



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 671

**SEVERN
TRENT
SERVICES**

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

Tel: 412 820 8380
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ANALYTICAL REPORT

PROJECT NO. UXB 7512-060

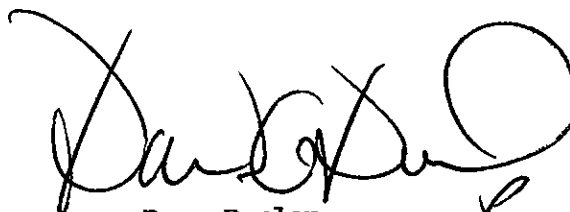
Dunn Field, Def Depot Memphis

Lot #: C0H220139

Frank Johnson

UXB International

SEVERN TRENT LABORATORIES, INC.



Dave Dunlap
Project Manager

September 11, 2000

CASE NARRATIVE
UXB International Inc.
Dunn Field

LOT # C0H220139

Sample Receiving:

STL Pittsburgh received samples on August 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:

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

Herbicides:

There were no problems associated with the analysis.

Total Metals:

There were no problems associated with the analysis.

TCLP Metals:

There were no problems associated with the analysis.

General Chemistry:

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

There were no problems associated with the analyses.

METHODS SUMMARY

COH220139

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

C0H220139

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
DJ7C8	001	DF/S1/0234/SDC/029	08/21/00	10:00
DJ7C9	002	DF/S1/0234/SDC/030	08/21/00	10:00
DJ7CC	003	DF/S1/0234/SDC/032	08/21/00	10:00

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



Client AXB International Address 641 Residence Inn, Route 116, Old Poplar Pk City Memphis State TN Zip Code 38119		Project Manager Jim Thoren Telephone Number (Area Code)/Fax Number (901) 745-4999 / 745-4280 Site Contact Chris Rose / James Rateloff Carrier/Waybill Number		Date 8/21/00	Chain Of Custody Number 67992				
Contract/Purchase Order/Quote No.									
Analysis									
Sample I.D. No. and Description	Date	Time	Sample Type	Total Volume	Containers Type No.	Preservative	Condition on Receipt	Analysis	
DE/SI/0234/SDC/0229	8/21/00	1000	Soil	4,832.02 GLASS	3			XX	XX
DE/SI/0234/SDC/0230	8/21/00	1000	Soil	4,832.02 GLASS	3			XX	XX
DE/SI/0234/SDC/0232	8/21/00	1000	Soil	4,832.02 GLASS	3			XX	XX
Special Instructions									
Possible Hazard Identification ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown Turn Around Time Required ☒ Normal ☐ Rush 1 Relinquished By Chris Rose Date 8/21/00 Time 1130 2 Relinquished By Date Time 3 Relinquished By Date Time									
Sample Disposal ☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months Project Specific (Specify) 1. Received By Date Time 2. Received By Date Time 3. Received By Chris Rose Date 8-27-00 Time 10:10									
Comments									

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Cooler Receipt Form
STL Pittsburgh

Client: U & B Project: _____ Quote: 34878
 Cooler Rec'd & Opened for Temp. Check on: 8-22-00
 Coolers Opened and Unpacked on: 8-22-00 By: AC
 (Signature)

STL Pittsburgh Lot Number: COH 220 139

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

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

Explain any discrepancies: _____

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

UP: Unpreserved

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

Soul Sampler

Lot Number*

[illegible]

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

SBCCOM
Monitoring Branch Laboratory

CLEARANCE REPORT

August-21, 2000

Dunn Field, Memphis Defense Depot

Results for CWM Soil Sample Analysis

Analyst: John L Schwarz

Sample#		1,4- Thioxane	1,4- Dithiane	TDG	Mustard	Lewisite
DF/S1/02 34/SDC/ 029		ND	ND	N/A	ND	ND
DF/S1/02 34/SDC/ 030		ND	ND	N/A	ND	ND
DF/S1/02 34/SDC/ 032		ND	ND	N/A	ND	ND

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

MDL= 200 ppb

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

MS= matrix spike

MSD= matrix spike duplicate

DUP= duplicate

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/22/00

Work Order: DJ7C8102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: 14

QC Batch: 0237125

Client Sample Id: DF/S1/0234/SDC/029

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	0.030	J
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0H220139 001

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

Sample WT/Vol: 5 / mL Date Received: 08/22/00

Work Order: DJ7C810Q Date Extracted: 08/24/00

Dilution factor: 1 Date Analyzed: 08/24/00

Moisture %: 14

QC Batch: 0237125

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.444	
78-93-3	2-Butanone	0.452	
56-23-5	Carbon tetrachloride	0.437	
108-90-7	Chlorobenzene	0.451	
67-66-3	Chloroform	0.478	
107-06-2	1,2-Dichloroethane	0.486	
75-35-4	1,1-Dichloroethene	0.426	
127-18-4	Tetrachloroethene	0.370	
79-01-6	Trichloroethene	0.409	
75-01-4	Vinyl chloride	0.428	

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UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 C01

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/22/00

Work Order: DJ7C810R

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: 14

QC Batch: 0237125

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
71-43-2	Benzene	0.437	
78-93-3	2-Butanone	0.481	
56-23-5	Carbon tetrachloride	0.438	
108-90-7	Chlorobenzene	0.439	
67-66-3	Chloroform	0.473	
107-06-2	1,2-Dichloroethane	0.480	
75-35-4	1,1-Dichloroethene	0.427	
127-18-4	Tetrachloroethene	0.363	
79-01-6	Trichloroethene	0.410	
75-01-4	Vinyl chloride	0.434	

FORM I

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 002

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/22/00

Work Order: DJ7C9102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: 15

QC Batch: 0237125

Client Sample Id: DF/S1/0234/SDC/030

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	0.030	J
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 003

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/22/00

Work Order: DJ7CC102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: 15

QC Batch: 0237125

Client Sample Id: DF/S1/0234/SDC/032

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	0.066	
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COH240000 125

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 08/22/00

Work Order: DJC74101 Date Extracted: 08/24/00

Dilution factor: 1 Date Analyzed: 08/24/00

Moisture %: NA

QC Batch: 0237125

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.495	
78-93-3	2-Butanone	0.516	
56-23-5	Carbon tetrachloride	0.547	
108-90-7	Chlorobenzene	0.494	
67-66-3	Chloroform	0.525	
107-06-2	1,2-Dichloroethane	0.530	
75-35-4	1,1-Dichloroethene	0.516	
127-18-4	Tetrachloroethene	0.457	
79-01-6	Trichloroethene	0.477	
75-01-4	Vinyl chloride	0.536	

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SW846 8260B SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0H220139

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	DF/S1/0234/SDC/032	112	95	88	100	00
02	DF/S1/0234/SDC/029	112	100	88	99	00
03	DF/S1/0234/SDC/030	112	98	88	98	00
04	METHOD BLK. DJC6Q101	113	103	90	100	00
05	LCS DJC74101	106	101	99	101	00
06	DF/S1/0234/SDC/029 D	109	100	100	103	00
07	DF/S1/0234/SDC/029 S	107	100	99	102	00

SURROGATES

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

QC LIMITS

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

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0H240000

WO #: DJC74101

BATCH: 0237125

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Benzene	0.500	0.495	99	79- 116	
2-Butanone	0.500	0.516	103	35- 156	
Chlorobenzene	0.500	0.494	99	81- 115	
Chloroform	0.500	0.525	105	81- 122	
Carbon tetrachloride	0.500	0.547	109	72- 133	
1,2-Dichloroethane	0.500	0.530	106	73- 127	
1,1-Dichloroethene	0.500	0.516	103	65- 119	
Tetrachloroethene	0.500	0.457	91	78- 131	
Trichloroethene	0.500	0.477	95	80- 122	
Vinyl chloride	0.500	0.536	107	53- 134	

NOTES(S) :

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

671 20 SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: C0H220139

WO #: DJ7C810Q

BATCH: 0237125

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	ND	0.444	89	73 - 123	
2-Butanone	0.500	0.030	0.452	84	10 - 151	
Carbon tetrachloride	0.500	ND	0.437	87	61 - 143	
Chlorobenzene	0.500	ND	0.451	90	70 - 122	
Chloroform	0.500	ND	0.478	96	65 - 131	
Tetrachloroethene	0.500	ND	0.370	74	70 - 130	
1,2-Dichloroethane	0.500	ND	0.486	97	67 - 132	
1,1-Dichloroethene	0.500	ND	0.426	85	57 - 138	
Trichloroethene	0.500	ND	0.409	82	58 - 141	
Vinyl chloride	0.500	ND	0.428	86	51 - 133	

NOTES (S) :

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

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: C0H220139

WO #: DJ7C810R

BATCH: 0237125

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
=====	=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	0.437	87	1.6	20	73 - 123	
2-Butanone	0.500	0.481	90	6.4	34	10 - 151	
Carbon tetrachloride	0.500	0.438	88	0.29	20	61 - 143	
Chlorobenzene	0.500	0.439	88	2.7	20	70 - 122	
Chloroform	0.500	0.473	95	1.1	20	65 - 131	
1,2-Dichloroethane	0.500	0.480	96	1.4	20	67 - 132	
1,1-Dichloroethene	0.500	0.427	85	0.37	20	57 - 138	
Tetrachloroethene	0.500	0.363	73	2.0	20	70 - 130	
Trichloroethene	0.500	0.410	82	0.14	20	58 - 141	
Vinyl chloride	0.500	0.434	87	1.4	20	51 - 133	

NOTES (S) :

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

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

COMMENTS:

FORM III

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SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DJC6Q101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: 40802401

Lot Number: C0H220139

Date Analyzed: 08/24/00

Time Analyzed: 07:37

Matrix: SOLID

Date Extracted: 08/24/00

GC Column: ID: .00

Extraction Method: 1311/5030B

Instrument ID: HP4

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	=====	=====	=====	=====	=====
01	CHECK SAMPLE	DJC74101 C	4082408.D	08/24/00	10:36
02	DF/S1/0234/SDC/032	DJ7CC102	4082409.D	08/24/00	11:03
03	DF/S1/0234/SDC/029	DJ7C810Q S	4082404.D	08/24/00	08:54
04	DF/S1/0234/SDC/029	DJ7C810R D	4082405.D	08/24/00	09:19
05	DF/S1/0234/SDC/029	DJ7C8102	4082403.D	08/24/00	08:28
06	DF/S1/0234/SDC/030	DJ7C9102	4082407.D	08/24/00	10:11
07					
08					
09					
10					
11					
12					
13					
14					
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26					
27					
28					
29					
30					

COMMENTS:

FORM IV

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COH240000 121

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/22/00

Work Order: DJC6Q101

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: NA

QC Batch: 0237125

Client Sample Id: INTRA-LAB BLANK

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0H220139

Lab File ID (Standard): CC40824

Date Analyzed: 08/24/00

Instrument ID: HP4

Time Analyzed: 0703

GC Column: DB 624 ID: 0.18 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DCB)		IS3	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	96831	10.13	154713	12.46	393004	7.00
UPPER LIMIT	193662	10.33	309426	12.66	786008	7.20
LOWER LIMIT	48416	9.93	77357	12.26	196502	6.80
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	90205	10.12	130508	12.46	402454	7.01
02 DF/S1/0234/S	90998	10.12	129712	12.46	402203	7.01
03 DF/S1/0234/S	92952	10.12	143612	12.46	377264	7.00
04 DF/S1/0234/S	93793	10.12	148108	12.46	378654	7.00
05 DF/S1/0234/S	92467	10.12	130783	12.46	402648	7.00
06 INTRA-LAB CH	96364	10.12	147128	12.46	392590	7.00
07 DF/S1/0234/S	93215	10.12	131113	12.46	371106	7.00
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.

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJ7C8103

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

QC Batch: 0238114

Client Sample Id: DF/S1/0234/SDC/029

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

GC/MS SEMIVOLATILE SUMMARY

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJ7C811G

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

QC Batch: 0238114

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.146	
121-14-2	2,4-Dinitrotoluene	0.188	
118-74-1	Hexachlorobenzene	0.213	
87-68-3	Hexachlorobutadiene	0.126	
67-72-1	Hexachloroethane	0.134	
98-95-3	Nitrobenzene	0.156	
87-86-5	Pentachlorophenol	0.240	
110-86-1	Pyridine	0.157	
95-95-4	2,4,5-Trichlorophenol	0.187	
88-06-2	2,4,6-Trichlorophenol	0.167	
1319-77-3	Cresols (total)	0.514	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJ7C811H

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

QC Batch: 0238114

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
106-46-7	1,4-Dichlorobenzene	0.137	
121-14-2	2,4-Dinitrotoluene	0.169	
118-74-1	Hexachlorobenzene	0.198	
87-68-3	Hexachlorobutadiene	0.116	
67-72-1	Hexachloroethane	0.127	
98-95-3	Nitrobenzene	0.143	
87-86-5	Pentachlorophenol	0.221	
110-86-1	Pyridine	0.142	
95-95-4	2,4,5-Trichlorophenol	0.160	
88-06-2	2,4,6-Trichlorophenol	0.154	
1319-77-3	Cresols (total)	0.467	

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 002

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJ7C9103

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

QC Batch: 0238114

Client Sample Id: DF/S1/0234/SDC/030

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

FORM I

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 003

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJ7CC103

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

QC Batch: 0238114

Client Sample Id: DF/S1/0234/SDC/032

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: COH250000 114

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJE32102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

QC Batch: 0238114

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.183	
121-14-2	2,4-Dinitrotoluene	0.184	
118-74-1	Hexachlorobenzene	0.212	
87-68-3	Hexachlorobutadiene	0.167	
67-72-1	Hexachloroethane	0.174	
98-95-3	Nitrobenzene	0.174	
87-86-5	Pentachlorophenol	0.225	
110-86-1	Pyridine	0.170	
95-95-4	2,4,5-Trichlorophenol	0.180	
88-06-2	2,4,6-Trichlorophenol	0.182	
1319-77-3	Cresols (total)	0.589	

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SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: COH220139

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	SRG07	SRG08	SRG09	SRG10	TOT OUT
01	DF/S1/0234/SDC/032	54	49	78	46	55	69					00
02	DF/S1/0234/SDC/029	67	60	84	50	71	77					00
03	DF/S1/0234/SDC/030	71	65	83	58	76	85					00
04	METHOD BLK. DJE32101	69	70	77	55	76	66					00
05	LCS DJE32102	67	71	76	57	75	77					00
06	DF/S1/0234/SDC/029 D	57	56	77	49	59	74					00
07	DF/S1/0234/SDC/029 S	61	62	81	48	64	77					00

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = 2-Fluorobiphenyl
 SRG03 = Terphenyl-d14
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol
 SRG07 = Bromofluorobenzene
 SRG08 = 1,2-Dichloroethane-d4
 SRG09 = Toluene-d8
 SRG10 = Dibromofluoromethane

QC LIMITS

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

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0H250000

WO #: DJE32102

BATCH: 0238114

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.250	0.183	73	28- 110	
2,4-Dinitrotoluene	0.250	0.184	74	47- 131	
Hexachlorobenzene	0.250	0.212	85	57- 128	
Hexachlorobutadiene	0.250	0.167	67	36- 116	
Hexachloroethane	0.250	0.174	70	30- 110	
Nitrobenzene	0.250	0.174	69	45- 130	
Pentachlorophenol	0.250	0.225	90	10- 140	
Pyridine	0.250	0.170	68	10- 148	
2,4,5-Trichlorophenol	0.250	0.180	72	41- 125	
2,4,6-Trichlorophenol	0.250	0.182	73	46- 135	
Cresols (total)	0.750	0.589	78	29- 144	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

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SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: C0H220139

WO #: DJ7C811G

BATCH: 0238114

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	ND	0.146	58	18 - 110	
2,4-Dinitrotoluene	0.250	ND	0.188	75	31 - 131	
Hexachlorobenzene	0.250	ND	0.213	85	36 - 132	
Hexachlorobutadiene	0.250	ND	0.126	50	18 - 116	
Hexachloroethane	0.250	ND	0.134	54	18 - 110	
Nitrobenzene	0.250	ND	0.156	62	10 - 211	
Pentachlorophenol	0.250	ND	0.240	96	10 - 140	
Pyridine	0.250	ND	0.157	63	10 - 148	
2,4,5-Trichlorophenol	0.250	ND	0.187	75	24 - 143	
2,4,6-Trichlorophenol	0.250	ND	0.167	67	36 - 135	
Cresols (total)	0.750	ND	0.514	69	25 - 144	

NOTES (S) :

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

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: C0H220139

WO #: DJ7C811H

BATCH: 0238114

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
1,4-Dichlorobenzene	0.250	0.137	55	6.5	36	18 - 110	
2,4-Dinitrotoluene	0.250	0.169	68	11	32	31 - 131	
Hexachlorobenzene	0.250	0.198	79	7.6	22	36 - 132	
Hexachlorobutadiene	0.250	0.116	46	8.4	32	18 - 116	
Hexachloroethane	0.250	0.127	51	5.2	33	18 - 110	
Nitrobenzene	0.250	0.143	57	8.8	50	10 - 211	
Pentachlorophenol	0.250	0.221	88	8.2	56	10 - 140	
Pyridine	0.250	0.142	57	9.6	65	10 - 148	
2,4,5-Trichlorophenol	0.250	0.160	64	15	22	24 - 143	
2,4,6-Trichlorophenol	0.250	0.154	62	7.8	27	36 - 135	
Cresols (total)	0.750	0.467	62	9.6	33	25 - 144	

NOTES (S) :

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

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

COMMENTS:

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DJE32101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: D0828011.

