00266	.00191	.00000	.00018	
%RSD	159.21	319.63	243.30	137.32	135.76	22.855	
#1	-.00332	-.00280	-.00298	-.00274	-.00000	.00091	
#2	.00020	.00108	.00079	-.00004	-.00000	.00066	
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	13594	--	--	--	--	--	--
SDev	46.84582	--	--	--	--	--	--
%RSD	.3446161	--	--	--	--	--	--
#1	13560	--	--	--	--	--	--
#2	13627	--	--	--	--	--	--

Method: METTRA Sample Name: DP2MWBFB Operator: RJG
 Run Time: 11/20/00 19:41:42
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00053	.00131	.00088	.00029	.00016	.00772	.00021
SDev	.00022	.00044	.00126	.00013	.00012	.00122	.00001
%RSD	41.218	33.402	142.59	46.251	78.692	15.759	4.5717
#1	.00038	.00100	-.00001	.00019	.00007	.00686	.00021
#2	.00069	.00162	.00178	.00038	.00024	.00858	.00020
Errors	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						
Avge	-.00004	.00056	.00080	.05120	.01277	.00086	.00213
SDev	.00051	.00002	.00025	.01168	.00330	.00012	.00037
%RSD	1452.8	3.3021	31.422	22.819	25.832	14.245	17.228
#1	-.00040	.00057	.00062	.04294	.01043	.00077	.00187
#2	.00033	.00054	.00098	.05946	.01510	.00095	.00239
Errors	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						
Avge	.00037	.00376	-.00003	.00123	.00151	.00008	.00056
SDev	.00083	.00170	.00141	.00037	.00157	.00050	.00019
%RSD	222.26	45.272	5041.5	30.316	103.98	600.52	34.172
#1	.00096	.00496	-.00102	.00097	.00262	-.00027	.00069
#2	-.00021	.00255	.00097	.00150	.00040	.00043	.00042
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	-.00684	.00207	-.00090	-.00231	.00002	.00065	
SDev	.00140	.00071	.00001	.00408	.00000	.00009	
%RSD	20.455	34.443	1.1299	176.85	22.819	14.185	
#1	-.00782	.00257	-.00089	-.00520	.00001	.00058	
#2	-.00585	.00157	-.00090	.00058	.00002	.00071	
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	13535	--	--	--	--	--	--
SDev	13.93014	--	--	--	--	--	--
%RSD	.1029213	--	--	--	--	--	--
#1	13545	--	--	--	--	--	--
#2	13525	--	--	--	--	--	--

Method: METTRA Sample Name: DP2MWCF Operator: RJG
 Run Time: 11/20/00 19:45:51
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.05003	1.8224	1.9722	1.9877	.05057	L.00642	.04859
SDev	.00016	.0092	.0100	.0197	.00030	.00208	.00046
%RSD	.32205	.50579	.50953	.98978	.58980	32.400	.94064
#1	.05014	1.8289	1.9793	2.0016	.05078	L.00495	.04892
#2	.04992	1.8158	1.9651	1.9738	.05036	L.00789	.04827
Errors	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						
Avg	.50888	.20279	.24225	.97789	L.01183	.49260	L.00070
SDev	.00052	.00065	.00185	.00105	.00528	.00261	.00035
%RSD	.10141	.32054	.76235	.10721	44.673	.52932	50.451
#1	.50925	.20325	.24355	.97715	L.00809	.49444	L.00045
#2	.50852	.20233	.24094	.97863	L.01557	.49076	L.00095
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						
Avg	.50577	.49232	.48763	.48919	.00121	.00234	L.00196
SDev	.00378	.00112	.00024	.00053	.00060	.00136	.00111
%RSD	.74769	.22661	.04937	.10877	49.608	58.042	56.311
#1	.50845	.49153	.48746	.48881	.00163	.00330	L.00275
#2	.50310	.49311	.48780	.48957	.00079	.00138	L.00118
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	
Avg	1.9345	1.9436	1.9406	1.9742	.49253	.51048	
SDev	.0053	.0016	.0007	.0024	.00138	.00181	
%RSD	.27382	.08196	.03614	.12276	.27986	.35527	
#1	1.9307	1.9447	1.9401	1.9759	.49351	.51176	
#2	1.9382	1.9425	1.9411	1.9725	.49156	.50919	
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	13631	--	--	--	--	--	--
SDev	38.18377	--	--	--	--	--	--
%RSD	.2801214	--	--	--	--	--	--
#1	13604	--	--	--	--	--	--
#2	13658	--	--	--	--	--	--

Method: METTRA Sample Name: DPL2KF Operator: RJG
 Run Time: 11/20/00 19:50:00
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00030	.49093	.00779	.02345	.00011	58.297	-.00006
SDev	.00033	.00449	.00073	.00017	.00025	.062	.00027
%RSD	110.39	.91376	9.3540	.70716	235.36	.10673	463.30

#1	.00007	.49410	.00831	.02333	.00028	58.253	-.00025
#2	.00054	.48776	.00728	.02356	-.00007	58.341	.00013

Errors	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	-.00033	.00221	.00908	.04761	.04715	.00249	.00740
SDev	.00051	.00005	.00055	.00958	.00308	.00013	.00013
%RSD	157.24	2.4234	6.1002	20.119	6.5409	5.3708	1.7617

#1	-.00069	.00217	.00869	.04083	.04497	.00240	.00731
#2	.00004	.00225	.00947	.05438	.04933	.00259	.00749

Errors	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						
Avge	.00245	.00311	.00114	.00180	.00220	.00338	.00299
SDev	.00061	.00068	.00024	.00038	.00138	.00051	.00012
%RSD	25.014	21.687	20.972	21.384	62.857	15.232	3.9634

#1	.00288	.00359	.00131	.00207	.00318	.00301	.00307
#2	.00201	.00264	.00097	.00153	.00122	.00374	.00290

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	.00123	.00666	.00485	-.00167	.02323	.00589
SDev	.00279	.00421	.00374	.00003	.00010	.00012
%RSD	226.73	63.229	77.040	1.7908	.43486	1.9553

#1	.00320	.00964	.00750	-.00165	.02316	.00581
#2	-.00074	.00368	.00221	-.00169	.02330	.00597

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

674 1459

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13417	--	--	--	--	--	--
SDev	56.49811	--	--	--	--	--	--
%RSD	.4210809	--	--	--	--	--	--
#1	13457	--	--	--	--	--	--
#2	13377	--	--	--	--	--	--

Method: METTRA Sample Name: DPL2KP5F Operator: RJG
 Run Time: 11/20/00 19:54:10
 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	-.00005	.07881	.00269	.00479	.00018	11.494	.00003
SDev	.00005	.00329	.00077	.00001	.00003	.056	.00004
%RSD	116.52	4.1763	28.694	.26980	16.121	.48997	113.66

#1	-.00001	.08114	.00323	.00478	.00020	11.534	.00006
#2	-.00008	.07649	.00214	.00480	.00016	11.454	.00001

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00045	.00013	.00206	-.00501	.00780	.00068	.00146
SDev	.00024	.00034	.00018	.00075	.00041	.00003	.00072
%RSD	52.928	265.08	8.7434	14.952	5.2715	3.6416	49.036

#1	.00061	.00037	.00218	-.00448	.00809	.00070	.00096
#2	.00028	-.00011	.00193	-.00554	.00751	.00066	.00197

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avge	.00000	.00282	.00021	.00108	.00154	.00270	.00232
SDev	.00072	.00152	.00046	.00020	.00064	.00111	.00096
%RSD	58391.	54.000	219.76	18.334	41.768	41.183	41.313

#1	.00051	.00390	-.00012	.00122	.00200	.00349	.00299
#2	-.00051	.00174	.00054	.00094	.00109	.00192	.00164

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00057	.00392	.00280	-.00132	.00674	.00109
SDev	.00024	.00098	.00074	.00032	.00001	.00009
%RSD	42.581	25.145	26.327	23.970	.07825	8.3760

#1	.00074	.00461	.00332	-.00154	.00674	.00103
#2	.00040	.00322	.00228	-.00110	.00674	.00116

674 1461

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13632	--	--	--	--	--	--
SDev	10.14671	--	--	--	--	--	--
%RSD	.0744353	--	--	--	--	--	--
#1	13624	--	--	--	--	--	--
#2	13639	--	--	--	--	--	--

Method: METTRA Sample Name: DPL2KSF Operator: RJG
 Run Time: 11/20/00 19:58:19
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.05093	2.5152	2.0031	2.0209	.05101	57.824	.04795
SDev	.00013	.0028	.0016	.0011	.00022	.104	.00014
%RSD	.24534	.11321	.08235	.05440	.42941	.17918	.28695

#1	.05102	2.5172	2.0043	2.0202	.05116	57.898	.04804
#2	.05084	2.5132	2.0020	2.0217	.05085	57.751	.04785

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm						
Avge	.50667	.20347	.26191	1.0348	.04722	.49742	.00754
SDev	.00127	.00062	.00010	.0060	.00299	.00012	.00011
%RSD	.25001	.30304	.03904	.58055	6.3427	.02327	1.4665

#1	.50757	.20391	.26184	1.0390	.04933	.49734	.00762
#2	.50578	.20304	.26198	1.0305	.04510	.49750	.00746

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avge	.50922	.50446	.49189	.49608	.00169	.00418	.00335
SDev	.00166	.00052	.00307	.00222	.00081	.00047	.00005
%RSD	.32649	.10356	.62500	.44842	47.525	11.314	1.4067

#1	.51039	.50483	.49407	.49765	.00112	.00451	.00338
#2	.50804	.50409	.48972	.49451	.00226	.00384	.00332

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9789	1.9770	1.9776	2.0942	.51678	.52674
SDev	.0031	.0014	.0001	.0104	.00159	.00124
%RSD	.15539	.06828	.00625	.49499	.30750	.23615

#1	1.9810	1.9760	1.9777	2.1016	.51790	.52762
#2	1.9767	1.9779	1.9775	2.0869	.51566	.52586

674 1463

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13397	--	--	--	--	--	--
SDev	27.18839	--	--	--	--	--	--
%RSD	.2029443	--	--	--	--	--	--
#1	13378	--	--	--	--	--	--
#2	13416	--	--	--	--	--	--

Method: METTRA Sample Name: DPL2KDF Operator: RJG
 Run Time: 11/20/00 20:02:55
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.05142	2.5217	2.0351	2.0408	.05272	58.818	.04868
SDev	.00020	.0154	.0193	.0177	.00186	.713	.00073
%RSD	.39324	.61242	.94877	.86945	3.5334	1.2120	1.4971
#1	.05157	2.5107	2.0488	2.0534	.05403	59.322	.04920
#2	.05128	2.5326	2.0215	2.0283	.05140	58.314	.04816
Errors	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						
Avg	.50990	.20581	.26737	1.0286	.04558	.50047	.00712
SDev	.00079	.00057	.00138	.0020	.00329	.00067	.00010
%RSD	.15450	.27560	.51603	.19020	7.2269	.13451	1.3278
#1	.50934	.20622	.26639	1.0272	.04791	.50000	.00705
#2	.51045	.20541	.26834	1.0299	.04325	.50095	.00719
Errors	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						
Avg	.52559	.50728	.50345	.50472	.00190	.00149	.00163
SDev	.02115	.00015	.00451	.00306	.00036	.00294	.00184
%RSD	4.0248	.03031	.89594	.60623	19.017	197.62	113.31
#1	.54055	.50738	.50664	.50689	.00216	-.00059	.00032
#2	.51064	.50717	.50026	.50256	.00164	.00357	.00293
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.9857	2.0042	1.9980	2.1431	.52485	.54232	
SDev	.0146	.0102	.0020	.0277	.00652	.00991	
%RSD	.73412	.50986	.09817	1.2927	1.2416	1.8271	
#1	1.9753	2.0114	1.9994	2.1627	.52946	.54933	
#2	1.9960	1.9969	1.9966	2.1235	.52024	.53531	
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	

674 1465

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13449	--	--	--	--	--	--
SDev	4.984965	--	--	--	--	--	--
%RSD	.0370666	--	--	--	--	--	--
#1	13452	--	--	--	--	--	--
#2	13445	--	--	--	--	--	--

Method: METTRA Sample Name: DPL2QF Operator: RJG
 Run Time: 11/20/00 20:07:05
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	-.00019	.01733	.00221	.04404	-.00001	97.669	.00015
SDev	.00070	.00310	.00189	.00064	.00003	.022	.00019
%RSD	361.45	17.870	85.427	1.4508	278.93	.02252	125.38
#1	-.00069	.01952	.00088	.04359	.00001	97.684	.00002
#2	.00030	.01514	.00355	.04449	-.00003	97.653	.00029
Errors	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						
Avg	-.00027	.00491	.00253	-.00149	5.0461	.03898	.00235
SDev	.00060	.00064	.00035	.00936	.0026	.00032	.00064
%RSD	221.53	13.057	13.944	626.26	.05079	.82592	27.078
#1	-.00070	.00446	.00228	-.00811	5.0479	.03876	.00190
#2	.00015	.00536	.00278	.00512	5.0443	.03921	.00281
Errors	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						
Avg	.00193	.00109	-.00000	.00036	.00501	.00163	.00276
SDev	.00052	.00100	.00124	.00049	.00009	.00148	.00096
%RSD	27.063	92.394	25905.	137.41	1.6872	90.727	34.747
#1	.00230	.00038	.00087	.00071	.00507	.00058	.00208
#2	.00156	.00180	-.00088	.00001	.00495	.00267	.00343
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	.00299	.00867	.00678	-.00074	.00133	.01162	
SDev	.00421	.00326	.00077	.00473	.00081	.00013	
%RSD	140.69	37.576	11.352	635.03	60.831	1.1183	
#1	.00002	.01097	.00732	-.00409	.00076	.01153	
#2	.00597	.00636	.00623	.00260	.00190	.01171	
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	

674 1467

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13424	--	--	--	--	--	--
SDev	6.823166	--	--	--	--	--	--
%RSD	.0508284	--	--	--	--	--	--
#1	13419	--	--	--	--	--	--
#2	13429	--	--	--	--	--	--

Method: METTRA Sample Name: DPL2TF Operator: RJG
Run Time: 11/20/00 20:11:14
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Table with 8 columns: Elem, Units, AG, AL, AS, BA, BE, CA, CD. Rows include Avge, SDev, %RSD and sample data for #1 and #2.

Table with 8 columns: #1, #2. Rows include Avge, SDev, %RSD and sample data for #1 and #2.

Table with 8 columns: Errors, High, Low. Rows include LC Pass, High, Low.

Table with 8 columns: Elem, Units, CO, CR, CU, FE, MG, MN, MO. Rows include Avge, SDev, %RSD and sample data for #1 and #2.

Table with 8 columns: #1, #2. Rows include Avge, SDev, %RSD and sample data for #1 and #2.

Table with 8 columns: Errors, High, Low. Rows include LC Pass, High, Low.

Table with 8 columns: Elem, Units, NI, PB/1, PB/2, PB, SB/1, SB/2, SB. Rows include Avge, SDev, %RSD and sample data for #1 and #2.

Table with 8 columns: #1, #2. Rows include Avge, SDev, %RSD and sample data for #1 and #2.

Table with 8 columns: Errors, High, Low. Rows include LC Pass, NOCHECK, High, Low.

Table with 7 columns: Elem, Units, SE/1, SE/2, SE, TL, V_, ZN. Rows include Avge, SDev, %RSD and sample data for #1 and #2.

Table with 7 columns: #1, #2. Rows include Avge, SDev, %RSD and sample data for #1 and #2.

Table with 7 columns: Errors, High, Low. Rows include NOCHECK, LC Pass, High, Low.

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13413	--	--	--	--	--	--
SDev	54.12958	--	--	--	--	--	--
%RSD	.4035508	--	--	--	--	--	--
#1	13375	--	--	--	--	--	--
#2	13452	--	--	--	--	--	--

Method: METTRA Sample Name: DPL2VF Operator: RJG
 Run Time: 11/20/00 20:15:24
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	-.00014	.06372	.00352	.09645	.00002	76.841	-.00021
SDev	.00022	.01170	.00290	.00063	.00014	.026	.00012
%RSD	163.12	18.363	82.522	.65641	893.33	.03446	58.138
#1	-.00029	.07200	.00146	.09600	.00011	76.860	-.00013
#2	.00002	.05545	.00557	.09690	-.00008	76.822	-.00030
Errors	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						
Avg	-.00044	.00068	.00067	1.2514	5.7551	.30345	.00150
SDev	.00045	.00005	.00013	.0071	.0088	.00036	.00107
%RSD	102.64	7.5413	19.854	.56365	.15253	.11891	71.719
#1	-.00075	.00064	.00076	1.2564	5.7613	.30320	.00074
#2	-.00012	.00071	.00058	1.2464	5.7489	.30371	.00225
Errors	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						
Avg	.00104	.00182	.00062	.00102	.00423	.00266	.00318
SDev	.00115	.00344	.00095	.00178	.00210	.00024	.00054
%RSD	110.79	188.91	151.88	173.83	49.671	9.1327	16.912
#1	.00185	-.00061	-.00005	-.00023	.00274	.00283	.00280
#2	.00023	.00425	.00129	.00228	.00571	.00248	.00356
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	-.00026	.00140	.00084	-.00023	.00175	.00342	
SDev	.00055	.00218	.00164	.00397	.00026	.00003	
%RSD	210.54	156.58	194.40	1713.2	14.722	.95996	
#1	-.00065	-.00015	-.00032	-.00304	.00157	.00340	
#2	.00013	.00294	.00200	.00257	.00193	.00345	
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	13488	--	--	--	--	--	--
SDev	75.73086	--	--	--	--	--	--
%RSD	.5614622	--	--	--	--	--	--
#1	13435	--	--	--	--	--	--
#2	13542	--	--	--	--	--	--

Method: METTRA Sample Name: DPL2WF Operator: RJG
 Run Time: 11/20/00 20:19:33
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00015	.64951	.00136	.08895	-.00005	51.153	-.00006
SDev	.00008	.00400	.00070	.00018	.00001	.100	.00001
%RSD	50.214	.61536	51.705	.19849	22.126	.19616	12.558
#1	.00021	.64668	.00185	.08882	-.00005	51.224	-.00005
#2	.00010	.65233	.00086	.08907	-.00004	51.082	-.00007
Errors	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						
Avge	.00030	.00156	.00419	1.3686	13.161	.13992	.00099
SDev	.00004	.00056	.00029	.0001	.031	.00013	.00035
%RSD	14.762	35.579	6.9610	.00809	.23790	.08982	35.396
#1	.00027	.00195	.00439	1.3687	13.183	.14001	.00074
#2	.00033	.00117	.00398	1.3685	13.139	.13983	.00123
Errors	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						
Avge	.00163	.00695	.00399	.00498	.00196	.00408	.00337
SDev	.00053	.00155	.00316	.00160	.00175	.00151	.00043
%RSD	32.684	22.248	79.297	32.047	89.233	37.026	12.657
#1	.00201	.00805	.00175	.00385	.00072	.00515	.00368
#2	.00125	.00586	.00623	.00610	.00319	.00301	.00307
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	-.00679	.00091	-.00166	-.00164	.00047	.00877	
SDev	.00325	.00441	.00186	.00163	.00000	.00018	
%RSD	47.857	486.61	112.22	99.591	.00809	2.0558	
#1	-.00450	-.00221	-.00297	-.00279	.00047	.00864	
#2	-.00909	.00403	-.00034	-.00048	.00047	.00890	
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	13468	--	--	--	--	--	--
SDev	70.53391	--	--	--	--	--	--
%RSD	.5237040	--	--	--	--	--	--
#1	13418	--	--	--	--	--	--
#2	13518	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-4 Operator: RJG
 Run Time: 11/20/00 20:23:43
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	1.0122	24.216	.49786	1.9956	2.0025	49.990	.48093
SDev	.0027	.053	.00333	.0072	.0052	.100	.00200
%RSD	.26517	.21976	.66976	.36171	.25853	.19952	.41610
#1	1.0141	24.254	.50021	2.0007	2.0062	50.061	.48235
#2	1.0103	24.178	.49550	1.9905	1.9989	49.920	.47952
Errors	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						
Avg	2.0051	2.0011	1.9597	24.766	48.837	1.9848	2.0042
SDev	.0047	.0040	.0046	.047	.107	.0032	.0048
%RSD	.23500	.19941	.23540	.19070	.21905	.16028	.23992
#1	2.0084	2.0039	1.9630	24.799	48.913	1.9871	2.0008
#2	2.0017	1.9982	1.9565	24.732	48.761	1.9826	2.0076
Errors	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						
Avg	2.0021	.49760	.49487	.49578	.50011	.50194	.50133
SDev	.0085	.00417	.00110	.00065	.00170	.00114	.00019
%RSD	.42402	.83714	.22199	.13200	.34102	.22632	.03786
#1	2.0081	.49466	.49565	.49532	.49891	.50274	.50146
#2	1.9961	.50055	.49409	.49624	.50132	.50113	.50120
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	.50406	.50875	.50719	1.0134	1.9896	2.0182	
SDev	.00590	.00467	.00115	.0014	.0077	.0063	
%RSD	1.1706	.91733	.22634	.13701	.38518	.31113	
#1	.49989	.51205	.50800	1.0125	1.9950	2.0226	
#2	.50824	.50545	.50638	1.0144	1.9841	2.0137	
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	

674 1475

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13705	--	--	--	--	--	--
SDev	18.17278	--	--	--	--	--	--
%RSD	.1326021	--	--	--	--	--	--
#1	13718	--	--	--	--	--	--
#2	13692	--	--	--	--	--	--

Method: METTRA Sample Name: CCB4

Operator: RJG

Run Time: 11/20/00 20:27:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00091	.01413	-.00019	.00110	.00081	.02907	.00029
SDev	.00040	.00306	.00215	.00045	.00032	.01920	.00005
%RSD	43.892	21.650	1160.8	40.497	39.121	66.048	16.203
#1	.00119	.01197	.00134	.00079	.00059	.01549	.00026
#2	.00063	.01629	-.00171	.00142	.00104	.04264	.00033
Errors	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						
Avge	.00035	.00107	.00080	.00110	.02533	.00098	.00562
SDev	.00068	.00041	.00027	.00162	.00776	.00034	.00185
%RSD	192.39	38.561	33.475	147.56	30.653	34.183	32.849
#1	-.00013	.00078	.00061	.00224	.01984	.00075	.00693
#2	.00083	.00136	.00098	-.00005	.03082	.00122	.00431
Errors	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						
Avge	.00074	.00346	.00104	.00185	.00030	.00338	.00236
SDev	.00011	.00155	.00146	.00046	.00091	.00036	.00006
%RSD	14.626	44.868	140.38	24.895	304.89	10.763	2.5601
#1	.00082	.00455	.00001	.00152	-.00035	.00364	.00231
#2	.00067	.00236	.00208	.00217	.00094	.00313	.00240
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	-.00128	.00273	.00139	.00294	.00000	.00053	
SDev	.00304	.00119	.00181	.00003	.00000	.00036	
%RSD	237.05	43.493	129.61	1.0990	147.56	67.491	
#1	.00087	.00357	.00267	.00296	.00000	.00028	
#2	-.00344	.00189	.00012	.00292	-.00000	.00078	
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	13484	--	--	--	--	--	--
SDev	48.04804	--	--	--	--	--	--
%RSD	.3563397	--	--	--	--	--	--
#1	13450	--	--	--	--	--	--
#2	13518	--	--	--	--	--	--

Method: METTRA Sample Name: DPL2XF Operator: RJG
 Run Time: 11/20/00 20:32:03
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00110	.02711	.07066	.07775	.00013	138.61	-.00018
SDev	.00009	.01571	.00164	.00001	.00001	.10	.00008
%RSD	8.3307	57.927	2.3155	.01760	10.805	.07148	42.466
#1	.00103	.03822	.07182	.07776	.00012	138.54	-.00013
#2	.00116	.01601	.06951	.07775	.00014	138.68	-.00024
Errors	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						
Avg	.00360	.00201	.00080	20.682	2.4993	5.7741	.00479
SDev	.00023	.00035	.00006	.051	.0003	.0074	.00026
%RSD	6.4018	17.476	6.9028	.24520	.01339	.12795	5.4108
#1	.00376	.00176	.00084	20.646	2.4996	5.7688	.00497
#2	.00343	.00226	.00076	20.718	2.4991	5.7793	.00461
Errors	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						
Avg	.00358	.00462	.00017	.00165	.00098	.00358	.00271
SDev	.00068	.00474	.00358	.00081	.00260	.00001	.00087
%RSD	19.136	102.75	2103.6	49.093	264.24	.24013	32.086
#1	.00310	.00126	.00270	.00222	.00282	.00359	.00333
#2	.00407	.00797	-.00236	.00108	-.00085	.00357	.00210
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	.00272	-.00019	.00078	-.00747	.00323	.00430	
SDev	.00296	.00183	.00023	.00281	.00060	.00005	
%RSD	108.66	957.71	30.008	37.656	18.655	1.1756	
#1	.00063	.00110	.00094	-.00946	.00280	.00426	
#2	.00481	-.00148	.00061	-.00548	.00365	.00433	
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	13337	--	--	--	--	--	--
SDev	151.1793	--	--	--	--	--	--
%RSD	1.133541	--	--	--	--	--	--
#1	13230	--	--	--	--	--	--
#2	13444	--	--	--	--	--	--

Method: METTRA Sample Name: DPXX4B Operator: RJG
 Run Time: 11/20/00 20:36:12
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	-.00006	-.00910	.00032	.00006	.00017	.03211	-.00009
SDev	.00045	.00999	.00028	.00002	.00005	.02522	.00018
%RSD	727.75	109.74	90.340	25.387	30.412	78.549	207.64
#1	-.00038	-.00204	.00052	.00008	.00021	.01428	.00004
#2	.00025	-.01617	.00011	.00005	.00014	.04995	-.00021
Errors	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						
Avge	-.00067	.00013	.00077	-.00212	.00607	.00173	.00121
SDev	.00024	.00018	.00009	.00616	.00286	.00065	.00017
%RSD	36.020	143.67	12.124	290.12	47.159	37.717	14.257
#1	-.00050	-.00000	.00083	.00223	.00404	.00127	.00133
#2	-.00084	.00025	.00070	-.00648	.00809	.00220	.00109
Errors	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						
Avge	-.00022	.00281	.00037	.00118	.00067	.00084	.00078
SDev	.00061	.00370	.00165	.00013	.00316	.00162	.00213
%RSD	280.96	131.68	450.51	10.904	471.44	193.70	273.10
#1	.00022	.00019	.00154	.00109	.00290	.00198	.00229
#2	-.00065	.00542	-.00080	.00127	-.00156	-.00031	-.00073
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	-.00187	.00293	.00133	.00119	-.00000	.00094	
SDev	.00101	.00432	.00254	.00011	.00000	.00014	
%RSD	53.785	147.41	191.36	8.8735	290.12	14.719	
#1	-.00259	.00598	.00313	.00111	.00000	.00084	
#2	-.00116	-.00012	-.00047	.00126	-.00000	.00103	
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	13638	--	--	--	--	--	--
SDev	34.75388	--	--	--	--	--	--
%RSD	.2548364	--	--	--	--	--	--
#1	13662	--	--	--	--	--	--
#2	13613	--	--	--	--	--	--

Method: METTRA Sample Name: DPXX4C Operator: RJG
 Run Time: 11/20/00 20:40:22
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.05036	1.8399	1.9918	2.0057	.05110	L.01277	.04882
SDev	.00027	.0139	.0001	.0009	.00018	.00612	.00017
%RSD	.54407	.75564	.00700	.04388	.34761	47.926	.34134
#1	.05055	1.8497	1.9917	2.0063	.05097	L.00844	.04870
#2	.05017	1.8301	1.9919	2.0051	.05122	L.01710	.04894
Errors	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						
Avge	.51265	.20513	.24374	1.0168	L.00605	.49747	L.00095
SDev	.00113	.00045	.00109	.0130	.00284	.00111	.00021
%RSD	.22134	.21782	.44686	1.2738	46.895	.22226	21.556
#1	.51185	.20481	.24297	1.0259	L.00404	.49668	L.00110
#2	.51345	.20544	.24451	1.0076	L.00806	.49825	L.00081
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						
Avge	.50886	.49282	.48973	.49076	.00172	.00205	L.00194
SDev	.00026	.00113	.00226	.00188	.00071	.00058	.00015
%RSD	.05042	.22903	.46061	.38317	41.307	28.085	7.5883
#1	.50868	.49203	.48813	.48943	.00223	.00164	L.00184
#2	.50905	.49362	.49132	.49209	.00122	.00246	L.00205
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9685	1.9586	1.9619	1.9841	.49917	.51480	
SDev	.0030	.0052	.0025	.0067	.00167	.00005	
%RSD	.15319	.26714	.12670	.33760	.33453	.00982	
#1	1.9706	1.9549	1.9601	1.9889	.50035	.51476	
#2	1.9663	1.9623	1.9637	1.9794	.49799	.51484	
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	13640	--	--	--	--	--	--
SDev	125.1579	--	--	--	--	--	--
%RSD	.9176001	--	--	--	--	--	--
#1	13551	--	--	--	--	--	--
#2	13728	--	--	--	--	--	--

Method: METTRA Sample Name: DPXX4L Operator: RJG
 Run Time: 11/20/00 20:44:31
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.05010	1.8498	1.9938	2.0001	.05108	L.00944	.04882
SDev	.00016	.0019	.0071	.0042	.00022	.00537	.00035
%RSD	.31502	.10044	.35604	.20806	.42764	56.856	.72395
#1	.04999	1.8485	1.9988	2.0030	.05124	L.00565	.04907
#2	.05021	1.8511	1.9888	1.9971	.05093	L.01324	.04857
Errors	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						
Avge	.51393	.20414	.24283	.98145	L.00608	.49729	L-.00018
SDev	.00101	.00037	.00004	.00260	.00040	.00070	.00019
%RSD	.19644	.18018	.01506	.26506	6.6037	.14002	107.92
#1	.51322	.20440	.24281	.97961	L.00580	.49778	L-.00004
#2	.51465	.20388	.24286	.98329	L.00636	.49680	L-.00031
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						
Avge	.51148	.49389	.48992	.49124	.00160	.00278	L.00239
SDev	.00339	.00194	.00299	.00135	.00046	.00084	.00041
%RSD	.66320	.39227	.60987	.27435	29.043	30.293	17.073
#1	.51387	.49526	.48780	.49029	.00127	.00337	L.00267
#2	.50908	.49252	.49203	.49219	.00192	.00218	L.00210
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9774	1.9818	1.9803	1.9883	.49857	.51597	
SDev	.0169	.0045	.0027	.0027	.00597	.00236	
%RSD	.85582	.22478	.13453	.13672	1.1970	.45682	
#1	1.9894	1.9786	1.9822	1.9902	.50279	.51763	
#2	1.9654	1.9849	1.9784	1.9864	.49435	.51430	
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	13512	--	--	--	--	--	--
SDev	67.67026	--	--	--	--	--	--
%RSD	.5008030	--	--	--	--	--	--
#1	13464	--	--	--	--	--	--
#2	13560	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0V

Operator: RJG

Run Time: 11/20/00 20:48:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	-.00064	.91880	.00267	.01101	.00036	.79976	-.00002
SDev	.00020	.00261	.00068	.00028	.00000	.00005	.00007
%RSD	31.226	.28388	25.499	2.5259	1.1457	.00633	277.94
#1	-.00078	.92064	.00219	.01082	.00035	.79972	-.00007
#2	-.00050	.91695	.00315	.01121	.00036	.79980	.00002
Errors	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						
Avge	.00006	.00648	.00675	2.9582	.28592	.04470	.00292
SDev	.00063	.00070	.00055	.0031	.00216	.00004	.00097
%RSD	1135.9	10.867	8.1929	.10406	.75719	.09228	33.236
#1	-.00039	.00598	.00636	2.9561	.28439	.04468	.00223
#2	.00050	.00698	.00714	2.9604	.28745	.04473	.00360
Errors	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						
Avge	.00138	.03092	.02540	.02724	-.00124	.00197	.00090
SDev	.00124	.00395	.00204	.00005	.00168	.00012	.00048
%RSD	89.768	12.769	8.0302	.16855	135.96	5.8636	53.564
#1	.00226	.03371	.02396	.02721	-.00243	.00205	.00056
#2	.00050	.02813	.02684	.02727	-.00005	.00189	.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	.00233	.00139	.00170	-.00054	.00325	.03346	
SDev	.00035	.00128	.00073	.00328	.00317	.00001	
%RSD	15.113	91.798	43.109	607.35	97.487	.02273	
#1	.00257	.00049	.00118	-.00286	.00101	.03346	
#2	.00208	.00229	.00222	.00178	.00549	.03347	
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	13650	--	--	--	--	--	--
SDev	53.06892	--	--	--	--	--	--
%RSD	.3887883	--	--	--	--	--	--
#1	13612	--	--	--	--	--	--
#2	13687	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0W Operator: RJG
 Run Time: 11/20/00 20:52:50
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00015	.00901	-.00034	.00034	.00014	.01708	-.00002
SDev	.00036	.01018	.00032	.00000	.00008	.00086	.00003
%RSD	235.70	113.00	93.888	1.1407	59.715	5.0644	121.85
#1	.00041	.01621	-.00057	.00034	.00008	.01769	-.00004
#2	-.00010	.00181	-.00012	.00033	.00020	.01647	-.00000
Errors	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						
Avg	-.00024	.00001	.00106	.00893	.00669	.00050	.00003
SDev	.00015	.00025	.00013	.00791	.00210	.00001	.00048
%RSD	60.986	1822.2	11.977	88.603	31.346	1.7074	1815.8
#1	-.00014	.00019	.00115	.01452	.00817	.00051	.00036
#2	-.00034	-.00016	.00097	.00334	.00520	.00050	-.00031
Errors	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						
Avg	.00053	.00371	.00009	.00130	.00395	.00081	.00186
SDev	.00022	.00084	.00066	.00016	.00055	.00070	.00065
%RSD	42.236	22.553	705.96	12.568	13.799	86.289	34.905
#1	.00068	.00312	.00056	.00141	.00357	.00032	.00140
#2	.00037	.00430	-.00037	.00118	.00434	.00130	.00231
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	-.00262	.00136	.00004	.00085	.00000	.00129	
SDev	.00280	.00210	.00233	.00055	.00000	.00001	
%RSD	106.84	153.86	6034.2	65.297	88.603	.68436	
#1	-.00459	-.00012	-.00161	.00124	.00000	.00129	
#2	-.00064	.00285	.00169	.00046	.00000	.00128	
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	13458	--	--	--	--	--	--
SDev	145.9471	--	--	--	--	--	--
%RSD	1.084464	--	--	--	--	--	--
#1	13355	--	--	--	--	--	--
#2	13561	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0X

Operator: RJG

Run Time: 11/20/00 20:57:00

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	.00046	.00894	-.00026	.00044	.00002	.75916	.00004
SDev	.00024	.00031	.00175	.00003	.00011	.00028	.00032
%RSD	53.464	3.5059	681.59	6.9890	663.35	.03654	831.19

#1	.00063	.00872	.00098	.00042	-.00006	.75896	.00026
#2	.00028	.00916	-.00150	.00047	.00009	.75936	-.00019

Errors	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	-.00064	.00070	.00090	-.01009	.73456	.00035	.00107
SDev	.00015	.00033	.00022	.00871	.00262	.00003	.00066
%RSD	23.606	47.235	24.828	86.326	.35613	7.9353	61.414

#1	-.00053	.00094	.00074	-.01625	.73641	.00037	.00153
#2	-.00075	.00047	.00106	-.00393	.73271	.00033	.00060

Errors	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	-.00013	.00634	-.00016	.00200	.00051	.00038	.00042
SDev	.00010	.00349	.00060	.00076	.00202	.00174	.00049
%RSD	75.078	55.063	363.43	38.194	399.77	461.21	115.87

#1	-.00021	.00880	-.00059	.00254	-.00092	.00161	.00076
#2	-.00006	.00387	.00026	.00146	.00193	-.00085	.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
Avg	-.00141	.00264	.00129	-.00587	-.00000	.00104
SDev	.00069	.00018	.00035	.00026	.00000	.00026
%RSD	49.251	6.9352	27.374	4.4432	86.326	25.257

#1	-.00092	.00277	.00154	-.00568	-.00001	.00086
#2	-.00190	.00251	.00104	-.00605	-.00000	.00123

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	13405	--	--	--	--	--	--
SDev	70.85223	--	--	--	--	--	--
%RSD	.5285606	--	--	--	--	--	--
#1	13355	--	--	--	--	--	--
#2	13455	--	--	--	--	--	--

Method: METTRA Sample Name: DPD00

Operator: RJG

Run Time: 11/20/00 21:01:10

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
Avg	.00016	.00143	-.00064	.00070	.00005	1.3958	-.00009
SDev	.00055	.00559	.00196	.00006	.00004	.0038	.00002
%RSD	335.39	391.91	305.00	9.0238	81.675	.26940	17.259

#1	.00055	.00538	-.00203	.00075	.00002	1.3931	-.00011
#2	-.00022	-.00253	.00074	.00066	.00008	1.3984	-.00008

Errors	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	-.00070	.00082	.00154	.41009	.71244	.00444	.00059
SDev	.00011	.00015	.00013	.01863	.00087	.00011	.00074
%RSD	14.957	17.768	8.6875	4.5429	.12214	2.4402	126.43

#1	-.00063	.00072	.00144	.42326	.71306	.00452	.00111
#2	-.00078	.00092	.00163	.39692	.71183	.00437	.00006

Errors	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	.00037	.00453	-.00050	.00117	.00201	.00083	.00122
SDev	.00063	.00168	.00042	.00028	.00005	.00256	.00169
%RSD	169.26	37.030	83.441	23.713	2.2454	309.81	138.83

#1	.00082	.00572	-.00080	.00137	.00198	.00264	.00242
#2	-.00007	.00335	-.00021	.00098	.00204	-.00099	.00002

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	-.00067	.00347	.00209	-.00340	.00014	.00351
SDev	.00218	.00180	.00048	.00275	.00001	.00006
%RSD	325.80	51.934	22.781	80.846	4.5429	1.8104

#1	.00087	.00220	.00176	-.00146	.00014	.00356
#2	-.00221	.00474	.00243	-.00534	.00014	.00347

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	13568	--	--	--	--	--	--
SDev	103.0608	--	--	--	--	--	--
%RSD	.7596056	--	--	--	--	--	--
#1	13495	--	--	--	--	--	--
#2	13641	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-5 Operator: RJG
 Run Time: 11/20/00 21:05:19
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	1.0355	24.777	.50971	2.0408	2.0562	51.256	.49211
SDev	.0027	.139	.00143	.0045	.0034	.070	.00066
%RSD	.26123	.56259	.28091	.22060	.16327	.13603	.13423
#1	1.0336	24.679	.51073	2.0376	2.0538	51.206	.49165
#2	1.0374	24.876	.50870	2.0440	2.0586	51.305	.49258
Errors	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						
Avg	2.0572	2.0529	2.0068	25.367	50.096	2.0350	2.0573
SDev	.0057	.0064	.0065	.116	.144	.0061	.0121
%RSD	.27615	.31349	.32407	.45605	.28665	.29791	.58703
#1	2.0532	2.0484	2.0022	25.285	49.995	2.0307	2.0488
#2	2.0612	2.0575	2.0114	25.449	50.198	2.0392	2.0659
Errors	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						
Avg	2.0525	.51106	.50837	.50927	.51340	.51495	.51443
SDev	.0006	.00218	.00232	.00082	.00372	.00275	.00307
%RSD	.03000	.42669	.45633	.16126	.72430	.53308	.59663
#1	2.0521	.51260	.50673	.50869	.51077	.51301	.51226
#2	2.0529	.50952	.51001	.50985	.51603	.51689	.51660
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	.52024	.52070	.52055	1.0363	2.0409	2.0655	
SDev	.00009	.00720	.00477	.0095	.0059	.0006	
%RSD	.01769	1.3830	.91685	.91473	.28977	.03092	
#1	.52030	.51561	.51717	1.0296	2.0367	2.0651	
#2	.52017	.52580	.52392	1.0430	2.0451	2.0660	
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	13497	--	--	--	--	--	--
SDev	.0711250	--	--	--	--	--	--
%RSD	.0005270	--	--	--	--	--	--
#1	13497	--	--	--	--	--	--
#2	13497	--	--	--	--	--	--

Method: METTRA Sample Name: CCB5

Operator: RJG

Run Time: 11/20/00 21:09:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00053	.00133	-.00015	.00115	.00107	.01452	.00005
SDev	.00068	.00594	.00152	.00019	.00041	.00166	.00003
%RSD	126.93	447.81	1045.3	16.426	37.991	11.408	57.402
#1	.00101	.00553	.00093	.00102	.00078	.01335	.00008
#2	.00005	-.00288	-.00122	.00128	.00136	.01569	.00003
Errors	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						
Avg	.00072	.00087	.00109	.01087	.02312	.00104	.00587
SDev	.00015	.00065	.00003	.00611	.00179	.00023	.00123
%RSD	21.402	74.360	2.6346	56.228	7.7299	22.174	21.014
#1	.00083	.00133	.00107	.00655	.02438	.00088	.00674
#2	.00062	.00041	.00112	.01519	.02185	.00120	.00499
Errors	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						
Avg	.00211	.00142	-.00024	.00031	.00276	.00131	.00179
SDev	.00039	.00009	.00049	.00030	.00124	.00059	.00002
%RSD	18.393	6.4885	205.01	95.988	45.010	45.280	1.0201
#1	.00184	.00148	-.00059	.00010	.00188	.00173	.00178
#2	.00238	.00135	.00011	.00052	.00363	.00089	.00180
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	-.00103	.00115	.00042	.00351	.00000	.00080	
SDev	.00077	.00240	.00134	.00035	.00000	.00030	
%RSD	74.324	208.15	316.75	9.9425	56.228	37.852	
#1	-.00049	-.00054	-.00053	.00376	.00000	.00058	
#2	-.00158	.00285	.00137	.00327	.00001	.00101	
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	13618	--	--	--	--	--	--
SDev	109.0712	--	--	--	--	--	--
%RSD	.8009092	--	--	--	--	--	--
#1	13541	--	--	--	--	--	--
#2	13696	--	--	--	--	--	--

Method: METTRA Sample Name: DPXXTB Operator: RJG
 Run Time: 11/20/00 21:13:38
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	-.00039	.00285	.00031	.00047	.00031	.03178	-.00015
SDev	.00019	.00870	.00014	.00011	.00005	.00076	.00012
%RSD	48.533	305.04	46.685	24.027	16.914	2.3823	77.873
#1	-.00052	.00900	.00021	.00039	.00027	.03125	-.00024
#2	-.00026	-.00330	.00041	.00055	.00035	.03232	-.00007
Errors	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						
Avg	-.00043	.00145	.00069	.01049	.01043	.00368	.00301
SDev	.00003	.00029	.00002	.00237	.00167	.00003	.00020
%RSD	7.8914	19.861	2.2917	22.600	15.983	.87591	6.6556
#1	-.00040	.00125	.00068	.01216	.01161	.00365	.00316
#2	-.00045	.00166	.00070	.00881	.00925	.00370	.00287
Errors	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						
Avg	.00321	.00361	.00048	.00152	.00239	.00058	.00119
SDev	.00091	.00052	.00250	.00184	.00046	.00071	.00032
%RSD	28.396	14.500	516.22	120.67	19.317	122.27	27.104
#1	.00257	.00398	.00225	.00283	.00207	.00109	.00141
#2	.00386	.00324	-.00128	.00022	.00272	.00008	.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	
Avg	-.00402	.00631	.00287	-.00305	.00000	H.02968	
SDev	.00117	.00152	.00140	.00265	.00000	.00005	
%RSD	29.187	24.047	48.882	87.140	22.600	.17778	
#1	-.00319	.00738	.00386	-.00492	.00000	H.02964	
#2	-.00485	.00523	.00188	-.00117	.00000	H.02971	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC High	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13565	--	--	--	--	--	--
SDev	55.22545	--	--	--	--	--	--
%RSD	.4071307	--	--	--	--	--	--
#1	13526	--	--	--	--	--	--
#2	13604	--	--	--	--	--	--

