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C.H.



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 675

SEVERN

TRENT

SERVICES

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

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

ANALYTICAL REPORT

PROJECT NO. UXB 7512-060

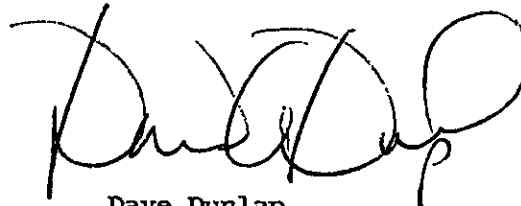
Dunn Field, Def Depot Memphis

Lot #: C0K220253

Frank Johnson

Memphis Depot

SEVERN TRENT LABORATORIES, INC.



Dave Dunlap
Project Manager

December 13, 2000

CASE NARRATIVE
UXB International Inc.
Dunn Field

LOT # C0K220253

Sample Receiving:

STL Pittsburgh received samples on November 22, 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 RTX-50 column on December 5, 2000 at 01:52 and 02:20, 4,4'-DDD and methoxychlor had %D's that were outside of the +/-15%D criteria (+16.8% and +38.4% respectively). The average %D of all of the compounds in the continuing calibration standards was 6.0%. There were no compounds detected in the samples. All data was reported.

Herbicides:

There were no problems associated with the analysis.

Metals:

There were no problems associated with the analysis.

TCLP Metals:

There were no problems associated with the analysis.

General Chemistry:

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

There were no problems associated with the analyses.

METHODS SUMMARY

COK220253

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

References:

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

SAMPLE SUMMARY

C0K220253

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DQCKK	001	DF/24-A/0326/SDC/006	11/21/00	14:00
DQCLC	002	DF/24-A/0326/SDC/007	11/21/00	15:00
DQCLE	003	DF/24-A/0326/SDC/008	11/21/00	15:00

NOTE(S) :

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

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Cooler Receipt Form
STL PittsburghClient: WXB Project: _____ Quote: 34878Cooler Rec'd & Opened for Temp. Check on: 11/22/00Coolers Opened and Unpacked on: 11/22/00 By: P. P. [Signature]

(Signature)

STL Pittsburgh Lot Number: CK220253

1. Were custody seals on the outside of the cooler? ✓
If YES, how many and where? Quantity 2 Location FRONT SIDE
Were signatures and date correct? ✓
2. Were custody papers included inside the cooler? ✓
3. Were custody papers properly filled out (ink, signed, match labels)? ✓
4. Did you sign the custody papers in the appropriate place? ✓
5. Was shippers packing slip attached to this form? ✓
6. Were packing materials used? ✓
If YES, what type? PURPLE WRAP
7. Were the samples chilled? (Record temperatures on reverse side.) ✓
8. Were the samples appropriately preserved? ✓
9. Were all bottles sealed in separate plastic bags? ✓
10. Did all bottles arrive in good condition (unbroken)? ✓
11. Were all bottle labels complete (sample ID, preservatives, etc.)? ✓
12. Did all bottle labels and/or tags agree with custody papers? ✓
13. Were correct bottles used for tests indicated? ✓
14. Were all VOA vials checked for the presence of air bubbles? W/ A
15. Was a sufficient amount of sample sent in each bottle? ✓

5. Samples received by: FEDEX UPS CLIENT DROP-OFF OTHER AIRBORNE

Explain any discrepancies:

Level 2 Review

Was contacted on _____ by _____ to resolve discrepancies.

FedEx USA Airbill

Tracking Number

0200

1 From Chas Rose Phone 201 745-4999

Date 4/11/99

Sender's Name Chas Rose Phone 201 745-4999

Company WXB Int

Address 1700 Duane Ave

City Memphis State TN ZIP 38114

2 Your Internal Billing Reference

3 To

Recipient's Name Rusty Vincie Phone 412 230-2091

Company Sevens Trent

Address 450 William Pitt Way

City Pittsburgh State PA ZIP 15232

4 Total Packages 1 Total Weight 53 Total Declared Value \$.00

5 Release Signature [Signature]

6 Special Handling

7 Payment Bill To Sender Recipient Third Party Credit Card Cash/Check

8 Release Signature [Signature]

9 Total Packages 1 Total Weight 53 Total Declared Value \$.00

10 Release Signature [Signature]

11 Release Signature [Signature]

12 Release Signature [Signature]

13 Release Signature [Signature]

14 Release Signature [Signature]

15 Release Signature [Signature]

16 Release Signature [Signature]

17 Release Signature [Signature]

18 Release Signature [Signature]

19 Release Signature [Signature]

20 Release Signature [Signature]

21 Release Signature [Signature]

22 Release Signature [Signature]

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27 Release Signature [Signature]

SBCCOM

Monitoring Branch Laboratory

CLEARANCE REPORT

SEP 14, 2000

Dunn Field, Memphis Defense Depot

Results for CWM Soil Sample Analysis

Analyst: Christopher Druyor

Sample#		1,4- Thioxane	1,4- Dithiane	TDG	Mustard	
DF/24A/ 0258/T1 /019		1594	2489	N/A	ND	
DF/24A/ 0258/T1 /019 DUP		1607	2489	N/A	ND	
DF/24A/ 0258/T1 /020		ND	ND	N/A	ND	
DF/24A/ 0258/T2 /021		ND	ND	N/A	ND	
DF/24A/ 0258/T1 022		ND	ND	N/A	ND	
DF/24A/ 0258/T2 023		ND	ND	N/A	ND	
DF/24A/ 0258/T1 024		50	85	N/A	ND	
DF/24A/ 0258/T1 /024 DUP		50	84	N/A	ND	
DF/24A/ 0258/T2 /025		ND	ND	N/A	ND	

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

MDL= 200 ppb

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

MS= matrix spike

MSD= matrix spike duplicate

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SBCCOM

Monitoring Branch Laboratory

CLEARANCE REPORT

SEP 13, 2000

Dunn Field, Memphis Defense Depot

Results for CWM Soil Sample Analysis

Analyst: Christopher Druyor

Sample#		1,4-Thioxane	1,4-Dithiane	TDG	Mustard	
DF/24A/ 0257/T2 /015		ND	ND	N/A	ND	
DF/24A/ 0257/T1 /016		ND	ND	N/A	ND	
DF/24A/ 0257/T2A /017	un	ND	ND	N/A	ND	
DF/24A/ 0257/T2B /018	un	ND	ND	N/A	ND	

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

MDL= 200 ppb

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

MS= matrix spike

MSD= matrix spike duplicate

DUP= duplicate

DATA SUMMARY PACKAGE

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GC/MS VOLATILE SUMMARY

UXB INTERNATIONAL

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

Matrix: (soil/water) SOLID

Lab Sample ID: C0K220253 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 11/22/00

Work Order: DQCKK1AC

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 11/29/00

Moisture %: 16

QC Batch: 0334199

Client Sample Id: DF/24-A/0326/SDC/006

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

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UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0K220253 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 11/22/00

Work Order: DQCKK1A1

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 11/29/00

Moisture %: 16

QC Batch: 0334199

Client Sample Id: DF/24-A/0326/SDC/006

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.472	
78-93-3	2-Butanone	0.524	
56-23-5	Carbon tetrachloride	0.414	
108-90-7	Chlorobenzene	0.451	
67-66-3	Chloroform	0.455	
107-06-2	1,2-Dichloroethane	0.446	
75-35-4	1,1-Dichloroethene	0.411	
127-18-4	Tetrachloroethene	0.456	
79-01-6	Trichloroethene	0.514	
75-01-4	Vinyl chloride	0.432	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0K220253 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/22/00

Work Order: DQCKK1A2 Date Extracted: 11/29/00

Dilution factor: 1 Date Analyzed: 11/29/00

Moisture %: 16

QC Batch: 0334199

Client Sample Id: DF/24-A/0326/SDC/006

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.466	
78-93-3	2-Butanone	0.519	
56-23-5	Carbon tetrachloride	0.424	
108-90-7	Chlorobenzene	0.450	
67-66-3	Chloroform	0.455	
107-06-2	1,2-Dichloroethane	0.446	
75-35-4	1,1-Dichloroethene	0.402	
127-18-4	Tetrachloroethene	0.452	
79-01-6	Trichloroethene	0.513	
75-01-4	Vinyl chloride	0.438	

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 002

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 11/22/00

Work Order: DQCLC1AC

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 11/29/00

Moisture %: 8.7

QC Batch: 0334199

Client Sample Id: DF/24-A/0326/SDC/007

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

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

Matrix: (soil/water) SOLID Lab Sample ID: COK220253 003

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

Sample WT/Vol: 5 / mL Date Received: 11/22/00

Work Order: DQCLE1AC Date Extracted: 11/29/00

Dilution factor: 1 Date Analyzed: 11/29/00

Moisture %: 9.4

QC Batch: 0334199

Client Sample Id: DF/24-A/0326/SDC/008

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	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

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UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK290000 199

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 11/22/00

Work Order: DQG441AA

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 11/29/00

Moisture %: NA

QC Batch: 0334199

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.474	
78-93-3	2-Butanone	0.496	
56-23-5	Carbon tetrachloride	0.490	
108-90-7	Chlorobenzene	0.460	
67-66-3	Chloroform	0.454	
107-06-2	1,2-Dichloroethane	0.441	
75-35-4	1,1-Dichloroethene	0.464	
127-18-4	Tetrachloroethene	0.490	
79-01-6	Trichloroethene	0.529	
75-01-4	Vinyl chloride	0.493	

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: C0K220253

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	DF/24-A/0326/SDC/006	108	97	97	104	00
02	DF/24-A/0326/SDC/007	102	95	96	100	00
03	DF/24-A/0326/SDC/008	105	95	96	102	00
04	METHOD BLK. DQFCV1AA	106	97	96	103	00
05	LCS DQG441AA	89	91	89	96	00
06	DF/24-A/0326/SDC/006 D	90	88	88	98	00
07	DF/24-A/0326/SDC/006 S	92	89	91	99	00

SURROGATES

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

QC LIMITS

(61-130)
 (60-143)
 (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

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SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: C0K290000

WO #: DQG441AA

BATCH: 0334199

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	0.500	0.464	93	55 - 142	
Trichloroethene	0.500	0.529	106	70 - 131	
Benzene	0.500	0.474	95	75 - 129	
Chlorobenzene	0.500	0.460	92	75 - 127	
2-Butanone	0.500	0.496	99	20 - 155	
Carbon tetrachloride	0.500	0.490	98	66 - 141	
Chloroform	0.500	0.454	91	77 - 125	
1,2-Dichloroethane	0.500	0.441	88	76 - 127	
Tetrachloroethene	0.500	0.490	98	68 - 136	
Vinyl chloride	0.500	0.493	99	41 - 138	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

STL Pittsburgh

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Matrix Spike ID: DF/24-A/0326/SDC/006

Level: (low/med) LOW

Lot #: C0K220253

WO #: DQCKK1A1

BATCH: 0334199

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	0.500	ND	0.411	82	43 - 147	
Trichloroethene	0.500	ND	0.514	103	46 - 143	
Benzene	0.500	ND	0.472	94	55 - 138	
Chlorobenzene	0.500	ND	0.451	90	49 - 139	
2-Butanone	0.500	ND	0.524	105	10 - 187	
Carbon tetrachloride	0.500	ND	0.414	83	39 - 149	
Chloroform	0.500	ND	0.455	91	52 - 140	
1,2-Dichloroethane	0.500	ND	0.446	89	44 - 145	
Tetrachloroethene	0.500	ND	0.456	91	39 - 154	
Vinyl chloride	0.500	ND	0.432	86	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 limitsSpike Recovery: 0 out of 10 outside limits

COMMENTS:

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SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIIT

SDG No:

Matrix Spike ID: DF/24-A/0326/SDC/006

Level: (low/med) LOW

Lot #: C0K220253

WO #: DQCKK1A2

BATCH: 0334199

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
1,1-Dichloroethene	0.500	0.402	80	2.3	27	43 - 147	
Trichloroethene	0.500	0.513	103	0.11	23	46 - 143	
Benzene	0.500	0.466	93	1.3	20	55 - 138	
Chlorobenzene	0.500	0.450	90	0.15	22	49 - 139	
2-Butanone	0.500	0.519	104	1.1	47	10 - 187	
Carbon tetrachloride	0.500	0.424	85	2.5	55	39 - 149	
Chloroform	0.500	0.455	91	0.13	20	52 - 140	
1,2-Dichloroethane	0.500	0.446	89	0.090	41	44 - 145	
Tetrachloroethene	0.500	0.452	90	0.83	22	39 - 154	
Vinyl chloride	0.500	0.438	88	1.3	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 limitsSpike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

BLANK WORKORDER NO.

SW846 8260B METHOD BLANK SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

DQFCV1AA

Lab Code: STLPIT

SDG Number:

Lab File ID: 6112901.D

Lot Number: C0K220253

Date Analyzed: 11/29/00

Time Analyzed: 07:48

Matrix: SOLID

Date Extracted: 11/29/00

GC Column: RTX-624 ID: .18

Extraction Method: 1311/5030B

Instrument ID: HP6

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/0326/SDC/006	DQCKK1AC	6112903.D	11/29/00	08:49
02	DF/24-A/0326/SDC/006	DQCKK1A1 S	6112904.D	11/29/00	09:13
03	DF/24-A/0326/SDC/006	DQCKK1A2 D	6112905.D	11/29/00	09:39
04	DF/24-A/0326/SDC/007	DQCLC1AC	6112906.D	11/29/00	10:03
05	DF/24-A/0326/SDC/008	DQCLE1AC	6112907.D	11/29/00	10:28
06	CHECK SAMPLE	DQG441AA C	6112902.D	11/29/00	08:24
07					
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30					

COMMENTS:

FORM IV

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UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID

Lab Sample ID: COK280000 110

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 11/22/00

Work Order: DQFCV1AA

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 11/29/00

Moisture %: NA

QC Batch: 0334199

Client Sample Id: INTRA-LAB BLANK

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY **675**

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Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0K220253

Lab File ID (Standard): CC61129

Date Analyzed: 11/29/00

Instrument ID: HP6

Time Analyzed: 0715

GC Column: DB 624 ID: 0.20 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DCB) AREA #	RT #	IS3 AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	197707	9.74	355916	12.05	790641	6.61
UPPER LIMIT	395414	9.94	711832	12.25	1581282	6.81
LOWER LIMIT	98854	9.54	177958	11.85	395321	6.41
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	193435	9.73	314281	12.05	815998	6.61
02 INTRA-LAB CH	211007	9.74	350664	12.05	822973	6.61
03 DF/24-A/0326	197772	9.73	328428	12.05	810225	6.61
04 DF/24-A/0326	216301	9.73	360861	12.05	822142	6.61
05 DF/24-A/0326	224640	9.74	376131	12.05	856052	6.61
06 DF/24-A/0326	210398	9.73	350076	12.05	863852	6.61
07 DF/24-A/0326	205047	9.73	339581	12.05	835531	6.61
08						
09						
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16						
17						
18						
19						
20						
21						
22						

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

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

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

GC/MS SEMIVOLATILE SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/22/00

Work Order: DQCKK1AD

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 12/05/00

Moisture %: 16

QC Batch: 0334321

Client Sample Id: DF/24-A/0326/SDC/006

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

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UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 002

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/22/00

Work Order: DQCLC1AD

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 12/05/00

Moisture %: 8.7

QC Batch: 0334321

Client Sample Id: DF/24-A/0326/SDC/007

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

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 003

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/22/00

Work Order: DQCLE1AD

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 12/05/00

Moisture %: 9.4

QC Batch: 0334321

Client Sample Id: DF/24-A/0326/SDC/008

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

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK290000 321

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/17/00

Work Order: DQHTK1AC

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 12/05/00

Moisture %: NA

QC Batch: 0334321

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.195	
121-14-2	2,4-Dinitrotoluene	0.192	
118-74-1	Hexachlorobenzene	0.178	
87-68-3	Hexachlorobutadiene	0.183	
67-72-1	Hexachloroethane	0.203	
98-95-3	Nitrobenzene	0.197	
87-86-5	Pentachlorophenol	0.202	
110-86-1	Pyridine	0.207	
95-95-4	2,4,5-Trichlorophenol	0.174	
88-06-2	2,4,6-Trichlorophenol	0.174	
1319-77-3	Cresols (total)	0.617	

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: C0K220253

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	INTRA-LAB QC	69	63	77	60	72	75	00
02	DF/24-A/0326/SDC/006	72	70	78	63	75	79	00
03	DF/24-A/0326/SDC/007	68	64	72	61	71	73	00
04	DF/24-A/0326/SDC/008	76	71	76	67	78	78	00
05	METHOD BLK. DQHTK1AA	74	70	81	73	79	76	00
06	LCS DQHTK1AC	74	68	66	71	76	70	00
07	LAB MS/MSD D	82	75	85	68	81	82	00
08	LAB MS/MSD S	78	72	80	66	79	77	00

SURROGATES

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

QC LIMITS

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

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

FORM II

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: C0K290000

WO #: DQHTK1AC

BATCH: 0334321

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
2,4-Dinitrotoluene	0.250	0.192	77	47- 131	
Hexachlorobenzene	0.250	0.178	71	57- 128	
Hexachlorobutadiene	0.250	0.183	73	36- 116	
Hexachloroethane	0.250	0.203	81	30- 110	
Nitrobenzene	0.250	0.197	79	45- 130	
Pentachlorophenol	0.250	0.202	81	10- 140	
Pyridine	0.250	0.207	83	10- 148	
2,4,5-Trichlorophenol	0.250	0.174	70	41- 125	
2,4,6-Trichlorophenol	0.250	0.174	70	46- 135	
Cresols (total)	0.750	0.617	82	29- 144	
1,4-Dichlorobenzene	0.250	0.195	78	28- 110	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: COK170119

WO #: DP2WN1AR

BATCH: 0334321

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	ND	0.184	74	18- 110	
2,4-Dinitrotoluene	0.250	ND	0.218	87	31- 131	
Hexachlorobenzene	0.250	ND	0.205	82	36- 132	
Hexachlorobutadiene	0.250	ND	0.169	68	18- 116	
Hexachloroethane	0.250	ND	0.183	73	18- 110	
Nitrobenzene	0.250	ND	0.204	82	10- 211	
Pentachlorophenol	0.250	ND	0.175	70	10- 140	
Pyridine	0.250	ND	0.186	74	10- 148	
2,4,5-Trichlorophenol	0.250	ND	0.204	82	24- 143	
2,4,6-Trichlorophenol	0.250	ND	0.189	76	36- 135	
Cresols (total)	0.750	ND	0.655	87	25- 144	

NOTES (S) :

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

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

COMMENTS:

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 #: C0K170119

WO #: DP2WN1AT

BATCH: 0334321

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
1,4-Dichlorobenzene	0.250	0.189	76	2.7	36	18- 110	
2,4-Dinitrotoluene	0.250	0.231	92	5.8	32	31- 131	
Cresols (total)	0.750	0.668	89	2.0	33	25- 144	
Hexachlorobenzene	0.250	0.215	86	4.8	22	36- 132	
Hexachlorobutadiene	0.250	0.177	71	4.6	32	18- 116	
Hexachloroethane	0.250	0.191	76	4.3	33	18- 110	
Nitrobenzene	0.250	0.216	86	5.7	50	10- 211	
Pentachlorophenol	0.250	0.180	72	2.8	56	10- 140	
Pyridine	0.250	0.190	76	2.1	65	10- 148	
2,4,5-Trichlorophenol	0.250	0.220	88	7.5	22	24- 143	
2,4,6-Trichlorophenol	0.250	0.200	80	5.6	27	36- 135	

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.

DQHTK1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIIT

SDG Number:

Lab File ID: F1205050.

Lot Number: COK220253

Date Analyzed: 12/05/00

Time Analyzed: 22:24

Matrix: SOLID

Date Extracted: 11/29/00

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 INTRA-LAB QC	DP2WN1AL	F1205054.	12/06/00	00:40
02 LAB MS/MSD	DP2WN1AR S	F1205052.	12/05/00	23:32
03 LAB MS/MSD	DP2WN1AT D	F1205053.	12/06/00	00:06
04 DF/24-A/0326/SDC/006	DQCKK1AD	F1205017.	12/05/00	19:32
05 DF/24-A/0326/SDC/007	DQCLC1AD	F1205018.	12/05/00	20:06
06 DF/24-A/0326/SDC/008	DQCLE1AD	F1205019.	12/05/00	20:40
07 CHECK SAMPLE	DQHTK1AC C	F1205051.	12/05/00	22:58
08				
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28				
29				
30				

COMMENTS:

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UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK290000 321

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/17/00

Work Order: DQHTK1AA

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 12/05/00

Moisture %: NA

QC Batch: 0334321

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

Lab Name: STL PITTSBURGH

Contract:

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Lab Code:

Case No.:

SAS No.:

SDG No.: COK 22053

Lab File ID (Standard): F12050C1

Date Analyzed: 12/05/00

Instrument ID: 722

Time Analyzed: 0948

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	80226	5.02	292220	6.56	151590	9.58
UPPER LIMIT	160452	5.52	584440	7.06	303180	10.08
LOWER LIMIT	40113	4.52	146110	6.06	75795	9.08
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 DF/24-A/0326	69531	5.02	281802	6.56	152766	9.58
02 DF/24-A/0326	74514	5.01	307310	6.54	170577	9.57
03 DF/24-A/0326	69630	5.01	281339	6.55	152699	9.58
04						
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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

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Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

00220253

Lab File ID (Standard): F12050C1

Date Analyzed: 12/05/00

Instrument ID: 722

Time Analyzed: 0948

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	239735	12.89	252718	19.52	255311	22.88
UPPER LIMIT	479470	13.39	505436	20.02	510622	23.38
LOWER LIMIT	119868	12.39	126359	19.02	127656	22.38
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 DF/24-A/0326	230892	12.89	211664	19.52	256299	22.88
02 DF/24-A/0326	259100	12.86	230503	19.49	277875	22.86
03 DF/24-A/0326	223938	12.87	205215	19.51	258054	22.88
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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.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH

Contract:

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Lab Code:

Case No.:

SAS No.:

SDG No.:

WJTW53

Lab File ID (Standard): F12050CN

Date Analyzed: 12/05/00

Instrument ID: 722

Time Analyzed: 2152

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	65173	5.00	247468	6.54	140963	9.56
UPPER LIMIT	130346	5.50	494936	7.04	281926	10.06
LOWER LIMIT	32587	4.50	123734	6.04	70482	9.06
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	55167	5.00	220199	6.54	128099	9.56
02 INTRA-LAB CH	53263	5.01	211242	6.55	127293	9.58
03						
04						
05						
06						
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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.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

COP 220253

Lab File ID (Standard): F12050CN

Date Analyzed: 12/05/00

Instrument ID: 722

Time Analyzed: 2152

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	253258	12.85	293042	19.49	281036	22.87
UPPER LIMIT	506516	13.35	586084	19.99	562072	23.37
LOWER LIMIT	126629	12.35	146521	18.99	140518	22.37
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	232169	12.86	236875	19.49	222831	22.86
02 INTRA-LAB CH	237658	12.87	262484	19.51	254312	22.88
03						
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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 SUMMLARY

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UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/22/00

Work Order: DQCKK1AE

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/04/00

Moisture %: 16

QC Batch: 0336519

Client Sample Id: DF/24-A/0326/SDC/006

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

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

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 002

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/22/00

Work Order: DQCLC1AE

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/04/00

Moisture %: 8.7

QC Batch: 0336519

Client Sample Id: DF/24-A/0326/SDC/007

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

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0K220253 003

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/22/00

Work Order: DQCLE1AE

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/04/00

Moisture %: 9.4

QC Batch: 0336519

Client Sample Id: DF/24-A/0326/SDC/008

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

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

675 45

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

Matrix: (soil/water) SOLID

Lab Sample ID: C0L010000 519

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/17/00

Work Order: DQPJG1AC

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/04/00

Moisture %: NA

QC Batch: 0336519

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00212	
76-44-8	Heptachlor	0.00225	
1024-57-3	Heptachlor epoxide	0.00207	
58-89-9	Lindane	0.00205	
72-43-5	Methoxychlor	0.00291	

FORM I

675 46

SW846 8081A SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: C0K220253

	CLIENT ID.	SRG01	SRG02	TOT OUT	
	=====	=====	=====	=====	
01	~~INTRA LAB QC~~	~~91~~	~~84~~	~~00~~	uwm 12-12-00
02	DF/24-A/0326/SDC/006	94	86	00	
03	DF/24-A/0326/SDC/007	94	86	00	
04	DF/24-A/0326/SDC/008	96	86	00	
05	METHOD BLK. DQPJG1AA	98	90	00	
06	LCS DQPJG1AC	93	88	00	
07	~~LAB MS/MSD D~~	~~91~~	~~85~~	~~00~~	uwm 12-12-00
08	~~LAB MS/MSD S~~	~~89~~	~~82~~	~~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 #: COL010000

WO #: DQPJG1AC

BATCH: 0336519

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Lindane	0.00250	0.00205	82	49 - 137	
Heptachlor	0.00250	0.00225	90	57 - 124	
Heptachlor epoxide	0.00250	0.00207	83	53 - 135	
Endrin	0.00250	0.00212	85	46 - 137	
Methoxychlor	0.00250	0.00291	116	12 - 154	

NOTES(S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

STL Pittsburgh

675 48

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 #: COK170261

WO #: DP4J81A3

BATCH: 0336519

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Lindane	0.00250	ND	0.00194	77	30 - 148	
Heptachlor	0.00250	ND	0.00212	85	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00194	78	38 - 138	
Endrin	0.00250	ND	0.00200	80	28 - 148	
Methoxychlor	0.00250	ND	0.00267	107	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

STL Pittsburgh

48

SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

675

49

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 #: C0K170261

WO #: DP4J81A4

BATCH: 0336519

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
=====	=====	=====	=====	=====	=====	=====	=====
Lindane	0.00250	0.00201	81	3.9	22	30 - 148	
Heptachlor	0.00250	0.00220	88	3.8	32	25 - 135	
Heptachlor epoxide	0.00250	0.00200	80	2.9	31	38 - 138	
Endrin	0.00250	0.00216	87	7.9	40	28 - 148	
Methoxychlor	0.00250	0.00280	112	4.9	29	13 - 154	

NOTES (S) :

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

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

COMMENTS:

FORM III

675 50

SW846 8081A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DQPJG1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIT

SDG Number:

Lab File ID: D-A9096.d

Lot Number: C0K220253

Matrix: SOLID

Extraction Method: 1311/3510

Date Extracted: 12/01/00

Date Analyzed(1): 12/04/00

Date Analyzed(2): N/A

Time Analyzed(1): 19:23

Time Analyzed(2): N/A

Instrument ID(1): G/H

Instrument ID(2): N/A

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

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

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED (1)	DATE ANALYZED (2)
01	INTRA LAB QC	DP4J81AE	12/04/00	N/A
02	LAB MS/MSD	DP4J81A3 S	12/04/00	N/A
03	LAB MS/MSD	DP4J81A4 D	12/04/00	N/A
04	DF/24-A/0326/SDC/006	DQCKK1AE	12/04/00	N/A
05	DF/24-A/0326/SDC/007	DQCLC1AE	12/04/00	N/A
06	DF/24-A/0326/SDC/008	DQCLE1AE	12/04/00	N/A
07	CHECK SAMPLE	DQPJG1AC C	12/04/00	N/A
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

sum
12-12-00

COMMENTS:

FORM IV

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

675

51

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

Matrix: (soil/water) SOLID

Lab Sample ID: COL010000 519

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/17/00

Work Order: DQPJG1AA

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/04/00

Moisture %: NA

QC Batch: 0336519

Client Sample Id: INTRA-LAB BLANK

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

HERBICIDE SUMMARY

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

Matrix: (soil/water) SOLID
Method: SW846 8151A
Herbicides (8151A)

Lab Sample ID: C0K220253 001

Sample WT/Vol: 100 / mL
Work Order: DQCKK1AF
Dilution factor: 1Date Received: 11/22/00
Date Extracted: 12/01/00
Date Analyzed: 12/06/00

QC Batch: 0336518

Client Sample Id: DF/24-A/0326/SDC/006

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

67.5

54

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 002

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 11/22/00

Work Order: DQCLC1AF

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/06/00

Moisture %: 8.7

QC Batch: 0336518

Client Sample Id: DF/24-A/0326/SDC/007

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

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 003

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 11/22/00

Work Order: DQCLE1AF

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/06/00

Moisture %: 9.4

QC Batch: 0336518

Client Sample Id: DF/24-A/0326/SDC/008

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

675

56

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID
Method: SW846 8151A
Herbicides (8151A)

Lab Sample ID: C0L010000 518

Sample WT/Vol: 100 / mL
Work Order: DQPJD1AC
Dilution factor: 1
Moisture %: NADate Received: 11/17/00
Date Extracted: 12/01/00
Date Analyzed: 12/06/00

QC Batch: 0336518

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	mg/L	
94-75-7	2,4-D	0.105		
93-72-1	2,4,5-TP (Silvex)	0.0275		

SW846 8151A SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

675

57

Lab Code: STLPIT

SDG No:

Lot #: COK220253

	CLIENT ID.	SRG01	TOT OUT	
	=====	=====	=====	
01	~~INTRA-LAB QC~~	78	00	sum 12-11-00
02	DF/24-A/0326/SDC/006	74	00	
03	DF/24-A/0326/SDC/007	76	00	
04	DF/24-A/0326/SDC/008	68	00	
05	METHOD BLK. DQPJD1AA	80	00	
06	LCS DQPJD1AC	78	00	
07	~~LAB MS/MSD D~~	67	00	sum 12-11-00
08	~~LAB MS/MSD S~~	81	00	

SURROGATES

SRG01 = DCAA

QC LIMITS

(42-125)

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

FORM II

675 53

SW846 8151A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIIT

SDG No:

Lot #: COL010000

WO #: DQPJD1AC

BATCH: 0336518

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	0.0275	69	50 - 128	

NOTES(S) :

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8151A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

675

59

Lab Code: STL PIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #: COK170261

WO #: DP4J81A1

BATCH: 0336518

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
2,4-D	0.160	ND	0.136	85	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0339	85	50 - 131	

NOTES (S) :

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

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

COMMENTS:

FORM III

675

60

SW846 8151A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPTIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #: COK170261

WO #: DP4J81A2

BATCH: 0336518

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
2,4-D	0.160	0.110	69	22	*	20	35- 133
2,4,5-TP (Silvex)	0.0400	0.0294	74	14		20	50- 131

NOTES (S) :

p Relative percent difference (RPD) is outside stated control limits.

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

RPD: 1 out of 2 outside limits
 Spike Recovery: 0 out of 2 outside limits

COMMENTS.

FORM III

SW846 8151A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DQPJD1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIT

SDG Number:

675

61

Lab File ID: A-B90066.

Lot Number: C0K220253

Matrix: SOLID

Extraction Method:

Date Extracted: 12/01/00

Date Analyzed(1): 12/06/00

Date Analyzed(2): N/A

Time Analyzed(1): 12:05

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~~	~~DP4J81AF~~	~~12/06/00~~	~~N/A~~	
02	~~LAB MS/MSD~~	~~DP4J81A1 S~~	~~12/06/00~~	~~N/A~~	sum
03	~~LAB MS/MSD~~	~~DP4J81A2 U~~	~~12/06/00~~	~~N/A~~	12-11-00
04	DF/24-A/0326/SDC/006	DQCKK1AF	12/06/00	N/A	
05	DF/24-A/0326/SDC/007	DQCLC1AF	12/06/00	N/A	
06	DF/24-A/0326/SDC/008	DQCLE1AF	12/06/00	N/A	
07	CHECK SAMPLE	DQPJD1AC C	12/06/00	N/A	
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

COMMENTS:

FORM IV

675 62

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID
Method: SW846 8151A
Herbicides (8151A)

Lab Sample ID: COL010000 518

Sample WT/Vol: 100 / mL
Work Order: DQPJD1AA
Dilution factor: 1
Moisture %: NADate Received: 11/17/00
Date Extracted: 12/01/00
Date Analyzed: 12/06/00

QC Batch: 0336518

Client Sample Id: INTRA-LAB BLANK

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

METALS SUMMARY

675 64

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCKK Client ID: DF/24-A/0326/SDC/006
Matrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161
Weight: 0.50 Volume: 50 Percent Moisture: 15.79

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	13.1		1	ICPST	11/29/00	18:22

Comments: Lot #: C0K220253 Sample #: 1

Version 4.10 2

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCLC Client ID: DF/24-A/0326/SDC/007
Matrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161
Weight: 0.50 Volume: 50 Percent Moisture: 8.70

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.28	1.1	13.8		1	ICPST	11/29/00	18:39

Comments: Lot #: C0K220253 Sample #. 2

Version 4.10.2

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

Form 1 Equivalent

675 66

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCLE Client ID: DF/24-A/0326/SDC/008
Matrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161
Weight: 0.50 Volume: 50 Percent Moisture: 9.40

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.28	1.1	12.9		1	ICPST	11/29/00	18:43

Comments: Lot #: C0K220253 Sample #: 3

Version 4.10.2

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

Form 1 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

675

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Initial Calibration Blank Results

Instrument: ICPST

Units: ug/L

Chart Number: T01129C.ARC

Standard Source: _____

Standard ID: _____

			ICB1 11/29/00 3:57 PM		.			
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	2.6	U				

675 68

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T01129C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/29/00 4:50 PM	CCB2 11/29/00 5:28 PM	CCB3 11/29/00 6:09 PM	CCB4 11/29/00 6:51 PM		
			Found Q	Found Q	Found Q	Found Q	Found	Q
Arsenic	189.042	10	2.6 U	2.6 U	2.6 U	2.6 U		

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DQD5ABMatrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161Weight: 0.50 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	11/29/00	18:14

Comments: Lot #: C0K220253

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

675 79

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DQCKKSOriginal Sample ID: DQCKK Client ID: DF/24-A/0326/SDC/006SMatrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161Weight: 0.50 Volume: 50 Percent Moisture: 15.79

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	13.1		241		237.50	95.9	1	1	ICPST	11/29/00	18:22	11/29/00	18:30

Comments: Lot # C0K220253 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: DQCKKD
 Original Sample ID: DQCKK Client ID: DF/24-A/0326/SDC/006SD
 Matrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161
 Weight: 0.50 Volume: 50 Percent Moisture: 15.79

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	13.1		236		237.50	94.0	1	1	ICPST	11/29/00	18:22	11/29/00	18:34

Comments: Lot #: C0K220253 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

675 72

STL-Pittsburgh
Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DQCKKDMatrix Spike Sample ID: DQCKKS Client ID: DF/24-A/0326/SDC/006SDMatrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161Weight: 0.50 Volume: 50 Percent Moisture: 15.79

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	241		236		2.0 %	1	1	ICPST	11/29/00	18:30	11/29/00	18:34

Comments: Lot #: C0K220253 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: DQD5ACMatrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161Weight: 0.50 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	200	100.0		80-120	1	ICPST	11/29/00	18:18

Comments: Lot #: C0K220253

Version 4 10.2

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

Form 7 Equivalent

675

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TCLP METALS SUMMARY

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCKKT Client ID: DF/24-A/0326/SDC/006
 Matrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135
 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	11/30/00	10:24
Barium	493.41	0.00041	10.0	0.96	B	1	ICP	11/30/00	10:24
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	11/30/00	10:24
Chromium	267.72	0.0038	0.50	0.024	B	1	ICP	11/30/00	10:24
Lead	220.35	0.025	0.50	0.027	B	1	ICP	11/30/00	10:24
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	11/30/00	10:24
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	11/30/00	10:24

Comments: LOH 220253-001

Version 4.10.2

mfw 11.30.00

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCLCT Client ID: DF/24-A/0326/SDC/007
 Matrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135
 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	0.13	B	1	ICP	11/30/00	10:27
Barium	493.41	0.00041	10.0	0.78	B	1	ICP	11/30/00	10:27
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	11/30/00	10:27
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	11/30/00	10:27
Lead	220.35	0.025	0.50	0.049	B	1	ICP	11/30/00	10:27
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	11/30/00	10:27
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	11/30/00	10:27

Comments: 604220253-002

Version 4 10.2

new 11-30-00

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: DQCLET Client ID: DF/24-A/0326/SDC/008
 Matrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.12	B	1	ICP	11/30/00	10:30
Barium	493.41	0.00041	10.0	0.75	B	1	ICP	11/30/00	10:30
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	11/30/00	10:30
Chromium	267.72	0.0038	0.50	0.0056	B	1	ICP	11/30/00	10:30
Lead	220.35	0.025	0.50	0.040	B	1	ICP	11/30/00	10:30
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	11/30/00	10:30
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	11/30/00	10:30

Comments: COK 220253-003Version 4.10 2 MTW, 1-30-00

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

Form 1 Equivalent

675

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STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCKKT Client ID: DF/24-A/0326/SDC/006
Matrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281
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	0.000071	B	1	CVAA	11/30/00	8:48

Comments _____

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: DQCLCT Client ID: DF/24-A/0326/SDC/007
Matrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281
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	11/30/00	8:53

Comments: _____

Version 4.10.2

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

Form 1 Equivalent

675

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STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCLET Client ID: DF/24-A/0326/SDC/008
Matrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281
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	11/30/00	8:55

Comments: _____

Version 4.10 2

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

Form 1 Equivalent

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 1130HGA.PRN

Standard Source: _____

Standard ID: _____

			ICBI 11/30/00 8:27 AM					
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U				

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J01130A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 11/30/00 9:21 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U						
Barium	493.409	10000	0.4	U						
Cadmium	228.802	100	2.8	U						
Chromium	267.716	500	3.8	U						
Lead	220.353	500	24.6	U						
Selenium	196.026	250	67.4	U						
Silver	328.068	500	3.1	U						

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 1130HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/30/00 8:32 AM	CCB2 11/30/00 8:52 AM	CCB3 11/30/00 9:14 AM		
			Found Q	Found Q	Found Q	Found Q	Found Q
Mercury	253.7	0.2	0.0 U	0.0 U	0.0 U		

675

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STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J01130A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCBI 11/30/00 9:58 AM		CCB2 11/30/00 10:36 AM					
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U	30.3	U				
Barium	493.409	10000	0.4	U	0.4	U				
Cadmium	228.802	100	2.8	U	2.8	U				
Chromium	267.716	500	3.8	U	3.8	U				
Lead	220.353	500	24.6	U	24.6	U				
Selenium	196.026	250	67.4	U	67.4	U				
Silver	328.068	500	3.1	U	3.1	U				

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DQF3KBT

Matrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135

Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.16	B	1	ICP	11/30/00	9:30
Barium	493.409	0.00041	10.0	0.00075	B	1	ICP	11/30/00	9:30
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	11/30/00	9:30
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	11/30/00	9:30
Lead	220.353	0.025	0.50	0.025	U	1	ICP	11/30/00	9:30
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	11/30/00	9:30
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	11/30/00	9:30

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 3 Equivalent

B Result is between MDL and RL

675

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STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DQGTKBTMatrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135Weight: 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	0.042	B	1	ICP	11/30/00	9:33
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	11/30/00	9:33
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	11/30/00	9:33
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	11/30/00	9:33
Lead	220.353	0.025	0.50	0.025	U	1	ICP	11/30/00	9:33
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	11/30/00	9:33
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	11/30/00	9:33

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

675 87

Preparation Blank Results

Lab Sample ID: DQF3KBT

Matrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281

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	0.000084	B	1	CVAA	11/30/00	8:37

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: DQHKJBTMatrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281Weight: 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	11/30/00	8:34

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

Laboratory Control Sample Results

Lab Sample ID: DQGTKCTMatrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	2.0	2.2	107.5		80-120	1	ICP	11/30/00	9:36
Barium	493.409	2.0	1.9	94.0	B	80-120	1	ICP	11/30/00	9:36
Cadmium	228.802	0.050	0.046	92.4	B	80-120	1	ICP	11/30/00	9:36
Chromium	267.716	0.20	0.19	95.4	B	80-120	1	ICP	11/30/00	9:36
Lead	220.353	0.50	0.49	97.6	B	80-120	1	ICP	11/30/00	9:36
Selenium	196.026	2.0	2.2	109.5		80-120	1	ICP	11/30/00	9:36
Silver	328.068	0.050	0.049	98.1	B	80-120	1	ICP	11/30/00	9:36

Comments _____

Version 4 10.2

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

675

90

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DQHKJCTMatrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281Weight: 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 0028	111.2		80-120	1	CVAA	11/30/00	8:35

Comments: _____

Version 4 10 2

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

Form 7 Equivalent

GENERAL CHEMISTRY SUMMARY

675

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UXB INTERNATIONAL

Client Sample ID: DF/24-A/0326/SDC/006

General Chemistry

Lot-Sample #...: COK220253-001 Work Order #...: DQCKK Matrix.....: SOLID
 Date Sampled...: 11/21/00 Date Received...: 11/22/00
 % Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	6.5		No Units	SW846 9045C	11/22/00	0327439
		Dilution Factor: 1		MS Run #.....: 0327175		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	11/30/00	0335206
		Dilution Factor: 1		MS Run #.....: 0335084		
Percent Solids	84.2		%	MCAWW 160.3 MOD	11/27-11/28/00	0332246
		Dilution Factor: 1		MS Run # 0332081		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	11/30/00	0335424
		Dilution Factor: 1		MS Run #.....: 0335241		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	11/30/00	0335426
		Dilution Factor: 1		MS Run #... : 0335239		

Client Sample ID: DF/24-A/0326/SDC/007

General Chemistry

Lot-Sample #...: C0K220253-002 Work Order #...: DQCLC Matrix.....: SOLID
 Date Sampled...: 11/21/00 Date Received...: 11/22/00
 % Moisture.....: 8.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	6.6		No Units	SW846 9045C	11/22/00	0327439
			Dilution Factor: 1	MS Run #..... 0327175		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	11/30/00	0335206
			Dilution Factor: 1	MS Run #..... : 0335084		
Percent Solids	91.3		%	MCAWW 160.3 MOD	11/27-11/28/00	0332246
			Dilution Factor: 1	MS Run #..: 0332081		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	11/30/00	0335424
			Dilution Factor: 1	MS Run #..... 0335241		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	11/30/00	0335426
			Dilution Factor: 1	MS Run # 0335239		

675

94

UXB INTERNATIONAL

Client Sample ID: DF/24-A/0326/SDC/008

General Chemistry

Lot-Sample #...: COK220253-003 Work Order #...: DQCLE Matrix.....: SOLID
 Date Sampled...: 11/21/00 Date Received...: 11/22/00
 % Moisture.....: 9.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	6.4		No Units	SW846 9045C	11/22/00	0327439
		Dilution Factor: 1		MS Run #.....: 0327175		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	11/30/00	0335206
		Dilution Factor: 1		MS Run #.....: 0335084		
Percent Solids	90.6		%	MCAWW 160.3 MOD	11/27-11/28/00	0332246
		Dilution Factor: 1		MS Run #.....: 0332081		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	11/30/00	0335424
		Dilution Factor: 1		MS Run #.....: 0335241		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	11/30/00	0335426
		Dilution Factor: 1		MS Run #.....: 0335239		

METHOD BLANK REPORT

675 95

General Chemistry

Client Lot #...: C0K220253

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	Work Order #: DQL6L1AA 200 Dilution Factor: 1	mg/kg	MB Lot-Sample #: A0K300000-424 SW846 7.3.3	11/30/00	0335424
Reactive Sulfide	ND	Work Order #: DQL6G1AA 200 Dilution Factor: 1	mg/kg	MB Lot-Sample #: A0K300000-426 SW846 7.3.4	11/30/00	0335426

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0K220253

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 #: DQCN51AA (85 - 115)	LCS Lot-Sample#: C0K220000-439 SW846 9045C	11/22/00	0327439
		Dilution Factor: 1			

NOTE(S) :

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

675 97

Client Lot #....: C0K220253	Work Order #....: DQCKK-SMP	Matrix.....: SOLID
	DQCKK-DUP	
Date Sampled....: 11/21/00	Date Received...: 11/22/00	
% Moisture.....: 16		

```

Ignitability                               SD Lot-Sample #: C0K220253-001
                                         No Units 0      (0-0.0) SW846 SECTION 7.1 11/30/00      0335206
                                         Dilution Factor: 1
                                         Prep Date.. .... 0335084   Analysis Date...      Prep Batch # ...

```

General Chemistry

Matrix.....: SOLID

Date Received...: 11/22/00

% Moisture.....: 8.7

Dilution Factor: 1

Prep Date.....: 0335241 Analysis Date... Prep Batch #. . .

Dilution Factor: 1

Prep Date.....: 0335239 Analysis Date...: Prep Batch.#...:

SAMPLE DUPLICATE EVALUATION REPORT

675 99

General Chemistry

Client Lot #...: COK220253

Work Order #...: DQCW3-SMP
DQCW3-DUP

Matrix.....: SOLID

Date Sampled...: 11/20/00

Date Received...: 11/22/00

% Moisture.....: 20

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	80.5	80.6	%	0.15	(0-20)	SD Lot-Sample #: COK220286-007 MCAWW 160.3 MOD	11/27-11/28/00	0332246
Dilution Factor: 1								
Prep Date.....: 0332081			Analysis Date...:			Prep Batch #....		

675 100

GC/MS VOLATILE DATA

675 101

**GC/MS VOLATILE
QC SUMMARY**

675 102

SW846 8260B SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPTIT

SDG No:

Lot #: COK220253

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	DF/24-A/0326/SDC/006	108	97	97	104	00
02	DF/24-A/0326/SDC/007	102	95	96	100	00
03	DF/24-A/0326/SDC/008	105	95	96	102	00
04	METHOD BLK. DQFCV1AA	106	97	96	103	00
05	LCS DQG441AA	89	91	89	96	00
06	DF/24-A/0326/SDC/006 D	90	88	88	98	00
07	DF/24-A/0326/SDC/006 S	92	89	91	99	00

SURROGATES

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

QC LIMITS

(61-130)
(60-143)
(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

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: C0K290000

WO #: DQG441AA

BATCH: 0334199

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,1-Dichloroethene	0.500	0.464	93	55- 142	
Trichloroethene	0.500	0.529	106	70- 131	
Benzene	0.500	0.474	95	75- 129	
Chlorobenzene	0.500	0.460	92	75- 127	
2-Butanone	0.500	0.496	99	20- 155	
Carbon tetrachloride	0.500	0.490	98	66- 141	
Chloroform	0.500	0.454	91	77- 125	
1,2-Dichloroethane	0.500	0.441	88	76- 127	
Tetrachloroethene	0.500	0.490	98	68- 136	
Vinyl chloride	0.500	0.493	99	41- 138	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

675 104

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Matrix Spike ID: DF/24-A/0326/SDC/006

Level: (low/med) LOW

Lot #: C0K220253

WO #: DQCKK1A1

BATCH: 0334199

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	0.500	ND	0.411	82	43 - 147	
Trichloroethene	0.500	ND	0.514	103	46 - 143	
Benzene	0.500	ND	0.472	94	55 - 138	
Chlorobenzene	0.500	ND	0.451	90	49 - 139	
2-Butanone	0.500	ND	0.524	105	10 - 187	
Carbon tetrachloride	0.500	ND	0.414	83	39 - 149	
Chloroform	0.500	ND	0.455	91	52 - 140	
1,2-Dichloroethane	0.500	ND	0.446	89	44 - 145	
Tetrachloroethene	0.500	ND	0.456	91	39 - 154	
Vinyl chloride	0.500	ND	0.432	86	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:

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPTIT

SDG No:

Matrix Spike ID: DF/24-A/0326/SDC/006

Level: (low/med) LOW

Lot #: C0K220253

WO #: DQCKK1A2

BATCH: 0334199

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
1,1-Dichloroethene	0.500	0.402	80	2.3	27	43 - 147	
Trichloroethene	0.500	0.513	103	0.11	23	46 - 143	
Benzene	0.500	0.466	93	1.3	20	55 - 138	
Chlorobenzene	0.500	0.450	90	0.15	22	49 - 139	
2-Butanone	0.500	0.519	104	1.1	47	10 - 187	
Carbon tetrachloride	0.500	0.424	85	2.5	55	39 - 149	
Chloroform	0.500	0.455	91	0.13	20	52 - 140	
1,2-Dichloroethane	0.500	0.446	89	0.090	41	44 - 145	
Tetrachloroethene	0.500	0.452	90	0.83	22	39 - 154	
Vinyl chloride	0.500	0.438	88	1.3	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 limitsSpike Recovery: 0 out of 10 outside limits

COMMENTS:

675 106

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DQFCV1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIIT

SDG Number:

Lab File ID: 6112901.D

Lot Number: COK220253

Date Analyzed: 11/29/00

Time Analyzed: 07:48

Matrix: SOLID

Date Extracted: 11/29/00

GC Column: RTX-624 ID: .18

Extraction Method: 1311/5030B

Instrument ID: HP6

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/0326/SDC/006	DQCKK1AC	6112903.D	11/29/00	08:49
02	DF/24-A/0326/SDC/006	DQCKK1A1 S	6112904.D	11/29/00	09:13
03	DF/24-A/0326/SDC/006	DQCKK1A2 D	6112905.D	11/29/00	09:39
04	DF/24-A/0326/SDC/007	DQCLC1AC	6112906.D	11/29/00	10:03
05	DF/24-A/0326/SDC/008	DQCLE1AC	6112907.D	11/29/00	10:28
06	CHECK SAMPLE	DQG441AA C	6112902.D	11/29/00	08:24
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

675 107

Lab Name: STL-PITTSBURGH Contract:
Lab Code: Case No.: SAS No.: SDG No.: METHODS
Lab File ID: BF61027Z BFB Injection Date: 10/27/00
Instrument ID: HP6 BFB Injection Time: 1023
GC Column: DB624 20M ID: 0.20 (nm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.5
75	30.0 - 60.0% of mass 95	51.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.4 (0.7)1
174	50.0 - 100.0% of mass 95	66.8
175	5.0 - 9.0% of mass 174	5.1 (7.7)1
176	95.0 - 101.0% of mass 174	65.8 (98.5)1
177	5.0 - 9.0% of mass 176	4.1 (6.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	1C61027Z	10/27/00	1126
02	VSTD20	VSTD20	1B61027Z	10/27/00	1153
03	VSTD5	VSTD5	1A61027Z	10/27/00	1217
04	VSTD100	VSTD100	1D61027Z	10/27/00	1242
05	VSTD200	VSTD200	1E61027Z	10/27/00	1309
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

675 108

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0K220253

Lab File ID: BF61129

BFB Injection Date: 11/29/00

Instrument ID: HP6

BFB Injection Time: 0650

GC Column: DB624 20M ID: 0.20 (mm)

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 60.0% of mass 95	47.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.6 (0.7)1
174	50.0 - 100.0% of mass 95	82.5
175	5.0 - 9.0% of mass 174	6.1 (7.4)1
176	95.0 - 101.0% of mass 174	79.8 (96.7)1
177	5.0 - 9.0% of mass 176	5.2 (6.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	CC61129	11/29/00	0715
02	INTRA-LAB BL	DQFCV1AA	6112901	11/29/00	0748
03	INTRA-LAB CH	DQG441AA	6112902	11/29/00	0824
04	DF/24-A/0326	DQCKK1AC	6112903	11/29/00	0849
05	DF/24-A/0326	DQCKK1A1	6112904	11/29/00	0913
06	DF/24-A/0326	DQCKK1A2	6112905	11/29/00	0939
07	DF/24-A/0326	DQCLC1AC	6112906	11/29/00	1003
08	DF/24-A/0326	DQCLE1AC	6112907	11/29/00	1028
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

675 109

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: COK220253

Lab File ID (Standard): CC61129

Date Analyzed: 11/29/00

Instrument ID: HP6

Time Analyzed: 0715

GC Column: DB 624 ID: 0.20 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DCB) AREA #	RT #	IS3 AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	197707	9.74	355916	12.05	790641	6.61
UPPER LIMIT	395414	9.94	711832	12.25	1581282	6.81
LOWER LIMIT	98854	9.54	177958	11.85	395321	6.41
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	193435	9.73	314281	12.05	815998	6.61
02 INTRA-LAB CH	211007	9.74	350664	12.05	822973	6.61
03 DF/24-A/0326	197772	9.73	328428	12.05	810225	6.61
04 DF/24-A/0326	216301	9.73	360861	12.05	822142	6.61
05 DF/24-A/0326	224640	9.74	376131	12.05	856052	6.61
06 DF/24-A/0326	210398	9.73	350076	12.05	863852	6.61
07 DF/24-A/0326	205047	9.73	339581	12.05	835531	6.61
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.

675 110

**GC/MS VOLATILE
SAMPLE DATA**

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

Matrix: (soil/water) SOLID Lab Sample ID: COK220253 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/22/00
Work Order: DQCKK1AC Date Extracted: 11/29/00
Dilution factor: 1 Date Analyzed: 11/29/00
Moisture %: 16

QC Batch: 0334199

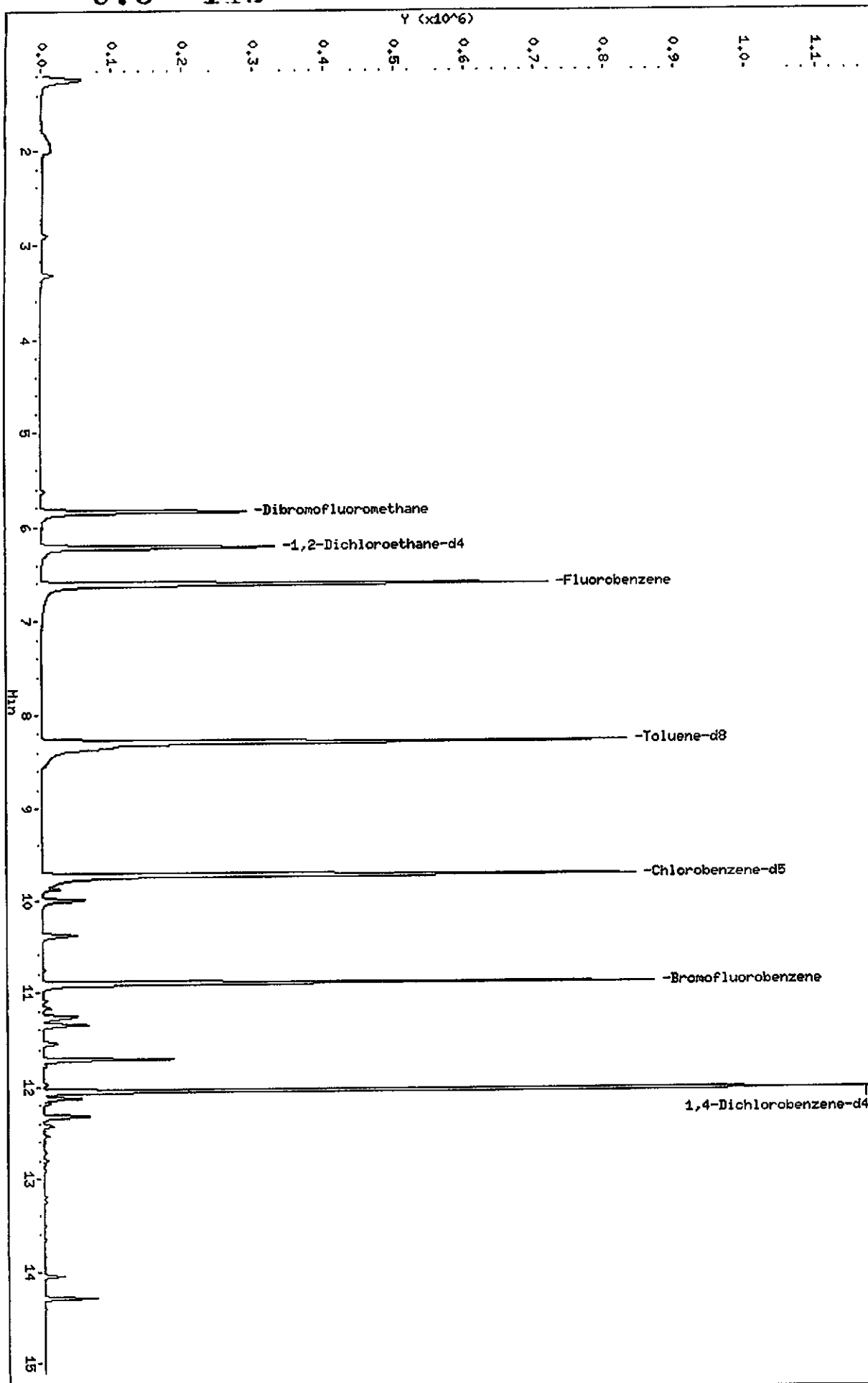
Client Sample Id: DF/24-A/0326/SDC/006

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

Data File: \\QPIIPA02\\chem\\hp6.1\\611290.b\\6112903.D
Date: 29-NOV-2000 08:49
Client ID: DF/24-A/0326/SDC/00
Sample Info: 00K20253-001 (1mL/10mL)/5mL
Purge Volume: 5.0
Column phase: DB 624

Instrument: hp6.1
Operator: 16328
Column diameter: 0.20

\\QPIIPA02\\chem\\hp6.1\\611290.b\\6112903.D



675 113

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp6.i\61129D.b\6112903.D
Lab Smp Id: DQCKK1AC Client Smp ID: DF/24-A/0326/SDC/00
Inj Date : 29-NOV-2000 08:49
Operator : 16328 Inst ID: hp6.i
Smp Info : c0k220253-001 (1ml/10ml)/5ml
Misc Info : dqckklac,61129d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\d\chem\hp6.i\61129D.b\8260bh2o.m *K_s 11/25/00*
Meth Date : 29-Nov-2000 08:21 dudeckk Quant Type: ISTD
Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-tclp.sub
Target Version: 4.04
Processing Host: PITPC077

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.613	6.613	(1.000)	810225	250.000	
* 69 Chlorobenzene-d5	119	9.734	9.740	(1.000)	197772	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.052	12.052	(1.000)	328428	250.000	
\$ 39 Dibromofluoromethane	113	5.847	5.853	(0.884)	206280	260.959	52.19
\$ 43 1,2-Dichloroethane-d4	65	6.218	6.218	(0.940)	242587	268.858	53.77
\$ 59 Toluene-d8	98	8.292	8.298	(0.852)	809282	242.303	48.46
\$ 80 Bromofluorobenzene	95	10.902	10.908	(1.120)	304150	241.914	48.38
3 Vinyl Chloride	62	Compound Not Detected.					
12 1,1-Dichloroethene	96	Compound Not Detected.					
31 2-Butanone	43	Compound Not Detected.					
37 Chloroform	83	Compound Not Detected.					
41 Carbon Tetrachloride	117	Compound Not Detected.					
42 Benzene	78	Compound Not Detected.					
45 1,2-Dichloroethane	62	Compound Not Detected.					
47 Trichloroethene	130	Compound Not Detected.					
65 Tetrachloroethene	164	Compound Not Detected.					

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Data File: \\QPITPA02\d\chem\hp6.i\61129D.b\6112903.D
Report Date: 29-Nov-2000 10:26

Page 2

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

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 002

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 11/22/00

Work Order: DQCLCIAC

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 11/29/00

Moisture %: 8.7

QC Batch: 0334199

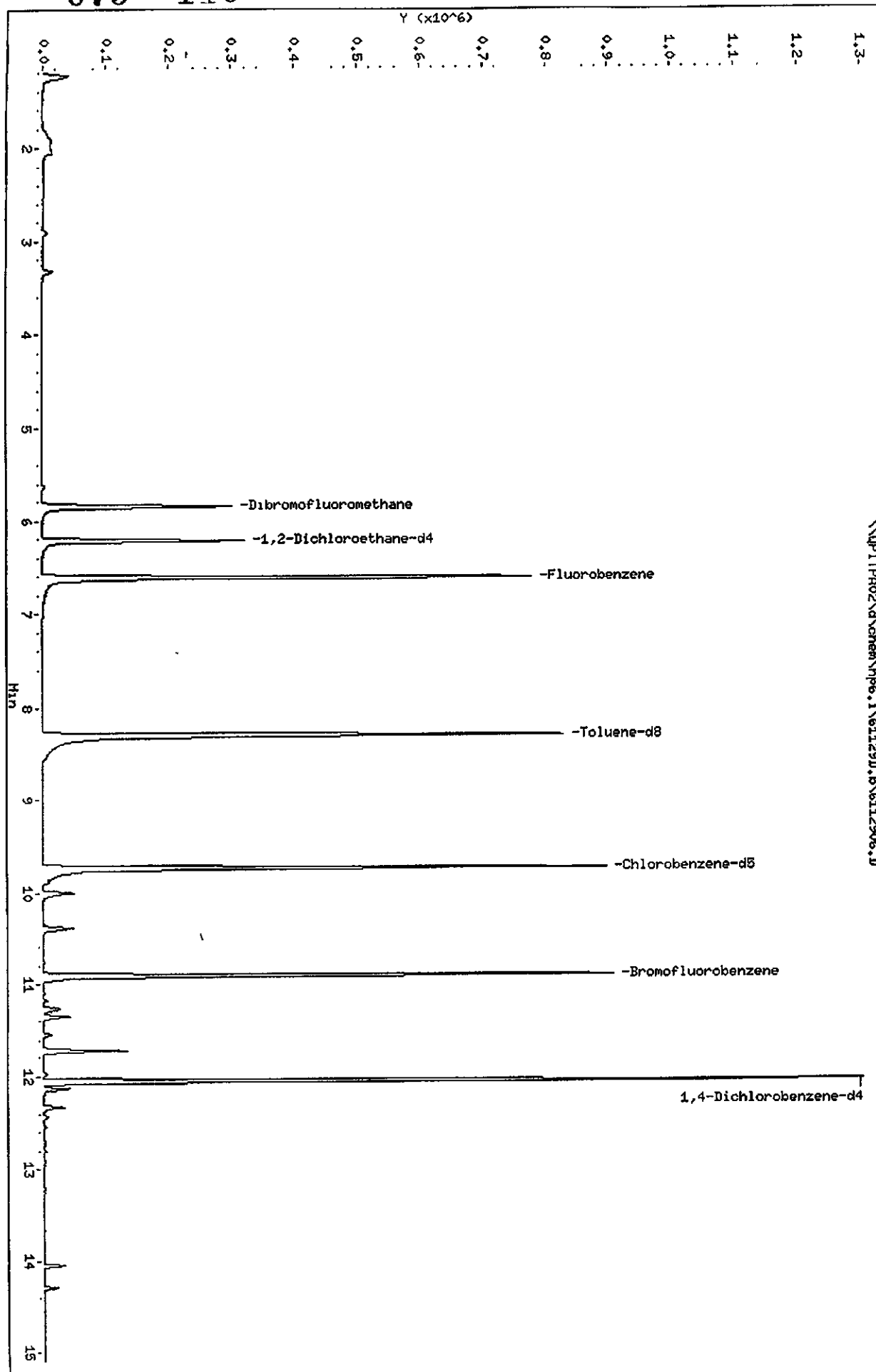
Client Sample Id: DF/24-A/0326/SDC/007

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

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Data File: \\QPI1P802\drachen\hp6.i\61129D.b\6112906.D
 Date : 29-NOV-2000 10:03
 Client ID: DF/24-R/0326/SDC/00
 Sample Info: c0k220253-002 (1ml/10ml)/Bml
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: hp6.1
 Operator: 16328
 Column diameter: 0.20



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STL-Pittsburgh

VOLATILE REPORT SW-846 Method
Data file : \\QPITPA02\d\chem\hp6.i\61129D.b\6112906.D
Lab Smp Id: DQCLC1AC Client Smp ID: DF/24-A/0326/SDC/00
Inj Date : 29-NOV-2000 10:03
Operator : 16328 Inst ID: hp6.i
Smp Info : c0k220253-002 (1ml/10ml)/5ml
Misc Info : dqclclac,61129d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\d\chem\hp6.i\61129D.b\8260bh2o.m
Meth Date : 29-Nov-2000 08:21 dudeckk Quant Type: ISTD
Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-tclp.sub
Target Version: 4.04
Processing Host: PITPC077

K₂ 11/29/00

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

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

Compounds	QUANT SIG	CONCENTRATIONS						
		MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (UG/L)
*****	****	==	=====	=====	=====	=====	=====	=====
* 46 Fluorobenzene	96	6.609	6.613	(1.000)	863852	250.000		
* 69 Chlorobenzene-d5	119	9.730	9.740	(1.000)	210398	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.048	12.052	(1.000)	350076	250.000		
\$ 39 Dibromofluoromethane	113	5.849	5.853	(0.885)	210122	249.318		49.86
\$ 43 1,2-Dichloroethane-d4	65	6.214	6.218	(0.940)	245342	255.031		51.01
\$ 59 Toluene-d8	98	8.294	8.298	(0.852)	845643	237.996		47.60
\$ 80 Bromofluorobenzene	95	10.904	10.908	(1.121)	319608	238.954		47.79
3 Vinyl Chloride	62				Compound Not Detected.			
12 1,1-Dichloroethene	96				Compound Not Detected			
31 2-Butanone	43				Compound Not Detected			
37 Chloroform	83				Compound Not Detected			
41 Carbon Tetrachloride	117				Compound Not Detected			
42 Benzene	78				Compound Not Detected.			
45 1,2-Dichloroethane	62				Compound Not Detected.			
47 Trichloroethene	130				Compound Not Detected.			
65 Tetrachloroethene	164				Compound Not Detected.			

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Data File: \\QPITPA02\d\chem\hp6.i\61129D.b\6112906.D
Report Date: 29-Nov-2000 10:38

Page 2

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

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

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 003

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 11/22/00

Work Order: DQCLE1AC

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 11/29/00

Moisture %: 9.4

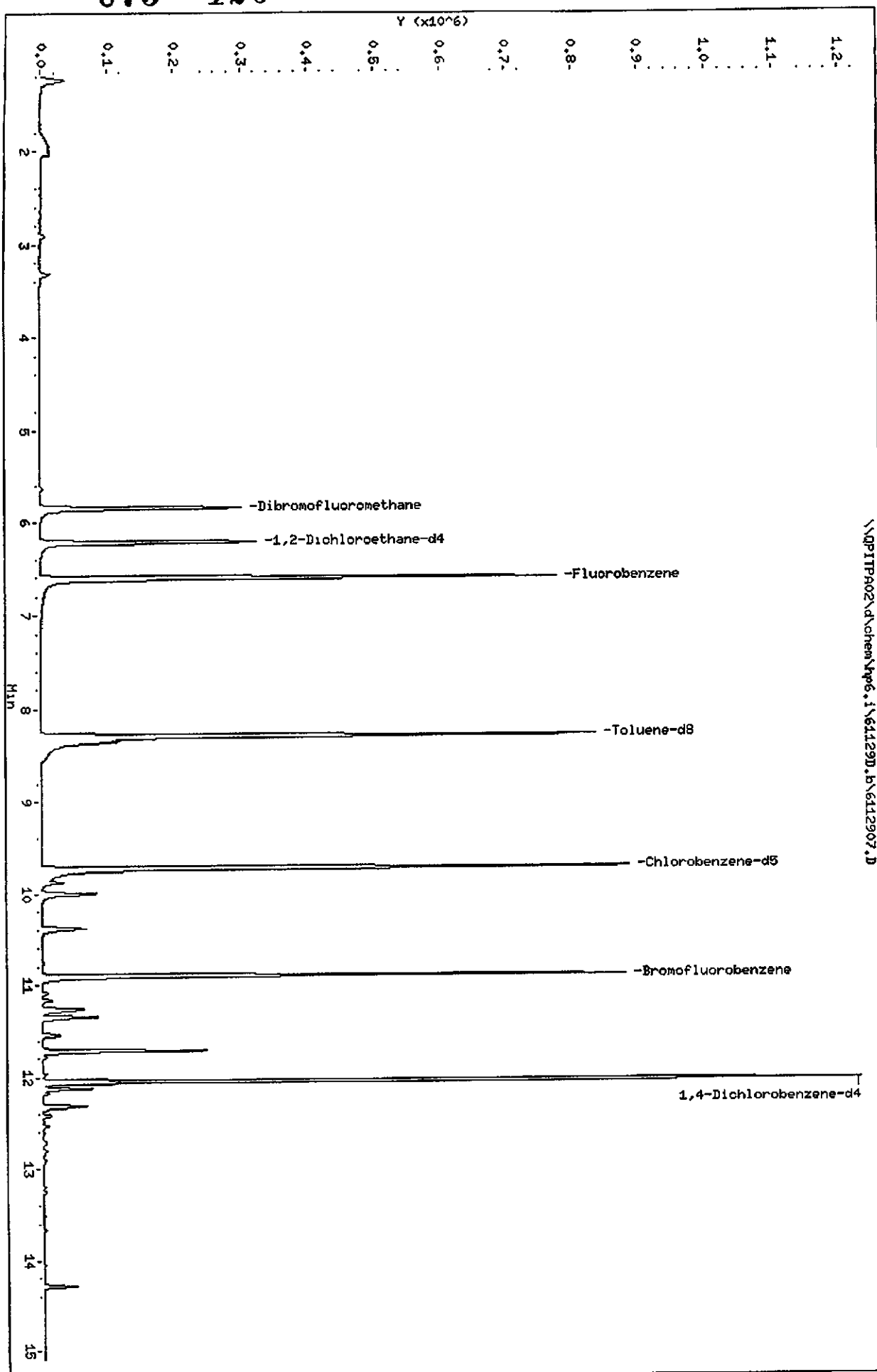
QC Batch: 0334199

Client Sample Id: DF/24-A/0326/SDC/008

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

Data File: \\QPIPPA02\chem\hp6.1\641290.b\6412907.D
 Date: 29-NOV-2000 10:28
 Client ID: DF/24-A/0326/SDC/00
 Sample Info: 00K220253-003 (1ml/10ml)/5ml
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: hp6.1
 Operator: 16328
 Column diameter: 0.20



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STL-Pittsburgh

VOLATILE REPORT SW-846 Method
Data file : \\QPITPA02\d\chem\hp6.i\61129D.b\6112907.D
Lab Smp Id: DQCLE1AC Client Smp ID: DF/24-A/0326/SDC/00
Inj Date : 29-NOV-2000 10:28
Operator : 16328 Inst ID: hp6.i
Smp Info : c0k220253-003 (1ml/10ml)/5ml
Misc Info : dqcle1ac,61129d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\d\chem\hp6.i\61129D.b\8260bh2o.m
Meth Date : 29-Nov-2000 08:21 dudeckk Quant Type: ISTD
Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC077

Compound Sublist: 2-tclp.sub

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

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

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.608	6.613	(1.000)	835531	250.000	
* 69 Chlorobenzene-d5	119	9.729	9.740	(1.000)	205047	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.047	12.052	(1.000)	339581	250.000	
\$ 39 Dibromofluoromethane	113	5.848	5.853	(0.885)	207309	254.318	50.86
\$ 43 1,2-Dichloroethane-d4	65	6.213	6.218	(0.940)	244296	262.552	52.51
\$ 59 Toluene-d8	98	8.293	8.298	(0.852)	823487	237.808	47.56
\$ 80 Bromofluorobenzene	95	10.903	10.908	(1.121)	312327	239.604	47.92
3 Vinyl Chloride	62				Compound Not Detected		
12 1,1-Dichloroethene	96				Compound Not Detected.		
31 2-Butanone	43				Compound Not Detected		
37 Chloroform	83				Compound Not Detected		
41 Carbon Tetrachloride	117				Compound Not Detected.		
42 Benzene	78				Compound Not Detected.		
45 1,2-Dichloroethane	62				Compound Not Detected.		
47 Trichloroethene	130				Compound Not Detected		
65 Tetrachloroethene	164				Compound Not Detected		

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Data File: \\QPITPA02\d\chem\hp6.i\61129D.b\6112907.D
Report Date: 29-Nov-2000 10:47

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
70 Chlorobenzene	112						

Compound Not Detected.

675 123

**GC/MS VOLATILE
CALIBRATION DATA**

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: METHODS

Instrument ID: HP6

Calibration Date(s): 10/27/00 10/27/00

Heated Purge: (Y/N) N

Calibration Time(s): 1126 1309

GC Column: DB 624

ID: 0.20 (mm)

LAB FILE ID:		RRF25 =1A61027Z		RRF100=1B61027Z			
RRF250=1C61027Z		RRF500=1D61027Z		RRF1000=1E61027Z			
COMPOUND	RRF25	RRF100	RRF250	RRF500	RRF1000	RRF	% RSD
Dichlorodifluoromethane	0.204	0.230	0.230	0.228	0.244	0.227	6.3
Chloromethane	0.298	0.310	0.312	0.308	0.308	0.307	1.8*
Vinyl Chloride	0.239	0.264	0.272	0.279	0.286	0.268	6.8
Bromomethane	0.181	0.136	0.147	0.153	0.144	0.152	11.4
Chloroethane	0.109	0.106	0.117	0.117	0.097	0.109	7.5
Trichlorofluoromethane	0.596	0.234	0.673	0.719	0.653	0.575	34.0
1,1-Dichloroethene	0.310	0.331	0.361	0.374	0.351	0.345	7.4
Methylene Chloride	0.222	0.244	0.251	0.264	0.252	0.247	6.3
trans-1,2-Dichloroethene	0.206	0.234	0.242	0.257	0.260	0.240	9.0
1,1-Dichloroethane	0.360	0.400	0.418	0.439	0.424	0.408	7.4*
cis-1,2-dichloroethene	0.203	0.242	0.253	0.276	0.281	0.251	12.5
Chloroform	0.326	0.376	0.399	0.422	0.407	0.386	9.7
Bromochloromethane	0.092	0.106	0.112	0.122	0.120	0.110	10.9
1,1,1-Trichloroethane	0.261	0.323	0.351	0.396	0.412	0.349	17.3
Carbon Tetrachloride	0.213	0.259	0.303	0.334	0.361	0.294	20.0
1,2-Dichloroethane	0.286	0.317	0.335	0.358	0.351	0.329	8.8
Benzene	0.770	0.910	0.960	1.033	0.983	0.931	10.8
Trichloroethene	0.192	0.224	0.241	0.266	0.262	0.237	12.8
1,2-Dichloropropane	0.191	0.220	0.227	0.252	0.237	0.225	10.1
Bromodichloromethane	0.198	0.250	0.280	0.306	0.300	0.267	16.7
cis-1,3-Dichloropropene	0.237	0.314	0.345	0.394	0.382	0.334	18.8
Toluene	3.921	4.562	4.743	4.937	4.510	4.535	8.4
trans-1,3-Dichloropropene	0.962	1.265	1.370	1.452	1.344	1.279	14.8
1,1,2-Trichloroethane	0.721	0.830	0.843	0.880	0.794	0.814	7.4
Tetrachloroethene	0.651	0.761	0.821	0.925	0.924	0.816	14.2
Dibromochloromethane	0.551	0.758	0.888	0.968	0.938	0.821	20.8
Chlorobenzene	2.705	2.928	3.044	3.274	3.121	3.014	7.1*
Ethylbenzene	1.339	1.480	1.550	1.679	1.675	1.545	9.3
Styrene	2.512	3.103	3.352	3.823	3.930	3.344	17.2
Bromoform	0.257	0.392	0.484	0.573	0.571	0.455	29.4*
1,1,2,2-Tetrachloroethane	0.512	0.550	0.597	0.602	0.549	0.562	6.7*
1,3-Dichlorobenzene	1.144	1.270	1.366	1.408	1.299	1.297	7.8
1,4-Dichlorobenzene	1.296	1.371	1.448	1.502	1.384	1.400	5.6
1,2-Dichlorobenzene	1.065	1.230	1.376	1.540	1.512	1.345	14.8
Dibromomethane	0.109	0.130	0.138	0.151	0.148	0.135	12.4
1,2-Dibromoethane	0.633	0.801	0.827	0.885	0.802	0.790	11.9
1,1,1,2-Tetrachloroethane	0.714	0.910	0.997	1.101	1.103	0.965	16.8

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

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL-PITTSBURGH

Contract:

675 125

Lab Code:

Case No.:

SAS No.:

SDG No.: METHODS

Instrument ID: HP6

Calibration Date(s): 10/27/00 10/27/00

Heated Purge: (Y/N) N

Calibration Time(s): 1126 1309

GC Column: DB 624 ID: 0.20 (mm)

LAB FILE ID:		RRF25 =1A61027Z		RRF100=1B61027Z			
RRF250=1C61027Z		RRF500=1D61027Z		RRF1000=1E61027Z			
COMPOUND	RRF25	RRF100	RRF250	RRF500	RRF1000	RRF	% RSD
=====	=====	=====	=====	=====	=====	=====	=====
1,2,3-Trichloropropane	0.172	0.182	0.189	0.188	0.158	0.178	7.3
1,2-Dibromo-3-chloropropane	0.054	0.070	0.077	0.083	0.077	0.072	15.6
2,2-Dichloropropane	0.240	0.283	0.315	0.359	0.378	0.315	17.8
1,1-Dichloropropene	0.175	0.217	0.225	0.245	0.243	0.221	12.8
1,3-Dichloropropane	1.300	1.538	1.591	1.692	1.556	1.535	9.4
n-Propylbenzene	0.705	0.779	0.816	0.810	0.761	0.774	5.8
Bromobenzene	0.561	0.609	0.655	0.698	0.676	0.640	8.6
1,3,5-Trimethylbenzene	1.934	2.235	2.507	2.657	2.492	2.365	12.0
2-Chlorotoluene	0.591	0.650	0.695	0.701	0.642	0.656	6.8
4-Chlorotoluene	0.641	0.693	0.762	0.835	0.840	0.754	11.6
tert-Butylbenzene	2.008	2.068	2.177	2.112	1.952	2.063	4.2
1,2,4-Trimethylbenzene	1.896	2.166	2.338	2.348	2.056	2.161	8.9
sec-Butylbenzene	2.712	3.095	3.245	3.161	2.707	2.984	8.6
4-Isopropyltoluene	2.383	2.702	2.925	2.998	2.675	2.737	8.8
n-Butylbenzene	1.991	2.389	2.674	2.836	2.583	2.495	13.0
1,2,4-Trichlorobenzene	0.506	0.604	0.655	0.729	0.710	0.641	14.0
Hexachlorobutadiene	0.368	0.392	0.426	0.456	0.465	0.421	9.8
Naphthalene	1.150	1.107	1.085	1.184	1.089	1.123	3.8
1,2,3-Trichlorobenzene	0.520	0.489	0.471	0.525	0.518	0.505	4.7
Acetone	0.440	0.212	0.135	0.116	0.104	0.201	69.5
Carbon Disulfide	0.826	0.948	1.039	1.090	1.004	0.981	10.3
2-Butanone	0.083	0.081	0.081	0.089	0.087	0.084	4.5
4-Methyl-2-Pentanone	0.541	0.645	0.727	0.770	0.702	0.677	13.0
2-Hexanone	0.338	0.414	0.456	0.504	0.481	0.439	14.9
Methyl tert-butyl ether	0.491	0.570	0.583	0.609	0.613	0.573	8.6
Isopropylbenzene	4.053	4.885	5.004	5.364	5.174	4.896	10.3
1,2-Dichloroethene (total)	0.205	0.238	0.247	0.267	0.271	0.246	10.8
Xylenes (total)	1.583	1.832	1.968	2.241	2.291	1.983	14.8
=====	=====	=====	=====	=====	=====	=====	=====
Dibromofluoromethane	0.252	0.246	0.233	0.240	0.248	0.244	2.9
1,2-Dichloroethane-d4	0.313	0.294	0.268	0.267	0.249	0.278	9.1
Toluene-d8	4.723	4.476	4.143	4.077	3.690	4.222	9.4
Bromofluorobenzene	1.720	1.649	1.543	1.550	1.484	1.589	5.9

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

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INITIAL CALIBRATION REPORT

Instrument ID: hp6.i
Lab File ID: 1A61027Z.D
Analysis Type: WATER

Injection Date: 27-OCT-2000 12:17
Lab Sample ID: vstd5
Method File: \\QPITPA02\d\chem\hp6.i\61027z.b

COMPOUND	%RSD
Xylenes (total)	14.8
1,2-Dichloroethene (total)	10.8
Dichlorodifluoromethane	6.3
Chloromethane	1.8
Vinyl Chloride	6.8
Bromomethane	11.4
Chloroethane	7.5
Trichlorofluoromethane	34.0
1,1-Dichloroethene	7.4
Acetone	69.5
Carbon Disulfide	10.3
Methylene Chloride	6.3
trans-1,2-Dichloroethene	9.0
Methyl tert-butyl ether	8.6
1,1-Dichloroethane	7.4
2,2-Dichloropropane	17.8
cis-1,2-dichloroethene	12.5
2-Butanone	4.5
Bromochloromethane	10.9
Chloroform	9.7
1,1,1-Trichloroethane	17.3
Dibromofluoromethane	2.9
Carbon Tetrachloride	20.0
1,1-Dichloropropene	12.8
1,2-Dichloroethane-d4	9.1
Benzene	10.8
1,2-Dichloroethane	8.8
Trichloroethene	12.8
1,2-Dichloropropane	10.1
Dibromomethane	12.4
Bromodichloromethane	16.7
cis-1,3-Dichloropropene	18.8
4-Methyl-2-Pentanone	13.0
Toluene-d8	9.4
Toluene	8.4
trans-1,3-Dichloropropene	14.8
1,1,2-Trichloroethane	7.4
Tetrachloroethene	14.2
1,3-Dichloropropane	9.4

INITIAL CALIBRATION REPORT

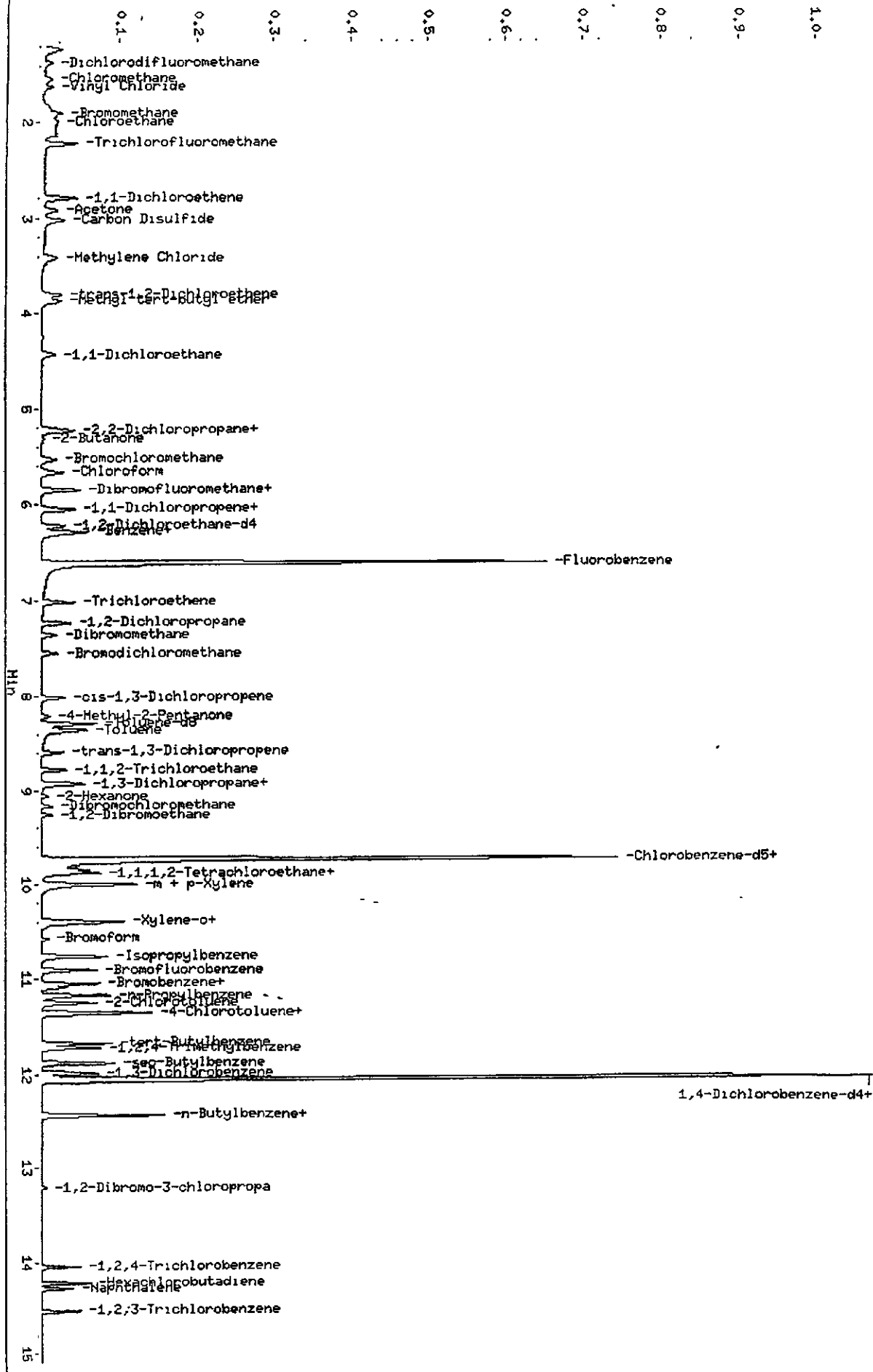
675 127

Instrument ID: hp6.i
Lab File ID: 1A61027Z.D
Analysis Type: WATER

Injection Date: 27-OCT-2000 12:17
Lab Sample ID: vstd5
Method File: \\QPITPA02\d\chem\hp6.i\61027z.b

COMPOUND	%RSD
-----	-----
2-Hexanone	14.9
Dibromochloromethane	20.8
1,2-Dibromoethane	11.9
Chlorobenzene	7.1
1,1,1,2-Tetrachloroethane	16.8
Ethylbenzene	9.3
m + p-Xylene	13.9
Xylene-o	14.8
Styrene	17.2
Bromoform	29.4
Isopropylbenzene	10.3
Bromofluorobenzene	5.9
Bromobenzene	8.6
1,1,2,2-Tetrachloroethane	6.7
1,2,3-Trichloropropane	7.3
n-Propylbenzene	5.8
2-Chlorotoluene	6.8
1,3,5-Trimethylbenzene	12.0
4-Chlorotoluene	11.6
tert-Butylbenzene	4.2
1,2,4-Trimethylbenzene	8.9
sec-Butylbenzene	8.6
1,3-Dichlorobenzene	7.8
4-Isopropyltoluene	8.8
1,4-Dichlorobenzene	5.6
n-Butylbenzene	13.0
1,2-Dichlorobenzene	14.8
1,2-Dibromo-3-chloropropane	15.6
1,2,4-Trichlorobenzene	14.0
Hexachlorobutadiene	9.8
Naphthalene	3.8
1,2,3-Trichlorobenzene	4.7

The average of all %RSD's in the initial calibration is 11.9



Data File: \\AQIPR02\chem\hp6.1\610272.b\610272.D
 Date : 27-Oct-2000 12:17
 Client ID: vstd5
 Sample Info: vstd5 5ml
 Purge Volume: 5.0
 Column phase: DB 624

\\AQIPR02\chem\hp6.1\610272.b\610272.D

Instrument: hp6.1
 Operator: 16328
 Column diameter: 0.20

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STL-Pittsburgh

VOLATILE REPORT SW-846 Method
Data file : \\QPITPA02\d\chem\hp6.i\61027z.b\1A61027Z.D
Lab Smp Id: vstd5 Client Smp ID: vstd5
Inj Date : 27-OCT-2000 12:17
Operator : 16328 Inst ID: hp6.i
Smp Info : vstd5 5ml
Misc Info : vstd5,61027z.b,
Comment :
Method : \\QPITPA02\d\chem\hp6.i\61027z.b\8260bh2o.m
Meth Date : 11-Nov-2000 07:43 dudeckk Quant Type: ISTD
Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwlistw.sub
Target Version: 4.04
Processing Host: PITPC077

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

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

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.608	6.613	(1.000)	709071	250.000	
* 69 Chlorobenzene-d5	119	9.735	9.740	(1.000)	158104	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.053	12.052	(1.000)	264976	250.000	
\$ 39 Dibromofluoromethane	113	5.854	5.853	(0.886)	17871	25.0000	25.83
\$ 43 1,2-Dichloroethane-d4	65	6.219	6.218	(0.941)	22197	25.0000	28.11
\$ 59 Toluene-d8	98	8.293	8.292	(0.852)	74672	25.0000	27.97
\$ 80 Bromofluorobenzene	95	10.909	10.908	(1.121)	27198	25.0000	27.06
2 Chloromethane	50	1.540	1.540	(0.233)	21098	25.0000	24.23
3 Vinyl Chloride	62	1.620	1.625	(0.245)	16932	25.0000	22.28
4 Bromomethane	94	1.899	1.905	(0.287)	12866	25.0000	29.77
5 Chloroethane	64	1.991	1.990	(0.301)	7723	25.0000	24.96
6 Trichlorofluoromethane	101	2.222	2.215	(0.336)	42253	25.0000	25.90
1 Dichlorodifluoromethane	85	1.364	1.369	(0.206)	14497	25.0000	22.46
12 1,1-Dichloroethene	96	2.794	2.787	(0.423)	21948	25.0000	22.41
13 Acetone	43	2.915	2.921	(0.441)	31235	25.0000	54.63
15 Carbon Disulfide	76	3.019	3.012	(0.457)	58541	25.0000	21.03

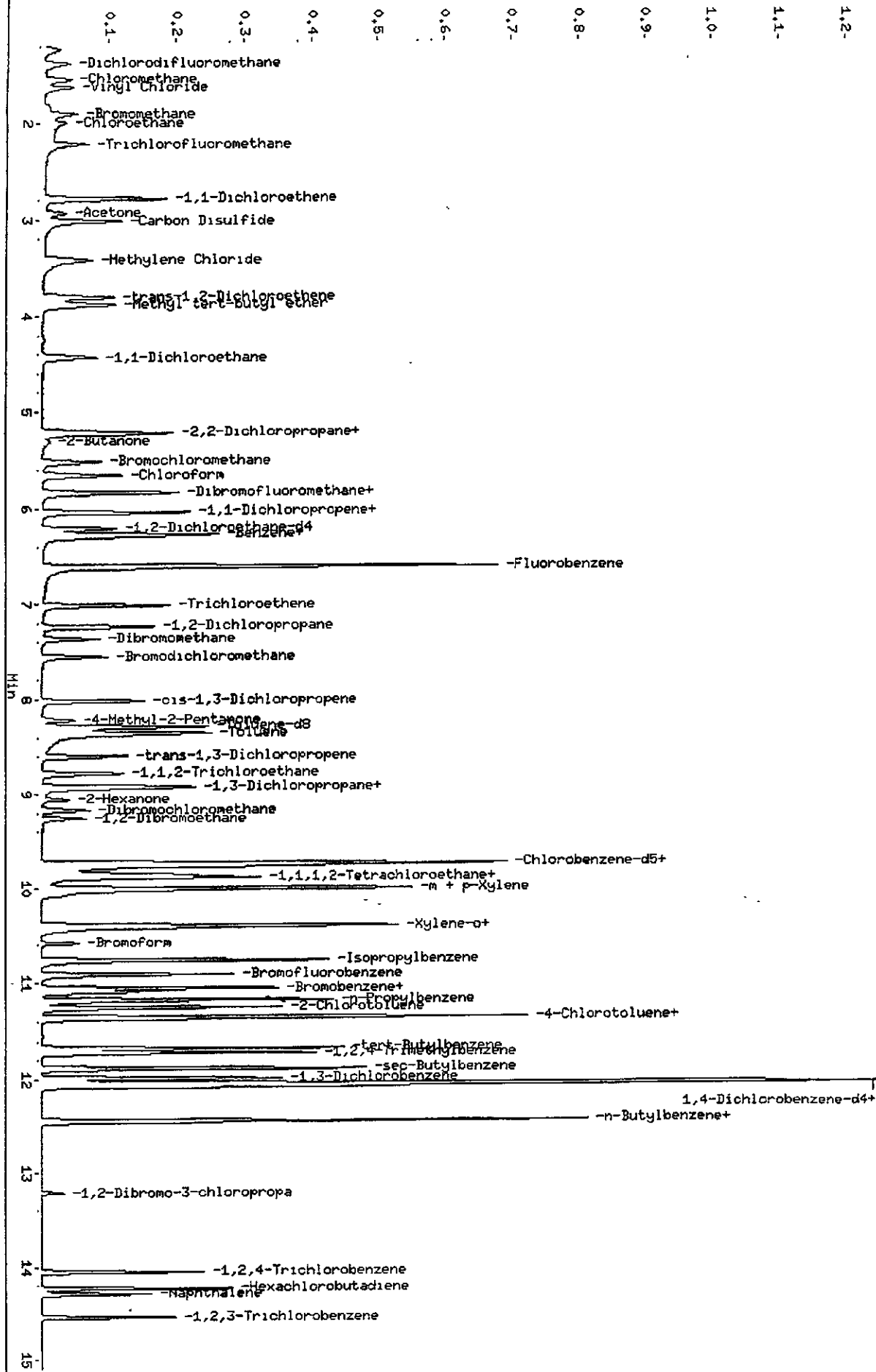
675 130

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
=====	=====	==	=====	=====	=====	=====	=====
18 Methylene Chloride	84	3.414	3.413	(0.517)	15738	25.0000	22.50
19 trans-1,2-Dichloroethene	96	3.797	3.797	(0.575)	14640	25.0000	21.53
20 Methyl tert-butyl ether	73	3.864	3.870	(0.585)	34833	25.0000	21.42
24 1,1-Dichloroethane	63	4.424	4.429	(0.669)	25550	25.0000	22.05
27 2,2-Dichloropropane	77	5.215	5.214	(0.789)	17011	25.0000	19.04
28 cis-1,2-dichloroethene	96	5.239	5.232	(0.793)	14411	25.0000	20.23
M 29 1,2-Dichloroethene (total)	96				29051	50.0000	41.73
30 Bromochloromethane	128	5.525	5.524	(0.836)	6537	25.0000	20.90
31 2-Butanone	43	5.318	5.311	(0.805)	5859	25.0000	24.56
37 Chloroform	83	5.659	5.664	(0.856)	23131	25.0000	21.12
38 1,1,1-Trichloroethane	97	5.848	5.847	(0.885)	18526	25.0000	18.73
40 1,1-Dichloropropene	75	6.048	6.047	(0.915)	12435	25.0000	19.83
41 Carbon Tetrachloride	117	6.036	6.041	(0.913)	15137	25.0000	18.14
42 Benzene	78	6.279	6.279	(0.950)	54576	25.0000	20.67
45 1,2-Dichloroethane	62	6.304	6.303	(0.954)	20285	25.0000	21.71
47 Trichloroethene	130	7.016	7.021	(1.062)	13601	25.0000	20.23
49 1,2-Dichloropropane	63	7.247	7.246	(1.097)	13550	25.0000	21.19
50 Dibromomethane	93	7.368	7.368	(1.115)	7727	25.0000	20.18
53 Bromodichloromethane	83	7.557	7.556	(1.144)	14034	25.0000	18.53
57 cis-1,3-Dichloropropene	75	8.019	8.025	(1.214)	16815	25.0000	17.72
58 4-Methyl-2-Pentanone	43	8.214	8.219	(0.844)	8561	25.0000	19.99
60 Toluene	91	8.360	8.359	(0.859)	61997	25.0000	21.62
61 trans-1,3-Dichloropropene	75	8.591	8.596	(0.883)	15210	25.0000	18.81
63 1,3-Dichloropropane	76	8.932	8.931	(0.918)	20562	25.0000	21.17
64 1,1,2-Trichloroethane	97	8.774	8.773	(0.901)	11395	25.0000	22.15
65 Tetrachloroethene	164	8.914	8.913	(0.916)	10294	25.0000	19.94
66 2-Hexanone	43	9.054	9.053	(0.930)	5338	25.0000	19.24
67 Dibromochloromethane	129	9.169	9.168	(0.942)	8714	25.0000	16.79
68 1,2-Dibromoethane	107	9.260	9.260	(0.951)	10003	25.0000	20.03
70 Chlorobenzene	112	9.765	9.771	(1.003)	42774	25.0000	22.44
71 1,1,1,2-Tetrachloroethane	131	9.850	9.856	(1.012)	11286	25.0000	18.49
72 Ethylbenzene	106	9.881	9.886	(1.015)	21167	25.0000	21.67
73 m + p-Xylene	106	10.003	10.002	(1.027)	53394	50.0000	40.57
74 Xylene-o	106	10.392	10.397	(1.067)	25023	25.0000	19.95
M 75 Xylenes (total)	106				78417	25.0000	62.53
76 Styrene	104	10.404	10.409	(1.069)	39708	25.0000	18.78
77 Bromoform	173	10.580	10.580	(1.087)	4062	25.0000	14.11
78 Isopropylbenzene	105	10.763	10.762	(1.106)	64075	25.0000	20.69
79 Bromobenzene	156	11.049	11.054	(0.917)	14863	25.0000	21.91
81 n-Propylbenzene	120	11.171	11.170	(0.927)	18688	25.0000	22.77
82 2-Chlorotoluene	126	11.250	11.249	(0.933)	15661	25.0000	22.52
83 1,1,2,2-Tetrachloroethane	83	11.055	11.054	(0.917)	13571	25.0000	22.78
84 1,2,3-Trichloropropane	110	11.085	11.091	(0.920)	4571	25.0000	24.23
85 4-Chlorotoluene	126	11.353	11.358	(0.942)	16980	25.0000	21.24
86 1,3,5-Trimethylbenzene	105	11.347	11.352	(0.941)	51249	25.0000	20.44
87 tert-Butylbenzene	119	11.669	11.669	(0.968)	53215	25.0000	24.33
88 1,2,4-Trimethylbenzene	105	11.718	11.717	(0.972)	50249	25.0000	21.94

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Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng)	(ng)
89 sec-Butylbenzene		105	11.888	11.888	(0.986)	71870	25.0000	22.72
90 4-Isopropyltoluene		119	12.034	12.034	(0.998)	63144	25.0000	21.77
91 1,3-Dichlorobenzene		146	11.986	11.985	(0.994)	30304	25.0000	22.04
93 1,4-Dichlorobenzene		146	12.077	12.076	(1.002)	34347	25.0000	23.14
94 n-Butylbenzene		91	12.442	12.441	(1.032)	52769	25.0000	19.96
95 1,2-Dichlorobenzene		146	12.442	12.441	(1.032)	28222	25.0000	19.80
96 1,2-Dibromo-3-chloropropane		157	13.215	13.214	(1.096)	1425	25.0000	18.62
97 1,2,4-Trichlorobenzene		180	14.048	14.053	(1.166)	13406	25.0000	19.74
98 Hexachlorobutadiene		225	14.237	14.236	(1.181)	9765	25.0000	21.86
99 Naphthalene		128	14.285	14.284	(1.185)	30485	25.0000	25.61
100 1,2,3-Trichlorobenzene		180	14.535	14.534	(1.206)	13780	25.0000	25.77

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Y (x10⁻⁶)

Data File: \\QPI\PA02\chem\hp6.1\610272.b\1B610272.D
 Date: 27-OCT-2000 11:53
 Client ID: vstd20
 Sample Info: vstd20 5m1
 Purge Volume: 5.0
 Column Phase: DB 624

Instrument: hp6.1
 Operator: 16328
 Column diameter: 0.20

\\QPI\PA02\chem\hp6.1\610272.b\1B610272.D

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STL-Pittsburgh

VOLATILE REPORT SW-846 Method
Data file : \\QPITPA02\d\chem\hp6.i\61027z.b\1B61027Z.D
Lab Smp Id: vstd20 Client Smp ID: vstd20
Inj Date : 27-OCT-2000 11:53
Operator : 16328 Inst ID: hp6.i
Smp Info : vstd20 5ml
Misc Info : vstd20,61027z.b, *Ku/14/0*
Comment :
Method : \\QPITPA02\d\chem\hp6.i\61027z.b\8260bh2o.m
Meth Date : 11-Nov-2000 07:42 dudeckk Quant Type: ISTD
Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwlistw.sub
Target Version: 4.04
Processing Host: PITPC077

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

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

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.608	6.613	(1.000)	697824	250.000	
* 69 Chlorobenzene-d5	119	9.741	9.740	(1.000)	157073	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.052	12.052	(1.000)	281857	250.000	
\$ 39 Dibromofluoromethane	113	5.853	5.853	(0.886)	68603	100.000	100.8
\$ 43 1,2-Dichloroethane-d4	65	6.218	6.218	(0.941)	82189	100.000	105.8
\$ 59 Toluene-d8	98	8.293	8.292	(0.851)	281229	100.000	106.0
\$ 80 Bromofluorobenzene	95	10.909	10.908	(1.120)	103623	100.000	103.8
2 Chloromethane	50	1.540	1.540	(0.233)	86570	100.000	101.0
3 Vinyl Chloride	62	1.625	1.625	(0.246)	73790	100.000	98.66
4 Bromomethane	94	1.899	1.905	(0.287)	38028	100.000	89.41
5 Chloroethane	64	1.990	1.990	(0.301)	29531	100.000	96.99
6 Trichlorofluoromethane	101	2.215	2.215	(0.335)	65393	100.000	40.73 (M) <i>Ku/14/0</i>
1 Dichlorodifluoromethane	85	1.370	1.369	(0.207)	64349	100.000	101.3
12 1,1-Dichloroethene	96	2.781	2.787	(0.421)	92285	100.000	95.75
13 Acetone	43	2.927	2.921	(0.443)	59307	100.000	105.4
15 Carbon Disulfide	76	3.012	3.012	(0.456)	264614	100.000	96.60

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS						CAL-AMT (ng)	ON-COL (ng)
18 Methylene Chloride	84		3.414	3.413	(0.517)	68221	100.000	99.08
19 trans-1,2-Dichloroethene	96		3.791	3.797	(0.574)	65217	100.000	97.45
20 Methyl tert-butyl ether	73		3.870	3.870	(0.586)	159032	100.000	99.36
24 1,1-Dichloroethane	63		4.430	4.429	(0.670)	111775	100.000	98.02
27 2,2-Dichloropropane	77		5.215	5.214	(0.789)	78976	100.000	89.83
28 cis-1,2-dichloroethene	96		5.233	5.232	(0.792)	67435	100.000	96.19
M 29 1,2-Dichloroethene (total)	96					132652	200.000	193.6
30 Bromochloromethane	128		5.531	5.524	(0.837)	29550	100.000	96.00
31 2-Butanone	43		5.312	5.311	(0.804)	22599	100.000	96.26
37 Chloroform	83		5.665	5.664	(0.857)	105004	100.000	97.42
38 1,1,1-Trichloroethane	97		5.841	5.847	(0.884)	90219	100.000	92.69
40 1,1-Dichloropropene	75		6.048	6.047	(0.915)	60611	100.000	98.21
41 Carbon Tetrachloride	117		6.042	6.041	(0.914)	72422	100.000	88.18
42 Benzene	78		6.279	6.279	(0.950)	254061	100.000	97.76
45 1,2-Dichloroethane	62		6.303	6.303	(0.954)	88390	100.000	96.11
47 Trichloroethene	130		7.015	7.021	(1.062)	62564	100.000	94.58
49 1,2-Dichloropropane	63		7.240	7.246	(1.096)	61320	100.000	97.43
50 Dibromomethane	93		7.368	7.368	(1.115)	36289	100.000	96.30
53 Bromodichloromethane	83		7.557	7.556	(1.144)	69694	100.000	93.52
57 cis-1,3-Dichloropropene	75		8.019	8.025	(1.214)	87721	100.000	93.92
58 4-Methyl-2-Pentanone	43		8.226	8.219	(0.844)	40531	100.000	95.26
60 Toluene	91		8.360	8.359	(0.858)	286648	100.000	100.6
61 trans-1,3-Dichloropropene	75		8.597	8.596	(0.883)	79509	100.000	98.97
63 1,3-Dichloropropane	76		8.932	8.931	(0.917)	96613	100.000	100.1
64 1,1,2-Trichloroethane	97		8.779	8.773	(0.901)	52147	100.000	102.0
65 Tetrachloroethene	164		8.913	8.913	(0.915)	47806	100.000	93.21
66 2-Hexanone	43		9.059	9.053	(0.930)	26044	100.000	94.50
67 Dibromochloromethane	129		9.175	9.168	(0.942)	47636	100.000	92.41
68 1,2-Dibromoethane	107		9.260	9.260	(0.951)	50322	100.000	101.4
70 Chlorobenzene	112		9.771	9.771	(1.003)	183946	100.000	97.12
71 1,1,1,2-Tetrachloroethane	131		9.856	9.856	(1.012)	57203	100.000	94.34
72 Ethylbenzene	106		9.887	9.886	(1.015)	92996	100.000	95.82
73 m + p-Xylene	106		10.002	10.002	(1.027)	243026	200.000	185.9
74 Xylene-o	106		10.398	10.397	(1.067)	115086	100.000	92.37
M 75 Xylenes (total)	106					358112	100.000	287.4
76 Styrene	104		10.410	10.409	(1.069)	194974	100.000	92.80
77 Bromoform	173		10.586	10.580	(1.087)	24604	100.000	86.00
78 Isopropylbenzene	105		10.763	10.762	(1.105)	306907	100.000	99.77
79 Bromobenzene	156		11.049	11.054	(0.917)	68714	100.000	95.24
81 n-Propylbenzene	120		11.170	11.170	(0.927)	87828	100.000	100.6
82 2-Chlorotoluene	126		11.249	11.249	(0.933)	73334	100.000	99.16
83 1,1,2,2-Tetrachloroethane	83		11.055	11.054	(0.917)	61986	100.000	97.80
84 1,2,3-Trichloropropane	110		11.091	11.091	(0.920)	20578	100.000	102.6
85 4-Chlorotoluene	126		11.359	11.358	(0.942)	78142	100.000	91.89
86 1,3,5-Trimethylbenzene	105		11.347	11.352	(0.941)	251985	100.000	94.50
87 tert-Butylbenzene	119		11.669	11.669	(0.968)	233105	100.000	100.2
88 1,2,4-Trimethylbenzene	105		11.718	11.717	(0.972)	244267	100.000	100.2

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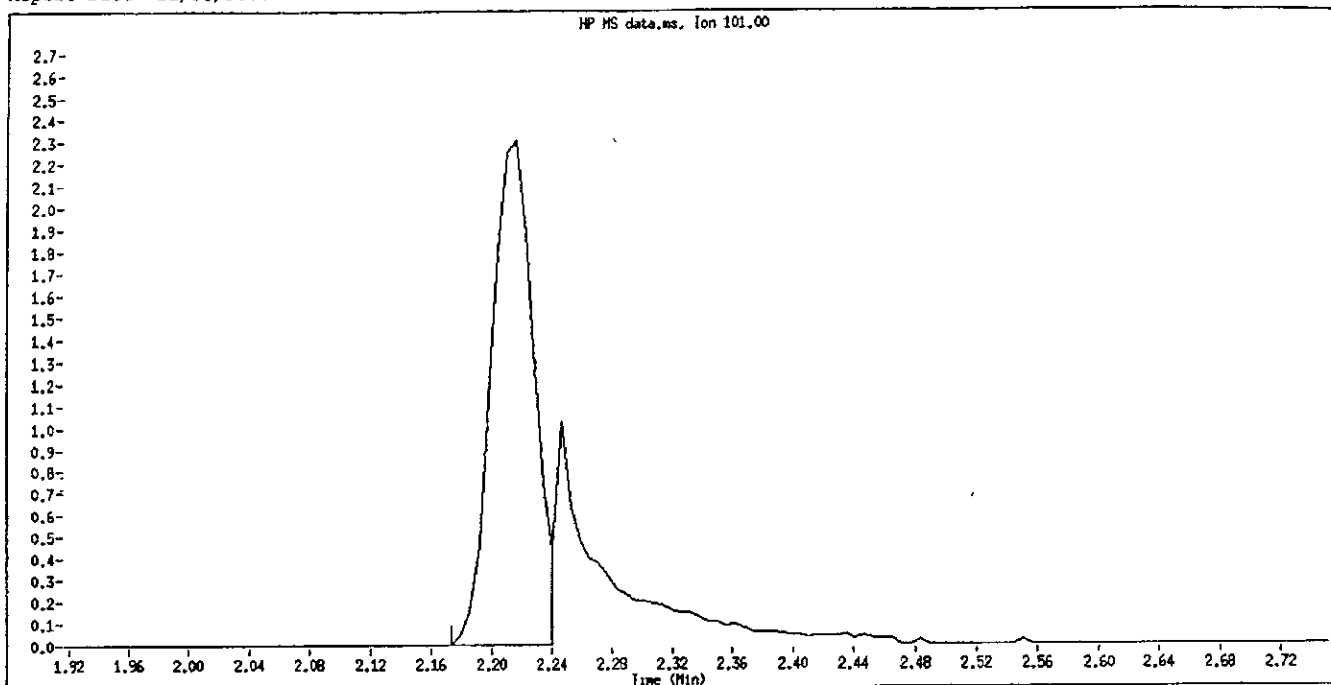
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
89 sec-Butylbenzene	105	11.888	11.888	(0.986)	348895	100.000	103.7
90 4-Isopropyltoluene	119	12.034	12.034	(0.998)	304578	100.000	98.72
91 1,3-Dichlorobenzene	146	11.985	11.985	(0.994)	143202	100.000	97.91
93 1,4-Dichlorobenzene	146	12.077	12.076	(1.002)	154592	100.000	97.92
94 n-Butylbenzene	91	12.442	12.441	(1.032)	269337	100.000	95.76
95 1,2-Dichlorobenzene	146	12.442	12.441	(1.032)	138673	100.000	91.48
96 1,2-Dibromo-3-chloropropane	157	13.214	13.214	(1.096)	7885	100.000	96.88
97 1,2,4-Trichlorobenzene	180	14.054	14.053	(1.166)	68082	100.000	94.23
98 Hexachlorobutadiene	225	14.236	14.236	(1.181)	44143	100.000	92.91
99 Naphthalene	128	14.291	14.284	(1.186)	124844	100.000	98.59
100 1,2,3-Trichlorobenzene	180	14.534	14.534	(1.206)	55119	100.000	96.91

QC Flag Legend

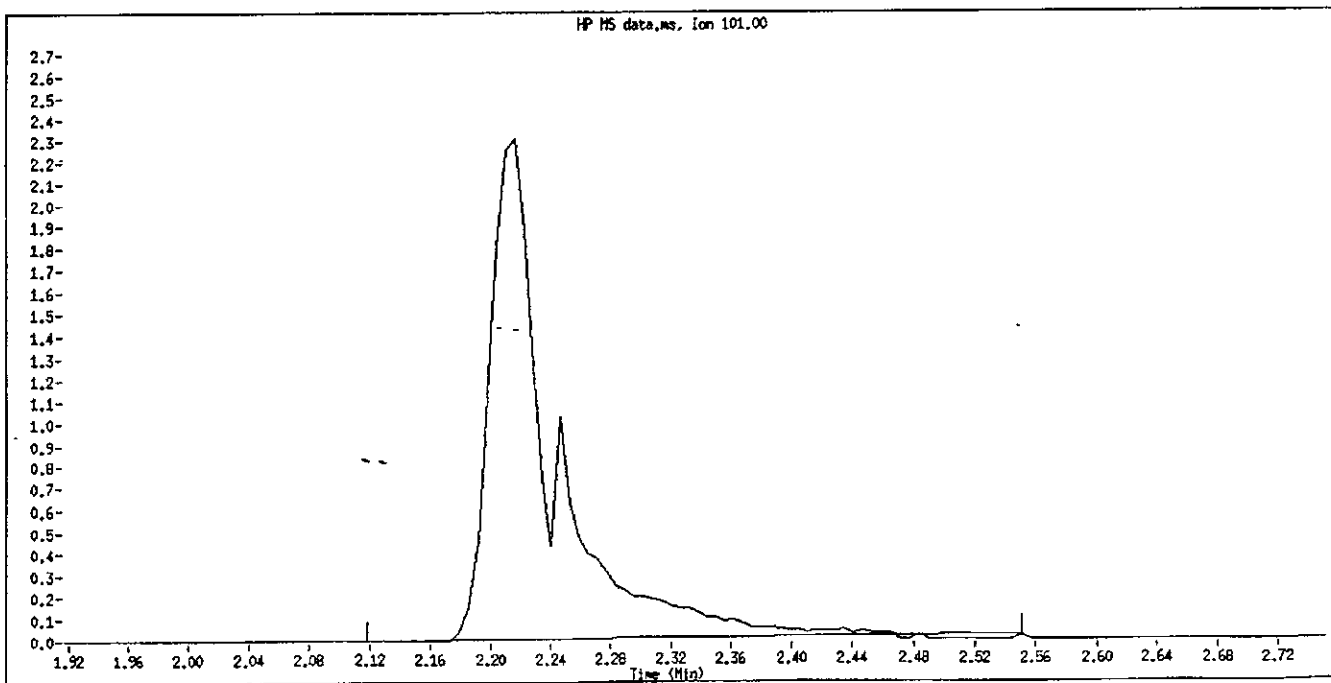
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Inj Date and Time 27-OCT-2000 11 53
Instrument ID hp6.1
Client ID vstd20
Compound Name Trichlorofluoromethane
CAS # 75-69-4
Report Date 11/11/2000

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Original Integration



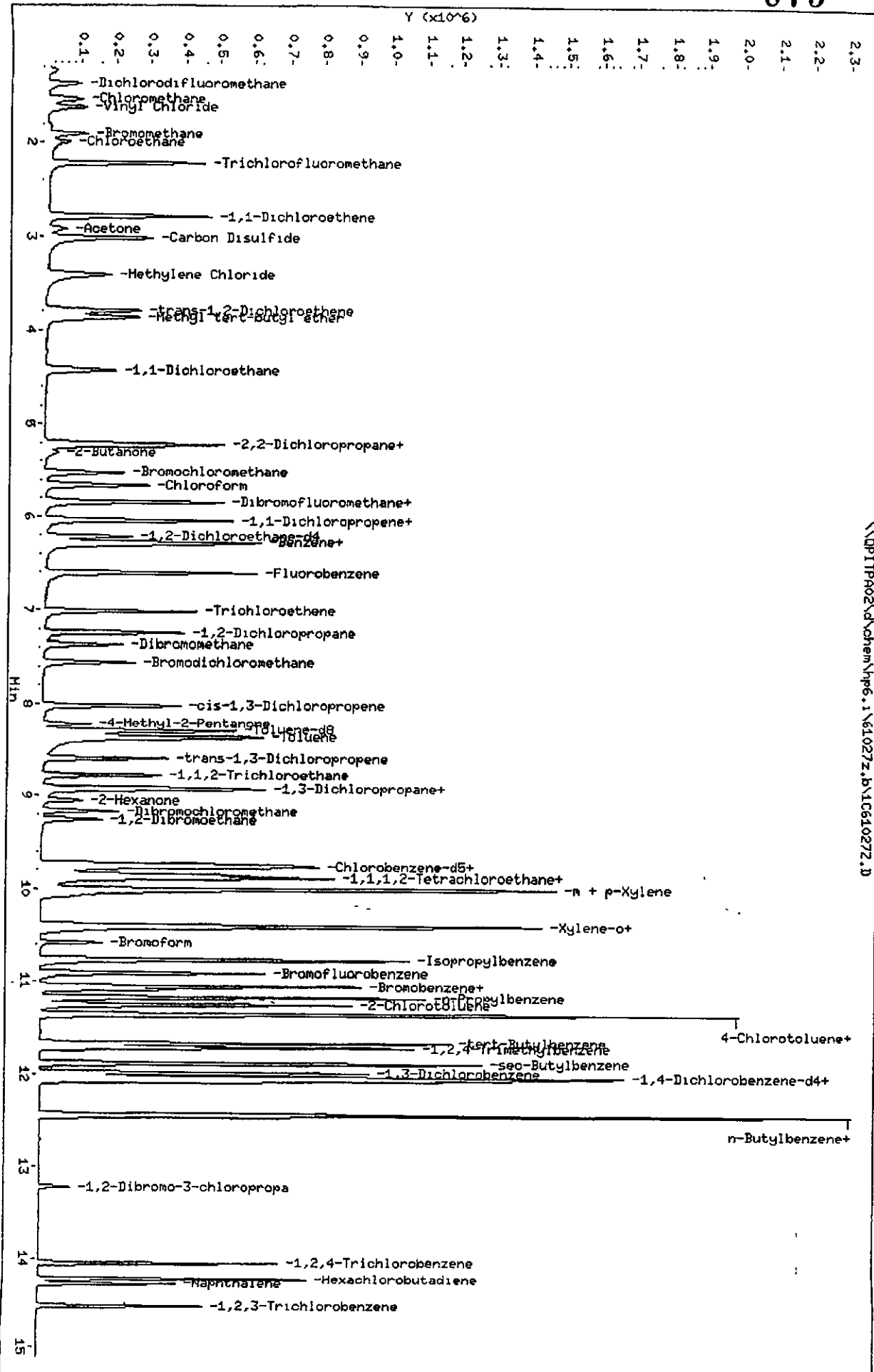
Manual Integration

Manually Integrated By DudeckK
Manual Integration Reason Peak Not Found

Ku/ulw

Data File: \\NPITPA02\chem\hpe.1\610272.b\610272.D
 Date: 27-OCT-2000 11:26
 Client ID: vstd50
 Sample Info: vstd50 5ml
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: hpe.1
 Operator: 16328
 Column diameter: 0.20



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VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp6.i\61027z.b\1C61027Z.D
 Lab Smp Id: vstd50 Client Smp ID: vstd50
 Inj Date : 27-OCT-2000 11:26
 Operator : 16328 Inst ID: hp6.i
 Smp Info : vstd50 5ml
 Misc Info : vstd50,61027z.b,
 Comment :
 Method : \\QPITPA02\d\chem\hp6.i\61027z.b\8260bh2o.m
 Meth Date : 11-Nov-2000 07:42 dudeckk Quant Type: ISTD
 Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
 Als bottle: 3 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 4-dwlistw.sub
 Target Version: 4.04
 Processing Host: PITPC077

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.613	6.613	(1.000)	674572	250.000	
* 69 Chlorobenzene-d5	119	9.740	9.740	(1.000)	157624	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.052	12.052	(1.000)	277465	250.000	
\$ 39 Dibromofluoromethane	113	5.853	5.853	(0.885)	157439	250.000	239.2
\$ 43 1,2-Dichloroethane-d4	65	6.218	6.218	(0.940)	181052	250.000	241.0
\$ 59 Toluene-d8	98	8.292	8.292	(0.851)	653078	250.000	245.3
\$ 80 Bromofluorobenzene	95	10.908	10.908	(1.120)	243222	250.000	242.7
2 Chloromethane	50	1.540	1.540	(0.233)	210493	250.000	254.1
3 Vinyl Chloride	62	1.625	1.625	(0.246)	183438	250.000	253.7
4 Bromomethane	94	1.905	1.905	(0.288)	99110	250.000	241.0
5 Chloroethane	64	1.990	1.990	(0.301)	78800	250.000	267.7
6 Trichlorofluoromethane	101	2.215	2.215	(0.335)	454159	250.000	292.6
1 Dichlorodifluoromethane	85	1.369	1.369	(0.207)	155499	250.000	253.2
12 1,1-Dichloroethene	96	2.787	2.787	(0.421)	243647	250.000	261.5
13 Acetone	43	2.921	2.921	(0.442)	91091	250.000	167.5
15 Carbon Disulfide	76	3.012	3.012	(0.455)	700976	250.000	264.7

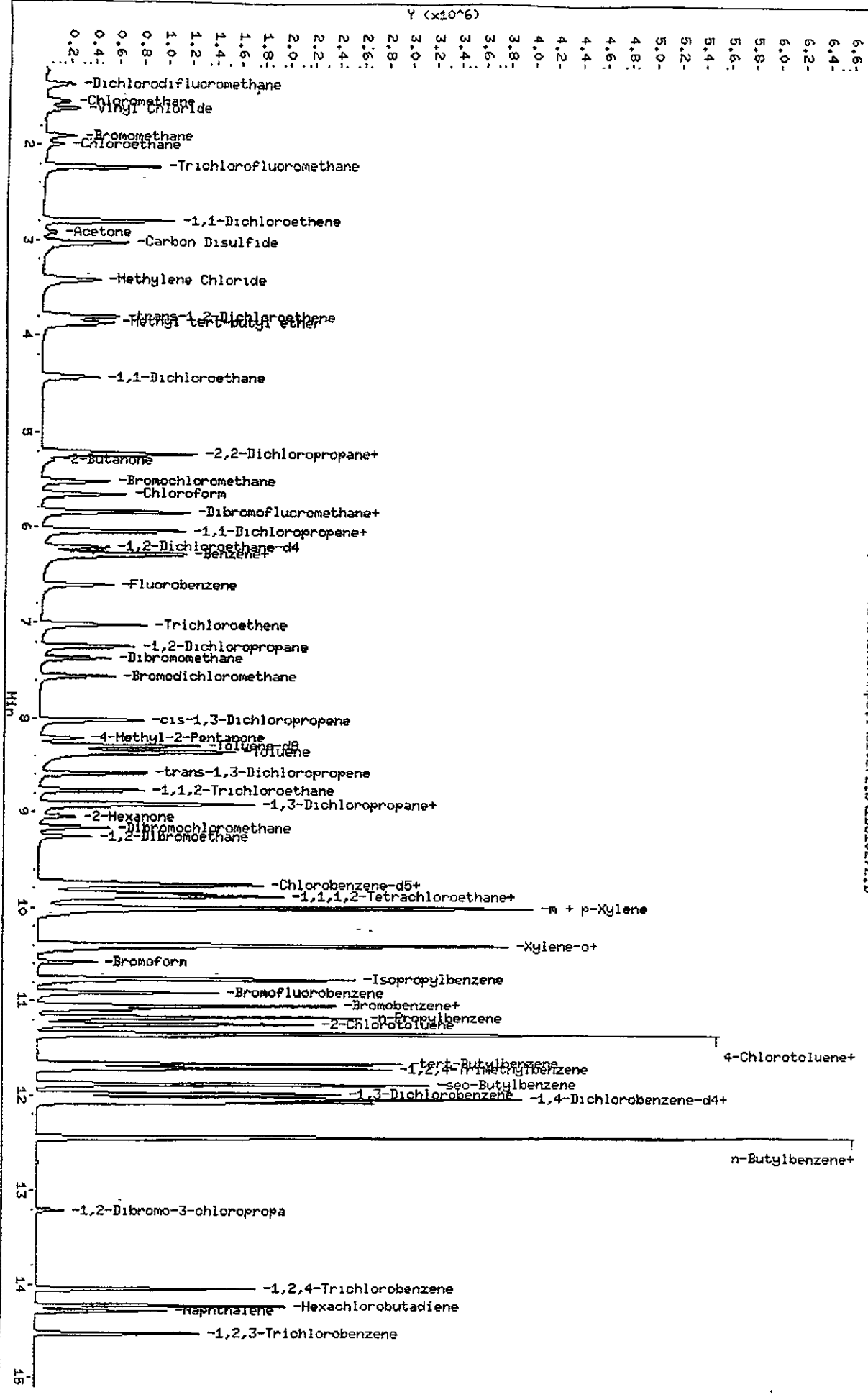
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Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
18 Methylene Chloride	84	3.413	3.413	(0.516)	169070	250.000	254.0
19 trans-1,2-Dichloroethene	96	3.797	3.797	(0.574)	163050	250.000	252.0
20 Methyl tert-butyl ether	73	3.870	3.870	(0.585)	393607	250.000	254.4
24 1,1-Dichloroethane	63	4.429	4.429	(0.670)	282360	250.000	256.2
27 2,2-Dichloropropane	77	5.214	5.214	(0.788)	212570	250.000	250.1
28 cis-1,2-dichloroethene	96	5.232	5.232	(0.791)	170851	250.000	252.1
M 29 1,2-Dichloroethene (total)	96				333901	500.000	504.1
30 Bromochloromethane	128	5.524	5.524	(0.835)	75253	250.000	252.9
31 2-Butanone	43	5.311	5.311	(0.803)	54519	250.000	240.2
37 Chloroform	83	5.664	5.664	(0.857)	268995	250.000	258.2
38 1,1,1-Trichloroethane	97	5.847	5.847	(0.884)	236661	250.000	251.5
40 1,1-Dichloropropene	75	6.047	6.047	(0.914)	151607	250.000	254.1
41 Carbon Tetrachloride	117	6.041	6.041	(0.914)	204382	250.000	257.4
42 Benzene	78	6.279	6.279	(0.949)	647457	250.000	257.7
45 1,2-Dichloroethane	62	6.303	6.303	(0.953)	225783	250.000	254.0
47 Trichloroethene	130	7.021	7.021	(1.062)	162374	250.000	253.9
49 1,2-Dichloropropane	63	7.246	7.246	(1.096)	153361	250.000	252.1
50 Dibromomethane	93	7.368	7.368	(1.114)	92833	250.000	254.8
53 Bromodichloromethane	83	7.556	7.556	(1.143)	189282	250.000	262.8
57 cis-1,3-Dichloropropene	75	8.025	8.025	(1.213)	232902	250.000	258.0
58 4-Methyl-2-Pentanone	43	8.219	8.219	(0.844)	114648	250.000	268.5
60 Toluene	91	8.359	8.359	(0.858)	747650	250.000	261.5
61 trans-1,3-Dichloropropene	75	8.596	8.596	(0.883)	215991	250.000	267.9
63 1,3-Dichloropropane	76	8.931	8.931	(0.917)	250760	250.000	259.0
64 1,1,2-Trichloroethane	97	8.773	8.773	(0.901)	132849	250.000	259.0
65 Tetrachloroethene	164	8.913	8.913	(0.915)	129363	250.000	251.3
66 2-Hexanone	43	9.053	9.053	(0.929)	71847	250.000	259.8
67 Dibromochloromethane	129	9.168	9.168	(0.941)	139927	250.000	270.5
68 1,2-Dibromoethane	107	9.260	9.260	(0.951)	130361	250.000	261.9
70 Chlorobenzene	112	9.771	9.771	(1.003)	479845	250.000	252.5
71 1,1,1,2-Tetrachloroethane	131	9.856	9.856	(1.012)	157229	250.000	258.4
72 Ethylbenzene	106	9.886	9.886	(1.015)	244319	250.000	250.9
73 m + p-Xylene	106	10.002	10.002	(1.027)	649823	500.000	495.3
74 Xylene-o	106	10.397	10.397	(1.067)	310279	250.000	248.2
M 75 Xylenes (total)	106				960102	250.000	767.9
76 Styrene	104	10.409	10.409	(1.069)	528438	250.000	250.6
77 Bromoform	173	10.580	10.580	(1.086)	76321	250.000	265.8
78 Isopropylbenzene	105	10.762	10.762	(1.105)	788815	250.000	255.5
79 Bromobenzene	156	11.054	11.054	(0.917)	181647	250.000	255.8
81 n-Propylbenzene	120	11.170	11.170	(0.927)	226460	250.000	263.5
82 2-Chlorotoluene	126	11.249	11.249	(0.933)	192877	250.000	264.9
83 1,1,2,2-Tetrachloroethane	83	11.054	11.054	(0.917)	165737	250.000	265.6
84 1,2,3-Trichloropropane	110	11.091	11.091	(0.920)	52537	250.000	266.0
85 4-Chlorotoluene	126	11.358	11.358	(0.942)	211351	250.000	252.5
86 1,3,5-Trimethylbenzene	105	11.352	11.352	(0.942)	695638	250.000	265.0
87 tert-Butylbenzene	119	11.669	11.669	(0.968)	604058	250.000	263.8
88 1,2,4-Trimethylbenzene	105	11.717	11.717	(0.972)	648786	250.000	270.5

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
89 sec-Butylbenzene	105	11.888	11.888	(0.986)	900473	250.000	271.9
90 4-Isopropyltoluene	119	12.034	12.034	(0.998)	811586	250.000	267.2
91 1,3-Dichlorobenzene	146	11.985	11.985	(0.994)	379131	250.000	263.3
93 1,4-Dichlorobenzene	146	12.076	12.076	(1.002)	401788	250.000	258.5
94 n-Butylbenzene	91	12.441	12.441	(1.032)	741938	250.000	268.0
95 1,2-Dichlorobenzene	146	12.441	12.441	(1.032)	381858	250.000	255.9
96 1,2-Dibromo-3-chloropropane	157	13.214	13.214	(1.096)	21476	250.000	268.0
97 1,2,4-Trichlorobenzene	180	14.053	14.053	(1.166)	181779	250.000	255.6
98 Hexachlorobutadiene	225	14.236	14.236	(1.181)	118248	250.000	252.8
99 Naphthalene	128	14.284	14.284	(1.185)	301145	250.000	241.6
100 1,2,3-Trichlorobenzene	180	14.534	14.534	(1.206)	130591	250.000	233.2

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 Client ID: vstd100
 Sample Info: vstd100 5ml
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: hp6.1
 Operator: 16328
 Column diameter: 0.20



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VOLATILE REPORT SW-846 Method
Data file : \\QPITPA02\d\chem\hp6.i\61027z.b\1D61027Z.D
Lab Smp Id: vstd100 Client Smp ID: vstd100
Inj Date : 27-OCT-2000 12:42
Operator : 16328 Inst ID: hp6.i
Smp Info : vstd100 5ml
Misc Info : vstd100,61027z.b,
Comment :
Method : \\QPITPA02\d\chem\hp6.i\61027z.b\8260bh2o.m
Meth Date : 11-Nov-2000 07:43 dudeckk Quant Type: ISTD
Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwlistw.sub
Target Version: 4.04
Processing Host: PITPC077

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

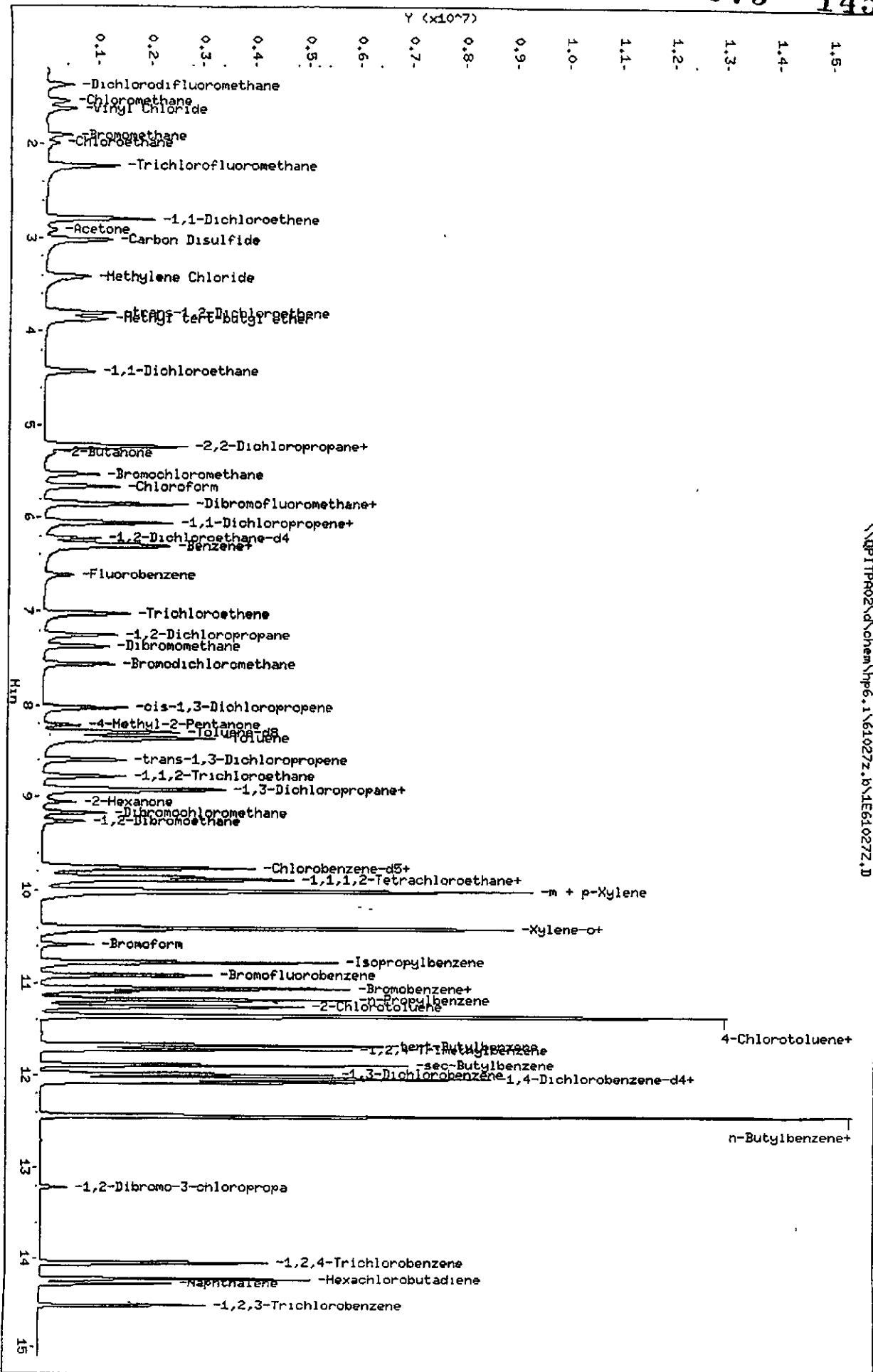
Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.613	6.613	(1.000)	738913	250.000	
* 69 Chlorobenzene-d5	119	9.740	9.740	(1.000)	181364	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.052	12.052	(1.000)	348758	250.000	
\$ 39 Dibromofluoromethane	113	5.847	5.853	(0.884)	355417	500.000	493.0
\$ 43 1,2-Dichloroethane-d4	65	6.218	6.218	(0.940)	394744	500.000	479.7
\$ 59 Toluene-d8	98	8.299	8.292	(0.852)	1478928	500.000	482.8
\$ 80 Bromofluorobenzene	95	10.908	10.908	(1.120)	562176	500.000	487.6
2 Chloromethane	50	1.552	1.540	(0.235)	454802	500.000	501.2
3 Vinyl Chloride	62	1.619	1.625	(0.245)	412226	500.000	520.5
4 Bromomethane	94	1.899	1.905	(0.287)	226459	500.000	502.8
5 Chloroethane	64	1.990	1.990	(0.301)	172466	500.000	534.9
6 Trichlorofluoromethane	101	2.227	2.215	(0.337)	1062971	500.000	625.3
1 Dichlorodifluoromethane	85	1.363	1.369	(0.206)	337265	500.000	501.4
12 1,1-Dichloroethene	96	2.793	2.787	(0.422)	552755	500.000	541.6
13 Acetone	43	2.915	2.921	(0.441)	170763	500.000	286.6
15 Carbon Disulfide	76	3.018	3.012	(0.456)	1611526	500.000	555.6