Lot Number: C0H220139

Date Analyzed: 08/28/00

Time Analyzed: 19:39

Matrix: SOLID

Date Extracted: 08/24/00

GC Column: HP5MS ID: .25

Extraction Method: 1311/3520C

Instrument ID: 721

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	CHECK SAMPLE	DJE32102 C	D0828012.	08/28/00	20:07
02	DF/S1/0234/SDC/032	DJ7CC103	D0828017.	08/28/00	22:32
03	DF/S1/0234/SDC/029	DJ7C8103	D0828013.	08/28/00	20:36
04	DF/S1/0234/SDC/029	DJ7C811G S	D0828014.	08/28/00	21:05
05	DF/S1/0234/SDC/029	DJ7C811H D	D0828015.	08/28/00	21:34
06	DF/S1/0234/SDC/030	DJ7C9103	D0828016.	08/28/00	22:03
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:

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COH250000 114

Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJE32101

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

QC Batch: 0238114

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

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SDS No.: COH220139

Lab File ID (Standard): D0828CCC

Date Analyzed: 08/28/00

Instrument ID: 721

Time Analyzed: 1419

	IS1 (DCB)	RT #	IS2 (NPT)	RT #	IS3 (ANT)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	127294	3.92	406842	4.97	239347	7.22
UPPER LIMIT	254588	4.42	813684	5.47	478694	7.72
LOWER LIMIT	63647	3.42	203421	4.47	119674	6.72
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	72955	3.91	261172	4.97	155193	7.21
02 LCS	76257	3.91	268224	4.97	152809	7.21
03 DF/S1/0234/S	66484	3.91	236168	4.97	140166	7.21
04 DF/S1/0234/S	98658	3.92	340247	4.97	201124	7.21
05 DF/S1/0234/S	129127	3.92	444276	4.97	258193	7.22
06 DF/S1/0234/S	68945	3.91	240503	4.97	140824	7.21
07 DF/S1/0234/S	76230	3.91	275088	4.97	150328	7.21
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

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Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SDG No.: COH220139

Lab File ID (Standard): D0828CCC

Date Analyzed: 08/28/00

Instrument ID: 721

Time Analyzed: 1419

	IS4 (PHN)	RT #	IS5 (CRY)	RT #	IS6 (PRY)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	411784	9.93	370866	15.64	290991	18.56
UPPER LIMIT	823568	10.43	741732	16.14	581982	19.06
LOWER LIMIT	205892	9.43	185433	15.14	145496	18.06
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	278704	9.91	254923	15.63	206524	18.56
02 LCS	295622	9.91	275682	15.63	244322	18.55
03 DF/S1/0234/S	250927	9.91	222108	15.63	209864	18.56
04 DF/S1/0234/S	347901	9.92	284853	15.63	266223	18.56
05 DF/S1/0234/S	431942	9.92	333390	15.64	312190	18.56
06 DF/S1/0234/S	246247	9.91	217231	15.62	204591	18.55
07 DF/S1/0234/S	277383	9.91	235539	15.63	228383	18.55
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

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

* Values outside of QC limits.

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PESTICIDE SUMMARY

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C8104

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: 14

QC Batch: 0237479

Client Sample Id: DF/S1/0234/SDC/029

CONCENTRATION UNITS:

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

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C810V

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: 14

QC Batch: 0237479

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00216	
76-44-8	Heptachlor	0.00209	
1024-57-3	Heptachlor epoxide	0.00216	
58-89-9	Lindane	0.00147	
72-43-5	Methoxychlor	0.00196	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C810W

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: 14

QC Batch: 0237479

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00235	
76-44-8	Heptachlor	0.00211	
1024-57-3	Heptachlor epoxide	0.00216	
58-89-9	Lindane	0.00150	
72-43-5	Methoxychlor	0.00200	

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 002

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C9104

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: 15

QC Batch: 0237479

Client Sample Id: DF/S1/0234/SDC/030

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 003

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7CC104

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: 15

QC Batch: 0237479

Client Sample Id: DF/S1/0234/SDC/032

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

671 46

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H240000 479

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJDTA102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: NA

QC Batch: 0237479

Client Sample Id: CHECK SAMPLE

		CONCENTRATION UNITS:	
CAS NO	COMPOUND	(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00222	
76-44-8	Heptachlor	0.00225	
1024-57-3	Heptachlor epoxide	0.00227	
58-89-9	Lindane	0.00157	
72-43-5	Methoxychlor	0.00210	

FORM I

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT QESSDG:

Lot #: C0H220139

	CLIENT ID.	SRG01	SRG02	TOT OUT
	=====	=====	=====	=====
01	DF/S1/0234/SDC/032	92	84	00
02	DF/S1/0234/SDC/029	90	82	00
03	DF/S1/0234/SDC/030	91	82	00
04	METHOD BLK. DJDTA101	100	93	00
05	LCS DJDTA102	95	87	00
06	DF/S1/0234/SDC/029 D	94	82	00
07	DF/S1/0234/SDC/029 S	91	80	00

SURROGATES

SRG01 = Decachlorobiphenyl
 SRG02 = Tetrachloro-m-xylene

QC LIMITS

(10-147)
 (39-130)

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

FORM II

671 48

SW846 8081A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0H240000

WO #: DJDTA102

BATCH: 0237479

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Lindane	0.00250	0.00157	63	49 - 137	
Heptachlor	0.00250	0.00225	90	57 - 124	
Heptachlor epoxide	0.00250	0.00227	91	53 - 135	
Endrin	0.00250	0.00222	89	46 - 137	
Methoxychlor	0.00250	0.00210	84	12 - 154	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: C0H220139

WO #: DJ7C810V

BATCH: 0237479

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
Lindane	0.00250	ND	0.00147	59	30 - 148	
Heptachlor	0.00250	ND	0.00209	84	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00216	86	38 - 138	
Endrin	0.00250	ND	0.00216	86	28 - 148	
Methoxychlor	0.00250	ND	0.00196	78	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:

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: C0H220139

WO #: DJ7C810W

BATCH: 0237479

COMPOUND	SPIKE	MSD	MSD		QC LIMITS		QUAL
	ADDED (mg/L)	CONCENT. (mg/L)	% REC	% RPD	RPD	REC	
Lindane	0.00250	0.00150	60	1.8	22	30 - 148	
Heptachlor	0.00250	0.00211	85	0.99	32	25 - 135	
Heptachlor epoxide	0.00250	0.00216	86	0.090	31	38 - 138	
Endrin	0.00250	0.00235	94	8.4	40	28 - 148	
Methoxychlor	0.00250	0.00200	80	2.3	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:

SW846 8081A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DJDTA101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: D-B5706.d

Lot Number: C0H220139

Matrix: SOLID

Extraction Method: 1311/3510

Date Extracted: 08/24/00

Date Analyzed(1): 08/26/00

Date Analyzed(2): N/A

Time Analyzed(1): 12:06

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	CHECK SAMPLE	DJDTA102 C	08/26/00	N/A
02	DF/S1/0234/SDC/032	DJ7CC104	08/26/00	N/A
03	DF/S1/0234/SDC/029	DJ7C810V S	08/26/00	N/A
04	DF/S1/0234/SDC/029	DJ7C810W D	08/26/00	N/A
05	DF/S1/0234/SDC/029	DJ7C8104	08/26/00	N/A
06	DF/S1/0234/SDC/030	DJ7C9104	08/26/00	N/A
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H240000 479

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJDTA101

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: NA

QC Batch: 0237479

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

Lab Sample ID: COH220139 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C8105

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: 14

QC Batch: 0237484

Client Sample Id: DF/S1/0234/SDC/029

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

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

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

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

Lab Sample ID: C0H220139 001

Sample WT/Vol: 100 / mL
Work Order: DJ7C810X
Dilution factor: 1
Moisture %: 14Date Received: 08/22/00
Date Extracted: 08/24/00
Date Analyzed: 08/28/00

QC Batch: 0237484

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.150	
93-72-1	2,4,5-TP (Silvex)	0.0342	

FORM I

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C8110

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: 14

QC Batch: 0237484

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.153	
93-72-1	2,4,5-TP (Silvex)	0.0339	

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 002

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C9105

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: 15

QC Batch: 0237484

Client Sample Id: DF/S1/0234/SDC/030

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 003

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7CC105

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: 15

QC Batch: 0237484

Client Sample Id: DF/S1/0234/SDC/032

		CONCENTRATION UNITS:		Q	
CAS NO.	COMPOUND	(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

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID

Lab Sample ID: C0H240000 484

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJDTD102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: NA

QC Batch: 0237484

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.122	
93-72-1	2,4,5-TP (Silvex)	0.0322	

671 60

SW846 8151A SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0H220139

	CLIENT ID.	SRG01	TOT OUT
	=====	=====	=====
01	DF/S1/0234/SDC/032	59	00
02	DF/S1/0234/SDC/029	52	00
03	DF/S1/0234/SDC/030	51	00
04	METHOD BLK. DJDTD101	93	00
05	LCS DJDTD102	86	00
06	DF/S1/0234/SDC/029 D	69	00
07	DF/S1/0234/SDC/029 S	71	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

SW846 8151A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0H240000

WO #: DJDTD102

BATCH: 0237484

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
2,4-D	0.160	0.122	76	28 - 136	
2,4,5-TP (Silvex)	0.0400	0.0322	80	50 - 128	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

671 62 SW846 8151A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Lot #: C0H220139

WO #: DJ7C810X

BATCH: 0237484

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
2,4-D	0.160	ND	0.150	94	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0342	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

SW846 8151A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Lot #: C0H220139

WO #: DJ7C8110

BATCH: 0237484

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
2,4-D	0.160	0.153	96	2.0	20	35 - 133	
2,4,5-TP (Silvex)	0.0400	0.0339	85	0.70	20	50 - 131	

NOTES(S) :

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

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

COMMENTS:

671 64

SW846 8151A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DJDTD101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: A-A50349.

Lot Number: C0H220139

Matrix: SOLID

Extraction Method:

Date Extracted: 08/24/00

Date Analyzed(1): 08/28/00

Date Analyzed(2): N/A

Time Analyzed(1): 14:12

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	CHECK SAMPLE	DJDTD102 C	08/28/00	N/A
02	DF/S1/0234/SDC/032	DJ7CC105	08/28/00	N/A
03	DF/S1/0234/SDC/029	DJ7C810X S	08/28/00	N/A
04	DF/S1/0234/SDC/029	DJ7C8105	08/28/00	N/A
05	DF/S1/0234/SDC/029	DJ7C8110 D	08/28/00	N/A
06	DF/S1/0234/SDC/030	DJ7C9105	08/28/00	N/A
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH240000 484

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJDTD101

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: NA

QC Batch: 0237484

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

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METALS SUMMARY

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C8 Client ID: DF/S1/0234/SDC/029
Matrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322
Weight: 1.00 Volume: 100 Percent Moisture: 13.99

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	8.0		1	ICPST	8/25/00	12:48

Comments: Lot #: C0H220139 Sample #: 1

Version 4 10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C9 Client ID: DF/S1/0234/SDC/030
Matrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322
Weight: 1.00 Volume: 100 Percent Moisture: 14.57

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	9.3		1	ICPST	8/25/00	13:04

Comments: Lot #: C0H220139 Sample #: 2

Version 4.10.2

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

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7CC Client ID: DF/S1/0234/SDC/032
 Matrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322
 Weight: 1.00 Volume: 100 Percent Moisture: 15.31

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	13.9		1	ICPST	8/25/00	13:08

Comments: Lot #: C0H220139 Sample #: 3

Version 4.10.2

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

Form 1 Equivalent

671 70

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00825B.ARC

Standard Source: _____

Standard ID: _____

			ICBI 8/25/00 10:47 AM				
Element	WL/ Mass	Report Limit	Found Q	Found Q	Found Q	Found Q	Found Q
Arsenic	189.042	10	2.6 U				

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00825B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/25/00 11:37 AM		CCB2 8/25/00 12:27 PM		CCB3 8/25/00 1:17 PM			
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	2.6	U	2.6	U	2.6	U		

671 72

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank ResultsLab Sample ID: DJA1QBMatrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322Weight: 1.00 Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Inst	Anal Date	Anal Time
Arsenic	189.042	0.26	1.0	0.26	U	1	ICPST	8/25/00	12:39

Comments: Lot #: C0H220139

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

Matrix Spike Sample Results

Spike Sample ID: DJ7C8S
 Original Sample ID: DJ7C8 Client ID: DF/S1/0234/SDC/029S
 Matrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322
 Weight: 1.00 Volume: 100 Percent Moisture: 13.99

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	8.0		211		232.53	87.1	1	1	ICPST	8/25/00	12:48	8/25/00	12:56

Comments: Lot #: C0H220139 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: DJ7C8DOriginal Sample ID: DJ7C8 Client ID: DF/S1/0234/SDC/029DMatrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322Weight: 1.00 Volume: 100 Percent Moisture: 13.99

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	8.0		213		232.53	88.1	1	1	ICPST	8/25/00	12:48	8/25/00	13:00

Comments: Lot #: C0H220139 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 RPD Report

Matrix Spike Duplicate Sample ID: DJ7C8DMatrix Spike Sample ID: DJ7C8S Client ID: DF/S1/0234/SDC/029DMatrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322Weight: 1.00 Volume: 100 Percent Moisture: 13.99

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	211		213		1.1 %	1	1	ICPST	8/25/00	12:56	8/25/00	13:00

Comments: Lot #: C0H220139 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: DJA1QCMatrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322Weight: 1.00 Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	200	193	96.3		80-120	1	ICPST	8/25/00	12:43

Comments: Lot #: C0H220139

TCLP METALS SUMMARY

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C8T Client ID: DF/S1/0234/SDC/029
Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Inst.	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000098	B	1	CVAA	8/25/00	9:39

Comments: _____

Version 4.10.2

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

Form I Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C9T Client ID: DF/S1/0234/SDC/1030 ⁶³⁰ ₁₀₃₀ *Dr. J. H. W.*
Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257
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	0.000068	B	1	CVAA	8/25/00	9:44

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

671 80

STL-Pittsburgh
Metals Data Reporting FormSample Results

Lab Sample ID: DJ7CCT Client ID: DF/S1/0234/SDC/1032 ⁰³² _{08/24/00}
Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Inst.	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000054	B	1	CVAA	8/25/00	9:46

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: DJ7C8T Client ID: DF/S1/0234/SDC/029
Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095
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	0.15	B	1	ICP	8/25/00	14:31
Barium	493.41	0.00041	10.0	1.3	B	1	ICP	8/25/00	14:31
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	8/25/00	14:31
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	8/25/00	14:31
Lead	220.35	0.025	0.50	0.025	U	1	ICP	8/25/00	14:31
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	8/25/00	14:31
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	8/25/00	14:31

Comments: C0H220139001

Version 4.10.2

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

Form 1 Equivalent

671 82

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C9T Client ID: DF/S1/0234/SDC/1030 ⁰³⁰ *02/24/00*
 Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Inst	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.17	B	1	ICP	8/25/00	14:47
Barium	493.41	0.00041	10.0	1.2	B	1	ICP	8/25/00	14:47
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	8/25/00	14:47
Chromium	267.72	0.0038	0.50	0.0062	B	1	ICP	8/25/00	14:47
Lead	220.35	0.025	0.50	0.080	B	1	ICP	8/25/00	14:47
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	8/25/00	14:47
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	8/25/00	14:47

Comments: C0H220139002

Version 4.10.2

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

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7CCT Client ID: DF/S1/0234/SDC/1032 ⁰³² ₀₃₂ ⁰³² ₀₃₂
 Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.22	B	1	ICP	8/25/00	14:51
Barium	493.41	0.00041	10.0	1.9	B	1	ICP	8/25/00	14:51
Cadmium	228.80	0.0028	0.10	0.078	B	1	ICP	8/25/00	14:51
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	8/25/00	14:51
Lead	220.35	0.025	0.50	80.0		1	ICP	8/25/00	14:51
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	8/25/00	14:51
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	8/25/00	14:51

Comments: C0H220139003

Version 4.10.2

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

Form 1 Equivalent

671 84

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0825HGB.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 8/25/00 9:29 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: J00825B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 8/25/00 1:24 PM							
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U						
Barium	493.409	10000	0.4	U						
Cadmium	228.802	100	2.8	U						
Chromium	267.716	500	3.8	U						
Lead	220.353	500	24.6	U						
Selenium	196.026	250	67.4	U						
Silver	328.068	500	3.1	U						

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0825HGB.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/25/00 9:32 AM		CCB2 8/25/00 9:52 AM					
			Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	B	0.0	U				

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00825B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/25/00 2:04 PM		CCB2 8/25/00 2:17 PM		CCB3 8/25/00 2:57 PM		Found	Q
			Found	Q	Found	Q	Found	Q		
Arsenic	193.696	500	44.3	B	44.3	B	53.8	B		
Barium	493.409	10000	0.4	U	0.4	U	0.5	B		
Cadmium	228.802	100	2.8	U	2.8	U	2.8	U		
Chromium	267.716	500	3.8	U	3.8	U	3.8	U		
Lead	220.353	500	24.6	U	24.6	U	24.6	U		
Selenium	196.026	250	67.4	U	67.4	U	67.4	U		
Silver	328.068	500	3.1	U	3.1	U	3.1	U		

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STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJC8ABTMatrix: TCLPUnits: mg/LPrep Date: 8/25/00Prep Batch: 0237257Weight: NAVolume: 100Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000064	B	1	CVAA	8/25/00	9:37

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: DJCPABTMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257Weight: 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	0.000085	B	1	CVAA	8/25/00	9:33

Comments: _____

Version 4.10.2

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

Form 3 Equivalent

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJC8ABTMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Inst	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.17	B	1	ICP	8/25/00	14:25
Barium	493.409	0.00041	10.0	0.0012	B	1	ICP	8/25/00	14:25
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	8/25/00	14:25
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	8/25/00	14:25
Lead	220.353	0.025	0.50	0.025	U	1	ICP	8/25/00	14:25
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	8/25/00	14:25
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	8/25/00	14:25

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJE23BT

Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095

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	0.030	U	1	ICP	8/25/00	14:22
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	8/25/00	14:22
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	8/25/00	14:22
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	8/25/00	14:22
Lead	220.353	0.025	0.50	0.025	U	1	ICP	8/25/00	14:22
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	8/25/00	14:22
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	8/25/00	14:22

Comments: _____

Version 4.10.2

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

Form 3 Equivalent

STL-Pittsburgh

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Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DJ7C8ST
 Original Sample ID: DJ7C8T Client ID: DF/S1/0234/SDC/029S
 Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.000098	B	0.0046		0.005	90.6	1	1	CVAA	8/25/00	9:39	8/25/00	9:41

Comments: _____

Version 4 10 2

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

Form 5A Equivalent

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DJ7C8DT
 Original Sample ID: DJ7C8T Client ID: DF/S1/0234/SDC/029D
 Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.000098	B	0.0046		0.005	89.2	1	1	CVAA	8/25/00	9:39	8/25/00	9:42