Method: METTRA Sample Name: DPXBTC Operator: RJG
 Run Time: 11/20/00 21:17:48
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.05015	1.8487	1.9820	2.0078	.05108	L.03927	.04904
SDev	.00122	.0466	.0347	.0359	.00099	.00218	.00105
%RSD	2.4289	2.5221	1.7487	1.7858	1.9430	5.5427	2.1426
#1	.05101	1.8817	2.0065	2.0332	.05178	L.04081	.04979
#2	.04929	1.8158	1.9575	1.9825	.05038	L.03773	.04830
Errors	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						
Avge	.51469	.20615	.24544	.99677	L.00867	.49994	L.00226
SDev	.00926	.00430	.00413	.02996	.00237	.00918	.00027
%RSD	1.7992	2.0871	1.6815	3.0056	27.308	1.8360	11.907
#1	.52124	.20919	.24836	1.0180	L.00699	.50643	L.00245
#2	.50814	.20310	.24252	.97559	L.01034	.49345	L.00207
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						
Avge	.51399	.50050	.49284	.49539	.00260	.00246	L.00251
SDev	.01451	.01337	.00544	.00808	.00027	.00098	.00074
%RSD	2.8225	2.6703	1.1037	1.6307	10.485	39.760	29.661
#1	.52425	.50995	.49669	.50110	.00241	.00177	L.00198
#2	.50373	.49105	.48900	.48968	.00279	.00315	L.00303
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9409	1.9301	1.9337	1.9859	.49830	.52495	
SDev	.0437	.0276	.0329	.0391	.01384	.01007	
%RSD	2.2509	1.4282	1.7032	1.9692	2.7779	1.9190	
#1	1.9718	1.9496	1.9570	2.0135	.50809	.53207	
#2	1.9100	1.9106	1.9104	1.9582	.48852	.51782	
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	

674 1501

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13539	--	--	--	--	--	--
SDev	289.0651	--	--	--	--	--	--
%RSD	2.135086	--	--	--	--	--	--
#1	13334	--	--	--	--	--	--
#2	13743	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0F Operator: RJG
 Run Time: 11/20/00 21:21:58
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00091	117.52	.03693	.96083	.00795	39.674	.00282
SDev	.00008	.69	.00078	.00697	.00009	.273	.00018
%RSD	8.9118	.58907	2.1031	.72495	1.1680	.68844	6.4842
#1	.00097	118.01	.03638	.96576	.00788	39.867	.00269
#2	.00085	117.03	.03748	.95591	.00801	39.480	.00295
Errors	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						
Avg	.10660	.41321	.33787	202.64	38.267	6.7912	.03044
SDev	.00079	.00237	.00210	1.01	.243	.0422	.00142
%RSD	.74006	.57259	.62012	.49988	.63525	.62182	4.6780
#1	.10715	.41488	.33935	203.36	38.438	6.8210	.03145
#2	.10604	.41154	.33639	201.93	38.095	6.7613	.02944
Errors	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						
Avg	.38012	.37580	.36651	.36960	.01132	.00950	.01010
SDev	.00285	.00086	.00110	.00102	.00160	.00016	.00042
%RSD	.74906	.22988	.29898	.27558	14.121	1.7234	4.1870
#1	.38213	.37641	.36728	.37032	.01019	.00961	.00980
#2	.37811	.37518	.36573	.36888	.01245	.00938	.01040
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	.01155	.00493	.00713	.00964	.36555	1.5563	
SDev	.00291	.00028	.00115	.00271	.00024	.0113	
%RSD	25.220	5.5876	16.177	28.152	.06575	.72654	
#1	.01361	.00512	.00795	.00772	.36572	1.5643	
#2	.00949	.00473	.00632	.01156	.36538	1.5483	
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	15557	--	--	--	--	--	--
SDev	116.2839	--	--	--	--	--	--
%RSD	.7474852	--	--	--	--	--	--
#1	15474	--	--	--	--	--	--
#2	15639	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0FP5 Operator: RJG
 Run Time: 11/20/00 21:26:08
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00040	24.855	.00815	.21259	.00190	8.8965	.00064
SDev	.00033	.094	.00021	.00024	.00002	.0168	.00008
%RSD	82.436	.37639	2.5533	.11089	1.2893	.18885	12.983
#1	.00063	24.789	.00830	.21242	.00192	8.9084	.00058
#2	.00017	24.921	.00801	.21276	.00188	8.8847	.00070

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm						
Avge	.02385	.09284	.07236	45.093	8.3467	1.4998	.00692
SDev	.00001	.00010	.00014	.005	.0087	.0013	.00021
%RSD	.05483	.10877	.18895	.01195	.10408	.08812	3.0876
#1	.02384	.09277	.07246	45.097	8.3528	1.5008	.00707
#2	.02386	.09291	.07226	45.089	8.3406	1.4989	.00677

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avge	.08557	.08559	.08369	.08432	.00425	.00254	.00311
SDev	.00228	.00245	.00151	.00019	.00229	.00305	.00127
%RSD	2.6633	2.8612	1.8039	.22707	53.803	119.81	40.899
#1	.08718	.08732	.08262	.08419	.00586	.00039	.00221
#2	.08396	.08386	.08476	.08446	.00263	.00470	.00401

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00143	.00103	.00021	.00395	.08226	.35378
SDev	.00049	.00056	.00021	.00196	.00030	.00056
%RSD	34.553	54.518	98.901	49.487	.36469	.15971
#1	-.00177	.00143	.00036	.00257	.08247	.35418
#2	-.00108	.00063	.00006	.00533	.08205	.35338

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14050	--	--	--	--	--	--
SDev	62.64938	--	--	--	--	--	--
%RSD	.4458952	--	--	--	--	--	--
#1	14006	--	--	--	--	--	--
#2	14095	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0FS Operator: RJG
 Run Time: 11/20/00 21:30:17
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.04471	121.64	1.6988	2.6613	.05161	39.064	.04370
SDev	.00025	.30	.0004	.0003	.00007	.019	.00017
%RSD	.56448	.24314	.02611	.01299	.12720	.04839	.39265
#1	.04489	121.43	1.6985	2.6615	.05165	39.078	.04382
#2	.04454	121.85	1.6992	2.6610	.05156	39.051	.04358
Errors	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						
Avge	.53863	.57521	.55381	204.87	38.055	7.1732	.02759
SDev	.00093	.00030	.00162	.31	.014	.0053	.00057
%RSD	.17258	.05269	.29273	.14891	.03692	.07371	2.0702
#1	.53797	.57500	.55267	204.66	38.045	7.1694	.02799
#2	.53929	.57543	.55496	205.09	38.065	7.1769	.02719
Errors	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						
Avge	.83244	.79538	.78492	.78841	.00961	.00934	.00943
SDev	.00520	.00280	.00342	.00321	.00169	.00053	.00092
%RSD	.62446	.35199	.43504	.40714	17.593	5.6900	9.7274
#1	.83612	.79341	.78251	.78614	.00841	.00897	.00878
#2	.82877	.79736	.78734	.79067	.01080	.00972	.01008
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	1.6681	1.6622	1.6642	1.7504	.79170	1.9659	
SDev	.0112	.0040	.0010	.0066	.00506	.0002	
%RSD	.67055	.24209	.06255	.37673	.63912	.01146	
#1	1.6602	1.6651	1.6634	1.7457	.79528	1.9660	
#2	1.6760	1.6594	1.6649	1.7551	.78812	1.9657	
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	15648	--	--	--	--	--	--
SDev	11.91447	--	--	--	--	--	--
%RSD	.0761399	--	--	--	--	--	--
#1	15640	--	--	--	--	--	--
#2	15657	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0FD Operator: RJG
 Run Time: 11/20/00 21:34:27
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.04516	120.22	1.7070	2.6546	.05140	38.252	.04393
SDev	.00029	.19	.0125	.0119	.00040	.195	.00013
%RSD	.64433	.15988	.73111	.44796	.78261	.50865	.28925
#1	.04537	120.35	1.7158	2.6630	.05169	38.390	.04402
#2	.04496	120.08	1.6981	2.6462	.05112	38.114	.04384
Errors	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						
Avge	.54276	.57909	.55092	203.20	37.788	7.1701	.02981
SDev	.00404	.00259	.00197	.53	.156	.0239	.00040
%RSD	.74402	.44721	.35699	.25945	.41289	.33319	1.3572
#1	.54561	.58092	.55231	203.57	37.898	7.1870	.02952
#2	.53990	.57726	.54953	202.82	37.678	7.1532	.03010
Errors	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						
Avge	.81177	.80787	.79209	.79735	.00890	.00967	.00942
SDev	.00577	.00134	.00159	.00151	.00195	.00039	.00039
%RSD	.71111	.16558	.20103	.18907	21.955	4.0143	4.1603
#1	.81586	.80693	.79097	.79628	.00752	.00995	.00914
#2	.80769	.80882	.79322	.79841	.01028	.00940	.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	1.6813	1.6683	1.6726	1.7591	.78857	1.9636	
SDev	.0073	.0021	.0010	.0021	.00526	.0109	
%RSD	.43162	.12534	.06109	.11933	.66733	.55269	
#1	1.6762	1.6698	1.6719	1.7606	.79229	1.9712	
#2	1.6864	1.6668	1.6734	1.7576	.78485	1.9559	
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	15509	--	--	--	--	--	--
SDev	34.29468	--	--	--	--	--	--
%RSD	.2211319	--	--	--	--	--	--
#1	15484	--	--	--	--	--	--
#2	15533	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0G Operator: RJG
 Run Time: 11/20/00 21:38:37
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	-.00077	100.11	.36776	.41272	.00427	7.8619	-.00020
SDev	.00089	1.16	.00086	.00177	.00026	.0292	.00002
%RSD	115.20	1.1614	.23298	.42830	5.9772	.37090	9.6443
#1	-.00141	99.288	.36837	.41147	.00445	7.8413	-.00019
#2	-.00014	100.93	.36716	.41397	.00409	7.8825	-.00021
Errors	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						
Avg	.13707	.11920	.32450	274.93	27.606	6.8399	.01698
SDev	.00041	.00086	.00176	1.90	.151	.0379	.00015
%RSD	.30141	.72008	.54148	.69240	.54583	.55425	.86128
#1	.13678	.11859	.32326	273.58	27.499	6.8131	.01687
#2	.13736	.11981	.32574	276.27	27.712	6.8668	.01708
Errors	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						
Avg	.21946	.22802	.22185	.22390	.00258	.00946	.00717
SDev	.00179	.00461	.00566	.00531	.00506	.00097	.00104
%RSD	.81630	2.0227	2.5492	2.3706	196.05	10.244	14.484
#1	.22072	.22476	.21785	.22015	-.00100	.01014	.00643
#2	.21819	.23128	.22584	.22765	.00616	.00877	.00790
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	.00354	.00667	.00563	.00179	.14295	.84573	
SDev	.00048	.00480	.00304	.00002	.00338	.00314	
%RSD	13.571	72.020	54.099	1.1033	2.3634	.37112	
#1	.00388	.00327	.00347	.00180	.14056	.84351	
#2	.00320	.01007	.00778	.00178	.14534	.84795	
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	14193	--	--	--	--	--	--
SDev	20.08142	--	--	--	--	--	--
%RSD	.1414872	--	--	--	--	--	--
#1	14179	--	--	--	--	--	--
#2	14207	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0H Operator: RJG
 Run Time: 11/20/00 21:42:47
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00060	111.02	.15351	.40596	.00475	8.9417	-.00037
SDev	.00172	.76	.00214	.00170	.00000	.0159	.00017
%RSD	285.44	.68539	1.3961	.41899	.02275	.17785	46.154

#1	.00182	110.48	.15502	.40476	.00476	8.9530	-.00025
#2	-.00061	111.56	.15199	.40716	.00475	8.9305	-.00049

Errors	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						
Avge	.13048	.13606	.17609	240.71	23.050	5.0800	.00939
SDev	.00100	.00142	.00001	.45	.004	.0066	.00223
%RSD	.76828	1.0403	.00396	.18517	.01819	.12963	23.726

#1	.13118	.13706	.17609	240.40	23.053	5.0753	.01096
#2	.12977	.13506	.17610	241.03	23.047	5.0847	.00781

Errors	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						
Avge	.15810	.21666	.20243	.20717	.00068	.00947	.00654
SDev	.00508	.01068	.00810	.00185	.00502	.00001	.00167
%RSD	3.2158	4.9279	3.9995	.89047	734.53	.06074	25.582

#1	.16169	.22421	.19670	.20586	-.00286	.00946	.00536
#2	.15450	.20911	.20815	.20847	.00423	.00947	.00773

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	.00176	.00289	.00251	.00035	.19591	.78374
SDev	.00578	.00006	.00189	.00077	.00148	.00212
%RSD	327.96	2.0018	75.043	222.58	.75525	.27098

#1	.00585	.00285	.00385	.00089	.19696	.78524
#2	-.00232	.00293	.00118	-.00020	.19487	.78224

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	13983	--	--	--	--	--	--
SDev	41.89608	--	--	--	--	--	--
%RSD	.2996135	--	--	--	--	--	--
#1	13954	--	--	--	--	--	--
#2	14013	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0J Operator: RJG
 Run Time: 11/20/00 21:46:56
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00064	113.52	.12279	.36263	.00507	7.6467	-.00085
SDev	.00047	.21	.00001	.00067	.00017	.0117	.00016
%RSD	73.603	.18538	.00638	.18511	3.3773	.15271	18.571

#1	-.00030	113.37	.12280	.36310	.00519	7.6549	-.00073
#2	-.00097	113.67	.12278	.36215	.00495	7.6384	-.00096

Errors	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						
Avge	.11923	.13092	.19489	243.35	27.340	4.7979	.00728
SDev	.00027	.00020	.00034	.48	.025	.0050	.00088
%RSD	.22725	.15281	.17473	.19708	.09126	.10461	12.026

#1	.11942	.13106	.19465	243.01	27.322	4.7943	.00789
#2	.11904	.13078	.19513	243.69	27.357	4.8014	.00666

Errors	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						
Avge	.17035	.21801	.20518	.20945	.00255	.00809	.00624
SDev	.00127	.00394	.00833	.00424	.00367	.00268	.00056
%RSD	.74270	1.8089	4.0595	2.0255	144.36	33.090	8.9958

#1	.17125	.22080	.19929	.20645	-.00005	.00998	.00664
#2	.16946	.21522	.21107	.21245	.00514	.00620	.00584

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	.00353	.00238	.00276	-.00010	.19922	.75906
SDev	.00264	.00234	.00068	.00027	.00484	.00081
%RSD	74.679	98.419	24.732	255.95	2.4281	.10710

#1	.00539	.00072	.00228	.00008	.20264	.75964
#2	.00167	.00403	.00324	-.00029	.19580	.75849

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	14266	--	--	--	--	--	--
SDev	23.61695	--	--	--	--	--	--
%RSD	.1655518	--	--	--	--	--	--
#1	14249	--	--	--	--	--	--
#2	14282	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0K Operator: RJG
 Run Time: 11/20/00 21:51:06
 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	-.00086	143.08	.25618	.67799	.00608	10.840	-.00028
SDev	.00076	.85	.00108	.00745	.00023	.065	.00048
%RSD	88.476	.59405	.42302	1.0982	3.8214	.59598	171.90

#1	-.00140	143.68	.25542	.68326	.00625	10.886	-.00061
#2	-.00032	142.48	.25695	.67273	.00592	10.794	.00006

Errors	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						
Avg	.12051	.15792	.24914	288.39	27.059	5.3634	.01020
SDev	.00003	.00078	.00122	1.31	.142	.0247	.00022
%RSD	.02223	.49571	.48802	.45384	.52421	.46023	2.1533

#1	.12049	.15848	.25000	289.32	27.160	5.3809	.01035
#2	.12053	.15737	.24828	287.46	26.959	5.3460	.01004

Errors	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						
Avg	.19589	.39791	.38850	.39163	.00212	.01078	.00789
SDev	.00415	.00218	.00403	.00197	.00394	.00188	.00257
%RSD	2.1202	.54683	1.0384	.50205	186.19	17.439	32.504

#1	.19883	.39945	.38565	.39024	-.00067	.00945	.00608
#2	.19295	.39637	.39135	.39302	.00490	.01211	.00971

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	.00056	.00464	.00328	.00267	.24567	1.0079
SDev	.00248	.00545	.00281	.00279	.00155	.0103
%RSD	442.50	117.49	85.685	104.48	.63074	1.0221

#1	.00231	.00079	.00129	.00070	.24676	1.0152
#2	-.00119	.00850	.00527	.00464	.24457	1.0007

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	14046	--	--	--	--	--	--
SDev	154.2549	--	--	--	--	--	--
%RSD	1.098195	--	--	--	--	--	--
#1	13937	--	--	--	--	--	--
#2	14155	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-6 Operator: RJG
 Run Time: 11/20/00 21:55:16
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	1.0480	25.005	.51470	2.0637	2.0747	51.712	.49678
SDev	.0008	.117	.00361	.0033	.0018	.001	.00002
%RSD	.07736	.46633	.70141	.16024	.08507	.00226	.00360
#1	1.0474	24.923	.51725	2.0614	2.0760	51.713	.49677
#2	1.0485	25.088	.51215	2.0661	2.0735	51.711	.49679
Errors	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						
Avge	2.0752	2.0737	2.0287	25.784	50.514	2.0487	2.0791
SDev	.0005	.0013	.0054	.078	.057	.0027	.0066
%RSD	.02378	.06333	.26718	.30242	.11298	.13202	.31895
#1	2.0749	2.0728	2.0248	25.728	50.473	2.0468	2.0744
#2	2.0756	2.0747	2.0325	25.839	50.554	2.0506	2.0838
Errors	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						
Avge	2.0673	.51702	.51342	.51462	.51843	.52096	.52012
SDev	.0025	.00488	.00168	.00275	.00497	.00188	.00040
%RSD	.12094	.94351	.32742	.53353	.95875	.36159	.07666
#1	2.0655	.52047	.51461	.51656	.51492	.52229	.51983
#2	2.0690	.51357	.51223	.51267	.52195	.51962	.52040
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	.52376	.52696	.52589	1.0471	2.0617	2.0844	
SDev	.00765	.00363	.00496	.0108	.0013	.0003	
%RSD	1.4604	.68785	.94407	1.0323	.06536	.01396	
#1	.52917	.52952	.52940	1.0394	2.0607	2.0842	
#2	.51836	.52439	.52238	1.0547	2.0626	2.0846	
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	13289	--	--	--	--	--	--
SDev	26.62285	--	--	--	--	--	--
%RSD	.2003363	--	--	--	--	--	--
#1	13270	--	--	--	--	--	--
#2	13308	--	--	--	--	--	--

Method: METTRA Sample Name: CCB6 Operator: RJG
 Run Time: 11/20/00 21:59:26
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00091	.02732	.00137	.00108	.00066	.01069	.00022
SDev	.00049	.00670	.00129	.00019	.00027	.00612	.00019
%RSD	54.045	24.503	94.269	17.448	41.295	57.215	86.477
#1	.00126	.02259	.00229	.00095	.00047	.00637	.00035
#2	.00056	.03206	.00046	.00122	.00086	.01502	.00008
Errors	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						
Avge	.00078	.00084	.00122	.05973	.02218	.00173	.00591
SDev	.00016	.00034	.00051	.02290	.00477	.00044	.00027
%RSD	20.203	40.886	42.086	38.330	21.520	25.563	4.5282
#1	.00089	.00060	.00085	.04354	.01881	.00142	.00610
#2	.00067	.00108	.00158	.07592	.02556	.00204	.00572
Errors	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						
Avge	.00053	.00193	.00015	.00075	.00135	.00175	.00162
SDev	.00061	.00100	.00033	.00011	.00155	.00212	.00090
%RSD	116.15	51.472	217.90	14.605	114.18	121.01	55.528
#1	.00009	.00123	.00039	.00067	.00245	.00025	.00098
#2	.00096	.00264	-.00008	.00082	.00026	.00325	.00226
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	-.00285	.00120	-.00015	.00153	.00002	.00084	
SDev	.00043	.00045	.00044	.00127	.00001	.00034	
%RSD	15.142	37.242	301.21	82.582	38.330	41.251	
#1	-.00315	.00089	-.00046	.00064	.00001	.00059	
#2	-.00254	.00152	.00017	.00243	.00003	.00108	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13428	--	--	--	--	--	--
SDev	146.8662	--	--	--	--	--	--
%RSD	1.093723	--	--	--	--	--	--
#1	13324	--	--	--	--	--	--
#2	13532	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0L

Operator: RJG

Run Time: 11/20/00 22:03:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00112	108.46	.05555	1.3099	.00683	144.19	.00246
SDev	.00002	.21	.00051	.0006	.00005	.57	.00017
%RSD	1.4258	.19559	.91857	.04395	.69836	.39876	6.8780
#1	.00111	108.31	.05591	1.3103	.00679	143.78	.00258
#2	.00113	108.61	.05519	1.3095	.00686	144.60	.00234
Errors	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						
Avge	.13673	.10377	.44786	231.72	43.760	8.5217	.00795
SDev	.00068	.00094	.00020	.79	.126	.0249	.00090
%RSD	.49709	.90576	.04475	.34305	.28816	.29258	11.290
#1	.13625	.10310	.44772	231.16	43.671	8.5040	.00731
#2	.13721	.10443	.44801	232.28	43.850	8.5393	.00858
Errors	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						
Avge	.22211	.89862	.87791	.88481	.00704	.01032	.00923
SDev	.00069	.00015	.00162	.00103	.00121	.00113	.00035
%RSD	.31230	.01707	.18407	.11605	17.202	10.986	3.8226
#1	.22260	.89851	.87905	.88553	.00790	.00952	.00898
#2	.22162	.89873	.87677	.88408	.00619	.01112	.00948
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	.00392	-.00063	.00089	-.00334	.15599	1.6781	
SDev	.00235	.00337	.00303	.00116	.00236	.0008	
%RSD	59.930	538.17	341.23	34.771	1.5105	.05047	
#1	.00558	.00175	.00303	-.00417	.15432	1.6775	
#2	.00226	-.00301	-.00125	-.00252	.15765	1.6787	
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	14077	--	--	--	--	--	--
SDev	87.85802	--	--	--	--	--	--
%RSD	.6241168	--	--	--	--	--	--
#1	14015	--	--	--	--	--	--
#2	14139	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0M
 Run Time: 11/20/00 22:07:45
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00224	107.16	.13403	2.0680	.00954	51.693	.01542
SDev	.00002	.21	.00138	.0025	.00012	.005	.00014
%RSD	.93394	.19385	1.0269	.12019	1.2362	.00963	.89735
#1	.00223	107.01	.13500	2.0698	.00963	51.690	.01532
#2	.00226	107.31	.13306	2.0663	.00946	51.697	.01552
Errors	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						
Avg	.14405	.64552	1.5318	H596.95	32.260	9.5356	.04306
SDev	.00056	.00035	.0004	1.13	.016	.0103	.00133
%RSD	.38557	.05466	.02474	.18981	.04911	.10756	3.0799
#1	.14365	.64527	1.5315	H596.15	32.249	9.5283	.04400
#2	.14444	.64577	1.5321	H597.75	32.272	9.5428	.04212
Errors	LC Pass	LC Pass	LC Pass	LC High	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						
Avg	.57856	7.1139	6.9451	H7.0013	.06971	.07950	.07624
SDev	.00302	.0191	.0588	.0328	.00030	.00235	.00147
%RSD	.52262	.26905	.84594	.46868	.43065	2.9594	1.9272
#1	.58070	7.1274	6.9035	H6.9781	.06950	.08117	.07728
#2	.57643	7.1004	6.9866	H7.0245	.06993	.07784	.07520
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	.00374	.00400	.00392	.01880	.28120	H5.2351	
SDev	.00179	.00768	.00453	.00266	.00286	.0028	
%RSD	47.867	191.87	115.58	14.150	1.0167	.05419	
#1	.00501	-.00143	.00072	.01692	.28322	H5.2371	
#2	.00248	.00944	.00712	.02068	.27918	H5.2331	
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	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15860	--	--	--	--	--	--
SDev	58.61943	--	--	--	--	--	--
%RSD	.3696113	--	--	--	--	--	--
#1	15818	--	--	--	--	--	--
#2	15901	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0N Operator: RJG
 Run Time: 11/20/00 22:11:55
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	-.00074	106.04	.03687	.44208	.00606	21.887	.00081
SDev	.00042	.16	.00069	.00199	.00003	.142	.00026
%RSD	56.449	.15511	1.8620	.45033	.50924	.65087	31.526
#1	-.00044	106.16	.03638	.44349	.00608	21.988	.00063
#2	-.00103	105.93	.03735	.44068	.00603	21.787	.00099
Errors	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						
Avge	.11984	.31240	.39201	222.08	47.394	7.5329	.00644
SDev	.00030	.00170	.00082	.91	.232	.0340	.00096
%RSD	.25417	.54559	.20805	.40931	.48987	.45079	14.916
#1	.11963	.31360	.39258	222.72	47.558	7.5569	.00576
#2	.12006	.31119	.39143	221.44	47.229	7.5088	.00712
Errors	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						
Avge	.24082	.46982	.45701	.46127	.01498	.01120	.01246
SDev	.00468	.00652	.00534	.00574	.00157	.00243	.00110
%RSD	1.9431	1.3887	1.1692	1.2437	10.501	21.711	8.8123
#1	.24413	.47443	.46078	.46533	.01609	.00948	.01168
#2	.23752	.46520	.45323	.45722	.01387	.01292	.01323
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	.00415	.00213	.00280	.00957	.29505	1.3251	
SDev	.00233	.00084	.00022	.00361	.00026	.0118	
%RSD	56.156	39.200	7.8207	37.743	.08655	.89074	
#1	.00580	.00154	.00296	.00702	.29487	1.3335	
#2	.00250	.00272	.00265	.01212	.29523	1.3168	
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	15382	--	--	--	--	--	--
SDev	141.4573	--	--	--	--	--	--
%RSD	.9196390	--	--	--	--	--	--
#1	15282	--	--	--	--	--	--
#2	15482	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0P
 Run Time: 11/20/00 22:16:05
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	-.00133	113.04	.03482	.39212	.00644	11.123	-.00106
SDev	.00025	.33	.00100	.00008	.00004	.041	.00036
%RSD	18.570	.29287	2.8838	.02076	.61065	.37227	34.054
#1	-.00116	112.80	.03553	.39206	.00647	11.152	-.00132
#2	-.00151	113.27	.03411	.39218	.00641	11.094	-.00081
Errors	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						
Avge	.13206	.23067	.30877	208.58	47.908	7.5377	.00148
SDev	.00197	.00088	.00089	.09	.097	.0106	.00002
%RSD	1.4929	.38057	.28954	.04140	.20301	.14111	1.5578
#1	.13345	.23129	.30814	208.64	47.977	7.5452	.00150
#2	.13066	.23005	.30941	208.52	47.839	7.5301	.00147
Errors	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						
Avge	.21848	.13777	.13191	.13386	.01312	.00700	.00904
SDev	.00169	.00381	.00327	.00091	.00365	.00110	.00048
%RSD	.77359	2.7689	2.4779	.67969	27.784	15.753	5.3026
#1	.21967	.14047	.12960	.13322	.01055	.00777	.00870
#2	.21728	.13508	.13422	.13451	.01570	.00622	.00938
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	.00260	.00018	.00099	.01345	.25146	.63722	
SDev	.00357	.00205	.00256	.00274	.00132	.00182	
%RSD	137.43	1113.5	258.97	20.385	.52365	.28496	
#1	.00512	.00164	.00280	.01539	.25053	.63851	
#2	.00007	-.00127	-.00082	.01151	.25239	.63594	
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	16683	--	--	--	--	--	--
SDev	115.7542	--	--	--	--	--	--
%RSD	.6938411	--	--	--	--	--	--
#1	16601	--	--	--	--	--	--
#2	16765	--	--	--	--	--	--

Method: METTRA Sample Name: DPD00 Operator: RJG
 Run Time: 11/20/00 22:20:14
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	-.00069	119.39	.05672	.87836	.00874	21.610	.00200
SDev	.00036	.53	.00063	.00736	.00005	.193	.00026
%RSD	51.858	.43991	1.1119	.83815	.51701	.89314	12.739
#1	-.00095	119.76	.05716	.88356	.00871	21.747	.00218
#2	-.00044	119.02	.05627	.87315	.00878	21.474	.00182
Errors	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						
Avge	.06896	.20677	.35558	173.66	24.644	3.6346	.00723
SDev	.00027	.00131	.00271	1.10	.189	.0266	.00158
%RSD	.39059	.63237	.76156	.63320	.76791	.73144	21.861
#1	.06915	.20770	.35750	174.43	24.777	3.6534	.00835
#2	.06877	.20585	.35367	172.88	24.510	3.6158	.00611
Errors	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						
Avge	.13031	1.1289	1.1171	1.1210	.00898	.01006	.00970
SDev	.00346	.0097	.0042	.0060	.00266	.00433	.00200
%RSD	2.6538	.85585	.37542	.53653	29.647	43.047	20.638
#1	.13276	1.1358	1.1200	1.1253	.00709	.01312	.01111
#2	.12787	1.1221	1.1141	1.1168	.01086	.00700	.00828
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	.00236	.00555	.00449	.00632	.26960	1.6877	
SDev	.00382	.00084	.00072	.00430	.00371	.0155	
%RSD	162.06	15.080	15.923	68.067	1.3748	.91998	
#1	.00507	.00496	.00500	.00937	.27222	1.6986	
#2	-.00034	.00615	.00399	.00328	.26698	1.6767	
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	

674 1531

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15781	--	--	--	--	--	--
SDev	181.2672	--	--	--	--	--	--
%RSD	1.148648	--	--	--	--	--	--
#1	15653	--	--	--	--	--	--
#2	15909	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0R Operator: RJG
 Run Time: 11/20/00 22:24:24
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00328	61.359	.26037	2.0560	.00489	190.77	.03478
SDev	.00078	.135	.00289	.0011	.00013	.57	.00152
%RSD	23.765	.22063	1.1110	.05149	2.5923	.30066	4.3698
#1	.00383	61.263	.25832	2.0568	.00480	191.18	.03370
#2	.00273	61.455	.26242	2.0553	.00498	190.37	.03585
Errors	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						
Avge	.20849	.96732	4.3966	H896.20	113.00	7.9179	.07269
SDev	.00104	.00192	.0020	1.38	.18	.0126	.00031
%RSD	.49670	.19797	.04592	.15364	.16204	.15891	.42719
#1	.20922	.96868	4.3951	H897.18	113.13	7.9268	.07291
#2	.20776	.96597	4.3980	H895.23	112.88	7.9090	.07247
Errors	LC Pass	LC Pass	LC Pass	LC High	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						
Avge	1.3547	11.638	11.400	H11.479	.14789	.16589	.15989
SDev	.0131	.103	.085	.091	.00167	.00015	.00066
%RSD	.96919	.88903	.74536	.79386	1.1270	.09269	.41126
#1	1.3640	11.711	11.460	H11.544	.14907	.16599	.16036
#2	1.3455	11.565	11.340	H11.415	.14671	.16578	.15943
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	.03018	.03395	.03270	.02366	1.0181	H8.6697	
SDev	.00203	.00633	.00490	.00371	.0001	.0488	
%RSD	6.7178	18.636	14.972	15.678	.00627	.56250	
#1	.02875	.02948	.02923	.02628	1.0181	H8.7042	
#2	.03162	.03842	.03616	.02104	1.0181	H8.6353	
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	

674 1533

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13650	--	--	--	--	--	--
SDev	73.32711	--	--	--	--	--	--
%RSD	.5371752	--	--	--	--	--	--
#1	13599	--	--	--	--	--	--
#2	13702	--	--	--	--	--	--

Method: METTRA Sample Name: DPD0T

Operator: RJG

Run Time: 11/20/00 22:28:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00207	112.93	.07077	.96910	.00695	75.464	.00708
SDev	.00017	.11	.00166	.00099	.00009	.425	.00007
%RSD	8.3135	.10019	2.3499	.10213	1.3562	.56300	.98362
#1	.00219	112.85	.06959	.96980	.00702	75.765	.00703
#2	.00195	113.01	.07194	.96840	.00689	75.164	.00713
Errors	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						
Avge	.13619	.90781	1.3473	446.37	36.127	7.9940	.53343
SDev	.00014	.00258	.0009	1.18	.112	.0247	.00056
%RSD	.10544	.28413	.07027	.26489	.30941	.30869	.10413
#1	.13629	.90964	1.3480	447.20	36.206	8.0114	.53382
#2	.13609	.90599	1.3467	445.53	36.048	7.9765	.53303
Errors	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						
Avge	1.3659	.93256	.90961	.91725	.02501	.03708	.03306
SDev	.0060	.00691	.00309	.00024	.00200	.00043	.00038
%RSD	.43776	.74078	.33992	.02596	7.9789	1.1653	1.1383
#1	1.3701	.93744	.90742	.91742	.02360	.03739	.03280
#2	1.3617	.92767	.91179	.91708	.02642	.03678	.03333
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	.01609	.01198	.01335	.00690	.37253	2.7927	
SDev	.00156	.00096	.00012	.00045	.00364	.0137	
%RSD	9.7054	7.9856	.88535	6.5772	.97764	.49214	
#1	.01719	.01130	.01326	.00722	.37510	2.8024	
#2	.01498	.01265	.01343	.00658	.36995	2.7830	
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	

674 1535

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15076	--	--	--	--	--	--
SDev	123.3549	--	--	--	--	--	--
%RSD	.8182408	--	--	--	--	--	--
#1	14988	--	--	--	--	--	--
#2	15163	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-7 Operator: RJG
 Run Time: 11/20/00 22:32:44
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	1.0260	24.403	.50284	2.0171	2.0262	50.579	.48517
SDev	.0023	.018	.00467	.0089	.0077	.196	.00128
%RSD	.22743	.07442	.92788	.44263	.38124	.38748	.26465
#1	1.0277	24.416	.50614	2.0235	2.0317	50.718	.48607
#2	1.0244	24.391	.49954	2.0108	2.0207	50.441	.48426
Errors	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						
Avg	2.0264	2.0265	1.9861	25.298	49.314	2.0019	2.0319
SDev	.0038	.0053	.0010	.060	.124	.0019	.0007
%RSD	.18559	.25986	.05062	.23727	.25160	.09635	.03203
#1	2.0291	2.0302	1.9869	25.255	49.402	2.0032	2.0314
#2	2.0237	2.0228	1.9854	25.340	49.226	2.0005	2.0323
Errors	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						
Avg	2.0250	.50783	.50560	.50634	.50853	.51246	.51115
SDev	.0151	.00316	.00604	.00508	.00680	.00412	.00501
%RSD	.74405	.62299	1.1948	1.0039	1.3372	.80412	.98073
#1	2.0356	.50560	.50133	.50275	.50372	.50955	.50761
#2	2.0143	.51007	.50987	.50994	.51333	.51538	.51470
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	.51288	.52035	.51786	1.0190	2.0143	2.0371	
SDev	.00090	.01209	.00776	.0024	.0072	.0046	
%RSD	.17505	2.3229	1.4991	.23101	.35504	.22444	
#1	.51351	.51180	.51237	1.0173	2.0194	2.0403	
#2	.51224	.52889	.52335	1.0207	2.0092	2.0338	
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	

674 1537

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13518	--	--	--	--	--	--
SDev	30.86549	--	--	--	--	--	--
%RSD	.2283309	--	--	--	--	--	--
#1	13540	--	--	--	--	--	--
#2	13496	--	--	--	--	--	--

Method: METTRA Sample Name: CCB7 Operator: RJG
 Run Time: 11/20/00 22:36:54
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	-.00005	.01019	.00028	.00104	.00082	.01949	.00023
SDev	.00001	.00301	.00003	.00030	.00008	.00899	.00010
%RSD	21.865	29.539	9.3122	29.243	9.4709	46.110	42.617
#1	-.00004	.00806	.00030	.00083	.00076	.01313	.00016
#2	-.00005	.01232	.00026	.00126	.00087	.02584	.00030
Errors	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						
Avge	.00016	.00086	.00083	.09039	.02112	.00171	.00505
SDev	.00032	.00026	.00003	.01926	.00202	.00060	.00109
%RSD	190.84	29.721	3.3147	21.306	9.5650	35.167	21.670
#1	.00039	.00068	.00081	.07678	.01969	.00128	.00582
#2	-.00006	.00104	.00085	H.10401	.02255	.00213	.00427
Errors	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						
Avge	-.00007	.00053	.00193	.00146	.00224	.00109	.00147
SDev	.00103	.00042	.00097	.00051	.00058	.00021	.00033
%RSD	1455.3	78.813	50.406	34.852	25.805	18.866	22.371
#1	-.00080	.00082	.00124	.00110	.00265	.00124	.00171
#2	.00066	.00023	.00262	.00182	.00183	.00095	.00124
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00354	.00185	.00005	-.00108	.00003	.00133	
SDev	.00300	.00044	.00129	.00264	.00001	.00043	
%RSD	84.652	23.631	2434.0	244.26	21.306	32.471	
#1	-.00142	.00216	.00097	.00079	.00003	.00103	
#2	-.00566	.00154	-.00086	-.00295	.00004	.00164	
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	13594	--	--	--	--	--	--
SDev	21.14277	--	--	--	--	--	--
%RSD	.1555273	--	--	--	--	--	--
#1	13579	--	--	--	--	--	--
#2	13609	--	--	--	--	--	--

Method: METTRA Sample Name: DP2M2B Operator: RJG
 Run Time: 11/20/00 22:41:04
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00075	.02118	.00037	.00057	-.00001	.05304	.00012
SDev	.00003	.00208	.00042	.00003	.00002	.00004	.00007
%RSD	4.4517	9.8254	112.53	5.9138	155.42	.07451	56.901
#1	.00073	.02265	.00067	.00055	.00000	.05307	.00017
#2	.00078	.01971	.00008	.00059	-.00002	.05301	.00007
Errors	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						
Avge	-.00046	.00177	.00524	.07201	.01740	.00192	.00254
SDev	.00012	.00010	.00011	.00315	.00210	.00005	.00028
%RSD	26.518	5.7004	2.0032	4.3688	12.037	2.5443	10.873
#1	-.00055	.00170	.00517	.06979	.01592	.00188	.00235
#2	-.00037	.00184	.00532	.07424	.01889	.00195	.00274
Errors	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						
Avge	.00137	.00877	.00123	H.00374	-.00017	.00290	.00188
SDev	.00137	.00326	.00040	.00135	.00002	.00201	.00135
%RSD	100.37	37.154	32.365	36.103	12.590	69.228	71.624
#1	.00040	.01108	.00151	H.00470	-.00018	.00148	.00093
#2	.00234	.00647	.00095	.00279	-.00015	.00433	.00284
Errors	LC Pass	NOCHECK	NOCHECK	LC High	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	-.00392	.00513	.00212	-.00339	.00002	.00453	
SDev	.00146	.00493	.00377	.00277	.00000	.00022	
%RSD	37.230	95.998	178.03	81.637	4.3688	4.8060	
#1	-.00495	.00165	-.00055	-.00143	.00002	.00437	
#2	-.00289	.00862	.00479	-.00535	.00003	.00468	
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	13250	--	--	--	--	--	--
SDev	4.525069	--	--	--	--	--	--
%RSD	.0341520	--	--	--	--	--	--
#1	13247	--	--	--	--	--	--
#2	13253	--	--	--	--	--	--

Method: METTRA Sample Name: DP2M2C

Operator: RJG

Run Time: 11/20/00 22:45:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.05032	1.8500	1.9707	2.0058	.05080	L.07895	.04900
SDev	.00036	.0081	.0116	.0024	.00021	.00253	.00038
%RSD	.71736	.43785	.58831	.11772	.41882	3.1994	.78000
#1	.05057	1.8558	1.9789	2.0075	.05095	L.08073	.04927
#2	.05006	1.8443	1.9625	2.0041	.05065	L.07716	.04873
Errors	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						
Avg	.51288	.20577	.24550	1.0581	L.01876	.49894	L.00120
SDev	.00254	.00089	.00020	.0029	.00347	.00071	.00025
%RSD	.49441	.43036	.08018	.27307	18.489	.14151	20.461
#1	.51467	.20639	.24564	1.0560	L.02122	.49943	L.00103
#2	.51109	.20514	.24536	1.0601	L.01631	.49844	L.00137
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						
Avg	.51200	.49873	.49204	.49427	.00215	.00185	L.00195
SDev	.00139	.00017	.00104	.00075	.00018	.00002	.00005
%RSD	.27212	.03413	.21063	.15133	8.3956	.81709	2.5637
#1	.51298	.49885	.49278	.49480	.00227	.00184	L.00198
#2	.51101	.49861	.49131	.49374	.00202	.00186	L.00191
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	
Avg	1.9219	1.9164	1.9183	1.9792	.49916	.51429	
SDev	.0041	.0048	.0018	.0048	.00166	.00279	
%RSD	.21271	.25026	.09580	.24413	.33227	.54206	
#1	1.9190	1.9198	1.9196	1.9758	.49799	.51626	
#2	1.9248	1.9130	1.9170	1.9826	.50034	.51231	
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	

674 1543

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13379	--	--	--	--	--	--
SDev	129.2590	--	--	--	--	--	--
%RSD	.9661514	--	--	--	--	--	--
#1	13287	--	--	--	--	--	--
#2	13470	--	--	--	--	--	--

Method: METTRA Sample Name: DPL3H Operator: RJG
 Run Time: 11/20/00 22:49:24
 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	.03362	323.70	.04990	H28.013	.02724	H697.55	-.00018
SDev	.00034	.19	.00061	.074	.00001	2.45	.00027
%RSD	1.0175	.05949	1.2192	.26252	.02970	.35138	151.04

#1	.03386	323.56	.04947	H28.065	.02723	H699.28	-.00036
#2	.03338	323.83	.05033	H27.961	.02724	H695.81	.00001

Errors	LC Pass	LC Pass	LC Pass	LC High	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
Avge	.06425	.50601	.14551	48.467	166.68	S20.402	-.00775
SDev	.00018	.00070	.00034	.037	.38	154.36	.00097
%RSD	.27855	.13820	.23089	.07583	.22512	756.61	12.563

#1	.06438	.50651	.14574	48.493	166.94	H129.55	-.00707
#2	.06412	.50552	.14527	48.441	166.41	S-88.749	-.00844

Errors	LC Pass	LC High	LC Pass				
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12586	33.898	32.460	H32.939	.01227	.00215	.00552
SDev	.00038	.065	.149	.121	.00103	.00027	.00052
%RSD	.29910	.19111	.45813	.36662	8.4140	12.490	9.4730

#1	.12560	33.944	32.565	H33.024	.01154	.00196	.00515
#2	.12613	33.852	32.355	H32.853	.01300	.00234	.00589

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	k.12685	k.07974	k.09542	k-1.2235	.06173	1.0575
SDev	.03040	.08487	.04648	.5500	.00045	.0033
%RSD	23.966	106.43	48.711	44.957	.72482	.31114

#1	.14834	.01973	.06256	L-.83453	.06141	1.0599
#2	k.10535	k.13975	k.12829	k-1.6124	.06205	1.0552

Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

674 1545

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16723	--	--	--	--	--	--
SDev	149.3763	--	--	--	--	--	--
%RSD	.8932213	--	--	--	--	--	--
#1	16618	--	--	--	--	--	--
#2	16829	--	--	--	--	--	--