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Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
18 Methylene Chloride	84	3.414	3.413	(0.516)	390916	500.000	536.2
19 trans-1,2-Dichloroethene	96	3.797	3.797	(0.574)	379897	500.000	536.1
20 Methyl tert-butyl ether	73	3.864	3.870	(0.584)	900489	500.000	531.3
24 1,1-Dichloroethane	63	4.430	4.429	(0.670)	649417	500.000	537.8
27 2,2-Dichloropropane	77	5.220	5.214	(0.789)	529996	500.000	569.3
28 cis-1,2-dichloroethene	96	5.233	5.232	(0.791)	408272	500.000	550.0
M 29 1,2-Dichloroethene (total)	96				788169	1000.00	1086
30 Bromochloromethane	128	5.525	5.524	(0.835)	179663	500.000	551.2
31 2-Butanone	43	5.306	5.311	(0.802)	131951	500.000	530.8
37 Chloroform	83	5.658	5.664	(0.856)	624180	500.000	546.9
38 1,1,1-Trichloroethane	97	5.847	5.847	(0.884)	585925	500.000	568.5
40 1,1-Dichloropropene	75	6.048	6.047	(0.914)	362032	500.000	554.0
41 Carbon Tetrachloride	117	6.048	6.041	(0.914)	493628	500.000	567.6
42 Benzene	78	6.279	6.279	(0.949)	1526466	500.000	554.7
45 1,2-Dichloroethane	62	6.303	6.303	(0.953)	529948	500.000	544.2
47 Trichloroethene	130	7.021	7.021	(1.062)	393127	500.000	561.2
49 1,2-Dichloropropane	63	7.246	7.246	(1.096)	372472	500.000	558.9
50 Dibromomethane	93	7.368	7.368	(1.114)	222969	500.000	558.8
53 Bromodichloromethane	83	7.556	7.556	(1.143)	452767	500.000	573.8
57 cis-1,3-Dichloropropene	75	8.025	8.025	(1.213)	582942	500.000	589.5
58 4-Methyl-2-Pentanone	43	8.213	8.219	(0.843)	279242	500.000	568.4
60 Toluene	91	8.366	8.359	(0.859)	1790762	500.000	544.4
61 trans-1,3-Dichloropropene	75	8.591	8.596	(0.882)	526519	500.000	567.6
63 1,3-Dichloropropane	76	8.931	8.931	(0.917)	613872	500.000	551.1
64 1,1,2-Trichloroethane	97	8.773	8.773	(0.901)	319281	500.000	540.9
65 Tetrachloroethene	164	8.913	8.913	(0.915)	335599	500.000	566.7
66 2-Hexanone	43	9.053	9.053	(0.929)	182737	500.000	574.2
67 Dibromochloromethane	129	9.169	9.168	(0.941)	350953	500.000	589.6
68 1,2-Dibromoethane	107	9.260	9.260	(0.951)	321045	500.000	560.5
70 Chlorobenzene	112	9.765	9.771	(1.002)	1187505	500.000	543.0
71 1,1,1,2-Tetrachloroethane	131	9.850	9.856	(1.011)	399227	500.000	570.2
72 Ethylbenzene	106	9.886	9.886	(1.015)	609137	500.000	543.6
73 m + p-Xylene	106	10.002	10.002	(1.027)	1699219	1000.00	1126
74 Xylene-o	106	10.397	10.397	(1.067)	812896	500.000	565.1
M 75 Xylenes (total)	106				2512115	500.000	1746
76 Styrene	104	10.403	10.409	(1.068)	1386771	500.000	571.6
77 Bromoform	173	10.580	10.580	(1.086)	207812	500.000	629.1
78 Isopropylbenzene	105	10.762	10.762	(1.105)	1945769	500.000	547.8
79 Bromobenzene	156	11.048	11.054	(0.917)	487100	500.000	545.6
81 n-Propylbenzene	120	11.170	11.170	(0.927)	565067	500.000	523.1
82 2-Chlorotoluene	126	11.249	11.249	(0.933)	488830	500.000	534.2
83 1,1,1,2,2-Tetrachloroethane	83	11.054	11.054	(0.917)	420256	500.000	535.9
84 1,2,3-Trichloropropane	110	11.091	11.091	(0.920)	130896	500.000	527.2
85 4-Chlorotoluene	126	11.359	11.358	(0.942)	582500	500.000	553.6
86 1,3,5-Trimethylbenzene	105	11.353	11.352	(0.942)	1853415	500.000	561.8
87 tert-Butylbenzene	119	11.669	11.669	(0.968)	1472834	500.000	511.7
88 1,2,4-Trimethylbenzene	105	11.718	11.717	(0.972)	1638127	500.000	543.3

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ng)	(ng)
=====	=====	==	=====	=====	=====	=====	=====
89 sec-Butylbenzene	105	11.888	11.888	(0.986)	2204914	500.000	529.6
90 4-Isopropyltoluene	119	12.034	12.034	(0.998)	2091467	500.000	547.8
91 1,3-Dichlorobenzene	146	11.985	11.985	(0.994)	981784	500.000	542.5
93 1,4-Dichlorobenzene	146	12.076	12.076	(1.002)	1047906	500.000	536.4
94 n-Butylbenzene	91	12.441	12.441	(1.032)	1977840	500.000	568.3
95 1,2-Dichlorobenzene	146	12.441	12.441	(1.032)	1074072	500.000	572.6
96 1,2-Dibromo-3-chloropropane	157	13.214	13.214	(1.096)	57916	500.000	575.1
97 1,2,4-Trichlorobenzene	180	14.047	14.053	(1.166)	508465	500.000	568.7
98 Hexachlorobutadiene	225	14.236	14.236	(1.181)	318102	500.000	541.1
99 Naphthalene	128	14.285	14.284	(1.185)	825862	500.000	527.1
100 1,2,3-Trichlorobenzene	180	14.534	14.534	(1.206)	365935	500.000	519.9



STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp6.i\61027z.b\1E61027Z.D
 Lab Smp Id: vstd200 Client Smp ID: vstd200
 Inj Date : 27-OCT-2000 13:09
 Operator : 16328 Inst ID: hp6.i
 Smp Info : vstd200 5ml
 Misc Info : vstd200,61027z.b,
 Comment :
 Method : \\QPITPA02\d\chem\hp6.i\61027z.b\8260bh2o.m
 Meth Date : 11-Nov-2000 07:43 dudeckk Quant Type: ISTD
 Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
 Als bottle: 7 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 4-dwlistw.sub
 Target Version: 4.04
 Processing Host: PITPC077

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

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

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.611	6.613	(1.000)	775121	250.000	
* 69 Chlorobenzene-d5	119	9.744	9.740	(1.000)	200465	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.049	12.052	(1.000)	418053	250.000	
\$ 39 Dibromofluoromethane	113	5.850	5.853	(0.885)	768360	1000.00	1016
\$ 43 1,2-Dichloroethane-d4	65	6.221	6.218	(0.941)	772125	1000.00	894.5
\$ 59 Toluene-d8	98	8.296	8.292	(0.851)	2959135	1000.00	874.1
\$ 80 Bromofluorobenzene	95	10.906	10.908	(1.119)	1189951	1000.00	933.7
2 Chloromethane	50	1.537	1.540	(0.233)	953553	1000.00	1002
3 Vinyl Chloride	62	1.622	1.625	(0.245)	885784	1000.00	1066
4 Bromomethane	94	1.902	1.905	(0.288)	446573	1000.00	945.2
5 Chloroethane	64	1.987	1.990	(0.301)	301243	1000.00	890.7
6 Trichlorofluoromethane	101	2.225	2.215	(0.337)	2024353	1000.00	1135
1 Dichlorodifluoromethane	85	1.367	1.369	(0.207)	756883	1000.00	1073
12 1,1-Dichloroethene	96	2.790	2.787	(0.422)	1088522	1000.00	1017
13 Acetone	43	2.918	2.921	(0.441)	323452	1000.00	517.5
15 Carbon Disulfide	76	3.015	3.012	(0.456)	3112073	1000.00	1023

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						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
*****	----	==	-----	-----	-----	-----	-----
18 Methylene Chloride	84	3 411	3 413	(0 516)	780758	1000 00	1021
19 trans-1,2-Dichloroethene	96	3 800	3 797	(0 575)	805792	1000 00	1084
20 Methyl tert-butyl ether	73	3 867	3 870	(0 585)	1901616	1000.00	1070
24 1,1-Dichloroethane	63	4 427	4 429	(0.670)	1314038	1000.00	1037
27 2,2-Dichloropropane	77	5 218	5 214	(0 789)	1172822	1000 00	1201
28 cis-1,2-dichloroethene	96	5 230	5 232	(0.791)	872704	1000 00	1121
M 29 1,2-Dichloroethene (total)	96				1678496	2000.00	2205
30 Bromochloromethane	128	5.528	5 524	(0 836)	372557	1000.00	1090
31 2-Butanone	43	5 303	5.311	(0 802)	269298	1000.00	1033
37 Chloroform	83	5.662	5 664	(0.856)	1262242	1000.00	1054
38 1,1,1-Trichloroethane	97	5.844	5.847	(0 884)	1276383	1000 00	1181
40 1,1-Dichloropropene	75	6.051	6 047	(0.915)	754127	1000 00	1100
41 Carbon Tetrachloride	117	6 045	6 041	(0.914)	1120246	1000 00	1228
42 Benzene	78	6 282	6.279	(0 950)	3046793	1000 00	1055
45 1,2-Dichloroethane	62	6 307	6.303	(0 954)	1089093	1000.00	1066
47 Trichloroethene	130	7 024	7 021	(1 063)	813164	1000.00	1107
49 1,2-Dichloropropane	63	7 250	7 246	(1.097)	735363	1000.00	1052
50 Dibromomethane	93	7.371	7 368	(1.115)	457444	1000 00	1093
53 Bromodichloromethane	83	7.560	7.556	(1 144)	931086	1000 00	1125
57 cis-1,3-Dichloropropene	75	8 022	8.025	(1 213)	1183846	1000.00	1141
58 4-Methyl-2-Pentanone	43	8.217	8 219	(0 843)	563008	1000.00	1037
60 Toluene	91	8.363	8 359	(0.858)	3616001	1000.00	994 4
61 trans-1,3-Dichloropropene	75	8 594	8.596	(0.882)	1077697	1000.00	1051
63 1,3-Dichloropropane	76	8 935	8.931	(0 917)	1247903	1000.00	1013
64 1,1,2-Trichloroethane	97	8 777	8.773	(0.901)	636858	1000 00	976.2
65 Tetrachloroethene	164	8.916	8.913	(0.915)	740714	1000.00	1132
66 2-Hexanone	43	9 050	9.053	(0 929)	386061	1000 00	1098
67 Dibromochloromethane	129	9 172	9.168	(0.941)	751993	1000 00	1143
68 1,2-Dibromoethane	107	9 263	9.260	(0 951)	642824	1000.00	1015
70 Chlorobenzene	112	9 768	9 771	(1 002)	2502925	1000 00	1035
71 1,1,1,2-Tetrachloroethane	131	9 853	9.856	(1 011)	884425	1000 00	1143
72 Ethylbenzene	106	9.884	9 886	(1.014)	1343094	1000.00	1084
73 m + p-Xylene	106	10 005	10 002	(1 027)	3814886	2000.00	2286
74 Xylene-o	106	10.395	10 397	(1 067)	1836828	1000.00	1155
M 75 Xylenes (total)	106				5651714	1000.00	3554
76 Styrene	104	10 407	10.409	(1.068)	3151159	1000 00	1175
77 Bromoform	173	10.583	10 580	(1 086)	457846	1000 00	1254
78 Isopropylbenzene	105	10 766	10 762	(1 105)	4149210	1000.00	1057
79 Bromobenzene	156	11 052	11.054	(0 917)	1130794	1000 00	1057
81 n-Propylbenzene	120	11 173	11.170	(0.927)	1272609	1000 00	982.8
82 2-Chlorotoluene	126	11 253	11.249	(0 934)	1074286	1000 00	979 4
83 1,1,2,2-Tetrachloroethane	83	11.058	11 054	(0 918)	918009	1000 00	976 6
84 1,2,3-Trichloropropane	110	11 088	11.091	(0 920)	264003	1000.00	887 0
85 4-Chlorotoluene	126	11 356	11 358	(0 942)	1405368	1000.00	1114
86 1,3,5-Trimethylbenzene	105	11 350	11 352	(0 942)	4166344	1000 00	1054
87 tert-Butylbenzene	119	11 672	11 669	(0 969)	3265030	1000 00	946 3
88 1,2,4-Trimethylbenzene	105	11 721	11 717	(0 973)	3438229	1000 00	951 4

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Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ng)	(ng)
=====	----	==	-----	-----	-----	-----	-----
89 sec-Butylbenzene	105	11.891	11.888	(0.987)	4527359	1000.00	907.3
90 4-Isopropyltoluene	119	12.037	12.034	(0.999)	4473384	1000.00	977.5
91 1,3-Dichlorobenzene	146	11.989	11.985	(0.995)	2171773	1000.00	1001
93 1,4-Dichlorobenzene	146	12.080	12.076	(1.003)	2314354	1000.00	988.3
94 n-Butylbenzene	91	12.439	12.441	(1.032)	4319922	1000.00	1036
95 1,2-Dichlorobenzene	146	12.439	12.441	(1.032)	2527635	1000.00	1124
96 1,2-Dibromo-3-chloropropane	157	13.211	13.214	(1.096)	128396	1000.00	1064
97 1,2,4-Trichlorobenzene	180	14.051	14.053	(1.166)	1187995	1000.00	1108
98 Hexachlorobutadiene	225	14.233	14.236	(1.181)	777343	1000.00	1103
99 Naphthalene	128	14.288	14.284	(1.186)	1820471	1000.00	969.3
100 1,2,3-Trichlorobenzene	180	14.531	14.534	(1.206)	866677	1000.00	1027

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH

Contract:

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Lab Code:

Case No.:

SAS No.:

SDG No.: METHODS

Instrument ID: HP6

Calibration Date: 11/29/00 Time: 0715

Lab File ID: CC61129

Init. Calib. Date(s): 10/27/00 10/27/00

Heated Purge: (Y/N) N

Init. Calib. Times: 1126 1309

GC Column: DB 624 ID: 0.20 (mm)

COMPOUND	RRF	RRF250	MIN RRF	%D	MAX %D
Chloromethane	0.307	0.252	0.1	17.9	50.0
Vinyl Chloride	0.268	0.253	0.01	5.6	20.0
Bromomethane	0.152	0.110	0.01	27.6	50.0
Chloroethane	0.109	0.111	0.01	1.8	50.0
1,1-Dichloroethene	0.345	0.323	0.01	6.4	20.0
Methylene Chloride	0.247	0.244	0.01	1.2	50.0
trans-1,2-Dichloroethene	0.240	0.246	0.01	2.5	50.0
1,1-Dichloroethane	0.408	0.409	0.1	0.2	50.0
cis-1,2-dichloroethene	0.251	0.261	0.01	4.0	50.0
Chloroform	0.386	0.396	0.01	2.6	20.0
1,1,1-Trichloroethane	0.349	0.357	0.01	2.3	50.0
Carbon Tetrachloride	0.294	0.330	0.01	12.2	50.0
1,2-Dichloroethane	0.329	0.326	0.01	0.9	50.0
Benzene	0.931	0.961	0.01	3.2	50.0
Trichloroethene	0.237	0.277	0.01	16.9	50.0
1,2-Dichloropropane	0.225	0.232	0.01	3.1	20.0
Bromodichloromethane	0.267	0.292	0.01	9.4	50.0
cis-1,3-Dichloropropene	0.334	0.358	0.01	7.2	50.0
Toluene	4.535	4.521	0.01	0.3	20.0
trans-1,3-Dichloropropene	1.279	1.285	0.01	0.5	50.0
1,1,2-Trichloroethane	0.814	0.853	0.01	4.8	50.0
Tetrachloroethene	0.816	0.926	0.01	13.5	50.0
Dibromochloromethane	0.821	0.973	0.01	18.5	50.0
Chlorobenzene	3.014	3.146	0.3	4.4	50.0
Ethylbenzene	1.545	1.596	0.01	3.3	20.0
Styrene	3.344	3.391	0.01	1.4	50.0
Bromoform	0.455	0.612	0.1	34.5	50.0
1,1,2,2-Tetrachloroethane	0.562	0.575	0.3	2.3	50.0
Acetone	0.201	0.124	0.01	38.3	50.0
Carbon Disulfide	0.981	0.814	0.01	17.0	50.0
2-Butanone	0.084	0.090	0.01	7.1	50.0
4-Methyl-2-Pentanone	0.677	0.782	0.01	15.5	50.0
2-Hexanone	0.439	0.511	0.01	16.4	50.0
1,2-Dichloroethene (total)	0.246	0.254	0.01	3.2	50.0
Xylenes (total)	1.983	1.989	0.01	0.3	50.0
Dibromofluoromethane	0.244	0.243	0.01	0.4	50.0

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FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: METHODS

Instrument ID: HP6

Calibration Date: 11/29/00 Time: 0715

Lab File ID: CC61129

Init. Calib. Date(s): 10/27/00 10/27/00

Heated Purge: (Y/N) N

Init. Calib. Times: 1126 1309

GC Column: DB 624 ID: 0.20 (mm)

COMPOUND	RRF	RRF250	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
1,2-Dichloroethane-d4	0.278	0.261	0.01	6.1	50.0
Toluene-d8	4.222	4.037	0.01	4.4	50.0
Bromofluorobenzene	1.589	1.512	0.01	4.8	50.0

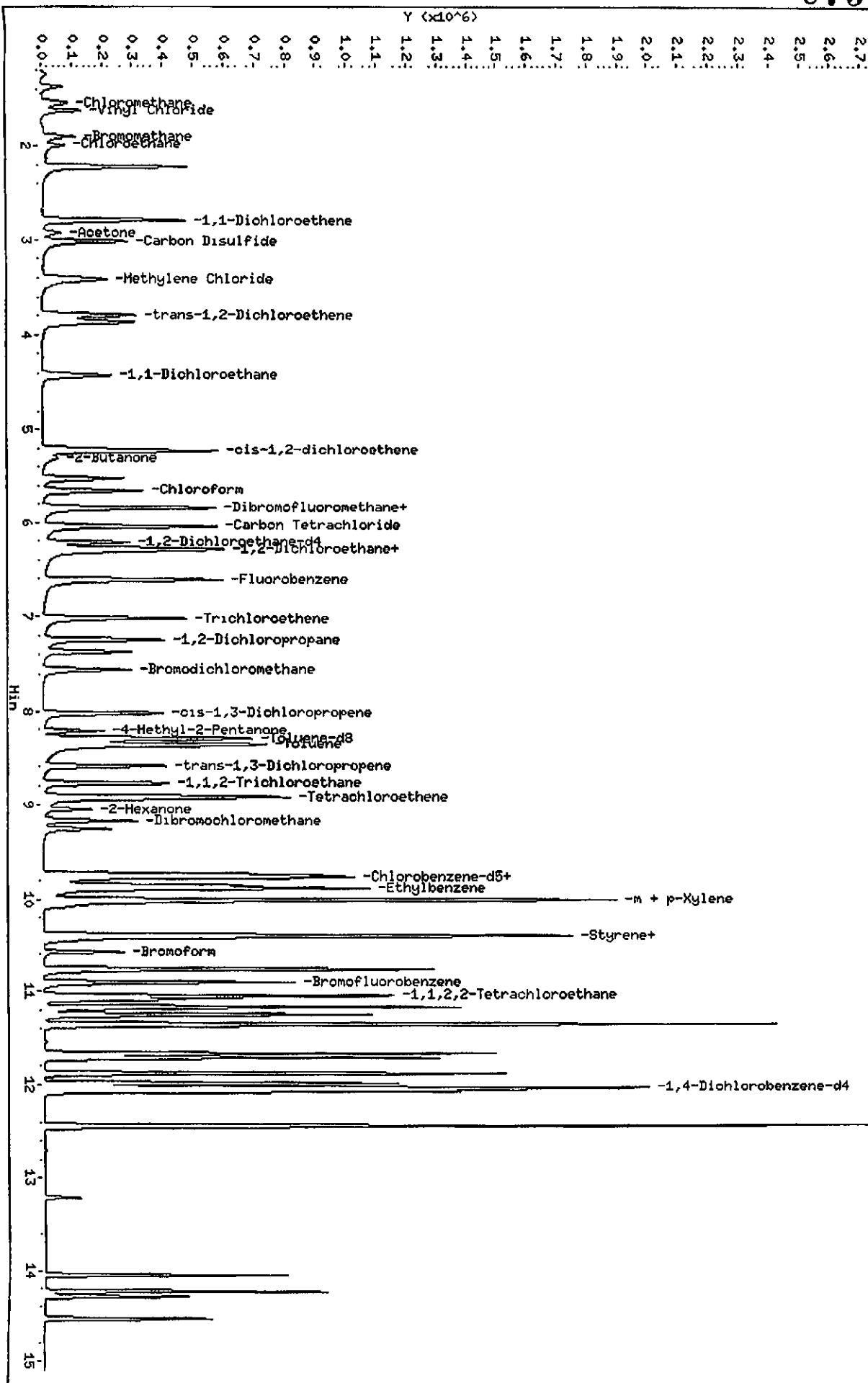
Data File: \\NPITPA02\chem\hp6.1\61129D.b\CC61129.D
 Date : 29-NOV-2000 07:15

Client ID: vstd50
 Sample Info: vstd50 5ml
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: hp6.1

Operator: 16328
 Column diameter: 0.20

\\NPITPA02\chem\hp6.1\61129D.b\CC61129.D



STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp6.i\61129D.b\CC61129.D
 Lab Smp Id: vstd50 Client Smp ID: vstd50
 Inj Date : 29-NOV-2000 07:15
 Operator : 16328 Inst ID: hp6.i
 Smp Info : vstd50 5ml
 Misc Info : vstd50,61129d.b,8260bh2o.m
 Comment :
 Method : \\QPITPA02\D\chem\hp6.i\61129d.b\8260bh2o.m
 Meth Date : 29-Nov-2000 07:41 dudeck Quant Type: ISTD
 Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
 Als bottle: 4 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-br.sub
 Target Version: 4.04
 Processing Host: PITPC077

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6 613	6 613	(1.000)	790641	250.000		
* 69 Chlorobenzene-d5	119	9.740	9.740	(1.000)	197707	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.052	12.052	(1.000)	355916	250.000		
\$ 39 Dibromofluoromethane	113	5.853	5.853	(0.885)	192210	250.000	249.2	
\$ 43 1,2-Dichloroethane-d4	65	6.218	6.218	(0.940)	206076	250.000	234.0	
\$ 59 Toluene-d8	98	8.298	8.298	(0.852)	798210	250.000	239.1	
\$ 80 Bromofluorobenzene	95	10.908	10.908	(1.120)	299022	250.000	237.9	
2 Chloromethane	50	1.540	1.540	(0.233)	199450	250.000	205.4	
4 Bromomethane	94	1.898	1.898	(0.287)	86628	250.000	179.8	
3 Vinyl Chloride	62	1.619	1.619	(0.245)	200150	250.000	236.2	
5 Chloroethane	64	1.984	1.984	(0.300)	88052	250.000	255.2	
18 Methylene Chloride	84	3.413	3.413	(0.516)	192816	250.000	247.2	
13 Acetone	43	2.920	2.920	(0.442)	98437	250.000	154.4	
15 Carbon Disulfide	76	3.012	3.012	(0.455)	643829	250.000	207.4	
12 1,1-Dichloroethene	96	2.787	2.787	(0.421)	255378	250.000	233.9	
24 1,1-Dichloroethane	63	4.423	4.423	(0.669)	323272	250.000	250.2	

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Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
*****	****	==	*****	*****	*****	*****	*****
19 trans-1,2-Dichloroethene	96	3.796	3.796	(0.574)	194324	250.000	256.3
28 cis-1,2-dichloroethene	96	5.232	5.232	(0.791)	206664	250.000	260.2
M 29 1,2-Dichloroethene (total)	96				400988	500.000	516.5
37 Chloroform	83	5.658	5.658	(0.856)	313180	250.000	256.5
45 1,2-Dichloroethane	62	6.303	6.303	(0.953)	257454	250.000	247.1
31 2-Butanone	43	5.311	5.311	(0.803)	71257	250.000	267.9
38 1,1,1-Trichloroethane	97	5.841	5.841	(0.883)	281947	250.000	255.7
41 Carbon Tetrachloride	117	6.041	6.041	(0.914)	260943	250.000	280.4
53 Bromodichloromethane	83	7.562	7.562	(1.143)	230817	250.000	273.4
49 1,2-Dichloropropane	63	7.246	7.246	(1.096)	183871	250.000	257.9
57 cis-1,3-Dichloropropene	75	8.018	8.018	(1.212)	282922	250.000	267.4
47 Trichloroethene	130	7.021	7.021	(1.062)	219054	250.000	292.3
67 Dibromochloromethane	129	9.168	9.168	(0.941)	192313	250.000	296.4
64 1,1,2-Trichloroethane	97	8.779	8.779	(0.901)	168592	250.000	262.0
42 Benzene	78	6.279	6.279	(0.949)	759673	250.000	258.0
61 trans-1,3-Dichloropropene	75	8.596	8.596	(0.883)	253978	250.000	251.2
77 Bromoform	173	10.580	10.580	(1.086)	121003	250.000	336.0
58 4-Methyl-2-Pentanone	43	8.219	8.219	(0.844)	154560	250.000	288.6
66 2-Hexanone	43	9.053	9.053	(0.929)	100951	250.000	291.0
65 Tetrachloroethene	164	8.913	8.913	(0.915)	183188	250.000	283.8
83 1,1,2,2-Tetrachloroethane	83	11.054	11.054	(0.917)	204600	250.000	255.6
60 Toluene	91	8.365	8.365	(0.859)	893916	250.000	249.3
70 Chlorobenzene	112	9.764	9.764	(1.002)	622091	250.000	260.9
72 Ethylbenzene	106	9.886	9.886	(1.015)	315466	250.000	258.2
76 Styrene	104	10.409	10.409	(1.069)	670378	250.000	253.5
M 75 Xylenes (total)	106				1220004	250.000	778.0
73 m + p-Xylene	106	10.002	10.002	(1.027)	826825	500.000	502.4
74 Xylene-o	106	10.391	10.391	(1.067)	393179	250.000	250.7

675 154

GC/MS VOLATILE
QC DATA

Date : 27-OCT-2000 10:23

Client ID: 50NCBFB

Instrument: hp6.1

675 155

Sample Info: bfb 1ul inj

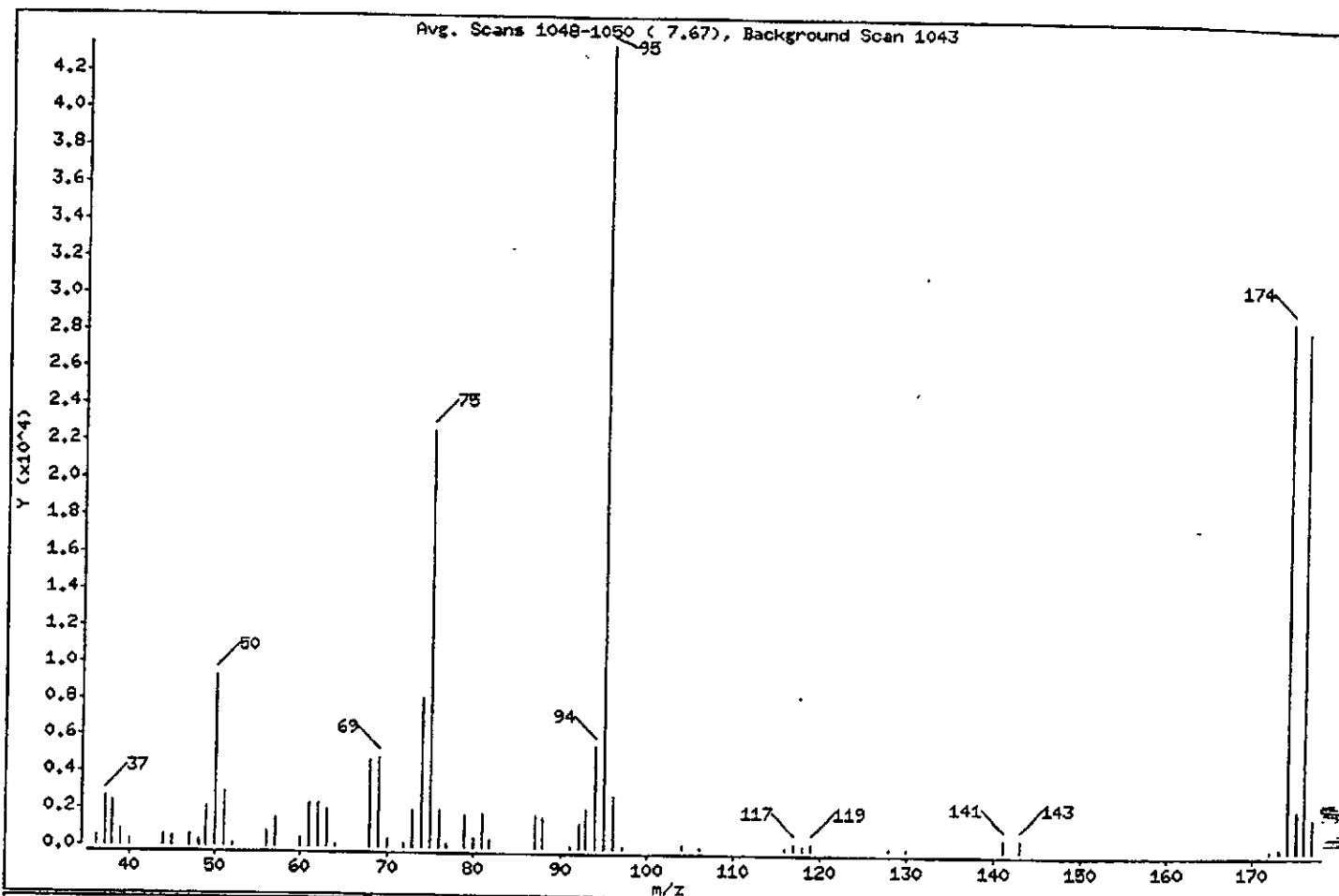
Operator: 16328

Volume Injected (uL): 1.0

Column diameter: 0.20

Column phase: DB624 20m

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	21.46
75	30.00 - 60.00% of mass 95	51.89
96	5.00 - 9.00% of mass 95	6.44
173	Less than 2.00% of mass 174	0.45 (0.67)
174	50.00 - 100.00% of mass 95	66.79
175	5.00 - 9.00% of mass 174	5.11 (7.66)
176	95.00 - 101.00% of mass 174	65.79 (98.51)
177	5.00 - 9.00% of mass 176	4.14 (6.28)

Date : 27-OCT-2000 10:23

Client ID: 50NGBFB

Instrument: hp6.1

Sample Info: bfb lui inj

Volume Injected (uL): 1.0

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.20

Data File: BF61027Z.D

Spectrum: Avg. Scans 1048-1050 (7.67), Background Scan 1043

Location of Maximum: 95.00

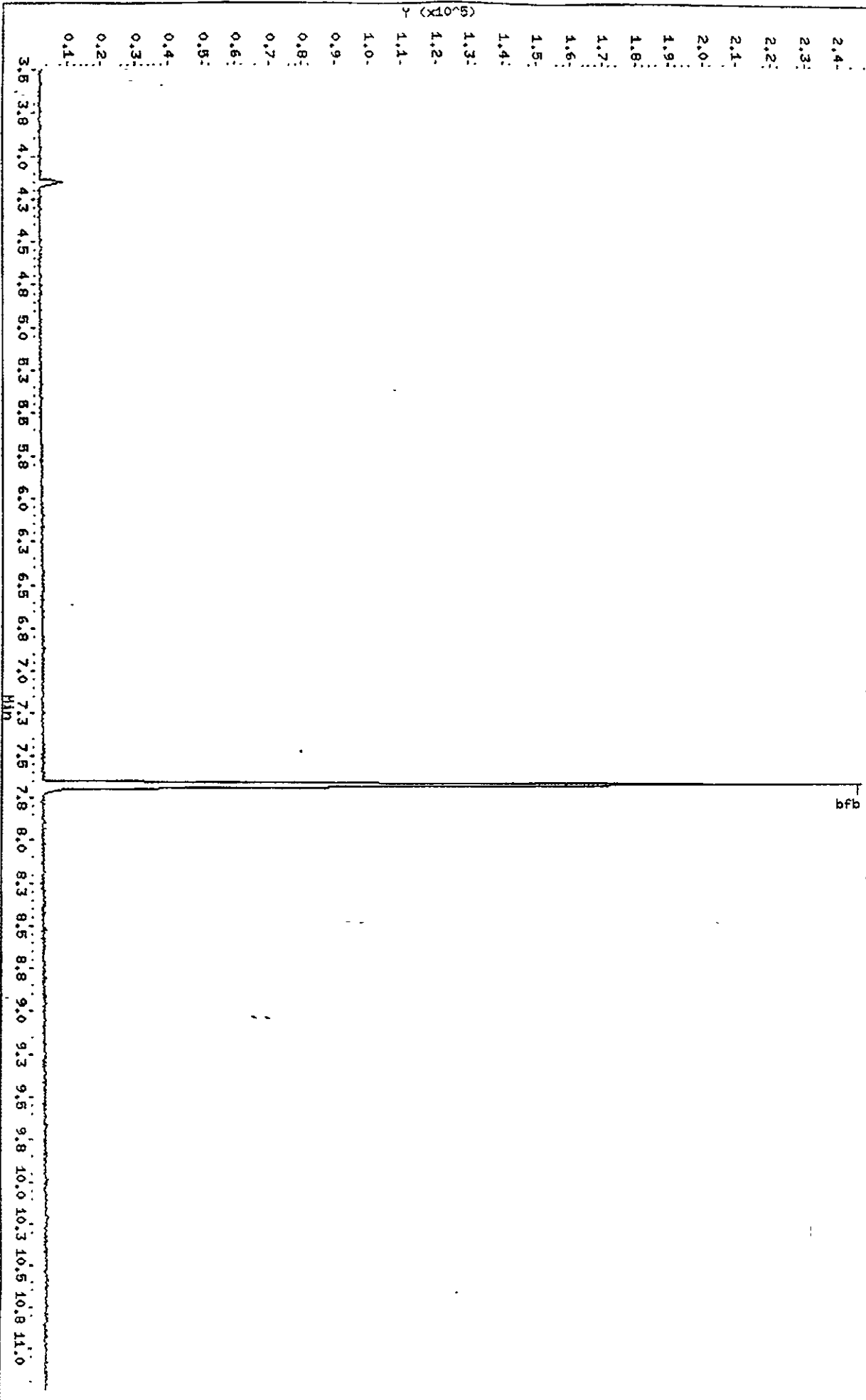
Number of points: 58

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	460	60.00	385	80.00	460	117.00	263
37.00	2555	61.00	2306	81.00	1812	118.00	169
38.00	2399	62.00	2260	82.00	331	119.00	322
39.00	902	63.00	1957	87.00	1706	128.00	70
40.00	252	64.00	70	88.00	1604	130.00	97
44.00	569	68.00	4712	91.00	68	141.00	591
45.00	452	69.00	4756	92.00	1268	143.00	617
47.00	600	70.00	432	93.00	2078	172.00	72
48.00	332	72.00	179	94.00	5837	173.00	194
49.00	2061	73.00	2049	95.00	43504	174.00	29056
50.00	9337	74.00	8131	96.00	2801	175.00	2225
51.00	2873	75.00	22576	97.00	73	176.00	28624
52.00	69	76.00	1966	104.00	167	177.00	1799
56.00	845	77.00	205	106.00	144		
57.00	1534	79.00	1669	116.00	149		

Data File: \NPI1P02\Nchem\hp6.1\610272.b\BF610272.D
 Date: 27-OCT-2000 10:23
 Client ID: 50HCBF8
 Sample Info: bfb 1ul Inj
 Volume Injected (ul): 1.0
 Column Phase: DB624 20m

Instrument: hp6.1
 Operator: 16328
 Column diameter: 0.20

\NPI1P02\Nchem\hp6.1\610272.b\BF610272.D



Date : 29-NOV-2000 06:50

Client ID: 50NG3FB

Sample Info: bfb iul inj

Volume Injected (uL): 1.0

Column phase: DB624 20m

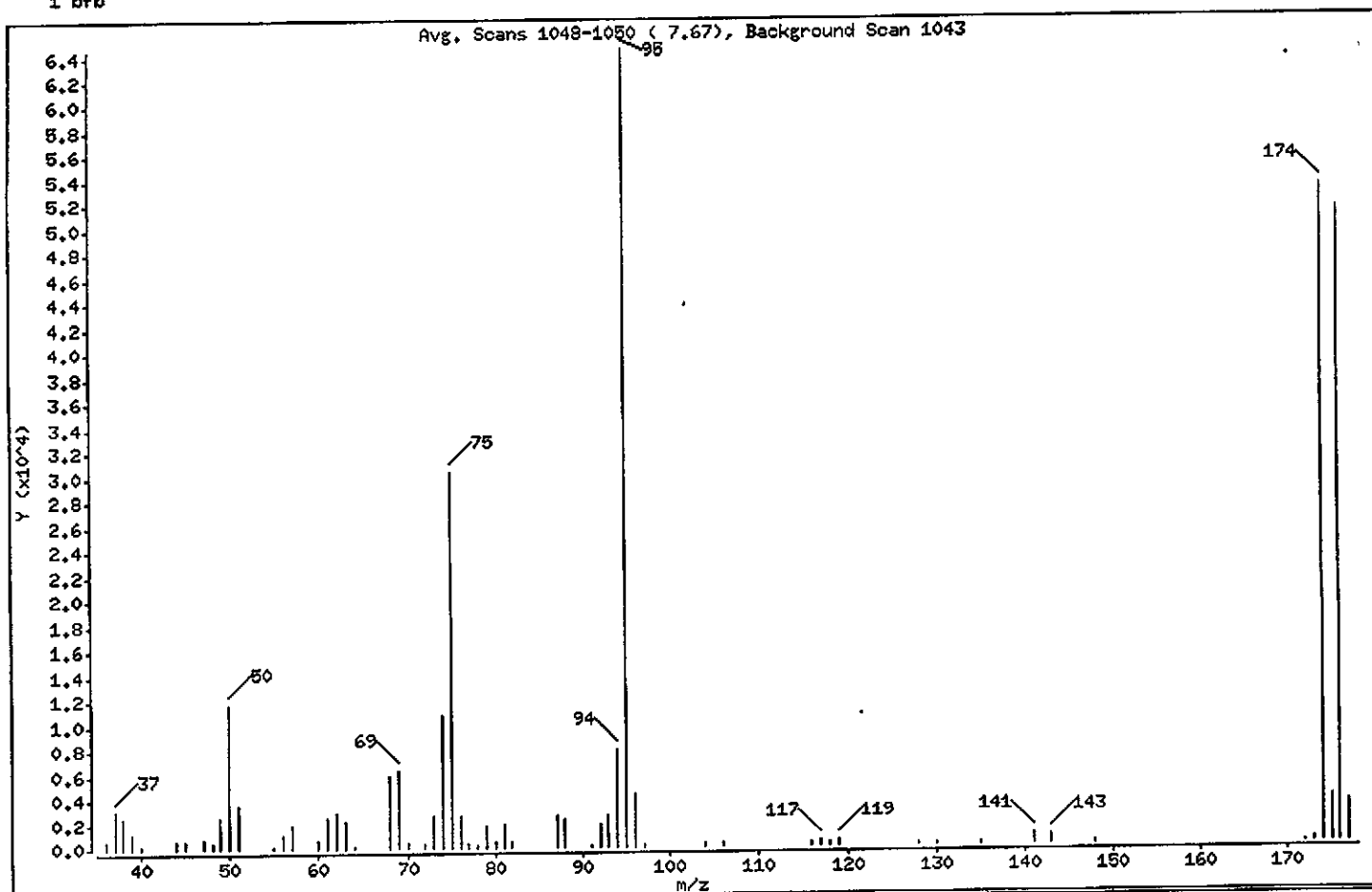
1 bfb

Instrument: hp6.i

Operator: 16328

Column diameter: 0.20

675 153



m/e		ION ABUNDANCE CRITERIA	X RELATIVE ABUNDANCE	
95	Base Peak, 100% relative abundance		100.00	
50	15.00 - 40.00% of mass 95		18.13	
75	30.00 - 60.00% of mass 95		47.22	
96	5.00 - 9.00% of mass 95		6.80	
173	Less than 2.00% of mass 174		0.57 (0.69)	
174	50.00 - 100.00% of mass 95		82.50	
175	5.00 - 9.00% of mass 174		6.08 (7.36)	
176	95.00 - 101.00% of mass 174		79.79 (96.72)	
177	5.00 - 9.00% of mass 176		5.24 (6.57)	

Date : 29-NOV-2000 06:50

Client ID: 50NGBFB

Instrument: hp6.i

Sample Info: bfb 1ul inj

Volume Injected (uL): 1.0

Operator: 16328

Column phase: BB624 20m

Column diameter: 0.20

Data File: BF61129.D

Spectrum: Avg. Scans 1048-1050 (7.67), Background Scan 1043

Location of Maximum: 95.00

Number of points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	568	61.00	2582	80.00	482	118.00	268
37.00	3078	62.00	3027	81.00	1958	119.00	390
38.00	2534	63.00	2235	82.00	435	128.00	183
39.00	1131	64.00	183	87.00	2734	130.00	112
40.00	92	67.00	71	88.00	2317	135.00	75
44.00	559	68.00	5969	91.00	187	137.00	71
45.00	583	69.00	6330	92.00	1888	141.00	864
47.00	797	70.00	512	93.00	2716	143.00	779
48.00	380	72.00	288	94.00	8051	148.00	87
49.00	2574	73.00	2711	95.00	64520	172.00	70
50.00	11697	74.00	10827	96.00	4389	173.00	366
51.00	3626	75.00	30464	97.00	80	174.00	53232
55.00	173	76.00	2643	104.00	287	175.00	3920
56.00	1048	77.00	332	106.00	285	176.00	51480
57.00	1934	78.00	167	116.00	268	177.00	3382
60.00	597	79.00	1854	117.00	480		

Data File: \\QPI1P002\N\chem\hp6.1\61129D.b\BF61129.D

Page 1

Date: 29-NOV-2000 06:50

Client ID: SONGBFB

Instrument: hp6.i

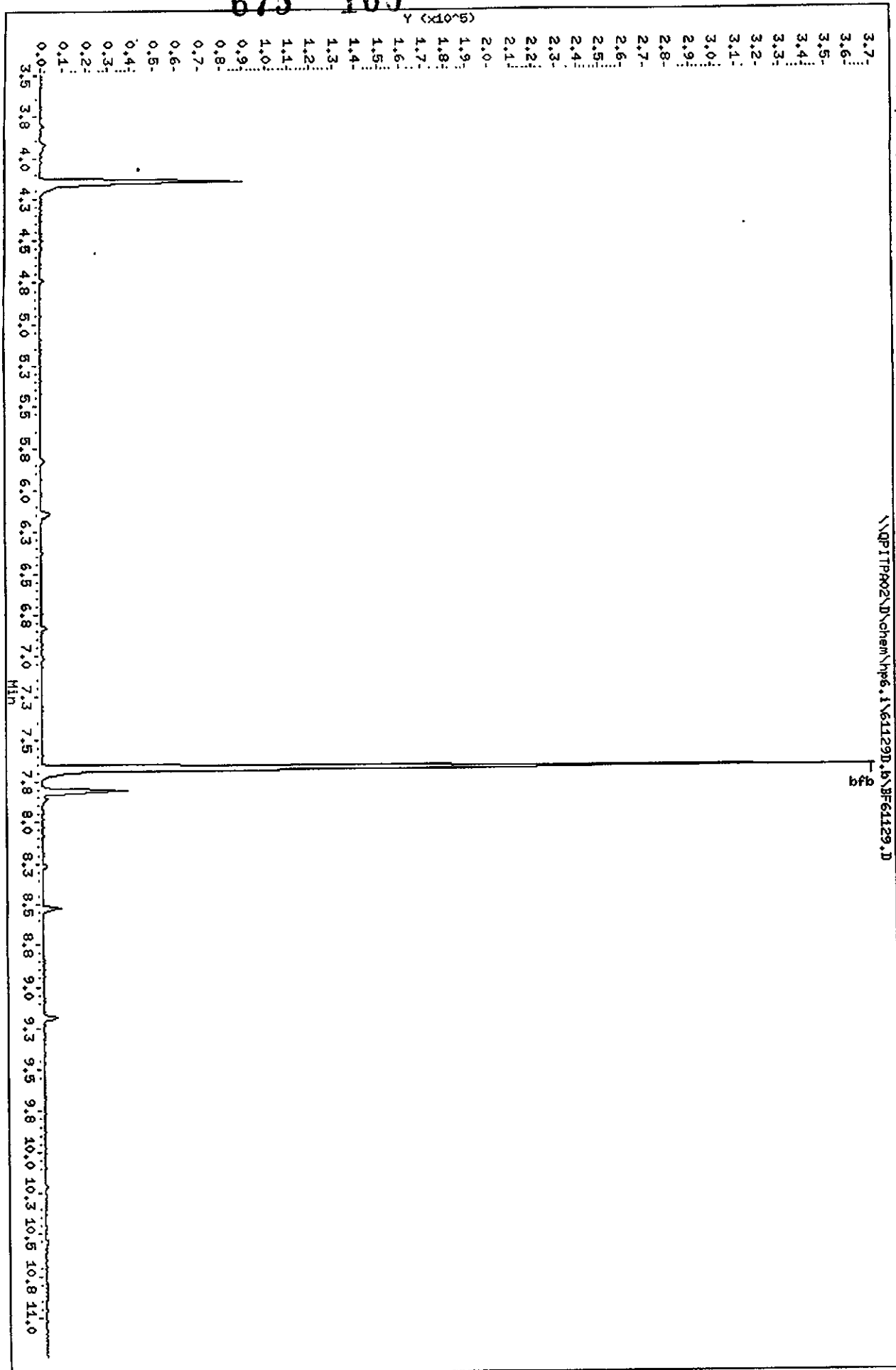
Sample Info: bfb tul fnj

Volume Injected (ul): 1.0

Operator: 16328

Column Phase: DB624 20w

Column diameter: 0.20



UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

675 161

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

Matrix: (soil/water) SOLID Lab Sample ID: COK280000 110

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

Sample WT/Vol: 5 / mL Date Received: 11/22/00

Work Order: DQFCV1AA Date Extracted: 11/29/00

Dilution factor: 1 Date Analyzed: 11/29/00

Moisture %: NA

QC Batch: 0334199

Client Sample Id: INTRA-LAB BLANK

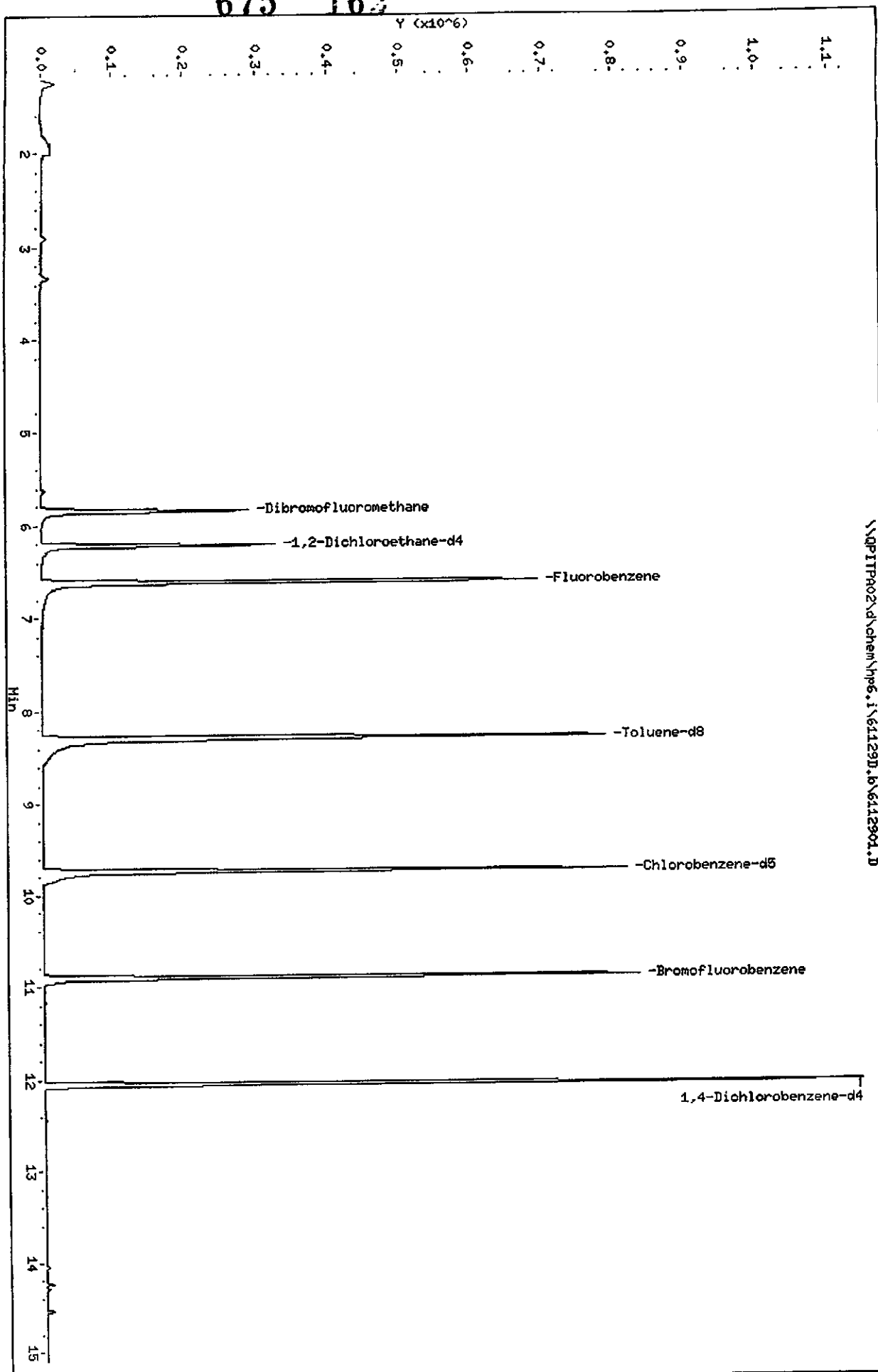
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.050	U
78-93-3	2-Butanone	0.050	U
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene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

675 163

Data File: \\QPIIPro2\d\chem\hp6.i\61129D.b\6112901.D
 Date: 29-NOV-2000 07:48
 Client ID:
 Sample Info: pb blk (1ml/10ml)/5ml
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: hp6.1
 Operator: 16328
 Column diameter: 0.20

\\QPIIPro2\d\chem\hp6.i\61129D.b\6112901.D



675 163

STL-Pittsburgh

VOLATILE REPORT SW-846 Method
Data file : \\QPITPA02\d\chem\hp6.i\61129D.b\6112901.D
Lab Smp Id: vstd50
Inj Date : 29-NOV-2000 07:48
Operator : 16328
Smp Info : pb blk (1ml/10ml)/5ml
Misc Info : vstd50,61129d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\d\chem\hp6.i\61129D.b\8260bh2o.m
Meth Date : 29-Nov-2000 08:21 dudeckk
Cal Date : 27-OCT-2000 13:09
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC077
Inst ID: hp6.i
Quant Type: ISTD
Cal File: 1E61027Z.D
Compound Sublist: 2-tclp.sub

Ks 11/29/00

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.609	6.613	(1.000)	815998	250.000		
* 69 Chlorobenzene-d5	119	9.730	9.740	(1.000)	193435	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.048	12.052	(1.000)	314281	250.000		
\$ 39 Dibromofluoromethane	113	5.849	5.853	(0.885)	205447	258.067	51.61	
\$ 43 1,2-Dichloroethane-d4	65	6.220	6.218	(0.941)	241162	265.388	53.08	
\$ 59 Toluene-d8	98	8.295	8.298	(0.852)	790128	241.872	48.37	
\$ 80 Bromofluorobenzene	95	10.904	10.908	(1.121)	294605	239.576	47.92	
3 Vinyl Chloride	62				Compound Not Detected.			
12 1,1-Dichloroethene	96				Compound Not Detected.			
31 2-Butanone	43				Compound Not Detected.			
37 Chloroform	83				Compound Not Detected.			
41 Carbon Tetrachloride	117				Compound Not Detected.			
42 Benzene	78				Compound Not Detected.			
45 1,2-Dichloroethane	62				Compound Not Detected.			
47 Trichloroethene	130				Compound Not Detected.			
65 Tetrachloroethene	164				Compound Not Detected.			

675 164

Data File: \\QPITPA02\d\chem\hp6.i\61129D.b\6112901.D
Report Date: 29-Nov-2000 08:22

Page 2

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
70 Chlorobenzene	112						

Compound Not Detected.

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

675 165

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

Matrix: (soil/water) SOLID Lab Sample ID: C0K290000 199
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/22/00
Work Order: DQG441AA Date Extracted: 11/29/00
Dilution factor: 1 Date Analyzed: 11/29/00
Moisture %: NA

QC Batch: 0334199

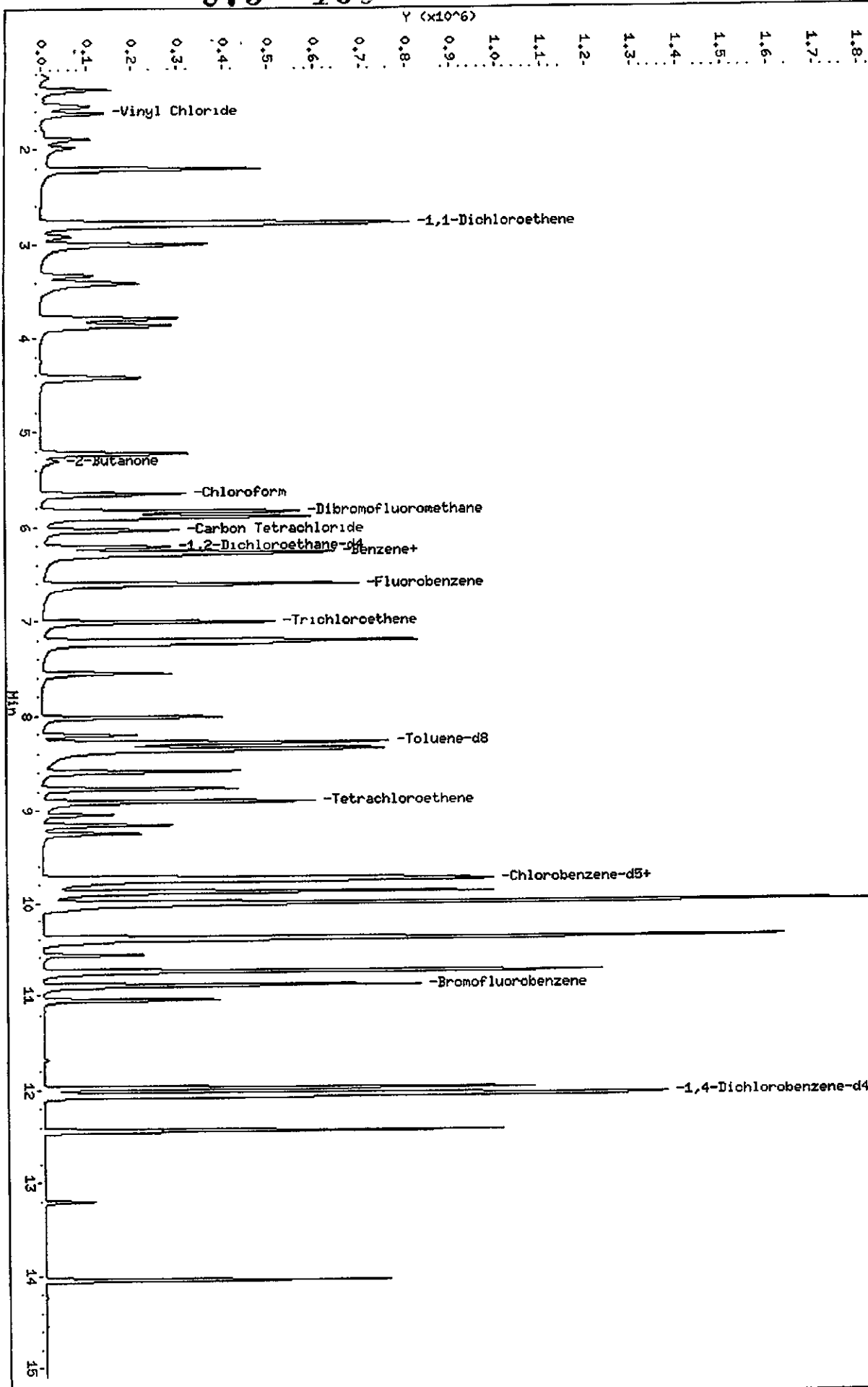
Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.474	
78-93-3	2-Butanone	0.496	
56-23-5	Carbon tetrachloride	0.490	
108-90-7	Chlorobenzene	0.460	
67-66-3	Chloroform	0.454	
107-06-2	1,2-Dichloroethane	0.441	
75-35-4	1,1-Dichloroethene	0.464	
127-18-4	Tetrachloroethene	0.490	
79-01-6	Trichloroethene	0.529	
75-01-4	Vinyl chloride	0.493	

Data File: \\QIPITPA02\J\chem\hpe.1\61129d.b\6112902.D
Date: 29-NOV-2000 08:24
Client ID:
Sample Info: pb blk ms (1ml/10ml)/5ml
Purge Volume: 5.0
Column phase: DB 624

Instrument: hpe.1
Operator: 16328
Column diameter: 0.20

\\QIPITPA02\J\chem\hpe.1\61129d.b\6112902.D



675 167

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\D\chem\hp6.i\61129d.b\6112902.D
Lab Smp Id: vstd50
Inj Date : 29-NOV-2000 08:24
Operator : 16328
Smp Info : pb blk ms (1ml/10ml)/5ml
Misc Info : vstd50,61129d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\D\chem\hp6.i\61129d.b\8260bh2o.m
Meth Date : 29-Nov-2000 08:21 dudeckk
Cal Date : 27-OCT-2000 13:09
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: QPITPA02

Inst ID: hp6.i
Quant Type: ISTD
Cal File: 1E61027Z.D
Compound Sublist: 2-tclp.sub

K's 11/29/00

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.608	6.613	(1.000)	822973	250.000		
* 69 Chlorobenzene-d5	119	9.735	9.740	(1.000)	211007	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.052	12.052	(1.000)	350664	250.000		
\$ 39 Dibromofluoromethane	113	5.847	5.853	(0.885)	193451	240.940	48.19	
\$ 43 1,2-Dichloroethane-d4	65	6.218	6.218	(0.941)	204057	222.652	44.53	
\$ 59 Toluene-d8	98	8.293	8.298	(0.852)	807966	226.736	45.35	
\$ 80 Bromofluorobenzene	95	10.903	10.908	(1.120)	299297	223.122	44.62	
3 Vinyl Chloride	62	1.619	1.619	(0.245)	217366	246.437	49.29	
12 1,1-Dichloroethene	96	2.781	2.787	(0.421)	263526	231.843	46.37	
31 2-Butanone	43	5.306	5.311	(0.803)	68603	247.771	49.55	
37 Chloroform	83	5.659	5.658	(0.856)	288808	227.213	45.44	
41 Carbon Tetrachloride	117	6.042	6.041	(0.914)	237414	245.101	49.02	
42 Benzene	78	6.279	6.279	(0.950)	725684	236.770	47.35	
45 1,2-Dichloroethane	62	6.303	6.303	(0.954)	239153	220.506	44.10	
47 Trichloroethene	130	7.025	7.021	(1.062)	206216	264.331	52.87	
65 Tetrachloroethene	164	8.913	8.913	(0.916)	168936	245.190	49.04	

675 168

Data File: \\QPITPA02\D\chem\hp6.i\61129d.b\6112902.D
Report Date: 29-Nov-2000 08:39

Page 2

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(UG/L)
*****	****	==	=====	=====	=====	=====	=====
70 Chlorobenzene	112	9.765	9 764	(1.003)	585546	230.137	46.03

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

675 169

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

Matrix: (soil/water) SOLID Lab Sample ID: C0K220253 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/22/00
Work Order: DQCKK1A1 Date Extracted: 11/29/00
Dilution factor: 1 Date Analyzed: 11/29/00
Moisture %: 16

QC Batch: 0334199

Client Sample Id: DF/24-A/0326/SDC/006

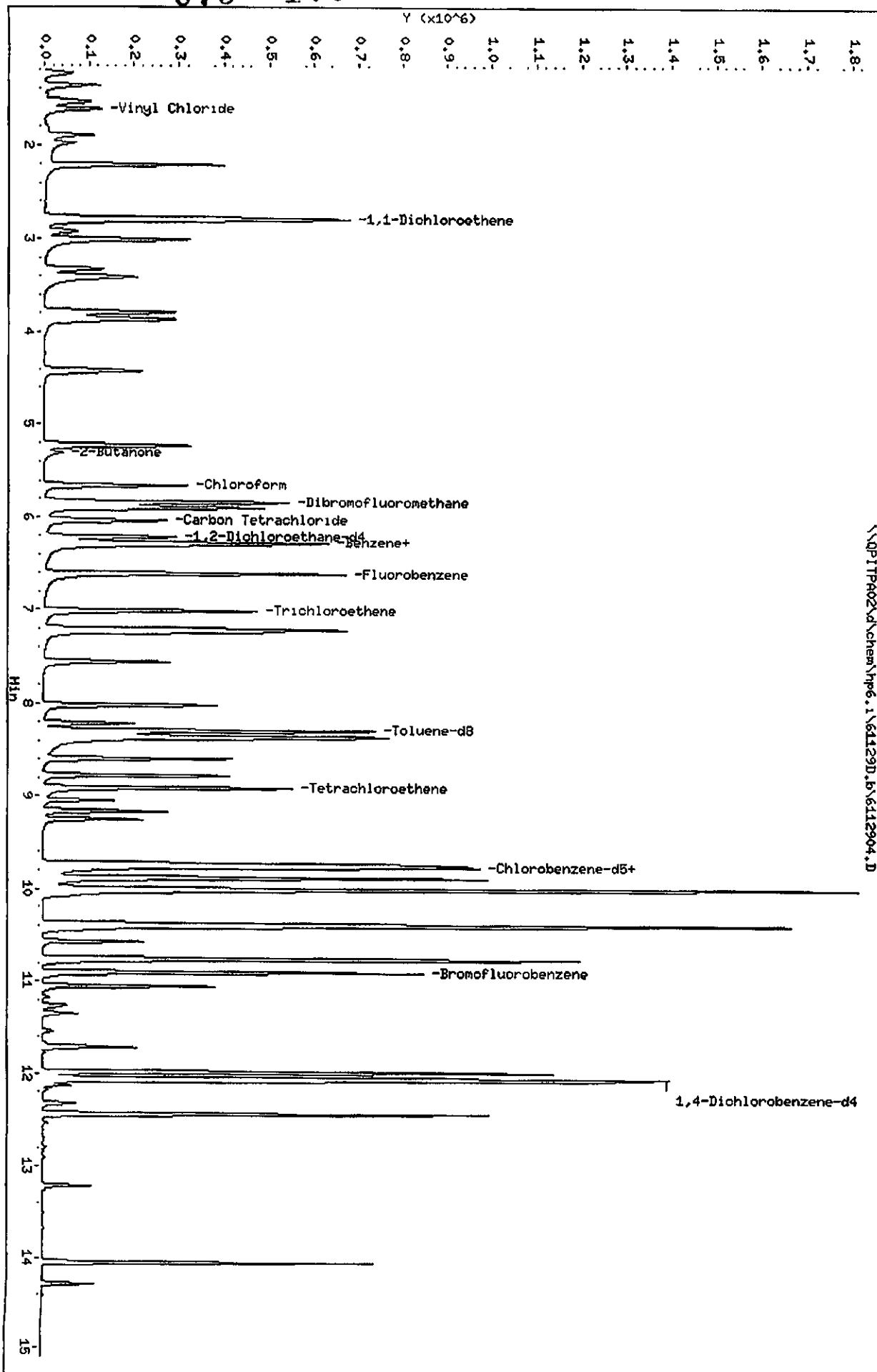
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.472	
78-93-3	2-Butanone	0.524	
56-23-5	Carbon tetrachloride	0.414	
108-90-7	Chlorobenzene	0.451	
67-66-3	Chloroform	0.455	
107-06-2	1,2-Dichloroethane	0.446	
75-35-4	1,1-Dichloroethene	0.411	
127-18-4	Tetrachloroethene	0.456	
79-01-6	Trichloroethene	0.514	
75-01-4	Vinyl chloride	0.432	

675 170

Data File: \\QIPITPA02\chem\hp6.1\61129D.b\6112904.D
 Date: 29-NOV-2000 09:13
 Client ID: DF/24-A/0326/SDC/00
 Sample Info: c0k220253-001.ms (1ml/10ml)/5ml
 Purge Volume: 5.0
 Column phase: DB 624

Instrument: hp6.1
 Operator: 16328
 Column diameter: 0.20

\\QIPITPA02\chem\hp6.1\61129D.b\6112904.D



675 171

STL-Pittsburgh

VOLATILE REPORT SW-846 Method
Data file : \\QPITPA02\d\chem\hp6.i\61129D.b\6112904.D
Lab Smp Id: DQCKK1AC Client Smp ID: DF/24-A/0326/SDC/00
Inj Date : 29-NOV-2000 09:13
Operator : 16328 Inst ID: hp6.i
Smp Info : c0k220253-001 ms (1ml/10ml)/5ml
Misc Info : dqckklac,61129d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\d\chem\hp6.i\61129D.b\8260bh2o.m
Meth Date : 29-Nov-2000 08:21 dudeckk Quant Type: ISTD
Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC077

K. J. J. J.

Compound Sublist: 2-tclp.sub

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.613	6.613	(1.000)	822142	250.000		
* 69 Chlorobenzene-d5	119	9.733	9.740	(1.000)	216301	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.051	12.052	(1.000)	360861	250.000		
\$ 39 Dibromofluoromethane	113	5.846	5.853	(0.884)	197546	246.288	49.26	
\$ 43 1,2-Dichloroethane-d4	65	6.217	6.218	(0.940)	210566	229.987	46.00	
\$ 59 Toluene-d8	98	8.292	8.298	(0.852)	814340	222.931	44.59	
\$ 80 Bromofluorobenzene	95	10.901	10.908	(1.120)	311227	226.337	45.27	
3 Vinyl Chloride	62	1.618	1.619	(0.245)	190523	216.221	43.24	
12 1,1-Dichloroethene	96	2.780	2.787	(0.420)	233552	205.680	41.14	
31 2-Butanone	43	5.311	5.311	(0.803)	72499	262.103	52.42	
37 Chloroform	83	5.657	5.658	(0.856)	288763	227.407	45.48	
41 Carbon Tetrachloride	117	6.041	6.041	(0.914)	200117	206.805	41.36	
42 Benzene	78	6.278	6.279	(0.949)	721976	235.798	47.16	
45 1,2-Dichloroethane	62	6.302	6.303	(0.953)	241769	223.143	44.63	
47 Trichloroethene	130	7.014	7.021	(1.061)	200272	256.971	51.39	
65 Tetrachloroethene	164	8.912	8.913	(0.916)	160977	227.919	45.58	

675 172

Data File: \\QPITPA02\d\chem\hp6.i\61129D.b\6112904.D
Report Date: 29-Nov-2000 10:27

Page 2

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(UG/L)
=====	----	--	=====	=====	=====	=====	=====
70 Chlorobenzene	112	9.764	9.764	(1.003)	587642	225.308	45.06

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

675 173

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

Matrix: (soil/water) SOLID Lab Sample ID: C0K220253 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 11/22/00
Work Order: DQCKK1A2 Date Extracted: 11/29/00
Dilution factor: 1 Date Analyzed: 11/29/00
Moisture %: 16

QC Batch: 0334199

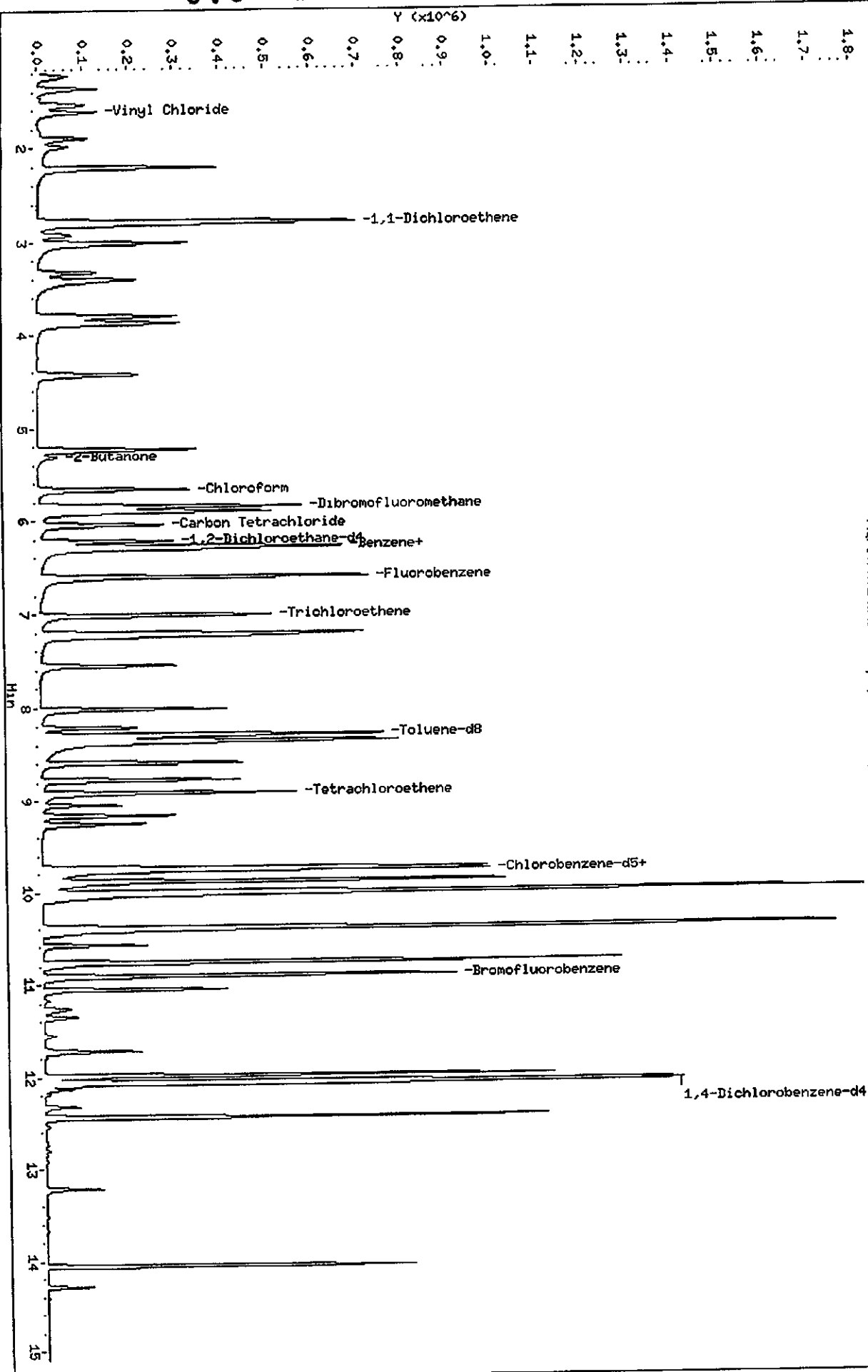
Client Sample Id: DF/24-A/0326/SDC/006

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.466	
78-93-3	2-Butanone	0.519	
56-23-5	Carbon tetrachloride	0.424	
108-90-7	Chlorobenzene	0.450	
67-66-3	Chloroform	0.455	
107-06-2	1,2-Dichloroethane	0.446	
75-35-4	1,1-Dichloroethene	0.402	
127-18-4	Tetrachloroethene	0.452	
79-01-6	Trichloroethene	0.513	
75-01-4	Vinyl chloride	0.438	

Data File: \\QPI1P02\chem\hp6.i\61129D.b\6112905.D
Date: 29-NOV-2000 09:39
Client ID: DF/24-A/0326/SDC/00
Sample Info: c0k220253-001.msd (1ml/10ml)/5ml
Purge Volume: 5.0
Column Phase: DB 624

Instrument: hp6.i
Operator: 16328
Column diameter: 0.20

\\QPI1P02\chem\hp6.i\61129D.b\6112905.D



675 175

STL-Pittsburgh

VOLATILE REPORT SW-846 Method
Data file : \\QPITPA02\d\chem\hp6.i\61129D.b\6112905.D
Lab Smp Id: DQCKK1AC Client Smp ID: DF/24-A/0326/SDC/00
Inj Date : 29-NOV-2000 09:39
Operator : 16328 Inst ID: hp6.i
Smp Info : c0k220253-001 msd (1ml/10ml)/5ml
Misc Info : dqckk1ac,61129d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\d\chem\hp6.i\61129D.b\8260bh2o.m
Meth Date : 29-Nov-2000 08:21 dudeckk Quant Type: ISTD
Cal Date : 27-OCT-2000 13:09 Cal File: 1E61027Z.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC077

R₁₁₁/27/2

Compound Sublist: 2-tclp.sub

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

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

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.610	6.613	(1.000)	856052	250.000	
* 69 Chlorobenzene-d5	119	9.737	9.740	(1.000)	224640	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.049	12.052	(1.000)	376131	250.000	
\$ 39 Dibromofluoromethane	113	5.850	5.853	(0.885)	204095	244.373	48.87
\$ 43 1,2-Dichloroethane-d4	65	6.215	6.218	(0.940)	215262	225.802	45.16
\$ 59 Toluene-d8	98	8.289	8.298	(0.851)	831004	219.048	43.81
\$ 80 Bromofluorobenzene	95	10.905	10.908	(1.120)	315285	220.777	44.16
3 Vinyl Chloride	62	1.616	1.619	(0.244)	200933	219.002	43.80
12 1,1-Dichloroethene	96	2.784	2.787	(0.421)	237576	200.936	40.19
31 2-Butanone	43	5.308	5.311	(0.803)	74680	259.293	51.86
37 Chloroform	83	5.661	5.658	(0.856)	301088	227.721	45.54
41 Carbon Tetrachloride	117	6.038	6.041	(0.913)	213698	212.092	42.42
42 Benzene	78	6.276	6.279	(0.949)	741983	232.733	46.55
45 1,2-Dichloroethane	62	6.306	6.303	(0.954)	251528	222.955	44.59
47 Trichloroethene	130	7.018	7.021	(1.062)	208263	256.639	51.33
65 Tetrachloroethene	164	8.916	8.913	(0.916)	165767	225.989	45.20

675 176

Data File: \\QPITPA02\d\chem\hp6.i\61129D.b\6112905.D
Report Date: 29-Nov-2000 10:37

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
-----	----	--	-----	-----	-----	-----	-----
70 Chlorobenzene	112	9.762	9.764	(1.002)	609370	224.965	44 99

GC/MS VOLATILE
MISCELLANEOUS

CMS Volatile

Run Log

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



Method: VOL Inst. ID: HP-6

Analyst: RWDReviewed by: KLGDate: 10/25/02Std: 192-192-2 BFA Std: 192-192-2 SWStd: 1023Std: 192-192-1 D-T Std: 192-192-2 V-AStd: 1023

Date	File ID	Lot No./Sample No.	Vol./Wt.	pH	Port#	Comments
10/27/02	1 BFA610272	BFA	1 ml			1023
	2. CCL610272	VSTD50	5 ml			
	3. IC610272	VSTD50	5 ml			
	4. IB610272	VSTD20	5 ml			
	5. IA610272	VSTD5	5 ml			
	6. ID610272	VSTD100	5 ml			
	7. IE610272	VSTD200	5 ml			
	8. 61027201	VBLK	100 ml/5 ml			102521
	9. 61027202	VBLK	100 ml/5 ml			102521
	10. 61027203	BLKMS	100 ml/5 ml			102522
	11. 61027204	BLKMD	100 ml/5 ml			102523
	12. 61027205	COJ250160-003	100 ml(5.25 g/5 ml)/5 ml			102529
	13. 61027206	-005	100 ml(5.34 g/5 ml)/5 ml			30
	14. 61027207	-006	100 ml(5.24 g/5 ml)/5 ml			31
	15. 61027208	-007	100 ml(5.05 g/5 ml)/5 ml			32
	16. 61027209	-002	100 ml(5.08 g/5 ml)/5 ml			33
	17. 61027210	-001	100 ml(5.41 g/5 ml)/5 ml			34
	18. 61027211	-004	100 ml(5.44 g/5 ml)/5 ml			35
	19. 61027212	COJ250208-001	100 ml(5.61 g/5 ml)/5 ml			36
	20. 61027213	-002	100 ml(7.18 g/5 ml)/5 ml			37
	21. 61027214	-003	100 ml(6.70 g/5 ml)/5 ml			38
	22. 61027215	-004	100 ml(5.71 g/5 ml)/5 ml			39
	61027216	-005	100 ml(6.22 g/5 ml)/5 ml			40
	61027217	-006	100 ml(4.98 g/5 ml)/5 ml			41

CMS Volatile

Kun Log



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

Method: 12608 Inst. ID 14P-6

Analyst KWD

Reviewed by:

Date:

Std: 192-196-8 BFB Std: 192-196-8 MS Std: 192-196-6 S

Std: 192-195-2 VOA Std: 192-196-5 DUT Std: 192-196-6 S

Date	File ID	Lot No./Sample No.	Vol./Wt.	pH	Port#	Comments
11/29/00	1-BF61129	BFB	1ul			650 0334199
	2-CC61129	VSTD50	5ul			
	3-6112901	PB GLK	(1.0/10.0)/5ul	5		
	4-6112902	PB GLK MS	(1.0/10.0)/5ul	5		
	5-6112903	CDK220253-001	(1.0/10.0)/5ul	5		
	6-6112904	-001 MS	(1.0/10.0)/5ul	5		
	7-6112905	-001 MSD	(1.0/10.0)/5ul	5		
	8-6112906	-002	(1.0/10.0)/5ul	5		
	9-6112907	-003	(1.0/10.0)/5ul	5		
	10-6112908	CDK200198-001	(1.0/10.0)/5ul	5		
	11-6112909	CDK220219-001	(1.0/10.0)/5ul	5		
	12.					
	13.					
	14.					
	15.					
	16.					
	17.					
	18.					
	19.					
	20.					
	21.					
	22.					

REQUESTED BY: TROUT

675 181

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

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
3B CLP1	DP70T-1-AC	___	288479	090421	A-58-QK C0K200198	001			SOLID	0	3
3D	DQCAP-1-AA	___	288480	039108	A-58-QK C0K220219	001			SOLID	0	4
CLP1 3D	DQCKK-1-AC	___	288476	399411	A-58-QK C0K220253	001			SOLID	0	3
CLP1 3D	DQCLC-1-AC	___	288477	399411	A-58-QK C0K220253	002			SOLID	0	3
CLP1 3D	DQCLE-1-AC	___	288478	399411	A-58-QK C0K220253	003			SOLID	0	3

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>Ka Duly</i>	<i>B Trout</i>	11/27/2000 08:05
<i>B Trout</i>	<i>Ka Duly</i>	11/27/2000 11:05

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

675 182

GC/MS SEMIVOLATILE DATA

675 183

**GC/MS SEMIVOLATILE
QC SUMMARY**

675 184

SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: COK220253

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====
01	INTRA-LAB QC	69	63	77	60	72	75	00
02	DF/24-A/0326/SDC/006	72	70	78	63	75	79	00
03	DF/24-A/0326/SDC/007	68	64	72	61	71	73	00
04	DF/24-A/0326/SDC/008	76	71	76	67	78	78	00
05	METHOD BLK. DQHTK1AA	74	70	81	73	79	76	00
06	LCS DQHTK1AC	74	68	66	71	76	70	00
07	LAB MS/MSD D	82	75	85	68	81	82	00
08	LAB MS/MSD S	78	72	80	66	79	77	00

SURROGATES

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

QC LIMITS

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

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

FORM II

675 185

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIIT

SDG No:

Lot #: C0K290000

WO #: DQHTK1AC

BATCH: 0334321

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
2,4-Dinitrotoluene	0.250	0.192	77	47- 131	
Hexachlorobenzene	0.250	0.178	71	57- 128	
Hexachlorobutadiene	0.250	0.183	73	36- 116	
Hexachloroethane	0.250	0.203	81	30- 110	
Nitrobenzene	0.250	0.197	79	45- 130	
Pentachlorophenol	0.250	0.202	81	10- 140	
Pyridine	0.250	0.207	83	10- 148	
2,4,5-Trichlorophenol	0.250	0.174	70	41- 125	
2,4,6-Trichlorophenol	0.250	0.174	70	46- 135	
Cresols (total)	0.750	0.617	82	29- 144	
1,4-Dichlorobenzene	0.250	0.195	78	28- 110	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

675 186

SW846 8270C 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 #: COK170119

WO #: DP2WN1AR

BATCH: 0334321

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	ND	0.184	74	18 - 110	
2,4-Dinitrotoluene	0.250	ND	0.218	87	31 - 131	
Hexachlorobenzene	0.250	ND	0.205	82	36 - 132	
Hexachlorobutadiene	0.250	ND	0.169	68	18 - 116	
Hexachloroethane	0.250	ND	0.183	73	18 - 110	
Nitrobenzene	0.250	ND	0.204	82	10 - 211	
Pentachlorophenol	0.250	ND	0.175	70	10 - 140	
Pyridine	0.250	ND	0.186	74	10 - 148	
2,4,5-Trichlorophenol	0.250	ND	0.204	82	24 - 143	
2,4,6-Trichlorophenol	0.250	ND	0.189	76	36 - 135	
Cresols (total)	0.750	ND	0.655	87	25 - 144	

NOTES (S) :

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

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

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

675 187

Lab Code: STL PIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: COK170119

WO #: DP2WN1AT

BATCH: 0334321

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
1,4-Dichlorobenzene	0.250	0.189	76	2.7	36	18- 110	
2,4-Dinitrotoluene	0.250	0.231	92	5.8	32	31- 131	
Cresols (total)	0.750	0.668	89	2.0	33	25- 144	
Hexachlorobenzene	0.250	0.215	86	4.8	22	36- 132	
Hexachlorobutadiene	0.250	0.177	71	4.6	32	18- 116	
Hexachloroethane	0.250	0.191	76	4.3	33	18- 110	
Nitrobenzene	0.250	0.216	86	5.7	50	10- 211	
Pentachlorophenol	0.250	0.180	72	2.8	56	10- 140	
Pyridine	0.250	0.190	76	2.1	65	10- 148	
2,4,5-Trichlorophenol	0.250	0.220	88	7.5	22	24- 143	
2,4,6-Trichlorophenol	0.250	0.200	80	5.6	27	36- 135	

NOTES (S) :

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

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

COMMENTS:

FORM III

675 188

BLANK WORKORDER NO.

SW846, 8270C METHOD BLANK SUMMARY

DQHTK1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIT

SDG Number:

Lab File ID: F1205050.

Lot Number: C0K220253

Date Analyzed: 12/05/00

Time Analyzed: 22:24

Matrix: SOLID

Date Extracted: 11/29/00

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	INTRA-LAB QC	DP2WN1AL	F1205054.	12/06/00	00:40
02	LAB MS/MSD	DP2WN1AR S	F1205052.	12/05/00	23:32
03	LAB MS/MSD	DP2WN1AT D	F1205053.	12/06/00	00:06
04	DF/24-A/0326/SDC/006	DQCKK1AD	F1205017.	12/05/00	19:32
05	DF/24-A/0326/SDC/007	DQCCL1AD	F1205018.	12/05/00	20:06
06	DF/24-A/0326/SDC/008	DQCLE1AD	F1205019.	12/05/00	20:40
07	CHECK SAMPLE	DQHTK1AC C	F1205051.	12/05/00	22:58
08					
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30					

COMMENTS:

FORM IV

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

675 189

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Lab File ID: F1203DF2

DFTPP Injection Date: 12/03/00

Instrument ID: 722

DFTPP Injection Time: 0754

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	47.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	49.8
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	52.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	29.2
365	Greater than 1.0% of mass 198	6.2
441	Present, but less than mass 443	13.8
442	40.0 - 100.0% of mass 198	87.0
443	17.0 - 23.0% of mass 442	16.8 (19.3)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	F12030C1	12/03/00	0812
02	SSTD120	SSTD120	F12030C4	12/03/00	0956
03	SSTD160	SSTD160	F12030C5	12/03/00	1031
04	SSTD020	SSTD020	F12030C6	12/03/00	1106
05	SSTD080	SSTD080	F12030C7	12/03/00	1140
06					
07					
08					
09					
10					
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22					

675 190

FORM 5

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

006220253

Lab File ID: F1205DF1

DFTPP Injection Date: 12/05/00

Instrument ID: 722

DFTPP Injection Time: 0857

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	49.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	49.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	57.5
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	7.2
275	10.0 - 30.0% of mass 198	29.6
365	Greater than 1.0% of mass 198	6.23
441	Present, but less than mass 443	13.5
442	40.0 - 100.0% of mass 198	84.9
443	17.0 - 23.0% of mass 442	15.6 (18.4)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	F12050C1	12/05/00	0948
02	DF/24-A/0326	DQCKK1AD	F1205017	12/05/00	1932
03	DF/24-A/0326	DQCLC1AD	F1205018	12/05/00	2006
04	DF/24-A/0326	DQCLE1AD	F1205019	12/05/00	2040
05					
06					
07					
08					
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FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

675 191
SDG No.: *0122253*

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Lab File ID: F1205DFN

DFTPP Injection Date: 12/05/00

Instrument ID: 722

DFTPP Injection Time: 2135

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	55.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	55.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	56.8
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	7.2
275	10.0 - 30.0% of mass 198	29.0
365	Greater than 1.0% of mass 198	6.32
441	Present, but less than mass 443	13.0
442	40.0 - 100.0% of mass 198	83.9
443	17.0 - 23.0% of mass 442	17.3 (20.6)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	F12050CN	12/05/00	2152
02	INTRA-LAB BL	DQHTK1AA	F1205050	12/05/00	2224
03	INTRA-LAB CH	DQHTK1AC	F1205051	12/05/00	2258
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06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

C016220253

Lab File ID (Standard): F12050C1

Date Analyzed: 12/05/00

Instrument ID: 722

Time Analyzed: 0948

	IS1 (DCB)	RT #	IS2 (NPT)	RT #	IS3 (ANT)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	80226	5.02	292220	6.56	151590	9.58
UPPER LIMIT	160452	5.52	584440	7.06	303180	10.08
LOWER LIMIT	40113	4.52	146110	6.06	75795	9.08
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 DF/24-A/0326	69531	5.02	281802	6.56	152766	9.58
02 DF/24-A/0326	74514	5.01	307310	6.54	170577	9.57
03 DF/24-A/0326	69630	5.01	281339	6.55	152699	9.58
04						
05						
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

675 193

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

OK 12/05/00

Lab File ID (Standard): F12050C1

Date Analyzed: 12/05/00

Instrument ID: 722

Time Analyzed: 0948

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	239735	12.89	252718	19.52	255311	22.88
UPPER LIMIT	479470	13.39	505436	20.02	510622	23.38
LOWER LIMIT	119868	12.39	126359	19.02	127656	22.38
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 DF/24-A/0326	230892	12.89	211664	19.52	256299	22.88
02 DF/24-A/0326	259100	12.86	230503	19.49	277875	22.86
03 DF/24-A/0326	223938	12.87	205215	19.51	258054	22.88
04						
05						
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10						
11						
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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.

675

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FORM 8

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

COK 220283

Lab File ID (Standard): F12050CN

Date Analyzed: 12/05/00

Instrument ID: 722

Time Analyzed: 2152

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	65173	5.00	247468	6.54	140963	9.56
UPPER LIMIT	130346	5.50	494936	7.04	281926	10.06
LOWER LIMIT	32587	4.50	123734	6.04	70482	9.06
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	55167	5.00	220199	6.54	128099	9.56
02 INTRA-LAB CH	53263	5.01	211242	6.55	127293	9.58
03						
04						
05						
06						
07						
08						
09						
10						
11						
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13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH

Contract:

675

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Lab Code:

Case No.:

SAS No.:

SDG No.:

CO622253

Lab File ID (Standard): F12050CN

Date Analyzed: 12/05/00

Instrument ID: 722

Time Analyzed: 2152

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	253258	12.85	293042	19.49	281036	22.87
UPPER LIMIT	506516	13.35	586084	19.99	562072	23.37
LOWER LIMIT	126629	12.35	146521	18.99	140518	22.37
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	232169	12.86	236875	19.49	222831	22.86
02 INTRA-LAB CH	237658	12.87	262484	19.51	254312	22.88
03						
04						
05						
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.

**GC/MS SEMIVOLATILE
SAMPLE DATA**

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0K220253 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/22/00

Work Order: DQCKK1AD

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 12/05/00

Moisture %: 16

QC Batch: 0334321

Client Sample Id: DF/24-A/0326/SDC/006

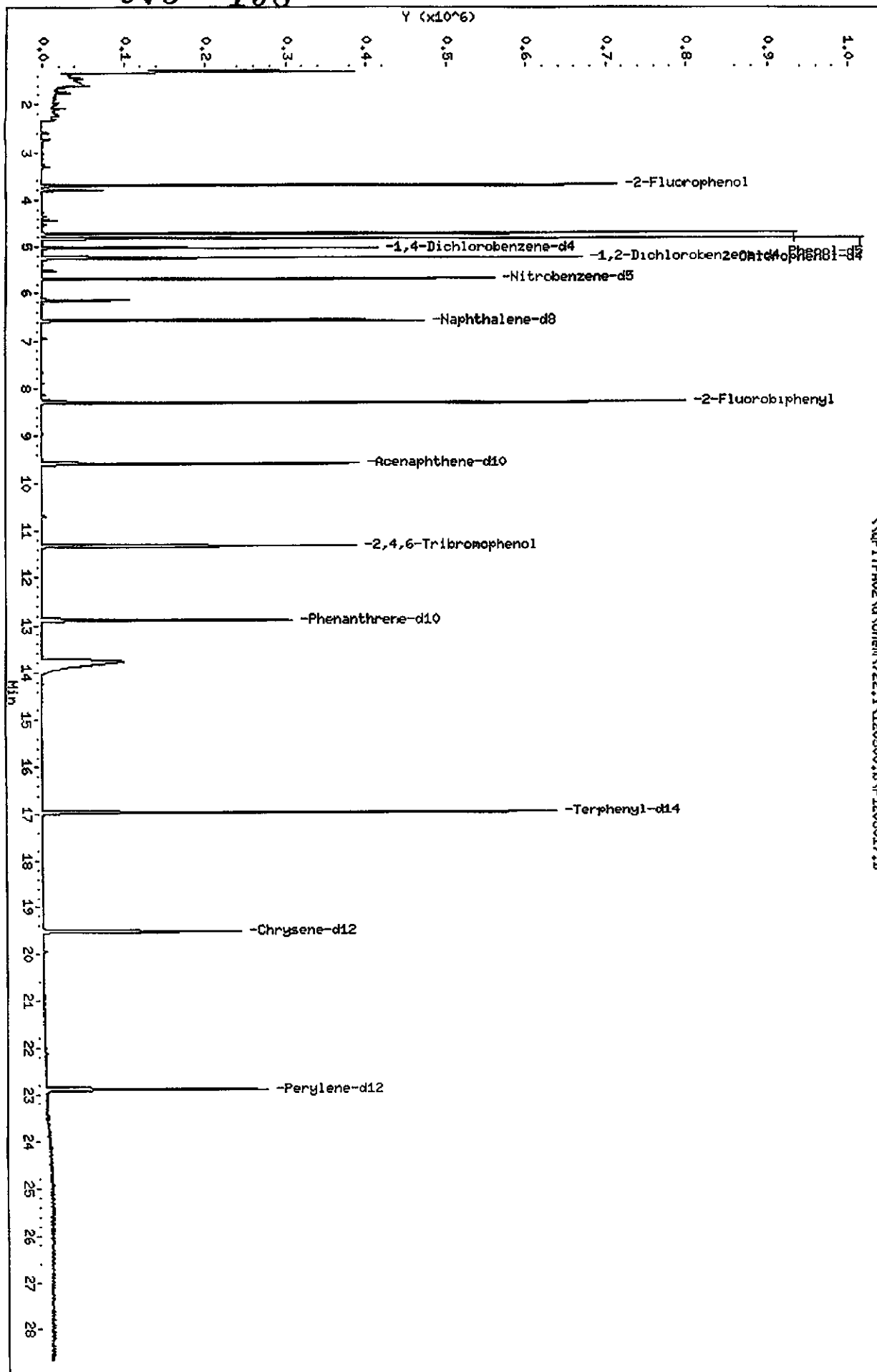
CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.050	U
121-14-2	2,4-Dinitrotoluene	0.050	U
118-74-1	Hexachlorobenzene	0.050	U
87-68-3	Hexachlorobutadiene	0.050	U
67-72-1	Hexachloroethane	0.050	U
98-95-3	Nitrobenzene	0.050	U
87-86-5	Pentachlorophenol	0.25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

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Data File: \\NPITPA02\chem\722.1\120500.b\F1205017.D
Date: 05-DEC-2000 19:32
Client ID: DF/24-R/0326/SDC/00
Sample Info: COK220253-001 11/29/00 TOLP (0334321)
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 722.1
Operator: 003200
Column diameter: 0.25

\\NPITPA02\chem\722.1\120500.b\F1205017.D



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Semivolatiles REPORT SW-846 Method 8270

Data file : \\QPITPA02\d\chem\722.i\120500.b\F1205017.D
Lab Smp Id: DQCKK1AD Client Smp ID: DF/24-A/0326/SDC/00
Inj Date : 05-DEC-2000 19:32
Operator : 003200 Inst ID: 722.i
Smp Info : C0K220253-001 11/29/00 TCLP (0334321)
Misc Info : dqckk1ad,120500.b,8270b.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\722.i\120500.b\8270b.m
Meth Date : 05-Dec-2000 10:24 bungardf Quant Type: ISTD
Cal Date : 03-DEC-2000 11:40 Cal File: F12030C7.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC062

Compound Sublist: tclp.sub

und
12/5/00

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						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (NG)	FINAL (mg/L)
*****	****	..	*****	*****	*****	*****	*****	*****	*****
* 1 1,4-Dichlorobenzene-d4	152		5.017	5.022	(1.000)	69531	40.0000		
* 2 Naphthalene-d8	136		6.555	6.561	(1.000)	281802	40.0000		
* 3 Acenaphthene-d10	164		9.584	9.584	(1.000)	152766	40.0000		
* 4 Phenanthrene-d10	188		12.886	12.886	(1.000)	230892	40.0000		
* 5 Chrysene-d12	240		19.515	19.521	(1.000)	211664	40.0000		
* 6 Perylene-d12	264		22.881	22.876	(1.000)	256299	40.0000		
9 Pyridine	79		Compound Not Detected.						
27 1,4-Dichlorobenzene	146		Compound Not Detected.						
M 195 Cresols, total	100		Compound Not Detected.						
30 2-Methylphenol	108		Compound Not Detected.						
192 4-Methylphenol	108		Compound Not Detected.						
193 3-Methylphenol	108		Compound Not Detected.						
34 Hexachloroethane	117		Compound Not Detected.						

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (ug/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	5.679	5.679	(0.866)	229922	71.9332	0.180(a)
\$ 155 2-Fluorobiphenyl	172	8.297	8.302	(0.866)	371766	70.1101	0.175(a)
\$ 156 Terphenyl-d14	244	16.962	16.951	(0.869)	381513	77.4296	0.194(a)
\$ 157 Phenol-d5	99	4.712	4.718	(0.939)	335952	112.042	0.280(a)
\$ 158 2-Fluorophenol	112	3.697	3.692	(0.737)	194212	94.9076	0.237(a)
\$ 159 2,4,6-Tribromophenol	330	11.326	11.321	(0.879)	71546	118.292	0.296(a)
\$ 186 2-Chlorophenol-d4	132	4.819	4.819	(0.961)	263108	124.818	0.312(a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.230	5.230	(1.043)	103042	62.7246	0.157(a)

QC Flag Legend

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

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0K220253 002

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/22/00

Work Order: DQCLC1AD

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 12/05/00

Moisture %: 8.7

QC Batch: 0334321

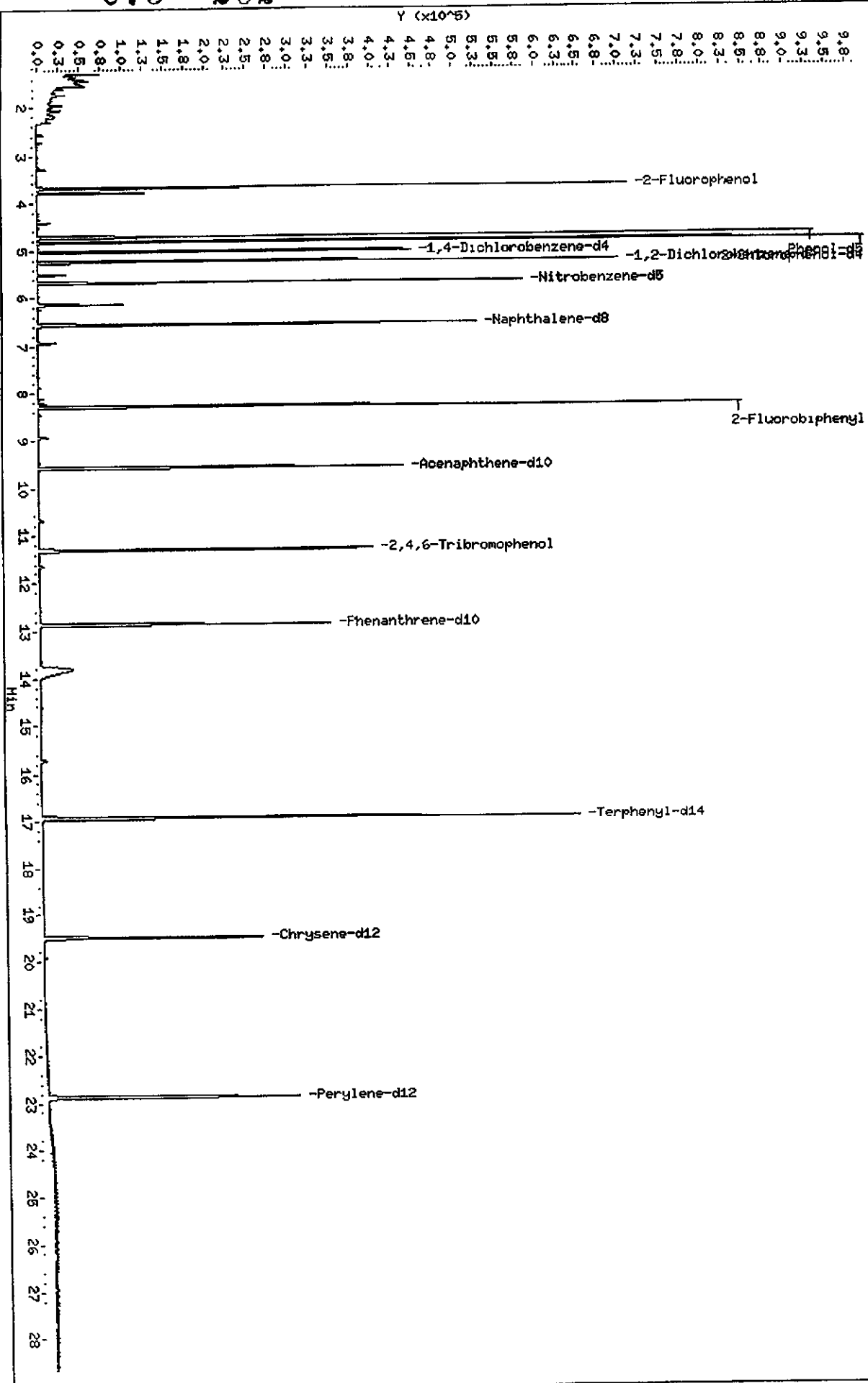
Client Sample Id: DF/24-A/0326/SDC/007

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: \\QPIITPA02\\chem\\722.1\\120500.b\\F1205018.D
 Date : 05-DEC-2000 20:06
 Client ID: DF/24-A/0326/SDC/00
 Sample Info: COK220253-002 11/29/00 TOLP (0334321)
 Volume Injected (ul): 2.0
 Column phase: Hp5-MS

Instrument: 722.1
 Operator: 003200
 Column diameter: 0.25

\\QPIITPA02\\chem\\722.1\\120500.b\\F1205018.D



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Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\d\chem\722.i\120500.b\F1205018.D
Lab Smp Id: DQCLC1AD Client Smp ID: DF/24-A/0326/SDC/00
Inj Date : 05-DEC-2000 20:06
Operator : 003200 Inst ID: 722.i
Smp Info : C0K220253-002 11/29/00 TCLP (0334321)
Misc Info : dqclclad,120500.b,8270b.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\722.i\120500.b\8270b.m
Meth Date : 05-Dec-2000 10:24 bungardf Quant Type: ISTD
Cal Date : 03-DEC-2000 11:40 Cal File: F12030C7.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC062

Compound Sublist: tclp.sub

well
12/5/00

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	5.011	5.022	(1.000)	74514	40.0000	
* 2 Naphthalene-d8	136	6.544	6.561	(1.000)	307310	40.0000	
* 3 Acenaphthene-d10	164	9.573	9.584	(1.000)	170577	40.0000	
* 4 Phenanthrene-d10	188	12.864	12.886	(1.000)	259100	40.0000	
* 5 Chrysene-d12	240	19.493	19.521	(1.000)	230503	40.0000	
* 6 Perylene-d12	264	22.864	22.876	(1.000)	277875	40.0000	
9 Pyridine	79				Compound Not Detected		
27 1,4-Dichlorobenzene	146				Compound Not Detected		
M 195 Cresols, total	100				Compound Not Detected.		
30 2-Methylphenol	108				Compound Not Detected.		
192 4-Methylphenol	108				Compound Not Detected.		
193 3-Methylphenol	108				Compound Not Detected.		
34 Hexachloroethane	117				Compound Not Detected.		

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
=====	====	==	=====	=====	=====	=====	=====
35 Nitrobenzene	77				Compound Not Detected.		
56 Hexachlorobutadiene	224				Compound Not Detected.		
66 2,4,6-Trichlorophenol	196				Compound Not Detected.		
67 2,4,5-Trichlorophenol	196				Compound Not Detected.		
87 2,4-Dinitrotoluene	165				Compound Not Detected.		
107 Hexachlorobenzene	283				Compound Not Detected.		
111 Pentachlorophenol	265				Compound Not Detected.		
\$ 154 Nitrobenzene-d5	82	5.668	5.679	(0.866)	238913	68.5418	0.171(a)
\$ 155 2-Fluorobiphenyl	172	8.285	8.302	(0.866)	380019	64.1834	0.160(a)
\$ 156 Terphenyl-d14	244	16.945	16.951	(0.869)	387102	72.1429	0.180(a)
\$ 157 Phenol-d5	99	4.706	4.718	(0.939)	341819	106.375	0.266(a)
\$ 158 2-Fluorophenol	112	3.686	3.692	(0.736)	198861	90.6808	0.227(a)
\$ 159 2,4,6-Tribromophenol	330	11.304	11.321	(0.879)	73814	108.755	0.272(a)
\$ 186 2-Chlorophenol-d4	132	4.808	4.819	(0.959)	266441	117.946	0.295(a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.219	5.230	(1.042)	104046	59.1003	0.148(a)

QC Flag Legend

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

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

Matrix: (soil/water) SOLID

Lab Sample ID: COK220253 003

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/22/00

Work Order: DQCLE1AD

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 12/05/00

Moisture %: 9.4

QC Batch: 0334321

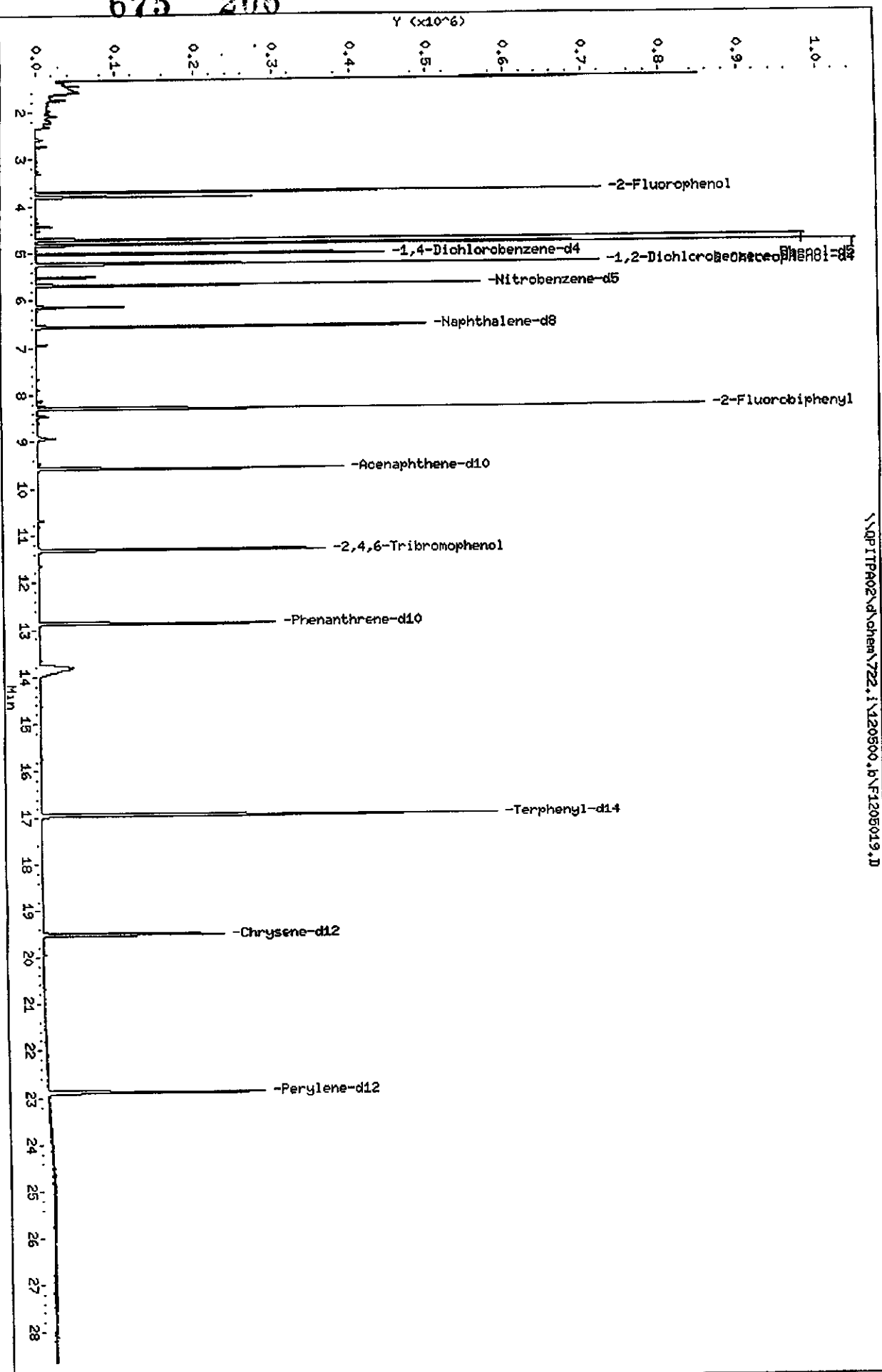
Client Sample Id: DF/24-A/0326/SDC/008

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

Data File: \\QPIPPA02\chem\722.1\120500.b\F1205019.D
 Date: 05-DEC-2000 20:40
 Client ID: DF/24-A/0326/SDC/00
 Sample Info: CCK220253-003 11/29/00 TCLP (0334321)
 Volume Injected (uL): 2.0
 Column phase: Hp5-HS

Instrument: 722.1
 Operator: 003200
 Column diameter: 0.25

\\QPIPPA02\chem\722.1\120500.b\F1205019.D



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STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\d\chem\722.i\120500.b\F1205019.D
Lab Smp Id: DQCLE1AD Client Smp ID: DF/24-A/0326/SDC/00
Inj Date : 05-DEC-2000 20:40
Operator : 003200 Inst ID: 722.i
Smp Info : C0K220253-003 11/29/00 TCLP (0334321)
Misc Info : dqcle1ad,120500.b,8270b.m,tclp.sub
Comment :
Method : \\QPITPA02\D\chem\722.i\120500.b\8270b.m
Meth Date : 05-Dec-2000 10:24 bungardf Quant Type: ISTD
Cal Date : 03-DEC-2000 11:40 Cal File: F12030C7.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC062

Compound Sublist: tclp.sub

WJL
12/5/00

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	5.014	5.022	(1.000)	69630	40.0000	
* 2 Naphthalene-d8	136	6.553	6.561	(1.000)	281339	40.0000	
* 3 Acenaphthene-d10	164	9.582	9.584	(1.000)	152699	40.0000	
* 4 Phenanthrene-d10	188	12.873	12.886	(1.000)	223938	40.0000	
* 5 Chrysene-d12	240	19.508	19.521	(1.000)	205215	40.0000	
* 6 Perylene-d12	264	22.878	22.876	(1.000)	258054	40.0000	
9 Pyridine	79				Compound Not Detected.		
27 1,4-Dichlorobenzene	146				Compound Not Detected.		
M 195 Cresols, total	100				Compound Not Detected.		
30 2-Methylphenol	108				Compound Not Detected.		
192 4-Methylphenol	108				Compound Not Detected.		
193 3-Methylphenol	108				Compound Not Detected.		
34 Hexachloroethane	117				Compound Not Detected.		

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
=====	----	==	=====	=====	=====	=====	=====
35 Nitrobenzene	77				Compound Not Detected.		
56 Hexachlorobutadiene	224				Compound Not Detected.		
66 2,4,6-Trichlorophenol	196				Compound Not Detected.		
67 2,4,5-Trichlorophenol	196				Compound Not Detected.		
87 2,4-Dinitrotoluene	165				Compound Not Detected.		
107 Hexachlorobenzene	283				Compound Not Detected.		
111 Pentachlorophenol	265				Compound Not Detected.		
\$ 154 Nitrobenzene-d5	82	5.677	5.679	(0.866)	241617	75.7164	0.189(a)
\$ 155 2-Fluorobiphenyl	172	8.294	8.302	(0.866)	375833	70.9082	0.177(a)
\$ 156 Terphenyl-d14	244	16.954	16.951	(0.869)	362541	75.8914	0.190(a)
\$ 157 Phenol-d5	99	4.710	4.718	(0.939)	350653	116.779	0.292(a)
\$ 158 2-Fluorophenol	112	3.695	3.692	(0.737)	205715	100.386	0.251(a)
\$ 159 2,4,6-Tribromophenol	330	11.318	11.321	(0.879)	68957	117.552	0.294(a)
\$ 186 2-Chlorophenol-d4	132	4.817	4.819	(0.961)	278442	131.905	0.330(a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.228	5.230	(1.043)	110283	67.0370	0.168(a)

QC Flag Legend

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

**GC/MS SEMIVOLATILE
CALIBRATION DATA**

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Instrument ID: 722

Calibration Date(s): 12/03/00

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

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:	RRF1 =F12030C6.D	RRF2 =F12030C1.D					
RRF3 =F12030C7.D	RRF4 =F12030C4.D	RRF5 =F12030C5.D					
COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	$\overline{RRF}$	% RSD
Phenol *	1.970	1.872	1.892	1.799	1.876	1.882	3.2*
bis(2-Chloroethyl)ether	1.429	1.383	1.367	1.301	1.373	1.371	3.3
2-Chlorophenol	1.358	1.307	1.323	1.250	1.320	1.312	3.0
1,3-Dichlorobenzene	1.526	1.477	1.548	1.440	1.526	1.503	2.9
1,4-Dichlorobenzene *	1.565	1.528	1.577	1.477	1.573	1.544	2.7*
1,2-Dichlorobenzene	1.446	1.410	1.447	1.381	1.480	1.433	2.7
2-Methylphenol	1.235	1.183	1.151	1.123	1.186	1.176	3.6
2,2'-oxybis(1-Chloropropane	2.114	1.949	1.902	1.791	1.790	1.909	7.0
4-Methylphenol	1.274	1.230	1.186	1.149	1.208	1.209	3.9
Hexachloroethane	0.627	0.598	0.626	0.585	0.611	0.609	3.0
Nitrobenzene	0.469	0.452	0.461	0.438	0.448	0.454	2.6
Isophorone	0.734	0.684	0.693	0.668	0.691	0.694	3.5
2-Nitrophenol *	0.196	0.190	0.194	0.184	0.193	0.191	2.4*
2,4-Dimethylphenol	0.352	0.362	0.362	0.352	0.367	0.359	1.9
bis(2-Chloroethoxy)methane	0.436	0.423	0.425	0.406	0.419	0.422	2.6
N-Nitroso-di-n-propylamine #	1.140	1.048	1.021	1.005	1.058	1.054	5.0#
2,4-Dichlorophenol *	0.284	0.280	0.280	0.266	0.282	0.278	2.5*
1,2,4-Trichlorobenzene	0.317	0.310	0.317	0.302	0.317	0.313	2.1
Naphthalene	1.099	1.058	1.076	1.030	1.066	1.066	2.4
4-Chloroaniline	0.410	0.386	0.387	0.371	0.383	0.387	3.7
Hexachlorobutadiene *	0.200	0.202	0.215	0.205	0.219	0.208	4.1*
4-Chloro-3-Methylphenol *	0.315	0.298	0.302	0.295	0.307	0.303	2.6*
2-Methylnaphthalene	0.697	0.654	0.671	0.641	0.677	0.668	3.2
Hexachlorocyclopentadiene #	0.393	0.430	0.482	0.438	0.472	0.443	8.0#
2,4,6-Trichlorophenol *	0.348	0.351	0.367	0.332	0.353	0.350	3.6*
2,4,5-Trichlorophenol	0.359	0.370	0.367	0.342	0.370	0.362	3.3
2-Chloronaphthalene	1.203	1.193	1.268	1.175	1.269	1.222	3.6
2-Nitroaniline	0.435	0.412	0.441	0.406	0.434	0.426	3.6
Dimethylphthalate	1.281	1.204	1.263	1.177	1.244	1.234	3.5
Acenaphthylene	1.920	1.826	1.929	1.750	1.836	1.852	4.0
2,6-Dinitrotoluene	0.280	0.265	0.283	0.262	0.279	0.274	3.5
3-Nitroaniline	0.290	0.280	0.297	0.279	0.296	0.288	3.0
Acenaphthene *	1.191	1.133	1.194	1.109	1.167	1.159	3.2*
2,4-Dinitrophenol #	0.087	0.118	0.141	0.135	0.152	0.127	20.1#
4-Nitrophenol #	0.198	0.202	0.231	0.218	0.239	0.218	8.1#
Dibenzofuran	1.642	1.566	1.644	1.526	1.626	1.601	3.3
2,4-Dinitrotoluene	0.350	0.337	0.356	0.339	0.359	0.348	2.8

6C
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

675 211

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: _

Instrument ID: 722

Calibration Date(s): 12/03/00

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

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:		RRF1	=F12030C6.D	RRF2	=F12030C1.D		
RRF3 =F12030C7.D		RRF4	=F12030C4.D	RRF5	=F12030C5.D		
COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	$\overline{RRF}$	% RSD
Diethylphthalate	1.288	1.204	1.288	1.222	1.302	1.261	3.5
4-Chlorophenyl-phenylether	0.635	0.604	0.634	0.592	0.628	0.619	3.1
Fluorene	1.325	1.248	1.328	1.239	1.326	1.293	3.5
4-Nitroaniline	0.264	0.249	0.271	0.260	0.278	0.264	4.2
4,6-Dinitro-2-methylphenol	0.092	0.106	0.122	0.115	0.126	0.112	12.2
N-Nitrosodiphenylamine (1)	* 0.606	0.475	0.586	0.502	0.536	0.541	10.2*
4-Bromophenyl-phenylether	0.233	0.228	0.242	0.223	0.235	0.232	3.0
Hexachlorobenzene	0.253	0.244	0.260	0.245	0.258	0.252	2.9
Pentachlorophenol	# 0.061	0.092	0.100	0.102	0.119	0.095	22.5#
Phenanthrene	1.100	1.055	1.107	1.037	1.083	1.076	2.8
Anthracene	1.106	1.054	1.128	1.048	1.105	1.088	3.2
Carbazole	0.897	0.856	0.946	0.895	0.938	0.906	4.0
Di-n-Butylphthalate	1.145	1.101	1.234	1.188	1.247	1.183	5.2
Fluoranthene	* 0.970	0.945	1.089	1.046	1.115	1.033	7.1*
Pyrene	1.304	1.165	1.022	0.953	0.956	1.080	14.1
Butylbenzylphthalate	0.546	0.521	0.512	0.475	0.485	0.508	5.6
3,3'-Dichlorobenzidine	0.364	0.385	0.430	0.365	0.373	0.383	7.1
Benzo(a) Anthracene	1.026	0.994	1.038	0.954	0.987	1.000	3.3
Chrysene	0.983	0.932	0.954	0.876	0.903	0.930	4.5
bis(2-ethylhexyl) Phthalate	0.710	0.711	0.706	0.657	0.669	0.691	3.7
Di-n-octylphthalate	* 1.321	1.347	1.282	1.226	1.282	1.292	3.6*
Benzo(b) fluoranthene	1.210	1.163	1.186	1.157	1.290	1.201	4.5
Benzo(k) fluoranthene	1.295	1.229	1.389	1.271	1.335	1.304	4.7
Benzo(a) pyrene	* 1.104	1.079	1.160	1.089	1.160	1.118	3.5*
Indeno(1,2,3-cd) pyrene	1.506	1.474	1.662	1.522	1.645	1.562	5.5
Dibenz(a,h) anthracene	1.266	1.268	1.407	1.306	1.418	1.333	5.6
Benzo(g,h,i) perylene	1.326	1.284	1.388	1.273	1.380	1.330	4.0
Pyridine	1.144	1.129	1.229	1.019	1.067	1.118	7.1
N-Nitrosodimethylamine	0.672	0.689	0.672	0.624	0.658	0.663	3.7
Aniline	2.346	2.057	2.315	1.991	2.074	2.157	7.5
Benzyl Alcohol	0.896	0.877	0.882	0.839	0.890	0.877	2.5
Benzoic Acid	0.066	0.113	0.127	0.123	0.130	0.112	23.5
2,3,4,6-Tetrachlorophenol	0.266	0.275	0.280	0.269	0.289	0.276	3.3
2,3,5,6-Tetrachlorophenol	0.264	0.288	0.288	0.278	0.303	0.284	5.0
1,2-Diphenylhydrazine	1.077	1.026	1.077	0.988	1.006	1.035	4.0

(1) Cannot be separated from Diphenylamine

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No. :

SAS No. :

SDG No. :

Instrument ID: 722

Calibration Date(s) : 12/03/00

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

Max %RSD for CCC(*) = 30.0%

[illegible]

page 3 of 3

FORM VI SV-3

1/87 Rev.