Comments: _____

Version 4.10.2

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

Form 5A Equivalent

STL-Pittsburgh

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Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DJ7C8STOriginal Sample ID: DJ7C8TClient ID: DF/S1/0234/SDC/029SMatrix: TCLP Units: mg/LPrep Date: 8/25/00 Prep Batch: 0238095Weight: NA Volume: 50Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	193.7	0.15	B	5.0		5	95.9	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Barium	493.4	1.3	B	45.0		50	87.4	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Cadmium	228.8	0.0028	U	0.96		1	95.9	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Chromium	267.7	0.0038	U	4.3		5	86.7	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Lead	220.4	0.025	U	4.5		5	90.8	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Selenium	196.0	0.067	U	1.0		1	100.1	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Silver	328.1	0.0031	U	0.90		1	89.6	1	1	ICP	8/25/00	14:31	8/25/00	14:41

Comments:

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DJ7C8DT
 Original Sample ID: DJ7C8T Client ID: DF/S1/0234/SDC/029D
 Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.7	0.15	B	4.8		5	93.7	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Barium	493.4	1.3	B	44.0		50	85.4	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Cadmium	228.8	0.0028	U	0.95		1	94.9	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Chromium	267.7	0.0038	U	4.3		5	85.6	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Lead	220.4	0.025	U	4.5		5	89.6	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Selenium	196.0	0.067	U	0.98		1	98.4	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Silver	328.1	0.0031	U	0.88		1	88.4	1	1	ICP	8/25/00	14:31	8/25/00	14:44

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-Pittsburgh

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Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DJ7C8DTMatrix Spike Sample ID: DJ7C8ST Client ID: DF/S1/0234/SDC/029DMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.0046		0.0046		1.6 %	1	1	CVAA	8/25/00	9:41	8/25/00	9:42

Comments: _____

Version 4.10.2

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

Form 6 Equivalent

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DJ7C8DTMatrix Spike Sample ID: DJ7C8ST Client ID: DF/S1/0234/SDC/029DMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.696	5.0		4.8		2.3 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Barium	493.409	45.0		44.0		2.3 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Cadmium	228.802	0.96		0.95		1.1 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Chromium	267.716	4.3		4.3		1.3 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Lead	220.353	4.5		4.5		1.3 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Selenium	196.026	1.0		0.98		1.6 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Silver	328.068	0.90		0.88		1.4 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 6 Equivalent

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STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJCPACTMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0025	0.0024	97.2		80-120	1	CVAA	8/25/00	9:36

Comments: _____

Version 4.10.2

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

Form 7 Equivalent

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJE23CTMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095Weight: 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	2.3	112.9		80-120	1	ICP	8/25/00	14:28
Barium	493.409	2.0	1.9	92.7	B	80-120	1	ICP	8/25/00	14:28
Cadmium	228.802	0.050	0.044	88.8	B	80-120	1	ICP	8/25/00	14:28
Chromium	267.716	0.20	0.18	91.7	B	80-120	1	ICP	8/25/00	14:28
Lead	220.353	0.50	0.46	91.5	B	80-120	1	ICP	8/25/00	14:28
Selenium	196.026	2.0	2.1	106.5		80-120	1	ICP	8/25/00	14:28
Silver	328.068	0.050	0.048	95.8	B	80-120	1	ICP	8/25/00	14:28

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

UXB INTERNATIONAL

Client Sample ID: DF/S1/0234/SDC/029

General Chemistry

Lot-Sample #...: 'C0H220139-001 Work Order #...: DJ7C8 Matrix.....: SOLID
 Date Sampled...: 08/21/00 '1 Date Received...: 08/22/00
 % Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.1		No Units	SW846 9045C	08/23/00	0236277
				Dilution Factor: 1	MS Run #.....: 0236116	
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/23/00	0236123
				Dilution Factor: 1	MS Run #.....: 0236114	
Percent Solids	86.0		%	MCAWW 160.3 MOD	08/23-08/24/00	0236154
				Dilution Factor: 1	MS Run #.....: 0236031	
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/29/00	0242294
				Dilution Factor: 1	MS Run #.....: 0242132	
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/29/00	0242295
				Dilution Factor: 1	MS Run #.....: 0242127	

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UXB INTERNATIONAL

Client Sample ID: DF/S1/0234/SDC/030

General Chemistry

Lot-Sample #...: C0H220139-002 Work Order #...: DJ7C9 Matrix.....: SOLID
Date Sampled...: 08/21/00 Date Received...: 08/22/00
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.8		No Units	SW846 9045C	08/23/00	0236277
			Dilution Factor: 1	MS Run #: 0236116		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/23/00	0236123
			Dilution Factor: 1	MS Run #: 0236114		
Percent Solids	85.4		%	MCAWW 160.3 MOD	08/23-08/24/00	0236154
			Dilution Factor: 1	MS Run #: 0236031		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/29/00	0242294
			Dilution Factor: 1	MS Run #: 0242132		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/29/00	0242295
			Dilution Factor: 1	MS Run #: 0242127		

UXB INTERNATIONAL

Client Sample ID: DF/S1/0234/SDC/032

General Chemistry

Lot-Sample #....: C0H220139-003 Work Order #....: DJ7CC Matrix.....: SOLID
 Date Sampled....: 08/21/00 Date Received...: 08/22/00
 % Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.8		No Units	SW846 9045C	08/23/00	0236277
				Dilution Factor: 1	MS Run #.....: 0236116	
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/23/00	0236123
				Dilution Factor: 1	MS Run #.....: 0236114	
Percent Solids	84.7		%	MCAWW 160.3 MOD	08/23-08/24/00	0236154
				Dilution Factor: 1	MS Run #.....: 0236031	
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/29/00	0242294
				Dilution Factor: 1	MS Run #.....: 0242132	
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/29/00	0242295
				Dilution Factor: 1	MS Run #.....: 0242127	

671 104

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0H220139

Matrik.....: 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 #: DJK20101 200	mg/kg	MB Lot-Sample #: A0H290000-294 SW846 7.3.3	08/29/00	0242294
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DJK1Q101 200	mg/kg	MB Lot-Sample #: A0H290000-295 SW846 7.3.4	08/29/00	0242295
		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 #...: C0H220139

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	101	Work Order #: DJ9Q8101 (85 - 115)	LCS Lot-Sample#: C0H230000-277 SW846 9045C	08/23/00	0236277
		Dilution Factor: 1			

NOTE(S) :

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

671 106

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: COH220139

Work Order #...: DJ7AW-SMP
DJ7AW-DUP

Matrix.....: SOLID

Date Sampled...: 08/21/00

Date Received...: 08/22/00

% Moisture.....: 31

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	69.2	68.3	%	1.3	(0-20)	MCAWW 160.3 MOD	08/23-08/24/00	0236154

SD Lot-Sample #: COH220137-001

Dilution Factor: 1

Prep Date.....: 0236031

Analysis Date...:

Prep Batch #...:

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H220139

Work Order #...: DJ7C8-SMP
DJ7C8-DUP

Matrix.....: SOLID

Date Sampled...: 08/21/00

Date Received...: 08/22/00

% Moisture.....: 14

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.1	7.2	No Units	1.3	(0-20)	SD Lot-Sample #: C0H220139-001 SW846 9045C	08/23/00	0236277

Dilution Factor: 1

Prep Date.....: 0236116

Analysis Date...:

Prep Batch #...:

Ignitability

No Units	0	(0-0.0)	SD Lot-Sample #: C0H220139-001 SW846 SECTION 7.1	08/23/00	0236123

Dilution Factor: 1

Prep Date.....: 0236114

Analysis Date...:

Prep Batch #...:

Reactive Cyanide

ND ND

mg/kg	67	(0-20)	SD Lot-Sample #: C0H220139-001 SW846 7.3.3	08/29/00	0242294

Dilution Factor: 1

Prep Date.....: 0242132

Analysis Date...:

Prep Batch #...:

Reactive Sulfide

ND ND

mg/kg	0.0	(0-20)	SD Lot-Sample #: C0H220139-001 SW846 7.3.4	08/29/00	0242295

Dilution Factor: 1

Prep Date.....: 0242127

Analysis Date...:

Prep Batch #...:

671 108

GC/MS VOLATILE DATA

**GC/MS VOLATILE
QC SUMMARY**

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0H220139

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
	=====	=====	=====	=====	=====	=====
01	DF/S1/0234/SDC/032	112	95	88	100	00
02	DF/S1/0234/SDC/029	112	100	88	99	00
03	DF/S1/0234/SDC/030	112	98	88	98	00
04	METHOD BLK. DJC6Q101	113	103	90	100	00
05	LCS DJC74101	106	101	99	101	00
06	DF/S1/0234/SDC/029 D	109	100	100	103	00
07	DF/S1/0234/SDC/029 S	107	100	99	102	00

SURROGATES

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

QC LIMITS

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

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

FORM II

SW846 8260B CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0H240000

WO #: DJC74101

BATCH: 0237125

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
Benzene	0.500	0.495	99	79- 116	
2-Butanone	0.500	0.516	103	35- 156	
Carbon tetrachloride	0.500	0.547	109	72- 133	
Chlorobenzene	0.500	0.494	99	81- 115	
Chloroform	0.500	0.525	105	81- 122	
1,2-Dichloroethane	0.500	0.530	106	73- 127	
1,1-Dichloroethene	0.500	0.516	103	65- 119	
Tetrachloroethene	0.500	0.457	91	78- 131	
Trichloroethene	0.500	0.477	95	80- 122	
Vinyl chloride	0.500	0.536	107	53- 134	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS:

FORM III

671 112 SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

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

Lab Code: QESPIT SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029 Level: (low/med) LOW

Lot #: C0H220139 WO #: DJ7C810Q
BATCH: 0237125

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====	=====
Benzene	0.500	ND	0.444	89	73- 123	
2-Butanone	0.500	0.030	0.452	84	10- 151	
Carbon tetrachloride	0.500	ND	0.437	87	61- 143	
Chlorobenzene	0.500	ND	0.451	90	70- 122	
Chloroform	0.500	ND	0.478	96	65- 131	
1,2-Dichloroethane	0.500	ND	0.486	97	67- 132	
1,1-Dichloroethene	0.500	ND	0.426	85	57- 138	
Tetrachloroethene	0.500	ND	0.370	74	70- 130	
Trichloroethene	0.500	ND	0.409	82	58- 141	
Vinyl chloride	0.500	ND	0.428	86	51- 133	

NOTES (S) :

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

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

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: COH220139

WO #: DJ7C810R

BATCH: 0237125

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD		QC LIMITS		QUAL
			% REC	% RPD	RPD	REC	
Benzene	0.500	0.437	87	1.6	20	73 - 123	
2-Butanone	0.500	0.481	90	6.4	34	10 - 151	
Carbon tetrachloride	0.500	0.438	88	0.29	20	61 - 143	
Chlorobenzene	0.500	0.439	88	2.7	20	70 - 122	
Chloroform	0.500	0.473	95	1.1	20	65 - 131	
1,2-Dichloroethane	0.500	0.480	96	1.4	20	67 - 132	
1,1-Dichloroethene	0.500	0.427	85	0.37	20	57 - 138	
Tetrachloroethene	0.500	0.363	73	2.0	20	70 - 130	
Trichloroethene	0.500	0.410	82	0.14	20	58 - 141	
Vinyl chloride	0.500	0.434	87	1.4	20	51 - 133	

NOTES (S) :

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

* Values outside of QC limits

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

COMMENTS:

671 114

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DJC6Q101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: 40802401

Lot Number: COH220139

Date Analyzed: 08/24/00

Time Analyzed: 07:37

Matrix: SOLID

Date Extracted: 08/24/00

GC Column: ID: .00

Extraction Method: 1311/5030B

Instrument ID: HP4

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CHECK SAMPLE	DJC74101 C	4082408.D	08/24/00	10:36
02	DF/S1/0234/SDC/032	DJ7CC102	4082409.D	08/24/00	11:03
03	DF/S1/0234/SDC/029	DJ7C810Q S	4082404.D	08/24/00	08:54
04	DF/S1/0234/SDC/029	DJ7C810R D	4082405.D	08/24/00	09:19
05	DF/S1/0234/SDC/029	DJ7C8102	4082403.D	08/24/00	08:28
06	DF/S1/0234/SDC/030	DJ7C9102	4082407.D	08/24/00	10:11
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)

671 115

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: METHODS

Lab File ID: CF40810

BFB Injection Date: 08/10/00

Instrument ID: HP4

BFB Injection Time: 1200

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

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.5
75	30.0 - 60.0% of mass 95	42.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.4 (0.4)1
174	50.0 - 100.0% of mass 95	82.0
175	5.0 - 9.0% of mass 174	5.6 (6.9)1
176	95.0 - 101.0% of mass 174	81.8 (99.8)1
177	5.0 - 9.0% of mass 176	5.8 (7.1)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	3C40810	08/10/00	1235
02	VSTD20	VSTD20	1B40810	08/10/00	1341
03	VSTD100	VSTD100	1D40810	08/10/00	1406
04	VSTD200	VSTD200	1E40810	08/10/00	1435
05	VSTD5	VSTD5	2A40810	08/10/00	1611
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.: C0H220139

Lab File ID (Standard): CC40824

Date Analyzed: 08/24/00

Instrument ID: HP4

Time Analyzed: 0703

GC Column: DB 624 ID: 0.18 (mm)

Heated Purge: (Y/N) N

	IS1 (CBZ)		IS2 (DCB)		IS3	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	96831	10.13	154713	12.46	393004	7.00
UPPER LIMIT	193662	10.33	309426	12.66	786008	7.20
LOWER LIMIT	48416	9.93	77357	12.26	196502	6.80
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	90205	10.12	130508	12.46	402454	7.01
02 DF/S1/0234/S	90998	10.12	129712	12.46	402203	7.01
03 DF/S1/0234/S	92952	10.12	143612	12.46	377264	7.00
04 DF/S1/0234/S	93793	10.12	148108	12.46	378654	7.00
05 DF/S1/0234/S	92467	10.12	130783	12.46	402648	7.00
06 INTRA-LAB CH	96364	10.12	147128	12.46	392590	7.00
07 DF/S1/0234/S	93215	10.12	131113	12.46	371106	7.00
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.

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

671 117

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0H220139

Lab File ID: BF40824

BFB Injection Date: 08/24/00

Instrument ID: HP4

BFB Injection Time: 0633

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

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	43.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	76.7
175	5.0 - 9.0% of mass 174	5.7 (7.4)1
176	95.0 - 101.0% of mass 174	76.2 (99.4)1
177	5.0 - 9.0% of mass 176	4.6 (6.0)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	CC40824	08/24/00	0703
02	INTRA-LAB BL	DJC6Q101	4082401	08/24/00	0737
03	DF/S1/0234/S	DJ7C8102	4082403	08/24/00	0828
04	DF/S1/0234/S	DJ7C810Q	4082404	08/24/00	0854
05	DF/S1/0234/S	DJ7C810R	4082405	08/24/00	0919
06	DF/S1/0234/S	DJ7C9102	4082407	08/24/00	1011
07	INTRA-LAB CH	DJC74101	4082408	08/24/00	1036
08	DF/S1/0234/S	DJ7CC102	4082409	08/24/00	1103
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

671 118

**GC/MS VOLATILE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/22/00

Work Order: DJ7C8102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: 14

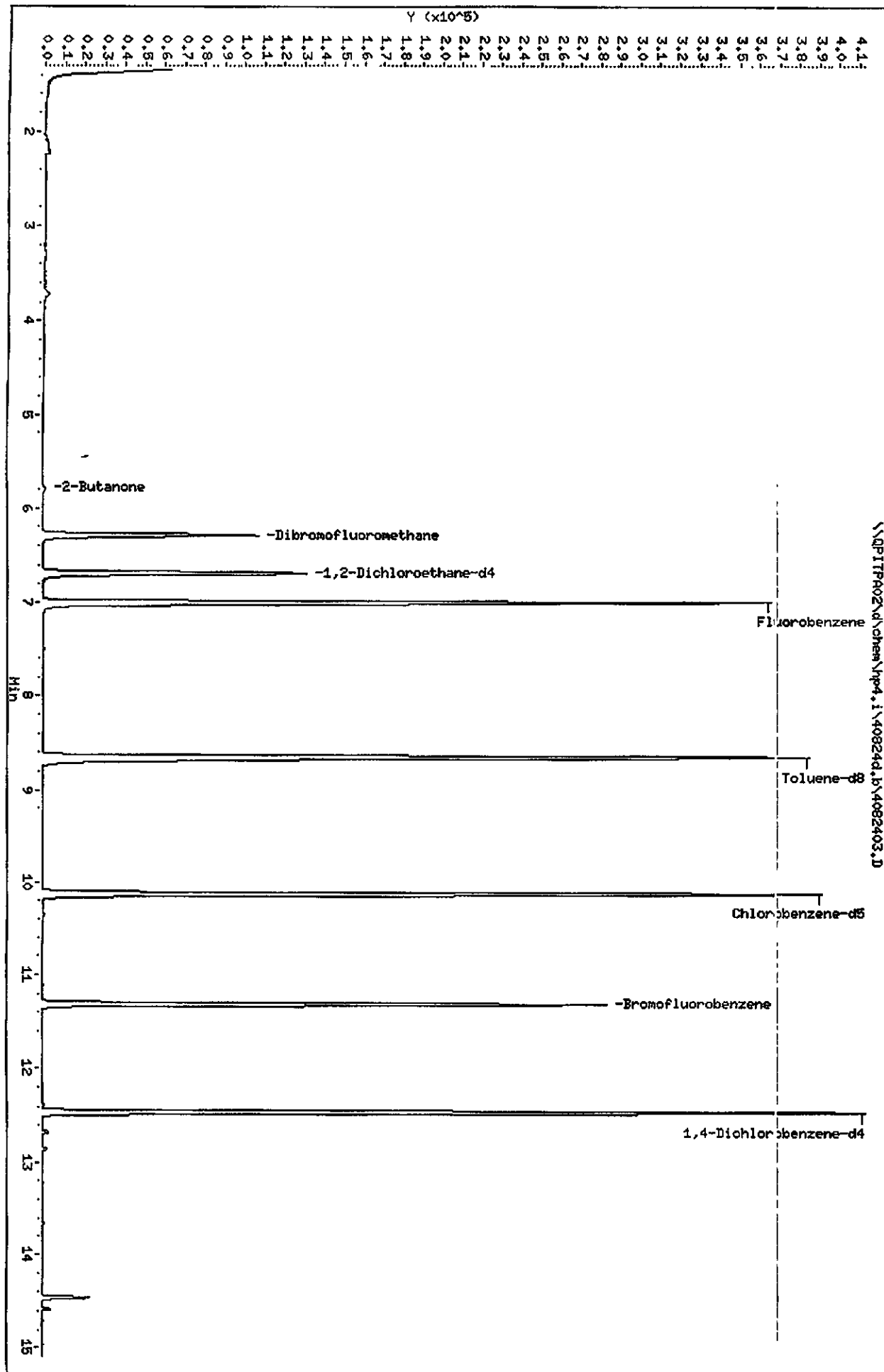
QC Batch: 0237125

Client Sample Id: DF/S1/0234/SDC/029

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	0.030	J
56-23-5	Carbon tetrachloride	0.050	U
108-90-7	Chlorobenzene	0.050	U
67-66-3	Chloroform	0.050	U
107-06-2	1,2-Dichloroethane	0.050	U
75-35-4	1,1-Dichloroethene	0.050	U
127-18-4	Tetrachloroethene	0.050	U
79-01-6	Trichloroethene	0.050	U
75-01-4	Vinyl chloride	0.050	U