Method: METTRA Sample Name: DPL3HP5 Operator: RJG
 Run Time: 11/20/00 22:53:34
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00720	76.599	.01140	7.5543	.00705	191.73	-.00041
SDev	.00062	.039	.00040	.0259	.00020	.29	.00018
%RSD	8.6468	.05101	3.5220	.34276	2.9095	.15302	42.480
#1	.00676	76.571	.01169	7.5726	.00720	191.94	-.00054
#2	.00765	76.626	.01112	7.5360	.00691	191.52	-.00029
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01611	.12801	.03348	12.016	39.850	80.174	-.00203
SDev	.00103	.00021	.00060	.020	.005	.009	.00026
%RSD	6.3890	.16318	1.8087	.16949	.01189	.01132	12.890
#1	.01538	.12786	.03305	12.001	39.854	80.181	-.00185
#2	.01684	.12816	.03390	12.030	39.847	80.168	-.00222
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03091	8.6347	8.4759	8.5288	.00546	.00031	.00203
SDev	.00199	.0318	.0833	.0661	.00044	.00151	.00115
%RSD	6.4305	.36777	.98294	.77554	7.9939	485.02	56.969
#1	.02951	8.6122	8.4170	8.4820	.00515	-.00076	.00121
#2	.03232	8.6571	8.5349	8.5756	.00577	.00138	.00284
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.04621	-.01722	.00390	-.03904	.01572	.26588	
SDev	.00458	.00135	.00063	.00287	.00001	.00155	
%RSD	9.9044	7.8095	16.074	7.3581	.03176	.58391	
#1	.04298	-.01627	.00346	-.04107	.01572	.26698	
#2	.04945	-.01817	.00434	-.03701	.01573	.26478	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14058	--	--	--	--	--	--
SDev	2.368532	--	--	--	--	--	--
%RSD	.0168478	--	--	--	--	--	--
#1	14057	--	--	--	--	--	--
#2	14060	--	--	--	--	--	--

Method: METTRA Sample Name: DPL3HS Operator: RJG
 Run Time: 11/20/00 22:57:44
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09655	325.66	1.6132	H27.857	.06323	H680.75	.03206
SDev	.00029	1.15	.0033	.036	.00006	.18	.00006
%RSD	.30434	.35211	.20592	.13080	.09726	.02694	.19167
#1	.09634	324.85	1.6109	H27.831	.06318	H680.62	.03210
#2	.09676	326.47	1.6155	H27.883	.06327	H680.88	.03201
Errors	LC Pass	LC Pass	LC Pass	LC High	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	.60427	.38017	.52786	75.307	161.43	S20.254	.02232
SDev	.00182	.00026	.00111	.219	.31	153.72	.00040
%RSD	.30045	.06975	.20936	.29020	.19314	758.98	1.7769
#1	.60299	.38036	.52708	75.153	161.21	H128.95	.02260
#2	.60556	.37998	.52865	75.462	161.65	S-88.445	.02204
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.88880	2.7759	2.7258	2.7425	.01374	.00356	.00695
SDev	.00308	.0031	.0047	.0021	.00234	.00334	.00145
%RSD	.34699	.11217	.17388	.07746	17.041	93.627	20.801
#1	.89098	2.7781	2.7225	2.7410	.01209	.00592	.00798
#2	.88662	2.7737	2.7292	2.7440	.01540	.00120	.00593
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	k1.6472	k1.5879	k1.6077	k-.59310	.61959	1.3106	
SDev	.0330	.0892	.0485	.54641	.00129	.0025	
%RSD	2.0038	5.6162	3.0163	92.127	.20820	.18747	
#1	1.6706	1.5249	1.5734	L-.20673	.62050	1.3089	
#2	k1.6239	k1.6510	k1.6420	k-.97947	.61867	1.3123	
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	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	16692	--	--	--	--	--	--
SDev	20.11664	--	--	--	--	--	--
%RSD	.1205154	--	--	--	--	--	--
#1	16678	--	--	--	--	--	--
#2	16706	--	--	--	--	--	--

Method: METTRA Sample Name: DPL3HD Operator: RJG
 Run Time: 11/20/00 23:01:54
 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
Avg	.07429	335.02	1.5016	H28.353	.06442	H700.92	.03184
SDev	.00090	.58	.0012	.043	.00012	.72	.00012
%RSD	1.2136	.17335	.07846	.15067	.19142	.10256	.37786
#1	.07365	334.61	1.5024	H28.383	.06450	H700.41	.03193
#2	.07493	335.44	1.5007	H28.322	.06433	H701.43	.03176
Errors	LC Pass	LC Pass	LC Pass	LC High	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	.39575	.26976	.33464	65.349	169.90	S19.574	-.01307
SDev	.00084	.00034	.00070	.120	.24	152.33	.00151
%RSD	.21222	.12497	.20991	.18437	.13933	778.22	11.581
#1	.39634	.26952	.33414	65.263	169.73	H127.29	-.01200
#2	.39515	.27000	.33514	65.434	170.06	S-88.138	-.01414
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.44750	2.0185	1.9916	2.0005	.01839	.00220	.00759
SDev	.00090	.0103	.0233	.0190	.00653	.00089	.00158
%RSD	.20115	.51131	1.1704	.94896	35.505	40.455	20.806
#1	.44686	2.0112	1.9751	1.9871	.01377	.00283	.00647
#2	.44813	2.0258	2.0081	2.0140	.02300	.00157	.00871
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	k1.5811	k1.5511	k1.5611	k.23406	.41621	1.1635	
SDev	.0226	.0966	.0569	.54838	.00081	.0004	
%RSD	1.4272	6.2306	3.6479	234.29	.19421	.03440	
#1	1.5970	1.4828	1.5208	.62182	.41564	1.1633	
#2	k1.5651	k1.6194	k1.6013	k-.15370	.41678	1.1638	
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	

674 1551

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16922	--	--	--	--	--	--
SDev	12.87017	--	--	--	--	--	--
%RSD	.0760538	--	--	--	--	--	--
#1	16913	--	--	--	--	--	--
#2	16932	--	--	--	--	--	--

Method: METTRA Sample Name: DPL3K

Operator: RJG

Run Time: 11/20/00 23:06:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00196	27.073	.10481	.64257	.00469	143.45	.00140
SDev	.00022	.259	.00011	.00138	.00015	.46	.00033
%RSD	11.327	.95707	.10727	.21551	3.2500	.32374	23.874
#1	.00180	26.890	.10489	.64355	.00480	143.12	.00116
#2	.00211	27.256	.10473	.64159	.00458	143.78	.00163
Errors	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						
Avg	.04237	.09927	.52098	247.82	28.028	H11.796	.01826
SDev	.00006	.00051	.00433	1.92	.147	.029	.00027
%RSD	.14626	.51761	.83169	.77648	.52475	.24590	1.4657
#1	.04241	.09891	.51792	246.46	27.924	H11.776	.01844
#2	.04233	.09964	.52405	249.18	28.132	H11.817	.01807
Errors	LC Pass	LC High	LC Pass				
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avg	.12706	.76960	.74767	.75497	.03572	.04445	.04154
SDev	.00015	.00690	.00738	.00722	.00085	.00233	.00127
%RSD	.11540	.89630	.98716	.95632	2.3764	5.2517	3.0679
#1	.12716	.76472	.74245	.74987	.03632	.04280	.04064
#2	.12695	.77448	.75288	.76008	.03512	.04610	.04244
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	.01609	.01285	.01393	.00047	.09695	.66402	
SDev	.00094	.00041	.00004	.00031	.00007	.00131	
%RSD	5.8266	3.1762	.28652	66.257	.07574	.19735	
#1	.01676	.01257	.01396	.00069	.09690	.66310	
#2	.01543	.01314	.01390	.00025	.09700	.66495	
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	13637	--	--	--	--	--	--
SDev	59.46809	--	--	--	--	--	--
%RSD	.4360934	--	--	--	--	--	--
#1	13594	--	--	--	--	--	--
#2	13679	--	--	--	--	--	--

Method: METTRA Sample Name: DPL3L Operator: RJG
 Run Time: 11/20/00 23:10:15
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00919	72.617	.11718	6.0972	.00921	231.72	.00423
SDev	.00089	.289	.00212	.0061	.00014	.17	.00025
%RSD	9.6866	.39822	1.8051	.10084	1.4944	.07315	5.8307
#1	.00982	72.412	.11569	6.0929	.00931	231.84	.00440
#2	.00856	72.821	.11868	6.1016	.00911	231.60	.00405
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	.05598	.14467	4.9909	227.26	69.037	H60.482	.01747
SDev	.00049	.00049	.0127	.35	.075	.114	.00006
%RSD	.87540	.34172	.25542	.15597	.10867	.18852	.31712
#1	.05564	.14502	4.9818	227.01	68.984	H60.401	.01751
#2	.05633	.14432	4.9999	227.51	69.090	H60.563	.01743
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15945	10.805	10.595	H10.665	.08858	.10483	.09942
SDev	.00135	.020	.029	.026	.00482	.00008	.00155
%RSD	.84860	.18292	.27625	.24477	5.4411	.07338	1.5627
#1	.16040	10.791	10.575	H10.647	.08517	.10489	.09832
#2	.15849	10.819	10.616	H10.684	.09199	.10478	.10052
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	.04890	-.00584	.01239	L-.03519	.12410	1.2154	
SDev	.00289	.00511	.00244	.00000	.00027	.0028	
%RSD	5.9137	87.416	19.726	.00255	.21635	.23005	
#1	.05095	-.00945	.01066	L-.03519	.12429	1.2174	
#2	.04686	-.00223	.01412	L-.03519	.12391	1.2134	
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

674 1555

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14101	--	--	--	--	--	--
SDev	40.44665	--	--	--	--	--	--
%RSD	.2868302	--	--	--	--	--	--
#1	14073	--	--	--	--	--	--
#2	14130	--	--	--	--	--	--

Method: METTRA Sample Name: DPL3N

Operator: RJG

Run Time: 11/20/00 23:14:25

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00078	26.148	.09730	.60192	.00686	118.59	.00133
SDev	.00048	.006	.00049	.00348	.00029	.09	.00015
%RSD	61.868	.02428	.50386	.57822	4.1972	.07637	10.937

#1	.00044	26.153	.09765	.60438	.00707	118.65	.00122
#2	.00112	26.144	.09695	.59946	.00666	118.53	.00143

Errors	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						
Avge	.04131	.09312	.59786	229.63	23.536	2.9203	.01846
SDev	.00059	.00068	.00182	.39	.023	.0015	.00057
%RSD	1.4275	.72962	.30379	.17196	.09939	.04995	3.1170

#1	.04090	.09264	.59914	229.36	23.520	2.9193	.01805
#2	.04173	.09360	.59658	229.91	23.553	2.9214	.01886

Errors	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						
Avge	.11784	.64497	.63216	.63643	.03032	.03636	.03435
SDev	.00218	.00909	.00412	.00578	.00251	.00019	.00096
%RSD	1.8525	1.4089	.65212	.90750	8.2736	.51245	2.7937

#1	.11938	.63855	.62925	.63234	.02855	.03623	.03367
#2	.11630	.65140	.63508	.64051	.03209	.03649	.03503

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	.01208	.01171	.01183	.00866	.10250	.55861
SDev	.00275	.00209	.00048	.00238	.00013	.00034
%RSD	22.753	17.888	4.0724	27.481	.12702	.06133

#1	.01013	.01319	.01217	.01034	.10260	.55885
#2	.01402	.01023	.01149	.00697	.10241	.55837

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	13760	--	--	--	--	--	--
SDev	148.2100	--	--	--	--	--	--
%RSD	1.077139	--	--	--	--	--	--
#1	13864	--	--	--	--	--	--
#2	13655	--	--	--	--	--	--

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Method: METTRA Sample Name: DPL3Q

Operator: RJG

Run Time: 11/20/00 23:18:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00312	67.603	.08629	5.6845	.00945	280.13	.00204
SDev	.00096	.194	.00054	.0105	.00029	.26	.00003
%RSD	30.843	.28746	.62755	.18539	3.0852	.09364	1.6683
#1	.00244	67.465	.08667	5.6919	.00965	279.94	.00201
#2	.00380	67.740	.08591	5.6770	.00924	280.32	.00206
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	.03852	.14466	.69042	213.34	95.272	H32.272	.00805
SDev	.00015	.00111	.00004	.55	.194	.080	.00057
%RSD	.39882	.76441	.00642	.25703	.20334	.24666	7.1461
#1	.03862	.14388	.69046	212.95	95.135	H32.216	.00846
#2	.03841	.14544	.69039	213.73	95.409	H32.328	.00764
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.11103	1.5392	1.5037	1.5155	.03767	.04000	.03922
SDev	.00024	.0162	.0245	.0217	.00039	.00244	.00175
%RSD	.21761	1.0498	1.6293	1.4333	1.0247	6.0945	4.4730
#1	.11120	1.5277	1.4864	1.5001	.03794	.04172	.04046
#2	.11086	1.5506	1.5210	1.5309	.03740	.03827	.03798
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	.03166	.00170	.01168	L-.02678	.09829	.80030	
SDev	.00230	.00472	.00238	.00224	.00100	.00042	
%RSD	7.2694	277.88	20.377	8.3587	1.0206	.05274	
#1	.03329	-.00164	.00999	L-.02520	.09900	.80000	
#2	.03004	.00503	.01336	L-.02837	.09758	.80059	
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	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	13934	--	--	--	--	--	--
SDev	57.59399	--	--	--	--	--	--
%RSD	.4133290	--	--	--	--	--	--
#1	13975	--	--	--	--	--	--
#2	13893	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-8 Operator: RJG
 Run Time: 11/20/00 23:22:45
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	1.0280	24.448	.50526	2.0102	2.0385	50.805	.48903
SDev	.0022	.050	.00325	.0008	.0063	.187	.00141
%RSD	.21373	.20424	.64409	.04128	.31128	.36771	.28752
#1	1.0295	24.413	.50756	2.0107	2.0429	50.937	.49003
#2	1.0264	24.484	.50296	2.0096	2.0340	50.673	.48804
Errors	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						
Avg	2.0424	2.0347	1.9858	25.262	49.448	1.9954	2.0420
SDev	.0038	.0060	.0012	.008	.062	.0035	.0044
%RSD	.18514	.29326	.06188	.03143	.12528	.17665	.21560
#1	2.0451	2.0389	1.9867	25.268	49.492	1.9979	2.0389
#2	2.0398	2.0305	1.9850	25.256	49.404	1.9929	2.0451
Errors	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						
Avg	2.0335	.50599	.50425	.50483	.50459	.50551	.50521
SDev	.0084	.00279	.00108	.00021	.00182	.00303	.00142
%RSD	.41457	.55197	.21468	.04120	.36049	.59981	.28042
#1	2.0395	.50797	.50348	.50498	.50330	.50766	.50621
#2	2.0275	.50402	.50501	.50468	.50588	.50337	.50420
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	.51059	.51759	.51526	1.0295	2.0205	2.0491	
SDev	.00431	.00008	.00138	.0015	.0051	.0047	
%RSD	.84481	.01539	.26846	.14625	.25033	.23083	
#1	.51364	.51754	.51624	1.0306	2.0241	2.0525	
#2	.50754	.51765	.51428	1.0285	2.0169	2.0458	
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	13511	--	--	--	--	--	--
SDev	42.92152	--	--	--	--	--	--
%RSD	.3176877	--	--	--	--	--	--
#1	13480	--	--	--	--	--	--
#2	13541	--	--	--	--	--	--

Method: METTRA Sample Name: CCB8

Operator: RJG

Run Time: 11/20/00 23:26:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00083	.01809	.00039	.00223	.00092	.05998	.00028
SDev	.00021	.00662	.00215	.00070	.00043	.02508	.00016
%RSD	25.887	36.579	555.17	31.477	46.808	41.813	58.529
#1	.00068	.02277	-.00113	.00173	.00061	.04225	.00016
#2	.00098	.01341	.00191	.00272	.00122	.07772	.00040
Errors	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						
Avge	.00097	.00123	.00138	.05235	.03817	.00824	.00531
SDev	.00052	.00026	.00033	.02519	.01077	.00263	.00145
%RSD	53.492	20.845	23.926	48.117	28.231	31.956	27.226
#1	.00060	.00105	.00114	.03454	.03055	.00637	.00634
#2	.00134	.00141	.00161	.07016	.04578	.01010	.00429
Errors	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						
Avge	.00067	.00256	.00141	.00179	.00334	.00076	.00162
SDev	.00019	.00013	.00033	.00018	.00065	.00034	.00001
%RSD	28.568	4.8873	23.677	10.100	19.460	44.251	.47743
#1	.00054	.00247	.00165	.00192	.00380	.00052	.00161
#2	.00081	.00265	.00118	.00167	.00288	.00100	.00162
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	-.00422	.00118	-.00062	.00453	.00002	.00102	
SDev	.00155	.00038	.00027	.00622	.00001	.00034	
%RSD	36.701	31.852	42.829	137.54	48.117	33.570	
#1	-.00532	.00144	-.00081	.00893	.00001	.00078	
#2	-.00313	.00091	-.00043	.00012	.00002	.00127	
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	13466	--	--	--	--	--	--
SDev	150.4370	--	--	--	--	--	--
%RSD	1.117143	--	--	--	--	--	--
#1	13360	--	--	--	--	--	--
#2	13573	--	--	--	--	--	--

Method: METTRA Sample Name: DPL3R Operator: RJG
 Run Time: 11/20/00 23:31:05
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00059	26.421	.09219	.30976	.00510	176.11	.00044
SDev	.00021	.060	.00017	.00026	.00003	.59	.00050
%RSD	35.215	.22697	.18452	.08222	.68592	.33307	113.41
#1	.00044	26.378	.09231	.30994	.00512	176.53	.00009
#2	.00073	26.463	.09207	.30958	.00507	175.70	.00079
Errors	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						
Avge	.04627	.09635	.78003	247.10	56.508	2.2047	.02219
SDev	.00046	.00045	.00096	.13	.039	.0022	.00194
%RSD	.98354	.47079	.12346	.05349	.06880	.09977	8.7621
#1	.04659	.09667	.77935	247.19	56.535	2.2062	.02357
#2	.04595	.09603	.78071	247.01	56.480	2.2031	.02082
Errors	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						
Avge	.11316	.87821	.85311	.86147	.04533	.05244	.05007
SDev	.00013	.00085	.00330	.00192	.00013	.00264	.00172
%RSD	.11684	.09717	.38712	.22271	.28578	5.0372	3.4327
#1	.11325	.87881	.85077	.86011	.04542	.05058	.04886
#2	.11307	.87761	.85544	.86282	.04524	.05431	.05129
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	.00954	.01205	.01121	.00638	.11331	.54479	
SDev	.00042	.00158	.00119	.00568	.00139	.00264	
%RSD	4.3755	13.106	10.633	89.006	1.2235	.48414	
#1	.00983	.01316	.01205	.01039	.11233	.54665	
#2	.00924	.01093	.01037	.00236	.11430	.54292	
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	13570	--	--	--	--	--	--
SDev	77.18098	--	--	--	--	--	--
%RSD	.5687503	--	--	--	--	--	--
#1	13516	--	--	--	--	--	--
#2	13625	--	--	--	--	--	--

Method: METTRA Sample Name: DPL3W

Operator: RJG

Run Time: 11/20/00 23:35:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00135	31.865	.12210	1.1504	.00643	170.60	.00122
SDev	.00030	.319	.00289	.0106	.00017	.84	.00012
%RSD	22.012	1.0011	2.3693	.91961	2.5947	.49349	9.7280
#1	.00156	31.639	.12006	1.1429	.00631	170.01	.00131
#2	.00114	32.090	.12415	1.1579	.00654	171.20	.00114
Errors	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						
Avg	.04636	.11442	.82819	314.22	63.776	7.0872	.01979
SDev	.00023	.00086	.00859	2.43	.409	.0471	.00081
%RSD	.48953	.75085	1.0370	.77412	.64143	.66402	4.1087
#1	.04620	.11382	.82212	312.50	63.487	7.0539	.02037
#2	.04652	.11503	.83427	315.94	64.065	7.1205	.01922
Errors	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						
Avg	.12739	1.1498	1.1282	1.1354	.05918	.06680	.06426
SDev	.00242	.0006	.0041	.0029	.00233	.00298	.00276
%RSD	1.8966	.04976	.36279	.25723	3.9408	4.4562	4.2981
#1	.12910	1.1502	1.1311	1.1375	.05753	.06470	.06231
#2	.12568	1.1494	1.1253	1.1333	.06083	.06891	.06622
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	.01160	.00777	.00904	.00315	.11676	.62071	
SDev	.00234	.00161	.00029	.00545	.00264	.00291	
%RSD	20.183	20.726	3.2564	173.14	2.2575	.46929	
#1	.00994	.00891	.00925	-.00071	.11863	.61865	
#2	.01325	.00663	.00883	.00700	.11490	.62277	
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	

674 1567

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13710	--	--	--	--	--	--
SDev	61.76550	--	--	--	--	--	--
%RSD	.4505036	--	--	--	--	--	--
#1	13667	--	--	--	--	--	--
#2	13754	--	--	--	--	--	--

Method: METTRA Sample Name: DPL3X

Operator: RJG

Run Time: 11/20/00 23:39:25

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00041	29.497	.10543	.35626	.00628	76.417	.00148
SDev	.00007	.069	.00104	.00006	.00003	.346	.00050
%RSD	17.840	.23289	.98644	.01727	.41353	.45234	33.451
#1	.00036	29.449	.10470	.35630	.00626	76.661	.00113
#2	.00047	29.546	.10617	.35621	.00630	76.172	.00183
Errors	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						
Avg	.03917	.07469	.55163	263.33	17.104	1.7486	.02786
SDev	.00006	.00044	.00013	.48	.051	.0054	.00047
%RSD	.13999	.59382	.02280	.18271	.29760	.30615	1.6885
#1	.03913	.07501	.55154	263.67	17.140	1.7524	.02819
#2	.03921	.07438	.55172	262.99	17.068	1.7449	.02753
Errors	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						
Avg	.09659	.66760	.65415	.65863	.03597	.03974	.03849
SDev	.00098	.00746	.00297	.00447	.00187	.00588	.00455
%RSD	1.0146	1.1177	.45428	.67820	5.1927	14.798	11.808
#1	.09590	.67287	.65625	.66179	.03730	.04390	.04170
#2	.09728	.66232	.65205	.65547	.03465	.03558	.03527
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	.00842	.01718	.01426	.00820	.10485	.65397	
SDev	.00272	.00281	.00097	.00201	.00043	.00529	
%RSD	32.351	16.363	6.7851	24.514	.40784	.80905	
#1	.01035	.01519	.01358	.00962	.10455	.65771	
#2	.00650	.01917	.01495	.00678	.10515	.65023	
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	

674 1569

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13813	--	--	--	--	--	--
SDev	177.4486	--	--	--	--	--	--
%RSD	1.284633	--	--	--	--	--	--
#1	13688	--	--	--	--	--	--
#2	13939	--	--	--	--	--	--

Method: METTRA Sample Name: DPL30

Operator: RJG

Run Time: 11/20/00 23:43:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00261	43.217	.08910	2.8072	.00687	132.10	.00196
SDev	.00003	.199	.00072	.0059	.00001	.35	.00029
%RSD	1.0428	.46083	.80705	.20866	.18578	.26517	14.715
#1	.00263	43.076	.08859	2.8031	.00686	131.85	.00176
#2	.00259	43.358	.08961	2.8114	.00688	132.34	.00217
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	.03818	.12347	.62516	221.32	35.810	H20.677	.01312
SDev	.00008	.00084	.00216	.85	.146	.064	.00003
%RSD	.21556	.68387	.34505	.38423	.40755	.31069	.25290
#1	.03812	.12287	.62364	220.72	35.706	H20.632	.01310
#2	.03824	.12406	.62669	221.92	35.913	H20.722	.01314
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.10420	.84663	.83005	.83557	.03460	.03875	.03737
SDev	.00328	.00103	.00103	.00034	.00051	.00131	.00104
%RSD	3.1467	.12212	.12416	.04106	1.4676	3.3800	2.7904
#1	.10189	.84590	.83078	.83582	.03496	.03967	.03810
#2	.10652	.84736	.82932	.83533	.03424	.03782	.03663
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	.01789	.00736	.01087	L-.01199	.09554	.57426	
SDev	.00347	.00104	.00185	.00160	.00348	.00112	
%RSD	19.422	14.205	17.065	13.331	3.6378	.19592	
#1	.02035	.00810	.01218	L-.01312	.09308	.57346	
#2	.01543	.00662	.00956	L-.01086	.09800	.57506	
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	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	13794	--	--	--	--	--	--
SDev	30.58237	--	--	--	--	--	--
%RSD	.2217122	--	--	--	--	--	--
#1	13815	--	--	--	--	--	--
#2	13772	--	--	--	--	--	--

Method: METTRA Sample Name: DPL32 Operator: RJG
 Run Time: 11/20/00 23:47:46
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	-.00019	29.455	.13802	.47424	.00598	107.22	.00116
SDev	.00118	.031	.00169	.00228	.00028	.22	.00025
%RSD	639.13	.10661	1.2266	.48069	4.6269	.20377	21.779
#1	-.00102	29.477	.13683	.47585	.00618	107.38	.00098
#2	.00065	29.433	.13922	.47263	.00579	107.07	.00134
Errors	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						
Avg	.04698	.07826	.55008	252.38	19.240	3.4295	.01956
SDev	.00035	.00044	.00150	.04	.024	.0009	.00021
%RSD	.75104	.56265	.27225	.01675	.12492	.02690	1.0767
#1	.04673	.07794	.55114	252.35	19.257	3.4302	.01971
#2	.04723	.07857	.54902	252.41	19.223	3.4289	.01941
Errors	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						
Avg	.11365	.65729	.64539	.64935	.03620	.03855	.03777
SDev	.00011	.00404	.00582	.00522	.00013	.00206	.00133
%RSD	.09459	.61489	.90117	.80467	.36435	5.3433	3.5218
#1	.11372	.65444	.64127	.64566	.03610	.04001	.03871
#2	.11357	.66015	.64950	.65305	.03629	.03709	.03683
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	.01599	.01344	.01429	.00462	.09520	.50677	
SDev	.00017	.00196	.00136	.00545	.00336	.00056	
%RSD	1.0384	14.596	9.5433	117.92	3.5287	.11032	
#1	.01611	.01483	.01526	.00077	.09757	.50716	
#2	.01588	.01205	.01333	.00847	.09282	.50637	
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	

674 1573

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13816	--	--	--	--	--	--
SDev	35.95679	--	--	--	--	--	--
%RSD	.2602608	--	--	--	--	--	--
#1	13841	--	--	--	--	--	--
#2	13790	--	--	--	--	--	--

Method: METTRA Sample Name: DPL34
 Run Time: 11/20/00 23:51:56
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00138	39.137	.13749	1.4501	.00648	140.58	.00154
SDev	.00027	.109	.00154	.0013	.00015	.30	.00003
%RSD	19.288	.27743	1.1240	.08869	2.3412	.21410	2.1130
#1	.00119	39.061	.13639	1.4511	.00659	140.79	.00156
#2	.00157	39.214	.13858	1.4492	.00637	140.37	.00151
Errors	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						
Avg	.05354	.21700	2.0516	426.64	43.364	H10.016	.02805
SDev	.00006	.00016	.0047	.28	.012	.001	.00066
%RSD	.12041	.07521	.22719	.06650	.02778	.00881	2.3561
#1	.05358	.21688	2.0483	426.44	43.373	H10.015	.02852
#2	.05349	.21712	2.0549	426.84	43.356	H10.016	.02758
Errors	LC Pass	LC High	LC Pass				
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avg	.16162	1.6324	1.5832	1.5996	.05595	.06513	.06207
SDev	.00003	.0022	.0072	.0055	.00119	.00168	.00072
%RSD	.01849	.13397	.45160	.34366	2.1286	2.5763	1.1641
#1	.16160	1.6308	1.5782	1.5957	.05679	.06394	.06156
#2	.16164	1.6339	1.5883	1.6035	.05511	.06632	.06258
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	.01565	.01199	.01321	.00214	.11724	.76570	
SDev	.00142	.00416	.00325	.00557	.00372	.00125	
%RSD	9.0581	34.700	24.583	260.63	3.1742	.16369	
#1	.01465	.00905	.01091	-.00180	.11987	.76658	
#2	.01665	.01493	.01550	.00607	.11461	.76481	
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	13753	--	--	--	--	--	--
SDev	57.84189	--	--	--	--	--	--
%RSD	.4205627	--	--	--	--	--	--
#1	13713	--	--	--	--	--	--
#2	13794	--	--	--	--	--	--

Method: METTRA Sample Name: DPL35

Operator: RJG

Run Time: 11/20/00 23:56:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00226	31.813	.15419	.95723	.00606	105.66	.00159
SDev	.00015	.114	.00140	.00039	.00024	.38	.00050
%RSD	6.4678	.35864	.90769	.04057	3.9713	.36276	31.483
#1	.00215	31.732	.15517	.95696	.00623	105.38	.00124
#2	.00236	31.894	.15320	.95750	.00589	105.93	.00195
Errors	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						
Avg	.04094	.09592	H10.056	243.93	34.719	4.0383	.01667
SDev	.00035	.00047	.023	1.14	.145	.0179	.00019
%RSD	.86253	.48795	.22690	.46875	.41849	.44230	1.1393
#1	.04069	.09559	H10.040	243.12	34.617	4.0257	.01680
#2	.04119	.09626	H10.072	244.74	34.822	4.0510	.01653
Errors	LC Pass	LC Pass	LC High	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						
Avg	.12821	2.6331	2.6051	2.6144	.08456	.09739	.09312
SDev	.00047	.0267	.0212	.0230	.00407	.00050	.00102
%RSD	.36949	1.0150	.81193	.88005	4.8080	.50927	1.0985
#1	.12854	2.6142	2.5901	2.5981	.08168	.09774	.09240
#2	.12787	2.6520	2.6200	2.6307	.08743	.09704	.09384
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	.01302	.01618	.01513	.00578	.09578	.56984	
SDev	.00228	.00156	.00028	.00227	.00002	.00050	
%RSD	17.507	9.6641	1.8787	39.307	.02042	.08810	
#1	.01463	.01508	.01493	.00739	.09580	.56949	
#2	.01141	.01729	.01533	.00417	.09577	.57020	
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	13868	--	--	--	--	--	--
SDev	122.7894	--	--	--	--	--	--
%RSD	.8854294	--	--	--	--	--	--
#1	13955	--	--	--	--	--	--
#2	13781	--	--	--	--	--	--

Method: METTRA Sample Name: DPL37 Operator: RJG
 Run Time: 11/21/00 00:00:17
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00070	27.578	.10879	.40758	.00597	152.87	.00141
SDev	.00032	.013	.00026	.00120	.00008	.00	.00019
%RSD	45.638	.04721	.24264	.29381	1.2821	.00223	13.530
#1	.00047	27.587	.10898	.40843	.00603	152.87	.00155
#2	.00092	27.569	.10861	.40674	.00592	152.87	.00128
Errors	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						
Avg	.05207	.12482	.96296	272.25	56.990	1.9281	.01811
SDev	.00014	.00047	.00247	.10	.004	.0003	.00016
%RSD	.26189	.37281	.25688	.03625	.00649	.01444	.86562
#1	.05197	.12449	.96471	272.18	56.993	1.9279	.01800
#2	.05217	.12515	.96121	272.32	56.988	1.9283	.01822
Errors	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						
Avg	.14136	1.3145	1.2867	1.2960	.06064	.06791	.06549
SDev	.00100	.0038	.0009	.0019	.00050	.00273	.00165
%RSD	.70607	.29273	.06847	.14421	.81851	4.0141	2.5241
#1	.14207	1.3117	1.2861	1.2946	.06099	.06599	.06432
#2	.14066	1.3172	1.2874	1.2973	.06029	.06984	.06666
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	.00887	.01095	.01026	.00504	.11891	.70925	
SDev	.00070	.00024	.00007	.00079	.00106	.00060	
%RSD	7.8505	2.2301	.67105	15.687	.89369	.08408	
#1	.00936	.01078	.01031	.00448	.11967	.70967	
#2	.00837	.01113	.01021	.00560	.11816	.70883	
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	13560	--	--	--	--	--	--
SDev	16.40502	--	--	--	--	--	--
%RSD	.1209765	--	--	--	--	--	--
#1	13549	--	--	--	--	--	--
#2	13572	--	--	--	--	--	--

Method: METTRA Sample Name: DPL38

Operator: RJG

Run Time: 11/21/00 00:04:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00015	26.093	.10124	.41887	.00583	186.98	.00152
SDev	.00070	.138	.00079	.00061	.00006	.09	.00006
%RSD	484.29	.52742	.77605	.14534	1.1114	.04834	4.2500
#1	.00064	25.996	.10180	.41844	.00588	186.92	.00148
#2	-.00035	26.191	.10069	.41930	.00578	187.05	.00157
Errors	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						
Avg	.04202	.11513	.94358	256.10	64.793	1.6363	.02094
SDev	.00022	.00029	.00413	.54	.152	.0032	.00067
%RSD	.51949	.25194	.43749	.21118	.23479	.19749	3.1937
#1	.04186	.11533	.94066	255.72	64.686	1.6340	.02142
#2	.04217	.11492	.94650	256.48	64.901	1.6386	.02047
Errors	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						
Avg	.13065	2.2348	2.1834	2.2006	.08567	.09096	.08919
SDev	.00009	.0053	.0112	.0092	.00168	.00476	.00374
%RSD	.06793	.23627	.51337	.41966	1.9648	5.2373	4.1906
#1	.13071	2.2311	2.1755	2.1940	.08448	.08759	.08655
#2	.13059	2.2386	2.1914	2.2071	.08686	.09432	.09184
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	.00973	.01106	.01062	.00501	.11160	.67783	
SDev	.00140	.00358	.00192	.00206	.00015	.00036	
%RSD	14.358	32.321	18.076	41.002	.13367	.05306	
#1	.00874	.01359	.01197	.00356	.11150	.67757	
#2	.01072	.00853	.00926	.00647	.11171	.67808	
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	13512	--	--	--	--	--	--
SDev	19.79899	--	--	--	--	--	--
%RSD	.1465262	--	--	--	--	--	--
#1	13498	--	--	--	--	--	--
#2	13526	--	--	--	--	--	--

Method: METTRA Sample Name: DPL39 Operator: RJG
 Run Time: 11/21/00 00:08:37
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00020	36.229	.10267	.82951	.00642	365.43	.00191
SDev	.00109	.410	.00379	.00694	.00010	2.55	.00019
%RSD	533.88	1.1315	3.6902	.83690	1.4838	.69772	9.9778
#1	-.00057	35.939	.09999	.82460	.00649	363.62	.00178
#2	.00097	36.518	.10535	.83442	.00636	367.23	.00205
Errors	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						
Avg	.04692	.34891	1.0040	271.01	186.54	4.6636	.02855
SDev	.00127	.00340	.0099	2.26	1.57	.0373	.00031
%RSD	2.7118	.97383	.98653	.83567	.83967	.79896	1.0725
#1	.04602	.34651	.99696	269.41	185.43	4.6373	.02876
#2	.04782	.35131	1.0110	272.61	187.65	4.6900	.02833
Errors	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						
Avg	.17034	9.2129	9.0530	H9.1062	.05984	.06434	.06284
SDev	.00062	.0404	.0813	.0677	.00060	.00239	.00139
%RSD	.36137	.43862	.89774	.74307	1.0058	3.7124	2.2162
#1	.16991	9.1843	8.9955	H9.0584	.06027	.06265	.06186
#2	.17078	9.2415	9.1105	H9.1541	.05942	.06603	.06383
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	.01153	.01147	.01149	.00919	.12573	1.0312	
SDev	.00172	.00056	.00020	.00319	.00050	.0052	
%RSD	14.913	4.9267	1.7018	34.725	.39711	.50582	
#1	.01274	.01107	.01163	.01144	.12537	1.0275	
#2	.01031	.01187	.01135	.00693	.12608	1.0349	
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	13527	--	--	--	--	--	--
SDev	105.8892	--	--	--	--	--	--
%RSD	.7828035	--	--	--	--	--	--
#1	13602	--	--	--	--	--	--
#2	13452	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-9 Operator: RJG
 Run Time: 11/21/00 00:12:48
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	1.0375	24.713	.51069	2.0359	2.0547	51.275	.49117
SDev	.0020	.090	.00022	.0014	.0040	.049	.00047
%RSD	.19615	.36547	.04283	.07027	.19482	.09625	.09508
#1	1.0389	24.649	.51054	2.0349	2.0575	51.310	.49150
#2	1.0360	24.777	.51085	2.0369	2.0519	51.240	.49084
Errors	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						
Avge	2.0508	2.0534	2.0069	25.496	49.896	2.0148	2.0568
SDev	.0027	.0007	.0001	.029	.002	.0003	.0048
%RSD	.13079	.03354	.00335	.11289	.00437	.01587	.23112
#1	2.0527	2.0539	2.0069	25.476	49.898	2.0146	2.0534
#2	2.0489	2.0529	2.0070	25.517	49.895	2.0151	2.0602
Errors	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						
Avge	2.0466	.51721	.50913	.51182	.51161	.51713	.51529
SDev	.0111	.00120	.00199	.00173	.00162	.00017	.00065
%RSD	.54077	.23285	.39121	.33792	.31606	.03390	.12719
#1	2.0545	.51806	.51054	.51305	.51276	.51725	.51576
#2	2.0388	.51636	.50772	.51060	.51047	.51701	.51483
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	.52094	.52262	.52206	1.0283	2.0384	2.0640	
SDev	.00471	.00382	.00098	.0027	.0009	.0066	
%RSD	.90488	.73147	.18775	.26141	.04467	.31917	
#1	.52427	.51992	.52137	1.0302	2.0390	2.0687	
#2	.51760	.52533	.52275	1.0264	2.0377	2.0594	
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	13359	--	--	--	--	--	--
SDev	118.1221	--	--	--	--	--	--
%RSD	.8841984	--	--	--	--	--	--
#1	13276	--	--	--	--	--	--
#2	13443	--	--	--	--	--	--

Method: METTRA Sample Name: CCB9

Operator: RJG

Run Time: 11/21/00 00:16:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00102	.00263	.00051	.00115	.00091	.04687	.00048
SDev	.00017	.00625	.00240	.00030	.00030	.02253	.00003
%RSD	16.253	237.10	469.20	25.609	33.009	48.062	5.2799
#1	.00114	-.00178	-.00118	.00094	.00070	.03094	.00050
#2	.00090	.00705	.00221	.00136	.00112	.06280	.00046
Errors	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						
Avge	.00081	.00106	.00158	.05201	.03471	.00172	.00530
SDev	.00051	.00050	.00023	.00681	.01057	.00057	.00128
%RSD	63.764	47.434	14.759	13.100	30.451	33.326	24.143
#1	.00044	.00141	.00141	.04719	.02724	.00132	.00621
#2	.00117	.00070	.00174	.05683	.04219	.00213	.00440
Errors	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						
Avge	.00197	.00304	-.00034	.00078	-.00145	.00241	.00112
SDev	.00144	.00214	.00009	.00078	.00346	.00344	.00114
%RSD	72.948	70.558	27.440	98.828	238.29	142.76	101.54
#1	.00095	.00455	-.00027	.00133	-.00390	.00484	.00193
#2	.00298	.00152	-.00041	.00024	.00100	-.00002	.00032
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	-.00017	-.00043	-.00034	-.00024	.00002	.00092	
SDev	.00320	.00222	.00042	.00239	.00000	.00039	
%RSD	1928.8	515.64	121.55	1015.4	13.100	42.173	
#1	.00210	-.00200	-.00064	.00145	.00002	.00064	
#2	-.00243	.00114	-.00005	-.00192	.00002	.00119	
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	13592	--	--	--	--	--	--
SDev	32.13814	--	--	--	--	--	--
%RSD	.2364468	--	--	--	--	--	--
#1	13569	--	--	--	--	--	--
#2	13615	--	--	--	--	--	--

Method: METTRA Sample Name: DPL4C

Operator: RJG

Run Time: 11/21/00 00:21:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00057	26.854	.15127	.59291	.00610	259.15	.00100
SDev	.00025	.133	.00016	.00167	.00005	.02	.00006
%RSD	43.792	.49350	.10903	.28211	.86449	.00916	6.1575
#1	.00074	26.760	.15116	.59172	.00606	259.13	.00096
#2	.00039	26.947	.15139	.59409	.00614	259.16	.00104
Errors	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						
Avge	.03828	.09433	.51762	258.18	41.116	3.1049	.02802
SDev	.00093	.00007	.00075	.63	.066	.0061	.00008
%RSD	2.4231	.07445	.14408	.24410	.16160	.19565	.28713
#1	.03894	.09438	.51709	257.73	41.069	3.1006	.02808
#2	.03762	.09428	.51815	258.62	41.163	3.1092	.02797
Errors	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						
Avge	.11041	.73287	.71402	.72030	.03683	.03988	.03887
SDev	.00038	.00109	.00343	.00265	.00131	.00075	.00094
%RSD	.34022	.14875	.47990	.36771	3.5587	1.8798	2.4096
#1	.11067	.73210	.71160	.71843	.03590	.03935	.03820
#2	.11014	.73364	.71644	.72217	.03776	.04041	.03953
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	.00744	.01018	.00927	.00834	.11340	.55321	
SDev	.00020	.00041	.00021	.00060	.00030	.00115	
%RSD	2.6355	4.0667	2.2737	7.1372	.26725	.20721	
#1	.00731	.01047	.00941	.00876	.11362	.55240	
#2	.00758	.00988	.00912	.00792	.11319	.55402	
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	13736	--	--	--	--	--	--
SDev	4.065864	--	--	--	--	--	--
%RSD	.0295993	--	--	--	--	--	--
#1	13739	--	--	--	--	--	--
#2	13734	--	--	--	--	--	--

Method: METTRA Sample Name: DPL4M Operator: RJG
 Run Time: 11/21/00 00:25:19
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00109	25.375	.15755	.51493	.00682	167.42	.00085
SDev	.00016	.076	.00172	.00111	.00000	.03	.00001
%RSD	14.620	.29850	1.0911	.21565	.03525	.01793	1.2806
#1	.00098	25.322	.15634	.51414	.00682	167.40	.00085
#2	.00120	25.429	.15877	.51571	.00682	167.44	.00086
Errors	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						
Avge	.04642	.11405	1.0222	238.31	28.938	2.5901	.02218
SDev	.00036	.00060	.0029	.41	.054	.0024	.00008
%RSD	.77316	.52868	.28620	.17216	.18523	.09275	.35397
#1	.04616	.11362	1.0201	238.02	28.900	2.5884	.02213
#2	.04667	.11447	1.0243	238.60	28.976	2.5918	.02224
Errors	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						
Avge	.12854	1.2234	1.1963	1.2053	.03554	.04171	.03965
SDev	.00222	.0014	.0068	.0041	.00124	.00108	.00030
%RSD	1.7249	.11083	.56600	.33723	3.4866	2.5814	.77040
#1	.12697	1.2244	1.1915	1.2025	.03466	.04247	.03987
#2	.13011	1.2225	1.2011	1.2082	.03642	.04095	.03944
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	.01322	.01473	.01422	.01184	.11597	.52145	
SDev	.00100	.00361	.00207	.00515	.00106	.00109	
%RSD	7.5272	24.488	14.580	43.469	.91175	.20962	
#1	.01392	.01218	.01276	.00820	.11671	.52068	
#2	.01252	.01728	.01569	.01547	.11522	.52222	
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	13717	--	--	--	--	--	--
SDev	57.27565	--	--	--	--	--	--
%RSD	.4175447	--	--	--	--	--	--
#1	13677	--	--	--	--	--	--
#2	13758	--	--	--	--	--	--

Method: METTRA Sample Name: DPL4W
 Run Time: 11/21/00 00:29:29
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00147	119.14	.13697	1.5431	.01586	471.09	.00223
SDev	.00009	.51	.00023	.0030	.00001	.72	.00017
%RSD	6.1590	.42470	.16565	.19649	.07003	.15247	7.6815
#1	.00140	118.79	.13681	1.5410	.01585	471.60	.00235
#2	.00153	119.50	.13713	1.5453	.01586	470.58	.00211
Errors	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						
Avg	.04134	.20063	.58106	206.76	41.941	H11.771	.02083
SDev	.00016	.00036	.00116	.06	.007	.002	.00037
%RSD	.38156	.18059	.20014	.02904	.01665	.01490	1.7746
#1	.04123	.20089	.58024	206.72	41.936	H11.772	.02109
#2	.04145	.20038	.58188	206.80	41.946	H11.770	.02056
Errors	LC Pass	LC High	LC Pass				
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avg	.13978	1.0598	1.0429	1.0485	.02297	.02099	.02165
SDev	.00155	.0079	.0010	.0033	.00211	.00042	.00099
%RSD	1.1081	.74832	.09281	.31344	9.1992	2.0160	4.5541
#1	.13868	1.0654	1.0436	1.0508	.02447	.02129	.02235
#2	.14087	1.0542	1.0422	1.0462	.02148	.02069	.02096
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	.01183	.00944	.01023	-.00307	.12029	.81430	
SDev	.00055	.00007	.00013	.00424	.00237	.00081	
%RSD	4.6634	.79210	1.3073	137.95	1.9728	.09934	
#1	.01144	.00949	.01014	-.00607	.11861	.81488	
#2	.01222	.00939	.01033	-.00008	.12197	.81373	
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	13966	--	--	--	--	--	--
SDev	65.33695	--	--	--	--	--	--
%RSD	.4678303	--	--	--	--	--	--
#1	13920	--	--	--	--	--	--
#2	14012	--	--	--	--	--	--

Method: METTRA Sample Name: DPL4X Operator: RJG
 Run Time: 11/21/00 00:33:40
 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
Avg	.00211	259.05	.00789	2.3037	.04635	H1455.9	-.00074
SDev	.00038	.18	.00057	.0032	.00013	7.6	.00010
%RSD	17.927	.06851	7.2796	.13829	.26986	.52450	13.651
#1	.00238	258.93	.00748	2.3060	.04644	H1461.3	-.00081
#2	.00184	259.18	.00830	2.3015	.04626	H1450.5	-.00067
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	.01853	.04820	.01464	29.430	101.08	H23.138	-.00011
SDev	.00061	.00011	.00035	.096	.31	.062	.00007
%RSD	3.2992	.22625	2.3941	.32700	.30410	.26727	61.389
#1	.01896	.04828	.01489	29.498	101.30	H23.182	-.00016
#2	.01810	.04813	.01439	29.362	100.86	H23.094	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00638	-.00474	.01356	.00746	.01211	.00348	.00635
SDev	.00114	.00097	.00336	.00192	.00399	.00407	.00138
%RSD	17.820	20.477	24.779	25.690	32.969	116.87	21.789
#1	.00719	-.00406	.01118	.00611	.00928	.00636	.00733
#2	.00558	-.00543	.01593	.00882	.01493	.00060	.00537
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	.03418	.01076	.01856	L-.01113	.09993	.05428	
SDev	.00168	.00128	.00030	.00359	.00138	.00036	
%RSD	4.9272	11.945	1.5955	32.223	1.3795	.65924	
#1	.03538	.00985	.01835	L-.01367	.10090	.05453	
#2	.03299	.01166	.01877	-.00860	.09895	.05402	
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

674 1595

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15481	--	--	--	--	--	--
SDev	111.2630	--	--	--	--	--	--
%RSD	.7187264	--	--	--	--	--	--
#1	15402	--	--	--	--	--	--
#2	15559	--	--	--	--	--	--

Method: METTRA Sample Name: DP5PHB Operator: RJG
Run Time: 11/21/00 00:37:50
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Table with 8 columns (Elem, Units, AG, AL, AS, BA, BE, CA, CD, CO, CR, CU, FE, MG, MN, MO, NI, PB/1, PB/2, PB, SB/1, SB/2, SB, SE/1, SE/2, SE, TL, V, ZN) and multiple rows of data including average values, standard deviations, and error ranges.