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
Lab File ID: F12030C7.D
Analysis Type: NONE

Injection Date: 03-DEC-2000 11:40
Lab Sample ID: sstd080
Method File: \\QPITPA02\D\chem\722.i\120300.b\

COMPOUND	%RSD
-----	-----
Benzo(b)fluoranthene	4.5
Benzo(k)fluoranthene	4.7
7,12-dimethylbenz(a)anthracen	8.7
Benzo(a)pyrene	3.5
Indeno(1,2,3-cd)pyrene	5.5
Dibenz(a,h)anthracene	5.6
Benzo(g,h,i)perylene	4.0

The average of all %RSD's in the initial calibration is 5.7

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
Lab File ID: F12030C7.D
Analysis Type: NONE

Injection Date: 03-DEC-2000 11:40
Lab Sample ID: sstd080
Method File: \\QPITPA02\D\chem\722.i\120300.b\

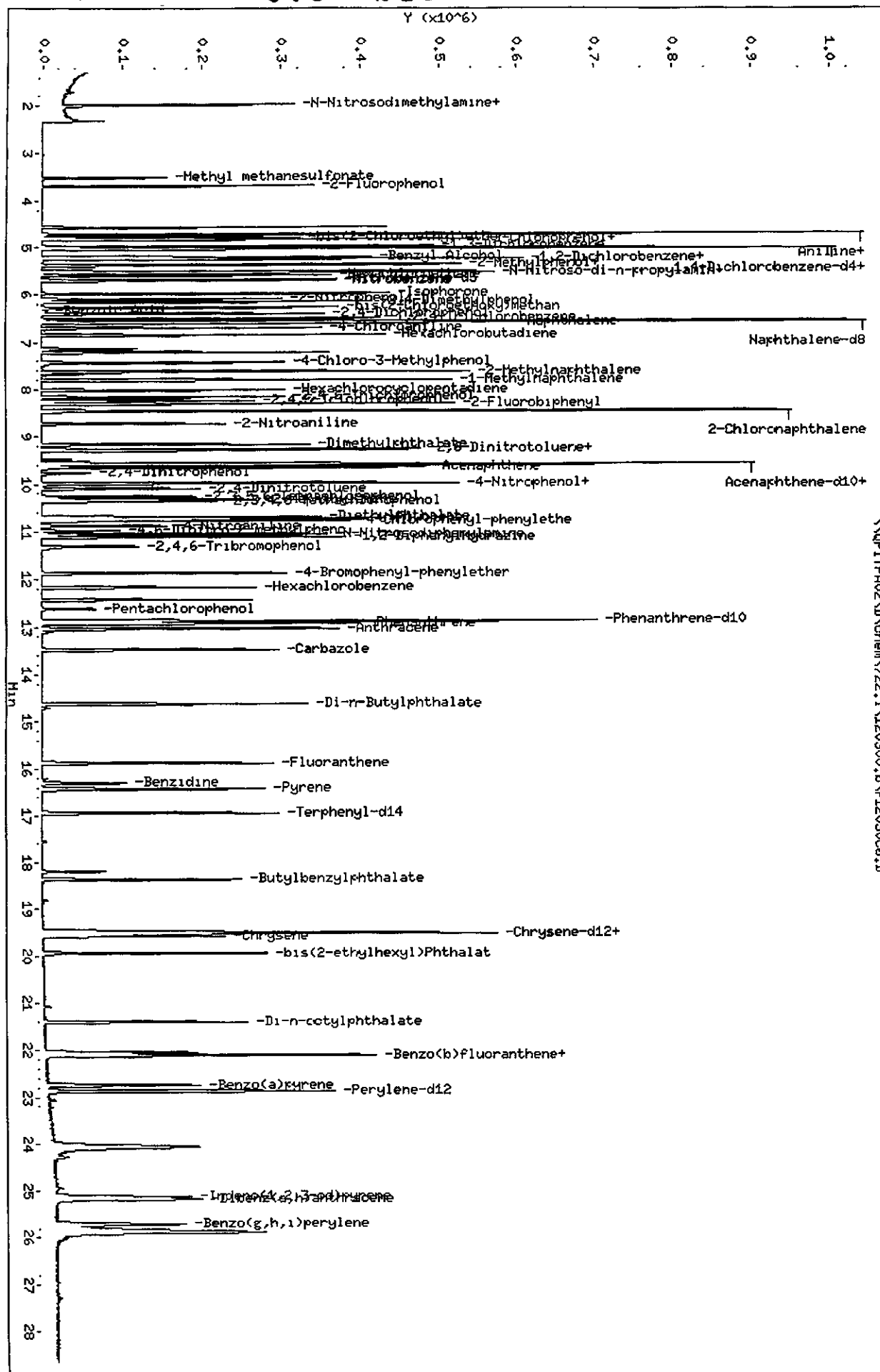
COMPOUND	%RSD
Pyridine	7.1
N-Nitrosodimethylamine	3.7
Methyl methanesulfonate	52.1
2-Fluorophenol	3.0
Aniline	7.5
Phenol-d5	2.1
Phenol	3.2
bis(2-Chloroethyl)ether	3.3
2-Chlorophenol-d4	2.9
2-Chlorophenol	3.0
1,3-Dichlorobenzene	2.9
1,4-Dichlorobenzene	2.7
Benzyl Alcohol	2.5
1,2-Dichlorobenzene-d4	4.1
1,2-Dichlorobenzene	2.7
2-Methylphenol	3.6
2,2'-oxybis(1-Chloropropane)	7.0
4-Methylphenol	3.9
N-Nitroso-di-n-propylamine	5.0
Hexachloroethane	3.0
Nitrobenzene-d5	4.1
Nitrobenzene	2.6
Isophorone	3.5
2-Nitrophenol	2.4
2,4-Dimethylphenol	1.9
bis(2-Chloroethoxy)methane	2.6
Benzoic Acid	23.5
2,4-Dichlorophenol	2.5
1,2,4-Trichlorobenzene	2.1
Naphthalene	2.4
4-Chloroaniline	3.7
Hexachlorobutadiene	4.1
4-Chloro-3-Methylphenol	2.6
2-Methylnaphthalene	3.2
1-Methylnaphthalene	2.4
Hexachlorocyclopentadiene	8.0
2,4,6-Trichlorophenol	3.6
2,4,5-Trichlorophenol	3.3
2-Fluorobiphenyl	4.9

INITIAL CALIBRATION REPORT

Instrument ID: 722.i
Lab File ID: F12030C7.D
Analysis Type: NONE

Injection Date: 03-DEC-2000 11:40
Lab Sample ID: sstd080
Method File: \\QPITPA02\D\chem\722.i\120300.b\

COMPOUND	%RSD
2-Chloronaphthalene	3.6
2-Nitroaniline	3.6
Dimethylphthalate	3.5
Acenaphthylene	4.0
2,6-Dinitrotoluene	3.5
3-Nitroaniline	3.0
Acenaphthene	3.2
2,4-Dinitrophenol	20.1
4-Nitrophenol	8.1
Dibenzofuran	3.3
2,4-Dinitrotoluene	2.8
2,3,5,6-Tetrachlorophenol	5.0
2-Naphthylamine	6.2
2,3,4,6-Tetrachlorophenol	3.3
Diethylphthalate	3.5
Fluorene	3.5
4-Chlorophenyl-phenylether	3.1
4-Nitroaniline	4.2
4,6-Dinitro-2-methylphenol	12.2
N-Nitrosodiphenylamine	10.2
1,2-Diphenylhydrazine	4.0
2,4,6-Tribromophenol	5.2
4-Bromophenyl-phenylether	3.0
Hexachlorobenzene	2.9
Pentachlorophenol	22.5
Phenanthrene	2.8
Anthracene	3.2
Carbazole	4.0
Di-n-Butylphthalate	5.2
Fluoranthene	7.1
Benzidine	16.5
Pyrene	14.1
Terphenyl-d14	12.3
Butylbenzylphthalate	5.6
Benzo(a) Anthracene	3.3
3,3'-Dichlorobenzidine	7.1
Chrysene	4.5
bis(2-ethylhexyl) Phthalate	3.7
Di-n-octylphthalate	3.6



Data File: \\QPI17PA02\JN\chem\722.1\120300.b\F1203006.D
 Date : 03-DEC-2000 11:06
 Client ID:
 Sample Info: SST020 (10ppb) 77-06-3
 Volume Injected (uL): 2.0
 Column phase: HP5-MS

\\QPI17PA02\JN\chem\722.1\120300.b\F1203006.D

Instrument: 722.1
 Operator: 003200
 Column diameter: 0.25

Data File: \\gpitpa02\d\chem\722.i\120300.b\F12030C6.D
Report Date: 04-Dec-2000 06:28

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270
Data file : \\gpitpa02\d\chem\722.i\120300.b\F12030C6.D
Lab Smp Id: sstd020 Client Smp ID: SSTD020
Inj Date : 03-DEC-2000 11:06
Operator : 003200 Inst ID: 722.i
Smp Info : SSTD020 (10ppb) 77-06-3
Misc Info : sstd020,120300.b,8270b.m,2-root.sub,1,1
Comment :
Method : \\QPITPA02\D\chem\722.i\120300.b\8270b.m
Meth Date : 04-Dec-2000 06:28 BungardF Quant Type: ISTD
Cal Date : 03-DEC-2000 11:40 Cal File: F12030C7.D
Als bottle: 30 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC062

12/09/00

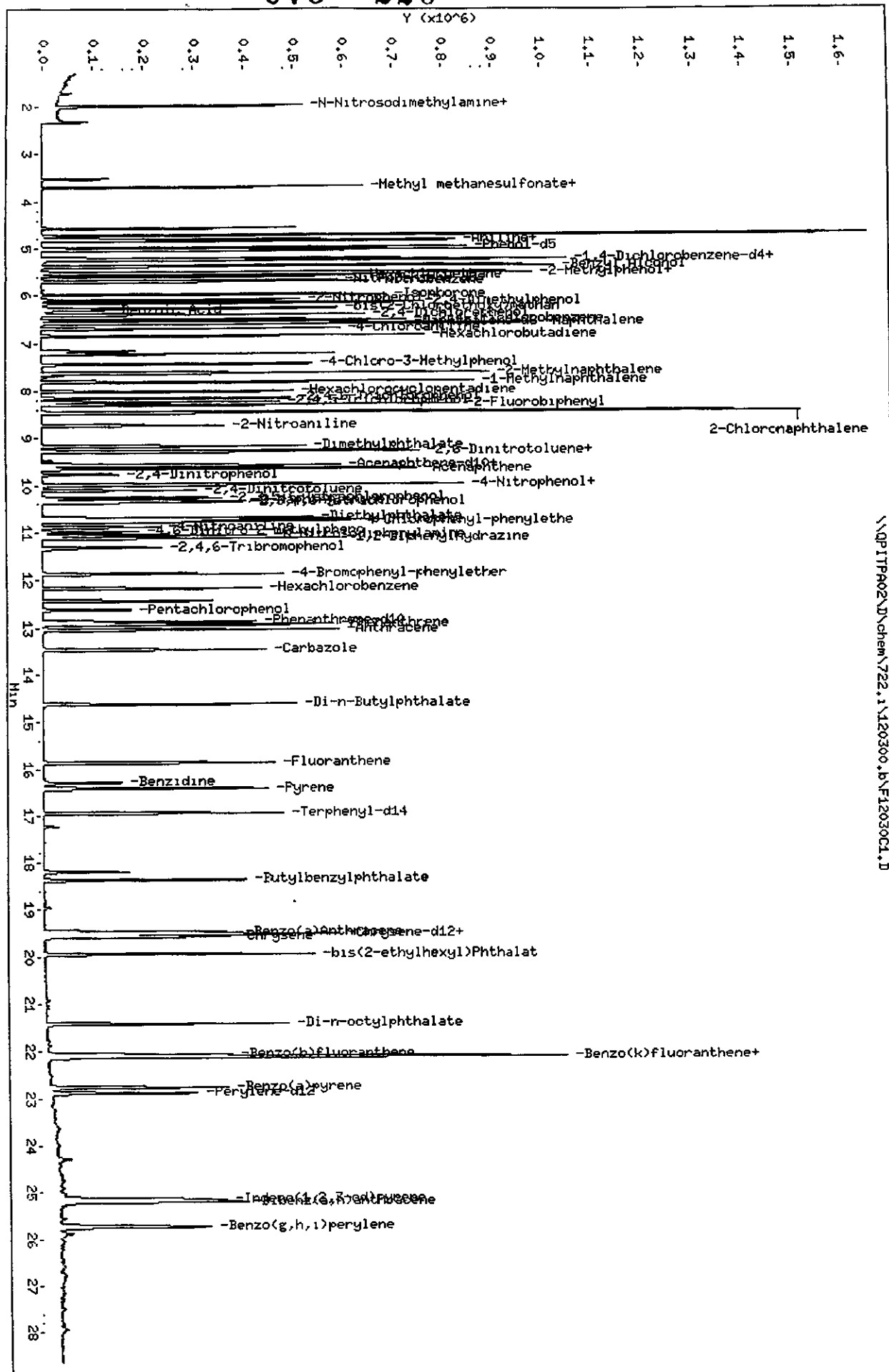
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT	ON-COL
-----	----	--	-----	-----	-----	(NG)	(NG)
* 1 1,4-Dichlorobenzene-d4	152	5 018	5 018	(1 000)	166598	40 0000	-----
* 2 Naphthalene-d8	136	6 557	6 557	(1 000)	632570	40.0000	
* 3 Acenaphthene-d10	164	9 581	9 581	(1 000)	341135	40.0000	
* 4 Phenanthrene-d10	188	12.877	12 877	(1 000)	532239	40 0000	
* 5 Chrysene-d12	240	19.506	19.506	(1.000)	381293	40 0000	
* 6 Perylene-d12	264	22 866	22.866	(1 000)	323896	40 0000	
10 N-Nitrosodimethylamine	74	1 979	1 979	(0 394)	55947	20.0000	20 3
9 Pyridine	79	1 973	1.973	(0 393)	95291	20.0000	20 5
16 Methyl methanesulfonate	80	3.523	3 523	(0 702)	72504	20.0000	32.0
21 Aniline	93	4 714	4.714	(0 939)	195380	20 0000	21.8
22 Phenol	94	4 719	4 719	(0.940)	164104	20 0000	20.9
23 bis(2-Chloroethyl)ether	93	4.783	4 783	(0 953)	119038	20 0000	20 8
24 2-Chlorophenol	128	4.831	4 831	(0.963)	113156	20 0000	20.7
26 1,3-Dichlorobenzene	146	4.976	4 976	(0.991)	127126	20.0000	20.3
27 1,4-Dichlorobenzene	146	5 034	5.034	(1 003)	130330	20 0000	20 3
28 1,2-Dichlorobenzene	146	5 243	5.243	(1 045)	120454	20.0000	20 2
29 Benzyl Alcohol	108	5.200	5 200	(1 036)	74675	20.0000	20 4
30 2-Methylphenol	108	5 355	5.355	(1 067)	102849	20 0000	21 0
31 2,2'-oxybis(1-Chloropropane)	45	5.371	5 371	(1.070)	176077	20 0000	22.1
32 N-Nitroso-di-n-propylamine	70	5 531	5 531	(1 102)	94980	20.0000	21.6
192 4-Methylphenol	108	5.515	5.515	(1 099)	106111	20.0000	21 1
34 Hexachloroethane	117	5.585	5 585	(1 113)	52208	20 0000	20 6
35 Nitrobenzene	77	5.697	5 697	(0.869)	148279	20.0000	20 7
41 Isophorone	82	5.969	5.969	(0.910)	232142	20 0000	21 1
42 2-Nitrophenol	139	6 081	6 081	(0 927)	62123	20 0000	20 5
43 2,4-Dimethylphenol	107	6 140	6.140	(0 936)	111405	20 0000	19.6

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
								(NG)	(NG)
=====	----	--	-----	-----	-----	-----	-----		
44 bis (2-Chloroethoxy)methane	93	6.263	6.263	(0.955)	137980	20.0000	20.7		
48 2,4-Dichlorophenol	162	6.391	6.391	(0.975)	89768	20.0000	20.4		
49 Benzoic Acid	122	6.268	6.268	(0.956)	20950	20.0000	11.8 (H)		
50 1,2,4-Trichlorobenzene	180	6.498	6.498	(0.991)	100185	20.0000	20.2		
51 Naphthalene	128	6.584	6.584	(1.004)	347630	20.0000	20.6		
52 4-Chloroaniline	127	6.685	6.685	(1.020)	129780	20.0000	21.2		
56 Hexachlorobutadiene	225	6.835	6.835	(1.042)	63402	20.0000	19.2		
59 4-Chloro-3-Methylphenol	107	7.422	7.422	(1.132)	99650	20.0000	20.8		
62 2-Methylnaphthalene	142	7.615	7.615	(1.161)	220376	20.0000	20.8		
205 1-Methylnaphthalene	142	7.796	7.796	(1.189)	205590	20.0000	20.5		
64 Hexachlorocyclopentadiene	237	8.005	8.005	(0.836)	67105	20.0000	17.8		
66 2,4,6-Trichlorophenol	196	8.154	8.154	(0.851)	59374	20.0000	19.9		
67 2,4,5-Trichlorophenol	196	8.229	8.229	(0.859)	61310	20.0000	19.9		
70 2-Chloronaphthalene	162	8.459	8.459	(0.883)	205158	20.0000	19.7		
73 2-Nitroaniline	65	8.720	8.720	(0.910)	74160	20.0000	20.4		
76 Dimethylphthalate	163	9.158	9.158	(0.956)	218550	20.0000	20.8		
78 2,6-Dinitrotoluene	165	9.287	9.287	(0.969)	47720	20.0000	20.4		
79 Acenaphthylene	152	9.265	9.265	(0.967)	327583	20.0000	20.7		
81 3-Nitroaniline	138	9.548	9.548	(0.997)	49445	20.0000	20.1		
82 Acenaphthene	153	9.645	9.645	(1.007)	203142	20.0000	20.6		
83 2,4-Dinitrophenol	184	9.762	9.762	(1.019)	14806	20.0000	13.7		
85 4-Nitrophenol	109	9.976	9.976	(1.041)	33855	20.0000	18.2		
86 Dibenzofuran	168	9.976	9.976	(1.041)	280171	20.0000	20.5		
87 2,4-Dinitrotoluene	165	10.093	10.093	(1.054)	59644	20.0000	20.1		
91 2,3,5,6-Tetrachlorophenol	232	10.259	10.259	(1.071)	45108	20.0000	18.6		
88 2,3,4,6-Tetrachlorophenol	232	10.355	10.355	(1.081)	45377	20.0000	19.3		
92 2-Naphthylamine	143	10.318	10.318	(1.077)	166884	20.0000	21.9		
93 Diethylphthalate	149	10.686	10.686	(1.115)	219741	20.0000	20.4		
94 Fluorene	166	10.724	10.724	(1.119)	226069	20.0000	20.5		
95 4-Chlorophenyl-phenylether	204	10.766	10.766	(1.124)	108260	20.0000	20.5		
96 4-Nitroaniline	138	10.873	10.873	(1.135)	44998	20.0000	20.0		
98 4,6-Dinitro-2-methylphenol	198	10.975	10.975	(0.852)	24519	20.0000	16.4		
99 N-Nitrosodiphenylamine	169	11.050	11.050	(0.858)	161367	20.0000	22.4		
100 1,2-Diphenylhydrazine	77	11.114	11.114	(0.863)	286682	20.0000	20.8		
106 4-Bromophenyl-phenylether	248	11.872	11.872	(0.922)	62078	20.0000	20.1		
107 Hexachlorobenzene	284	12.166	12.166	(0.945)	67394	20.0000	20.1		
111 Pentachlorophenol	266	12.620	12.620	(0.980)	16183	20.0000	12.8		
115 Phenanthrene	178	12.930	12.930	(1.004)	292619	20.0000	20.4		
116 Anthracene	178	13.032	13.032	(1.012)	294221	20.0000	20.3		
119 Carbazole	167	13.475	13.475	(1.046)	238807	20.0000	19.8		
120 Di-n-Butylphthalate	149	14.618	14.618	(1.135)	304625	20.0000	19.3		
123 Fluoranthene	202	15.863	15.863	(1.232)	258263	20.0000	18.8		
124 Benzidine	184	16.290	16.290	(0.835)	90765	20.0000	21.7		
125 Pyrene	202	16.402	16.402	(0.841)	248709	20.0000	24.2		
131 Butylbenzylphthalate	149	18.358	18.358	(0.941)	104073	20.0000	21.5		
135 3,3'-Dichlorobenzidine	252	19.517	19.517	(1.001)	69463	20.0000	19.0		
136 Benzo(a)Anthracene	228	19.463	19.463	(0.998)	195640	20.0000	20.5		

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
-----	----	--	-----	-----	-----	-----	-----
137 Chrysene	228	19.565	19.565	(1.003)	187469	20.0000	21.2
139 bis(2-ethylhexyl) Phthalate	149	19.939	19.939	(1.022)	135301	20.0000	20.6
140 Di-n-octylphthalate	149	21.403	21.403	(0.936)	213885	20.0000	20.4
141 Benzo(b) fluoranthene	252	22.044	22.044	(0.964)	195995	20.0000	20.1 (H)
142 Benzo(k) fluoranthene	252	22.097	22.097	(0.966)	209770	20.0000	19.9
143 7,12-dimethylbenz(a)anthracen	256	22.097	22.097	(0.966)	83607	20.0000	18.0
146 Benzo(a)pyrene	252	22.744	22.744	(0.995)	178843	20.0000	19.7
149 Indeno(1,2,3-cd)pyrene	276	25.115	25.115	(1.098)	243880	20.0000	19.3
150 Dibenz(a,h)anthracene	278	25.174	25.174	(1.101)	204972	20.0000	19.0
151 Benzo(g,h,i)perylene	276	25.703	25.703	(1.124)	214710	20.0000	19.9
\$ 154 Nitrobenzene-d5	82	5.675	5.675	(0.866)	149171	20.0000	20.8
\$ 155 2-Fluorobiphenyl	172	8.293	8.293	(0.866)	242837	20.0000	20.5
\$ 156 Terphenyl-d14	244	16.942	16.942	(0.869)	210603	20.0000	23.7
\$ 157 Phenol-d5	99	4.708	4.708	(0.938)	145833	20.0000	20.3
\$ 158 2-Fluorophenol	112	3.693	3.693	(0.736)	96554	20.0000	19.7
\$ 159 2,4,6-Tribromophenol	330	11.311	11.311	(0.878)	25586	20.0000	18.4
\$ 186 2-Chlorophenol-d4	132	4.815	4.815	(0.960)	102657	20.0000	20.3
\$ 187 1,2-Dichlorobenzene-d4	152	5.227	5.227	(1.042)	80137	20.0000	20.4

QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: \\NPITPA02\chem\722.1\120300.b\F1203001.D
 Date : 03-DEC-2000 08:12
 Client ID:
 Sample Info: SST050 (25ppb) 77-05-14
 Volume Injected (uL): 2.0
 Column phase: He5-HS

\\NPITPA02\chem\722.1\120300.b\F1203001.D

Instrument: 722.1
 Operator: 003200
 Column diameter: 0.25

Data File: \\qpitpa02\d\chem\722.i\120300.b\F12030C1.D
Report Date: 03-Dec-2000 09:20

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\120300.b\F12030C1.D
Lab Smp Id: sstd050 Client Smp ID: SSTD050
Inj Date : 03-DEC-2000 08:12
Operator : 003200 Inst ID: 722.i
Smp Info : SSTD050 (25ppb) 77-05-14
Misc Info : sstd050,120300.b,8270b.m,2-root.sub,1,2.
Comment :
Method : \\QPITPA02\D\chem\722.i\120300.b\8270b.m
Meth Date : 03-Dec-2000 09:20 BungardF Quant Type: ISTD
Cal Date : 03-DEC-2000 08:12 Cal File: F12030C1.D
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC062

12/12/00

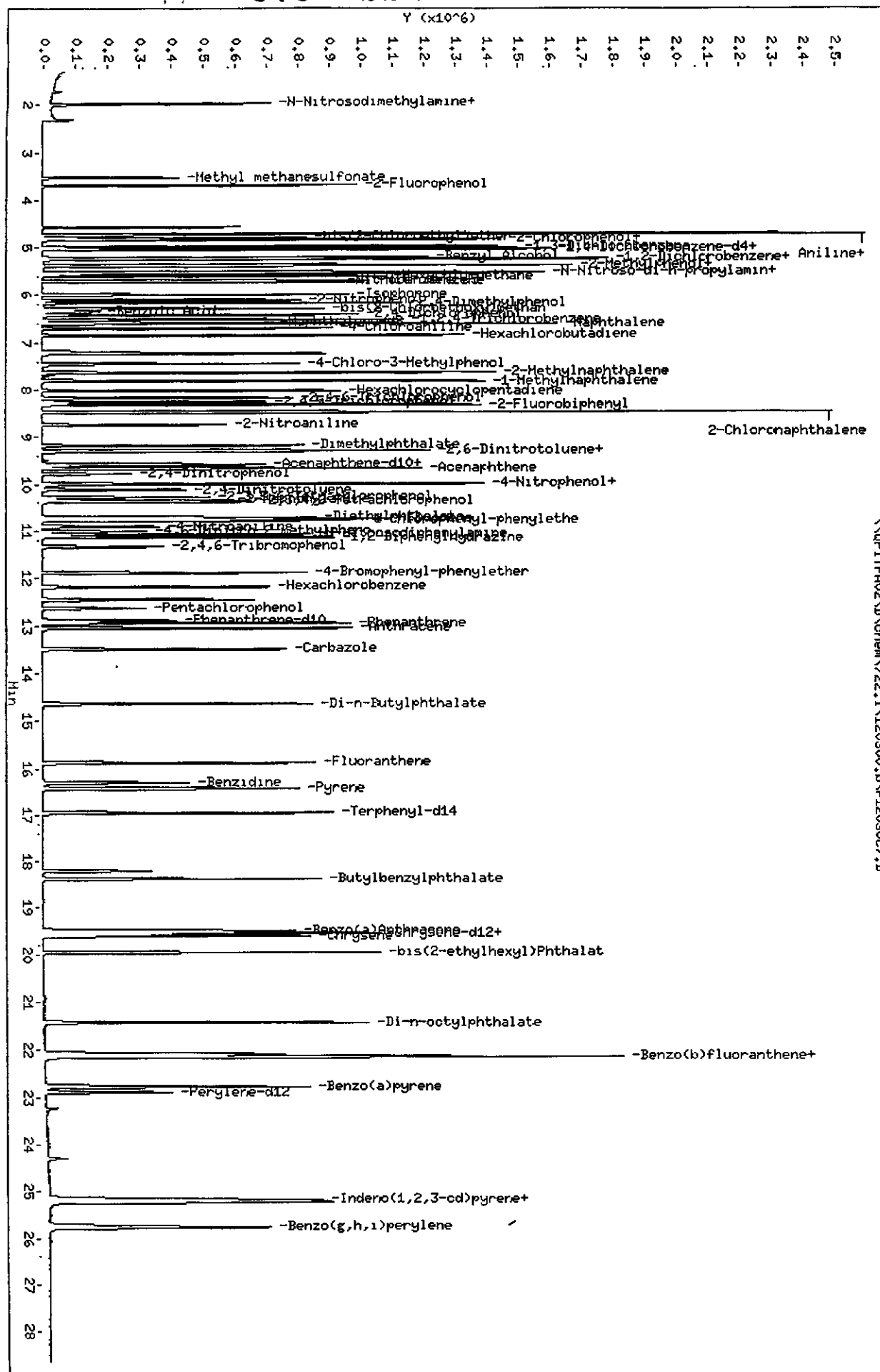
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
* 1 1,4-Dichlorobenzene-d4	152	5.019	5.019	(1.000)	122020	40 0000	(H)
* 2 Naphthalene-d8	136	6.557	6.557	(1.000)	446076	40 0000	
* 3 Acenaphthene-d10	164	9.581	9.581	(1.000)	229589	40.0000	
* 4 Phenanthrene-d10	188	12.877	12.877	(1.000)	346584	40 0000	
* 5 Chrysene-d12	240	19.512	19.512	(1.000)	269715	40.0000	
* 6 Perylene-d12	264	22.878	22.878	(1.000)	240852	40 0000	
10 N-Nitrosodimethylamine	74	1.984	1.984	(0.380)	105094	50 0000	50 0
9 Pyridine	79	1.974	1.974	(0.378)	172269	50 0000	50 0
16 Methyl methanesulfonate	80	3.523	3.523	(0.674)	56820	50 0000	50.0 (H)
21 Aniline	93	4.720	4.720	(0.903)	313723	50 0000	50.0 (H)
22 Phenol	94	4.730	4.730	(0.905)	285545	50.0000	50.0 (H)
23 bis (2-Chloroethyl) ether	93	4.789	4.789	(0.916)	210969	50.0000	50.0 (H)
24 2-Chlorophenol	128	4.837	4.837	(0.925)	199384	50 0000	50 0
26 1,3-Dichlorobenzene	146	4.981	4.981	(0.953)	225257	50 0000	50 0 (H)
27 1,4-Dichlorobenzene	146	5.035	5.035	(0.963)	233076	50 0000	50 0 (H)
28 1,2-Dichlorobenzene	146	5.243	5.243	(1.003)	214996	50 0000	50 0
29 Benzyl Alcohol	108	5.206	5.206	(0.996)	133741	50 0000	50 0 (H)
30 2-Methylphenol	108	5.361	5.361	(1.026)	180408	50 0000	50 0 (H)
31 2,2'-oxybis (1-Chloropropane)	45	5.377	5.377	(1.029)	297338	50 0000	50.0 (H)
32 N-Nitroso-di-n-propylamine	70	5.537	5.537	(1.059)	159794	50 0000	50 0
192 4-Methylphenol	108	5.521	5.521	(1.056)	187685	50 0000	50.0
34 Hexachloroethane	117	5.590	5.590	(1.069)	91181	50 0000	50.0
35 Nitrobenzene	77	5.703	5.703	(0.870)	252193	50 0000	50.0
41 Isophorone	82	5.975	5.975	(0.911)	381549	50 0000	50.0
42 2-Nitrophenol	139	6.087	6.087	(0.928)	106241	50 0000	50.0
43 2,4-Dimethylphenol	107	6.146	6.146	(0.937)	202093	50.0000	50 0

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
44 bis (2-Chloroethoxy)methane	93	6.263	6.263	(0.955)	235770	50.0000	50.0
48 2,4-Dichlorophenol	162	6.397	6.397	(0.976)	156026	50.0000	50.0
49 Benzoic Acid	122	6.312	6.312	(0.963)	62867	50.0000	50.0
50 1,2,4-Trichlorobenzene	180	6.504	6.504	(0.992)	173064	50.0000	50.0
51 Naphthalene	128	6.584	6.584	(1.004)	590015	50.0000	50.0
52 4-Chloroaniline	127	6.691	6.691	(1.020)	215088	50.0000	50.0
56 Hexachlorobutadiene	225	6.840	6.840	(1.043)	112364	50.0000	50.0
59 4-Chloro-3-Methylphenol	107	7.428	7.428	(1.133)	166092	50.0000	50.0
62 2-Methylnaphthalene	142	7.620	7.620	(1.162)	364850	50.0000	50.0
205 1-Methylnaphthalene	142	7.802	7.802	(1.190)	349824	50.0000	50.0
64 Hexachlorocyclopentadiene	237	8.010	8.010	(0.836)	123537	50.0000	50.0
66 2,4,6-Trichlorophenol	196	8.160	8.160	(0.852)	100768	50.0000	50.0
67 2,4,5-Trichlorophenol	196	8.235	8.235	(0.859)	106066	50.0000	50.0
70 2-Chloronaphthalene	162	8.464	8.464	(0.883)	342513	50.0000	50.0
73 2-Nitroaniline	65	8.726	8.726	(0.911)	118330	50.0000	50.0
76 Dimethylphthalate	163	9.164	9.164	(0.957)	345579	50.0000	50.0
78 2,6-Dinitrotoluene	165	9.292	9.292	(0.970)	76095	50.0000	50.0
79 Acenaphthylene	152	9.266	9.266	(0.967)	523999	50.0000	50.0
81 3-Nitroaniline	138	9.554	9.554	(0.997)	80287	50.0000	50.0
82 Acenaphthene	153	9.650	9.650	(1.007)	325107	50.0000	50.0
83 2,4-Dinitrophenol	184	9.763	9.763	(1.019)	33730	50.0000	50.0
85 4-Nitrophenol	109	9.982	9.982	(1.042)	57994	50.0000	50.0
86 Dibenzofuran	168	9.982	9.982	(1.042)	449358	50.0000	50.0
87 2,4-Dinitrotoluene	165	10.099	10.099	(1.054)	96708	50.0000	50.0
91 2,3,5,6-Tetrachlorophenol	232	10.265	10.265	(1.071)	82535	50.0000	50.0
88 2,3,4,6-Tetrachlorophenol	232	10.361	10.361	(1.081)	78887	50.0000	50.0
92 2-Naphthylamine	143	10.324	10.324	(1.078)	246507	50.0000	50.0
93 Diethylphthalate	149	10.692	10.692	(1.116)	345661	50.0000	50.0
94 Fluorene	166	10.724	10.724	(1.119)	358181	50.0000	50.0
95 4-Chlorophenyl-phenylether	204	10.767	10.767	(1.124)	173331	50.0000	50.0
96 4-Nitroaniline	138	10.884	10.884	(1.136)	71351	50.0000	50.0
98 4,6-Dinitro-2-methylphenol	198	10.981	10.981	(0.853)	45900	50.0000	50.0
99 N-Nitrosodiphenylamine	169	11.055	11.055	(0.859)	205887	50.0000	50.0
100 1,2-Diphenylhydrazine	77	11.114	11.114	(0.863)	444318	50.0000	50.0
106 4-Bromophenyl-phenylether	248	11.873	11.873	(0.922)	98884	50.0000	50.0
107 Hexachlorobenzene	284	12.172	12.172	(0.945)	105725	50.0000	50.0
111 Pentachlorophenol	266	12.615	12.615	(0.980)	39810	50.0000	50.0
115 Phenanthrene	178	12.930	12.930	(1.004)	457142	50.0000	50.0
116 Anthracene	178	13.037	13.037	(1.012)	456819	50.0000	50.0
119 Carbazole	167	13.481	13.481	(1.047)	370726	50.0000	50.0
120 Di-n-Butylphthalate	149	14.624	14.624	(1.136)	477192	50.0000	50.0
123 Fluoranthene	202	15.869	15.869	(1.232)	409523	50.0000	50.0
124 Benzdine	184	16.291	16.291	(0.835)	129322	50.0000	50.0
125 Pyrene	202	16.408	16.408	(0.841)	392687	50.0000	50.0
131 Butylbenzylphthalate	149	18.363	18.363	(0.941)	175778	50.0000	50.0
135 3,3'-Dichlorobenzidine	252	19.523	19.523	(1.001)	129835	50.0000	50.0
136 Benzo(a)Anthracene	228	19.469	19.469	(0.998)	335220	50.0000	50.0

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
-----	----	==	=====	=====	=====	=====	=====
137 Chrysene	228	19.576	19.576	(1.003)	314087	50.0000	50.0
139 bis(2-ethylhexyl)Phthalate	149	19.939	19.939	(1.022)	239869	50.0000	50.0
140 Di-n-octylphthalate	149	21.408	21.408	(0.936)	405593	50.0000	50.0
141 Benzo(b)fluoranthene	252	22.055	22.055	(0.964)	350240	50.0000	50.0
142 Benzo(k)fluoranthene	252	22.114	22.114	(0.967)	369992	50.0000	50.0
143 7,12-dimethylbenz(a)anthracen	256	22.114	22.114	(0.967)	160485	50.0000	50.0
146 Benzo(a)pyrene	252	22.749	22.749	(0.994)	324847	50.0000	50.0
149 Indeno(1,2,3-cd)pyrene	276	25.143	25.143	(1.099)	443805	50.0000	50.0
150 Dabenz(a,h)anthracene	278	25.191	25.191	(1.101)	381920	50.0000	50.0
151 Benzo(g,h,i)perylene	276	25.725	25.725	(1.124)	386455	50.0000	50.0
\$ 154 Nitrobenzene-d5	82	5.681	5.681	(0.866)	247064	50.0000	50.0
\$ 155 2-Fluorobiphenyl	172	8.293	8.293	(0.866)	394086	50.0000	50.0
\$ 156 Terphenyl-d14	244	16.948	16.948	(0.869)	329997	50.0000	50.0
\$ 157 Phenol-d5	99	4.714	4.714	(0.902)	264082	50.0000	50.0 (H)
\$ 158 2-Fluorophenol	112	3.694	3.694	(0.707)	183943	50.0000	50.0
\$ 159 2,4,6-Tribromophenol	330	11.317	11.317	(0.879)	47192	50.0000	50.0
\$ 186 2-Chlorophenol-d4	132	4.821	4.821	(0.922)	186304	50.0000	50.0
\$ 187 1,2-Dichlorobenzene-d4	152	5.227	5.227	(1.000)	139184	50.0000	50.0

QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: \\NPITPA02\chem\722.i\120300.b\F12030C7.D
 Date : 03-DEC-2000 11:40
 Client ID:
 Sample Info: SST080 (40ppb) 77-06-4
 Volume Injected (uL): 2.0
 Column phase: Hps-HS

\\NPITPA02\chem\722.i\120300.b\F12030C7.D

Instrument: 722.i
 Operator: 003200
 Column diameter: 0.25

Data File: \\gpitpa02\d\chem\722.i\120300.b\F12030C7.D
Report Date: 04-Dec-2000 06:28

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270
Data file : \\gpitpa02\d\chem\722.i\120300.b\F12030C7.D
Lab Smp Id: sstd080 Client Smp ID: SSTD080
Inj Date : 03-DEC-2000 11:40
Operator : 003200 Inst ID: 722.i
Smp Info : SSTD080 (40ppb) 77-06-4
Misc Info : sstd080,120300.b,8270b.m,2-root.sub,1,3
Comment :
Method : \\QPITPA02\D\chem\722.i\120300.b\8270b.m
Meth Date : 04-Dec-2000 06:28 BungardF Quant Type: ISTD
Cal Date : 03-DEC-2000 11:40 Cal File: F12030C7.D
Als bottle: 31 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC062

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT	ON-COL
-----	----	--	-----	-----	-----	(NG)	(NG)
* 1 1,4-Dichlorobenzene-d4	152	5.021	5.021	(1.000)	122115	40 0000	
* 2 Naphthalene-d8	136	6 565	6 565	(1.000)	431284	40 0000	
* 3 Acenaphthene-d10	164	9 589	9 589	(1.000)	216818	40 0000	
* 4 Phenanthrene-d10	188	12 885	12.885	(1.000)	333578	40 0000	
* 5 Chrysene-d12	240	19 525	19 525	(1.000)	344328	40.0000	
* 6 Perylene-d12	264	22 890	22 890	(1.000)	342759	40 0000	
10 N-Nitrosodimethylamine	74	1.981	1.981	(0.395)	164006	80 0000	81.0
9 Pyridine	79	1.965	1.965	(0.391)	300110	80 0000	88.0
16 Methyl methanesulfonate	80	3 525	3 525	(0.702)	204209	80 0000	123
21 Aniline	93	4 722	4 722	(0.940)	565355	80 0000	85.9
22 Phenol	94	4 733	4.733	(0.943)	462099	80 0000	80.4
23 bis(2-Chloroethyl)ether	93	4 797	4 797	(0.955)	333783	80 0000	79.8
24 2-Chlorophenol	128	4 839	4 839	(0.964)	323148	80.0000	80.7
26 1,3-Dichlorobenzene	146	4 984	4 984	(0.993)	377965	80.0000	82.4
27 1,4-Dichlorobenzene	146	5 037	5 037	(1.003)	385215	80 0000	81.7
28 1,2-Dichlorobenzene	146	5 245	5.245	(1.045)	353381	80 0000	80.8
29 Benzyl Alcohol	108	5 208	5.208	(1.037)	215523	80 0000	80.5
30 2-Methylphenol	108	5 368	5.368	(1.069)	281083	80 0000	78.3
31 2,2'-oxybis(1-Chloropropane)	45	5 379	5 379	(1.071)	464565	80 0000	79.7
32 N-Nitroso-di-n-propylamine	70	5 545	5 545	(1.104)	249436	80 0000	77.5
192 4-Methylphenol	108	5 529	5 529	(1.101)	289589	80 0000	78.4
34 Hexachloroethane	117	5 593	5 593	(1.114)	152912	80 0000	82.2
35 Nitrobenzene	77	5 710	5 710	(0.870)	397550	80.0000	81.3
41 Isophorone	82	5 988	5 988	(0.912)	597599	80 0000	79.8
42 2-Nitrophenol	139	6 089	6 089	(0.928)	167274	80 0000	80.9
43 2,4-Dimethylphenol	107	6 154	6 154	(0.937)	312415	80 0000	80.7

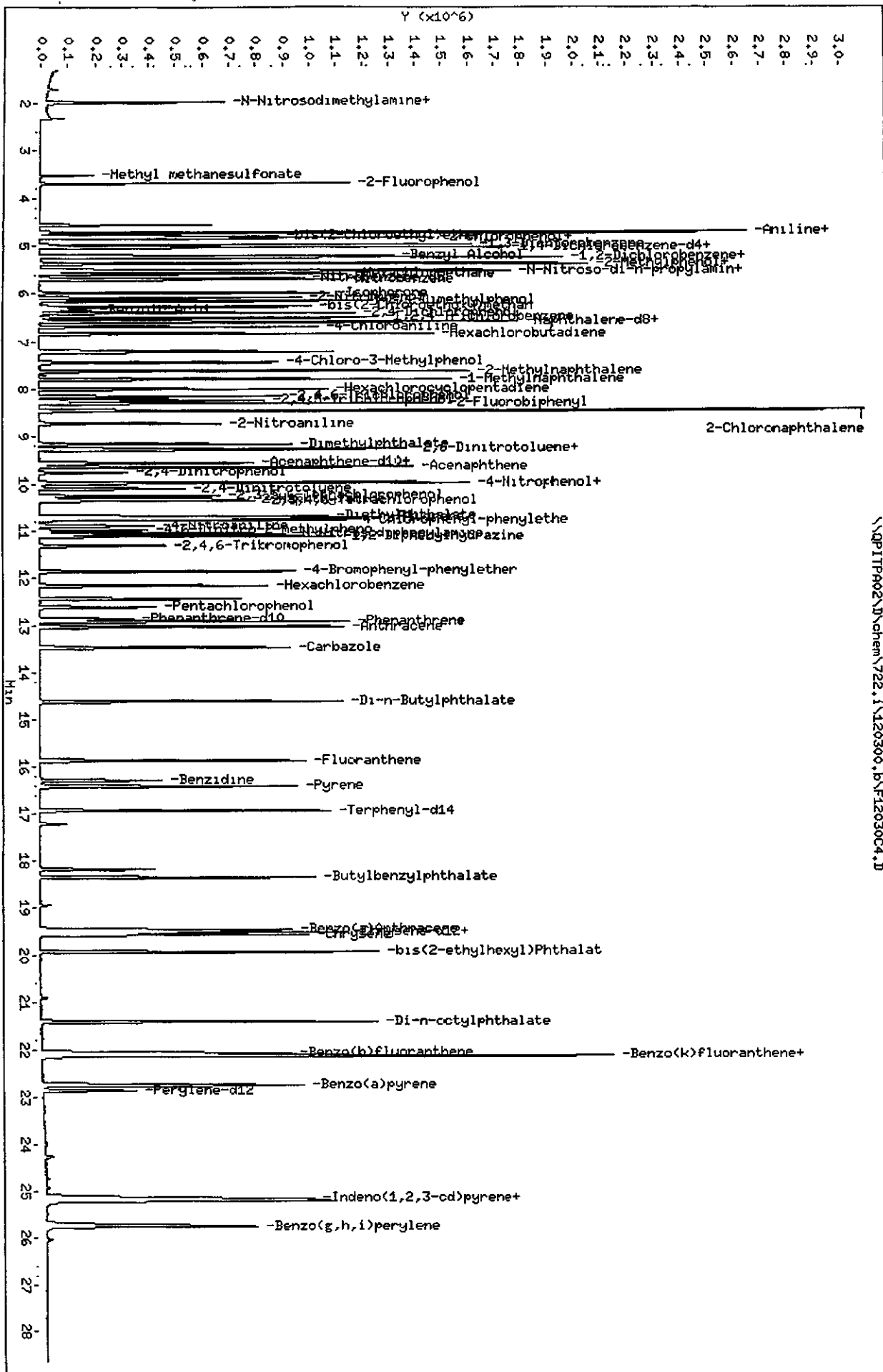
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
-----	----	==	-----	-----	-----	-----	-----
44 bis(2-Chloroethoxy)methane	93	6.276	6.276	(0.956)	366629	80.0000	80.6
48 2,4-Dichlorophenol	162	6.405	6.405	(0.976)	241881	80.0000	80.5
49 Benzoic Acid	122	6.341	6.341	(0.966)	109434	80.0000	90.8
50 1,2,4-Trichlorobenzene	180	6.506	6.506	(0.991)	273281	80.0000	81.0
51 Naphthalene	128	6.592	6.592	(1.004)	928333	80.0000	80.8
52 4-Chloroaniline	127	6.693	6.693	(1.020)	333612	80.0000	79.9
56 Hexachlorobutadiene	225	6.843	6.843	(1.042)	185285	80.0000	82.5
59 4-Chloro-3-Methylphenol	107	7.441	7.441	(1.133)	260208	80.0000	79.5
62 2-Methylnaphthalene	142	7.628	7.628	(1.162)	578563	80.0000	80.3
205 1-Methylnaphthalene	142	7.810	7.810	(1.190)	553735	80.0000	81.1
64 Hexachlorocyclopentadiene	237	8.013	8.013	(0.836)	208850	80.0000	87.0
66 2,4,6-Trichlorophenol	196	8.162	8.162	(0.851)	159277	80.0000	83.9
67 2,4,5-Trichlorophenol	196	8.248	8.248	(0.860)	159227	80.0000	81.2
70 2-Chloronaphthalene	162	8.472	8.472	(0.884)	549639	80.0000	83.0
73 2-Nitroaniline	65	8.734	8.734	(0.911)	191084	80.0000	82.8
76 Dimethylphthalate	163	9.177	9.177	(0.957)	547638	80.0000	81.9
78 2,6-Dinitrotoluene	165	9.300	9.300	(0.970)	122690	80.0000	82.7
79 Acenaphthylene	152	9.279	9.279	(0.968)	836675	80.0000	83.3
81 3-Nitroaniline	138	9.567	9.567	(0.998)	128931	80.0000	82.5
82 Acenaphthene	153	9.658	9.658	(1.007)	517879	80.0000	82.4
83 2,4-Dinitrophenol	184	9.776	9.776	(1.019)	61021	80.0000	89.1
85 4-Nitrophenol	109	9.989	9.989	(1.042)	100203	80.0000	84.9
86 Dibenzofuran	168	9.989	9.989	(1.042)	712933	80.0000	82.2
87 2,4-Dinitrotoluene	165	10.112	10.112	(1.055)	154323	80.0000	81.8
91 2,3,5,6-Tetrachlorophenol	232	10.272	10.272	(1.071)	124809	80.0000	81.0
88 2,3,4,6-Tetrachlorophenol	232	10.369	10.369	(1.081)	121291	80.0000	81.2
92 2-Naphthylamine	143	10.336	10.336	(1.078)	362934	80.0000	75.0
93 Diethylphthalate	149	10.705	10.705	(1.116)	558641	80.0000	81.7
94 Fluorene	166	10.737	10.737	(1.120)	576089	80.0000	82.2
95 4-Chlorophenyl-phenylether	204	10.775	10.775	(1.124)	275008	80.0000	82.0
96 4-Nitroaniline	138	10.903	10.903	(1.137)	117609	80.0000	82.1
98 4,6-Dinitro-2-methylphenol	198	11.004	11.004	(0.854)	81736	80.0000	87.2
99 N-Nitrosodiphenylamine	169	11.068	11.068	(0.859)	390638	80.0000	86.6
100 1,2-Diphenylhydrazine	77	11.127	11.127	(0.864)	718386	80.0000	83.2
106 4-Bromophenyl-phenylether	248	11.880	11.880	(0.922)	161234	80.0000	83.2
107 Hexachlorobenzene	284	12.185	12.185	(0.946)	173440	80.0000	82.5
111 Pentachlorophenol	266	12.628	12.628	(0.980)	67082	80.0000	84.8
115 Phenanthrene	178	12.943	12.943	(1.005)	738567	80.0000	82.3
116 Anthracene	178	13.050	13.050	(1.013)	752348	80.0000	82.9
119 Carbazole	167	13.488	13.488	(1.047)	630990	80.0000	83.5
120 Di-n-Butylphthalate	149	14.632	14.632	(1.136)	823556	80.0000	83.5
123 Fluoranthene	202	15.876	15.876	(1.232)	726842	80.0000	84.3
124 Benzdine	184	16.304	16.304	(0.835)	379505	80.0000	100
125 Pyrene	202	16.421	16.421	(0.841)	703609	80.0000	75.7
131 Butylbenzylphthalate	149	18.371	18.371	(0.941)	352322	80.0000	80.6
135 3,3'-Dichlorobenzidine	252	19.536	19.536	(1.001)	296088	80.0000	89.7
136 Benzo(a)Anthracene	228	19.482	19.482	(0.998)	714553	80.0000	83.0

Data File: \\gpitpa02\d\chem\722.i\120300.b\F12030C7.D
Report Date: 04-Dec-2000 06:28

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
-----	----	--	-----	-----	-----	-----	-----
137 Chrysene	228	19 589	19 589	(1.003)	656892	80 0000	82 1
139 bis(2-ethylhexyl)Phthalate	149	19 952	19.952	(1.022)	486091	80 0000	81.8
140 Di-n-octylphthalate	149	21 427	21 427	(0.936)	879126	80 0000	79 4
141 Benzo(b)fluoranthene	252	22 078	22.078	(0.965)	813397	80 0000	79 0 (H)
142 Benzo(k)fluoranthene	252	22.137	22.137	(0.967)	952247	80 0000	85 2
143 7,12-dimethylbenz[a]anthracen	256	22 137	22.137	(0.967)	412179	80.0000	83.8
146 Benzo(a)pyrene	252	22.773	22.773	(0.995)	795128	80 0000	83 0
149 Indeno(1,2,3-cd)pyrene	276	25 172	25 172	(1.100)	1139222	80.0000	85 1
150 Dibenz(a,h)anthracene	278	25 220	25.220	(1.102)	964291	80.0000	84 4
151 Benzo(g,h,i)perylene	276	25.765	25.765	(1.126)	951217	80 0000	83 5
\$ 154 Nitrobenzene-d5	82	5.689	5.689	(0.867)	408566	80 0000	83 5
\$ 155 2-Fluorobiphenyl	172	8.306	8 306	(0.866)	640774	80.0000	85.1
\$ 156 Terphenyl-d14	244	16.955	16 955	(0.868)	622913	80.0000	77.7
\$ 157 Phenol-d5	99	4.722	4.722	(0.940)	426970	80 0000	81 1
\$ 158 2-Fluorophenol	112	3 696	3.696	(0.736)	295109	80 0000	82 1
\$ 159 2,4,6-Tribromophenol	330	11 330	11 330	(0.879)	72322	80.0000	82.8
\$ 186 2-Chlorophenol-d4	132	4 823	4 823	(0.961)	303497	80 0000	82 0
\$ 187 1,2-Dichlorobenzene-d4	152	5 235	5 235	(1.043)	239787	80 0000	83 1

QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: \NPITPA02\Nchem\722.1\120300.b\F12030C4.D
 Date: 03-DEC-2000 09:56
 Client ID:
 Sample Info: STD120 (60ppb) 77-06-5
 Volume Injected (uL): 2.0
 Column phase: HP5-MS

Instrument: 722.1
 Operator: 003200
 Column diameter: 0.25

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270
Data file : \\qpitpa02\d\chem\722.i\120300.b\F12030C4.D
Lab Smp Id: sstd120 Client Smp ID: SSTD160
Inj Date : 03-DEC-2000 09:56
Operator : 003200 Inst ID: 722.i
Smp Info : SSTD120 (60ppb) 77-06-5
Misc Info : sstd120,120300.b,8270b.m,2-root.sub,1,4
Comment :
Method : \\QPITPA02\D\chem\722.i\120300.b\8270b.m
Meth Date : 03-Dec-2000 10:30 BungardF Quant Type: ISTD
Cal Date : 03-DEC-2000 09:56 Cal File: F12030C4.D
Als bottle: 32 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC062

12/3/00

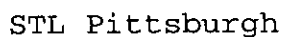
Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
* 1 1,4-Dichlorobenzene-d4	152	5 013	5 013	(1.000)	93928	40 0000	
* 2 Naphthalene-d8	136	6.551	6 551	(1.000)	339418	40.0000	
* 3 Acenaphthene-d10	164	9 570	9 570	(1.000)	182024	40 0000	
* 4 Phenanthrene-d10	188	12.866	12.866	(1.000)	286527	40 0000	
* 5 Chrysene-d12	240	19 501	19 501	(1.000)	303410	40.0000	
* 6 Perylene-d12	264	22.861	22 861	(1.000)	292680	40 0000	
10 N-Nitrosodimethylamine	74	1.978	1 978	(0.395)	175898	120.000	116
9 Pyridine	79	1.962	1.962	(0.392)	287139	120.000	114
16 Methyl methanesulfonate	80	3.517	3.517	(0.702)	88052	120.000	110
21 Aniline	93	4 714	4 714	(0.940)	560953	120 000	115
22 Phenol	94	4 730	4 730	(0.944)	507054	120 000	116
23 bis(2-Chloroethyl)ether	93	4 788	4.788	(0.955)	366643	120 000	114
24 2-Chlorophenol	128	4 831	4.831	(0.964)	352199	120 000	116
26 1,3-Dichlorobenzene	146	4 975	4 975	(0.993)	405652	120.000	118
27 1,4-Dichlorobenzene	146	5.029	5 029	(1.003)	416121	120.000	117
28 1,2-Dichlorobenzene	146	5 237	5 237	(1.045)	389216	120 000	118
29 Benzyl Alcohol	108	5 200	5 200	(1.037)	236551	120 000	117
30 2-Methylphenol	108	5 360	5 360	(1.069)	316367	120.000	115
31 2,2'-oxybis(1-Chloropropane)	45	5 371	5 371	(1.071)	504642	120 000	111
32 N-Nitroso-di-n-propylamine	70	5 536	5 536	(1.104)	283193	120.000	114
192 4-Methylphenol	108	5.520	5 520	(1.101)	323696	120.000	113
34 Hexachloroethane	117	5.584	5 584	(1.114)	164859	120 000	117
35 Nitrobenzene	77	5 702	5 702	(0.870)	446256	120.000	118
41 Isophorone	82	5 974	5.974	(0.912)	680778	120.000	117
42 2-Nitrophenol	139	6.081	6 081	(0.928)	187595	120 000	119
43 2,4-Dimethylphenol	107	6.145	6.145	(0.938)	358049	120 000	118

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	----	--	-----	-----	-----	-----	-----
44 bis(2-Chloroethoxy)methane	93	6.263	6.263	(0.956)	413877	120.000	117
48 2,4-Dichlorophenol	162	6.391	6.391	(0.976)	271431	120.000	118
49 Benzoic Acid	122	6.338	6.338	(0.967)	125387	120.000	141
50 1,2,4-Trichlorobenzene	180	6.498	6.498	(0.992)	307838	120.000	120
51 Naphthalene	128	6.578	6.578	(1.004)	1048825	120.000	118
52 4-Chloroaniline	127	6.685	6.685	(1.020)	377686	120.000	117
56 Hexachlorobutadiene	225	6.834	6.834	(1.043)	208614	120.000	124
59 4-Chloro-3-Methylphenol	107	7.427	7.427	(1.134)	300564	120.000	119
62 2-Methylnaphthalene	142	7.614	7.614	(1.162)	652805	120.000	118
205 1-Methylnaphthalene	142	7.791	7.791	(1.189)	621838	120.000	116
64 Hexachlorocyclopentadiene	237	7.999	7.999	(0.836)	239060	120.000	130
66 2,4,6-Trichlorophenol	196	8.149	8.149	(0.852)	181185	120.000	119
67 2,4,5-Trichlorophenol	196	8.234	8.234	(0.860)	186704	120.000	119
70 2-Chloronaphthalene	162	8.458	8.458	(0.884)	641749	120.000	122
73 2-Nitroaniline	65	8.720	8.720	(0.911)	221922	120.000	120
76 Dimethylphthalate	163	9.164	9.164	(0.958)	642780	120.000	118
78 2,6-Dinitrotoluene	165	9.287	9.287	(0.970)	143059	120.000	121
79 Acenaphthylene	152	9.260	9.260	(0.968)	955845	120.000	118
81 3-Nitroaniline	138	9.554	9.554	(0.998)	152316	120.000	120
82 Acenaphthene	153	9.639	9.639	(1.007)	605698	120.000	118
83 2,4-Dinitrophenol	184	9.762	9.762	(1.020)	73526	120.000	152
85 4-Nitrophenol	109	9.976	9.976	(1.042)	118988	120.000	130
86 Dibenzofuran	168	9.976	9.976	(1.042)	833249	120.000	118
87 2,4-Dinitrotoluene	165	10.099	10.099	(1.055)	185272	120.000	121
91 2,3,5,6-Tetrachlorophenol	232	10.253	10.253	(1.071)	151692	120.000	121
88 2,3,4,6-Tetrachlorophenol	232	10.355	10.355	(1.082)	146858	120.000	119
92 2-Naphthylamine	143	10.323	10.323	(1.079)	480418	120.000	115
93 Diethylphthalate	149	10.692	10.692	(1.117)	667324	120.000	121
94 Fluorene	166	10.724	10.724	(1.121)	676420	120.000	119
95 4-Chlorophenyl-phenylether	204	10.761	10.761	(1.124)	323450	120.000	119
96 4-Nitroaniline	138	10.889	10.889	(1.138)	141918	120.000	124
98 4,6-Dinitro-2-methylphenol	198	10.985	10.985	(0.854)	98647	120.000	139
99 N-Nitrosodiphenylamine	169	11.055	11.055	(0.859)	431305	120.000	129
100 1,2-Diphenylhydrazine	77	11.114	11.114	(0.864)	849321	120.000	118
106 4-Bromophenyl-phenylether	248	11.861	11.861	(0.922)	191921	120.000	120
107 Hexachlorobenzene	284	12.166	12.166	(0.946)	210647	120.000	122
111 Pentachlorophenol	266	12.609	12.609	(0.980)	87705	120.000	156
115 Phenanthrene	178	12.925	12.925	(1.005)	891437	120.000	120
116 Anthracene	178	13.031	13.031	(1.013)	901314	120.000	120
119 Carbazole	167	13.475	13.475	(1.047)	769214	120.000	124
120 Di-n-Butylphthalate	149	14.613	14.613	(1.136)	1021637	120.000	128
123 Fluoranthene	202	15.863	15.863	(1.233)	899620	120.000	129
124 Benzidine	184	16.285	16.285	(0.835)	355163	120.000	111
125 Pyrene	202	16.402	16.402	(0.841)	867395	120.000	104
131 Butylbenzylphthalate	149	18.352	18.352	(0.941)	432739	120.000	114
135 3,3'-Dichlorobenzidine	252	19.511	19.511	(1.001)	332143	120.000	118
136 Benzo(a)Anthracene	228	19.463	19.463	(0.998)	868728	120.000	118

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
*****	====	==	=====	=====	=====	=====	=====
137 Chrysene	228	19.565	19 565	(1 003)	797549	120 000	116
139 bis(2-ethylhexyl) Phthalate	149	19.928	19.928	(1 022)	598225	120 000	117
140 Di-n-octylphthalate	149	21.402	21 402	(0.936)	1076274	120 000	114
141 Benzo(b)fluoranthene	252	22 054	22 054	(0.965)	1016214	120.000	122
142 Benzo(k)fluoranthene	252	22 113	22.113	(0 967)	1116306	120 000	120
143 7,12-dimethylbenz[a]anthracen	256	22.118	22.118	(0 968)	507725	120 000	123
146 Benzo(a)pyrene	252	22.749	22 749	(0.995)	956372	120 000	122
149 Indeno(1,2,3-cd)pyrene	276	25 142	25 142	(1.100)	1336089	120 000	127
150 Dibenz(a,h)anthracene	278	25 185	25.185	(1 102)	1146768	120.000	127
151 Benzo(g,h,i)perylene	276	25.740	25.740	(1.126)	1117478	120 000	125
\$ 154 Nitrobenzene-d5	82	5 675	5.675	(0 866)	438905	120 000	119
\$ 155 2-Fluorobiphenyl	172	8.288	8.288	(0.866)	707080	120.000	119
\$ 156 Terphenyl-d14	244	16.936	16 936	(0.869)	755096	120 000	108
\$ 157 Phenol-d5	99	4.714	4.714	(0 940)	468174	120 000	116
\$ 158 2-Fluorophenol	112	3 688	3 688	(0.736)	316862	120 000	116
\$ 159 2,4,6-Tribromophenol	330	11 311	11 311	(0.879)	88201	120 000	120
\$ 186 2-Chlorophenol-d4	132	4 815	4 815	(0.961)	324737	120 000	114
\$ 187 1,2-Dichlorobenzene-d4	152	5.227	5 227	(1 043)	252334	120 000	120

Instrument: 722.1
Operator: 003200
Column diameter: 0.25

2051



Data File: \\qpitpa02\d\chem\722.i\120300.b\F12030C5.D
Report Date: 03-Dec-2000 11:03

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\qpitpa02\d\chem\722.i\120300.b\F12030C5.D
Lab Smp Id: sstd160 Client Smp ID: SSTD160
Inj Date : 03-DEC-2000 10:31
Operator : 003200 Inst ID: 722.i
Smp Info : SSTD160 (60ppb) 77-06-6
Misc Info : sstd160,120300.b,8270b.m,2-root.sub,1,5
Comment :
Method : \\QPITPA02\D\chem\722.i\120300.b\8270b.m
Meth Date : 03-Dec-2000 11:03 BungardF Quant Type: ISTD
Cal Date : 03-DEC-2000 10:31 Cal File: F12030C5.D
Als bottle: 33 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]
11/3/00

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
*****	----	--	-----	-----	-----	-----	-----
* 1 1,4-Dichlorobenzene-d4	152	5.011	5.011	(1.000)	87578	40.0000	
* 2 Naphthalene-d8	136	6.550	6.550	(1.000)	317940	40.0000	
* 3 Acenaphthene-d10	164	9.573	9.573	(1.000)	170427	40.0000	
* 4 Phenanthrene-d10	188	12.869	12.869	(1.000)	273023	40.0000	
* 5 Chrysene-d12	240	19.504	19.504	(1.000)	306956	40.0000	
* 6 Perylene-d12	264	22.864	22.864	(1.000)	294964	40.0000	
10 N-Nitrosodimethylamine	74	1.987	1.987	(0.397)	230563	160.000	162 (A)
9 Pyridine	79	1.966	1.966	(0.392)	373671	160.000	159
16 Methyl methanesulfonate	80	3.515	3.515	(0.702)	114812	160.000	155
21 Aniline	93	4.717	4.717	(0.941)	726383	160.000	160 (A)
22 Phenol	94	4.728	4.728	(0.944)	657193	160.000	161 (A)
23 bis (2-Chloroethyl) ether	93	4.792	4.792	(0.956)	481014	160.000	160 (A)
24 2-Chlorophenol	128	4.835	4.835	(0.965)	462529	160.000	163 (A)
26 1,3-Dichlorobenzene	146	4.974	4.974	(0.993)	534434	160.000	165 (A)
27 1,4-Dichlorobenzene	146	5.032	5.032	(1.004)	551197	160.000	165 (A)
28 1,2-Dichlorobenzene	146	5.241	5.241	(1.046)	518584	160.000	167 (A)
29 Benzyl Alcohol	108	5.203	5.203	(1.038)	311637	160.000	164 (A)
30 2-Methylphenol	108	5.364	5.364	(1.070)	415335	160.000	161 (A)
31 2,2'-oxybis (1-Chloropropane)	45	5.369	5.369	(1.071)	627049	160.000	150
32 N-Nitroso-di-n-propylamine	70	5.545	5.545	(1.107)	370782	160.000	160
192 4-Methylphenol	108	5.524	5.524	(1.102)	423094	160.000	158
34 Hexachloroethane	117	5.583	5.583	(1.114)	214101	160.000	162 (A)
35 Nitrobenzene	77	5.700	5.700	(0.870)	569701	160.000	161 (A)
41 Isophorone	82	5.978	5.978	(0.913)	879025	160.000	161 (A)
42 2-Nitrophenol	139	6.085	6.085	(0.929)	245967	160.000	165 (A)
43 2,4-Dimethylphenol	107	6.144	6.144	(0.938)	466827	160.000	163 (A)

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	----	---	-----	-----	-----	-----	-----
44 bis(2-Chloroethoxy)methane	93	6.266	6.266	(0.957)	532867	160.000	161 (A)
48 2,4-Dichlorophenol	162	6.395	6.395	(0.976)	358954	160.000	165 (A)
49 Benzoic Acid	122	6.357	6.357	(0.971)	164937	160.000	189 (A)
50 1,2,4-Trichlorobenzene	180	6.496	6.496	(0.992)	403740	160.000	166 (A)
51 Naphthalene	128	6.582	6.582	(1.005)	1355910	160.000	162 (A)
52 4-Chloroaniline	127	6.683	6.683	(1.020)	487647	160.000	160 (A)
56 Hexachlorobutadiene	225	6.833	6.833	(1.043)	279110	160.000	174 (A)
59 4-Chloro-3-Methylphenol	107	7.431	7.431	(1.135)	391009	160.000	164 (A)
62 2-Methylnaphthalene	142	7.613	7.613	(1.162)	861439	160.000	164 (A)
205 1-Methylnaphthalene	142	7.794	7.794	(1.190)	809791	160.000	161 (A)
64 Hexachlorocyclopentadiene	237	7.997	7.997	(0.835)	321830	160.000	181 (A)
66 2,4,6-Trichlorophenol	196	8.152	8.152	(0.852)	240572	160.000	167 (A)
67 2,4,5-Trichlorophenol	196	8.232	8.232	(0.860)	252367	160.000	169 (A)
70 2-Chloronaphthalene	162	8.457	8.457	(0.883)	865410	160.000	172 (A)
73 2-Nitroaniline	65	8.724	8.724	(0.911)	296149	160.000	168 (A)
76 Dimethylphthalate	163	9.167	9.167	(0.958)	848219	160.000	165 (A)
78 2,6-Dinitrotoluene	165	9.290	9.290	(0.970)	190204	160.000	169 (A)
79 Acenaphthylene	152	9.258	9.258	(0.967)	1251962	160.000	164 (A)
81 3-Nitroaniline	138	9.557	9.557	(0.998)	201843	160.000	168 (A)
82 Acenaphthene	153	9.643	9.643	(1.007)	795547	160.000	165 (A)
83 2,4-Dinitrophenol	184	9.766	9.766	(1.020)	103645	160.000	210 (A)
85 4-Nitrophenol	109	9.985	9.985	(1.043)	163132	160.000	183 (A)
86 Dibenzofuran	168	9.974	9.974	(1.042)	1108549	160.000	166 (A)
87 2,4-Dinitrotoluene	165	10.102	10.102	(1.055)	244799	160.000	169 (A)
91 2,3,5,6-Tetrachlorophenol	232	10.257	10.257	(1.071)	206712	160.000	173 (A)
88 2,3,4,6-Tetrachlorophenol	232	10.359	10.359	(1.082)	196869	160.000	169 (A)
92 2-Naphthylamine	143	10.327	10.327	(1.079)	621622	160.000	159
93 Diethylphthalate	149	10.695	10.695	(1.117)	887433	160.000	169 (A)
94 Fluorene	166	10.727	10.727	(1.121)	903690	160.000	168 (A)
95 4-Chlorophenyl-phenylether	204	10.759	10.759	(1.124)	427791	160.000	166 (A)
96 4-Nitroaniline	138	10.903	10.903	(1.139)	189296	160.000	173 (A)
98 4,6-Dinitro-2-methylphenol	198	10.994	10.994	(0.854)	138077	160.000	193 (A)
99 N-Nitrosodiphenylamine	169	11.058	11.058	(0.859)	585022	160.000	178 (A)
100 1,2-Diphenylhydrazine	77	11.112	11.112	(0.863)	1098261	160.000	160 (A)
106 4-Bromophenyl-phenylether	248	11.865	11.865	(0.922)	256389	160.000	166 (A)
107 Hexachlorobenzene	284	12.164	12.164	(0.945)	281498	160.000	169 (A)
111 Pentachlorophenol	266	12.613	12.613	(0.980)	129768	160.000	220 (A)
115 Phenanthrene	178	12.928	12.928	(1.005)	1183249	160.000	165 (A)
116 Anthracene	178	13.035	13.035	(1.013)	1206471	160.000	167 (A)
119 Carbazole	167	13.478	13.478	(1.047)	1025028	160.000	171 (A)
120 Di-n-Butylphthalate	149	14.616	14.616	(1.136)	1361569	160.000	175 (A)
123 Fluoranthene	202	15.866	15.866	(1.233)	1217516	160.000	178 (A)
124 Benzidine	184	16.283	16.283	(0.835)	487295	160.000	152
125 Pyrene	202	16.406	16.406	(0.841)	1173732	160.000	142
131 Butylbenzylphthalate	149	18.356	18.356	(0.941)	595913	160.000	157
135 3,3'-Dichlorobenzidine	252	19.515	19.515	(1.001)	457815	160.000	161 (A)
136 Benzo(a)Anthracene	228	19.467	19.467	(0.998)	1212263	160.000	162 (A)

Data File: \\gpitpa02\d\chem\722.i\120300.b\F12030C5.D
 Report Date: 03-Dec-2000 11:03

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
137 Chrysene	228	19 574	19.574	(1.004)	1109334	160.000	159
139 bis(2-ethylhexyl)Phthalate	149	19 932	19.932	(1.022)	821606	160.000	159
140 Di-n-octylphthalate	149	21 406	21.406	(0.936)	1512309	160.000	159
141 Benzo(b)fluoranthene	252	22 074	22.074	(0.965)	1521442	160.000	177 (A)
142 Benzo(k)fluoranthene	252	22.133	22.133	(0.968)	1575146	160.000	166 (A)
143 7,12-dimethylbenz(a)anthracen	256	22 127	22.127	(0.968)	754626	160.000	177 (A)
146 Benzo(a)pyrene	252	22 763	22.763	(0.996)	1369278	160.000	171 (A)
149 Indeno(1,2,3-cd)pyrene	276	25 156	25.156	(1.100)	1940876	160.000	178 (A)
150 Dibenz(a,h)anthracene	278	25 210	25.210	(1.103)	1673288	160.000	179 (A)
151 Benzo(g,h,i)perylene	276	25 755	25.755	(1.126)	1628258	160.000	176 (A)
\$ 154 Nitrobenzene-d5	82	5 679	5.679	(0.867)	571109	160.000	165 (A)
\$ 155 2-Fluorobiphenyl	172	8 291	8.291	(0.866)	935788	160.000	167 (A)
\$ 156 Terphenyl-d14	244	16 940	16.940	(0.869)	1029068	160.000	148
\$ 157 Phenol-d5	99	4 717	4.717	(0.941)	607078	160.000	161 (A)
\$ 158 2-Fluorophenol	112	3 686	3.686	(0.736)	416228	160.000	163 (A)
\$ 159 2,4,6-Tribromophenol	330	11 309	11.309	(0.879)	117745	160.000	166 (A)
\$ 186 2-Chlorophenol-d4	132	4.819	4.819	(0.962)	425395	160.000	161 (A)
\$ 187 1,2-Dichlorobenzene-d4	152	5 225	5.225	(1.043)	340998	160.000	171 (A)

QC Flag Legend

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

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

CON22253

Instrument ID: 722

Calibration Date: 12/05/00 Time: 0948

Lab File ID: F12050C1

Init. Calib. Date(s): 12/03/00 12/03/00

Init. Calib. Times: 0812 1140

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

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.882	1.718	0.01	8.7	20.0
bis(2-Chloroethyl) ether	1.371	1.282	0.01	6.5	50.0
2-Chlorophenol	1.312	1.200	0.01	8.5	50.0
1,3-Dichlorobenzene	1.503	1.385	0.01	7.8	50.0
1,4-Dichlorobenzene	1.544	1.430	0.01	7.4	20.0
1,2-Dichlorobenzene	1.433	1.308	0.01	8.7	50.0
2-Methylphenol	1.176	1.089	0.01	7.4	50.0
2,2'-oxybis(1-Chloropropane)	1.909	1.859	0.01	2.6	50.0
4-Methylphenol	1.209	1.126	0.01	6.9	50.0
Hexachloroethane	0.609	0.583	0.01	4.3	50.0
Nitrobenzene	0.454	0.425	0.01	6.4	50.0
Isophorone	0.694	0.635	0.01	8.5	50.0
2-Nitrophenol	0.191	0.174	0.01	8.9	20.0
2,4-Dimethylphenol	0.359	0.336	0.01	6.4	50.0
bis(2-Chloroethoxy)methane	0.422	0.389	0.01	7.8	50.0
N-Nitroso-di-n-propylamine	1.054	0.975	0.05	7.5	50.0
2,4-Dichlorophenol	0.278	0.251	0.01	9.7	20.0
1,2,4-Trichlorobenzene	0.313	0.286	0.01	8.6	50.0
Naphthalene	1.066	0.996	0.01	6.6	50.0
4-Chloroaniline	0.387	0.348	0.01	10.1	50.0
Hexachlorobutadiene	0.208	0.188	0.01	9.6	20.0
4-Chloro-3-Methylphenol	0.303	0.270	0.01	10.9	20.0
2-Methylnaphthalene	0.668	0.610	0.01	8.7	50.0
Hexachlorocyclopentadiene	0.443	0.370	0.05	16.5	50.0
2,4,6-Trichlorophenol	0.350	0.316	0.01	9.7	20.0
2,4,5-Trichlorophenol	0.362	0.324	0.01	10.5	50.0
2-Chloronaphthalene	1.222	1.085	0.01	11.2	50.0
2-Nitroaniline	0.426	0.383	0.01	10.1	50.0
Dimethylphthalate	1.234	1.138	0.01	7.8	50.0
Acenaphthylene	1.852	1.697	0.01	8.4	50.0
2,6-Dinitrotoluene	0.274	0.241	0.01	12.0	50.0
3-Nitroaniline	0.288	0.256	0.01	11.1	50.0
Acenaphthene	1.159	1.064	0.01	8.2	20.0
2,4-Dinitrophenol	0.127	0.097	0.05	23.6	50.0
4-Nitrophenol	0.218	0.196	0.05	10.1	50.0
Dibenzofuran	1.601	1.457	0.01	9.0	50.0
2,4-Dinitrotoluene	0.348	0.313	0.01	10.0	50.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

675 237

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

CON 2253

Instrument ID: 722

Calibration Date: 12/05/00 Time: 0948

Lab File ID: F12050C1

Init. Calib. Date(s): 12/03/00 12/03/00

Init. Calib. Times: 0812 1140

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

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.261	1.201	0.01	4.8	50.0
4-Chlorophenyl-phenylether	0.619	0.553	0.01	10.7	50.0
Fluorene	1.293	1.169	0.01	9.6	50.0
4-Nitroaniline	0.264	0.238	0.01	9.8	50.0
4,6-Dinitro-2-methylphenol	0.112	0.092	0.01	17.8	50.0
N-Nitrosodiphenylamine	0.541	0.459	0.01	15.2	20.0
4-Bromophenyl-phenylether	0.232	0.202	0.01	12.9	50.0
Hexachlorobenzene	0.252	0.221	0.01	12.3	50.0
Pentachlorophenol	0.095	0.094	0.05	1.0	20.0
Phenanthrene	1.076	0.985	0.01	8.4	50.0
Anthracene	1.088	0.991	0.01	8.9	50.0
Carbazole	0.906	0.846	0.01	6.6	50.0
Di-n-Butylphthalate	1.183	1.120	0.01	5.3	50.0
Fluoranthene	1.033	0.990	0.01	4.2	20.0
Pyrene	1.080	0.917	0.01	15.1	50.0
Butylbenzylphthalate	0.508	0.460	0.01	9.4	50.0
3,3'-Dichlorobenzidine	0.383	0.358	0.01	6.5	50.0
Benzo(a)Anthracene	1.000	0.916	0.01	8.4	50.0
Chrysene	0.930	0.860	0.01	7.5	50.0
bis(2-ethylhexyl) Phthalate	0.691	0.634	0.01	8.2	50.0
Di-n-octylphthalate	1.292	1.092	0.01	15.5	20.0
Benzo(b)fluoranthene	1.201	1.068	0.01	11.1	50.0
Benzo(k)fluoranthene	1.304	1.099	0.01	15.7	50.0
Benzo(a)pyrene	1.118	0.988	0.01	11.6	20.0
Indeno(1,2,3-cd)pyrene	1.562	1.489	0.01	4.7	50.0
Dibenz(a,h)anthracene	1.333	1.258	0.01	5.6	50.0
Benzo(g,h,i)perylene	1.330	1.306	0.01	1.8	50.0
Pyridine	1.118	0.972	0.01	13.0	50.0
N-Nitrosodimethylamine	0.663	0.593	0.01	10.6	50.0
Aniline	2.157	1.834	0.01	15.0	50.0
Benzyl Alcohol	0.877	0.753	0.01	14.1	50.0
Benzoic Acid	0.112	0.119	0.01	6.2	50.0
2,3,4,6-Tetrachlorophenol	0.276	0.249	0.01	9.8	50.0
2,3,5,6-Tetrachlorophenol	0.284	0.252	0.01	11.3	50.0
1,2-Diphenylhydrazine	1.035	0.965	0.01	6.8	50.0
Benzidine	0.440	0.342	0.01	22.3	50.0
Methyl methanesulfonate	0.544	0.284	0.01	47.8	50.0

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FORM 7

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

cd22053

Instrument ID: 722

Calibration Date: 12/05/00 Time: 0948

Lab File ID: F12050C1

Init. Calib. Date(s): 12/03/00 12/03/00

Init. Calib. Times: 0812 1140

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

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
2-Naphthylamine	0.893	0.867	0.01	2.9	50.0
7,12-dimethylbenz[a]anthracene	0.574	0.491	0.01	14.4	50.0
1-Methylnaphthalene	0.633	0.568	0.01	10.3	50.0
Nitrobenzene-d5	0.454	0.424	0.01	6.6	50.0
2-Fluorobiphenyl	1.389	1.273	0.01	8.4	50.0
Terphenyl-d14	0.931	0.800	0.01	14.1	50.0
Phenol-d5	1.725	1.536	0.01	11.0	50.0
2-Fluorophenol	1.177	1.065	0.01	9.5	50.0
2,4,6-Tribromophenol	0.105	0.089	0.01	15.2	50.0
2-Chlorophenol-d4	1.212	1.100	0.01	9.2	50.0
1,2-Dichlorobenzene-d4	0.945	0.860	0.01	9.0	50.0

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CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 722.i
Lab File ID: F12050C1.D
Analysis Type: NONE

Injection Date: 05-DEC-2000 09:48
Lab Sample ID: sstd050
Method File: \\QPITPA02\D\chem\722.i\120500.b\

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
66 Pyridine	50.0000	43.4745	13.1	50.0
67 N-Nitrosodimethylamine	50.0000	44.7577	10.5	50.0
87 Methyl methanesulfonate	50.0000	26.1544	47.7	50.0
185 2-Fluorophenol	50.0000	45.2334	9.5	50.0
68 Aniline	50.0000	42.5331	14.9	50.0
184 Phenol-d5	50.0000	44.5183	11.0	50.0
1 Phenol	50.0000	45.6331	8.7	20.0
2 bis(2-Chloroethyl)ether	50.0000	46.7591	6.5	50.0
187 2-Chlorophenol-d4	50.0000	45.3365	9.3	50.0
3 2-Chlorophenol	50.0000	45.7614	8.5	50.0
4 1,3-Dichlorobenzene	50.0000	46.0655	7.9	50.0
11 1,4-Dichlorobenzene-d4	40.0000	40.0000	0.0	50.0
5 1,4-Dichlorobenzene	50.0000	46.3083	7.4	20.0
69 Benzyl Alcohol	50.0000	42.9531	14.1	50.0
188 1,2-Dichlorobenzene-d4	50.0000	45.5174	9.0	50.0
6 1,2-Dichlorobenzene	50.0000	45.6410	8.7	50.0
7 2-Methylphenol	50.0000	46.3272	7.3	50.0
8 2,2'-oxybis(1-Chloropropane)	50.0000	48.6926	2.6	50.0
9 4-Methylphenol	50.0000	46.5365	6.9	50.0
18 N-Nitroso-di-n-propylamine	50.0000	46.2338	7.5	50.0
12 Hexachloroethane	50.0000	47.8138	4.4	50.0
181 Nitrobenzene-d5	50.0000	46.7773	6.4	50.0
13 Nitrobenzene	50.0000	46.8353	6.3	50.0
14 Isophorone	50.0000	45.7686	8.5	50.0
15 2-Nitrophenol	50.0000	45.5300	8.9	20.0
16 2,4-Dimethylphenol	50.0000	46.7861	6.4	50.0
17 bis(2-Chloroethoxy)methane	50.0000	46.1432	7.7	50.0
71 Benzoic Acid	50.0000	53.1976	6.4	50.0
18 2,4-Dichlorophenol	50.0000	44.9977	10.0	20.0
19 1,2,4-Trichlorobenzene	50.0000	45.7191	8.6	50.0
32 Naphthalene-d8	40.0000	40.0000	0.0	50.0
20 Naphthalene	50.0000	46.7374	6.5	50.0
21 4-Chloroaniline	50.0000	44.9847	10.0	50.0
22 Hexachlorobutadiene	50.0000	45.2115	9.6	20.0
23 4-Chloro-3-Methylphenol	50.0000	44.4892	11.0	20.0
24 2-Methylnaphthalene	50.0000	45.6657	8.7	50.0
205 1-Methylnaphthalene	50.0000	44.8668	10.3	50.0
25 Hexachlorocyclopentadiene	50.0000	41.7753	16.4	50.0
26 2,4,6-Trichlorophenol	50.0000	45.1008	9.8	20.0

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Data File: \\QPITPA02\d\chem\722.i\120500.b\F12050C1.D
 Report Date: 12/05/2000

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: 722.i
 Lab File ID: F12050C1.D
 Analysis Type: NONE

Injection Date: 05-DEC-2000 09:48
 Lab Sample ID: sstd050
 Method File: \\QPITPA02\D\chem\722.i\120500.b\

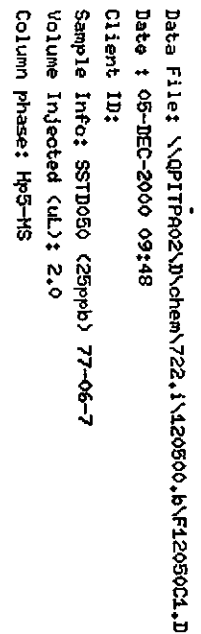
COMPOUND	EXPECTED CONC	MEASURED CONC.	%D	MAX %D
27 2,4,5-Trichlorophenol	50.0000	44.7243	10.6	50.0
182 2-Fluorobiphenyl	50.0000	45.8578	8.3	50.0
28 2-Chloronaphthalene	50.0000	44.3939	11.2	50.0
29 2-Nitroaniline	50.0000	45.0329	9.9	50.0
30 Dimethylphthalate	50.0000	46.1176	7.8	50.0
31 Acenaphthylene	50.0000	45.8018	8.4	50.0
32 2,6-Dinitrotoluene	50.0000	43.9829	12.0	50.0
33 3-Nitroaniline	50.0000	44.4640	11.1	50.0
52 Acenaphthene-d10	40.0000	40.0000	0.0	50.0
34 Acenaphthene	50.0000	45.9146	8.2	20.0
35 2,4-Dinitrophenol	50.0000	38.3250	23.3	50.0
36 4-Nitrophenol	50.0000	45.0306	9.9	50.0
37 Dibenzofuran	50.0000	45.4962	9.0	50.0
38 2,4-Dinitrotoluene	50.0000	44.9585	10.1	50.0
77 2,3,5,6-Tetrachlorophenol	50.0000	44.3090	11.4	50.0
114 2-Naphthylamine	50.0000	48.5152	3.0	50.0
76 2,3,4,6-Tetrachlorophenol	50.0000	45.1041	9.8	50.0
39 Diethylphthalate	50.0000	47.6162	4.8	50.0
41 Fluorene	50.0000	45.1828	9.6	50.0
40 4-Chlorophenyl-phenylether	50.0000	44.7289	10.5	50.0
42 4-Nitroaniline	50.0000	45.0471	9.9	50.0
43 4,6-Dinitro-2-methylphenol	50.0000	41.1029	17.8	50.0
44 N-Nitrosodiphenylamine	50.0000	42.4249	15.2	20.0
78 1,2-Diphenylhydrazine	50.0000	46.6347	6.7	50.0
186 2,4,6-Tribromophenol	50.0000	42.4353	15.1	50.0
45 4-Bromophenyl-phenylether	50.0000	43.4314	13.1	50.0
46 Hexachlorobenzene	50.0000	43.8468	12.3	50.0
47 Pentachlorophenol	50.0000	49.6672	0.7	20.0
78 Phenanthrene-d10	40.0000	40.0000	0.0	50.0
48 Phenanthrene	50.0000	45.7703	8.5	50.0
49 Anthracene	50.0000	45.5353	8.9	50.0
50 Carbazole	50.0000	46.6659	6.7	50.0
51 Di-n-Butylphthalate	50.0000	47.3246	5.4	50.0
52 Fluoranthene	50.0000	47.8965	4.2	20.0
79 Benzidine	50.0000	38.9418	22.1	50.0
53 Pyrene	50.0000	42.4672	15.1	50.0
183 Terphenyl-d14	50.0000	42.9475	14.1	50.0
54 Butylbenzylphthalate	50.0000	45.2809	9.4	50.0
56 Benzo(a)Anthracene	50.0000	45.8046	8.4	50.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 722.i
Lab File ID: F12050C1.D
Analysis Type: NONE

Injection Date: 05-DEC-2000 09:48
Lab Sample ID: sstd050
Method File: \\QPITPA02\D\chem\722.i\120500.b\

COMPOUND	EXPECTED	MEASURED	%D	MAX
	CONC	CONC.		%D
90 Chrysene-d12	40.0000	40.0000	0.0	50.0
55 3,3'-Dichlorobenzidine	50.0000	46.6732	6.7	50.0
57 Chrysene	50.0000	46.2504	7.5	50.0
58 bis(2-ethylhexyl) Phthalate	50.0000	45.8642	8.3	50.0
59 Di-n-octylphthalate	50.0000	42.2586	15.5	20.0
60 Benzo(b) fluoranthene	50.0000	44.4545	11.1	50.0
61 Benzo(k) fluoranthene	50.0000	42.1442	15.7	50.0
143 7,12-dimethylbenz[a]anthracen	50.0000	42.8107	14.4	50.0
62 Benzo(a)pyrene	50.0000	44.1685	11.7	20.0
101 Perylene-d12	40.0000	40.0000	0.0	50.0
63 Indeno(1,2,3-cd)pyrene	50.0000	47.6674	4.7	50.0
64 Dibenzo(a,h)anthracene	50.0000	47.2015	5.6	50.0
65 Benzo(g,h,i)perylene	50.0000	49.0909	1.8	50.0



Instrument: 722.i
Operator: 003200
Column diameter: 0.25

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\d\chem\722.i\120500.b\F12050C1.D
Lab Smp Id: sstd050 Client Smp ID: SSTD050
Inj Date : 05-DEC-2000 09:48
Operator : 003200 Inst ID: 722.i
Smp Info : SSTD050 (25ppb) 77-06-7
Misc Info : sstd050,120500.b,8270b.m,2-root.sub,2,2
Comment :
Method : \\QPITPA02\D\chem\722.i\120500.b\8270b.m
Meth Date : 05-Dec-2000 10:24 bungardf Quant Type: ISTD
Cal Date : 03-DEC-2000 11:40 Cal File: F12030C7.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-root.sub
Target Version: 4.04
Processing Host: PITPC062

12/5/00

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT	ON-COL
*****	----	--	-----	-----	-----	(NG)	(NG)
* 1 1,4-Dichlorobenzene-d4	152	5.022	5.022	(1.000)	80226	40.0000	
* 2 Naphthalene-d8	136	6.561	6.561	(1.000)	292220	40.0000	
* 3 Acenaphthene-d10	164	9.584	9.584	(1.000)	151590	40.0000	
* 4 Phenanthrene-d10	188	12.886	12.886	(1.000)	239735	40.0000	
* 5 Chrysene-d12	240	19.521	19.521	(1.000)	252718	40.0000	
* 6 Perylene-d12	264	22.876	22.876	(1.000)	255311	40.0000	
10 N-Nitrosodimethylamine	74	1.982	1.982	(0.395)	59509	50.0000	44.8
9 Pyridine	79	1.977	1.977	(0.394)	97447	50.0000	43.5
16 Methyl methanesulfonate	80	3.526	3.526	(0.702)	28529	50.0000	26.2
21 Aniline	93	4.718	4.718	(0.939)	183946	50.0000	42.5
22 Phenol	94	4.728	4.728	(0.942)	172243	50.0000	45.6
23 bis (2-Chloroethyl) ether	93	4.787	4.787	(0.953)	128541	50.0000	46.8
24 2-Chlorophenol	128	4.835	4.835	(0.963)	120399	50.0000	45.8
26 1,3-Dichlorobenzene	146	4.979	4.979	(0.991)	138878	50.0000	46.1
27 1,4-Dichlorobenzene	146	5.038	5.038	(1.003)	143407	50.0000	46.3
28 1,2-Dichlorobenzene	146	5.247	5.247	(1.045)	131161	50.0000	45.6
29 Benzyl Alcohol	108	5.204	5.204	(1.036)	75550	50.0000	43.0
30 2-Methylphenol	108	5.364	5.364	(1.068)	109209	50.0000	46.3
31 2,2'-oxybis (1-Chloropropane)	45	5.380	5.380	(1.071)	186458	50.0000	48.7
32 N-Nitroso-di-n-propylamine	70	5.535	5.535	(1.102)	97785	50.0000	46.2
192 4-Methylphenol	108	5.524	5.524	(1.100)	112873	50.0000	46.5
34 Hexachloroethane	117	5.588	5.588	(1.113)	58438	50.0000	47.8
35 Nitrobenzene	77	5.701	5.701	(0.869)	155216	50.0000	46.8
41 Isophorone	82	5.978	5.978	(0.911)	232102	50.0000	45.8
42 2-Nitrophenol	139	6.091	6.091	(0.928)	63764	50.0000	45.5
43 2,4-Dimethylphenol	107	6.149	6.149	(0.937)	122743	50.0000	46.8

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	(NG)	(NG)	(NG)	(NG)	(NG)	(NG)	(NG)
44 bis(2-Chloroethoxy)methane	93	6.267	6.267	(0.955)	142228	50.0000	46.1
48 2,4-Dichlorophenol	162	6.395	6.395	(0.975)	91576	50.0000	45.0
49 Benzoic Acid	122	6.299	6.299	(0.960)	43425	50.0000	53.2
50 1,2,4-Trichlorobenzene	180	6.507	6.507	(0.992)	104458	50.0000	45.7
51 Naphthalene	128	6.587	6.587	(1.004)	363953	50.0000	46.7
52 4-Chloroaniline	127	6.694	6.694	(1.020)	127326	50.0000	45.0
56 Hexachlorobutadiene	225	6.844	6.844	(1.043)	68775	50.0000	45.2
59 4-Chloro-3-Methylphenol	107	7.437	7.437	(1.134)	98625	50.0000	44.5
62 2-Methylnaphthalene	142	7.624	7.624	(1.162)	222872	50.0000	45.7
205 1-Methylnaphthalene	142	7.805	7.805	(1.190)	207599	50.0000	44.9
64 Hexachlorocyclopentadiene	237	8.008	8.008	(0.836)	70147	50.0000	41.8
66 2,4,6-Trichlorophenol	196	8.163	8.163	(0.852)	59864	50.0000	45.1
67 2,4,5-Trichlorophenol	196	8.238	8.238	(0.860)	61300	50.0000	44.7
70 2-Chloronaphthalene	162	8.468	8.468	(0.884)	205540	50.0000	44.4
73 2-Nitroaniline	65	8.730	8.730	(0.911)	72654	50.0000	45.0
76 Dimethylphthalate	163	9.168	9.168	(0.957)	215662	50.0000	46.1
78 2,6-Dinitrotoluene	165	9.296	9.296	(0.970)	45633	50.0000	44.0
79 Acenaphthylene	152	9.274	9.274	(0.968)	321561	50.0000	45.8
81 3-Nitroaniline	138	9.563	9.563	(0.998)	48597	50.0000	44.5
82 Acenaphthene	153	9.648	9.648	(1.007)	201646	50.0000	45.9
83 2,4-Dinitrophenol	184	9.771	9.771	(1.020)	18351	50.0000	38.3
85 4-Nitrophenol	109	9.985	9.985	(1.042)	37163	50.0000	45.0
86 Dibenzofuran	168	9.985	9.985	(1.042)	276025	50.0000	45.5
87 2,4-Dinitrotoluene	165	10.108	10.108	(1.055)	59324	50.0000	45.0
91 2,3,5,6-Tetrachlorophenol	232	10.268	10.268	(1.071)	47719	50.0000	44.3
88 2,3,4,6-Tetrachlorophenol	232	10.364	10.364	(1.081)	47121	50.0000	45.1
92 2-Naphthylamine	143	10.332	10.332	(1.078)	164222	50.0000	48.5
93 Diethylphthalate	149	10.695	10.695	(1.116)	227546	50.0000	47.6
94 Fluorene	166	10.733	10.733	(1.120)	221447	50.0000	45.2
95 4-Chlorophenyl-phenylether	204	10.770	10.770	(1.124)	104850	50.0000	44.7
96 4-Nitroaniline	138	10.893	10.893	(1.137)	45111	50.0000	45.0
98 4,6-Dinitro-2-methylphenol	198	10.989	10.989	(0.853)	27679	50.0000	41.1
99 N-Nitrosodiphenylamine	169	11.064	11.064	(0.859)	137538	50.0000	42.4
100 1,2-Diphenylhydrazine	77	11.123	11.123	(0.863)	289190	50.0000	46.6
106 4-Bromophenyl-phenylether	248	11.876	11.876	(0.922)	60454	50.0000	43.4
107 Hexachlorobenzene	284	12.175	12.175	(0.945)	66227	50.0000	43.8
111 Pentachlorophenol	266	12.624	12.624	(0.980)	28226	50.0000	49.7
115 Phenanthrene	178	12.939	12.939	(1.004)	295295	50.0000	45.8
116 Anthracene	178	13.041	13.041	(1.012)	296982	50.0000	45.5
119 Carbazole	167	13.489	13.489	(1.047)	253527	50.0000	46.7
120 Di-n-Butylphthalate	149	14.627	14.627	(1.135)	335589	50.0000	47.3
123 Fluoranthene	202	15.872	15.872	(1.232)	296629	50.0000	47.9
124 Benzidine	184	16.305	16.305	(0.835)	108147	50.0000	38.9
125 Pyrene	202	16.417	16.417	(0.841)	289765	50.0000	42.5
131 Butylbenzylphthalate	149	18.367	18.367	(0.941)	145309	50.0000	45.3
135 3,3'-Dichlorobenzidine	252	19.526	19.526	(1.000)	113067	50.0000	46.7
136 Benzo(a)Anthracene	228	19.478	19.478	(0.998)	289381	50.0000	45.8

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Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
-----	----	==	=====	=====	-----	=====	-----
137 Chrysene	228	19.579	19.579	(1.003)	271667	50.0000	46.2
139 bis(2-ethylhexyl)Phthalate	149	19.943	19.943	(1.022)	200137	50.0000	45.9
140 Di-n-octylphthalate	149	21.417	21.417	(0.936)	348372	50.0000	42.2
141 Benzo(b)fluoranthene	252	22.064	22.064	(0.965)	340889	50.0000	44.4
142 Benzo(k)fluoranthene	252	22.117	22.117	(0.967)	350757	50.0000	42.1
143 7,12-dimethylbenz[a]anthracen	256	22.117	22.117	(0.967)	156760	50.0000	42.8
146 Benzo(a)pyrene	252	22.753	22.753	(0.995)	315351	50.0000	44.2
149 Indeno(1,2,3-cd)pyrene	276	25.151	25.151	(1.099)	475151	50.0000	47.7
150 Dibenz(a,h)anthracene	278	25.194	25.194	(1.101)	401611	50.0000	47.2
151 Benzo(g,h,i)perylene	276	25.734	25.734	(1.125)	416722	50.0000	49.1
\$ 154 Nitrobenzene-d5	82	5.679	5.679	(0.866)	155043	50.0000	46.8
\$ 155 2-Fluorobiphenyl	172	8.302	8.302	(0.866)	241294	50.0000	45.8
\$ 156 Terphenyl-d14	244	16.951	16.951	(0.868)	252656	50.0000	42.9
\$ 157 Phenol-d5	99	4.718	4.718	(0.939)	154018	50.0000	44.5
\$ 158 2-Fluorophenol	112	3.692	3.692	(0.735)	106800	50.0000	45.2
\$ 159 2,4,6-Tribromophenol	330	11.321	11.321	(0.879)	26649	50.0000	42.4
\$ 186 2-Chlorophenol-d4	132	4.819	4.819	(0.960)	110266	50.0000	45.3
\$ 187 1,2-Dichlorobenzene-d4	152	5.230	5.230	(1.041)	86276	50.0000	45.5

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FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

Cdk 22253

Instrument ID: 722

Calibration Date: 12/05/00 Time: 2152

Lab File ID: F12050CN

Init. Calib. Date(s): 12/03/00 12/03/00

Init. Calib. Times: 0812

1140

GC Column: HP5-MS

ID: 0.25 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.882	1.756	0.01	6.7	20.0
bis(2-Chloroethyl) ether	1.371	1.310	0.01	4.4	50.0
2-Chlorophenol	1.312	1.223	0.01	6.8	50.0
1,3-Dichlorobenzene	1.503	1.394	0.01	7.2	50.0
1,4-Dichlorobenzene	1.544	1.420	0.01	8.0	20.0
1,2-Dichlorobenzene	1.433	1.311	0.01	8.5	50.0
2-Methylphenol	1.176	1.080	0.01	8.2	50.0
2,2'-oxybis(1-Chloropropane)	1.909	1.936	0.01	1.4	50.0
4-Methylphenol	1.209	1.178	0.01	2.6	50.0
Hexachloroethane	0.609	0.582	0.01	4.4	50.0
Nitrobenzene	0.454	0.424	0.01	6.6	50.0
Isophorone	0.694	0.659	0.01	5.0	50.0
2-Nitrophenol	0.191	0.173	0.01	9.4	20.0
2,4-Dimethylphenol	0.359	0.334	0.01	7.0	50.0
bis(2-Chloroethoxy) methane	0.422	0.391	0.01	7.3	50.0
N-Nitroso-di-n-propylamine	1.054	1.024	0.05	2.8	50.0
2,4-Dichlorophenol	0.278	0.256	0.01	7.9	20.0
1,2,4-Trichlorobenzene	0.313	0.280	0.01	10.5	50.0
Naphthalene	1.066	0.997	0.01	6.5	50.0
4-Chloroaniline	0.387	0.367	0.01	5.2	50.0
Hexachlorobutadiene	0.208	0.183	0.01	12.0	20.0
4-Chloro-3-Methylphenol	0.303	0.294	0.01	3.0	20.0
2-Methylnaphthalene	0.668	0.617	0.01	7.6	50.0
Hexachlorocyclopentadiene	0.443	0.335	0.05	24.4	50.0
2,4,6-Trichlorophenol	0.350	0.310	0.01	11.4	20.0
2,4,5-Trichlorophenol	0.362	0.330	0.01	8.8	50.0
2-Chloronaphthalene	1.222	1.041	0.01	14.8	50.0
2-Nitroaniline	0.426	0.407	0.01	4.5	50.0
Dimethylphthalate	1.234	1.189	0.01	3.6	50.0
Acenaphthylene	1.852	1.674	0.01	9.6	50.0
2,6-Dinitrotoluene	0.274	0.262	0.01	4.4	50.0
3-Nitroaniline	0.288	0.287	0.01	0.3	50.0
Acenaphthene	1.159	1.049	0.01	9.5	20.0
2,4-Dinitrophenol	0.127	0.124	0.05	2.4	50.0
4-Nitrophenol	0.218	0.236	0.05	8.2	50.0
Dibenzofuran	1.601	1.477	0.01	7.7	50.0
2,4-Dinitrotoluene	0.348	0.350	0.01	0.6	50.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

675 247

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

675247

Instrument ID: 722

Calibration Date: 12/05/00 Time: 2152

Lab File ID: F12050CN

Init. Calib. Date(s): 12/03/00 12/03/00

Init. Calib. Times: 0812 1140

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

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.261	1.280	0.01	1.5	50.0
4-Chlorophenyl-phenylether	0.619	0.576	0.01	6.9	50.0
Fluorene	1.293	1.224	0.01	5.3	50.0
4-Nitroaniline	0.264	0.292	0.01	10.6	50.0
4,6-Dinitro-2-methylphenol	0.112	0.106	0.01	5.4	50.0
N-Nitrosodiphenylamine	0.541	0.442	0.01	18.3	20.0
4-Bromophenyl-phenylether	0.232	0.192	0.01	17.2	50.0
Hexachlorobenzene	0.252	0.218	0.01	13.5	50.0
Pentachlorophenol	0.095	0.091	0.05	4.2	20.0
Phenanthrene	1.076	0.985	0.01	8.4	50.0
Anthracene	1.088	1.003	0.01	7.8	50.0
Carbazole	0.906	0.894	0.01	1.3	50.0
Di-n-Butylphthalate	1.183	1.157	0.01	2.2	50.0
Fluoranthene	1.033	1.060	0.01	2.6	20.0
Pyrene	1.080	0.910	0.01	15.7	50.0
Butylbenzylphthalate	0.508	0.455	0.01	10.4	50.0
3,3'-Dichlorobenzidine	0.383	0.340	0.01	11.2	50.0
Benzo(a)Anthracene	1.000	0.908	0.01	9.2	50.0
Chrysene	0.930	0.868	0.01	6.7	50.0
bis(2-ethylhexyl) Phthalate	0.691	0.627	0.01	9.3	50.0
Di-n-octylphthalate	1.292	1.133	0.01	12.3	20.0
Benzo(b) fluoranthene	1.201	1.040	0.01	13.4	50.0
Benzo(k) fluoranthene	1.304	1.189	0.01	8.8	50.0
Benzo(a) pyrene	1.118	0.993	0.01	11.2	20.0
Indeno(1,2,3-cd)pyrene	1.562	1.309	0.01	16.2	50.0
Dibenz(a,h)anthracene	1.333	1.116	0.01	16.3	50.0
Benzo(g,h,i)perylene	1.330	1.089	0.01	18.1	50.0
Pyridine	1.118	1.046	0.01	6.4	50.0
N-Nitrosodimethylamine	0.663	0.639	0.01	3.6	50.0
Aniline	2.157	1.883	0.01	12.7	50.0
Benzyl Alcohol	0.877	0.738	0.01	15.8	50.0
Benzoic Acid	0.112	0.132	0.01	17.8	50.0
2,3,4,6-Tetrachlorophenol	0.276	0.268	0.01	2.9	50.0
2,3,5,6-Tetrachlorophenol	0.284	0.271	0.01	4.6	50.0
1,2-Diphenylhydrazine	1.035	0.897	0.01	13.3	50.0
Benzidine	0.440	0.315	0.01	28.4	50.0
Methyl methanesulfonate	0.544	0.292	0.01	46.3	50.0

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FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.:

CONC 220253

Instrument ID: 722

Calibration Date: 12/05/00

Time: 2152

Lab File ID: F12050CN

Init. Calib. Date(s): 12/03/00

12/03/00

Init. Calib. Times: 0812

1140

GC Column: HP5-MS

ID: 0.25 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
2-Naphthylamine	0.893	0.948	0.01	6.2	50.0
7,12-dimethylbenz[a]anthrace	0.574	0.516	0.01	10.1	50.0
1-Methylnaphthalene	0.633	0.587	0.01	7.3	50.0
=====	=====	=====	=====	=====	=====
Nitrobenzene-d5	0.454	0.417	0.01	8.1	50.0
2-Fluorobiphenyl	1.389	1.207	0.01	13.1	50.0
Terphenyl-d14	0.931	0.789	0.01	15.2	50.0
Phenol-d5	1.725	1.557	0.01	9.7	50.0
2-Fluorophenol	1.177	1.064	0.01	9.6	50.0
2,4,6-Tribromophenol	0.105	0.088	0.01	16.2	50.0
2-Chlorophenol-d4	1.212	1.114	0.01	8.1	50.0
1,2-Dichlorobenzene-d4	0.945	0.870	0.01	7.9	50.0

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CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 722.i
Lab File ID: F12050CN.D
Analysis Type: NONE

Injection Date: 05-DEC-2000 21:52
Lab Sample ID: sstd050
Method File: \\QPITPA02\d\chem\722.i\120500n.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
66 Pyridine	50.0000	46.7928	6.4	50.0
67 N-Nitrosodimethylamine	50.0000	48.2137	3.6	50.0
87 Methyl methanesulfonate	50.0000	26.8868	46.2	50.0
185 2-Fluorophenol	50.0000	45.1996	9.6	50.0
184 Phenol-d5	50.0000	45.1202	9.8	50.0
68 Aniline	50.0000	43.6685	12.7	50.0
1 Phenol	50.0000	46.6661	6.7	20.0
2 bis(2-Chloroethyl) ether	50.0000	47.7857	4.4	50.0
187 2-Chlorophenol-d4	50.0000	45.9213	8.2	50.0
3 2-Chlorophenol	50.0000	46.6203	6.8	50.0
4 1,3-Dichlorobenzene	50.0000	46.3554	7.3	50.0
11 1,4-Dichlorobenzene-d4	40.0000	40.0000	0.0	50.0
5 1,4-Dichlorobenzene	50.0000	45.9731	8.1	20.0
69 Benzyl Alcohol	50.0000	42.0997	15.8	50.0
188 1,2-Dichlorobenzene-d4	50.0000	46.0072	8.0	50.0
6 1,2-Dichlorobenzene	50.0000	45.7502	8.5	50.0
7 2-Methylphenol	50.0000	45.9503	8.1	50.0
8 2,2'-oxybis(1-Chloropropane)	50.0000	50.6910	1.4	50.0
9 4-Methylphenol	50.0000	48.6993	2.6	50.0
18 N-Nitroso-di-n-propylamine	50.0000	48.5767	2.8	50.0
12 Hexachloroethane	50.0000	47.7523	4.5	50.0
181 Nitrobenzene-d5	50.0000	45.9960	8.0	50.0
13 Nitrobenzene	50.0000	46.7246	6.6	50.0
14 Isophorone	50.0000	47.4482	5.1	50.0
15 2-Nitrophenol	50.0000	45.0436	9.9	20.0
16 2,4-Dimethylphenol	50.0000	46.5090	7.0	50.0
17 bis(2-Chloroethoxy)methane	50.0000	46.3939	7.2	50.0
71 Benzoic Acid	50.0000	59.2000	18.4	50.0
18 2,4-Dichlorophenol	50.0000	46.0522	7.9	20.0
19 1,2,4-Trichlorobenzene	50.0000	44.8587	10.3	50.0
32 Naphthalene-d8	40.0000	40.0000	0.0	50.0
20 Naphthalene	50.0000	46.7841	6.4	50.0
21 4-Chloroaniline	50.0000	47.3770	5.2	50.0
22 Hexachlorobutadiene	50.0000	44.0281	11.9	20.0
23 4-Chloro-3-Methylphenol	50.0000	48.5199	3.0	20.0
24 2-Methylnaphthalene	50.0000	46.2016	7.6	50.0
205 1-Methylnaphthalene	50.0000	46.3174	7.4	50.0
25 Hexachlorocyclopentadiene	50.0000	37.8011	24.4	50.0
26 2,4,6-Trichlorophenol	50.0000	44.3050	11.4	20.0

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: 722.i
 Lab File ID: F12050CN.D
 Analysis Type: NONE

Injection Date: 05-DEC-2000 21:52
 Lab Sample ID: sstd050
 Method File: \\QPITPA02\d\chem\722.i\120500n.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 2,4,5-Trichlorophenol	50.0000	45.7037	8.6	50.0
182 2-Fluorobiphenyl	50.0000	43.4698	13.1	50.0
28 2-Chloronaphthalene	50.0000	42.5943	14.8	50.0
29 2-Nitroaniline	50.0000	47.8539	4.3	50.0
30 Dimethylphthalate	50.0000	48.1829	3.6	50.0
31 Acenaphthylene	50.0000	45.1711	9.7	50.0
32 2,6-Dinitrotoluene	50.0000	47.8605	4.3	50.0
33 3-Nitroaniline	50.0000	49.8193	0.4	50.0
52 Acenaphthene-d10	40.0000	40.0000	0.0	50.0
34 Acenaphthene	50.0000	45.2711	9.5	20.0
35 2,4-Dinitrophenol	50.0000	48.9693	2.1	50.0
36 4-Nitrophenol	50.0000	54.3217	8.6	50.0
37 Dibenzofuran	50.0000	46.1370	7.7	50.0
38 2,4-Dinitrotoluene	50.0000	50.3332	0.7	50.0
77 2,3,5,6-Tetrachlorophenol	50.0000	47.6524	4.7	50.0
114 2-Naphthylamine	50.0000	53.0985	6.2	50.0
76 2,3,4,6-Tetrachlorophenol	50.0000	48.6238	2.8	50.0
39 Diethylphthalate	50.0000	50.7516	1.5	50.0
41 Fluorene	50.0000	47.3421	5.3	50.0
40 4-Chlorophenyl-phenylether	50.0000	46.5710	6.9	50.0
42 4-Nitroaniline	50.0000	55.3503	10.7	50.0
43 4,6-Dinitro-2-methylphenol	50.0000	47.3494	5.3	50.0
44 N-Nitrosodiphenylamine	50.0000	40.8516	18.3	20.0
78 1,2-Diphenylhydrazine	50.0000	43.3700	13.3	50.0
186 2,4,6-Tribromophenol	50.0000	41.9964	16.0	50.0
45 4-Bromophenyl-phenylether	50.0000	41.3027	17.4	50.0
46 Hexachlorobenzene	50.0000	43.3619	13.3	50.0
47 Pentachlorophenol	50.0000	48.1412	3.7	20.0
78 Phenanthrene-d10	40.0000	40.0000	0.0	50.0
48 Phenanthrene	50.0000	45.7431	8.5	50.0
49 Anthracene	50.0000	46.1055	7.8	50.0
50 Carbazole	50.0000	49.2861	1.4	50.0
51 Di-n-Butylphthalate	50.0000	48.8873	2.2	50.0
52 Fluoranthene	50.0000	51.3002	2.6	20.0
79 Benzidine	50.0000	35.8719	28.3	50.0
53 Pyrene	50.0000	42.1289	15.7	50.0
183 Terphenyl-d14	50.0000	42.3579	15.3	50.0
54 Butylbenzylphthalate	50.0000	44.7529	10.5	50.0
56 Benzo(a)Anthracene	50.0000	45.3821	9.2	50.0

Data File: \\QPITPA02\d\chem\722.i\120500n.b\F12050CN.D
Report Date: 12/05/2000

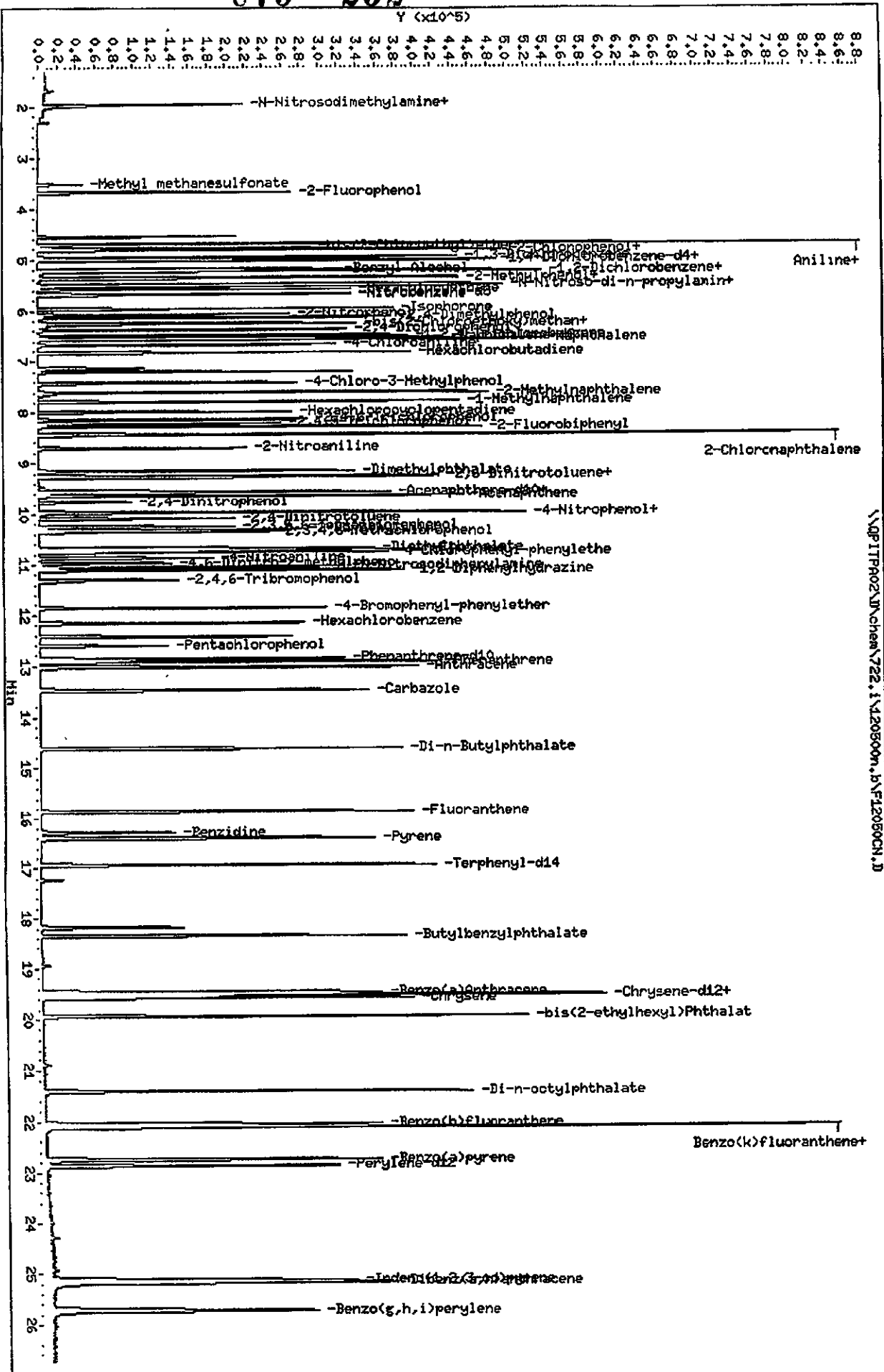
675 251

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 722.i
Lab File ID: F12050CN.D
Analysis Type: NONE

Injection Date: 05-DEC-2000 21:52
Lab Sample ID: sstd050
Method File: \\QPITPA02\d\chem\722.i\120500n.b

COMPOUND	EXPECTED	MEASURED	%D	MAX
	CONC.	CONC.		%D
90 Chrysene-d12	40.0000	40.0000	0.0	50.0
55 3,3'-Dichlorobenzidine	50.0000	44.3617	11.3	50.0
57 Chrysene	50.0000	46.6695	6.7	50.0
58 bis(2-ethylhexyl)Phthalate	50.0000	45.3984	9.2	50.0
59 Di-n-octylphthalate	50.0000	43.8795	12.2	20.0
60 Benzo(b)fluoranthene	50.0000	43.2851	13.4	50.0
61 Benzo(k)fluoranthene	50.0000	45.5926	8.8	50.0
143 7,12-dimethylbenz[a]anthracen	50.0000	44.9627	10.1	50.0
62 Benzo(a)pyrene	50.0000	44.3783	11.2	20.0
101 Perylene-d12	40.0000	40.0000	0.0	50.0
63 Indeno(1,2,3-cd)pyrene	50.0000	41.9105	16.2	50.0
64 Dibenzo(a,h)anthracene	50.0000	41.8519	16.3	50.0
65 Benzo(g,h,i)perylene	50.0000	40.9379	18.1	50.0



Data File: \\QPI1P02\IN\chem\722.1\120500n.b\F120500N.D
 Date: 05-DEC-2000 21:52
 Client ID:
 Sample Info: SST0050 (25ppb) 77-06-7
 Volume Injected (uL): 2.0
 Column phase: HPL-MS

Instrument: 722.1
 Operator: 003200
 Column diameter: 0.25

\\QPI1P02\IN\chem\722.1\120500n.b\F120500N.D

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STL-Pittsburgh

Semivolatiles REPORT SW-846 Method 8270

Data file : \\QPITPA02\d\chem\722.i\120500n.b\F12050CN.D
Lab Smp Id: sstd050 Client Smp ID: SST050
Inj Date : 05-DEC-2000 21:52
Operator : 003200 Inst ID: 722.i
Smp Info : SST050 (25ppb) 77-06-7
Misc Info : sstd050,120500n.b,8270b.m,2-root.sub,2,2
Comment :
Method : \\QPITPA02\d\chem\722.i\120500n.b\8270b.m
Meth Date : 05-Dec-2000 22:23 bungardf Quant Type: ISTD
Cal Date : 03-DEC-2000 11:40 Cal File: F12030C7.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC062

Compound Sublist: 2-root.sub

inf
12/5/00

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
*****	----	---	-----	-----	-----	-----	-----
* 1 1,4-Dichlorobenzene-d4	152	5.001	5.001	(1.000)	65173	40.0000	
* 2 Naphthalene-d8	136	6.539	6.539	(1.000)	247468	40.0000	
* 3 Acenaphthene-d10	164	9.563	9.563	(1.000)	140963	40.0000	
* 4 Phenanthrene-d10	188	12.854	12.854	(1.000)	253258	40.0000	
* 5 Chrysene-d12	240	19.494	19.494	(1.000)	293042	40.0000	
* 6 Perylene-d12	264	22.865	22.865	(1.000)	281036	40.0000	
10 N-Nitrosodimethylamine	74	1.961	1.961	(0.392)	52076	50.0000	48.2
9 Pyridine	79	1.950	1.950	(0.390)	85205	50.0000	46.8
16 Methyl methanesulfonate	80	3.510	3.510	(0.702)	23825	50.0000	26.9
21 Aniline	93	4.702	4.702	(0.940)	153421	50.0000	43.7
22 Phenol	94	4.707	4.707	(0.941)	143092	50.0000	46.7
23 bis(2-Chloroethyl) ether	93	4.771	4.771	(0.954)	106715	50.0000	47.8
24 2-Chlorophenol	128	4.819	4.819	(0.964)	99644	50.0000	46.6
26 1,3-Dichlorobenzene	146	4.963	4.963	(0.993)	113530	50.0000	46.4
27 1,4-Dichlorobenzene	146	5.022	5.022	(1.004)	115656	50.0000	46.0
28 1,2-Dichlorobenzene	146	5.230	5.230	(1.046)	106806	50.0000	45.8
29 Benzyl Alcohol	108	5.188	5.188	(1.037)	60155	50.0000	42.1
30 2-Methylphenol	108	5.343	5.343	(1.068)	87996	50.0000	46.0
31 2,2'-oxybis(1-Chloropropane)	45	5.359	5.359	(1.072)	157689	50.0000	50.7
32 N-Nitroso-di-n-propylamine	70	5.519	5.519	(1.104)	83463	50.0000	48.6
192 4-Methylphenol	108	5.503	5.503	(1.100)	95956	50.0000	48.7
34 Hexachloroethane	117	5.572	5.572	(1.114)	47412	50.0000	47.8
35 Nitrobenzene	77	5.684	5.684	(0.869)	131135	50.0000	46.7
41 Isophorone	82	5.957	5.957	(0.911)	203770	50.0000	47.4
42 2-Nitrophenol	139	6.069	6.069	(0.928)	53422	50.0000	45.0
43 2,4-Dimethylphenol	107	6.128	6.128	(0.937)	103330	50.0000	46.5

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
=====	----	--	-----	-----	-----	-----	-----
44 bis (2-Chloroethoxy)methane	93	6.245	6.245	(0.955)	121101	50.0000	46.4
48 2,4-Dichlorophenol	162	6.374	6.374	(0.975)	79369	50.0000	46.0
49 Benzoic Acid	122	6.272	6.272	(0.959)	40924	50.0000	59.2
50 1,2,4-Trichlorobenzene	180	6.486	6.486	(0.992)	86796	50.0000	44.8
51 Naphthalene	128	6.566	6.566	(1.004)	308524	50.0000	46.8
52 4-Chloroaniline	127	6.673	6.673	(1.020)	113561	50.0000	47.4
56 Hexachlorobutadiene	225	6.822	6.822	(1.043)	56718	50.0000	44.0
59 4-Chloro-3-Methylphenol	107	7.410	7.410	(1.133)	91088	50.0000	48.5
62 2-Methylnaphthalene	142	7.602	7.602	(1.163)	190955	50.0000	46.2
205 1-Methylnaphthalene	142	7.779	7.779	(1.190)	181490	50.0000	46.3
64 Hexachlorocyclopentadiene	237	7.987	7.987	(0.835)	59024	50.0000	37.8
66 2,4,6-Trichlorophenol	196	8.137	8.137	(0.851)	54685	50.0000	44.3
67 2,4,5-Trichlorophenol	196	8.217	8.217	(0.859)	58251	50.0000	45.7
70 2-Chloronaphthalene	162	8.441	8.441	(0.883)	183383	50.0000	42.6
73 2-Nitroaniline	65	8.708	8.708	(0.911)	71793	50.0000	47.8
76 Dimethylphthalate	163	9.146	9.146	(0.956)	209524	50.0000	48.2
78 2,6-Dinitrotoluene	165	9.274	9.274	(0.970)	46175	50.0000	47.9
79 Acenaphthylene	152	9.248	9.248	(0.967)	294901	50.0000	45.2
81 3-Nitroaniline	138	9.536	9.536	(0.997)	50633	50.0000	49.8
82 Acenaphthene	153	9.627	9.627	(1.007)	184882	50.0000	45.3
83 2,4-Dinitrophenol	184	9.750	9.750	(1.020)	21804	50.0000	49.0
85 4-Nitrophenol	109	9.953	9.953	(1.041)	41688	50.0000	54.3
86 Dibenzofuran	168	9.958	9.958	(1.041)	260290	50.0000	46.1
87 2,4-Dinitrotoluene	165	10.081	10.081	(1.054)	61760	50.0000	50.3
91 2,3,5,6-Tetrachlorophenol	232	10.241	10.241	(1.071)	47722	50.0000	47.6
88 2,3,4,6-Tetrachlorophenol	232	10.337	10.337	(1.081)	47237	50.0000	48.6
92 2-Naphthylamine	143	10.305	10.305	(1.078)	167136	50.0000	53.1
93 Diethylphthalate	149	10.674	10.674	(1.116)	225527	50.0000	50.8
94 Fluorene	166	10.706	10.706	(1.120)	215764	50.0000	47.3
95 4-Chlorophenyl-phenylether	204	10.749	10.749	(1.124)	101515	50.0000	46.6
96 4-Nitroaniline	138	10.866	10.866	(1.136)	51543	50.0000	55.4
98 4,6-Dinitro-2-methylphenol	198	10.968	10.968	(0.853)	33684	50.0000	47.3
99 N-Nitrosodiphenylamine	169	11.037	11.037	(0.859)	139908	50.0000	40.8
100 1,2-Diphenylhydrazine	77	11.096	11.096	(0.863)	284116	50.0000	43.4
106 4-Bromophenyl-phenylether	248	11.849	11.849	(0.922)	60734	50.0000	41.3
107 Hexachlorobenzene	284	12.154	12.154	(0.946)	69189	50.0000	43.4
111 Pentachlorophenol	266	12.597	12.597	(0.980)	28902	50.0000	48.1
115 Phenanthrene	178	12.912	12.912	(1.005)	311767	50.0000	45.7
116 Anthracene	178	13.019	13.019	(1.013)	317663	50.0000	46.1
119 Carbazole	167	13.463	13.463	(1.047)	282866	50.0000	49.3
120 Di-n-Butylphthalate	149	14.606	14.606	(1.136)	366225	50.0000	48.9
123 Fluoranthene	202	15.851	15.851	(1.233)	335630	50.0000	51.3
124 Benzidine	184	16.278	16.278	(0.835)	115517	50.0000	35.9
125 Pyrene	202	16.390	16.390	(0.841)	333323	50.0000	42.1
131 Butylbenzylphthalate	149	18.351	18.351	(0.941)	166530	50.0000	44.8
135 3,3'-Dichlorobenzidine	252	19.505	19.505	(1.001)	124615	50.0000	44.4
136 Benzo(a)Anthracene	228	19.456	19.456	(0.998)	332460	50.0000	45.4

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Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
137 Chrysene	228	19.558	19.558	(1.003)	317869	50.0000	46.7
139 bis (2-ethylhexyl) Phthalate	149	19.927	19.927	(1.022)	229714	50.0000	45.4
140 Di-n-octylphthalate	149	21.401	21.401	(0.936)	398183	50.0000	43.9
141 Benzo (b) fluoranthene	252	22.042	22.042	(0.964)	365366	50.0000	43.3
142 Benzo (k) fluoranthene	252	22.101	22.101	(0.967)	417691	50.0000	45.6
143 7,12-dimethylbenz [a] anthracen	256	22.101	22.101	(0.967)	181229	50.0000	45.0
146 Benzo (a) pyrene	252	22.737	22.737	(0.994)	348775	50.0000	44.4
149 Indeno (1,2,3-cd) pyrene	276	25.130	25.130	(1.099)	459860	50.0000	41.9
150 Dibenz (a,h) anthracene	278	25.173	25.173	(1.101)	391974	50.0000	41.8
151 Benzo (g,h,i) perylene	276	25.712	25.712	(1.125)	382528	50.0000	40.9
\$ 154 Nitrobenzene-d5	82	5.663	5.663	(0.866)	129106	50.0000	46.0
\$ 155 2-Fluorobiphenyl	172	8.275	8.275	(0.865)	212694	50.0000	43.5
\$ 156 Terphenyl-d14	244	16.930	16.930	(0.868)	288948	50.0000	42.4
\$ 157 Phenol-d5	99	4.696	4.696	(0.939)	126811	50.0000	45.1
\$ 158 2-Fluorophenol	112	3.676	3.676	(0.735)	86696	50.0000	45.2
\$ 159 2,4,6-Tribromophenol	330	11.299	11.299	(0.879)	27861	50.0000	42.0
\$ 186 2-Chlorophenol-d4	132	4.803	4.803	(0.960)	90732	50.0000	45.9
\$ 187 1,2-Dichlorobenzene-d4	152	5.214	5.214	(1.043)	70842	50.0000	46.0

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**GC/MS SEMIVOLATILE
QC DATA**

Data File: \\QPITPA02\chem\722.1\120300.b\F1203DF2.D

Page 3

Date : 03-DEC-2000 07:54

Client ID: DFTPP02

Instrument: 722.1

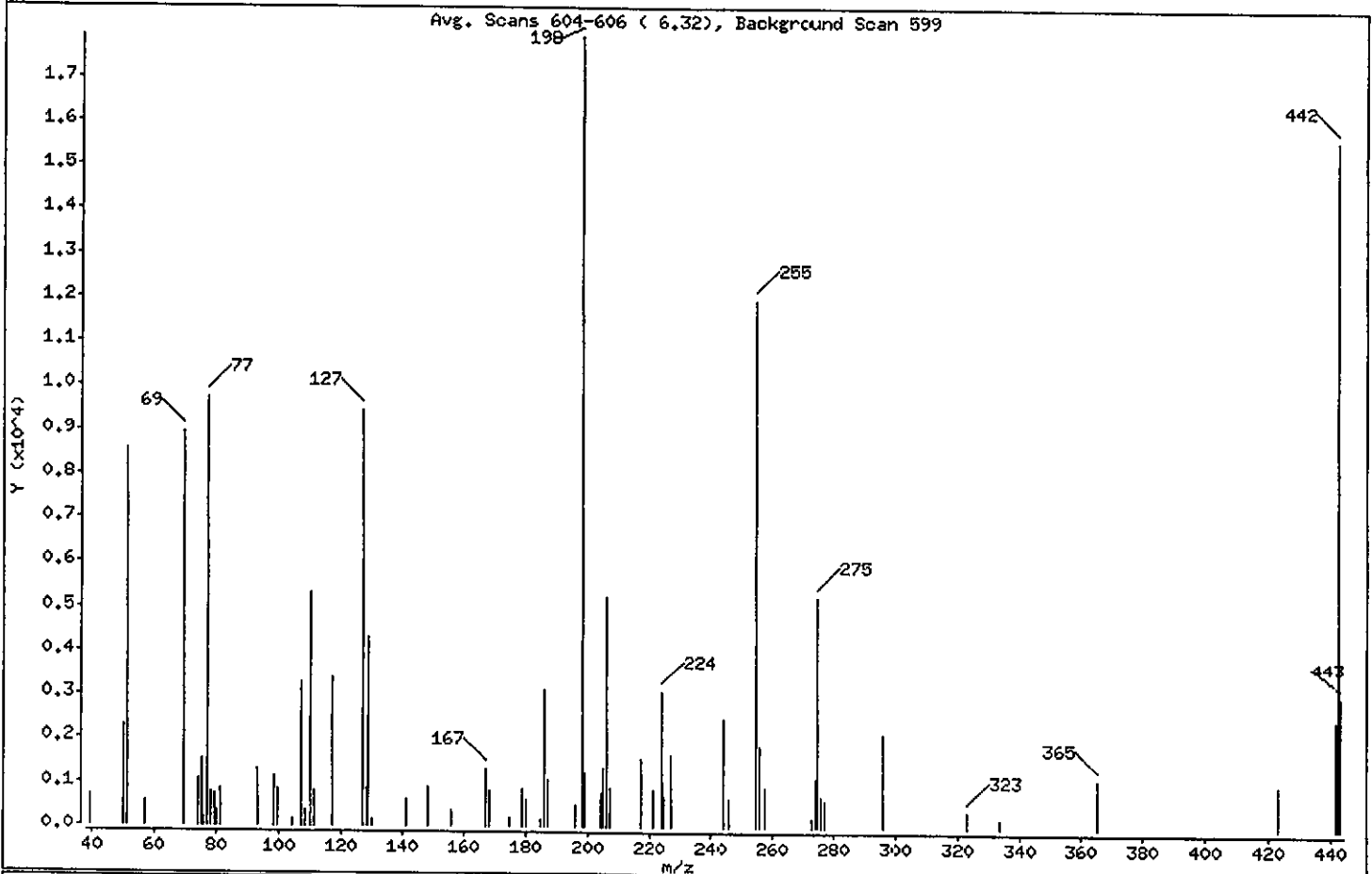
Sample Info: DFTPP050 (25ppb) 194-175-8

Operator: 003200

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	47.81
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	49.77
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	52.55
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.98
275	10.00 - 30.00% of mass 198	29.22
365	Greater than 1.00% of mass 198	6.17
441	Present, but less than mass 443	13.81
442	40.00 - 100.00% of mass 198	87.02
443	17.00 - 23.00% of mass 442	16.80 (19.30)

Data File: \\QP1TPA02\Jchem\722.1\120300.b\F1203DF2.D

Date: 03-DEC-2000 07:54

Client ID: DFTPP02

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

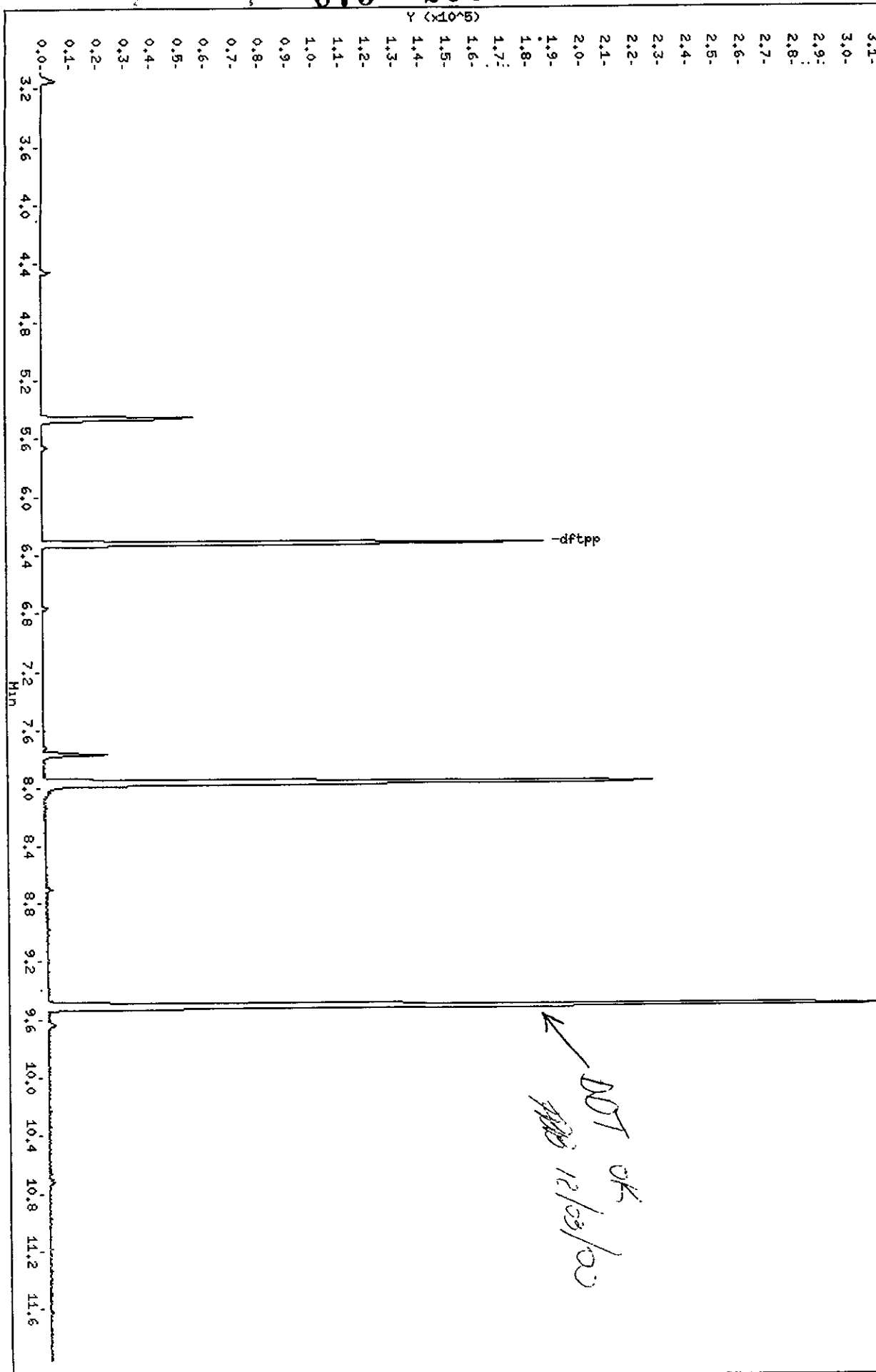
Instrument: 722.1

Operator: 003200

Column diameter: 2.00

Column phase:

\\QP1TPA02\Jchem\722.1\120300.b\F1203DF2.D



675 258

Date : 03-DEC-2000 07:54

Client ID: DFTPP02

Instrument: 722.1

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

Operator: 003200

Column phase:

Column diameter: 2.00

Data File: F1203DF2.D

Spectrum: Avg. Scans 604-606 (6.32), Background Scan 599

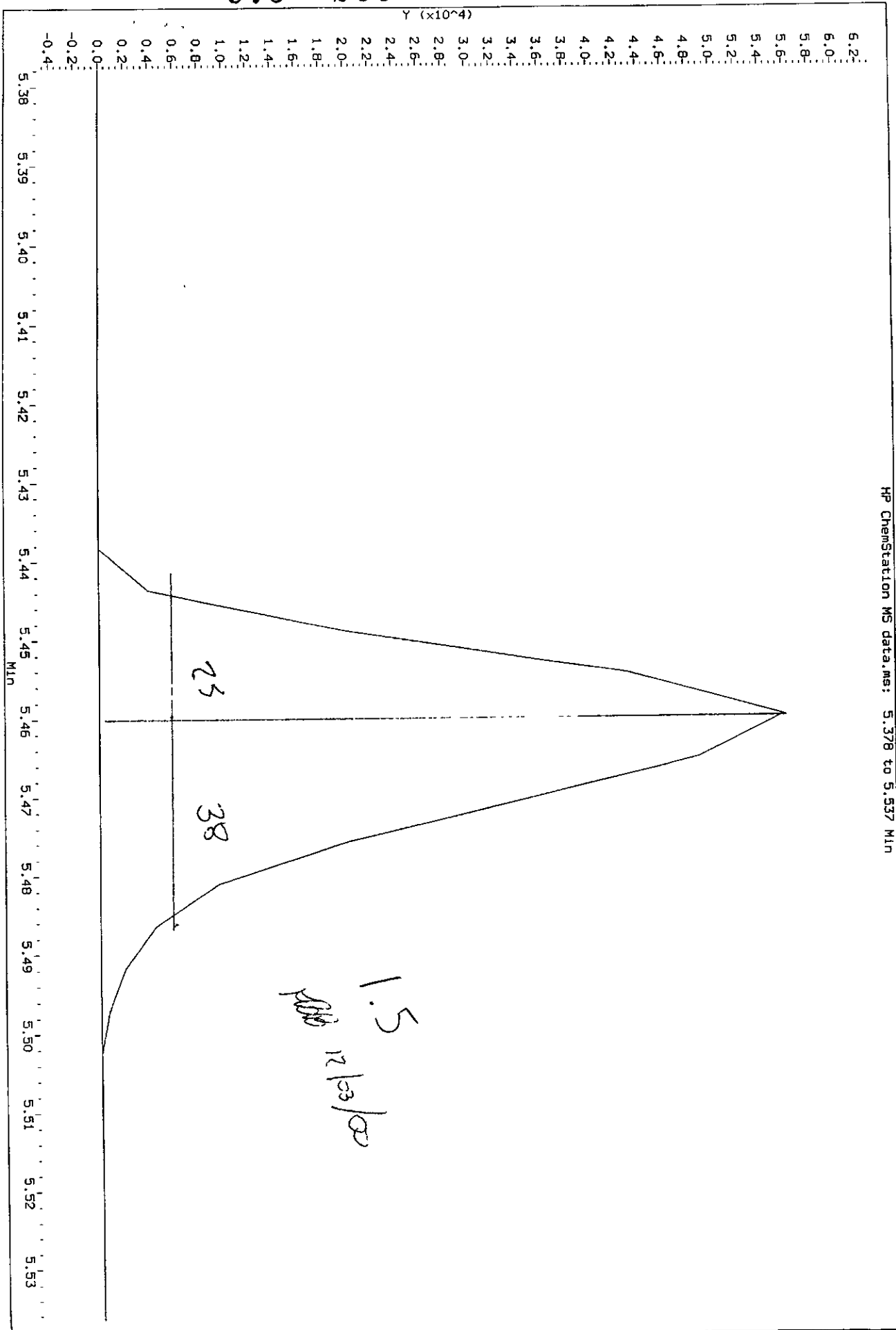
Location of Maximum: 198.00

Number of points: 67

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50.00	2308	108.00	365	186.00	3139	256.00	1872
51.00	8573	110.00	5330	187.00	1076	258.00	890
57.00	578	111.00	831	196.00	490	273.00	200
69.00	8925	117.00	3367	198.00	17928	274.00	1127
74.00	1075	127.00	9424	199.00	1252	275.00	5240
75.00	1542	128.00	875	204.00	793	276.00	691
76.00	191	129.00	4310	205.00	1352	277.00	609
77.00	9709	130.00	171	206.00	5244	296.00	2147
78.00	799	141.00	603	207.00	898	323.00	378
79.00	742	148.00	911	217.00	1584	334.00	205
80.00	387	156.00	352	221.00	858	365.00	1107
81.00	845	167.00	1300	224.00	3089	423.00	994
93.00	1320	168.00	828	225.00	704	441.00	2477
98.00	1151	175.00	191	227.00	1628	442.00	15606
99.00	845	179.00	852	244.00	2459	443.00	3012
104.00	168	180.00	612	246.00	655		

Data File: \\qpltpa02\d\chem\722.1\120300.b\F12030F2.D
 Injection Date: 03-DEC-2000 07:54
 Instrument: 722.1
 Client Sample ID: DFTPP02