Data File: \\NPITPA02\chem\hpa4.i\40824d.b\4082403.D
Date: 24-AUG-2000 08:28
Client ID: DF/SL/0234/SDC/029
Sample Info: coh20439-001 (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column phase: DB 624

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



Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082403.D
 Report Date: 24-Aug-2000 09:03

Page 1

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40824d.b\4082403.D
 Lab Smp Id: DJ7C8102 Client Smp ID: DF/S1/0234/SDC/029
 Inj Date : 24-AUG-2000 08:28
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0h220139-001 (1ml/10ml)/5ml
 Misc Info : dj7c8102,40824d.b,8260bh2o.M
 Comment :
 Method : \\QPITPA02\D\chem\hp4.i\40824d.b\8260bh2o.m
 Meth Date : 24-Aug-2000 07:56 dudeckk Quant Type: ISTD
 Cal Date : 10-AUG-2000 12:35 Cal File: 3C40810.D
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 4.04
 Processing Host: PITPC077

Ks 8/24/00

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

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

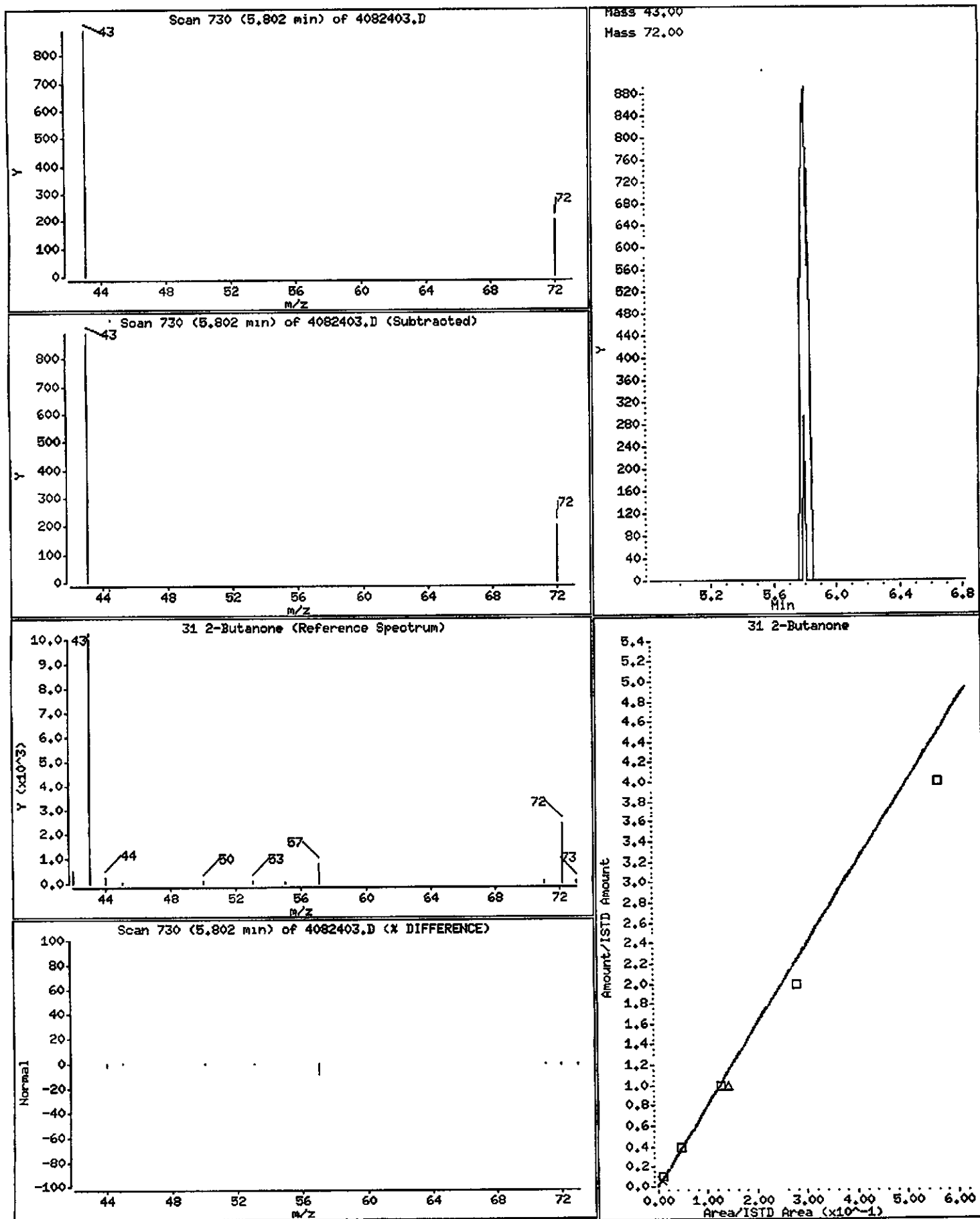
Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	7.005	7.001	(1.000)	402203	250.000		
* 69 Chlorobenzene-d5	119	10.123	10.125	(1.000)	90998	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.458	12.460	(1.000)	129712	250.000		
\$ 43 1,2-Dichloroethane-d4	65	6.688	6.689	(0.955)	101860	280.230	56 05	
\$ 39 Dibromofluoromethane	113	6.290	6.286	(0.898)	83465	247.799	49.56	
\$ 59 Toluene-d8	98	8.650	8.651	(0.854)	356117	249.251	49.85	
\$ 80 Bromofluorobenzene	95	11.309	11.311	(1.117)	121312	220.200	44.04	
3 Vinyl Chloride	62				Compound Not Detected.			
12 1,1-Dichloroethene	96				Compound Not Detected.			
31 2-Butanone	43	5.801	5.809	(0.828)	3026	14.9620	2.992	
37 Chloroform	83				Compound Not Detected.			
41 Carbon Tetrachloride	117				Compound Not Detected.			
42 Benzene	78				Compound Not Detected.			
45 1,2-Dichloroethane	62				Compound Not Detected.			
47 Trichloroethene	130				Compound Not Detected.			

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082403.D
Report Date: 24-Aug-2000 09:03

Page 2

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

31 2-Butanone



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 C02

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/22/00

Work Order: DJ7C9102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: 15

QC Batch: 0237125

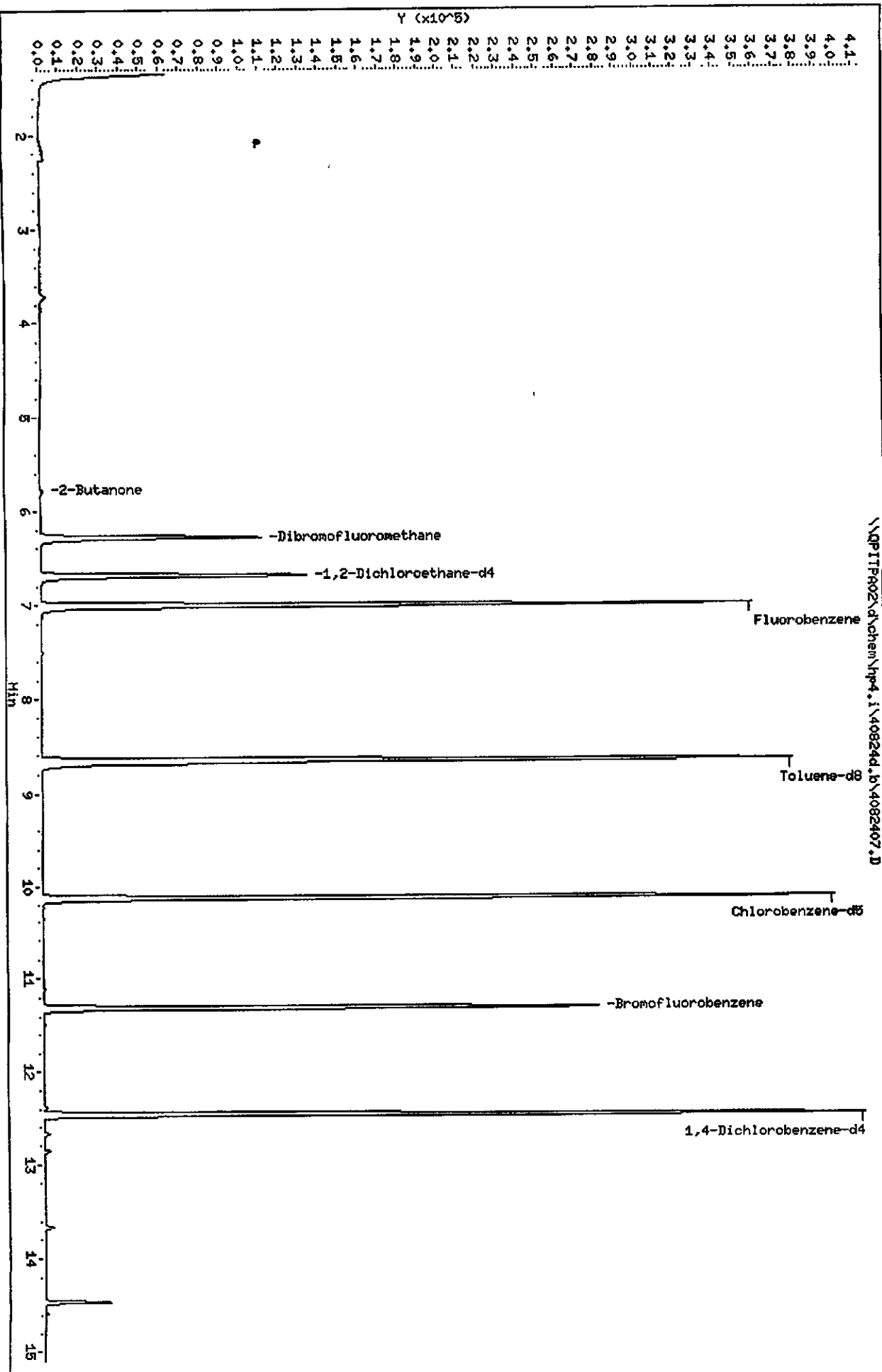
Client Sample Id: DF/S1/0234/SDC/030

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q	
		(ug/L or ug/kg)	mg/L		
71-43-2	Benzene	0.050			U
78-93-3	2-Butanone	0.030		J	
56-23-5	Carbon tetrachloride	0.050			U
108-90-7	Chlorobenzene	0.050			U
67-66-3	Chloroform	0.050			U
107-06-2	1,2-Dichloroethane	0.050			U
75-35-4	1,1-Dichloroethene	0.050			U
127-18-4	Tetrachloroethene	0.050			U
79-01-6	Trichloroethene	0.050			U
75-01-4	Vinyl chloride	0.050			U

FORM I

Data File: \\QPIITP002\chem\hp4.i\40824d.b\4082407.D
Date: 24-AUG-2000 10:11
Client ID: JF/SI/0234/SDC/030
Sample Info: c0h220439-002 (1ml/10ml)/5ml
Volume Injected (uL): 5.0
Column phase: DB 624

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



671 126

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082407.D
 Report Date: 24-Aug-2000 11:29

Page 1

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40824d.b\4082407.D
 Lab Smp Id: DJ7C9102 Client Smp ID: DF/S1/0234/SDC/030
 Inj Date : 24-AUG-2000 10:11
 Operator : 16328 Inst ID: hp4.i
 Smp Info : c0h220139-002 (1ml/10ml)/5ml
 Misc Info : dj7c9102,40824d.b,8260bh2o.M
 Comment :
 Method : \\QPITPA02\D\chem\hp4.i\40824d.b\8260bh2o.m
 Meth Date : 24-Aug-2000 07:56 dudeckk Quant Type: ISTD
 Cal Date : 10-AUG-2000 12:35 Cal File: 3C40810.D
 Als bottle: 9
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC077

K.f/2t/w

Compound Sublist: tc1p.sub

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene		96	7.004	7.001 (1.000)	402648	250.000		
* 69 Chlorobenzene-d5		119	10.122	10.125 (1.000)	92467	250.000		
* 92 1,4-Dichlorobenzene-d4		152	12.457	12.460 (1.000)	130783	250.000		
\$ 43 1,2-Dichloroethane-d4		65	6.686	6.689 (0.955)	101988	280.272	56.05	
\$ 39 Dibromofluoromethane		113	6.289	6.286 (0.898)	83023	246.214	49.24	
\$ 59 Toluene-d8		98	8.648	8.651 (0.854)	356309	245.424	49.08	
\$ 80 Bromofluorobenzene		95	11.308	11.311 (1.117)	123086	219.070	43.97	
3 Vinyl Chloride		62	Compound Not Detected.					
12 1,1-Dichloroethene		96	Compound Not Detected.					
31 2-Butanone		43	5.787	5.809 (0.826)	3073	15.176	3.036	
37 Chloroform		83	Compound Not Detected.					
41 Carbon Tetrachloride		117	Compound Not Detected.					
42 Benzene		78	Compound Not Detected.					
45 1,2-Dichloroethane		62	Compound Not Detected.					
47 Trichloroethene		130	Compound Not Detected.					

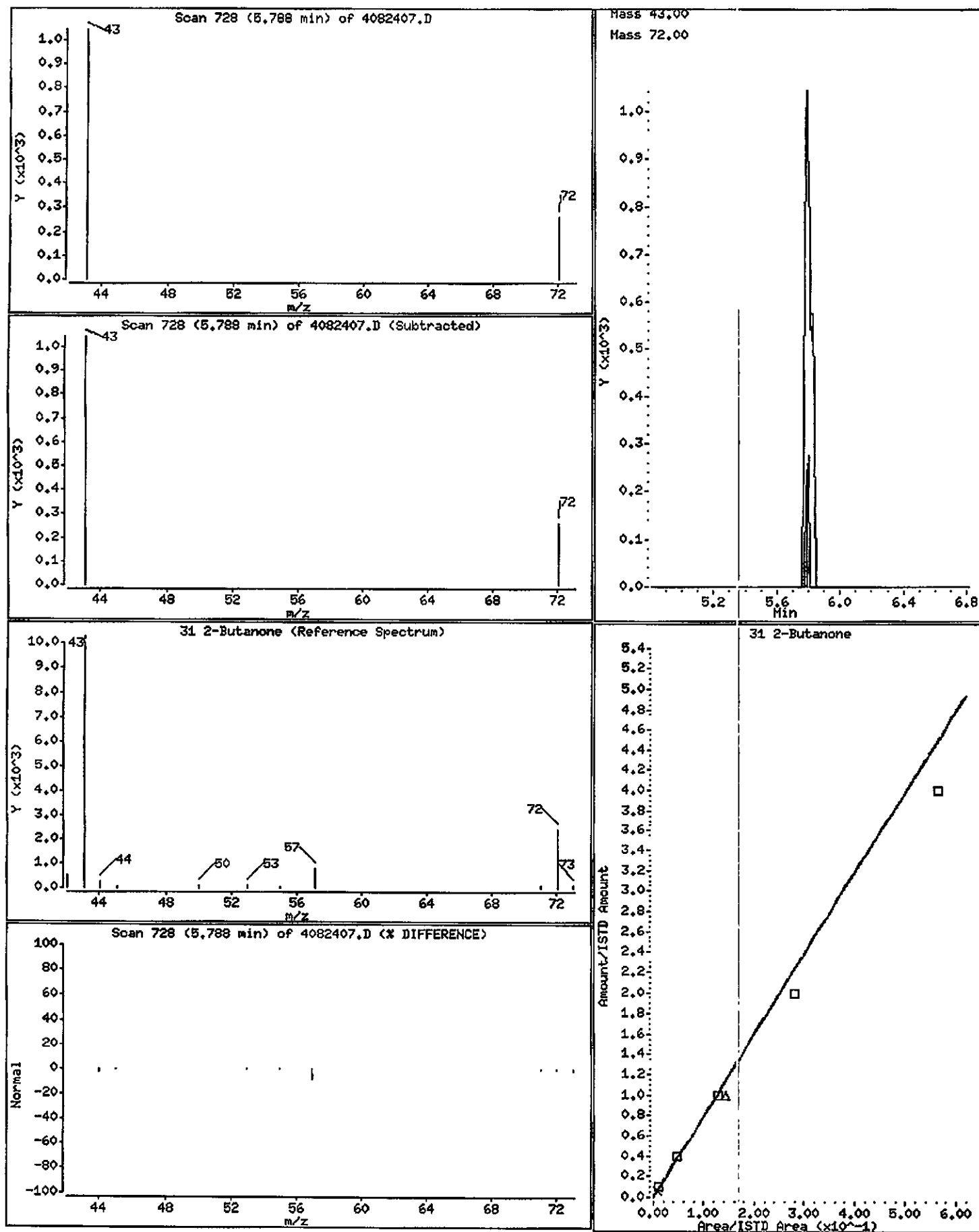
Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082407.D
Report Date: 24-Aug-2000 11:29