674 1597

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13531	--	--	--	--	--	--
SDev	85.45358	--	--	--	--	--	--
%RSD	.6315334	--	--	--	--	--	--
#1	13471	--	--	--	--	--	--
#2	13592	--	--	--	--	--	--

Method: METTRA Sample Name: DP5PHC Operator: RJG
 Run Time: 11/21/00 00:42:01
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.05118	1.8645	1.9936	2.0323	.05219	L.06612	.04939
SDev	.00016	.0042	.0123	.0012	.00026	.00390	.00022
%RSD	.31330	.22332	.61449	.05970	.49327	5.9042	.44205
#1	.05130	1.8675	2.0022	2.0331	.05237	L.06888	.04955
#2	.05107	1.8616	1.9849	2.0314	.05201	L.06336	.04924
Errors	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						
Avg	.52077	.20852	.25051	1.0206	L.01622	.50138	L.00070
SDev	.00301	.00078	.00028	.0071	.00225	.00142	.00006
%RSD	.57836	.37416	.11327	.69572	13.846	.28257	8.7209
#1	.52289	.20908	.25031	1.0156	L.01780	.50238	L.00066
#2	.51864	.20797	.25072	1.0256	L.01463	.50038	L.00075
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						
Avg	.51972	.51024	.50142	.50436	.00265	.00129	L.00174
SDev	.00602	.00153	.00485	.00374	.00049	.00004	.00014
%RSD	1.1589	.29942	.96656	.74181	18.538	2.8574	7.9683
#1	.52398	.51133	.50484	.50700	.00230	.00132	L.00165
#2	.51547	.50916	.49799	.50171	.00300	.00127	L.00184
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	
Avg	1.9357	1.9169	1.9232	2.0170	.50936	.51968	
SDev	.0156	.0133	.0141	.0007	.00375	.00208	
%RSD	.80575	.69616	.73289	.03645	.73626	.40009	
#1	1.9468	1.9263	1.9331	2.0176	.51202	.52115	
#2	1.9247	1.9074	1.9132	2.0165	.50671	.51821	
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	13267	--	--	--	--	--	--
SDev	161.6450	--	--	--	--	--	--
%RSD	1.218441	--	--	--	--	--	--
#1	13152	--	--	--	--	--	--
#2	13381	--	--	--	--	--	--

Method: METTRA Sample Name: DP5PHL Operator: RJG
 Run Time: 11/21/00 00:46:11
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.04772	1.7506	1.8880	1.9227	.04935	L.03368	.04697
SDev	.00002	.0029	.0108	.0065	.00033	.00022	.00011
%RSD	.03887	.16742	.57283	.33774	.67013	.64710	.22613
#1	.04771	1.7527	1.8956	1.9273	.04959	L.03352	.04704
#2	.04773	1.7485	1.8803	1.9181	.04912	L.03383	.04689
Errors	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						
Avg	.49257	.19710	.23574	.95127	L.00756	.47393	L.00119
SDev	.00113	.00074	.00006	.00078	.00084	.00027	.00009
%RSD	.22968	.37573	.02684	.08163	11.073	.05739	7.0839
#1	.49337	.19762	.23578	.95072	L.00697	.47412	L.00125
#2	.49177	.19658	.23569	.95182	L.00816	.47373	L.00113
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						
Avg	.49217	.47789	.46688	.47054	.00031	.00178	L.00129
SDev	.00003	.00453	.00263	.00025	.00059	.00058	.00019
%RSD	.00719	.94739	.56426	.05302	194.12	32.533	14.561
#1	.49220	.48110	.46501	.47037	.00073	.00137	L.00115
#2	.49215	.47469	.46874	.47072	-.00011	.00218	L.00142
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	
Avg	1.8137	1.7989	1.8039	1.8982	.47544	.49064	
SDev	.0026	.0060	.0049	.0010	.00108	.00063	
%RSD	.14073	.33534	.27018	.05531	.22608	.12846	
#1	1.8119	1.7946	1.8004	1.8975	.47468	.49108	
#2	1.8155	1.8032	1.8073	1.8989	.47620	.49019	
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	13412	--	--	--	--	--	--
SDev	30.33516	--	--	--	--	--	--
%RSD	.2261801	--	--	--	--	--	--
#1	13433	--	--	--	--	--	--
#2	13390	--	--	--	--	--	--

Method: METTRA Sample Name: DPL4T
 Run Time: 11/21/00 00:50:22
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.00010	239.38	.01306	1.9037	.04251	H1400.3	-.00039
SDev	.00026	.23	.00026	.0038	.00016	5.0	.00002
%RSD	250.02	.09481	2.0121	.19858	.37125	.35377	4.2600
#1	.00029	239.54	.01324	1.9064	.04262	H1403.8	-.00037
#2	-.00008	239.22	.01287	1.9010	.04240	H1396.8	-.00040
Errors	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						
Avge	.01257	.02234	.03404	74.644	72.870	5.6128	.00089
SDev	.00011	.00061	.00005	.108	.134	.0136	.00091
%RSD	.84444	2.7421	.14350	.14489	.18421	.24153	102.62
#1	.01265	.02277	.03408	74.721	72.965	5.6224	.00154
#2	.01250	.02190	.03401	74.568	72.775	5.6032	.00024
Errors	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						
Avge	.00931	.11837	.13064	.12655	.00735	.00647	.00676
SDev	.00022	.00171	.00248	.00108	.00053	.00389	.00278
%RSD	2.3409	1.4439	1.8950	.85504	7.2825	60.129	41.021
#1	.00946	.11958	.12889	.12579	.00772	.00923	.00873
#2	.00915	.11716	.13239	.12732	.00697	.00372	.00480
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	.02457	.01257	.01656	.00049	.02548	.16578	
SDev	.00447	.00122	.00230	.00426	.00004	.00107	
%RSD	18.182	9.7126	13.897	865.10	.14489	.64361	
#1	.02773	.01343	.01819	-.00252	.02551	.16654	
#2	.02141	.01170	.01494	.00351	.02545	.16503	
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	14913	--	--	--	--	--	--
SDev	44.19418	--	--	--	--	--	--
%RSD	.2963526	--	--	--	--	--	--
#1	14881	--	--	--	--	--	--
#2	14944	--	--	--	--	--	--

Method: METTRA Sample Name: DPL4TP5 Operator: RJG
 Run Time: 11/21/00 00:54:32
 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	-.00012	52.720	.00262	.43774	.00999	390.50	-.00015
SDev	.00031	.217	.00024	.00018	.00011	.40	.00006
%RSD	260.72	.41203	9.2551	.04186	1.1005	.10273	41.354

#1	-.00034	52.567	.00279	.43761	.01007	390.22	-.00019
#2	.00010	52.874	.00245	.43787	.00992	390.79	-.00010

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm						
Avge	.00305	.00533	.00759	17.271	16.566	1.2903	.00036
SDev	.00015	.00019	.00009	.009	.036	.0020	.00044
%RSD	5.0220	3.4952	1.1676	.05398	.21526	.15627	121.76

#1	.00294	.00520	.00765	17.264	16.541	1.2888	.00005
#2	.00316	.00546	.00753	17.277	16.591	1.2917	.00068

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avge	.00317	.02956	.03313	.03194	.00349	.00283	.00305
SDev	.00050	.00389	.00279	.00316	.00074	.00191	.00152
%RSD	15.889	13.146	8.4270	9.8813	21.258	67.456	49.839

#1	.00281	.02681	.03116	.02971	.00402	.00418	.00412
#2	.00352	.03231	.03511	.03418	.00297	.00148	.00197

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00476	.00377	.00410	-.00308	.00590	.03811
SDev	.00345	.00086	.00172	.00517	.00000	.00002
%RSD	72.476	22.875	42.060	168.04	.05398	.04766

#1	.00232	.00316	.00288	-.00673	.00589	.03809
#2	.00720	.00438	.00532	.00058	.00590	.03812

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13740	--	--	--	--	--	--
SDev	22.48586	--	--	--	--	--	--
%RSD	.1636489	--	--	--	--	--	--
#1	13724	--	--	--	--	--	--
#2	13756	--	--	--	--	--	--

Method: METTRA Sample Name: DP2M5B Operator: RJG
 Run Time: 11/21/00 00:58:42
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	-.00015	.02405	.00033	.00053	.00015	.17717	-.00001
SDev	.00014	.00358	.00237	.00005	.00002	.02718	.00005
%RSD	96.241	14.887	723.45	9.3655	12.708	15.340	396.30
#1	-.00005	.02658	-.00135	.00050	.00017	.19639	.00002
#2	-.00025	.02152	.00201	.00057	.00014	.15795	-.00005
Errors	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						
Avg	-.00026	.00158	.00059	.07180	.01441	.00186	.00018
SDev	.00024	.00048	.00053	.01595	.00124	.00003	.00010
%RSD	93.963	30.691	90.619	22.207	8.6083	1.5084	53.562
#1	-.00009	.00123	.00021	.08307	.01353	.00188	.00025
#2	-.00043	.00192	.00096	.06053	.01528	.00184	.00011
Errors	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						
Avg	.00136	.00474	.00075	.00208	.00205	-.00005	.00065
SDev	.00031	.00350	.00306	.00088	.00119	.00152	.00062
%RSD	22.949	73.909	410.36	42.215	57.852	3253.3	94.648
#1	.00114	.00226	.00291	.00269	.00289	-.00112	.00022
#2	.00158	.00721	-.00142	.00146	.00121	.00103	.00109
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	-.00477	.00208	-.00020	-.00587	.00002	.00308	
SDev	.00227	.00398	.00190	.00331	.00001	.00009	
%RSD	47.540	191.30	947.26	56.441	22.207	2.8065	
#1	-.00637	.00489	.00114	-.00353	.00003	.00301	
#2	-.00317	-.00073	-.00154	-.00821	.00002	.00314	
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	13288	--	--	--	--	--	--
SDev	20.64766	--	--	--	--	--	--
%RSD	.1553898	--	--	--	--	--	--
#1	13273	--	--	--	--	--	--
#2	13302	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-10 Operator: RJG
 Run Time: 11/21/00 01:02:53
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	1.0265	24.332	.50756	2.0192	2.0381	50.782	.48969
SDev	.0010	.153	.00104	.0023	.0037	.077	.00172
%RSD	.09807	.63057	.20445	.11463	.18197	.15203	.35188
#1	1.0258	24.223	.50682	2.0176	2.0407	50.837	.49091
#2	1.0272	24.440	.50829	2.0208	2.0354	50.727	.48847
Errors	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						
Avge	2.0317	2.0280	1.9821	25.041	49.367	1.9927	2.0377
SDev	.0003	.0024	.0090	.052	.084	.0028	.0056
%RSD	.01463	.11968	.45400	.20610	.17093	.14186	.27278
#1	2.0314	2.0262	1.9757	25.004	49.307	1.9907	2.0338
#2	2.0319	2.0297	1.9885	25.077	49.426	1.9947	2.0417
Errors	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						
Avge	2.0471	.50405	.49380	.49722	.49646	.51135	.50639
SDev	.0154	.00125	.00739	.00535	.01341	.00609	.00853
%RSD	.75061	.24783	1.4972	1.0754	2.7010	1.1914	1.6842
#1	2.0579	.50317	.48858	.49343	.48698	.50704	.50036
#2	2.0362	.50493	.49903	.50100	.50594	.51566	.51242
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	.51187	.50245	.50558	1.0257	2.0202	2.0539	
SDev	.00732	.00815	.00787	.0030	.0029	.0021	
%RSD	1.4294	1.6225	1.5574	.29012	.14124	.10173	
#1	.50670	.49668	.50002	1.0278	2.0222	2.0554	
#2	.51705	.50821	.51115	1.0236	2.0181	2.0524	
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	13592	--	--	--	--	--	--
SDev	1.449431	--	--	--	--	--	--
%RSD	.0106637	--	--	--	--	--	--
#1	13591	--	--	--	--	--	--
#2	13593	--	--	--	--	--	--

Method: METTRA Sample Name: CCB10

Operator: RJG

Run Time: 11/21/00 01:07:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00074	.00792	.00131	.00099	.00092	.04072	.00017

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13553	--	--	--	--	--	--
SDev	89.83778	--	--	--	--	--	--
%RSD	.6628664	--	--	--	--	--	--
#1	13489	--	--	--	--	--	--
#2	13616	--	--	--	--	--	--

Method: METTRA Sample Name: DP2M5C Operator: RJG
 Run Time: 11/21/00 01:11:14
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.04904	1.8032	1.9419	1.9681	.05029	L.07800	.04831
SDev	.00069	.0051	.0086	.0014	.00002	.00258	.00022
%RSD	1.4173	.28245	.44504	.06962	.04278	3.3105	.45701
#1	.04855	1.7996	1.9358	1.9690	.05031	L.07617	.04816
#2	.04953	1.8068	1.9480	1.9671	.05028	L.07982	.04847
Errors	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						
Avg	.50415	.20105	.24014	1.0129	L.01516	.48511	L.00131
SDev	.00393	.00129	.00061	.0206	.00424	.00278	.00006
%RSD	.77873	.64381	.25248	2.0335	27.986	.57221	4.5006
#1	.50137	.20013	.23971	.99834	L.01216	.48315	L.00135
#2	.50693	.20196	.24057	1.0275	L.01817	.48707	L.00127
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						
Avg	.50275	.48479	.48085	.48216	.00210	.00225	L.00220
SDev	.00419	.00883	.00673	.00743	.00045	.00004	.00018
%RSD	.83349	1.8210	1.3987	1.5401	21.397	1.9403	8.1422
#1	.49979	.47855	.47610	.47691	.00242	.00228	L.00233
#2	.50572	.49103	.48561	.48742	.00179	.00222	L.00207
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	
Avg	1.8989	1.8970	1.8977	1.9469	.49052	.50788	
SDev	.0268	.0190	.0216	.0148	.00393	.00330	
%RSD	1.4122	1.0025	1.1390	.76150	.80033	.64979	
#1	1.8800	1.8836	1.8824	1.9364	.48774	.50555	
#2	1.9179	1.9105	1.9130	1.9574	.49329	.51021	
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	13469	--	--	--	--	--	--
SDev	137.1435	--	--	--	--	--	--
%RSD	1.018203	--	--	--	--	--	--
#1	13566	--	--	--	--	--	--
#2	13372	--	--	--	--	--	--

Method: METTRA Sample Name: DPL42 Operator: RJG
 Run Time: 11/21/00 01:15:25
 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	.00286	251.63	.01457	4.6581	.04396	H1209.3	-.00085
SDev	.00006	.29	.00002	.0037	.00008	.0	.00018
%RSD	2.0071	.11480	.12789	.07963	.18662	.00168	20.937
#1	.00290	251.43	.01456	4.6607	.04401	H1209.3	-.00098
#2	.00282	251.84	.01459	4.6555	.04390	H1209.3	-.00072
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
Avge	.01515	.03415	.00949	77.052	46.943	H30.315	-.00272
SDev	.00023	.00037	.00038	.067	.052	.011	.00061
%RSD	1.4904	1.0705	3.9828	.08745	.11027	.03688	22.609
#1	.01531	.03441	.00976	77.005	46.906	H30.307	-.00315
#2	.01499	.03389	.00922	77.100	46.979	H30.323	-.00228
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00525	-.00979	.00193	-.00197	.00954	.00468	.00630
SDev	.00095	.00041	.00093	.00048	.00473	.00069	.00204
%RSD	18.087	4.1988	47.900	24.385	49.606	14.827	32.372
#1	.00592	-.00950	.00128	-.00231	.00619	.00419	.00486
#2	.00458	-.01008	.00259	-.00163	.01289	.00517	.00774
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	.03997	.00276	.01515	L-.01103	.04139	.00889	
SDev	.00231	.00334	.00146	.00374	.00356	.00025	
%RSD	5.7717	120.97	9.6502	33.900	8.6065	2.7920	
#1	.04160	.00040	.01412	-.00839	.04390	.00906	
#2	.03834	.00513	.01619	L-.01368	.03887	.00871	
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	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	15903	--	--	--	--	--	--
SDev	50.13415	--	--	--	--	--	--
%RSD	.3152506	--	--	--	--	--	--
#1	15938	--	--	--	--	--	--
#2	15868	--	--	--	--	--	--

Method: METTRA Sample Name: DPL42P5 Operator: RJG
 Run Time: 11/21/00 01:19:36
 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	.00079	58.277	.00312	1.1331	.01085	346.51	-.00027
SDev	.00088	.125	.00147	.0005	.00002	1.49	.00013
%RSD	112.05	.21417	47.030	.04678	.17924	.42861	48.851
#1	.00016	58.188	.00208	1.1335	.01084	345.46	-.00036
#2	.00141	58.365	.00416	1.1328	.01086	347.56	-.00018
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00326	.00909	.00219	18.682	11.195	7.0645	-.00021
SDev	.00148	.00061	.00015	.089	.040	.0259	.00107
%RSD	45.497	6.7558	7.0767	.47780	.35304	.36715	504.22
#1	.00221	.00865	.00208	18.619	11.167	7.0462	-.00097
#2	.00431	.00952	.00230	18.745	11.223	7.0828	.00054
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00179	.00092	.00001	.00031	.00356	-.00008	.00113
SDev	.00163	.00046	.00094	.00078	.00317	.00090	.00046
%RSD	91.247	49.844	15378.	250.15	88.934	1161.4	40.239
#1	.00063	.00060	-.00066	-.00024	.00580	-.00071	.00146
#2	.00294	.00125	.00067	.00086	.00132	.00056	.00081
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00657	.00394	.00482	-.00870	.01174	.00223	
SDev	.00296	.00208	.00040	.00272	.00083	.00003	
%RSD	45.003	52.851	8.4083	31.307	7.0617	1.5853	
#1	.00448	.00542	.00511	-.01063	.01115	.00221	
#2	.00867	.00247	.00453	-.00677	.01232	.00226	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13820	--	--	--	--	--	--
SDev	37.37032	--	--	--	--	--	--
%RSD	.2704148	--	--	--	--	--	--
#1	13846	--	--	--	--	--	--
#2	13793	--	--	--	--	--	--

Method: METTRA Sample Name: DPL42S

Operator: RJG

Run Time: 11/21/00 01:23:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.04691	231.52	1.6385	5.7081	.08002	H1123.4	.03502
SDev	.00001	.45	.0071	.0073	.00011	.7	.00034
%RSD	.02584	.19231	.43204	.12795	.13602	.06589	.96527
#1	.04690	231.21	1.6435	5.7132	.08010	H1122.9	.03526
#2	.04692	231.84	1.6335	5.7029	.07994	H1123.9	.03478
Errors	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						
Avge	.39824	.18708	.22712	114.00	42.645	H27.919	-.00335
SDev	.00060	.00031	.00028	.22	.017	.026	.00040
%RSD	.15201	.16409	.12516	.19004	.03960	.09315	11.852
#1	.39781	.18730	.22732	113.85	42.633	H27.900	-.00307
#2	.39867	.18687	.22692	114.15	42.657	H27.937	-.00364
Errors	LC Pass	LC High	LC Pass				
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avge	.39253	.38795	.39317	.39143	.01362	.00288	.00646
SDev	.00004	.00009	.00263	.00178	.00227	.00011	.00083
%RSD	.00934	.02413	.66866	.45594	16.642	3.8375	12.829
#1	.39250	.38789	.39131	.39017	.01522	.00296	.00704
#2	.39255	.38802	.39503	.39269	.01202	.00280	.00587
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	1.6245	1.6197	1.6213	1.6784	.43888	.42753	
SDev	.0044	.0040	.0042	.0037	.00052	.00043	
%RSD	.27367	.24768	.25635	.21814	.11865	.10141	
#1	1.6214	1.6168	1.6183	1.6758	.43851	.42784	
#2	1.6276	1.6225	1.6242	1.6810	.43924	.42723	
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	15530	--	--	--	--	--	--
SDev	26.37495	--	--	--	--	--	--
%RSD	.1698339	--	--	--	--	--	--
#1	15548	--	--	--	--	--	--
#2	15511	--	--	--	--	--	--

Method: METTRA Sample Name: DPL42D Operator: RJG
 Run Time: 11/21/00 01:27:57
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	.04728	244.15	1.6400	5.8998	.08260	H1182.4	.03522
SDev	.00049	.43	.0023	.0096	.00004	1.7	.00003
%RSD	1.0309	.17534	.14120	.16325	.04775	.14317	.09399
#1	.04694	243.85	1.6416	5.9066	.08263	H1181.2	.03519
#2	.04763	244.45	1.6383	5.8930	.08257	H1183.6	.03524
Errors	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						
Avge	.39639	.17774	.22247	45.301	43.593	H27.068	-.00389
SDev	.00098	.00073	.00107	.113	.067	.055	.00039
%RSD	.24757	.41020	.48120	.25045	.15443	.20463	10.102
#1	.39570	.17723	.22172	45.221	43.546	H27.029	-.00361
#2	.39708	.17826	.22323	45.381	43.641	H27.107	-.00417
Errors	LC Pass	LC High	LC Pass				
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avge	.38902	.39024	.39274	.39190	.01088	.00098	.00428
SDev	.00016	.00208	.00259	.00103	.00103	.00082	.00020
%RSD	.04121	.53163	.65880	.26407	9.5022	82.933	4.6742
#1	.38891	.39171	.39091	.39117	.01015	.00156	.00442
#2	.38914	.38877	.39457	.39264	.01162	.00041	.00414
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	1.6488	1.6442	1.6457	1.6849	.42326	.42207	
SDev	.0061	.0063	.0022	.0069	.00343	.00023	
%RSD	.36799	.38185	.13168	.41251	.80911	.05373	
#1	1.6531	1.6397	1.6442	1.6799	.42568	.42191	
#2	1.6445	1.6486	1.6472	1.6898	.42084	.42223	
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	15695	--	--	--	--	--	--
SDev	17.21777	--	--	--	--	--	--
%RSD	.1097035	--	--	--	--	--	--
#1	15707	--	--	--	--	--	--
#2	15683	--	--	--	--	--	--

674 1622

Analysis Report

11/21/00 01:36:14 AM

page 1

Method: METTRA Sample Name: DPL45

Operator: RJG

Run Time: 11/21/00 01:32:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00172	218.49	.01985	2.5450	.03402	H1003.2	-.00122
SDev	.00016	.92	.00071	.0071	.00006	1.7	.00010
%RSD	9.1082	.42285	3.5942	.27944	.17282	.16915	7.8102
#1	.00184	217.84	.01934	2.5399	.03406	H1004.4	-.00129
#2	.00161	219.14	.02035	2.5500	.03397	H1002.0	-.00115
Errors	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						
Avg	.01836	.02385	.01269	240.53	78.469	H18.487	-.00339
SDev	.00016	.00010	.00002	.35	.019	.017	.00072
%RSD	.89787	.41539	.16106	.14438	.02368	.09284	21.192
#1	.01824	.02392	.01270	240.29	78.456	H18.475	-.00288
#2	.01848	.02378	.01267	240.78	78.482	H18.499	-.00390
Errors	LC Pass	LC High	LC Pass				
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm						
Avg	.01053	.00150	.00706	.00521	.00484	.00966	.00806
SDev	.00036	.00453	.00129	.00065	.00228	.00348	.00308
%RSD	3.3720	302.30	18.337	12.419	47.049	36.087	38.282
#1	.01078	.00470	.00614	.00566	.00323	.00719	.00587
#2	.01028	-.00171	.00797	.00475	.00646	.01212	.01024
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	.02720	.00133	.00995	-.00053	.05413	.01017	
SDev	.00024	.00455	.00295	.00809	.00064	.00028	
%RSD	.87228	341.65	29.690	1538.5	1.1873	2.7642	
#1	.02737	-.00188	.00786	.00520	.05459	.00997	
#2	.02703	.00454	.01203	-.00625	.05368	.01037	
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	15148	--	--	--	--	--	--
SDev	104.0510	--	--	--	--	--	--
%RSD	.6869019	--	--	--	--	--	--
#1	15074	--	--	--	--	--	--
#2	15221	--	--	--	--	--	--

Method: METTRA Sample Name: DPL46 Operator: RJG
 Run Time: 11/21/00 01:36:18
 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	.00284	242.46	.01325	3.2751	.03953	H1130.7	-.00096
SDev	.00007	.71	.00067	.0037	.00004	.5	.00018
%RSD	2.4315	.29099	5.0543	.11273	.09292	.04801	18.897

#1	.00289	241.96	.01373	3.2724	.03956	H1131.1	-.00108
#2	.00280	242.96	.01278	3.2777	.03951	H1130.4	-.00083

Errors	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
Avge	.01478	.02546	.04345	89.327	107.38	H27.323	-.00340
SDev	.00005	.00010	.00010	.216	.16	.038	.00016
%RSD	.36481	.38237	.23426	.24198	.14959	.13831	4.6606

#1	.01475	.02553	.04338	89.174	107.27	H27.296	-.00351
#2	.01482	.02540	.04352	89.479	107.50	H27.350	-.00328

Errors	LC Pass	LC High	LC Pass				
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00484	-.00106	.00707	.00436	.01180	.00554	.00762
SDev	.00063	.00295	.00304	.00104	.00416	.00208	.00000
%RSD	13.056	279.86	43.008	23.923	35.245	37.568	.04083

#1	.00529	.00103	.00492	.00363	.00886	.00701	.00763
#2	.00439	-.00315	.00922	.00510	.01474	.00407	.00762

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	.03307	.00679	.01554	L-.01165	.03587	.01312
SDev	.00505	.00382	.00087	.00156	.00108	.00026
%RSD	15.257	56.331	5.5952	13.408	3.0231	1.9636

#1	.03664	.00408	.01493	L-.01275	.03664	.01294
#2	.02951	.00949	.01615	L-.01054	.03510	.01331

Errors	NOCHECK	NOCHECK	LC Pass	LC Low	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	15664	--	--	--	--	--	--
SDev	16.72335	--	--	--	--	--	--
%RSD	.1067608	--	--	--	--	--	--
#1	15652	--	--	--	--	--	--
#2	15676	--	--	--	--	--	--

Method: METTRA Sample Name: DPL48

Operator: RJG

Run Time: 11/21/00 01:40:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00002	190.86	.00700	1.8092	.03609	H1262.4	-.00054
SDev	.00005	.09	.00279	.0041	.00005	2.7	.00010
%RSD	230.67	.04729	39.804	.22815	.14389	.21783	18.272
#1	.00006	190.92	.00897	1.8121	.03612	H1264.4	-.00061
#2	-.00001	190.79	.00503	1.8063	.03605	H1260.5	-.00047
Errors	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						
Avg	.00943	.00760	.00531	8.4866	72.086	5.6853	.00116
SDev	.00002	.00020	.00042	.0299	.050	.0020	.00042
%RSD	.23892	2.5967	7.8171	.35248	.06908	.03571	36.527
#1	.00945	.00746	.00561	8.5077	72.121	5.6868	.00147
#2	.00942	.00774	.00502	8.4654	72.051	5.6839	.00086
Errors	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						
Avg	.00103	.00161	.01084	.00776	.01058	.00155	.00456
SDev	.00009	.00305	.00104	.00170	.00297	.00049	.00131
%RSD	8.7963	189.75	9.5571	21.964	28.028	31.734	28.868
#1	.00096	.00376	.01157	.00897	.00848	.00120	.00363
#2	.00109	-.00055	.01011	.00656	.01268	.00190	.00549
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	.02334	.01000	.01444	-.00249	.01992	.02605	
SDev	.00122	.00103	.00028	.00256	.00104	.00046	
%RSD	5.2367	10.296	1.9349	102.60	5.2137	1.7730	
#1	.02421	.00927	.01424	-.00068	.02065	.02573	
#2	.02248	.01072	.01464	-.00430	.01918	.02638	
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	14700	--	--	--	--	--	--
SDev	39.56276	--	--	--	--	--	--
%RSD	.2691386	--	--	--	--	--	--
#1	14672	--	--	--	--	--	--
#2	14728	--	--	--	--	--	--

Method: METTRA Sample Name: DPL49

Operator: RJG

Run Time: 11/21/00 01:44:40

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
Avg	.00150	198.65	.03775	2.9407	.03529	H986.15	-.00077
SDev	.00011	.09	.00199	.0065	.00005	.81	.00020
%RSD	7.3244	.04450	5.2737	.22238	.13079	.08253	26.186
#1	.00158	198.58	.03634	2.9453	.03532	H986.72	-.00063
#2	.00142	198.71	.03916	2.9360	.03526	H985.57	-.00092
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	.01735	.03436	.06584	147.56	53.349	H21.045	.00082
SDev	.00021	.00007	.00026	.04	.003	.003	.00180
%RSD	1.1849	.20132	.40283	.02417	.00644	.01601	219.90
#1	.01720	.03431	.06603	147.53	53.347	H21.043	.00210
#2	.01750	.03441	.06565	147.58	53.352	H21.048	-.00046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01906	.11142	.11923	.11663	.01024	.00516	.00685
SDev	.00151	.00364	.00071	.00074	.00078	.00113	.00049
%RSD	7.9146	3.2670	.59427	.63408	7.6433	21.813	7.1610
#1	.02013	.11399	.11873	.11715	.00969	.00596	.00720
#2	.01800	.10884	.11973	.11611	.01079	.00437	.00651
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	.02545	.00406	.01119	L-.01049	.05975	.11183	
SDev	.00112	.00314	.00172	.00756	.00025	.00023	
%RSD	4.3931	77.366	15.415	72.056	.41467	.20969	
#1	.02466	.00629	.01241	L-.01583	.05957	.11200	
#2	.02625	.00184	.00997	-.00514	.05992	.11166	
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	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	14969	--	--	--	--	--	--
SDev	8.945177	--	--	--	--	--	--
%RSD	.0597575	--	--	--	--	--	--
#1	14963	--	--	--	--	--	--
#2	14975	--	--	--	--	--	--

Method: METTRA Sample Name: DPL5A

Operator: RJG

Run Time: 11/21/00 01:48:51

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	.00340	245.83	.01294	5.2323	.04138	H1083.4	-.00072
SDev	.00057	.52	.00137	.0019	.00005	6.0	.00006
%RSD	16.904	.21311	10.598	.03611	.10877	.55441	8.3898
#1	.00381	245.46	.01197	5.2310	.04141	H1087.6	-.00077
#2	.00299	246.20	.01392	5.2336	.04135	H1079.1	-.00068
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
Avge	.01231	.02094	.00896	31.731	25.940	H35.046	-.00374
SDev	.00030	.00036	.00020	.061	.049	.040	.00071
%RSD	2.4565	1.7266	2.2718	.19100	.18762	.11347	18.999
#1	.01210	.02119	.00882	31.774	25.974	H35.074	-.00425
#2	.01253	.02068	.00911	31.689	25.905	H35.018	-.00324
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00317	-.00469	.00713	.00320	.00931	.00090	.00370
SDev	.00127	.00138	.00252	.00122	.00177	.00297	.00139
%RSD	40.032	29.521	35.277	38.086	18.964	329.74	37.551
#1	.00407	-.00371	.00535	.00234	.00806	.00300	.00468
#2	.00227	-.00567	.00891	.00406	.01056	-.00120	.00272
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	.04088	.00643	.01790	L-.02279	.02422	.03578	
SDev	.00180	.00010	.00067	.00224	.00108	.00004	
%RSD	4.4014	1.5307	3.7141	9.8262	4.4603	.11335	
#1	.04216	.00649	.01837	L-.02120	.02498	.03581	
#2	.03961	.00636	.01743	L-.02437	.02345	.03575	
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	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	16027	--	--	--	--	--	--
SDev	189.6814	--	--	--	--	--	--
%RSD	1.183488	--	--	--	--	--	--
#1	15893	--	--	--	--	--	--
#2	16161	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-11 Operator: RJG
 Run Time: 11/21/00 01:53:01
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avge	1.0332	24.483	.50517	2.0317	2.0391	51.312	.48870
SDev	.0014	.120	.00203	.0010	.0009	.172	.00077
%RSD	.14036	.49186	.40223	.05158	.04473	.33603	.15767
#1	1.0322	24.398	.50373	2.0309	2.0384	51.190	.48815
#2	1.0343	24.568	.50661	2.0324	2.0397	51.434	.48924
Errors	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						
Avge	2.0306	2.0313	1.9987	25.054	49.401	2.0002	2.0368
SDev	.0076	.0027	.0048	.084	.103	.0078	.0112
%RSD	.37372	.13467	.24173	.33497	.20897	.39216	.55000
#1	2.0252	2.0294	1.9952	24.995	49.328	1.9947	2.0289
#2	2.0360	2.0332	2.0021	25.114	49.474	2.0058	2.0448
Errors	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						
Avge	2.0566	.50477	.50517	.50504	.51116	.51064	.51081
SDev	.0000	.00098	.00315	.00177	.00016	.00351	.00239
%RSD	.00170	.19420	.62348	.35134	.03078	.68706	.46836
#1	2.0566	.50547	.50294	.50378	.51128	.51312	.51251
#2	2.0567	.50408	.50740	.50629	.51105	.50816	.50912
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	.51182	.51953	.51696	1.0268	2.0292	2.0586	
SDev	.00231	.00290	.00270	.0034	.0025	.0049	
%RSD	.45055	.55799	.52257	.32928	.12167	.23726	
#1	.51019	.51748	.51505	1.0244	2.0275	2.0551	
#2	.51345	.52158	.51887	1.0291	2.0309	2.0620	
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	13515	--	--	--	--	--	--
SDev	57.41721	--	--	--	--	--	--
%RSD	.4248406	--	--	--	--	--	--
#1	13556	--	--	--	--	--	--
#2	13474	--	--	--	--	--	--

Method: METTRA Sample Name: CCB11

Operator: RJG

Run Time: 11/21/00 01:57:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm						
Avg	.00046	.01678	-.00038	.00140	.00094	.13214	.00040
SDev	.00023	.01350	.00085	.00054	.00002	.06511	.00010
%RSD	49.945	80.484	221.93	38.604	1.6463	49.272	24.624
#1	.00030	.00723	-.00099	.00102	.00095	.08610	.00033
#2	.00063	.02633	.00022	.00178	.00093	.17818	.00047
Errors	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						
Avg	.00039	.00056	.00059	.01213	.02243	.00323	.00445
SDev	.00063	.00079	.00045	.00313	.01039	.00140	.00015
%RSD	164.57	139.83	75.486	25.770	46.309	43.287	3.4501
#1	-.00006	.00001	.00028	.00992	.01508	.00224	.00456
#2	.00083	.00112	.00091	.01434	.02977	.00422	.00434
Errors	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						
Avg	.00089	.00350	-.00040	.00090	.00411	.00153	.00239
SDev	.00053	.00289	.00071	.00144	.00382	.00055	.00164
%RSD	59.176	82.610	177.73	159.64	92.843	35.780	68.489
#1	.00052	.00555	.00010	.00191	.00681	.00192	.00355
#2	.00126	.00146	-.00090	-.00012	.00141	.00114	.00123
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	-.00156	.00328	.00167	.00054	.00000	.00056	
SDev	.00233	.00075	.00028	.00267	.00000	.00013	
%RSD	149.10	22.841	16.602	497.46	25.770	23.590	
#1	.00008	.00275	.00186	-.00135	.00000	.00046	
#2	-.00321	.00381	.00147	.00243	.00000	.00065	
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	13501	--	--	--	--	--	--
SDev	60.42241	--	--	--	--	--	--
%RSD	.4475411	--	--	--	--	--	--
#1	13544	--	--	--	--	--	--
#2	13458	--	--	--	--	--	--

674 1636

Method: 3050B		Main: Soil	Start Time: 1000	Balance #: 094817
Analyst	Date	Lot Number:	MS MSBREV	Lab Lot # (book/page/line) 0057-093-1
Reviewed by: <i>[Signature]</i>	11-18-00	20K150188		
Sample ID	Initial Wt/Vol g/ml	Final Vol ml	Comments	Reagents:
1. DPWU1E	0.529g	0.50ml	CAR 11-18-00 +0.5ml MSBREV	5ml 11HNO ₃ 0057-147-4 2.5ml 6MCHNO ₃ 0623709MS Mallinckrodt 5ml 30% H ₂ O 5240721HOS Mallinckrodt 5ml 6MCHCl 5587-724AD1 Mallinckrodt
2. DPWUFS				
3. DPWUFD				
4. DP5NKB				
5. DP5NKC	0.5ml DEH ₂ O		CAR 11-18-00 +0.5ml MSBREV	
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				

674 1637

PSR024 11/18/00 7:35:32 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

REQUESTED BY: RIZZOC

METHOD: QM Inductively Coupled Plasma (6010B Trace)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
11E,12A CLP1	DN1EK	___	286154	009072	A-46-QM	COJ280132	008		SOLID	0	9 1
11E,12A CLP1	DN1EN	___	286155	009072	A-46-QM	COJ280132	009		SOLID	0	9 1
11E,12A CLP1	DN1EP	___	286156	009072	A-46-QM	COJ280132	010		SOLID	0	9 1
11E,12A CLP1	DN1ET	___	286157	009072	A-46-QM	COJ280132	011		SOLID	0	9 1
12A CLP1	DN1KT	___	286158	009072	A-46-QM	COJ280161	001		SOLID	0	9 1
12A CLP1	DN1K5	___	286159	009072	A-46-QM	COJ280161	003		SOLID	0	9 1
14C,D,E CLP1	DN9H9	___	286127	001361	A-46-QM	COK020291	001		SOLID	0	2 1
14C,D,E CLP1	DN9JD	___	286128	001361	A-46-QM	COK020291	002		SOLID	0	2 1
14C,D,E CLP1	DN9JE	___	286129	001361	A-46-QM	COK020291	003		SOLID	0	2 1
14C,D,E CLP1	DN9JG	___	286130	001361	A-46-QM	COK020291	004		SOLID	0	2 1
14C,D,E CLP1	DN9JP	___	286131	001361	A-46-QM	COK020291	005		SOLID	0	2 1
14C,D,E CLP1	DN9JR	___	286132	001361	A-46-QM	COK020291	006		SOLID	0	2 1
14C,D,E CLP1	DN9J2	___	286133	001361	A-46-QM	COK020291	007		SOLID	0	2 1
14C,D,E CLP1	DN9J3	___	286134	001361	A-46-QM	COK020291	008		SOLID	0	2 1
14C,D,E CLP1	DN9J4	___	286135	001361	A-46-QM	COK020291	009		SOLID	0	2 1
14C,D,E CLP1	DN9J5	___	286136	001361	A-46-QM	COK020291	010		SOLID	0	2 1
14C,D,E CLP1	DN9J6	___	286137	001361	A-46-QM	COK020291	011		SOLID	0	2 1
14C,D,E CLP1	DN9J7	___	286138	001361	A-46-QM	COK020291	012		SOLID	0	2 1
14C,D,E CLP1	DN9J8	___	286139	001361	A-46-QM	COK020291	013		SOLID	0	6 1
14C,D,E CLP1	DN9J9	___	286140	001361	A-46-QM	COK020291	014		SOLID	0	2 1
14C,D,E CLP1	DN9KA	___	286141	001361	A-46-QM	COK020291	015		SOLID	0	2 1
14C,D,E CLP1	DN9KC	___	286142	001361	A-46-QM	COK020291	016		SOLID	0	2 1
14E	DPCMH	___	286160	071212	1-05-QM	COK030304	001		WATER	0	6 1
14E CLP1	DPCM6	___	286143	001361	1-05-QM	COK030308	001		WATER	0	8 1
14E CLP1	DPCNF	___	286144	001361	A-46-QM	COK030308	002		SOLID	0	2 1
14E CLP1	DPCNJ	___	286145	001361	A-46-QM	COK030308	003		SOLID	0	2 1

STL Pittsburgh

REQUESTED BY: RIZZOC

METHOD: QM Inductively Coupled Plasma (60f0B Trace)