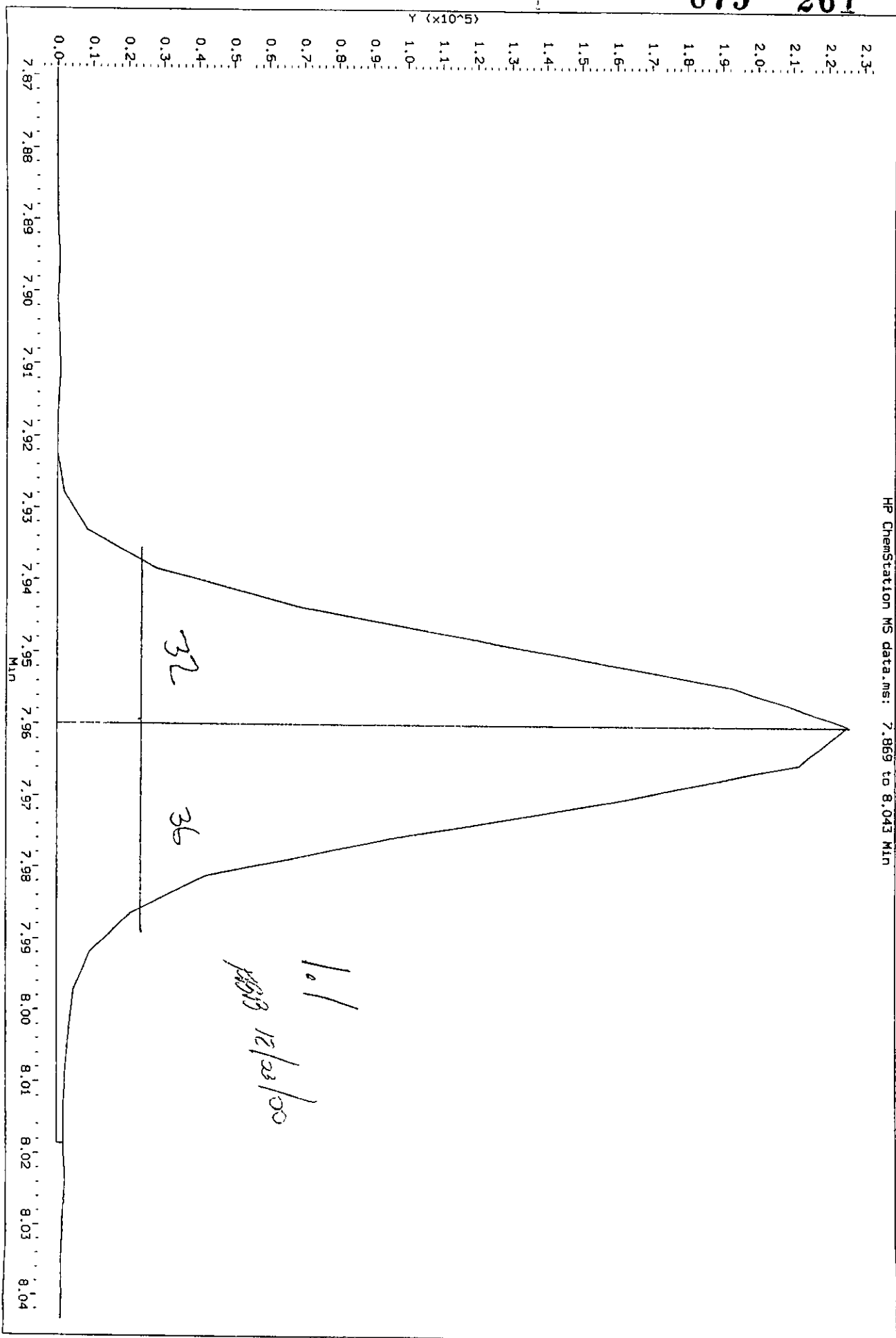
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Data File: \\qpltpa02\\chem\\722.1\\120300.b\\120300F2.D
Injection Date: 03-DEC-2000 07:54
Instrument: 722.1
Client Sample ID: DFTFP02

675 261

HP ChemStation MS data.ms: 7.869 to 8.043 Min



Date : 05-DEC-2000 08:57

Client ID: DFTPP02

Instrument: 722.1

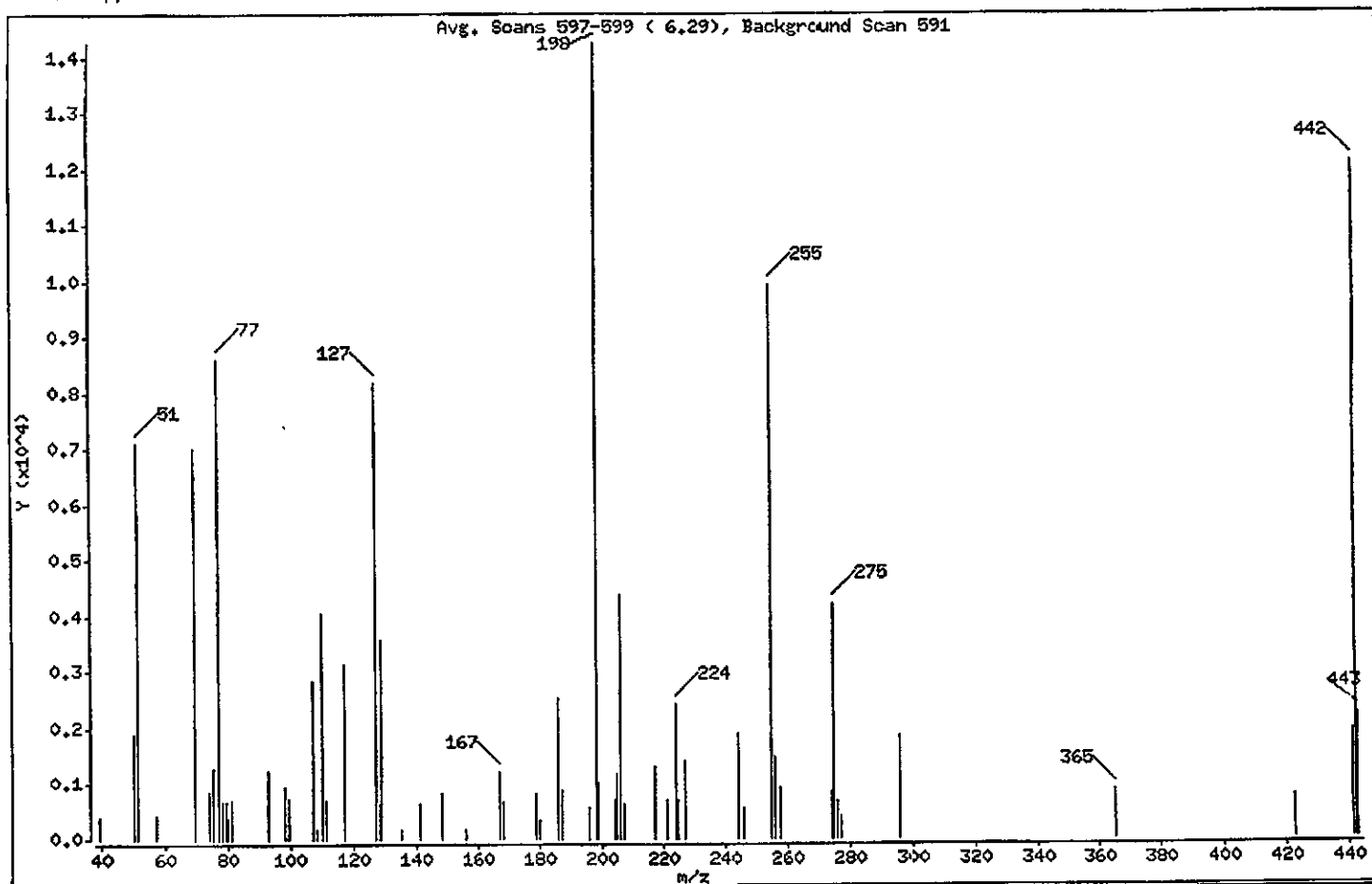
Sample Info: DFTPP050 (25ppb) 77-06-09

Operator: 003200

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	49.91
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	49.18
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	57.49
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.23
275	10.00 - 30.00% of mass 198	29.57
365	Greater than 1.00% of mass 198	6.23
441	Present, but less than mass 443	13.47
442	40.00 - 100.00% of mass 198	84.92
443	17.00 - 23.00% of mass 442	15.63 (18.41)

Data File: \\QPITPA02\nd\chem\722.1\120500.b\F1205DF1.D

Page 3

Date : 05-DEC-2000 08:57

Client ID: DFTPP02

Instrument: 722.1

Sample Info: DFTPP050 (25ppb) 77-06-09

Operator: 003200

Column phase:

Column diameter: 2.00

Data File: F1205IF1.D

Spectrum: Avg. Scans 597-599 (6.29), Background Scan 591

Location of Maximum: 198.00

Number of points: 60

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	393	108.00	174	187.00	885	256.00	1460
50.00	1894	110.00	4063	196.00	570	258.00	926
51.00	7117	111.00	679	198.00	14261	274.00	836
57.00	420	117.00	3134	199.00	1031	275.00	4217
69.00	7013	127.00	8198	204.00	693	276.00	646
74.00	848	128.00	626	205.00	1183	277.00	379
75.00	1293	129.00	3878	206.00	4401	296.00	1857
77.00	8618	135.00	170	207.00	619	365.00	888
78.00	644	141.00	637	217.00	1324	423.00	760
79.00	649	148.00	830	221.00	673	441.00	1921
80.00	358	156.00	178	224.00	2435	442.00	12110
81.00	679	167.00	1224	225.00	683	443.00	2229
93.00	1248	168.00	667	227.00	1424		
98.00	941	179.00	812	244.00	1894		
99.00	711	180.00	338	246.00	553		
107.00	2849	186.00	2526	255.00	9943		

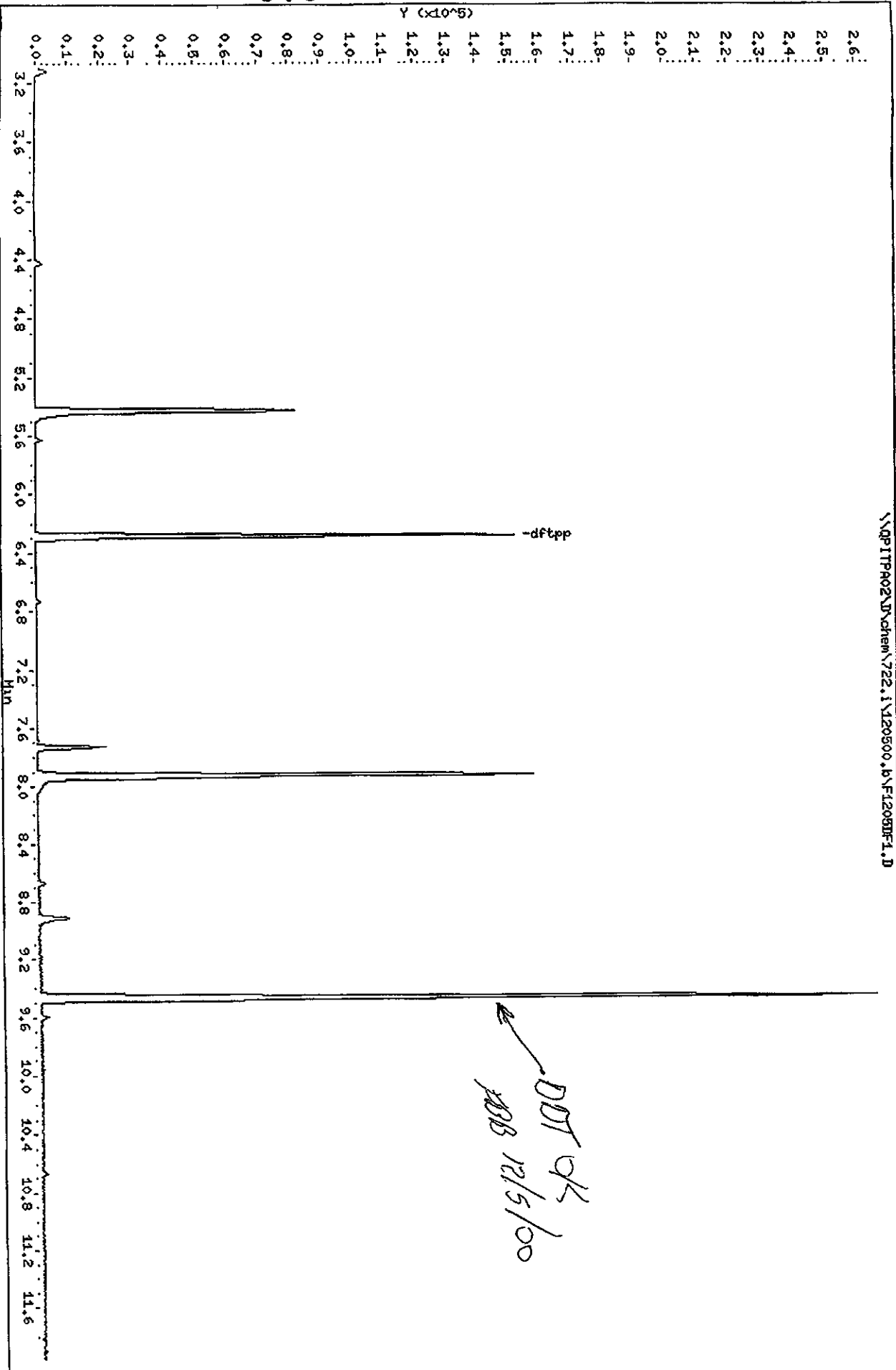
675 264

Data File: \\QPIPPA02\N\chem\722.1\120500.b\F1205DF1.D
 Date: 05-DEC-2000 08:57
 Client ID: DFTPP02
 Sample Info: DFTPP050 (25ppb) 77-06-09

Column phase:

\\QPIPPA02\N\chem\722.1\120500.b\F1205DF1.D

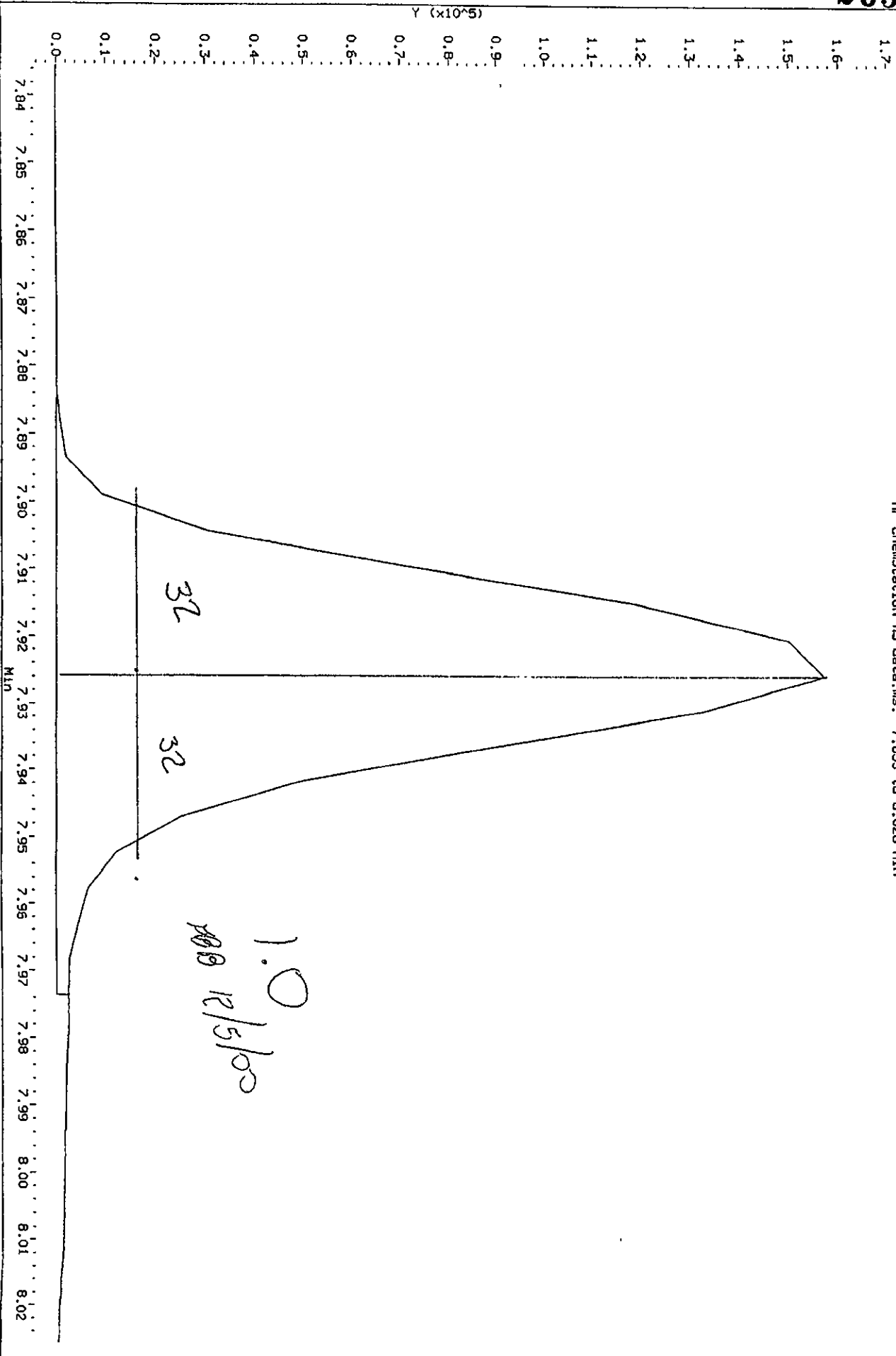
Instrument: 722.1
 Operator: 003200
 Column diameter: 2.00



675 265

Data File: \NPIPA02\chem\722.1\120500.b\120501.D
 Injection Date: 05-DEC-2000 08:57
 Instrument: 722.1
 Client Sample ID: DFTPP02

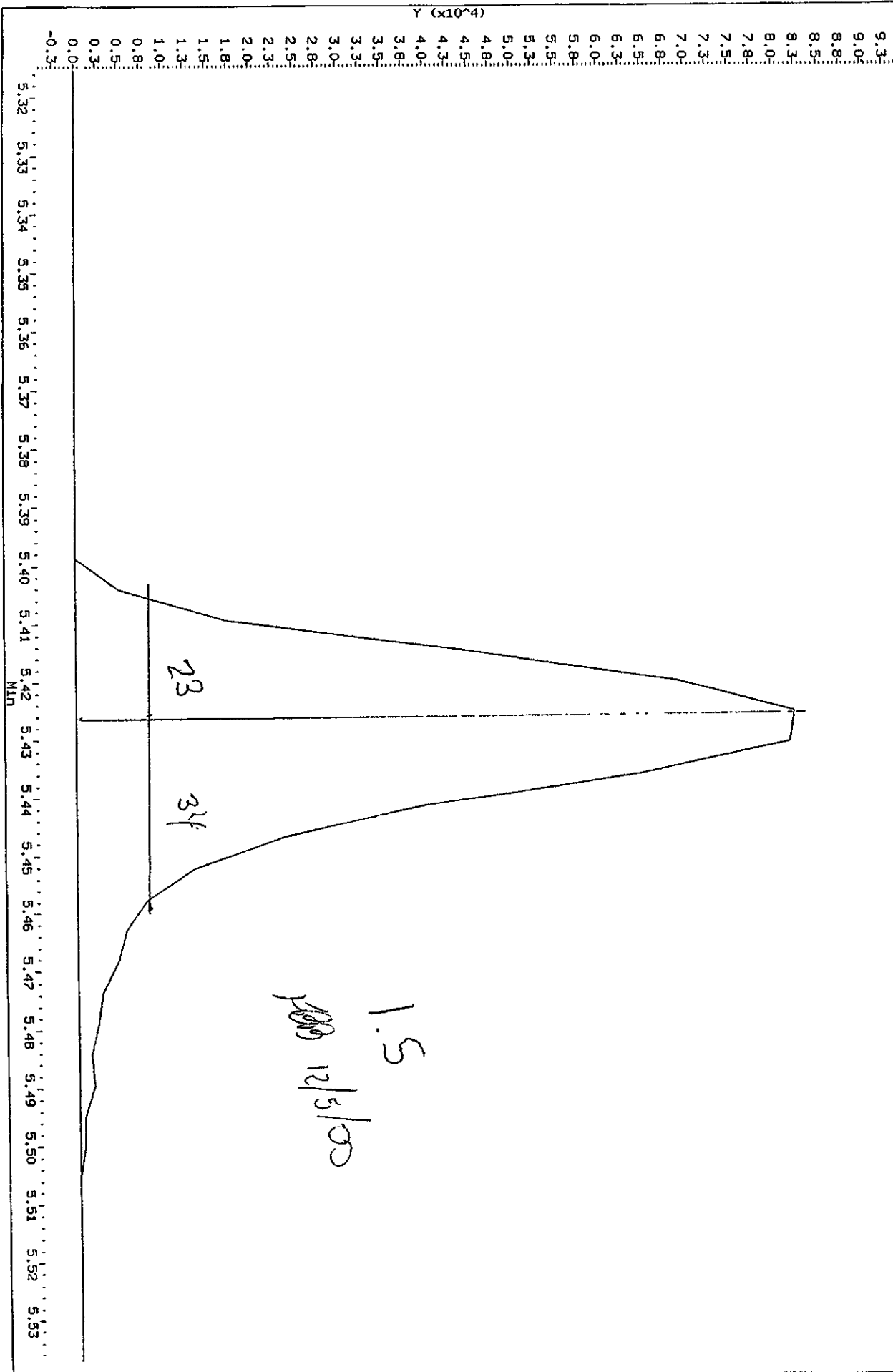
HP ChemStation NS data.ms: 7.835 to 8.026 Min



675 260

Data File: \\QIP1P02\d\chem\722.1\120500.b\F1205DF1.D
 Injection Date: 05-DEC-2000 08:57
 Instrument: 722.1
 Client Sample ID: DTFPP02

HP ChemStation MS data.ms: 5.315 to 5.537 Min



Data File: \\QPITPA02\D\chem\722.i\120500n.b\F1205DFN.D

Date : 05-DEC-2000 21:35

Client ID: DFTPP02

Instrument: 722.i

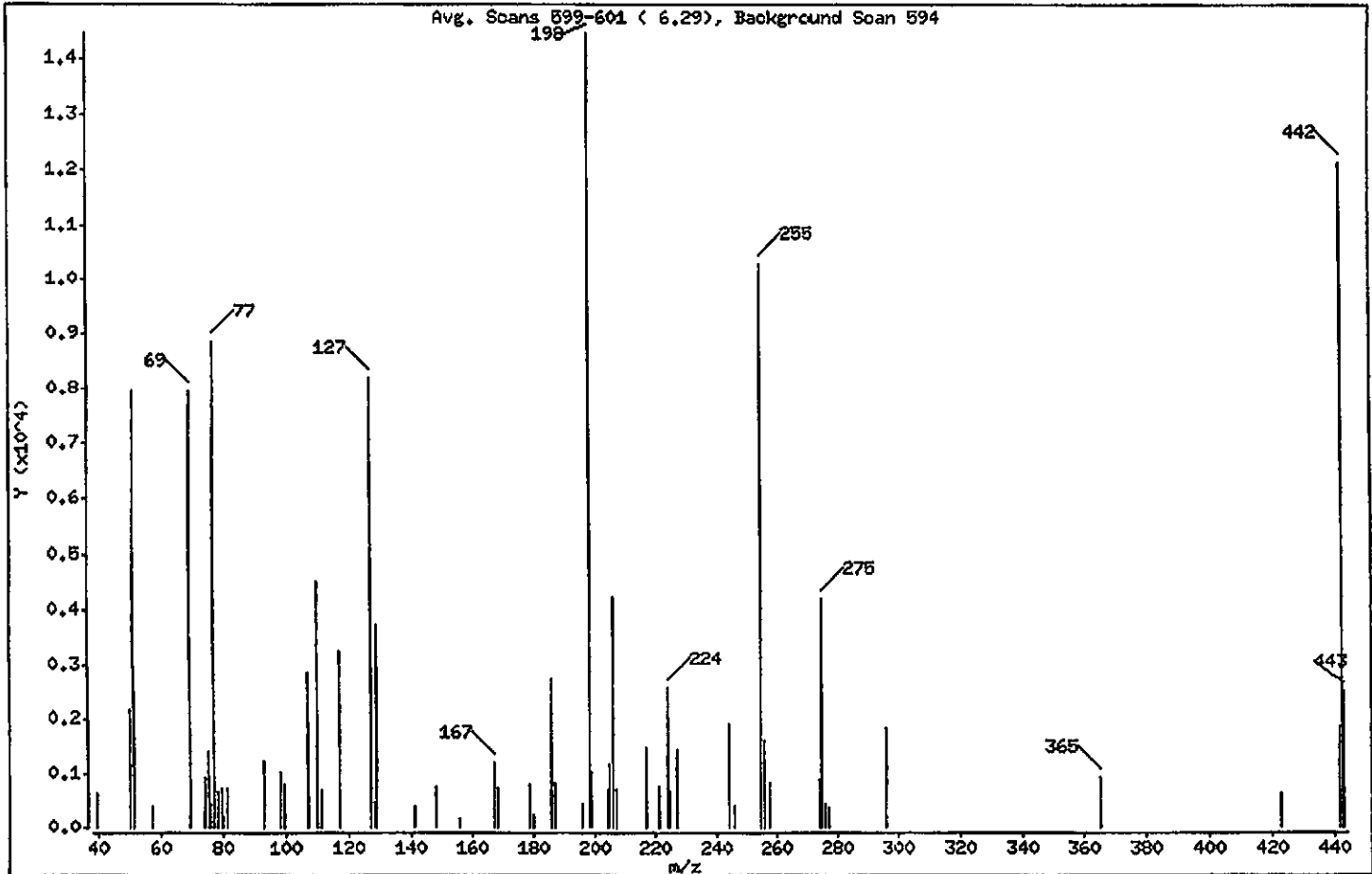
Sample Info: DFTPP050 (25ppb) 77-06-09

Operator: 003200

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	55.09
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	55.18
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	56.81
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.22
275	10.00 - 30.00% of mass 198	28.98
365	Greater than 1.00% of mass 198	6.32
441	Present, but less than mass 443	12.95
442	40.00 - 100.00% of mass 198	83.95
443	17.00 - 23.00% of mass 442	17.30 (20.60)

Data File: \\QPITPA02\chem\722.i\120500n.b\F1205DFN.D

Page 4

Date : 05-DEC-2000 21:35

Client ID: DFTPP02

Instrument: 722.i

Sample Info: DFTPP050 (25ppb) 77-06-09

Operator: 003200

Column phase:

Column diameter: 2.00

Data File: F1205DFN.D

Spectrum: Avg. Scans 599-601 (6.29), Background Scan 594

Location of Maximum: 198.00

Number of points: 59

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	630	99.00	803	186.00	2730	246.00	389
50.00	2167	107.00	2865	187.00	825	258.00	10298
51.00	7962	110.00	4808	196.00	417	256.00	1607
57.00	398	111.00	700	198.00	14484	288.00	819
69.00	7975	117.00	3255	199.00	1044	274.00	904
74.00	946	127.00	8212	204.00	705	275.00	4189
75.00	1386	128.00	458	205.00	1168	276.00	445
76.00	422	129.00	3720	206.00	4229	277.00	374
77.00	8888	141.00	414	207.00	685	296.00	1813
78.00	664	148.00	749	217.00	1447	365.00	914
79.00	722	186.00	172	221.00	752	423.00	642
80.00	199	167.00	1212	224.00	2570	441.00	1872
81.00	739	168.00	743	225.00	686	442.00	12134
93.00	1242	179.00	798	227.00	1424	443.00	2500
98.00	1036	180.00	223	244.00	1910		

675 269

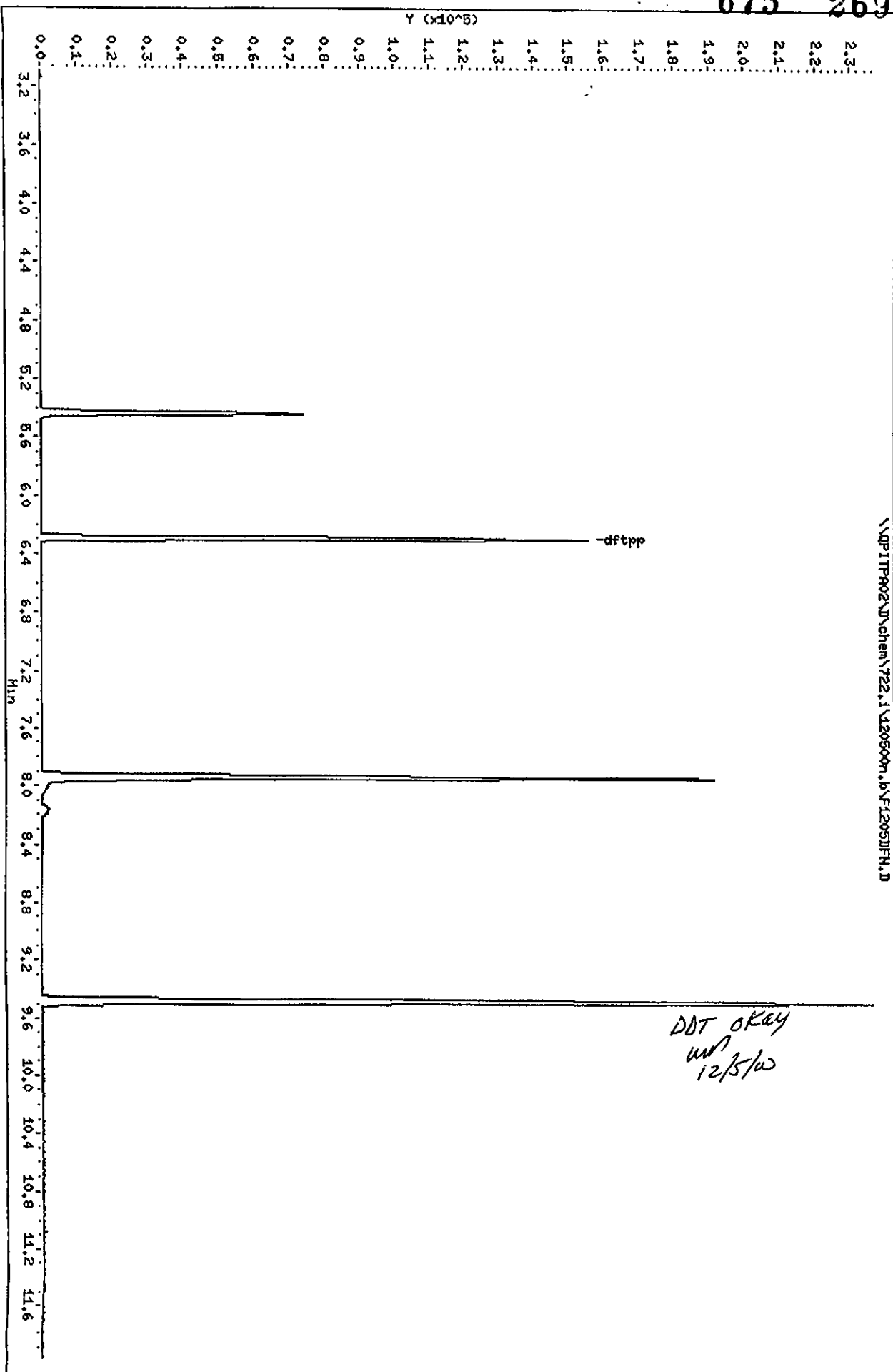
Data File: \\QIPITPA02\UNchem\722.1\120500n.b\F120500N.D
Date: 05-DEC-2000 21:35
Client ID: DFTPP02
Sample Info: DFTPP050 (26ppb) 77-06-09

Column phase:

\\QIPITPA02\UNchem\722.1\120500n.b\F120500N.D

Instrument: 722.1
Operator: 003200
Column diameter: 2.00

Page 2

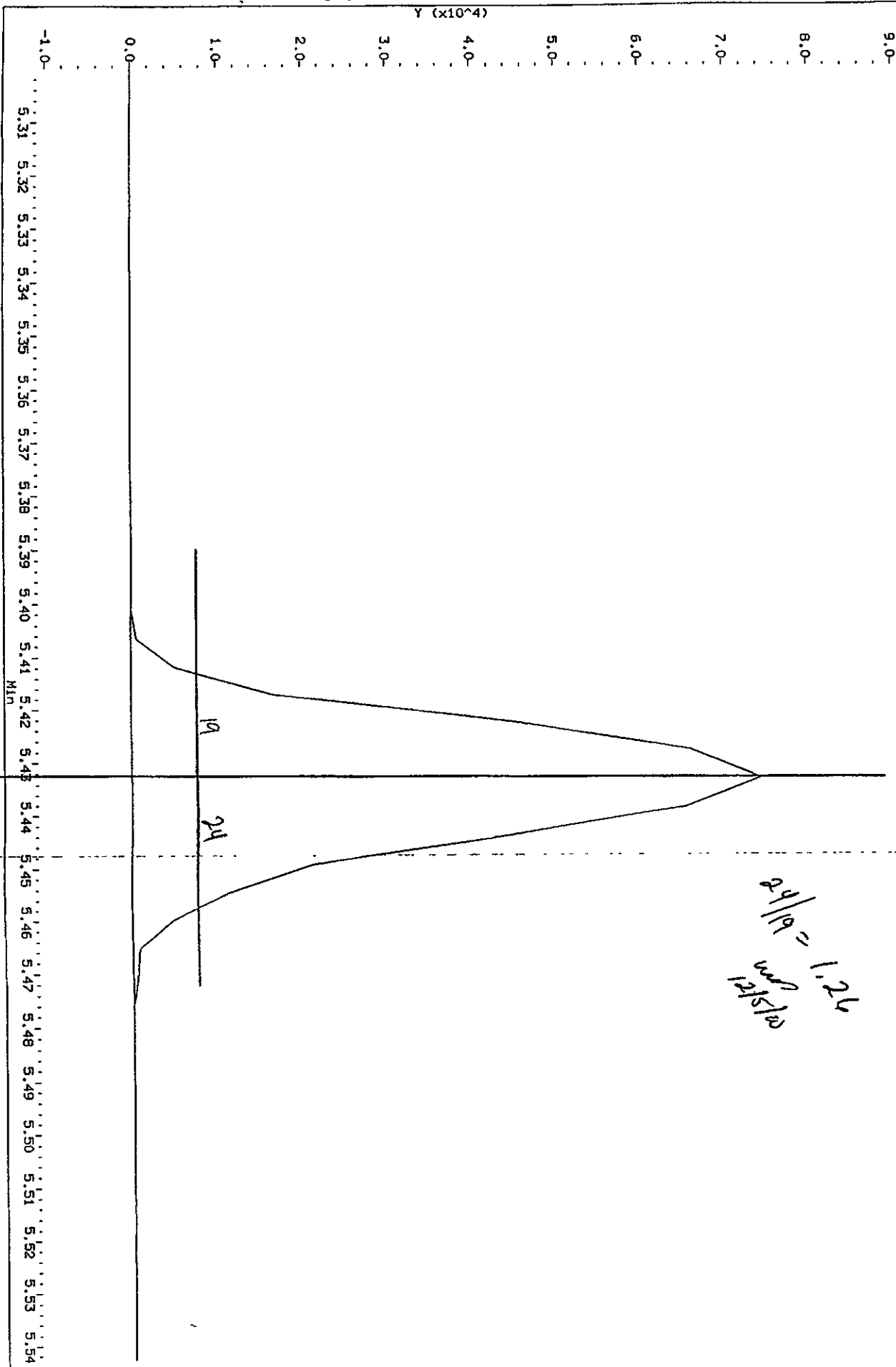


Data File: \GPIPA02\chem\722.1\120500n.b\F1205BPN.D
 Injection Date: 05-DEC-2000 21:35
 Instrument: 722.1
 Client Sample ID: DFTPP02

HP ChemStation MS data.ms: 5.300 to 5.543 Min

675 270

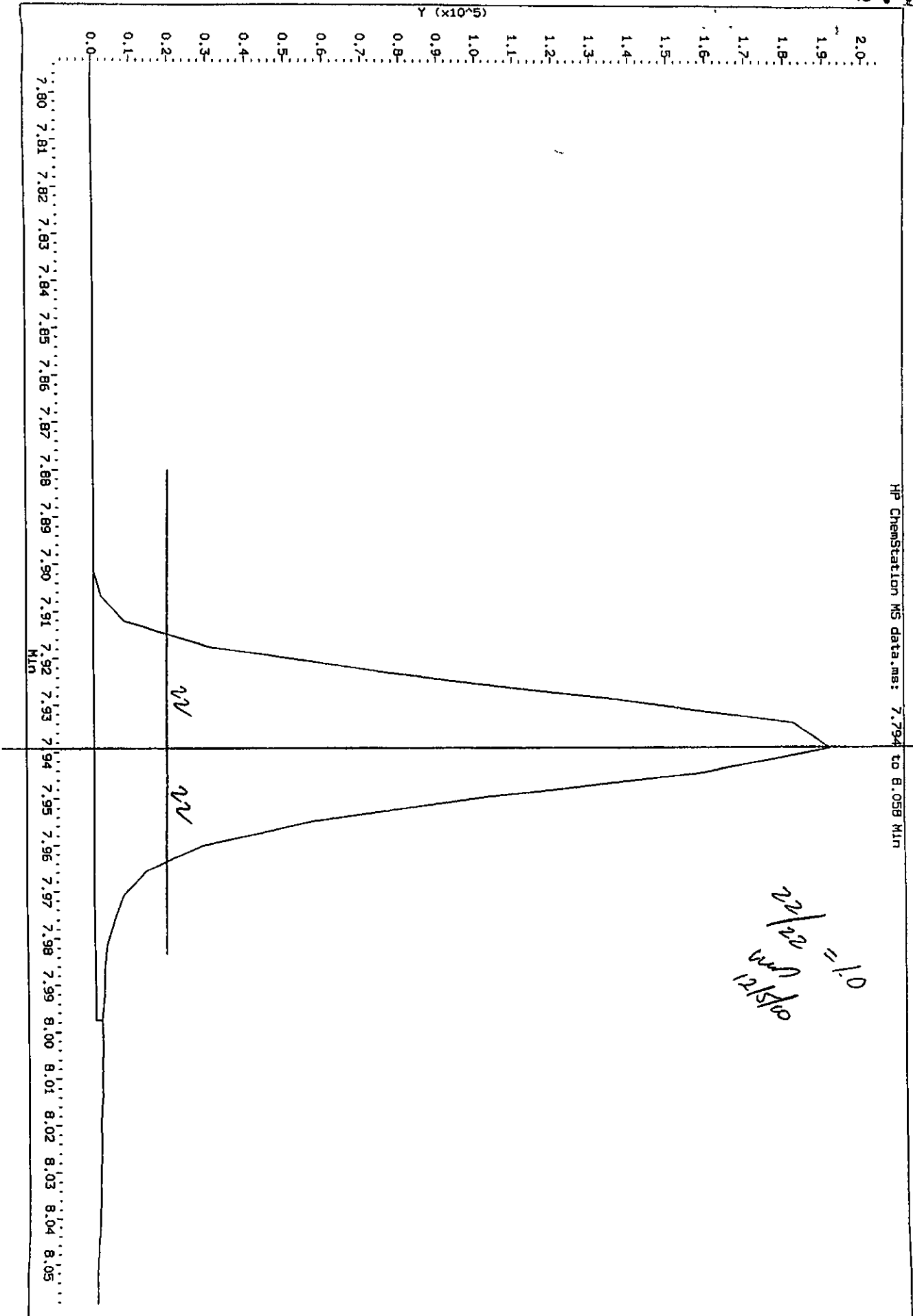
Y (x10⁻⁴)



675 271

Data File: \NPIR02\chem\722.1\120500n.b\120500FN.D
 Injection Date: 05-DEC-2000 21:35
 Instrument: 722.1
 Client Sample ID: DFTPP02

HP ChemStation MS data.ms: 7.794 to 8.058 Min



675 272

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK290000 321

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/17/00

Work Order: DQHTK1AA

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 12/05/00

Moisture %: NA

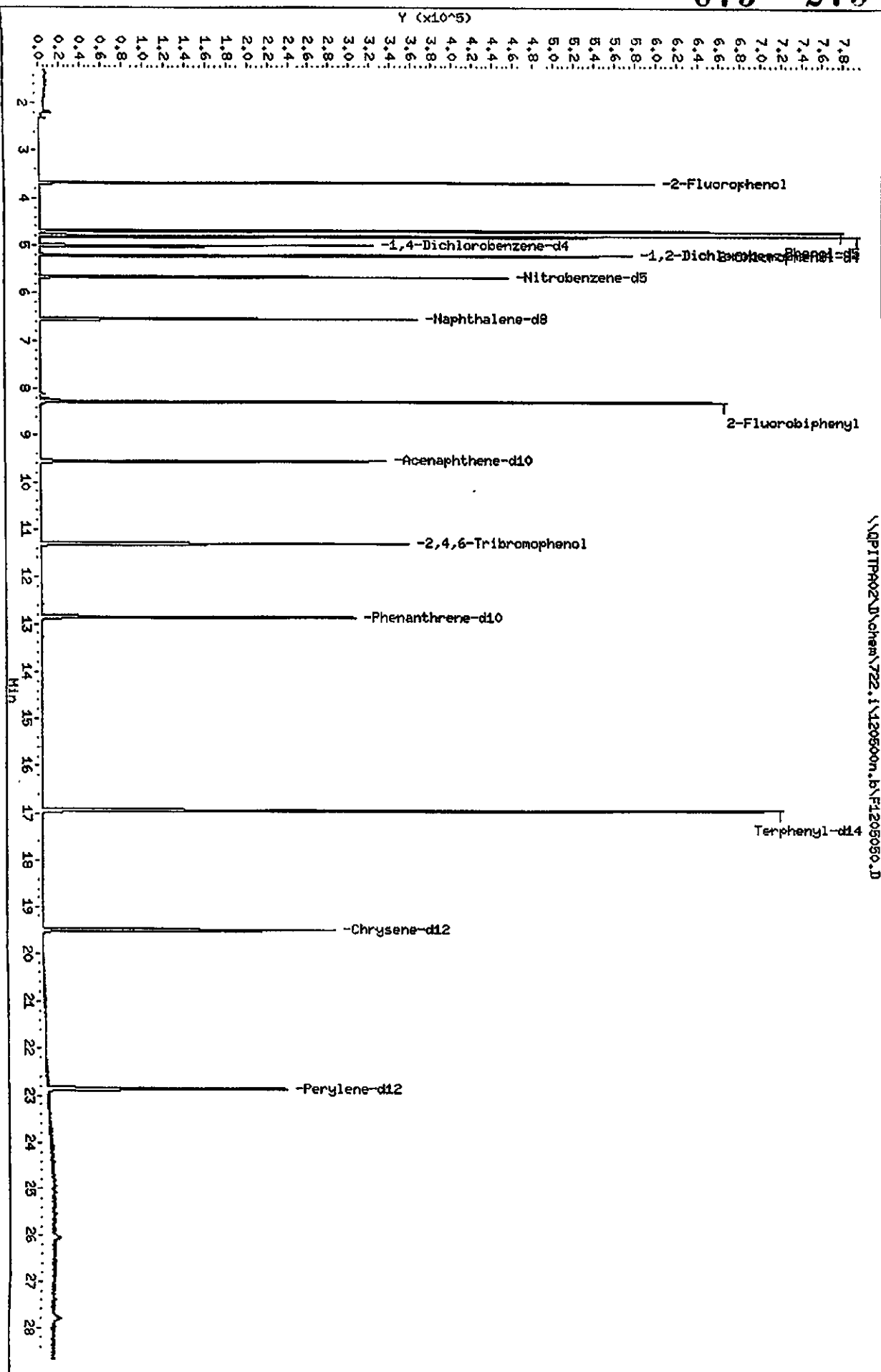
QC Batch: 0334321

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: \\QPI1TPA02\U\chem\722.i\120500n.b\F1205050.D
 Date: 05-DEC-2000 22:24
 Client ID: INTRA-LAB BLANK
 Sample Info: C0K170419-BLK 11/29/00 TCLP (0334321)
 Volume Injected (uL): 2.0
 Column phase: Hp5-HS

Instrument: 722.i
 Operator: 003200
 Column diameter: 0.25



STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\d\chem\722.i\120500n.b\F1205050.D
 Lab Smp Id: DQHTK1AA Client Smp ID: INTRA-LAB BLANK
 Inj Date : 05-DEC-2000 22:24
 Operator : 003200 Inst ID: 722.i
 Smp Info : C0K170119-BLK 11/29/00 TCLP (0334321)
 Misc Info : dqhtk1aa,120500n.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\d\chem\722.i\120500n.b\8270b.m
 Meth Date : 05-Dec-2000 22:23 bungardf Quant Type: ISTD
 Cal Date : 03-DEC-2000 11:40 Cal File: F12030C7.D
 Als bottle: 3 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062

MSB
12/6/00

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	5.002	5.001	(1.000)	55167	40.0000		
* 2 Naphthalene-d8	136	6.536	6.539	(1.000)	220199	40.0000		
* 3 Acenaphthene-d10	164	9.559	9.563	(1.000)	128099	40.0000		
* 4 Phenanthrene-d10	188	12.855	12.854	(1.000)	232169	40.0000		
* 5 Chrysene-d12	240	19.490	19.494	(1.000)	236875	40.0000		
* 6 Perylene-d12	264	22.856	22.865	(1.000)	222831	40.0000		
9 Pyridine	79				Compound Not Detected.			
27 1,4-Dichlorobenzene	146				Compound Not Detected.			
M 195 Cresols, total	100				Compound Not Detected.			
30 2-Methylphenol	108				Compound Not Detected.			
192 4-Methylphenol	108				Compound Not Detected.			
193 3-Methylphenol	108				Compound Not Detected.			
34 Hexachloroethane	117				Compound Not Detected.			

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	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	5.659	5.663	(0.866)	186238	74.5668	0.186 (a)
\$ 155 2-Fluorobiphenyl	172	8.277	8.275	(0.866)	311053	69.9562	0.175 (a)
\$ 156 Terphenyl-d14	244	16.931	16.930	(0.869)	447326	81.1240	0.203 (a)
\$ 157 Phenol-d5	99	4.692	4.696	(0.938)	282292	118.659	0.297 (a)
\$ 158 2-Fluorophenol	112	3.672	3.676	(0.734)	177930	109.591	0.274 (a)
\$ 159 2,4,6-Tribromophenol	330	11.295	11.299	(0.879)	69617	114.469	0.286 (a)
\$ 186 2-Chlorophenol-d4	132	4.799	4.803	(0.959)	220921	132.093	0.330 (a)
\$ 187 1,2-Dichlorobenzene-d4	152	5.211	5.214	(1.042)	93535	71.7624	0.179 (a)

QC Flag Legend

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

675 276

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COK290000 321

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 11/17/00

Work Order: DQHTK1AC

Date Extracted: 11/29/00

Dilution factor: 1

Date Analyzed: 12/05/00

Moisture %: NA

QC Batch: 0334321

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.195	
121-14-2	2,4-Dinitrotoluene	0.192	
118-74-1	Hexachlorobenzene	0.178	
87-68-3	Hexachlorobutadiene	0.183	
67-72-1	Hexachloroethane	0.203	
98-95-3	Nitrobenzene	0.197	
87-86-5	Pentachlorophenol	0.202	
110-86-1	Pyridine	0.207	
95-95-4	2,4,5-Trichlorophenol	0.174	
88-06-2	2,4,6-Trichlorophenol	0.174	
1319-77-3	Cresols (total)	0.617	

Data File: \\QPI1TR02\chem\722.i\420500n.b\F1205051.D

Date : 05-DEC-2000 22:58

Client ID: INTR-LAB CHECK

Sample Info: C0470149-LCS 11/29/00 TOLP (0334321)

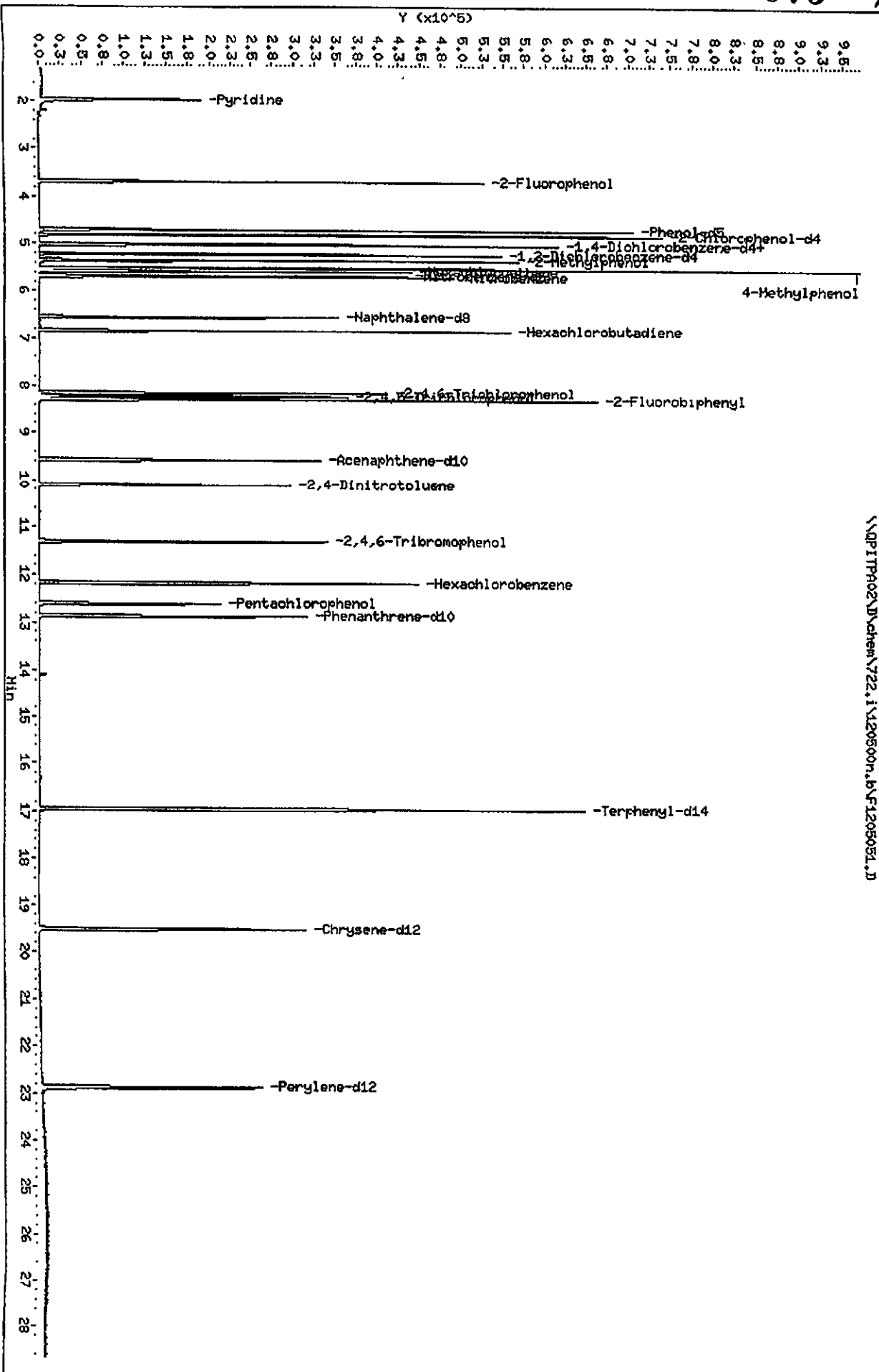
Volume Injected (uL): 2.0

Column phase: HP5-MS

Instrument: 722.1

Operator: 003200

Column diameter: 0.25



STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\d\chem\722.i\120500n.b\F1205051.D
 Lab Smp Id: DQHTK1AC Client Smp ID: INTRA-LAB CHECK
 Inj Date : 05-DEC-2000 22:58
 Operator : 003200 Inst ID: 722.i
 Smp Info : C0K170119-LCS 11/29/00 TCLP (0334321)
 Misc Info : dqhtklac,120500n.b,8270b.m,tclp.sub
 Comment :
 Method : \\QPITPA02\d\chem\722.i\120500n.b\8270b.m
 Meth Date : 05-Dec-2000 22:23 bungardf Quant Type: ISTD
 Cal Date : 03-DEC-2000 11:40 Cal File: F12030C7.D
 Als bottle: 4 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC062

Handwritten signature
 12/2/00

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	5.008	5.001	(1.000)	53263	40.0000		
* 2 Naphthalene-d8	136	6.547	6.539	(1.000)	211242	40.0000		
* 3 Acenaphthene-d10	164	9.576	9.563	(1.000)	127293	40.0000		
* 4 Phenanthrene-d10	188	12.872	12.854	(1.000)	237658	40.0000		
* 5 Chrysene-d12	240	19.507	19.494	(1.000)	262484	40.0000		
* 6 Perylene-d12	264	22.878	22.865	(1.000)	254312	40.0000		
9 Pyridine	79	1.953	1.950	(0.390)	123392	82.9169	0.207	
27 1,4-Dichlorobenzene	146	5.030	5.022	(1.004)	160165	77.9014	0.195	
M 195 Cresols, total	100				393717	246.740	0.617	
30 2-Methylphenol	108	5.350	5.343	(1.068)	124875	79.7890	0.199	
192 4-Methylphenol	108	5.521	5.503	(1.102)	268842	166.951	0.417 (AQ)	
193 3-Methylphenol	108	Compound Not Detected.						
34 Hexachloroethane	117	5.580	5.572	(1.114)	65838	81.1380	0.203	

675 279

Compounds	QUANT SIG							CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (NG)	FINAL (mg/L)		
35 Nitrobenzene	77	5.692	5.684	(0.869)	189076	78.9228	0.197		
56 Hexachlorobutadiene	225	6.835	6.822	(1.044)	80582	73.2801	0.183		
66 2,4,6-Trichlorophenol	196	8.144	8.137	(0.850)	77636	69.6543	0.174		
67 2,4,5-Trichlorophenol	196	8.219	8.217	(0.858)	80364	69.8249	0.174		
87 2,4-Dinitrotoluene	165	10.094	10.081	(1.054)	85139	76.8380	0.192		
107 Hexachlorobenzene	284	12.167	12.154	(0.945)	106710	71.2667	0.178		
111 Pentachlorophenol	266	12.610	12.597	(0.980)	45603	80.9455	0.202		
\$ 154 Nitrobenzene-d5	82	5.671	5.663	(0.866)	178817	74.6313	0.186 (a)		
\$ 155 2-Fluorobiphenyl	172	8.288	8.275	(0.866)	299068	67.6867	0.169 (a)		
\$ 156 Terphenyl-d14	244	16.948	16.930	(0.869)	403398	66.0200	0.165 (a)		
\$ 157 Phenol-d5	99	4.704	4.696	(0.939)	260727	113.512	0.284 (a)		
\$ 158 2-Fluorophenol	112	3.684	3.676	(0.736)	166588	106.273	0.266 (a)		
\$ 159 2,4,6-Tribromophenol	330	11.307	11.299	(0.878)	65235	104.787	0.262 (a)		
\$ 186 2-Chlorophenol-d4	132	4.811	4.803	(0.961)	206126	127.652	0.319 (a)		
\$ 187 1,2-Dichlorobenzene-d4	152	5.222	5.214	(1.043)	89841	71.3923	0.178 (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.

675 280

**GC/MS SEMIVOLATILE
MISCELLANEOUS**

TCLP (N 'hod 1311)

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



James O Murphy

Applicant <u>RW</u>	Room Temp <u>51.0</u>	Date <u>11/27/00</u>	Checked By <u>CLM/ML/awt</u>	Date <u>11-28-00</u>	pH Instrument <u>Summet AP25</u>	Probe <u>52059607</u>	Balance <u>0.14837</u>
Lot # <u>5103319</u>	Client Codes <u>6203118</u>		Solution # 1 - Log book # <u>004487-12</u>		Solution # 2 - Log book # <u>45-08-02203607</u>		

Fluid Determination

TCLP Extraction

Sample ID	Wgt/Vol	Init. pH	Final pH	Extract fluid #1 or #2	Sample ID	Wgt (g) Wet/Dry	Fluid Vol.	Vessel glass/plastic	Final pH after Tumbling	Conc HNO ₃ 10 Acidity (for Metals)
1 DP2WN	5.00	46.54	1.90	F1	DP2WN	100 g.	2000ml	GLASS	5.12	5ml
2 DP4JB		2.81	1.94		DP4JB				5.04	5ml
3 DP7HA		12.17	12.17		DP7HA				10.40	5ml
4 DP7HS		12.17	2.35		DP7HS				9.86	5ml
5 DP7OT		4.42			DP7OT				4.80	5ml
6 DP9AN		2.85			DP9AN				4.96	5ml
7 DP9AV		12.33	3.36		DP9AV				11.36	5ml
8 DP9AO		5.65	1.84		DP9AO				4.96	5ml
9 DQAZL		4.95			DQAZL				10.84	5ml
10 DQAZL		12.32	3.05		DQAZL				11.20	5ml
11 DQCAP		9.52	1.94		DQCAP				6.01	5ml
12 DQCKK		7.39	1.86		DQCKK				5.10	5ml
13 DQCLC		7.75	1.84		DQCLC				5.04	5ml
14 DQCLE		7.31	1.86		DQCLE				5.04	5ml
15 DQOEX		13.39	9.24	F2	DQOEX				4.25	5ml

Extract(s)			Extract(s) Received			Extract(s) Relinquished		
(Record line number from above)	Date	Time	Date	Time	Location	Date	Time	Location
ALL GLASS	11-28	14:00	11-28	14:30	N.P	11-28	14:30	30D
GLASS	11-28	14:00	11-28	14:30	APP	11-28	14:30	30D
	11-28	14:00	11-28	14:30		11-28	14:30	30D

Comments pH = 4.95 H₂O

pH = 2.85 H₂O

* = Sample determined to have free liquid, % solid determination was performed.	Date/Time On	Date/Time Off	Agitation Apparatus RPM's 30±2
<5 = Extraction fluid # 1 5.7mL Glacial acetic acid dil 500mL + 64.3mL HaOH dil to 1L (pH 4.93 ± 0.05)	11/27/00 16:45	11/28/00 09:30	checked by <u>CLM</u> 11/27/00
>5 = Extraction fluid #2 5.7mL Glacial acetic acid dil to 1L (pH 2.88 ± 0.05)			(7.0)
	Date	pH calibration	(4.0)
	11/27/00	4.00	7.01
	Date		10.02
	11/28/00	4.00	10.01
	Filter Lot #		
	8320701W		

TCLP (N hod 1311)

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



Analyst <u>LCW</u>	Room Temp <u>17°C</u>	Date <u>11/27/20</u>	Checked By <u>Guillermo</u>	Date <u>11/27/20</u>	pH Instrument <u>Accumet AP-5</u>	Probe <u>500.5-260.7</u>	Balance <u>1948.17</u>
Log # <u>COK270112</u>	Client Codes				Solution # 1 - Log book #	Solution # 2 - Log book # <u>95-08-0220-36</u>	

Fluid Determination				TCLP Extraction			
Sample ID	Wgt/Vol	Init. pH	Final pH	Extract fluid #1 or #2	Sample ID	Wgt (g) Wet/Dry	Fluid Vol.
1. <u>13-704P RW</u>					13-704P1		200.00
2. <u>13-704P RW</u>					13-704P2		↓
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							

Extract(s) Received			Extract(s) Relinquished		
(Record line number from above)	Date	Time	Analyst	Date	Time
11 above	11-28-20	14:00	JW	11-28-20	14:30
	11-28-20	14:20	RW	11-28-20	14:30
	11-28-20	14:20	RW	11-28-20	14:30

Comments

Date/Time On	Date/Time Off	pH calibration	Agitation Apparatus RPM's 30±2
11/27/20 16:45	11/28-00 09:30	(4.0)	checked by <u>LCW</u> 11/27/20
Date 11-27-20		4.00	(7.0)
Date 11-28-20		↓	10.00
Filter Lot # <u>63207011W</u>			10.00

* = Sample determined to have free liquid, % solid determination was performed.
 <5 = Extraction fluid # 1 5.7mL Glacial acetic acid dil 500mL + 64.3mL HaOH 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)

Continuous L-L Extraction Worksheet

STL - Pittsburgh
Logbook ID: OP5

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Lot Number	Sample ID	Client ID	Extract Volume (mL)	Final Volume (mL)	pH	Surrogate Lot #	Surrogate Lot #	Surrogate Lot #	Matrix Spike Lot #	MS Vol (mL)	Cleanup Method
1. COK170119	BIK	NA	2.00	1.0	5/2/11	77-05-12	0.5	NA	77-05-6	0.5	NA
2.	LCS				5/2/11						
3.	MS (001)				5/2/11						
4.	MSD (001)				5/2/11						
5.	001				5/2/11						
6. COK170261	001				5/2/11						
7. COK200198	001				5/2/11						
8. COK220219	001				7/2/11						
9. COK220253	001				5/2/11						
10.	002				5/2/11						
11.	003				5/2/11						
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											
21.											
22.											
23.											
24.											
Prep Analyst:	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT
Extract(s) (record line # from above)	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT
ALL ABOVE	12-1-00 0940	12-1-00 0940	12-1-00 0940	12-1-00 0940	12-1-00 0940	12-1-00 0940	12-1-00 0940	12-1-00 0940	12-1-00 0940	12-1-00 0940	12-1-00 0940
ALL ABOVE	12-4-00 0800	12-4-00 0800	12-4-00 0800	12-4-00 0800	12-4-00 0800	12-4-00 0800	12-4-00 0800	12-4-00 0800	12-4-00 0800	12-4-00 0800	12-4-00 0800
ALL ABOVE	12-5-00 1300	12-5-00 1300	12-5-00 1300	12-5-00 1300	12-5-00 1300	12-5-00 1300	12-5-00 1300	12-5-00 1300	12-5-00 1300	12-5-00 1300	12-5-00 1300
Batch Number: 0334321	Reviewed by: <i>Jane Miller</i> Date: 12-4-00										

Instrument Name: GC/MS Instrument #1

Sequence File: D:\HPCHEM\1\SEQUENCE\120300.S

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

Operator: 003200

Data Path: d:\HPCHEM\1\DATA\120300.b\

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

284
675

Line	Type	Vial	DataFile	Method	Sample Name
1)	Sample	1	F1203DF1	DFTPP	DFTPP050 (25ppb) 194-175-8
2)	Sample	734 1	F1203DF2	DFTPP	DFTPP050 (25ppb) 194-175-8
3)	Sample	734 2	F12030C1	72EARLY	SSTD050 (25ppb) 77-05-14
4)	Sample	734 30	F12030C2	72EARLY	SSTD020 (10ppb) 77-06-3
5)	Sample	734 31	F12030C3	72EARLY	SSTD080 (40ppb) 77-06-4
6)	Sample	734 32	F12030C4	72EARLY	SSTD120 (60ppb) 77-06-5
7)	Sample	734 33	F12030C5	72EARLY	SSTD160 (60ppb) 77-06-6
8)	Sample	734 30	F12030C6	72EARLY	SSTD020 (10ppb) 77-06-3
9)	Sample	734 31	F12030C7	72EARLY	SSTD080 (40ppb) 77-06-4
10)	Sample	34	F12030V1	72EARLY	SSTD VER. SST050 77-05-15
11)	Sample	3	F1203001	72EARLY	C0K110151-BLK 11/15/00 H2O (0321
12)	Sample	4	F1203002	72EARLY	C0K110151-LCS 11/15/00 H2O (0321
13)	Sample	5	F1203003	72EARLY	C0K110151-005S x100 11/15/00 H2O
14)	Sample	6	F1203004	72EARLY	C0K110151-005D x100 11/15/00 H2O
15)	Sample	7	F1203005	72EARLY	C0K110151-001 x4 11/15/00 H2O (0
16)	Sample	8	F1203006	72EARLY	C0K110151-002 x20 11/15/00 H2O (
17)	Sample	9	F1203007	72EARLY	C0K110151-003 11/15/00 H2O (0321
18)	Sample	10	F1203008	72EARLY	C0K110151-004 11/15/00 H2O (0321
19)	Sample	11	F1203009	72EARLY	C0K110151-005 x100 11/15/00 H2O
20)	Sample	12	F1203010	72EARLY	C0K110151-006 x5 11/15/00 H2O (0
21)	Sample	13	F1203011	72EARLY	C0K110151-007 11/15/00 H2O (0321
22)	Sample	14	F1203012	72EARLY	C0K110151-008 11/15/00 H2O (0321
23)	Sample	15	F1203013	72EARLY	C0K110151-009 11/15/00 H2O (0321
24)	Sample	16	F1203014	72EARLY	C0K110151-010 x5 11/15/00 H2O (0
25)	Sample	17	F1203015	72EARLY	C0K110151-011 11/15/00 H2O (0321
26)	Sample	100	F11290B2	72EARLY	Blank
27)	Sample	100	F11290B3	72EARLY	Blank
28)	Sample	100	F11290B4	72EARLY	Blank
29)	Sample	100	F11290B5	72EARLY	Blank
30)	Sample	100	F11290B6	72EARLY	Blank

Bytes Needed: 1500000 Space on drive D: 1023932928

Sequence Verification Done!

Instrument Name: GC/MS Instrument #1

675 285

Sequence File: D:\HPCHEM\1\SEQUENCE\120500.S

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

Operator: 003200

Data Path: d:\HPCHEM\1\DATA\120500.b\

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

8270
12/5/00
FBB/VUP

Line	Type	Vial	DataFile	Method	Sample Name
1)	Sample	(0857) 1	F1205DF1	DFTPP	DFTPP050 (25ppb) 77-06-09
2)	Sample	AOC 2	F12050C1	72EARLY	SSTD050 (25ppb) 77-06-7
3)	Sample	AOC 3	F1205001	72EARLY	C0K160334-BLK 11/22/00 H2O (0327
4)	Sample	AOC 4	F1205002	72EARLY	C0K160334-LCS 11/22/00 H2O (0327
5)	Sample	AOC 5	F1205003	72EARLY	C0K160334-LCSD 11/22/00 H2O (032
6)	Sample	AOC 6	F1205004	72EARLY	C0K110151-016 x200 11/15/00 H2O
7)	Sample	AOC 7	F1205005	72EARLY	C0K110151-017 x100 11/15/00 H2O
8)	Sample	AOC 8	F1205006	72EARLY	C0K150260-001 11/20/00 H2O (0325
9)	Sample	AOC 9	F1205007	72EARLY	C0K150260-007 11/20/00 H2O (0325
10)	Sample	AOC 10	F1205008	72EARLY	C0K040176-006 x50 11/20/00 TCLP
11)	Sample	AOC 11	F1205009	72EARLY	C0K160334-001 11/22/00 H2O (0327
12)	Sample	AOC 12	F1205010	72EARLY	C0K160334-002 11/22/00 H2O (0327
13)	Sample	AOC 13	F1205011	72EARLY	C0K160334-003 11/22/00 H2O (0327
14)	Sample	AOC 14	F1205012	72EARLY	C0K160334-004 11/22/00 H2O (0327
15)	Sample	AOC 15	F1205013	72EARLY	C0K160334-005 11/22/00 H2O (0327
16)	Sample	AOC 16	F1205014	72EARLY	C0K160334-006 11/22/00 H2O (0327
17)	Sample	AOC 17	F1205015	72EARLY	C0K160334-007 11/22/00 H2O (0327
18)	Sample	AOC 18	F1205016	72EARLY	C0K220219-001 11/29/00 TCLP (033
19)	Sample	AOC 19	F1205017	72EARLY	C0K220253-001 11/29/00 TCLP (033
20)	Sample	20	F1205018	72EARLY	C0K220253-002 11/29/00 TCLP (033
21)	Sample	21	F1205019	72EARLY	C0K220253-003 11/29/00 TCLP (033
22)	Sample	100	F11290B2	72EARLY	Blank
23)	Sample	100	F11290B3	72EARLY	Blank
24)	Sample	100	F11290B4	72EARLY	Blank
25)	Sample	100	F11290B5	72EARLY	Blank
26)	Sample	100	F11290B6	72EARLY	Blank

Bytes Needed: 1300000 Space on drive D: 1023932928

Sequence Verification Done!

675 286

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Instrument Name: GC/MS Instrument #1

Sequence File: D:\HPCHEM\1\SEQUENCE\120500n.S

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

Operator: 003200

Data Path: d:\HPCHEM\1\DATA\120500n.b\

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

8270
12/5/00(N)
VUP

Line Type	Vial	DataFile	Method	Sample Name
1) Sample	(2/35) 1	F1205DFN	DFTPP	DFTPP050 (25ppb) 77-06-09
2) Sample	AGC-2	F12050CN	72EARLY	SSTD050 (25ppb) 77-06-7
3) Sample	AGC 3	F1205050	72EARLY	C0K170119-BLK 11/29/00 TCLP (033
4) Sample	AGC 4	F1205051	72EARLY	C0K170119-LCS 11/29/00 TCLP (033
5) Sample	AGC 5	F1205052	72EARLY	C0K170119-001S 11/29/00 TCLP (03
6) Sample	AGC 6	F1205053	72EARLY	C0K170119-001D 11/29/00 TCLP (03
7) Sample	AGC 7	F1205054	72EARLY	C0K170119-001 11/29/00 TCLP (033
8) Sample	AGC 8	F1205055	72EARLY	C0K170261-001 11/29/00 TCLP (033
9) Sample	AGC 9	F1205056	72EARLY	C0K200198-001 11/29/00 TCLP (033
10) Sample	AGC 10	F1205057	72EARLY	C0K040176-BLK 11/24/00 SPLP (032
11) Sample	AGC 11	F1205058	72EARLY	C0K040176-LCS 11/24/00 SPLP (032
12) Sample	AGC 12	F1205059	72EARLY	C0K040176-LCSD 11/24/00 SPLP (03
13) Sample	AGC 13	F1205060	72EARLY	C0K040176-001 x20 11/24/00 SPLP
14) Sample	AGC 14	F1205061	72EARLY	C0K040176-002 x250 11/24/00 SPLP
15) Sample	AGC 15	F1205062	72EARLY	C0K040176-003 11/24/00 SPLP (032
16) Sample	AGC 16	F1205063	72EARLY	C0K040176-004 11/24/00 SPLP (032
17) Sample	AGC (over)-17	F1205064	72EARLY	C0K040176-005 x10 11/24/00 SPLP
18) Sample	AGC 18	F1205065	72EARLY	C0K040176-006 x250 11/24/00 SPLP
19) Sample	19	F1205066	72EARLY	C0K070217-001 11/24/00 SPLP (032
20) Sample	20	F1205067	72EARLY	C0K070217-002 11/24/00 SPLP (032
21) Sample	21	F1205068	72EARLY	C0K070217-003 x50 11/24/00 SPLP
22) Sample	22	F1205069	72EARLY	C0K080214-001 x60 11/24/00 SPLP
23) Sample	100	F11290B2	72EARLY	Blank
24) Sample	100	F11290B3	72EARLY	Blank
25) Sample	100	F11290B4	72EARLY	Blank
26) Sample	100	F11290B5	72EARLY	Blank
27) Sample	100	F11290B6	72EARLY	Blank

Bytes Needed: 1350000 Space on drive D: 1023932928
Sequence Verification Done!

REQUESTED BY. WILLIAMR

METHOD. QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED		CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY		
		CNTR#	CONTROL #							RCVD	REQD	
2B	DP2WN	---	288558	039108	A-34-QO	C0K170119	001		SOLID	0	4	1
2D,E	DP4J8	---	288559	378644	A-34-QO	C0K170261	001		SOLID	0	8	1
3B	DP7HA	---	288547	413315	A-34-QO	C0K200168	001		SOLID	0	2	1
3B	DP7HJ	---	288548	413315	A-34-QO	C0K200168	002		SOLID	0	1	1
3B CLP1	DP70T	---	288560	090421	A-34-QO	C0K200198	001		SOLID	0	3	1
3C	DP9AN	---	288549	413315	A-34-QO	C0K210198	001		SOLID	0	1	1
3C	DP9AV	---	288550	413315	A-34-QO	C0K210198	002		SOLID	0	1	1
3C	DP9A0	---	288551	413315	A-34-QO	C0K210198	003		SOLID	0	1	1
3E	DQA2L	---	288552	413315	A-34-QO	C0K220186	001		SOLID	0	1	1
3E	DQA2R	---	288553	413315	A-34-QO	C0K220186	002		SOLID	0	1	1
3D	DQCAP	---	288554	039108	A-34-QO	C0K220219	001		SOLID	0	4	1
CLP1 3D	DQCKK	---	288555	399411	A-34-QO	C0K220253	001		SOLID	0	3	1
CLP1 3D	DQCLC	---	288556	399411	A-34-QO	C0K220253	002		SOLID	0	3	1
CLP1 3D	DQCLE	---	288557	399411	A-34-QO	C0K220253	003		SOLID	0	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

[Signature]
Thomas J. Williams

[Signature]
Thomas J. Williams

11/27-0900
11/27-1430

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

675 288

PSR024 11/29/00 5:14:56 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: TROUTB

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

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	
										RCVD	REQD
2B 300	DP2WN-1-AL	___	289242	039108	A-59-QL	C0K170119	001		SOLID	0	4 1
2D,E	DP4J8-1-AD	___	289238	378644	A-59-QL	C0K170261	001		SOLID	0	8 1
3B CLP1	DP70T-1-AD	___	289243	090421	A-59-QL	C0K200198	001		SOLID	0	3 1
3D	DQCAP-1-AL	___	289244	039108	A-59-QL	C0K220219	001		SOLID	0	4 1
CLP1 3D	DQCKK-1-AD	___	289239	399411	A-59-QL	C0K220253	001		SOLID	0	3 1
CLP1 3D	DQCIC-1-AD	___	289240	399411	A-59-QL	C0K220253	002		SOLID	0	3 1
CLP1 3D	DQCLE-1-AD	___	289241	399411	A-59-QL	C0K220253	003		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

[Signature]
B Trout

[Signature]
[Signature]

11/29/2000 08:10
11/29/2000 12:30

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

675 289

PESTICIDE DATA

675 290

**PESTICIDE
QC SUMMARY**

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: COK220253

	CLIENT ID.	SRG01	SRG02	TOT OUT	
	=====	=====	=====	=====	
01	~~INTRA LAB QC~~	~~91~~	~~84~~	~~00~~	uwm 12-12-00
02	DF/24-A/0326/SDC/006	94	86	00	
03	DF/24-A/0326/SDC/007	94	86	00	
04	DF/24-A/0326/SDC/008	96	86	00	
05	METHOD BLK. DQPJG1AA	98	90	00	
06	LCS DQPJG1AC	93	88	00	
07	~~LAB MS/MSD D~~	~~91~~	~~85~~	~~00~~	uwm 12-12-00
08	~~LAB MS/MSD S~~	~~89~~	~~82~~	~~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

675 292

SW846 8081A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: C0L010000

WO #: DQPJG1AC

BATCH: 0336519

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Lindane	0.00250	0.00205	82	49 - 137	
Heptachlor	0.00250	0.00225	90	57 - 124	
Heptachlor epoxide	0.00250	0.00207	83	53 - 135	
Endrin	0.00250	0.00212	85	46 - 137	
Methoxychlor	0.00250	0.00291	116	12 - 154	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Level: (low/med) LOW

Lot #: C0K170261

WO #: DP4J81A3

BATCH: 0336519

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Lindane	0.00250	ND	0.00194	77	30 - 148	
Heptachlor	0.00250	ND	0.00212	85	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00194	78	38 - 138	
Endrin	0.00250	ND	0.00200	80	28 - 148	
Methoxychlor	0.00250	ND	0.00267	107	13 - 154	

NOTES (S) :

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

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

COMMENTS:

675 294

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 #: COK170261

WO #: DP4J81A4

BATCH: 0336519

COMPOUND	SPIKE	MSD	MSD	% QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD REC	
Lindane	0.00250	0.00201	81	3.9	22 30 - 148	
Heptachlor	0.00250	0.00220	88	3.8	32 25 - 135	
Heptachlor epoxide	0.00250	0.00200	80	2.9	31 38 - 138	
Endrin	0.00250	0.00216	87	7.9	40 28 - 148	
Methoxychlor	0.00250	0.00280	112	4.9	29 13 - 154	

NOTES(S) :

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

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

COMMENTS:

FORM III

SW846 8081A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

675

295

DQPJG1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIT

SDG Number:

Lab File ID: D-A9096.d

Lot Number: C0K220253

Matrix: SOLID

Extraction Method: 1311/3510

Date Analyzed(1): 12/04/00

Date Extracted: 12/01/00

Date Analyzed(2): N/A

Time Analyzed(1): 19:23

Time Analyzed(2): N/A

Instrument ID(1): G/H

Instrument ID(2): N/A

GC Column(1): DB608/1701 ID: 053

GC Column(2): N/A

ID: N/A

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

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED (1)	DATE ANALYZED (2)
01	~~INTRA LAB QC~~	~~DP4J81AE~~	~~12/04/00~~	~~N/A~~
02	~~LAB MS/MSD~~	~~DP4J81A3 S~~	~~12/04/00~~	~~N/A~~
03	~~LAB MS/MSD~~	~~DP4J81A4 D~~	~~12/04/00~~	~~N/A~~
04	DF/24-A/0326/SDC/006	DQCKK1AE	12/04/00	N/A
05	DF/24-A/0326/SDC/007	DQCLC1AE	12/04/00	N/A
06	DF/24-A/0326/SDC/008	DQCLE1AE	12/04/00	N/A
07	CHECK SAMPLE	DQPJG1AC C	12/04/00	N/A
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

umm
12-12-00

COMMENTS:

FORM IV

675 296

PESTICIDE
SAMPLE DATA

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

Matrix: (soil/water) SOLID Lab Sample ID: C0K220253 001
 Method: SW846 8081A
 Pesticides (8081A)

Sample WT/Vol: 100 / mL Date Received: 11/22/00
 Work Order: DQCKK1AE Date Extracted: 12/01/00
 Dilution factor: 1 Date Analyzed: 12/04/00
 Moisture %: 16

QC Batch: 0336519

Client Sample Id: DF/24-A/0326/SDC/006

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

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9093.d
 Report Date: 05-Dec-2000 10:48

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9093.d
 Lab Smp Id: DQCKK1AE Client Smp ID: DF/24-A/0326/SDC/00
 Inj Date : 04-DEC-2000 18:00
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DQCKK1AE,9010-G.b,,PEST.sub,,
 Misc Info : 220253001
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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 (mg/L)
\$ 1 Tetrachloro-m-xylene	5.400	5.400	0.000	18908	0.01713	0.001713 (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	CONCENTRATIONS					
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
21 4,4'-DDD				Compound Not Detected.		
18 Toxaphene				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde	15.846	15.853	-0.007	1019	0.00104	0.0001040(a)
26 Endosulfan sulfate				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	21.613	21.613	0.000	11527	0.01879	0.001879(aR)

QC Flag Legend

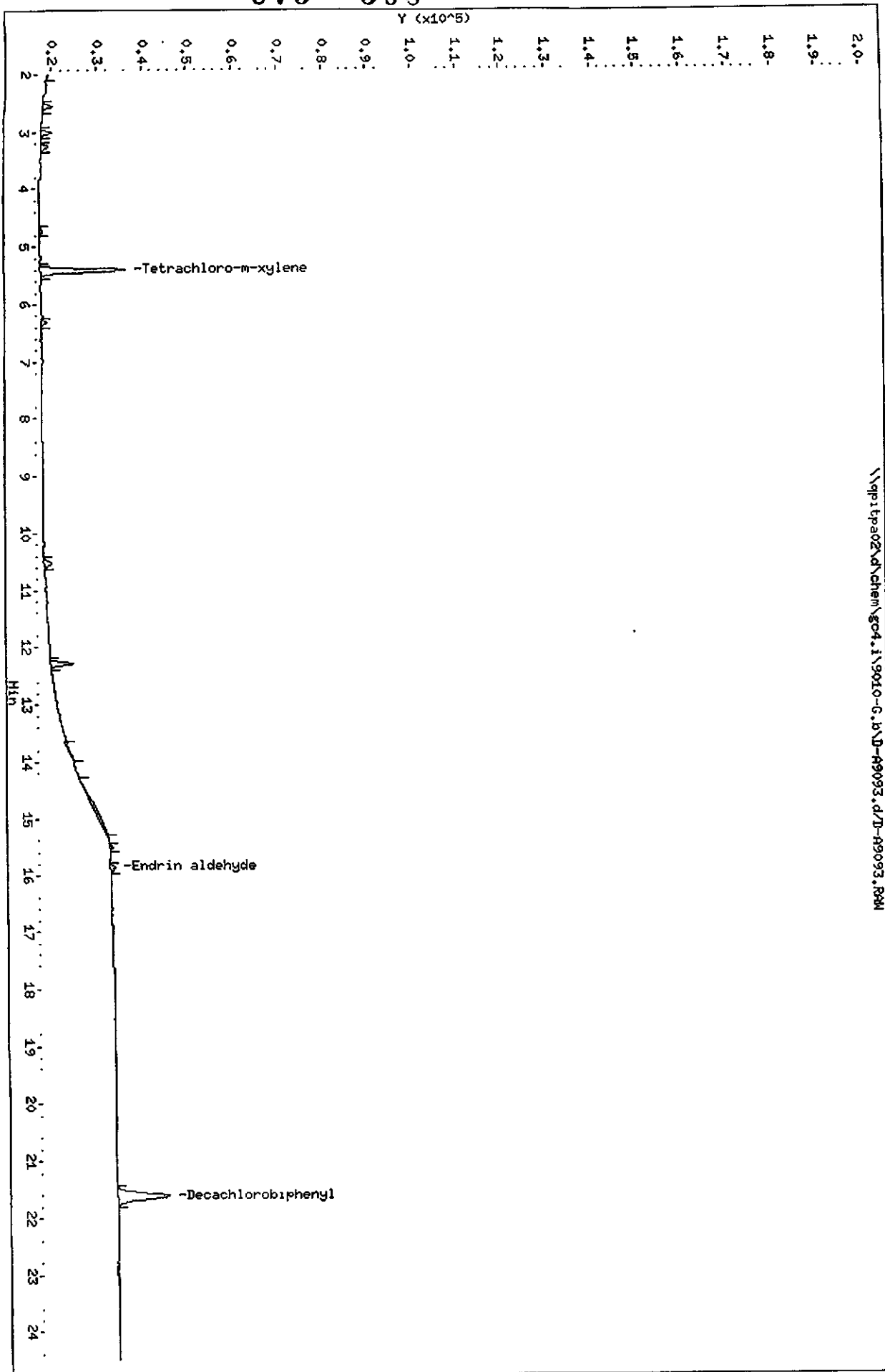
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

675 300

Data File: \\pittpa02\chem\gc4.1\9010-G.b\D-A9093.d
 Date : 04-DEC-2000 18:00
 Client ID: DF/24-A/0326/SJC/00
 Sample Info: DQCKIAE, 9010-G.b, PEST, sub,,
 Volume Injected (uL): 1.0
 Column phase: RTX-50

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

\\pittpa02\chem\gc4.1\9010-G.b\D-A9093.d\J-A9093.RAW



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

Matrix: (soil/water) SOLID

Lab Sample ID: C0K220253 002

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/22/00

Work Order: DQCLC1AE

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/04/00

Moisture %: 8.7

QC Batch: 0336519

Client Sample Id: DF/24-A/0326/SDC/007

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

Data File: \\gpitpa02\d\chem\gc4.i\9010-G.b\D-A9094.d
 Report Date: 05-Dec-2000 10:48

STL-Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\9010-G.b\D-A9094.d
 Lab Smp Id: DQCLC1AE Client Smp ID: DF/24-A/0326/SDC/00
 Inj Date : 04-DEC-2000 18:27
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DQCLC1AE,9010-G.b,,PEST.sub,,
 Misc Info : 220253002
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC061

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
\$ 1 Tetrachloro-m-xylene	5.400	5.400	0.000	18914	0.01714	0.001714 (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'-DDB				Compound Not Detected.		
17 Dieldrin				Compound Not Detected.		
20 Endrin				Compound Not Detected.		

Compoundo	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	15.360	15.333	0.027	308	<0.0	0.00002433(a)
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde	15.846	15.853	-0.007	936	<0.0	0.00009555(a)
26 Endosulfan sulfate				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	21.613	21.613	0.000	11520	0.01878	0.001878(aR)

QC Flag Legend

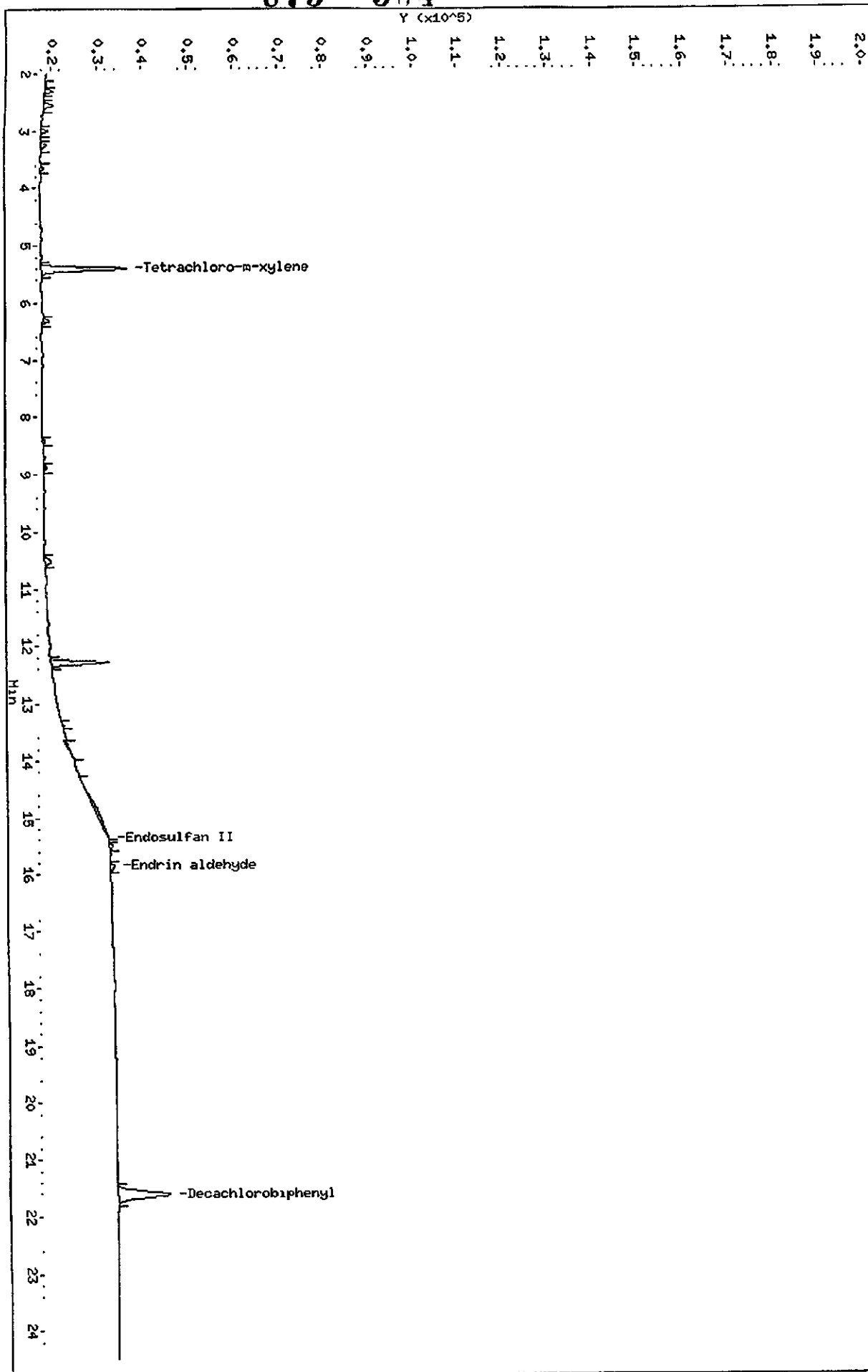
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

675 304

Data File: \\pittpa02\chem\gc4.1\9010-G.b\D-A9094.d
Date: 04-DEC-2000 18:27
Client ID: DF/24-A/0326/SDC/00
Sample Info: DQCLC/AE, 9010-G.b, PEST, sub,,
Volume Injected (uL): 1.0
Column phase: RTX-50

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

\\pittpa02\chem\gc4.1\9010-G.b\D-A9094.d\J-A9094.RAW



UXB INTERNATIONAL

675 305

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

Matrix: (soil/water) SOLID Lab Sample ID: C0K220253 003
 Method: SW846 8081A
 Pesticides (8081A)

Sample WT/Vol: 100 / mL Date Received: 11/22/00
 Work Order: DQCLE1AE Date Extracted: 12/01/00
 Dilution factor: 1 Date Analyzed: 12/04/00
 Moisture %: 9.4

QC Batch: 0336519

Client Sample Id: DF/24-A/0326/SDC/008

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

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9095.d
Report Date: 05-Dec-2000 10:49

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9095.d
Lab Smp Id: DQCLE1AE Client Smp ID: DF/24-A/0326/SDC/00
Inj Date : 04-DEC-2000 18:55
Operator : 1891 Inst ID: gc4.i
Smp Info : DQCLE1AE,9010-G.b,, PEST.sub,,,
Misc Info : 220253003
Comment :
Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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 (mg/L)
\$ 1 Tetrachloro-m-xylene	5.400	5.400	0.000	19083	0.01729	0.001729(aR)
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)	9.046	9.093	-0.047	3632	0.00312	0.0003116(a)
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	13.520	13.520	0.000	1095	<0.0	0.00007490(a)
14 alpha-Chlordane				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
16 4,4'-DDB				Compound Not Detected.		
17 Dieldrin				Compound Not Detected.		
20 Endrin				Compound Not Detected.		

Compounds	CONCENTRATIONS					
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
21 4,4'-DDD				Compound Not Detected		
18 Toxaphene				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde	15.846	15.853	-0.007	1016	0.00104	0.0001037(a)
26 Endosulfan sulfate				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	21.613	21.613	0.000	11789	0.01922	0.001922(aR)

QC Flag Legend

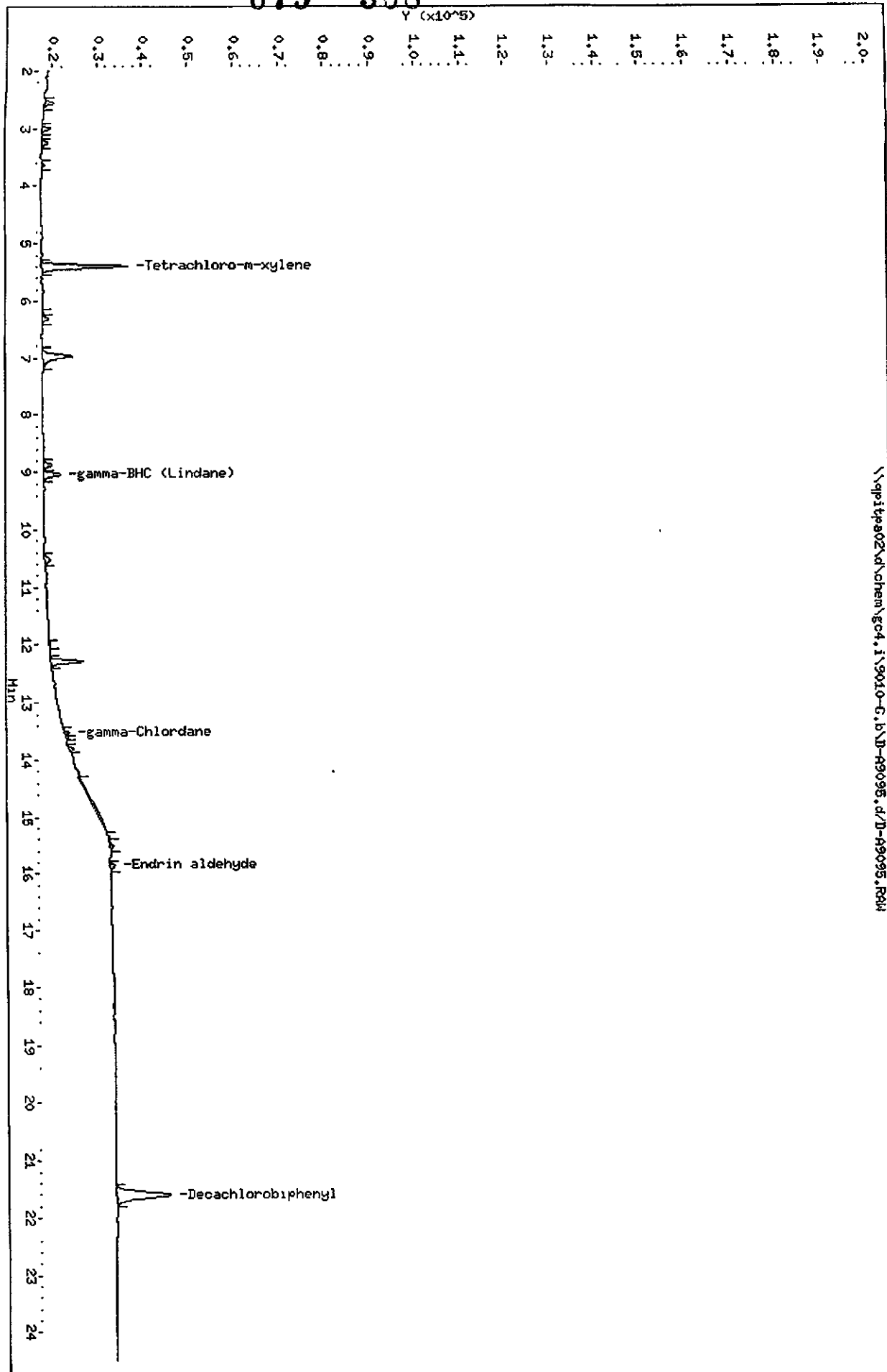
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

675 308

Data File: \\qritpa02\chem\gc4.1\9010-G.b\D-A9095.d
 Date : 04-DEC-2000 18:55
 Client ID: DF/24-A/0326/SDC/00
 Sample Info: DQCLE1AE,9010-G.b,,PEST.sub,,,
 Volume Injected (uL): 1.0
 Column phase: RTX-50

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

\\qritpa02\chem\gc4.1\9010-G.b\D-A9095.d\D-A9095.RM



675 309

**PESTICIDE
CALIBRATION DATA**

675 310
Report Date : 05-Dec-2000 10:10

6D
HP589046
RT-50

STL-Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
Quant Method : ESTD Target Version : 4.04
Last Update : 05-Dec-2000 10:09 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	5.400	5.350-5.450	1.10e+006
2 Diallate A	6.360	6.310-6.410	
3 Diallate B	6.633	6.583-6.683	
4 HEXACHLOROBENZENE	7.193	7.143-7.243	
5 alpha-BHC	7.620	7.570-7.670	1.23e+006
6 gamma-BHC (Lindane)	9.093	9.043-9.143	1.17e+006
7 beta-BHC	10.073	10.023-10.123	6.18e+005
8 delta-BHC	11.033	10.983-11.083	1.05e+006
9 Chlordane	9.473	9.423-9.523	3.23e+004
	10.167	10.117-10.217	4.13e+004
	13.520	13.470-13.570	1.41e+005
	13.800	13.750-13.850	1.51e+005
10 Heptachlor	10.167	10.117-10.217	9.36e+005
11 Aldrin	11.360	11.310-11.410	9.94e+005
12 Heptachlor epoxide	13.127	13.077-13.177	1.33e+006
13 gamma-Chlordane	13.520	13.470-13.570	1.46e+006
14 alpha-Chlordane	13.800	13.750-13.850	1.51e+006
15 Endosulfan I	13.840	13.790-13.890	1.36e+006
16 4,4'-DDE	14.247	14.197-14.297	1.23e+006
17 Dieldrin	14.413	14.363-14.463	1.40e+006
18 Toxaphene	15.200	15.150-15.250	2.38e+004
	15.380	15.330-15.430	2.84e+004
	15.753	15.703-15.803	2.01e+004
	16.840	16.790-16.890	1.58e+004

Report Date : 05-Dec-2000 10:10

6D
HP589046
~~03608~~ DE
RT 50 12-500

675 311

STL-Pittsburgh

COMPOUND LISTING

Method file : \\gpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m

Compound	RT	RT Window	RF
19 Isodrin	12.520	12.470-12.570	
20 Endrin	14.940	14.890-14.990	1.18e+006
21 4,4'-DDD	15.140	15.090-15.190	8.03e+005
22 Endosulfan II	15.333	15.283-15.383	1.27e+006
23 4,4'-DDT	15.587	15.537-15.637	8.88e+005
24 Endrin aldehyde	15.853	15.803-15.903	9.80e+005
25 Methoxychlor	17.313	17.263-17.363	3.07e+005
26 Endosulfan sulfate	16.153	16.103-16.203	8.83e+005
27 Endrin ketone	17.673	17.623-17.723	9.35e+005
28 MIREX	17.773	17.723-17.823	
29 Kepone	14.847	14.797-14.897	
58 CHLOROBENZILATE	14.600	14.550-14.650	
\$ 30 Decachlorobiphenyl	21.613	21.563-21.663	6.13e+005

675 312

6E
589046
RTX-50

Report Date : 04-Dec-2000 11:36

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 01-DEC-2000 11:22
 End Cal Date : 01-DEC-2000 16:28
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Cal Date : 04-Dec-2000 11:35 morganw
 Curve Type : Average

Calibration File Names:

Level 1: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9011.d
 Level 2: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9012.d
 Level 3: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9013.d
 Level 4: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9014.d
 Level 5: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9015.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 Diallyl A	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Diallyl B	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 HEXACHLOROBENZENE	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 alpha-BHC	1033400	1093100	1186720	1350880	1480590	1228938	15.041
6 gamma-BHC (Lindane)	1027400	1074500	1134920	1254520	1337060	1165680	10.990
7 beta-BHC	604000	653400	609880	618780	605330	618278	3.311
8 delta-BHC	893000	988500	1005760	1135140	1221310	1048742	12.339
9 Chlordane(1)	+++++	+++++	32332	+++++	+++++	32332	0.000
(2)	+++++	+++++	41304	+++++	+++++	41304	0.000
(3)	+++++	+++++	141048	+++++	+++++	141048	0.000
(4)	+++++	+++++	150900	+++++	+++++	150900	0.000
10 Heptachlor	979400	964700	909440	905080	921890	936102	3.610
11 Aldrin	923200	973200	951200	1033160	1089190	993990	6.725
12 Heptachlor epoxide	1270600	1346600	1291720	1365200	1395030	1333830	3.871
13 gamma-Chlordane	1388600	1486400	1430640	1491300	1513180	1462024	3.495
14 alpha-Chlordane	1448600	1547900	1487120	1542480	1544830	1514186	2.937
15 Endosulfan I	1317600	1330900	1331240	1388120	1421020	1357776	3.286
16 4,4'-DDE	1124800	1207500	1197500	1293540	1331840	1231056	6.677
17 Dieldrin	1269800	1328500	1376440	1479280	1568190	1404442	8.507
18 Toxaphene(1)	+++++	+++++	23763	+++++	+++++	23763	0.000
(2)	+++++	+++++	28444	+++++	+++++	28444	0.000
(3)	+++++	+++++	20100	+++++	+++++	20100	0.000
(4)	+++++	+++++	15801	+++++	+++++	15801	0.000
19 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 Endrin	1095800	1137500	1163200	1230160	1281510	1181634	6.274
21 4,4'-DDD	725200	751500	781920	846020	909970	802922	9.329

Report Date : 04-Dec-2000 11:36

6E
58904G
RTX-50

675 313

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 01-DEC-2000 11:22
End Cal Date : 01-DEC-2000 16:28
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
Cal Date : 04-Dec-2000 11:35 morganw
Curve Type : Average

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
22 Endosulfan II	1184600	1295700	1190280	1318480	1340850	1265982	5.804
23 4,4'-DDT	830200	843500	865920	920680	978380	887736	6.908
24 Endrin aldehyde	938800	1019500	959600	991520	988340	979552	3.177
25 Methoxychlor	296600	303200	307400	313920	315625	307349	2.543
26 Endosulfan sulfate	784200	871300	858120	930020	971450	883018	8.118
27 Endrin ketone	831000	920200	914400	990840	1020930	935474	7.921
28 MIREX	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 CHLOROBENZILATE	+++++	+++++	+++++	+++++	+++++	+++++	+++++
\$ 1 Tetrachloro-m-xylene	1116600	1125300	1089280	1102280	1085630	1103818	1.549
\$ 30 Decachlorobiphenyl	641800	641400	609320	597480	576620	613324	4.621

675 314

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 4140-G

GC Column: RTX-50 ID: 0.53 (mm) Init. Calib. Date(s): 12/01/00 12/01/00

EPA Sample No. (PIBLK): _____

Date Analyzed : _____

Lab Sample ID (PIBLK): _____

Time Analyzed : _____

EPA Sample No. (PEM): _____

Date Analyzed : 12/01/00

Lab Sample ID (PEM): EVALB

Time Analyzed : 1055

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	14.95	14.90	15.00	0.02341	0.02500	-6.4
4,4'-DDT	15.60	15.55	15.65	0.02377	0.02500	-4.9

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

~~0.73~~ 1.0%

Endrin % breakdown (1):

~~2.82~~ 2.4

Combined % breakdown (1):

~~3.55~~ 3.4DE
12-5-00

675 315

Contract:

SDG No.: 4140-G

GC Column: RTX-50 ID: 0.53 (mm) Init. Calib. Date(s): 12/01/00 12/01/00

Date Analyzed : _____

Time Analyzed :

Date Analyzed :12/01/00

Time Analyzed :1753

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		FROM	TO			
=====	=====	=====	=====	=====	=====	=====
Endrin	14.95	14.90	15.00	0.02334	0.02500	-6.6
4,4'-DDT	15.60	15.55	15.65	0.02390	0.02500	-4.4

$$\begin{array}{r} 1.0 \\ -0.70 \\ \hline \end{array}$$

Endrin % breakdown (1):

37
~~279~~

Combined % breakdown (1) :

~~4.50~~

09
12500

675 316

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 4140-G

GC Column: RTX-50

ID: 0.53

(mm)

Init. Calib. Date(s): 12/01/00 12/01/00

EPA Sample No. (PIBLK): _____

Date Analyzed : _____

Lab Sample ID (PIBLK): _____

Time Analyzed : _____

EPA Sample No. (PEM): _____

Date Analyzed : 12/04/00

Lab Sample ID (PEM): EVALB

Time Analyzed : 1417

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	14.94	14.89	14.99	0.02136	0.02500	-14.6
4,4'-DDT	15.59	15.54	15.64	0.02301	0.02500	-8.0

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

0.00

Endrin % breakdown (1):

~~4.21~~ 3.8

Combined % breakdown (1):

~~4.21~~

3.8

DE

12-5-00

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY **675 317**

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 4140-G
 GC Column: RTX-50 ID: 0.53 (mm) Init. Calib. Date(s): 12/01/00 12/01/00
 EPA Sample No. (PIBLK): _____ Date Analyzed : _____
 Lab Sample ID (PIBLK): _____ Time Analyzed : _____
 EPA Sample No. (PEM): _____ Date Analyzed : 12/05/00
 Lab Sample ID (PEM): EVALB Time Analyzed : 0248

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	14.93	14.89	14.99	0.02339	0.02500	-6.4
4,4'-DDT	15.59	15.54	15.64	0.02661	0.02500	6.4

4,4'-DDT % breakdown (1): 0.00 Endrin % breakdown (1): 3.7
 Combined % breakdown (1): 4.48 3.7 De 12500
~~4.48~~

675 318

7E HP589046

Data File: \\gpitpa02\d\chem\gc4.i\9010-G.b\D-A9086.d
Report Date: 05-Dec-2000 10:08

RTZ-SU

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 04-DEC-2000 14:45
Lab File ID: D-A9086.d Init. Cal. Date(s): 01-DEC-2000 01-DEC-2000
Analysis Type: Init. Cal. Times: 11:22 16:28
Lab Sample ID: MEDTOX Quant Type: ESTD
Method: \\gpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m

COMPOUND	RRF	RFO	MIN	MAX
			RRF	%D
18 Toxaphene(1)	23763	23422	0.010	-1.4
(2)	28444	28007	0.010	-1.5
(3)	20100	19939	0.010	-0.8
(4)	15801	15270	0.010	-3.4
\$ 1 Tetrachloro-m-xylene	1103818	1015920	0.000	-8.0
\$ 30 Decachlorobiphenyl	613324	582880	0.010	-5.0

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9087.d
Report Date: 05-Dec-2000 10:08

7E HP589046
RTX 50

STL-Pittsburgh

675 319

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 04-DEC-2000 15:13
Lab File ID: D-A9087.d Init. Cal. Date(s): 01-DEC-2000 01-DEC-2000
Analysis Type: Init. Cal. Times: 11:22 16:28
Lab Sample ID: MEDCHLOR Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m

COMPOUND	RRF	RFO	MIN RRF	%D	MAX %D
9 Chlordane (1)	32332	31492	0.010	-2.6	15.0
(2)	41304	40412	0.010	-2.2	15.0
(3)	141048	133888	0.010	-5.1	15.0
(4)	150900	144340	0.010	-4.3	15.0
\$ 1 Tetrachloro-m-xylene	1103818	1015520	0.000	-8.0	15.0
\$ 30 Decachlorobiphenyl	613324	588720	0.010	-4.0	15.0

675 320

7E HP589046
RTZ-50Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9088.d
Report Date: 05-Dec-2000 10:08

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 04-DEC-2000 15:40
 Lab File ID: D-A9088.d Init. Cal. Date(s): 01-DEC-2000 01-DEC-2000
 Analysis Type: Init. Cal. Times: 11:22 16:28
 Lab Sample ID: MEDA Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m

COMPOUND	RRF	RFO	MIN	MAX
=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	1103818	1097320	0.000	-0.6 15.0
5 alpha-BHC	1228938	1169640	0.010	-4.8 15.0
6 gamma-BHC (Lindane)	1165680	1111960	0.010	-4.6 15.0
10 Heptachlor	936102	898880	0.010	-4.0 15.0
15 Endosulfan I	1357776	1269360	0.010	-6.5 15.0
17 Dieldrin	1404442	1299560	0.010	-7.5 15.0
20 Endrin	1181634	1082720	0.010	-8.4 15.0
21 4,4'-DDD	802922	880320	0.010	9.6 15.0
23 4,4'-DDT	887736	876280	0.010	-1.3 15.0
25 Methoxychlor	307349	342400	0.010	11.4 15.0
\$ 30 Decachlorobiphenyl	613324	613000	0.010	-0.1 15.0

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9089.d
 Report Date: 05-Dec-2000 10:09

7E HP589046
 RT-50

STL-Pittsburgh

675 321

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 04-DEC-2000 16:08
 Lab File ID: D-A9089.d Init. Cal. Date(s): 01-DEC-2000 01-DEC-2000
 Analysis Type: Init. Cal. Times: 11:22 16:28
 Lab Sample ID: MEDEB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m

COMPOUND	RRF	RFO	MIN	MAX
11 Aldrin	993990	912600	0.010	-8 2 15.0
7 beta-BHC	618278	613640	0.010	-0 8 15.0
8 delta-BHC	1048742	1009200	0.010	-3 8 15.0
12 Heptachlor epoxide	1333830	1236000	0.010	-7 3 15.0
13 gamma-Chlordane	1462024	1370480	0.010	-6 3 15.0
14 alpha-Chlordane	1514186	1425640	0.010	-5 8 15.0
16 4,4'-DDE	1231056	1240440	0.010	0 8 15.0
22 Endosulfan II	1265982	1102280	0.010	-12 9 15.0
24 Endrin aldehyde	979552	875840	0.010	-10 6 15.0
26 Endosulfan sulfate	883018	852880	0.010	-3.4 15.0
27 Endrin ketone	935474	886760	0.010	-5.2 15.0

675 322

7E HP589046

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9110.d

RT-50

Report Date: 05-Dec-2000 10:18

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i

Injection Date: 05-DEC-2000 01:52

Lab File ID: D-A9110.d

Init. Cal. Date(s): 01-DEC-2000 01-DEC-2000

Analysis Type:

Init. Cal. Times: 11:22 16:28

Lab Sample ID: MEDA

Quant Type: ESTD

Method: \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m

COMPOUND	RRF	RFO	MIN	RRF	%D	MAX
=====	=====	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	1103818	1178800	0.000	6 8	15 0	
5 alpha-BHC	1228938	1203000	0 010	-2.1	15.0	
6 gamma-BHC (Lindane)	1165680	1151720	0 010	-1.2	15.0	
10 Heptachlor	936102	965600	0.010	3.2	15.0	
15 Endosulfan I	1357776	1312800	0 010	-3.3	15.0	
17 Dieldrin	1404442	1359080	0 010	-3.2	15 0	
20 Endrin	1181634	1152800	0 010	-2.4	15.0	
21 4,4'-DDD	802922	937720	0.010	16 8	15.0	<-
23 4,4'-DDT	887736	951920	0.010	7 2	15.0	
25 Methoxychlor	307349	425420	0.010	38 4	15.0	<-
\$ 30 Decachlorobiphenyl	613324	662480	0 010	8.0	15.0	

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9111.d
Report Date: 05-Dec-2000 10:18

7E HP58946

RTZ-50

675 323

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 05-DEC-2000 02:20
Lab File ID: D-A9111.d Init. Cal. Date(s): 01-DEC-2000 01-DEC-2000
Analysis Type: Init. Cal. Times: 11:22 16:28
Lab Sample ID: MEDB Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m

COMPOUND	RRF	RPO	MIN	MAX
11 Aldrin	993990	947280	0.010	15.0
7 beta-BHC	618278	632440	0.010	15.0
8 delta-BHC	1048742	1041400	0.010	15.0
12 Heptachlor epoxide	1333830	1274360	0.010	15.0
13 gamma-Chlordane	1462024	1430400	0.010	15.0
14 alpha-Chlordane	1514186	1476720	0.010	15.0
16 4,4'-DDE	1231056	1319880	0.010	15.0
22 Endosulfan II	1265982	1189520	0.010	15.0
24 Endrin aldehyde	979552	999480	0.010	15.0
26 Endosulfan sulfate	883018	949040	0.010	15.0
27 Endrin ketone	935474	942840	0.010	15.0

AVS 6.07.D

675 324

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0K220253

GC Column: RTX-50 ID: 0.53 (mm) Init. Calib. Date(s): 12/01/00 12/01/00

Instrument ID: GC4

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
TCX: 5.40			DCB: 21.61		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	EVALB	12/01/00	1055	5.42	21.65
02	MEDTOX	12/01/00	1122	5.42	21.65
03	MEDCHLOR	12/01/00	1150	5.42	21.65
04	LOWA	12/01/00	1218	5.42	21.65
05	MLOWA	12/01/00	1246	5.42	21.65
06	MEDA	12/01/00	1314	5.41	21.65
07	MHIGHA	12/01/00	1341	5.41	21.65
08	HIGHA	12/01/00	1409	5.41	21.65
09	LOWB	12/01/00	1437		
10	MLOWB	12/01/00	1505		
11	MEDB	12/01/00	1533		
12	MHIGHB	12/01/00	1601		
13	HIGHB	12/01/00	1628		
14	2ND A	12/01/00	1657	5.42	21.65
15	2ND B	12/01/00	1725		
16	EVALB	12/01/00	1753	5.41	21.65
17	EVALB	12/04/00	1417	5.40	21.62
18	MEDTOX	12/04/00	1445	5.40	21.62
19	MEDCHLOR	12/04/00	1513	5.40	21.61
20	MEDA	12/04/00	1540	5.40	21.61
21	MEDB	12/04/00	1608		
22	DF/24-A/0326 DQCKK1AE	12/04/00	1800	5.40	21.61
23	DF/24-A/0326 DQCLC1AE	12/04/00	1827	5.40	21.61
24	DF/24-A/0326 DQCLE1AE	12/04/00	1855	5.40	21.61
25	PBLK DQPJG1AA	12/04/00	1923	5.40	21.61
26	LCS DQPJG1AC	12/04/00	1951	5.40	21.61
27	MEDA	12/05/00	0152	5.40	21.61
28	MEDB	12/05/00	0220		
29	EVALB	12/05/00	0248	5.40	21.61
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.

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\9010-G.SEQ
Created by : DE11/02/98 on : 12/1/00 14:53
Edited by : WM12/01/00 on : 12/4/00 10:43
Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
REVIEWED BY:

675 325

6

Number of Times Edited : 3

9010G.PDF

Sequence File Header Information:

Number of Rows : 80
Instrument Type : 760 / 900 Series Intelligent Interface
Injection Type : SINGLE

Row	Type	Sample Name	Sample Number	Sequence Sample Descriptions - Channel A	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend	Norm. factor
1	Std Check	EVALB, 9010-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, 9010-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, 9010-G	190-102-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
4	Cal Replace	LOWA, 9010-G.b,,	190-100-6		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Cal Replace	MLOWA, 9010-G b,,	190-100-7		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Cal Replace	MEDA, 9010-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Cal Replace	MHIGHA, 9010-G b	190-100-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Cal Replace	HIGHA, 9010-G b,	190-100-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Cal Replace	LOWB, 9010-G.b,,	190-100-12		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Cal Replace	MLOWB, 9010-G b,	190-100-13		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Cal Replace	MEDB, 9010-G b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Cal Replace	MHIGHB, 9010-G.b	190-101-1		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Cal Replace	HIGHB, 9010-G b,	190-101-2		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Std Check	2ND A, 9010-G.b,	190-101-7		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Std Check	2ND B, 9010-G b,	190-101-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
16	Std Check	EVALB, 9010-G b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
17	Sample	DPVOL10N, 9010-G	150121002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
18	Sample	DPVOL10D, 9010-G	150121002S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
19	Sample	DPVOL10I, 9010-G	150121002D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
20	Sample	DPVOL10A, 9010-G	150121006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Sample	DPVOL10C, 9010-G	150121006S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
22	Sample	DPVOL10D, 9010-G	150121006D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
23	Sample	DQCCE1AA, 9010-G	220224001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
24	Sample	DQCCE1AA, 9010-G	220224002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
25	Sample	DQCCE1AA, 9010-G	220224003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
26	Sample	DQCCE1AA, 9010-G	220224004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
27	Sample	DQCCE1AA, 9010-G	220224005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
28	Sample	DPR901AJ, 9010-G	140150001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
29	Sample	DPR901AK, 9010-G	140150001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
30	Sample	DPR901AL, 9010-G	140150001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
31	Sample	DPR941AH, 9010-G	140150002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
32	Sample	DQE851AC, 9010-G	150121006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
33	Sample	DQE851AA, 9010-G	150121006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
34	Sample	DQGJE1AC, 9010-G	220224LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
35	Sample	DQGJE1AD, 9010-G	220224LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
36	Sample	DQGJE1AA, 9010-G	220224BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
37	Std Check	MEDA, 9010-G b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
38	Std Check	MEDB, 9010-G b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
39	Std Check	EVALB, 9010-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
40	Sample	DPTAH1AH, 9010-G	140150003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
41	Sample	DPTAH1AH, 9010-G	140150004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
42	Sample	DPTAH1AH, 9010-G	140150005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
43	Sample	DPTAH1AH, 9010-G	160285007		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
44	Sample	DPIKA1AN, 9010-G	160285002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
45	Sample	DP5XR1AN, 9010-G	18147-1 5X		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
46	Sample	DP5XV1AE, 9010-G	18147-2		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
47	Sample	DQAXP1AE, 9010-G	220169001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
48	Sample	DQAX21AN, 9010-G	220169002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
49	Sample	DQEK91AA, 9010-G	140150BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
50	Sample	DQEK91AC, 9010-G	140150LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
51	Sample	DQEK91AF, 9010-G	290122001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
52	Sample	DQEK91AF, 9010-G	290122002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
53	Sample	DQEK91AF, 9010-G	290122003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
54	Sample	DQEK91AF, 9010-G	290122004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
55	Sample	DQEK91AF, 9010-G	290122005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
56	Sample	DQEK91AF, 9010-G	290122006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
57	Sample	DQEK91AF, 9010-G	290122LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
58	Sample	DQEK91AA, 9010-G	290122BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
59	Sample	DQEK91AA, 9010-G	290122BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

675 326

60	Sta Check	MEDA, 9010-G b,,	190-100-8	1 000	1 000	1 000	1.000	1 000	1 000	0.000	100 000
61	Std Check	MEDB, 9010-G b,,	190-100-14	1 000	1 000	1 000	1 000	1 000	1 000	0.000	100 000
62	Std Check	EVALB, 9010-G.b,	190-102-10	1 000	1 000	1 000	1 000	1 000	1 000	0.000	100 000
63	Sample	DQG801AC, 9010-G	290122007	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
64	Sample	DQG871AC, 9010-G	290122008	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
65	Sample	DQG8V1AC, 9010-G	290122009	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
66	Sample	DQG821AC, 9010-G	290122010	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
67	Sample	DQG871AC, 9010-G	290122011	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
68	Sample	DQG801AC, 9010-G	290122012	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
69	Sample	DQG9M1AF, 9010-G	290122013	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
70	Sample	DQG941AF, 9010-G	290122014	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
71	Sample	DQJXV1AA, 9010-G	HEXANE	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
72	Std Check	MEDA, 9010-G.b,,	190-100-8	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
73	Std Check	MEDB, 9010-G b,,	190-100-14	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
74	Std Check	EVALB, 9010-G.b,	190-102-10	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
75	Sample	DPWVP1AD, 9010-G	150209001	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
76	Sample	DP9W31AA, 9010-G	150209BLK	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
77	Sample	DP9W31AC, 9010-G	150209LCS	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
78	Sample	DP9W31AD, 9010-G	150209LCS	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
79	Std Check	MEDA, 9010-G b,,	190-100-8	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000
80	Std Check	MEDB, 9010-G.b,,	190-100-14	1 000	1 000	1 000	1 000	1 000	1 000	0 000	100 000

DDP, METH

DDP, METH
Silo II (End H2)

DDP, METH

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-A9003	D-A9003		D-A9003	-	-	-	LPT1:
2	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A9004	D-A9004		D-A9004	N	MED	N	LPT1:, LP
3	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A9005	D-A9005		D-A9005	N	MED	N	LPT1:, LP
4	-	1	4	GEN4C	GEN4A	122190A	INDA	D-A9006	D-A9006		D-A9006	N	LOW	N	LPT1.
5	-	1	5	GEN4C	GEN4A	122190A	INDA	D-A9007	D-A9007		D-A9007	N	MLOW	N	LPT1.
6	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A9008	D-A9008		D-A9008	N	MLOW	N	LPT1
7	-	1	7	GEN4C	GEN4A	122190A	INDA	D-A9009	D-A9009		D-A9009	N	MLOW	N	LPT1
8	-	1	8	GEN4C	GEN4A	122190A	INDA	D-A9010	D-A9010		D-A9010	N	MLOW	N	LPT1
9	-	1	9	GEN4C	GEN4A	122190A	INDA	D-A9011	D-A9011		D-A9011	N	LOW	N	LPT1
10	-	1	10	GEN4C	GEN4A	122190A	INDA	D-A9012	D-A9012		D-A9012	N	MLOW	N	LPT1
11	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A9013	D-A9013		D-A9013	N	MLOW	N	LPT1
12	-	1	12	GEN4C	GEN4A	122190A	INDA	D-A9014	D-A9014		D-A9014	N	MLOW	N	LPT1
13	-	1	13	GEN4C	GEN4A	122190A	INDA	D-A9015	D-A9015		D-A9015	N	MLOW	N	LPT1
14	-	1	23	GEN4C	GEN4A	122190A	INDA	D-A9016	D-A9016		D-A9016	-	-	-	LPT1.
15	-	1	24	GEN4C	GEN4A	122190A	INDA	D-A9017	D-A9017		D-A9017	-	-	-	LPT1.
16	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9018	D-A9018		D-A9018	-	-	-	LPT1
17	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9019	D-A9019		D-A9019	-	-	-	LPT1
18	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9020	D-A9020		D-A9020	-	-	-	LPT1
19	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9021	D-A9021		D-A9021	-	-	-	LPT1
20	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9022	D-A9022		D-A9022	-	-	-	LPT1.
21	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9023	D-A9023		D-A9023	-	-	-	LPT1
22	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9024	D-A9024		D-A9024	-	-	-	LPT1
23	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9025	D-A9025		D-A9025	-	-	-	LPT1:
24	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9026	D-A9026		D-A9026	-	-	-	LPT1
25	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9027	D-A9027		D-A9027	-	-	-	LPT1.
26	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9028	D-A9028		D-A9028	-	-	-	LPT1
27	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9029	D-A9029		D-A9029	-	-	-	LPT1.
28	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9030	D-A9030		D-A9030	-	-	-	LPT1
29	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9031	D-A9031		D-A9031	-	-	-	LPT1
30	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9032	D-A9032		D-A9032	-	-	-	LPT1
31	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9033	D-A9033		D-A9033	-	-	-	LPT1.
32	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9034	D-A9034		D-A9034	-	-	-	LPT1.
33	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9035	D-A9035		D-A9035	-	-	-	LPT1.
34	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9036	D-A9036		D-A9036	-	-	-	LPT1
35	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9037	D-A9037		D-A9037	-	-	-	LPT1
36	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9038	D-A9038		D-A9038	-	-	-	LPT1.
37	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A9039	D-A9039		D-A9039	-	-	-	LPT1.
38	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A9040	D-A9040		D-A9040	-	-	-	LPT1.
39	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9041	D-A9041		D-A9041	-	-	-	LPT1
40	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9042	D-A9042		D-A9042	-	-	-	LPT1.
41	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9043	D-A9043		D-A9043	-	-	-	LPT1
42	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9044	D-A9044		D-A9044	-	-	-	LPT1
43	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9045	D-A9045		D-A9045	-	-	-	LPT1.
44	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9046	D-A9046		D-A9046	-	-	-	LPT1
45	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9047	D-A9047		D-A9047	-	-	-	LPT1
46	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9048	D-A9048		D-A9048	-	-	-	LPT1
47	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9049	D-A9049		D-A9049	-	-	-	LPT1
48	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9050	D-A9050		D-A9050	-	-	-	LPT1
49	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9051	D-A9051		D-A9051	-	-	-	LPT1
50	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9052	D-A9052		D-A9052	-	-	-	LPT1:
51	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9053	D-A9053		D-A9053	-	-	-	LPT1.
52	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9054	D-A9054		D-A9054	-	-	-	LPT1
53	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9055	D-A9055		D-A9055	-	-	-	LPT1.
54	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9056	D-A9056		D-A9056	-	-	-	LPT1
55	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9057	D-A9057		D-A9057	-	-	-	LPT1
56	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9058	D-A9058		D-A9058	-	-	-	LPT1.
57	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9059	D-A9059		D-A9059	-	-	-	LPT1:
58	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9060	D-A9060		D-A9060	-	-	-	LPT1:
59	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9061	D-A9061		D-A9061	-	-	-	LPT1

60	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A9062	D-A9062	D-A9062	-	-	-	-	LPT11
61	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A9063	D-A9063	D-A9063	-	-	-	-	LPT11
62	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9064	D-A9064	D-A9064	-	-	-	-	LPT11
63	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9065	D-A9065	D-A9065	-	-	-	-	LPT11
64	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9066	D-A9066	D-A9066	-	-	-	-	LPT11
65	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9067	D-A9067	D-A9067	-	-	-	-	LPT11
66	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9068	D-A9068	D-A9068	-	-	-	-	LPT11
67	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9069	D-A9069	D-A9069	-	-	-	-	LPT11
68	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9070	D-A9070	D-A9070	-	-	-	-	LPT11
69	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9071	D-A9071	D-A9071	-	-	-	-	LPT11
70	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9072	D-A9072	D-A9072	-	-	-	-	LPT11
71	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9073	D-A9073	D-A9073	-	-	-	-	LPT11
72	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A9074	D-A9074	D-A9074	-	-	-	-	LPT11
73	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A9075	D-A9075	D-A9075	-	-	-	-	LPT11
74	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9076	D-A9076	D-A9076	-	-	-	-	LPT11
75	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9077	D-A9077	D-A9077	-	-	-	-	LPT11
76	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9078	D-A9078	D-A9078	-	-	-	-	LPT11
77	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9079	D-A9079	D-A9079	-	-	-	-	LPT11
78	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9080	D-A9080	D-A9080	-	-	-	-	LPT11
79	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A9081	D-A9081	D-A9081	-	-	-	-	LPT11
80	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A9082	D-A9082	D-A9082	-	-	-	-	LPT11

675 327

Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9003.d
 Report Date: 04-Dec-2000 12:14

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9003.d
 Lab Smp Id: EVALB
 Inj Date : 01-DEC-2000 10:55
 Operator : 1891 Inst ID: gc4.i
 Smp Info : EVALB,9010-G.b,,EVALBR.sub,,3,1
 Misc Info : 190-102-10
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.d
 Als bottle: 1 QC Sample: PEM
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: EVALBR.sub
 Target Version: 4.04
 Processing Host: PITPC085

Compounds	CONCENTRATIONS					
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ng)	FINAL (ng)
\$ 1 Tetrachloro-m-xylene	5.420	5.413	0.007	20569	0.01863	0.01863 (R)
16 4,4'-DDE	14.266	14.253	0.013	224	<0.0	0.0001820
20 Endrin	14.946	14.946	0.000	27664	0.02341	0.02341
21 4,4'-DDD	Compound Not Detected.					
23 4,4'-DDT	15.600	15.600	0.000	21100	0.02377	0.02377
24 Endrin aldehyde	15.866	15.866	0.000	303	<0.0	0.0003093 (M)
27 Endrin ketone	17.693	17.686	0.007	370	<0.0	0.0003955
\$ 30 Decachlorobiphenyl	21.653	21.653	0.000	11959	0.01950	0.01950 (R)

% Breakdown

QC Flag Legend

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

DPT - 1.05%

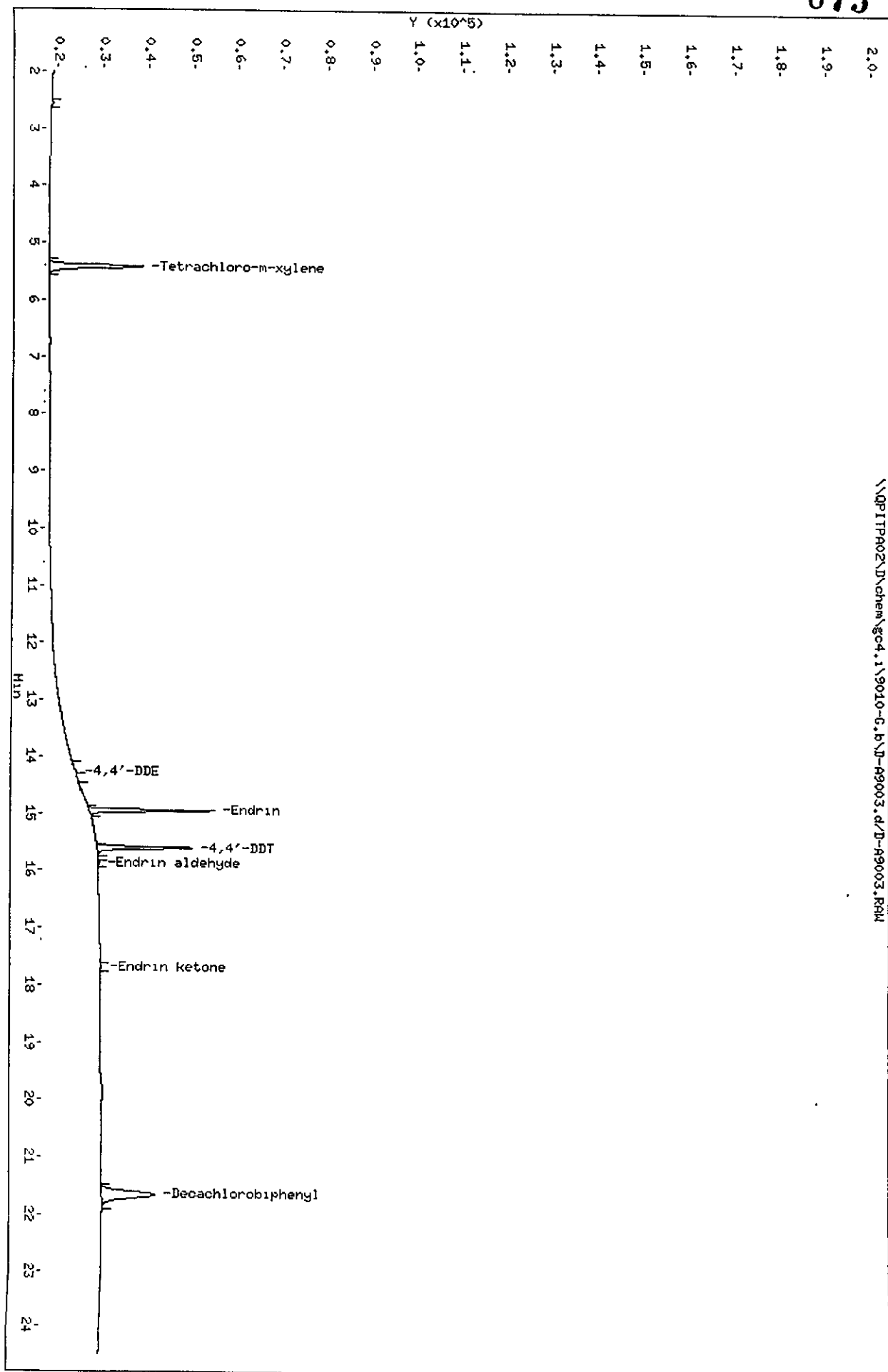
Endrin - 2.37

675

329

Data File: \\QPIITPA02\Jvchem\gc4.1\9010-G.b.D-A9003.d
Date : 01-DEC-2000 10:55
Client ID:
Sample Info: EVALB,9010-G.b.,EVALBR,sub,,3,1
Column phase: RTX-50

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



675 330

Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9004.d
Report Date: 04-Dec-2000 12:15

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9004.d
Lab Smp Id: MEDTOX
Inj Date : 01-DEC-2000 11:22
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDTOX,9010-G.b,,1-TOX.sub,,1,3
Misc Info : 190-98-12
Comment :
Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
Cal Date : 01-DEC-2000 11:22 Cal File: D-A9004.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: PITPC085

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
18 Toxaphene	15 213	15.213	0.000	23763	1 00000	1 000 (M)
\$ 1 Tetrachloro-m-xylene	5.420	5.413	0.007	25827	0 02500	0.02500 (M)
\$ 30 Decachlorobiphenyl	21 653	21 653	0.000	15012	0 02500	0 02500 (M)

QC Flag Legend

M - Compound response manually integrated.