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

671 128

31 2-Butanone



UXB INTERNATIONAL

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

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 003

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/22/00

Work Order: DJ7CC102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: 15

QC Batch: 0237125

Client Sample Id: DF/S1/0234/SDC/032

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	0.066	
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

671 130

**GC/MS VOLATILE
CALIBRATION DATA**

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

671 131

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: METHODS

Instrument ID: HP4

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

Heated Purge: (Y/N) N

Calibration Time(s): 1235 1611

GC Column: DB 624 ID: 0.18 (mm)

LAB FILE ID:			RRF5 =2A40810		RRF20 =1B40810			
RRF50 =3C40810			RRF100=1D40810		RRF200=1E40810			
COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200	RRF	% RSD	
Dichlorodifluoromethane	0.270	0.232	0.256	0.246	0.242	0.249	5.8	
Chloromethane	* 0.409	0.330	0.353	0.366	0.338	0.359	8.7*	
Vinyl Chloride	0.348	0.275	0.312	0.317	0.302	0.311	8.5	
Bromomethane	0.054	0.044	0.049	0.051	0.042	0.048	10.6	
Chloroethane	0.067	0.052	0.060	0.060	0.053	0.058	10.6	
Trichlorofluoromethane	0.130	0.262	0.133	0.130	0.115	0.154	39.4	
1,1-Dichloroethene	0.225	0.168	0.201	0.201	0.197	0.198	10.2	
Methylene Chloride	0.290	0.216	0.251	0.254	0.247	0.252	10.4	
trans-1,2-Dichloroethene	0.286	0.217	0.254	0.262	0.258	0.255	9.7	
1,1-Dichloroethane	* 0.508	0.380	0.430	0.443	0.433	0.439	10.5*	
cis-1,2-dichloroethene	0.315	0.242	0.283	0.291	0.281	0.282	9.3	
Chloroform	0.430	0.325	0.372	0.379	0.368	0.375	9.9	
Bromochloromethane	0.146	0.113	0.128	0.133	0.130	0.130	9.2	
1,1,1-Trichloroethane	0.351	0.276	0.322	0.330	0.323	0.320	8.5	
Carbon Tetrachloride	0.273	0.221	0.266	0.268	0.266	0.259	8.1	
1,2-Dichloroethane	0.343	0.255	0.285	0.289	0.273	0.289	11.4	
Benzene	1.249	0.930	1.065	1.092	1.032	1.074	10.8	
Trichloroethene	0.319	0.244	0.280	0.291	0.281	0.283	9.5	
1,2-Dichloropropane	0.318	0.239	0.268	0.278	0.266	0.274	10.5	
Bromodichloromethane	0.281	0.229	0.265	0.280	0.271	0.265	8.1	
cis-1,3-Dichloropropene	0.358	0.297	0.351	0.372	0.356	0.347	8.3	
Toluene	5.700	4.373	4.724	4.867	4.519	4.837	10.7	
trans-1,3-Dichloropropene	1.430	1.230	1.353	1.468	1.436	1.383	6.9	
1,1,2-Trichloroethane	1.053	0.867	0.908	0.948	0.902	0.936	7.7	
Tetrachloroethene	1.191	0.837	0.914	0.941	0.900	0.957	14.3	
Dibromochloromethane	0.833	0.722	0.856	0.932	0.797	0.828	9.3	
Chlorobenzene	* 3.900	2.895	3.224	3.306	3.080	3.281	11.6*	
Ethylbenzene	2.114	1.598	1.789	1.829	1.714	1.809	10.6	
Styrene	4.024	3.116	3.723	3.815	3.477	3.631	9.6	
Bromoform	* 0.434	0.398	0.520	0.596	0.602	0.510	18.2*	
1,1,2,2-Tetrachloroethane	* 0.786	0.637	0.688	0.712	0.680	0.701	7.8*	
1,3-Dichlorobenzene	1.929	1.407	1.603	1.643	1.429	1.602	13.1	
1,4-Dichlorobenzene	1.971	1.423	1.582	1.626	1.531	1.627	12.7	
1,2-Dichlorobenzene	1.754	1.275	1.433	1.477	1.412	1.470	12.0	
Dibromomethane	0.148	0.121	0.135	0.138	0.132	0.135	7.4	
1,2-Dibromoethane	0.999	0.847	0.893	0.942	0.884	0.913	6.4	
1,1,1,2-Tetrachloroethane	1.131	0.884	0.977	1.020	0.917	0.986	9.8	

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

671 132

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: METHODS

Instrument ID: HP4

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

Heated Purge: (Y/N) N

Calibration Time(s): 1235 1611

GC Column: DB 624 ID: 0.18 (mm)

LAB FILE ID:	RRF5 =2A40810	RRF20 =1B40810
RRF50 =3C40810	RRF100=1D40810	RRF200=1E40810

COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
1,2,3-Trichloropropane	0.268	0.198	0.215	0.219	0.202	0.220	12.7
1,2-Dibromo-3-chloropropane	0.080	0.071	0.088	0.100	0.123	0.092	21.8
2,2-Dichloropropane	0.325	0.258	0.303	0.317	0.315	0.304	8.7
1,1-Dichloropropene	0.294	0.233	0.269	0.274	0.262	0.266	8.2
1,3-Dichloropropane	1.877	1.479	1.564	1.628	1.531	1.616	9.6
n-Propylbenzene	1.120	0.868	1.002	0.995	0.896	0.976	10.2
Bromobenzene	1.010	0.745	0.854	0.880	0.822	0.862	11.2
1,3,5-Trimethylbenzene	3.127	2.327	2.712	2.719	2.498	2.677	11.2
2-Chlorotoluene	0.978	0.746	0.857	0.864	0.791	0.847	10.4
4-Chlorotoluene	1.040	0.763	0.880	0.877	0.778	0.868	12.7
tert-Butylbenzene	2.786	2.115	2.487	2.515	2.362	2.453	10.0
1,2,4-Trimethylbenzene	2.883	2.142	2.593	2.618	2.498	2.547	10.5
sec-Butylbenzene	4.344	3.210	3.806	3.832	2.498	3.538	20.0
4-Isopropyltoluene	3.403	2.506	3.059	3.096	2.362	2.885	15.1
n-Butylbenzene	2.782	2.037	2.596	2.629	2.710	2.551	11.6
1,2,4-Trichlorobenzene	0.794	0.569	0.618	0.664	0.722	0.673	13.1
Hexachlorobutadiene	0.733	0.451	0.501	0.512	0.514	0.542	20.2
Naphthalene	1.091	0.920	0.845	0.932	1.110	0.980	11.8
1,2,3-Trichlorobenzene	0.658	0.465	0.393	0.430	0.479	0.485	21.0
Acetone	0.141	0.067	0.073	0.072	0.071	0.085	37.1
Carbon Disulfide	0.645	0.484	0.564	0.603	0.604	0.580	10.5
2-Butanone	0.105	0.116	0.126	0.140	0.141	0.126	12.2
4-Methyl-2-Pentanone	0.599	1.031	1.073	1.244	1.189	1.027	24.7
2-Hexanone	0.355	0.688	0.739	0.852	0.821	0.691	28.8
Methyl tert-butyl ether	0.621	0.450	0.512	0.559	0.564	0.541	11.8
Isopropylbenzene	6.240	4.826	5.619	5.716	5.322	5.545	9.4
1,2-Dichloroethene (total)	0.301	0.230	0.268	0.277	0.269	0.269	9.5
Xylenes (total)	2.450	1.818	2.156	2.199	2.131	2.151	10.5
Dibromofluoromethane	0.218	0.201	0.212	0.211	0.205	0.209	3.1
1,2-Dichloroethane-d4	0.249	0.218	0.227	0.224	0.213	0.226	6.1
Toluene-d8	4.168	3.861	3.929	3.954	3.714	3.925	4.2
Bromofluorobenzene	1.632	1.369	1.550	1.524	1.493	1.514	6.3

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

INITIAL CALIBRATION REPORT

Instrument ID: hp4.i
 Lab File ID: 2A40810.D
 Analysis Type: WATER

Injection Date: 10-AUG-2000 16:11
 Lab Sample ID: vstd5
 Method File: \\QPITPA02\d\chem\hp4.i\40810d.b

COMPOUND	%RSD
Xylenes (total)	10.5
1,2-Dichloroethene (total)	9.5
Dichlorodifluoromethane	5.8
Chloromethane	8.7
Vinyl Chloride	8.5
Bromomethane	10.6
Chloroethane	10.6
Trichlorofluoromethane	39.4
1,1-Dichloroethene	10.2
Carbon Disulfide	10.5
Acetone	37.1
Methylene Chloride	10.4
trans-1,2-Dichloroethene	9.7
Methyl tert-butyl ether	11.8
1,1-Dichloroethane	10.5
2,2-Dichloropropane	8.7
cis-1,2-dichloroethene	9.3
2-Butanone	12.2
Bromochloromethane	9.2
Chloroform	9.9
1,1,1-Trichloroethane	8.5
Dibromofluoromethane	3.1
Carbon Tetrachloride	8.1
1,1 Dichloropropene	8.2
Benzene	10.8
1,2-Dichloroethane-d4	6.1
1,2-Dichloroethane	11.4
Trichloroethene	9.5
1,2-Dichloropropane	10.5
Dibromomethane	7.4
Bromodichloromethane	8.1
cis-1,3-Dichloropropene	8.3
4-Methyl-2-Pentanone	24.7
Toluene-d8	4.2
Toluene	10.7
trans-1,3-Dichloropropene	6.9
1,1,2-Trichloroethane	7.7
Tetrachloroethene	14.3
1,3-Dichloropropane	9.6

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Data File: \\QPITPA02\d\chem\hp4.i\40810d.b\2A40810.D
 Report Date: 08/10/2000

INITIAL CALIBRATION REPORT

Instrument ID: hp4.i
 Lab File ID: 2A40810.D
 Analysis Type: WATER

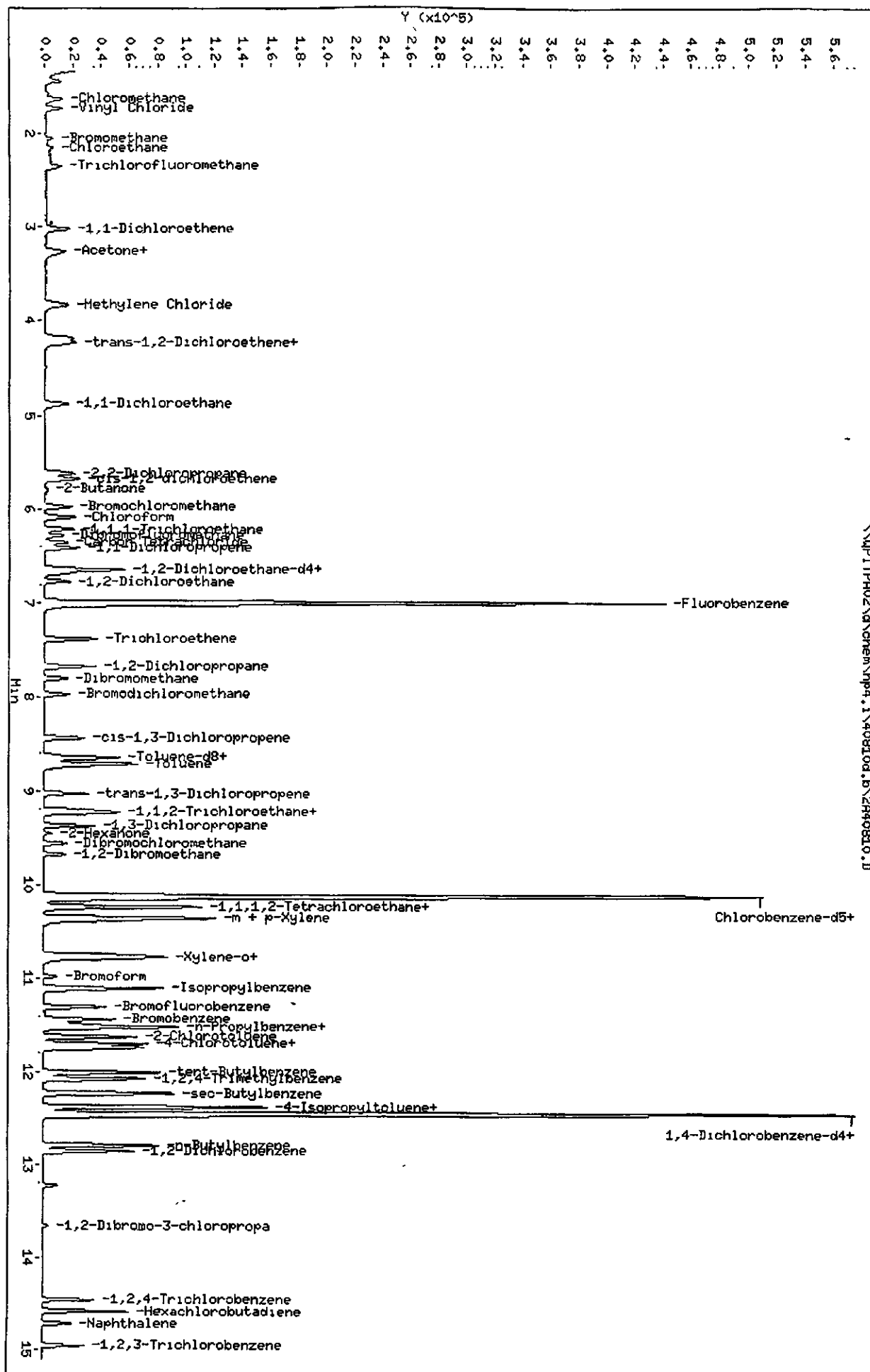
Injection Date: 10-AUG-2000 16:11
 Lab Sample ID: vstd5
 Method File: \\QPITPA02\d\chem\hp4.i\40810d.b

COMPOUND	%RSD
2-Hexanone	28.8
Dibromochloromethane	9.3
1,2-Dibromoethane	6.4
Chlorobenzene	11.6
Ethylbenzene	10.6
1,1,1,2-Tetrachloroethane	9.8
m + p Xylene	11.2
Xylene-o	10.5
Styrene	9.6
Bromoform	18.2
Isopropylbenzene	9.4
Bromofluorobenzene	6.3
Bromobenzene	11.2
1,1,2,2-Tetrachloroethane	7.8
n-Propylbenzene	10.2
1,2,3-Trichloropropane	12.7
2-Chlorotoluene	10.4
1,3,5-Trimethylbenzene	11.2
4-Chlorotoluene	12.7
tert-Butylbenzene	10.0
1,2,4-Trimethylbenzene	10.5
sec-Butylbenzene	20.0
4-Isopropyltoluene	15.1
1,3-Dichlorobenzene	13.1
1,4-Dichlorobenzene	12.7
n-Butylbenzene	11.6
1,2-Dichlorobenzene	12.0
1,2-Dibromo-3-chloropropane	21.8
1,2,4-Trichlorobenzene	13.1
Hexachlorobutadiene	20.2
Naphthalene	11.8
1,2,3-Trichlorobenzene	21.0

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

Data File: \\PIFPA02\chem\hp4.1\408104.b\2440810.D
 Date: 10-AUG-2000 16:11
 Client ID: vstd5
 Sample Info: vstd5 5ml
 Volume Injected (ul): 5.0
 Column Phase: DB 624

Instrument: hp4.1
 Operator: 10099
 Column diameter: 0.18



'671 136

Data File: \\QPITPA02\d\chem\hp4.i\40810d.b\2A40810.D
Report Date: 10-Aug-2000 16:31

Page 1

STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40810d.b\2A40810.D
Lab Smp Id: vstd5 Client Smp ID: vstd5
Inj Date : 10-AUG-2000 16:11 MS Autotune Date: 08-AUG-1996 10:00
Operator : 10099 Inst ID: hp4.i
Smp Info : vstd5 5ml
Misc Info : vstd5,40810d.b,8260bh2o.M
Comment :
Method : \\QPITPA02\d\chem\hp4.i\40810d.b\8260bh2o.m
Meth Date : 10-Aug-2000 16:30 dudeckk Quant Type: ISTD
Cal Date : 10-AUG-2000 16:11 Cal File: 2A40810.D
Als bottle: 9 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2-padep.sub
Target Version: 4.04
Processing Host: PITPC077

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

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

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (rg)	ON-COL (ng)
* 46 Fluorobenzene	96	6.997	6.997	(1.000)	491906	250.000	
* 69 Chlorobenzene d5	119	10.121	10.121	(1.000)	123051	250.000	
* 92 1,4 Dichlorobenzene-d4	152	12.457	12.457	(1.000)	193489	250.000	
\$ 39 Dibromofluoromethane	113	6.282	6.282	(0.898)	10708	25.0000	25.99
\$ 43 1,2-Dichloroethane-d4	65	6.679	6.679	(0.955)	12231	25.0000	27.51
\$ 59 Toluene-d8	98	8.648	8.648	(0.854)	51294	25.0000	26.55
\$ 80 Bromofluorobenzene	95	11.307	11.307	(1.117)	20080	25.0000	26.95
1 Dichlorodifluoromethane	85	1.446	1.446	(0.207)	13265	25.0000	27.08
2 Chloromethane	50	1.630	1.630	(0.233)	20128	25.0000	28.48
3 Vinyl Chloride	62	1.734	1.734	(0.248)	17147	25.0000	28.02
4 Bromomethane	94	2.058	2.058	(0.294)	2679	25.0000	28.25
5 Chloroethane	64	2.156	2.156	(0.308)	3307	25.0000	28.68
6 Trichlorofluoromethane	101	2.357	2.357	(0.337)	6400	25.0000	21.08
12 1,1-Dichloroethene	96	3.024	3.024	(0.432)	11058	25.0000	28.32
13 Acetone	43	3.299	3.299	(0.471)	6919	25.0000	41.55

Data File: \\QPITPA02\d\chem\hp4.i\40810d.b\2A40810.D
Report Date: 10-Aug-2000 16:31