STORAGE LOCATION	WORK ORDER #	PICKED		CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#									RCVD	REQD
11C,D CLP1	DNOJX	___	___	286100	001361	A-46-QM	COJ270275	001		SOLID	0	6 1
11C,D CLP1	DNOJ1	___	___	286101	001361	A-46-QM	COJ270275	002		SOLID	0	2 1
11C,D CLP1	DNOJ4	___	___	286102	001361	A-46-QM	COJ270275	003		SOLID	0	2 1
11C,D CLP1	DNOJ5	___	___	286103	001361	A-46-QM	COJ270275	004		SOLID	0	2 1
11C,D CLP1	DNOKC	___	___	286104	001361	A-46-QM	COJ270275	005		SOLID	0	2 1
11C,D CLP1	DNOKM	___	___	286105	001361	A-46-QM	COJ270275	007		SOLID	0	2 1
11C,D CLP1	DNOKT	___	___	286106	001361	A-46-QM	COJ270275	008		SOLID	0	2 1
11C,D CLP1	DNOKO	___	___	286107	001361	A-46-QM	COJ270275	009		SOLID	0	2 1
11C,D CLP1	DNOK3	___	___	286108	001361	A-46-QM	COJ270275	010		SOLID	0	2 1
11C,D CLP1	DNOK6	___	___	286109	001361	A-46-QM	COJ270275	011		SOLID	0	2 1
11C,D CLP1	DNOK8	___	___	286110	001361	A-46-QM	COJ270275	012		SOLID	0	2 1
11C,D CLP1	DNOK9	___	___	286111	001361	A-46-QM	COJ270275	013		SOLID	0	2 1
11C,D CLP1	DNOLC	___	___	286112	001361	A-46-QM	COJ270275	014		SOLID	0	2 1
11C,D CLP1	DNOLE	___	___	286113	001361	A-46-QM	COJ270275	015		SOLID	0	2 1
11C,D CLP1	DNOLH	___	___	286114	001361	A-46-QM	COJ270275	016		SOLID	0	2 1
11C,D CLP1	DNOLK	___	___	286115	001361	A-46-QM	COJ270275	017		SOLID	0	2 1
11C,D CLP1	DNOLL	___	___	286116	001361	A-46-QM	COJ270275	018		SOLID	0	2 1
11C,D CLP1	DNOLM	___	___	286117	001361	A-46-QM	COJ270275	019		SOLID	0	2 1
11C,D CLP1	DNOLP	___	___	286118	001361	A-46-QM	COJ270275	020		SOLID	0	2 1
11E,12A CLP1	DN1D9	___	___	286147	009072	A-46-QM	COJ280132	001		SOLID	0	10 1
11E,12A CLP1	DN1EC	___	___	286148	009072	A-46-QM	COJ280132	002		SOLID	0	8 1
11E,12A CLP1	DN1ED	___	___	286149	009072	A-46-QM	COJ280132	003		SOLID	0	9 1
11E,12A CLP1	DN1EE	___	___	286150	009072	A-46-QM	COJ280132	004		SOLID	0	7 1
11E,12A CLP1	DN1EF	___	___	286151	009072	A-46-QM	COJ280132	005		SOLID	0	7 1
11E,12A CLP1	DN1EH	___	___	286152	009072	A-46-QM	COJ280132	006		SOLID	0	7 1
11E,12A CLP1	DN1EJ	___	___	286153	009072	A-46-QM	COJ280132	007		SOLID	0	7 1

674 1639

PSR024 11/18/00 7:35:32 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 003

REQUESTED BY: RIZZOC

METHOD: QM Inductively Coupled Plasma (6010B Trace)

STORAGE LOCATION	WORK ORDER #	PICKED		CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#									RCVD	REQD
18E	DPJVD	___	___	286161	071212	I-05-QM	COK080286	001		WATER	0	5 1
	DPJVD	___	___	286168	071212	I-05-QM	COK080286	001		WATER	0	5 1
18E	DPJVF	___	___	286162	071212	I-00-QM	COK080286	002		WATER	0	5 1
	DPJVF	___	___	286169	071212	I-00-QM	COK080286	002		WATER	0	5 1
18E	DPJVH	___	___	286163	071212	I-00-QM	COK080286	003		WATER	0	5 1
	DPJVH	___	___	286170	071212	I-00-QM	COK080286	003		WATER	0	5 1
18E	DPJVJ	___	___	286164	071212	I-00-QM	COK080286	004		WATER	0	5 1
	DPJVJ	___	___	286171	071212	I-00-QM	COK080286	004		WATER	0	5 1
18E	DPJVK	___	___	286165	071212	I-00-QM	COK080286	005		WATER	0	5 1
	DPJVK	___	___	286172	071212	I-00-QM	COK080286	005		WATER	0	5 1
18E	DPJVL	___	___	286166	071212	I-00-QM	COK080286	006		WATER	0	5 1
	DPJVL	___	___	286173	071212	I-00-QM	COK080286	006		WATER	0	5 1
18E	DPJVM	___	___	286167	071212	I-00-QM	COK080286	007		WATER	0	5 1
	DPJVM	___	___	286174	071212	I-00-QM	COK080286	007		WATER	0	5 1
20B,C	DPM53	___	___	286119	016580	I-05-QM	COK100147	002		WATER	0	1 1
20B,C	DPM6D	___	___	286120	016580	I-05-QM	COK100147	005		WATER	0	1 1
20B,C	DPM65	___	___	286121	016580	I-05-QM	COK100151	001		WATER	0	5 1
20B,C	DPM69	___	___	286122	016580	I-05-QM	COK100151	002		WATER	0	5 1
22C CLP1	DPWNF	___	___	286146	399411	A-46-QM	COK150188	001		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<u>AL</u>	<u>Cynthia A [Signature]</u>	<u>11-18-00 1000</u>
<u>Cynthia A [Signature]</u>	<u>AL</u>	<u>11-18-00 1400</u>

674 1640

**TCLP
METALS DATA**

674 -1641

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

<u>Client ID</u>	<u>Lab Sample ID:</u>
<u>DF/24-A/0319/CVS/013</u>	<u>DPWNFT</u>
<u>DF/24-A/0319/CVS/013S</u>	<u>DPWNFST</u>
<u>DF/24-A/0319/CVS/013SD</u>	<u>DPWNFDT</u>

Comments: UXB DUNN FIELD
COK150188
6010B, 7470A-TCLP

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: _____

Title: _____

Version 4.10.2

REVIEWED BY: MTW
DATE: 11-29-00

Cover Page Equivalent

674 1642

3 2 1 0 9 8 7 6 5 4 3 2 1 0

**TCLP
METALS
RESULTS**

674 1643

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013
 Matrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115
 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	0.18	B	1	ICP	11/20/00	17:03
Barium	493.41	0.00041	10.0	0.37	B	1	ICP	11/20/00	17:03
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	11/20/00	17:03
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	11/20/00	17:03
Lead	220.35	0.025	0.50	0.025	U	1	ICP	11/20/00	17:03
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	11/20/00	17:03
Silver	328.07	0.0031	0.50	0.0031	UN*	1	ICP	11/20/00	17:03

Comments. COK150188001

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: DPWNFT Client ID: DF/24-A/0319/CVS/013
 Matrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135
 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	0.000053	B	1	CVAA	11/20/00	14:33

Comments: _____

Version 4.10.2

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

Form I Equivalent

674 1645

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAA

Units: ug/L

Chart Number: 1120HGA.PRN

Acceptable Range: 90% - 110%

Standard Source: Ultra

Standard ID: 0057-151-9

Element	WL/ Mass	True Conc	ICV5-1 11/20/00 2:17 PM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Mercury	253.7	2.5	2.47	98.8								

STL-Pittsburgh

Metals Data Reporting Form

674 1646

Initial Calibration Verification Standard

Instrument: ICP

Units: ug/L

Chart Number: J01120B.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0057-120-2

Element	WL/ Mass	True Conc	ICV2-1 11/20/00 4:32 PM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Arsenic	193.696	1000.0	992.93	99.3								
Barium	493.409	1000.0	1010.28	101.0								
Cadmium	228.802	1000.0	1011.70	101.2								
Chromium	267.716	1000.0	1022.07	102.2								
Lead	220.353	1000.0	1053.39	105.3								
Selenium	196.026	1000.0	982.52	98.3								
Silver	328.068	500.0	518.37	103.7								

674 1647

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAAUnits: ug/LChart Number: 1120HGA.PRNAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0057-151-10

Element	WL/ Mass	True Conc	CCV5-1 11/20/00 2:20 PM		CCV5-2 11/20/00 2:42 PM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	4.60	92.0	4.86	97.2						

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J01120B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-146-1

Element	WL/ Mass	True Conc	CCV2-1 11/20/00 5:09 PM		CCV2-2 11/20/00 5:47 PM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	5000.0	4944.18	98.9	4877.49	97.5						
Barium	493.409	5000.0	4705.53	94.1	4709.87	94.2						
Cadmium	228.802	5000.0	4825.95	96.5	4839.01	96.8						
Chromium	267.716	5000.0	4738.03	94.8	4769.05	95.4						
Lead	220.353	5000.0	4784.63	95.7	4810.97	96.2						
Selenium	196.026	5000.0	4764.67	95.3	4782.22	95.6						
Silver	328.068	1000.0	960.80	96.1	962.41	96.2						

674 1649

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA

Units: ug/L

Chart Number: 1120HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 11/20/00 2:19 PM		Found	Q	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: ICP

Units: ug/L

Chart Number: J01120B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICBI 11/20/00 4:35 PM		Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q								
Arsenic	193.696	500	-42.0	B								
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								

674 1651

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA

Units: ug/L

Chart Number: 1120HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/20/00 2:22 PM		CCB2 11/20/00 2:43 PM		Found	Q	Found	Q
			Found	Q	Found	Q				
Mercury	253.7	0.2	0.0	U	0.0	U				

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP

Units: ug/L

Chart Number: J01120B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/20/00 5:12 PM		CCB2 11/20/00 5:50 PM		Found	Q	Found	Q
			Found	Q	Found	Q				
Arsenic	193.696	500	30.3	U	-36.0	B				
Barium	493.409	10000	0.4	U	0.4	U				
Cadmium	228.802	100	2.8	U	2.8	U				
Chromium	267.716	500	3.8	U	3.8	U				
Lead	220.353	500	24.6	U	24.6	U				
Selenium	196.026	250	67.4	U	67.4	U				
Silver	328.068	500	3.1	U	3.1	U				

674 1653

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DP6A2BTMatrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115Weight: 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	0.13	B	1	ICP	11/20/00	16:44
Barium	493.409	0.00041	10.0	0.0012	B	1	ICP	11/20/00	16:44
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	11/20/00	16:44
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	11/20/00	16:44
Lead	220.353	0.025	0.50	0.025	U	1	ICP	11/20/00	16:44
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	11/20/00	16:44
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	11/20/00	16:44

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

Preparation Blank Results

Lab Sample ID: DP6J2BTMatrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115Weight: 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	-0.036	B	1	ICP	11/20/00	16:47
Barium	493.409	0.00041	10.0	-0.00054	B	1	ICP	11/20/00	16:47
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	11/20/00	16:47
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	11/20/00	16:47
Lead	220.353	0.025	0.50	0.025	U	1	ICP	11/20/00	16:47
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	11/20/00	16:47
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	11/20/00	16:47

Comments: _____

674 1655

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DP6A2BT

Matrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135

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	11/20/00	14:23

Comments: _____

674 1656

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DP6QKBT

Matrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135

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	0.000054	B	1	CVAA	11/20/00	14:25

Comments: _____

674 1657

STL-Pittsburgh
Metals Data Reporting Form

Interference Check Standard A

Instrument: ICP

Units: ug/L

Chart Number: J01120B.ARC

Acceptable Range: 0% - 0%

Standard Source: Inorganic Ventures

Standard ID: 0057-146-2

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 11/20/00 4:38 PM	Found	Found	Found	Found	Found
				Found					
Arsenic	193.696	500			121				
Barium	493.409	10000			1				
Cadmium	228.802	100			-6				
Chromium	267.716	500			-1				
Lead	220.353	500			41				
Selenium	196.026	250			-100				
Silver	328.068	500			-1				

STL-Pittsburgh
Metals Data Reporting Form

674 1658

Interference Check Standard AB

Instrument: ICP

Units: ug/L

Chart Number: J01120B.ARC

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0057-130-11

Element	WL/ Mass	True Conc	ICSAB 11/20/00 4:41 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000	1072.9	107.3								
Barium	493.409	500	473.3	94.7								
Cadmium	228.802	1000	943.9	94.4								
Chromium	267.716	500	449.1	89.8								
Lead	220.353	1000	985.8	98.6								
Selenium	196.026	1000	857.4	85.7								
Silver	328.068	1000	969.4	96.9								

674 1659

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DPWNFST
 Original Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013S
 Matrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	193.7	0.18	B	5.2		5	100.4	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Barium	493.4	0.37	B	46.8		50	92.8	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Cadmium	228.8	0.0028	U	0.98		1	98.2	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Chromium	267.7	0.0038	U	4.8		5	95.0	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Lead	220.4	0.025	U	4.8		5	96.1	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Selenium	196.0	0.067	U	1.1		1	106.8	1	1	ICP	11/20/00	17:03	11/20/00	17:15
Silver	328.1	0.0031	U	0.19	B N	1	19.1	1	1	ICP	11/20/00	17:03	11/20/00	17:15

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

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DPWNFDT
 Original Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013SD
 Matrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.7	0.18	B	5.3		5	103.3	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Barium	493.4	0.37	B	47.3		50	93.8	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Cadmium	228.8	0.0028	U	0.99		1	98.5	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Chromium	267.7	0.0038	U	4.8		5	95.5	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Lead	220.4	0.025	U	4.8		5	95.3	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Selenium	196.0	0.067	U	1.1		1	108.9	1	1	ICP	11/20/00	17:03	11/20/00	17:18
Silver	328.1	0.0031	UN	0.14	N*	1	14.2	1	1	ICP	11/20/00	17:03	11/20/00	17:18

Comments: _____

- 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

674 1661

STL-Pittsburgh
Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DPWNFST
 Original Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013S
 Matrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.000053	B	0.0052		0.005	102.7	1	1	CVAA	11/20/00	14:33	11/20/00	14:35

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

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DPWNFDT
 Original Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013SD
 Matrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.000053	B	0.0052		0.005	102.3	1	1	CVAA	11/20/00	14:33	11/20/00	14:36

Comments: _____

- 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

674 1663

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DPWNFDTMatrix Spike Sample ID: DPWNFST Client ID: DF/24-A/0319/CVS/013SDMatrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.696	5.2		5.3		2.9 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Barium	493.409	46.8		47.3		1.1 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Cadmium	228.802	0.98		0.99		0.3 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Chromium	267.716	4.8		4.8		0.4 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Lead	220.353	4.8		4.8		0.8 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Selenium	196.026	1.1		1.1		1.9 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18
Silver	328.068	0.19	B N	0.14	B N *	29.1 %	1	1	ICP	11/20/00	17:15	11/20/00	17:18

Comments: _____

Version 4 10.2

U Result is less than the MDL

Form 6 Equivalent

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DPWNFDTMatrix Spike Sample ID: DPWNFST Client ID: DF/24-A/0319/CVS/013SDMatrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.0052		0.0052		0.4 %	1	1	CVAA	11/20/00	14:35	11/20/00	14:36

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 6 Equivalent

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

674 1665

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DP6J2CTMatrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115Weight: 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	108.5		80-120	1	ICP	11/20/00	16:50
Barium	493.409	2.0	1.9	92.8	B	80-120	1	ICP	11/20/00	16:50
Cadmium	228.802	0.050	0.046	91.8	B	80-120	1	ICP	11/20/00	16:50
Chromium	267.716	0.20	0.19	94.5	B	80-120	1	ICP	11/20/00	16:50
Lead	220.353	0.50	0.49	97.0	B	80-120	1	ICP	11/20/00	16:50
Selenium	196.026	2.0	2.2	107.7		80-120	1	ICP	11/20/00	16:50
Silver	328.068	0.050	0.049	98.6	B	80-120	1	ICP	11/20/00	16:50

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

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DP6QKCTMatrix: Water Units: mg/L Prep Date: 11/20/00 Prep Batch: 0325135Weight: 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	0.0024	94.0		80-120	1	CVAA	11/20/00	14:27

Comments: _____

674 1667

STL-Pittsburgh

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DPWNFPTOriginal Sample ID: DPWNFT Client ID: DF/24-A/0319/CVS/013Matrix: Water Units: mg/L Prep Date: 11/19/00 Prep Batch: 0324115Weight: NA Volume: 50 Percent Moisture: NA

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	193.696	0.18	B	0.25	B		1	5	ICP	11/20/00	17:03	11/20/00	17:06
Barium	493.409	0.37	B	0.37	B	0.6 %	1	5	ICP	11/20/00	17:03	11/20/00	17:06
Cadmium	228.802	0.0028	U	0.014	U		1	5	ICP	11/20/00	17:03	11/20/00	17:06
Chromium	267.716	0.0038	U	0.019	U		1	5	ICP	11/20/00	17:03	11/20/00	17:06
Lead	220.353	0.025	U	0.12	U		1	5	ICP	11/20/00	17:03	11/20/00	17:06
Selenium	196.026	0.067	U	0.34	U		1	5	ICP	11/20/00	17:03	11/20/00	17:06
Silver	328.068	0.0031	UN	0.016	U		1	5	ICP	11/20/00	17:03	11/20/00	17:06

Comments: _____

Version 4.10 2

U Result is less than the MDL

B Result is between MDL and RL

E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-Pittsburgh

674 1668

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

674 1669

STL-Pittsburgh

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

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP Date of IEC's: 9/20/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(0.007861), 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(-0.003038), Sn(-0.000176), 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)

674.1671

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	10/15/00

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	193.70	100000	10/6/00
Barium	493.41	100000	10/6/00
Cadmium	228.80	100000	10/6/00
Chromium	267.72	100000	10/6/00
Lead	220.35	100000	10/6/00
Selenium	196.03	100000	10/6/00
Silver	328.07	2000	10/6/00

674 1673

STL-Pittsburgh
Metals Data Reporting Form

Preparation Log

Preparation Batch: 0324115 Instrument: ICP Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DP6A2BT	11/19/00	NA	50	NA
DP6J2BT	11/19/00	NA	50	NA
DP6J2CT	11/19/00	NA	50	NA
DPWNFDT	11/19/00	NA	50	NA
DPWNFST	11/19/00	NA	50	NA
DPWNFT	11/19/00	NA	50	NA

STL-Pittsburgh

Metals Data Reporting Form

674 1674

Preparation Log

Preparation Batch: 0325135 Instrument: CVAA Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DP6A2BT	11/20/00	NA	100	NA
DP6QKBT	11/20/00	NA	100	NA
DP6QKCT	11/20/00	NA	100	NA
DPWNFDT	11/20/00	NA	100	NA
DPWNFST	11/20/00	NA	100	NA
DPWNFT	11/20/00	NA	100	NA

674 1675

STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 1120HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		11/20/00	14:05
Std2Rep1		11/20/00	14:07
Std3Rep1		11/20/00	14:09
Std4Rep1		11/20/00	14:11
Std5Rep1		11/20/00	14:12
Std6Rep1		11/20/00	14:14
ICV5-1		11/20/00	14:17
ICB1		11/20/00	14:19
CCV5-1		11/20/00	14:20
CCB1		11/20/00	14:22
DP6A2BT		11/20/00	14:23
DP6QKBT		11/20/00	14:25
DP6QKCT		11/20/00	14:27
ZZZZZZ		11/20/00	14:28
ZZZZZZ		11/20/00	14:31
DPWNFT	DF/24-A/0319/CVS/013	11/20/00	14:33
DPWNFST	DF/24-A/0319/CVS/013S	11/20/00	14:35
DPWNFDT	DF/24-A/0319/CVS/013SD	11/20/00	14:36
ZZZZZZ		11/20/00	14:38
ZZZZZZ		11/20/00	14:40
CCV5-2		11/20/00	14:42
CCB2		11/20/00	14:43
ZZZZZZ		11/20/00	14:45
ZZZZZZ		11/20/00	14:47
ZZZZZZ		11/20/00	14:49
ZZZZZZ		11/20/00	14:51
ZZZZZZ		11/20/00	14:53
ZZZZZZ		11/20/00	14:54
ZZZZZZ		11/20/00	14:55
ZZZZZZ		11/20/00	14:57
ZZZZZZ		11/20/00	14:59
ZZZZZZ		11/20/00	15:00
ZZZZZZ		11/20/00	15:02
ZZZZZZ		11/20/00	15:03
ZZZZZZ		11/20/00	15:05
ZZZZZZ		11/20/00	15:07
ZZZZZZ		11/20/00	15:08
ZZZZZZ		11/20/00	15:10
ZZZZZZ		11/20/00	15:11

STL-Pittsburgh

Metals Data Reporting Form

674 1676

Instrument Runlog

Instrument: CVAA

Chart Number: 1120HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		11/20/00	15:13
ZZZZZZ		11/20/00	15:15
ZZZZZZ		11/20/00	15:17
ZZZZZZ		11/20/00	15:19
ZZZZZZ		11/20/00	15:20
ZZZZZZ		11/20/00	15:22
ZZZZZZ		11/20/00	15:23
ZZZZZZ		11/20/00	15:25
ZZZZZZ		11/20/00	15:26
ZZZZZZ		11/20/00	15:28
ZZZZZZ		11/20/00	15:30
ZZZZZZ		11/20/00	15:31
ZZZZZZ		11/20/00	15:33
ZZZZZZ		11/20/00	15:35
ZZZZZZ		11/20/00	15:36
ZZZZZZ		11/20/00	15:39
ZZZZZZ		11/20/00	15:40
ZZZZZZ		11/20/00	15:42
ZZZZZZ		11/20/00	15:44
ZZZZZZ		11/20/00	15:45
ZZZZZZ		11/20/00	15:47
ZZZZZZ		11/20/00	15:48
ZZZZZZ		11/20/00	15:50
ZZZZZZ		11/20/00	15:51
ZZZZZZ		11/20/00	15:53
ZZZZZZ		11/20/00	15:54
ZZZZZZ		11/20/00	15:56
ZZZZZZ		11/20/00	15:58
ZZZZZZ		11/20/00	16:00
ZZZZZZ		11/20/00	16:02
ZZZZZZ		11/20/00	16:03
ZZZZZZ		11/20/00	16:05
ZZZZZZ		11/20/00	16:06
ZZZZZZ		11/20/00	16:09
ZZZZZZ		11/20/00	16:10

674 1677

STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J01120B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		11/20/00	14:48
ZZZZZZ		11/20/00	15:54
ZZZZZZ		11/20/00	15:57
ZZZZZZ		11/20/00	16:00
ZZZZZZ		11/20/00	16:03
ZZZZZZ		11/20/00	16:08
ZZZZZZ		11/20/00	16:11
ZZZZZZ		11/20/00	16:14
ZZZZZZ		11/20/00	16:18
STD1		11/20/00	16:22
STD5A		11/20/00	16:25
STD5B		11/20/00	16:28
ICV2-1		11/20/00	16:32
ICB1		11/20/00	16:35
ICSA		11/20/00	16:38
ICSAB		11/20/00	16:41
DP6A2BT		11/20/00	16:44
DP6J2BT		11/20/00	16:47
DP6J2CT		11/20/00	16:50
ZZZZZZ		11/20/00	16:53
ZZZZZZ		11/20/00	16:57
ZZZZZZ		11/20/00	17:00
DPWNFT	DF/24-A/0319/CVS/013	11/20/00	17:03
DPWNEPT	DF/24-A/0319/CVS/013	11/20/00	17:06
CCV2-1		11/20/00	17:09
CCB1		11/20/00	17:12
DPWNFST	DF/24-A/0319/CVS/013S	11/20/00	17:15
DPWNFDT	DF/24-A/0319/CVS/013SD	11/20/00	17:18
ZZZZZZ		11/20/00	17:22
ZZZZZZ		11/20/00	17:25
ZZZZZZ		11/20/00	17:28
ZZZZZZ		11/20/00	17:31
ZZZZZZ		11/20/00	17:34
ZZZZZZ		11/20/00	17:37
ZZZZZZ		11/20/00	17:40
ZZZZZZ		11/20/00	17:44
CCV2-2		11/20/00	17:47
CCB2		11/20/00	17:50
ZZZZZZ		11/20/00	17:53

STL-Pittsburgh

Metals Data Reporting Form

674 1678

Instrument Runlog

Instrument: ICP

Chart Number: J01120B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
<i>ZZZZZZ</i>		11/20/00	17:56
<i>ZZZZZZ</i>		11/20/00	17:59
<i>ZZZZZZ</i>		11/20/00	18:02
<i>ZZZZZZ</i>		11/20/00	18:05

674 1679

TCLP
METALS
RAW DATA

#	Sample Name	AG	AS	BA	CD	CR	PB
1	STD1	-.0008	.0009	.00029	.0001	.00079	-.00004
2	STD5A	.27179	.5033	4.08084	.88784	3.8048	.24805
3	STD5B						
4	ICV2-1 0057-120-2	.51837	.99293	1.0103	1.0117	1.0221	1.0534
5	ICB1	.00179	-.04147	-.00024	.00181	-.00052	.00195
6	ICSA 0057-146-2	-.00100	.12045	.00141	-.00630	-.00105	.04078
7	ICSAB 0057-130-11	.96943	1.0729	.47329	.94385	.44908	.98575
8	DP6A2BT	.00180	.13210	.00124	-.00140	.00170	.00392
9	DP6J2BT	.00215	-.03640	-.00054	.00142	.00052	.00004
10	DP6J2CT	.04931	2.1692	1.8567	.04589	.18894	.48486
11	DPWPWT	-.00356	.20188	.19642	-.00309	-.00407	6.9773
12	DPWPOT	.00115	.18423	.17988	.02782	.00078	54.088
13	DP0DOT	-.00177	.18283	.28676	L-.00648	-.00381	.02181
14	DPWNFT	.00135	.17647	.37210	-.00165	.00065	.01137
15	DPWNFTP5	.00172	.05047	.07484	-.00135	.00000	.00586
16	CCV2-1 0057-146-1	.96080	4.9442	4.7055	4.8260	4.7380	4.7846
17	CCB1	.00109	-.02325	.00002	.00056	.00144	.00197
18	DPWNFST	.19061	5.1951	46.778	.98212	4.7523	4.8030
19	DPWNFDT	.14212	5.3405	47.271	.98486	4.7734	4.7638
20	DP21TT	-.00106	.18778	.19498	-.00418	-.00302	.02164
21	DPLF2T	.00028	.19534	.03651	-.00386	.00157	.00362
22	DPT5FT	-.00015	.23633	.35558	.00186	.00053	.06267
23	DP6AWBT	.00144	.23830	.00191	L-.00522	-.00039	-.00390
24	DP6K0BT	.00072	.02422	-.00054	-.00122	-.00105	.00190
25	DP6K0CT	.05010	2.1424	1.9690	.04145	.19695	.50491
26	DPWPKT	-.00319	.13527	.28161	L-.00635	-.00276	.08643
27	DP0EDT	-.00356	.10384	.25287	-.00354	.00104	.07465
28	CCV2-2	.96241	4.8775	4.7099	4.8390	4.7691	4.8110
29	CCB2	.00217	-.03639	-.00034	-.00223	.00000	.01574
30	DP0EDTP5	.00251	.02626	-.00034	-.00227	-.00065	.00198
31	DP0EDST	.16841	4.7567	44.847	.89664	4.2418	4.4778
32	DP0EDDT	.17380	4.8870	44.859	.89892	4.2522	4.5033
33	CCV2-3	.96719	4.8557	4.7377	4.8656	4.7890	4.8210
34	CCB3	.00251	-.01307	.00031	-.00023	-.00065	.00192

Cd R.L = 0.1 mg/L 9 11-20-00

#	Sample Name	SE
1	STD1	.00075
2	STD5A	.48074
3	STD5B	
4	ICV2-1 0057-120-2	.98252
5	ICB1	-.02809
6	ICSA 0057-146-2	-.10002
7	ICSAB 0057-130-11	.85744
8	DP6A2BT	.00632
9	DP6J2BT	-.03956
10	DP6J2CT	2.1541
11	DPWPWT	.00416
12	DPWPOT	-.05218
13	DP0DOT	-.01458
14	DPWNFT	.02091
15	DPWNFTP5	.01668

#	Sample Name	SE
16	CCV2-1 0057-146-1	4.7647
17	CCB1	-.02705
18	DPWNFST	1.0678
19	DPWNFDT	1.0886
20	DP21TT	-.03854
21	DPLF2T	.01975
22	DPT5FT	.00454
23	DP6AWBT	-.03540
24	DP6K0BT	-.01353
25	DP6K0CT	2.1500
26	DPWPKT	-.02500
27	DPOEDT	-.01039
28	CCV2-2	4.7822
29	CCB2	-.01978
30	DPOEDTP5	-.02082
31	DPOEDST	1.0542
32	DPOEDDT	.97190
33	CCV2-3	4.8546
34	CCB3	-.02499

8 11-20-00

674 1682

11/20/00 05:26:31 PM

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J01120B	QUANMET	11/20/00	16:22		X	IR
2	STD5A	J01120B	QUANMET	11/20/00	16:25		X	IR
3	STD5B	J01120B	QUANMET	11/20/00	16:28		X	IR
4	ICV2-1 0057-120-2	J01120B	QUANMET	11/20/00	16:32	LEJ	S	CONC
5	ICB1	J01120B	QUANMET	11/20/00	16:35	LEJ	S	CONC
6	ICSA 0057-146-2	J01120B	QUANMET	11/20/00	16:38	LEJ	Q	CONC
7	ICSAB 0057-130-11	J01120B	QUANMET	11/20/00	16:41	LEJ	Q	CONC
8	DP6A2BT	J01120B	QUANMET	11/20/00	16:44	LEJ	S	CONC
9	DP6J2BT	J01120B	QUANMET	11/20/00	16:47	LEJ	S	CONC
10	DP6J2CT	J01120B	QUANMET	11/20/00	16:50	LEJ	S	CONC
11	DPWPWT	J01120B	QUANMET	11/20/00	16:53	LEJ	S	CONC
12	DPWP0T	J01120B	QUANMET	11/20/00	16:57	LEJ	S	CONC
13	DP0D0T	J01120B	QUANMET	11/20/00	17:00	LEJ	S	CONC
14	DPWNFT	J01120B	QUANMET	11/20/00	17:03	LEJ	S	CONC
15	DPWNFTP5	J01120B	QUANMET	11/20/00	17:06	LEJ	S	CONC
16	CCV2-1 0057-146-1	J01120B	QUANMET	11/20/00	17:09	LEJ	S	CONC
17	CCB1	J01120B	QUANMET	11/20/00	17:12	LEJ	S	CONC
18	DPWNFST	J01120B	QUANMET	11/20/00	17:15	LEJ	S	CONC
19	DPWNFDT	J01120B	QUANMET	11/20/00	17:18	LEJ	S	CONC
20	DP21TT	J01120B	QUANMET	11/20/00	17:22	LEJ	S	CONC
21	DPLF2T	J01120B	QUANMET	11/20/00	17:25	LEJ	S	CONC
22	DPT5FT	J01120B	QUANMET	11/20/00	17:28	LEJ	S	CONC
23	DP6AWBT	J01120B	QUANMET	11/20/00	17:31	LEJ	S	CONC
24	DP6K0BT	J01120B	QUANMET	11/20/00	17:34	LEJ	S	CONC
25	DP6K0CT	J01120B	QUANMET	11/20/00	17:37	LEJ	S	CONC
26	DPWPKT	J01120B	QUANMET	11/20/00	17:40	LEJ	S	CONC
27	DP0EDT	J01120B	QUANMET	11/20/00	17:44	LEJ	S	CONC
28	CCV2-2	J01120B	QUANMET	11/20/00	17:47	LEJ	S	CONC
29	CCB2	J01120B	QUANMET	11/20/00	17:50	LEJ	S	CONC
30	DP0EDTP5	J01120B	QUANMET	11/20/00	17:53	LEJ	S	CONC
31	DP0EDST	J01120B	QUANMET	11/20/00	17:56	LEJ	S	CONC
32	DP0EDDT	J01120B	QUANMET	11/20/00	17:59	LEJ	S	CONC
33	CCV2-3	J01120B	QUANMET	11/20/00	18:02	LEJ	S	CONC
34	CCB3	J01120B	QUANMET	11/20/00	18:05	LEJ	S	CONC

674 1683

Standardization Rpt.

11/20/00 04:25:39 PM

page 1

Method: QUANMET Standard: STD1
Run Time: 11/20/00 16:22:34

Elem	AG	AL	AS	B ₁	BA	BE	CA
Avge	-.00080	.00935	.00090	.00040	.00029	.00300	.00049
SDev	.00028	.00114	.00099	.00014	.00008	.00000	.00013
%RSD	35.355	12.147	109.62	35.538	28.259	.00000	25.273
#1	-.00080	.00820	.00100	.00032	.00028	.00300	.00049
#2	-.00100	.01000	.00200	.00060	.00028	.00300	.00034
#3	-.00100	.00860	.00100	.00040	.00040	.00300	.00049
#4	-.00040	.01060	-.00040	.00028	.00020	.00300	.00065
Elem	CD	CO	CR	CU	FE	K ₁	LI
Avge	.00010	.00000	.00080	.00050	.00155	-.02120	-.00034
SDev	.00008	.00016	.00065	.00012	.00044	.00429	.00026
%RSD	76.594	.00000	81.650	23.094	28.611	20.234	76.900
#1	.00000	.00000	.00080	.00040	.00180	-.02740	-.00033
#2	.00008	.00000	.00080	.00060	.00100	-.01900	-.00040
#3	.00016	.00020	.00000	.00040	.00140	-.01780	-.00064
#4	.00016	-.00020	.00160	.00060	.00200	-.02060	.00000
Elem	MG	MN	MO	NA	NI	PB	SB
Avge	-.00000	.00020	.00000	.07005	.00018	-.00005	.00000
SDev	.00082	.00000	.00000	.00143	.00035	.00034	.00016
%RSD	7481e6	.00000	.00000	2.0373	200.00	683.13	.00000
#1	-.00120	.00020	.00000	.06920	.00000	-.00040	.00000
#2	.00040	.00020	.00000	.06880	.00000	.00000	-.00020
#3	.00020	.00020	.00000	.07020	.00071	-.00020	.00020
#4	.00060	.00020	.00000	.07200	.00000	.00040	.00000
Elem	SE	SI	SN	SR	TI	TL	V ₁
Avge	.00075	.00100	-.00045	.00045	.00210	.00090	.00000
SDev	.00298	.00115	.00068	.00010	.00026	.00074	.00000
%RSD	396.95	115.47	151.26	22.222	12.295	82.152	.00000
#1	-.00320	.00000	-.00040	.00060	.00180	.00180	.00000
#2	.00080	.00200	-.00020	.00040	.00220	.00120	.00000
#3	.00140	.00000	-.00140	.00040	.00200	.00020	.00000
#4	.00400	.00200	.00020	.00040	.00240	.00040	.00000
Elem	ZN						
Avge	.00034						
SDev	.00021						
%RSD	62.051						
#1	.00012						
#2	.00052						
#3	.00052						
#4	.00020						

Standardization Rpt.

11/20/00 04:28:48 PM

Method: QUANMET Standard: STD5A
Run Time: 11/20/00 16:25:43

0657-144-7 g11-20-d

Elem	AG	AS	B ₁	BA	BE	CD	CO
Avge	.27180	.50330	.56965	4.0808	15.709	.88784	1.4451
SDev	.00082	.00955	.00156	.0227	.055	.00650	.0032
%RSD	.30040	1.8970	.27402	.55593	.34840	.73197	.21955
#1	.27100	.50060	.56820	4.0820	15.673	.88126	1.4420
#2	.27120	.51480	.57100	4.1122	15.786	.88354	1.4428
#3	.27240	.49200	.56840	4.0607	15.668	.89162	1.4472
#4	.27260	.50580	.57100	4.0684	15.710	.89495	1.4484
Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.8048	2.1662	3.6708	2.0062	.38540	1.7594	.24805
SDev	.0171	.0140	.0456	.0072	.00205	.0063	.00191
%RSD	.44822	.64696	1.2415	.35699	.53091	.35955	.76880
#1	3.7898	2.1662	3.6842	1.9994	.38560	1.7566	.24640
#2	3.7910	2.1860	3.7295	2.0008	.38280	1.7518	.24640
#3	3.8146	2.1548	3.6349	2.0104	.38540	1.7636	.24980
#4	3.8238	2.1580	3.6345	2.0140	.38780	1.7654	.24960
Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.17895	.48075	.34925	.92670	8.0478	6.1224	.31910
SDev	.00030	.00507	.00620	.01009	.0408	.0150	.00248
%RSD	.16764	1.0548	1.7764	1.0883	.50635	.24470	.77695
#1	.17880	.47360	.34100	.93140	8.0478	6.1114	.31700
#2	.17860	.48280	.34800	.91500	8.1047	6.1420	.31960
#3	.17920	.48120	.35340	.93800	8.0114	6.1100	.32240
#4	.17920	.48540	.35460	.92240	8.0272	6.1262	.31740
Elem	V ₁	ZN					
Avge	1.6107	1.4442					
SDev	.0028	.0056					
%RSD	.17246	.38557					
#1	1.6076	1.4400					
#2	1.6094	1.4387					
#3	1.6122	1.4495					
#4	1.6138	1.4484					

Standardization Rpt. **674 1685**

11/20/00 04:31:58 PM

Method: QUANMET Standard: STD5B
 Run Time: 11/20/00 16:28:52

0057-144-8

Elem	AL	CA	FE	K	MG	NA
Avge	10.976	27.392	30.049	2.0575	7.2494	46.061
SDev	.027	.152	.087	.0078	.0216	.153
%RSD	.24920	.55587	.29038	.37968	.29754	.33201
#1	10.955	27.276	29.973	2.0584	7.2354	46.036
#2	11.007	27.607	30.174	2.0622	7.2798	46.026
#3	10.950	27.390	30.016	2.0462	7.2328	45.908
#4	10.990	27.294	30.032	2.0632	7.2496	46.273

Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.18150	.005745	11/20/00 04:28:52
AL	308.215	STD5B	STD1	9.11893	-.085262	11/20/00 04:28:52
AS	193.696	STD5A	STD1	20.2070	-.018186	11/20/00 04:28:52
B	249.600	STD5A	STD1	17.5965	-.007039	11/20/00 04:28:52
BA	493.409	STD5A	STD1	2.45065	-.000714	11/20/00 04:28:52
BE	313.042	STD5A	STD1	.638068	-.001914	11/20/00 04:28:52
CA	317.933	STD5B	STD1	3.65081	-.001804	11/20/00 04:28:52
CD	228.802	STD5A	STD1	11.4339	-.001177	11/20/00 04:28:52
CO	228.616	STD5A	STD1	6.95457	.000000	11/20/00 04:28:52
CR	267.716	STD5A	STD1	2.62971	-.002104	11/20/00 04:28:52
CU	324.754	STD5A	STD1	4.61284	-.002306	11/20/00 04:28:52
FE	259.940	STD5B	STD1	3.32811	-.005159	11/20/00 04:28:52
K	766.491	STD5B	STD1	48.1070	1.01987	11/20/00 04:28:52
LI	670.789	STD5A	STD1	2.72397	.000929	11/20/00 04:28:52
MG	279.079	STD5B	STD1	13.7942	.000000	11/20/00 04:28:52
MN	257.610	STD5A	STD1	4.98351	-.000997	11/20/00 04:28:52
MO	202.030	STD5A	STD1	25.9471	.000000	11/20/00 04:28:52
NA	588.995	STD5B	STD1	2.17435	-.152313	11/20/00 04:28:52
NI	231.604	STD5A	STD1	5.68148	-.001003	11/20/00 04:28:52
PB	220.353	STD5A	STD1	39.1645	.001958	11/20/00 04:28:52
SB	206.838	STD5A	STD1	55.9103	.000000	11/20/00 04:28:52
SE	196.026	STD5A	STD1	20.8333	-.015625	11/20/00 04:28:52
SI	288.158	STD5A	STD1	28.3795	-.028380	11/20/00 04:28:52
SN	189.989	STD5A	STD1	10.7766	.004849	11/20/00 04:28:52
SR	409.552	STD5A	STD1	1.24265	-.000559	11/20/00 04:28:52
TI	334.941	STD5A	STD1	1.63391	-.003431	11/20/00 04:28:52
TL	190.864	STD5A	STD1	63.0875	-.056779	11/20/00 04:28:52
V	292.402	STD5A	STD1	6.11212	.000000	11/20/00 04:28:52
ZN	213.856	STD5A	STD1	6.94549	-.002349	11/20/00 04:28:52

Analysis Report

674 1687

11/20/00 04:35:07 PM

page 1

Method: QUANMET Sample Name: ICV2-1 0057-120-2
 Run Time: 11/20/00 16:32:01
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
 Mode: CONC Corr. Factor: 1

Operator: LEJ
W J Jandke 11-20-00

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm						
Avge	.51838	25.389	.99293	1.0292	1.0103	.98999	25.467
SDev	.00085	.147	.03609	.0157	.0104	.00554	.046
%RSD	.16389	.57817	3.6348	1.5243	1.0253	.55937	.17916
#1	.51760	25.171	1.0424	1.0206	.99627	.98184	25.466
#2	.51912	25.487	.99510	1.0225	1.0213	.99318	25.404
#3	.51910	25.439	.95916	1.0527	1.0122	.99370	25.490
#4	.51768	25.461	.97510	1.0210	1.0115	.99126	25.509
Errors	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						
Avge	1.0117	1.0239	1.0221	1.0050	26.139	24.797	1.0114
SDev	.0080	.0026	.0012	.0082	.103	.253	.0117
%RSD	.79570	.25599	.11876	.81689	.39506	1.0214	1.1548
#1	1.0112	1.0257	1.0231	.99341	25.985	25.131	.99588
#2	1.0030	1.0201	1.0231	1.0128	26.202	24.515	1.0240
#3	1.0102	1.0242	1.0210	1.0063	26.196	24.765	1.0147
#4	1.0225	1.0256	1.0210	1.0073	26.172	24.775	1.0112
Errors	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						
Avge	25.321	1.0216	.99845	25.081	1.0092	1.0534	1.0031
SDev	.098	.0030	.00779	.232	.0108	.0163	.0813
%RSD	.38750	.29542	.77997	.92475	1.0722	1.5499	8.1077
#1	25.174	1.0171	.99454	24.754	1.0180	1.0577	1.0842
#2	25.365	1.0231	.98938	25.301	1.0101	1.0494	1.0618
#3	25.379	1.0231	1.0049	25.153	1.0151	1.0728	.92767
#4	25.368	1.0231	1.0049	25.114	.99375	1.0337	.93876
Errors	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						
Avge	.98252	1.0236	1.0179	1.0017	.99864	4.9523	1.0191
SDev	.04098	.0276	.0411	.0088	.00513	.0923	.0039
%RSD	4.1705	2.6964	4.0336	.87803	.51358	1.8633	.38077
#1	.98831	.98243	1.0581	.98963	.99096	4.8878	1.0142
#2	.98063	1.0336	1.0408	1.0108	1.0014	5.0494	1.0215

Analysis Report

11/20/00 04:35:07 PM

#3	.93062	1.0392	1.0079	1.0030	1.0008	5.0116	1.0180
#4	1.0305	1.0393	.96484	1.0033	1.0014	4.8604	1.0229
Errors	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	1.0173						
SDev	.0021						
%RSD	.21001						
#1	1.0183						
#2	1.0144						
#3	1.0194						
#4	1.0172						
Errors	LC Pass						
High	1.1000						
Low	.90000						