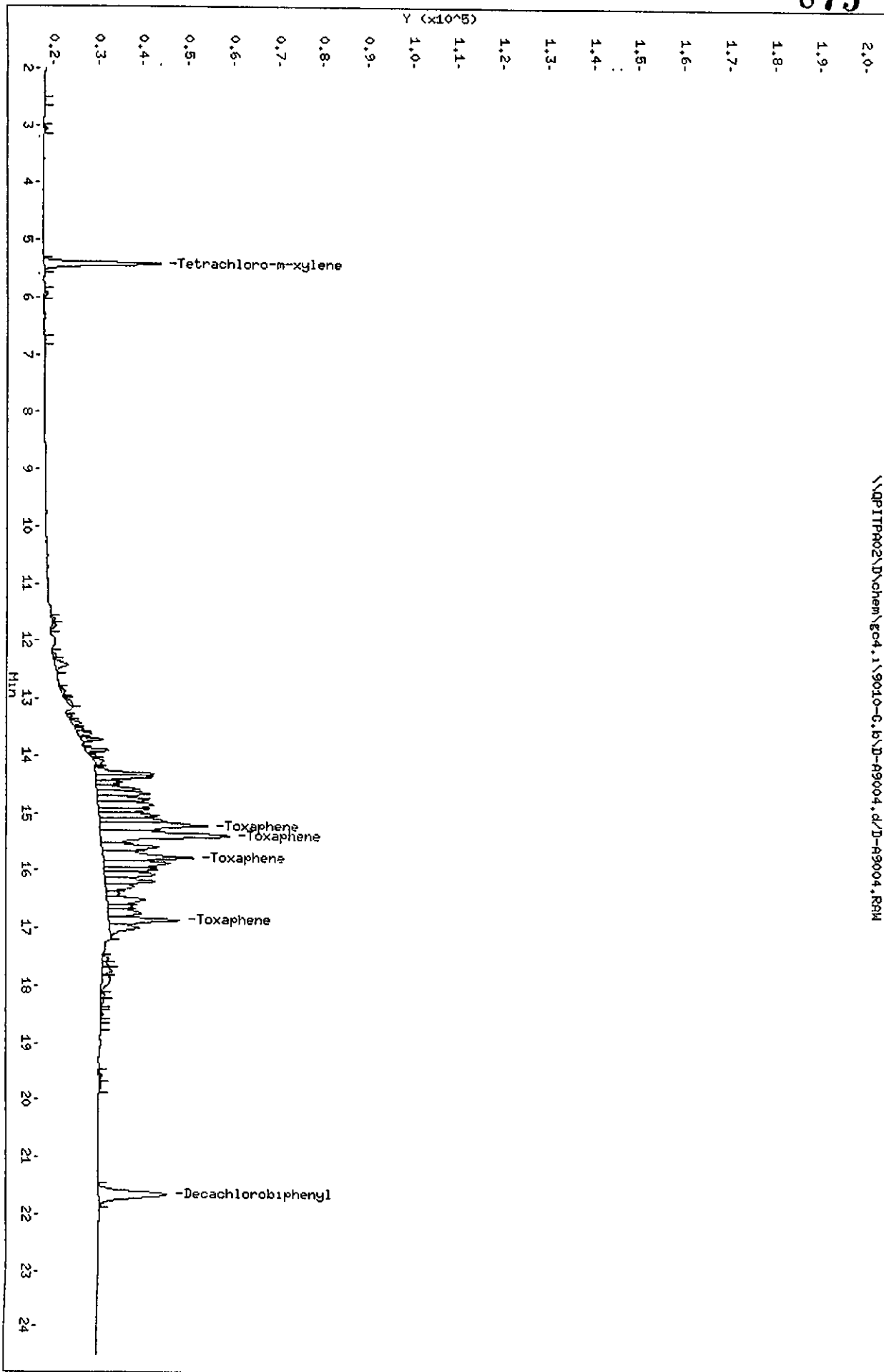
675

331

Data File: \QPI\FR02\Chem\gc4,1\9010-G.b\D-A9004.d
Date : 01-DEC-2000 14:22
Client ID:
Sample Info: HEDTOX, 9010-G.b, 1-TOX, sub, 1,3
Column phase: RTX-50

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

\QPI\FR02\Chem\gc4,1\9010-G.b\D-A9004.d\T-A9004.RM



675 332

Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9005.d
 Report Date: 04-Dec-2000 12:15

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9005.d
 Lab Smp Id: MEDCHLOR
 Inj Date : 01-DEC-2000 11:50
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDCHLOR,9010-G.b,,2-CHLO.sub,,1,3
 Misc Info : 190-102-9
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 11:50 Cal File: D-A9005.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: PITPC085

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
9 Chlordane	9.493	9.493	0.000	8083	0.25000	0.2500 (M)
\$ 1 Tetrachloro-m-xylene	5.420	5.413	0.007	24572	0.02500	0.02500 (M)
\$ 30 Decachlorobiphenyl	21.653	21.653	0.000	14877	0.02500	0.02500 (M)

QC Flag Legend

M - Compound response manually integrated.

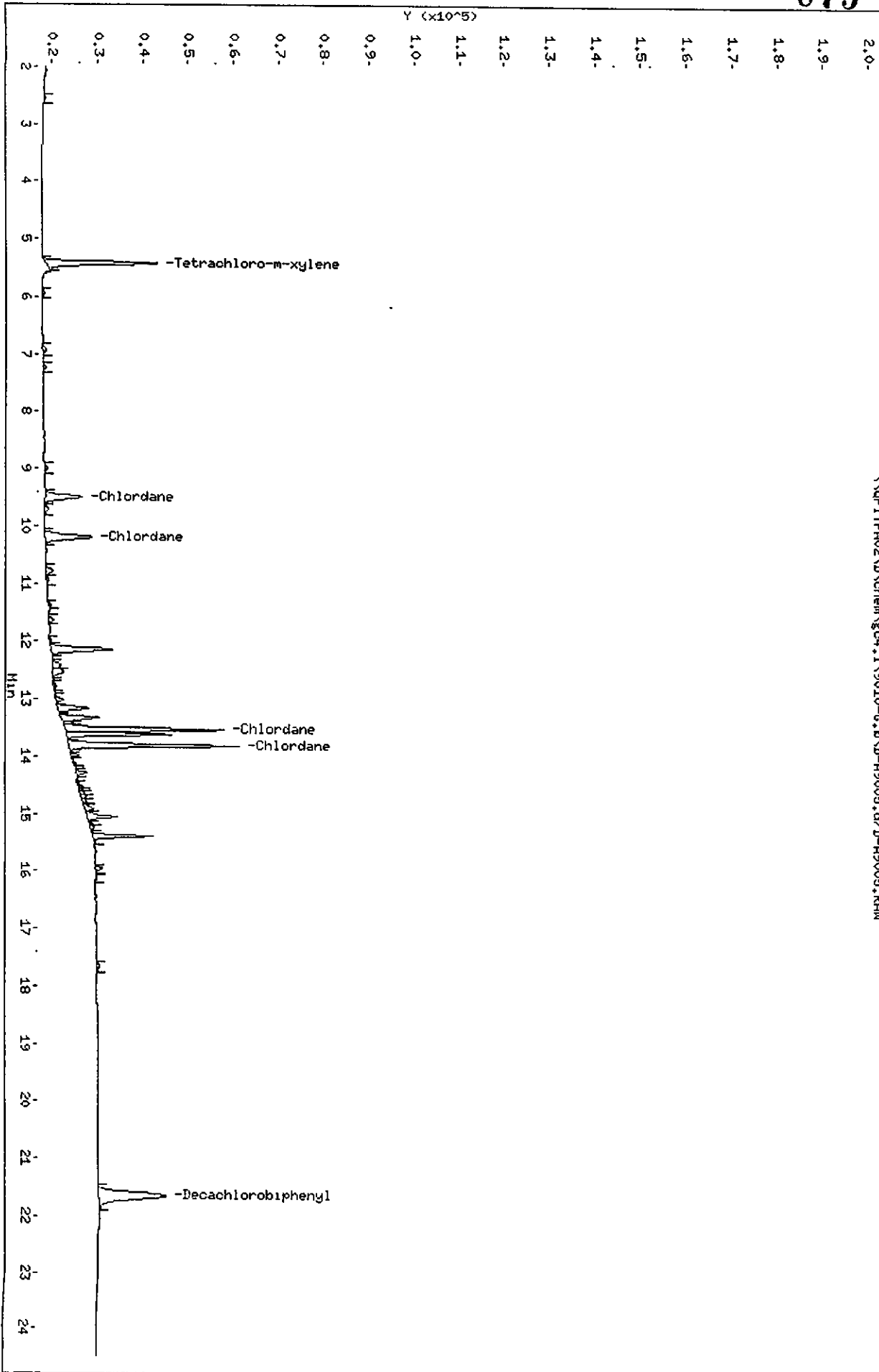
675

333

Data File: \\QPI1P02\chem\gc4.1\9010-G.b\D-89005.d
Date: 01-DEC-2000 11:50
Client ID:
Sample Info: MEDCHLOR, 9010-G.b, 2-CHL0.sub, 1,3
Column phase: RTX-50

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

\\QPI1P02\chem\gc4.1\9010-G.b\D-89005.d\D-89005.RAW



Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9006.d
 Report Date: 04-Dec-2000 12:16

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9006.d
 Lab Smp Id: LOWA
 Inj Date : 01-DEC-2000 12:18
 Operator : 1891 Inst ID: gc4.i
 Smp Info : LOWA,9010-G.b,,3-INDA.sub,,1,1
 Misc Info : 190-100-6
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 12:18 Cal File: D-A9006.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: PITPC085

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.420	5.413	0.007	5583	0.00500	0.005318
5 alpha-BHC	7.640	7.633	0.007	5167	0.00500	0.005000
6 gamma-BHC (Lindane)	9.106	9.106	0.000	5137	0.00500	0.005000
10 Heptachlor	10.193	10.186	0.007	4897	0.00500	0.005000
15 Endosulfan I	13.853	13.846	0.007	6588	0.00500	0.005000
17 Dieldrin	14.420	14.420	0.000	6349	0.00500	0.005000
20 Endrin	14.946	14.946	0.000	5479	0.00500	0.005000
21 4,4'-DDD	15.146	15.146	0.000	3626	0.00500	0.005000
23 4,4'-DDT	15.600	15.600	0.000	4151	0.00500	0.005000
25 Methoxychlor	17.340	17.333	0.007	2966	0.01000	0.010000
\$ 30 Decachlorobiphenyl	21.653	21.653	0.000	3209	0.00500	0.005189

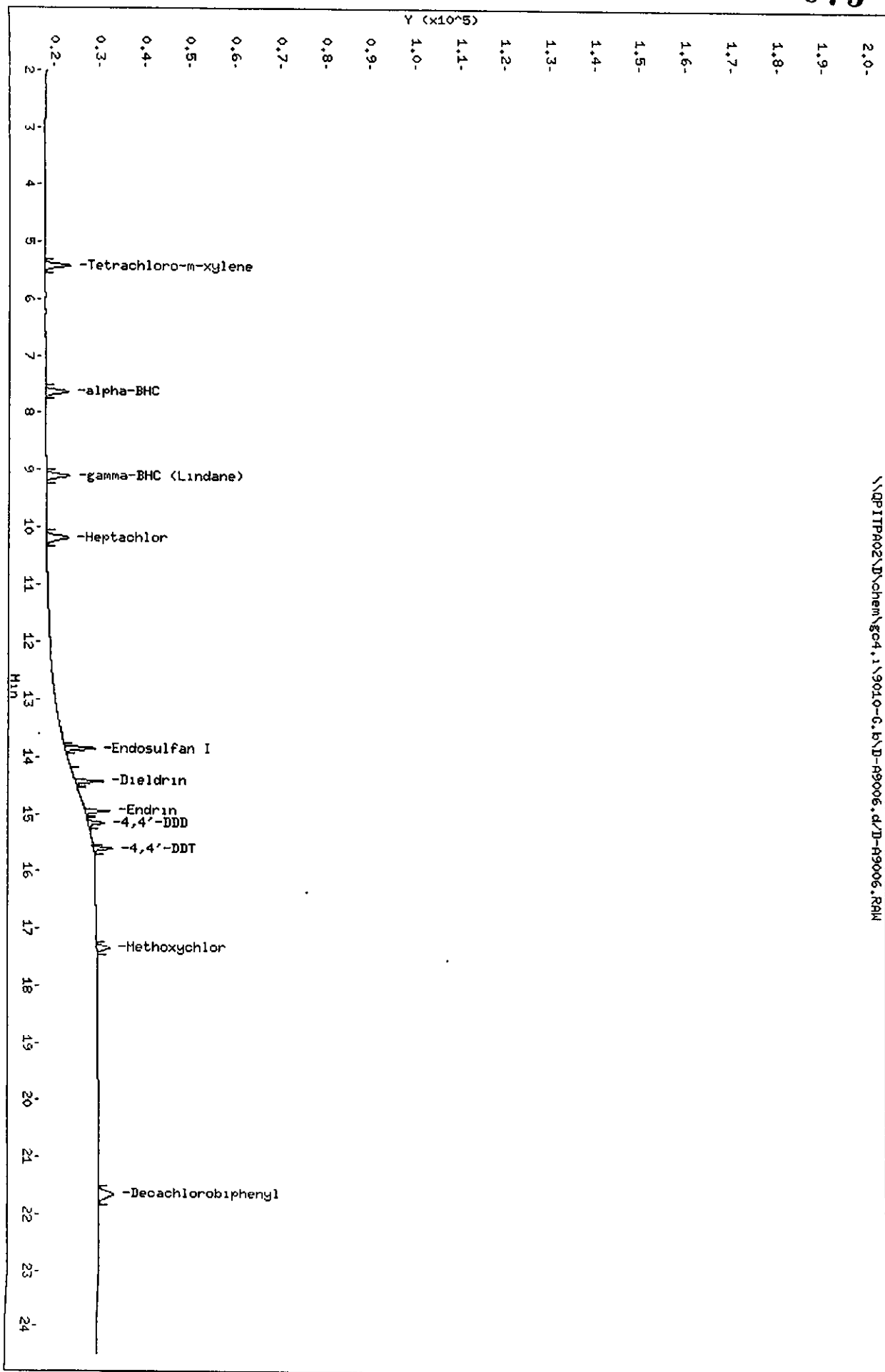
675

335

Data File: \\GPITPA02\chem\gc4.1\9010-G.b\D-A9006.d
Date : 01-DEC-2000 12:18
Client ID:
Sample Info: LOMA, 9010-G.b, 3-INDA.sub, 1.1
Column Phase: RTX-50

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

\\GPITPA02\chem\gc4.1\9010-G.b\D-A9006.d\D-A9006.RAW



Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9007.d
 Report Date: 04-Dec-2000 12:16

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9007.d
 Lab Smp Id: MLOWA
 Inj Date : 01-DEC-2000 12:46
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MLOWA, 9010-G.b,, 3-INDA.sub,, 1, 2
 Misc Info : 190-100-7
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 12:46 Cal File: D-A9007.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: PITPC085

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.420	5.413	0.007	11253	0.01000	0.01047
5 alpha-BHC	7.633	7.633	0.000	10931	0.01000	0.01028
6 gamma-BHC (Lindane)	9.106	9.106	0.000	10745	0.01000	0.01022
10 Heptachlor	10.186	10.186	0.000	9647	0.01000	0.009924
15 Endosulfan I	13.853	13.846	0.007	13309	0.01000	0.01005
17 Dieldrin	14.420	14.420	0.000	13285	0.01000	0.01022
20 Endrin	14.946	14.946	0.000	11375	0.01000	0.01019
21 4,4'-DDD	15.146	15.146	0.000	7515	0.01000	0.01018
23 4,4'-DDT	15.600	15.600	0.000	8435	0.01000	0.01008
25 Methoxychlor	17.340	17.333	0.007	6064	0.02000	0.02022
\$ 30 Decachlorobiphenyl	21.653	21.653	0.000	6414	0.01000	0.01024

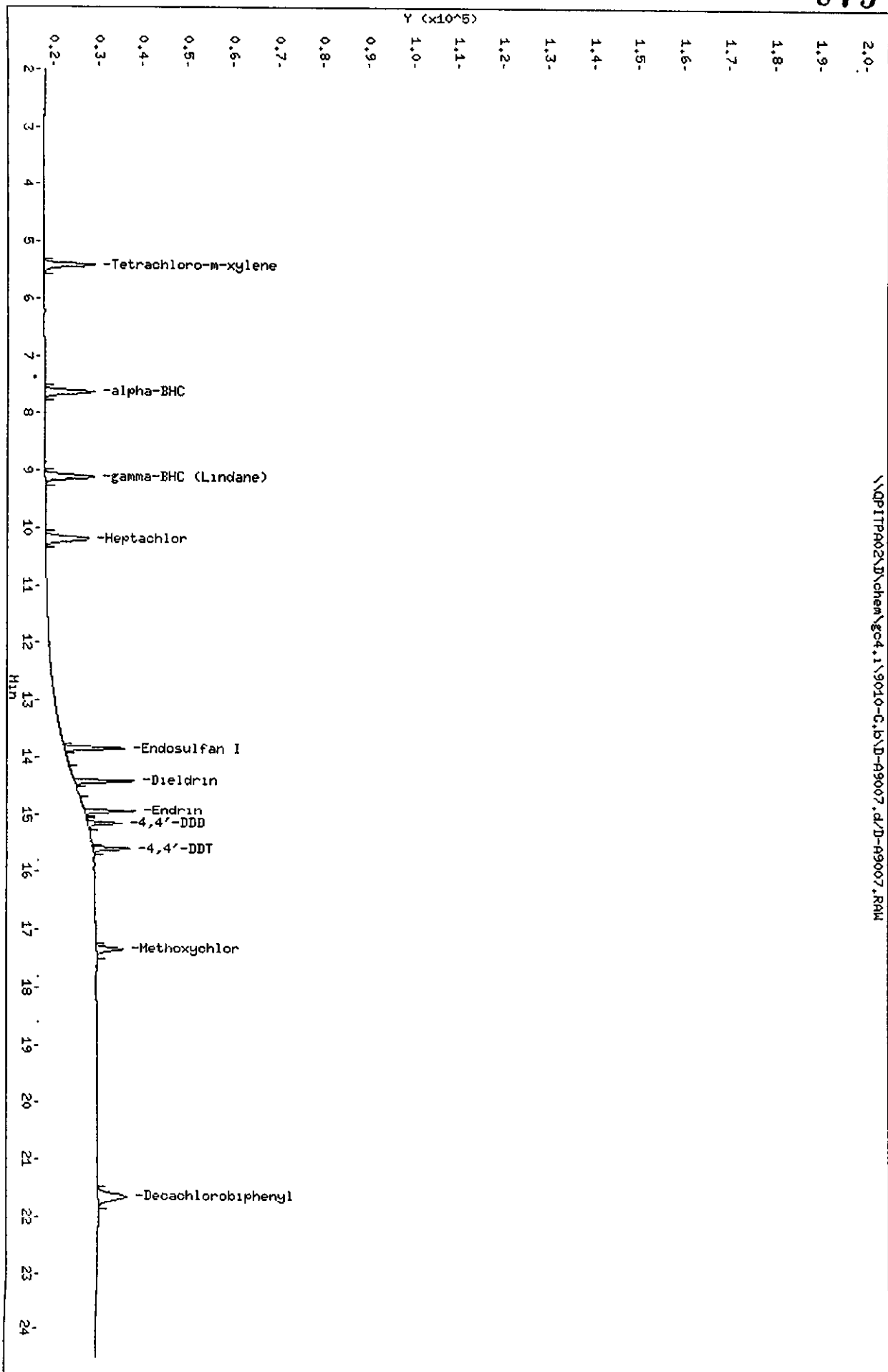
675

337

Data File: \\NPITPA02\chem\gc4.1\9010-G.b\D-09007.d
Date: 01-DEC-2000 12:46
Client ID:
Sample Info: HLDH, 9010-G.b, 3-INDH, sub, 1,2
Column phase: RTX-50

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

\\NPITPA02\chem\gc4.1\9010-G.b\D-09007.d\D-09007.RAW



Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9008.d
 Report Date: 04-Dec-2000 12:17

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9008.d
 Lab Smp Id: MEDA
 Inj Date : 01-DEC-2000 13:14
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDA,9010-G.b,,3-INDA.sub,,1,3
 Misc Info : 190-100-8
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 13:14 Cal File: D-A9008.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: PITPC085

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.413	5.413	0 000	27232	0 02500	0.02452 (M)
5 alpha-BHC	7.633	7 633	0 000	29668	0.02500	0.02686 (M)
6 gamma-BHC (Lindane)	9.106	9.106	0 000	28373	0.02500	0 02630 (M)
10 Heptachlor	10 186	10 186	0.000	22736	0.02500	0 02390 (M)
15 Endosulfan I	13 846	13 846	0.000	33281	0.02500	0 02509 (M)
17 Dieldrin	14 420	14 420	0.000	34411	0 02500	0 02597 (M)
20 Endrin	14 946	14 946	0 000	29080	0 02500	0.02568 (M)
21 4,4'-DDD	15.146	15 146	0 000	19548	0.02500	0 02596 (M)
23 4,4'-DDT	15.600	15 600	0 000	21648	0.02500	0.02557 (M)
25 Methoxychlor	17.333	17.333	0 000	15370	0 05000	0 05083 (M)
\$ 30 Decachlorobiphenyl	21.653	21 653	0.000	15233	0 02500	0.02415 (M)

QC Flag Legend

M - Compound response manually integrated.

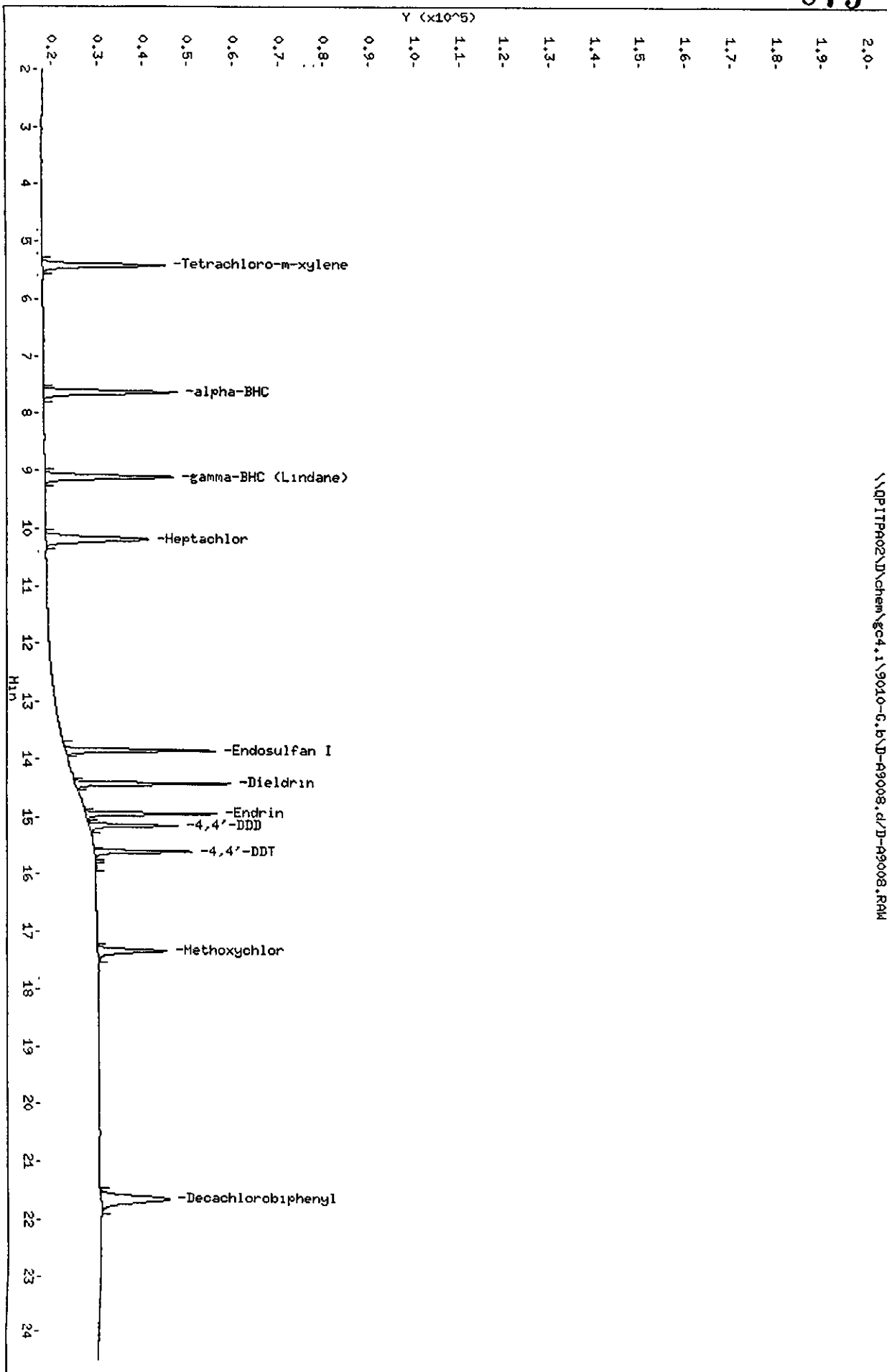
675

339

Data File: \QPI7PA02\chem\gc4,1\9010-G.b\D-A9008.d
Date: 01-DEC-2000 13:14
Client ID:
Sample Info: MEDA,9010-G,b,3-INDA,sub,1,3
Column phase: RTX-50

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

\QPI7PA02\chem\gc4,1\9010-G.b\D-A9008.d\D-A9008.RAW



675 340

Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9009.d
 Report Date: 04-Dec-2000 12:17

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9009.d
 Lab Smp Id: MHIGHA
 Inj Date : 01-DEC-2000 13:41
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MHIGHA, 9010-G.b, , 3-INDA.sub, , 1, 4
 Misc Info : 190-100-9
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 13:41 Cal File: D-A9009.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: PITPC085

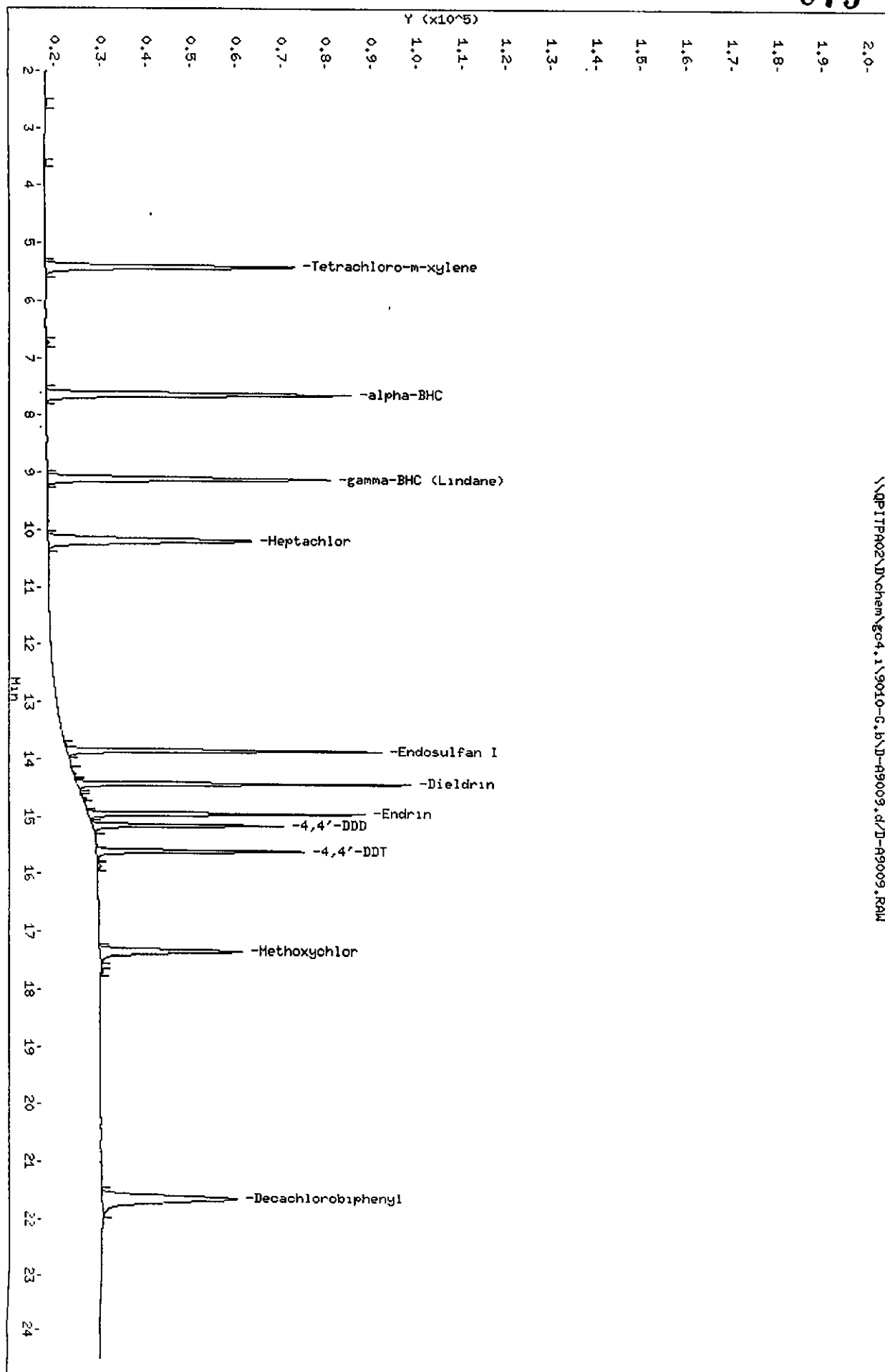
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
\$ 1 Tetrachloro-m-xylene	5.413	5.413	0.000	55114	0.05000	0.04972
5 alpha-BHC	7.633	7.633	0.000	67544	0.05000	0.05793
6 gamma-BHC (Lindane)	9.106	9.106	0.000	62726	0.05000	0.05586
10 Heptachlor	10.186	10.186	0.000	45254	0.05000	0.04816
15 Endosulfan I	13.846	13.846	0.000	69406	0.05000	0.05172
17 Dieldrin	14.420	14.420	0.000	73964	0.05000	0.05424
20 Endrin	14.946	14.946	0.000	61508	0.05000	0.05318
21 4,4'-DDD	15.146	15.146	0.000	42301	0.05000	0.05450
23 4,4'-DDT	15.600	15.600	0.000	46034	0.05000	0.05321
25 Methoxychlor	17.333	17.333	0.000	31392	0.10000	0.1028
\$ 30 Decachlorobiphenyl	21.653	21.653	0.000	29874	0.05000	0.04799

675

341

Data File: \\QPITPA02\N\chem\gc4.1\9010-G.b\D-A9009.d
Date : 01-DEC-2000 13:41
Client ID:
Sample Info: MHIGHA,9010-G,b,,3-INDR,sub,,1,4
Column phase: RTX-50

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



675 342

Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9010.d
 Report Date: 04-Dec-2000 12:18

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9010.d
 Lab Smp Id: HIGHA
 Inj Date : 01-DEC-2000 14:09
 Operator : 1891 Inst ID: gc4.i
 Smp Info : HIGHA,9010-G.b,,3-INDA.sub,,1,5
 Misc Info : 190-100-10
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 14:09 Cal File: D-A9010.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: PITPC085

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
\$ 1 Tetrachloro-m-xylene	5.413	5.413	0.000	108563	0.10000	0.09835
5 alpha-BHC	7.633	7.633	0.000	148059	0.10000	0.1205(A)
6 gamma-BHC (Lindane)	9.106	9.106	0.000	133706	0.10000	0.1147(A)
10 Heptachlor	10.186	10.186	0.000	92189	0.10000	0.09848
15 Endosulfan I	13.846	13.846	0.000	142102	0.10000	0.1046(A)
17 Dieldrin	14.420	14.420	0.000	156819	0.10000	0.1116(A)
20 Endrin	14.946	14.946	0.000	128151	0.10000	0.1084(A)
21 4,4'-DDD	15.146	15.146	0.000	90997	0.10000	0.1133(A)
23 4,4'-DDT	15.600	15.600	0.000	97838	0.10000	0.1102(A)
25 Methoxychlor	17.333	17.333	0.000	63125	0.20000	0.2054(A)
\$ 30 Decachlorobiphenyl	21.646	21.653	-0.007	57662	0.10000	0.09402

QC Flag Legend

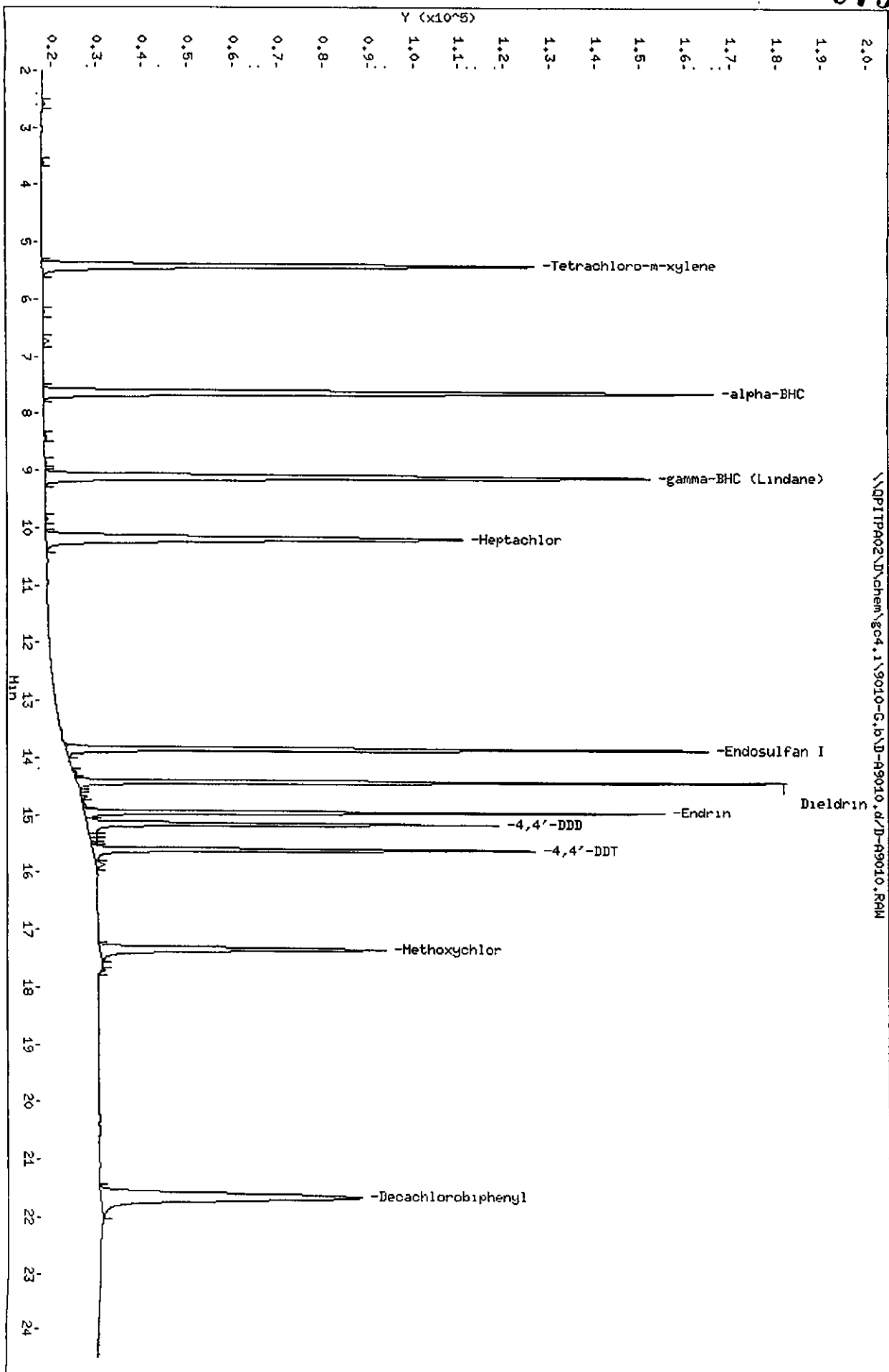
A - Target compound detected but, quantitated amount
 exceeded maximum amount.

675

343

Data File: \\QIPITPA02\Q\chem\gc4.1\9010-G.b\D-A9010.d
Date: 01-DEC-2000 14:09
Client ID:
Sample Info: HICHA,9010-G.b,3-INDA.sub,1,5
Column phase: RTX-50

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



675 344

Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9011.d
 Report Date: 04-Dec-2000 12:18

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9011.d
 Lab Smp Id: LOWB
 Inj Date : 01-DEC-2000 14:37
 Operator : 1891 Inst ID: gc4.i
 Smp Info : LOWB,9010-G.b,,4-INDB.sub,,1,1
 Misc Info : 190-100-12
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 14:37 Cal File: D-A9011.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: PITPC085

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.380	11.373	0.007	4616	0.00500	0.005000
7 beta-BHC	10.086	10.086	0.000	3020	0.00500	0.005000
8 delta-BHC	11.046	11.046	0.000	4465	0.00500	0.005000
12 Heptachlor epoxide	13.140	13.140	0.000	6353	0.00500	0.005000
13 gamma-Chlordane	13.533	13.526	0.007	6943	0.00500	0.005000
14 alpha-Chlordane	13.813	13.813	0.000	7243	0.00500	0.005000
16 4,4'-DDE	14.253	14.253	0.000	5624	0.00500	0.005000
22 Endosulfan II	15.346	15.346	0.000	5923	0.00500	0.005000
24 Endrin aldehyde	15.866	15.866	0.000	4694	0.00500	0.005000
26 Endosulfan sulfate	16.160	16.160	0.000	3921	0.00500	0.005000
27 Endrin ketone	17.693	17.686	0.007	4155	0.00500	0.005000

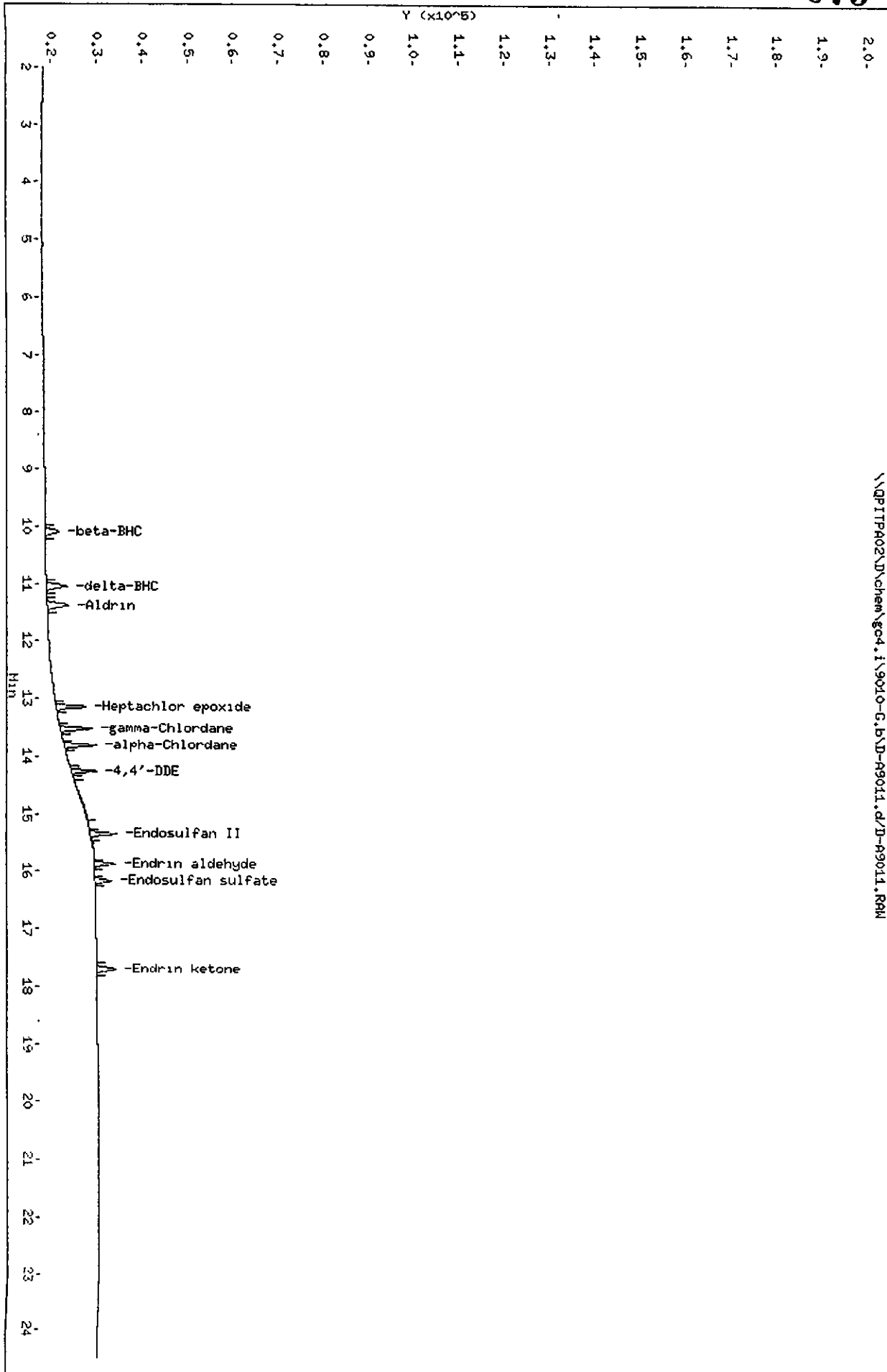
675

345

Data File: \\QPI7FA02\Uvchem\gc4.1\9010-G.b\D-A9011.d
Date: 01-DEC-2000 14:37
Client ID:
Sample Info: L04B,9010-G.b,4-INDB.sub,1.1
Column phase: RTX-50

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

\\QPI7FA02\Uvchem\gc4.1\9010-G.b\D-A9011.d\D-A9011.RAW



Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9012.d
 Report Date: 04-Dec-2000 12:19

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9012.d
 Lab Smp Id: MLOWB
 Inj Date : 01-DEC-2000 15:05
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MLOWB, 9010-G.b, , 4-INDB.sub, , 1, 2
 Misc Info : 190-100-13
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 15:05 Cal File: D-A9012.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: PITPC085

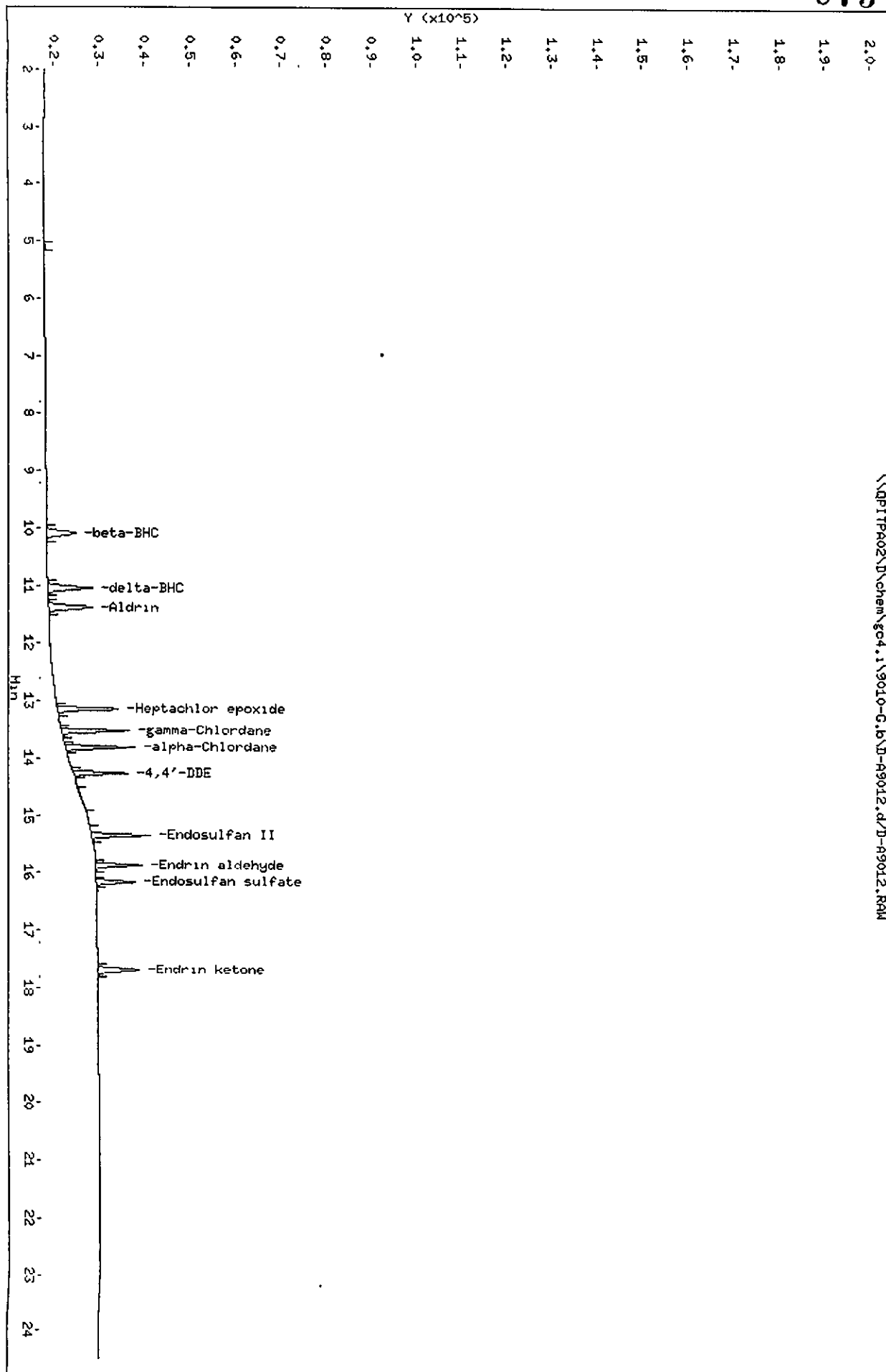
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11 380	11 373	0 007	9732	0 01000	0 01026
7 beta-BHC	10 086	10 086	0 000	6534	0 01000	0 01039
8 delta-BHC	11 046	11 046	0.000	9885	0 01000	0 01051
12 Heptachlor epoxide	13 140	13.140	0.000	13466	0.01000	0.01029
13 gamma-Chlordane	13 526	13 526	0.000	14864	0 01000	0 01034
14 alpha-Chlordane	13 813	13.813	0.000	15479	0 01000	0 01033
16 4,4'-DDE	14.253	14 253	0.000	12075	0 01000	0.01035
22 Endosulfan II	15 346	15 346	0 000	12957	0.01000	0.01045
24 Endrin aldehyde	15.866	15 866	0 000	10195	0 01000	0 01041
26 Endosulfan sulfate	16 160	16 160	0 000	8713	0.01000	0 01053
27 Endrin ketone	17 693	17 686	0.007	9202	0.01000	0 01051

675

347

Data File: \\AQIP\PA02\chem\gc4.1\9010-G.b\D-A9012.d
Date: 01-DEC-2000 15:05
Client ID:
Sample Info: HLOMB,9010-G.b,4-INDB,sdb,1,2
Column phase: RTX-50

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



Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9013.d
 Report Date: 04-Dec-2000 12:19

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9013.d
 Lab Smp Id: MEDB
 Inj Date : 01-DEC-2000 15:33
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDB,9010-G.b,,4-INDB.sub,,1,3
 Misc Info : 190-100-14
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 15:33 Cal File: D-A9013.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: PITPC085

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.373	11.373	0.000	23780	0.02500	0.02505(M)
7 beta-BHC	10.086	10.086	0.000	15247	0.02500	0.02450(M)
8 delta-BHC	11.046	11.046	0.000	25144	0.02500	0.02612(M)
12 Heptachlor epoxide	13.140	13.140	0.000	32293	0.02500	0.02478(M)
13 gamma-Chlordane	13.526	13.526	0.000	35766	0.02500	0.02492(M)
14 alpha-Chlordane	13.813	13.813	0.000	37178	0.02500	0.02488(M)
16 4,4'-DDE	14.253	14.253	0.000	29940	0.02500	0.02544(M)
22 Endosulfan II	15.346	15.346	0.000	29757	0.02500	0.02432(M)
24 Endrin aldehyde	15.866	15.866	0.000	23990	0.02500	0.02466(M)
26 Endosulfan sulfate	16.160	16.160	0.000	21453	0.02500	0.02560(M)
27 Endrin ketone	17.686	17.686	0.000	22860	0.02500	0.02573(M)

QC Flag Legend

M - Compound response manually integrated.

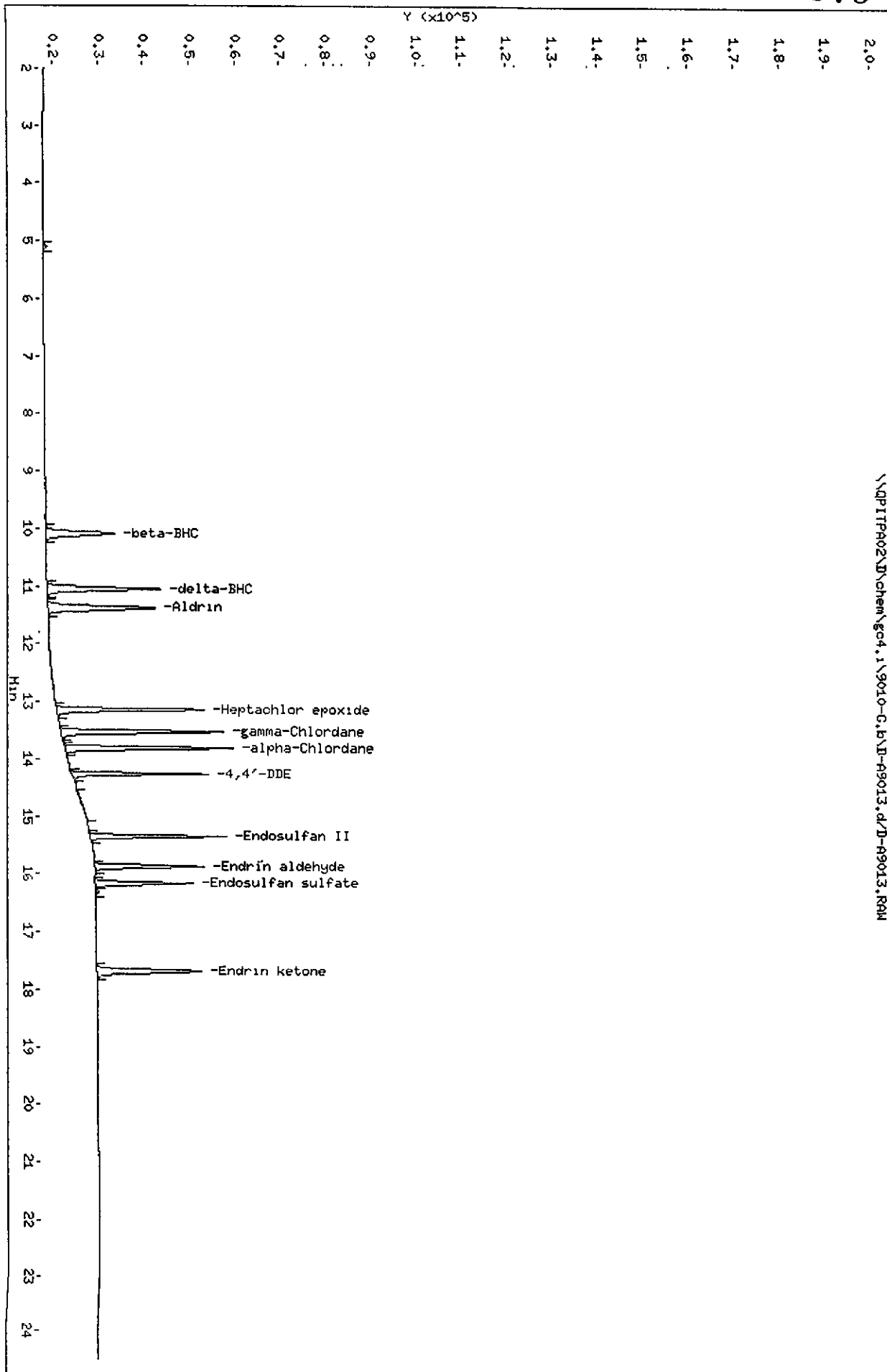
675

349

Data File: \NPITP02\Nchem\gc4,1\9010-G.b\D-69013.d
Date : 01-DEC-2000 15:33
Client ID:
Sample Info: MEDB,9010-G.b,4-INDB,sub,1,3
Column phase: RTX-50

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

\NPITP02\Nchem\gc4,1\9010-G.b\D-69013.d\D-69013.RAW



Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9014.d
 Report Date: 04-Dec-2000 12:19

STL-Pittsburgh

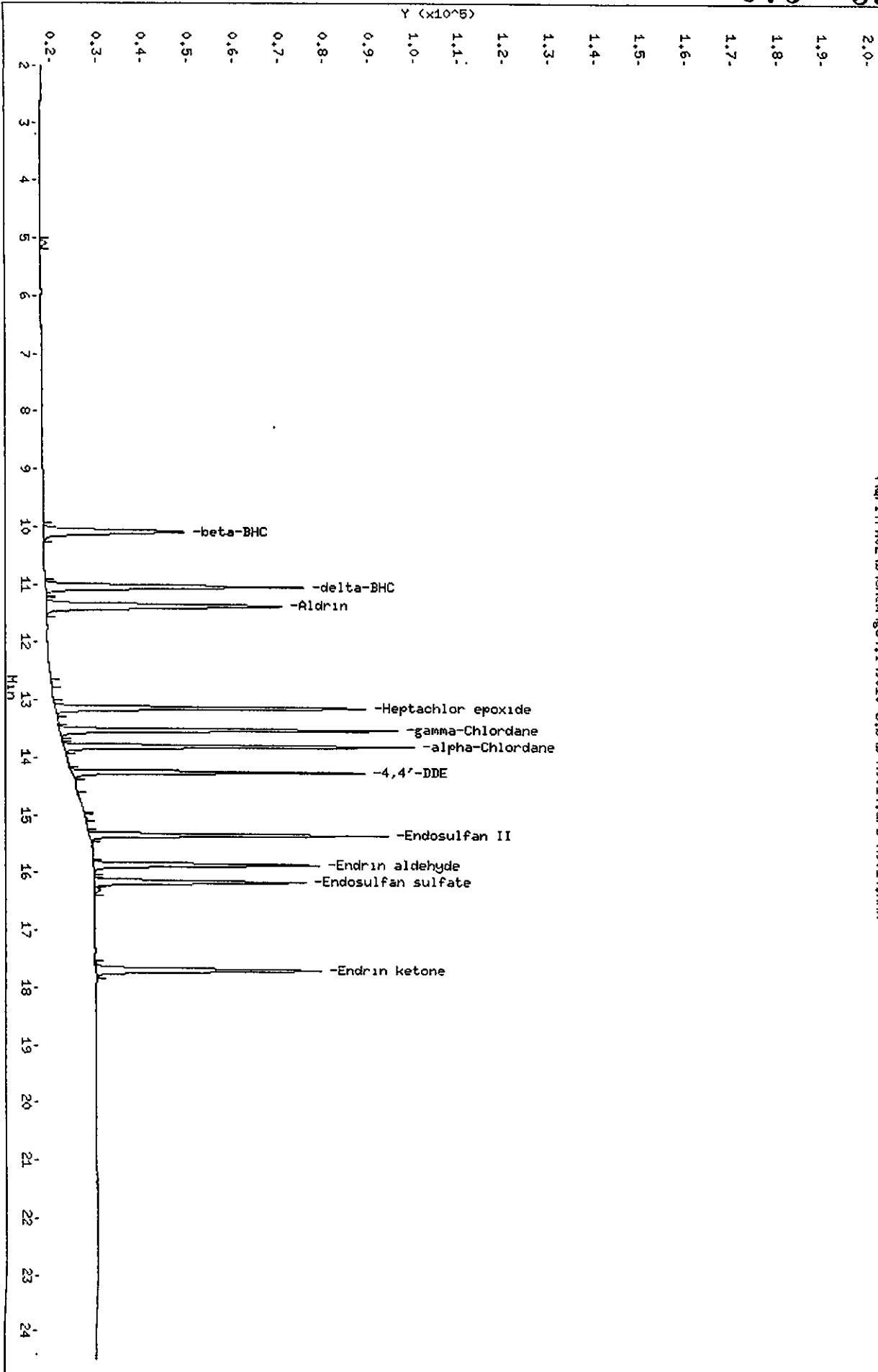
Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9014.d
 Lab Smp Id: MHIGHB
 Inj Date : 01-DEC-2000 16:01
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MHIGHB, 9010-G.b, , 4-INDB.sub, , 1, 4
 Misc Info : 190-101-1
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:01 Cal File: D-A9014.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: PITPC085

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.373	11.373	0.000	51658	0.05000	0.05324
7 beta-BHC	10.086	10.086	0.000	30939	0.05000	0.04978
8 delta-BHC	11.046	11.046	0.000	56757	0.05000	0.05644
12 Heptachlor epoxide	13.140	13.140	0.000	68260	0.05000	0.05177
13 gamma-Chlordane	13.526	13.526	0.000	74565	0.05000	0.05145
14 alpha-Chlordane	13.813	13.813	0.000	77124	0.05000	0.05119
16 4,4'-DDE	14.253	14.253	0.000	64677	0.05000	0.05364
22 Endosulfan II	15.346	15.346	0.000	65924	0.05000	0.05285
24 Endrin aldehyde	15.860	15.866	-0.006	49576	0.05000	0.05072
26 Endosulfan sulfate	16.160	16.160	0.000	46501	0.05000	0.05401
27 Endrin ketone	17.686	17.686	0.000	49542	0.05000	0.05420

Data File: \\QPIITPA02\chem\gc4.1\9010-G.b\D-A9014.d
Date: 01-DEC-2000 16:01
Client ID:
Sample Info: MHIGHB, 9010-G.b, 4-INDB, sub, 1,4
Column phase: RTX-50

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

\\QPIITPA02\chem\gc4.1\9010-G.b\D-A9014.d\A9014.RAW



Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9015.d
 Report Date: 04-Dec-2000 12:20

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9015.d
 Lab Smp Id: HIGHB
 Inj Date : 01-DEC-2000 16:28
 Operator : 1891 Inst ID: gc4.i
 Smp Info : HIGHB,9010-G.b,,4-INDB.sub,,1,5
 Misc Info : 190-101-2
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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: PITPC085

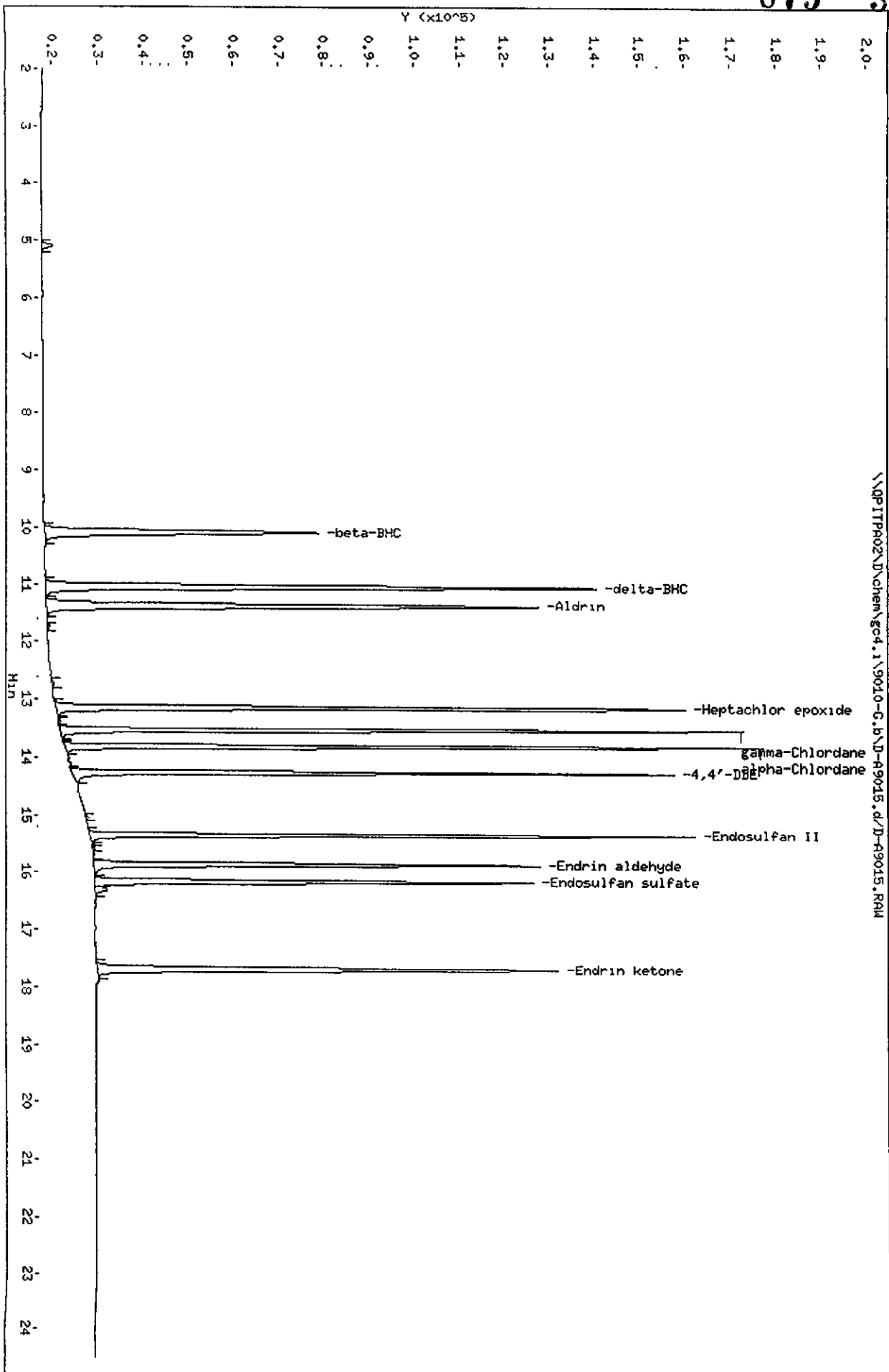
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.373	11.373	0.000	108919	0.10000	0.1096(A)
7 beta-BHC	10.086	10.086	0.000	60533	0.10000	0.09790
8 delta-BHC	11.046	11.046	0.000	122131	0.10000	0.1164(A)
12 Heptachlor epoxide	13.140	13.140	0.000	139503	0.10000	0.1046(A)
13 gamma-Chlordane	13.526	13.526	0.000	151318	0.10000	0.1035(A)
14 alpha-Chlordane	13.813	13.813	0.000	154483	0.10000	0.1020(A)
16 4,4'-DDE	14.253	14.253	0.000	133184	0.10000	0.1082(A)
22 Endosulfan II	15.346	15.346	0.000	134085	0.10000	0.1059(A)
24 Endrin aldehyde	15.860	15.866	-0.006	98834	0.10000	0.1009(A)
26 Endosulfan sulfate	16.160	16.160	0.000	97145	0.10000	0.1100(A)
27 Endrin ketone	17.686	17.686	0.000	102093	0.10000	0.1091(A)

QC Flag Legend

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

Data File: \\QPITPA02\chem\gc4.1\9010-G.b\D-A9015.d
Date : 01-DEC-2000 16:28
Client ID:
Sample Info: HIGHB, 9010-G.b, 4-INDB, sub, 1,5
Column phase: RTX-50

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



Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9016.d
 Report Date: 04-Dec-2000 12:20

STL-Pittsburgh

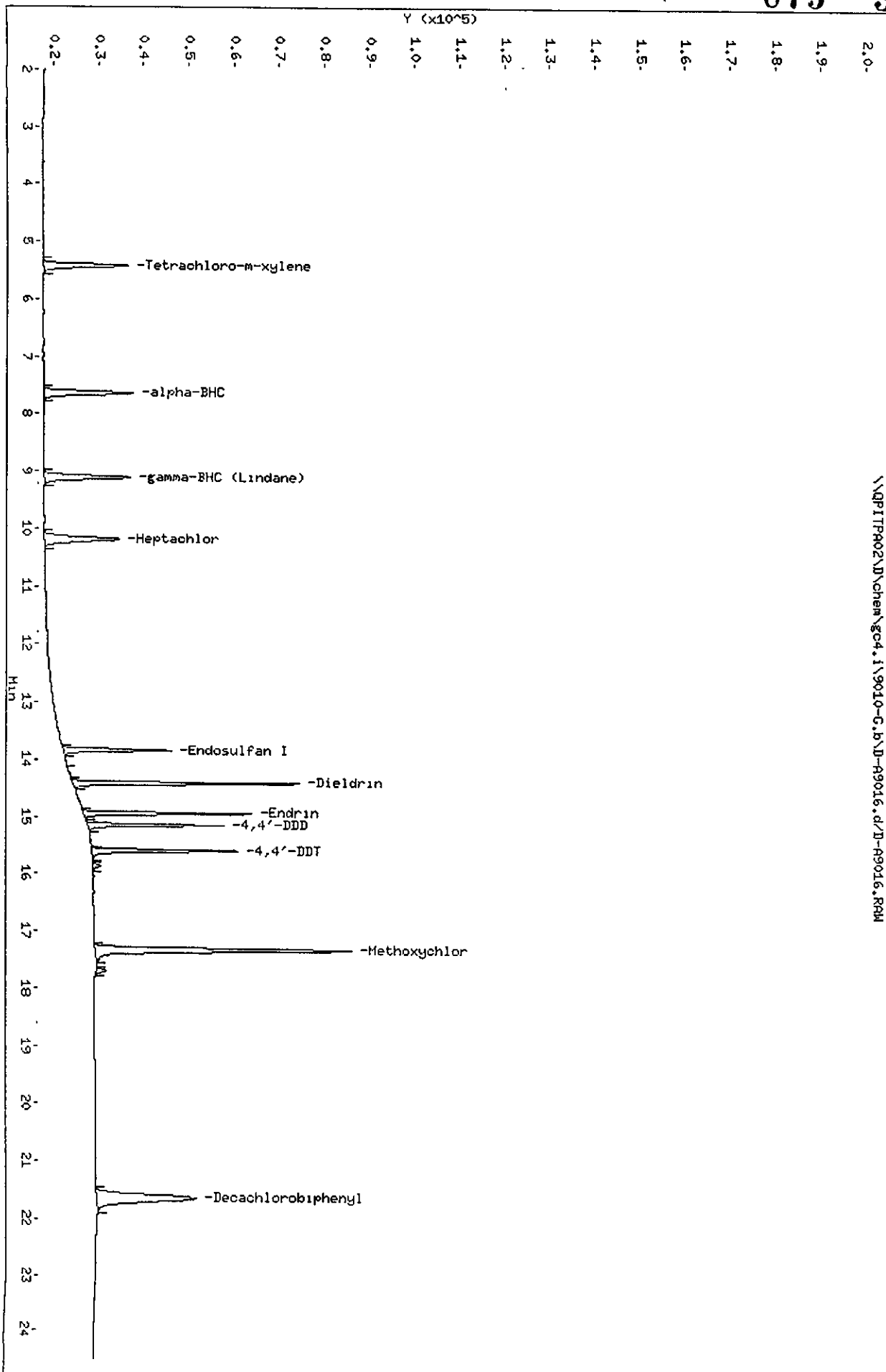
Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9016.d
 Lab Smp Id: 2ND A
 Inj Date : 01-DEC-2000 16:57
 Operator : 1891 Inst ID: gc4.i
 Smp Info : 2ND A, 9010-G.b, , INDA.sub, , 2, 3
 Misc Info : 190-101-7
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: INDA.sub
 Target Version: 4.04
 Processing Host: PITPC085

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5 420	5 413	0 007	18902	0 02500	0 01712
5 alpha-BHC	7 640	7 633	0 007	20013	0 02500	0 01628
6 gamma-BHC (Lindane)	9 106	9 106	0 000	19235	0 02500	0 01650
10 Heptachlor	10 193	10 186	0 007	16529	0.02500	0.01766
15 Endosulfan I	13 846	13 846	0 000	23987	0.02500	0.01767
17 Dieldrin	14 420	14 420	0 000	49989	0.02500	0.03559
20 Endrin	14.946	14 946	0.000	37223	0.02500	0.03150
21 4,4'-DDD	15 146	15 146	0 000	30316	0.02500	0 03776
23 4,4'-DDT	15 600	15 600	0 000	32241	0.02500	0 03632
25 Methoxychlor	17 333	17 333	0 000	56594	0 05000	0 1841
\$ 30 Decachlorobiphenyl	21.646	21 653	-0.007	22045	0 02500	0.03594

Data File: \NPI\TFA02\chem\gc4.1\9010-G.b\D-A9016.d
Date: 01-DEC-2000 16:57
Client ID:
Sample Info: 2ND 4,9010-G.b, INDA.sub, 2,3
Column phase: RTX-50

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

\NPI\TFA02\chem\gc4.1\9010-G.b\D-A9016.d\D-A9016.RAW



Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9017.d
 Report Date: 04-Dec-2000 12:21

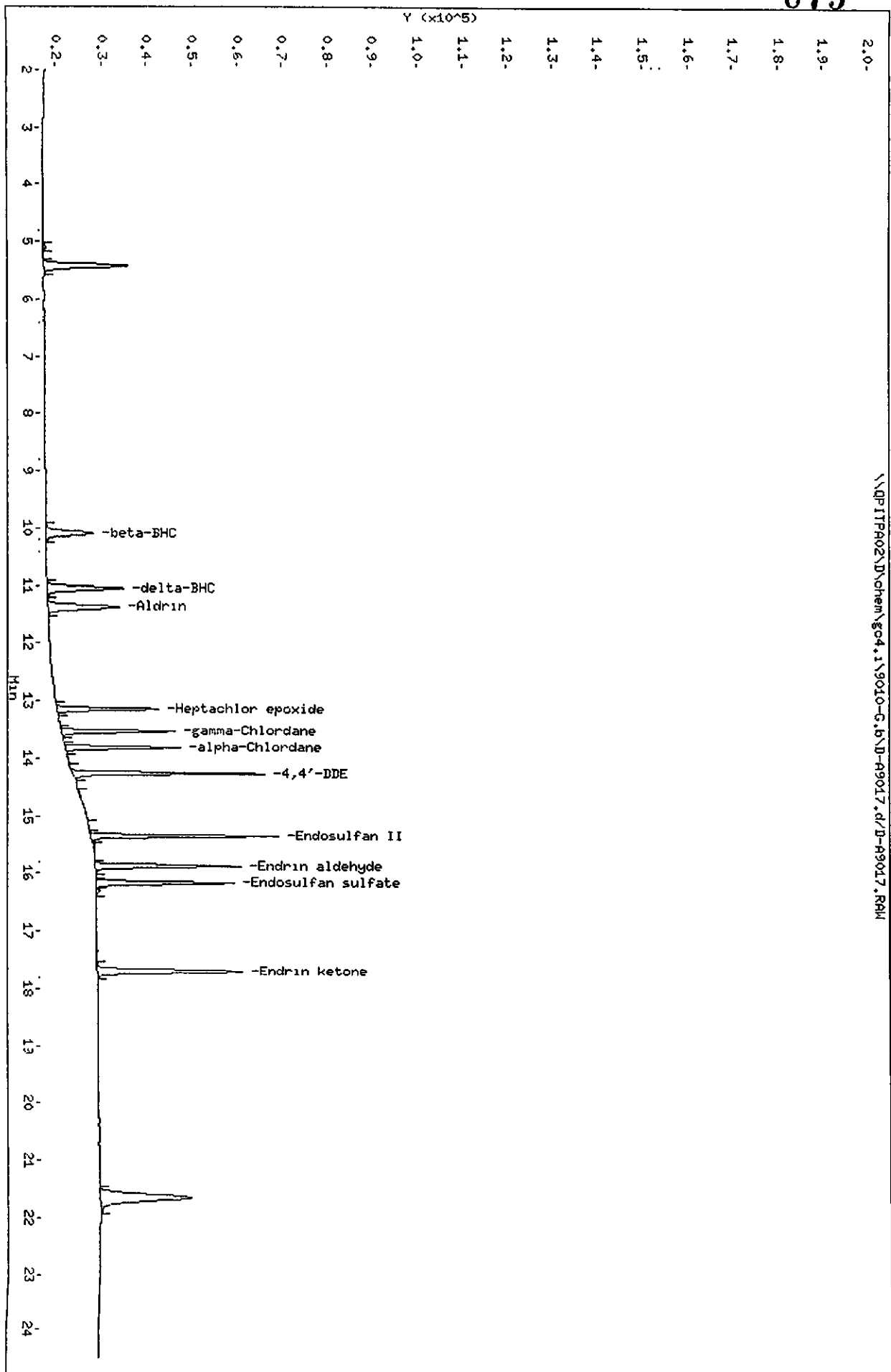
STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9017.d
 Lab Smp Id: 2ND B
 Inj Date : 01-DEC-2000 17:25
 Operator : 1891 Inst ID: gc4.i
 Smp Info : 2ND B,9010-G.b,,INDB.sub,,2,3
 Misc Info : 190-101-10
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: INDB.sub
 Target Version: 4.04
 Processing Host: PITPC085

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.373	11.373	0.000	15843	0.02500	0.01594
7 beta-BHC	10.086	10.086	0.000	10460	0.02500	0.01692
8 delta-BHC	11.046	11.046	0.000	16772	0.02500	0.01599
12 Heptachlor epoxide	13.140	13.140	0.000	22287	0.02500	0.01671
13 gamma-Chlordane	13.526	13.526	0.000	25227	0.02500	0.01725
14 alpha-Chlordane	13.813	13.813	0.000	25476	0.02500	0.01682
16 4,4'-DDE	14.253	14.253	0.000	42471	0.02500	0.03450
22 Endosulfan II	15.346	15.346	0.000	41569	0.02500	0.03284
24 Endrin aldehyde	15.866	15.866	0.000	32346	0.02500	0.03302
26 Endosulfan sulfate	16.160	16.160	0.000	30718	0.02500	0.03479
27 Endrin ketone	17.686	17.686	0.000	32423	0.02500	0.03466

Data File: \\QPITPA02\DJchem\gc4.1\9010-G.b\D-A9017.d
Date: 01-DEC-2000 17:25
Client ID:
Sample Info: 2ND B,9010-G.b,INDB.sub.2,3
Column phase: RTX-50

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



675 358

Data File: \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9018.d
 Report Date: 04-Dec-2000 12:21

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\9010-G.b\D-A9018.d
 Lab Smp Id: EVALB
 Inj Date : 01-DEC-2000 17:53
 Operator : 1891 Inst ID: gc4.i
 Smp Info : EVALB,9010-G.b,,EVALBR.sub,,3,1
 Misc Info : 190-102-10
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 04-Dec-2000 11:52 morganw Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.d
 Als bottle: 1 QC Sample: PEM
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: EVALBR.sub
 Target Version: 4.04
 Processing Host: PITPC085

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ng)
\$ 1 Tetrachloro-m-xylene	5.413	5.413	0.000	21493	0.01947	0.01947(R)
16 4,4'-DDE	14.266	14.253	0.013	216	<0.0	0.0001754(M)
20 Endrin	14.946	14.946	0.000	27579	0.02334	0.02334
21 4,4'-DDD	Compound Not Detected					
23 4,4'-DDT	15.600	15.600	0.000	21221	0.02390	0.02390
24 Endrin aldehyde	15.866	15.866	0.000	435	<0.0	0.0004441
27 Endrin ketone	17.686	17.686	0.000	472	<0.0	0.0005046
\$ 30 Decachlorobiphenyl	21.646	21.653	-0.007	12258	0.01999	0.01999(R)

QC Flag Legend

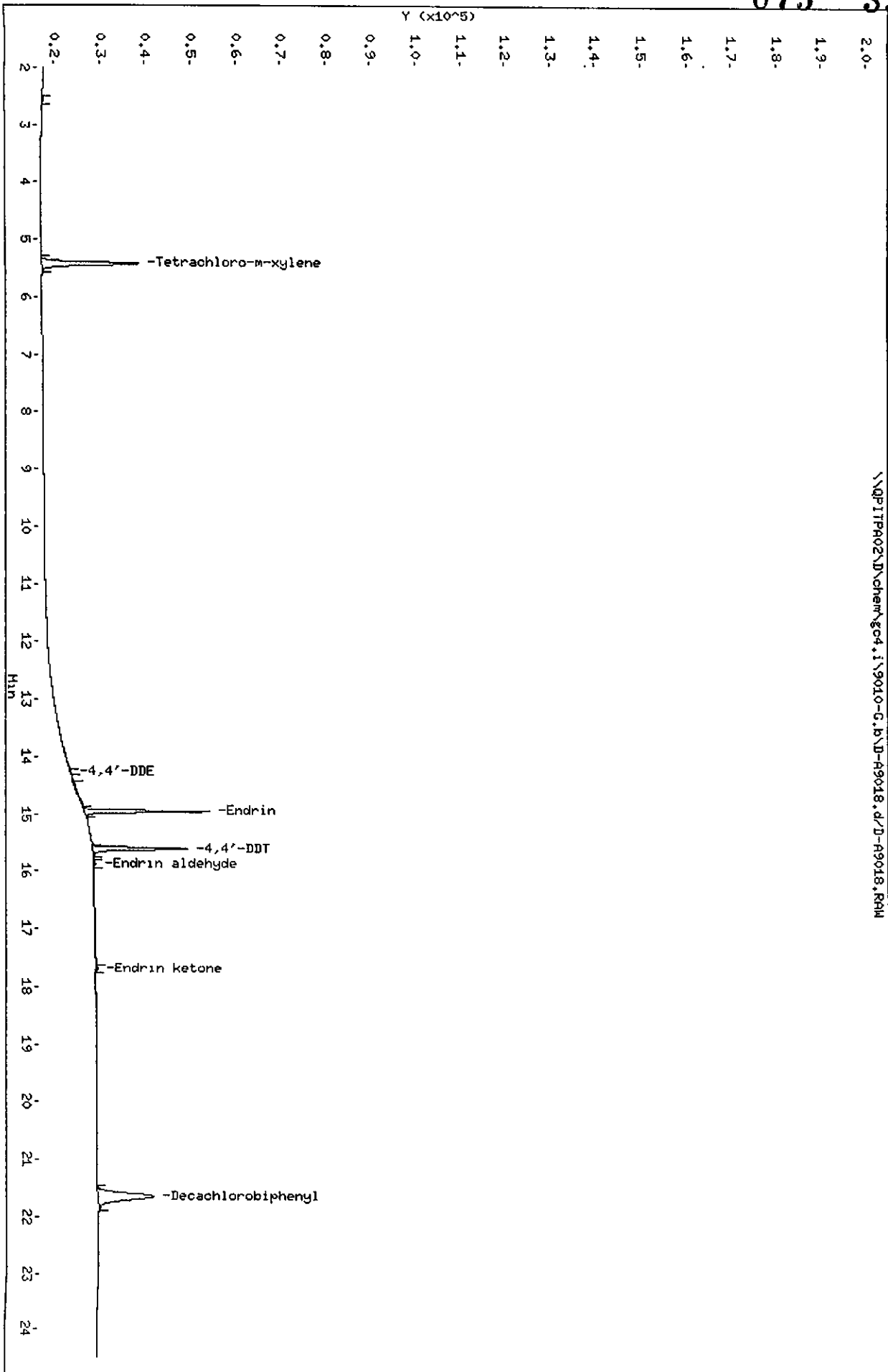
R - Spike/Surrogate failed recovery limits.
 M - Compound response manually integrated.

Endrin - 3.15%

DDT - 1.01%

Data File: \NQPITP02\Nchem\gc4.1\9010-G.b\D-A9018.d
Date: 01-DEC-2000 17:53
Client ID:
Sample Info: EVALB,9010-G.b,,EVALBR,sub,,3.1
Column phase: RTX-50

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



675 360

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9085.d
 Report Date: 05-Dec-2000 10:17

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9085.d
 Lab Smp Id: EVALB
 Inj Date : 04-DEC-2000 14:17
 Operator : 1891 Inst ID: gc4.i
 Smp Info : EVALB, 9010-G.b, , EVALBR.sub, , 3, 1
 Misc Info : 190-102-10
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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	5.400	5.400	0.000	19854	0.01799	0.01799(R)
16 4,4'-DDE	Compound Not Detected.					
20 Endrin	14.940	14.940	0.000	25237	0.02136	0.02136
21 4,4'-DDD	Compound Not Detected.					
23 4,4'-DDT	15.586	15.586	0.000	20424	0.02301	0.02301
24 Endrin aldehyde	15.853	15.853	0.000	573	<0.0	0.0005850
27 Endrin ketone	17.673	17.673	0.000	437	<0.0	0.0004671
\$ 30 Decachlorobiphenyl	21.620	21.613	0.007	11640	0.01898	0.01898(R)

QC Flag Legend

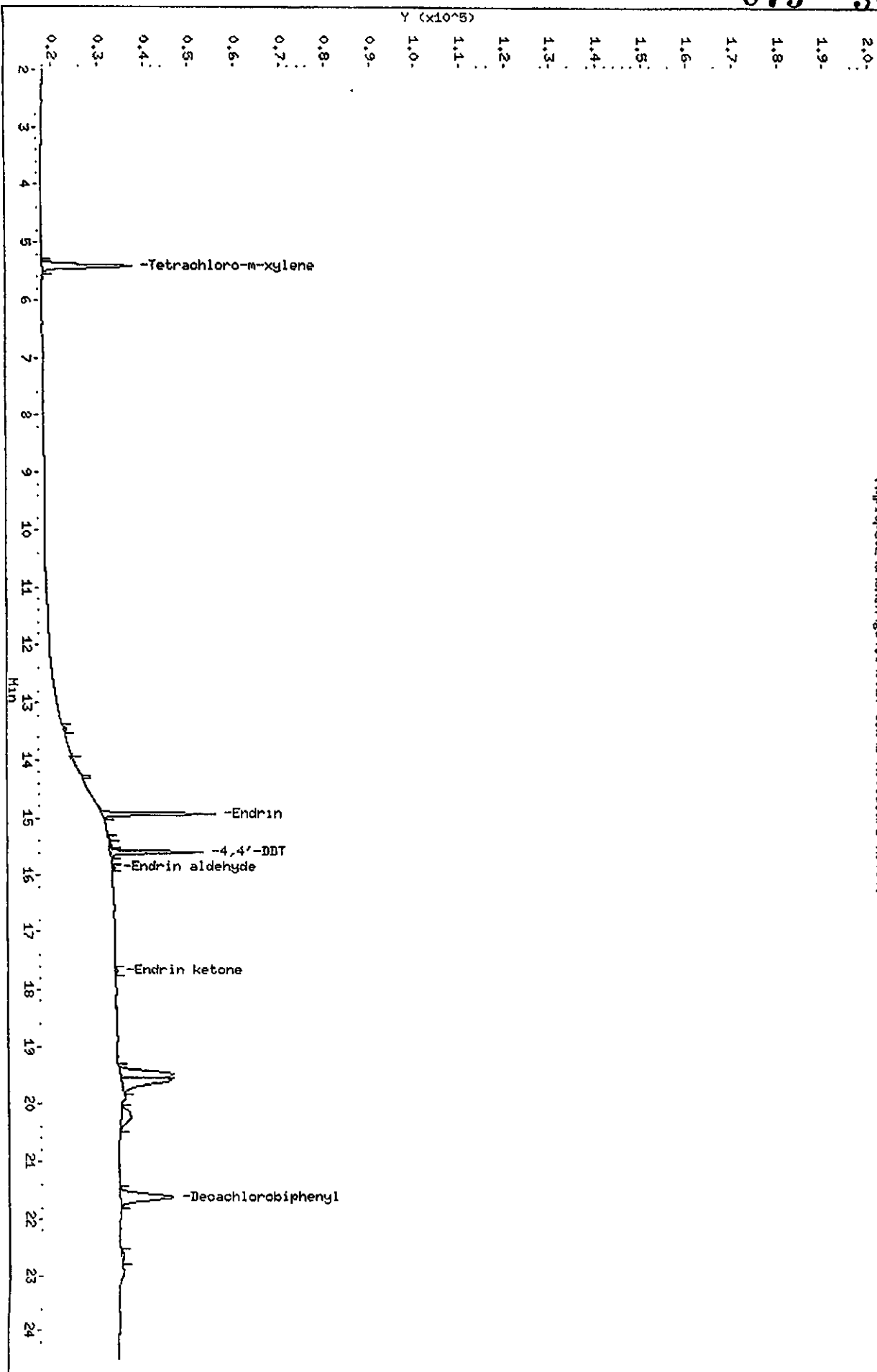
R - Spike/Surrogate failed recovery limits.

DDT 0.07,
 ENDRI 3.87,

Data File: \\np1tpa02\chem\gc4.1\9010-G.b\D-R9085.d
Date : 04-DEC-2000 14:17
Client ID:
Sample Info: EVALB,9010-G.b,EVALBR,sub,3,1
Column phase: RTX-50

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

\\np1tpa02\chem\gc4.1\9010-G.b\D-R9085.d\D-R9085.RAW



675 362

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9086.d
 Report Date: 05-Dec-2000 10:17

STL-Pittsburgh

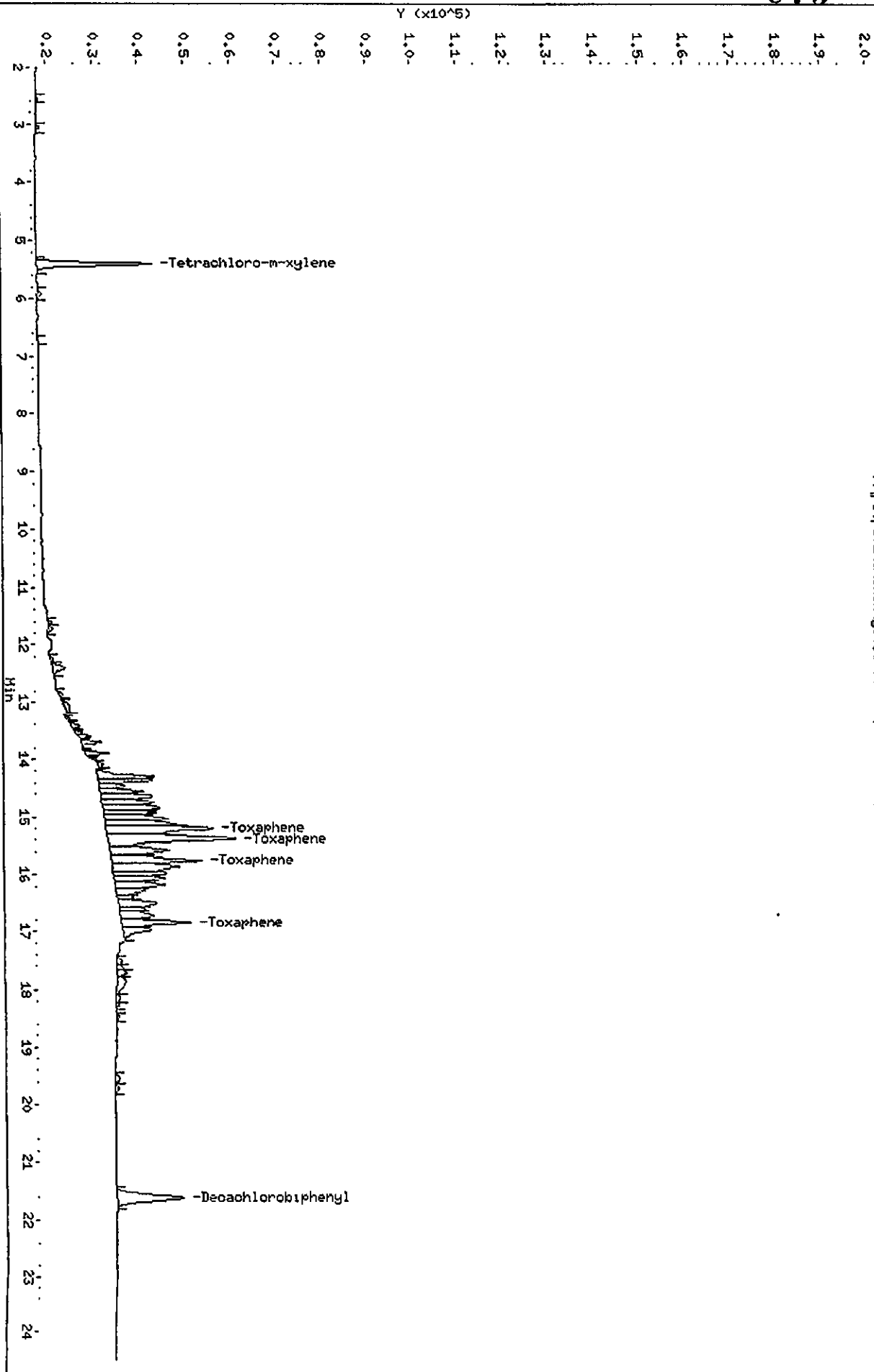
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 Lab Smp Id: MEDTOX
 Inj Date : 04-DEC-2000 14:45
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDTOX,9010-G.b,,1-TOX.sub,,2,3
 Misc Info : 190-98-12
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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	15.200	15.200	0.000	23422	1.00000	0.9856
\$ 1 Tetrachloro-m-xylene	5.400	5.400	0.000	25398	0.02500	0.02301
\$ 30 Decachlorobiphenyl	21.620	21.613	0.007	14572	0.02500	0.02376

Data File: \\ppitpa02\chem\gc04.i\9010-G.b\D-A9086.d
 Date: 04-DEC-2000 14:45
 Client ID:
 Sample Info: HEDTOX, 9010-G.b, 1-TOX, sub, 2,3
 Column phase: RTX-50

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

\\ppitpa02\chem\gc04.i\9010-G.b\D-A9086.d\A9086.R04



675 364

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9087.d
Report Date: 05-Dec-2000 10:17

STL-Pittsburgh

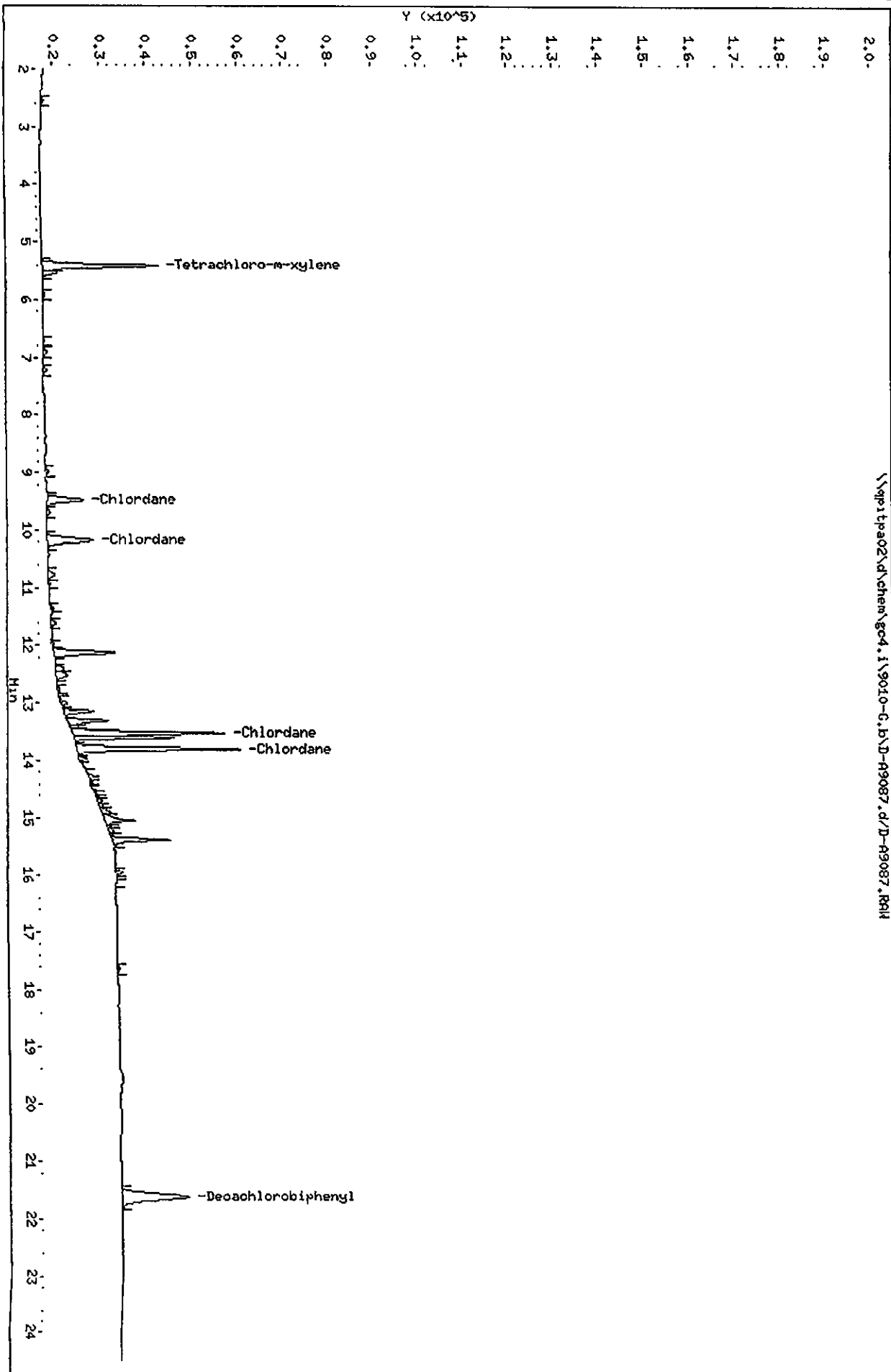
Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9087.d
Lab Smp Id: MEDCHLOR
Inj Date : 04-DEC-2000 15:13
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDCHLOR,9010-G.b,,2-CHLO.sub,,2,3
Misc Info : 190-102-9
Comment :
Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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	9.473	9.473	0 000	7873	0.25000	0.2435
\$ 1 Tetrachloro-m-xylene	5.400	5.400	0 000	25388	0.02500	0.02300
\$ 30 Decachlorobiphenyl	21.613	21.613	0 000	14718	0.02500	0.02400

Data File: \\vapitpa02\chem\gc4.1\9010-G.b\D-A9087.d
Date: 04-DEC-2000 15:13
Client ID:
Sample Info: HEDCHLOR, 9010-G.b, 2-CHL.D, sub, 2,3
Column phase: RTX-50

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

\\vapitpa02\chem\gc4.1\9010-G.b\D-A9087.d\D-A9087.RM



Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9088.d
 Report Date: 05-Dec-2000 10:18

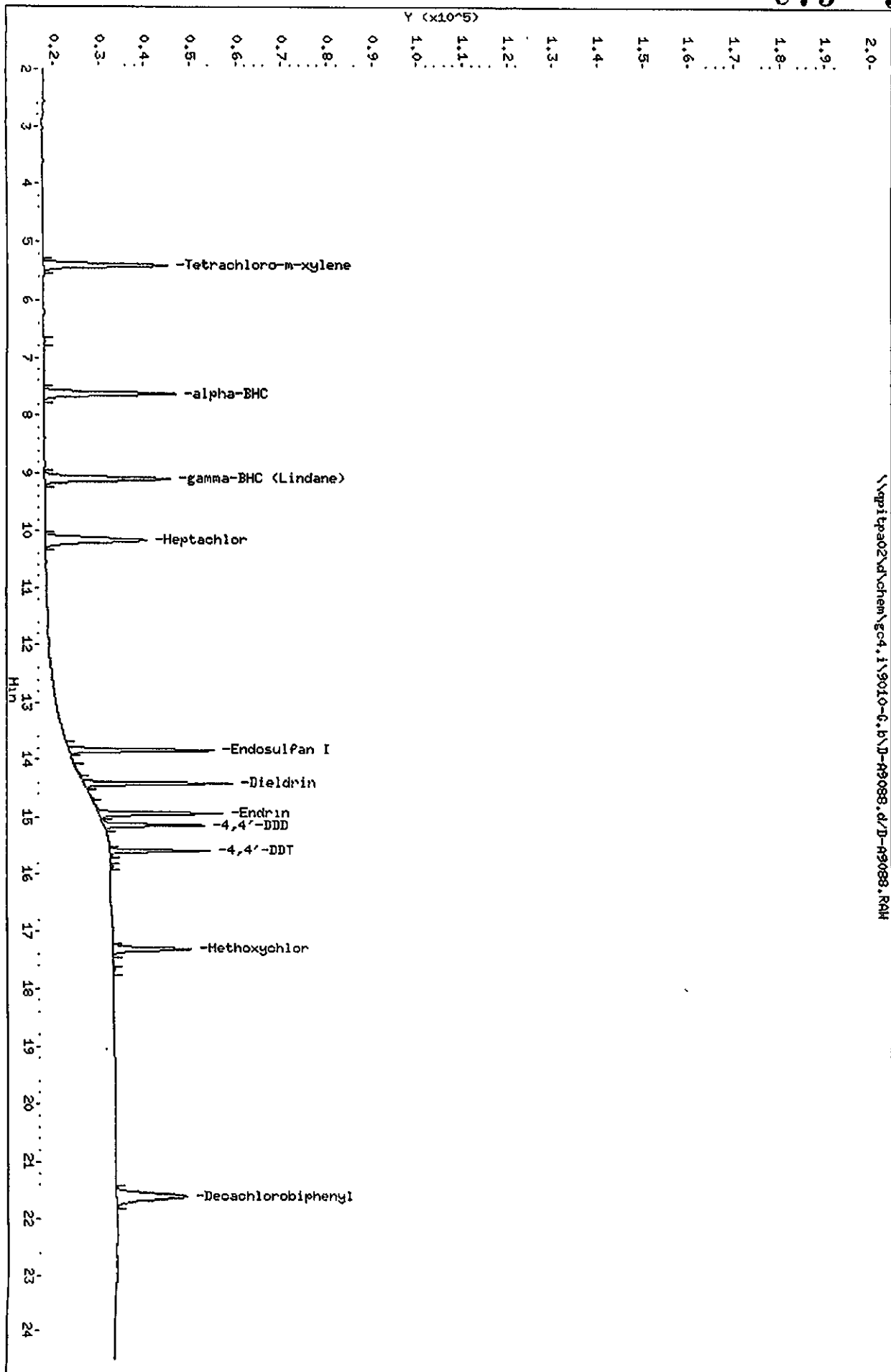
STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9088.d
 Lab Smp Id: MEDA
 Inj Date : 04-DEC-2000 15:40
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDA, 9010-G.b, , INDA.sub, , 2, 3
 Misc Info : 190-100-8
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: INDA.sub
 Target Version: 4.04
 Processing Host: PITPC061

						AMOUNTS	
						CAL-AMT	ON-COL
						(ng)	(ng)
Compounds	RT	EXP RT	DLT RT	RESPONSE			
=====	==	=====	=====	=====		=====	=====
\$ 1 Tetrachloro-m-xylene	5.400	5.400	0.000	27433		0.02500	0.02485
5 alpha-BHC	7.620	7.620	0.000	29241		0.02500	0.02379
6 gamma-BHC (Lindane)	9.093	9.093	0.000	27799		0.02500	0.02385
10 Heptachlor	10.166	10.166	0.000	22472		0.02500	0.02400
15 Endosulfan I	13.840	13.840	0.000	31734		0.02500	0.02337
17 Dieldrin	14.413	14.413	0.000	32489		0.02500	0.02313
20 Endrin	14.940	14.940	0.000	27068		0.02500	0.02291
21 4,4'-DDD	15.140	15.140	0.000	22008		0.02500	0.02741
23 4,4'-DDT	15.586	15.586	0.000	21907		0.02500	0.02468
25 Methoxychlor	17.313	17.313	0.000	17120		0.05000	0.05570
\$ 30 Decachlorobiphenyl	21.613	21.613	0.000	15325		0.02500	0.02499

Data File: \\pittpa02\chem\gc4,1\9010-G,b\D-A9088.d
Date : 04-DEC-2000 15:40
Client ID:
Sample Info: HEDA, 9010-G,b,1INDA,sub,2,3
Column phase: RTX-50

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



Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9089.d
 Report Date: 05-Dec-2000 10:18

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9089.d
 Lab Smp Id: MEDB
 Inj Date : 04-DEC-2000 16:08
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDB,9010-G.b,,INDB.sub,,2,3
 Misc Info : 190-100-14
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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	11.360	11.360	0.000	22815	0.02500	0.02295
7 beta-BHC	10.073	10.073	0.000	15341	0.02500	0.02481
8 delta-BHC	11.033	11.033	0.000	25230	0.02500	0.02406
12 Heptachlor epoxide	13.126	13.126	0.000	30900	0.02500	0.02317
13 gamma-Chlordane	13.520	13.520	0.000	34262	0.02500	0.02343
14 alpha-Chlordane	13.800	13.800	0.000	35641	0.02500	0.02354
16 4,4'-DDE	14.246	14.246	0.000	31011	0.02500	0.02519
22 Endosulfan II	15.333	15.333	0.000	27557	0.02500	0.02177
24 Endrin aldehyde	15.853	15.853	0.000	21896	0.02500	0.02235
26 Endosulfan sulfate	16.153	16.153	0.000	21322	0.02500	0.02415
27 Endrin ketone	17.673	17.673	0.000	22169	0.02500	0.02370

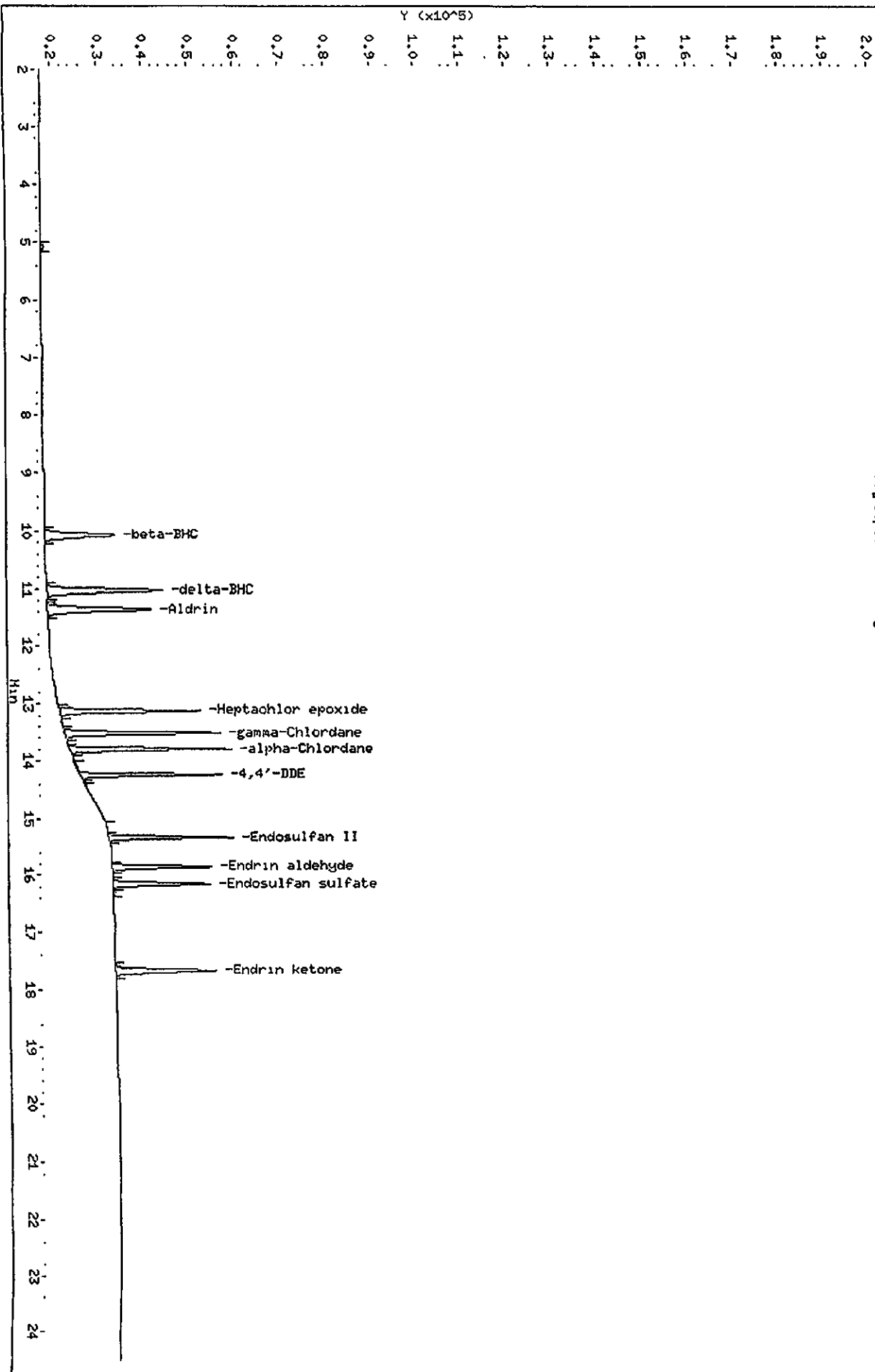
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Data File: \\qtpipa02\chem\gc4.1\9010-G.b.D-A9089.d
Date: 04-DEC-2000 16:08
Client ID:
Sample Info: HEDB,9010-G.b.,INDB,sub,2,3
Column phase: RTX-50

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

\\qtpipa02\chem\gc4.1\9010-G.b.D-A9089.d\7D-A9089.RAW



Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9110.d
 Report Date: 05-Dec-2000 10:18

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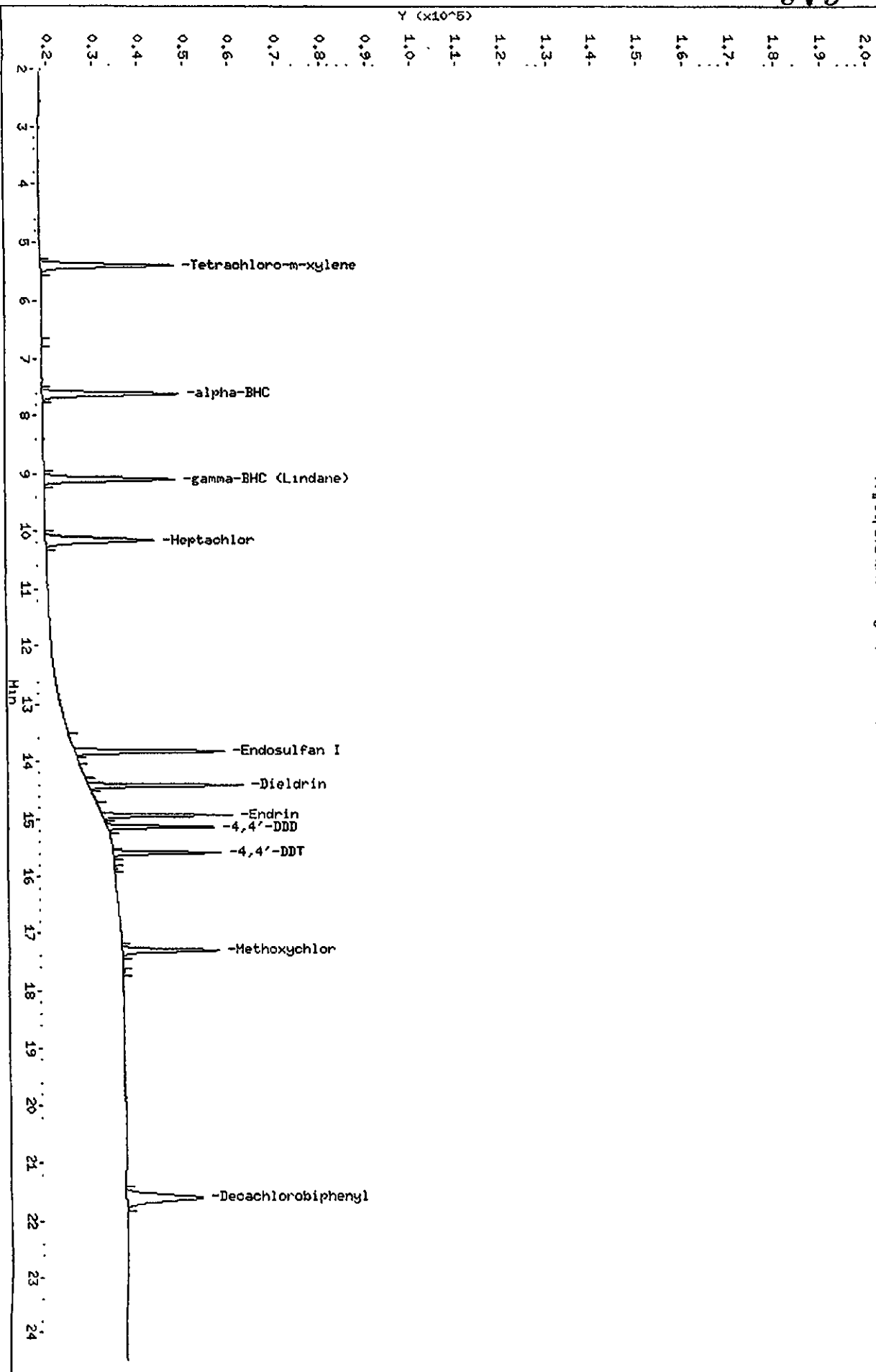
Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9110.d
 Lab Smp Id: MEDA
 Inj Date : 05-DEC-2000 01:52
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDA,9010-G.b,, INDA.sub,,2,3
 Misc Info : 190-100-8
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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	5.400	5.400	0.000	29470	0.02500	0.02670
5 alpha-BHC	7.613	7.620	-0.007	30075	0.02500	0.02447
6 gamma-BHC (Lindane)	9.086	9.093	-0.007	28793	0.02500	0.02470
10 Heptachlor	10.160	10.166	-0.006	24140	0.02500	0.02579
15 Endosulfan I	13.833	13.840	-0.007	32820	0.02500	0.02417
17 Dieldrin	14.406	14.413	-0.007	33977	0.02500	0.02419
20 Endrin	14.933	14.940	-0.007	28820	0.02500	0.02439
21 4,4'-DDD	15.140	15.140	0.000	23443	0.02500	0.02920
23 4,4'-DDT	15.586	15.586	0.000	23798	0.02500	0.02681
25 Methoxychlor	17.313	17.313	0.000	21271	0.05000	0.06921
\$ 30 Decachlorobiphenyl	21.606	21.613	-0.007	16562	0.02500	0.02700

Data File: \\pittpa02\chem\gc4.i\9010-G.b.D-89110.d
Date: 05-DEC-2000 01:52
Client ID:
Sample Info: HEDA,9010-G.b.,IINDA.sds,2,3
Column phase: RTX-50

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

\\pittpa02\chem\gc4.i\9010-G.b.D-89110.d/D-89110.RM



675 372

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9111.d
 Report Date: 05-Dec-2000 10:18

STL-Pittsburgh

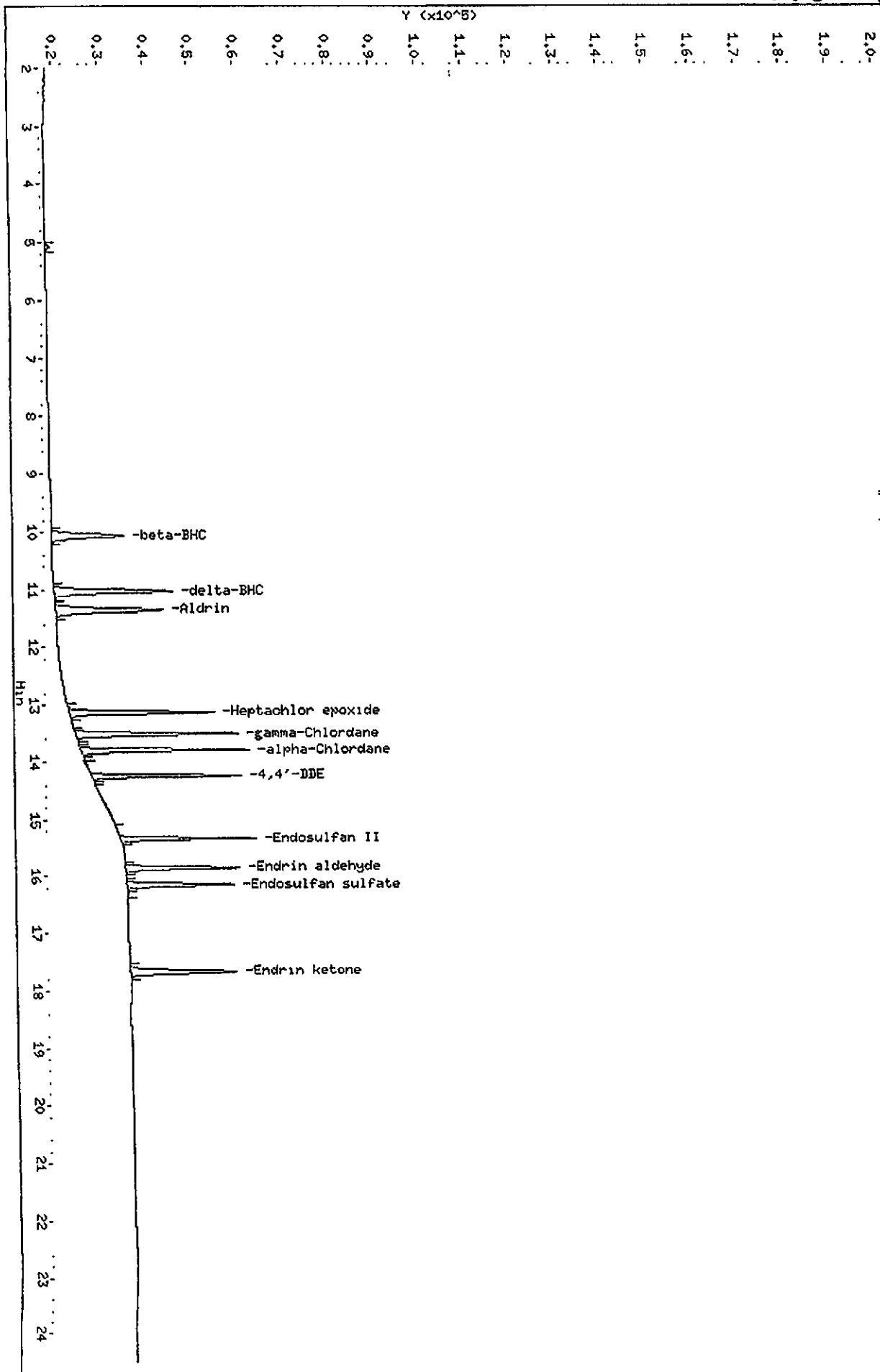
Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9111.d
 Lab Smp Id: MEDB
 Inj Date : 05-DEC-2000 02:20
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDB,9010-G.b,,INDB.sub,,2,3
 Misc Info : 190-100-14
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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	11.353	11.360	-0.007	23682	0.02500	0.02382
7 beta-BHC	10.066	10.073	-0.007	15811	0.02500	0.02557
8 delta-BHC	11.026	11.033	-0.007	26035	0.02500	0.02482
12 Heptachlor epoxide	13.120	13.126	-0.006	31859	0.02500	0.02388
13 gamma-Chlordane	13.513	13.520	-0.007	35760	0.02500	0.02446
14 alpha-Chlordane	13.800	13.800	0.000	36918	0.02500	0.02438
16 4,4'-DDE	14.246	14.246	0.000	32997	0.02500	0.02680
22 Endosulfan II	15.333	15.333	0.000	29738	0.02500	0.02349
24 Endrin aldehyde	15.853	15.853	0.000	24987	0.02500	0.02551
26 Endosulfan sulfate	16.146	16.153	-0.007	23726	0.02500	0.02687
27 Endrin ketone	17.673	17.673	0.000	23571	0.02500	0.02520

Data File: \\pittpa02\chem\gc04.i\9010-G.b\D-09111.d
Date: 05-DEC-2000 02:20
Client ID:
Sample Info: HEDB,9010-G.b,,INDB,sub,,2,3
Column phase: RTX-50

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

\\pittpa02\chem\gc04.i\9010-G.b\D-09111.d\D-09111.R04



675 374

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9112.d
 Report Date: 05-Dec-2000 10:18

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9112.d
 Lab Smp Id: EVALB
 Inj Date : 05-DEC-2000 02:48
 Operator : 1891 Inst ID: gc4.i
 Smp Info : EVALB,9010-G.b,,EVALBR.sub,,3,1
 Misc Info : 190-102-10
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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	5.400	5.400	0.000	22434	0.02032	0.02032(R)
16 4,4'-DDE	Compound Not Detected					
20 Endrin	14.933	14.940	-0.007	27637	0.02339	0.02339
21 4,4'-DDD	Compound Not Detected					
23 4,4'-DDT	15.586	15.586	0.000	23621	0.02661	0.02661
24 Endrin aldehyde	15.853	15.853	0.000	539	0.00055	0.0005502
27 Endrin ketone	17.673	17.673	0.000	532	<0.0	0.0005687
\$ 30 Decachlorobiphenyl	21.606	21.613	-0.007	13186	0.02150	0.02150(R)

QC Flag Legend

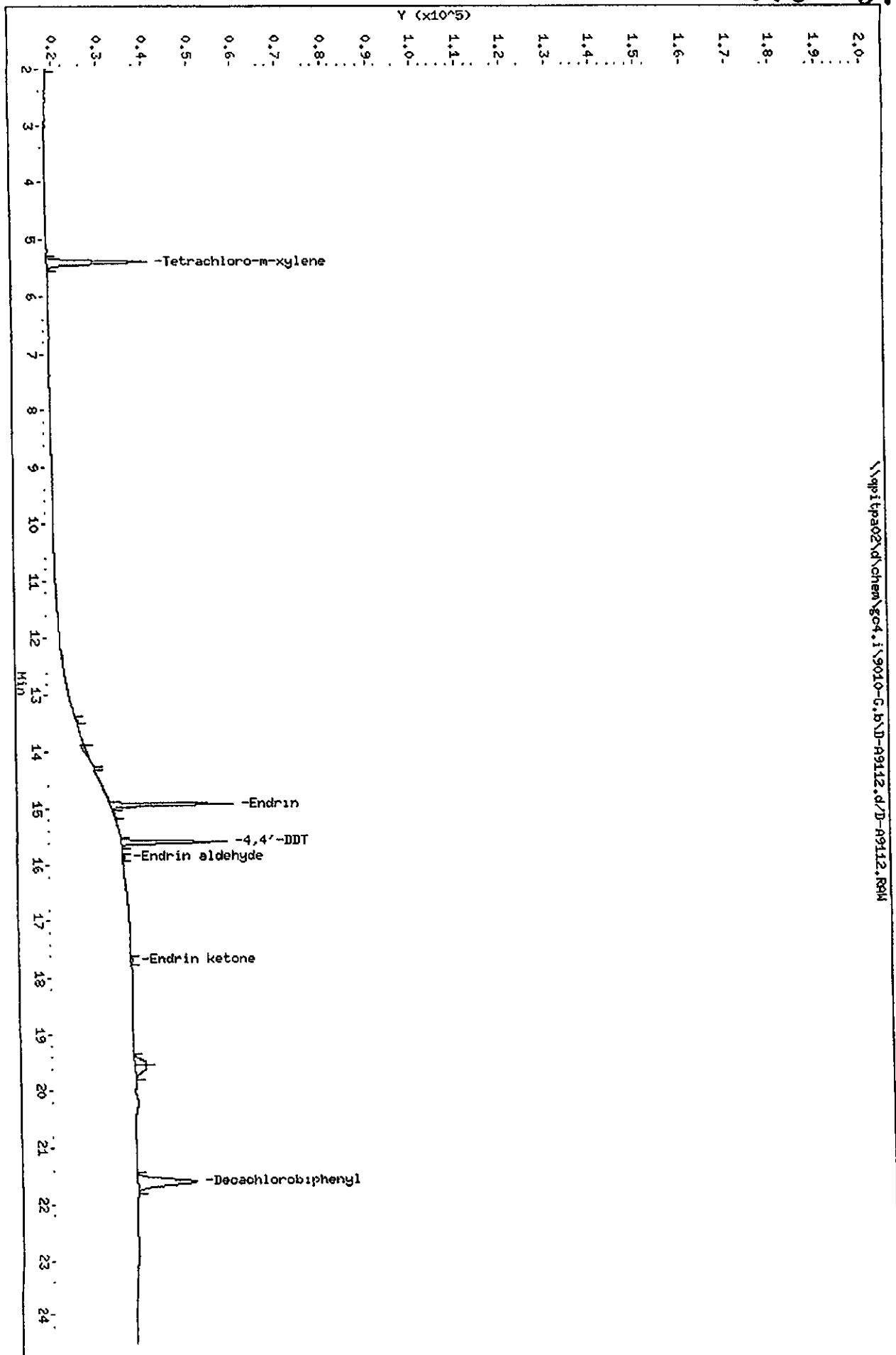
R - Spike/Surrogate failed recovery limits.

DOT 0070
 ENDRIN 3.770

Data File: \\npitpa02\chem\gc4.i\9010-G.b\D-A9112.d
Date: 05-DEC-2000 02:48
Client ID:
Sample Info: EVALB,9010-G.b,EVALBR,sub,,3,1
Column phase: RTX-50

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

\\npitpa02\chem\gc4.i\9010-G.b\D-A9112.d/D-A9112.RevM



675 376

PESTICIDE
QC DATA

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0L010000 519

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/17/00

Work Order: DQPJG1AA

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/04/00

Moisture %: NA

QC Batch: 0336519

Client Sample Id: INTRA-LAB BLANK

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

675 373

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9096.d
 Report Date: 05-Dec-2000 10:49

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9096.d
 Lab Smp Id: DQPJG1AA Client Smp ID: PBLK
 Inj Date : 04-DEC-2000 19:23
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DQPJG1AA,9010-G.b,,PEST.sub,,3,
 Misc Info : 170261BLK
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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 (ug/L)
\$ 1 Tetrachloro-m-xylene	5.400	5.400	0.000	19941	0.01807	0.001806 (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				Compound Not Detected.		
18 Toxaphene				Compound Not Detected		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	21.613	21.613	0.000	12027	0.01961	0.001961 (aR)

QC Flag Legend

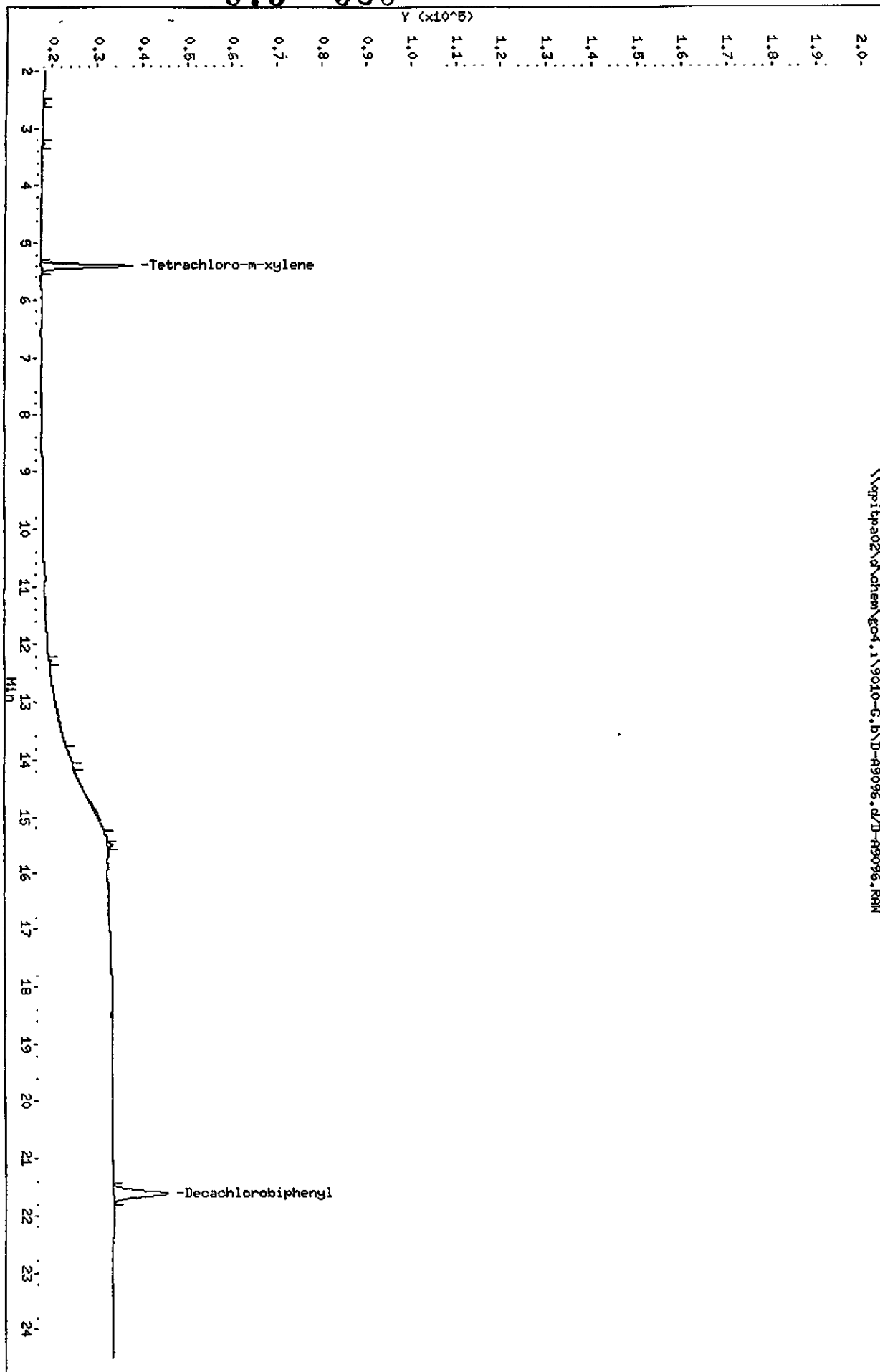
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation (BLOQ).
- R - Spike/Surrogate failed recovery limits.