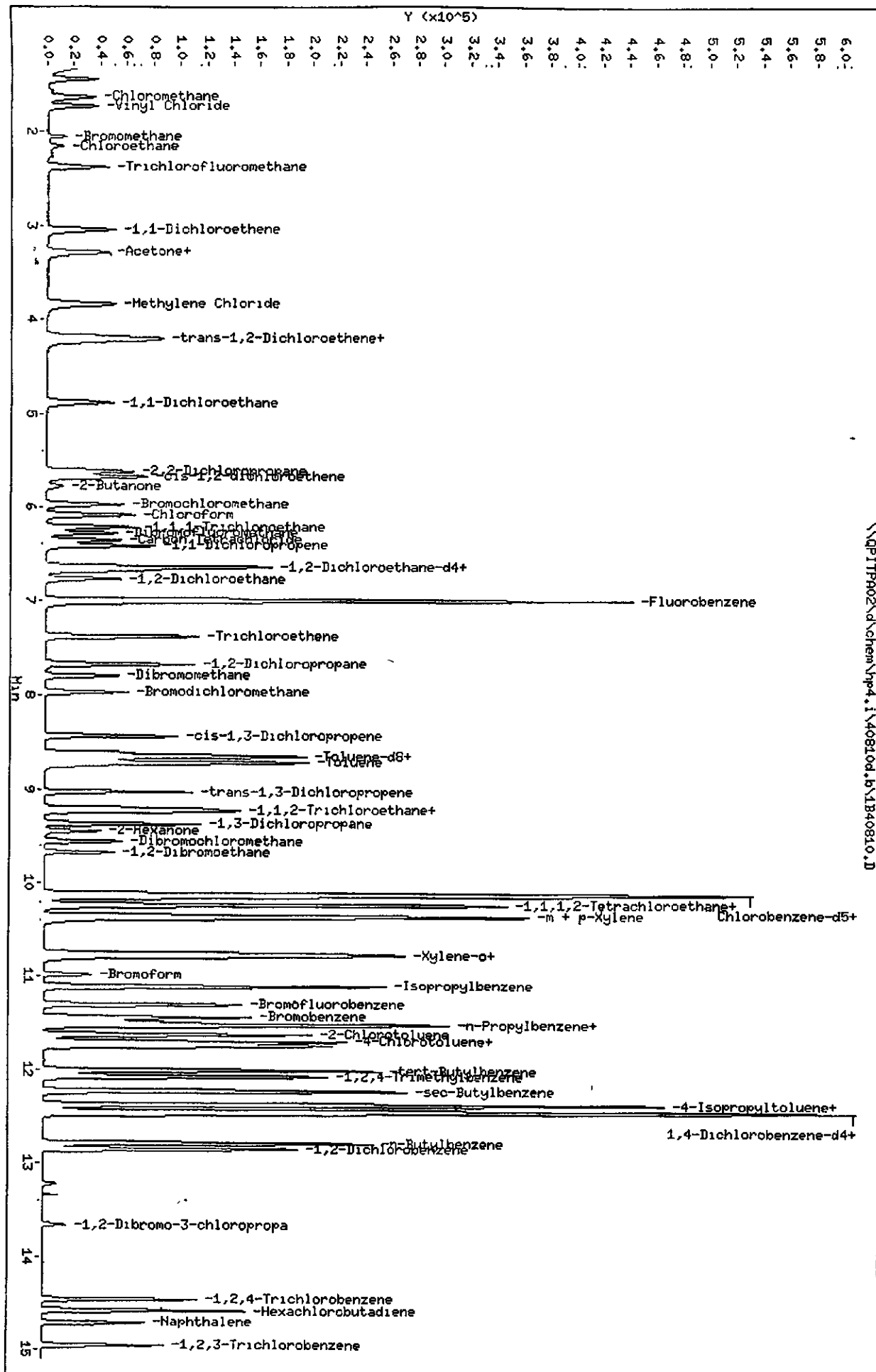
Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
15 Carbon Disulfide	76	3.268	3.268	(0.467)	31731	25.0000	27.80
18 Methylene Chloride	84	3.831	3.831	(0.547)	14257	25.0000	28.78
19 trans-1,2-Dichloroethene	96	4.173	4.173	(0.596)	14093	25.0000	28.03
20 Methyl tert-butyl ether	73	4.228	4.228	(0.604)	30561	25.0000	28.69
24 1,1-Dichloroethane	63	4.876	4.876	(0.697)	25008	25.0000	28.96
27 2,2-Dichloropropane	77	5.616	5.616	(0.803)	15990	25.0000	26.76
28 cis-1,2-dichloroethene	96	5.677	5.677	(0.811)	15495	25.0000	27.88
M 29 1,2-Dichloroethene (total)	100				29588	50.0000	55.90
30 Bromochloromethane	128	5.970	5.970	(0.853)	7206	25.0000	28.12
31 2-Butanone	43	5.793	5.793	(0.828)	5171	25.0000	20.90
37 Chloroform	83	6.086	6.086	(0.870)	21140	25.0000	28.66
38 1,1,1-Trichloroethane	97	6.215	6.215	(0.888)	17260	25.0000	27.38
40 1,1-Dichloropropene	75	6.417	6.417	(0.917)	14454	25.0000	27.57
41 Carbon Tetrachloride	117	6.355	6.355	(0.908)	13427	25.0000	26.37
42 Benzene	78	6.643	6.643	(0.949)	61463	25.0000	29.09
45 1,2-Dichloroethane	62	6.771	6.771	(0.968)	16869	25.0000	29.67
47 Trichloroethene	130	7.376	7.376	(1.054)	15704	25.0000	28.19
49 1,2-Dichloropropane	63	7.670	7.670	(1.096)	15634	25.0000	29.02
50 Dibromomethane	93	7.792	7.792	(1.114)	7298	25.0000	27.50
53 Bromodichloromethane	83	7.969	7.969	(1.139)	13838	25.0000	26.51
57 cis-1,3-Dichloropropene	75	8.434	8.434	(1.205)	17627	25.0000	25.82
58 4-Methyl-2-Pentanone	43	8.611	8.611	(0.851)	7373	25.0000	14.58
60 Toluene	91	8.715	8.715	(0.861)	70144	25.0000	29.46
61 trans-1,3-Dichloropropene	75	9.027	9.027	(0.892)	17599	25.0000	25.84
63 1,3-Dichloropropane	76	9.375	9.375	(0.926)	23100	25.0000	29.04
64 1,1,2-Trichloroethane	97	9.204	9.204	(0.909)	12959	25.0000	28.14
65 Tetrachloroethene	164	9.235	9.235	(0.912)	14657	25.0000	31.12
66 2-Hexanone	43	9.455	9.455	(0.934)	4366	25.0000	12.84
67 Dibromochloromethane	129	9.565	9.565	(0.945)	10256	25.0000	25.16
68 1,2-Dibromoethane	107	9.675	9.675	(0.956)	12295	25.0000	27.36
70 Chlorobenzene	112	10.146	10.146	(1.002)	47987	25.0000	29.71
71 1,1,1,2-Tetrachloroethane	131	10.237	10.237	(1.011)	13922	25.0000	28.68
72 Ethylbenzene	106	10.231	10.231	(1.011)	26012	25.0000	29.21
73 m + p-Xylene	106	10.354	10.354	(1.023)	63235	50.0000	58.89
74 Xylene-o	106	10.751	10.751	(1.062)	30145	25.0000	28.48
M 75 Xylenes (total)	106				93380	25.0000	88.21
76 Styrene	104	10.781	10.781	(1.065)	49515	25.0000	27.70
77 Bromoform	173	10.977	10.977	(1.085)	5341	25.0000	21.28
78 Isopropylbenzene	105	11.105	11.105	(1.097)	76781	25.0000	28.13
79 Bromobenzene	156	11.442	11.442	(0.919)	19540	25.0000	29.27
81 n-Propylbenzene	120	11.521	11.521	(0.925)	21681	25.0000	28.69
82 2-Chlorotoluene	126	11.625	11.625	(0.933)	18930	25.0000	28.87
83 1,1,2,2-Tetrachloroethane	83	11.485	11.485	(0.922)	15206	25.0000	28.04
84 1,2,3-Trichloropropane	110	11.533	11.533	(0.926)	5196	25.0000	30.41
85 4-Chlorotoluene	126	11.747	11.747	(0.943)	20134	25.0000	29.98
86 1,3,5-Trimethylbenzene	105	11.705	11.705	(0.940)	60506	25.0000	29.21
87 tert-Butylbenzene	119	12.016	12.016	(0.965)	53913	25.0000	28.40

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ng)	ON-COL (ng)
*****	----	==	=====	=====	=====		-----	-----
88 1,2,4-Trimethylbenzene	105	12.078	12.078	(0.970)	55777		25.0000	28.30
89 sec-Butylbenzene	105	12.236	12.236	(0.982)	84044		25.0000	30.69
90 4-Isopropyltoluene	119	12.383	12.383	(0.994)	65851		25.0000	29.49
91 1,3-Dichlorobenzene	146	12.383	12.383	(0.994)	37331		25.0000	30.10
93 1,4-Dichlorobenzene	146	12.481	12.481	(1.002)	38132		25.0000	30.29
94 n-Butylbenzene	91	12.793	12.793	(1.027)	53828		25.0000	27.27
95 1,2-Dichlorobenzene	146	12.854	12.854	(1.032)	33936		25.0000	29.83
96 1,2-Dibromo-3 chloropropane	157	13.655	13.655	(1.096)	1548		25.0000	21.58
97 1,2,4-Trichlorobenzene	180	14.456	14.456	(1.160)	15371		25.0000	29.48
98 Hexachlorobutadiene	225	14.572	14.572	(1.170)	14183		25.0000	33.79
99 Naphthalene	128	14.712	14.712	(1.181)	21111		25.0000	27.83
100 1,2,3-Trichlorobenzene	180	14.957	14.957	(1.201)	12722		25.0000	33.89

Data File: \\NPITP02\chem\hpa4.i\40810d.b\1340810.D
 Date: 10-AUG-2000 13:41
 Client ID: vstd20
 Sample Info: vstd20 5ml
 Volume Injected (ul): 5.0
 Column phase: DB 624

Instrument: hpa4.i
 Operator: 10099
 Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40810d.b\1B40810.D
 Lab Smp Id: vstd20 Client Smp ID: vstd20
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 Method : \\QPITPA02\d\chem\hp4.i\40810d.b\8260bh2o.m *Kr/46/w*
 Meth Date : 10-Aug-2000 16:36 dudeckk Quant Type: ISTD
 Cal Date : 10-AUG-2000 12:35 Cal File: 3C40810.D
 Als bottle: 4 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 4.04
 Processing Host: PITPC077

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

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

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96		6.997	6.997	(1.000)	495734	250.000	
* 69 Chlorobenzene-d5	119		10.121	10.121	(1.000)	122194	250.000	
* 92 1,4-Dichlorobenzene-d4	152		12.457	12.457	(1.000)	193773	250.000	
\$ 39 Dibromofluoromethane	113		6.282	6.282	(0.898)	39868	100.000	96.03
\$ 43 1,2-Dichloroethane-d4	65		6.686	6.686	(0.955)	43190	100.000	96.40
\$ 59 Toluene-d8	98		8.648	8.648	(0.854)	188713	100.000	98.36
\$ 80 Bromofluorobenzene	95		11.301	11.301	(1.117)	66910	100.000	90.44
1 Dichlorodifluoromethane	85		1.446	1.446	(0.207)	45915	100.000	93.00
2 Chloromethane	50		1.642	1.642	(0.235)	65384	100.000	91.78
3 Vinyl Chloride	62		1.734	1.734	(0.248)	54521	100.000	88.42
4 Bromomethane	94		2.058	2.058	(0.294)	8706	100.000	91.10
5 Chloroethane	64		2.156	2.156	(0.308)	10327	100.000	88.87
6 Trichlorofluoromethane	101		2.376	2.376	(0.340)	52000	100.000	169.9
12 1,1 Dichloroethene	96		3.042	3.042	(0.435)	33276	100.000	84.57
13 Acetone	43		3.287	3.287	(0.470)	13351	100.000	79.56

Data File: \\QPITPA02\d\chem\hp4.i\40810d.b\1B40810.D
Report Date: 10-Aug-2000 16:36

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Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
*****	****	==	=====	=====	*****	=====	=====
15 Carbon Disulfide	76	3 280	3 280	(0.469)	95940	100.000	83.40
18 Methylene Chloride	84	3 837	3 837	(0.548)	42892	100 000	85 93
19 trans-1,2-Dichloroethene	96	4 185	4 185	(0.598)	43098	100 000	85 05
20 Methyl tert-butyl ether	73	4 216	4 216	(0.603)	89338	100.000	83 21
24 1,1-Dichloroethane	63	4 888	4 888	(0.699)	75338	100 000	86 56
27 2,2-Dichloropropane	77	5.622	5 622	(0.803)	51218	100 000	85 05
28 cis-1,2-dichloroethene	96	5.683	5 683	(0.812)	48046	100 000	85 79
M 29 1,2-Dichloroethene (total)	100				91144	200.000	170 9
30 Bromochloromethane	128	5.976	5 976	(0.854)	22414	100 000	86 81
31 2-Butanone	43	5.781	5.781	(0.826)	23101	100 000	92 67
37 Chloroform	83	6.086	6 086	(0.870)	64531	100 000	86 80
38 1,1,1-Trichloroethane	97	6 221	6 221	(0.889)	54745	100 000	86.19
40 1,1 Dichloropropene	75	6 417	6 417	(0.917)	46259	100 000	87 56
41 Carbon Tetrachloride	117	6.362	6.362	(0.909)	43908	100.000	85 57
42 Benzene	78	6.643	6.643	(0.949)	184379	100 000	86 60
45 1,2-Dichloroethane	62	6.771	6.771	(0.968)	50547	100.000	88.23
47 Trichloroethene	130	7 376	7 376	(1.054)	48396	100 000	86 20
49 1,2-Dichloropropane	63	7.670	7.670	(1.096)	47316	100 000	87 15
50 Dibromomethane	93	7.792	7.792	(1.114)	23948	100.000	89.56
53 Bromodichloromethane	83	7 963	7 963	(1.138)	45346	100 000	86 19
57 cis-1,3-Dichloropropene	75	8 434	8 434	(1.205)	58991	100 000	85 74
58 4-Methyl-2-Pentanone	43	8 605	8.605	(0.850)	50415	100.000	100 4
60 Toluene	91	8 715	8 715	(0.861)	213743	100.000	90 42
61 trans-1,3-Dichloropropene	75	9.027	9 027	(0.892)	60110	100 000	88 90
63 1,3-Dichloropropane	76	9.369	9 369	(0.926)	72296	100 000	91 54
64 1,1,2-Trichloroethane	97	9 204	9.204	(0.909)	42363	100.000	92 64
65 Tetrachloroethene	164	9 229	9.229	(0.912)	40917	100.000	87 50
66 2-Hexanone	43	9 449	9 449	(0.934)	33613	100 000	99.54
67 Dibromochloromethane	129	9.559	9.559	(0.944)	35270	100.000	87.15
68 1,2-Dibromoethane	107	9 675	9.675	(0.956)	41407	100 000	92 79
70 Chlorobenzene	112	10 146	10 146	(1.002)	141512	100.000	88 24
71 1,1,1,2 Tetrachloroethane	131	10.237	10 237	(1.011)	43214	100 000	89 66
72 Ethylbenzene	106	10 231	10.231	(1.011)	78133	100.000	88.37
73 m + p-Xylene	106	10 354	10.354	(1.023)	188943	200 000	177 2
74 Xylene-o	106	10 751	10 751	(1.062)	88866	100 000	84 54
M 75 Xylenes (total)	106				277809	100 000	264.3
76 Styrene	104	10 781	10 781	(1.065)	152301	100.000	85.81
77 Bromoform	173	10 977	10.977	(1.085)	19430	100 000	77 94
78 Isopropylbenzene	105	11 105	11 105	(1.097)	235896	100 000	87 04
79 Bromobenzene	156	11 442	11 442	(0.919)	57778	100 000	86.43
81 n-Propylbenzene	120	11 521	11 521	(0.925)	67241	100.000	88.85
82 2-Chlorotoluene	126	11 631	11.631	(0.934)	57854	100.000	88 10
83 1,1,2,2-Tetrachloroethane	83	11 484	11 484	(0.922)	49373	100 000	90 93
84 1,2,3-Trichloropropane	110	11 527	11.527	(0.925)	15385	100 000	89.92
85 4-Chlorotoluene	126	11 747	11.747	(0.943)	59169	100 000	87 97
86 1,3,5-Trimethylbenzene	105	11 705	11.705	(0.940)	180333	100 000	86.92
87 tert-Butylbenzene	119	12 016	12 016	(0.965)	163958	100.000	86 23