Method: QUANMET Sample Name: ICB1

Run Time: 11/20/00 16:35:09

Operator: LEJ

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm						
Avge	.00180	.00451	-.04147	.00525	-.00025	-.00006	.01388
SDev	.00137	.00754	.02168	.00647	.00040	.00007	.00290
%RSD	76.458	167.34	52.281	123.34	164.25	115.47	20.888
#1	.00288	.01317	-.01426	.00354	-.00022	.00000	.01447
#2	.00288	.00409	-.03440	.01450	.00027	-.00013	.01619
#3	.00144	.00593	-.05462	.00354	-.00071	-.00013	.00966
#4	.00000	-.00516	-.06262	-.00059	-.00031	.00000	.01520
Errors	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						
Avge	.00181	-.00001	-.00052	-.00115	.01048	-.25737	-.00130
SDev	.00284	.00227	.00265	.00046	.00127	.02873	.00082
%RSD	157.04	42062.	504.20	40.043	12.147	11.163	62.902
#1	H.00584	-.00002	.00210	-.00046	.01082	-.28864	-.00016
#2	.00016	.00278	.00000	-.00138	.00949	-.22129	-.00125
#3	.00172	-.00001	-.00000	-.00138	.00949	-.25016	-.00189
#4	-.00049	-.00278	-.00421	-.00139	.01215	-.26940	-.00189
Errors	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						
Avge	.00759	.00000	.00519	.01653	-.00100	.00195	-.00001
SDev	.00726	.00000	.00424	.00280	.00000	.00639	.00006
%RSD	95.635	38.822	81.631	16.970	.00000	327.49	738.63
#1	.01104	.00000	.00519	.01381	-.00100	.00978	-.00010
#2	-.00276	.00000	.00519	.01468	-.00100	.00203	.00003
#3	.00828	.00000	.00000	.01772	-.00100	-.00588	.00004
#4	.01379	.00001	.01038	.01990	-.00100	.00188	-.00000
Errors	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	-.02809	.02554	-.00916	-.00006	.00025	-.01905	.00007
SDev	.01701	.00328	.01842	.00041	.00031	.06267	.00005
%RSD	60.544	12.830	201.06	653.20	127.66	329.03	77.540
#1	-.04059	.02270	.01778	-.00006	.00016	.05665	.00007
#2	-.00310	.02270	-.02101	-.00056	.00049	-.08215	.00007

Analysis Report

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#3	-.03643	.02838	-.02101	-.00006	.00049	.00620	.00000
#4	-.03225	.02838	-.01239	.00043	-.00016	-.05689	.00013
Errors	LC Pass						
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00056						
SDev	.00080						
%RSD	143.26						
#1	.00125						
#2	-.00013						
#3	.00125						
#4	-.00013						
Errors	LC Pass						
High	.02000						
Low	-.02000						

Analysis Report

674 1691

QC Standard

11/20/00 04:41:23 PM

page 1

Method: QUANMET Sample Name: ICSA 0057-146-2
Run Time: 11/20/00 16:38:18
Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
Mode: CONC Corr. Factor: 1

Operator: LEJ

Elem Units	AG ppm	AL ppm	AS ppm	B ppm	BA ppm	BE ppm	CA ppm
Avge	-.00101	496.44	.12045	-.04505	.00142	-.00023	481.56
SDev	.00115	2.21	.14581	.00066	.00038	.00007	.59
%RSD	114.00	.44507	121.05	1.4742	27.090	29.533	.12210
#1	-.00113	493.66	-.01680	-.04593	.00174	-.00026	480.94
#2	.00046	497.65	.08456	-.04475	.00125	-.00013	481.62
#3	-.00101	495.78	.08731	-.04514	.00096	-.00027	482.34
#4	-.00235	498.68	.32674	-.04438	.00174	-.00027	481.35
Errors Value Range	NOCHECK	QC Pass 500.00 20.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass 500.00 20.000

Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K ppm	LI ppm
Avge	-.00631	.01083	-.00105	-.00152	185.51	-.53639	.00006
SDev	.00317	.00175	.00210	.00075	.35	.15037	.00073
%RSD	50.228	16.121	199.79	49.204	.18952	28.033	1138.7
#1	-.00324	.01117	.00210	-.00157	185.05	-.50993	-.00080
#2	-.00395	.01117	-.00210	-.00058	185.67	-.53880	-.00016
#3	-.00856	.01258	-.00211	-.00152	185.47	-.36561	.00093
#4	-.00949	.00841	-.00211	-.00240	185.87	-.73123	.00029
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass 200.00 20.000	NOCHECK	NOCHECK

Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	490.97	.00985	-.00067	.00500	-.01725	.04078	-.00270
SDev	1.53	.00056	.00259	.00291	.00658	.03956	.00553
%RSD	.31209	5.6522	385.84	58.278	38.143	97.000	205.15
#1	488.99	.00901	-.00203	.00467	-.01498	.07420	-.01099
#2	491.39	.01012	-.00195	.00902	-.02219	-.01493	.00011
#3	490.82	.01009	.00321	.00424	-.02286	.04132	-.00009
#4	492.68	.01016	-.00192	.00207	-.00896	.06255	.00018
Errors Value Range	QC Pass 500.00 20.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK

Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V ppm
Avge	-.10003	.07665	-.07136	.01345	-.02181	.13748	.00243
SDev	.09100	.02840	.03944	.00035	.00062	.24199	.00284
%RSD	90.970	37.048	55.276	2.6139	2.8359	176.01	116.72
#1	.03397	.06243	-.10919	.01295	-.02140	-.04960	-.00002
#2	-.16830	.06243	-.09180	.01369	-.02173	-.00626	-.00003

#3	-.12725	.11925	-.01855	.01345	-.02140	.12221	.00493
#4	-.13853	.06249	-.06589	.01369	-.02271	.48357	.00486
Errors Value Range	NOCHECK						

Elem ZN
Units ppm
Avge -.00202
SDev .00154
%RSD 76.350

#1 -.00279
#2 -.00210
#3 -.00336
#4 .00016

Errors Value Range
NOCHECK

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Analysis Report

QC Standard

11/20/00 04:44:31 PM

Method: QUANMET

Sample Name: ICSAB 0057-130-11

Operator: LEJ

Run Time: 11/20/00 16:41:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm						
Avge	.96943	492.42	1.0729	.91548	.47329	.46184	478.31
SDev	.00258	2.13	.1010	.02965	.00341	.00129	1.97
%RSD	.26598	.43249	9.4180	3.2381	.72107	.27902	.41228
#1	.96570	490.76	1.1724	.87188	.47062	.46057	476.75
#2	.97015	491.19	1.1078	.93821	.47131	.46146	479.60
#3	.97163	495.47	1.0780	.92654	.47817	.46363	476.50
#4	.97024	492.26	.93333	.92530	.47307	.46171	480.39
Errors	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						
Avge	.94385	.46430	.44908	.48359	184.20	10.013	1.0067
SDev	.00675	.00653	.00438	.00404	.39	.288	.0091
%RSD	.71550	1.4062	.97498	.83437	.21412	2.8744	.90381
#1	.93682	.46294	.44382	.48121	183.64	9.8042	1.0042
#2	.94030	.47127	.45013	.48129	184.24	10.102	1.0012
#3	.94606	.45594	.44804	.48960	184.40	9.7657	1.0201
#4	.95222	.46706	.45434	.48224	184.53	10.381	1.0012
Errors	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						
Avge	485.79	.46658	.90212	10.033	.87514	.98576	1.0067
SDev	1.34	.00150	.01664	.083	.01672	.02859	.0754
%RSD	.27634	.32244	1.8444	.82953	1.9109	2.9004	7.4853
#1	484.35	.46444	.89037	10.004	.86735	.94400	1.0516
#2	485.17	.46760	.89563	9.9736	.87702	.99057	.89481
#3	487.47	.46659	.92679	10.156	.85865	1.0029	1.0288
#4	486.14	.46767	.89567	9.9984	.89756	1.0055	1.0515
Errors	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						
Avge	.85744	1.0655	.87953	.94312	.89489	9.5869	.46859
SDev	.09294	.0028	.05591	.00502	.00279	.1681	.00180
%RSD	10.839	.26716	6.3562	.53172	.31128	1.7536	.38366
#1	.85885	1.0612	.94005	.94005	.89162	9.6281	.46751
#2	Q.77318	1.0669	Q.79719	.94005	.89391	9.7221	.46750
			.91518				

Analysis Report

QC Standard

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#3	.81118	1.0669	.89204	.95053	.89816	9.3418	.46800
#4	.98655	1.0669	.91372	.94184	.89587	9.6557	.47127
Errors	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	.94491						
SDev	.00347						
%RSD	.36722						
#1	.94361						
#2	.94246						
#3	.94353						
#4	.95006						
Errors	QC Pass						
Value	1.0000						
Range	20.000						

Analysis Report

674 1695

11/20/00 04:47:39 PM

Method: QUANMET Sample Name: DP6A2BT
Run Time: 11/20/00 16:44:34

Operator: LEJ

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00180	.02825	.13210	.00620	.00125	-.00026	.18970
SDev	.00181	.00702	.05543	.00468	.00023	.00010	.00110
%RSD	100.24	24.843	41.962	75.463	18.878	40.236	.57942
#1	.00001	.02057	.07458	.00356	.00125	-.00026	.18928
#2	.00144	.03330	.17955	.01267	.00125	-.00026	.18911
#3	.00145	.02410	.17961	.00210	.00154	-.00013	.18907
#4	.00431	.03504	.09467	.00646	.00096	-.00038	.19135
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	-.00140	.00105	.00171	.00093	.02363	.12027	-.00104
SDev	.00051	.00237	.00189	.00053	.00166	.41942	.00083
%RSD	36.068	226.91	110.58	57.713	7.0431	348.74	79.822
#1	-.00106	.00000	.00210	.00046	.02413	-.30788	-.00170
#2	-.00184	.00140	-.00000	.00139	.02546	.40410	-.00170
#3	-.00088	.00417	.00421	.00139	.02147	.54842	.00003
#4	-.00183	-.00139	.00053	.00046	.02346	-.16356	-.00080
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	.07587	-.00024	.00260	S-.15231	.00979	.00392	.00006
SDev	.01809	.00050	.00670	.00000	.00930	.00398	.00004
%RSD	23.845	206.61	257.89	.00000	94.984	101.39	76.173
#1	.06897	-.00099	-.00519	S-.15231	.01831	.00194	.00011
#2	.06069	.00001	.00000	S-.15231	-.00328	.00197	.00002
#3	.10208	.00001	.01038	S-.15231	.01377	.00988	.00005
#4	.07173	.00001	.00519	S-.15231	.01036	.00189	.00003
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	.00632	.07521	.00809	.00125	.00025	-.02867	.00034
SDev	.03542	.02554	.02056	.00012	.00031	.02799	.00069
%RSD	560.20	33.957	254.28	9.8954	127.66	97.615	199.43
1	-.04472	.11352	.03072	.00143	-.00016	-.01921	-.00006
2	.00945	.06243	-.01886	.00122	.00049	-.06970	.00000

Analysis Report

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#3	.03027	.06245	.00701	.00122	.00016	-.00660	.00137
#4	.03028	.06243	.01347	.00114	.00049	-.01918	.00007
Errors	LC Pass						
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00434						
SDev	.00082						
%RSD	18.976						
#1	.00396						
#2	.00345						
#3	.00537						
#4	.00456						
Errors	LC Pass						
High	.02000						
Low	-.02000						

674 1697

Analysis Report

11/20/00 04:50:47 PM

Method: QUANMET Sample Name: DP6J2BT
Run Time: 11/20/00 16:47:42
Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
Mode: CONC Corr. Factor: 1

Operator: LEJ

Table with 8 columns (AG, AL, AS, B_, BA, BE, CA) and 8 rows (#1-#4, Errors High/Low, Elem Units, Avge, SDev, %RSD). Includes a second section with columns (CD, CO, CR, CU, FE, K_, LI) and a third section with columns (MG, MN, MO, NA, NI, PB, SB). Includes a fourth section with columns (SE, SI, SN, SR, TI, TL, V_).

Analysis Report

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#3	-.00727	.03406	.02210					
#4	-.04477	.03406	.00916	-.00027	-.00114	.03142	.00000	
				-.00035	.00049	.00625	.00000	
Errors	LC Pass							
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000	
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000	
Elem	ZN							
Units	ppm							
Avge	.00742							
SDev	.00084							
%RSD	11.260							
#1	.00763							
#2	.00762							
#3	.00623							
#4	.00820							
Errors	LC Pass							
High	.02000							
Low	-.02000							

Method: QUANMET Sample Name: DP6J2CT

Run Time: 11/20/00 16:50:49

Operator: LEJ

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04931	1.9019	2.1692	.95258	1.8567	.04379	L.17264
SDev	.00297	.0189	.0450	.00088	.0192	.00034	.00682
%RSD	6.0268	.99129	2.0756	.09240	1.0336	.78406	3.9502
#1	.04970	1.9023	2.2095	.95280	1.8455	.04400	L.17455
#2	.04534	1.8932	2.1046	.95278	1.8737	.04338	L.16283
#3	.04965	1.8841	2.1815	.95134	1.8354	.04364	L.17455
#4	.05255	1.9279	2.1810	.95341	1.8722	.04414	L.17863
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	.04589	.47333	.18895	.23629	1.0214	L-.07697	.94506
SDev	.00109	.00590	.00564	.00271	.0087	.39988	.01925
%RSD	2.3693	1.2466	2.9836	1.1487	.85049	519.51	2.0368
#1	.04691	.47750	.19328	.23445	1.0299	L.22129	.93009
#2	.04439	.46498	.18066	.23813	1.0099	L-.66388	.96803
#3	.04639	.47334	.19118	.23353	1.0199	L.11546	.92826
#4	.04587	.47750	.19066	.23907	1.0259	L.01924	.95387
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.02759	.47220	-.00246	S862.61	.47626	.48486	L.00648
SDev	.01759	.00478	.00519	1725.5	.01273	.03419	.00008
%RSD	63.770	1.0131	210.76	200.04	2.6729	7.0520	1.2209
#1	L.03035	.47669	.00013	S3450.9	.49355	.51434	L.00659
#2	L.00276	.46572	-.01025	S-.15231	.46327	.45135	L.00647
#3	L.03311	.47170	.00013	S-.15231	.47624	.45942	L.00648
#4	L.04414	.47469	.00013	S-.15231	.47196	.51432	L.00640
Errors	LC Low	LC Pass	NOCHECK	LC High	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	2.1541	.09498	.01637	.92948	.00041	1.8522	.47837
SDev	.0433	.03124	.02078	.00816	.00086	.0801	.00473
%RSD	2.0098	32.888	126.92	.87817	210.40	4.3232	.98795
#1	2.1750	.12485	.03739	.92575	.00049	1.9214	.48453
#2	2.1999	.06798	-.00356	.93520	-.00082	1.7829	.47458

Analysis Report

11/20/00 04:53:54 PM **674 1700** page 2

#3	2.1000	.11906	.00074	.91979	.00114	1.9216	.47474
#4	2.1417	.06804	.03092	.93719	.00082	1.7827	.47963
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	.49085						
SDev	.00814						
%RSD	1.6578						
#1	.49450						
#2	.47869						
#3	.49427						
#4	.49592						
Errors	LC Pass						
High	.60000						
Low	.40000						

Analysis Report

674 1701

11/20/00 04:57:02 PM

Method: QUANMET Sample Name: DPWPWT
Run Time: 11/20/00 16:53:57
Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
Mode: CONC Corr. Factor: 1

Operator: LEJ

Table with 8 columns (AG, AL, AS, B, BA, BE, CA) and 8 rows (Units, Avge, SDev, %RSD, #1-4, Errors High/Low). Includes a second section with columns (CD, CO, CR, CU, FE, K, LI) and a third section with columns (MG, MN, MO, NA, NI, PB, SB). Includes a fourth section with columns (SE, SI, SN, SR, TI, TL, V).

Analysis Report

674 1702

11/20/00 04:57:02 PM

page 2

#3	.02604	1.4247	.02735	.23128	L-.06062	.06938	.00495
#4	-.03645	1.4247	.01226	.22696	L-.05898	.11981	.00494
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	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	.00646						
SDev	.00091						
%RSD	14.102						
#1	.00659						
#2	.00742						
#3	.00662						
#4	.00522						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Analysis Report

674 1703

11/20/00 05:00:09 PM

page 1

Method: QUANMET Sample Name: DPWP0T

Run Time: 11/20/00 16:57:04

Operator: LEJ

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00116	.67842	.18423	.00834	.17988	-.00007	26.101
SDev	.00073	.00871	.01663	.00083	.00038	.00007	.161
%RSD	63.329	1.2836	9.0273	9.9918	.21303	98.585	.61500
#1	.00152	.67152	.17012	.00907	.17986	-.00001	26.210
#2	.00152	.67168	.17012	.00906	.17937	-.00001	26.195
#3	.00006	.68979	.20240	.00762	.18026	-.00013	25.865
#4	.00152	.68070	.19429	.00762	.18006	-.00014	26.134
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	.02782	.00261	.00079	.00949	.31054	.94771	-.00059
SDev	.00097	.00341	.00125	.00139	.00274	.24599	.00108
%RSD	3.4722	130.79	159.04	14.606	.88146	25.956	181.41
#1	.02879	.00260	-.00053	.01065	.31237	1.0487	-.00125
#2	.02746	.00678	.00210	.01065	.30970	1.1642	-.00061
#3	.02840	-.00157	.00158	.00788	.30704	.59653	-.00144
#4	.02664	.00261	-.00000	.00880	.31303	.98138	.00093
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	6.9082	.06262	.00134	S-.15231	.48903	54.088	.16707
SDev	.0339	.00095	.00497	.00000	.00894	.210	.01455
%RSD	.49128	1.5229	371.48	.00000	1.8279	.38749	8.7067
#1	6.8861	.06188	.00523	S-.15231	.48983	54.268	.17270
#2	6.9109	.06287	-.00515	S-.15231	.49197	54.190	.16154
#3	6.8806	.06187	.00523	S-.15231	.47659	53.790	.15010
#4	6.9551	.06387	.00004	S-.15231	.49773	54.104	.18393
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	-.05218	1.1764	-.00412	.03622	.00743	.00950	.00338
SDev	.05293	.0054	.01076	.00000	.00016	.04667	.00302
%RSD	101.43	.46037	260.90	.00000	2.1978	490.98	89.353
#1	.02699	1.1693	-.02027	.03622	.00735	-.02208	.00496
#2	-.08135	1.1750	.00124	.03622	.00735	-.03469	.00483

Analysis Report

674 1704

11/20/00 05:00:09 PM

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#3	-.08136	1.1806	.00119	.03622	.00768	.02853	
#4	-.07301	1.1806	.00133	.03622	.00735	.06625	-.00115
Errors	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	.09676						
SDev	.00174						
%RSD	1.7966						
#1	.09904						
#2	.09487						
#3	.09686						
#4	.09625						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Analysis Report

674 1705

11/20/00 05:03:17 PM

Method: QUANMET Sample Name: DPODOT
Run Time: 11/20/00 17:00:12
Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
Mode: CONC Corr. Factor: 1

Operator: LEJ

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00178	-.00276	.18283	.02572	.28677	-.00026	519.50
SDev	.00072	.01245	.03773	.01165	.00445	.00000	2.95
%RSD	40.231	451.48	20.637	45.300	1.5499	1.5583	.56754
#1	-.00285	-.00694	.20811	.00911	.29103	-.00027	521.74
#2	-.00143	-.01768	.13955	.02774	.28927	-.00026	521.76
#3	-.00141	.01142	.22009	.03623	.28584	-.00027	518.96
#4	-.00142	.00217	.16359	.02981	.28094	-.00027	515.54

Errors	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	L-.00649	.00064	-.00382	.01730	.00005	1.2917	-.00082
SDev	.00265	.00241	.00079	.00046	.00144	.2427	.00124
%RSD	40.906	377.03	20.675	2.6691	2628.8	18.789	151.86
#1	L-.00821	.00134	-.00421	.01799	-.00061	1.3662	-.00234
#2	L-.00919	.00134	-.00263	.01707	.00005	1.1931	-.00016
#3	-.00498	.00272	-.00421	.01707	.00205	1.5875	.00048
#4	-.00356	-.00284	-.00421	.01706	-.00127	1.0199	-.00125

Errors	LC Low	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	101.57	-.00000	-.00259	S862.47	-.00356	.02181	.18178
SDev	1.15	.00000	.00670	1725.2	.00191	.02439	.00560
%RSD	1.1282	250.02	258.20	200.04	53.696	111.83	3.0831
#1	102.70	.00000	.00519	S-.15231	-.00511	.01010	.19019
#2	102.18	-.00000	-.01038	S-.15231	-.00111	.01792	.17906
#3	101.31	-.00000	-.00519	S-.15231	-.00298	.05710	.17895
#4	100.08	-.00000	-.00000	S3450.3	-.00505	.00213	.17892

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01458	.20296	-.00075	.47059	-.03439	-.07574	.00393
SDev	.05141	.02796	.02359	.00712	.00049	.09800	.00190
%RSD	352.52	13.774	3161.7	1.5129	1.4252	129.39	48.376
#1	.00104	.24412	-.02657	.47706	-.03480	-.06943	.00495
#2	.00938	.19300	-.01369	.47457	-.03480	.04414	.00108

Analysis Report

674 1706

11/20/00 05:03:17 PM

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#3	-.09062	.19304	.02511	.46985	-.03415	-.08209	.00481
#4	.02187	.18169	.01217	.46090	-.03382	-.19557	.00488
Errors	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	.00364						
SDev	.00186						
%RSD	51.239						
#1	.00146						
#2	.00396						
#3	.00595						
#4	.00318						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Analysis Report

674 1707

11/20/00 05:06:24 PM.

Method: QUANMET Sample Name: DPWNFT
Run Time: 11/20/00 17:03:19
Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
Mode: CONC Corr. Factor: 1

Operator: LEJ

Table with 8 columns (Elem Units, AG, AL, AS, B, BA, BE, CA) and 8 rows of data. Includes sub-sections for elements CD, CO, CR, CU, FE, K, LI, MG, MN, MO, NA, NI, PB, SB, SE, SI, SN, SR, TI, TL, V.

Analysis Report

674 1708

11/20/00 05:06:24 PM

page 2

#3	.02195	2.3328	.03719	.28135	-.00212	-.11430	.00123
#4	-.01555	2.3328	.01564	.28259	-.00212	-.05110	.00007
Errors	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	.03270						
SDev	.00094						
%RSD	2.8857						
#1	.03168						
#2	.03224						
#3	.03302						
#4	.03385						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Analysis Report

674 1709

11/20/00 05:09:31 PM

Method: QUANMET Sample Name: DPWNFTP5
 Run Time: 11/20/00 17:06:26
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
 Mode: CONC Corr. Factor: 1

Operator: LEJ

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm						
Avg	.00172	.12719	.05048	.00192	.07485	-.00007	5.8585
SDev	.00071	.00314	.04405	.00583	.00073	.00007	.0460
%RSD	41.243	2.4666	87.280	303.82	.97266	100.42	.78493
#1	.00136	.12450	.06564	.00911	.07497	-.00001	5.8089
#2	.00136	.12446	.07777	-.00207	.07468	-.00014	5.8410
#3	.00278	.12991	-.01517	.00415	.07399	-.00013	5.8662
#4	.00137	.12991	.07366	-.00351	.07575	-.00001	5.9178
Errors	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						
Avg	-.00136	.00310	-.00000	.00139	.00566	.06254	-.00027
SDev	.00065	.00175	.00000	.00000	.00114	.24372	.00072
%RSD	48.203	56.406	117.10	.12696	20.114	389.71	263.68
#1	-.00095	.00553	-.00000	.00139	.00682	.29826	-.00016
#2	-.00109	.00275	-.00000	.00139	.00416	-.25978	-.00016
#3	-.00234	.00136	.00000	.00139	.00616	.19243	-.00125
#4	-.00105	.00275	-.00000	.00139	.00549	.01924	.00048
Errors	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						
Avg	2.1602	.48589	.00130	263.39	.00304	.00586	.00004
SDev	.0137	.00310	.00260	2.83	.01466	.00456	.00011
%RSD	.63430	.63768	199.89	1.0752	482.20	77.705	277.10
#1	2.1519	.48340	.00000	262.35	-.01504	.00984	-.00011
#2	2.1464	.48539	.00000	264.85	.00876	.00977	.00004
#3	2.1657	.48440	.00519	259.95	.01945	.00190	.00017
#4	2.1767	.49038	.00000	266.40	-.00100	.00194	.00006
Errors	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						
Avg	.01668	.48391	.00216	.05585	-.00008	-.03427	.00307
SDev	.03442	.02638	.01978	.00037	.00049	.04777	.00208
%RSD	206.33	5.4525	917.29	.66651	600.00	139.40	67.825
1	.02190	.49385	-.00377	.05586	.00016	-.04063	.00367
2	-.02395	.45979	.02856	.05611	-.00049	.03514	.00367

Analysis Report

11/20/00 05:09:31 PM **674 1710**
page 2

#3	.00939	.46542	.00269	.05532	.00049	-.06579	.00007
#4	.05939	.51656	-.01886	.05611	-.00049	-.06578	.00489
Errors	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	.00799						
SDev	.00102						
%RSD	12.827						
#1	.00743						
#2	.00736						
#3	.00951						
#4	.00764						
Errors	LC Pass						
High	100.00						
Low	-.02000						

674 1711

Analysis Report

11/20/00 05:12:39 PM

Method: QUANMET Sample Name: CCV2-1 0057-146-1
 Run Time: 11/20/00 17:09:34
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
 Mode: CONC Corr. Factor: 1

Operator: LEJ

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm						
Avg	.96081	47.566	4.9442	4.7325	4.7055	4.6870	48.152
SDev	.01657	.441	.1348	.0486	.0460	.0707	1.299
%RSD	1.7242	.92708	2.7264	1.0268	.97786	1.5084	2.6986
#1	.97016	47.961	4.9800	4.7647	4.7435	4.7486	48.874
#2	.97448	47.916	4.9884	4.7834	4.7452	4.7346	48.941
#3	.93738	47.075	4.7491	4.6877	4.6792	4.5938	46.217
#4	.96121	47.314	5.0592	4.6944	4.6541	4.6711	48.575
Errors	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						
Avg	4.8260	4.7330	4.7380	4.6991	48.727	46.628	4.7637
SDev	.0998	.1056	.1082	.0393	.878	.705	.0673
%RSD	2.0677	2.2315	2.2837	.83616	1.8015	1.5117	1.4121
#1	4.8505	4.7899	4.8055	4.7287	49.310	47.039	4.7690
#2	4.9101	4.8078	4.8065	4.7315	49.348	47.376	4.7744
#3	4.6814	4.5778	4.5788	4.6877	47.469	45.836	4.8372
#4	4.8619	4.7566	4.7613	4.6484	48.782	46.260	4.6741
Errors	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						
Avg	47.460	4.7422	4.7248	47.065	4.7037	4.7846	4.8475
SDev	.563	.0968	.0990	.433	.1154	.0941	.1457
%RSD	1.1855	2.0420	2.0948	.91902	2.4538	1.9670	3.0051
#1	47.891	4.8032	4.7754	47.268	4.7539	4.8016	4.9510
#2	47.924	4.8082	4.7910	47.262	4.7859	4.8569	4.9623
#3	46.740	4.6013	4.5780	47.312	4.5328	4.6476	4.6490
#4	47.284	4.7562	4.7546	46.417	4.7422	4.8324	4.8279
Errors	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						
Avg	4.7647	4.6657	4.7435	4.6967	4.6989	9.3448	4.7435
SDev	.0468	.0764	.1205	.0463	.0650	.2005	.0826
%RSD	.98203	1.6375	2.5403	.98581	1.3843	2.1456	1.7419
#1	4.8050	4.7501	4.7428	4.7379	4.7493	9.4639	4.7999
#2	4.8009	4.6876	4.8032	4.7358	4.7483	9.4381	4.7989

Analysis Report

674 1712

11/20/00 05:12:39 PM

page 2

#3	4.7077	4.5664	4.5757	4.6563	4.6120	9.0447	4.6244
#4	4.7451	4.6587	4.8524	4.6570	4.6859	9.4323	4.7507
Errors	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	4.7930						
SDev	.0886						
%RSD	1.8494						
#1	4.8343						
#2	4.8550						
#3	4.6617						
#4	4.8211						
Errors	LC Pass						
High	5.5000						
Low	4.5000						

Analysis Report

674 1713

11/20/00 05:15:47 PM

Method: QUANMET Sample Name: CCB1

Run Time: 11/20/00 17:12:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Operator: LEJ

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm						
Avg	.00109	-.00380	-.02326	.00804	.00002	.00022	.00647
SDev	.00246	.00617	.03231	.00615	.00049	.00012	.00207
%RSD	225.04	162.13	138.91	76.559	2266.7	57.042	32.035
#1	.00433	.00205	-.05870	.01451	.00076	.00024	.00889
#2	.00000	-.00145	-.01819	.00002	-.00022	.00038	.00468
#3	.00144	-.01242	.01827	.01058	-.00022	.00013	.00752
#4	-.00141	-.00340	-.03441	.00705	-.00022	.00012	.00481
Errors	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						
Avg	.00056	.00069	.00145	-.00092	.00866	.03367	-.00059
SDev	.00173	.00080	.00179	.00053	.00137	.39627	.00110
%RSD	307.58	115.89	123.64	57.752	15.859	1176.8	185.45
#1	.00217	-.00001	.00368	-.00046	.00749	.44258	.00093
#2	.00037	.00139	.00000	-.00138	.01015	-.39448	-.00080
#3	-.00179	.00000	.00211	-.00046	.00949	-.20205	-.00080
#4	.00150	.00139	.00000	-.00138	.00749	.28864	-.00170
Errors	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						
Avg	.00690	.00001	.01297	.02577	-.00334	.00198	-.00015
SDev	.01781	.00081	.00300	.00242	.00468	.00002	.00003
%RSD	258.20	11783.	23.091	9.3971	140.00	.95838	18.491
#1	.03035	.00100	.01557	.02685	-.00100	.00196	-.00017
#2	-.00828	.00001	.01038	.02816	-.00100	.00199	-.00011
#3	-.00552	.00001	.01038	.02250	-.00100	.00197	-.00016
#4	.01104	-.00099	.01557	.02555	-.01036	.00200	-.00017
Errors	LC Pass						
High	5.0000	.01500	.04000	5.0000	5.0000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-5.0000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm						
Avg	-.02706	.04402	.02047	-.00004	.00065	-.03482	.00262
SDev	.01244	.00542	.01236	.00013	.00063	.05390	.00286
%RSD	45.994	12.322	60.388	352.32	95.743	154.79	109.33
1	-.04477	.03979	.02640	.00014	.00114	-.05689	.00510
2	-.02393	.03973	.02209	-.00006	.00049	-.09476	.00014

Analysis Report

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#3	-.01560	.05108	.03071	-.00006	.00114	-.01904	.00014
#4	-.02394	.04547	.00270	-.00016	-.00016	.03141	.00510
Errors	LC Pass						
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00086						
SDev	.00065						
%RSD	75.747						
#1	.00046						
#2	.00044						
#3	.00182						
#4	.00074						
Errors	LC Pass						
High	.02000						
Low	-.02000						

Analysis Report

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Method: QUANMET

Sample Name: DPWNFST

Run Time: 11/20/00 17:15:49

Operator: LEJ

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm						
Avge	.19062	.64345	5.1951	.03506	46.778	.00076	27.919
SDev	.00511	.00530	.1139	.00287	.398	.00001	.156
%RSD	2.6792	.82408	2.1922	8.1995	.85056	.69056	.55861
#1	.19780	.63877	5.0406	.03462	46.470	.00076	27.756
#2	.18632	.64803	5.3153	.03522	47.259	.00075	27.875
#3	.19061	.63895	5.2103	.03171	46.950	.00076	28.130
#4	.18774	.64805	5.2143	.03871	46.434	.00076	27.916
Errors	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						
Avge	.98212	.00839	4.7523	.00831	.02696	.56285	.00159
SDev	.00375	.00333	.0241	.00093	.00137	.26865	.00078
%RSD	.38179	39.622	.50741	11.130	5.0948	47.731	49.195
#1	.97916	.00402	4.7272	.00693	.02679	.17319	.00093
#2	.97881	.01201	4.7571	.00878	.02546	.63501	.00093
#3	.98643	.00935	4.7834	.00878	.02679	.65425	.00202
#4	.98409	.00819	4.7414	.00878	.02879	.78895	.00247
Errors	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						
Avge	10.065	2.3101	-.00259	S3453.3	.03410	4.8030	-.02851
SDev	.089	.0112	.00519	.2	.00690	.0560	.01421
%RSD	.88746	.48473	200.27	.00599	20.224	1.1654	49.819
#1	9.9788	2.2974	.00519	S3453.0	.02920	4.7598	-.00882
#2	10.169	2.3143	-.00519	S3453.2	.04169	4.7835	-.03123
#3	10.108	2.3233	-.00519	S3453.5	.03810	4.8852	-.04274
#4	10.004	2.3054	-.00519	S3453.4	.02739	4.7834	-.03127
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm						
Avge	1.0678	2.2022	.03814	.26469	-.00016	-.05537	.00232
SDev	.0228	.0266	.00665	.00244	.00046	.02602	.00243
%RSD	2.1374	1.2086	17.442	.91996	282.84	46.990	104.76
#1	1.0928	2.2419	.03284	.26271	.00016	-.02703	.00114
#2	1.0636	2.1908	.03490	.26768	-.00082	-.05222	.00596

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#3	1.0386	2.1851	.04778	.26569	-.00016	-.05211	.00113
#4	1.0761	2.1908	.03705	.26271	.00016	-.09012	.00104
Errors	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	.02918						
SDev	.00164						
%RSD	5.6063						
#1	.02891						
#2	.03141						
#3	.02748						
#4	.02890						
Errors	LC Pass						
High	100.00						
Low	-.02000						

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Analysis Report

11/20/00 05:22:03 PM

Method: QUANMET Sample Name: DPWNFDT
Run Time: 11/20/00 17:18:57
Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
Mode: CONC Corr. Factor: 1

Operator: LEJ

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avg	.14212	.66483	5.3405	.03398	47.271	.00060	28.732
SDev	.00138	.01193	.1356	.00204	.510	.00006	.163
%RSD	.96861	1.7944	2.5389	6.0139	1.0779	10.550	.56734
#1	.14032	.66075	5.2223	.03378	47.867	.00064	28.940
#2	.14320	.67349	5.2303	.03667	47.462	.00064	28.628
#3	.14177	.64980	5.4932	.03171	46.681	.00051	28.580
#4	.14320	.67529	5.4162	.03374	47.075	.00064	28.781
Errors High	LC Pass 2.0000	LC Pass 600.00	LC Pass 100.00	LC Pass 100.00	LC Pass 100.00	LC Pass 15.000	LC Pass 600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avg	.98486	.00677	4.7734	.00877	.02496	.53158	.00213
SDev	.00992	.00225	.0261	.00076	.00114	.16542	.00092
%RSD	1.0077	33.159	.54655	8.6101	4.5559	31.118	43.052
#1	.99638	.00751	4.8055	.00877	.02613	.47145	.00311
#2	.98258	.00913	4.7703	.00970	.02546	.32713	.00247
#3	.98782	.00668	4.7419	.00877	.02346	.63501	.00093
#4	.97267	.00377	4.7761	.00785	.02479	.69274	.00202
Errors High	LC Pass 100.00	LC Pass 100.00	LC Pass 100.00	LC Pass 100.00	LC Pass 400.00	LC Pass 1000.0	LC Pass 20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avg	10.408	2.3826	.00130	S2589.0	.03693	4.7638	-.02864
SDev	.079	.0155	.00260	1726.1	.00547	.0354	.02124
%RSD	.76291	.65031	199.51	66.671	14.825	.74208	74.163
#1	10.514	2.4030	.00000	S3451.3	.04438	4.7912	-.04286
#2	10.384	2.3771	.00519	S-.15231	.03610	4.7834	.00216
#3	10.324	2.3662	.00000	S3452.6	.03120	4.7128	-.03121
#4	10.409	2.3841	.00000	S3452.4	.03603	4.7676	-.04265
Errors High	LC Pass 600.00	LC Pass 100.00	LC Pass 50.000	LC High 400.00	LC Pass 100.00	LC Pass 100.00	LC Pass 100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avg	1.0886	2.2944	.01282	.27438	-.00041	-.08947	.00120
SDev	.0248	.0255	.01229	.00267	.00016	.04488	.00007
%RSD	2.2750	1.1132	95.898	.97159	40.000	50.164	5.5597
1	1.0720	2.2816	.02838	.27733	-.00016	-.08934	.00125
2	1.0678	2.3327	-.00160	.27563	-.00049	-.02645	.00125

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#3	1.0928	2.2816	.01335	.27122	-.00049	-.11481	.00111
#4	1.1220	2.2816	.01114	.27335	-.00049	-.12729	.00119
Errors	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	.03145						
SDev	.00126						
%RSD	3.9968						
#1	.03138						
#2	.03247						
#3	.03224						
#4	.02970						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DP21TT
Run Time: 11/20/00 17:22:05
Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
Mode: CONC Corr. Factor: 1

Operator: LEJ

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00106	.01040	.18779	.01092	.19499	-.00020	H639.12
SDev	.00271	.01564	.09257	.02011	.00181	.00016	15.74
%RSD	255.25	150.39	49.293	184.18	.92910	80.471	2.4629
#1	-.00285	.00037	.07065	.03166	.19672	-.00027	H647.29
#2	-.00285	.00023	.23230	-.00704	.19456	-.00001	H647.85
#3	.00287	.03326	.16341	-.00558	.19263	-.00038	H615.54
#4	-.00141	.00774	.28478	.02463	.19603	-.00014	H645.78
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	-.00419	.00034	-.00303	.02237	-.00113	1.4456	-.00087
SDev	.00444	.00430	.00475	.00231	.00240	.8908	.00114
%RSD	105.89	1275.2	157.02	10.325	211.78	61.624	131.82
#1	.00033	.00276	-.00211	.02353	-.00330	1.4625	-.00061
#2	-.00109	-.00002	.00000	.02353	-.00263	2.2610	.00048
#3	L-.00801	-.00557	-.00999	.01891	.00204	.20205	-.00228
#4	L-.00798	.00417	-.00000	.02353	-.00063	1.8569	-.00106
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.662	.00000	.00389	S862.89	-.00175	.02165	.07829
SDev	.273	.00000	.00886	1726.1	.00604	.05371	.06711
%RSD	1.3899	335.97	227.71	200.04	345.72	248.11	85.725
#1	19.789	.00000	.00519	S3452.0	-.00419	.01776	.04470
#2	19.753	.00000	.01557	S-.15231	.00450	.06468	.04478
#3	19.257	-.00000	-.00519	S-.15231	-.00900	-.05280	.17896
#4	19.850	-.00000	-.00000	S-.15231	.00169	.05695	.04471
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03855	.20721	.01609	.29259	-.04150	-.00317	.00371
SDev	.02295	.03291	.02330	.00218	.00242	.05083	.00254
%RSD	59.552	15.883	144.79	.74652	5.8395	1604.4	68.348
#1	-.06564	.20439	.02242	.29342	-.04363	-.03156	.00495
#2	-.04897	.21574	-.00560	.29168	-.04264	.01892	.00510

Analysis Report

#3	-.02395	.24406	.00141	.29010	-.03807	-.05675	-.00009
#4	-.01563	.16466	.04612	.29516	-.04166	.05672	.00489

Errors	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	.00465
SDev	.00052
%RSD	11.279

#1	.00478
#2	.00418
#3	.00430
#4	.00533

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DPLF2T

Run Time: 11/20/00 17:25:14

Operator: LEJ

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00028	.28311	.19534	.04903	.03651	.00019	13.290
SDev	.00311	.00979	.02653	.00237	.00033	.00007	.231
%RSD	1102.9	3.4596	13.582	4.8338	.89418	39.977	1.7349
#1	.00173	.29404	.19219	.04977	.03674	.00025	13.386
#2	.00030	.27576	.16403	.04625	.03605	.00012	13.406
#3	-.00404	.27397	.22882	.04826	.03654	.00013	12.945
#4	.00315	.28866	.19633	.05185	.03674	.00026	13.423
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	-.00387	.00173	.00158	.34035	1.3585	1.0463	.00010
SDev	.00246	.00208	.00105	.00158	.0174	.1126	.00039
%RSD	63.540	120.02	66.708	.46262	1.2818	10.760	403.68
#1	-.00324	.00417	.00210	.34105	1.3667	1.1161	.00048
#2	-.00066	.00277	.00210	.34012	1.3640	1.1546	.00003
#3	L-.00597	.00000	.00210	.34196	1.3327	1.0102	-.00042
#4	L-.00560	-.00000	-.00000	.33828	1.3707	.90441	.00029
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	.81731	.30787	.00277	S862.37	.00865	.00363	.08949
SDev	.01262	.00435	.00519	1725.0	.00790	.00381	.05992
%RSD	1.5438	1.4125	187.29	200.04	91.311	105.06	66.961
#1	.83041	.31037	.00537	S-.15231	.01724	.00177	.12315
#2	.82490	.30937	.00537	S-.15231	.00019	.00173	.11185
#3	.80283	.30139	.00536	S-.15231	.00401	.00934	-.00004
#4	.81110	.31037	-.00501	S3449.9	.01317	.00166	.12301
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01975	2.7103	.01570	.02231	-.00016	-.09521	.00218
SDev	.07856	.0587	.03248	.00000	.00096	.02903	.00256
%RSD	397.75	2.1663	206.90	.00000	588.78	30.494	117.50
#1	-.06981	2.7358	.00560	.02231	-.00049	-.07008	.00374
#2	.11352	2.6904	-.01815	.02231	-.00016	-.07005	.00497

Analysis Report

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#3	.04676	2.6393	.01586	.02231	-.00114	-.12017	.00008
#4	-.01146	2.7755	.05948	.02231	.00114	-.12054	-.00007
Errors	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	.16772						
SDev	.00308						
%RSD	1.8356						
#1	.16775						
#2	.16725						
#3	.16418						
#4	.17168						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DPT5FT

Run Time: 11/20/00 17:28:22

Operator: LEJ

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00015	.37812	.23634	.08877	.35558	-.00000	33.717
SDev	.00166	.00565	.06285	.01584	.00262	.00010	.078
%RSD	1079.0	1.4946	26.592	17.842	.73646	14865.	.23056
#1	-.00159	.37033	.16871	.06501	.35936	-.00013	33.617
#2	-.00159	.37774	.28989	.09668	.35524	.00013	33.770
#3	.00126	.38315	.19697	.09669	.35426	.00001	33.787
#4	.00130	.38124	.28979	.09669	.35348	-.00001	33.695
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	.00187	.01270	.00054	14.001	.12598	.80579	.00181
SDev	.00229	.00263	.00105	.127	.00109	.46219	.00116
%RSD	122.78	20.702	196.32	.90752	.86213	57.358	64.133
#1	.00252	.01234	.00001	14.186	.12465	.18281	.00074
#2	.00387	.01652	.00211	13.969	.12598	1.2989	.00311
#3	-.00143	.01097	.00001	13.950	.12731	.84668	.00093
#4	.00250	.01096	.00001	13.898	.12598	.89479	.00247
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	1.3918	1.0122	.04932	S862.44	.03122	.06268	-.01668
SDev	.0132	.0013	.00300	1725.2	.00435	.03646	.02147
%RSD	.95061	.12716	6.0754	200.04	13.941	58.177	128.68
#1	1.3849	1.0137	.05191	S-.15231	.02939	.02543	-.04472
#2	1.4043	1.0127	.04672	S-.15231	.03583	.11176	.00022
#3	1.4015	1.0117	.05191	S-.15231	.03361	.06458	-.02229
#4	1.3767	1.0107	.04672	S3450.2	.02607	.04894	.00005
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00455	2.7102	.01072	.17666	.00245	-.02539	.00065
SDev	.05778	.0073	.01979	.00103	.00038	.05253	.00396
%RSD	1270.0	.26983	184.62	.58458	15.396	206.87	608.14
#1	-.05275	2.7074	.03054	.17821	.00278	.03772	.00068
#2	-.00274	2.7017	-.01669	.17622	.00212	-.03804	.00062

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#3	.08476	2.7187	.01339	.17622	.00212	-.08845	-.00420
#4	-.01108	2.7131	.01564	.17601	.00278	-.01280	.00551
Errors	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	70.013						
SDev	.218						
%RSD	.31133						
#1	70.325						
#2	69.974						
#3	69.932						
#4	69.820						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DP6AWBT