675 380

Data File: \\gpi1tpa02\chem\gc04.1\9010-G.b\D-A9096.d
 Date : 04-DEC-2000 19:23
 Client ID: PBLK
 Sample Info: DQPC1A0, 9010-G.b, PEST.sub, 3,
 Volume Injected (uL): 1.0
 Column phase: RTX-50

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

\\gpi1tpa02\chem\gc04.1\9010-G.b\D-A9096.d\D-A9096.R01



UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0L010000 519

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 11/17/00

Work Order: DQPJG1AC

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/04/00

Moisture %: NA

QC Batch: 0336519

Client Sample Id: CHECK SAMPLE

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00212	
76-44-8	Heptachlor	0.00225	
1024-57-3	Heptachlor epoxide	0.00207	
58-89-9	Lindane	0.00205	
72-43-5	Methoxychlor	0.00291	

675 382

Data File: \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9097.d
 Report Date: 05-Dec-2000 10:49

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\9010-G.b\D-A9097.d
 Lab Smp Id: DQPJG1AC Client Smp ID: LCS
 Inj Date : 04-DEC-2000 19:51
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DQPJG1AC, 9010-G.b,, PEST.sub,, 3,
 Misc Info : 170261LCS
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\9010-G.b\PESTA.m
 Meth Date : 05-Dec-2000 10:15 eppingerd Quant Type: ESTD
 Cal Date : 01-DEC-2000 16:28 Cal File: D-A9015.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	5.400	5.400	0.000	43805	0.03968	0.003968(aR)
5 alpha-BHC	7.620	7.620	0.000	24451	0.01990	0.001990(a)
6 gamma-BHC (Lindane)	9.093	9.093	0.000	23918	0.02052	0.002052(aR)
7 beta-BHC	10.080	10.073	0.007	14902	0.02410	0.002410(a)
9 Chlordane	Compound Not Detected					
10 Heptachlor	10.160	10.166	-0.006	21072	0.02251	0.002251(aR)
8 delta-BHC	11.026	11.033	-0.007	21651	0.02064	0.002064(a)
11 Aldrin	11.353	11.360	-0.007	19837	0.01996	0.001996(aR)
12 Heptachlor epoxide	13.126	13.126	0.000	27624	0.02071	0.002071(a)
13 gamma-Chlordane	13.520	13.520	0.000	30735	0.02102	0.002102(a)
14 alpha-Chlordane	13.806	13.800	0.006	35356	0.02335	0.002335(a)
15 Endosulfan I	Compound Not Detected.					
16 4,4'-DDE	14.246	14.246	0.000	28554	0.02319	0.002319(a)
17 Dieldrin	14.413	14.413	0.000	29583	0.02106	0.002106(aR)
20 Endrin	14.933	14.940	-0.007	25040	0.02119	0.002119(aR)

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
21 4,4'-DDD	15.140	15.140	0.000	20751	0.02584	0.002584(a)
18 Toxaphene	Compound Not Detected.					
22 Endosulfan II	15.333	15.333	0.000	15964	0.01261	0.001261(a)
23 4,4'-DDT	15.586	15.586	0.000	21423	0.02413	0.002413(aR)
24 Endrin aldehyde	15.853	15.853	0.000	21593	0.02204	0.002204(a)
26 Endosulfan sulfate	16.153	16.153	0.000	20665	0.02340	0.002340(a)
25 Methoxychlor	17.313	17.313	0.000	8945	0.02910	0.002910(a)
27 Endrin ketone	17.673	17.673	0.000	20501	0.02192	0.002192(a)
\$ 30 Decachlorobiphenyl	21.613	21.613	0.000	25769	0.04202	0.004202(aR)

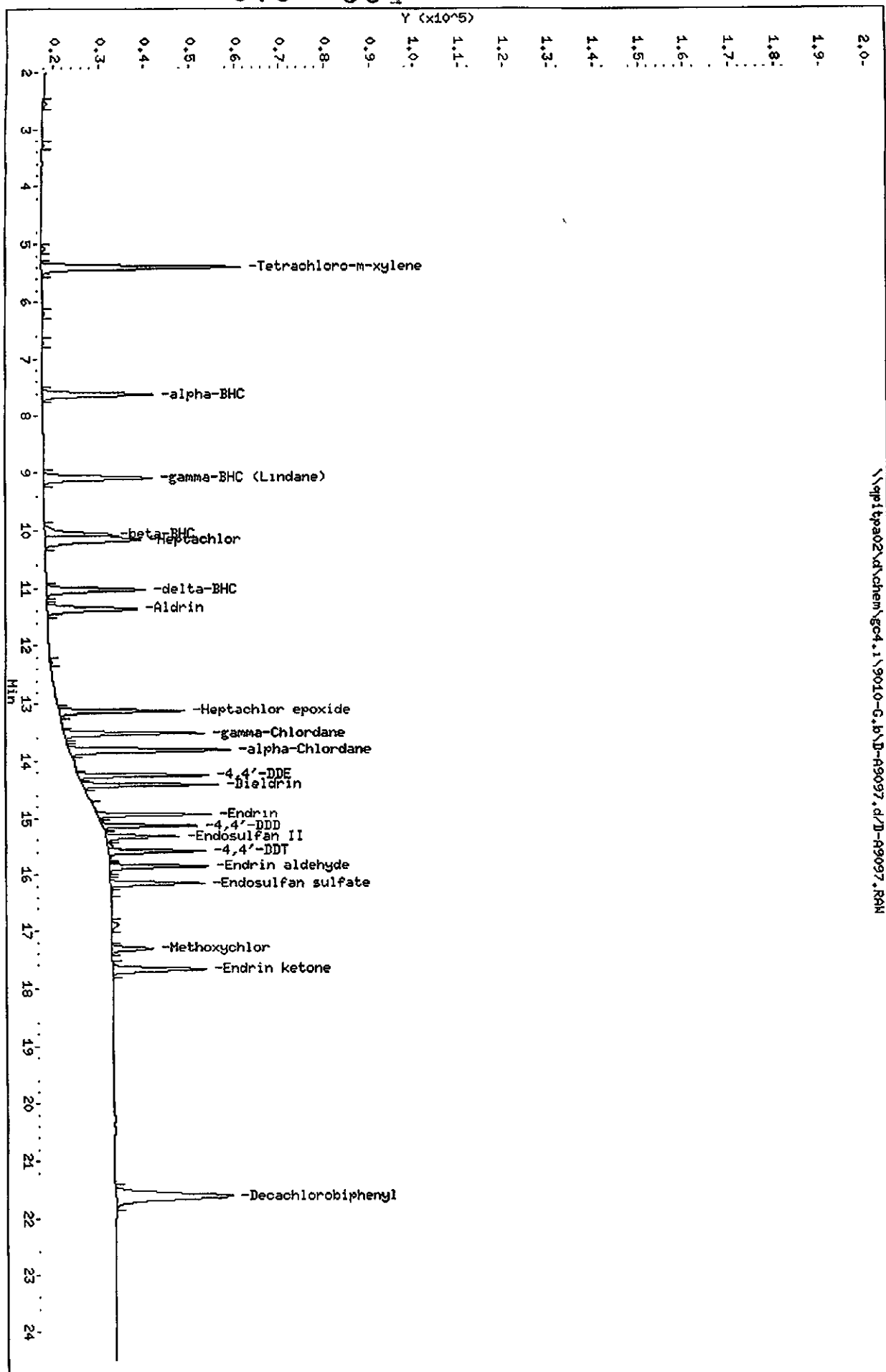
QC Flag Legend

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

675 384

Data File: \\sp1tpa02\chem\g04.1\9010-G.b\D-89097.d
 Date: 04-DEC-2000 19:51
 Client ID: LCS
 Sample Info: DQPC1AC, 9010-G.b, PEST, sub, 3,
 Volume Injected (uL): 1.0
 Column phase: RTX-50

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



675 385

PESTICIDE
MISCELLANEOUS

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\9010-G.SEQ
Created by : DE11/02/98 on : 12/1/00 14:53
Edited by : WM12/01/00 on : 12/4/00 10:43
Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
REVIEWED BY:

675 387

6

Number of Times Edited : 3

9010G.PDF

Sequence File Header Information:

Number of Rows : 80
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, 9010-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, 9010-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, 9010-G	190-102-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
4	Cal:Replace	LOWA, 9010-G.b,,	190-100-6		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Cal:Replace	MLOWA, 9010-G.b,	190-100-7		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Cal:Replace	MEDA, 9010-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Cal:Replace	MHIGHA, 9010-G.b	190-100-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Cal:Replace	HIGHA, 9010-G.b,	190-100-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Cal:Replace	LOWB, 9010-G.b,,	190-100-12		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Cal:Replace	MLOWB, 9010-G.b,	190-100-13		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Cal:Replace	MEDB, 9010-G.b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Cal:Replace	MHIGHB, 9010-G.b	190-101-1		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Cal:Replace	HIGHB, 9010-G.b,	190-101-2		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Std Check	2ND A, 9010-G.b,	190-101-7		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Std Check	2ND B, 9010-G.b,	190-101-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
16	Std Check	EVALB, 9010-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
17	Sample	~~DPVOL1BK, 9010-G~~	~~150121002~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
18	Sample	~~DPVOL1DO, 9010-G~~	~~150121002S~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
19	Sample	~~DPVOL1D1, 9010-G~~	~~150121002D~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
20	Sample	~~DPVIL1CA, 9010-G~~	~~150121006~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Sample	~~DPVIL1CC, 9010-G~~	~~150121006S~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
22	Sample	~~DPVIL1CD, 9010-G~~	~~150121006D~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
23	Sample	~~DQCE1AA, 9010-G~~	~~220224001~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
24	Sample	~~DQCE1AA, 9010-G~~	~~220224002~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
25	Sample	~~DQCE1AA, 9010-G~~	~~220224003~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
26	Sample	~~DQCE1AA, 9010-G~~	~~220224004~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
27	Sample	~~DQCE1AA, 9010-G~~	~~220224005~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
28	Sample	DPR901AJ, 9010-G	140150001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
29	Sample	DPR901AK, 9010-G	140150001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
30	Sample	DPR901AL, 9010-G	140150001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
31	Sample	DPR941AH, 9010-G	140150002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
32	Sample	~~DQES1AC, 9010-G~~	~~150121100~~	BK num 12-4-00	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
33	Sample	~~DQES1AA, 9010-G~~	~~150121100S~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
34	Sample	DQGJ1AC, 9010-G	2202241CS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
35	Sample	DQGJ1AD, 9010-G	2202241CSD		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
36	Sample	DQGJ1AA, 9010-G	2202241CS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
37	Std Check	MEDA, 9010-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
38	Std Check	MEDB, 9010-G.b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
39	Std Check	EVALB, 9010-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
40	Sample	DPTAH1AH, 9010-G	140150003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
41	Sample	DPTAJ1AH, 9010-G	140150004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
42	Sample	DPTAM1AH, 9010-G	140150005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
43	Sample	~~DP1KALAN, 9010-G~~	~~160285002~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
44	Sample	DP1KALAN, 9010-G	160285002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
45	Sample	DP5XR1AN, 9010-G	18147-1 5X		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
46	Sample	~~DP5XR1AE, 9010-G~~	~~18147-2~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
47	Sample	DQAXP1AE, 9010-G	220169001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
48	Sample	DQAX21AN, 9010-G	220169002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
49	Sample	DQEK91AA, 9010-G	140150BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
50	Sample	DQEK91AC, 9010-G	140150LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
51	Sample	~~DQG6N1AF, 9010-G~~	~~290122001~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
52	Sample	DQG7H1AF, 9010-G	290122002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
53	Sample	~~DQG7Q1AF, 9010-G~~	~~290122003~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
54	Sample	DQG7Q1AJ, 9010-G	290122-3S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
55	Sample	~~DQG7Q1AK, 9010-G~~	~~290122-3D~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
56	Sample	DQG781AC, 9010-G	290122005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
57	Sample	DQG8G1AF, 9010-G	290122006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
58	Sample	DQJXV1AC, 9010-G	2901221CS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
59	Sample	DQJXV1AA, 9010-G	2901221CS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

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60	Std Check	MEDA, 9010-G b,,	190-100-8	1 000	1.000	1.000	1.000	1.000	1.000	0 000	100.000
61	Std Check	MEDB, 9010-G b,,	190-100-14	1 000	1 000	1 000	1.000	1.000	1.000	0 000	100.000
62	Std Check	EVALB, 9010-G b,,	190-102-10	1 000	1 000	1 000	1.000	1.000	1.000	0.000	100.000
63	Sample	~~DQG811AC, 9010-G~~	~~290122007~~	1 000	1 000	1.000	1.000	1.000	1.000	0.000	100.000
64	Sample	DQG8T1AC, 9010-G	290122008	1.000	1 000	1 000	1.000	1 000	1.000	0.000	100.000
65	Sample	DQG8V1AC, 9010-G	290122009	1.000	1.000	1 000	1.000	1.000	1 000	0.000	100.000
66	Sample	DQG821AC, 9010-G	290122010	1 000	1.000	1 000	1.000	1.000	1 000	0 000	100.000
67	Sample	DQG871AC, 9010-G	290122011	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
68	Sample	~~DQG891AC, 9010-G~~	~~290122012~~	1.000	1.000	1.000	1.000	1.000	1 000	0.000	100.000
69	Sample	DQG9M1AF, 9010-G	290122013	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
70	Sample	DQG941AF, 9010-G	290122014	1.000	1.000	1 000	1.000	1.000	1 000	0.000	100.000
71	Sample	DQJXV1AA, 9010-G	HEKANE	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
72	Std Check	MEDA, 9010-G b,,	190-100-8	1.000	1.000	1.000	1.000	1.000	1.000	0 000	100.000
73	Std Check	MEDB, 9010-G b,,	190-100-14	1.000	1.000	1.000	1.000	1.000	1 000	0.000	100.000
74	Std Check	EVALB, 9010-G b,,	190-102-10	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
75	Sample	DPWV1AD, 9010-G	150209001	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
76	Sample	DP9W31AA, 9010-G	150209BLK	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
77	Sample	DP9W31AC, 9010-G	150209LCS	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
78	Sample	DP9W31AD, 9010-G	150209LCSD	1 000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
79	Std Check	MEDA, 9010-G b,,	190-100-8	1 000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
80	Std Check	MEDB, 9010-G b,,	190-100-14	1 000	1.000	1.000	1.000	1.000	1.000	0 000	100.000

000, METH

000, METH
Gule II, End And

000, METH

Sequence Process Information - Channel A														
Row	Site	Rack	Vial	Inst	Process	Calib	Report	Raw	Result	Baseline	Modified	Cal	Level	Update
				Method	Method	Method	Format	File	File	File	Raw File	Rpt	Name	RT
1	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9003	D-A9003		D-A9003	-	-	-
2	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A9004	D-A9004		D-A9004	N	MED	N
3	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A9005	D-A9005		D-A9005	N	MED	N
4	-	1	4	GEN4C	GEN4A	122190A	INDA	D-A9006	D-A9006		D-A9006	N	LOW	N
5	-	1	5	GEN4C	GEN4A	122190A	INDA	D-A9007	D-A9007		D-A9007	N	MLOW	N
6	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A9008	D-A9008		D-A9008	N	MLOW	N
7	-	1	7	GEN4C	GEN4A	122190A	INDA	D-A9009	D-A9009		D-A9009	N	MLOW	N
8	-	1	8	GEN4C	GEN4A	122190A	INDA	D-A9010	D-A9010		D-A9010	N	MLOW	N
9	-	1	9	GEN4C	GEN4A	122190A	INDA	D-A9011	D-A9011		D-A9011	N	LOW	N
10	-	1	10	GEN4C	GEN4A	122190A	INDA	D-A9012	D-A9012		D-A9012	N	MLOW	N
11	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A9013	D-A9013		D-A9013	N	MLOW	N
12	-	1	12	GEN4C	GEN4A	122190A	INDA	D-A9014	D-A9014		D-A9014	N	MLOW	N
13	-	1	13	GEN4C	GEN4A	122190A	INDA	D-A9015	D-A9015		D-A9015	N	MLOW	N
14	-	1	23	GEN4C	GEN4A	122190A	INDA	D-A9016	D-A9016		D-A9016	-	-	-
15	-	1	24	GEN4C	GEN4A	122190A	INDA	D-A9017	D-A9017		D-A9017	-	-	-
16	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9018	D-A9018		D-A9018	-	-	-
17	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9019	D-A9019		D-A9019	-	-	-
18	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9020	D-A9020		D-A9020	-	-	-
19	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9021	D-A9021		D-A9021	-	-	-
20	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9022	D-A9022		D-A9022	-	-	-
21	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9023	D-A9023		D-A9023	-	-	-
22	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9024	D-A9024		D-A9024	-	-	-
23	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9025	D-A9025		D-A9025	-	-	-
24	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9026	D-A9026		D-A9026	-	-	-
25	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9027	D-A9027		D-A9027	-	-	-
26	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9028	D-A9028		D-A9028	-	-	-
27	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9029	D-A9029		D-A9029	-	-	-
28	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9030	D-A9030		D-A9030	-	-	-
29	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9031	D-A9031		D-A9031	-	-	-
30	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9032	D-A9032		D-A9032	-	-	-
31	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9033	D-A9033		D-A9033	-	-	-
32	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9034	D-A9034		D-A9034	-	-	-
33	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9035	D-A9035		D-A9035	-	-	-
34	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9036	D-A9036		D-A9036	-	-	-
35	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9037	D-A9037		D-A9037	-	-	-
36	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9038	D-A9038		D-A9038	-	-	-
37	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A9039	D-A9039		D-A9039	-	-	-
38	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A9040	D-A9040		D-A9040	-	-	-
39	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9041	D-A9041		D-A9041	-	-	-
40	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9042	D-A9042		D-A9042	-	-	-
41	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9043	D-A9043		D-A9043	-	-	-
42	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9044	D-A9044		D-A9044	-	-	-
43	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9045	D-A9045		D-A9045	-	-	-
44	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9046	D-A9046		D-A9046	-	-	-
45	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9047	D-A9047		D-A9047	-	-	-
46	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9048	D-A9048		D-A9048	-	-	-
47	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9049	D-A9049		D-A9049	-	-	-
48	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9050	D-A9050		D-A9050	-	-	-
49	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9051	D-A9051		D-A9051	-	-	-
50	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9052	D-A9052		D-A9052	-	-	-
51	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9053	D-A9053		D-A9053	-	-	-
52	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9054	D-A9054		D-A9054	-	-	-
53	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9055	D-A9055		D-A9055	-	-	-
54	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9056	D-A9056		D-A9056	-	-	-
55	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9057	D-A9057		D-A9057	-	-	-
56	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9058	D-A9058		D-A9058	-	-	-
57	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9059	D-A9059		D-A9059	-	-	-
58	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9060	D-A9060		D-A9060	-	-	-
59	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9061	D-A9061		D-A9061	-	-	-

60	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A9062	D-A9062	D-A9062	-	-	-	LPT1.
61	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A9063	D-A9063	D-A9063	-	-	-	LPT1:
62	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9064	D-A9064	D-A9064	-	-	-	LPT1:
63	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9065	D-A9065	D-A9065	-	-	-	LPT1:
64	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9066	D-A9066	D-A9066	-	-	-	LPT1:
65	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9067	D-A9067	D-A9067	-	-	-	LPT1:
66	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9068	D-A9068	D-A9068	-	-	-	LPT1:
67	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9069	D-A9069	D-A9069	-	-	-	LPT1:
68	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9070	D-A9070	D-A9070	-	-	-	LPT1:
69	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9071	D-A9071	D-A9071	-	-	-	LPT1:
70	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9072	D-A9072	D-A9072	-	-	-	LPT1:
71	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9073	D-A9073	D-A9073	-	-	-	LPT1:
72	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A9074	D-A9074	D-A9074	-	-	-	LPT1:
73	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A9075	D-A9075	D-A9075	-	-	-	LPT1:
74	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9076	D-A9076	D-A9076	-	-	-	LPT1:
75	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9077	D-A9077	D-A9077	-	-	-	LPT1:
76	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9078	D-A9078	D-A9078	-	-	-	LPT1:
77	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9079	D-A9079	D-A9079	-	-	-	LPT1:
78	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A9080	D-A9080	D-A9080	-	-	-	LPT1:
79	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A9081	D-A9081	D-A9081	-	-	-	LPT1:
80	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A9082	D-A9082	D-A9082	-	-	-	LPT1:

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\9040-G.SEQ
 Created by : DE11/02/98 on : 12/5/00 06:39
 Edited by : DE12/05/00 on : 12/5/00 12:18
 Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
 REVIEWED BY:

675 390

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Number of Times Edited : 2

Sequence File Header Information:

Number of Rows : 45
 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, 9010-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, 9010-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, 9010-G	190-102-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
4	Std Check	MEDA, 9010-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, 9010-G b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Sample	DP4J81AE, 9010-G	170261001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Sample	DP4J81A3, 9010-G	170261001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Sample	DP4J81A4, 9010-G	170261001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Sample	DQCKK1AE, 9010-G	220253001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Sample	DQCLC1AE, 9010-G	220253002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Sample	DQCLE1AE, 9010-G	220253003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Sample	DQFJG1AA, 9010-G	170261BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Sample	DQFJG1AC, 9010-G	170261LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Sample	DQHAE1AD, 9010-G	290122016		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Sample	DQKHR1AD, 9010-G	300162015		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
16	Sample	DQKL71AL, 9010-G	300181001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
17	Sample	DQKMW1AV, 9010-G	300181002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
18	Sample	DQKM21AV, 9010-G	300181003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
19	Sample	DQKM61AV, 9010-G	300181004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
20	Sample	DQKND1AV, 9010-G	300181005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Sample	DQKNF1AV, 9010-G	300181006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
22	Sample	DQKNT1AV, 9010-G	300181007		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
23	Sample	DQPNJ1AA, 9010-G	290122BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
24	Sample	DQPNJ1AC, 9010-G	290122LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
25	Sample	DQPNJ1AD, 9010-G	290122LCD		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
26	Std Check	MEDA, 9010-G.b,,	190-100-8	DDO, METH	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
27	Std Check	MEDB, 9010-G.b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
28	Std Check	EVALB, 9010-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
29	Sample	DQKN61AV, 9010-G	300181008		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
30	Sample	DQKPR1AV, 9010-G	300181009		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
31	Sample	DQKPR1AV, 9010-G	300181010		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
32	Sample	DQGWFLAA, 9010-G	290105001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
33	Sample	DQG8Q1AC, 9010-G	290122007		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
34	Sample	~~DQG8T1AC, 9010-G~~	~~290122008~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
35	Sample	~~DQG8V1AC, 9010-G~~	~~290122009~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
36	Sample	DQG821AC, 9010-G	290122010		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
37	Sample	DQG871AC, 9010-G	290122011		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
38	Sample	DQG891AC, 9010-G	290122012	DDO, METH	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
39	Std Check	MEDA, 9010-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
40	Std Check	MEDB, 9010-G.b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
41	Std Check	EVALB, 9010-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
42	Sample	DQG8T1AC, 9010-G	290122008		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
43	Sample	DQG8V1AC, 9010-G	290122009		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
44	Std Check	MEDA, 9010-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
45	Std Check	MEDB, 9010-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-a9085	d-a9085		d-a9085	-	-	-	LPT1
2	-	1	2	GEN4C	GEN4A	122190A	TOX	d-a9086	d-a9086		d-a9086	N	MED	N	LPT1, LP
3	-	1	2	GEN4C	GEN4A	122190A	TOX	d-a9087	d-a9087		d-a9087	N	MED	N	LPT1, LP
4	-	1	6	GEN4C	GEN4A	122190A	INDA	d-a9088	d-a9088		d-a9088	-	-	-	LPT1
5	-	1	11	GEN4C	GEN4A	122190A	INDA	d-a9089	d-a9089		d-a9089	-	-	-	LPT1
6	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9090	d-a9090		d-a9090	-	-	-	LPT1
7	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9091	d-a9091		d-a9091	-	-	-	LPT1

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8	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9092	d-a9092	d-a9092	-	-	-	LPT1:
9	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9093	d-a9093	d-a9093	-	-	-	LPT1:
10	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9094	d-a9094	d-a9094	-	-	-	LPT1:
11	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9095	d-a9095	d-a9095	-	-	-	LPT1:
12	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9096	d-a9096	d-a9096	-	-	-	LPT1:
13	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9097	d-a9097	d-a9097	-	-	-	LPT1:
14	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9098	d-a9098	d-a9098	-	-	-	LPT1:
15	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9099	d-a9099	d-a9099	-	-	-	LPT1:
16	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9100	d-a9100	d-a9100	-	-	-	LPT1:
17	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9101	d-a9101	d-a9101	-	-	-	LPT1:
18	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9102	d-a9102	d-a9102	-	-	-	LPT1:
19	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9103	d-a9103	d-a9103	-	-	-	LPT1:
20	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9104	d-a9104	d-a9104	-	-	-	LPT1:
21	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9105	d-a9105	d-a9105	-	-	-	LPT1:
22	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9106	d-a9106	d-a9106	-	-	-	LPT1:
23	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9107	d-a9107	d-a9107	-	-	-	LPT1:
24	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9108	d-a9108	d-a9108	-	-	-	LPT1:
25	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9109	d-a9109	d-a9109	-	-	-	LPT1:
26	-	1	6	GEN4C	GEN4A	122190A	INDA	d-a9110	d-a9110	d-a9110	-	-	-	LPT1:
27	-	1	11	GEN4C	GEN4A	122190A	INDA	d-a9111	d-a9111	d-a9111	-	-	-	LPT1:
28	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9112	d-a9112	d-a9112	-	-	-	LPT1:
29	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9113	d-a9113	d-a9113	-	-	-	LPT1:
30	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9114	d-a9114	d-a9114	-	-	-	LPT1:
31	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9115	d-a9115	d-a9115	-	-	-	LPT1:
32	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9116	d-a9116	d-a9116	-	-	-	LPT1:
33	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9117	d-a9117	d-a9117	-	-	-	LPT1:
34	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9118	d-a9118	d-a9118	-	-	-	LPT1:
35	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9119	d-a9119	d-a9119	-	-	-	LPT1:
36	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9120	d-a9120	d-a9120	-	-	-	LPT1:
37	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9121	d-a9121	d-a9121	-	-	-	LPT1:
38	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9122	d-a9122	d-a9122	-	-	-	LPT1:
39	-	1	6	GEN4C	GEN4A	122190A	INDA	d-a9123	d-a9123	d-a9123	-	-	-	LPT1:
40	-	1	11	GEN4C	GEN4A	122190A	INDA	d-a9124	d-a9124	d-a9124	-	-	-	LPT1:
41	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9125	d-a9125	d-a9125	-	-	-	LPT1:
42	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9126	d-a9126	d-a9126	-	-	-	LPT1:
43	-	1	1	GEN4C	GEN4A	122190A	EVAL	d-a9127	d-a9127	d-a9127	-	-	-	LPT1:
44	-	1	6	GEN4C	GEN4A	122190A	INDA	d-a9128	d-a9128	d-a9128	-	-	-	LPT1:
45	-	1	11	GEN4C	GEN4A	122190A	INDA	d-a9129	d-a9129	d-a9129	-	-	-	LPT1:

675 392

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SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY. PINOB

METHOD. QJ Pesticides (8081A)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX	QTY	QTY	
		CNTR#							DESCRIPTION			RCVD
2D,E	DP4J8-1-AE	___	290444	378644	A-36-QJ	C0K170261	001		SOLID	0	8	1
CLP1 3D	DQCKK-1-AE	___	290441	399411	A-36-QJ	C0K220253	001		SOLID	0	3	1
CLP1 3D	DQCLC-1-AE	___	290442	399411	A-36-QJ	C0K220253	002		SOLID	0	3	1
CLP1 3D	DQCLE-1-AE	___	290443	399411	A-36-QJ	C0K220253	003		SOLID	0	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>P. Yushinski</i>	<i>P. Yushinski</i>	12-1-00 15:35
<i>P. Yushinski</i>	<i>P. Yushinski</i>	12-1-00 2:00

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

HERBICIDE DATA

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HERBICIDE
QC SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: COK220253

	CLIENT ID.	SRG01	TOT OUT	
	=====	=====	=====	
01	~~INTRA-LAB QC~~	78	00	sum 12-11-00
02	DF/24-A/0326/SDC/006	74	00	
03	DF/24-A/0326/SDC/007	76	00	
04	DF/24-A/0326/SDC/008	68	00	
05	METHOD BLK. DQPJD1AA	80	00	
06	LCS DQPJD1AC	78	00	
07	~~LAB MS/MCD D~~	67	00	sum 12-11-00
08	~~LAB MS/MCD S~~	81	00	

SURROGATES

SRG01 = DCAA

QC LIMITS

(42-125)

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

FORM II

675 396
SW846 8151A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: STLPIT

SDG No:

Lot #: C0L010000

WO #: DQPJD1AC

BATCH: 0336518

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	0.0275	69	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: STLPIT

SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #: COK170261

WO #: DP4J81A1

BATCH: 0336518

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
2,4-D	0.160	ND	0.136	85	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0339	85	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:

675 398

SW846 8151A 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

Lot #: COK170261

WO #: DP4J81A2

BATCH: 0336518

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD %	MSD %	QC LIMITS		QUAL
	(mg/L)	(mg/L)	REC	RPD	RPD	REC	
=====	=====	=====	=====	=====	=====	=====	=====
2,4-D	0.160	0.110	69	22	*	20	35 - 133 p
2,4,5-TP (Silvex)	0.0400	0.0294	74	14		20	50 - 131

NOTES (S) :

p Relative percent difference (RPD) is outside stated control limits.

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

* Values outside of QC limits

RPD: 1 out of 2 outside limitsSpike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8151A METHOD BLANK SUMMARY

DQPJD1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIIT

SDG Number:

Lab File ID: A-B90066.

Lot Number: C0K220253

Matrix: SOLID

Extraction Method:

Date Extracted: 12/01/00

Date Analyzed(1): 12/06/00

Date Analyzed(2): N/A

Time Analyzed(1): 12:05

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~~	~~DP4J01AF~~	~~12/06/00~~	~~N/A~~	<i>hum</i>
02	~~LAB MS/MSD~~	~~DP4J01A1 S~~	~~12/06/00~~	~~N/A~~	<i>12-11-00</i>
03	~~LAB MS/MSD~~	~~DP4J01A2 D~~	~~12/06/00~~	~~N/A~~	
04	DF/24-A/0326/SDC/006	DQCKK1AF	12/06/00	N/A	
05	DF/24-A/0326/SDC/007	DQCLC1AF	12/06/00	N/A	
06	DF/24-A/0326/SDC/008	DQCLE1AF	12/06/00	N/A	
07	CHECK SAMPLE	DQPJD1AC C	12/06/00	N/A	
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

COMMENTS:

FORM IV

**HERBICIDE
SAMPLE DATA**

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0K220253 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 11/22/00

Work Order: DQCKK1AF

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/06/00

QC Batch: 0336518

Client Sample Id: DF/24-A/0326/SDC/006

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

Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90059.D
 Report Date: 06-Dec-2000 13:35

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90059.D
 Lab Smp Id: DQCKK1AF Client Smp ID: DF/24-A/0326/SDC/00
 Inj Date : 06-DEC-2000 08:42
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DQCKK1AF, 7180A.b
 Misc Info : 220253001
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
 Meth Date : 06-Dec-2000 13:29 morganw Quant Type: ESTD
 Cal Date : 18-OCT-2000 19:53 Cal File: A-B70377.D
 Als bottle: 35
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

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

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

Compounds	RT	EXP RT	DEL RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON						
2 DCAA	11.140	11.142	-0.002	1199701	0.03707	0.07414(a)
3 DICAMBA						
4 MCPP	12.167	12.181	-0.014	12865	0.54704	1.094
5 MCPA						
6 DICHLOROPROP						
7 2,4-D						
8 PENTACHLOROPHENOL						
9 2,4,5-TP(SILVEX)						
10 2,4,5-T						
11 2,4-DB	19.079	19.137	-0.058	25286	0.00244	0.004883(a)
12 DINOSEB						

Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90059.D
Report Date: 06-Dec-2000 13:35

675 403

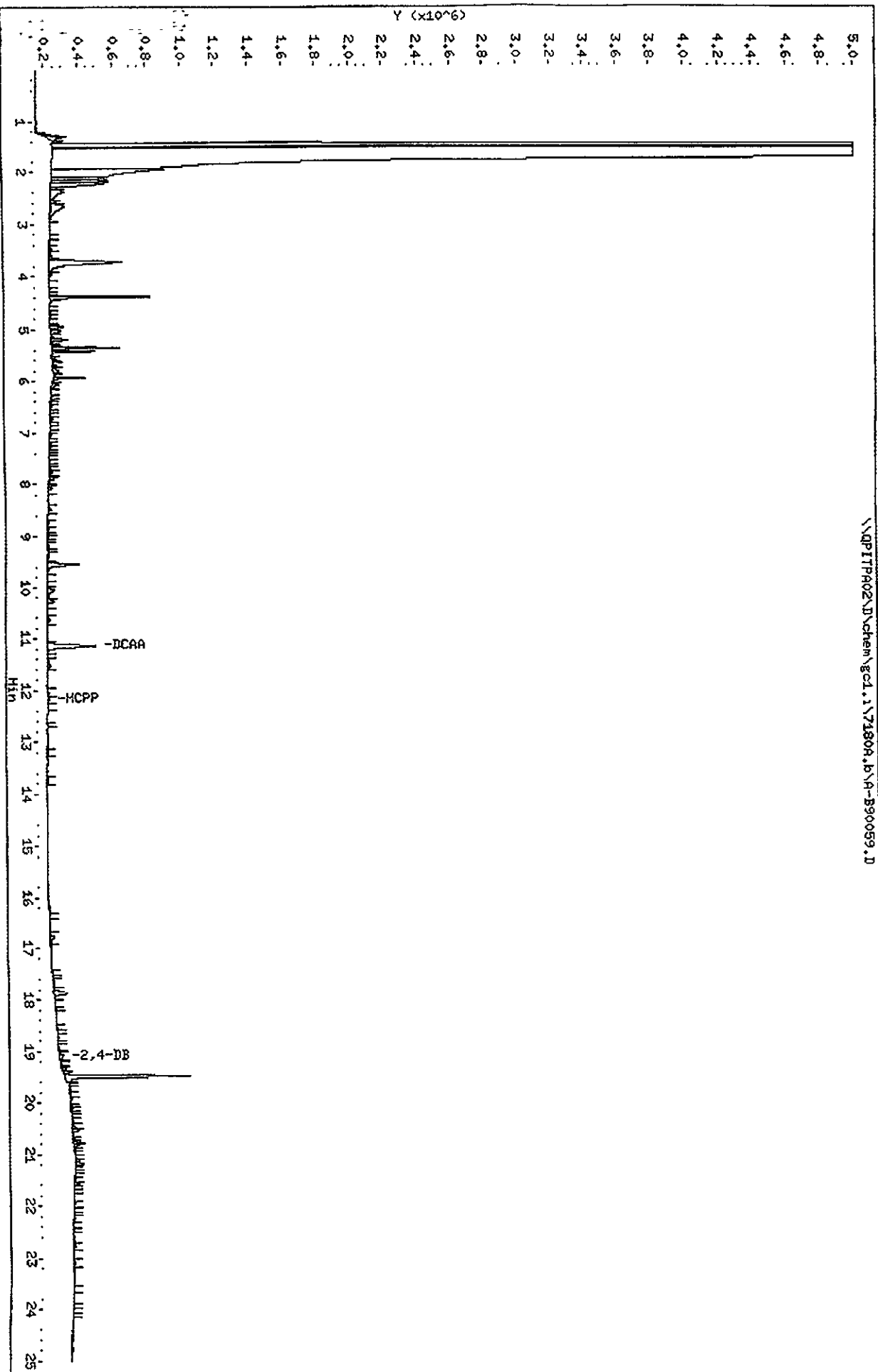
QC Flag Legend

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

675 404

Data File: \\QPIFPA02\chem\gcl.1\7180A.b\A-B90059.D
 Date: 06-DEC-2000 08:42
 Client ID: DF/24-A/0326/SDC/00
 Sample Info: DQCKK1AF, 7180A.b
 Volume Injected (uL): 1.0
 Column phase: DB1701

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



Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0K220253 002

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 11/22/00

Work Order: DQCLC1AF

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/06/00

Moisture %: 8.7

QC Batch: 0336518

Client Sample Id: DF/24-A/0326/SDC/007

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

675 406

Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90060.D
 Report Date: 06-Dec-2000 13:35

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90060.D
 Lab Smp Id: DQCLC1AF Client Smp ID: DF/24-A/0326/SDC/00
 Inj Date : 06-DEC-2000 09:11
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DQCLC1AF,7180A.b
 Misc Info : 220253002
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
 Meth Date : 06-Dec-2000 13:29 morganw Quant Type: ESTD
 Cal Date : 18-OCT-2000 19:53 Cal File: A-B70377.D
 Als bottle: 36
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON				Compound Not Detected.		
\$ 2 DCAA	11.141	11.142	-0.001	1231666	0.03806	0.07612(a)
3 DICAMBA				Compound Not Detected.		
4 MCPP	12.171	12.181	-0.010	12064	0.51298	1.026
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				Compound Not Detected.		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected.		
9 2,4,5-TP(SILVEX)				Compound Not Detected.		
10 2,4,5-T				Compound Not Detected.		
11 2,4-DB	19.081	19.137	-0.056	25030	0.00242	0.004834(a)
12 DINOSEB				Compound Not Detected.		

Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90060.D
Report Date: 06-Dec-2000 13:35

675 497

QC Flag Legend

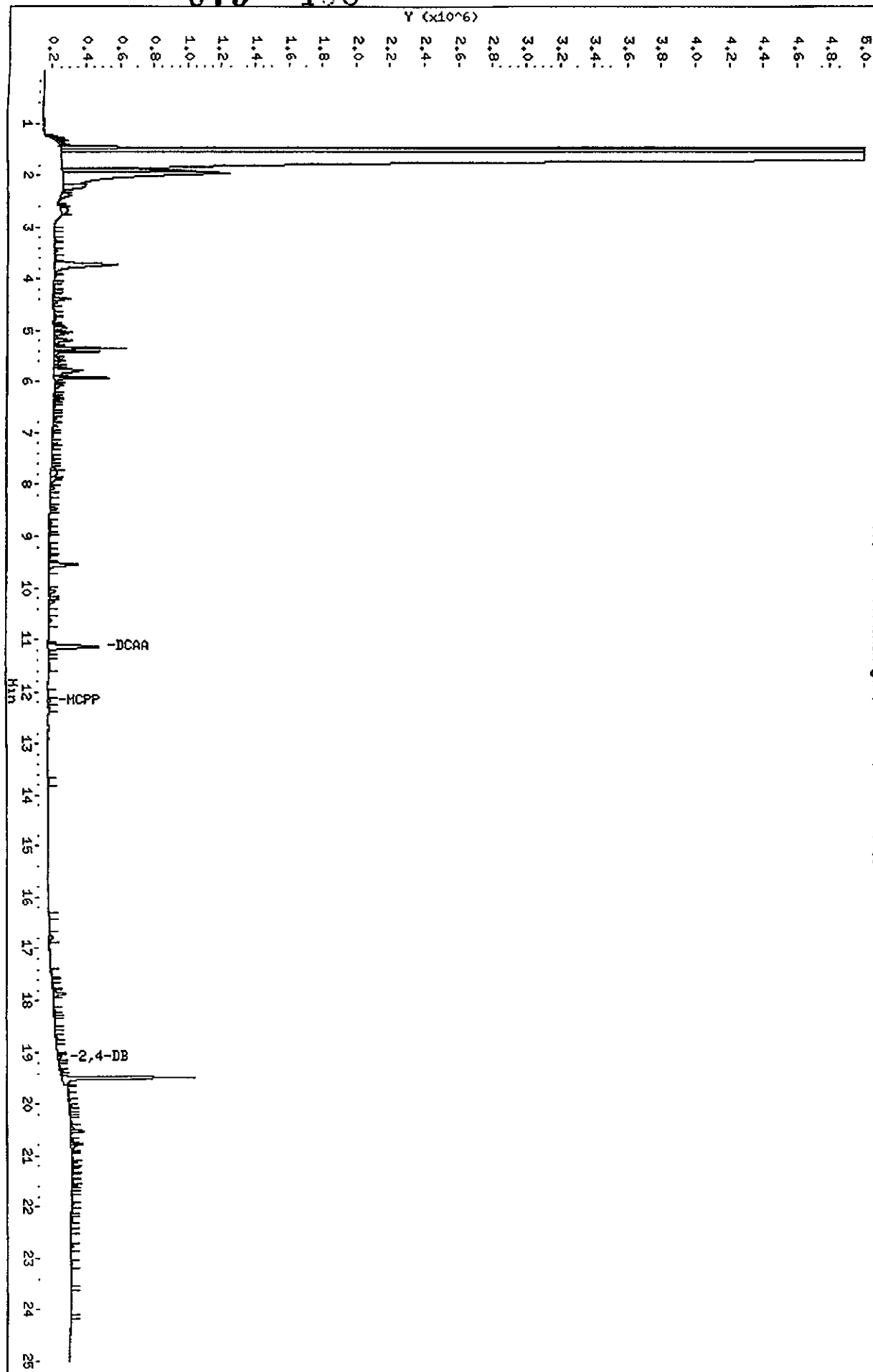
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

675 408

Data File: \\QPI1P02\chem\gc1.i\7180A.b\A-B90060.D
 Date: 06-DEC-2000 09:11
 Client ID: DF/24-A/0326/SDC/00
 Sample Info: DQCLCLAF,7180A.b
 Volume Injected (ul): 1.0
 Column phase: DB1701

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

\\QPI1P02\chem\gc1.i\7180A.b\A-B90060.D



Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0K220253 003

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 11/22/00

Work Order: DQCLE1AF

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/06/00

Moisture %: 9.4

QC Batch: 0336518

Client Sample Id: DF/24-A/0326/SDC/008

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

Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90061.D
 Report Date: 06-Dec-2000 13:36

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90061.D
 Lab Smp Id: DQCLE1AF Client Smp ID: DF/24-A/0326/SDC/00
 Inj Date : 06-DEC-2000 09:40
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DQCLE1AF,7180A.b
 Misc Info : 220253003
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
 Meth Date : 06-Dec-2000 13:29 morganw Quant Type: ESTD
 Cal Date : 18-OCT-2000 19:53 Cal File: A-B70377.D
 Als bottle: 37
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON						
2 DCRA	11.142	11.142	0.000	1093914	0.03380	0.06760(a)
3 DICAMEA						
4 MCPP	12.173	12.181	-0.008	12480	0.53067	1.061
5 MCPA						
6 DICHLOROPROP						
7 2,4-D						
8 PENTACHLOROPHENOL						
9 2,4,5-TP(SILVEX)						
10 2,4,5-T						
11 2,4-DB	19.084	19.137	-0.053	24481	0.00236	0.004728(a)
12 DINOSEB						

Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90061.D
Report Date: 06-Dec-2000 13:36

675 411

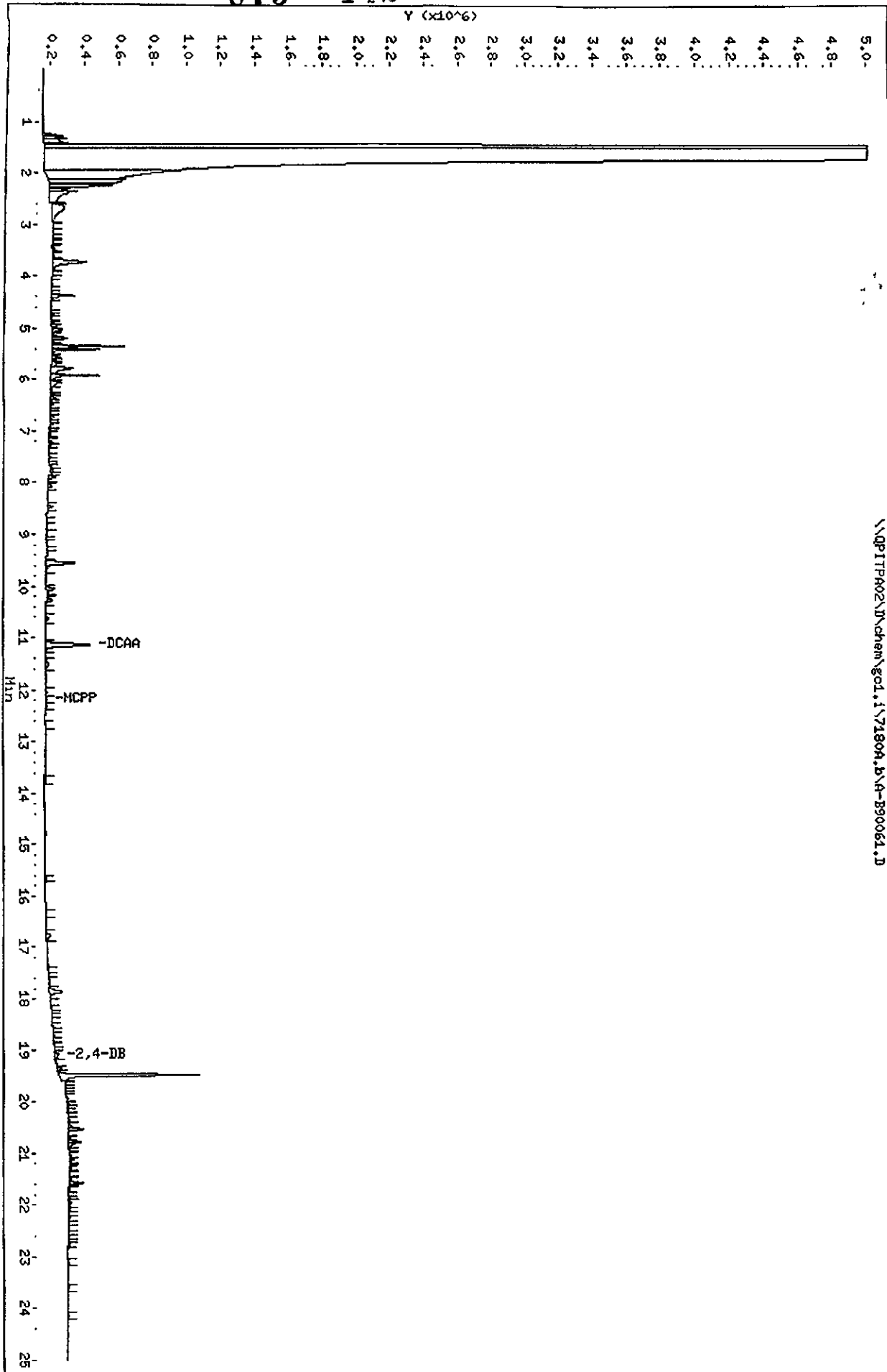
QC Flag Legend

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

675 412

Data File: \\GPITPA02\chem\ec1.1\71804.b\A-B90061.D
 Date : 06-DEC-2000 09:40
 Client ID: DF/24-A/0326/SDC/00
 Sample Info: DGCLE1AF,71804.b
 Volume Injected (uL): 1.0
 Column phase: DB1701

Instrument: ec1.1
 Operator: 01797
 Column diameter: 0.53



HERBICIDE
CALIBRATION DATA

675 414

6 D
68901B
031701

Report Date : 05-Dec-2000 17:33

STL-Pittsburgh

COMPOUND LISTING

Method file : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
Quant Method : ESTD Target Version : 4.04
Last Update : 05-Dec-2000 17:32 Number of CpnDs : 12
Data Type : GC MULTI COMP

Global Integrator : Falcon

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

Compound	RT	RT Window	RF
1 DALAPON	4.259	4.189-4.329	1.48e+007
\$ 2 DCAA	11.143	11.073-11.213	3.24e+007
3 DICAMBA	11.742	11.672-11.812	2.78e+007
4 MCPP	12.182	12.112-12.252	2.35e+004
5 MCPA	13.059	12.989-13.129	3.50e+004
6 DICHLOROPROP	14.204	14.134-14.274	5.99e+006
7 2,4-D	15.698	15.628-15.768	6.21e+006
8 PENTACHLOROPHENOL	16.124	16.054-16.194	8.17e+007
9 2,4,5-TP (SILVEX)	17.794	17.724-17.864	6.41e+007
10 2,4,5-T	18.561	18.491-18.631	7.05e+007
11 2,4-DB	19.138	19.068-19.208	1.04e+007
12 DINOSEB	19.846	19.776-19.916	6.82e+007

Report Date : 19-Oct-2000 09:12

6 E
689013
DB1701

675 415

STL - Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 18-OCT-2000 17:56
End Cal Date : 18-OCT-2000 19:53
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
Cal Date : 19-Oct-2000 09:08 morganw
Curve Type : Average

Calibration File Names:

Level 1: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70373.D
Level 2: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70374.D
Level 3: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70375.D
Level 4: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70376.D
Level 5: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70377.D

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	t RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 DALAPON	16896818	15853636	14561298	13522369	13071136	14781052	10.795
3 DICAMBA	30754528	29614648	27867647	25745394	24996176	27795679	8.833
4 MCPP	29682	26712	23250	20166	17778	23518	20.442<-
5 MCPA	47520	40273	33535	28244	25396	34993	25.742<-
6 DICHLOROPROP	6930377	6553703	6028042	5438371	5004876	5991074	13.138
7 2,4-D	6786493	6636165	6295253	5832882	5483488	6206856	8.792
8 PENTACHLOROPHENOL	84773308	84225188	81955921	78899671	78773866	81725591	3.476
9 2,4,5-TP(SILVEX)	67239048	66907714	65041896	61994751	59543762	64145434	5.159
10 2,4,5-T	69988046	72315524	71742133	69888649	68773045	70541479	2.060
11 2,4-DB	10637678	10682512	10353467	10030769	10075311	10355947	2.939
12 DINOSEB	69240694	70630709	69077953	66604134	65636260	68237950	3.010
\$ 2 DCAA	37964038	36021953	32385734	28812482	26624824	32361806	14.681

9.9 %D
AVG.

Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90047.D
Report Date: 06-Dec-2000 09:37

7E
689013
DB1701
675 416

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 06-DEC-2000 02:54
Lab File ID: A-B90047.D Init. Cal. Date(s): 18-OCT-2000 18-OCT-2000
Analysis Type: Init. Cal. Times: 17:56 19:53
Lab Sample ID: MHERB Quant Type: ESTD
Method: \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m

COMPOUND	RRF	RFO	MIN	MAX
1 DALARON	14781052	15458041	0.010	4.6
\$ 2 DCAA	32361806	34134783	0.010	5.5
3 DICAMBA	27795679	30238824	0.010	8.8
4 MCPP	23518	28840	0.010	22.6
5 MCPA	34993	38049	0.010	8.7
6 DICHLOROPROP	5991074	6451014	0.010	7.7
7 2,4-D	6206856	6800729	0.010	9.6
8 PENTACHLOROPHENOL	81725591	87412030	0.010	7.0
9 2,4,5-TP(SILVEX)	64145434	70589716	0.010	10.0
10 2,4,5-T	70541479	77932417	0.010	10.5
11 2,4-DB	10355947	11424450	0.010	10.3
12 DINOSES	68237950	73339134	0.010	7.5

9.4% D AVG.

Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90067.D
Report Date: 06-Dec-2000 13:29

7E
669018
DB1701

STL-Pittsburgh

675 417

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 06-DEC-2000 12:34
Lab File ID: A-B90067.D Init. Cal. Date(s): 18-OCT-2000 18-OCT-2000
Analysis Type: Init. Cal. Times: 17:56 19:53
Lab Sample ID: MHERB Quant Type: ESTD
Method: \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m

COMPOUND	RRF	RPO	MIN	MAX
	RRF	RPO	RRF	%D
1 DALAPON	14781052	15553941	0.010	5.2
2 DCAA	32361806	33614230	0.010	3.9
3 DICAMBA	27795679	29864400	0.010	7.4
4 MCPP	23518	28056	0.010	19.3
5 MCPA	34993	37389	0.010	6.8
6 DICHLOROPROP	5991074	6359021	0.010	6.1
7 2,4-D	6206856	6741774	0.010	8.6
8 PENTACHLOROPHENOL	81725591	85443985	0.010	4.5
9 2,4,5-TP(SILVEX)	64145434	68614028	0.010	7.0
10 2,4,5-T	70541479	75427630	0.010	6.9
11 2,4-DB	10355947	11182746	0.010	8.0
12 DINOSBB	68237950	70499370	0.010	3.3

7.3% D AVG

675 418

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: CQK220253

GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 10/18/00 10/18/00

Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 11.14					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01					
02	LHERB	10/18/00	1756	11.16	
03	MLHERB	10/18/00	1825	11.15	
04	MHERB	10/18/00	1855	11.16	
05	MHHERB	10/18/00	1924	11.16	
06	HHERB	10/18/00	1953	11.15	
07	MHERB	12/06/00	0254	11.14	
08	DF/24-A/0326 DQCKK1AF	12/06/00	0842	11.14	
09	DF/24-A/0326 DQCLC1AF	12/06/00	0911	11.14	
10	DF/24-A/0326 DQCLE1AF	12/06/00	0940	11.14	
11	LCS DQPJD1AC	12/06/00	1136	11.14	
12	BLK DQPJD1AA	12/06/00	1205	11.15	
13	MHERB	12/06/00	1234	11.14	
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

S1 = DCAA QC LIMITS
(+/- 0.07 MINUTES)

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

Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70373.D
Report Date: 19-Oct-2000 09:09

675 419

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70373.D
Lab Smp Id: LHERB
Inj Date : 18-OCT-2000 17:56
Operator : 01797
Smp Info : LHERB,7180A.b
Misc Info : 190-94-1
Comment :
Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
Meth Date : 19-Oct-2000 09:08 morganw
Cal Date : 18-OCT-2000 17:56
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085

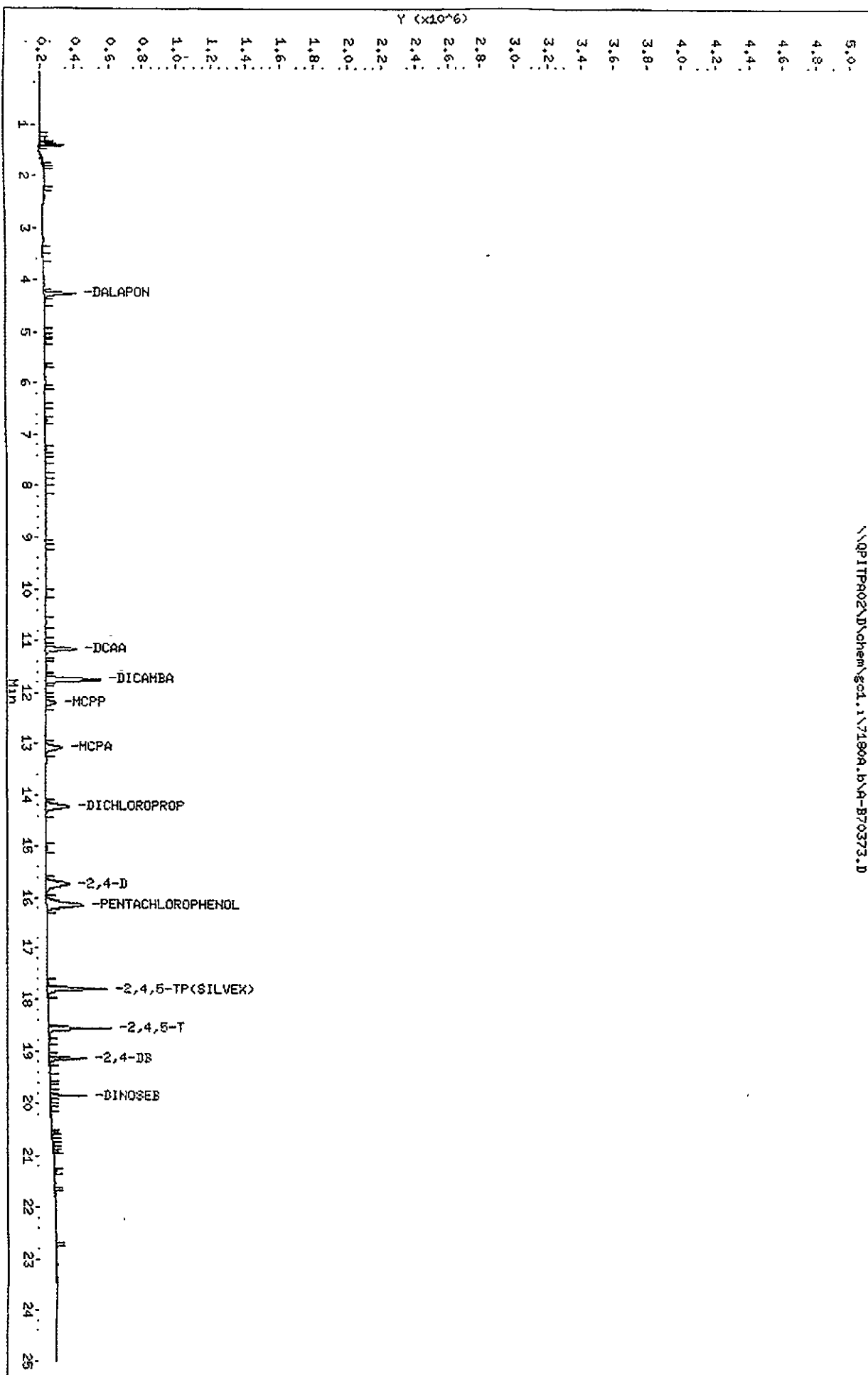
Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B70373.D
Calibration Sample, Level: 1
Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.265	4.269	-0.004	185865	0.01100	0.01100
\$ 2 DCAA	11.157	11.153	0.004	808634	0.02130	0.02130
3 DICAMBA	11.754	11.757	-0.003	325998	0.01060	0.01060
4 MCPP	12.198	12.199	-0.001	62926	2.12000	2.120
5 MCPA	13.077	13.076	0.001	101692	2.14000	2.140
6 DICHLOROPROP	14.222	14.220	0.002	146924	0.02120	0.02120
7 2,4-D	15.725	15.711	0.014	143195	0.02110	0.02110
8 PENTACHLOROPHENOL	16.141	16.142	-0.001	225497	0.00266	0.002660
9 2,4,5-TP(SILVEX)	17.802	17.803	-0.001	353005	0.00525	0.005250
10 2,4,5-T	18.569	18.566	0.003	368837	0.00527	0.005270
11 2,4-DB	19.146	19.142	0.004	224455	0.02110	0.02110
12 DINOSEB	19.851	19.851	0.000	219493	0.00317	0.003170

Data File: \\QPI1P002\chem\gcl.1\7180A.b\A-E70373.D
Date: 18-OCT-2000 17:56
Client ID:
Sample Info: LHERB, 7180A.b
Column Phase: DB1701

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

\\QPI1P002\chem\gcl.1\7180A.b\A-E70373.D



Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70374.D
Report Date: 19-Oct-2000 09:09

675 421

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70374.D
Lab Smp Id: MLHERB
Inj Date : 18-OCT-2000 18:25
Operator : 01797
Smp Info : MLHERB,7180A.b
Misc Info : 190-94-2
Comment :
Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
Meth Date : 19-Oct-2000 09:08 morganw
Cal Date : 18-OCT-2000 18:25
Als bottle: 3
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085

Inst ID: gc1.1

Quant Type: ESTD

Cal File: A-B70374.D

Calibration Sample, Level: 2

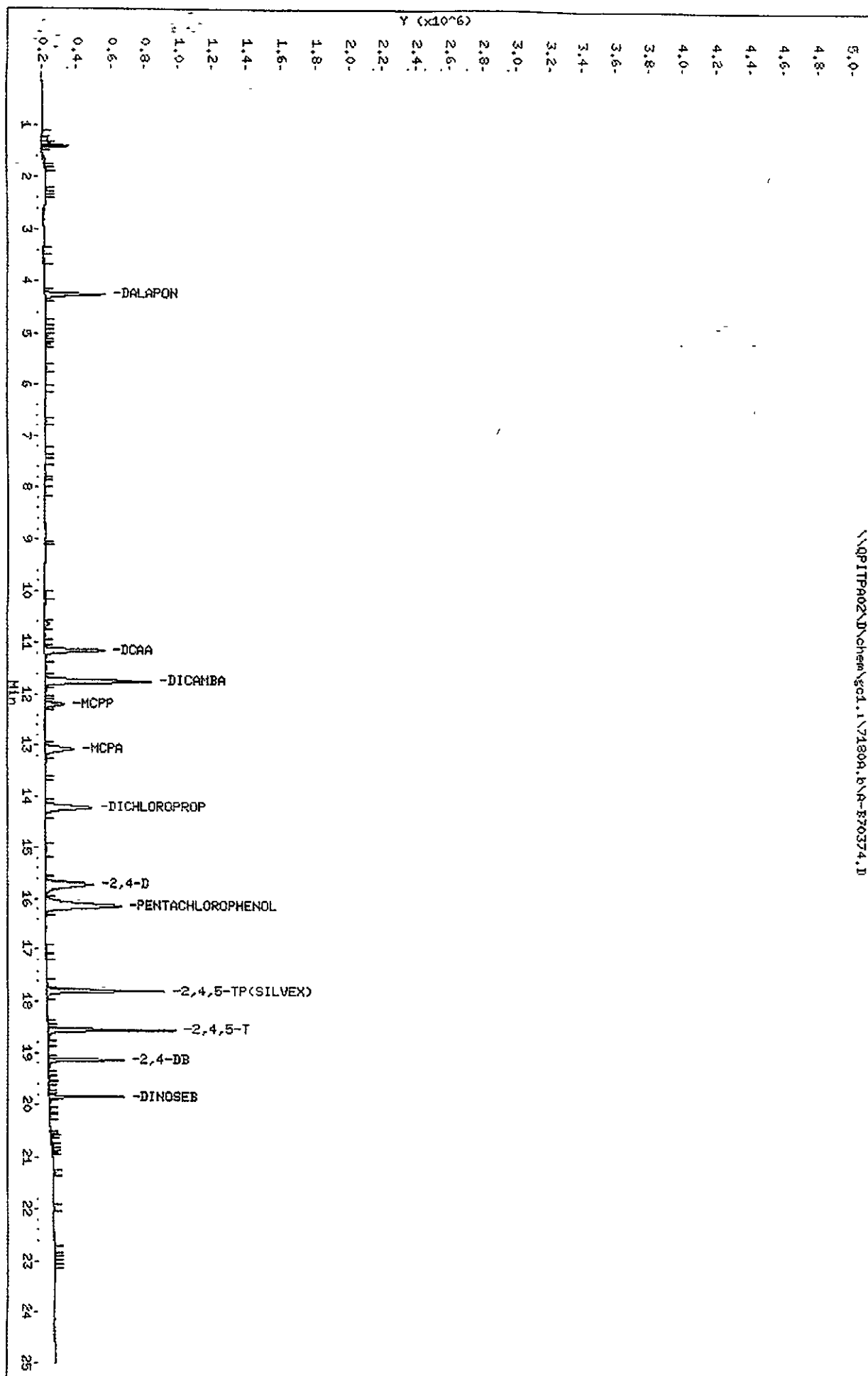
Compound Sublist: all.sub

					AMOUNTS	
					CAL-AMT	ON-COL
					(ng)	(ng)
Compounds	RT	EXP RT	DLT RT	RESPONSE		
-----	--	-----	-----	-----	-----	-----
1 DALAPON	4.265	4.269	-0.004	348780	0.02200	0.02130
\$ 2 DCAA	11.153	11.153	0.000	1530933	0.04250	0.04138
3 DICAMBA	11.754	11.757	-0.003	630792	0.02130	0.02090
4 MCPP	12.196	12.199	-0.003	113792	4.26000	4.036
5 MCPA	13.073	13.076	-0.003	172367	4.28000	3.927
6 DICHLOROPROP	14.219	14.220	-0.001	277877	0.04240	0.04122
7 2,4-D	15.720	15.711	0.009	282037	0.04250	0.04202
8 PENTACHLOROPHENOL	16.139	16.142	-0.003	448078	0.00532	0.005303
9 2,4,5-TP(SILVEX)	17.801	17.803	-0.002	702531	0.01050	0.01047
10 2,4,5-T	18.568	18.566	0.002	759313	0.01050	0.01067
11 2,4-DB	19.144	19.142	0.002	450802	0.04220	0.04229
12 DINOSEB	19.851	19.851	0.000	448505	0.00635	0.006413

Data File: \\QPITPA02\N\chem\gc1.1\71809.b\8-F70374.D
Date: 18-OCT-2000 18:25
Client ID:
Sample Info: HLHERB, 71809.b
Column phase: DB1701

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

\\QPITPA02\N\chem\gc1.1\71809.b\8-F70374.D



STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70375.D
Lab Smp Id: MHERB
Inj Date : 18-OCT-2000 18:55
Operator : 01797
Smp Info : MHERB,7180A.b
Misc Info : 190-94-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
Meth Date : 19-Oct-2000 09:08 morganw
Cal Date : 18-OCT-2000 18:55
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-B70375.D
Calibration Sample, Level: 3
Compound Sublist: all.sub

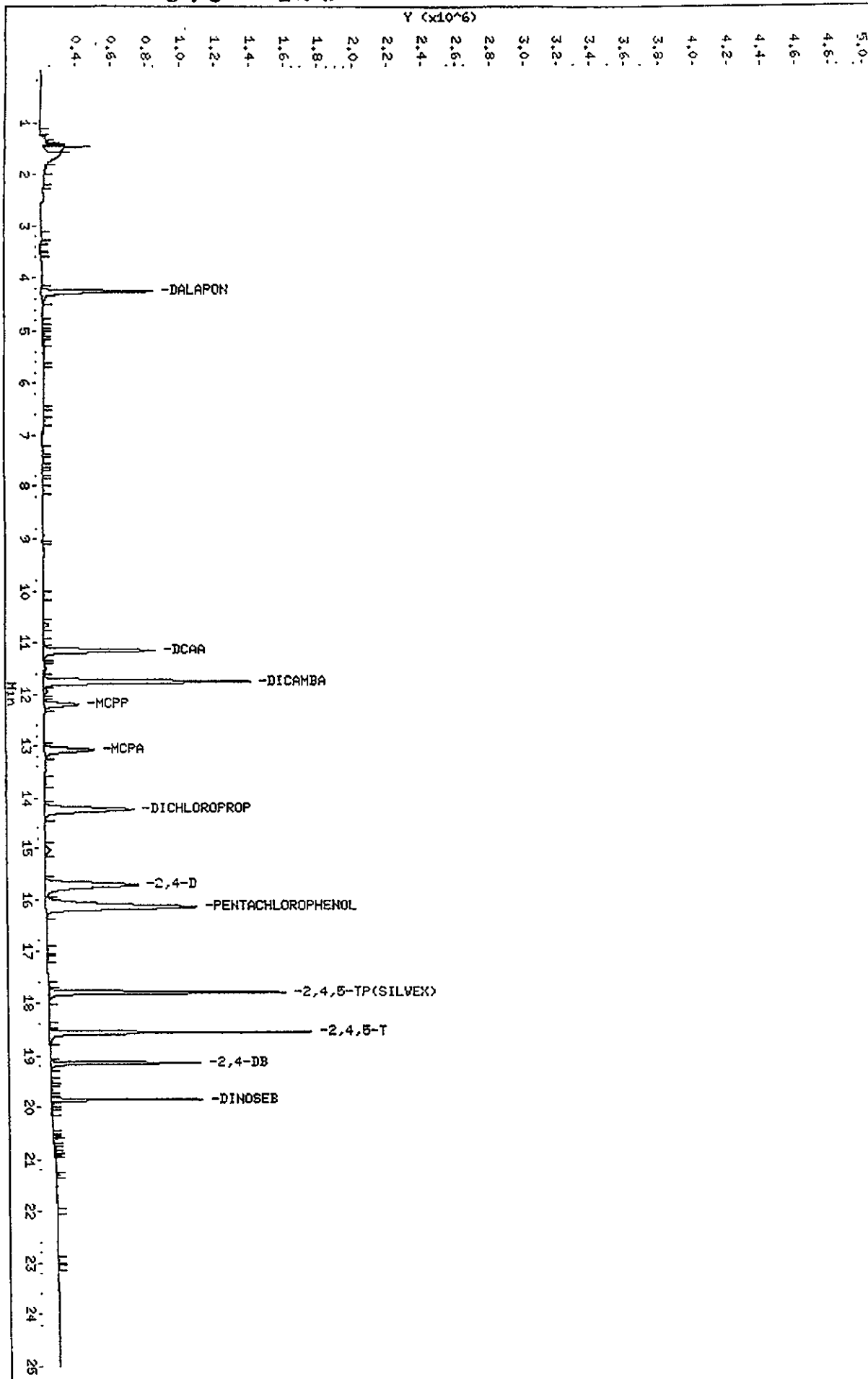
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.267	4 269	-0.002	639241	0.04390	0.04053
\$ 2 DCAA	11 156	11 153	0.003	2756026	0 08510	0.07773
3 DICAMBA	11 757	11 757	0.000	1184375	0.04250	0 04027
4 MCPP	12 196	12 199	-0.003	198088	8.52000	7 462
5 MCPA	13.077	13 076	0 001	287058	8.56000	7.098
6 DICHLOROPROP	14.221	14 220	0 001	511178	0.08480	0 07859
7 2,4-D	15.720	15 711	0.009	535726	0.08510	0 08151
8 PENTACHLOROPHENOL	16 142	16 142	0 000	872011	0.01064	0.01042
9 2,4,5-TP(SILVEX)	17.802	17 803	-0 001	1372384	0.02110	0.02067
10 2,4,5-T	18.568	18 566	0.002	1513759	0 02110	0.02122
11 2,4-DB	19.143	19.142	0.001	874868	0.08450	0.08286
12 DINOSEB	19 852	19 851	0 001	877290	0.01270	0.01260

675 424

Data File: \\QP1TPRO2\N\chem\gc1.1\7180A.b\A-B70375.D
Date: 18-OCT-2000 18:55
Client ID:
Sample Info: HHERB, 7180A.b
Column phase: DB1701

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

\\QP1TPRO2\N\chem\gc1.1\7180A.b\A-B70375.D



STL - Pittsburgh

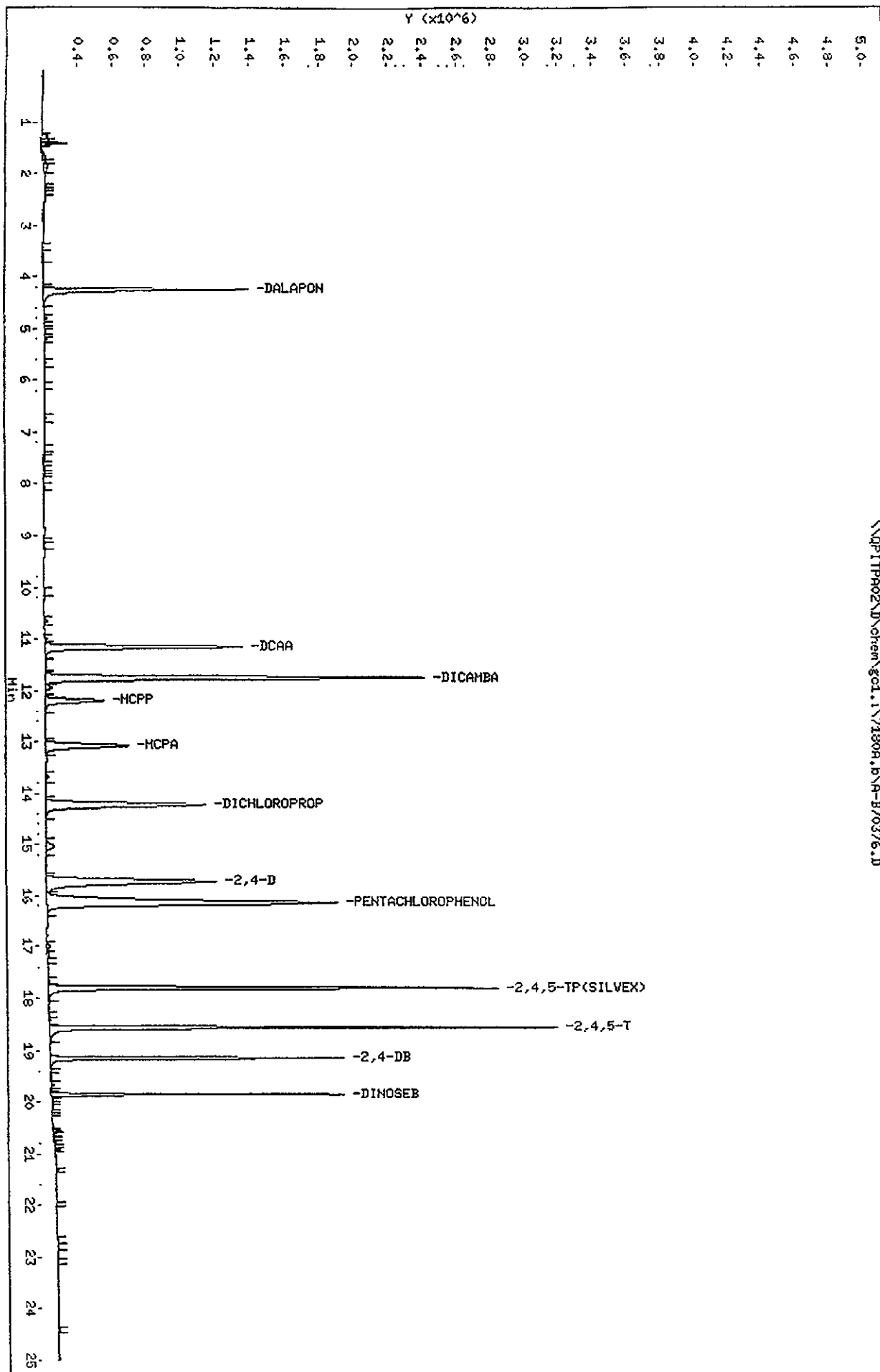
Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70376.D
 Lab Smp Id: MHHERB
 Inj Date : 18-OCT-2000 19:24
 Operator : 01797 Inst ID: gc1.i
 Smp Info : MHHERB,7180A.b
 Misc Info : 190-94-4
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
 Meth Date : 19-Oct-2000 09:08 morganw Quant Type: ESTD
 Cal Date : 18-OCT-2000 19:24 Cal File: A-B70376.D
 Als bottle: 5 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	4.267	4.269	-0.002	1187264	0.08780	0.07806
\$ 2 DCAA	11.158	11.153	0.005	4898122	0.17000	0.1449
3 DICAMBA	11.759	11.757	0.002	2190933	0.08510	0.07689
4 MCPP	12.200	12.199	0.001	342828	17.0000	13.74
5 MCPA	13.079	13.076	0.003	482975	17.1000	12.92
6 DICHLOROPROP	14.223	14.220	0.003	924523	0.17000	0.1482
7 2,4-D	15.716	15.711	0.005	991590	0.17000	0.1552
8 PENTACHLOROPHENOL	16.144	16.142	0.002	1678985	0.02128	0.02036
9 2,4,5-TP(SILVEX)	17.806	17.803	0.003	2609979	0.04210	0.03997
10 2,4,5-T	18.568	18.566	0.002	2949301	0.04220	0.04155
11 2,4-DB	19.143	19.142	0.001	1695200	0.16900	0.1626
12 DINOSEB	19.853	19.851	0.002	1691745	0.02540	0.02456

Data file: \NQPITPA02\Nchem\gcl.1\71808.b\A-B70376.D
Date: 18-OCT-2000 19:24
Client ID:
Sample Info: HHEERB.71808.b
Column phase: DB1701

Instrument: gcl.1
Operator: 04797
Column diameter: 0.53

\NQPITPA02\Nchem\gcl.1\71808.b\A-B70376.D



Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70377.D
Report Date: 19-Oct-2000 09:09

675 427

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B70377.D
Lab Smp Id: HHERB
Inj Date : 18-OCT-2000 19:53
Operator : 01797
Smp Info : HHERB,7180A.b
Misc Info : 190-94-5
Comment :
Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
Meth Date : 19-Oct-2000 09:08 morganw
Cal Date : 18-OCT-2000 19:53
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-B70377.D
Calibration Sample, Level: 5
Compound Sublist: all.sub

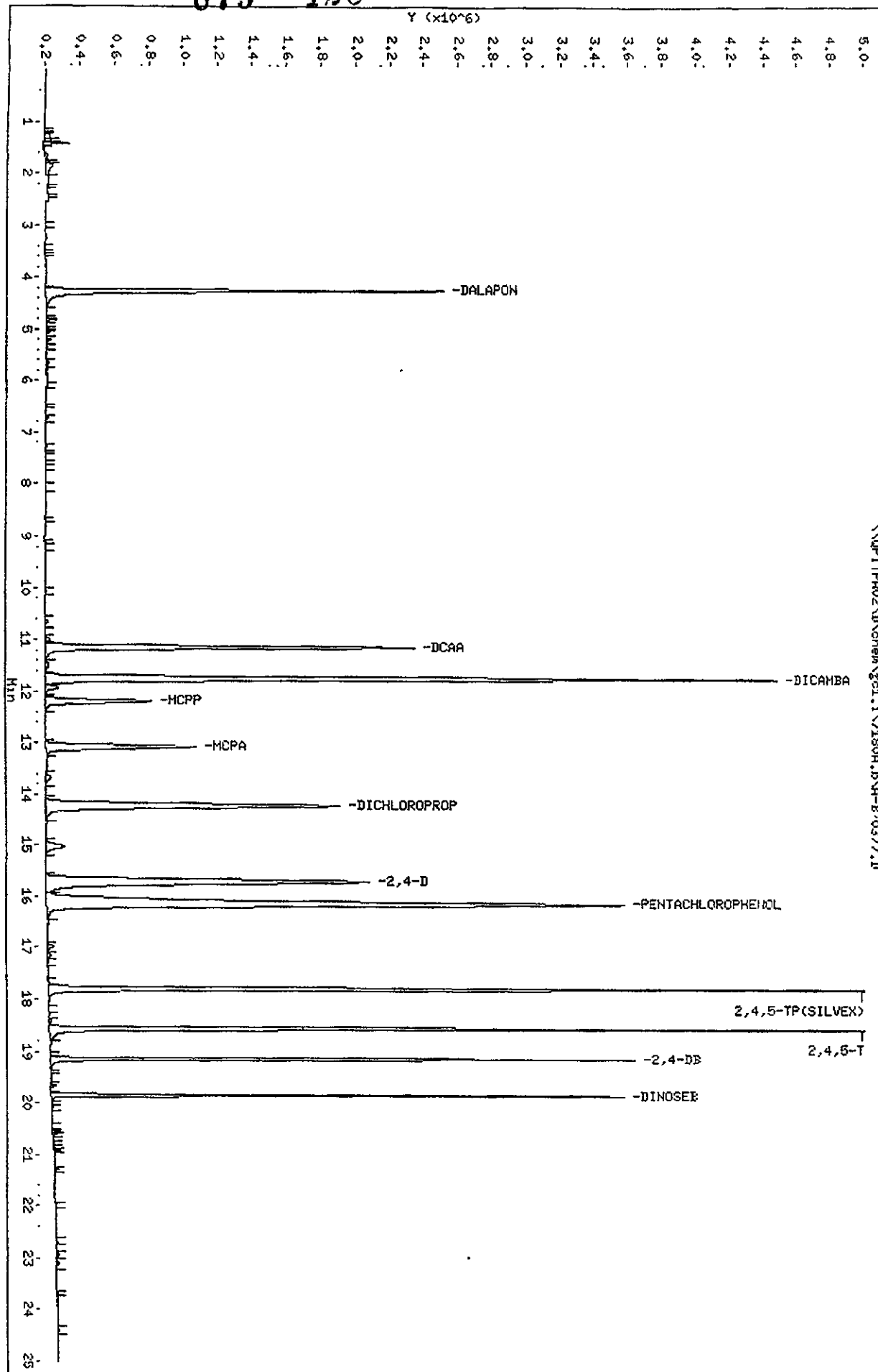
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.269	4.269	0.000	2300520	0.17600	0.1556
\$ 2 DCAA	11.153	11.153	0.000	9052440	0.34000	0.2797
3 DICAMBA	11.757	11.757	0.000	4249350	0.17000	0.1529
4 MCPP	12.199	12.199	0.000	606232	34.1000	25.78
5 MCPA	13.076	13.076	0.000	863457	34.0000	24.67
6 DICHLOROPROP	14.220	14.220	0.000	1696653	0.33900	0.2832
7 2,4-D	15.711	15.711	0.000	1864386	0.34000	0.3004
8 PENTACHLOROPHENOL	16.142	16.142	0.000	3351828	0.04255	0.04101
9 2,4,5-TP (SILVEX)	17.803	17.803	0.000	5001676	0.08400	0.07797
10 2,4,5-T	18.566	18.566	0.000	5804445	0.08440	0.08228
11 2,4-DB	19.142	19.142	0.000	3405455	0.33800	0.3288
12 DINOSEB	19.851	19.851	0.000	3334322	0.05080	0.04886

675 428

Data File: \\QPIFPA02\B\chem\col.1\7180A.B\A-E70377.D
 Date: 18-OCT-2000 19:53
 Client ID:
 Sample Info: HHEPB, 7180A.b
 Column phase: DB1701

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

\\QPIFPA02\B\chem\col.1\7180A.B\A-E70377.D



STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90047.D
Lab Smp Id: MHERB
Inj Date : 06-DEC-2000 02:54
Operator : 01797
Smp Info : MHERB,7180A.b
Misc Info : 190-94-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
Meth Date : 06-Dec-2000 09:21 morganw
Cal Date : 18-OCT-2000 19:53
Als bottle: 23
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085
Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B70377.D
Continuing Calibration Sample
Compound Sublist: all.sub

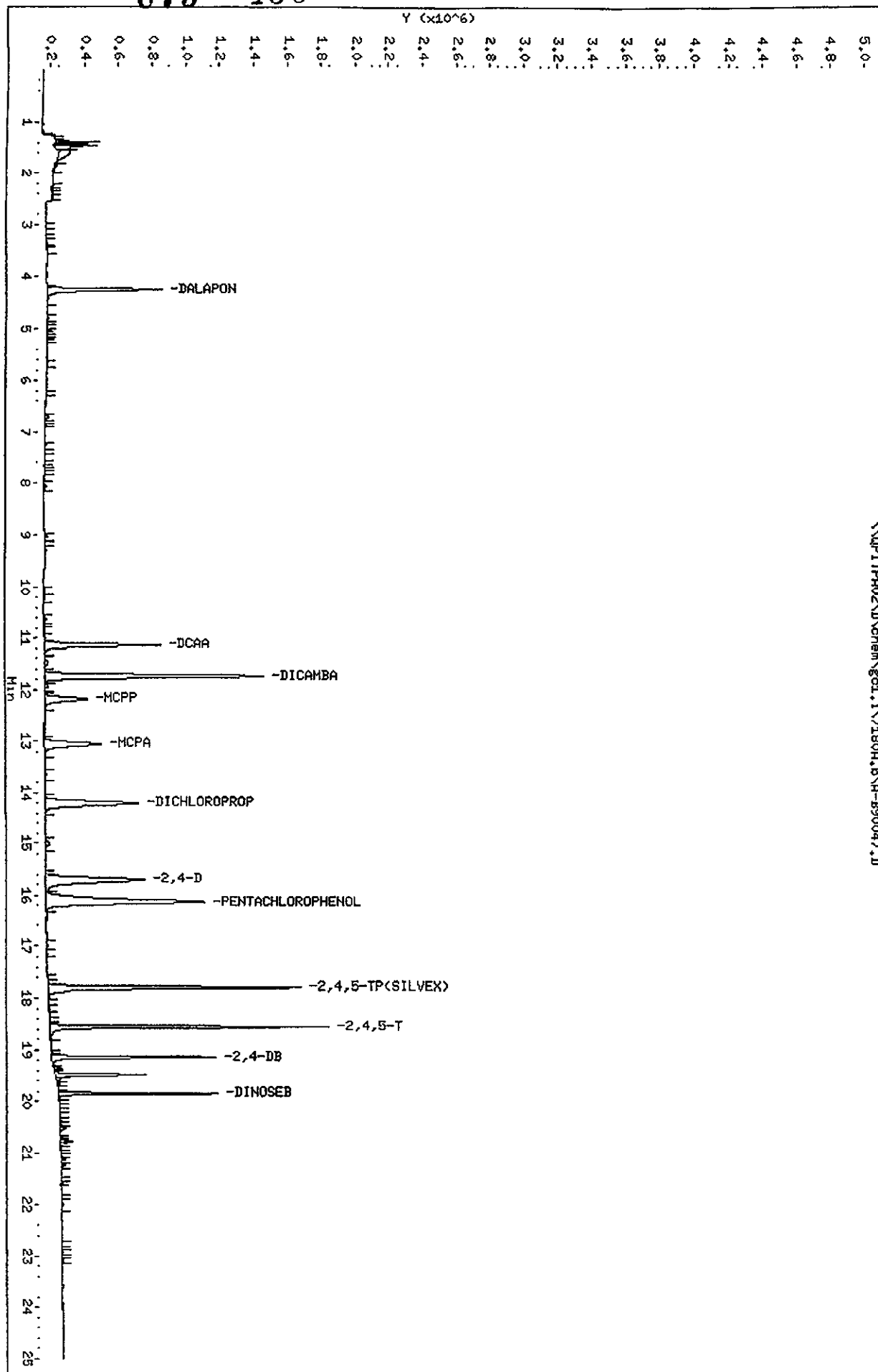
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.260	4.259	0.001	678608	0.04390	0.04591
\$ 2 DCAA	11.142	11.142	0.000	2904870	0.08510	0.08976
3 DICAMBA	11.738	11.741	-0.003	1285150	0.04250	0.04624
4 MCPP	12.181	12.181	0.000	245718	8.52000	10.45
5 MCPA	13.058	13.058	0.000	325701	8.56000	9.307
6 DICHLOROPROP	14.202	14.204	-0.002	547046	0.08480	0.09131
7 2,4-D	15.695	15.697	-0.002	578742	0.08510	0.09324
8 PENTACHLOROPHENOL	16.122	16.124	-0.002	930064	0.01064	0.01138
9 2,4,5-TP(SILVEX)	17.793	17.793	0.000	1489443	0.02110	0.02322
10 2,4,5-T	18.561	18.561	0.000	1644374	0.02110	0.02331
11 2,4-DB	19.137	19.137	0.000	965366	0.08450	0.09322
12 DINOSEB	19.845	19.846	-0.001	931407	0.01270	0.01365

675 430

Data File: \\QPIITPA02\chem\col.1\7180A.b\A-B90047.D
 Date: 06-DEC-2000 02:54
 Client ID:
 Sample Info: MHERB, 7180A.b
 Column phase: DB1701

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

\\QPIITPA02\chem\col.1\7180A.b\A-B90047.D



STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90067.D
Lab Smp Id: MHERB
Inj Date : 06-DEC-2000 12:34
Operator : 01797
Smp Info : MHERB,7180A.b
Misc Info : 190-94-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
Meth Date : 06-Dec-2000 13:29 morganw
Cal Date : 18-OCT-2000 19:53
Als bottle: 43
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B70377.D
Continuing Calibration Sample
Compound Sublist: all.sub

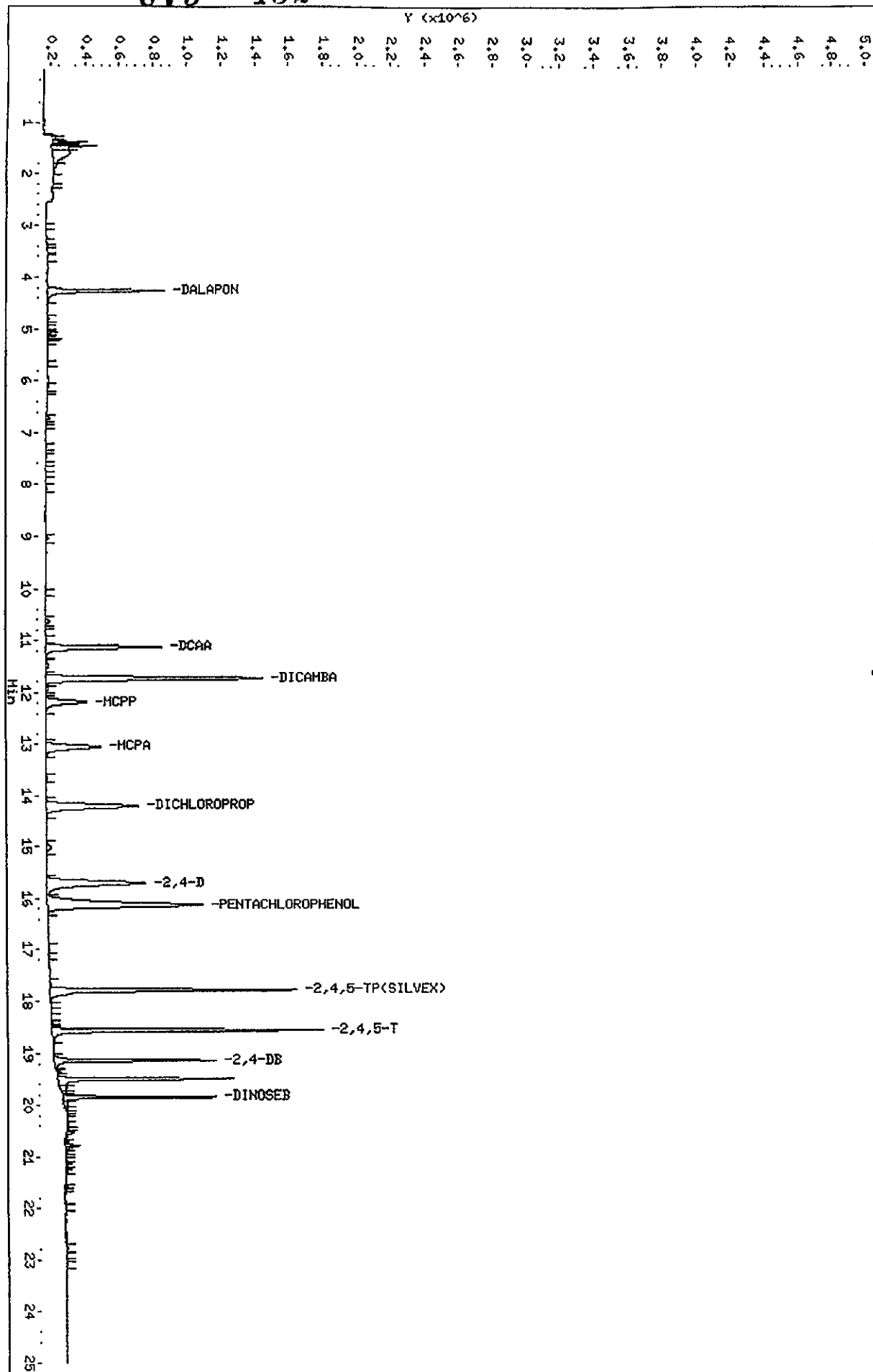
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	4.261	4.259	0.002	682818	0.04390	0.04620
\$ 2 DCAA	11.141	11.142	-0.001	2860571	0.08510	0.08839
3 DICAMBA	11.741	11.741	0.000	1269237	0.04250	0.04566
4 MCPP	12.182	12.181	0.001	239033	8.52000	10.16
5 MCPA	13.059	13.058	0.001	320046	8.56000	9.146
6 DICHLOROPROP	14.202	14.204	-0.002	539245	0.08480	0.09001
7 2,4-D	15.697	15.697	0.000	573725	0.08510	0.09243
8 PENTACHLOROPHENOL	16.123	16.124	-0.001	909124	0.01064	0.01112
9 2,4,5-TP(SILVEX)	17.794	17.793	0.001	1447756	0.02110	0.02257
10 2,4,5-T	18.560	18.561	-0.001	1591523	0.02110	0.02256
11 2,4-DB	19.137	19.137	0.000	944942	0.08450	0.09125
12 DINOSEB	19.846	19.846	0.000	895342	0.01270	0.01312

675 432

Data File: \\QPI1P002\chem\gcl.1\71804.b\A-B90067.D
Date: 06-DEC-2000 12:34
Client ID:
Sample Info: MHERB.71804.b
Column phase: DB1701

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

\\QPI1P002\chem\gcl.1\71804.b\A-B90067.D



675 433

**HERBICIDE
QC DATA**

675 434

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COL010000 518

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 11/17/00

Work Order: DQPJD1AA

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/06/00

Moisture %: NA

QC Batch: 0336518

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

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90066.D
 Lab Smp Id: DQPJD1AA Client Smp ID: BLK
 Inj Date : 06-DEC-2000 12:05
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DQPJD1AA,7180A.b
 Misc Info : 170261BLK
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
 Meth Date : 06-Dec-2000 13:29 morganw Quant Type: ESTD
 Cal Date : 18-OCT-2000 19:53 Cal File: A-B70377.D
 Als bottle: 42 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON						
2 DCAA	11.145	11.142	0.003	1297988	0.04011	0.08022(a)
3 DICAMBA						
4 MCPP						
5 MCPA						
6 DICHLOROPROP						
7 2,4-D						
8 PENTACHLOROPHENOL						
9 2,4,5-TP(SILVEX)						
10 2,4,5-T						
11 2,4-DB	19.082	19.137	-0.055	25022	0.00242	0.004832(a)
12 DINOSEB						

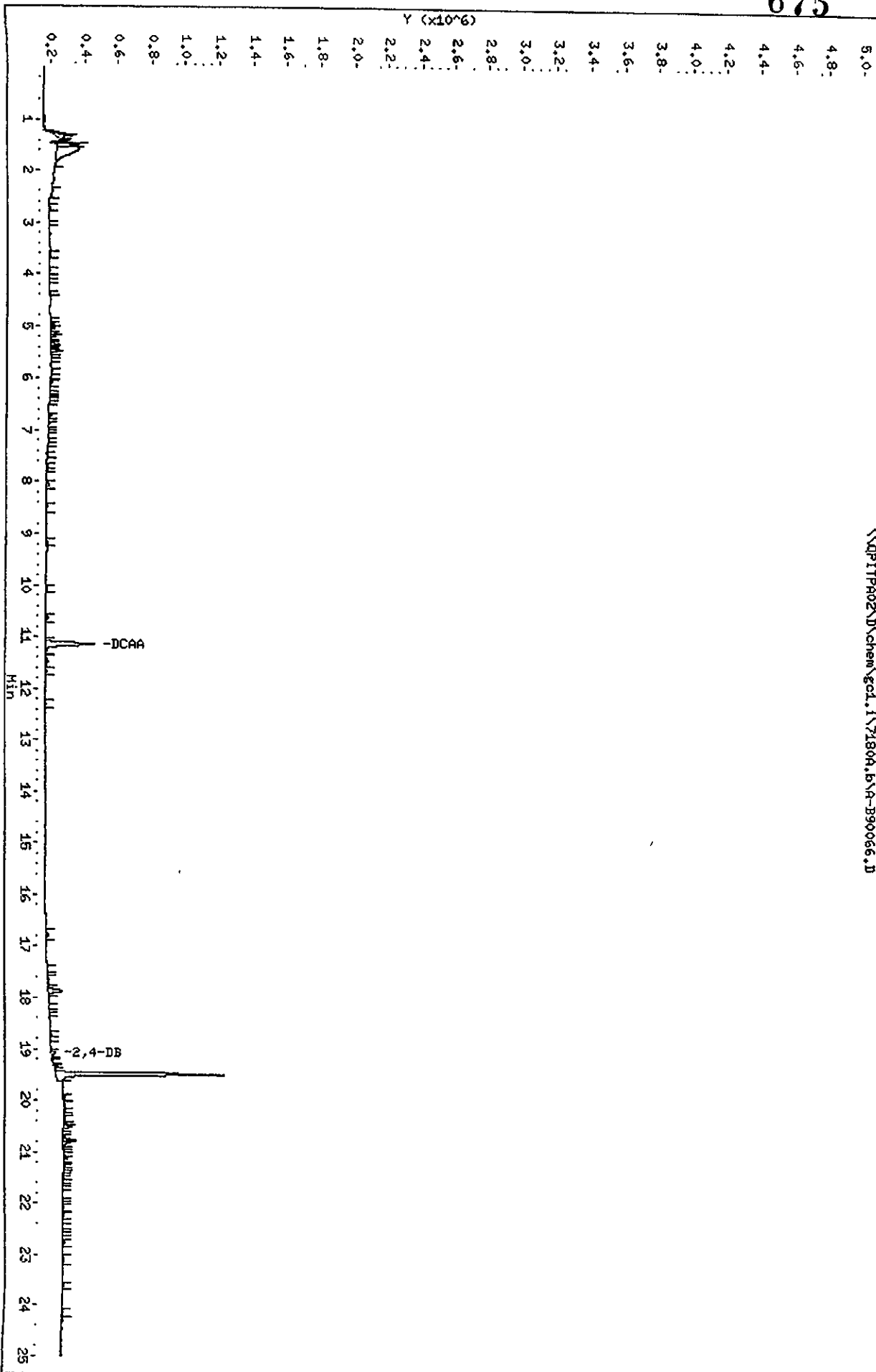
QC Flag Legend

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

Data File: \\QPITP002\chem\gcl.1\71804.b\A-B90066.D
 Date: 06-DEC-2000 12:05
 Client ID: BLK
 Sample Info: DGPJDA9A,71804.b
 Volume Injected (uL): 1.0
 Column phase: DB1701

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

\\QPITP002\chem\gcl.1\71804.b\A-B90066.D



675 438

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COL010000 518

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 11/17/00

Work Order: DQPJD1AC

Date Extracted: 12/01/00

Dilution factor: 1

Date Analyzed: 12/06/00

Moisture %: NA

QC Batch: 0336518

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)	0.0275	

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90065.D
 Lab Smp Id: DQPJD1AC Client Smp ID: LCS
 Inj Date : 06-DEC-2000 11:36
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DQPJD1AC,7180A.b
 Misc Info : 170261LCS
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\7180A.b\LONGHB.m
 Meth Date : 06-Dec-2000 13:29 morganw Quant Type: ESTD
 Cal Date : 18-OCT-2000 19:53 Cal File: A-B70377.D
 Als bottle: 41 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	4.259	4.259	0.000	407714	0.02758	0.05517(aR)
2 DCAA	11.143	11.142	0.001	1258290	0.03888	0.07776(a)
3 DICAMBA	11.741	11.741	0.000	815436	0.02934	0.05867(a)
4 MCPP	12.183	12.181	0.002	177423	7.54427	15.09
5 MCPA	13.061	13.058	0.003	226374	6.46905	12.94
6 DICHLOROPROP	14.201	14.204	-0.003	340502	0.05683	0.1137(a)
7 2,4-D	15.698	15.697	0.001	325250	0.05240	0.1048(aR)
8 PENTACHLOROPHENOL	16.124	16.124	0.000	579678	0.00709	0.01418(a)
9 2,4,5-TP(SILVEX)	17.792	17.793	-0.001	881683	0.01375	0.02749(aR)
10 2,4,5-T	18.560	18.561	-0.001	949130	0.01345	0.02691(aR)
11 2,4-DB	19.137	19.137	0.000	542542	0.05239	0.1048(a)
12 DINOSEB	19.844	19.846	-0.002	333114	0.00488	0.009763(a)

675 440
Data File: \\QPITPA02\D\chem\gc1.i\7180A.b\A-B90065.D
Report Date: 06-Dec-2000 13:37

QC Flag Legend

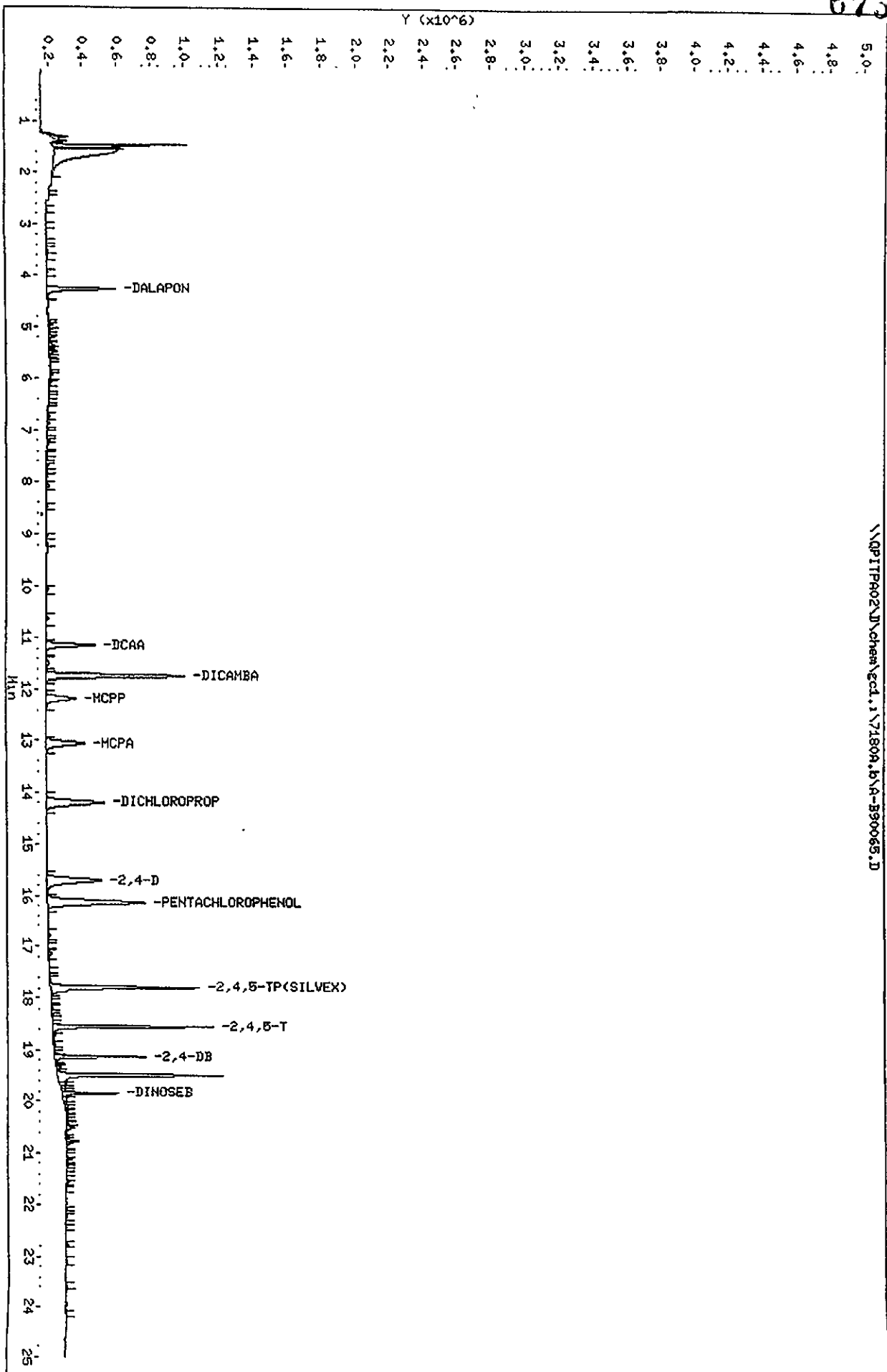
- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- R - Spike/Surrogate failed recovery limits.

441

Data File: \\NPITPA02\N\chem\gcd.i\71804.b\A-B90065.D
Date: 06-DEC-2000 11:36
Client ID: LCS
Sample Info: DGPJBIAC,71804.b
Volume Injected (uL): 1.0
Column phase: DB1704

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

\\NPITPA02\N\chem\gcd.i\71804.b\A-B90065.D



675 442

**HERBICIDE
MISCELLANEOUS**

B #0336518

(TLP)

STL - Pittsburgh

Separatory Funnel Extraction Worksheet

Logbook ID: OP4

Start Date	Date Completed	Parameter	Method	Solvent	Solvent Lot	Solvent Mfg	Cleanup Method			
12-1-00	12-5-00	Herb	3510C	MECL ₂	HEXANE	723305	BAKER			
Lot Number	Sample ID	Client ID	Sample Volume (mL)	Final Volume (mL)	pH	Surrogate #	Sur Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	Cleanup Date
1. PK170261	Lik	NA	100	10.0	5.12	190-101-7	1.0	NA	NA	NA
2.	L15				5.11			190-101-7	1.0	
3.	001/115				5.11					
4.	001/115				5.11					
5.	001				5.11			NA	NA	
6. PK220253	001				5.11					
7.	002				5.11					
8.	003				5.11					
9.					5.11					

Analyst	Extract(s)	Date	Time	Location
PY	PY	12-1-00	2030	P. Yushinskiy, Oak Ridge
PY	PY	12-5-00	0500	Jane Miller, Oak Ridge
PY	PY	12-5-00	1615	W. Mayne, Oak Ridge

Analyst	Extract(s)	Date	Time	Location
PY	PY	12-1-00	3040	P. Yushinskiy, Oak Ridge
PY	PY	12-5-00	1530	Jane Miller, Oak Ridge
PY	PY	12-5-00	1650	W. Mayne, Oak Ridge

P. Yushinskiy
12-1-00

Reviewed by:

Jane Miller

Date:

12-5-00

Sodium Sulfate Mfg/Lot Number

Baker T41639

675 444

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information
====	====	=====
1	1	8151 HERB ANALYSIS
2	2	190-94-1
3	3	190-94-2
4	4	190-94-3
5	5	190-94-4
6	6	190-94-5

Created: 10-18-00 uwm B

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	==	=====	=====	=====
1	1	HEXANE	HERB	1	Sample		
2	2	LHERB,7180.b	HERB	1	Sample		
3	3	MLHERB,7180.b	HERB	1	Sample		
4	4	MHERB,7180.b	HERB	1	Sample		
5	5	MHHERB,7180.b	HERB	1	Sample		
6	6	HHHERB,7180.b	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
====	====	=====
1	100	8151 HERB ANALYSIS
2	1	8151 HERB ANALYSIS
3	2	190-94-1 373
4	3	190-94-2 374
5	4	190-94-3 375
6	5	190-94-4 376
7	6	190-94-5 377

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
1	100	HEXANE	HERBA	1	Sample	675	445
2	1	HEXANE	HERBA	1	Sample		
3	2	LHERB,7180A.b	HERBA	1	Sample		
4	3	MLHERB,7180A.b	HERBA	1	Sample		
5	4	MHERB,7180A.b	HERBA	1	Sample		
6	5	MHHERB,7180A.b	HERBA	1	Sample		
7	6	HHHERB,7180A.b	HERBA	1	Sample		

Vial Information Part: **675 446**

Line	Vial	Vial Information	Created: 12-5-00	B
1	100	8151/515 HERB ANALYSIS		
2	1	8151/515 HERB ANALYSIS		
3	2	190-94-3 26		
4	3	100226001 27		
5	4	100226002 28		
6	5	100226003 29		
7	6	100226004 30		
8	7	100226005 31		
9	8	100226006 32		
10	9	100226007 33		
11	10	100226008 34		
12	11	~~100226009~~ 35		
13	12	100226010 36		
14	13	100283001 37		
15	14	100283002 38		
16	15	110161001 39		
17	16	110161002 40		
18	17	110161003 41		
19	18	110161004 42		
20	19	110161005 43		
21	20	100226LCS 44		
22	21	100226LCSD 45		
23	22	100226BLK 46		
24	23	190-94-3 47		
25	24	140240001 48		
26	25	140240002 49		
27	26	140240003 50		

✓
DE
127-00

Line	Vial	Vial Information	675	447
====	====	=====		
28	27	140240004	51	
29	28	140240005	52	
30	29	140240006	53	
31	30	140240007	54	
32	31	140240008	55	
33	32	170261001	56	
34	33	170261001MS	57	
35	34	170261001MSD	58	
36	35	220253001	59	
37	36	220253002	60	
38	37	220253003	61	
39	38	140240LCS	62	
40	39	140240LCSD	63	
41	40	140240BLK	64	
42	41	170261LCS	65	
43	42	170261BLK	66	
44	43	190-94-3	67	
45	44	~~220203003~~	68 100*	
46	45	~~220203004~~	69	
47	46	220203LCS	70	
48	47	220203LCSD	71	
49	48	220203BLK	72	
50	49	100226009	73	
51	50	220203004	74	
52	51	220203003 100XDL	75	
53	52	190-94-3	76	

REQUESTED BY. PINOB

METHOD QS Herbicides (8151A)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	
		CNTR#								RCVD	REQD
2D,E	DP4J8-1-AF	___	290448	378644	A-64-QS	C0K170261	001		SOLID	0	8 1
CLP1 3D	DQCKK-1-AF	___	290445	399411	A-64-QS	C0K220253	001		SOLID	0	3 1
CLP1 3D	DQCLC-1-AF	___	290446	399411	A-64-QS	C0K220253	002		SOLID	0	3 1
CLP1 3D	DQCLE-1-AF	___	290447	399411	A-64-QS	C0K220253	003		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

P. Zushinski
P. Zushinski

P. Zushinski
P. Zushinski

PBY
12-1-00
12-1-00
~~12-1-00~~ 1535
12-1-00 2100

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

675 449

METALS DATA

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
DF/24-A/0326/SDC/006	DQCKK
DF/24-A/0326/SDC/006S	DQCKKS
DF/24-A/0326/SDC/006SD	DQCKKD
DF/24-A/0326/SDC/007	DQCLC
DF/24-A/0326/SDC/008	DQCLE

Comments: UXB, DUNN FIELD
C0K220253
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: MTW
DATE: 11-30-00

675 451

METALS
RESULTS

675 . 452

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCKK Client ID: DF/24-A/0326/SDC/006
Matrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161
Weight: 0.50 Volume: 50 Percent Moisture: 15.79

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	13.1		1	ICPST	11/29/00	18:22

Comments: Lot #: C0K220253 Sample #: 1

Version 4.10 2

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

Form 1 Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCLC Client ID: DF/24-A/0326/SDC/007
Matrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161
Weight: 0.50 Volume: 50 Percent Moisture: 8.70

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.28	1.1	13.8		1	ICPST	11/29/00	18:39

Comments: Lot #: C0K220253 Sample #. 2

Version 4.10.2

U Result is less than the MDL

Form 1 Equivalent

B Result is between MDL and RL

675 454

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCLE Client ID: DF/24-A/0326/SDC/008
Matrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161
Weight: 0.50 Volume: 50 Percent Moisture: 9.40

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.28	1.1	12.9		1	ICPST	11/29/00	18:43

Comments: Lot #: C0K220253 Sample #: 3

Version 4.10.2

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

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

675 455

Initial Calibration Verification Standard

Instrument: ICPST

Units: ug/L

Chart Number: T01129C.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0057-160-8

			ICV3-1 11/29/00 3:53 PM							
Element	WL/ Mass	True Conc	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	250.0	257.19	102.9						

675 456 STL-Pittsburgh
Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST **Units:** ug/L
Chart Number: T01129C.ARC **Acceptable Range:** 90% - 110%
Standard Source: Inorganic Ventures **Standard ID:** 0057-157-12

Element	WL/ Mass	True Conc	CCV3-1 11/29/00 4:46 PM		CCV3-2 11/29/00 5:24 PM		CCV3-3 11/29/00 6:05 PM		CCV3-4 11/29/00 6:47 PM		
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	
Arsenic	189.042	500.0	522.20	104.4	519.20	103.8	517.96	103.6	514.01	102.8	

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T01129C.ARC

Standard Source: _____

Standard ID: _____

			ICB1 11/29/00 3:57 PM					
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	2.6	U				

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STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T01129C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/29/00 4:50 PM	CCB2 11/29/00 5:28 PM	CCB3 11/29/00 6:09 PM	CCB4 11/29/00 6:51 PM		
			Found Q	Found Q	Found Q	Found Q	Found	Q
Arsenic	189.042	10	2.6 U	2.6 U	2.6 U	2.6 U		

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Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DQD5ABMatrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161Weight: 0.50 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	11/29/00	18:14

Comments: Lot #: C0K220253

Version 4.10.2

U Result is less than the MDL

Form 3 Equivalent

B Result is between MDL and RL

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Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST

Units: ug/L

Chart Number: T01129C.ARC

Acceptable Range: 0% - 0%

Standard Source: Inorganic Ventures

Standard ID: 0057-146-2

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 11/29/00 4:01 PM				
				Found	Found	Found	Found	Found
Arsenic	189.042	10		3				

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPSTUnits: ug/LChart Number: T01129C.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0057-151-1

Element	WL/ Mass	True Conc	ICSAB 11/29/00 4:06 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	1045.8	104.6								

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Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DQCKKSOriginal Sample ID: DQCKK Client ID: DF/24-A/0326/SDC/006SMatrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161Weight: 0.50 Volume: 50 Percent Moisture: 15.79

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	13.1		241		237.50	95.9	1	1	ICPST	11/29/00	18:22	11/29/00	18:30

Comments: Lot #: C0K220253 Sample #: 1

Version 4 10.2

U Result is less than the MDL

Form 5A Equivalent

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DQCKKD
 Original Sample ID: DQCKK Client ID: DF/24-A/0326/SDC/006SD
 Matrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161
 Weight: 0.50 Volume: 50 Percent Moisture: 15.79

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	13.1		236		237.50	94.0	1	1	ICPST	11/29/00	18:22	11/29/00	18:34

Comments: Lot #: C0K220253 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

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Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DQCKKD

Matrix Spike Sample ID: DQCKKS Client ID: DF/24-A/0326/SDC/006SD

Matrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161

Weight: 0.50 Volume: 50 Percent Moisture: 15.79

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	241		236		2.0 %	1	1	ICPST	11/29/00	18:30	11/29/00	18:34

Comments: Lot #. C0K220253 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: DQD5ACMatrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161Weight: 0.50 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	200	100.0		80-120	1	ICPST	11/29/00	18:18

Comments: Lot #: C0K220253

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Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DQCKKPOriginal Sample ID: DQCKK Client ID: DF/24-A/0326/SDC/006Matrix: Soil Units: mg/kg Prep Date: 11/27/00 Prep Batch: 0332161Weight: 0.50 Volume: 50 Percent Moisture: 15.79

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	13.1		12.9			1	5	ICPST	11/29/00	18:22	11/29/00	18:26

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 9 Equivalent

B Result is between MDL and RL

E Serial dilution percent difference not within limits

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPSTUnits: ppb

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

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

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Metals Data Reporting Form

Preparation Log

Preparation Batch: 0332161 Instrument: ICP Matrix: Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DQD5AB	11/27/00	0.50	50	NA
DQD5AC	11/27/00	0.50	50	NA
DQCKK	11/27/00	0.50	50	15.79
DQCKKD	11/27/00	0.50	50	15.79
DQCKKS	11/27/00	0.50	50	15.79
DQCLC	11/27/00	0.50	50	8.70
DQCLE	11/27/00	0.50	50	9.40

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPSTChart Number: T01129C.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		11/29/00	15:41
STD6		11/29/00	15:45
STD7		11/29/00	15:49
ICV3-1		11/29/00	15:53
ICB1		11/29/00	15:57
ICSA		11/29/00	16:01
ICSAB		11/29/00	16:06
ZZZZZZ		11/29/00	16:12
ZZZZZZ		11/29/00	16:16
ZZZZZZ		11/29/00	16:20
ZZZZZZ		11/29/00	16:25
ZZZZZZ		11/29/00	16:29
ZZZZZZ		11/29/00	16:34
ZZZZZZ		11/29/00	16:38
ZZZZZZ		11/29/00	16:42
CCV3-1		11/29/00	16:46
CCB1		11/29/00	16:50
ZZZZZZ		11/29/00	16:59
ZZZZZZ		11/29/00	17:03
ZZZZZZ		11/29/00	17:07
ZZZZZZ		11/29/00	17:11
ZZZZZZ		11/29/00	17:15
ZZZZZZ		11/29/00	17:20
CCV3-2		11/29/00	17:24
CCB2		11/29/00	17:28
ZZZZZZ		11/29/00	17:32
ZZZZZZ		11/29/00	17:36
ZZZZZZ		11/29/00	17:40
ZZZZZZ		11/29/00	17:44
ZZZZZZ		11/29/00	17:49
ZZZZZZ		11/29/00	17:53
ZZZZZZ		11/29/00	17:57
ZZZZZZ		11/29/00	18:01
CCV3-3		11/29/00	18:05
CCB3		11/29/00	18:09
DQD5AB		11/29/00	18:14
DQD5AC		11/29/00	18:18
DQCKK	DF/24-A/0326/SDC/006	11/29/00	18:22
DQCKKP	DF/24-A/0326/SDC/006	11/29/00	18:26

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPSTChart Number: T01129C.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
DQCKKS	DF/24-A/0326/SDC/006S	11/29/00	18:30
DQCKKD	DF/24-A/0326/SDC/006SD	11/29/00	18:34
DQCLC	DF/24-A/0326/SDC/007	11/29/00	18:39
DQCLE	DF/24-A/0326/SDC/008	11/29/00	18:43
CCV3-4		11/29/00	18:47
CCB4		11/29/00	18:51

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METALS
RAW DATA

Sample Name *PinkVgylid 113000* AS

1	STD1	-.01096
2	STD6	4.92854
3	STD7	
4	ICV3-1 0057-160-8	.25719
5	ICB1	-.00031
6	ICSA 0057-146-2	.00264
7	ICSAB 0057-151-1	1.0458
8	DP6K2B Pb Rerun	.00169
9	DN1EP/50 Pb	.01395
10	DN1ET/50 Pb	.01604
11	DPDV1	.10840
12	DNDV4	.14693
13	DPDVN/5 Fe	.12341
14	DN1K5/5 Fe	.00522
15	DPDWA	.19384
16	CCV3-1 0057-157-12	.52220
17	CCB1	.00102
18	DPDWE	.05487
19	DPDWK	.05103
20	DP6K4B	-.00016
21	DP6K4C	2.1223
22	DP6K4L	2.0805
23	DPDWR	.00110
24	CCV3-2	.51920
25	CCB2	.00063
26	DQD43B	-.00077
27	DQD43C	1.9675
28	DQCD1	.00669
29	DQCD1P5	.00082
30	DQCD1S	1.8915
31	DQCD1D	1.9087
32	DQCEM	.02038
33	DQ9MA	.02417
34	CCV3-3	.51796
35	CCB3	-.00008
36	DQD5AB	-.00031
37	DQD5AC	2.0002
38	DQCKK	.11047
39	DQCKKP5	.02175
40	DQCKKS	2.0290
41	DQCKKD	1.9902
42	DQCLC	.12583
43	DQCLE	.11659
44	CCV3-4	.51401
45	CCB4	.00062

PB 113000

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T01129C	METTRA	11/29/00	15:41		X	IR
2	STD6	T01129C	METTRA	11/29/00	15:45		X	IR
3	STD7	T01129C	METTRA	11/29/00	15:49		X	IR
4	ICV3-1 0057-160-8	T01129C	METTRA	11/29/00	15:53	RJG	S	CONC
5	ICB1	T01129C	METTRA	11/29/00	15:57	RJG	S	CONC
6	ICSA 0057-146-2	T01129C	METTRA	11/29/00	16:01	RJG	Q	CONC
7	ICSAB 0057-151-1	T01129C	METTRA	11/29/00	16:06	RJG	Q	CONC
8	DP6K2B Pb Rerun	T01129C	METTRA	11/29/00	16:12	RJG	S	CONC
9	DN1EP/50 Pb	T01129C	METTRA	11/29/00	16:16	RJG	S	CONC
10	DN1ET/50 Pb	T01129C	METTRA	11/29/00	16:20	RJG	S	CONC
11	DPDV1	T01129C	METTRA	11/29/00	16:25	RJG	S	CONC
12	DNDV4	T01129C	METTRA	11/29/00	16:29	RJG	S	CONC
13	DPDVN/5 Fe	T01129C	METTRA	11/29/00	16:34	RJG	S	CONC
14	DN1K5/5 Fe	T01129C	METTRA	11/29/00	16:38	RJG	S	CONC
15	DPDWA	T01129C	METTRA	11/29/00	16:42	RJG	S	CONC
16	CCV3-1 0057-157-12	T01129C	METTRA	11/29/00	16:46	RJG	S	CONC
17	CCB1	T01129C	METTRA	11/29/00	16:50	RJG	S	CONC
18	DPDWE	T01129C	METTRA	11/29/00	16:59	RJG	S	CONC
19	DPDWK	T01129C	METTRA	11/29/00	17:03	RJG	S	CONC
20	DP6K4B	T01129C	METTRA	11/29/00	17:07	RJG	S	CONC
21	DP6K4C	T01129C	METTRA	11/29/00	17:11	RJG	S	CONC
22	DP6K4L	T01129C	METTRA	11/29/00	17:15	RJG	S	CONC
23	DPDWR	T01129C	METTRA	11/29/00	17:20	RJG	S	CONC
24	CCV3-2	T01129C	METTRA	11/29/00	17:24	RJG	S	CONC
25	CCB2	T01129C	METTRA	11/29/00	17:28	RJG	S	CONC
26	DQD43B	T01129C	METTRA	11/29/00	17:32	RJG	S	CONC
27	DQD43C	T01129C	METTRA	11/29/00	17:36	RJG	S	CONC
28	DQCD1	T01129C	METTRA	11/29/00	17:40	RJG	S	CONC
29	DQCD1P5	T01129C	METTRA	11/29/00	17:44	RJG	S	CONC
30	DQCD1S	T01129C	METTRA	11/29/00	17:49	RJG	S	CONC
31	DQCD1D	T01129C	METTRA	11/29/00	17:53	RJG	S	CONC
32	DQCEM	T01129C	METTRA	11/29/00	17:57	RJG	S	CONC
33	DQ9MA	T01129C	METTRA	11/29/00	18:01	RJG	S	CONC
34	CCV3-3	T01129C	METTRA	11/29/00	18:05	RJG	S	CONC
35	CCB3	T01129C	METTRA	11/29/00	18:09	RJG	S	CONC
36	DQD5AB	T01129C	METTRA	11/29/00	18:14	RJG	S	CONC
37	DQD5AC	T01129C	METTRA	11/29/00	18:18	RJG	S	CONC
38	DQCKK	T01129C	METTRA	11/29/00	18:22	RJG	S	CONC
39	DQCKKP5	T01129C	METTRA	11/29/00	18:26	RJG	S	CONC
40	DQCKKS	T01129C	METTRA	11/29/00	18:30	RJG	S	CONC
41	DQCKKD	T01129C	METTRA	11/29/00	18:34	RJG	S	CONC
42	DQCLC	T01129C	METTRA	11/29/00	18:39	RJG	S	CONC
43	DQCLE	T01129C	METTRA	11/29/00	18:43	RJG	S	CONC
44	CCV3-4	T01129C	METTRA	11/29/00	18:47	RJG	S	CONC
45	CCB4	T01129C	METTRA	11/29/00	18:51	RJG	S	CONC

Method: METTRA Standard: STD1
Run Time: 11/29/00 15:41:34

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	-.00070	.10111	-.01097	.00067	-.03072	.00362	.00213
SDev	.00238	.00028	.00207	.00005	.00032	.00006	.00401
%RSD	340.69	.27357	18.847	7.1768	1.0273	1.6401	187.97
#1	.00099	.10091	-.01243	.00063	-.03049	.00366	.00496
#2	-.00239	.10131	-.00951	.00070	-.03094	.00358	-.00070
Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00095	.00285	.00248	-.00095	.00014	.00095	.00134
SDev	.00015	.00204	.00003	.00124	.00020	.00005	.00000
%RSD	15.450	71.782	1.2701	130.91	141.42	5.5046	.26714
#1	-.00085	.00430	.00250	-.00007	.00028	.00099	.00134
#2	-.00105	.00140	.00246	-.00182	.00000	.00091	.00133
Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00025	.05080	.00427	-.00423	.01533	-.10757	.06415
SDev	.00005	.01142	.01470	.01972	.00432	.00245	.00797
%RSD	19.941	22.477	344.43	466.63	28.152	2.2740	12.431
#1	.00021	.05887	-.00613	.00972	.01838	-.10584	.06979
#2	.00028	.04272	.01466	-.01817	.01228	-.10930	.05851
Elem	TL	V	ZN				
Avge	-.03378	.00011	.00051				
SDev	.00282	.00005	.00002				
%RSD	8.3601	47.378	4.6098				
#1	-.03577	.00014	.00049				
#2	-.03178	.00007	.00053				

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14227	--	--	--	--	--	--
SDev	38.00699	--	--	--	--	--	--
%RSD	.2671455	--	--	--	--	--	--
#1	14200	--	--	--	--	--	--
#2	14254	--	--	--	--	--	--

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Method: METTRA Standard: STD6
Run Time: 11/29/00 15:45:48

0057.1277

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	8.8658	4.9285	11.265	4.5782	6.1855	7.7849	4.3200
SDev	.0311	.0170	.067	.0486	.0769	.0737	.0458
%RSD	.35103	.34424	.59392	1.0615	1.2438	.94719	1.0595

#1	8.8878	4.9405	11.312	4.6125	6.2399	7.8371	4.3524
#2	8.8438	4.9166	11.218	4.5438	6.1310	7.7328	4.2877

Elem	SE/1	SE/2	TL
Avge	4.3138	3.3348	3.1072
SDev	.0454	.0177	.0241
%RSD	1.0532	.53095	.77434

#1	4.3459	3.3473	3.1242
#2	4.2817	3.3223	3.0901

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14559	--	--	--	--	--	--
SDev	115.4704	--	--	--	--	--	--
%RSD	.7930986	--	--	--	--	--	--

#1	14478	--	--	--	--	--	--
#2	14641	--	--	--	--	--	--

Method: METTRA Standard: STD7
Run Time: 11/29/00 15:49:59

0057.1218

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Elem	AL	BA	BE	CA	CO	CR	CU
Avge	5.6643	12.157	9.9530	4.2987	2.4783	9.9333	2.8417
SDev	.0030	.036	.0181	.0077	.0064	.0242	.0017
%RSD	.05220	.29297	.18194	.17873	.25734	.24391	.05875

#1	5.6664	12.182	9.9402	4.2933	2.4738	9.9161	2.8429
#2	5.6622	12.132	9.9658	4.3041	2.4828	9.9504	2.8406

Elem	FE	MG	MN	MO	NI	V	ZN
Avge	3.1531	12.019	8.1493	2.1759	1.9023	.74374	2.2039
SDev	.0074	.017	.0149	.0097	.0003	.00108	.0012
%RSD	.23399	.13968	.18340	.44348	.01644	.14575	.05630

#1	3.1479	12.007	8.1388	2.1691	1.9021	.74297	2.2030
#2	3.1584	12.031	8.1599	2.1827	1.9025	.74450	2.2048

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14041	--	--	--	--	--	--
SDev	88.91868	--	--	--	--	--	--
%RSD	.6332641	--	--	--	--	--	--

#1	14104	--	--	--	--	--	--
#2	13978	--	--	--	--	--	--

Method: METTRA

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.225569	.000158	11/29/00 03:49:59
AL	308.215	STD7	STD1	9.00203	-.910192	11/29/00 03:49:59
AS	189.042	STD6	STD1	.202449	.002220	11/29/00 03:49:59
BA	493.409	STD7	STD1	.329045	-.000220	11/29/00 03:49:59
BE	313.042	STD7	STD1	.397388	.012206	11/29/00 03:49:59
CA	317.933	STD7	STD1	23.2825	-.084281	11/29/00 03:49:59
CD	226.502	STD6	STD1	.088786	-.000189	11/29/00 03:49:59
CO	228.616	STD7	STD1	1.61341	.001531	11/29/00 03:49:59
CR	267.716	STD7	STD1	.402743	-.001148	11/29/00 03:49:59
CU	324.753	STD7	STD1	1.40882	-.003491	11/29/00 03:49:59
FE	271.441	STD7	STD1	15.9561	.015114	11/29/00 03:49:59
MG	279.078	STD7	STD1	8.32040	-.001172	11/29/00 03:49:59
MN	257.610	STD7	STD1	.490894	-.000466	11/29/00 03:49:59
MO	202.030	STD7	STD1	1.83945	-.002457	11/29/00 03:49:59
NI	231.604	STD7	STD1	2.10147	-.000517	11/29/00 03:49:59
PB/1	220.351	STD6	STD1	.220879	-.011220	11/29/00 03:49:59
PB/2	220.352	STD6	STD1	.161781	-.000690	11/29/00 03:49:59
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.128384	.000543	11/29/00 03:49:59
SB/2	206.832	STD6	STD1	.232304	-.003561	11/29/00 03:49:59
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.226175	.024330	11/29/00 03:49:59
SE/2	196.022	STD6	STD1	.305747	-.019613	11/29/00 03:49:59
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.636752	.021508	11/29/00 03:49:59
V	292.402	STD7	STD1	5.35606	-.000565	11/29/00 03:49:59
ZN	213.856	STD7	STD1	1.82771	-.000931	11/29/00 03:49:59

Analysis Report

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Method: METTRA Sample Name: ICV3-1 0057-160-8 Operator: RJG
Run Time: 11/29/00 15:53:40
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	.51404	11.814	.25720	.99366	.99689	24.952	.25279
SDev	.00489	.091	.00330	.01164	.01018	.274	.00250
%RSD	.95106	.76855	1.2826	1.1715	1.0208	1.0979	.98733
#1	.51750	11.878	.25953	1.0019	1.0041	25.145	.25455
#2	.51058	11.750	.25487	.98542	.98970	24.758	.25102
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	13.750	.27500	1.1000	1.1000	27.500	.27500
Low	.45000	11.250	.22500	.90000	.90000	22.500	.22500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0144	1.0140	.95959	12.441	24.106	.99267	1.0149
SDev	.0083	.0107	.01026	.120	.244	.00981	.0080
%RSD	.81883	1.0567	1.0687	.96351	1.0109	.98844	.78423
#1	1.0203	1.0216	.96684	12.526	24.279	.99961	1.0205
#2	1.0085	1.0064	.95234	12.356	23.934	.98573	1.0093
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	13.750	27.500	1.1000	1.1000
Low	.90000	.90000	.90000	11.250	22.500	.90000	.90000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0046	.25363	.25407	.25392	.25819	.26063	.25981
SDev	.0140	.00093	.00221	.00178	.00415	.00204	.00275
%RSD	1.3959	.36621	.87084	.70298	1.6083	.78463	1.0572
#1	1.0146	.25428	.25564	.25519	.26112	.26207	.26176
#2	.99473	.25297	.25251	.25266	.25525	.25918	.25787
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	.25927	.26295	.26172	.52352	.99681	1.0297	
SDev	.00099	.00085	.00089	.00104	.00763	.0113	
%RSD	.38175	.32227	.34189	.19895	.76571	1.0967	
#1	.25997	.26354	.26235	.52279	1.0022	1.0377	
#2	.25857	.26235	.26109	.52426	.99141	1.0217	
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	14397	--	--	--	--	--	--
SDev	106.2428	--	--	--	--	--	--
%RSD	.7379317	--	--	--	--	--	--
#1	14322	--	--	--	--	--	--
#2	14472	--	--	--	--	--	--

Analysis Report

11/29/00 04:01:55 PM

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Method: METTRA Sample Name: ICB1

Operator: RJG

Run Time: 11/29/00 15:57:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00006	-.00880	-.00032	.00052	.00052	.02491	.00002
SDev	.00003	.00964	.00095	.00008	.00014	.00258	.00011
%RSD	41.641	109.50	300.13	14.504	27.114	10.356	567.17
#1	-.00008	-.00199	-.00099	.00047	.00042	.02309	.00010
#2	-.00004	-.01561	.00036	.00058	.00062	.02674	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00065	.00035	.00040	.03176	.00695	.00056	.00405
SDev	.00030	.00047	.00028	.00598	.00314	.00008	.00058
%RSD	45.354	132.80	68.565	18.836	45.212	13.826	14.222
#1	.00044	.00068	.00021	.02753	.00473	.00051	.00446
#2	.00086	.00002	.00060	.03599	.00918	.00062	.00365
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00030	-.00131	.00127	.00041	.00315	-.00134	.00016
SDev	.00053	.00311	.00090	.00164	.00365	.00191	.00006
%RSD	179.66	238.26	71.362	399.79	115.82	142.73	35.522
#1	.00068	.00089	.00191	.00157	.00057	.00001	.00020
#2	-.00008	-.00350	.00063	-.00075	.00573	-.00268	.00012
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	-.00228	.00223	.00073	.00334	.00001	.00111	
SDev	.00083	.00001	.00027	.00237	.00026	.00015	
%RSD	36.412	.45638	37.008	71.014	4335.8	13.070	
#1	-.00287	.00224	.00054	.00502	-.00018	.00101	
#2	-.00169	.00222	.00092	.00166	.00019	.00121	
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	14283	--	--	--	--	--	--
SDev	265.5897	--	--	--	--	--	--
%RSD	1.859540	--	--	--	--	--	--
#1	14095	--	--	--	--	--	--
#2	14470	--	--	--	--	--	--

Method: METTRA

Sample Name: ICSA 0057-146-2

Operator: RJG

Run Time: 11/29/00 16:01:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00028	522.99	.00264	.00165	-.00064	481.43	.00172
SDev	.00036	.08	.00074	.00002	.00001	.48	.00022
%RSD	127.03	.01608	28.145	1.1538	.90938	.10055	12.791
#1	-.00054	523.05	.00317	.00166	-.00064	481.77	.00156
#2	-.00003	522.93	.00212	.00164	-.00064	481.09	.00187
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value		500.00				500.00	
Range		20.000				20.000	
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00029	.00087	-.00129	202.62	527.55	.00759	-.00156
SDev	.00039	.00011	.00034	.10	.76	.00011	.00049
%RSD	135.05	12.125	26.038	.04869	.14363	1.4638	31.417
#1	.00056	.00080	-.00153	202.69	528.08	.00767	-.00190
#2	.00001	.00095	-.00105	202.55	527.01	.00751	-.00121
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK	NOCHECK
Value				200.00	500.00		
Range				20.000	20.000		
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00289	-.02089	.01417	.00249	.00166	.00304	.00258
SDev	.00145	.00450	.00207	.00012	.00040	.00119	.00066
%RSD	50.314	21.537	14.606	4.7138	24.055	38.990	25.495
#1	.00186	-.02407	.01563	.00241	.00194	.00220	.00212
#2	.00391	-.01770	.01270	.00258	.00138	.00388	.00305
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00007	.00064	.00045	.00040	.01536	.00155	
SDev	.00242	.00434	.00209	.00015	.00058	.00018	
%RSD	3363.2	674.66	460.60	38.987	3.7775	11.367	
#1	.00179	-.00242	-.00102	.00029	.01495	.00143	
#2	-.00164	.00371	.00193	.00050	.01577	.00168	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value							
Range							

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Analysis Report

QC Standard

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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	13280	--	--	--	--	--	--
SDev	10.85450	--	--	--	--	--	--
%RSD	.0817359	--	--	--	--	--	--
#1	13272	--	--	--	--	--	--
#2	13288	--	--	--	--	--	--

Method: METTRA Sample Name: ICSAB 0057-151-1 Operator: RJG
 Run Time: 11/29/00 16:06:09
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACE ICP
 Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1114	523.25	1.0458	.52233	.49744	481.49	.94274
SDev	.0020	1.61	.0033	.00086	.00012	.20	.00122
%RSD	.18114	.30763	.31453	.16477	.02427	.04067	.12942
#1	1.1100	522.12	1.0481	.52172	.49735	481.35	.94360
#2	1.1128	524.39	1.0435	.52294	.49752	481.63	.94187
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	.50000	.50000	500.00	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49501	.50230	.53995	202.86	526.01	.50960	.98994
SDev	.00052	.00108	.00148	.58	.96	.00097	.00011
%RSD	.10443	.21517	.27510	.28453	.18156	.18991	.01069
#1	.49537	.50154	.53890	202.45	525.34	.50891	.98987
#2	.49464	.50306	.54100	203.27	526.69	.51028	.99002
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	.50000	.50000	200.00	500.00	.50000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97393	1.0049	1.0046	1.0047	1.0501	1.0851	1.0735
SDev	.00202	.0061	.0063	.0063	.0125	.0054	.0078
%RSD	.20713	.61020	.62954	.62310	1.1920	.50212	.72684
#1	.97536	1.0005	1.0002	1.0003	1.0413	1.0813	1.0680
#2	.97251	1.0092	1.0091	1.0091	1.0590	1.0890	1.0790
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	1.0523	1.0539	1.0534	1.0877	.52608	1.0465	
SDev	.0065	.0040	.0005	.0047	.00122	.0005	
%RSD	.62067	.37532	.04401	.43134	.23287	.04332	
#1	1.0476	1.0567	1.0537	1.0844	.52521	1.0462	
#2	1.0569	1.0511	1.0531	1.0910	.52694	1.0468	
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	

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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	13273	--	--	--	--	--	--
SDev	38.11333	--	--	--	--	--	--
%RSD	.2871450	--	--	--	--	--	--
#1	13300	--	--	--	--	--	--
#2	13246	--	--	--	--	--	--

Analysis Report

11/29/00 04:16:42 PM

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Method: METTRA Sample Name: DP6K2B Pb Rerun Operator: RJG
 Run Time: 11/29/00 16:12:36
 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	-.00004	.03070	.00170	.00033	-.00010	.04640	.00012
SDev	.00007	.01240	.00082	.00001	.00006	.00500	.00019
%RSD	187.67	40.384	48.206	1.8656	60.256	10.775	160.45
#1	.00001	.03947	.00228	.00034	-.00014	.04993	-.00002
#2	-.00008	.02193	.00112	.00033	-.00006	.04286	.00026
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00060	.00081	.00059	.04999	.03546	.00050	.00215
SDev	.00022	.00002	.00054	.00280	.00924	.00009	.00061
%RSD	36.670	2.3095	92.084	5.5948	26.069	17.071	28.367
#1	-.00045	.00080	.00098	.05197	.04200	.00056	.00258
#2	-.00076	.00082	.00021	.04802	.02892	.00044	.00172
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00099	.00866	.00865	H.00865	.00069	-.00100	-.00044
SDev	.00023	.00171	.00077	.00108	.00072	.00098	.00041
%RSD	23.271	19.773	8.9022	12.527	105.14	97.910	94.107
#1	.00115	.00988	.00919	H.00942	.00018	-.00031	-.00015
#2	.00082	.00745	.00810	H.00789	.00120	-.00169	-.00072
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	-.00383	.00513	.00214	-.00507	-.00017	-.00052	
SDev	.00182	.00103	.00008	.00464	.00001	.00014	
%RSD	47.533	20.181	3.9063	91.547	3.1857	27.417	
#1	-.00254	.00440	.00209	-.00836	-.00016	-.00042	
#2	-.00512	.00586	.00220	-.00179	-.00017	-.00062	
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	13989	--	--	--	--	--	--
SDev	157.2601	--	--	--	--	--	--
%RSD	1.124182	--	--	--	--	--	--
#1	13878	--	--	--	--	--	--
#2	14100	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DN1EP/50 Pb