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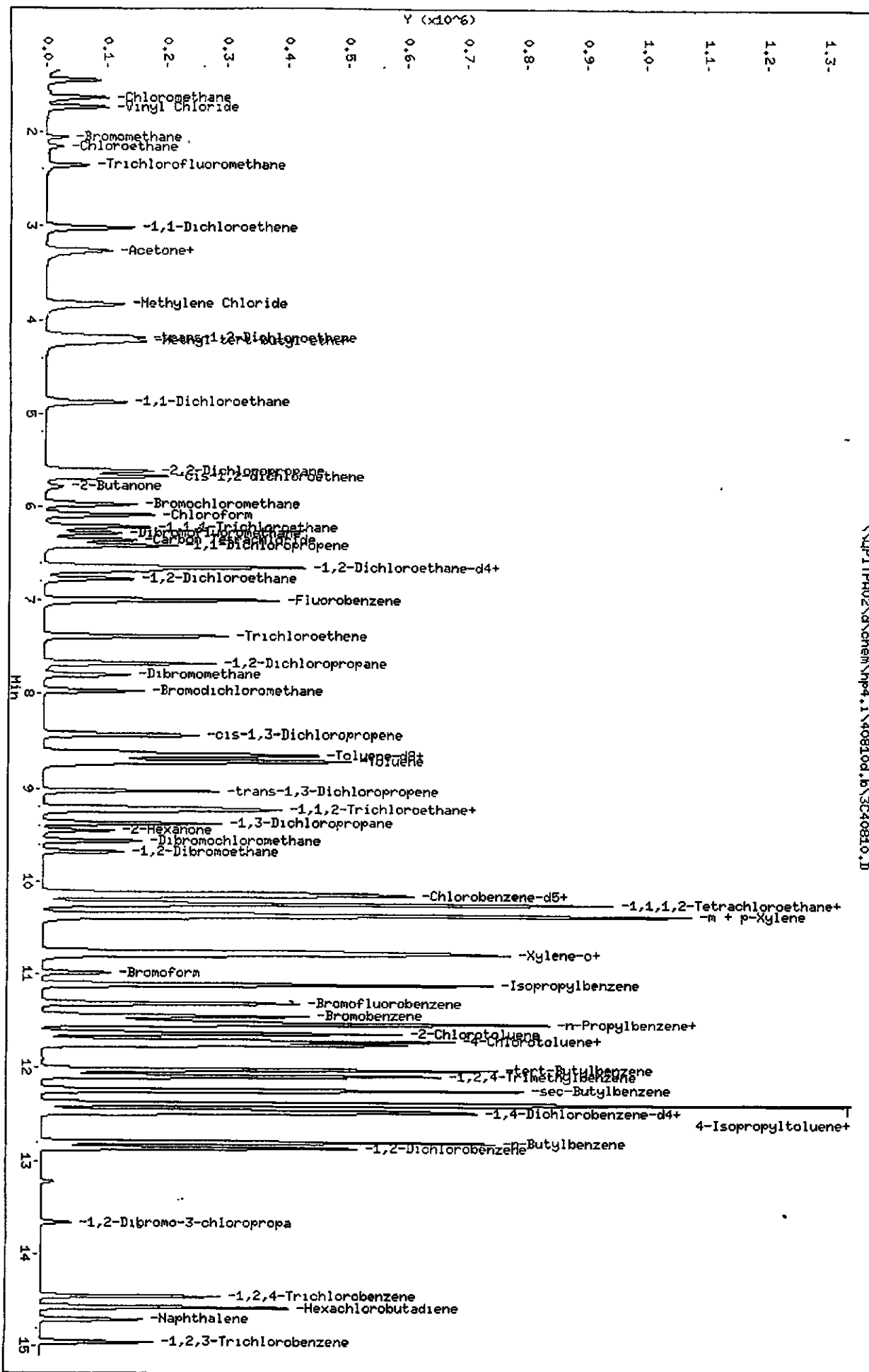
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Report Date: 10-Aug-2000 16:36

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Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							(ng)	(ng)
88 1,2,4-Trimethylbenzene	105	12.077	12.077	(0.970)	165998		100.000	84.09
89 sec-Butylbenzene	105	12.236	12.236	(0.982)	248807		100.000	90.73
90 4-Isopropyltoluene	119	12.383	12.383	(0.994)	194280		100.000	86.87
91 1,3-Dichlorobenzene	146	12.383	12.383	(0.994)	109061		100.000	87.81
93 1,4-Dichlorobenzene	146	12.481	12.481	(1.002)	110287		100.000	87.48
94 n-Butylbenzene	91	12.793	12.793	(1.027)	157888		100.000	79.86
95 1,2-Dichlorobenzene	146	12.854	12.854	(1.032)	98805		100.000	86.71
96 1,2-Dibromo-3-chloropropane	157	13.655	13.655	(1.096)	5540		100.000	77.11
97 1,2,4-Trichlorobenzene	180	14.456	14.456	(1.160)	44128		100.000	84.50
98 Hexachlorobutadiene	225	14.578	14.578	(1.170)	34976		100.000	83.21
99 Naphthalene	128	14.706	14.706	(1.181)	71345		100.000	93.92
100 1,2,3-Trichlorobenzene	180	14.957	14.957	(1.201)	36040		100.000	95.86

Data File: \\QPIITPA02\chem\mp4.1\40810d.b\3040810.D
 Date: 10-AUG-2000 12:35
 Client ID: vstd50
 Sample Info: vstd50 5ml
 Volume Injected (ul): 5.0
 Column phase: DB 624

Instrument: mp4.1
 Operator: 10099
 Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40810d.b\3C40810.D
 Lab Smp Id: vstd50 Client Smp ID: vstd50
 Inj Date : 10-AUG-2000 12:35 MS Autotune Date: 08-AUG-1996 10:00
 Operator : 10099 Inst ID: hp4.i
 Smp Info : vstd50 5ml
 Misc Info : vstd50,40810d.b,8260bh2o.M
 Comment :
 Method : \\QPITPA02\d\chem\hp4.i\40810d.b\8260bh2o.m K&E/10/0
 Meth Date : 10-Aug-2000 16:35 dudeckk Quant Type: ISTD
 Cal Date : 10-AUG-2000 12:35 Cal File: 3C40810.D
 Als bottle: 2 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 4.04
 Processing Host: PITPC077

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-FMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.999	6.999	(1.000)	452795	250.000	
* 69 Chlorobenzene-d5	119	10.123	10.123	(1.000)	115782	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.458	12.458	(1.000)	186854	250.000	
\$ 39 Dibromofluoromethane	113	6.283	6.283	(0.898)	95911	250.000	252.9
\$ 43 1,2-Dichloroethane-d4	65	6.681	6.681	(0.955)	102798	250.000	251.2
\$ 59 Toluene-d8	98	8.649	8.649	(0.854)	454896	250.000	250.2
\$ 80 Bromofluorobenzene	95	11.302	11.302	(1.117)	179460	250.000	256.0
1 Dichlorodifluoromethane	85	1.448	1.448	(0.207)	115938	250.000	257.1
2 Chloromethane	50	1.631	1.631	(0.233)	159962	250.000	245.8
3 Vinyl Chloride	62	1.735	1.735	(0.248)	141303	250.000	250.9
4 Bromomethane	94	2.059	2.059	(0.294)	22348	250.000	256.0
5 Chloroethane	64	2.157	2.157	(0.308)	27388	250.000	258.0
6 Trichlorofluoromethane	101	2.359	2.359	(0.337)	60442	250.000	216.3
12 1,1-Dichloroethene	96	3.019	3.019	(0.431)	91101	250.000	253.5
13 Acetone	43	3.306	3.306	(0.472)	32876	250.000	214.5

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON- COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
15 Carbon Disulfide	76	3.263	3 263	(0.466)	255615	250 000	243.3
18 Methylene Chloride	84	3 826	3 826	(0 547)	113786	250.000	249 6
19 trans-1,2-Dichloroethene	96	4 174	4 174	(0 596)	114892	250 000	248 2
20 Methyl tert-butyl ether	73	4.229	4 229	(0 604)	231861	250.000	236.4
24 1,1-Dichloroethane	63	4.877	4 877	(0 697)	194782	250.000	245 0
27 2,2-Dichloropropane	77	5 617	5.617	(0 803)	137248	250 000	249 5
28 cis-1,2-dichloroethene	96	5 678	5 678	(0.811)	128140	250 000	250.5
M 29 1,2-Dichloroethene (total)	100				243032	500 000	498.9
30 Bromochloromethane	128	5.972	5.972	(0.853)	58062	250 000	246 2
31 2-Butanone	43	5.788	5.788	(0 827)	57056	250 000	250.6
37 Chloroform	83	6.088	6.088	(0 870)	168272	250 000	247 8
38 1,1,1-Trichloroethane	97	6 216	6 216	(0 888)	145744	250.000	251 2
40 1,1-Dichloropropene	75	6 412	6 412	(0 916)	121878	250.000	252 6
41 Carbon Tetrachloride	117	6 357	6.357	(0 908)	120223	250 000	256.5
42 Benzene	78	6 644	6 644	(0.949)	482417	250 000	248 1
45 1,2 Dichloroethane	62	6.772	6 772	(0.968)	129175	250 000	246 8
47 Trichloroethene	130	7 378	7 378	(1 054)	126828	250.000	247.3
49 1,2-Dichloropropane	63	7.671	7.671	(1 096)	121524	250.000	245.0
50 Dibromomethane	93	7 793	7 793	(1.114)	60950	250 000	249 5
53 Bromodichloromethane	83	7.965	7 965	(1.138)	120038	250.000	249.8
57 cis-1,3-Dichloropropene	75	8 435	8.435	(1.205)	158789	250 000	252 7
58 4-Methyl-2-Pentanone	43	8 613	8.613	(0.851)	124218	250 000	261 1
60 Toluene	91	8.717	8.717	(0.861)	546931	250.000	244 2
61 trans-1,3-Dichloropropene	75	9.028	9.028	(0 892)	156662	250.000	244.5
63 1,3-Dichloropropane	76	9 371	9.371	(0 926)	181089	250 000	242.0
64 1,1,2-Trichloroethane	97	9 206	9 206	(0 909)	105090	250 000	242 5
65 Tetrachloroethene	164	9.230	9 230	(0.912)	105893	250 000	239.0
66 2-Hexanone	43	9 450	9.450	(0 934)	85599	250 000	267.5
67 Dibromochloromethane	129	9 560	9 560	(0.944)	99083	250 000	258 4
68 1,2-Dibromomethane	107	9.676	9 676	(0.956)	103441	250 000	244 6
70 Chlorobenzene	112	10.147	10.147	(1 002)	373335	250.000	245.7
71 1,1,1,2-Tetrachloroethane	131	10 239	10.239	(1.011)	113136	250 000	247.7
72 Ethylbenzene	106	10 233	10 233	(1.011)	207145	250.000	247 2
73 m + p-Xylene	106	10 355	10.355	(1 023)	503449	500 000	498.3
74 Xylene-o	106	10.752	10.752	(1.062)	249635	250 000	250 6
M 75 Xylenes (total)	106				753084	250 000	756 0
76 Styrene	104	10.777	10.777	(1.065)	431111	250 000	256.4
77 Bromoform	173	10.978	10.978	(1 085)	60256	250 000	255.1
78 Isopropylbenzene	105	11 107	11.107	(1.097)	650561	250.000	253 3
79 Bromobenzene	156	11 443	11 443	(0 919)	159642	250 000	247 7
81 n-Propylbenzene	120	11 516	11.516	(0 924)	187300	250.000	256.7
82 2-Chlorotoluene	126	11.626	11 626	(0 933)	160084	250.000	252.8
83 1,1,2,2-Tetrachloroethane	83	11.486	11.486	(0 922)	128619	250 000	245 6
84 1,2,3-Trichloropropane	110	11 535	11.535	(0.926)	40191	250 000	243 6
85 4-Chlorotoluene	126	11.749	11.749	(0.943)	164352	250.000	253.4
86 1,3,5-Trimethylbenzene	105	11 706	11 706	(0 940)	506685	250.000	253 3
87 tert-Butylbenzene	119	12.012	12.012	(0 964)	464665	250.000	253 4

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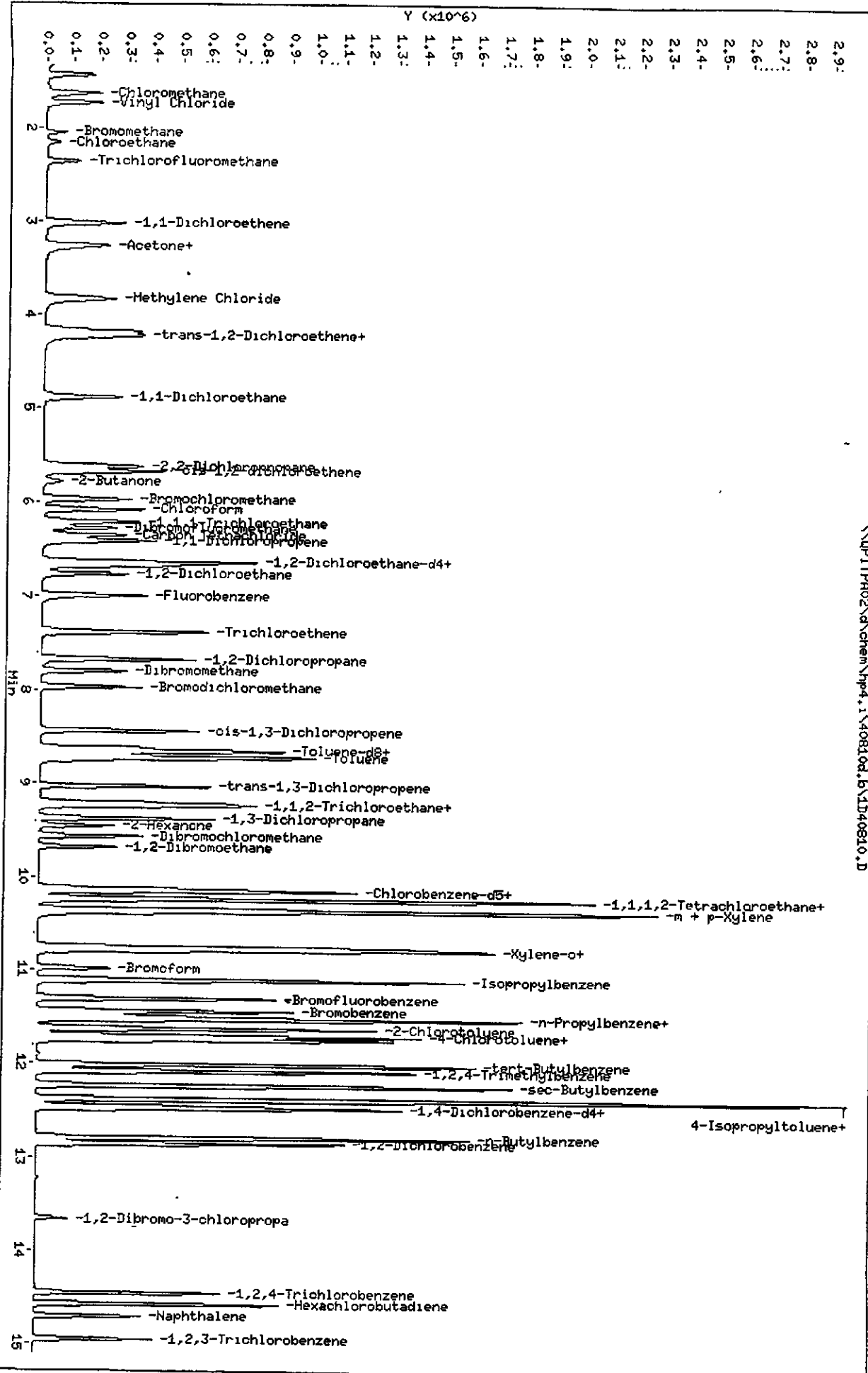
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Report Date: 10-Aug-2000 16:36

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Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	
88 1,2,4-Trimethylbenzene	105	12.079	12.079	(0.970)	484587	250.000	254.6	
89 sec-Butylbenzene	105	12.238	12.238	(0.982)	711176	250.000	268.9	
90 4-Isopropyltoluene	119	12.384	12.384	(0.994)	571632	250.000	265.1	
91 1,3-Dichlorobenzene	146	12.378	12.378	(0.994)	299598	250.000	250.2	
93 1,4-Dichlorobenzene	146	12.476	12.476	(1.001)	295702	250.000	243.2	
94 n-Butylbenzene	91	12.794	12.794	(1.027)	485052	250.000	254.4	
95 1,2-Dichlorobenzene	146	12.855	12.855	(1.032)	267693	250.000	243.6	
96 1,2-Dibromo-3-chloropropane	157	13.662	13.662	(1.097)	16497	250.000	238.1	
97 1,2,4-Trichlorobenzene	180	14.457	14.457	(1.160)	115576	250.000	229.5	
98 Hexachlorobutadiene	225	14.579	14.579	(1.170)	93635	250.000	231.0	
99 Naphthalene	128	14.708	14.708	(1.181)	157980	250.000	215.7	
100 1,2,3-Trichlorobenzene	180	14.958	14.958	(1.201)	73511	250.000	202.8	

Data File: \\QIPITPA02\chem\hp4.1\40810d.b\1D40810.D
 Date: 10-AUG-2000 14:06
 Client ID: vsid100
 Sample Info: vsid100 5ml
 Volume Injected (uL): 5.0
 Column phase: DB 624

Instrument: hp4.i
 Operator: 10099
 Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40810d.b\1D40810.D
 Lab Smp Id: vstd100 Client Smp ID: vstd100
 Inj Date : 10-AUG-2000 14:06 MS Autotune Date: 08-AUG-1996 10:00
 Operator : 10099 Inst ID: hp4.i
 Smp Info : vstd100 5ml
 Misc Info : ,40810d.b,8260bh2o.M
 Comment :
 Method : \\QPITPA02\d\chem\hp4.i\40810d.b\8260bh2o.m
 Meth Date : 10-Aug-2000 16:36 dudeckk Quant Type: ISTD
 Cal Date : 10-AUG-2000 12:35 Cal File: 3C40810.D
 Als bottle: 5 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 4.04
 Processing Host: PITPC077

K.8/10/0

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

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

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL AMT (ng)	ON COL (ng)
* 46 Fluorobenzene	96		6.995	6.995	(1.000)	473366	250.000	
* 69 Chlorobenzene-d5	119		10.119	10.119	(1.000)	119424	250.000	
* 92 1,4-Dichlorobenzene-d4	152		12.454	12.454	(1.000)	194132	250.000	
\$ 39 Dibromofluoromethane	113		6.280	6.280	(0.898)	200165	500.000	504.9
\$ 43 1,2-Dichloroethane-d4	65		6.683	6.683	(0.955)	211639	500.000	494.7
\$ 59 Toluene d8	98		8.646	8.646	(0.854)	944343	500.000	503.6
\$ 80 Bromofluorobenzene	95		11.305	11.305	(1.117)	364072	500.000	503.5
1 Dichlorodifluoromethane	85		1.444	1.444	(0.207)	232828	500.000	493.9
2 Chloromethane	50		1.634	1.634	(0.234)	346234	500.000	509.0
3 Vinyl Chloride	62		1.738	1.738	(0.248)	299912	500.000	509.4
4 Bromomethane	94		2.055	2.055	(0.294)	48414	500.000	530.5
5 Chloroethane	64		2.159	2.159	(0.309)	56931	500.000	513.0
6 Trichlorofluoromethane	101		2.361	2.361	(0.338)	123603	500.000	423.0
12 1,1-Dichloroethene	96		3.021	3.021	(0.432)	190578	500.000	507.2
13 Acetone	43		3.303	3.303	(0.472)	67734	500.000	422.7

Data File: \\QPITPA02\d\chem\hp4.i\40810d.b\1D40810.D
Report Date: 10-Aug-2000 16:36