Operator: LEJ

Run Time: 11/20/00 17:31:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm						
Avge	.00144	.01502	.23830	.02340	.00191	-.00032	.29355
SDev	.00117	.00534	.06905	.01532	.00023	.00008	.00241
%RSD	81.298	35.573	28.978	65.468	12.138	23.901	.82063
#1	.00146	.01314	.24432	.01615	.00223	-.00039	.29206
#2	.00000	.01503	.29288	.01554	.00174	-.00038	.29426
#3	.00287	.02229	.13925	.01554	.00194	-.00026	.29125
#4	.00144	.00961	.27676	.04637	.00174	-.00026	.29662
Errors	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	L-.00522	.00106	-.00039	.00531	.00433	.11546	-.00109
SDev	.00072	.00209	.00117	.00190	.00100	.13169	.00108
%RSD	13.754	197.40	295.76	35.832	23.093	114.06	99.189
#1	L-.00619	.00280	-.00211	.00692	.00549	.22129	-.00125
#2	-.00447	-.00138	.00053	.00692	.00349	.16356	-.00170
#3	L-.00502	.00001	.00000	.00415	.00483	-.07697	.00048
#4	L-.00521	.00280	-.00000	.00323	.00349	.15394	-.00189
Errors	LC Low	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						
Avge	.08483	.00000	.00260	H6.3111	-.00100	-.00390	-.00007
SDev	.00612	.00000	.00300	.0292	.00000	.00753	.00007
%RSD	7.2109	66.478	115.45	.46328	.00000	192.97	107.86
#1	.09104	.00000	.00519	H6.3490	-.00100	-.00581	.00002
#2	.08277	.00000	.00000	H6.2903	-.00100	-.01376	-.00010
#3	.07725	.00000	.00519	H6.2859	-.00100	.00194	-.00014
#4	.08828	.00000	.00000	H6.3190	-.00100	.00202	-.00005
Errors	LC Pass	LC Pass	LC Pass	LC High	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	-.03540	.06245	.02155	-.00006	.00008	-.01584	.00126
SDev	.03733	.00003	.02032	.00000	.00031	.02603	.00247
%RSD	105.43	.04633	94.292	.00000	382.97	164.34	196.32
#1	.00523	.06249	-.00593	-.00006	.00016	-.01904	.00495
#2	-.01561	.06243	.03071	-.00006	-.00016	.01890	.00000

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#3	-.05311	.06243	.04149	-.00006	.00049	-.01898	.00007
#4	-.07811	.06243	.01994	-.00006	-.00016	-.04423	.00000
Errors	LC Pass						
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000
Elem	ZN						
Units	ppm						
Avge	.00942						
SDev	.00146						
%RSD	15.483						
#1	.00819						
#2	.00817						
#3	.01038						
#4	.01096						
Errors	LC Pass						
High	.02000						
Low	-.02000						

Method: QUANMET Sample Name: DP6K0BT Operator: LEJ
 Run Time: 11/20/00 17:34:38
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm						
Avge	.00072	.00040	.02422	-.00454	-.00054	-.00029	.00980
SDev	.00248	.00941	.04807	.00472	.00023	.00007	.00210
%RSD	342.49	2376.7	198.45	103.78	42.888	23.842	21.375
#1	-.00144	-.01053	.00210	.00001	-.00071	-.00026	.00700
#2	.00287	.00414	-.03035	-.00351	-.00051	-.00026	.00954
#3	-.00141	-.00332	.07876	-.01117	-.00071	-.00039	.01082
#4	.00287	.01129	.04638	-.00350	-.00022	-.00026	.01185
Errors	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						
Avge	-.00122	-.00208	-.00105	-.00162	.00333	-.23572	-.00103
SDev	.00166	.00331	.00122	.00088	.00183	.21262	.00045
%RSD	135.48	158.94	115.53	54.524	55.098	90.197	43.750
#1	-.00122	-.00278	-.00000	-.00231	.00150	-.31751	-.00170
#2	-.00082	.00278	-.00210	-.00230	.00549	-.44258	-.00080
#3	-.00342	-.00416	-.00211	-.00139	.00216	.05773	-.00080
#4	.00057	-.00418	.00000	-.00046	.00416	-.24054	-.00080
Errors	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						
Avge	-.00483	-.00124	.00130	.02751	-.00368	.00190	-.00005
SDev	.01200	.00125	.00260	.00765	.00535	.00009	.00007
%RSD	248.53	100.81	199.94	27.822	145.45	4.4914	139.24
#1	.00552	-.00100	.00000	.01859	-.01170	.00189	-.00014
#2	-.02207	.00000	.00000	.02729	-.00100	.00203	-.00003
#3	.00000	-.00299	.00000	.02685	-.00100	.00185	.00003
#4	-.00276	-.00099	.00519	.03729	-.00100	.00184	-.00007
Errors	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						
Avge	-.01353	.03975	.00485	-.00063	.00016	-.05051	.00124
SDev	.00417	.00003	.01232	.00022	.00053	.09800	.00243
%RSD	30.825	.07179	254.04	35.116	326.60	194.04	196.59
#1	-.01562	.03973	.00485	-.00076	-.00049	-.09463	.00000
#2	-.00727	.03973	.01994	-.00085	.00016	-.01901	-.00000

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#3	-.01562	.03979	-.01024	-.00056	.00016	-.15776	.00488
#4	-.01561	.03973	.00485	-.00035	.00082	.06938	.00007
Errors	LC Pass						
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge .00121
SDev .00201
%RSD 166.61

#1 -.00067
#2 -.00038
#3 .00267
#4 .00321

Errors LC Pass
High .02000
Low -.02000

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Method: QUANMET Sample Name: DP6K0CT

Run Time: 11/20/00 17:37:45

Operator: LEJ

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05010	1.9292	2.1424	1.0087	1.9690	.04631	L.29049
SDev	.00138	.0068	.0518	.0014	.0103	.00024	.00242
%RSD	2.7558	.35339	2.4174	.13812	.52238	.51084	.83408
#1	.05120	1.9387	2.0675	1.0105	1.9814	.04665	L.28975
#2	.04974	1.9225	2.1809	1.0091	1.9675	.04628	L.29095
#3	.04830	1.9278	2.1485	1.0076	1.9706	.04615	L.28773
#4	.05117	1.9279	2.1728	1.0076	1.9564	.04615	L.29353
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	.04145	.49172	.19696	.24438	1.0201	L.05773	.95562
SDev	.00419	.00210	.00315	.00046	.0020	.45039	.00889
%RSD	10.106	.42739	1.6020	.18854	.19481	780.20	.92982
#1	.04719	.48857	.19538	.24461	1.0226	L-.30788	.96384
#2	.04096	.49277	.19959	.24461	1.0192	L-.18281	.95204
#3	L.03715	.49278	.19328	.24462	1.0206	L.01924	.96185
#4	.04051	.49277	.19959	.24369	1.0179	L.70236	.94477
Errors	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.08690	.48914	-.00246	L6.1615	.49721	.50491	L.00672
SDev	.00276	.00058	.00670	.0361	.01440	.00985	.00011
%RSD	3.1746	.11793	272.02	.58569	2.8970	1.9501	1.6851
#1	L.08828	.48964	-.00506	L6.1985	.51828	.50678	L.00688
#2	L.08828	.48864	-.01025	L6.1477	.49469	.49124	L.00672
#3	L.08277	.48964	.00532	L6.1820	.48781	.50689	L.00665
#4	L.08828	.48864	.00013	L6.1177	.48807	.51473	L.00663
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	2.1500	.06822	.02876	.97789	.00049	1.9214	.49550
SDev	.0501	.00003	.02090	.00479	.00027	.1095	.00242
%RSD	2.3312	.04145	72.653	.48993	54.433	5.6998	.48859
#1	2.1666	.06827	.05894	.98312	.00049	1.8583	.49913
#2	2.1208	.06821	.02661	.97740	.00049	2.0855	.49418

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#3	2.2125	.06821	.01583	.97939	.00016	1.8710	.49437
#4	2.1000	.06821	.01367	.97164	.00082	1.8710	.49432
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	.48335						
SDev	.00276						
%RSD	.57051						
#1	.48669						
#2	.48453						
#3	.48096						
#4	.48121						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DPWPKT

Run Time: 11/20/00 17:40:53

Operator: LEJ

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00320	-.00012	.13528	.01438	.28162	-.00018	H1050.5
SDev	.00217	.01301	.05471	.01069	.00131	.00006	3.0
%RSD	67.718	10552.	40.444	74.326	.46665	34.453	.29011
#1	-.00139	.01862	.21592	.01924	.28045	-.00015	H1049.4
#2	-.00139	-.00167	.09484	.01780	.28053	-.00015	H1055.0
#3	-.00429	-.00695	.11112	-.00145	.28299	-.00027	H1048.4
#4	-.00572	-.01050	.11923	.02193	.28249	-.00014	H1049.1
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
Avg	L-.00636	.00070	-.00276	.02906	-.00255	.90441	.00016
SDev	.00455	.00290	.00179	.00075	.00183	.11303	.00136
%RSD	71.547	416.07	64.735	2.5957	71.779	12.497	849.76
#1	L-.01233	.00141	-.00211	.02906	-.00339	1.0391	.00029
#2	-.00144	-.00001	-.00053	.02998	-.00139	.83706	.00048
#3	L-.00675	-.00278	-.00421	.02814	-.00072	.78895	-.00170
#4	-.00492	.00417	-.00421	.02906	-.00472	.95252	.00157
Errors	LC Low	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	433.32	-.00050	.00259	2.4866	-.00505	.08643	.17903
SDev	.97	.00057	.00899	.0161	.01465	.02504	.00019
%RSD	.22358	115.11	346.46	.64895	289.95	28.966	.10468
#1	432.17	-.00000	-.00519	2.4634	.01533	.11189	.17922
#2	432.92	-.00099	.01557	2.4921	-.00418	.06487	.17911
#3	433.84	-.00000	-.00000	2.5008	-.01655	.10397	.17878
#4	434.35	-.00100	-.00000	2.4900	-.01481	.06499	.17901
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	-.02501	.33496	-.01735	1.0506	L-.06920	.06621	.00736
SDev	.04645	.00003	.05047	.0050	.00049	.18294	.00287
%RSD	185.72	.01001	290.93	.47995	.70838	276.30	38.964
#1	-.01564	.33499	.00582	1.0458	L-.06879	-.15776	.00971
#2	-.08646	.33500	-.07824	1.0468	L-.06879	.28384	.00998

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#3	.02604	.33494	.03815	1.0547	L-.06944	.03154	.00488
#4	-.02397	.33494	-.03513	1.0552	L-.06977	.10723	.00488
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	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	.00285						
SDev	.00201						
%RSD	70.550						
#1	.00504						
#2	.00396						
#3	.00178						
#4	.00062						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DPOEDT Operator: LEJ
 Run Time: 11/20/00 17:44:01
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm						
Avg	-.00356	.01451	.10385	-.00703	.25287	-.00021	H1250.2
SDev	.00186	.00430	.08961	.00000	.00071	.00007	5.5
%RSD	52.246	29.638	86.288	.05241	.27967	34.084	.43708
#1	-.00572	.01496	.03817	-.00702	.25378	-.00014	H1242.3
#2	-.00285	.01135	.04631	-.00703	.25300	-.00027	H1251.9
#3	-.00429	.01131	.09884	-.00703	.25260	-.00027	H1251.6
#4	-.00139	.02043	.23206	-.00703	.25211	-.00015	H1254.9
Errors	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
Avg	-.00354	.00211	.00105	.01753	.00756	.90201	-.00054
SDev	.00647	.00178	.00122	.00092	.00115	.21289	.00087
%RSD	182.68	84.258	115.95	5.2695	15.288	23.602	159.59
#1	L-.01264	.00005	-.00000	.01615	.00856	.88517	.00048
#2	-.00358	.00142	.00210	.01799	.00656	.61577	-.00016
#3	.00176	.00279	.00210	.01799	.00656	.99100	-.00106
#4	.00029	.00418	-.00001	.01800	.00856	1.1161	-.00144
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						
Avg	200.94	.00224	.00130	3.4824	-.00126	.07466	.14264
SDev	.36	.00050	.00260	.0214	.01660	.01961	.01062
%RSD	.17781	22.191	199.84	.61315	1315.8	26.266	7.4460
#1	201.23	.00200	.00000	3.5076	-.01497	.06480	.13411
#2	200.91	.00200	.00000	3.4845	-.01115	.06486	.14549
#3	201.16	.00200	.00519	3.4823	-.00092	.10407	.15647
#4	200.44	.00299	.00000	3.4554	.02199	.06490	.13450
Errors	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	-.01039	.19164	.01164	.89656	L-.08121	-.08530	.00644
SDev	.05687	.03862	.04564	.00280	.00096	.10319	.00230
%RSD	547.12	20.154	392.10	.31209	1.1847	120.98	35.683
#1	-.00727	.21576	.01645	.89994	L-.08121	-.08214	.00611
#2	-.08644	.16466	-.05031	.89621	L-.08219	-.09473	.00489

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#3	.00106	.15331	.05965	.89695	L-.08153	-.20830	.00496
#4	.05107	.23283	.02076	.89312	L-.07990	.04399	.00978
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	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	.00439
SDev	.00051
%RSD	11.699

#1	.00485
#2	.00483
#3	.00398
#4	.00392

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-2 Operator: LEJ
 Run Time: 11/20/00 17:47:09
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
 Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	.96242	47.610	4.8775	4.7586	4.7099	4.6957	48.647
SDev	.00329	.209	.1249	.0315	.0266	.0216	.219
%RSD	.34214	.43877	2.5604	.66202	.56490	.46093	.45068
#1	.95834	47.417	4.9210	4.7433	4.6913	4.6840	48.366
#2	.96130	47.495	4.8553	4.7335	4.6981	4.6840	48.701
#3	.96576	47.892	4.7182	4.8043	4.7493	4.7281	48.624
#4	.96427	47.635	5.0155	4.7533	4.7008	4.6866	48.896
Errors High	LC Pass 1.1000	LC Pass 55.000	LC Pass 5.5000	LC Pass 5.5000	LC Pass 5.5000	LC Pass 5.5000	LC Pass 55.000
Errors Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	4.8390	4.7702	4.7691	4.6952	49.016	46.664	4.7327
SDev	.0338	.0178	.0192	.0285	.178	.340	.0413
%RSD	.69751	.37280	.40212	.60658	.36292	.72820	.87370
#1	4.8391	4.7441	4.7429	4.6816	48.782	46.183	4.7137
#2	4.8093	4.7734	4.7787	4.6798	48.994	46.856	4.7163
#3	4.8215	4.7817	4.7676	4.7379	49.202	46.943	4.7944
#4	4.8862	4.7815	4.7871	4.6817	49.087	46.673	4.7064
Errors High	LC Pass 5.5000	LC Pass 5.5000	LC Pass 5.5000	LC Pass 5.5000	LC Pass 55.000	LC Pass 55.000	LC Pass 5.5000
Errors Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	47.487	4.7735	4.7495	46.888	4.7053	4.8110	4.8306
SDev	.216	.0154	.0284	.333	.0332	.0361	.0961
%RSD	.45533	.32253	.59882	.71006	.70579	.75081	1.9890
#1	47.262	4.7522	4.7183	46.688	4.6629	4.7692	4.7158
#2	47.394	4.7722	4.7391	46.718	4.7156	4.8562	4.8279
#3	47.769	4.7832	4.7547	47.385	4.7001	4.8169	4.8275
#4	47.521	4.7862	4.7858	46.759	4.7424	4.8016	4.9510
Errors High	LC Pass 55.000	LC Pass 5.5000	LC Pass 5.5000	LC Pass 55.000	LC Pass 5.5000	LC Pass 5.5000	LC Pass 5.5000
Errors Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	4.7822	4.7071	4.7467	4.7042	4.7173	9.3917	4.7680
SDev	.0660	.0495	.0710	.0247	.0183	.1612	.0155
%RSD	1.3800	1.0527	1.4954	.52450	.38880	1.7160	.32606
#1	4.7076	4.6587	4.7355	4.6860	4.6976	9.4703	4.7501
#2	4.7499	4.6701	4.7057	4.6940	4.7124	9.2406	4.7603

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#3	4.8547	4.7499	4.8501	4.7406	4.7418	9.2759	4.7837
#4	4.8168	4.7498	4.6955	4.6960	4.7173	9.5801	4.7780
Errors	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	4.8127						
SDev	.0160						
%RSD	.33250						
#1	4.8015						
#2	4.8011						
#3	4.8129						
#4	4.8352						
Errors	LC Pass						
High	5.5000						
Low	4.5000						

Method: QUANMET Sample Name: CCB2

Operator: LEJ

Run Time: 11/20/00 17:50:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00217	-.00422	-.03640	.00461	-.00035	-.00014	.01486
SDev	.00185	.00797	.01823	.00574	.00025	.00001	.00280
%RSD	85.004	188.66	50.081	124.70	70.833	3.9851	18.842
#1	.00146	-.01058	-.03435	.00848	-.00022	-.00014	.01765
#2	.00002	-.01064	-.01414	-.00000	-.00022	-.00014	.01679
#3	.00290	.00584	-.03852	.01056	-.00071	-.00014	.01314
#4	.00431	-.00151	-.05860	-.00062	-.00022	-.00013	.01185
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	-.00224	.00279	.00000	-.00115	.00216	-.05292	-.00104
SDev	.00351	.00197	.00000	.00046	.00122	.03726	.00078
%RSD	156.93	70.652	4702.2	40.017	56.198	70.418	74.928
#1	-.00305	.00557	-.00000	-.00138	.00150	-.04811	-.00170
#2	L-.00559	.00141	-.00000	-.00046	.00083	-.01924	-.00170
#3	-.00302	.00279	-.00000	-.00138	.00283	-.10584	-.00061
#4	.00271	.00138	.00000	-.00138	.00350	-.03849	-.00016
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	.00828	-.00049	.01038	.01098	-.00368	.01574	-.00008
SDev	.00504	.00058	.00424	.00338	.00535	.01733	.00011
%RSD	60.858	116.48	40.824	30.762	145.45	110.11	126.85
#1	.00552	-.00099	.01038	.00989	-.00100	.00211	-.00004
#2	.01379	-.00099	.01038	.00685	-.00100	.00984	-.00005
#3	.00276	.00000	.00519	.01250	-.00100	.00986	-.00000
#4	.01104	.00001	.01557	.01468	-.01170	.04116	-.00024
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	-.01979	.04119	.00700	-.00006	.00049	-.04108	.00380
SDev	.03436	.00711	.00980	.00000	.00046	.04873	.00240
%RSD	173.65	17.272	139.89	.00000	94.281	118.61	63.072
#1	.01771	.03411	.00700	-.00006	.00016	.00620	.00503
#2	-.01562	.03979	.00485	-.00006	.00016	-.06946	.00503

#3	-.06562	.03979	-.00377	-.00006	.00049	-.09472	.00496
#4	-.01561	.05108	.01993	-.00006	.00114	-.00636	.00021

Errors	LC Pass						
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge -.00005
SDev .00154
%RSD 3226.0

#1 -.00150
#2 .00209
#3 -.00068
#4 -.00010

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DPOEDTP5
Run Time: 11/20/00 17:53:24
Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
Mode: CONC Corr. Factor: 1

Operator: LEJ

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00252	-.00096	.02626	-.00212	-.00035	-.00026	.01481
SDev	.00137	.00913	.03482	.00326	.00025	.00000	.00356
%RSD	54.612	952.57	132.59	154.01	70.833	.61020	24.054
#1	.00288	.00590	.02620	.00207	-.00022	-.00026	.01954
#2	.00144	-.01056	.03039	-.00558	-.00022	-.00026	.01117
#3	.00144	.00773	-.01827	-.00145	-.00022	-.00026	.01331
#4	.00431	-.00690	.06673	-.00352	-.00071	-.00026	.01520

Errors	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	-.00227	.00105	-.00066	-.00069	.00200	-.14913	-.00087
SDev	.00220	.00209	.00100	.00116	.00064	.56978	.00086
%RSD	97.016	199.32	151.67	168.33	31.944	382.06	98.827
#1	-.00279	.00279	-.00210	.00046	.00283	.50993	-.00016
#2	-.00018	-.00139	.00000	-.00231	.00150	-.78895	-.00189
#3	-.00097	.00000	-.00053	-.00046	.00150	-.41372	-.00016
#4	L-.00514	.00280	.00000	-.00046	.00216	.09621	-.00125

Errors	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	.01173	-.00025	.00519	.03098	.00155	.00199	-.00003
SDev	.01517	.00095	.00424	.00626	.01070	.00005	.00009
%RSD	129.41	386.03	81.646	20.193	688.70	2.6656	366.21
#1	.03311	.00000	.00519	.03990	.01671	.00202	.00010
#2	-.00276	-.00099	.00519	.02685	-.00849	.00193	-.00012
#3	.00828	.00100	.00000	.02642	-.00100	.00195	-.00001
#4	.00828	-.00099	.01038	.03077	-.00100	.00204	-.00007

Errors	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	-.02083	.04400	.01078	-.00038	.00041	-.05682	.00068
SDev	.06212	.00852	.01356	.00039	.00031	.04250	.00067
%RSD	298.26	19.356	125.84	101.65	76.594	74.797	98.146
#1	.05938	.05110	.03071	-.00006	.00082	-.11993	.00129
#2	-.01562	.03406	.00054	-.00085	.00016	-.03156	.00007

#3	-.09062	.03975	.00485	-.00056	.00016	-.03156	.00122
#4	-.03645	.05108	.00700	-.00006	.00049	-.04422	.00014
Errors	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	.00090						
SDev	.00137						
%RSD	152.72						
#1	.00258						
#2	-.00068						
#3	.00044						
#4	.00125						
Errors	LC Pass						
High	100.00						
Low	-.02000						

Method: QUANMET Sample Name: DPOEDST

Operator: LEJ

Run Time: 11/20/00 17:56:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.16842	.00541	4.7567	-.00702	44.847	-.00026	H1205.4
SDev	.00216	.00754	.0565	.00001	.171	.00001	1.1
%RSD	1.2808	139.30	1.1872	.09574	.38101	2.2122	.08714
#1	.16663	.00035	4.7830	-.00703	44.629	-.00027	H1204.2
#2	.16660	-.00146	4.7022	-.00702	44.885	-.00027	H1204.9
#3	.17092	.01500	4.8233	-.00701	45.043	-.00026	H1206.7
#4	.16951	.00775	4.7183	-.00703	44.831	-.00027	H1205.7
Errors	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	.89664	.00129	4.2418	.01730	.01056	.74806	.00005
SDev	.00649	.00267	.0075	.00088	.00261	.12331	.00044
%RSD	.72430	206.08	.17745	5.1002	24.695	16.484	926.14
#1	.90521	.00102	4.2328	.01615	.00790	.90441	-.00016
#2	.89415	-.00045	4.2486	.01799	.00923	.65425	.00003
#3	.89737	-.00054	4.2475	.01799	.01389	.64463	-.00035
#4	.88983	.00515	4.2386	.01707	.01123	.78895	.00067
Errors	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	196.13	.00175	-.00130	3.4453	-.00379	4.4778	.00384
SDev	.50	.00095	.00653	.0201	.01842	.0278	.01422
%RSD	.25240	54.554	503.83	.58267	485.88	.62162	370.41
#1	195.54	.00100	.00519	3.4297	-.03022	4.4543	-.01593
#2	196.26	.00100	.00000	3.4645	-.00254	4.5091	.00665
#3	196.73	.00299	-.01038	3.4606	.00809	4.4934	.00666
#4	196.01	.00200	.00000	3.4262	.00950	4.4544	.01797
Errors	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	1.0542	.17174	-.00511	.87388	L-.07843	.00299	.00636
SDev	.0780	.03319	.02718	.00319	.00063	.10727	.00225
%RSD	7.3970	19.323	531.91	.36463	.79785	3581.8	35.293
#1	1.1261	.15331	-.01435	.86982	L-.07924	.15760	.00490
#2	1.0219	.15332	-.03581	.87465	L-.07859	-.06953	.00609

#3	1.1094	.22136	.02885	.87753	L-.07794	-.00650	.00961
#4	.95941	.15898	.00087	.87355	L-.07794	-.06958	.00484
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	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 .00740
 SDev .00148
 %RSD 19.946

#1 .00743
 #2 .00815
 #3 .00871
 #4 .00533

Errors LC Pass
 High 100.00
 Low -.02000

Method: QUANMET Sample Name: DPOEDDT Operator: LEJ
 Run Time: 11/20/00 17:59:39
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm						
Avge	.17381	.01365	4.8870	-.00651	44.859	-.00014	H1237.7
SDev	.00203	.00405	.0303	.00103	.103	.00000	2.3
%RSD	1.1688	29.673	.62067	15.825	.22860	2.7804	.18247
#1	.17238	.01508	4.9042	-.00703	44.996	-.00014	H1236.5
#2	.17379	.00952	4.8557	-.00702	44.876	-.00015	H1238.3
#3	.17238	.01137	4.9204	-.00496	44.797	-.00014	H1240.6
#4	.17669	.01864	4.8678	-.00702	44.766	-.00014	H1235.4
Errors	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						
Avge	.89892	.00302	4.2522	.01707	.00956	.66628	-.00026
SDev	.00369	.00267	.0028	.00075	.00115	.08655	.00063
%RSD	.41046	88.332	.06621	4.4190	12.079	12.990	245.37
#1	.90146	.00365	4.2538	.01615	.00923	.70236	.00029
#2	.89742	.00093	4.2533	.01707	.00923	.69274	.00029
#3	.89443	.00654	4.2538	.01800	.00856	.73123	-.00080
#4	.90238	.00097	4.2480	.01707	.01123	.53880	-.00080
Errors	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						
Avge	200.71	.00175	-.00130	3.5086	.00331	4.5033	.01784
SDev	.31	.00050	.00497	.0176	.01142	.0225	.07574
%RSD	.15486	28.464	383.33	.50055	345.31	.50027	424.48
#1	201.06	.00199	-.00519	3.5345	.00641	4.4700	-.01568
#2	200.88	.00199	-.00519	3.5045	.00922	4.5091	-.00450
#3	200.55	.00100	.00519	3.4967	.01116	4.5171	-.03797
#4	200.37	.00200	.00000	3.4989	-.01357	4.5172	.12952
Errors	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	.97190	.17457	-.02229	.89438	L-.07965	.10078	.00577
SDev	.04208	.00545	.01645	.00135	.00056	.12929	.00180
%RSD	4.3299	3.1238	73.788	.15127	.70064	128.29	31.214
#1	.91774	.17601	-.01650	.89611	L-.07990	.23327	.00481
#2	.95940	.17026	-.00353	.89472	L-.07957	-.06955	.00847

#3	1.0052	.18169	-.04246	.89372	L-.08022	.08184	.00495
#4	1.0052	.17033	-.02668	.89298	L-.07892	.15757	.00486
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	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 .00376
 SDev .00203
 %RSD 54.022

#1 .00314
 #2 .00535
 #3 .00116
 #4 .00541

Errors LC Pass
 High 100.00
 Low -.02000

Method: QUANMET Sample Name: CCV2-3 Operator: LEJ
 Run Time: 11/20/00 18:02:47
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm						
Avge	.96719	47.884	4.8557	4.7756	4.7377	4.7181	48.812
SDev	.00117	.121	.1010	.0296	.0203	.0104	.185
%RSD	.12120	.25351	2.0791	.62077	.42836	.21967	.37902
#1	.96710	47.750	4.8491	4.7498	4.7253	4.7049	48.699
#2	.96579	47.854	4.7265	4.8090	4.7295	4.7225	48.998
#3	.96722	47.887	4.8758	4.7515	4.7280	4.7158	48.939
#4	.96866	48.043	4.9716	4.7922	4.7680	4.7292	48.614

Errors	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						
Avge	4.8656	4.7899	4.7890	4.7234	49.193	47.092	4.7755
SDev	.0180	.0109	.0118	.0227	.100	.371	.0419
%RSD	.37093	.22817	.24544	.48087	.20309	.78856	.87815
#1	4.8418	4.7788	4.7771	4.7075	49.074	46.808	4.7509
#2	4.8622	4.8024	4.8018	4.7205	49.310	47.626	4.7628
#3	4.8830	4.7954	4.7960	4.7094	49.226	47.058	4.7506
#4	4.8753	4.7829	4.7813	4.7564	49.161	46.875	4.8379

Errors	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						
Avge	47.769	4.7897	4.7638	47.285	4.7459	4.8211	4.8252
SDev	.143	.0090	.0130	.285	.0267	.0356	.0867
%RSD	.29891	.18863	.27246	.60279	.56352	.73865	1.7962
#1	47.596	4.7832	4.7495	47.139	4.7569	4.7935	4.8283
#2	47.822	4.8002	4.7599	47.176	4.7129	4.8725	4.9282
#3	47.728	4.7942	4.7806	47.115	4.7382	4.8015	4.7161
#4	47.932	4.7812	4.7650	47.711	4.7755	4.8168	4.8284

Errors	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						
Avge	4.8546	4.7413	4.7472	4.7324	4.7418	9.5346	4.7829
SDev	.0309	.0171	.0366	.0172	.0102	.1260	.0104
%RSD	.63631	.36163	.77033	.36382	.21523	1.3213	.21814
#1	4.8709	4.7156	4.7079	4.7190	4.7293	9.4163	4.7677
#2	4.8633	4.7499	4.7945	4.7292	4.7444	9.5774	4.7851

#3	4.8089	4.7499	4.7333	4.7241	4.7395	9.4522	4.7878
#4	4.8754	4.7499	4.7531	4.7575	4.7539	9.6927	4.7912
Errors	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 4.8211
SDev .0202
%RSD .41967

#1 4.7972
#2 4.8291
#3 4.8443
#4 4.8137

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB3

Operator: LEJ

Run Time: 11/20/00 18:05:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00252	-.00923	-.01307	.00228	.00032	-.00000	.01038
SDev	.00412	.00570	.03912	.00598	.00010	.00000	.00300
%RSD	163.77	61.761	299.22	262.01	31.818	327.82	28.933
#1	.00862	-.00875	.01825	.00208	.00027	.00000	.01142
#2	.00000	-.01426	.01829	.00001	.00027	.00000	.01387
#3	.00143	-.00140	-.02624	.01056	.00047	.00000	.00679
#4	.00002	-.01249	-.06260	-.00352	.00027	-.00001	.00945
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	-.00023	-.00139	-.00066	-.00185	.00183	-.25737	-.00131
SDev	.00426	.00112	.00220	.00053	.00115	.30246	.00100
%RSD	1842.6	80.728	335.99	28.850	62.940	117.52	75.885
#1	L-.00502	-.00277	.00000	-.00231	.00283	-.43296	-.00125
#2	.00089	-.00139	-.00052	-.00138	.00283	-.20205	-.00125
#3	H.00504	-.00002	-.00368	-.00231	.00083	-.53880	-.00016
#4	-.00183	-.00139	.00158	-.00139	.00083	.14432	-.00260
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	.00552	-.00099	.00778	.01229	-.00383	.00193	-.00014
SDev	.01425	.00000	.00300	.00366	.01725	.00003	.00021
%RSD	258.20	.11577	38.489	29.827	450.66	1.3721	154.14
#1	-.01104	-.00099	.00519	.01424	.01831	.00189	.00013
#2	.01104	-.00099	.01038	.01642	-.02273	.00193	-.00032
#3	.00000	-.00099	.00519	.00989	-.00100	.00196	-.00007
#4	.02207	-.00099	.01038	.00859	-.00989	.00193	-.00028
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	-.02499	.04258	.02371	.00004	.00025	-.01895	.00071
SDev	.02729	.00982	.01763	.00011	.00049	.08176	.00215
%RSD	109.20	23.063	74.367	312.20	200.00	431.53	301.53
#1	-.06562	.05676	.00701	-.00006	-.00016	-.05680	.00007
#2	-.01145	.03973	.01562	-.00006	.00049	.09460	.00014

#3	-.00729	.03972	.02424	.00014	.00082	-.09464	-.00116
#4	-.01562	.03410	.04796	.00013	-.00016	-.01896	.00381

Errors	LC Pass						
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	-.00032
SDev	.00037
%RSD	115.13

#1	-.00019
#2	-.00088
#3	-.00014
#4	-.00009

Errors	LC Pass
High	.02000
Low	-.02000

674 1749

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William J. Reinherm

Date of Analysis: 11-20-00

File ID: 1120HGA

Matrix: water/tclp

Lot Number/SDG

Method

Lot Number/SDG	Method
<u>COK090223</u>	<u>7470A</u>
<u>COK140226</u>	
<u>COK150188</u>	
<u>COK160164</u>	
<u>COS270283 BIPROZ</u>	
<u>COS280168 ↓</u>	
<u>COS310146 SCOTIAZ</u>	
<u>COK020256 ↓</u>	
<u>COK010279 SADVAZI</u>	
<u>COK020216 ↓</u>	
<u>COK030304 (HGT+DIE)</u>	

William J. Rankin 11-20-00

674 1750
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14:05:53 20 Nov 2000

Folder: 1120HGA
Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0		14:05:53 20 Nov 2000 HG		
Hg	.000	ppb	6707					
*** Standard: 2 Rep: 1				Seq: 1		14:07:53 20 Nov 2000 HG		
Hg	.200	ppb	30798	<i>0057-151-4</i>				
*** Standard: 3 Rep: 1				Seq: 2		14:09:59 20 Nov 2000 HG		
Hg	.500	ppb	63167	<i>0057-151-5</i>				
*** Standard: 4 Rep: 1				Seq: 3		14:11:25 20 Nov 2000 HG		
Hg	1.00	ppb	121062	<i>0057-151-6</i>				
*** Standard: 5 Rep: 1				Seq: 4		14:12:52 20 Nov 2000 HG		
Hg	5.00	ppb	618862	<i>0057-151-7</i>				
*** Standard: 6 Rep: 1				Seq: 5		14:14:28 20 Nov 2000 HG		
Hg	10.0	ppb	1268661	<i>0057-151-8</i>				

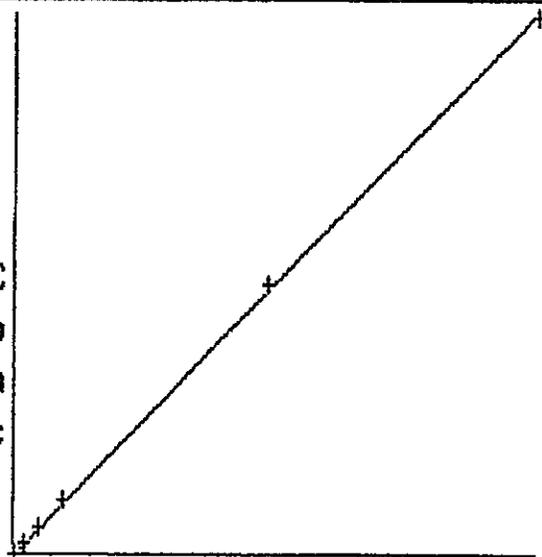
674 1751

William J. Heath 11-20-00

RunDate: HGNET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 1120HGA Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 14:15:37 20 Nov 2000 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WTR A/S: On

CALIBRATION: Line proto: HGNET

Hg	Accepted
Conc.	Calc. Dev. ->linear
S1 .000	.051 .051 Quadratic
S2 .200	.242 .042 Wtdlinear
S3 .500	.498 -.002 C
S4 1.00	.957 -.043 Accept o
S5 5.00	4.90 -.098 n
S6 10.0	10.1 .051 c
A .0000000	r .999885
B 7.92434e-6	C -2.41321e-3



Mean	SD	Mean
S1 6787	0 SD	6787
S2 30798	0 %RSD	30798
S3 63167	0 %RSD	63167
S4 121062	0 %RSD	121062
S5 618862	0 %RSD	618862
S6 1268661	0 %RSD	1268661

New cal coefficients stored

William J. Runkle 11-20-00

674 1752

14:17:51 20 Nov 2000

Folder: 1120HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1					Seq: 6	14:17:51 20 Nov 2000	HG	
Hg	2.47	ppb	311941		<i>0057-151-9</i>			
*** Sample ID: ICB1					Seq: 7	14:19:15 20 Nov 2000	HG	
Hg	.014	ppb	2017					
*** Sample ID: CCV5-1					Seq: 8	14:20:39 20 Nov 2000	HG	
Hg	4.60	ppb	581346		<i>0057-151-10</i>			
*** Sample ID: CCB1					Seq: 9	14:22:14 20 Nov 2000	HG	
Hg	.006	ppb	1096					
*** Sample ID: DP6A2BT					Seq: 10	14:23:48 20 Nov 2000	HG	
Hg	.035	ppb	4770					
*** Sample ID: DP6QKBT					Seq: 11	14:25:13 20 Nov 2000	HG	
Hg	.054	ppb	7130					
*** Sample ID: DP6QKCT					Seq: 12	14:27:12 20 Nov 2000	HG	
Hg	2.35	ppb	297134		<i>0057-152-1</i>			
*** Sample ID: DPLF2T					Seq: 13	14:28:49 20 Nov 2000	HG	
Hg	.051	ppb	6714					
*** Sample ID: DPT5FT					Seq: 14	14:31:09 20 Nov 2000	HG	
Hg	.048	ppb	6402					
*** Sample ID: DPWNFT					Seq: 15	14:33:15 20 Nov 2000	HG	
Hg	.053	ppb	6941					
*** Sample ID: DPWNFST					Seq: 16	14:35:15 20 Nov 2000	HG	
Hg	5.19	ppb	655091					<i>Spike Rec 103%</i>
*** Sample ID: DPWNFDT					Seq: 17	14:36:40 20 Nov 2000	HG	
Hg	5.17	ppb	652572					<i>Spike Rec 102%</i>

674 1753

14:38:26 20 Nov 2000

Folder: 1120HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DP6AWBT					Seq: 18		14:38:26 20 Nov 2000	HG
Hg	.027	ppb	3701					
*** Sample ID: DP6QTBT					Seq: 19		14:40:22 20 Nov 2000	HG
Hg	.043	ppb	5737					
*** Sample ID: CCV5-2					Seq: 20		14:42:32 20 Nov 2000	HG
Hg	4.86	ppb	614232					
*** Sample ID: CCB2					Seq: 21		14:43:59 20 Nov 2000	HG
Hg	-.006	ppb	-451					
*** Sample ID: DP6QTCT					Seq: 22		14:45:28 20 Nov 2000	HG
Hg	2.40	ppb	303685			0057-152-2		
*** Sample ID: DPOEDT					Seq: 23		14:47:15 20 Nov 2000	HG
Hg	.030	ppb	4029					
*** Sample ID: DPOEDST					Seq: 24		14:49:41 20 Nov 2000	HG
Hg	5.12	ppb	646021					Spike Rec 102%
*** Sample ID: DPOEDDT					Seq: 25		14:51:07 20 Nov 2000	HG
Hg	5.06	ppb	639065					Spike Rec 101%
*** Sample ID: DP6QXB					Seq: 26		14:53:02 20 Nov 2000	HG
Hg	.027	ppb	3732					
*** Sample ID: DP6QXC					Seq: 27		14:54:29 20 Nov 2000	HG
Hg	2.38	ppb	300270			0057-152-3		
*** Sample ID: DN0LO					Seq: 28		14:55:55 20 Nov 2000	HG
Hg	.006	ppb	1043					
*** Sample ID: DN1MV					Seq: 29		14:57:54 20 Nov 2000	HG
Hg	.131	ppb	16795					

14:59:19 20 Nov 2000

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DN1MVS								
Hg	1.23	ppb	154940	Seq: 30		14:59:19 20 Nov 2000 HG		
								<i>Spike Rec 110%</i>
*** Sample ID: DN1MVD				Seq: 31		15:00:55 20 Nov 2000 HG		
Hg	1.27	ppb	160934					<i>Spike Rec 114%</i>
*** Sample ID: CCV5-3				Seq: 32		15:02:20 20 Nov 2000 HG		
Hg	4.67	ppb	589241					
*** Sample ID: CCB3				Seq: 33		15:03:48 20 Nov 2000 HG		
Hg	.018	ppb	2639					
*** Sample ID: DP6Q1B				Seq: 34		15:05:13 20 Nov 2000 HG		
Hg	.055	ppb	7261					
*** Sample ID: DP6Q1C				Seq: 35		15:07:04 20 Nov 2000 HG		
Hg	2.45	ppb	309734					<i>0057-152-4</i>
*** Sample ID: DN1M9				Seq: 36		15:08:30 20 Nov 2000 HG		
Hg	.034	ppb	4608					
*** Sample ID: DN1M9S				Seq: 37		15:10:08 20 Nov 2000 HG		
Hg	1.06	ppb	134590					<i>Spike Rec 106%</i>
*** Sample ID: DN1M9D				Seq: 38		15:11:46 20 Nov 2000 HG		
Hg	1.12	ppb	142007					<i>Spike Rec. 112%</i>
*** Sample ID: DP6Q3B				Seq: 39		15:13:17 20 Nov 2000 HG		
Hg	.043	ppb	5747					
*** Sample ID: DP6Q3C				Seq: 40		15:15:24 20 Nov 2000 HG		
Hg	2.48	ppb	312872					<i>0057-152-5</i>
*** Sample ID: DN35V				Seq: 41		15:17:09 20 Nov 2000 HG		
Hg	.006	ppb	1036					

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15:19:05 20 Nov 2000

Folder: 1120HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DN35X					Seq: 42			15:19:05 20 Nov 2000 HG
Hg	.034	ppb	4579					
*** Sample ID: DN35XS					Seq: 43			15:20:39 20 Nov 2000 HG
Hg	1.08	ppb	136033					Spike rec 108%
*** Sample ID: CCV5-4					Seq: 44			15:22:06 20 Nov 2000 HG
Hg	4.66	ppb	588241					
*** Sample ID: CCB4					Seq: 45			15:23:43 20 Nov 2000 HG
Hg	.013	ppb	1973					
*** Sample ID: DN35XD					Seq: 46			15:25:30 20 Nov 2000 HG
Hg	1.14	ppb	143753					Spike rec. 114%
*** Sample ID: DN352					Seq: 47			15:26:57 20 Nov 2000 HG
Hg	.027	ppb	3763					<i>N in 11-20-00</i>
*** Sample ID: DN353					Seq: 48			15:28:25 20 Nov 2000 HG
Hg	.045	ppb	6016					
*** Sample ID: DN87F					Seq: 49			15:30:13 20 Nov 2000 HG
Hg	.049	ppb	6520					
*** Sample ID: DN87K					Seq: 50			15:31:39 20 Nov 2000 HG
Hg	.055	ppb	7307					
*** Sample ID: DP6Q5B					Seq: 51			15:33:06 20 Nov 2000 HG
Hg	.031	ppb	4193					
*** Sample ID: DP6Q5C					Seq: 52			15:35:11 20 Nov 2000 HG
Hg	2.25	ppb	283947					0057-152-6
*** Sample ID: DN768					Seq: 53			15:36:56 20 Nov 2000 HG
Hg	.039	ppb	5252					

15:39:04 20 Nov 2000

Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DN7G8S				Seq: 54		15:39:04 20 Nov 2000	HG	
Hg	1.20	ppb	151818					
*** Sample ID: DN7G8D				Seq: 55		15:40:55 20 Nov 2000	HG	
Hg	1.25	ppb	158334					
*** Sample ID: CCV5-5				Seq: 56		15:42:32 20 Nov 2000	HG	
Hg	5.19	ppb	655643					
*** Sample ID: CCB5				Seq: 57		15:44:20 20 Nov 2000	HG	
Hg	.025	ppb	3410					
*** Sample ID: DN7HA				Seq: 58		15:45:56 20 Nov 2000	HG	
Hg	.038	ppb	5084					
*** Sample ID: DN7HC				Seq: 59		15:47:24 20 Nov 2000	HG	
Hg	.062	ppb	8121					
*** Sample ID: DN7HD				Seq: 60		15:48:52 20 Nov 2000	HG	
Hg	.103	ppb	13314					
*** Sample ID: DN8VJ				Seq: 61		15:50:20 20 Nov 2000	HG	
Hg	.026	ppb	3543					
*** Sample ID: DN8VP				Seq: 62		15:51:47 20 Nov 2000	HG	
Hg	.034	ppb	4537					
*** Sample ID: DP6RAB				Seq: 63		15:53:15 20 Nov 2000	HG	
Hg	.032	ppb	4384					
*** Sample ID: DP6RAC				Seq: 64		15:54:52 20 Nov 2000	HG	
Hg	2.71	ppb	342064					0057-152-7
*** Sample ID: DPCMH				Seq: 65		15:56:19 20 Nov 2000	HG	
Hg	.045	ppb	6039					