Operator: RJG

Run Time: 11/29/00 16:16:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00155	1.4300	.01396	.00871	.00036	17.762	.00387
SDev	.00048	.0156	.00058	.00007	.00003	.172	.00006
%RSD	31.261	1.0929	4.1795	.79146	7.9527	.96631	1.6130
#1	.00189	1.4410	.01437	.00867	.00034	17.883	.00391
#2	.00120	1.4189	.01355	.00876	.00038	17.641	.00383
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	.00280	.02196	.02685	46.627	2.2759	.56417	.01025
SDev	.00037	.00032	.00031	.299	.0201	.00457	.00069
%RSD	13.310	1.4686	1.1537	.64041	.88361	.81024	6.7185
#1	.00306	.02219	.02707	46.838	2.2901	.56740	.01074
#2	.00254	.02173	.02663	46.416	2.2617	.56094	.00976
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	.00952	2.4352	2.3998	2.4116	.00271	-.00088	.00032
SDev	.00061	.0211	.0222	.0218	.00092	.00214	.00112
%RSD	6.4194	.86817	.92385	.90513	33.856	243.27	354.76
#1	.00909	2.4501	2.4155	2.4270	.00336	-.00239	-.00048
#2	.00996	2.4202	2.3842	2.3962	.00206	.00063	.00111
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	.05119	.05778	.05558	.00617	.00921	.15344	
SDev	.00067	.00228	.00130	.00044	.00347	.00147	
%RSD	1.3079	3.9415	2.3317	7.1672	37.660	.95779	
#1	.05072	.05939	.05650	.00586	.01166	.15448	
#2	.05166	.05617	.05467	.00649	.00675	.15240	
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	14335	--	--	--	--	--	--
SDev	162.7761	--	--	--	--	--	--
%RSD	1.135495	--	--	--	--	--	--
#1	14220	--	--	--	--	--	--
#2	14450	--	--	--	--	--	--

Method: METTRA Sample Name: DN1ET/50 Pb Operator: RJG
 Run Time: 11/29/00 16:20:55
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00389	1.8243	.01604	.01345	.00027	16.586	.00815
SDev	.00030	.0011	.00022	.00013	.00018	.024	.00014
%RSD	7.7938	.06172	1.3960	.94638	69.548	.14758	1.6892
#1	.00368	1.8251	.01588	.01336	.00040	16.568	.00805
#2	.00411	1.8235	.01620	.01354	.00013	16.603	.00825
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	.00266	.02084	.07872	48.929	2.5158	.57101	.00761
SDev	.00008	.00043	.00041	.185	.0047	.00169	.00095
%RSD	3.1485	2.0778	.52639	.37755	.18641	.29584	12.430
#1	.00260	.02054	.07843	48.798	2.5125	.56981	.00694
#2	.00272	.02115	.07901	49.059	2.5191	.57220	.00828
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01018	3.3016	3.2553	3.2707	.00120	.00112	.00114
SDev	.00049	.0050	.0264	.0160	.00051	.00042	.00011
%RSD	4.7723	.15117	.81217	.48835	42.655	37.218	9.3460
#1	.01052	3.3051	3.2366	3.2595	.00156	.00082	.00107
#2	.00983	3.2981	3.2740	3.2820	.00084	.00141	.00122
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	.01647	.01995	.01879	.00305	.01482	.26903	
SDev	.00225	.00082	.00021	.00076	.00074	.00013	
%RSD	13.673	4.0912	1.0940	24.974	4.9846	.04860	
#1	.01488	.02053	.01865	.00251	.01534	.26894	
#2	.01807	.01938	.01894	.00359	.01430	.26912	
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	14250	--	--	--	--	--	--
SDev	47.58815	--	--	--	--	--	--
%RSD	.3339636	--	--	--	--	--	--
#1	14283	--	--	--	--	--	--
#2	14216	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DPDV1

Operator: RJG

Run Time: 11/29/00 16:25:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00249	237.99	.10840	1.7551	.03645	H1206.9	.00425
SDev	.00002	3.57	.00061	.0140	.00014	6.7	.00004
%RSD	.67235	1.4995	.56338	.79965	.37503	.55447	1.0373
#1	.00248	235.47	.10797	1.7452	.03635	H1202.1	.00422
#2	.00250	240.52	.10883	1.7651	.03655	H1211.6	.00428
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	.01690	.04075	.02816	218.68	54.026	H28.382	-.00417
SDev	.00104	.00010	.00104	2.46	.490	.256	.00081
%RSD	6.1830	.25320	3.7047	1.1263	.90697	.90241	19.350
#1	.01616	.04068	.02742	216.93	53.679	H28.201	-.00360
#2	.01764	.04083	.02890	220.42	54.372	H28.563	-.00475
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	.00990	.15637	.16219	.16025	.00679	.00460	.00533
SDev	.00011	.00470	.00032	.00178	.00411	.00367	.00108
%RSD	1.0679	3.0090	.19782	1.1113	60.625	79.786	20.259
#1	.00998	.15970	.16242	.16151	.00388	.00720	.00610
#2	.00983	.15304	.16196	.15899	.00970	.00201	.00457
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	.04454	.00512	.01825	L-.01733	.07758	.29571	
SDev	.00515	.00226	.00021	.00086	.00081	.00220	
%RSD	11.573	44.160	1.1418	4.9824	1.0506	.74403	
#1	.04819	.00352	.01840	L-.01794	.07816	.29415	
#2	.04090	.00672	.01810	L-.01672	.07701	.29726	
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	16057	--	--	--	--	--	--
SDev	21.53154	--	--	--	--	--	--
%RSD	.1340975	--	--	--	--	--	--
#1	16041	--	--	--	--	--	--
#2	16072	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DNDV4

Operator: RJG

Run Time: 11/29/00 16:29:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00145	65.640	.14693	.53810	.00843	282.86	.00389
SDev	.00067	.240	.00140	.00093	.00007	1.15	.00023
%RSD	46.444	.36578	.95325	.17294	.88575	.40481	5.8168
#1	.00193	65.470	.14594	.53744	.00837	283.67	.00373
#2	.00097	65.810	.14792	.53876	.00848	282.05	.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	.02746	.09800	.08806	369.48	21.529	9.5793	.00266
SDev	.00041	.00152	.00044	.69	.044	.0234	.00083
%RSD	1.4909	1.5453	.50435	.18681	.20563	.24480	31.238
#1	.02775	.09908	.08837	369.97	21.560	9.5959	.00324
#2	.02717	.09693	.08775	369.00	21.497	9.5627	.00207
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06005	.56902	.55094	.55696	.00792	.01284	.01120
SDev	.00091	.00229	.00224	.00226	.00406	.00039	.00161
%RSD	1.5098	.40256	.40698	.40548	51.240	3.0040	14.360
#1	.05941	.57064	.55253	.55856	.00505	.01257	.01006
#2	.06069	.56740	.54936	.55537	.01079	.01311	.01234
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	.00056	-.00062	-.00023	-.00109	.13677	.60002	
SDev	.00229	.00254	.00093	.00031	.00107	.00281	
%RSD	407.46	407.90	408.26	28.983	.78501	.46857	
#1	.00218	-.00242	-.00089	-.00086	.13753	.60201	
#2	-.00106	.00117	.00043	-.00131	.13601	.59803	
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	14577	--	--	--	--	--	--
SDev	76.15554	--	--	--	--	--	--
%RSD	.5224435	--	--	--	--	--	--
#1	14523	--	--	--	--	--	--
#2	14631	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DPDVN/5 Fe Operator: RJG
Run Time: 11/29/00 16:34:01
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	20.567	.12341	.17141	.00371	117.84	.00331
SDev	.00001	.093	.00039	.00019	.00006	.25	.00048
%RSD	1.5252	.45068	.31427	.11277	1.5260	.21305	14.513
#1	.00055	20.501	.12368	.17128	.00375	118.02	.00297
#2	.00056	20.632	.12314	.17155	.00367	117.67	.00365
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	.01546	.03627	.03629	444.41	5.6006	6.1752	-.00470
SDev	.00013	.00008	.00037	.12	.0002	.0089	.00119
%RSD	.83785	.23017	1.0087	.02602	.00390	.14332	25.317
#1	.01555	.03633	.03603	444.49	5.6005	6.1815	-.00554
#2	.01536	.03621	.03655	444.32	5.6008	6.1690	-.00386
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01752	.17188	.16071	.16443	.00466	.01119	.00902
SDev	.00063	.00072	.00264	.00200	.00150	.00075	.00000
%RSD	3.6096	.42185	1.6410	1.2166	32.245	6.7005	.00373
#1	.01797	.17239	.16257	.16584	.00572	.01066	.00902
#2	.01708	.17137	.15884	.16301	.00359	.01172	.00902
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	.00036	-.00177	-.00106	.00907	.07636	.32468	
SDev	.00342	.00647	.00545	.00800	.00219	.00132	
%RSD	947.72	365.21	514.01	88.246	2.8650	.40549	
#1	-.00206	-.00635	-.00492	.01473	.07791	.32561	
#2	.00278	.00280	.00280	.00341	.07481	.32375	
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	14396	--	--	--	--	--	--
SDev	92.91341	--	--	--	--	--	--
%RSD	.6453956	--	--	--	--	--	--
#1	14331	--	--	--	--	--	--
#2	14462	--	--	--	--	--	--

Method: METTRA Sample Name: DN1K5/5 Fe

Operator: RJG

Run Time: 11/29/00 16:38:10

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	.00465	13.071	.00523	.06587	.00241	464.70	.00255
SDev	.00048	.123	.00043	.00041	.00006	.41	.00016
%RSD	10.258	.94249	8.1549	.61728	2.5500	.08902	6.4215
#1	.00499	12.984	.00493	.06558	.00246	464.41	.00243
#2	.00432	13.158	.00553	.06615	.00237	464.99	.00267
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	.01045	1.3768	.08113	230.09	51.832	H41.623	.08510
SDev	.00043	.0022	.00050	1.01	.146	.126	.00058
%RSD	4.1290	.15886	.61096	.43988	.28078	.30383	.68097
#1	.01075	1.3753	.08078	229.37	51.729	H41.533	.08469
#2	.01014	1.3784	.08148	230.81	51.935	H41.712	.08551
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	.07832	.11823	.10971	.11255	.00365	.00482	.00443
SDev	.00167	.00187	.00077	.00011	.00136	.00081	.00100
%RSD	2.1252	1.5836	.70667	.09450	37.333	16.913	22.510
#1	.07714	.11691	.11026	.11247	.00268	.00424	.00372
#2	.07950	.11955	.10916	.11262	.00461	.00540	.00513
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	.02005	-.01266	-.00176	L-.02954	.95505	.10626	
SDev	.00099	.00206	.00104	.00504	.00406	.00028	
%RSD	4.9547	16.275	59.123	17.063	.42492	.26387	
#1	.01935	-.01120	-.00103	L-.02597	.95219	.10646	
#2	.02075	-.01411	-.00250	L-.03310	.95792	.10606	
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	13981	--	--	--	--	--	--
SDev	100.5859	--	--	--	--	--	--
%RSD	.7194435	--	--	--	--	--	--
#1	13910	--	--	--	--	--	--
#2	14052	--	--	--	--	--	--

Method: METTRA Sample Name: DPDWA

Operator: RJG

Run Time: 11/29/00 16:42:19

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00331	276.95	.19385	2.4356	.04179	H1362.2	.00199
SDev	.00024	1.82	.00065	.0084	.00013	.5	.00017
%RSD	7.3884	.65721	.33455	.34389	.31478	.03915	8.7151
#1	.00348	275.66	.19339	2.4297	.04169	H1361.8	.00187
#2	.00313	278.24	.19430	2.4416	.04188	H1362.5	.00211
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	.01555	.06555	.02333	219.48	98.138	H41.787	-.00457
SDev	.00032	.00040	.00037	.76	.282	.095	.00032
%RSD	2.0666	.60431	1.5895	.34718	.28747	.22789	7.0724
#1	.01532	.06583	.02307	218.94	97.939	H41.719	-.00480
#2	.01577	.06527	.02359	220.02	98.338	H41.854	-.00434
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	.01277	.04912	.06302	.05839	.00795	.00652	.00699
SDev	.00003	.00688	.00045	.00199	.00518	.00167	.00061
%RSD	.27567	14.013	.71861	3.4076	65.186	25.557	8.7859
#1	.01274	.05398	.06270	.05980	.00428	.00769	.00656
#2	.01279	.04425	.06334	.05699	.01161	.00534	.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	.05069	.00430	.01975	L-.02546	.12696	.26686	
SDev	.00915	.01080	.00416	.00849	.00064	.00044	
%RSD	18.049	251.10	21.059	33.343	.50723	.16644	
#1	.05716	-.00334	.01681	L-.03147	.12742	.26654	
#2	.04422	.01194	.02269	L-.01946	.12650	.26717	
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	16546	--	--	--	--	--	--
SDev	68.37805	--	--	--	--	--	--
%RSD	.4132616	--	--	--	--	--	--
#1	16498	--	--	--	--	--	--
#2	16594	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: CCV3-1 0057-157-12 Operator: RJG
 Run Time: 11/29/00 16:46:28
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0435	24.189	.52220	1.9964	2.0282	51.188	.50426
SDev	.0171	.415	.00814	.0445	.0338	.613	.00803
%RSD	1.6370	1.7155	1.5592	2.2288	1.6650	1.1979	1.5929
#1	1.0556	24.483	.52796	2.0279	2.0520	51.621	.50994
#2	1.0315	23.896	.51645	1.9650	2.0043	50.754	.49858
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0362	2.0248	1.9575	25.294	49.253	2.0150	2.0352
SDev	.0277	.0320	.0375	.333	.801	.0253	.0228
%RSD	1.3627	1.5793	1.9170	1.3157	1.6257	1.2555	1.1195
#1	2.0558	2.0474	1.9840	25.529	49.819	2.0329	2.0513
#2	2.0165	2.0021	1.9309	25.059	48.687	1.9971	2.0191
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0296	.51517	.51235	.51329	.51653	.52254	.52054
SDev	.0402	.00389	.00077	.00181	.00324	.00546	.00257
%RSD	1.9812	.75555	.15120	.35319	.62637	1.0453	.49291
#1	2.0580	.51792	.51290	.51457	.51424	.52640	.52235
#2	2.0012	.51241	.51181	.51201	.51882	.51867	.51872
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	.52238	.52746	.52577	1.0575	2.0037	2.0534	
SDev	.00168	.00324	.00160	.0146	.0408	.0330	
%RSD	.32124	.61360	.30431	1.3769	2.0357	1.6079	
#1	.52357	.52517	.52464	1.0678	2.0325	2.0767	
#2	.52120	.52975	.52690	1.0472	1.9748	2.0300	
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	14165	--	--	--	--	--	--
SDev	89.44900	--	--	--	--	--	--
%RSD	.6314590	--	--	--	--	--	--
#1	14102	--	--	--	--	--	--
#2	14229	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: CCB1

Operator: RJG

Run Time: 11/29/00 16:50:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00058	.01549	.00102	.00076	.00080	.12522	.00018
SDev	.00021	.01205	.00092	.00006	.00007	.06620	.00015
%RSD	36.653	77.753	89.816	7.1402	8.3405	52.862	83.733
#1	.00073	.00698	.00167	.00080	.00085	.07842	.00029
#2	.00043	.02401	.00037	.00073	.00076	.17203	.00007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00057	.00051	.00055	.04916	.02009	.00466	.00501
SDev	.00032	.00071	.00027	.01670	.00046	.00196	.00002
%RSD	56.423	138.59	48.726	33.963	2.3069	42.011	.36141
#1	.00080	.00102	.00074	.03735	.01976	.00327	.00500
#2	.00034	.00001	.00036	.06097	.02041	.00604	.00502
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	.00089	-.00030	.00010	.00007	.00143	.00097
SDev	.00062	.00081	.00057	.00011	.00038	.00025	.00029
%RSD	170.26	90.897	193.37	111.76	562.65	17.296	29.894
#1	.00081	.00146	-.00070	.00002	.00034	.00160	.00118
#2	-.00007	.00032	.00011	.00018	-.00020	.00125	.00077
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	.00220	.00051	.00107	.00236	.00020	.00002	
SDev	.00405	.00196	.00265	.00250	.00001	.00009	
%RSD	183.98	387.81	248.18	105.91	3.7298	432.10	
#1	.00506	.00189	.00295	.00412	.00020	.00008	
#2	-.00066	-.00088	-.00081	.00059	.00021	-.00004	
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	14286	--	--	--	--	--	--
SDev	34.64823	--	--	--	--	--	--
%RSD	.2425370	--	--	--	--	--	--
#1	14310	--	--	--	--	--	--
#2	14261	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DPDWE* Operator: RJG
 Run Time: 11/29/00 16:59:13
 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
Avge	-.00036	13.745	.05487	.08474	.00175	40.135	.00222
SDev	.00044	.043	.00159	.00018	.00003	.225	.00027
%RSD	122.30	.31240	2.8945	.21580	1.5549	.56055	12.385
#1	-.00005	13.714	.05375	.08487	.00173	40.295	.00202
#2	-.00067	13.775	.05599	.08461	.00177	39.976	.00241
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	.02392	.04146	.10140	79.656	11.631	.85132	.00536
SDev	.00058	.00035	.00071	.184	.045	.00310	.00026
%RSD	2.4171	.85115	.70243	.23133	.38593	.36437	4.8095
#1	.02433	.04171	.10191	79.786	11.663	.85351	.00517
#2	.02351	.04121	.10090	79.526	11.599	.84913	.00554
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05842	.38643	.38159	.38320	.00198	.00151	.00167
SDev	.00214	.00069	.00823	.00526	.00401	.00319	.00346
%RSD	3.6555	.17762	2.1562	1.3725	202.30	210.89	207.49
#1	.05993	.38595	.38740	.38692	.00482	.00377	.00412
#2	.05691	.38692	.37577	.37948	-.00085	-.00074	-.00078
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	-.00609	.00726	.00281	-.00058	.07232	.56142	
SDev	.00042	.00018	.00002	.00003	.00041	.00517	
%RSD	6.8395	2.5120	.60734	5.3538	.56926	.91999	
#1	-.00580	.00713	.00283	-.00061	.07261	.56507	
#2	-.00639	.00739	.00280	-.00056	.07203	.55777	
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	14359	--	--	--	--	--	--
SDev	192.4746	--	--	--	--	--	--
%RSD	1.340488	--	--	--	--	--	--
#1	14222	--	--	--	--	--	--
#2	14495	--	--	--	--	--	--

Method: METTRA Sample Name: DPDWK

Operator: RJG

Run Time: 11/29/00 17:03:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP 675 511

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00370	257.49	.05103	1.6453	.03750	H1335.0	.00190
SDev	.00049	.32	.00003	.0060	.00018	11.6	.00006
%RSD	13.368	.12287	.05850	.36587	.47763	.86804	3.4200
#1	.00405	257.72	.05106	1.6496	.03763	H1343.2	.00195
#2	.00335	257.27	.05101	1.6410	.03738	H1326.8	.00186
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	.01293	.03784	.01386	88.539	73.316	H38.748	-.00449
SDev	.00018	.00082	.00025	.347	.418	.244	.00023
%RSD	1.4256	2.1714	1.8173	.39136	.57040	.62888	5.0755
#1	.01280	.03842	.01404	88.784	73.611	H38.920	-.00432
#2	.01306	.03725	.01368	88.294	73.020	H38.576	-.00465
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	.00341	.03607	.05058	.04575	.00864	.00199	.00421
SDev	.00088	.00659	.00007	.00215	.00014	.00274	.00178
%RSD	25.800	18.271	.12982	4.7015	1.6233	137.61	42.398
#1	.00403	.04073	.05054	.04727	.00854	.00393	.00547
#2	.00279	.03141	.05063	.04423	.00874	.00005	.00295
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	.03876	.00139	.01383	L-.02217	.07781	.08475	
SDev	.00194	.00002	.00063	.00498	.00318	.00038	
%RSD	5.0184	1.5202	4.5812	22.438	4.0912	.45095	
#1	.03738	.00140	.01338	L-.02569	.08006	.08502	
#2	.04014	.00137	.01428	L-.01866	.07556	.08448	
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	15854	--	--	--	--	--	--
SDev	144.0371	--	--	--	--	--	--
%RSD	.9084963	--	--	--	--	--	--
#1	15753	--	--	--	--	--	--
#2	15956	--	--	--	--	--	--

Method: METTRA Sample Name: DP6K4B

Operator: RJG

Run Time: 11/29/00 17:07:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP 675 513

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00017	.03898	-.00017	.00023	.00024	.34863	-.00005
SDev	.00064	.01655	.00045	.00014	.00008	.15657	.00002
%RSD	376.29	42.451	266.30	58.379	32.452	44.909	49.931
#1	.00028	.02728	.00015	.00014	.00029	.23792	-.00007
#2	-.00063	.05069	-.00049	.00033	.00018	.45934	-.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00021	.00002	-.00030	.05122	.01129	.00820	.00088
SDev	.00071	.00062	.00050	.03059	.00118	.00357	.00035
%RSD	336.17	3368.8	167.06	59.722	10.442	43.528	39.848
#1	.00029	.00046	.00005	.02959	.01046	.00568	.00063
#2	-.00071	-.00042	-.00065	.07285	.01213	.01072	.00112
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00110	.00150	.00220	.00197	.00125	-.00229	-.00111
SDev	.00186	.00227	.00176	.00193	.00093	.00115	.00046
%RSD	169.44	151.72	80.049	98.205	74.153	50.252	41.350
#1	.00022	.00310	.00345	H.00334	.00059	-.00148	-.00079
#2	-.00242	-.00011	.00096	.00060	.00190	-.00311	-.00144
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00566	.00442	.00106	-.00321	-.00055	.00162	
SDev	.00041	.00226	.00137	.00410	.00105	.00000	
%RSD	7.3104	51.135	129.03	127.91	191.66	.27273	
#1	-.00596	.00602	.00203	-.00611	.00019	.00162	
#2	-.00537	.00282	.00009	-.00031	-.00128	.00161	
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	14349	--	--	--	--	--	--
SDev	58.61943	--	--	--	--	--	--
%RSD	.4085262	--	--	--	--	--	--
#1	14308	--	--	--	--	--	--
#2	14390	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DP6K4C

Operator: RJG

Run Time: 11/29/00 17:11:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05353	2.1092	2.1223	2.0432	.05122	51.255	.05045
SDev	.00012	.0216	.0059	.0025	.00017	.028	.00014
%RSD	.22839	1.0224	.27746	.12360	.34070	.05422	.27864
#1	.05344	2.0940	2.1265	2.0414	.05134	51.236	.05035
#2	.05361	2.1245	2.1182	2.0449	.05110	51.275	.05055
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51955	.20865	.25114	.94442	50.025	.51143	1.0304
SDev	.00081	.00077	.00086	.01017	.016	.00176	.0011
%RSD	.15562	.36722	.34141	1.0773	.03158	.34491	.10971
#1	.52012	.20919	.25053	.93723	50.036	.51018	1.0296
#2	.51897	.20811	.25174	.95162	50.014	.51267	1.0312
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51410	.53345	.52049	.52481	.50782	.52923	.52210
SDev	.00140	.00755	.00043	.00223	.00308	.00049	.00135
%RSD	.27233	1.4160	.08211	.42497	.60705	.09164	.25858
#1	.51509	.53879	.52019	.52638	.50999	.52957	.52305
#2	.51311	.52810	.52080	.52323	.50564	.52888	.52114
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0941	2.1016	2.0991	2.2094	.51473	.53269	
SDev	.0091	.0050	.0064	.0011	.00120	.00138	
%RSD	.43678	.23993	.30533	.05093	.23261	.25897	
#1	2.1006	2.1052	2.1037	2.2102	.51558	.53367	
#2	2.0877	2.0981	2.0946	2.2086	.51388	.53172	
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	14129	--	--	--	--	--	--
SDev	99.13582	--	--	--	--	--	--
%RSD	.7016255	--	--	--	--	--	--
#1	14059	--	--	--	--	--	--
#2	14200	--	--	--	--	--	--

Analysis Report

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11/29/00 05:19:58 PM page 1

Method: METTRA Sample Name: DP6K4L Operator: RJG
Run Time: 11/29/00 17:15:52
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05314	2.0525	2.0805	1.9980	.05011	50.102	.04983
SDev	.00008	.0083	.0018	.0063	.00002	.063	.00035
%RSD	.15886	.40334	.08448	.31648	.03202	.12634	.71077

#1	.05320	2.0466	2.0793	1.9935	.05012	50.057	.05008
#2	.05308	2.0583	2.0818	2.0025	.05010	50.146	.04958

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50940	.20451	.24572	.90295	48.948	.49940	1.0125
SDev	.00039	.00056	.00000	.00273	.064	.00119	.0048
%RSD	.07653	.27421	.00152	.30243	.13177	.23757	.47251

#1	.50912	.20490	.24572	.90488	48.903	.49856	1.0091
#2	.50967	.20411	.24573	.90102	48.994	.50024	1.0159

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50503	.52288	.51344	.51658	.49863	.51612	.51030
SDev	.00021	.00236	.00294	.00275	.00434	.00173	.00260
%RSD	.04207	.45143	.57250	.53169	.87009	.33461	.50885

#1	.50518	.52455	.51551	.51852	.50170	.51734	.51213
#2	.50488	.52121	.51136	.51464	.49557	.51490	.50846

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0506	2.0681	2.0623	2.1607	.50248	.52116
SDev	.0120	.0101	.0107	.0057	.00160	.00096
%RSD	.58341	.48698	.51892	.26246	.31881	.18360

#1	2.0591	2.0753	2.0699	2.1647	.50361	.52183
#2	2.0421	2.0610	2.0547	2.1567	.50135	.52048

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	14175	--	--	--	--	--	--
SDev	67.74138	--	--	--	--	--	--
%RSD	.4778950	--	--	--	--	--	--
#1	14127	--	--	--	--	--	--
#2	14223	--	--	--	--	--	--

Method: METTRA Sample Name: DPDWR

Operator: RJG

Run Time: 11/29/00 17:20:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00013	.00998	.00110	.00069	.00019	.03753	-.00015
SDev	.00025	.00297	.00064	.00029	.00006	.01501	.00017
%RSD	195.39	29.784	57.745	42.416	30.051	39.991	110.07

#1	-.00005	.00788	.00065	.00049	.00023	.02692	-.00027
#2	.00030	.01208	.00155	.00090	.00015	.04815	-.00003

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00014	.00020	.00019	.03528	.01665	.00084	.00297
SDev	.00004	.00074	.00087	.00634	.00702	.00044	.00037
%RSD	28.255	377.78	448.68	17.974	42.170	51.953	12.337

#1	.00011	-.00033	-.00042	.03977	.01168	.00053	.00323
#2	.00017	.00072	.00081	.03080	.02161	.00115	.00271

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00044	.00490	.00295	.00360	.00069	-.00239	-.00136
SDev	.00136	.00082	.00042	.00055	.00010	.00306	.00201
%RSD	306.60	16.709	14.165	15.319	14.214	128.17	147.38

#1	-.00052	.00432	.00265	.00321	.00076	-.00455	-.00278
#2	.00140	.00548	.00324	.00399	.00062	-.00022	.00006

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	-.00497	.00113	-.00090	.00074	-.00018	.00063
SDev	.00249	.00078	.00135	.00193	.00000	.00013
%RSD	50.021	69.092	149.33	260.86	1.2604	20.420

#1	-.00322	.00168	.00005	-.00063	-.00018	.00054
#2	-.00673	.00058	-.00186	.00211	-.00018	.00073

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	14239	--	--	--	--	--	--
SDev	2.439656	--	--	--	--	--	--
%RSD	.0171333	--	--	--	--	--	--
#1	14238	--	--	--	--	--	--
#2	14241	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-2

Operator: RJG

Run Time: 11/29/00 17:24:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

675 521

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0322	23.810	.51920	1.9714	2.0037	50.045	.49887
SDev	.0040	.068	.00422	.0151	.0114	.263	.00116
%RSD	.39128	.28623	.81269	.76376	.56926	.52466	.23335
#1	1.0351	23.859	.52219	1.9820	2.0118	50.230	.49969
#2	1.0294	23.762	.51622	1.9607	1.9956	49.859	.49804
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0127	2.0017	1.9343	24.790	48.730	1.9843	2.0131
SDev	.0061	.0092	.0084	.091	.206	.0087	.0015
%RSD	.30313	.45772	.43234	.36829	.42327	.44044	.07538
#1	2.0170	2.0081	1.9402	24.855	48.876	1.9905	2.0141
#2	2.0084	1.9952	1.9284	24.726	48.585	1.9781	2.0120
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9965	.51421	.50959	.51113	.51605	.52031	.51889
SDev	.0108	.00566	.00498	.00521	.00466	.00048	.00123
%RSD	.53948	1.1006	.97750	1.0187	.90363	.09172	.23792
#1	2.0041	.51020	.50607	.50745	.51275	.52064	.51802
#2	1.9889	.51821	.51312	.51481	.51935	.51997	.51976
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	.52518	.52577	.52557	1.0402	1.9817	2.0269	
SDev	.00385	.01450	.01095	.0007	.0117	.0077	
%RSD	.73349	2.7574	2.0839	.07067	.59028	.37877	
#1	.52246	.51552	.51783	1.0408	1.9899	2.0324	
#2	.52791	.53602	.53332	1.0397	1.9734	2.0215	
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	14222	--	--	--	--	--	--
SDev	11.87926	--	--	--	--	--	--
%RSD	.0835264	--	--	--	--	--	--
#1	14231	--	--	--	--	--	--
#2	14214	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2

Operator: RJG

Run Time: 11/29/00 17:28:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP 675 523

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00029	.01523	.00063	.00089	.00084	.01000	-.00001
SDev	.00008	.00375	.00030	.00034	.00023	.01361	.00004
%RSD	27.174	24.592	47.878	38.438	27.846	136.09	273.90
#1	.00035	.01788	.00085	.00065	.00067	.00038	-.00004
#2	.00024	.01258	.00042	.00113	.00100	.01963	.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00093	.00038	.00074	.03032	.01685	.00077	.00591
SDev	.00037	.00026	.00044	.01353	.00535	.00032	.00152
%RSD	39.618	66.873	59.716	44.625	31.772	40.818	25.652
#1	.00067	.00020	.00043	.02075	.01307	.00055	.00699
#2	.00119	.00056	.00105	.03989	.02064	.00099	.00484
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00112	-.00004	-.00009	-.00007	.00277	-.00141	-.00002
SDev	.00084	.00008	.00118	.00076	.00080	.00092	.00034
%RSD	74.475	190.52	1312.8	1017.5	28.855	64.806	1640.3
#1	.00053	.00002	-.00093	-.00061	.00220	-.00077	.00022
#2	.00172	-.00010	.00075	.00046	.00333	-.00206	-.00026
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	-.00247	.00693	.00380	.00074	.00002	-.00016	
SDev	.00400	.00414	.00409	.00023	.00027	.00027	
%RSD	162.10	59.767	107.71	30.554	1732.3	163.92	
#1	-.00529	.00400	.00091	.00090	-.00018	-.00035	
#2	.00036	.00986	H.00669	.00058	.00021	.00003	
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	14071	--	--	--	--	--	--
SDev	63.74526	--	--	--	--	--	--
%RSD	.4530282	--	--	--	--	--	--
#1	14026	--	--	--	--	--	--
#2	14116	--	--	--	--	--	--

Method: METTRA Sample Name: DQD43B

Operator: RJG

Run Time: 11/29/00 17:32:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

675 525

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00050	.00483	-.00078	.00040	.00046	.00962	.00016
SDev	.00011	.01222	.00048	.00001	.00018	.00093	.00017
%RSD	21.446	253.13	61.234	2.6049	38.106	9.6755	105.32
#1	-.00042	.01347	-.00044	.00039	.00034	.01028	.00004
#2	-.00057	-.00381	-.00112	.00040	.00059	.00896	.00027
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00010	.00119	-.00000	.03490	.00029	.00051	.00197
SDev	.00023	.00026	.00039	.00576	.00207	.00011	.00004
%RSD	217.52	22.261	10254.	16.515	713.61	21.270	2.2284
#1	.00027	.00138	-.00028	.03897	-.00117	.00058	.00200
#2	-.00006	.00100	.00027	.03082	.00175	.00043	.00194
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00105	.00478	.00670	H.00606	.00259	-.00138	-.00006
SDev	.00012	.00356	.00123	.00201	.00032	.00049	.00044
%RSD	11.558	74.377	18.382	33.081	12.470	35.608	763.07
#1	.00113	.00729	.00758	H.00748	.00236	-.00173	-.00036
#2	.00096	.00227	.00583	H.00465	.00282	-.00103	.00025
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	-.00810	.00538	.00089	-.00245	-.00055	.00006	
SDev	.00633	.00507	.00549	.00320	.00000	.00015	
%RSD	78.169	94.295	615.59	130.65	.35564	235.80	
#1	-.01257	.00179	-.00299	-.00471	-.00055	.00016	
#2	-.00362	.00897	.00478	-.00019	-.00055	-.00004	
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	14133	--	--	--	--	--	--
SDev	140.1128	--	--	--	--	--	--
%RSD	.9913542	--	--	--	--	--	--
#1	14034	--	--	--	--	--	--
#2	14233	--	--	--	--	--	--

Method: METTRA Sample Name: DQD43C

Operator: RJG

Run Time: 11/29/00 17:36:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

675 527

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04900	1.7539	1.9675	1.9082	.04914	L.01875	.04866
SDev	.00020	.0070	.0063	.0079	.00034	.00169	.00000
%RSD	.41044	.39981	.31930	.41317	.69690	9.0348	.00244
#1	.04886	1.7588	1.9720	1.9138	.04938	L.01755	.04866
#2	.04914	1.7489	1.9631	1.9026	.04889	L.01994	.04866
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49672	.19743	.23365	.98677	L.00299	.48245	L.00102
SDev	.00153	.00047	.00084	.00492	.00171	.00157	.00007
%RSD	.30736	.23925	.35760	.49906	57.052	.32455	6.9116
#1	.49780	.19777	.23424	.98329	L.00420	.48356	L.00097
#2	.49564	.19710	.23306	.99025	L.00178	.48135	L.00107
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	.49401	.49680	.49135	.49316	.00094	.00079	L.00084
SDev	.00177	.00653	.00156	.00113	.00151	.00019	.00063
%RSD	.35851	1.3143	.31754	.22986	160.60	23.997	74.865
#1	.49527	.50142	.49024	.49397	-.00013	.00066	L.00040
#2	.49276	.49219	.49245	.49236	.00201	.00093	L.00129
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	1.9102	1.9094	1.9097	1.9728	.47650	.49738	
SDev	.0112	.0055	.0001	.0066	.00141	.00263	
%RSD	.58729	.28665	.00445	.33217	.29676	.52884	
#1	1.9181	1.9056	1.9097	1.9775	.47750	.49924	
#2	1.9023	1.9133	1.9096	1.9682	.47550	.49552	
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	14010	--	--	--	--	--	--
SDev	89.27223	--	--	--	--	--	--
%RSD	.6371934	--	--	--	--	--	--
#1	13947	--	--	--	--	--	--
#2	14073	--	--	--	--	--	--

Method: METTRA Sample Name: DQCD1

Operator: RJG

Run Time: 11/29/00 17:40:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP 675 529

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00033	30.986	.00670	.01563	.00081	.55363	.00027
SDev	.00034	.232	.00028	.00011	.00016	.00434	.00029
%RSD	101.77	.74939	4.1458	.71311	19.945	.78316	106.08
#1	.00009	31.150	.00689	.01571	.00092	.55670	.00007
#2	.00057	30.822	.00650	.01555	.00069	.55057	.00048
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	.00208	.11596	.04329	14.000	.19664	.06171	.03761
SDev	.00012	.00088	.00019	.073	.00067	.00033	.00004
%RSD	5.8268	.75901	.43253	.52462	.34283	.53019	.10791
#1	.00199	.11658	.04316	14.052	.19711	.06194	.03759
#2	.00216	.11533	.04343	13.948	.19616	.06148	.03764
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.35294	.00595	.00371	.00446	.00469	.00196	.00287
SDev	.00162	.00107	.00035	.00012	.00137	.00001	.00046
%RSD	.45873	18.052	9.4652	2.7704	29.223	.56059	16.157
#1	.35409	.00519	.00396	.00437	.00372	.00195	.00254
#2	.35180	.00671	.00346	.00454	.00566	.00197	.00320
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.03166	.03610	.03462	.00311	.00992	.02981	
SDev	.00046	.00051	.00049	.00124	.00051	.00016	
%RSD	1.4393	1.4073	1.4171	39.783	5.0980	.55221	
#1	.03134	.03574	.03428	.00223	.00957	.02993	
#2	.03198	.03646	.03497	.00398	.01028	.02970	
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	14070	--	--	--	--	--	--
SDev	18.20800	--	--	--	--	--	--
%RSD	.1294098	--	--	--	--	--	--
#1	14057	--	--	--	--	--	--
#2	14083	--	--	--	--	--	--

Method: METTRA Sample Name: DQCD1P5

Operator: RJG

Run Time: 11/29/00 17:44:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

675 531

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00032	5.7573	.00083	.00321	.00054	.09704	.00005
SDev	.00029	.0049	.00140	.00012	.00003	.00050	.00018
%RSD	91.505	.08472	169.24	3.7775	5.9519	.51217	349.98
#1	-.00011	5.7608	.00181	.00312	.00051	.09739	.00018
#2	-.00052	5.7539	-.00016	.00329	.00056	.09668	-.00008
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00054	.02274	.00862	2.7226	.03502	.01231	.00677
SDev	.00004	.00023	.00003	.0272	.00093	.00011	.00007
%RSD	7.9122	1.0299	.38512	.99961	2.6405	.90239	.97424
#1	.00051	.02258	.00864	2.7418	.03568	.01223	.00672
#2	.00057	.02291	.00859	2.7033	.03437	.01239	.00682
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06789	.00249	.00129	.00169	-.00050	.00084	.00039
SDev	.00106	.00398	.00241	.00028	.00212	.00000	.00071
%RSD	1.5666	159.98	186.87	16.742	421.17	.21094	180.72
#1	.06714	-.00033	.00299	.00189	.00100	.00084	.00089
#2	.06864	.00530	-.00041	.00149	-.00200	.00084	-.00011
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00497	.01103	.00901	-.00179	.00149	.00626	
SDev	.00122	.00097	.00105	.00720	.00001	.00007	
%RSD	24.554	8.8011	11.693	402.46	.82995	1.0673	
#1	.00411	.01034	.00827	.00330	.00150	.00621	
#2	.00583	.01172	.00976	-.00688	.00148	.00631	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14253	--	--	--	--	--	--
SDev	39.06765	--	--	--	--	--	--
%RSD	.2740950	--	--	--	--	--	--
#1	14226	--	--	--	--	--	--
#2	14281	--	--	--	--	--	--

Method: METTRA Sample Name: DQCD1S

Operator: RJG

Run Time: 11/29/00 17:49:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP 675 533

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04667	32.661	1.8915	1.8574	.04876	.49688	.04644
SDev	.00087	.094	.0084	.0013	.00015	.00069	.00001
%RSD	1.8564	.28779	.44324	.06897	.30593	.13932	.01032
#1	.04729	32.594	1.8974	1.8565	.04886	.49737	.04645
#2	.04606	32.727	1.8855	1.8583	.04865	.49639	.04644
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	.48059	.28211	.26912	14.297	.17152	.52973	.03604
SDev	.00011	.00084	.00016	.002	.00254	.00035	.00047
%RSD	.02371	.29905	.06092	.01373	1.4819	.06655	1.3106
#1	.48067	.28271	.26900	14.298	.17332	.52998	.03638
#2	.48051	.28152	.26923	14.295	.16972	.52948	.03571
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.77687	.47922	.46943	.47269	.00376	.00354	.00361
SDev	.00349	.01016	.00015	.00328	.00101	.00087	.00025
%RSD	.44942	2.1201	.03286	.69396	26.749	24.717	6.8766
#1	.77934	.48641	.46932	.47501	.00305	.00415	.00378
#2	.77440	.47204	.46954	.47037	.00447	.00292	.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	
Avge	1.9013	1.9021	1.9018	1.2278	.46098	.51134	
SDev	.0165	.0035	.0079	.0091	.00236	.00112	
%RSD	.86657	.18646	.41288	.74013	.51168	.21830	
#1	1.9129	1.9046	1.9074	1.2213	.46265	.51213	
#2	1.8896	1.8996	1.8963	1.2342	.45931	.51055	
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	14262	--	--	--	--	--	--
SDev	73.64476	--	--	--	--	--	--
%RSD	.5163641	--	--	--	--	--	--
#1	14210	--	--	--	--	--	--
#2	14314	--	--	--	--	--	--

Method: METTRA Sample Name: DQCD1D

Operator: RJG

Run Time: 11/29/00 17:53:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

675 535

Modé: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04684	40.931	1.9087	1.8649	.04919	.52484	.04696
SDev	.00001	.021	.0027	.0024	.00013	.00112	.00035
%RSD	.01685	.05192	.14113	.12764	.25752	.21327	.73987
#1	.04685	40.916	1.9106	1.8666	.04928	.52563	.04721
#2	.04684	40.946	1.9068	1.8632	.04910	.52405	.04672
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	.48391	.27887	.28228	13.050	.18052	.53495	.03476
SDev	.00009	.00002	.00059	.015	.00115	.00057	.00098
%RSD	.01870	.00641	.20790	.11751	.63971	.10696	2.8073
#1	.48397	.27889	.28187	13.039	.18134	.53535	.03545
#2	.48385	.27886	.28270	13.061	.17970	.53454	.03407
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.75855	.48181	.47341	.47621	.00418	.00161	.00246
SDev	.00160	.00005	.00137	.00090	.00308	.00173	.00013
%RSD	.21114	.00961	.28912	.18847	73.748	107.52	5.1710
#1	.75968	.48184	.47244	.47557	.00636	.00039	.00237
#2	.75742	.48178	.47438	.47684	.00200	.00283	.00255
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	1.9189	1.9331	1.9284	1.1907	.46724	.51337	
SDev	.0001	.0086	.0057	.0024	.00085	.00009	
%RSD	.00351	.44397	.29569	.20472	.18111	.01797	
#1	1.9190	1.9271	1.9244	1.1890	.46784	.51344	
#2	1.9189	1.9392	1.9324	1.1924	.46664	.51331	
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	14334	--	--	--	--	--	--
SDev	26.33973	--	--	--	--	--	--
%RSD	.1837618	--	--	--	--	--	--
#1	14315	--	--	--	--	--	--
#2	14352	--	--	--	--	--	--

Method: METTRA Sample Name: DQCEM

Operator: RJG

Run Time: 11/29/00 17:57:25

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP 675 537

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00021	47.728	.02038	.95840	.00510	23.696	-.00004
SDev	.00021	.032	.00172	.00130	.00003	.020	.00032
%RSD	100.04	.06646	8.4310	.13620	.68848	.08447	895.49
#1	.00006	47.706	.01917	.95932	.00512	23.711	-.00027
#2	.00036	47.751	.02160	.95748	.00507	23.682	.00019
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	.03685	.09182	.25695	39.711	4.8799	1.2297	.04447
SDev	.00005	.00002	.00081	.018	.0003	.0004	.00047
%RSD	.13364	.02214	.31720	.04468	.00649	.03513	1.0538
#1	.03688	.09184	.25752	39.724	4.8797	1.2300	.04414
#2	.03681	.09181	.25637	39.699	4.8802	1.2294	.04481
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.27632	.00611	.00447	.00502	.00917	.00656	.00743
SDev	.00279	.00056	.00094	.00044	.00189	.00175	.00180
%RSD	1.0109	9.2115	21.029	8.7687	20.670	26.631	24.182
#1	.27830	.00571	.00514	.00533	.00783	.00533	.00616
#2	.27435	.00651	.00381	.00471	.01051	.00780	.00870
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	.00650	.00762	.00724	.00241	.13834	.03915	
SDev	.00209	.00176	.00048	.00078	.00073	.00006	
%RSD	32.231	23.138	6.6005	32.568	.52941	.15966	
#1	.00502	.00886	.00758	.00186	.13885	.03920	
#2	.00798	.00637	.00690	.00297	.13782	.03911	
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	14208	--	--	--	--	--	--
SDev	52.11322	--	--	--	--	--	--
%RSD	.3667891	--	--	--	--	--	--
#1	14171	--	--	--	--	--	--
#2	14245	--	--	--	--	--	--

Method: METTRA Sample Name: DQ9MA

Operator: RJG

Run Time: 11/29/00 18:01:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	29.513	.02418	.58738	.01021	14.400	-.00008
SDev	.00070	.054	.00145	.00230	.00016	.014	.00013
%RSD	203.30	.18205	6.0114	.39109	1.5450	.09797	168.61

#1	.00084	29.475	.02315	.58575	.01010	14.390	.00001
#2	-.00015	29.551	.02521	.58900	.01032	14.410	-.00017

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	.04107	.04339	.16726	19.654	2.6536	.46240	.01626
SDev	.00023	.00024	.00024	.056	.0035	.00058	.00068
%RSD	.55149	.55350	.14628	.28634	.13362	.12448	4.1547

#1	.04123	.04356	.16709	19.614	2.6511	.46200	.01673
#2	.04091	.04322	.16744	19.693	2.6561	.46281	.01578

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	.10317	.00108	.00075	.00086	.00409	-.00119	.00057
SDev	.00053	.00218	.00160	.00034	.00340	.00135	.00023
%RSD	.51156	202.09	212.74	39.276	83.002	113.76	40.172

#1	.10279	.00262	-.00038	.00062	.00169	-.00023	.00041
#2	.10354	-.00046	.00188	.00110	.00649	-.00214	.00073

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	.01489	.00653	.00931	.00416	.06210	.05285
SDev	.00056	.00261	.00155	.00152	.00040	.00003
%RSD	3.7923	39.988	16.685	36.466	.63588	.06386

#1	.01449	.00838	.01041	.00523	.06238	.05287
#2	.01529	.00468	.00822	.00308	.06182	.05283

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	14597	--	--	--	--	--	--
SDev	40.34031	--	--	--	--	--	--
%RSD	.2763550	--	--	--	--	--	--
#1	14569	--	--	--	--	--	--
#2	14626	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3

Operator: RJG

Run Time: 11/29/00 18:05:44

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	1.0348	23.864	.51796	1.9775	1.9998	49.927	.49728
SDev	.0007	.089	.00043	.0049	.0070	.199	.00190
%RSD	.06332	.37300	.08226	.24569	.34868	.39844	.38201
#1	1.0344	23.801	.51827	1.9740	1.9948	49.787	.49594
#2	1.0353	23.927	.51766	1.9809	2.0047	50.068	.49862
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0121	2.0009	1.9406	24.795	48.867	1.9889	2.0148
SDev	.0082	.0056	.0041	.141	.191	.0065	.0131
%RSD	.40645	.28229	.21285	.56725	.39185	.32705	.65186
#1	2.0063	1.9969	1.9377	24.695	48.732	1.9843	2.0056
#2	2.0178	2.0049	1.9435	24.894	49.002	1.9935	2.0241
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9956	.50990	.50843	.50892	.51667	.52249	.52055
SDev	.0104	.00169	.00181	.00064	.00513	.00107	.00099
%RSD	.52110	.33170	.35568	.12634	.99237	.20463	.19100
#1	1.9883	.51110	.50715	.50846	.52030	.52173	.52125
#2	2.0030	.50870	.50971	.50937	.51305	.52324	.51985
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	.52531	.52980	.52831	1.0475	1.9778	2.0305	
SDev	.00823	.00263	.00099	.0094	.0068	.0066	
%RSD	1.5674	.49672	.18674	.89954	.34568	.32441	
#1	.51949	.53166	.52761	1.0408	1.9729	2.0258	
#2	.53113	.52794	.52900	1.0542	1.9826	2.0351	
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	14166	--	--	--	--	--	--
SDev	14.21257	--	--	--	--	--	--
%RSD	.1003291	--	--	--	--	--	--
#1	14176	--	--	--	--	--	--
#2	14156	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3

Operator: RJG

Run Time: 11/29/00 18:09:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00021	.01808	-.00008	.00072	.00095	-.00277	.00033
SDev	.00056	.00154	.00034	.00017	.00010	.00352	.00017
%RSD	274.12	8.4984	411.89	24.135	10.312	126.99	51.237
#1	-.00019	.01917	.00016	.00059	.00088	-.00526	.00021
#2	.00060	.01700	-.00032	.00084	.00102	-.00028	.00045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00082	.00039	-.00005	.02520	.01148	.00059	.00522
SDev	.00004	.00040	.00021	.01117	.00708	.00022	.00110
%RSD	4.9101	103.23	400.67	44.326	61.644	37.304	21.109
#1	.00079	.00011	-.00020	.03310	.00648	.00044	.00600
#2	.00085	.00068	.00010	.01730	.01649	.00075	.00444
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00082	-.00111	.00009	-.00031	.00152	-.00097	-.00014
SDev	.00042	.00377	.00484	.00197	.00309	.00100	.00036
%RSD	51.225	338.41	5230.7	637.33	202.42	103.17	267.41
#1	.00052	-.00378	.00351	.00108	.00371	-.00167	.00012
#2	.00112	.00155	-.00333	-.00170	-.00066	-.00026	-.00039
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	.00040	.00335	.00237	.00203	.00039	-.00036	
SDev	.00535	.00014	.00169	.00074	.00026	.00027	
%RSD	1338.1	4.0224	71.543	36.334	67.668	76.624	
#1	-.00339	.00344	.00117	.00255	.00020	-.00055	
#2	.00419	.00325	.00356	.00151	.00058	-.00016	
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	14139	--	--	--	--	--	--
SDev	4.101772	--	--	--	--	--	--
%RSD	.0290104	--	--	--	--	--	--
#1	14142	--	--	--	--	--	--
#2	14136	--	--	--	--	--	--

Method: METTRA Sample Name: DQD5AB

Operator: RJG

Run Time: 11/29/00 18:14:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00040	.02722	-.00031	.00041	.00044	.03300	-.00013
SDev	.00063	.00709	.00166	.00009	.00004	.00217	.00018
%RSD	156.94	26.044	530.06	22.516	8.2171	6.5722	137.26

#1	.00004	.03223	.00086	.00048	.00041	.03147	-.00000
#2	-.00085	.02221	-.00149	.00035	.00046	.03454	-.00025

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00036	.00087	.00011	.05247	-.00117	.00061	.00118
SDev	.00004	.00014	.00008	.00250	.00169	.00003	.00047
%RSD	12.432	16.147	71.700	4.7637	144.70	4.3852	40.049

#1	-.00039	.00077	.00016	.05423	.00003	.00063	.00152
#2	-.00032	.00097	.00005	.05070	-.00237	.00059	.00085

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00099	.00321	.00449	H.00406	.00285	-.00084	.00039
SDev	.00085	.00036	.00012	.00020	.00073	.00106	.00047
%RSD	85.768	11.162	2.6193	4.8674	25.824	127.03	119.49

#1	.00039	.00346	.00457	H.00420	.00337	-.00159	.00006
#2	.00160	.00296	.00440	H.00392	.00233	-.00009	.00072

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	-.00877	.00485	.00032	-.00605	-.00016	.00050
SDev	.00168	.00166	.00055	.00206	.00055	.00001
%RSD	19.154	34.233	173.78	34.038	339.00	1.3188

#1	-.00996	.00602	.00070	-.00459	.00023	.00051
#2	-.00758	.00368	-.00007	-.00750	-.00055	.00050

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	13896	--	--	--	--	--	--
SDev	23.75920	--	--	--	--	--	--
%RSD	.1709812	--	--	--	--	--	--
#1	13879	--	--	--	--	--	--
#2	13913	--	--	--	--	--	--

Method: METTRA Sample Name: DQD5AC

Operator: RJG

Run Time: 11/29/00 18:18:13

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	.04964	1.7790	2.0002	1.9439	.05027	L.03470	.04964
SDev	.00081	.0276	.0238	.0253	.00073	.00067	.00013
%RSD	1.6287	1.5521	1.1910	1.3033	1.4628	1.9153	.26861
#1	.05021	1.7985	2.0170	1.9618	.05079	L.03517	.04973
#2	.04907	1.7595	1.9833	1.9260	.04975	L.03423	.04954
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50268	.20048	.23730	1.0281	L-.00293	.49148	L.00074
SDev	.00511	.00181	.00233	.0086	.00333	.00531	.00011
%RSD	1.0160	.90479	.98395	.84000	113.52	1.0804	14.842
#1	.50629	.20177	.23895	1.0342	L-.00058	.49523	L.00082
#2	.49907	.19920	.23565	1.0219	L-.00529	.48772	L.00066
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
Avg	.50051	.49916	.49423	.49587	.00134	-.00022	L.00030
SDev	.00987	.00850	.00135	.00193	.00207	.00084	.00125
%RSD	1.9713	1.7036	.27300	.38958	155.02	383.23	419.67
#1	.50749	.50518	.49327	.49724	.00280	.00038	L.00118
#2	.49354	.49315	.49518	.49451	-.00013	-.00082	L-.00059
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	1.9244	1.9286	1.9272	2.0061	.48430	.50766	
SDev	.0110	.0116	.0114	.0112	.00567	.00523	
%RSD	.57327	.60327	.59330	.55895	1.1700	1.0310	
#1	1.9322	1.9369	1.9353	2.0140	.48831	.51136	
#2	1.9166	1.9204	1.9192	1.9981	.48030	.50396	
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	14089	--	--	--	--	--	--
SDev	78.70084	--	--	--	--	--	--
%RSD	.5585839	--	--	--	--	--	--
#1	14034	--	--	--	--	--	--
#2	14145	--	--	--	--	--	--

Method: METTRA Sample Name: DQCKK

Operator: RJG

Run Time: 11/29/00 18:22:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00038	130.23	.11047	1.0222	.00577	167.03	.00242
SDev	.00061	1.14	.00030	.0137	.00016	2.03	.00006
%RSD	159.99	.87221	.27275	1.3426	2.7898	1.2169	2.6673
#1	-.00081	131.04	.11068	1.0319	.00588	168.47	.00247
#2	.00005	129.43	.11026	1.0125	.00566	165.59	.00237
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	.06828	.18645	.19707	189.88	18.217	4.5363	.00832
SDev	.00024	.00163	.00208	1.80	.222	.0506	.00175
%RSD	.35844	.87446	1.0527	.95031	1.2168	1.1163	21.070
#1	.06845	.18760	.19854	191.16	18.374	4.5721	.00956
#2	.06811	.18530	.19560	188.60	18.060	4.5005	.00708
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	.13432	.31306	.30465	.30745	.00570	.00811	.00730
SDev	.00555	.00337	.00123	.00030	.00690	.00234	.00074
%RSD	4.1302	1.0751	.40422	.09740	121.01	28.831	10.091
#1	.13824	.31544	.30378	.30766	.00082	.00976	.00678
#2	.13039	.31068	.30552	.30723	.01057	.00645	.00783
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	.00431	.00676	.00594	.00788	.27757	.62013	
SDev	.00577	.00050	.00226	.00446	.00523	.00819	
%RSD	134.10	7.3999	37.969	56.560	1.8845	1.3201	
#1	.00839	.00711	.00754	.01103	.28126	.62592	
#2	.00022	.00640	.00435	.00473	.27387	.61434	
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	14527	--	--	--	--	--	--
SDev	189.9997	--	--	--	--	--	--
%RSD	1.307872	--	--	--	--	--	--
#1	14393	--	--	--	--	--	--
#2	14662	--	--	--	--	--	--

Method: METTRA Sample Name: DQCKKP5

Operator: RJG

Run Time: 11/29/00 18:26:32

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	-.00054	25.340	.02175	.20910	.00157	34.710	.00050
SDev	.00003	.080	.00137	.00010	.00001	.089	.00011
%RSD	5.7952	.31698	6.2783	.04796	.66177	.25538	21.661

#1	-.00057	25.284	.02272	.20917	.00157	34.773	.00042
#2	-.00052	25.397	.02079	.20902	.00156	34.648	.00057

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01434	.03839	.03802	38.942	3.6669	.93066	.00148
SDev	.00010	.00018	.00006	.009	.0109	.00132	.00121
%RSD	.71970	.46792	.15588	.02395	.29727	.14187	81.538

#1	.01426	.03852	.03798	38.949	3.6746	.93160	.00063
#2	.01441	.03826	.03806	38.935	3.6592	.92973	.00233

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02754	.06293	.06351	.06332	.00213	.00424	.00354
SDev	.00085	.00075	.00025	.00009	.00013	.00069	.00050
%RSD	3.1026	1.1969	.38745	.13692	6.1176	16.277	14.237

#1	.02694	.06346	.06333	.06338	.00204	.00375	.00318
#2	.02815	.06240	.06368	.06325	.00223	.00473	.00389

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00128	-.00079	-.00095	.00150	.05719	.12753
SDev	.00105	.00251	.00202	.00203	.00060	.00087
%RSD	82.267	315.50	211.65	136.04	1.0560	.68007

#1	-.00202	-.00257	-.00238	.00006	.05762	.12814
#2	-.00053	.00098	.00047	.00293	.05676	.12691

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14457	--	--	--	--	--	--
SDev	195.3382	--	--	--	--	--	--
%RSD	1.351132	--	--	--	--	--	--
#1	14319	--	--	--	--	--	--
#2	14596	--	--	--	--	--	--

Method: METTRA Sample Name: DQCKKS

Operator: RJG

Run Time: 11/29/00 18:30:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04822	106.54	2.0290	2.7189	.05392	28.997	.04986
SDev	.00043	.30	.0020	.0035	.00017	.029	.00041
%RSD	.89779	.27807	.09875	.12705	.31224	.10092	.82805
#1	.04792	106.33	2.0304	2.7165	.05380	28.976	.04956
#2	.04853	106.75	2.0275	2.7214	.05404	29.018	.05015
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	.55107	.33532	.39353	177.09	15.982	3.9835	.00667
SDev	.00044	.00067	.00115	.21	.006	.0041	.00006
%RSD	.08008	.20100	.29217	.11933	.03597	.10288	.83134
#1	.55076	.33484	.39272	176.94	15.977	3.9806	.00664
#2	.55138	.33580	.39435	177.24	15.986	3.9864	.00671
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.60936	.82306	.80488	.81093	.00679	.00661	.00667
SDev	.00186	.00245	.00321	.00296	.00208	.00167	.00180
%RSD	.30443	.29774	.39868	.36456	30.633	25.263	27.083
#1	.60804	.82479	.80715	.81302	.00825	.00779	.00794
#2	.61067	.82133	.80261	.80884	.00532	.00543	.00539
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	1.9027	1.9051	1.9043	2.0078	.71032	1.0963	
SDev	.0015	.0089	.0054	.0108	.00135	.0005	
%RSD	.08102	.46740	.28492	.53907	.18983	.04401	
#1	1.9016	1.9113	1.9081	2.0001	.70936	1.0959	
#2	1.9038	1.8988	1.9004	2.0154	.71127	1.0966	
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	14806	--	--	--	--	--	--
SDev	52.46746	--	--	--	--	--	--
%RSD	.3543710	--	--	--	--	--	--
#1	14769	--	--	--	--	--	--
#2	14843	--	--	--	--	--	--

Method: METTRA Sample Name: DQCKKD

Operator: RJG

Run Time: 11/29/00 18:34:51

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	.04741	123.90	1.9902	2.8473	.05329	28.210	.04841
SDev	.00081	.98	.0132	.0096	.00022	.176	.00061
%RSD	1.6978	.79134	.66563	.33797	.41297	.62565	1.2678
#1	.04684	123.21	1.9809	2.8405	.05314	28.085	.04798
#2	.04798	124.59	1.9996	2.8542	.05345	28.334	.04884
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	.55300	.35838	.40931	195.21	17.751	4.9332	.00723
SDev	.00379	.00223	.00291	1.61	.121	.0345	.00042
%RSD	.68609	.62196	.71008	.82364	.68328	.70020	5.7827
#1	.55032	.35680	.40725	194.07	17.666	4.9087	.00693
#2	.55568	.35995	.41136	196.35	17.837	4.9576	.00752
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.61640	.84190	.82205	.82866	.00713	.00624	.00653
SDev	.00147	.00528	.01647	.01275	.00617	.00086	.00148
%RSD	.23883	.62764	2.0039	1.5383	86.621	13.825	22.668
#1	.61536	.83816	.81040	.81965	.00276	.00684	.00548
#2	.61744	.84564	.83370	.83767	.01149	.00563	.00758
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	1.8350	1.8384	1.8373	1.9693	.73082	1.1567	
SDev	.0115	.0439	.0331	.0091	.00216	.0074	
%RSD	.62613	2.3876	1.8017	.46019	.29585	.63962	
#1	1.8269	1.8074	1.8138	1.9629	.72929	1.1515	
#2	1.8431	1.8694	1.8607	1.9757	.73235	1.1620	
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	15007	--	--	--	--	--	--
SDev	110.4854	--	--	--	--	--	--
%RSD	.7362370	--	--	--	--	--	--
#1	15085	--	--	--	--	--	--
#2	14929	--	--	--	--	--	--

Method: METTRA Sample Name: DQCLC

Operator: RJG

Run Time: 11/29/00 18:39:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	109.29	.12583	.95593	.00574	57.434	.00246
SDev	.00001	.52	.00046	.00178	.00004	.092	.00021
%RSD	4.0464	.47128	.36138	.18642	.64229	.15953	8.4583
#1	.00025	108.93	.12551	.95467	.00571	57.499	.00232
#2	.00026	109.65	.12616	.95719	.00576	57.369	.00261
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	.08079	.16276	.17044	184.96	17.655	4.6360	.00721
SDev	.00014	.00032	.00023	.16	.002	.0004	.00109
%RSD	.17222	.19535	.13493	.08435	.01220	.00829	15.075
#1	.08089	.16299	.17028	184.85	17.654	4.6362	.00798
#2	.08070	.16254	.17061	185.07	17.657	4.6357	.00645
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	.14187	.41417	.40087	.40530	.01051	.00915	.00961
SDev	.00108	.00472	.00338	.00068	.00694	.00154	.00128
%RSD	.75858	1.1386	.84358	.16909	65.980	16.877	13.323
#1	.14111	.41750	.39848	.40481	.00561	.01024	.00870
#2	.14263	.41083	.40326	.40578	.01542	.00806	.01051
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	.00178	.00230	.00212	.00627	.29864	.80858	
SDev	.00478	.00245	.00004	.00724	.00184	.00068	
%RSD	268.13	106.55	1.9179	115.40	.61615	.08472	
#1	.00516	.00057	.00210	.01139	.29994	.80809	
#2	-.00160	.00402	.00215	.00115	.29733	.80906	
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	14839	--	--	--	--	--	--
SDev	54.83599	--	--	--	--	--	--
%RSD	.3695453	--	--	--	--	--	--
#1	14800	--	--	--	--	--	--
#2	14878	--	--	--	--	--	--

Method: METTRA Sample Name: DQCLE

Operator: RJG

Run Time: 11/29/00 18:43:10

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	-.00060	119.43	.11659	1.0959	.00628	101.87	.00250
SDev	.00010	1.12	.00052	.0090	.00001	.63	.00029
%RSD	17.325	.94123	.45070	.81684	.20239	.61570	11.502
#1	-.00052	118.63	.11696	1.0896	.00629	101.43	.00229
#2	-.00067	120.22	.11622	1.1022	.00627	102.31	.00270
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	.08310	.16099	.19153	192.88	20.326	4.1463	.00734
SDev	.00002	.00090	.00156	1.46	.121	.0271	.00033
%RSD	.02022	.56157	.81288	.75464	.59296	.65471	4.4498
#1	.08311	.16036	.19043	191.85	20.240	4.1271	.00710
#2	.08309	.16163	.19263	193.91	20.411	4.1655	.00757
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15340	.31689	.31011	.31237	.00915	.00745	.00802
SDev	.00054	.00020	.00266	.00171	.00271	.00098	.00156
%RSD	.35035	.06367	.85842	.54691	29.658	13.171	19.435
#1	.15302	.31703	.30823	.31116	.00723	.00676	.00692
#2	.15378	.31675	.31200	.31358	.01107	.00815	.00912
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	-.00145	.00294	.00148	.00905	.29303	.74088	
SDev	.00066	.00016	.00011	.00003	.00362	.00557	
%RSD	45.521	5.4069	7.7170	.27481	1.2356	.75151	
#1	-.00098	.00282	.00156	.00903	.29047	.73694	
#2	-.00192	.00305	.00140	.00907	.29559	.74482	
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	24.11275	--	--	--	--	--	--
%RSD	.1584765	--	--	--	--	--	--
#1	15198	--	--	--	--	--	--
#2	15232	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-4

Operator: RJG

Run Time: 11/29/00 18:47:19

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0344	23.843	.51402	1.9787	1.9981	49.981	.49704
SDev	.0004	.052	.00188	.0021	.0000	.007	.00059
%RSD	.03416	.21865	.36568	.10699	.00093	.01312	.11910
#1	1.0346	23.806	.51269	1.9772	1.9982	49.976	.49746
#2	1.0341	23.879	.51535	1.9802	1.9981	49.985	.49662
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0141	2.0006	1.9416	24.908	48.902	1.9879	2.0153
SDev	.0006	.0003	.0012	.058	.011	.0014	.0060
%RSD	.02982	.01256	.06211	.23468	.02204	.07269	.29960
#1	2.0137	2.0004	1.9407	24.867	48.894	1.9869	2.0111
#2	2.0145	2.0008	1.9424	24.950	48.909	1.9889	2.0196
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9944	.51322	.50814	.50983	.51655	.51821	.51766
SDev	.0050	.00142	.00083	.00103	.00061	.00418	.00258
%RSD	.24860	.27710	.16381	.20179	.11786	.80622	.49916
#1	1.9979	.51222	.50755	.50911	.51698	.51525	.51583
#2	1.9909	.51423	.50873	.51056	.51612	.52116	.51948
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	.51823	.53114	.52684	1.0512	1.9770	2.0287	
SDev	.00146	.00186	.00075	.0002	.0022	.0004	
%RSD	.28175	.34923	.14256	.02111	.11060	.01852	
#1	.51926	.52983	.52631	1.0511	1.9785	2.0290	
#2	.51719	.53245	.52737	1.0514	1.9754	2.0285	
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	14267	--	--	--	--	--	--
SDev	19.83421	--	--	--	--	--	--
%RSD	.1390199	--	--	--	--	--	--
#1	14253	--	--	--	--	--	--
#2	14281	--	--	--	--	--	--

Method: METTRA Sample Name: CCB4

Operator: RJG

Run Time: 11/29/00 18:51:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	.03825	.00063	.00077	.00093	.00819	.00003
SDev	.00073	.01188	.00027	.00017	.00009	.01092	.00029
%RSD	659.87	31.058	42.793	22.076	9.8818	133.28	937.49
#1	-.00041	.02985	.00044	.00065	.00100	.00047	-.00017
#2	.00063	.04664	.00082	.00089	.00087	.01591	.00023
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00075	-.00004	.00001	.03792	.01164	.00127	.00432
SDev	.00053	.00100	.00040	.01940	.00552	.00033	.00044
%RSD	70.170	2749.5	3148.6	51.164	47.402	25.823	10.234
#1	.00038	-.00075	-.00027	.02420	.00774	.00104	.00463
#2	.00113	.00067	.00030	.05164	.01554	.00151	.00401
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00119	-.00088	-.00049	-.00062	.00031	-.00001	.00010
SDev	.00096	.00485	.00098	.00096	.00477	.00376	.00092
%RSD	80.163	550.31	201.13	155.48	1523.0	26793.	965.79
#1	-.00187	-.00431	.00021	-.00130	.00369	-.00267	-.00055
#2	-.00052	.00255	-.00118	.00006	-.00306	.00264	.00074
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	-.00659	.00120	-.00140	-.00004	.00002	.00012	
SDev	.00035	.00410	.00262	.00207	.00082	.00009	
%RSD	5.3357	342.87	187.12	5252.4	3407.9	76.031	
#1	-.00684	.00409	.00045	.00143	-.00056	.00005	
#2	-.00634	-.00170	-.00325	-.00150	.00061	.00018	
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	13976	--	--	--	--	--	--
SDev	47.76492	--	--	--	--	--	--
%RSD	.3417535	--	--	--	--	--	--
#1	14010	--	--	--	--	--	--
#2	13943	--	--	--	--	--	--

Method	365DB	Matrix	Soil	Start Time	1030	Reagents	5ml 11HNO ₃ 6057-153-5 5ml 11HNO ₃ 6057-153-5 5ml 1302H ₂ O ₂ 5240721ADS Mallinckrodt 5ml 1302H ₂ O ₂ 5240721ADS Mallinckrodt 5ml 1302H ₂ O ₂ 5240721ADS Mallinckrodt
Analyst	Christopher R	Date	11-27-00	Lot Number	60K220253	Balance #	094817
Reviewed by	W. Murphy	Date	11/27/00	Lab Lot # (book, page, line)	6057-123-9		
SDG		MS	MSB12R				

Sample ID	Initial Wt/Vol g/mL	Final Vol mL	Comments	Color		Clarity		Texture		Artifacts	Artifact Codes
				Pre	Post	Pre	Post	Pre	Post		
1. DQCKK	6.50g	9ml	OK 11-27-00								
2. DQCKK5			to 5ml MSB12R								
3. DQCKKD			OK 11-27-00								
4. DQCLE											
5. DQCLE											
6. DQDSAB											
7. DQDSAC			to 5ml MSB12R								
8.											
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											
21.											
22.											
23.											
24.											

Digestate(s)	Date	Time	(Received)	Analyst	Location	Date	Time	(Relinquished)	Analyst	Location
All 1302H ₂ O ₂	11-27-00	14:50		CAR	Met 1108	11-27-00	15:00		CAR	Met 1108
All 1302H ₂ O ₂	11-27-00	16:35		W. Murphy	Met 1108	11-27-00	16:50		W. Murphy	Met 1108

Hot Plate/Block Temp	Correction Factor
#12/95°C	+0.1°C

Color	Y=Yellow	W=White
R=Red	O=Orange	GY=Gray
BL=Blue	V=Violet	GN=Green
BR=Brown	P=Pink	C=Colorless
BLK=Black		

Clarity	C=Clear
CL=Cloudy	O=Opaque
Texture	F=Fine
M=Medium	C=Coarse
Artifacts	S=Stones
O=Organic (plant mat)	W=Free H ₂ O
G=Glass	M=Metal Fragments
R=Rubber/Plastic	C=Cloth
P=Paper	I=Insects

REQUESTED BY: RIZZOC

METHOD: QM Inductively Coupled Plasma (6010B Trace)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
3E CLP1	DQCD1	___	288585	027262	A-46-QM	C0K220232	001		SOLID	0	2 1
3E CLP1	DQCEM	___	288586	027262	A-46-QM	C0K220234	001		SOLID	0	2 1
CLP1 3D	DQCKK	___	288588	399411	A-46-QM	C0K220253	001		SOLID	0	3 1
CLP1 3D	DQCLC	___	288589	399411	A-46-QM	C0K220253	002		SOLID	0	3 1
CLP1 3D	DQCLE	___	288590	399411	A-46-QM	C0K220253	003		SOLID	0	3 1

RELINQUISHED BYRECEIVED BYDATE/TIME

<u>AL</u>	<u>Cynthia A [Signature]</u>	<u>11-27-00 1030</u>
<u>Cynthia A [Signature]</u>	<u>AL</u>	<u>11-27-00 1300</u>

675 567

**TCLP
METALS DATA**

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
DF/24-A/0326/SDC/006	DQCKKT
DF/24-A/0326/SDC/007	DQCLCT
DF/24-A/0326/SDC/008	DQCLET

Comments: UXB, DUNN FIELD
C0K220253
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: _____

REVIEWED BY: MTW
DATE: 11-30-00

110

**TCLP
METALS
RESULTS**

675 570

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCKKT Client ID: DF/24-A/0326/SDC/006
 Matrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135
 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	11/30/00	10:24
Barium	493.41	0.00041	10.0	0.96	B	1	ICP	11/30/00	10:24
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	11/30/00	10:24
Chromium	267.72	0.0038	0.50	0.024	B	1	ICP	11/30/00	10:24
Lead	220.35	0.025	0.50	0.027	B	1	ICP	11/30/00	10:24
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	11/30/00	10:24
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	11/30/00	10:24

Comments: 60K220253-001

Version 4 10.2

rev 11.30.00

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: DQCLCT Client ID: DF/24-A/0326/SDC/007
 Matrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135
 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	0.13	B	1	ICP	11/30/00	10:27
Barium	493.41	0.00041	10.0	0.78	B	1	ICP	11/30/00	10:27
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	11/30/00	10:27
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	11/30/00	10:27
Lead	220.35	0.025	0.50	0.049	B	1	ICP	11/30/00	10:27
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	11/30/00	10:27
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	11/30/00	10:27

Comments: 604220253-002

Version 4.10.2

mtw 11-30-00

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

Form 1 Equivalent

675 572 STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCLET Client ID: DF/24-A/0326/SDC/008
 Matrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.12	B	1	ICP	11/30/00	10:30
Barium	493.41	0.00041	10.0	0.75	B	1	ICP	11/30/00	10:30
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	11/30/00	10:30
Chromium	267.72	0.0038	0.50	0.0056	B	1	ICP	11/30/00	10:30
Lead	220.35	0.025	0.50	0.040	B	1	ICP	11/30/00	10:30
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	11/30/00	10:30
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	11/30/00	10:30

Comments: COK 220253-003

Version 4.10.2

11-30-00

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: DQCKKT Client ID: DF/24-A/0326/SDC/006
Matrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281
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	0.000071	B	1	CVAA	11/30/00	8:48

Comments: _____

675 574 STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DQCLCT Client ID: DF/24-A/0326/SDC/007
Matrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281
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	11/30/00	8:53

Comments: _____

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: DQCLET Client ID: DF/24-A/0326/SDC/008
Matrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281
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	11/30/00	8:55

Comments: _____

Version 4.10.2

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

Form 1 Equivalent

675 576

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAAUnits: ug/LChart Number: 1130HGA.PRNAcceptable Range: 90% - 110%Standard Source: UltraStandard ID: 0057-165-11

Element	WL/ Mass	True Conc	ICV5-1 11/30/00 8:25 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.43	97.2								

Initial Calibration Verification Standard

Instrument: ICPUnits: ug/LChart Number: J01130A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-15621

MW 11-30-00

Element	WL/ Mass	True Conc	ICV2-1 11/30/00 9:18 AM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Arsenic	193.696	1000.0	989.10	98.9								
Barium	493.409	1000.0	1006.06	100.6								
Cadmium	228.802	1000.0	1011.21	101.1								
Chromium	267.716	1000.0	1018.02	101.8								
Lead	220.353	1000.0	1034.99	103.5								
Selenium	196.026	1000.0	1021.52	102.2								
Silver	328.068	500.0	516.82	103.4								

675 578

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAAUnits: ug/LChart Number: 1130HGA.PRNAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0057-165-12

166-1

0057-165-12

MTW 11-30-00

Element	WL/ Mass	True Conc	CCV5-1 11/30/00 8:30 AM		CCV5-2 11/30/00 8:50 AM		CCV5-3 11/30/00 9:11 AM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.08	101.6	5.09	101.8	5.03	100.6				

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J01130A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-146-1

Element	WL/ Mass	True Conc	CCV2-1 11/30/00 9:55 AM		CCV2-2 11/30/00 10:33 AM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	5000.0	5131.03	102.6	5159.27	103.2						
Barium	493.409	5000.0	5049.97	101.0	5041.20	100.8						
Cadmium	228.802	5000.0	5085.98	101.7	5087.85	101.8						
Chromium	267.716	5000.0	5001.95	100.0	4993.45	99.9						
Lead	220.353	5000.0	5053.29	101.1	5025.61	100.5						
Selenium	196.026	5000.0	5207.79	104.2	5226.06	104.5						
Silver	328.068	1000.0	1011.70	101.2	1007.75	100.8						

675 580 STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA

Units: ug/L

Chart Number: 1130HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 11/30/00 8:27 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U						

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J01130A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 11/30/00 9:21 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U						
Barium	493.409	10000	0.4	U						
Cadmium	228.802	100	2.8	U						
Chromium	267.716	500	3.8	U						
Lead	220.353	500	24.6	U						
Selenium	196.026	250	67.4	U						
Silver	328.068	500	3.1	U						

675 582

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 1130HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/30/00 8:32 AM	CCB2 11/30/00 8:52 AM	CCB3 11/30/00 9:14 AM		
			Found Q	Found Q	Found Q	Found Q	Found Q
Mercury	253.7	0.2	0.0 U	0.0 U	0.0 U		

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J01130A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 11/30/00 9:58 AM		CCB2 11/30/00 10:36 AM					
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U	30.3	U				
Barium	493.409	10000	0.4	U	0.4	U				
Cadmium	228.802	100	2.8	U	2.8	U				
Chromium	267.716	500	3.8	U	3.8	U				
Lead	220.353	500	24.6	U	24.6	U				
Selenium	196.026	250	67.4	U	67.4	U				
Silver	328.068	500	3.1	U	3.1	U				

675 584

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DQF3KBTMatrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135Weight: 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	0.16	B	1	ICP	11/30/00	9:30
Barium	493.409	0.00041	10.0	0.00075	B	1	ICP	11/30/00	9:30
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	11/30/00	9:30
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	11/30/00	9:30
Lead	220.353	0.025	0.50	0.025	U	1	ICP	11/30/00	9:30
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	11/30/00	9:30
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	11/30/00	9:30

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

Preparation Blank Results

Lab Sample ID: DQGTKBTMatrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135Weight: 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	0.042	B	1	ICP	11/30/00	9:33
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	11/30/00	9:33
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	11/30/00	9:33
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	11/30/00	9:33
Lead	220.353	0.025	0.50	0.025	U	1	ICP	11/30/00	9:33
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	11/30/00	9:33
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	11/30/00	9:33

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 3 Equivalent

B Result is between MDL and RL

675 586 STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DQF3KBT

Matrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281

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	0.000084	B	1	CVAA	11/30/00	8:37

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

Preparation Blank Results

Lab Sample ID: DQHKJBTMatrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281Weight: 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	11/30/00	8:34

Comments: _____

675 588 STL-Pittsburgh
Metals Data Reporting Form

Interference Check Standard A

Instrument: ICP

Units: ug/L

Chart Number: J01130A.ARC

Acceptable Range: 0% - 0%

Standard Source: Inorganic Ventures

Standard ID: 0057-146-2

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 11/30/00 9:24 AM				
				Found	Found	Found	Found	Found
Arsenic	193.696	500		194				
Barium	493.409	10000		2				
Cadmium	228.802	100		-6				
Chromium	267.716	500		2				
Lead	220.353	500		40				
Selenium	196.026	250		-170				
Silver	328.068	500		0				

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPUnits: ug/LChart Number: J01130A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0057-130-11

Element	WL/ Mass	True Conc	ICSAB 11/30/00 9:27 AM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Arsenic	193.696	1000	1083.1	108.3								
Barium	493.409	500	468.3	93.7								
Cadmium	228.802	1000	946.9	94.7								
Chromium	267.716	500	442.9	88.6								
Lead	220.353	1000	951.3	95.1								
Selenium	196.026	1000	841.6	84.2								
Silver	328.068	1000	962.1	96.2								

675 590

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DQGTKCTMatrix: Water Units: mg/L Prep Date: 11/29/00 Prep Batch: 0334135Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	2.0	2.2	107.5		80-120	1	ICP	11/30/00	9:36
Barium	493.409	2.0	1.9	94.0	B	80-120	1	ICP	11/30/00	9:36
Cadmium	228.802	0.050	0.046	92.4	B	80-120	1	ICP	11/30/00	9:36
Chromium	267.716	0.20	0.19	95.4	B	80-120	1	ICP	11/30/00	9:36
Lead	220.353	0.50	0.49	97.6	B	80-120	1	ICP	11/30/00	9:36
Selenium	196.026	2.0	2.2	109.5		80-120	1	ICP	11/30/00	9:36
Silver	328.068	0.050	0.049	98.1	B	80-120	1	ICP	11/30/00	9:36

Comments. _____

Version 4.10.2

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

675 591

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DQHKJCTMatrix: Water Units: mg/L Prep Date: 11/30/00 Prep Batch: 0334281Weight: 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	0.0028	111.2		80-120	1	CVAA	11/30/00	8:35

Comments. _____

Version 4.10.2

STL Pittsburgh

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

6025

675 592

STL-Pittsburgh
Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA

Units: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	0.2	0.045	3/20/00

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	193.70	500	30.3	4/1/00
Barium	493.41	10000	0.41	4/1/00
Cadmium	228.80	100	2.8	4/1/00
Chromium	267.72	500	3.8	4/1/00
Lead	220.35	500	24.6	4/1/00
Selenium	196.03	250	67.4	4/1/00
Silver	328.07	500	3.1	4/1/00

675 594

STL-Pittsburgh

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	493.402	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)

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAAUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	10/15/00

675 596

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	193.70	100000	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

STL-Pittsburgh

Metals Data Reporting Form

675 597

Preparation Log

Preparation Batch: 0334135 Instrument: ICP Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DQF3KBT	11/29/00	NA	50	NA
DQGTKBT	11/29/00	NA	50	NA
DQGTKCT	11/29/00	NA	50	NA
DQCKKT	11/29/00	NA	50	NA
DQCLCT	11/29/00	NA	50	NA
DQCLET	11/29/00	NA	50	NA

STL-Pittsburgh

Metals Data Reporting Form

675 598
Preparation LogPreparation Batch: 0334281 Instrument: CVAA Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DQF3KBT	11/30/00	NA	100	NA
DQHKJBT	11/30/00	NA	100	NA
DQHKJCT	11/30/00	NA	100	NA
DQCKKT	11/30/00	NA	100	NA
DQCLCT	11/30/00	NA	100	NA
DQCLET	11/30/00	NA	100	NA

STL-Pittsburgh
Metals Data Reporting Form

675 599

Instrument Runlog

Instrument: CVAA

Chart Number: 1130HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		11/30/00	8:15
Std2Rep1		11/30/00	8:17
Std3Rep1		11/30/00	8:18
Std4Rep1		11/30/00	8:20
Std5Rep1		11/30/00	8:21
Std6Rep1		11/30/00	8:23
ICV5-1		11/30/00	8:25
ICB1		11/30/00	8:27
CRA-1		11/30/00	8:29
CCV5-1		11/30/00	8:30
CCB1		11/30/00	8:32
DQHKJBT		11/30/00	8:34
DQHKJCT		11/30/00	8:35
DQF3KBT		11/30/00	8:37
ZZZZZZ		11/30/00	8:38
ZZZZZZ		11/30/00	8:40
ZZZZZZ		11/30/00	8:42
ZZZZZZ		11/30/00	8:43
ZZZZZZ		11/30/00	8:45
ZZZZZZ		11/30/00	8:46
DQCKKT	DF/24-A/0326/SDC/006	11/30/00	8:48
CCV5-2		11/30/00	8:50
CCB2		11/30/00	8:52
DQCLCT	DF/24-A/0326/SDC/007	11/30/00	8:53
DQCLET	DF/24-A/0326/SDC/008	11/30/00	8:55
ZZZZZZ		11/30/00	8:58
ZZZZZZ		11/30/00	8:59
ZZZZZZ		11/30/00	9:01
ZZZZZZ		11/30/00	9:02
ZZZZZZ		11/30/00	9:04
ZZZZZZ		11/30/00	9:06
ZZZZZZ		11/30/00	9:08
ZZZZZZ		11/30/00	9:10
CCV5-3		11/30/00	9:11
CCB3		11/30/00	9:14
ZZZZZZ		11/30/00	9:15
ZZZZZZ		11/30/00	9:16
ZZZZZZ		11/30/00	9:18
ZZZZZZ		11/30/00	9:19

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 1130HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		11/30/00	9:21
ZZZZZZ		11/30/00	9:23
ZZZZZZ		11/30/00	9:25
ZZZZZZ		11/30/00	9:26
ZZZZZZ		11/30/00	9:27
ZZZZZZ		11/30/00	9:29
ZZZZZZ		11/30/00	9:30
ZZZZZZ		11/30/00	9:32
ZZZZZZ		11/30/00	9:34
ZZZZZZ		11/30/00	9:35
ZZZZZZ		11/30/00	9:37
ZZZZZZ		11/30/00	9:38
ZZZZZZ		11/30/00	9:40
ZZZZZZ		11/30/00	9:42
ZZZZZZ		11/30/00	9:43
ZZZZZZ		11/30/00	9:45
ZZZZZZ		11/30/00	9:46
ZZZZZZ		11/30/00	9:48
ZZZZZZ		11/30/00	9:50
ZZZZZZ		11/30/00	9:52
ZZZZZZ		11/30/00	9:54
ZZZZZZ		11/30/00	9:56
ZZZZZZ		11/30/00	9:57
ZZZZZZ		11/30/00	9:59
ZZZZZZ		11/30/00	10:01
ZZZZZZ		11/30/00	10:02
ZZZZZZ		11/30/00	10:04
ZZZZZZ		11/30/00	10:05
ZZZZZZ		11/30/00	10:07
ZZZZZZ		11/30/00	10:09
ZZZZZZ		11/30/00	10:11
ZZZZZZ		11/30/00	10:12
ZZZZZZ		11/30/00	10:14
ZZZZZZ		11/30/00	10:16
ZZZZZZ		11/30/00	10:18
ZZZZZZ		11/30/00	10:19
ZZZZZZ		11/30/00	10:21
ZZZZZZ		11/30/00	10:22

STL-Pittsburgh
Metals Data Reporting Form

675 601

Instrument Runlog

Instrument: ICP

Chart Number: J01130A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		11/30/00	9:08
STD5A		11/30/00	9:11
STD5B		11/30/00	9:14
ICV2-1		11/30/00	9:18
ICB1		11/30/00	9:21
ICSA		11/30/00	9:24
ICSAB		11/30/00	9:27
DQF3KBT		11/30/00	9:30
DQGTKBT		11/30/00	9:33
DQGTKCT		11/30/00	9:36
ZZZZZZ		11/30/00	9:40
ZZZZZZ		11/30/00	9:43
ZZZZZZ		11/30/00	9:46
ZZZZZZ		11/30/00	9:49
ZZZZZZ		11/30/00	9:52
CCV2-1		11/30/00	9:55
CCB1		11/30/00	9:58
ZZZZZZ		11/30/00	10:02
ZZZZZZ		11/30/00	10:05
ZZZZZZ		11/30/00	10:08
ZZZZZZ		11/30/00	10:11
ZZZZZZ		11/30/00	10:14
ZZZZZZ		11/30/00	10:17
ZZZZZZ		11/30/00	10:21
DQCKKT	DF/24-A/0326/SDC/006	11/30/00	10:24
DQCLCT	DF/24-A/0326/SDC/007	11/30/00	10:27
DQCLET	DF/24-A/0326/SDC/008	11/30/00	10:30
CCV2-2		11/30/00	10:33
CCB2		11/30/00	10:36
ZZZZZZ		11/30/00	10:39
ZZZZZZ		11/30/00	10:43
ZZZZZZ		11/30/00	10:46
ZZZZZZ		11/30/00	10:49
ZZZZZZ		11/30/00	10:52
ZZZZZZ		11/30/00	10:55
ZZZZZZ		11/30/00	10:59
ZZZZZZ		11/30/00	11:02
ZZZZZZ		11/30/00	11:05
ZZZZZZ		11/30/00	11:08

675 602

STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J01130A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		11/30/00	11:11

675 603

TCLP
METALS
RAW DATA

William J. Kuntz 11-30-00

#	Sample Name	AG	AS	BA	CD	CR	PB
1	STD1	-.0008	.0006	.0001	.00012	.00049	0
2	STD5A	.27979	.49984	4.40341	.86781	3.82159	.24539
3	STD5B						
4	ICV2-1 0057-156-1	.51682	.98910	1.0061	1.0112	1.0180	1.0350
5	ICB1	.00034	.01518	-.00008	-.00098	.00013	.01191
6	ICSA 0057-146-2	.00020	.19417	.00150	-.00642	.00182	.04029
7	ICSAB 0057-130-11	.96209	1.0831	.46831	.94687	.44288	.95134
8	DQF3KBT	.00212	.15929	.00075	-.00188	-.00052	.00980
9	DQGTKBT	.00105	.04163	.00004	-.00231	.00143	-.00197
10	DQGTKCT	.04904	2.1501	1.8801	.04618	.19071	.48800
11	DP7HAT	-.00136	.15318	.18381	-.00325	-.00183	.06159
12	DP7HATP5	.00000	.02125	.03890	-.00023	.00026	.00989
13	DP7HAST	.86265	4.8212	44.497	.93713	4.2920	4.4977
14	DP7HADT	.87800	4.9656	45.138	.94520	4.3543	4.5947
15	DP7HJT	-.00066	.15621	.18735	-.00386	.00209	.10527
16	CCV2-1 0057-146-1	1.0117	5.1310	5.0500	5.0860	5.0019	5.0533
17	CCB1	.00139	.01111	.00030	-.00152	.00170	.02181
18	DP9ANT	-.00035	.19718	.19961	.00896	.00026	27.083
19	DP9AVT	-.00102	.11246	.29534	-.00227	.00012	.05761
20	DP9AOT	.00207	.18077	.18594	.01674	.00183	35.681
21	DPA2LT	-.00312	.18366	.27862	-.00149	-.00013	.02584
22	DPA2RT	-.00207	.11568	.22861	-.00338	-.00275	.01602
23	DP2WNT	-.00011	.16008	.33422	.00072	.00013	.01904
24	DP4J8T	-.00029	.18730	.29924	.00176	.01806	.07665
25	DQCKKT	.00014	.18162	.95775	-.00290	.02421	.02732
26	DQCLCT	-.00052	.12663	.77635	-.00112	-.00052	.04939
27	DQCLET	.00051	.12445	.74655	-.00173	.00562	.03992
28	CCV2-2	1.0077	5.1593	5.0412	5.0879	4.9935	5.0256
29	CCB2	.00244	.00699	.00030	-.00261	-.00012	.00002
30	DQCAPT	-.00331	.10961	.45836	-.00203	-.00131	.00985
31	DP70TT	.00027	.15272	.00393	-.00164	.00877	.00615
32	DQF4MBT	.00454	.20096	.00052	L-.00560	.00104	.01787
33	DQGT1BT	.00211	.01300	.00027	-.00096	.00143	.01781
34	DQGT1CT	.05048	2.1194	2.0441	L.03888	.19319	.47647
35	DQD8XT	-.00177	.14587	.28337	.03957	-.00340	36.198
36	DQD8XTP5	.00034	.03440	.05975	.00929	.00039	7.8400
37	DQD8XST	.91249	4.8218	46.198	.94147	4.1802	42.034
38	DQD8XDT	.90935	4.8545	45.406	.92978	4.1551	41.060
39	CCV2-3	.99685	5.0534	4.9174	5.0667	4.9314	4.9849
40	CCB3	.00173	.00608	.00018	-.00133	.00091	.01386

#	Sample Name	SE
1	STD1	-.00034
2	STD5A	.48339
3	STD5B	
4	ICV2-1 0057-156-1	1.0215
5	ICB1	.02066
6	ICSA 0057-146-2	-.17053
7	ICSAB 0057-130-11	.84163
8	DQF3KBT	.01173
9	DQGTKBT	-.01443

#	Sample Name	SE
10	DQGTKCT	2.1895
11	DP7HAT	.05184
12	DP7HATP5	-.02788
13	DP7HAST	1.0429
14	DP7HADT	1.0595
15	DP7HJT	.01138
16	CCV2-1 0057-146-1	5.2078
17	CCB1	.01963
18	DP9ANT	.00535
19	DP9AVT	-.02578
20	DP9A0T	.00533
21	DPA2LT	.05065
22	DPA2RT	-.00619
23	DP2WNT	.02049
24	DP4J8T	.00510
25	DQCKKT	.02923
26	DQCLCT	.01172
27	DQCLET	.01377
28	CCV2-2	5.2261
29	CCB2	-.01964
30	DQCAPT	-.01320
31	DP70TT	-.00804
32	DQF4MBT	.03008
33	DQGT1BT	-.00590
34	DQGT1CT	2.1996
35	DQD8XT	-.03614
36	DQD8XTP5	-.01136
37	DQD8XST	.99747
38	DQD8XDT	.99333
39	CCV2-3	5.2003
40	CCB3	-.01550

WTR 11-30-00

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J01130A	QUANMET	11/30/00	09:08		X	IR
2	STD5A	J01130A	QUANMET	11/30/00	09:11		X	IR
3	STD5B	J01130A	QUANMET	11/30/00	09:14		X	IR
4	ICV2-1 0057-156-1	J01130A	QUANMET	11/30/00	09:18	WTR	S	CONC
5	ICB1	J01130A	QUANMET	11/30/00	09:21	WTR	S	CONC
6	ICSA 0057-146-2	J01130A	QUANMET	11/30/00	09:24	WTR	Q	CONC
7	ICSAB 0057-130-11	J01130A	QUANMET	11/30/00	09:27	WTR	Q	CONC
8	DQF3KBT	J01130A	QUANMET	11/30/00	09:30	WTR	S	CONC
9	DQGTKBT	J01130A	QUANMET	11/30/00	09:33	WTR	S	CONC
10	DQGTKCT	J01130A	QUANMET	11/30/00	09:36	WTR	S	CONC
11	DP7HAT	J01130A	QUANMET	11/30/00	09:40	WTR	S	CONC
12	DP7HATP5	J01130A	QUANMET	11/30/00	09:43	WTR	S	CONC
13	DP7HAST	J01130A	QUANMET	11/30/00	09:46	WTR	S	CONC
14	DP7HADT	J01130A	QUANMET	11/30/00	09:49	WTR	S	CONC
15	DP7HJT	J01130A	QUANMET	11/30/00	09:52	WTR	S	CONC
16	CCV2-1 0057-146-1	J01130A	QUANMET	11/30/00	09:55	WTR	S	CONC
17	CCB1	J01130A	QUANMET	11/30/00	09:58	WTR	S	CONC
18	DP9ANT	J01130A	QUANMET	11/30/00	10:02	WTR	S	CONC
19	DP9AVT	J01130A	QUANMET	11/30/00	10:05	WTR	S	CONC
20	DP9AOT	J01130A	QUANMET	11/30/00	10:08	WTR	S	CONC
21	DPA2LT	J01130A	QUANMET	11/30/00	10:11	WTR	S	CONC
22	DPA2RT	J01130A	QUANMET	11/30/00	10:14	WTR	S	CONC
23	DP2WNT	J01130A	QUANMET	11/30/00	10:17	WTR	S	CONC
24	DP4J8T	J01130A	QUANMET	11/30/00	10:21	WTR	S	CONC
25	DQCKKT	J01130A	QUANMET	11/30/00	10:24	WTR	S	CONC
26	DQCLCT	J01130A	QUANMET	11/30/00	10:27	WTR	S	CONC
27	DQCLET	J01130A	QUANMET	11/30/00	10:30	WTR	S	CONC
28	CCV2-2	J01130A	QUANMET	11/30/00	10:33	WTR	S	CONC
29	CCB2	J01130A	QUANMET	11/30/00	10:36	WTR	S	CONC
30	DQCAPT	J01130A	QUANMET	11/30/00	10:39	WTR	S	CONC
31	DP70TT	J01130A	QUANMET	11/30/00	10:43	WTR	S	CONC
32	DQF4MBT	J01130A	QUANMET	11/30/00	10:46	WTR	S	CONC
33	DQGT1BT	J01130A	QUANMET	11/30/00	10:49	WTR	S	CONC
34	DQGT1CT	J01130A	QUANMET	11/30/00	10:52	WTR	S	CONC
35	DQD8XT	J01130A	QUANMET	11/30/00	10:55	WTR	S	CONC
36	DQD8XTP5	J01130A	QUANMET	11/30/00	10:59	WTR	S	CONC
37	DQD8XST	J01130A	QUANMET	11/30/00	11:02	WTR	S	CONC
38	DQD8XDT	J01130A	QUANMET	11/30/00	11:05	WTR	S	CONC
39	CCV2-3	J01130A	QUANMET	11/30/00	11:08	WTR	S	CONC
40	CCB3	J01130A	QUANMET	11/30/00	11:11	WTR	S	CONC

Standardization Rpt.

11/30/00 09:11:44 AM

page 1

Method: QUANMET Standard: STD1
 Run Time: 11/30/00 09:08:37

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00080	.00915	.00060	.00000	.00011	.00280	.01116
SDev	.00016	.00094	.00217	.00000	.00008	.00000	.00087
%RSD	20.412	10.310	362.09	.00000	75.611	.00000	7.7639
#1	-.00080	.00780	.00200	.00000	.00012	.00280	.01049
#2	-.00100	.00980	.00260	.00000	.00012	.00280	.01056
#3	-.00080	.00980	.00000	.00000	.00020	.00280	.01236
#4	-.00060	.00920	-.00220	.00000	.00000	.00280	.01121
Elem	CD	CO	CR	CU	FE	K	LI
Avge	.00013	.00005	.00050	.00045	.00180	-.02010	-.00054
SDev	.00014	.00025	.00089	.00019	.00063	.00090	.00031
%RSD	104.18	503.32	177.39	42.552	35.136	4.4868	58.007
#1	.00000	.00040	.00000	.00040	.00100	-.02120	-.00080
#2	.00008	.00000	.00080	.00060	.00160	-.02000	-.00016
#3	.00012	.00000	.00160	.00060	.00240	-.01900	-.00040
#4	.00032	-.00020	-.00040	.00020	.00220	-.02020	-.00080
Elem	MG	MN	MO	NA	NI	PB	SB
Avge	-.00010	.00015	.00010	.06685	-.00096	.00000	.00005
SDev	.00060	.00010	.00012	.00153	.00112	.00016	.00010
%RSD	600.00	66.667	115.47	2.2964	117.08	.00000	200.00
#1	-.00040	.00020	.00000	.06620	-.00160	-.00020	.00000
#2	-.00040	.00000	.00020	.06720	-.00068	.00020	.00000
#3	.00080	.00020	.00020	.06880	-.00204	.00000	.00020
#4	-.00040	.00020	.00000	.06520	.00049	.00000	.00000
Elem	SE	SI	SN	SR	TI	TL	V
Avge	-.00035	.00155	-.00010	.00003	.00205	.00020	.00020
SDev	.00191	.00098	.00109	.00006	.00010	.00052	.00040
%RSD	544.86	63.541	1089.3	200.00	4.8780	258.20	200.00
#1	.00040	.00240	-.00040	.00000	.00200	-.00040	.00000
#2	.00200	.00060	-.00140	.00000	.00200	.00040	.00000
#3	-.00180	.00240	.00120	.00012	.00220	.00000	.00080
#4	-.00200	.00080	.00020	.00000	.00200	.00080	.00000
Elem	ZN						
Avge	.00070						
SDev	.00011						
%RSD	14.993						
#1	.00064						
#2	.00072						
#3	.00084						
#4	.00060						

Method: QUANMET Standard: STD5A

Run Time: 11/30/00 09:11:47

0057-144-7

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.27980	.49985	.59285	4.4034	16.515	.86781	1.4342
SDev	.00033	.00465	.00060	.0146	.030	.00188	.0026
%RSD	.11673	.93116	.10074	.33155	.18170	.21638	.18039

#1	.28020	.50140	.59300	4.3951	16.530	.86731	1.4362
#2	.27980	.49500	.59360	4.4147	16.533	.86651	1.4364
#3	.27940	.49740	.59260	4.4167	16.528	.86686	1.4332
#4	.27980	.50560	.59220	4.3871	16.471	.87059	1.4310

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.8216	2.3644	4.1838	2.0233	.38300	1.7459	.24540
SDev	.0068	.0066	.0208	.0036	.00069	.0086	.00071
%RSD	.17921	.28007	.49711	.17765	.18089	.48996	.29006

#1	3.8270	2.3594	4.1614	2.0244	.38400	1.7586	.24500
#2	3.8276	2.3688	4.1907	2.0274	.38280	1.7430	.24540
#3	3.8182	2.3712	4.2093	2.0226	.38240	1.7410	.24640
#4	3.8136	2.3580	4.1740	2.0188	.38280	1.7408	.24480

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.18160	.48340	.35500	.87045	8.6638	6.4320	.30960
SDev	.00136	.00170	.00334	.00675	.0261	.0138	.00344
%RSD	.74695	.35107	.94159	.77587	.30167	.21479	1.1102

#1	.18220	.48420	.35000	.87320	8.6548	6.4314	.31400
#2	.18320	.48220	.35700	.86300	8.6863	6.4442	.30640
#3	.18020	.48540	.35660	.87840	8.6834	6.4394	.30740
#4	.18080	.48180	.35640	.86720	8.6309	6.4128	.31060

Elem	V	ZN
Avge	1.6691	1.4257
SDev	.0027	.0048
%RSD	.16415	.33595

#1	1.6712	1.4322
#2	1.6708	1.4257
#3	1.6692	1.4208
#4	1.6652	1.4239

Method: QUANMET Standard: STD5B

Run Time: 11/30/00 09:14:56

0057-144-8

Elem	AL	CA	FE	K	MG	NA
Avge	11.664	26.704	30.255	2.3031	7.6251	51.070
SDev	.046	.133	.042	.0071	.0302	.460
%RSD	.39577	.49628	.13935	.30965	.39552	.90042
#1	11.650	26.665	30.192	2.2974	7.6088	51.040
#2	11.721	26.559	30.269	2.3100	7.6638	51.635
#3	11.611	26.877	30.280	2.2966	7.5950	50.510
#4	11.673	26.715	30.278	2.3086	7.6328	51.095

Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	6.97675	.005581	11/30/00 09:14:56
AL	308.215	STD5B	STD1	8.58023	-.078509	11/30/00 09:14:56
AS	193.696	STD5A	STD1	20.3344	-.012201	11/30/00 09:14:56
B	249.600	STD5A	STD1	16.8960	.000000	11/30/00 09:14:56
BA	493.409	STD5A	STD1	2.27102	-.000247	11/30/00 09:14:56
BE	313.042	STD5A	STD1	.606904	-.001699	11/30/00 09:14:56
CA	317.933	STD5B	STD1	3.74631	-.041804	11/30/00 09:14:56
CD	228.802	STD5A	STD1	11.6982	-.001514	11/30/00 09:14:56
CO	228.616	STD5A	STD1	7.00767	-.000350	11/30/00 09:14:56
CR	267.716	STD5A	STD1	2.61794	-.001309	11/30/00 09:14:56
CU	324.754	STD5A	STD1	4.22618	-.001902	11/30/00 09:14:56
FE	259.940	STD5B	STD1	3.30545	-.005950	11/30/00 09:14:56
K	766.491	STD5B	STD1	43.0432	.865167	11/30/00 09:14:56
LI	670.789	STD5A	STD1	2.38985	.001293	11/30/00 09:14:56
MG	279.079	STD5B	STD1	13.1144	.001311	11/30/00 09:14:56
MN	257.610	STD5A	STD1	4.94114	-.000741	11/30/00 09:14:56
MO	202.030	STD5A	STD1	26.1165	-.002612	11/30/00 09:14:56
NA	588.995	STD5B	STD1	1.96066	-.131070	11/30/00 09:14:56
NI	231.604	STD5A	STD1	5.72158	.005469	11/30/00 09:14:56
PB	220.353	STD5A	STD1	39.5954	.000000	11/30/00 09:14:56
SB	206.838	STD5A	STD1	55.1096	-.002755	11/30/00 09:14:56
SE	196.026	STD5A	STD1	20.6718	.007235	11/30/00 09:14:56
SI	288.158	STD5A	STD1	27.9620	-.043341	11/30/00 09:14:56
SN	189.989	STD5A	STD1	11.4773	.001148	11/30/00 09:14:56
SR	409.552	STD5A	STD1	1.15423	-.000034	11/30/00 09:14:56
TI	334.941	STD5A	STD1	1.55523	-.003188	11/30/00 09:14:56
TL	190.864	STD5A	STD1	64.8819	-.012976	11/30/00 09:14:56
V	292.402	STD5A	STD1	5.89915	-.001180	11/30/00 09:14:56
ZN	213.856	STD5A	STD1	7.03739	-.004905	11/30/00 09:14:56

Analysis Report

William J. Renshaw

11-30-00

11/30/00 09:21:10 AM

675 611

page 1

Method: QUANMET Sample Name: ICV2-1 0057-156-1 Operator: WTR
 Run Time: 11/30/00 09:18:05
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	.51683	25.433	.98911	1.0403	1.0061	.98457	25.418
SDev	.00069	.070	.01400	.0079	.0041	.00266	.080
%RSD	.13424	.27332	1.4157	.76365	.40618	.27014	.31524
#1	.51718	25.439	1.0053	1.0320	1.0062	.98390	25.411
#2	.51579	25.501	.97229	1.0447	1.0103	.98706	25.313
#3	.51714	25.336	.99405	1.0353	1.0005	.98112	25.445
#4	.51719	25.456	.98479	1.0490	1.0072	.98621	25.505
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	27.500	1.1000	1.1000	1.1000	1.1000	27.500
Low	.45000	22.500	.90000	.90000	.90000	.90000	22.500
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	1.0112	1.0160	1.0180	1.0052	26.311	24.778	1.0123
SDev	.0126	.0045	.0016	.0038	.050	.168	.0081
%RSD	1.2439	.44534	.15996	.37842	.19033	.67927	.79715
#1	1.0149	1.0121	1.0188	1.0054	26.316	24.634	1.0115
#2	1.0274	1.0121	1.0183	1.0096	26.307	24.720	1.0221
#3	1.0019	1.0192	1.0157	1.0003	26.250	24.737	1.0024
#4	1.0006	1.0206	1.0193	1.0054	26.372	25.021	1.0133
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	27.500	27.500	1.1000
Low	.90000	.90000	.90000	.90000	22.500	22.500	.90000
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	25.492	1.0155	.99191	25.112	1.0178	1.0350	1.0358
SDev	.058	.0010	.01077	.143	.0081	.0444	.0386
%RSD	.22703	.09445	1.0860	.56929	.79969	4.2877	3.7223
#1	25.493	1.0158	.99322	25.085	1.0225	1.0665	.97795
#2	25.561	1.0148	1.0037	25.315	1.0061	.97944	1.0549
#3	25.420	1.0147	.97754	24.979	1.0240	1.0748	1.0552
#4	25.496	1.0168	.99322	25.070	1.0187	1.0193	1.0551
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	27.500	1.1000	1.1000	27.500	1.1000	1.1000	1.1000
Low	22.500	.90000	.90000	22.500	.90000	.90000	.90000
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	1.0215	.98492	.97836	.99723	.98703	4.9897	1.0133
SDev	.0222	.00279	.01824	.00387	.00224	.1195	.0024
%RSD	2.1703	.28273	1.8638	.38846	.22652	2.3948	.23368
#1	1.0009	.98074	.97295	.99691	.98812	4.9475	1.0148
#2	1.0050	.98633	.98245	1.0015	.98874	5.0125	1.0149

#3	1.0337	.98627	1.0008	.99219	.98376	4.8574	1.0098
#4	1.0465	.98632	.95721	.99829	.98750	5.1414	1.0136
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	1.1000	5.5000	1.1000
Low	.90000	.90000	.90000	.90000	.90000	4.5000	.90000

Elem ZN
Units ppm
Avge 1.0066
SDev .0042
%RSD .41383

#1 1.0042
#2 1.0118
#3 1.0024
#4 1.0078

Errors LC Pass
High 1.1000
Low .90000

Analysis Report

11/30/00 09:24:18 AM

page 1

Method: QUANMET Sample Name: ICB1

Operator: WTR

Run Time: 11/30/00 09:21:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	.00904	.01518	.02280	-.00009	-.00003	-.00771
SDev	.00071	.00707	.03721	.01521	.00031	.00006	.00353
%RSD	203.31	78.125	245.05	66.701	352.62	195.23	45.744

#1	-.00001	.01070	.04467	-.00001	-.00006	.00000	-.01078
#2	-.00001	.00732	-.03257	.03041	-.00051	-.00012	-.01073
#3	-.00001	.00059	.04475	.03041	.00002	.00000	-.00509
#4	.00141	.01757	.00388	.03040	.00021	-.00001	-.00425

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	-.00098	.00246	.00013	-.00063	-.00248	.11406	-.00010
SDev	.00219	.00114	.00050	.00049	.00113	.29625	.00039
%RSD	222.76	46.335	384.17	77.096	45.543	259.72	399.66

#1	-.00021	.00245	.00026	-.00021	-.00397	.03013	.00034
#2	-.00251	.00246	.00079	-.00105	-.00132	-.26256	-.00062
#3	-.00297	.00106	-.00026	-.00021	-.00265	.27978	-.00006
#4	.00176	.00385	-.00026	-.00105	-.00198	.40891	-.00006

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	.00852	-.00049	-.00000	-.00971	.00135	.01191	-.01653
SDev	.02102	.00049	.00905	.00507	.00556	.00454	.01381
%RSD	246.63	99.940	2823400.	52.214	410.63	38.112	83.551

#1	-.00393	-.00074	.00783	-.01147	.00782	.01588	-.01375
#2	-.01180	-.00074	.00261	-.00755	-.00254	.00798	-.00285
#3	.01443	-.00075	-.01306	-.01578	.00410	.01582	-.03576
#4	.03541	.00025	.00261	-.00402	-.00396	.00799	-.01377

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	.02066	.00280	.00969	.00002	-.00039	-.01946	.00000
SDev	.04235	.04044	.01537	.00012	.00044	.04304	.00238
%RSD	204.95	1446.2	158.68	485.71	113.14	221.18	804810.

#1	-.04239	-.03217	.00568	-.00003	-.00039	-.02593	-.00108
#2	.03617	.04053	.02179	.00020	-.00008	.03892	-.00114

#3	.04857	-.03217	.02166	-.00003	-.00101	-.02593	-.00135
#4	.04030	.03499	-.01039	-.00003	-.00008	-.06491	.00357

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00029
SDev	.00087
%RSD	302.28

#1	-.00046
#2	-.00010
#3	.00153
#4	.00018

Errors	LC Pass
High	.02000
Low	-.02000

Analysis Report

QC Standard

11/30/00 09:27:26 AM

page 1

Method: QUANMET

Sample Name: ICSA 0057-146-2

Operator: WTR

Run Time: 11/30/00 09:24:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00020	492.97	.19417	-.03995	.00150	-.00006	481.97
SDev	.00201	.75	.06381	.01504	.00013	.00006	1.37
%RSD	990.33	.15135	32.860	37.656	8.8889	95.794	.28349
#1	-.00129	492.80	.16438	-.05878	.00157	-.00012	480.35
#2	-.00116	492.01	.12937	-.02327	.00157	-.00001	483.66
#3	.00022	493.30	.27788	-.04355	.00157	-.00001	481.69
#4	.00304	493.75	.20506	-.03420	.00130	-.00012	482.17
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value		500.00					500.00
Range		20.000					20.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00643	.01302	.00183	-.00157	185.11	-.20661	.00134
SDev	.00530	.00293	.00205	.00164	.25	.25162	.00071
%RSD	82.438	22.500	112.05	104.30	.13499	121.79	53.412
#1	.00020	.01229	.00393	-.00288	184.76	-.49500	.00225
#2	-.01246	.01654	.00287	.00055	185.15	.00430	.00051
#3	-.00535	.00951	.00131	-.00283	185.14	.00430	.00129
#4	-.00809	.01372	-.00079	-.00112	185.37	-.34004	.00129
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK
Value					200.00		
Range					20.000		
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	483.72	.00836	-.00872	-.00029	-.01086	.04029	.01678
SDev	.66	.00050	.00655	.00568	.01626	.02796	.04157
%RSD	.13541	5.9336	75.086	1930.7	149.69	69.403	247.79
#1	483.17	.00851	.00038	-.00206	.00892	.03058	.03077
#2	483.15	.00863	-.01524	.00814	-.01219	.05485	-.03550
#3	484.37	.00762	-.01002	-.00402	-.00937	.06971	.06352
#4	484.21	.00866	-.00999	-.00324	-.03081	.00603	.00831
Errors	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	500.00						
Range	20.000						
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.17054	.08111	-.09533	.01364	-.02107	.72855	.00195
SDev	.12258	.06094	.03633	.00005	.00031	.21761	.00395
%RSD	71.876	75.135	38.113	.34834	1.4760	29.869	202.24
#1	-.04341	.11323	-.13378	.01367	-.02092	.48593	-.00117
#2	-.08771	-.00971	-.11103	.01357	-.02154	.77985	.00688

#3	-.27792	.10210	-.04865	.01367	-.02092	1.0006	.00341
#4	-.27311	.11882	-.08786	.01367	-.02092	.64776	-.00131

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	-.00399
SDev	.00138
%RSD	34.719

#1	-.00212
#2	-.00546
#3	-.00407
#4	-.00429

Errors	NOCHECK
Value	
Range	

Method: QUANMET Sample Name: ICSAB 0057-130-11 Operator: WTR
 Run Time: 11/30/00 09:27:29
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96210	489.29	1.0831	.92506	.46832	.45543	475.41
SDev	.00142	1.72	.0359	.01367	.00217	.00140	.62
%RSD	.14745	.35228	3.3166	1.4776	.46382	.30684	.13035
#1	.96021	486.70	1.0613	.94490	.46507	.45346	474.63
#2	.96320	490.14	1.0578	.91871	.46961	.45674	475.37
#3	.96317	490.20	1.0778	.92253	.46916	.45589	475.48
#4	.96181	490.11	1.1353	.91410	.46943	.45564	476.15
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	1.0000	.50000	.50000	500.00
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94687	.45809	.44289	.49061	183.50	9.7600	1.0023
SDev	.01570	.00387	.00194	.00166	.42	.2351	.0054
%RSD	1.6575	.84434	.43713	.33822	.22895	2.4084	.53552
#1	.92667	.45640	.44053	.48842	182.87	10.033	.99437
#2	.96480	.45347	.44472	.49190	183.74	9.8784	1.0053
#3	.94618	.46054	.44210	.49190	183.66	9.5513	1.0058
#4	.94983	.46193	.44420	.49022	183.72	9.5771	1.0038
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	.50000	.50000	200.00	10.000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	478.25	.45839	.89731	9.9782	.85734	.95134	.91518
SDev	1.62	.00096	.00267	.0480	.02892	.00362	.03036
%RSD	.33959	.20999	.29709	.48117	3.3736	.37994	3.3175
#1	475.82	.45801	.89332	9.9067	.87965	.95125	.87961
#2	479.26	.45919	.89865	9.9945	.82743	.95649	.90106
#3	479.05	.45917	.89864	10.002	.83781	.94876	.93426
#4	478.85	.45721	.89865	10.009	.88447	.94888	.94579
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	.50000	1.0000	10.000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.84163	1.0358	.80610	.93087	.88065	9.8108	.45883
SDev	.03011	.0000	.03559	.00374	.00219	.2018	.00165
%RSD	3.5780	.00186	4.4154	.40210	.24892	2.0565	.36018
#1	.81492	1.0358	Q.79380	.92528	.87739	9.7304	.45995
#2	.85889	1.0358	.85830	.93313	.88143	9.5778	.45885

#3	.87520	1.0357	Q.79416	.93243	.88205	10.046	.45649
#4	.81751	1.0358	Q.77815	.93266	.88174	9.8893	.46003

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	10.000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	ZN
Units	ppm
Avge	.93717
SDev	.00296
%RSD	.31587

#1	.93292
#2	.93978
#3	.93776
#4	.93820

Errors	QC Pass
Value	1.0000
Range	20.000

Analysis Report

11/30/00 09:33:42 AM

page 1

Method: QUANMET Sample Name: DQF3KBT

Operator: WTR

Run Time: 11/30/00 09:30:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00212	.02613	.15929	.03487	.00075	-.00015	.07748
SDev	.00180	.01025	.02089	.00169	.00011	.00006	.00441
%RSD	84.830	39.237	13.115	4.8405	14.306	39.013	5.6886
#1	.00421	.03472	.16229	.03403	.00085	-.00012	.08103
#2	.00002	.01420	.17872	.03740	.00066	-.00012	.07363
#3	.00144	.02096	.16640	.03402	.00066	-.00013	.08156
#4	.00281	.03464	.12976	.03403	.00085	-.00024	.07371
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	-.00189	-.00210	-.00052	.00043	H.12148	.15926	.00034
SDev	.00132	.00369	.00244	.00043	.00083	.27966	.00068
%RSD	70.056	175.72	465.49	98.078	.68528	175.60	201.38
#1	-.00333	-.00174	-.00078	.00065	H.12231	.21952	.00129
#2	-.00021	-.00035	-.00131	.00065	H.12164	-.08178	-.00006
#3	-.00240	.00106	.00288	.00065	H.12032	.52943	.00034
#4	-.00161	-.00735	-.00288	-.00020	H.12164	-.03013	-.00022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	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	.02885	.01091	.00132	S-.13107	.00742	.00981	.00555
SDev	.00546	.00095	.00261	.00000	.00578	.01354	.01658
%RSD	18.924	8.6797	197.62	.00000	77.889	138.00	298.95
#1	.02229	.01214	.00263	S-.13107	.00109	.01574	-.00281
#2	.03016	.01016	-.00260	S-.13107	.00520	-.00797	-.00270
#3	.03541	.01115	.00263	S-.13107	.01476	.02375	-.00272
#4	.02754	.01016	.00263	S-.13107	.00865	.00772	.03041
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	.01174	.07270	.01152	.00123	.00062	.06360	.00002
SDev	.03759	.03078	.02034	.00010	.00053	.02805	.00238
%RSD	320.24	42.332	176.59	7.7496	85.391	44.112	14639.
#1	.06135	.09646	.01952	.00122	.00117	.07658	-.00115
#2	.00347	.04612	.00804	.00135	-.00008	.02465	-.00122

#3	.01173	.10210	.03329	.00112	.00054	.06356	.00358
#4	-.02960	.04612	-.01478	.00122	.00086	.08959	-.00115

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge .00245
SDev .00042
%RSD 16.981

#1	.00211
#2	.00292
#3	.00267
#4	.00209

Errors	LC Pass
High	.02000
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DQGTKBT

Operator: WTR

Run Time: 11/30/00 09:33:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00105	.00344	.04164	.00763	.00005	-.00012	-.03557
SDev	.00176	.00474	.01855	.01520	.00036	.00001	.00241
%RSD	167.58	137.85	44.543	199.30	762.38	4.9467	6.7664

#1	.00141	.00905	.06902	.00002	.00047	-.00013	-.03784
#2	.00281	.00557	.03649	.03042	-.00025	-.00013	-.03220
#3	-.00140	-.00132	.03255	.00003	-.00025	-.00012	-.03577
#4	.00139	.00047	.02848	.00003	.00021	-.00012	-.03647

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	-.00232	.00036	.00144	-.00021	.01223	-.09900	-.00007
SDev	.00189	.00333	.00089	.00120	.00244	.15796	.00088
%RSD	81.709	931.27	62.028	571.17	19.985	159.55	1246.9

#1	-.00366	-.00034	.00183	.00063	.01058	-.04735	-.00062
#2	-.00052	.00526	.00235	.00064	.00992	.09039	.00062
#3	-.00422	-.00174	.00026	-.00021	.01322	-.15926	.00073
#4	-.00087	-.00175	.00131	-.00190	.01520	-.27978	-.00101

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	-.00131	.00000	-.00130	-.00304	.00629	-.00197	.00005
SDev	.01303	.00049	.00500	.00711	.00320	.02178	.01056
%RSD	993.31	16152.	383.44	233.81	50.854	1103.4	19259.