674 1757

15:58:18 20 Nov 2000

Folder: 1120HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DPCMHS					Seq: 66	15:58:18 20 Nov 2000 HG		
Hg	1.30	ppb	164939					Spike Rec 126%
*** Sample ID: DPCMHD C with 11-20-00					Seq: 67	16:00:25 20 Nov 2000 HG		
Hg	1.25	ppb	158613					Spike Rec 121%
*** Sample ID: CCV5-6					Seq: 68	16:02:15 20 Nov 2000 HG		
Hg	5.44	ppb	686692					
*** Sample ID: CCB6					Seq: 69	16:03:47 20 Nov 2000 HG		
Hg	.036	ppb	4880					
*** Sample ID: DPCMHF					Seq: 70	16:05:16 20 Nov 2000 HG		
Hg	.056	ppb	7422					
*** Sample ID: DPCMHSF					Seq: 71	16:06:45 20 Nov 2000 HG		
Hg	1.24	ppb	156355					Spike Rec 118%
*** Sample ID: DPCM HDF					Seq: 72	16:09:12 20 Nov 2000 HG		
Hg	1.25	ppb	158274					Spike Rec 119%
*** Sample ID: CCV5-7					Seq: 73	16:10:40 20 Nov 2000 HG		
Hg	5.44	ppb	686506					
*** Sample ID: CCB7					Seq: 74	16:12:06 20 Nov 2000 HG		
Hg	.006	ppb	1021					

End of analysis
WDR 11-20-00

William Phentim 11-20-00

674 1758

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS
RunFold: 1120HGA	Seq: 0 Batch:
	Prnt: R/T On
Rev: 4.2	13:11:06 20 Nov 2000
State: Idle	Pump: On
	Xmit: Off Gas: 0.30 LPM
	User: WTR A/S: On

AUTOSAMPLER:	Rack Edit	rack:	RACK1	Range	1-44	Clear seQ	Undo eXit
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	DP6A2BT	1.0000	1.0000				
6	DP6QKBT	1.0000	1.0000				
7	DP6QKCT	1.0000	1.0000				
8	DPLF2T	1.0000	1.0000				
9	DPT5FT	1.0000	1.0000				
10	DPWNFT	1.0000	1.0000				
11	DPWNFST	1.0000	1.0000				
12	DPWNFDT	1.0000	1.0000				
13	DP6AWBT	1.0000	1.0000				
14	DP6QTB1	1.0000	1.0000				
15	CCV5-2	1.0000	1.0000				

PgDn

For help on <hotkey> press Shift <hotkey>	Full column mode Ins to switch
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674 1759

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS
RunFold: 1120HGA	Seq: 0 Batch:
	Prnt: R/T On Pump: On
State: Idle	Rev: 4.2 13:11:08 20 Nov 2000 Xmit: Off Gas: 0.30 LPM
	User: WTR A/S: On

AUTOSAMPLER:	Rack Edit	rack:	RACK1	Range	1-44	Clear se@	Undo eXit	PgUp
cup ID	Extended id	Weight	Volume	Macro	check	macros		
16	CCB2	1.0000	1.0000					
17	DP6QTCT	1.0000	1.0000					
18	DPOEDT	1.0000	1.0000					
19	DPOEDST	1.0000	1.0000					
20	DPOEDDT	1.0000	1.0000					
21	DP6QXB	1.0000	1.0000					
22	DP6QXC	1.0000	1.0000					
23	DN0LO	1.0000	1.0000					
24	DN1MV	1.0000	1.0000					
25	DN1MVS	1.0000	1.0000					
26	DN1MVD	1.0000	1.0000					
27	CCV5-3	1.0000	1.0000					
28	CCB3	1.0000	1.0000					
29	DP6Q1B	1.0000	1.0000					
30	DP6Q1C	1.0000	1.0000					

PgDn

Full column mode Ins to switch

674 1760

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS
RunFold: 1120HGA	Seq: 0 Batch:
	Prnt: R/T On
	Rev: 4.2 13:11:10 20 Nov 2000
State: Idle	Pump: On
	Xmit: Off Gas: 0.30 LPM
	User: WTR A/S: On

AUTOSAMPLER:	Rack Edit	rack: RACK1	Range	1-44	Clear seQ	Undo eXit	PgUp
cup ID	Extended id	Weight	Volume	Macro	check	macros	
31	DN1M9	1.0000	1.0000				
32	DN1M9S	1.0000	1.0000				
33	DN1M9D	1.0000	1.0000				
34	DP6Q3B	1.0000	1.0000				
35	DP6Q3C	1.0000	1.0000				
36	DN35V	1.0000	1.0000				
37	DN35X	1.0000	1.0000				
38	DN35XS	1.0000	1.0000				
39	CCV5-4	1.0000	1.0000				
40	CCB4	1.0000	1.0000				
41	DN35XD	1.0000	1.0000				
42	DN352	1.0000	1.0000				
43	DN353	1.0000	1.0000				
44	DN87F	1.0000	1.0000				

PgDn

Full column mode Ins to switch

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

Hg Digestion Log

6741763



QUA-4169

Serial Number: 067 | Log Book Number: 96-MT-578 | Start Time: 12:00 → 12:15

Sample ID	Date Rec'd	Prep Date	Prepared By	WVVol	Sample Type	Run Date	Comments
1. STD0	N/A	11-20-00	JTR	100mL	Water	11-20-00	N/A
2. STD1							0057-151-4
3. STD2							0057-151-5
4. STD3							0057-151-6
5. STD4							0057-151-7
6. STD5							0057-151-8
7. TON							0057-151-9
8. TCB							N/A
9. CCl ₄							0057-151-10
10. CCB							N/A
11. DRGA28T					TCLP		N/A
12. DRGA28T					Water		N/A
13. DRGA28T					TCLP		0057-152-1
14. DRLE2T	11-9-00						N/A
15. DRP5FT	11-14-00						N/A
16. DRWUFT	11-15-00						+ 5mL 0057-151-2
17. DRWUFT							N/A
18. DRWUFT							N/A
19. DRGAU2BT	N/A				Water		N/A
20. DRVOTBT					TCLP		0057-152-2
21. DRP2CT							N/A
22. DROEBT	11-16-00						+ 5mL 0057-151-2
23. DROENDST							N/A
24. DROEDDT							N/A
25. DROAXB	N/A				Water		N/A
Reagents							
HNO ₃		0.5 mL			Mallinckrodt 6023 TORBOS		7470A Analytical 15 ppt 120°C
H ₂ SO ₄		5.0 mL			SS57 TOZATZ		SnCl ₂ = 0057-149-10
KMNO ₄		15.0 mL			0057-144-11		DiCl-NH ₄ OH = 0057-149-9
K ₂ S ₂ O ₄		8.0 mL			0057-144-12		H ₂ O 11-20-00
Extract(s)							
(Record line number from above)		Date	Time	Analyst	Location	Date	Time
				JTR	11-20-00		
Extract(s) Relinquished							
		Date	Time	Analyst	Location	Date	Time

Hg Digestion Log

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



QUA-4189

Serial Number: 069
 Log Book Number: 96-MT-578
 Start Time: 12:00 → 12:15

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. DN17HA	11-1-00	11-20-00	WJR	100 mL	Water	11-20-00	DIA
2. DN17HC	↓						
3. DN17HD	↓						
4. DN8VJ	11-2-00						
5. DN8VD	↓						
6. DN6RFB	D/A						
7. DN6RAC	↓						
8. DRCMH	11-3-00						0657-152-7 DIA
9. DRCMHS							+ 1 mL 0057-151-2 ↓
10. DRCMH0							
11. DRCMHF							DIA
12. DRCMH5F							
13. DRCMHDF	↓						1 mL 0057-151-2 ↓
14.							
15.							
16.							
17.							
18.							
19.							
20.							
21.							
22.							
23.							
24.							
25.							

Reagents	Vol (mL)	Ref. Number	Method
HNO3	2.5 mL	6623 TO9A05	7HDA Autoclave 15 psi 120°C
H2SO4	5.0 mL	5557 TOZ-A1Z	SnCl ₂ = 0057-149-10
KMnO4	15.0 mL	0057-144-11	NaCl-NH ₂ OH = 0057-149-9
K2S2O4	8.0 mL	0057-144-12	WJR 11-20-00

Extract(s)	Date	Time	Analyst	Location	Date	Time	Analyst	Location
(Record line number from above)			WJR					

Extract(s) Received	Extract(s) Relinquished
WJR 11-20-00	WJR 11-20-00



Analyst	Room Temp.	Date	Checked By	Balance
COX/K610325	61.75	11-17-00	COX/K610325	54.817
Client Codes	Solution # 1 - Log book #	Solution # 2 - Log book #	Probe	
	COXUG7-12	COXUG7-12	3005107	

Sample ID	Wg/Vol	Fluid Determination		Extract fluid #1 or #2	Sample ID	TCLP Extraction		Final pH after Tumbling	Conc. HNO ₃ to Acidity (for Metals)	
		Init. pH	Final pH			Wgt (g)	Fluid Vol.			Vessel
1. DPFE2	500g 96.5ml	4.16	1.58	Soln #1	DPFE2	100.0g	200.0ml	glass	4.96	5ml
2. DPSE	1g	7.85	1.64		DPSE			glass/plastic	4.96	5ml
3. DPWF	1g	9.54	1.61		DPWF			glass	4.93	5ml
4. DPWRK	1g	12.35	9.24	Soln #2	DPWRK			Resin	10.20	5ml
5. DPWRU	1g	12.41	2.44	Soln #1	DPWRU				12.03	5ml
6. DPWRU	1g	11.05	11.82		DPWRU				10.68	5ml
7. DPWRU	1g	8.24	1.61		DPWRU				5.00	5ml
8. DPWRU	1g	12.56	10.62	Soln #2	DPWRU				10.40	5ml
9. DPWRU	1g	12.37	2.35	Soln #1	DPWRU				11.13	5ml
10. DPWRU	1g	12.37	2.35	Soln #1	DPWRU				4.89	5ml
11. DPWRU	1g	12.37	2.35	Soln #1	DPWRU				7.83	5ml
12. DPWRU	1g	12.37	2.35	Soln #1	DPWRU				7.83	5ml
13. DPWRU	1g	12.37	2.35	Soln #1	DPWRU				7.83	5ml
14. DPWRU	1g	12.37	2.35	Soln #1	DPWRU				7.83	5ml
15. DPWRU	1g	12.37	2.35	Soln #1	DPWRU				7.83	5ml

DPWRU Extract(s) (Record line number from above)	Date		Time		Extract(s) Retained	Analyst	Location	Date	Time	Extract(s) Retiniquished	Analyst	Location
	1-12	11-18-00	16:00	16:10								

Comments: pH EFA1 = 4.95 pH EFA2 = 2.89

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

<5 = Extraction fluid # 1 5.7mL Glacial acetic acid dil 500mL + 64.3mL NaOH dil to 1L (pH 4.93 ± 0.05)

>5 = Extraction fluid #2 5.7mL Glacial acetic acid dil to 1L (pH 2.88 ± 0.05)

Date/Time On	11-17-00	Date/Time Off	11-18-00	Agitation Apparatus RPM's	30F2
Weight	18.30g	Volume	4.0	Checked by	(7.0)
Date	11-18-00	Date	11-18-00	Checked by	(10.0)
Date	11-18-00	Date	11-18-00	Checked by	(10.0)
Filler Lot #	8320701W				

Method	3010A	Matrix	Water	Start Time	1330	Reagents:	3ml ConcnHNO3 5ml 1:1 HCl										
Analyst	Chris M. H. [Signature]	Date	11-19-00	Lot Number	60K150186 60K150188 60K150223	60K150184 60K150188 60K150223	W625D9A05 Mallinckrodt										
Reviewed by	[Signature]	Date	11-19-00	Lab Lot #	(book, page, line)	0057-093-1, 0014-154-2	0057-147-5										
SDG:		MS	MSB12EV, TCLP Spike	Lab Lot #	(book, page, line)	0057-093-1, 0014-154-2											
Sample ID	1. DPWSPD	Initial WWT	50ml	Final Vol	50ml	Color	Pre	Post	Clarity	Pre	Post	Texture	Pre	Post	Artifacts	Artifact Codes	
2.	DPWPD																S=Stones O=Organic (plant mat)
3.	DPDD																W=free H2O G=Glass M=Metal Fragments
4.	DPUNF																R=Rubber/Plastic C=Cloth P=Paper I=Insects
5.	DPUNFS																
6.	DPUNFD																
7.	DP2IT																
8.	DPLEF2																
9.	DP15F																
10.	DP6A2B																
11.	DP6J2B																
12.	DP6J2C																
13.																	
14.																	
15.																	
16.																	
17.																	
18.																	
19.																	
20.																	
21.																	
22.																	
23.																	
24.																	
Digestate(s)		Date	Time	(Received)	Analyst	Location	Date	Time	(Relinquished)	Analyst	Location	Hot Plate/Block Temp	Correction Factor				
A11 Above		11-19-00	17:40		CHR METRIC	11-19-00	17:50			CHR METRIC	11-19-00						
A11 Above		11-20-00	10:00		CHR METRIC	11-20-00	18:30			CHR METRIC	11-20-00						

REQUESTED BY: MURPHYJ

METHOD: QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
20A	DPLF2	___	286007	422326	A-34-QO	COK090223	001	λ	SOLID	0	7 1
22A CLP1	DPT5F	___	286008	002532	A-34-QO	COK140226	001	*	SOLID	0	6 1
22C CLP1	DPWNF	___	286006	399411	A-34-QO	COK150188	001	*	SOLID	0	3 1
22C	DPWPK	___	286001	413315	A-34-QO	COK150194	001		SOLID	0	1 1
22C	DPWPW	___	286002	413315	A-34-QO	COK150194	002		SOLID	0	1 1
22C	DPWPO	___	286003	413315	A-34-QO	COK150194	003		SOLID	0	1 1
1D	DP0D0	___	286004	413315	A-34-QO	COK160164	001		SOLID	0	1 1
1D	DP0ED	___	286005	413315	A-34-QO	COK160164	002		SOLID	0	1 1
2B	DP21T	___	286009	413315	A-34-QO	COK170126	001		SOLID	0	1 1

} Plastic

RELINQUISHED BY

Evan M Faust
Paul Karl

RECEIVED BY

Paul Karl
Evan M Faust

DATE/TIME

11/17/00 16:00
11/17/00 17:30

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

674 1769

PSR024 11/19/00 10:26:11 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 003

REQUESTED BY: RIZZOC

METHOD: QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
20A	DPLF2	___	286427	422326	A-34-QO	COK090223	001		SOLID	0	7 1
22A CLP1	DPT5F	___	286428	002532	A-34-QO	COK140226	001		SOLID	0	6 1
22C CLP1	DPWNF	___	286426	399411	A-34-QO	COK150188	001		SOLID	0	3 1
22C	DPWPK	___	286421	413315	A-34-QO	COK150194	001		SOLID	0	1 1
22C	DPWPW	___	286422	413315	A-34-QO	COK150194	002		SOLID	0	1 1
22C	DPWPO	___	286423	413315	A-34-QO	COK150194	003		SOLID	0	1 1
1D	DP0D0	___	286424	413315	A-34-QO	COK160164	001		SOLID	0	1 1
1D	DP0ED	___	286425	413315	A-34-QO	COK160164	002		SOLID	0	1 1
2B	DP21T	___	286420	413315	A-34-QO	COK170126	001		SOLID	0	1 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

E. T. Whelan

Cynthia A [Signature]

Cynthia A [Signature]

E. T. Whelan

11-19-00 1330

 11-19-00 1530

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

674 1770

REQUESTED BY: MESOLOSM

METHOD: 08 Mercury (7470A, Cold Vapor) - Liquid

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX DESCRIPTION</u>	<u>QTY RCVD</u>	<u>QTY REQD</u>
20A	DPLF2	---	286637	422326	A-0M-08	COK090223	001		SOLID	0	7 1
22A CLPT	DPT5F	---	286635	002532	A-0M-08	COK140226	001		SOLID	0	6 1
22E CLP1	DPWNF	---	286636	399411	A-0M-08	COK150188	001		SOLID	0	3 1
<p>30F</p> <p>DP6A2TB</p> <p>Tclp Leachates</p>											

RELINQUISHED BY

RECEIVED BY

DATE/TIME

[Signature]

William J. Robinson

[Signature]

11-20-00 10:00

11-20-00 13:45

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

674 1771

GENERAL CHEMISTRY DATA

674 1772

UXB INTERNATIONAL

Client Sample ID: DF/24-A/0319/CVS/013

General Chemistry

Lot-Sample #...: COK150188-001 Work Order #...: DPWNF Matrix.....: SOLID
 Date Sampled...: 11/14/00 Date Received...: 11/15/00
 % Moisture.....: 19 -

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH	5.0		No Units	SW846 9045C	11/16/00	0321381
			Dilution Factor: 1	MS Run #.....: 0321207		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	11/21/00	0326120
			Dilution Factor: 1	MS Run #.....: 0326021		
Percent Solids	80.9		%	MCAWW 160.3 MOD	11/16-11/17/00	0321255
			Dilution Factor: 1	MS Run #.....: 0321094		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	11/19/00	0324146
			Dilution Factor: 1	MS Run #.....: 0324043		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	11/19/00	0324147
			Dilution Factor: 1	MS Run #.....: 0324044		

674 1773

METHOD BLANK REPORT

General Chemistry

Client Lot #...: COK150188

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 #: DP6M01AA 200	mg/kg	MB Lot-Sample #: A0K190000-146 SW846 7.3.3	11/19/00	0324146
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DP6M11AA 200	mg/kg	MB Lot-Sample #: A0K190000-147 SW846 7.3.4	11/19/00	0324147
		Dilution Factor: 1				

NOTE(S):

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

674 1774

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0K150188

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 #: DP1G91AA (85 - 115)	LCS Lot-Sample#: C0K160000-381 SW846 9045C	11/16/00	0321381
		Dilution Factor: 1			

NOTE(S) :

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

674 1075

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: COK150188

Work Order #...: DPT4L-SMP
DPT4L-DUP

Matrix.....: SOLID

Date Sampled...: 11/14/00

Date Received...: 11/14/00

% Moisture.....: 12

<u>PARAM RESULT</u>	<u>DUPLICATE RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD LIMIT</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Reactive Cyanide	ND	mg/kg	0.0	(0-20)	SD Lot-Sample #: COK140221-001 SW846 7.3.3	11/19/00	0324146
					Dilution Factor: 1		
					Prep Date.....: 0324043	Analysis Date...:	Prep Batch #....
Reactive Sulfide	ND	mg/kg	0	(0-20)	SD Lot-Sample #: COK140221-001 SW846 7.3.4	11/19/00	0324147
					Dilution Factor: 1		
					Prep Date.....: 0324044	Analysis Date...:	Prep Batch #....

674 1776

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: COK150188

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

Matrix.....: SOLID

Date Sampled...: 11/14/00

Date Received...: 11/15/00

% Moisture.....: 19

<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>
Percent Solids	80.9	82.2	%	1.5	(0-20)	SD Lot-Sample #: COK150188-001 MCAWW 160.3 MOD	11/16-11/17/00	0321255
Dilution Factor: 1								
Prep Date.....: 0321094 Analysis Date...: Prep Batch #...:								
pH	5.0	4.9	No Units	2.2	(0-20)	SD Lot-Sample #: COK150188-001 SW846 9045C	11/16/00	0321381
Dilution Factor: 1								
Prep Date.....: 0321207 Analysis Date...: Prep Batch #...:								

674 1777

11013

STL Pittsburgh

TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Lot No. Lot No. Lot No. Batch No.

COK150188 COK150178 0321255

COK150240 0321256

COK150219 0321257

COK110117-21

COK150132

Analyst: CLLOHEYDE

In: Date 11-16-00 Time 1115

Out: Date 11-17-00 Time 0430

Balance ID #: C94817

Oven Temp: 103°C±2°C

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
COK150188-001	79	1.07	5.84	4.93	COK150132-029	95	1.07	6.28	5.15
-001D	45	1.04	6.59	5.60	-030	15	1.03	7.09	5.81
COK150240-001	94	1.05	6.89	6.19	-031	59	1.07	6.50	5.87
COK150219-001	30	1.04	6.67	6.00	-032	6	1.05	6.19	5.70
-002	3	1.06	6.34	5.56	-033	49	1.05	6.14	5.04
-003	19	1.07	6.30	5.60	-035	98	1.04	6.79	6.08
-004	181	1.13	5.72	5.16	-036	66	1.04	6.91	5.88
COK110117-021	1151	1.11	6.87	5.67	-036D	73	1.04	7.36	6.38
COK150132-001	83	1.06	6.53	5.61	-037	68	1.04	7.30	6.24
-002	97	1.14	7.02	5.98	-038	112	1.05	6.18	5.23
-003	23	1.08	6.50	5.43	COK150178-001	93	1.07	8.28	6.23
-004	37	1.07	6.46	5.44	-002	108	1.07	7.97	6.30
-005	109	1.03	7.40	5.93	-003	4	1.05	10.35	8.10
-006	210	1.14	6.66	5.83	-004	47	1.06	7.65	4.89
-007	107	1.05	5.86	5.24	COK150132-010	102	1.06	5.52	4.39
-008	46	1.07	6.03	5.20	SAMPLES 7009				
010+	-009	102	1.06	5.52					
-011	36	1.08	5.64	4.92					
-012	80	1.06	6.35	5.25					
-013	29	1.07	5.65	4.80					
-014	53	1.04	7.10	5.84					
-015	XX	1.10	7.00	6.30					
-015D	50	1.05	6.46	5.88					
-016	88	1.06	6.91	6.14					
-017	99	1.03	6.60	6.01					
-018	1	1.03	6.50	5.33					
-019	31	1.06	6.48	5.34					
-020	17	1.05	7.19	6.89					
-021	56	1.07	7.64	6.54					
-022	41	1.06	7.14	6.42					
-023	42	1.06	5.38	4.51					
-024	57	1.05	6.22	5.36					
-025	PU	1.14	5.98	4.95					
-026	55	1.09	6.27	5.40					
-027	100	1.06	7.19	6.91					
-028	24	1.08	6.14	5.40					

11:15

11:15

STL - Pittsburgh WATER CONTENT SHEET

674 1778

SHEET NUM	0011013	
STED	CLL	11/16/00
CHECKED	<i>EJW</i>	<i>11/18/00</i>

CREATED	11/16/00 1 02 30 PM
REVISED	11/18/00 10 43:34 AM

COMMENTS

C0K150188 C0K150240 C0K150219 C0K110117 C0K150132 C0K150178

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.
C0K150188	001	SMP	79	1 07	5 84	4.93	11:15 4:30	0.91	19 078	80 922
C0K150188	001D	SMP	45	1.04	6 59	5 6	11.15 4:30	0.99	17 838	82 162
C0K150240	001	SMP	94	1 05	6.89	6 19	11.15 4:30	0.7	11.986	88 014
C0K150219	001	SMP	30	1 04	6.67	6	11:15 4:30	0.67	11 901	88 099
C0K150219	002	SMP	3	1 06	6 34	5 56	11:15 4:30	0.78	14 773	85.227
C0K150219	003	SMP	19	1 07	6.3	5 6	11 15 4:30	0.7	13 384	86 616
C0K150219	004	SMP	181	1 13	5 72	5 16	11 15 4:30	0.56	12.2	87 8
C0K110117	021	SMP	1151	1.11	6 87	5.67	11.15 4:30	1.2	20.833	79 167
C0K150132	001	SMP	83	1.06	6 53	5.61	11:15 4:30	0.92	16 819	83 181
C0K150132	002	SMP	97	1 14	7.02	5 98	11.15 4:30	1 04	17 687	82 313
C0K150132	003	SMP	23	1 08	6 5	5 43	11.15 4:30	1 07	19.742	80 258
C0K150132	004	SMP	37	1.07	6.46	5 44	11:15 4:30	1 02	18 924	81 076
C0K150132	005	SMP	109	1.03	7 4	5 93	11:15 4:30	1 47	23 077	76 923
C0K150132	006	SMP	21C	1 14	6 66	5 83	11 15 4:30	0.83	15 036	84 964
C0K150132	007	SMP	107	1 05	5 86	5 24	11 15 4:30	0.62	12 89	87 11
C0K150132	008	SMP	46	1 07	6.03	5 2	11:15 4:30	0 83	16 734	83 266
C0K150132	009	SMP	102	1 06	5 52	4 39	11.15 4:30	1.13	25.336	74.664
C0K150132	011	SMP	36	1 08	5 64	4 92	11 15 4:30	0 72	15 789	84.211

*RPD-910
11/18/00*

674 1779

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM	0011013	
.STED.	CLL	11/16/00
CHECKED	ELW	11/18/00

CREATED	11/16/00 1 02 30 PM	
REVISED	11/18/00 10:43 34 AM	

COMMENTS

COK150188 COK150240 COK150219 COK110117 COK150132 COK150178

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.
COK150132	012	SMP	80	1 06	6 35	5 25	11 15 4 30	1 1	20.794	79 206
COK150132	013	SMP	29	1 07	5 65	4 8	11:15 4.30	0 85	18 559	81 441
COK150132	014	SMP	53	1.04	7 1	5 84	11 15 4 30	1.26	20 792	79 208
COK150132	015	SMP	XX	1 1	7	6 3	11 15 4:30	0 7	11 864	88 136
COK150132	015D	SMP	50	1 05	6.46	5 88	11:15 4.30	0 58	10.721	89 279
COK150132	016	SMP	88	1 06	6 91	6.14	11:15 4.30	0 77	13 162	86 838
COK150132	017	SMP	99	1 03	6 6	6 01	11 15 4:30	0 59	10 592	89 408
COK150132	018	SMP	1	1 03	6 5	5.33	11 15 4:30	1 17	21 389	78 611
COK150132	019	SMP	31	1 06	6.48	5 34	11 15 4 30	1 14	21.033	78.967
COK150132	020	SMP	17	1 05	7.19	6 89	11 15 4.30	0.3	4 886	95 114
COK150132	021	SMP	56	1 07	7.64	6 54	11 15 4:30	1 1	16 743	83 257
COK150132	022	SMP	41	1.06	7.14	6 42	11 15 4 30	0 72	11 842	88.158
COK150132	023	SMP	42	1 06	5.38	4 51	11 15 4 30	0 87	20 139	79 861
COK150132	024	SMP	57	1 05	6.22	5 36	11.15 4 30	0 86	16.634	83 366
COK150132	025	SMP	PU	1 14	5 98	4.95	11:15 4 30	1 03	21.281	78 719
COK150132	026	SMP	55	1.09	6 27	5 4	11 15 4 30	0 87	16.795	83 205
COK150132	027	SMP	100	1 06	7.19	6 91	11 15 4 30	0 28	4 568	95 432
COK150132	028	SMP	24	1 08	6.14	5 4	11.15 4:30	0 74	14 625	85 375

RPD
1.3%

674 1780

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM	0011013	
.STED	CLL	11/16/00
CHECKED	ELW	11/18/00

CREATED	11/16/00 1 02 30 PM	
REVISED	11/18/00 10 43 34 AM	

COMMENTS

COK150188 COK150240 COK150219 COK110117 COK150132 COK150178

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
COK150132	029	SMP	95	1.07	6.28	11 15	4:30	1.13	21 689	78.311
COK150132	030	SMP	15	1.03	7.09	11 15	4 30	1.28	21 122	78 878
COK150132	031	SMP	59	1.07	6.5	11:15	4 30	0.63	11.602	88 398
COK150132	032	SMP	6	1 05	6 19	11.15	4 30	0 49	9 533	90 467
COK150132	033	SMP	49	1 05	6 14	11 15	4 30	1 1	21.611	78 389
COK150132	035	SMP	98	1 04	6 79	11 15	4 30	0 71	12 348	87 652
COK150132	036	SMP	66	1 04	6 91	11 15	4:30	1.03	17 547	82 453
COK150132	036D	SMP	73	1.04	7.36	11.15	4 30	0 98	15 506	84 494
COK150132	037	SMP	68	1.04	7 3	11:15	4 30	1 06	16 933	83 067
COK150132	038	SMP	112	1 05	6 18	11 15	4 30	0 95	18 519	81 481
COK150178	001	SMP	93	1 07	8.28	11:15	4.30	2.05	28 433	71 567
COK150178	002	SMP	108	1 07	7 97	11:15	4 30	1 67	24.203	75 797
COK150178	003	SMP	4	1 05	10 35	11.15	4 30	2.25	24.194	75 806
COK150178	004	SMP	47	1 06	7.65	11:15	4:30	2.76	41 882	58 118
COK150132	010	Smp	102	1 06	5 52	11 15	4 30	1 13	25 336	74 664

RPD
2.4 070

REQUESTED BY: LOHEYDEC

40D 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
22C CLP1	DPWNF-1-AA	___	284977	399411	A-88-SM	COK150188	001		SOLID	0	3 1
22D CLP1	DPWX1-1-AA	___	284979	378257	A-88-SM	COK150219	001		SOLID	0	5 1
22D CLP1	DPWX3-1-AM	___	284980	378257	A-88-SM	COK150219	002		SOLID	0	5 1
22D CLP1	DPWX5-1-CA	___	284981	378257	A-88-SM	COK150219	003		SOLID	0	9 1
22D CLP1	DPW0A-1-AM	___	284982	378257	A-88-SM	COK150219	004		SOLID	0	5 1
22D	DPW35-1-AA	___	284978	039108	A-88-SM	COK150240	001		SOLID	0	1 1

COK110117-021

RELINQUISHED BY

RECEIVED BY

DATE/TIME

(Signature)

(Signature)

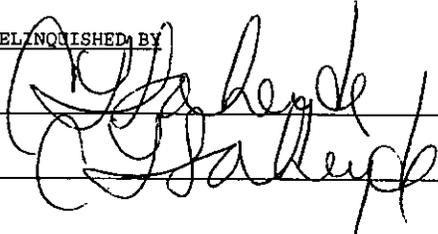
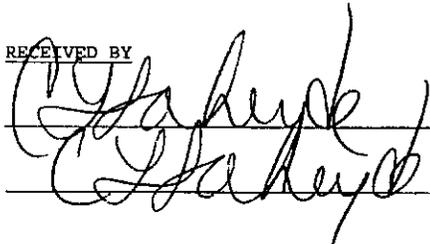
11-16-00 0600
11-16-00 1130

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

REQUESTED BY: LOHEYDEC

HOD. SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED			ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	
		CNTR#	CONTROL #	CLIENT #						RCVD	REQD
22B	DPWK4-1-AA	___	284983	131369	A-88-SM COK150178	001		SOLID	0	1	1
22B	DPWK5-1-AA	___	284984	131369	A-88-SM COK150178	002		SOLID	0	1	1
22B	DPWK7-1-AA	___	284985	131369	A-88-SM COK150178	003		SOLID	0	1	1
22B	DPWK8-1-AA	___	284986	131369	A-88-SM COK150178	004		SOLID	0	1	1

<u>RELINQUISHED BY</u>	<u>RECEIVED BY</u>	<u>DATE/TIME</u>
		11-16-00 0600
		11-16-00 1130

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

674 1783

REQUESTED BY LOHEYDEC

MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED							MATRIX DESCRIPTION	QTY	
		CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX		RCVD	REQD
22B CLP1	DPV4Q-1-AA	___	284987	131369	A-88-SM	COK150132	001	SOLID	0	2	1
22B CLP1	DPV48-1-AK	___	284988	131369	A-88-SM	COK150132	002	SOLID	0	2	1
22B CLP1	DPV49-1-AK	___	284989	131369	A-88-SM	COK150132	003	SOLID	0	2	1
22B CLP1	DPV5C-1-AK	___	284990	131369	A-88-SM	COK150132	004	SOLID	0	2	1
22B CLP1	DPV5D-1-AK	___	284991	131369	A-88-SM	COK150132	005	SOLID	0	2	1
22B CLP1	DPV5F-1-AK	___	284992	131369	A-88-SM	COK150132	006	SOLID	0	2	1
22B CLP1	DPV5G-1-AK	___	284993	131369	A-88-SM	COK150132	007	SOLID	0	2	1
22B CLP1	DPV5M-1-AA	___	284994	131369	A-88-SM	COK150132	008	SOLID	0	3	1
22B CLP1	DPV5W-1-AL	___	284995	131369	A-88-SM	COK150132	009	SOLID	0	3	1
22B CLP1	DPV6V-1-AK	___	284996	131369	A-88-SM	COK150132	011	SOLID	0	2	1
22B CLP1	DPWGP-1-AK	___	284997	131369	A-88-SM	COK150132	012	SOLID	0	2	1
22B CLP1	DPWG0-1-AL	___	284998	131369	A-88-SM	COK150132	013	SOLID	0	2	1
22B CLP1	DPWG8-1-AW	___	284999	131369	A-88-SM	COK150132	014	SOLID	0	2	1
22B CLP1	DPWHF-1-AK	___	285000	131369	A-88-SM	COK150132	015	SOLID	0	2	1
22B CLP1	DPWHJ-1-AK	___	285001	131369	A-88-SM	COK150132	016	SOLID	0	2	1
22B CLP1	DPWHK-1-AK	___	285002	131369	A-88-SM	COK150132	017	SOLID	0	2	1
22B CLP1	DPWHP-1-AK	___	285003	131369	A-88-SM	COK150132	018	SOLID	0	2	1
22B CLP1	DPWHV-1-AK	___	285004	131369	A-88-SM	COK150132	019	SOLID	0	2	1
22B CLP1	DPWH0-1-AK	___	285005	131369	A-88-SM	COK150132	020	SOLID	0	2	1
22B CLP1	DPWH1-1-AK	___	285006	131369	A-88-SM	COK150132	021	SOLID	0	2	1
22B CLP1	DPWH3-1-AK	___	285007	131369	A-88-SM	COK150132	022	SOLID	0	2	1
22B CLP1	DPWH7-1-AK	___	285008	131369	A-88-SM	COK150132	023	SOLID	0	2	1
22B CLP1	DPWH9-1-AK	___	285009	131369	A-88-SM	COK150132	024	SOLID	0	2	1
22B CLP1	DPWJC-1-AK	___	285010	131369	A-88-SM	COK150132	025	SOLID	0	2	1
22B CLP1	DPWJE-1-AK	___	285011	131369	A-88-SM	COK150132	026	SOLID	0	2	1
22B CLP1	DPWJG-1-AL	___	285012	131369	A-88-SM	COK150132	027	SOLID	0	2	1

REQUESTED BY: LOHEYDEC

MOD. SM Solids, Percent (as TS - 160 3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX	QTY	QTY	
		CNTR#							DESCRIPTION	RCVD	REQD	
22B CLP1	DPWJH-1-AK	___ ___ ___	285013	131369	A-88-SM	COK150132	028		SOLID	0	2	1
22B CLP1	DPWJL-1-A7	___ ___ ___	285014	131369	A-88-SM	COK150132	029		SOLID	0	4	1
22B CLP1	DPWJV-1-AK	___ ___ ___	285015	131369	A-88-SM	COK150132	030		SOLID	0	2	1
22B CLP1	DPWJ2-1-AL	___ ___ ___	285016	131369	A-88-SM	COK150132	031		SOLID	0	2	1
22B CLP1	DPWJ4-1-AK	___ ___ ___	285017	131369	A-88-SM	COK150132	032		SOLID	0	2	1
22B CLP1	DPWJ6-1-AL	___ ___ ___	285018	131369	A-88-SM	COK150132	033		SOLID	0	2	1
22B CLP1	DPWKA-1-AK	___ ___ ___	285019	131369	A-88-SM	COK150132	035		SOLID	0	2	1
22B CLP1	DPWKC-1-AK	___ ___ ___	285020	131369	A-88-SM	COK150132	036		SOLID	0	2	1
22B CLP1	DPWKE-1-AK	___ ___ ___	285021	131369	A-88-SM	COK150132	037		SOLID	0	2	1
22B CLP1	DPWKF-1-AK	___ ___ ___	285022	131369	A-88-SM	COK150132	038		SOLID	0	2	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

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11-16-00 0600
11-16-00 1130

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

674,1785

STL Pittsburgh
pH LOG SHEET

Lot No. LCR150188 Batch No. 0521381 SDG No. Z
LCR150214
LCR160259 - 5322115

Analyst: BRANDY MUECHLER
 Date: 11/16/00
 Start Time: 0845

pH Meter Calibration

Reading	Buffer	Manf. Lot No.	Rec'd	Expire
<u>4.00</u>	4.0	<u>LABCHEM 0266-09</u>	<u>11/4/00</u>	<u>7/24/02</u>
<u>7.01</u>	7.0	<u>0220-07</u>	<u>8/25/00</u>	<u>8/7/02</u>
<u>10.05</u>	10.0	<u>0146-07</u>	<u>11/4/00</u>	<u>5/25/01</u>

LCS ID No.: 0062-03 exp: 3/01/00

Range = ± .05 pH units

Relative Percent Difference =

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X_1 = Original Result
 X_2 = Duplicate

$LCR150188-001 = 2.200$
 $LCR160259-003 = 0.490$

pH Liquid

Sample ID	pH Reading
LCS	6.95
<u>LCR160259-004</u>	<u>7.99</u>
<u>LCR160259-003</u>	<u>7.05</u> <i>7 RPD = 0.490</i>
<u>003 DUP</u>	<u>7.02</u>
LCS	6.95
<i>BM 11/16/00</i>	

pH Solid

Sample ID	pH Reading
LCS	7.00
<u>LCR150188-001</u>	<u>5.01</u> <i>7 RPD = 2.200</i>
<u>-001 DUP</u>	<u>4.90</u>
<u>LCR150214-001</u>	<u>6.32</u>
<u>-002</u>	<u>7.06</u>
<u>-003</u>	<u>7.21</u>
<u>-004</u>	<u>7.31</u>
LCS	6.95
<i>BM 11/16/00</i>	

Brandy Muechler 11/16/00

COC/Sample Request

STL Pittsburgh
 450 William Pitt Way
 Pittsburgh, Pennsylvania 15238
 412/820/8380 FAX:412/820-2080

Project Name

Site

Lot Number/Sample Number	Analysis	Matrix
WTP-AIRSTRIP-1	pH - LIQUID	H ₂ O
WTP-INFLUENT-5	↓	↓
<p><i>BM</i> <i>11/14/00</i></p>		

Raw Sample	Raw Relinquished by				Raw Received by			
	Date	Time	Analyst	Location	Date	Time	Analyst	Location
ALL ABOVE	11/16/00	12:50	<i>AC</i>	SR	11/16/00	12:50	<i>By Michelle</i>	WC
↓	11/16/00	13:10	<i>By Michelle</i>	WC	11/16/00	13:10	<i>AC</i>	SR
STL Pittsburgh								

REQUESTED BY: MLECHICB

.IOD: OZ pH (9045C) - Non-Aqueous

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX DESCRIPTION</u>	<u>QTY RCVD</u>	<u>QTY REQD</u>
22C CLP1	DPWNF-1-AQ	___	285253	399411	A-88-OZ	COK150188	001		SOLID	3	1
22D CLP1	DPWX1-1-A7	___	285254	378257	A-88-OZ	COK150219	001		SOLID	5	1
22D CLP1	DPWX3-1-AJ	___	285255	378257	A-88-OZ	COK150219	002		SOLID	5	1
22D CLP1	DPWX5-1-A1	___	285256	378257	A-88-OZ	COK150219	003		SOLID	9	1
22D CLP1	DPW0A-1-AJ	___	285257	378257	A-88-OZ	COK150219	004		SOLID	5	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>[Signature]</i>	<i>[Signature]</i>	11/16/00 08:30
<i>[Signature]</i>	<i>[Signature]</i>	11/16/00 09:30

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

674 1789

PSR024 11/21/00 4.37 36 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: WESOLOSE

METHOD: IQ Ignitability (SW7.1 2)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX	QTY	QTY
		CNTR#							DESCRIPTION	RCVD	REQD
2D,E	DP4J8-1-AU	___	287264	378644	A-88-IQ	C0K170261	001		SOLID	8	1
20A	DPLF2-1-AV	___	287261	422326	A-88-IQ	C0K090223	001		SOLID	7	1
22A CLP1	DPT5F-1-AT	___	287262	002532	A-88-IQ	C0K140226	001		SOLID	6	1
22C CLP1	DFWNF-1-AR	___	287263	399411	A-88-IQ	C0K150188	001		SOLID	3	1
3B CLP1	DP70T-1-AR	___	287265	090421	A-88-IQ	C0K200198	001		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>E. J. Mersch</i>	<i>E. J. Mersch</i>	11/21/00 (06:45)
<i>E. J. Mersch</i>	<i>E. J. Mersch</i>	11/21/00 (07:30)

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

TITRIMETRIC LOGSHEET

674 1790

Analysis Reactive Cyanide

Prep/ Anal. Date 11.19.00

Analyst AS

Batch Number 0324146

LCS Number -

LCS Prep Date -

RL 200

Titrant Name Silver Nitrate

Titrant Normality 0.0192 N

Titrant Standardization Date/ Initials AA /

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments		
BK	100 ml		0.025	6.25	mg/kg			
DPLF2	↓		0.05	12.5	↓			
DPT3J			0.05	12.5				
DPT3T			0.025	6.25				
DPT5F			0.05	12.5				
DPT4L			0.025	6.25				
DPT4L-X			0.025	6.25				
DPT4M			0.025	6.25				
DPT4P			0.05	12.5				
DPT4R			0.05	12.5				
DPT4T			0.025	6.25				
DPWNF			0.05	12.5				
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5;"> <p>AS 11.19.00</p> </div>								

$$CN^- \left(\frac{mg}{kg} \right) = ml. \text{ titrant} \times 250$$

TITRIMETRIC LOGSHEET

674 1791

Analysis Reactive Sulfide

Batch Number 0324147

Prep/Anal. Date 11-19-00

LCS Number -

Analyst AS

LCS Prep Date -

RL 200

Titrant Name Sodium Thiosulfate Iodine ~~02781N~~ 02798

Titrant Normality 0.025 N

11-17-00 AS

Titrant Standardization Date/Initials 11-17-00 / AS

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
B1K	100ml	1	22.5	ND		
DPLF2			22.7			
DPT3J			22.5			
DPT3T			22.5			
DPT5F			22.7			
DPT4L			22.6			
DPT4L-X			22.5			
DPT4M			22.7			
DPT4P			22.6			
DPT4R			22.6			
DPT4T			22.5			
DPWNF			22.5			
<div style="border: 1px solid black; width: 100px; height: 100px; margin: 0 auto; transform: rotate(45deg); display: flex; align-items: center; justify-content: center;"> AS 11-19-00 </div>						

12/08/00 12:51:20

Sample Control Chain of Custody - STL North Canton

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LOT NUMBER	SAMPLE SUFFIX	SAMPLE SUFFIX ID	LAB ID	ANALYSIS TYPE	PREP DATE	PREP ANALYST	ANALYSIS DATE	ANALYST
OK150188	1		OPAF1UT	DIRECT	11/19/00	Angela Serra	11/19/00	Angela Serra
OK150188	1		OPAF1UKU	SUBREACT	11/19/00	Angela Serra	11/19/00	Angela Serra

*** END OF REPORT ***

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ADMINISTRATIVE RECORD

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