#1	.00656	.00025	-.00783	.00618	.00413	.02375	.00832
#2	.00918	.00025	.00261	-.00284	.00985	-.01569	.00832
#3	-.00131	-.00074	.00261	-.00441	.00311	.00785	-.01376
#4	-.01967	.00025	-.00261	-.01108	.00809	-.02381	-.00266

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	-.01443	.03356	.00230	-.00002	-.00039	-.05854	.00058
SDev	.03898	.00534	.01268	.00015	.00000	.04434	.00281
%RSD	270.07	15.903	551.37	647.13	.00000	75.735	487.16

#1	.03621	.03498	.00807	-.00013	-.00039	-.05204	.00226
#2	-.01754	.02940	.01725	.00020	-.00039	-.10399	.00358

#3	-.01753	.02935	-.00579	-.00013	-.00039	-.07799	-.00114
#4	-.05887	.04052	-.01034	-.00003	-.00039	-.00014	-.00239

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	-.00198
SDev	.00149
%RSD	75.022

#1	-.00069
#2	-.00410
#3	-.00128
#4	-.00187

Errors	LC Pass
High	.02000
Low	-.02000

Analysis Report

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11/30/00 09:40:02 AM

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Method: QUANMET Sample Name: DQGTKCT Operator: WTR
 Run Time: 11/30/00 09:36:57
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04905	1.9349	2.1501	.96967	1.8801	.04600	L.06667
SDev	.00140	.0050	.0523	.00563	.0110	.00016	.00299
%RSD	2.8597	.25588	2.4325	.58098	.58313	.34501	4.4810

#1	.04975	1.9392	2.1358	.96440	1.8745	.04606	L.06917
#2	.04974	1.9306	2.1562	.96521	1.8699	.04582	L.06737
#3	.04975	1.9392	2.2171	.97455	1.8808	.04594	L.06781
#4	.04694	1.9307	2.0912	.97454	1.8951	.04619	L.06234

Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04619	.47274	.19072	.24402	1.1283	L.01722	.97317
SDev	.00104	.00239	.00116	.00160	.0044	.12817	.00962
%RSD	2.2617	.50534	.60869	.65613	.38981	744.43	.98828

#1	.04528	.47239	.19163	.24296	1.1245	L-.09900	.96499
#2	.04600	.46959	.18902	.24296	1.1285	L.17648	.96730
#3	.04769	.47518	.19111	.24381	1.1344	L-.07317	.97399
#4	.04578	.47378	.19111	.24634	1.1258	L.06456	.98642

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.01180	.48601	-.00247	S-.13107	.47830	.48801	L-.01556
SDev	.00371	.00148	.00000	.00000	.01235	.02777	.00536
%RSD	31.427	.30500	.02306	.00000	2.5823	5.6908	34.454

#1	L.00918	.48773	-.00247	S-.13107	.48667	.47809	L-.01823
#2	L.01705	.48477	-.00247	S-.13107	.46305	.45428	L-.00752
#3	L.00918	.48675	-.00247	S-.13107	.48984	.51776	L-.01814
#4	L.01180	.48477	-.00247	S-.13107	.47362	.50189	L-.01836

Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.1895	.06432	.02079	.94329	-.00008	1.9042	.47942
SDev	.0607	.02517	.02042	.00517	.00062	.0436	.00167
%RSD	2.7709	39.125	98.220	.54791	800.00	2.2911	.34809

#1	2.2184	.05175	.01734	.94122	.00023	1.8912	.48060
#2	2.0985	.10207	.04952	.93776	.00023	1.8782	.47941

#3	2.2184	.05175	.00127	.94422	.00023	1.9689	.48060
#4	2.2225	.05171	.01505	.94995	-.00101	1.8782	.47706
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	.49465						
SDev	.00300						
%RSD	.60681						
#1	.49683						
#2	.49210						
#3	.49764						
#4	.49204						
Errors	LC Pass						
High	.60000						
Low	.40000						

Analysis Report

11/30/00 09:43:14 AM

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Method: QUANMET Sample Name: DP7HAT Operator: WTR
 Run Time: 11/30/00 09:40:09
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00137	.02920	.15319	.03086	.18381	-.00001	498.27
SDev	.00228	.01040	.03440	.01859	.00107	.00000	1.99
%RSD	166.66	35.625	22.455	60.244	.58287	1.0004	.40021
#1	.00142	.03140	.16639	.05416	.18445	-.00001	498.79
#2	-.00137	.03308	.19484	.01480	.18290	-.00001	497.57
#3	-.00416	.01420	.13399	.01699	.18499	-.00001	495.99
#4	-.00137	.03813	.11753	.03748	.18290	-.00001	500.71
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	-.00326	.00103	-.00184	.04988	.05394	2.3157	-.00000
SDev	.00244	.00228	.00074	.00042	.00232	.1881	.00090
%RSD	74.778	221.92	40.336	.84416	4.2931	8.1248	4312e6
#1	.00036	.00382	-.00288	.04967	.05477	2.5611	-.00062
#2	-.00465	.00103	-.00131	.04966	.05146	2.1048	-.00062
#3	-.00398	.00103	-.00131	.04966	.05278	2.2770	-.00006
#4	-.00476	-.00177	-.00183	.05051	.05675	2.3200	.00129
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	119.30	.00150	-.00652	S-.13107	.00239	.06160	.16547
SDev	.33	.00049	.00261	.00000	.00590	.00764	.03643
%RSD	.27994	33.034	40.046	.00000	246.57	12.397	22.014
#1	119.56	.00224	-.00783	S-.13107	.00831	.07157	.16282
#2	118.81	.00125	-.00783	S-.13107	.00250	.05559	.11858
#3	119.43	.00125	-.00783	S-.13107	-.00568	.06360	.17371
#4	119.40	.00125	-.00260	S-.13107	.00443	.05564	.20679
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	.05184	.67253	-.00723	.31357	-.03196	.12913	.00345
SDev	.03610	.00000	.01739	.00094	.00074	.02801	.00003
%RSD	69.636	.00000	240.57	.29880	2.3168	21.694	1.0004
#1	.10249	.67253	-.01413	.31394	-.03118	.15505	.00343
#2	.05287	.67253	.01553	.31233	-.03243	.09023	.00343

#3	.02807	.67253	-.02556	.31454	-.03274	.14212	.00343
#4	.02394	.67253	-.00476	.31348	-.03149	.12912	.00350

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00839
SDev	.00140
%RSD	16.676

#1	.00671
#2	.00781
#3	.00982
#4	.00921

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DP7HATP5 Operator: WTR
 Run Time: 11/30/00 09:43:16
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.01163	.02126	.00339	.03891	-.00006	103.59
SDev	.00114	.00587	.06715	.00163	.00011	.00007	.47
%RSD	376690.	50.443	315.90	47.942	.27752	113.56	.45712
#1	-.00140	.00393	-.07322	.00340	.03900	.00000	102.92
#2	.00139	.01074	.05280	.00538	.03881	-.00012	103.78
#3	.00001	.01771	.02422	.00140	.03881	-.00000	104.02
#4	-.00000	.01414	.08124	.00339	.03900	-.00012	103.63
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	-.00023	.00034	.00026	.00993	.00775	.36371	-.00014
SDev	.00150	.00333	.00222	.00069	.00063	.30325	.00096
%RSD	645.20	969.76	850.11	6.9481	8.1854	83.377	680.00
#1	.00026	-.00176	-.00183	.00909	.00725	-.09039	-.00157
#2	.00023	-.00176	.00131	.01078	.00725	.49500	.00034
#3	.00100	.00524	.00288	.00994	.00857	.53804	.00034
#4	-.00242	-.00035	-.00131	.00993	.00791	.51221	.00034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.133	.00025	-.00392	281.45	.00675	.00989	-.00269
SDev	.107	.00000	.00500	2.48	.00407	.00751	.00007
%RSD	.42394	.65716	127.69	.88074	60.349	75.925	2.5931
#1	25.108	.00025	-.00783	282.48	.00136	.00786	-.00271
#2	25.173	.00025	-.00261	281.35	.00917	.01578	-.00262
#3	25.000	.00025	-.00783	278.07	.01052	.00012	-.00265
#4	25.252	.00025	.00261	283.89	.00594	.01581	-.00278
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02788	.10625	.01092	.06640	-.00653	.03884	-.00035
SDev	.02669	.03077	.02275	.00055	.00053	.05506	.00174
%RSD	95.704	28.959	208.45	.82675	8.1325	141.74	502.91
#1	.00726	.07968	.00805	.06641	-.00723	.09078	-.00129
#2	-.02168	.07968	-.01950	.06641	-.00630	.05185	-.00121

#3	-.05062	.13005	.02182	.06572	-.00599	.05175	.00226
#4	-.04649	.13560	.03330	.06706	-.00661	-.03901	-.00115

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00114
SDev .00138
%RSD 121.44

#1 .00316
#2 .00006
#3 .00066
#4 .00066

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DP7HAST

Operator: WTR

Run Time: 11/30/00 09:46:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.86265	.02104	4.8212	.02919	44.497	-.00004	471.80
SDev	.00070	.00728	.0999	.01109	.128	.00006	.78
%RSD	.08117	34.608	2.0715	37.994	.28712	152.35	.16621
#1	.86230	.02272	4.8354	.03879	44.420	-.00001	472.64
#2	.86230	.02276	4.8517	.01891	44.400	-.00001	471.53
#3	.86230	.02792	4.9167	.03878	44.486	-.00013	472.19
#4	.86370	.01075	4.6810	.02029	44.680	-.00001	470.85
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	.93713	.00564	4.2920	.04713	.01610	2.4492	.00034
SDev	.00865	.00235	.0027	.00098	.00175	.2973	.00046
%RSD	.92278	41.729	.06408	2.0743	10.872	12.139	136.08
#1	.94041	.00496	4.2958	.04797	.01842	2.6472	.00034
#2	.92439	.00362	4.2905	.04628	.01643	2.1737	.00034
#3	.94006	.00494	4.2921	.04628	.01445	2.2167	-.00022
#4	.94367	.00904	4.2895	.04798	.01511	2.7591	.00090
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	112.98	.00075	.00000	S-.13107	.00500	4.4977	.13786
SDev	.14	.00057	.00302	.00000	.00935	.0293	.00563
%RSD	.12698	76.539	144920.	.00000	186.94	.65186	4.0837
#1	113.03	.00124	.00261	S-.13107	-.00112	4.4620	.13498
#2	112.84	.00025	-.00261	S-.13107	.00083	4.5016	.13498
#3	112.90	.00124	-.00261	S-.13107	.01894	4.4937	.14630
#4	113.16	.00025	.00261	S-.13107	.00137	4.5334	.13518
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	1.0429	.65014	-.01425	.29797	-.02947	.05490	.00425
SDev	.0289	.00005	.03185	.00071	.00060	.09074	.00061
%RSD	2.7745	.00779	223.60	.23783	2.0210	165.30	14.359
#1	1.0119	.65016	-.00967	.29778	-.02901	.16842	.00400
#2	1.0533	.65016	.02706	.29778	-.02901	-.05215	.00392

#3	1.0781	.65016	-.02569	.29732	-.02963	.03871	.00392
#4	1.0285	.65006	-.04869	.29898	-.03025	.06460	.00516

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00629
SDev	.00070
%RSD	11.091

#1	.00560
#2	.00676
#3	.00579
#4	.00700

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DP7HADT

Operator: WTR

Run Time: 11/30/00 09:49:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.87800	.01886	4.9656	.01604	45.138	.00008	497.38
SDev	.00072	.01080	.1048	.00258	.130	.00005	.74
%RSD	.08163	57.258	2.1098	16.102	.28887	65.875	.14971
#1	.87765	.00382	5.1162	.01611	45.190	.00011	497.04
#2	.87765	.02954	4.9533	.01353	44.949	.00011	496.95
#3	.87763	.02109	4.8802	.01494	45.245	.00000	497.04
#4	.87908	.02098	4.9126	.01958	45.171	.00010	498.49
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94520	.00393	4.3543	.04966	.02452	2.6988	.00042
SDev	.00637	.00174	.0078	.00069	.02163	.2882	.00034
%RSD	.67433	44.366	.17894	1.3864	88.217	10.678	79.629
#1	.94015	.00322	4.3513	.05051	.00981	2.8796	.00051
#2	.94237	.00192	4.3502	.04966	.01114	2.8882	.00051
#3	.95450	.00596	4.3497	.04882	.02105	2.2770	.00073
#4	.94380	.00462	4.3659	.04967	.05609	2.7505	-.00006
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	118.89	.00100	.00131	S-.13107	.00155	4.5947	.13453
SDev	.18	.00050	.00261	.00000	.01563	.0277	.00018
%RSD	.14878	49.884	199.31	.00000	1007.1	.60353	.13207
#1	119.07	.00124	.00261	S-.13107	.02472	4.6283	.13476
#2	118.65	.00025	.00261	S-.13107	-.00705	4.5649	.13441
#3	118.90	.00124	.00261	S-.13107	-.00294	4.5809	.13458
#4	118.93	.00125	-.00260	S-.13107	-.00853	4.6046	.13437
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0595	.66126	-.02802	.31424	-.03157	-.00358	.00412
SDev	.0568	.06340	.02153	.00094	.00016	.05920	.00384
%RSD	5.3590	9.5881	76.832	.29923	.49261	1655.1	93.326
#1	1.0946	.73393	-.01884	.31477	-.03149	-.09099	.00413
#2	.99952	.69479	-.00507	.31283	-.03149	.02578	.00412

#3	1.0244	.61096	-.05557	.31468	-.03149	.01270	-.00060
#4	1.1196	.60536	-.03261	.31468	-.03180	.03820	.00881

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00409
SDev	.00063
%RSD	15.336

#1	.00492
#2	.00362
#3	.00359
#4	.00422

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

11/30/00 09:55:43 AM

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Method: QUANMET Sample Name: DP7HJT

Operator: WTR

Run Time: 11/30/00 09:52:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00067	.03167	.15622	.04050	.18735	-.00005	446.57
SDev	.00140	.00917	.03850	.00134	.00056	.00006	1.07
%RSD	209.38	28.949	24.645	3.2984	.29766	139.62	.23906
#1	-.00276	.02438	.12577	.03876	.18654	-.00002	445.02
#2	.00004	.03464	.12160	.04155	.18745	-.00002	447.16
#3	.00004	.02432	.17862	.04016	.18771	-.00014	447.39
#4	.00002	.04334	.19888	.04155	.18771	-.00001	446.70
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	-.00386	.00348	.00209	.05875	.00520	2.9592	.00015
SDev	.00619	.00240	.00310	.00081	.00270	.2698	.00057
%RSD	160.31	69.152	148.15	1.3812	51.962	9.1173	383.91
#1	-.00304	.00382	.00026	.05896	.00123	2.7763	-.00062
#2	L-.01041	.00665	.00497	.05981	.00652	3.2928	.00014
#3	L-.00626	.00103	-.00131	.05811	.00586	2.7074	.00073
#4	.00425	.00240	.00445	.05811	.00718	3.0604	.00034
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	173.18	.00050	.00261	S-.13107	.01177	.10527	.19584
SDev	.38	.00049	.00426	.00000	.00598	.01878	.04505
%RSD	.22099	99.497	163.26	.00000	50.849	17.844	23.003
#1	172.61	.00124	.00261	S-.13107	.00455	.11910	.16271
#2	173.42	.00025	.00784	S-.13107	.01826	.11931	.26203
#3	173.35	.00025	.00261	S-.13107	.01465	.07946	.18490
#4	173.34	.00025	-.00261	S-.13107	.00960	.10323	.17370
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01139	1.9770	-.01573	.29688	-.02831	.13288	.00682
SDev	.03834	.0252	.01691	.00079	.00047	.07956	.00228
%RSD	336.74	1.2735	107.47	.26674	1.6484	59.876	33.402
#1	.01137	1.9644	-.01185	.29575	-.02901	.07777	.00711
#2	.03206	2.0148	-.02751	.29713	-.02807	.05172	.00837

#3	.04446	1.9644	-.03013	.29704	-.02807	.19452	.00829
#4	-.04236	1.9644	.00656	.29759	-.02807	.20750	.00352
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00116
SDev .00115
%RSD 99.572

#1 .00215
#2 .00211
#3 .00047
#4 -.00011

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

11/30/00 09:58:50 AM

675

635

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Method: QUANMET Sample Name: CCV2-1 0057-146-1 Operator: WTR
 Run Time: 11/30/00 09:55:45
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0117	50.692	5.1310	5.0536	5.0500	5.0141	51.044
SDev	.0027	.166	.1567	.0370	.0261	.0120	.138
%RSD	.26671	.32666	3.0542	.73164	.51749	.24026	.27026
#1	1.0134	50.602	5.2985	5.0447	5.0317	5.0224	51.212
#2	1.0078	50.515	4.9254	5.0594	5.0250	5.0011	50.909
#3	1.0135	50.885	5.1863	5.0997	5.0805	5.0261	50.957
#4	1.0121	50.766	5.1140	5.0104	5.0627	5.0068	51.099
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0860	5.0209	5.0020	5.0408	52.245	50.591	5.1190
SDev	.0012	.0059	.0072	.0251	.100	.287	.0461
%RSD	.02413	.11666	.14301	.49805	.19217	.56716	.90129
#1	5.0851	5.0269	5.0093	5.0220	52.266	50.313	5.0713
#2	5.0848	5.0129	4.9925	5.0203	52.098	50.373	5.0900
#3	5.0868	5.0227	5.0009	5.0736	52.316	50.830	5.1699
#4	5.0872	5.0213	5.0051	5.0474	52.301	50.847	5.1449
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.683	5.0206	5.0133	49.940	4.9819	5.0533	5.1088
SDev	.176	.0086	.0196	.288	.0085	.0266	.0002
%RSD	.34802	.17223	.39007	.57668	.17126	.52663	.00484
#1	50.560	5.0255	5.0133	49.691	4.9757	5.0377	5.1088
#2	50.521	5.0077	4.9871	49.717	4.9742	5.0374	5.1091
#3	50.901	5.0235	5.0185	50.290	4.9924	5.0453	5.1087
#4	50.749	5.0255	5.0342	50.061	4.9852	5.0928	5.1085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2078	4.9954	4.9726	5.0405	4.9978	10.182	5.0220
SDev	.1025	.0359	.0878	.0221	.0138	.197	.0098
%RSD	1.9678	.71896	1.7651	.43847	.27605	1.9363	.19603
#1	5.3298	5.0093	4.9135	5.0271	4.9966	10.383	5.0200
#2	5.1474	4.9421	4.8814	5.0182	4.9795	10.177	5.0090

#3	5.1026	5.0206	5.0489	5.0670	5.0121	9.9151	5.0306
#4	5.2514	5.0094	5.0466	5.0497	5.0031	10.253	5.0285
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem ZN
Units ppm
Avge 5.0340
SDev .0210
%RSD .41694

#1 5.0549
#2 5.0397
#3 5.0049
#4 5.0365

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB1

Operator: WTR

Run Time: 11/30/00 09:58:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00140	.00776	.01112	.01689	.00030	.00009	.00792
SDev	.00199	.01103	.03510	.01951	.00011	.00005	.00499
%RSD	142.76	142.06	315.71	115.48	35.924	57.340	62.975
#1	-.00142	.00054	-.02024	.03379	.00021	.00001	.00126
#2	.00281	-.00294	-.00410	.03379	.00021	.00011	.00738
#3	.00140	.02105	.06084	-.00001	.00039	.00012	.01012
#4	.00281	.01241	.00798	.00000	.00039	.00011	.01294
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	-.00153	.00141	.00170	.00021	-.00033	.17432	.00048
SDev	.00067	.00210	.00306	.00109	.00256	.35926	.00105
%RSD	44.163	149.49	180.01	514.15	774.56	206.09	220.41
#1	-.00225	-.00034	-.00288	-.00106	-.00397	-.35726	-.00062
#2	-.00146	.00246	.00340	.00064	.00066	.31422	-.00022
#3	-.00176	.00386	.00340	.00148	.00000	.43474	.00146
#4	-.00064	-.00035	.00288	-.00021	.00198	.30561	.00129
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	.00000	-.00000	-.00261	-.00480	.00456	.02181	.00002
SDev	.01311	.00049	.00426	.00386	.00758	.00753	.01654
%RSD	2651e6	44755.	163.30	80.261	166.18	34.528	86993.
#1	-.01705	-.00074	-.00261	-.00559	-.00073	.03165	-.01381
#2	-.00131	.00024	-.00783	-.00990	.00539	.01589	-.01378
#3	.01443	.00025	.00261	-.00127	.01496	.01594	.00846
#4	.00393	.00025	-.00261	-.00245	-.00139	.02377	.01921
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	.01964	.02936	.01263	.00017	-.00008	.01945	.00026
SDev	.01940	.00648	.02661	.00015	.00067	.02246	.00444
%RSD	98.776	22.060	210.80	87.893	864.10	115.46	1680.1
#1	-.00518	.02370	.01946	-.00003	-.00101	.01306	-.00594
#2	.02791	.03499	.03323	.00033	-.00008	.01293	.00344

#3	.04031	.03495	-.02636	.00020	.00054	-.00003	.00004
#4	.01551	.02381	.02418	.00020	.00023	.05186	.00351
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge .00189
SDev .00083
%RSD 43.909

#1 .00095
#2 .00213
#3 .00291
#4 .00157

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DP9ANT

Operator: WTR

Run Time: 11/30/00 10:02:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00035	.90543	.19718	.05416	.19962	.00036	4.0840
SDev	.00134	.00448	.03617	.00001	.00107	.00010	.0098
%RSD	381.60	.49460	18.342	.00983	.53589	27.183	.24073
#1	-.00140	.90332	.20433	.05415	.19907	.00037	4.0718
#2	-.00140	.90161	.24501	.05416	.19971	.00049	4.0925
#3	.00001	.90497	.17579	.05416	.19861	.00036	4.0804
#4	.00139	.91182	.16360	.05416	.20107	.00025	4.0914
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	.00897	.01320	.00026	.00636	.06082	.68439	-.00014
SDev	.00189	.00266	.00074	.00081	.00171	.21880	.00052
%RSD	21.042	20.151	283.05	12.725	2.8055	31.970	373.09
#1	.00797	.01495	.00079	.00573	.05884	.75326	-.00006
#2	.00751	.01495	.00026	.00742	.06148	.86517	-.00045
#3	.00869	.01355	.00078	.00573	.06281	.75326	-.00062
#4	.01170	.00933	-.00079	.00657	.06016	.36587	.00056
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	.98817	.08054	-.00260	S-.13107	.01747	27.083	.03607
SDev	.01180	.00049	.00000	.00000	.00760	.072	.01100
%RSD	1.1944	.61323	.00847	.00000	43.499	.26454	30.484
#1	.97440	.08029	-.00260	S-.13107	.02750	27.028	.04169
#2	.99801	.08029	-.00260	S-.13107	.01484	27.028	.01958
#3	.99801	.08029	-.00260	S-.13107	.00940	27.099	.04144
#4	.98227	.08128	-.00260	S-.13107	.01815	27.178	.04158
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00535	.61236	-.00443	.03522	.00101	.03225	-.00033
SDev	.03484	.03399	.02078	.00027	.00018	.06487	.00177
%RSD	650.85	5.5506	468.69	.75624	17.765	201.16	538.63
#1	-.02980	.58299	-.00785	.03515	.00117	.01280	-.00121
#2	.04463	.58299	-.02860	.03505	.00086	-.03914	-.00121

#3	-.01738	.63896	.02199	.03505	.00086	.11655	.00233
#4	.02396	.64451	-.00326	.03561	.00117	.03879	-.00122

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .07759
SDev .00095
%RSD 1.2216

#1 .07685
#2 .07689
#3 .07776
#4 .07887

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

675 641
11/30/00 10:08:14 AM page 1

Method: QUANMET Sample Name: DP9AVT, Operator: WTR
Run Time: 11/30/00 10:05:09
Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00102	.04030	.11246	.11035	.29535	.00008	H737.24
SDev	.00133	.00758	.03515	.00182	.00123	.00006	1.09
%RSD	130.16	18.810	31.259	1.6461	.41558	72.783	.14752
#1	.00002	.04502	.10531	.11015	.29437	.00011	H737.92
#2	-.00138	.03304	.07287	.11294	.29710	-.00001	H736.72
#3	-.00277	.03471	.11351	.10876	.29528	.00011	H735.98
#4	.00002	.04843	.15815	.10956	.29464	.00011	H738.35
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	-.00228	.00310	.00013	.03255	.01885	3.4542	.00048
SDev	.00072	.00081	.00108	.00042	.00174	.3008	.00028
%RSD	31.584	26.075	836.64	1.2977	9.2315	8.7082	58.823
#1	-.00171	.00380	.00026	.03276	.02034	3.8610	.00034
#2	-.00328	.00240	-.00131	.03276	.01902	3.1378	.00090
#3	-.00180	.00380	.00026	.03191	.01637	3.4391	.00034
#4	-.00231	.00240	.00131	.03276	.01968	3.3789	.00034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0471	.00025	.00131	S-.13107	.01037	.05761	.10757
SDev	.0120	.00000	.00261	.00000	.00312	.02083	.02202
%RSD	.23768	.33983	199.63	.00000	30.050	36.160	20.468
#1	5.0530	.00025	.00261	S-.13107	.01380	.08731	.09660
#2	5.0504	.00025	-.00261	S-.13107	.01191	.03977	.09659
#3	5.0556	.00025	.00261	S-.13107	.00673	.04772	.09651
#4	5.0294	.00025	.00261	S-.13107	.00904	.05566	.14060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02578	.83052	.02815	.34119	-.04673	.04840	.00385
SDev	.02504	.01153	.00548	.00124	.00076	.08300	.00060
%RSD	97.110	1.3878	19.459	.36382	1.6303	171.50	15.644
#1	.01143	.84030	.02007	.34003	-.04673	.03864	.00357
#2	-.04232	.81793	.03155	.34293	-.04673	-.01323	.00350

#3	-.03406	.82354	.03155	.34109	-.04767	-.00025	.00475
#4	-.03818	.84030	.02943	.34072	-.04580	.16843	.00358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .00660
SDev .00103
%RSD 15.618

#1 .00784
#2 .00702
#3 .00589
#4 .00562

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DP9A0T

Operator: WTR

Run Time: 11/30/00 10:08:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00208	.92213	.18077	.24990	.18594	.00057	16.194
SDev	.00082	.00583	.02989	.00751	.00078	.00006	.066
%RSD	39.332	.63274	16.533	3.0066	.41882	10.059	.40979
#1	.00278	.92720	.17563	.24001	.18563	.00060	16.222
#2	.00279	.92717	.22441	.25253	.18499	.00060	16.096
#3	.00137	.91704	.16356	.24915	.18654	.00049	16.244
#4	.00137	.91712	.15949	.25790	.18662	.00061	16.213
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	.01675	.01143	.00183	.01544	.05620	1.1320	.00096
SDev	.00372	.00080	.00128	.00085	.00108	.3983	.00064
%RSD	22.205	6.9906	70.038	5.4768	1.9218	35.184	67.412
#1	.01805	.01212	.00236	.01587	.05620	1.2612	.00034
#2	.01240	.01074	.00340	.01587	.05619	1.1837	.00090
#3	.01543	.01073	.00078	.01417	.05487	.57247	.00073
#4	.02112	.01211	.00078	.01587	.05752	1.5108	.00186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.4452	.18430	-.00391	S-.13107	.02071	35.681	.04437
SDev	.0292	.00095	.00783	.00000	.00749	.150	.01050
%RSD	.84778	.51307	200.37	.00000	36.166	.41968	23.666
#1	3.4320	.18505	.00262	S-.13107	.02811	35.683	.05272
#2	3.4478	.18307	.00262	S-.13107	.01028	35.477	.05245
#3	3.4163	.18504	-.00783	S-.13107	.02225	35.833	.04169
#4	3.4845	.18405	-.01305	S-.13107	.02218	35.731	.03064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00534	1.3492	-.00956	.08081	.00078	.03634	.00084
SDev	.05385	.0262	.01680	.00036	.00039	.03727	.00253
%RSD	1008.8	1.9456	175.62	.44659	50.332	102.55	302.45
#1	.07769	1.3324	-.02388	.08068	.00086	.09148	.00240
#2	-.01327	1.3884	.00826	.08035	.00023	.01361	.00358

#3	-.05048	1.3380	-.02392	.08105	.00086	.02665	-.00128
#4	.00741	1.3380	.00128	.08114	.00117	.01362	-.00135

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.10458
SDev	.00152
%RSD	1.4503

#1	.10497
#2	.10421
#3	.10275
#4	.10638

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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11/30/00 10:14:35 AM page 1

Method: QUANMET Sample Name: DPA2LT

Operator: WTR

Run Time: 11/30/00 10:11:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00313	.04071	.18366	.05323	.27863	-.00004	H668.77
SDev	.00133	.00753	.03608	.00169	.00078	.00006	2.61
%RSD	42.677	18.489	19.643	3.1798	.27840	172.18	.39017
#1	-.00417	.02949	.15832	.05407	.27783	-.00013	H666.49
#2	-.00417	.04500	.19887	.05069	.27965	-.00001	H666.60
#3	-.00138	.04503	.22733	.05408	.27874	-.00001	H671.55
#4	-.00279	.04333	.15013	.05407	.27829	.00000	H670.45
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	-.00150	.00065	-.00013	.04078	.00333	2.8559	.00062
SDev	.00185	.00177	.00228	.00109	.00165	.3055	.00085
%RSD	123.65	272.51	1723.4	2.6778	49.675	10.698	136.67
#1	-.00053	.00100	-.00131	.03952	.00250	2.7418	.00034
#2	-.00235	.00240	.00026	.04205	.00250	2.9226	.00034
#3	-.00363	.00100	.00288	.04121	.00581	3.2411	.00186
#4	.00052	-.00181	-.00236	.04036	.00250	2.5180	-.00006
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	47.684	.00297	.00131	S-.13107	.01479	.02584	.08283
SDev	.112	.00049	.00500	.00000	.00890	.01872	.03867
%RSD	.23460	16.660	382.84	.00000	60.171	72.450	46.681
#1	47.612	.00321	.00784	S-.13107	.00611	.03969	.06333
#2	47.746	.00222	.00261	S-.13107	.00833	.03971	.06346
#3	47.809	.00321	-.00261	S-.13107	.02408	.00008	.06371
#4	47.570	.00321	-.00261	S-.13107	.02062	.02387	.14084
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05066	.46280	.01541	.38639	-.04370	.06160	.00267
SDev	.03797	.00967	.03361	.00126	.00047	.03416	.00181
%RSD	74.951	2.0904	218.11	.32724	1.0676	55.448	67.690
#1	.06099	.45442	.05894	.38570	-.04425	.09080	.00364
#2	.08993	.45442	.02451	.38823	-.04331	.02590	.00357

#3	.05273	.47120	-.01451	.38616	-.04331	.03886	.00351
#4	-.00103	.47116	-.00730	.38546	-.04394	.09085	-.00004

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00106
SDev	.00086
%RSD	81.228

#1	.00023
#2	.00054
#3	.00215
#4	.00132

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

11/30/00 10:17:47 AM

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page 1

Method: QUANMET Sample Name: DPA2RT

Operator: WTR

Run Time: 11/30/00 10:14:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00208	.02186	.11568	.01421	.22862	-.00004	H692.06
SDev	.00081	.00453	.02359	.00080	.00212	.00006	3.51
%RSD	38.778	20.725	20.394	5.6357	.92578	159.88	.50709
#1	-.00138	.02273	.10957	.01490	.22651	-.00001	H686.95
#2	-.00138	.02784	.12987	.01352	.22723	-.00013	H692.71
#3	-.00277	.01929	.08520	.01352	.23105	-.00001	H693.83
#4	-.00278	.01756	.13808	.01491	.22969	-.00001	H694.76
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	-.00339	.00103	-.00275	.03127	.00101	2.2856	-.00038
SDev	.00217	.00303	.00116	.00127	.00147	.3681	.00038
%RSD	63.933	294.90	42.206	4.0467	144.73	16.107	100.02
#1	L-.00505	.00524	-.00236	.03022	.00184	2.4405	-.00006
#2	-.00105	-.00178	-.00236	.03191	-.00080	2.3975	-.00079
#3	-.00205	.00102	-.00445	.03022	.00250	1.7432	-.00062
#4	L-.00540	-.00037	-.00183	.03275	.00052	2.5611	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.947	.00074	-.00131	S-.13107	.00925	.01602	.12414
SDev	.067	.00057	.00261	.00000	.00934	.01301	.01101
%RSD	.55755	76.955	200.03	.00000	100.95	81.190	8.8718
#1	11.878	.00025	.00261	S-.13107	.02048	.03198	.12972
#2	11.901	.00123	-.00261	S-.13107	.00863	.00011	.12966
#3	12.001	.00123	-.00261	S-.13107	-.00234	.01603	.12957
#4	12.006	.00025	-.00261	S-.13107	.01024	.01597	.10762
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00620	.34118	.01960	.39437	-.04440	-.00653	.00352
SDev	.02892	.00535	.01132	.00273	.00018	.08771	.00003
%RSD	466.53	1.5694	57.725	.69210	.40445	1344.1	.99996
#1	-.02170	.34258	.03627	.39114	-.04425	-.11687	.00357
#2	-.00104	.33698	.01102	.39368	-.04425	.02596	.00350

#3	.03205	.34817	.01561	.39770	-.04456	.09078	.00349
#4	-.03411	.33698	.01552	.39497	-.04456	-.02598	.00350
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge -.00155
SDev .00034
%RSD 22.092

#1 -.00119
#2 -.00141
#3 -.00161
#4 -.00200

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

11/30/00 10:21:00 AM

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Method: QUANMET Sample Name: DP2WNT

Operator: WTR

Run Time: 11/30/00 10:17:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00012	1.0679	.16008	.06577	.33423	.00033	143.16
SDev	.00114	.0032	.01838	.00366	.00136	.00006	.26
%RSD	986.96	.29882	11.483	5.5584	.40580	17.791	.18363
#1	-.00010	1.0713	.13764	.06950	.33389	.00036	142.97
#2	-.00152	1.0697	.16212	.06612	.33480	.00037	143.04
#3	-.00012	1.0644	.15809	.06672	.33252	.00025	143.09
#4	.00127	1.0662	.18248	.06075	.33570	.00037	143.55
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	.00072	.00265	.00013	.00701	.28145	4.3344	.02670
SDev	.00193	.00070	.00198	.00201	.00063	.3338	.00028
%RSD	266.44	26.214	1517.5	28.722	.22523	7.7007	1.0654
#1	.00304	.00370	.00288	.00997	.28228	4.7907	.02693
#2	-.00136	.00231	-.00131	.00574	.28095	4.0073	.02637
#3	.00143	.00230	-.00131	.00658	.28162	4.1967	.02654
#4	-.00022	.00231	.00026	.00574	.28096	4.3431	.02693
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.751	.99199	-.00388	S-.13107	.03921	.01904	-.00238
SDev	.029	.00099	.00892	.00000	.00444	.02287	.00009
%RSD	.20800	.09964	229.84	.00000	11.316	120.11	3.8450
#1	13.792	.99150	-.00780	S-.13107	.03710	.03887	-.00239
#2	13.727	.99150	-.01302	S-.13107	.04491	-.00077	-.00226
#3	13.740	.99150	.00787	S-.13107	.03461	.03883	-.00248
#4	13.745	.99348	-.00258	S-.13107	.04020	-.00076	-.00241
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02049	H23.533	.02243	.42304	-.00233	.06919	-.00005
SDev	.04427	.037	.00604	.00150	.00039	.06614	.00233
%RSD	216.04	.15690	26.914	.35337	16.777	95.592	4580.9
#1	.07011	H23.540	.01956	.42222	-.00194	.15998	.00344
#2	-.02085	H23.534	.01727	.42374	-.00288	.04325	-.00135

#3	.04530	H23.484	.02185	.42144	-.00226	.00432	-.00108
#4	-.01258	H23.573	.03104	.42476	-.00226	.06922	-.00121

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.49171
SDev	.00227
%RSD	.46133

#1	.49425
#2	.48917
#3	.49284
#4	.49059

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

675 651
11/30/00 10:24:13 AM page 1

Method: QUANMET Sample Name: DP4J8T

Operator: WTR

Run Time: 11/30/00 10:21:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00029	1.0759	.18730	.03760	.29925	.00097	41.113
SDev	.00176	.0066	.01978	.00114	.00111	.00001	.153
%RSD	604.18	.61669	10.560	3.0364	.36960	.50588	.37260
#1	.00007	1.0818	.17603	.03858	.29873	.00096	41.048
#2	.00006	1.0664	.19246	.03661	.29918	.00097	41.114
#3	-.00274	1.0768	.21273	.03661	.30081	.00097	40.966
#4	.00145	1.0785	.16798	.03860	.29827	.00097	41.324
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	.00177	.02474	.01806	.04530	2.3596	4.9134	.00522
SDev	.00053	.00162	.00214	.00049	.0038	.3642	.00020
%RSD	29.895	6.5390	11.832	1.0742	.15910	7.4133	3.7736
#1	.00197	.02614	.01963	.04488	2.3541	5.2814	.00551
#2	.00218	.02334	.01649	.04572	2.3601	5.1523	.00512
#3	.00099	.02334	.01597	.04572	2.3621	4.5066	.00512
#4	.00192	.02614	.02016	.04488	2.3621	4.7132	.00512
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	1.9088	2.7857	-.00100	S-.13107	.02122	.07666	.00566
SDev	.0110	.0042	.00261	.00000	.00414	.01758	.01060
%RSD	.57619	.15051	260.90	.00000	19.497	22.927	187.17
#1	1.9239	2.7808	.00292	S-.13107	.02561	.06285	.01953
#2	1.9081	2.7887	-.00231	S-.13107	.01671	.07067	-.00264
#3	1.9055	2.7838	-.00231	S-.13107	.01886	.07067	-.00260
#4	1.8977	2.7897	-.00231	S-.13107	.02372	.10243	.00835
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00510	1.7239	.00561	.12507	-.00109	.05568	.00032
SDev	.03986	.0079	.02379	.00052	.00039	.02673	.00227
%RSD	781.47	.45841	424.41	.41984	35.952	48.012	701.89
#1	-.01455	1.7183	-.02131	.12500	-.00101	.07189	.00362
#2	-.00627	1.7350	.00844	.12477	-.00101	.03300	.00001

#3	-.02280	1.7238	-.00074	.12583	-.00163	.08486	-.00117
#4	.06402	1.7183	.03603	.12468	-.00070	.03297	-.00116
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .68719
SDev .00298
%RSD .43317

#1 .68959
#2 .68538
#3 .68984
#4 .68394

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

675 653
11/30/00 10:27:21 AM page 1

Method: QUANMET Sample Name: DQCKKT

Operator: WTR

Run Time: 11/30/00 10:24:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00015	.75900	.18163	.05488	.95776	.00036	149.30
SDev	.00134	.00780	.04205	.00163	.00310	.00001	.27
%RSD	905.05	1.0279	23.152	2.9646	.32359	1.4074	.18235
#1	.00120	.76070	.20092	.05488	.96173	.00036	148.90
#2	.00120	.75902	.12366	.05488	.95719	.00036	149.46
#3	-.00022	.76758	.22127	.05687	.95791	.00037	149.45
#4	-.00159	.74870	.18068	.05288	.95420	.00036	149.40
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	-.00290	.00798	.02421	.01231	.43701	2.8301	.00138
SDev	.00076	.00210	.00089	.00160	.00108	.2783	.00072
%RSD	26.306	26.364	3.6929	12.984	.24694	9.8328	52.111
#1	-.00371	.00622	.02539	.01337	.43701	2.8193	.00129
#2	-.00187	.00902	.02330	.01337	.43833	3.2239	.00090
#3	-.00298	.00622	.02435	.01252	.43701	2.6816	.00242
#4	-.00305	.01043	.02382	.00999	.43568	2.5955	.00090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.622	1.7177	.00006	S-.13107	.02562	.02732	.00555
SDev	.020	.0022	.00302	.00000	.00885	.01989	.00551
%RSD	.19273	.12756	5338.8	.00000	34.565	72.799	99.189
#1	10.624	1.7189	-.00256	S-.13107	.03414	.05498	-.00271
#2	10.645	1.7169	-.00255	S-.13107	.02876	.00756	.00841
#3	10.624	1.7199	.00267	S-.13107	.01328	.02332	.00820
#4	10.595	1.7149	.00267	S-.13107	.02627	.02344	.00830
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02923	4.1622	.01213	.44079	.00778	.02746	.00242
SDev	.02239	.0000	.02379	.00119	.00030	.06043	.00234
%RSD	76.586	.00066	196.19	.27044	3.8297	220.07	96.718
#1	.01270	4.1622	.04250	.44217	.00801	.08587	.00356
#2	.02097	4.1622	-.00565	.44032	.00739	-.05692	.00356

#3	.02097	4.1621	-.00795	.44125	.00801	.04698	-.00109
#4	.06231	4.1622	.01960	.43940	.00770	.03391	.00363
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .08387
SDev .00177
%RSD 2.1068

#1 .08300
#2 .08359
#3 .08247
#4 .08643

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

 11/30/00 10:30:29 AM **675** **655** page 1

Method: QUANMET Sample Name: DQCLCT Operator: WTR
 Run Time: 11/30/00 10:27:24
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00052	.42828	.12663	.08687	.77635	.00048	82.127
SDev	.00197	.01198	.02496	.01625	.00242	.00010	1.291
%RSD	378.10	2.7981	19.707	18.706	.31154	19.673	1.5715
#1	.00086	.43653	.13474	.10019	.77540	.00049	82.256
#2	-.00051	.43470	.13468	.07116	.77358	.00060	82.953
#3	.00088	.43131	.14691	.10158	.77722	.00048	83.035
#4	-.00332	.41060	.09021	.07455	.77922	.00037	80.263
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	-.00113	.00877	-.00052	.01672	.11585	2.3566	.00077
SDev	.00180	.00403	.00151	.00098	.00218	.2229	.00106
%RSD	159.74	45.988	287.69	5.8567	1.8854	9.4572	136.75
#1	-.00201	.00912	-.00026	.01756	.11635	2.1909	-.00022
#2	-.00296	.01333	-.00079	.01757	.11833	2.5697	.00169
#3	-.00077	.00912	.00131	.01587	.11569	2.5266	.00169
#4	.00122	.00350	-.00235	.01586	.11304	2.1392	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.1473	3.0023	-.00260	S-.13107	.02370	.04940	.00301
SDev	.0217	.0299	.00603	.00000	.00465	.00764	.01427
%RSD	.23761	.99634	232.27	.00000	19.605	15.475	473.72
#1	9.1316	3.0025	-.00782	S-.13107	.02837	.05536	.01959
#2	9.1709	3.0203	.00263	S-.13107	.01947	.04754	.00852
#3	9.1604	3.0262	-.00782	S-.13107	.02701	.05534	-.00244
#4	9.1263	2.9600	.00263	S-.13107	.01993	.03935	-.01361
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01172	4.0084	.01668	.35305	-.00148	.03117	.00114
SDev	.03149	.0660	.00999	.00053	.00018	.04283	.00273
%RSD	268.62	1.6456	59.863	.15049	12.155	137.43	238.37
#1	.05307	4.0055	.02650	.35292	-.00132	.03442	-.00128
#2	-.02135	4.0559	.00350	.35268	-.00163	-.03042	.00357

#3	.01586	4.0559	.01493	.35384	-.00132	.06053	.00344
#4	-.00069	3.9161	.02178	.35278	-.00163	.06014	-.00115

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .13242
SDev .00201
%RSD 1.5195

#1	.13309
#2	.13232
#3	.13453
#4	.12973

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

675 657
11/30/00 10:33:36 AM page 1

Method: QUANMET Sample Name: DQCLET

Operator: WTR

Run Time: 11/30/00 10:30:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00052	.31863	.12446	.01622	.74656	.00039	77.312
SDev	.00069	.00570	.04312	.00234	.00322	.00006	.344
%RSD	133.64	1.7897	34.647	14.411	.43077	14.375	.44467
#1	-.00052	.31476	.14783	.01706	.75087	.00048	76.977
#2	.00086	.32161	.09904	.01905	.74705	.00037	77.618
#3	.00086	.31302	.17230	.01370	.74470	.00036	77.054
#4	.00086	.32513	.07866	.01508	.74361	.00036	77.600
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	-.00173	.02245	.00563	.02180	.11155	2.7203	.00072
SDev	.00057	.00334	.00099	.00098	.00136	.2312	.00047
%RSD	32.920	14.868	17.607	4.4885	1.2226	8.4973	65.111
#1	-.00209	.02315	.00497	.02095	.10973	2.7160	.00034
#2	-.00154	.02455	.00498	.02265	.11172	2.6127	.00090
#3	-.00102	.01754	.00550	.02095	.11172	2.5094	.00034
#4	-.00228	.02455	.00707	.02265	.11304	3.0432	.00129
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.050	3.0309	.00001	S-.13107	.02265	.03993	-.00529
SDev	.021	.0073	.00522	.00000	.00146	.03040	.01883
%RSD	.21027	.24020	36227.	.00000	6.4338	76.129	355.77
#1	10.068	3.0302	-.00260	S-.13107	.02471	.06368	-.02460
#2	10.050	3.0401	.00785	S-.13107	.02256	.03205	-.01350
#3	10.021	3.0223	-.00260	S-.13107	.02196	.00021	-.00258
#4	10.063	3.0312	-.00260	S-.13107	.02137	.06377	.01952
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01378	3.4617	.02353	.35334	-.00202	.05403	.00060
SDev	.03282	.0084	.02761	.00130	.00039	.04559	.00200
%RSD	238.23	.24219	117.32	.36939	19.359	84.380	332.31
#1	-.01724	3.4575	.05387	.35499	-.00257	.02158	.00352
#2	.05719	3.4575	-.01036	.35370	-.00194	.08653	-.00106

#3	-.00483	3.4743	.03559	.35268	-.00163	.09943	-.00002
#4	.01998	3.4575	.01503	.35199	-.00194	.00858	-.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .10665
SDev .00208
%RSD 1.9506

#1 .10637
#2 .10412
#3 .10918
#4 .10694

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

675 659
11/30/00 10:36:44 AM page 1

Method: QUANMET Sample Name: CCV2-2

Operator: WTR

Run Time: 11/30/00 10:33:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0078	50.387	5.1593	5.0256	5.0412	4.9783	51.147
SDev	.0021	.207	.0233	.0201	.0329	.0165	.144
%RSD	.20499	.41061	.45210	.40049	.65241	.33242	.28203
#1	1.0063	50.210	5.1559	5.0086	5.0189	4.9676	51.167
#2	1.0077	50.240	5.1313	5.0084	5.0103	4.9635	51.031
#3	1.0064	50.439	5.1619	5.0473	5.0539	4.9821	51.046
#4	1.0107	50.657	5.1881	5.0382	5.0816	5.0001	51.343
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0879	5.0136	4.9935	4.9886	52.136	50.305	5.0463
SDev	.0284	.0158	.0231	.0232	.180	.188	.0365
%RSD	.55899	.31603	.46278	.46584	.34449	.37310	.72374
#1	5.0706	4.9990	4.9815	4.9696	52.033	50.313	5.0169
#2	5.0785	5.0032	4.9758	4.9687	51.971	50.089	5.0147
#3	5.0720	5.0186	4.9894	5.0009	52.162	50.546	5.0653
#4	5.1302	5.0338	5.0271	5.0153	52.377	50.270	5.0885
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.348	5.0097	4.9950	49.502	5.0080	5.0256	5.1063
SDev	.241	.0160	.0366	.285	.0449	.0589	.0056
%RSD	.47820	.31884	.73242	.57473	.89739	1.1720	.10944
#1	50.216	5.0027	4.9558	49.286	5.0178	5.0373	5.1094
#2	50.106	4.9958	4.9767	49.252	4.9738	4.9502	5.0980
#3	50.413	5.0077	5.0080	49.624	4.9727	5.0217	5.1086
#4	50.654	5.0325	5.0394	49.847	5.0676	5.0932	5.1093
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2261	4.9909	5.0083	5.0180	4.9726	10.109	5.0020
SDev	.1082	.0356	.0235	.0272	.0198	.072	.0159
%RSD	2.0700	.71377	.46962	.54213	.39732	.70878	.31749
#1	5.3167	4.9419	5.0169	5.0007	4.9602	10.204	4.9908
#2	5.1966	4.9922	4.9916	4.9920	4.9533	10.114	4.9923

#3	5.0856	5.0035	5.0375	5.0274	4.9801	10.034	4.9998
#4	5.3054	5.0262	4.9870	5.0521	4.9969	10.083	5.0251
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem ZN
Units ppm
Avge 4.9988
SDev .0089
%RSD .17816

#1 4.9957
#2 4.9920
#3 4.9955
#4 5.0119

Errors LC Pass
High 5.5000
Low 4.5000

Analysis Report

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11/30/00 10:39:51 AM page 1

Method: QUANMET Sample Name: CCB2

Operator: WTR

Run Time: 11/30/00 10:36:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00244	.01584	.00699	.03125	.00030	-.00000	-.00031
SDev	.00070	.01308	.02940	.00169	.00030	.00010	.00367
%RSD	28.719	82.572	420.41	5.4070	101.22	75551.	1190.8

#1	.00280	.01756	-.00018	.03379	.00066	-.00001	.00011
#2	.00279	.02267	.04864	.03041	.00021	.00000	.00020
#3	.00139	-.00305	.00004	.03041	-.00006	-.00012	-.00522
#4	.00279	.02616	-.02054	.03041	.00039	.00012	.00368

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	-.00262	.00106	-.00013	-.00042	-.00083	-.07963	.00006
SDev	.00074	.00114	.00089	.00042	.00174	.23933	.00085
%RSD	28.168	108.02	687.81	100.25	210.80	300.56	1503.3

#1	-.00246	.00246	.00078	-.00021	.00066	-.02152	-.00022
#2	-.00344	-.00034	.00026	-.00021	-.00198	.17648	.00129
#3	-.00288	.00106	-.00131	-.00106	-.00264	-.40030	-.00062
#4	-.00169	.00106	-.00026	-.00021	.00066	-.07317	-.00022

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	.00066	-.00049	.00522	.00686	.00604	.00002	.00278
SDev	.01120	.00049	.00301	.00520	.00396	.00003	.00632
%RSD	1708.8	100.16	57.732	75.719	65.580	144.69	227.19

#1	-.01180	-.00074	.00261	.01049	.00527	.00005	-.00269
#2	.01443	-.00074	.00783	.00343	.00157	-.00001	.00821
#3	-.00393	-.00074	.00783	.00147	.00615	.00004	.00829
#4	.00393	.00025	.00261	.01206	.01119	.00000	-.00269

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	-.01964	.02517	.00632	.00025	.00039	-.00974	.00007
SDev	.03842	.00705	.01067	.00029	.00031	.05336	.00164
%RSD	195.59	28.033	168.74	114.09	80.000	548.06	2386.6

#1	.03204	.03498	-.00805	.00020	.00054	.05186	.00240
#2	-.01758	.02376	.01036	.00066	.00054	.00003	-.00108

#3	-.03412	.01816	.00577	-.00003	-.00008	-.01295	-.00108
#4	-.05891	.02377	.01720	.00020	.00054	-.07787	.00003

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00042
SDev	.00140
%RSD	335.55

#1	.00014
#2	.00072
#3	-.00128
#4	.00210

Errors	LC Pass
High	.02000
Low	-.02000

Analysis Report

11/30/00 10:42:59 AM

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Method: QUANMET Sample Name: DQCAPT

Operator: WTR

Run Time: 11/30/00 10:39:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00332	.13254	.10962	.06266	.45837	.00014	H668.04
SDev	.00210	.00636	.03004	.00201	.00249	.00006	3.19
%RSD	63.255	4.7966	27.402	3.2035	.54406	41.979	.47776

#1	-.00017	.13942	.10852	.06494	.45516	.00011	H665.65
#2	-.00439	.12411	.14537	.06097	.45853	.00012	H665.10
#3	-.00435	.13240	.07196	.06375	.45853	.00010	H669.68
#4	-.00436	.13422	.11263	.06097	.46125	.00023	H671.71

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	-.00204	.00267	-.00131	.00614	.07788	5.3029	.01541
SDev	.00167	.00176	.00154	.00049	.00143	.2990	.00075
%RSD	81.901	66.192	117.49	7.9665	1.8327	5.6384	4.8692

#1	-.00270	.00512	-.00288	.00656	.07788	5.4364	.01603
#2	-.00312	.00232	-.00183	.00572	.07986	5.0231	.01451
#3	.00045	.00231	.00078	.00656	.07656	5.6602	.01603
#4	-.00276	.00091	-.00131	.00571	.07722	5.0920	.01507

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.687	1.1936	-.00130	S-.13107	.01287	.00985	-.00254
SDev	.030	.0042	.00657	.00000	.00412	.01980	.00011
%RSD	.18842	.34803	507.22	.00000	31.980	200.89	4.1584

#1	15.655	1.1891	-.00260	S-.13107	.00742	.00001	-.00265
#2	15.678	1.1921	-.00782	S-.13107	.01644	.03955	-.00241
#3	15.691	1.1940	.00784	S-.13107	.01200	-.00005	-.00260
#4	15.725	1.1990	-.00260	S-.13107	.01563	-.00009	-.00251

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01320	7.0031	.00415	1.0645	-.03950	.07950	.00529
SDev	.04504	.0447	.02725	.0053	.00082	.01672	.00443
%RSD	341.20	.63865	656.36	.49595	2.0708	21.034	83.728

#1	.04882	6.9361	.03800	1.0581	-.03834	.08593	.00704
#2	-.01733	7.0254	-.02856	1.0644	-.04020	.07303	-.00129

#3	-.02561	7.0256	.00128	1.0644	-.03958	.09897	.00836
#4	-.05868	7.0255	.00587	1.0710	-.03989	.06009	.00704
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .02951
SDev .00092
%RSD 3.1200

#1 .02827
#2 .02961
#3 .03050
#4 .02965

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

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Method: QUANMET Sample Name: DP70TT

Operator: WTR

Run Time: 11/30/00 10:43:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00027	.48202	.15273	.12429	.00393	-.00012	2.5781
SDev	.00196	.01048	.03069	.00169	.00030	.00000	.0188
%RSD	720.72	2.1740	20.094	1.3567	7.7332	.10246	.73077
#1	.00029	.49480	.17499	.12513	.00429	-.00012	2.5748
#2	-.00112	.47430	.18329	.12513	.00357	-.00012	2.5562
#3	-.00113	.47264	.12637	.12513	.00384	-.00012	2.5792
#4	.00305	.48632	.12625	.12176	.00403	-.00012	2.6020
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	-.00165	.02137	.00877	.00616	.07272	21.339	.00117
SDev	.00317	.00140	.00193	.00049	.00229	.304	.00091
%RSD	192.54	6.5630	21.998	7.9158	3.1492	1.4238	77.945
#1	-.00110	.01927	.00864	.00658	.07206	21.199	.00225
#2	L-.00587	.02209	.00655	.00574	.07206	21.001	.00017
#3	.00180	.02207	.00864	.00573	.07074	21.457	.00073
#4	-.00141	.02207	.01126	.00658	.07603	21.698	.00152
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	.61900	13.690	.00784	S-.13107	16.494	.00616	.00881
SDev	.00896	.077	.00426	.00000	.103	.01186	.02863
%RSD	1.4473	.56166	54.369	.00000	.62183	192.61	324.74
#1	.62818	13.613	.01307	S-.13107	16.443	.01604	.04133
#2	.61769	13.654	.00784	S-.13107	16.422	-.00770	-.00292
#3	.60720	13.700	.00262	S-.13107	16.466	.01603	-.02446
#4	.62293	13.792	.00784	S-.13107	16.645	.00025	.02131
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00805	14.936	.01095	.00636	.00109	.06421	-.00106
SDev	.05352	.167	.01243	.00008	.00016	.07098	.00006
%RSD	664.99	1.1214	113.52	1.2323	14.286	110.53	5.3445
#1	.00332	14.693	.01281	.00643	.00117	.02473	-.00099
#2	.06120	14.961	.01262	.00629	.00086	.16775	-.00106

Analysis Report

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#3	-.03389	15.028	-.00583	.00643	.00117	.01241	-.00113
#4	-.06282	15.062	.02420	.00629	.00117	.05197	-.00105
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 50.710
SDev .255
%RSD .50234

#1 50.412
#2 50.620
#3 50.798
#4 51.011

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DQF4MBT Operator: WTR
 Run Time: 11/30/00 10:46:14
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00454	.03905	.20097	.03892	.00053	-.00009	.20387
SDev	.00133	.00698	.07571	.00195	.00015	.00006	.00242
%RSD	29.300	17.869	37.673	5.0215	29.233	62.776	1.1890
#1	.00559	.03987	.23553	.04062	.00039	-.00012	.20523
#2	.00281	.03295	.22335	.03723	.00066	-.00001	.20395
#3	.00418	.03483	.08919	.04061	.00066	-.00012	.20043
#4	.00558	.04856	.25581	.03723	.00039	-.00012	.20585
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	L-.00561	.00352	.00105	.00022	.03570	1.7798	.00058
SDev	.00126	.00311	.00091	.00176	.00076	.2334	.00058
%RSD	22.443	88.282	86.496	804.72	2.1391	13.112	99.931
#1	L-.00553	-.00033	.00026	-.00190	.03636	1.5711	.00129
#2	L-.00634	.00247	.00236	.00233	.03504	1.9412	-.00006
#3	-.00386	.00527	.00079	-.00020	.03636	1.5883	.00034
#4	L-.00669	.00668	.00079	.00064	.03504	2.0187	.00073
Errors	LC Low	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	.03279	.00125	.00392	H10.473	.00560	.01787	-.00281
SDev	.01192	.00000	.00261	.065	.00448	.02444	.00906
%RSD	36.368	.06910	66.587	.62393	80.007	136.77	322.49
#1	.02492	.00125	.00262	H10.504	.00297	.03161	-.01388
#2	.03541	.00125	.00784	H10.551	.00877	.03963	-.00283
#3	.02229	.00125	.00262	H10.428	.00069	.01594	-.00282
#4	.04852	.00125	.00262	H10.411	.00998	-.01569	.00831
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	.03008	.04613	.03787	.00053	.00016	-.02638	-.00024
SDev	.02626	.00002	.01197	.00014	.00047	.03179	.00205
%RSD	87.287	.05179	31.622	26.191	300.00	120.51	850.00
#1	.04455	.04614	.04700	.00033	.00054	-.01338	.00004
#2	.04042	.04617	.04935	.00056	-.00039	-.05233	.00247

#3	.04455	.04611	.02869	.00066	-.00008	.01254	-.00232
#4	-.00920	.04612	.02644	.00056	.00054	-.05235	-.00114

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge .00364
SDev .00134
%RSD 36.725

#1	.00436
#2	.00235
#3	.00270
#4	.00515

Errors	LC Pass
High	.02000
Low	-.02000

Analysis Report

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 11/30/00 10:52:32 AM page 1

Method: QUANMET Sample Name: DQGT1BT

Operator: WTR

Run Time: 11/30/00 10:49:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00212	.01374	.01301	.00018	.00027	-.00012	-.03358
SDev	.00180	.00165	.03993	.00000	.00013	.00000	.00196
%RSD	84.924	12.029	307.01	2.0282	48.780	3.0009	5.8233

#1	.00421	.01595	-.00023	.00019	.00021	-.00012	-.03409
#2	.00281	.01243	.03642	.00018	.00021	-.00012	-.03277
#3	.00003	.01407	-.03685	.00018	.00021	-.00013	-.03603
#4	.00141	.01252	.05269	.00018	.00047	-.00012	-.03145

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	-.00097	.00000	.00144	-.00020	.09702	.02583	.00058
SDev	.00127	.00177	.00066	.00069	.00099	.18932	.00066
%RSD	131.00	63678.	45.692	344.53	1.0234	733.08	114.99

#1	-.00150	-.00035	.00235	-.00105	.09850	-.09900	-.00022
#2	.00083	-.00035	.00079	.00064	.09652	.22813	.00090
#3	-.00111	-.00175	.00131	-.00020	.09652	-.16787	.00034
#4	-.00209	.00246	.00131	-.00020	.09652	.14204	.00129

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	.00656	.00027	-.00129	.00235	.00053	.01781	.01371
SDev	.00829	.00000	.00500	.00261	.00507	.00753	.06268
%RSD	126.49	.52532	386.68	110.87	958.94	42.289	457.23

#1	-.00131	.00027	-.00782	.00461	.00472	.02370	-.01375
#2	.01705	.00028	.00262	.00382	-.00181	.00803	H.10739
#3	.00131	.00028	.00262	-.00127	-.00552	.01573	-.02498
#4	.00918	.00027	-.00260	.00225	.00472	.02378	-.01383

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	-.00591	.03355	.02705	.00015	.00000	-.04652	-.00001
SDev	.04496	.00534	.01652	.00012	.00039	.07146	.00169
%RSD	761.07	15.927	61.079	82.822	414e6	153.61	12256.

#1	-.07102	.03495	.01488	.00020	.00054	-.01410	-.00010
#2	.03233	.02935	.01079	.00020	-.00039	-.11788	-.00114

#3	.00753	.02939	.04008	-.00003	-.00008	.03783	.00240
#4	.00753	.04053	.04243	.00024	-.00008	-.09195	-.00121

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	-.00332
SDev	.00089
%RSD	26.938

#1	-.00410
#2	-.00409
#3	-.00265
#4	-.00245

Errors	LC Pass
High	.02000
Low	-.02000

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Method: QUANMET Sample Name: DQGT1CT

Operator: WTR

Run Time: 11/30/00 10:52:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05048	1.9340	2.1194	.98609	2.0441	.04910	L.20855
SDev	.00082	.0061	.0411	.00213	.0061	.00022	.00334
%RSD	1.6208	.31567	1.9392	.21640	.29949	.45897	1.5996

#1	.05119	1.9289	2.1072	.98455	2.0421	.04906	L.20995
#2	.04978	1.9288	2.1317	.98395	2.0389	.04895	L.20356
#3	.05119	1.9374	2.0706	.98792	2.0530	.04942	L.21052
#4	.04977	1.9409	2.1682	.98792	2.0425	.04895	L.21017

Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.03889	.48460	.19320	.24698	1.0678	L1.6830	1.0014
SDev	.00231	.00477	.00186	.00243	.0052	.3133	.0035
%RSD	5.9335	.98490	.96377	.98373	.49122	18.617	.35332

#1	L.03686	.49056	.19320	.24635	1.0756	L2.0704	.99676
#2	L.03790	.48075	.19163	.24550	1.0650	L1.4075	1.0031
#3	L.03861	.48635	.19581	.25057	1.0663	L1.8035	1.0050
#4	.04217	.48074	.19215	.24550	1.0644	L1.4506	1.0007

Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.03803	.48722	-.00117	L10.636	.48739	.47647	L-.00163
SDev	.00710	.00128	.00261	.019	.01433	.02174	.02763
%RSD	18.676	.26197	223.62	.17777	2.9397	4.5625	1693.9

#1	L.04065	.48871	-.00247	L10.621	.50788	.46276	L-.00690
#2	L.02754	.48574	.00275	L10.635	.47465	.50216	L.03675
#3	L.04065	.48772	-.00247	L10.663	.48485	.45470	L-.02917
#4	L.04328	.48673	-.00247	L10.624	.48217	.48626	L-.00720

Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.1996	.05189	.01912	1.0107	-.00047	1.9241	.49242
SDev	.0424	.00003	.01431	.0029	.00053	.0767	.00271
%RSD	1.9258	.06097	74.828	.28436	113.86	3.9869	.55003

#1	2.1769	.05192	.02197	1.0096	.00023	1.9954	.49476
#2	2.1521	.05186	.03592	1.0087	-.00101	1.9826	.49011

#3	2.2430	.05192	.00121	1.0150	-.00039	1.8787	.49477
#4	2.2265	.05186	.01738	1.0094	-.00070	1.8399	.49004

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	.47272
SDev	.00313
%RSD	.66259

#1	.47231
#2	.47663
#3	.47295
#4	.46898

Errors	LC Pass
High	.60000
Low	.40000

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Method: QUANMET Sample Name: DQD8XT

Operator: WTR

Run Time: 11/30/00 10:55:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00178	.05014	.14588	.04230	.28338	.00001	H928.88
SDev	.00070	.00507	.05838	.00862	.00111	.00006	1.65
%RSD	39.185	10.118	40.024	20.386	.39046	488.06	.17763
#1	-.00283	.04671	.09303	.04156	.28483	.00010	H928.01
#2	-.00143	.05531	.14584	.03340	.28219	-.00002	H927.60
#3	-.00143	.04496	.22725	.04016	.28347	-.00002	H931.27
#4	-.00143	.05358	.11738	.05408	.28302	-.00002	H928.63
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	.03958	.00650	-.00341	.01015	.01171	2.4126	.00325
SDev	.00153	.00198	.00280	.00127	.00162	.2565	.00078
%RSD	3.8727	30.431	82.296	12.505	13.818	10.631	24.175
#1	.03822	.00651	-.00236	.00909	.01369	2.1565	.00225
#2	.04162	.00790	-.00184	.01079	.01039	2.6816	.00321
#3	.03988	.00790	-.00184	.01163	.01237	2.5783	.00416
#4	.03861	.00370	-.00760	.00909	.01039	2.2339	.00337
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	541.72	.40592	.00261	1.7118	.00578	36.198	.04984
SDev	1.31	.00099	.00426	.0115	.01290	.123	.01886
%RSD	.24228	.24353	163.21	.67160	223.12	.33943	37.853
#1	543.12	.40641	.00261	1.7272	.02018	36.317	.07468
#2	539.95	.40444	.00261	1.6994	.01007	36.048	.04167
#3	541.94	.40641	.00784	1.7100	.00347	36.277	.03044
#4	541.90	.40641	-.00261	1.7108	-.01059	36.151	.05255
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03614	6.2091	-.01452	.55520	L-.05801	.07746	.00829
SDev	.06165	.0188	.03122	.00209	.00053	.13080	.00006
%RSD	170.59	.30322	215.05	.37549	.91572	168.86	.74555
#1	.05275	6.2147	.02002	.55759	L-.05855	-.03610	.00829
#2	-.04648	6.1811	-.03981	.55252	L-.05731	.23641	.00829

#3	-.08782	6.2202	.00376	.55519	L-.05793	-.02312	.00836
#4	-.06302	6.2202	-.04205	.55552	L-.05824	.13265	.00821
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 .08859
SDev .00196
%RSD 2.2111

#1 .08875
#2 .08960
#3 .09020
#4 .08579

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

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Method: QUANMET Sample Name: DQD8XTP5

Operator: WTR

Run Time: 11/30/00 10:59:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00034	.01719	.03440	.02574	.05975	-.00000	199.58
SDev	.00134	.00602	.04929	.00784	.00030	.00001	.55
%RSD	392.31	35.050	143.28	30.474	.50107	202.08	.27331
#1	.00137	.01434	.08125	.02325	.05971	.00000	198.99
#2	-.00142	.01257	-.02855	.03717	.05944	.00000	199.81
#3	.00140	.02600	.02007	.01929	.05971	-.00001	200.21
#4	.00001	.01584	.06484	.02326	.06016	-.00002	199.29
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	.00929	.00137	.00039	.00233	.00062	.70160	.00119
SDev	.00543	.00136	.00079	.00000	.00179	.17145	.00038
%RSD	58.397	99.333	201.43	.05750	288.61	24.437	31.539
#1	.00323	.00244	-.00026	.00233	-.00004	.64134	.00090
#2	.00625	.00243	.00131	.00233	-.00004	.75326	.00129
#3	.01313	.00100	.00079	.00233	.00327	.90821	.00169
#4	.01455	-.00040	-.00027	.00232	-.00070	.50360	.00090
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	114.64	.08919	-.00392	.34664	.00469	7.8400	.05797
SDev	.17	.00000	.01158	.00577	.00772	.0530	.04273
%RSD	.15073	.00477	295.66	1.6635	164.49	.67583	73.712
#1	114.66	.08918	-.01306	.34262	.01115	7.7925	.05257
#2	114.77	.08918	-.00783	.35517	.00520	7.9035	.11865
#3	114.39	.08919	.01306	.34498	-.00629	7.8637	.04120
#4	114.73	.08918	-.00784	.34380	.00871	7.8003	.01944
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	-.01137	1.2989	-.00431	.11725	-.01244	.02984	.00201
SDev	.01528	.0000	.01580	.00041	.00039	.05231	.00407
%RSD	134.41	.00361	366.61	.35335	3.1458	175.28	202.08
#1	-.01757	1.2988	-.00548	.11733	-.01283	.09150	-.00135
#2	.00310	1.2988	-.02586	.11779	-.01252	.00067	-.00128

#3	-.02996	1.2989	.01054	.11683	-.01190	.05251	.00371
#4	-.00104	1.2989	.00357	.11706	-.01252	-.02531	.00697

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .01975
SDev .00188
%RSD 9.5078

#1 .02005
#2 .02122
#3 .02071
#4 .01703

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

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Method: QUANMET Sample Name: DQD8XST

Run Time: 11/30/00 11:02:09

Operator: WTR

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.91249	.04848	4.8218	.03739	46.198	.00001	H965.69
SDev	.00198	.00719	.0676	.00000	.115	.00006	.76
%RSD	.21677	14.828	1.4021	.01027	.24825	797.20	.07834
#1	.91250	.05699	4.7739	.03739	46.214	-.00003	H966.10
#2	.91390	.05181	4.7536	.03739	46.036	.00009	H964.72
#3	.90969	.04342	4.8799	.03740	46.236	-.00002	H966.44
#4	.91388	.04171	4.8799	.03739	46.306	-.00002	H965.50
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	.94148	.00772	4.1802	.01100	.01914	2.6063	.00358
SDev	.00486	.00180	.0059	.00081	.00113	.2340	.00026
%RSD	.51592	23.327	.14073	7.3514	5.8904	8.9787	7.3993
#1	.93644	.00702	4.1879	.01163	.01766	2.6816	.00377
#2	.94782	.00847	4.1738	.01163	.01898	2.8968	.00360
#3	.93937	.00560	4.1785	.01078	.02030	2.3631	.00321
#4	.94229	.00977	4.1806	.00994	.01964	2.4836	.00377
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	565.25	.42346	-.00522	1.7949	.02812	42.034	.13655
SDev	.77	.00124	.00674	.0098	.01096	.080	.00024
%RSD	.13637	.29371	129.16	.54589	38.975	.19062	.17325
#1	565.48	.42321	-.00261	1.7880	.02109	41.998	.13621
#2	564.11	.42321	.00261	1.7947	.03213	42.022	.13675
#3	565.61	.42222	-.01306	1.7880	.01759	42.149	.13658
#4	565.79	.42519	-.00783	1.8088	.04169	41.967	.13665
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99747	6.5110	-.05776	.58199	L-.06019	.09695	.01071
SDev	.03467	.0079	.05861	.00106	.00059	.22109	.00281
%RSD	3.4763	.12127	101.47	.18141	.97828	228.05	26.206
#1	.98300	6.4998	.01798	.58170	L-.05980	.11966	.01312
#2	.98300	6.5166	L-.11056	.58077	L-.05980	-.12692	.01316

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#3	1.0492	6.5109	-.09678	.58216	L-.06104	.39217	.00824
#4	.97474	6.5165	-.04169	.58331	L-.06011	.00287	.00831
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	.09119
SDev	.00267
%RSD	2.9270

#1	.09356
#2	.08789
#3	.09016
#4	.09315

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DQD8XDT

Operator: WTR

Run Time: 11/30/00 11:05:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.90935	.04769	4.8545	.03808	45.406	.00002	H940.11
SDev	.00208	.02065	.0332	.00081	.145	.00006	3.28
%RSD	.22892	43.297	.68431	2.1155	.31922	328.08	.34902
#1	.90692	.06229	4.8432	.03739	45.196	-.00001	H938.14
#2	.91109	.06052	4.8676	.03878	45.497	-.00002	H945.02
#3	.91109	.05017	4.8148	.03878	45.507	.00010	H938.72
#4	.90832	.01777	4.8924	.03739	45.423	-.00001	H938.55
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	.92979	.00810	4.1551	.01036	.01700	2.3050	.00239
SDev	.00584	.00075	.0115	.00049	.00209	.2782	.00073
%RSD	.62784	9.2437	.27593	4.7087	12.314	12.069	30.769
#1	.92259	.00752	4.1408	.00994	.01568	2.2598	.00321
#2	.93677	.00874	4.1685	.00994	.01766	1.9585	.00169
#3	.92897	.00876	4.1575	.01079	.01964	2.6299	.00281
#4	.93083	.00739	4.1534	.01079	.01501	2.3717	.00186
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	552.51	.41259	-.00392	1.7353	.01794	41.060	.13667
SDev	1.18	.00095	.00657	.0152	.01587	.094	.00026
%RSD	.21441	.22962	167.87	.87336	88.462	.22961	.19046
#1	550.95	.41135	-.00261	1.7159	.03031	40.953	.13701
#2	553.75	.41333	-.00261	1.7429	.01187	41.175	.13646
#3	552.98	.41333	.00261	1.7316	.03132	41.088	.13673
#4	552.35	.41234	-.01306	1.7508	-.00173	41.024	.13647
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99333	6.3236	-.06523	.56317	L-.05848	.20721	.00595
SDev	.04304	.0378	.02888	.00188	.00112	.02874	.00281
%RSD	4.3326	.59798	44.269	.33468	1.9117	13.870	47.172
#1	.99126	6.2704	L-.10827	.56040	L-.05824	.17156	.00357
#2	1.0202	6.3599	-.05318	.56456	L-.05762	.23639	.00836

#3	1.0285	6.3320	-.05318	.56410	L-.05793	.22339	.00840
#4	.93338	6.3319	-.04629	.56364	L-.06011	.19753	.00346
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	.09056
SDev	.00351
%RSD	3.8725

#1	.08753
#2	.09556
#3	.08895
#4	.09020

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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11/30/00 11:11:34 AM page 1

Method: QUANMET Sample Name: CCV2-3

Operator: WTR

Run Time: 11/30/00 11:08:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99685	49.583	5.0534	5.0000	4.9174	4.9558	50.523
SDev	.00142	.189	.0931	.0433	.0232	.0228	.121
%RSD	.14282	.38195	1.8432	.86534	.47270	.46105	.23940

#1	.99750	49.438	5.0781	4.9993	4.9083	4.9394	50.501
#2	.99754	49.529	5.0406	4.9550	4.9045	4.9507	50.689
#3	.99765	49.862	5.1596	5.0585	4.9522	4.9893	50.398
#4	.99472	49.505	4.9352	4.9873	4.9046	4.9437	50.504

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0667	4.9504	4.9314	4.9283	51.489	48.934	4.9493
SDev	.0370	.0036	.0082	.0294	.095	.292	.0416
%RSD	.73073	.07253	.16608	.59647	.18449	.59683	.84073

#1	5.0561	4.9487	4.9255	4.9120	51.392	48.695	4.9400
#2	5.0252	4.9558	4.9365	4.9103	51.515	48.772	4.9157
#3	5.0712	4.9486	4.9402	4.9720	51.609	49.349	5.0099
#4	5.1142	4.9486	4.9234	4.9187	51.439	48.919	4.9318

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.699	4.9435	4.9179	48.592	4.9426	4.9849	5.0291
SDev	.210	.0091	.0050	.338	.0139	.0102	.0705
%RSD	.42247	.18473	.10185	.69498	.28098	.20475	1.4019

#1	49.668	4.9324	4.9139	48.480	4.9459	4.9732	5.0870
#2	49.542	4.9482	4.9244	48.338	4.9593	4.9968	4.9327
#3	50.004	4.9532	4.9192	49.090	4.9259	4.9808	5.0760
#4	49.582	4.9403	4.9139	48.460	4.9394	4.9889	5.0208

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2003	4.9328	5.0041	4.9103	4.8928	9.8279	4.9353
SDev	.0680	.0073	.0696	.0213	.0153	.1761	.0108
%RSD	1.3077	.14741	1.3906	.43443	.31202	1.7918	.21855

#1	5.1080	4.9300	5.0399	4.9004	4.8840	9.8614	4.9288
#2	5.1994	4.9412	5.0415	4.8993	4.8930	10.055	4.9325

#3	5.2245	4.9358	4.8998	4.9422	4.9142	9.7551	4.9513
#4	5.2694	4.9244	5.0351	4.8991	4.8799	9.6403	4.9288

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem ZN
Units ppm
Avge 4.9677
SDev .0093
%RSD .18624

#1 4.9585
#2 4.9619
#3 4.9790
#4 4.9712

Errors LC Pass
High 5.5000
Low 4.5000

Analysis Report

11/30/00 11:14:42 AM

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page 1

Method: QUANMET Sample Name: CCB3

Operator: WTR

Run Time: 11/30/00 11:11:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00174	.00434	.00608	.03210	.00019	.00009	~.00515
SDev	.00070	.01129	.03521	.00195	.00029	.00006	.00440
%RSD	40.053	260.35	578.87	6.0746	153.58	64.688	85.546
#1	.00139	-.00300	-.04063	.03041	-.00006	.00012	-.00743
#2	.00140	.00042	.00813	.03379	.00039	.00012	-.00650
#3	.00139	-.00122	.04477	.03041	-.00006	.00000	-.00804
#4	.00279	.02114	.01205	.03378	.00047	.00012	.00139

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	-.00133	.00141	.00092	.00000	-.00165	.06456	.00076
SDev	.00306	.00289	.00178	.00175	.00138	.40464	.00134
%RSD	229.28	205.24	194.46	147730.	83.213	626.71	176.69

#1	.00267	.00104	.00079	-.00021	-.00198	-.03013	-.00101
#2	-.00160	.00106	.00026	-.00021	-.00000	-.30561	.00090
#3	-.00477	-.00174	-.00079	-.00190	-.00331	-.04735	.00090
#4	-.00162	.00526	.00340	.00233	-.00132	.64134	.00225

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	.00918	-.00000	-.00131	.00000	.00699	.01387	-.01645
SDev	.01071	.00049	.00500	.00816	.00726	.01359	.01876
%RSD	116.64	49644.	382.92	85e6	103.87	97.992	114.05

#1	.00393	.00025	.00261	-.00206	.01259	.01582	-.03571
#2	.00131	-.00074	.00261	-.00480	-.00186	.00796	.00823
#3	.00656	.00024	-.00784	-.00520	.00398	-.00008	-.02469
#4	.02492	.00025	-.00261	.01206	.01327	.03178	-.01363

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	-.01551	.03075	-.00466	.00003	-.00039	.04867	-.00090
SDev	.02814	.00535	.00788	.00008	.00044	.01950	.00063
%RSD	181.43	17.412	169.13	230.94	113.14	40.060	69.562

#1	-.01758	.03494	-.00130	-.00003	-.00039	.06490	-.00114
#2	-.04238	.02936	.00348	-.00003	-.00070	.03891	.00004

#3	.02376	.02375	-.01502	.00010	-.00070	.06494	-.00129
#4	-.02584	.03494	-.00580	.00010	.00023	.02593	-.00121

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge .00033
SDev .00122
%RSD 375.77

#1	.00010
#2	.00156
#3	-.00127
#4	.00091

Errors	LC Pass
High	.02000
Low	-.02000

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A. NyeDate of Analysis: 11-30-00File ID: 1130HGAMatrix: WATER

Lot Number/SDG

Method

<u>COK170119</u>	<u>TCLP</u>	<u>7470A</u>
<u>COK170261</u>		
<u>COK200198</u>		
<u>COK220219</u>		
<u>COK220253</u>		
<u>COK140192</u>	<u>(TOR-DISS)</u>	
<u>COK210108</u>	<u>(DISS)</u>	
<u>COK250103</u>		<u>ILM04.0</u>

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08:15:58 30 Nov 2000

Folder: 1130HGA
Protocol: HGMET

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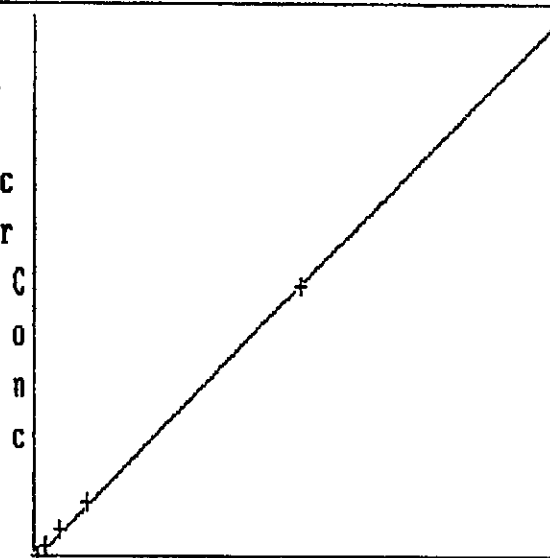
Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0	08:15:58 30 Nov 2000 HG			
Hg	.000	ppb	11512					
*** Standard: 2 Rep: 1				Seq: 1	08:17:23 30 Nov 2000 HG			
Hg	.200	ppb	30858	0057-165-6				
*** Standard: 3 Rep: 1				Seq: 2	08:18:53 30 Nov 2000 HG			
Hg	.500	ppb	65601	0057-165-7 WAH 11-30-00				
*** Standard: 4 Rep: 1				Seq: 3	08:20:28 30 Nov 2000 HG			
Hg	1.00	ppb	129999	0057-165-8				
*** Standard: 5 Rep: 1				Seq: 4	08:21:54 30 Nov 2000 HG			
Hg	5.00	ppb	648548	0057-165-9 WAH 11-30-00				
*** Standard: 6 Rep: 1				Seq: 5	08:23:25 30 Nov 2000 HG			
Hg	10.0	ppb	1275484	0057-165-10 WAH 11-30-00				

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RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 1130HGA Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 08:23:45 30 Nov 2000 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAM A/S: On

CALIBRATION: Line proto: HGMET

	Hg	Accepted
	Conc.	Calc. Dev. ->linear
S1	.000	.041 .041 Quadratic
S2	.200	.193 -.007 Wtdlinear
S3	.500	.466 -.034
S4	1.00	.972 -.028 Accept
S5	5.00	5.05 .050
S6	10.0	9.98 -.021
A	.0000000	r .999959
B	7.86304e-6	C -4.99041e-2



	Mean	SD
S1	11512	11512
S2	30858	30858
S3	65601	65601
S4	129999	129999
S5	648548	648548
S6	1275404	1275404

New cal coefficients stored

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Folder: 1130HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6	08:25:56 30 Nov 2000 HG			
Hg	2.43	ppb	315660	0057-165-11				
*** Sample ID: ICB1				Seq: 7	08:27:31 30 Nov 2000 HG			
Hg	.006	ppb	7179					
*** Sample ID: CRA-1				Seq: 8	08:29:18 30 Nov 2000 HG			
Hg	.207	ppb	32706	0057-165-12				
*** Sample ID: CCV5-1				Seq: 9	08:30:44 30 Nov 2000 HG			
Hg	5.08	ppb	652158	0057-166-1				
*** Sample ID: CCB1				Seq: 10	08:32:30 30 Nov 2000 HG			
Hg	.027	ppb	9807					
*** Sample ID: DQHKJBT				Seq: 11	08:34:10 30 Nov 2000 HG			
Hg	-.013	ppb	4688					
*** Sample ID: DQHKJCT				Seq: 12	08:35:37 30 Nov 2000 HG			
Hg	2.78	ppb	360033	0057-166-2				
*** Sample ID: DQF3KBT				Seq: 13	08:37:04 30 Nov 2000 HG			
Hg	.084	ppb	17076					
*** Sample ID: DP2WNT				Seq: 14	08:38:44 30 Nov 2000 HG			
Hg	.121	ppb	21686					
*** Sample ID: DP2WNST				Seq: 15	08:40:13 30 Nov 2000 HG			
Hg	5.19	ppb	666380	SP. REC. 101%				
*** Sample ID: DP2WNDT				Seq: 16	08:42:01 30 Nov 2000 HG			
Hg	5.15	ppb	660824	SP. REC. 101%				
*** Sample ID: DP4JBT				Seq: 17	08:43:27 30 Nov 2000 HG			
Hg	.061	ppb	14118					

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Folder: 1130HGA

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Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DP70TT				Seq: 18	08:45:21 30 Nov 2000 HG			
Hg	.076	ppb	16025					
*** Sample ID: DQCAPT				Seq: 19	08:46:58 30 Nov 2000 HG			
Hg	.067	ppb	14929					
*** Sample ID: DQCKKT				Seq: 20	08:48:27 30 Nov 2000 HG			
Hg	.071	ppb	15333					
*** Sample ID: CCV5-2				Seq: 21	08:50:26 30 Nov 2000 HG			
Hg	5.09	ppb	653425					
*** Sample ID: CCB2				Seq: 22	08:52:22 30 Nov 2000 HG			
Hg	.006	ppb	7136					
*** Sample ID: DQCLCT				Seq: 23	08:53:51 30 Nov 2000 HG			
Hg	.039	ppb	11355					
*** Sample ID: DQCLET				Seq: 24	08:55:39 30 Nov 2000 HG			
Hg	.042	ppb	11675					
*** Sample ID: DQHKXB				Seq: 25	08:58:05 30 Nov 2000 HG			
Hg	.045	ppb	12088					
*** Sample ID: DQHKXC				Seq: 26	08:59:54 30 Nov 2000 HG			
Hg	2.36	ppb	306643		0057-166-3			
*** Sample ID: DPTPB				Seq: 27	09:01:20 30 Nov 2000 HG			
Hg	.108	ppb	20051					
*** Sample ID: DPTQK				Seq: 28	09:02:56 30 Nov 2000 HG			
Hg	.106	ppb	19868					
*** Sample ID: DPTQR				Seq: 29	09:04:33 30 Nov 2000 HG			
Hg	.056	ppb	13440					

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09:06:59 30 Nov 2000

Folder: 1130HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DPTQV				Seq: 30	09:06:59 30 Nov 2000 HG			
Hg	.869	ppb	116887					
*** Sample ID: DPTQ1				Seq: 31	09:08:36 30 Nov 2000 HG			
Hg	.025	ppb	9514					
*** Sample ID: DPTRD				Seq: 32	09:10:12 30 Nov 2000 HG			
Hg	.006	ppb	7142					
*** Sample ID: CCV5-3				Seq: 33	09:11:39 30 Nov 2000 HG			
Hg	5.03	ppb	646180					
*** Sample ID: CCB3				Seq: 34	09:14:05 30 Nov 2000 HG			
Hg	.015	ppb	8205					
*** Sample ID: DPTRDS				Seq: 35	09:15:30 30 Nov 2000 HG			
Hg	1.10	ppb	146200					
*** Sample ID: DPTRDD				Seq: 36	09:16:56 30 Nov 2000 HG			
Hg	1.02	ppb	135902					
*** Sample ID: DPTRP				Seq: 37	09:18:24 30 Nov 2000 HG			
Hg	.285	ppb	42655					
*** Sample ID: DPTRT				Seq: 38	09:19:56 30 Nov 2000 HG			
Hg	.025	ppb	9562					
*** Sample ID: DPTR0				Seq: 39	09:21:31 30 Nov 2000 HG			
Hg	.099	ppb	18972					
*** Sample ID: DPTR3				Seq: 40	09:23:26 30 Nov 2000 HG			
Hg	.060	ppb	14010					
*** Sample ID: DPTPSF				Seq: 41	09:25:03 30 Nov 2000 HG			
Hg	.031	ppb	10323					

SP REC.
110%SP REC
102%

09:26:29 30 Nov 2000

Folder: ^ 1130HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DPTQKF				Seq: 42	09:26:29 30 Nov 2000 HG			
Hg	.042	ppb	11715					
*** Sample ID: DPTQRF				Seq: 43	09:27:55 30 Nov 2000 HG			
Hg	.016	ppb	8389					
*** Sample ID: DPTQVF				Seq: 44	09:29:20 30 Nov 2000 HG			
Hg	.015	ppb	8312					
*** Sample ID: CCV5-4				Seq: 45	09:30:51 30 Nov 2000 HG			
Hg	4.95	ppb	635256					
*** Sample ID: CCB4				Seq: 46	09:32:19 30 Nov 2000 HG			
Hg	-.013	ppb	4699					
*** Sample ID: DPTQ1F				Seq: 47	09:34:20 30 Nov 2000 HG			
Hg	.008	ppb	7346					
*** Sample ID: DPTRDF				Seq: 48	09:35:50 30 Nov 2000 HG			
Hg	.037	ppb	11102					
*** Sample ID: DPTRDSF				Seq: 49	09:37:31 30 Nov 2000 HG			
Hg	1.16	ppb	153340					SP REC. 116%
*** Sample ID: DPTRDDF				Seq: 50	09:38:59 30 Nov 2000 HG			
Hg	1.11	ppb	147651					SP REC. 111%
*** Sample ID: DPTRPT				Seq: 51	09:40:46 30 Nov 2000 HG			
Hg	.007	ppb	7248					
*** Sample ID: DPTRTF				Seq: 52	09:42:21 30 Nov 2000 HG			
Hg	.023	ppb	9316					
*** Sample ID: DPTR0F				Seq: 53	09:43:46 30 Nov 2000 HG			
Hg	.008	ppb	7362					

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Folder: 1130HGA
Protocol: HGMET

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09:45:11 30 Nov 2000

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DPTR3F				Seq: 54	09:45:11 30 Nov 2000 HG			
Hg	.025	ppb	9523					
*** Sample ID: DQJXMBF				Seq: 55	09:46:37 30 Nov 2000 HG			
Hg	.023	ppb	9232					
*** Sample ID: DQJXCMF				Seq: 56	09:48:23 30 Nov 2000 HG			
Hg	2.43	ppb	315024		0657-166-4			
*** Sample ID: CCV5-5				Seq: 57	09:50:13 30 Nov 2000 HG			
Hg	4.94	ppb	634831					
*** Sample ID: CCB5				Seq: 58	09:52:14 30 Nov 2000 HG			
Hg	.021	ppb	9009					
*** Sample ID: DP8H6F				Seq: 59	09:54:14 30 Nov 2000 HG			
Hg	.017	ppb	8577					
*** Sample ID: DP8H6SF				Seq: 60	09:56:01 30 Nov 2000 HG			
Hg	.973	ppb	130042					SP.REC 97%
*** Sample ID: DP8H6DF				Seq: 61	09:57:39 30 Nov 2000 HG			
Hg	.979	ppb	130923					SP.REC 98%
*** Sample ID: DP8JGF				Seq: 62	09:59:14 30 Nov 2000 HG			
Hg	-.042	ppb	1061					
*** Sample ID: DP8JJF				Seq: 63	10:01:06 30 Nov 2000 HG			
Hg	.020	ppb	8878					
*** Sample ID: DP8JTf				Seq: 64	10:02:36 30 Nov 2000 HG			
Hg	.017	ppb	8528					
*** Sample ID: DP8JVF				Seq: 65	10:04:14 30 Nov 2000 HG			
Hg	.083	ppb	16856					

10:05:51 30 Nov 2000

Folder: 1130HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DPBJWF				Seq: 66	10:05:51 30 Nov 2000	HG		
Hg	.049	ppb	12541					
*** Sample ID: DQHLMB				Seq: 67	10:07:32 30 Nov 2000	HG		
Hg	.030	ppb	10198					
*** Sample ID: DQHLMC				Seq: 68	10:09:53 30 Nov 2000	HG		
Hg	2.39	ppb	310521		0057-166-5			
*** Sample ID: CCV5-6				Seq: 69	10:11:20 30 Nov 2000	HG		
Hg	4.98	ppb	639260					
*** Sample ID: CCB6				Seq: 70	10:12:58 30 Nov 2000	HG		
Hg	-.004	ppb	5829					
*** Sample ID: DQDV2				Seq: 71	10:14:44 30 Nov 2000	HG		
Hg	.507	ppb	70827					
*** Sample ID: DQDV2X				Seq: 72	10:16:33 30 Nov 2000	HG		
Hg	.174	ppb	28544					
*** Sample ID: DQDV2S				Seq: 73	10:18:00 30 Nov 2000	HG		
Hg	1.26	ppb	166012					SP. REC. 75%
*** Sample ID: DQDV5				Seq: 74	10:19:25 30 Nov 2000	HG		
Hg	7.53	ppb	963648					
*** Sample ID: CCV5-7				Seq: 75	10:21:11 30 Nov 2000	HG		
Hg	4.94	ppb	634180					
*** Sample ID: CCB7				Seq: 76	10:22:43 30 Nov 2000	HG		
Hg	.000	ppb	6406					

END OF ANALYSIS

WAH

11-30-00

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RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 1130HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
State: Idle	Rev: 4.2	07:26:38 30 Nov 2000	Xmit: Off Gas: LPM
		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit		rack: RACK1	
cup ID	Extended id	Weight	Volume Macro
1	ICV5-1	1.0000	1.0000
2	ICB1	1.0000	1.0000
3	CRA-1	1.0000	1.0000
4	CCV5-1	1.0000	1.0000
5	CCB1	1.0000	1.0000
6	DG HKJBT	1.0000	1.0000
7	DG HKJCT	1.0000	1.0000
8	DG F3KBT	1.0000	1.0000
9	DP2WNT	1.0000	1.0000
10	DP2WNST	1.0000	1.0000
11	DP2WNDT	1.0000	1.0000
12	DP4JBT	1.0000	1.0000
13	DP70TT	1.0000	1.0000
14	DQCAPT	1.0000	1.0000
15	DQCKKT	1.0000	1.0000

PgDn

Cup 1 ID: ICV5-1

Cell down mode Ins to switch

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 1130HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 07:26:40 30 Nov 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1 PgUp
cup ID Extended id Weight Volume Macro checkK macros
16 CCV5-2 1.0000 1.0000
17 CCB2 1.0000 1.0000
18 DQCLCT 1.0000 1.0000
19 DQCLET 1.0000 1.0000
20 DQHKXB 1.0000 1.0000
21 DQHKXC 1.0000 1.0000
22 DPTP8 1.0000 1.0000
23 DPTQK 1.0000 1.0000
24 DPTQR 1.0000 1.0000
25 DPTQV 1.0000 1.0000
26 DPTQ1 1.0000 1.0000
27 DPTRD 1.0000 1.0000
28 CCV5-3 1.0000 1.0000
29 CCB3 1.0000 1.0000
30 DPTRDS 1.0000 1.0000

PgDn

Cup 16 ID: CCV5-2

Cell down mode Ins to switch

675 696

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 1130HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
Rev: 4.2	07:26:41 30 Nov 2000	Xmit: Off Gas:	LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1 PgUp

cup ID	Extended id	Weight	Volume	Macro	check macros
31 DPTRDD		1.0000	1.0000		
32 DPTRP		1.0000	1.0000		
33 DPTRT		1.0000	1.0000		
34 DPTR0		1.0000	1.0000		
35 DPTR3		1.0000	1.0000		
36 DPTP8F		1.0000	1.0000		
37 DPTQKF		1.0000	1.0000		
38 DPTQRF		1.0000	1.0000		
39 DPTQVF		1.0000	1.0000		
40 CCV5-4		1.0000	1.0000		
41 CCB4		1.0000	1.0000		
42 DPTQ1F		1.0000	1.0000		
43 DPTRDF		1.0000	1.0000		
44 DPTRDSF		1.0000	1.0000		

PgDn

Cup 31 ID: DPTRDD

Cell down mode Ins to switch

675 697

RunProt: HGMET		STL-PITTSBURGH METALS ANALYSIS	
RunFold: 1130HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
Rev: 4.2	07:33:36 30 Nov 2000	Xmit: Off Gas:	LPM
State: Idle	User: WAH	A/S: On	

AUTOSAMPLER: Rack Edit		rack: RACK2			
cup ID	Extended id	Weight	Volume	Macro	checkK macros
1	DPTRDDF	1.0000	1.0000		
2	DPTRPT	1.0000	1.0000		
3	DPTRTF	1.0000	1.0000		
4	DPTR0F	1.0000	1.0000		
5	DPTR3F	1.0000	1.0000		
6	DQJXMBF	1.0000	1.0000		
7	DQJXMCF	1.0000	1.0000		
8	CCV5-5	1.0000	1.0000		
9	CCB5	1.0000	1.0000		
10	DPBH6F	1.0000	1.0000		
11	DPBH6SF	1.0000	1.0000		
12	DPBH6DF	1.0000	1.0000		
13	DPBJGF	1.0000	1.0000		
14	DPBJJF	1.0000	1.0000		
15	DPBJTF	1.0000	1.0000		

PgDn

Cup 1 ID: DPTRDDF	Cell down mode Ins to switch

675 693

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 1130HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	07:33:37 30 Nov 2000	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit		rack: RACK2	PgUp
cup ID	Extended id	Weight Volume Macro	check macros
16 DPBJVF		1.0000 1.0000	
17 DPBJWF		1.0000 1.0000	
18 DQHLMB		1.0000 1.0000	
19 DQHLMC		1.0000 1.0000	
20 CCV5-6		1.0000 1.0000	
21 CCB6		1.0000 1.0000	
22 DQDV2		1.0000 1.0000	
23 DQDV2X		1.0000 1.0000	
24 DQDV2S		1.0000 1.0000	
25 DQDV5		1.0000 1.0000	
26 CCV5-7		1.0000 1.0000	
27 CCB7		1.0000 1.0000	
28		1.0000 1.0000	
29		1.0000 1.0000	
30		1.0000 1.0000	

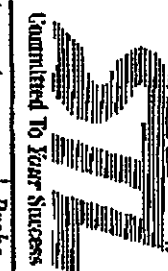
PgDn

Cup 16 ID: DPBJVF

Cell down mode Ins to switch

TCLP (A Method 1311)

675 699



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

James Murphy

Analyst <u>JP</u>	Room Temp <u>51.0</u>	Date <u>11/27/00</u>	Checked By <u>Chad M. Faust</u>	Date <u>11/28/00</u>	PH Instrument <u>AP25</u>	Probe <u>SP25</u>	Balance <u>0.443.7</u>	
Lot # <u>675699</u>	Client Codes <u>675699</u>	Solution # 1 - Log book # <u>004497-12</u>	Solution # 2 - Log book # <u>45-08-02203607</u>					

Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1 or #2	Sample ID	Wgt (g) We/Dry	Fluid Vol.	Vessel glass/plastic	Final pH after Tumbling	Conc. HNO ₃ to Acidity (for Metals)
1. DP2WN	500g 96.5mL	7.09	1.90	#1	DP2WN	100g	200mL	4.855	5.12	5mL
2. DP4J38		7.81	7.81		DP4J38				5.04	5mL
3. DP7HA		12.17	12.17		DP7HA				9.86	5mL
4. DP7H5		12.17	3.35		DP7H5				4.80	5mL
5. DP7OT		4.42			DP7OT				4.96	5mL
6. DP9AN		4.85			DP9AN				11.36	5mL
7. DP9AV		12.33	3.36		DP9AV				4.96	5mL
8. DP9AO		5.65	1.84		DP9AO				10.84	5mL
9. DP92L		4.95			DP92L				11.20	5mL
10. DP92L		12.32	3.05		DP92L				6.01	5mL
11. DP9AP		9.52	1.94		DP9AP				5.10	5mL
12. DP9CK		7.39	1.86		DP9CK				5.04	5mL
13. DP9CL		7.75	1.34		DP9CL				5.04	5mL
14. DP9CL		7.31	1.36		DP9CL				5.04	5mL
15. DP98X		13.29	9.34	#2	DP98X				4.25	5mL

Comments: pH = 4.45 #1
pH = 2.48 #2

Extract(s) (Record line number from above)		Date		Time		Location		Date		Time		Location	
11-28		11-28		11-28		N.D.		11-28		11-28		N.D.	
11-28		11-28		11-28		N.D.		11-28		11-28		N.D.	

TCLP (A Method 1311)
675 700

STL
STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380
Committed to Your Success

Analyst RLW Room Temp 19°C Date 11/27/00 Checked By Chris M. Gault Date 11/28/00 pH Instrument Accumet AR45 Probe 5800559607 Balance 194817
Lot # COK270112 Client Codes _____ Solution # 1 - Log book # _____ Solution # 2 - Log book # 95-09-0220-36-07

Fluid Determination					TCLP Extraction					
Sample ID	Wgt/Vol	Init. pH	Final pH	Extract fluid #1 or #2	Sample ID	Wgt (g) Wet/Dry	Fluid Vol.	Vessel glass/plastic	Final pH after Tumbling	Conc. HNO ₃ to Acidity (for Metals)
~~18-714P Bld~~					~~18-714P1~~	~~---~~	~~200.00~~	~~glass~~	~~4.93~~	~~5mL~~
~~18-714P Bld~~					~~18-714P2~~	~~---~~	~~200.00~~	~~glass~~	~~8.77~~	~~5mL~~
3.										
4										
5										
6.										
7.										
8										
9.										
10.										
11.										
12										
13										
14.										
15.										

Extract(s) (Record line number from above)	Extract(s) Received				Extract(s) Relinquished			
	Date	Time	Analyst	Location	Date	Time	Analyst	Location
A1 above	11-28-00	14:00	Jm	MD	11-28-00	14:30	A	30D
	11-28-00	14:30	W	MD	11-28-00	14:30		30D
	11-28-00				11-28-00			with 11-28-00

Comments

Extract(s)			Extract(s) Received			Extract(s) Relinquished		
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst	Location
All above	11-28-00	14:00	J.M.	Lab	11-28-00	14:30	A	Lab
	11-28-00	14:30	RLW	Lab	11-28-00	14:30		

* = 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	Date/Time Off	Agitation Apparatus RPM's 30±2
11/27/00 16:35	11/28/00 04:30	checked by RLW 11/27/00
Date 11-27-00	pH calibration (4.0)	(7.0)
Date 11-28-00	4.00	7.61
Filter Lot # 632070112		10.61

STL N:\QAL\LOGBOOKS\TCLP LOG

Log Book Number IP-00-0081

Page 20 of 20

[illegible]

675 702

Hg Digestion Log

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



QUA-4169

Pipet H3609

Serial Number 093 Log Book Number 96-MT-578 Start Time 06:55 → 07:10

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. STD0	N/A	11-30-00	WAH	100ml	WATER	11-30-00	N/A
2. STD1							0057-165-6
3. STD2							0057-165-7
4. STD3							0057-165-8
5. STD4							0057-165-9
6. STD5							0057-165-10
7. ICV							0057-165-11
8. ICB							N/A
9. CRA							0057-165-12
10. CCV							0057-166-1
11. CCB							N/A
12. DQHKRBT							N/A
13. DQHKCT							0057-166-2
14. DQF3KBT							N/A
15. DP3WMT	11-17-00						+5ml 0057-165-4
16. DP3WMT							+5ml 0057-165-4
17. DP3WMT							N/A
18. DP4JBT							N/A
19. DP70TT	11-30-00						N/A
20. DQCAPT	11-20-00						N/A
21. DQCKRT							N/A
22. DQCKCT							N/A
23. DQCLET							N/A
24. DQHKXR	N/A						N/A
25. DQHKXC							0057-166-3
Reagents	Vol (mL)		Ref. Number		Method		
HNO3	2.5ml		MAIL/CKRBT	6823	TORAO5	7470A/ILM400 ACTOCLAVE 150ST/130°C	
H2SO4	5.0ml			5557	TO2M12	SNCL2 = 0057-149-10	
KMNO4	15.0ml			0057-156-2		NOCL-NH2OH = 0057-155-1	
K2S2O4	8.0ml			0057-157-11		WAH 11-30-00	
Extract(s)	Extract(s) Received		Extract(s) Relinquished				
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Location
			WAH	11-30-00			

STL Pittsburgh

675 703

Hg Digestion Log

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



QUA-4169

P1ETD H31609

Serial Number 094 Log Book Number 96-MT-578 Start Time 06:55:30Z10

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. DPT88	11-14-00	11-30-00	WAH	100ml	WATER	11-30-00	N/A
2. DPT88							
3. DPT88							
4. DPT88							
5. DPT88							
6. DPT88							
7. DPT88							
8. DPT88							+1ml 0057-165-4
9. DPT88							+1ml 0057-165-4
10. DPT88							N/A
11. DPT88							
12. DPT88							
13. DPT88							
14. DPT88							
15. DPT88							
16. DPT88							
17. DPT88							
18. DPT88							
19. DPT88							+1ml 0057-165-4
20. DPT88							+1ml 0057-165-4
21. DPT88							N/A
22. DPT88							
23. DPT88							
24. DPT88							
25. DPT88							
Reagents		Vol (mL)				Ref. Number	Method
HNO3	2.5ml					MA1111111111 6623 T09A05	7470A/1111111111 AUTOCLAVE 15PSI 120°C
H2SO4	5.0ml					5557 T02A13	SALE = 0057-149-10
KMNO4	15.0ml					0057-156-2	NaCl-AH2OH = 0057-155-1
K2S2O4	8.0ml					0057-157-11	WASH 11-30-00
Extract(s)			Extract(s) Received				Extract(s) Relinquished
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
			WAH 11-30-00				

Hg Digestion Log

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



QUA-4169

P1PET# H31609

Serial Number 095 Log Book Number 96-MT-578 Start Time 06:55 → 07:10

Sample ID	Date Rec'd	Prep Date	Prepared By	WVVol	Sample Type	Run Date	Comments
1. DQXMSF	N/A	11-30-00	WAH	100ml	WATER	11-30-00	0057-166-4 WAH 11-30-00
2. DQXMSF	11-21-00						N/A
3. DQXMSF							41ml 0057-165-4
4. DQXMSF							41ml 0057-165-4
5. DQXMSF							N/A
6. DQXMSF							
7. DQXMSF							
8. DQXMSF							
9. DQXMSF							
10. DQXMSF	N/A						
11. DQXMSF	11-25-00						0057-166-5
12. DQXMSF							N/A
13. DQXMSF							
14. DQXMSF							41ml 0057-165-4
15. DQXMSF							N/A
16. DQXMSF							
17. DQXMSF							
18. DQXMSF							
19. DQXMSF							
20. DQXMSF							
21. DQXMSF							
22. DQXMSF							
23. DQXMSF							
24. DQXMSF							
25. DQXMSF							
Reagents	Vol (ml)	Ref. Number	Method				
HNO3	3.5ml	0057-166-4	7470A/ILM40 AUTOCALVE 15PSI 120°C				
H2SO4	5.0ml	5557 TOSAD	5.1CL9 = 0057-148-10				
KMNO4	15.0ml	0057-156-2	NOCL-A/H2O2H = 0057-155-1				
K2S2O4	8.0ml	0057-157-11	WAH 11-30-00				
Extract(s)	Date	Time	Analyst	Location	Date	Time	Location
(Record line number from above)							
			WAH	11-30-00			

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
2B	DP2WN	— — —	289376	039108	A-34-QO	C0K170119	001		SOLID	0	4 1
2D,E	DP4J8	— — —	289375	378644	A-34-QO	C0K170261	001		SOLID	0	8 1
3B	DP7HA	— — —	289373	413315	A-34-QO	C0K200168	001		SOLID	0	2 1
3B	DP7HJ	— — —	289374	413315	A-34-QO	C0K200168	002		SOLID	0	1 1
3B CLP1	DP70T	— — —	289377	090421	A-34-QO	C0K200198	001		SOLID	0	3 1
3C	DP9AN	— — —	289364	413315	A-34-QO	C0K210198	001		SOLID	0	1 1
3C	DP9AV	— — —	289365	413315	A-34-QO	C0K210198	002		SOLID	0	1 1
3C	DP9A0	— — —	289366	413315	A-34-QO	C0K210198	003		SOLID	0	1 1
3E	DQA2L	— — —	289370	413315	A-34-QO	C0K220186	001		SOLID	0	1 1
3E	DQA2R	— — —	289371	413315	A-34-QO	C0K220186	002		SOLID	0	1 1
3D	DQCAP	— — —	289372	039108	A-34-QO	C0K220219	001		SOLID	0	4 1
CLP1 3D	DQCKK	— — —	289367	399411	A-34-QO	C0K220253	001		SOLID	0	3 1
CLP1 3D	DQCLC	— — —	289368	399411	A-34-QO	C0K220253	002		SOLID	0	3 1
CLP1 3D	DQCLE	— — —	289369	399411	A-34-QO	C0K220253	003		SOLID	0	3 1
4C	DQD8M	— — —	289379	413315	A-46-QO	C0K270111	001		SOLID	0	1 1
5C	DQD8X	— — —	289378	413315	A-34-QO	C0K270112	001		SOLID	0	1 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

AL	Cynthia A [Signature]	11-29-00 1000
Cynthia A [Signature]	AL	11-29-00 1230

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

675 706

PSR024 11/27/00 6:47:51 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: WILLIAMR

METHOD: QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
2B	DP2WN	— — —	288558	039108	A-34-QO	C0K170119	001		SOLID	0	4 1
2D,E	DP4J8	— — —	288559	378644	A-34-QO	C0K170261	001		SOLID	0	8 1
3B	DP7HA	— — —	288547	413315	A-34-QO	C0K200168	001		SOLID	0	2 1
3B	DP7HJ	— — —	288548	413315	A-34-QO	C0K200168	002		SOLID	0	1 1
3B CLP1	DP70T	— — —	288560	090421	A-34-QO	C0K200198	001		SOLID	0	3 1
3C	DP9AN	— — —	288549	413315	A-34-QO	C0K210198	001		SOLID	0	1 1
3C	DP9AV	— — —	288550	413315	A-34-QO	C0K210198	002		SOLID	0	1 1
3C	DP9A0	— — —	288551	413315	A-34-QO	C0K210198	003		SOLID	0	1 1
3E	DQA2L	— — —	288552	413315	A-34-QO	C0K220186	001		SOLID	0	1 1
3E	DQA2R	— — —	288553	413315	A-34-QO	C0K220186	002		SOLID	0	1 1
3D	DQCAP	— — —	288554	039108	A-34-QO	C0K220219	001		SOLID	0	4 1
CLP1 3D	DQCKK	— — —	288555	399411	A-34-QO	C0K220253	001		SOLID	0	3 1
CLP1 3D	DQCLC	— — —	288556	399411	A-34-QO	C0K220253	002		SOLID	0	3 1
CLP1 3D	DQCLE	— — —	288557	399411	A-34-QO	C0K220253	003		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

[Signature]
[Signature]

[Signature]
[Signature]

11/27-0900
11/27-1430

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

STL Pittsburgh

6140

REQUESTED BY HOYLEW

METHOD: 08 Mercury (7470A, Cold Vapor) - Liquid

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>	
2B	DP2WN	___	289507	039108	A-0M-08	C0K170119	001		SOLID	0	4	1
2D,E	DP4J8	___	289508	378644	A-0M-08	C0K170261	001		SOLID	0	8	1
3B CLP1	DP70T	___	289512	090421	A-0M-08	C0K200198	001		SOLID	0	3	1
3D	DQCAP	___	289506	039108	A-0M-08	C0K220219	001		SOLID	0	4	1
CLP1 3D	DQCKK	___	289509	399411	A-0M-08	C0K220253	001		SOLID	0	3	1
CLP1 3D	DQCLC	___	289510	399411	A-0M-08	C0K220253	002		SOLID	0	3	1
CLP1 3D	DQCLE	___	289511	399411	A-0M-08	C0K220253	003		SOLID	0	3	1

DQF3KB

TCLP
LEACHATE

RELINQUISHED BYRECEIVED BYDATE/TIMEWilliam A Hoyle William A Hoyle 11-30-00 04:55William A Hoyle William A Hoyle 11-30-00 05:50

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

675 703

GENERAL CHEMISTRY DATA

675 709

UXB INTERNATIONAL

Client Sample ID: DF/24-A/0326/SDC/006

General Chemistry

Lot-Sample #...: C0K220253-001 Work Order #...: DQCKK Matrix.....: SOLID
 Date Sampled...: 11/21/00 Date Received...: 11/22/00
 % Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	6.5		No Units	SW846 9045C	11/22/00	0327439
				Dilution Factor: 1	MS Run #.....: 0327175	
Ignitability	NO	--	No Units	SW846 SECTION 7.1	11/30/00	0335206
				Dilution Factor: 1	MS Run #.....: 0335084	
Percent Solids	84.2		%	MCAWW 160.3 MOD	11/27-11/28/00	0332246
				Dilution Factor: 1	MS Run # 0332081	
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	11/30/00	0335424
				Dilution Factor: 1	MS Run #.....: 0335241	
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	11/30/00	0335426
				Dilution Factor: 1	MS Run # 0335239	

675 710

UXB INTERNATIONAL

Client Sample ID: DF/24-A/0326/SDC/007

General Chemistry

Lot-Sample #...: COK220253-002 Work Order #...: DQCLC Matrix.....: SOLID
 Date Sampled...: 11/21/00 Date Received...: 11/22/00
 % Moisture.....: 8.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	6.6		No Units	SW846 9045C	11/22/00	0327439
		Dilution Factor: 1		MS Run #.: 0327175		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	11/30/00	0335206
		Dilution Factor: 1		MS Run #.....: 0335084		
Percent Solids	91.3		%	MCAWW 160.3 MOD	11/27-11/28/00	0332246
		Dilution Factor: 1		MS Run #.....: 0332081		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	11/30/00	0335424
		Dilution Factor: 1		MS Run #.....: 0335241		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	11/30/00	0335426
		Dilution Factor: 1		MS Run #.....: 0335239		

UXB INTERNATIONAL

Client Sample ID: DF/24-A/0326/SDC/008

General Chemistry

Lot-Sample #....: COK220253-003 Work Order #....: DQCLE Matrix.....: SOLID
 Date Sampled....: 11/21/00 Date Received...: 11/22/00
 % Moisture.....: 9.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	6.4		No Units	SW846 9045C	11/22/00	0327439
				Dilution Factor: 1	MS Run #.....: 0327175	
Ignitability	NO	--	No Units	SW846 SECTION 7.1	11/30/00	0335206
				Dilution Factor: 1	MS Run #.....: 0335084	
Percent Solids	90.6		%	MCAWW 160.3 MOD	11/27-11/28/00	0332246
				Dilution Factor: 1	MS Run #.....: 0332081	
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	11/30/00	0335424
				Dilution Factor: 1	MS Run #.....: 0335241	
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	11/30/00	0335426
				Dilution Factor: 1	MS Run #.....: 0335239	

675 712

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0K220253

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 #: DQL6L1AA 200	mg/kg	MB Lot-Sample #: SW846 7.3.3	AOK300000-424 11/30/00	0335424
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DQL6G1AA 200	mg/kg	MB Lot-Sample #: SW846 7.3.4	AOK300000-426 11/30/00	0335426
		Dilution Factor: 1				

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: C0K220253

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 #: DQCN51AA (85 - 115)	LCS Lot-Sample#: C0K220000-439 SW846 9045C	11/22/00	0327439
		Dilution Factor: 1			

NOTE(S) :

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

675 714

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0K220253

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

Matrix.....: SOLID

Date Sampled...: 11/21/00

Date Received..: 11/22/00

% Moisture.....: 16

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	6.5	6.6	No Units	1.8	(0-20)	SD Lot-Sample #: SW846 9045C	C0K220253-001 11/22/00	0327439
			Dilution Factor. 1					
			Prep Date.....: 0327175			Analysis Date...		Prep Batch #... :

Ignitability

SD Lot-Sample #: C0K220253-001

No Units 0 (0-0.0) SW846 SECTION 7.1 11/30/00 0335206

Dilution Factor: 1

Prep Date.....: 0335084 Analysis Date...: Prep Batch #...:

SAMPLE DUPLICATE EVALUATION REPORT

Prep Batch #...:

675 716

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: COK220253

Work Order #...: DQCW3-SMP
DQCW3-DUP

Matrix.....: SOLID

Date Sampled...: 11/20/00

Date Received...: 11/22/00

% Moisture.....: 20

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	80.5	80.6	%	0.15	(0-20)	MCAWW 160.3 MOD	11/27-11/28/00	0332246

Dilution Factor: 1

Prep Date.....: 0332081 Analysis Date ..

Prep Batch #....:

675 717

Analyst: LEON GROV
Date: 11-22-00
Start Time: 12:13 15:30

Reading	Buffer	Manf. Lot No.	Rec'd	Expire
4.00	4.0	Lot 3-11-13M 0200-09	11-4-00	7-24-02
7.01	7.0	0220-07	8-25-00	8-7-02
10.02	10.0	0146-04	11-4-00	5-25-01

Relative Percent Difference = $\frac{COK220210-001 - COK220253-001}{COK220210-001 + COK220253-001} = 0.8\%$

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X_1 = Original Result
 X_2 = Duplicate

Sample ID	pH Reading
LCS	7.03
COK220253 -001	6.53
-001 DUP	6.65
-002	6.61
-003	6.38
LCS	6.96

675 718

PSR024 11/22/00 13.23:35 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: GROVER

IOD AJ pH - Aqueous (150.1)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
CLP1 3D	DQA8G-1-AF	___	288012	120141	I-88-AJ	C0K220210	001		WATER	9	1
CLP1 3D	DQA8T-1-AF	___	288013	120141	I-88-AJ	C0K220210	002		WATER	9	1
CLP1 3D	DQA8V-1-AF	___	288014	120141	I-88-AJ	C0K220210	003		WATER	9	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

11/22/00 15:25
11/22/00 15:40

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

ROC/Sample Request

Project Name

UXB DUNFIELD

Site

Lot Number/Sample Number

Analysis

Matrix

DF/24-A/0.526/SPC/006

PH

So, /

007

008

11-22-01

Raw Sample

Raw Relinquished by

Raw Received by

	Date	Time	Analyst	Location	Date	Time	Analyst	Location
By BSI JS	11-22-00	15:30	[Signature]	5th	11-22-00	15:30	[Signature]	5th
Adm	11-22-00	15:50	[Signature]	1072 W	11-22-00	15:50	[Signature]	5th
STL Pittsburgh								

7012

675 720

STL Pittsburgh

TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

11017

Lot No. Lot No. Lot No. Batch No. Analyst: CLLOTHEIDE
CKB0125 CK210116 2 0332246 In: Date 11/27/00 Time 1030
CK220232 CK210232 2 0332248 Out: Date 11/28/00 Time 0600
CK220253 CK220190 2 0332252 Balance ID #: C94817
CK220286 CK210145 2 2 Oven Temp: 103°C ± 2°C
CK250104

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
CK180125-001	10	1.07	6.46	5.50	CK210145-001	106	1.05	6.39	6.20
CK220232-001	1	1.05	6.00	5.66	-010	101	1.05	6.91	6.68
CK220253-001	37	1.08	7.10	6.15	-002	19	1.06	7.69	7.32
-002	5	1.08	6.60	6.12	-003	97	1.12	6.25	5.59
-003	47	1.10	7.06	6.50	-004	43	1.10	6.71	5.71
CK220286-001	2	1.06	6.55	5.88	-005	81	1.02	6.56	6.07
-002	58	1.07	6.29	5.08	-007	15	1.04	7.13	6.49
-003	26	1.05	6.30	5.53	-008	70	1.06	6.80	5.87
-004	88	1.08	6.73	5.86	-009	XX	1.10	6.68	5.61
-005	33	1.05	6.30	5.58	-010	30	1.04	6.39	5.61
-006	44	1.06	6.56	5.51	-011	98	1.05	7.70	6.63
-007	11	1.07	6.30	5.28	-012	57	1.06	7.69	7.17
-007D	110	1.06	6.22	5.22	-013	8	1.07	6.46	5.75
-008	96	1.08	6.28	5.54	-014	67	1.07	6.48	5.75
-009	CA	1.14	6.07	5.36	-015	104	1.08	7.00	4.92
CK250104-001	23	1.09	6.78	4.52					
-001	64	1.05	7.78	5.30					
-002	25	1.07	7.16	5.63					
CK210116-001	75	1.08	6.42	5.82					
-002	92	1.06	7.64	6.63					
-003	54	1.06	6.76	5.57					
-004	1151	1.11	8.89	7.43					
-005	E1	1.11	7.09	6.24					
-006	93	1.07	6.64	5.89					
-007	73	1.04	6.76	6.00					
-008	89	1.06	5.90	5.07					
-009	79	1.08	6.86	5.78					
-010	68	1.05	6.90	6.18					
-011	95	1.07	6.68	6.00					
-012	80	1.06	8.20	6.79					
-013	103	1.08	6.37	5.51					
CK220232-001	24	1.09	6.30	5.56					
CK220190-001	13	1.06	5.75	5.21					
-002	21	1.04	6.76	6.16					
-003	42	1.05	6.37	5.24					
-004	100	1.07	6.12	4.94					

STL - Pittsburgh WATER CONTENT SHEET

675 721

SHEET NUM	0011017	
STED:	CLL	11/27/00
CHECKED:	<i>[Signature]</i>	

CREATED:	11/28/00 9:35 26 AM
REVISED:	11/28/00 9:36:32 AM

COMMENTS:

C0K180125 C0K220232 C0K220253 C0K220286 C0K250104 C0K210116 C0K210232 C0K220190 C0K210145

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	
C0K180125	001	SMP	10	1.07	6.46	5.5	10:30	6:00	0.96	17.811	82.189
C0K220232	001	SMP	1	1.05	6	5.66	10:30	6:00	0.34	6.869	93.131
C0K220253	001	SMP	37	1.08	7.1	6.15	10:30	6:00	0.95	15.781	84.219
C0K220253	002	SMP	5	1.08	6.6	6.12	10:30	6:00	0.48	8.696	91.304
C0K220253	003	SMP	47	1.1	7.06	6.5	10:30	6:00	0.56	9.396	90.604
C0K220286	001	SMP	7	1.06	6.55	5.88	10:30	6:00	0.67	12.204	87.796
C0K220286	002	SMP	58	1.07	6.29	5.08	10:30	6:00	1.21	23.18	76.82
C0K220286	003	SMP	26	1.05	6.3	5.53	10:30	6:00	0.77	14.667	85.333
C0K220286	004	SMP	88	1.08	6.73	5.86	10:30	6:00	0.87	15.398	84.602
C0K220286	005	SMP	53	1.05	6.3	5.58	10:30	6:00	0.72	13.714	86.286
C0K220286	006	SMP	44	1.06	6.56	5.51	10:30	6:00	1.05	19.091	80.909
C0K220286	007	SMP	11	1.07	6.3	5.28	10:30	6:00	1.02	19.503	80.497
C0K220286	007D	SMP	110	1.06	6.22	5.22	10:30	6:00	1	19.38	80.62
C0K220286	008	SMP	96	1.08	6.28	5.54	10:30	6:00	0.74	14.231	85.769
C0K220286	009	SMP	CA	1.14	6.07	5.36	10:30	6:00	0.71	14.402	85.598
C0K250104	001	SMP	23	1.09	6.78	4.52	10:30	6:00	2.26	39.719	60.281
C0K250104	001D	SMP	64	1.05	7.78	5.3	10:30	6:00	2.48	36.85	63.15
C0K250104	002	SMP	25	1.07	7.16	5.63	10:30	6:00	1.53	25.123	74.877

675 722

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM 0011017
 STED CLL 11/27/00
 CHECKED *[Signature]*

CREATED: 11/28/00 9:35:26 AM
 REVISED: 11/28/00 9:36:32 AM

COMMENTS:

C0K180125 C0K220232 C0K220253 C0K220286 C0K250104 C0K210116 C0K210232 C0K220190 C0K210145

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.
C0K210116	001	SMP	75	1.08	6.42	5.82	10:30	6:00	0.6	11.236	88.764
C0K210116	002	SMP	92	1.06	7.64	6.63	10:30	6:00	1.01	15.35	84.65
C0K210116	003	SMP	54	1.06	6.76	5.57	10:30	6:00	1.19	20.877	79.123
C0K210116	004	SMP	1151	1.11	8.89	7.43	10:30	6:00	1.46	18.766	81.234
C0K210116	005	SMP	E1	1.11	7.09	6.24	10:30	6:00	0.85	14.214	85.786
C0K210116	006	SMP	93	1.07	6.64	5.89	10:30	6:00	0.75	13.465	86.535
C0K210116	007	SMP	73	1.04	6.76	6	10:30	6:00	0.76	13.287	86.713
C0K210116	008	SMP	89	1.06	5.9	5.07	10:30	6:00	0.83	17.149	82.851
C0K210116	009	SMP	79	1.08	6.86	5.78	10:30	6:00	1.08	18.685	81.315
C0K210116	010	SMP	68	1.05	6.9	6.18	10:30	6:00	0.72	12.308	87.692
C0K210116	011	SMP	95	1.07	6.68	6	10:30	6:00	0.68	12.121	87.879
C0K210116	012	SMP	80	1.06	8.2	6.79	10:30	6:00	1.41	19.748	80.252
C0K210116	013	SMP	103	1.08	6.37	5.51	10:30	6:00	0.86	16.257	83.743
C0K210232	001	SMP	24	1.09	6.3	5.56	10:30	6:00	0.74	14.203	85.797
C0K220190	001	SMP	13	1.06	5.75	5.21	10:30	6:00	0.54	11.514	88.486
C0K220190	002	SMP	21	1.04	6.76	6.16	10:30	6:00	0.6	10.49	89.51
C0K220190	003	SMP	42	1.05	6.37	5.24	10:30	6:00	1.13	21.241	78.759
C0K220190	004	SMP	100	1.07	6.12	4.94	10:30	6:00	1.18	23.366	76.634

STL - Pittsburgh WATER CONTENT SHEET

675 723

SHEET NUM: 0011017
 STED. CLL 11/27/00
 CHECKED: *[Signature]*

CREATED: 11/28/00 9:35:26 AM
 REVISED: 11/28/00 9:36:32 AM

COMMENTS:

C0K180125 C0K220232 C0K220253 C0K220286 C0K250104 C0K210116 C0K210232 C0K220190 C0K210145

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.	
C0K210145	001	SMP	106	1.05	6.39	6.2	10.30	6.00	0.19	3.558	96.442
C0K210145	001D	SMP	101	1.05	6.91	6.68	10.30	6:00	0.23	3.925	96.075
C0K210145	002	SMP	19	1.06	7.69	7.32	10:30	6.00	0.37	5.581	94.419
C0K210145	003	SMP	97	1.12	6.25	5.59	10:30	6:00	0.66	12.865	87.135
C0K210145	004	SMP	43	1.1	6.71	5.71	10.30	6.00	1	17.825	82.175
C0K210145	005	SMP	81	1.02	6.56	6.07	10:30	6:00	0.49	8.845	91.155
C0K210145	007	SMP	15	1.04	7.13	6.49	10.30	6:00	0.64	10.509	89.491
C0K210145	008	SMP	70	1.06	6.8	5.87	10.30	6:00	0.93	16.202	83.798
C0K210145	009	SMP	XX	1.1	6.68	5.61	10:30	6.00	1.07	19.176	80.824
C0K210145	010	SMP	30	1.04	6.39	5.61	10:30	6:00	0.78	14.579	85.421
C0K210145	011	SMP	98	1.05	7.7	6.63	10.30	6:00	1.07	16.09	83.91
C0K210145	012	SMP	57	1.06	7.69	7.17	10:30	6:00	0.52	7.843	92.157
C0K210145	013	SMP	8	1.07	6.46	5.75	10.30	6.00	0.71	13.173	86.827
C0K210145	014	SMP	67	1.07	6.48	5.75	10.30	6:00	0.73	13.494	86.506
C0K210145	015	SMP	104	1.08	7	4.92	10.30	6.00	2.08	35.135	64.865

675 724

PSR024 11/27/00 3:49:27 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY LOHEYDEC

OD 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		
CLP-1	DP9MA-1-AF	___	288359	027262	A-88-SM C0K210232	001			SOLID	1	1
CLP1	DP5PD-1-AA	___	288358	396447	A-88-SM C0K180125	001			SOLID	3	1
CLP1 3D	DQCKK-1-AA	___	288360	399411	A-88-SM C0K220253	001			SOLID	3	1
CLP1 3D	DQCCLC-1-AA	___	288361	399411	A-88-SM C0K220253	002			SOLID	3	1
CLP1 3D	DQCLE-1-AA	___	288362	399411	A-88-SM C0K220253	003			SOLID	3	1
4C	DQCVR-1-AA	___	288363	016580	A-88-SM C0K220286	001			SOLID	1	1
4C	DQCWD-1-AA	___	288364	016580	A-88-SM C0K220286	002			SOLID	1	1
4C	DQCWK-1-AA	___	288365	016580	A-88-SM C0K220286	003			SOLID	1	1
4C	DQCWP-1-AA	___	288366	016580	A-88-SM C0K220286	004			SOLID	1	1
4C	DQCWT-1-AA	___	288367	016580	A-88-SM C0K220286	005			SOLID	1	1
	DQCWX-1-AA	___	288368	016580	A-88-SM C0K220286	006			SOLID	1	1
4C	DQCW3-1-AA	___	288369	016580	A-88-SM C0K220286	007			SOLID	4	2
4C	DQCW7-1-AA	___	288370	016580	A-88-SM C0K220286	008			SOLID	1	1
4C	DQCXA-1-AA	___	288371	016580	A-88-SM C0K220286	009			SOLID	1	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

11-27-00 0600
11-27-00 1100

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

STL Pittsburgh

7017

REQUESTED BY: LOHEYDEC

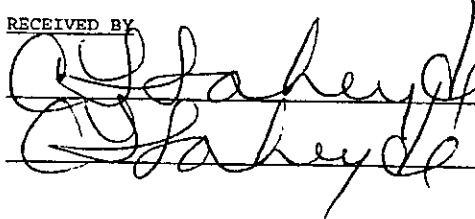
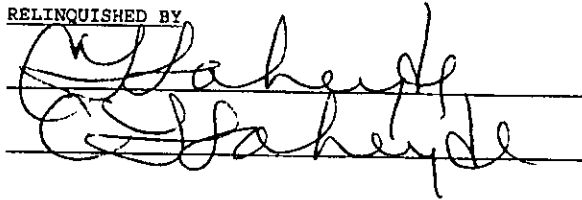
OD SM Solids, Percent (as TS - 160 3 MOD) - Solids

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u>	
										<u>RCVD</u>	<u>REQD</u>
CLP1 4C	DQDV9-1-AA	— — —	288421	002532	A-88-SM C0K250104	001	—	—	SOLID	2	1
CLP1 4C	DQDWA-1-AE	— — —	288422	002532	A-88-SM C0K250104	002	—	—	SOLID	2	1
3E CLP1	DQCD1-1-AF	— — —	288420	027262	A-88-SM C0K220232	001	—	—	SOLID	2	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

11-27-00 0600
11-27-00 1100

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

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		
CLP1 3B	DP8LP-1-AA	___	288403	371899	A-88-SM COK210116	001			SOLID	5	1
CLP1 3B	DP8MR-1-AA	___	288404	371899	A-88-SM COK210116	002			SOLID	5	1
CLP1 3B	DP8MO-1-AA	___	288405	371899	A-88-SM COK210116	003			SOLID	5	1
CLP1 3B	DP8M3-1-AA	___	288406	371899	A-88-SM COK210116	004			SOLID	5	1
CLP1 3B	DP8M5-1-AA	___	288407	371899	A-88-SM COK210116	005			SOLID	5	1
CLP1 3B	DP8M8-1-AA	___	288408	371899	A-88-SM COK210116	006			SOLID	5	1
CLP1 3B	DP8M9-1-AA	___	288409	371899	A-88-SM COK210116	007			SOLID	5	1
CLP1 3B	DP8NA-1-AA	___	288410	371899	A-88-SM COK210116	008			SOLID	5	1
CLP1 3B	DP8ND-1-AA	___	288411	371899	A-88-SM COK210116	009			SOLID	5	1
CLP1 3B	DP8NE-1-AA	___	288412	371899	A-88-SM COK210116	010			SOLID	5	1
CLP1 3B	DP8NG-1-AA	___	288413	371899	A-88-SM COK210116	011			SOLID	5	1
CLP1 3B	DP8NH-1-AA	___	288414	371899	A-88-SM COK210116	012			SOLID	5	1
CLP1 3B	DP8NK-1-AA	___	288415	371899	A-88-SM COK210116	013			SOLID	5	1
CLP1 4B	DQA22-1-AA	___	288416	371899	A-88-SM COK220190	001			SOLID	3	1
CLP1 4B	DQA3Q-1-AA	___	288417	371899	A-88-SM COK220190	002			SOLID	3	1
CLP1 4B	DQA3W-1-AA	___	288418	371899	A-88-SM COK220190	003			SOLID	3	1
CLP1 4B	DQA31-1-AA	___	288419	371899	A-88-SM COK220190	004			SOLID	3	1

REQUESTED BY LOHEYDEC

675 727

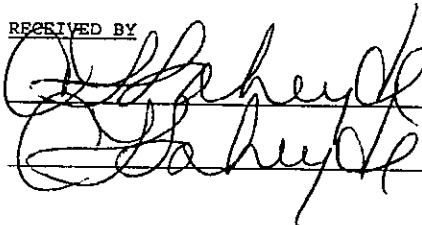
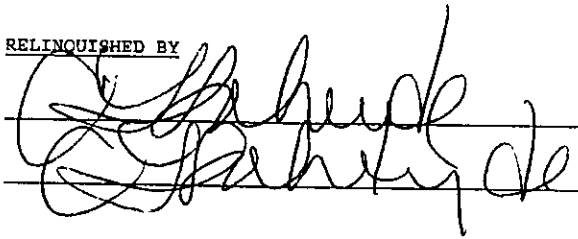
MOD SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
CLP1 3B	DP8WG-1-AA	---	288561	371899	A-88-SM COK210145	001			SOLID	0	5 1
CLP1 3B	DP8XN-1-AA	---	288562	371899	A-88-SM COK210145	002			SOLID	0	5 1
CLP1 3B	DP8XX-1-AA	---	288563	371899	A-88-SM COK210145	003			SOLID	0	5 1
CLP1 3B	DP8X4-1-AA	---	288564	371899	A-88-SM COK210145	004			SOLID	0	5 1
CLP1 3B	DP8X5-1-AA	---	288565	371899	A-88-SM COK210145	005			SOLID	0	5 1
CLP1 3B	DP80H-1-AA	---	288566	371899	A-88-SM COK210145	007			SOLID	0	5 1
CLP1 3B	DP80P-1-AA	---	288567	371899	A-88-SM COK210145	008			SOLID	0	5 1
CLP1 3B	DP80T-1-AA	---	288568	371899	A-88-SM COK210145	009			SOLID	0	5 1
CLP1 3B	DP80W-1-AA	---	288569	371899	A-88-SM COK210145	010			SOLID	0	5 1
CLP1 3B	DP800-1-AA	---	288570	371899	A-88-SM COK210145	011			SOLID	0	5 1
1 3B	DP803-1-AA	---	288571	371899	A-88-SM COK210145	012			SOLID	0	5 1
CLP1 3B	DP806-1-AA	---	288572	371899	A-88-SM COK210145	013			SOLID	0	5 1
CLP1 3B	DP809-1-AA	---	288573	371899	A-88-SM COK210145	014			SOLID	0	5 1
CLP1 3B	DP84H-1-AA	---	288574	371899	A-88-SM COK210145	015			SOLID	0	5 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

11-27-00 0900
11-27-00 1100

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

675 728

PSR024 11/27/00 3 51.39 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 002

REQUESTED BY: LOHEYDEC

IOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>

RELINQUISHED BY

RECEIVED BY

DATE/TIME

[Signature]
[Signature]

[Signature]
[Signature]

11-27-00 0600
11-27-00 1100

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

STL Pittsburgh

7021

675 729

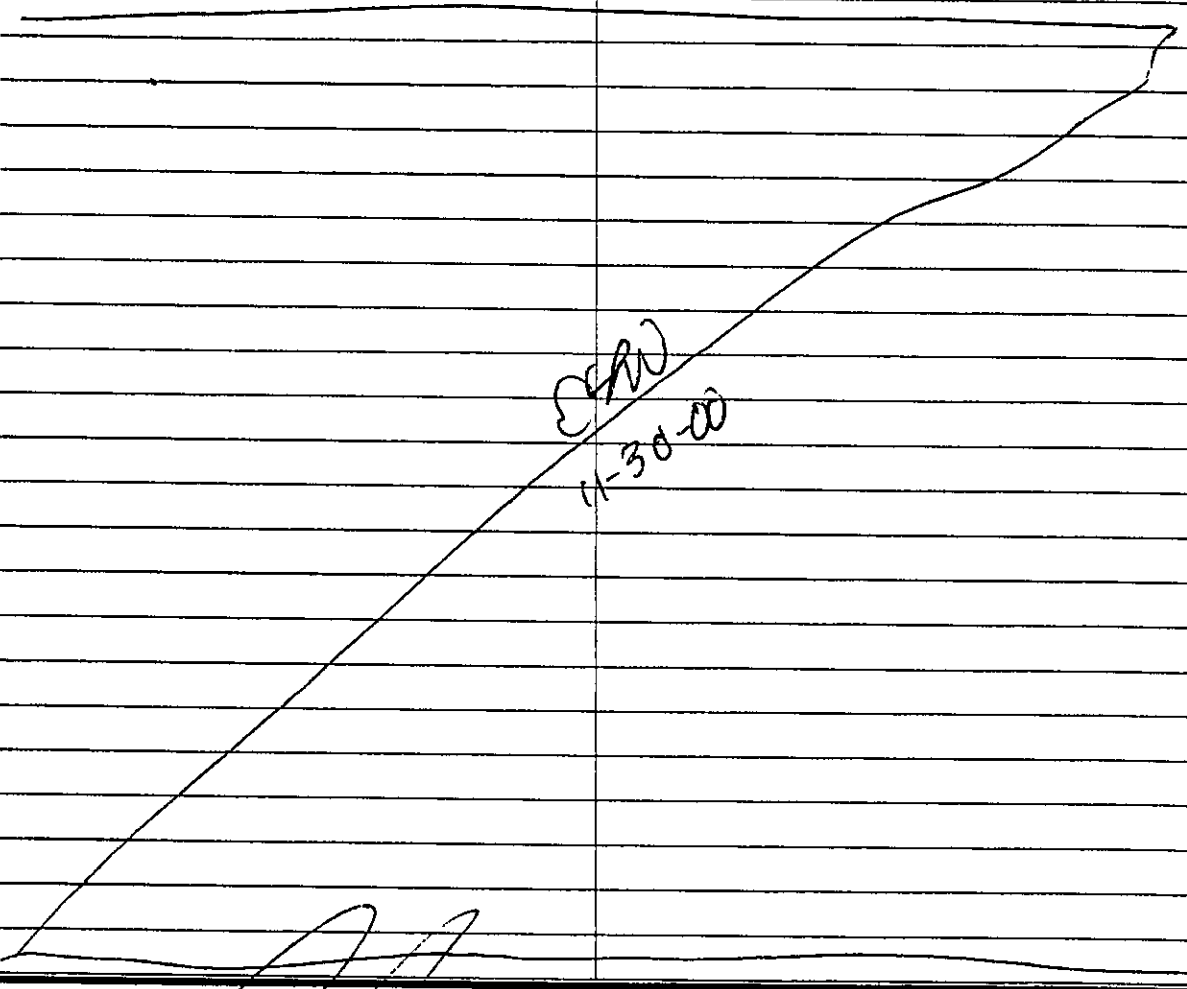
Ignitability

Method: IGNITABILITY (SW7.1.2)

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238

ANALYST: <u>Eric L. Wesolowski</u>	DATE: <u>11-30-00</u>
BATCH: <u>0335206</u>	TIME: <u>11:00</u>

SAMPLE ID	RESULT
<u>COK220253 -001</u>	<u>NO</u>
<u>↓ -001 Dup</u>	<u>NO</u>
<u>-002</u>	<u>NO</u>
<u>-003</u>	<u>NO</u>



Reviewed by [Signature] Date 11-30-00

WC-00-0060

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[Signature]

675 730

PSR024 11/30/00 8 40 36 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY. WESOLOSE

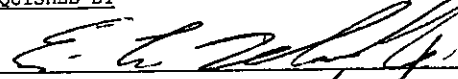
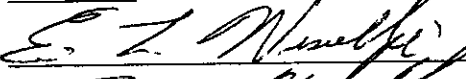
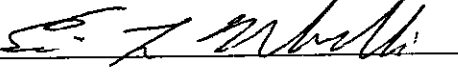
METHOD: IQ Ignitability (SW/ 1 2)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
CLP1 3D	DQCKK-1-AR	___	289984	399411	A-88-IQ	C0K220253	001		SOLID	3	1
CLP1 3D	DQCLC-1-AR	___	289985	399411	A-88-IQ	C0K220253	002		SOLID	3	1
CLP1 3D	DQCLE-1-AR	___	289986	399411	A-88-IQ	C0K220253	003		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

		11/30/00 (10:55)
		11/30/00 (11:09)

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

TITRIMETRIC LOGSHEET

Analysis Reactive SulfidePrep/ Anal. Date 11-30-00Analyst TA

675 731

Batch Number 0335426LCS Number NALCS Prep Date NARL 200mg/LTitrant Name Sodium Thiosulfate, Iodine .02498 AS 11/17/00Titrant Normality .025Titrant Standardization Date/ Initials 11-17-001 AS

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
Blank	10g		22.2	ND	mg/kg	-11.5
DQCLC	I		22.3	ND	I	-11.5
DQCLC-DUP			22.25	ND		-11.5
DQCKK			22.3	ND		-11.5
DQCLE			22.3	ND		-11.5
DQEWK	I		22.2	ND	I	-11.5
TA 11-30-00						

TITRIMETRIC LOGSHEET

Analysis Reactive Cyanide

675 732

Batch Number 0335424Prep/ Anal. Date 11-30-00LCS Number NAAnalyst TA

LCS Prep Date _____

RL _____

Titrant Name Silver NitrateTitrant Normality 0.0192 NTitrant Standardization Date/ Initials NA /

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
<u>Blank</u>	<u>10g</u>		<u>.05</u>	<u>12.5</u>	<u>mg/kg</u>	<u>100</u>
<u>DQCLC</u>	<u> </u>		<u>.05</u>	<u> </u>	<u> </u>	
<u>DQCLC-DUP</u>	<u> </u>		<u>.05</u>	<u> </u>	<u> </u>	
<u>DQCKK</u>	<u> </u>		<u>.05</u>	<u> </u>	<u> </u>	
<u>DQCLE</u>	<u> </u>		<u>.05</u>	<u> </u>	<u> </u>	
<u>DQEWMM</u>	<u> </u>		<u>.05</u>	<u> </u>	<u> </u>	
TA 11/30/00						

675 733

12/08/00 12:55:22 Sample Control Chain of Custody - STL North Canton PAGE 1

LOT NUMBER	SAMPLE SUFFIX	LAB ID	ANALYSIS TYPE	PREP DATE	PREP ANALYST	ANALYSIS DATE	ANALYST
00X090253	1	DPUL91AC	TOC	11/18/00	Melissa Fuller-Gustave	11/18/00	Melissa Fuller-Gustave
00X090253	1	DPUL91AC	TOX_1	12/01/00	Susan Macorczak	12/01/00	Melissa Fuller-Gustave
00X090253	2	DPUL61AC	TOC	11/18/00	Melissa Fuller-Gustave	11/18/00	Melissa Fuller-Gustave
00X090253	2	DPUL61AC	TOX_1	12/01/00	Susan Macorczak	12/01/00	Melissa Fuller-Gustave
00X090253	3	DPUL61AC	TOC	11/18/00	Melissa Fuller-Gustave	11/18/00	Melissa Fuller-Gustave
00X090253	3	DPUL61AC	TOX_1	12/01/00	Susan Macorczak	12/01/00	Melissa Fuller-Gustave
00X090253	5	DPUL61AC	TOC	11/18/00	Melissa Fuller-Gustave	11/18/00	Melissa Fuller-Gustave
00X090253	5	DPUL61AC	TOX_1	12/01/00	Susan Macorczak	12/01/00	Melissa Fuller-Gustave

*** END OF REPORT ***

12/08/00 12:51:38 Sample Control Chain of Custody - STL North Canton PAGE 1

LOT NUMBER	SAMPLE SLFTIX	SAMPLE SLFTIX	LAB ID	ANALYSIS TYPE	PREP DATE	PREP ANALYST	ANALYSIS DATE	ANALYST
00K220253	1		DOOXC1AT	OREACT	11/30/00	Tia Anderson	11/30/00	Tia Anderson
00K220253	1		DOOXC1AU	SUREACT	11/30/00	Tia Anderson	11/30/00	Tia Anderson
00K220253	2		DOOXC1AT	OREACT	11/30/00	Tia Anderson	11/30/00	Tia Anderson
00K220253	2		DOOXC1AU	SUREACT	11/30/00	Tia Anderson	11/30/00	Tia Anderson
00K220253	2	X	DOOXC1AU	SUREACT	11/30/00	Tia Anderson	11/30/00	Tia Anderson
00K220253	2	X	DOOXC1AU	SUREACT	11/30/00	Tia Anderson	11/30/00	Tia Anderson
00K220253	2	X	DOOXC1AU	SUREACT	11/30/00	Tia Anderson	11/30/00	Tia Anderson
00K220253	3		DOOXC1AT	OREACT	11/30/00	Tia Anderson	11/30/00	Tia Anderson
00K220253	3		DOOXC1AU	SUREACT	11/30/00	Tia Anderson	11/30/00	Tia Anderson

*** END OF REPORT ***

FINAL PAGE

PART I

ADMINISTRATIVE RECORD

PART I

FINAL PAGE