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
15 Carbon Disulfide	76	3.260	3.260	(0.466)	570903	500.000	519.7
18 Methylene Chloride	84	3.828	3.828	(0.547)	240513	500.000	504.6
19 trans-1,2-Dichloroethene	96	4.177	4.177	(0.597)	248235	500.000	513.0
20 Methyl tert-butyl ether	73	4.220	4.220	(0.603)	529200	500.000	516.2
24 1,1-Dichloroethane	63	4.880	4.880	(0.698)	419405	500.000	504.6
27 2,2-Dichloropropane	77	5.626	5.626	(0.804)	300256	500.000	522.2
28 cis-1,2-dichloroethene	96	5.675	5.675	(0.811)	275543	500.000	515.3
M 29 1,2 Dichloroethene (total)	100				523778	1000.00	1028
30 Bromochloromethane	128	5.974	5.974	(0.854)	126075	500.000	511.4
31 2-Butanone	43	5.785	5.785	(0.827)	132359	500.000	556.1
37 Chloroform	83	6.084	6.084	(0.870)	359191	500.000	506.0
38 1,1,1-Trichloroethane	97	6.219	6.219	(0.889)	312280	500.000	514.9
40 1,1-Dichloropropene	75	6.414	6.414	(0.917)	259153	500.000	513.7
41 Carbon Tetrachloride	117	6.359	6.359	(0.909)	254014	500.000	518.4
42 Benzene	78	6.640	6.640	(0.949)	1033933	500.000	508.6
45 1,2-Dichloroethane	62	6.769	6.769	(0.968)	273325	500.000	499.6
47 Trichloroethene	130	7.380	7.380	(1.055)	275944	500.000	514.7
49 1,2-Dichloropropane	63	7.668	7.668	(1.096)	263031	500.000	507.4
50 Dibromomethane	93	7.796	7.796	(1.114)	130892	500.000	512.6
53 Bromodichloromethane	83	7.967	7.967	(1.139)	265584	500.000	528.6
57 cis-1,3-Dichloropropene	75	8.432	8.432	(1.205)	352109	500.000	535.9
58 4-Methyl 2-Pentanone	43	8.609	8.609	(0.851)	297073	500.000	605.4
60 Toluene	91	8.713	8.713	(0.861)	1162390	500.000	503.1
61 trans-1,3-Dichloropropene	75	9.025	9.025	(0.892)	350695	500.000	530.7
63 1,3 Dichloropropane	76	9.373	9.373	(0.926)	388797	500.000	503.7
64 1,1,2-Trichloroethane	97	9.202	9.202	(0.909)	226447	500.000	506.7
65 Tetrachloroethene	164	9.233	9.233	(0.912)	224740	500.000	491.8
66 2-Hexanone	43	9.446	9.446	(0.934)	203465	500.000	616.5
67 Dibromochloromethane	129	9.563	9.563	(0.945)	222559	500.000	562.7
68 1,2 Dibromoethane	107	9.679	9.679	(0.957)	224892	500.000	515.7
70 Chlorobenzene	112	10.150	10.150	(1.003)	789750	500.000	503.8
71 1,1,1,2-Tetrachloroethane	131	10.241	10.241	(1.012)	243741	500.000	517.4
72 Ethylbenzene	106	10.235	10.235	(1.011)	436917	500.000	505.6
73 m + p-Xylene	106	10.357	10.357	(1.024)	1056681	1000.00	1014
74 Xylene-o	106	10.755	10.755	(1.063)	525170	500.000	511.2
M 75 Xylenes (total)	106				1581851	500.000	1540
76 Styrene	104	10.779	10.779	(1.065)	911313	500.000	525.4
77 Bromoform	173	10.981	10.981	(1.085)	142435	500.000	584.6
78 Isopropylbenzene	105	11.103	11.103	(1.097)	1365371	500.000	515.5
79 Bromobenzene	156	11.446	11.446	(0.919)	341865	500.000	510.5
81 n-Propylbenzene	120	11.519	11.519	(0.925)	386309	500.000	509.5
82 2-Chlorotoluene	126	11.629	11.629	(0.934)	335393	500.000	509.8
83 1,1,2,2-Tetrachloroethane	83	11.482	11.482	(0.922)	276312	500.000	507.9
84 1,2,3-Trichloropropane	110	11.531	11.531	(0.926)	85050	500.000	496.2
85 4-Chlorotoluene	126	11.745	11.745	(0.943)	340449	500.000	505.2
86 1,3,5-Trimethylbenzene	105	11.702	11.702	(0.940)	1055866	500.000	508.0
87 tert-Butylbenzene	119	12.014	12.014	(0.965)	976616	500.000	512.7

671 150

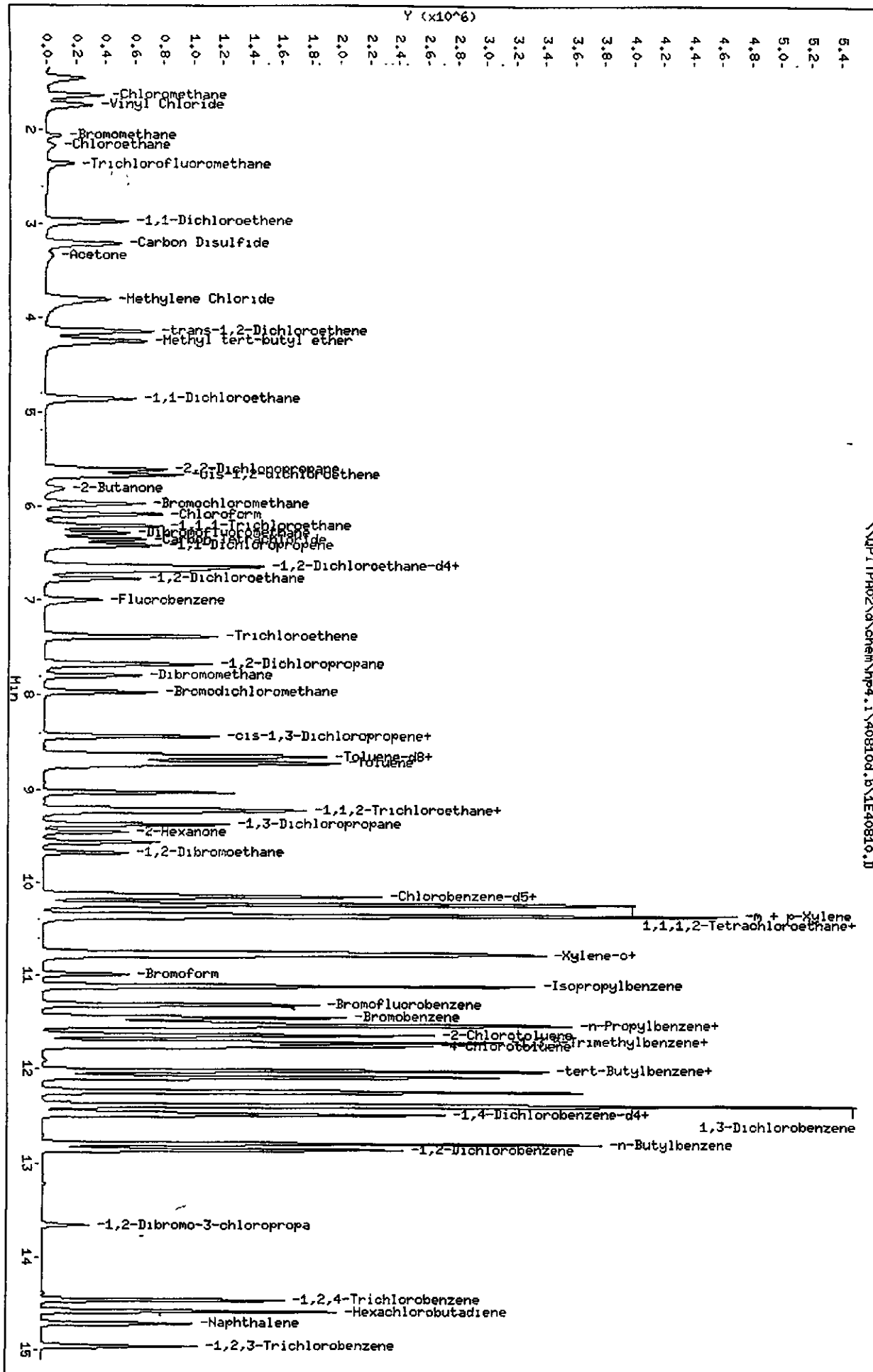
Data File: \\QPITPA02\d\chem\hp4.i\40810d.b\1D40810.D
Report Date: 10-Aug-2000 16:36

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Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	
=====	=====	==	=====	=====	=====	=====	=====	
88 1,2 4-Trimethylbenzene	105	12.081	12.081	(0.970)	1016549	500.000	514.0	
89 sec Butylbenzene	105	12.234	12.234	(0.982)	1487770	500.000	541.5	
90 4-Isopropyltoluene	119	12.381	12.381	(0.994)	1201958	500.000	536.4	
91 1,3-Dichlorobenzene	146	12.381	12.381	(0.994)	638053	500.000	512.8	
93 1,4-Dichlorobenzene	146	12.479	12.479	(1.002)	631138	500.000	499.7	
94 n Butylbenzene	91	12.790	12.790	(1.027)	1020614	500.000	515.3	
95 1,2-Dichlorobenzene	146	12.852	12.852	(1.032)	573514	500.000	502.4	
96 1,2-Dibromo-3-chloropropane	157	13.659	13.659	(1.097)	38988	500.000	541.6	
97 1,2,4 Trichlorobenzene	180	14.453	14.453	(1.161)	257882	500.000	492.9	
98 Hexachlorobutadiene	225	14.576	14.576	(1.170)	198835	500.000	472.2	
99 Naphthalene	128	14.710	14.710	(1.181)	362076	500.000	475.8	
100 1,2,3-Trichlorobenzene	180	14.955	14.955	(1.201)	167134	500.000	443.7	

Data File: \\QPIFPA02\chem\mp4.1\408104.b\1E40810.D
 Date: 10-AUG-2000 14:35
 Client ID: vstd200
 Sample Info: vstd200 5ml
 Volume Injected (uL): 5.0
 Column phase: DB 624

Instrument: mp4.1
 Operator: 10099
 Column diameter: 0.18



STL Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40810d.b\1E40810.D
 Lab Smp Id: vstd200 Client Smp ID: vstd200
 Inj Date : 10-AUG-2000 14:35 MS Autotune Date: 08-AUG-1996 10:00
 Operator : 10099 Inst ID: hp4.i
 Smp Info : vstd200 5ml
 Misc Info : ,40810d.b,8260bh2o.M
 Comment :
 Method : \\QPITPA02\d\chem\hp4.i\40810d.b\8260bh2o.m *K. f. u.*
 Meth Date : 10-Aug-2000 16:37 dudeckk Quant Type: ISTD
 Cal Date : 10-AUG-2000 12:35 Cal File: 3C40810.D
 Als bottle: 6 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 2-padep.sub
 Target Version: 4.04
 Processing Host: PITPC077

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.992	6.992	(1.000)	525499	250.000	
* 69 Chlorobenzene-d5	119	10.122	10.122	(1.000)	130469	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.458	12.458	(1.000)	216631	250.000	
\$ 39 Dibromofluoromethane	113	6.283	6.283	(0.899)	430551	1000.00	978.3
\$ 43 1,2-Dichloroethane-d4	65	6.681	6.681	(0.955)	446979	1000.00	941.2
\$ 59 Toluene-d8	98	8.649	8.649	(0.854)	1938238	1000.00	946.2
\$ 80 Bromofluorobenzene	95	11.308	11.308	(1.117)	778999	1000.00	986.2
1 Dichlorodifluoromethane	85	1.454	1.454	(0.208)	508101	1000.00	970.8
2 Chloromethane	50	1.643	1.643	(0.235)	711140	1000.00	941.7
3 Vinyl Chloride	62	1.747	1.747	(0.250)	635614	1000.00	972.4
4 Bromomethane	94	2.065	2.065	(0.295)	88530	1000.00	873.9
5 Chloroethane	64	2.169	2.169	(0.310)	111598	1000.00	905.9
6 Trichlorofluoromethane	101	2.358	2.358	(0.337)	242021	1000.00	746.2
12 1,1-Dichloroethene	96	2.970	2.970	(0.425)	414175	1000.00	993.0
13 Acetone	43	3.343	3.343	(0.478)	149260	1000.00	839.0

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
15 Carbon Disulfide	76	3 208	3 208	(0.459)	1270062	1000.00	1042
18 Methylene Chloride	84	3 807	3.807	(0.545)	519426	1000.00	981.7
19 trans-1,2-Dichloroethene	96	4 144	4 144	(0.593)	542185	1000.00	1009
20 Methyl tert-butyl ether	73	4.247	4 247	(0.607)	1186317	1000.00	1042
24 1,1-Dichloroethane	63	4.865	4 865	(0.696)	910317	1000.00	986.7
27 2,2-Dichloropropane	77	5 611	5.611	(0.802)	661709	1000.00	1037
28 cis-1,2-dichloroethene	96	5.672	5 672	(0.811)	590114	1000.00	994.1
M 29 1,2-Dichloroethene (total)	100				1132299	2000.00	2003
30 Bromochloromethane	128	5 971	5.971	(0.854)	273528	1000.00	999.4
31 2-Butanone	43	5 812	5.812	(0.831)	296637	1000.00	1122
37 Chloroform	83	6 088	6 088	(0.871)	774338	1000.00	982.6
38 1,1,1-Trichloroethane	97	6 210	6 210	(0.888)	678817	1000.00	1008
40 1,1-Dichloropropene	75	6.412	6 412	(0.917)	550915	1000.00	983.7
41 Carbon Tetrachloride	117	6 350	6 350	(0.908)	558273	1000.00	1026
42 Benzene	78	6 638	6.638	(0.949)	2168595	1000.00	960.9
45 1,2-Dichloroethane	62	6.766	6.766	(0.968)	573393	1000.00	944.1
47 Trichloroethene	130	7.384	7 384	(1.056)	590195	1000.00	991.7
49 1,2-Dichloropropane	63	7 671	7 671	(1.097)	559853	1000.00	972.8
50 Dibromomethane	93	7 793	7.793	(1.115)	278055	1000.00	980.9
53 Bromodichloromethane	83	7.964	7 964	(1.139)	569575	1000.00	1021
57 cis-1,3 Dichloropropene	75	8.435	8 435	(1.206)	749239	1000.00	1027
58 4 Methyl-2 Pentanone	43	8 618	8.618	(0.851)	620377	1000.00	1157
60 Toluene	91	8 716	8.716	(0.861)	2358321	1000.00	934.3
61 trans-1,3-Dichloropropene	75	8.435	8 435	(0.833)	749239	1000.00	1038
63 1,3-Dichloropropane	76	9.377	9 377	(0.926)	799129	1000.00	947.6
64 1,1,2-Trichloroethane	97	9 211	9 211	(0.910)	470827	1000.00	964.3
65 Tetrachloroethene	164	9.236	9.236	(0.912)	469546	1000.00	940.4
66 2-Hexanone	43	9.456	9 456	(0.934)	428392	1000.00	1188
67 Dibromochloromethane	129	9.230	9.230	(0.912)	416139	1000.00	963.0
68 1,2-Dibromoethane	107	9 682	9.682	(0.957)	461094	1000.00	967.8
70 Chlorobenzene	112	10.153	10 153	(1.003)	1607588	1000.00	938.8
71 1,1,1,2 Tetrachloroethane	131	10 245	10 245	(1.012)	478686	1000.00	930.2
72 Ethylbenzene	106	10.232	10.232	(1.011)	894469	1000.00	947.5
73 m + p-Xylene	106	10.355	10 355	(1.023)	2106879	2000.00	1851
74 Xylene-o	106	10.752	10 752	(1.062)	1112076	1000.00	990.8
M 75 Xylenes (total)	106				3218955	1000.00	2868
76 Styrene	104	10 783	10.783	(1.065)	1814554	1000.00	957.5
77 Bromoform	173	10.984	10 984	(1.085)	313995	1000.00	1180
78 Isopropylbenzene	105	11.107	11.107	(1.097)	2777670	1000.00	959.9
79 Bromobenzene	156	11 443	11.443	(0.919)	712268	1000.00	953.1
81 n-Propylbenzene	120	11.522	11 522	(0.925)	776756	1000.00	918.1
82 2-Chlorotoluene	126	11 632	11 632	(0.934)	685389	1000.00	933.6
83 1,1,2,2-Tetrachloroethane	83	11 486	11 486	(0.922)	589052	1000.00	970.4
84 1,2,3-Trichloropropane	110	11.535	11.535	(0.926)	175481	1000.00	917.4
85 4-Chlorotoluene	126	11 749	11 749	(0.943)	674535	1000.00	897.1
86 1,3,5-Trimethylbenzene	105	11.706	11 706	(0.940)	2164970	1000.00	933.4
87 tert-Butylbenzene	119	12 018	12.018	(0.965)	2046796	1000.00	962.9

671 154

Data File: \\QPITPA02\d\chem\hp4.i\40810d.b\1E40810.D
Report Date: 10-Aug-2000 16:37

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Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL AMT (ng)	ON-COL (ng)
88 1,2,4-Trimethylbenzene	105	11 706	11 706	(0.940)	2164970		1000.00	981.0
89 sec-Butylbenzene	105	11 706	11 706	(0.940)	2164970		1000.00	706.2
90 4-Isopropyltoluene	119	12.018	12 018	(0.965)	2046796		1000.00	818.6
91 1,3-Dichlorobenzene	146	12 378	12.378	(0.994)	1237961		1000.00	891.6
93 1,4-Dichlorobenzene	146	12 482	12.482	(1.002)	1326529		1000.00	941.2
94 n-Butylbenzene	91	12 794	12 794	(1.027)	2348250		1000.00	1062
95 1,2 Dichlorobenzene	146	12 855	12.855	(1.032)	1223559		1000.00	960.5
96 1,2-Dibromo-3-chloropropane	157	13 662	13 662	(1.097)	106838		1000.00	1330
97 1,2,4-Trichlorobenzene	180	14.457	14 457	(1.160)	625908		1000.00	1072
98 Hexachlorobutadiene	225	14 579	14 579	(1.170)	445298		1000.00	947.6
99 Naphthalene	128	14.707	14.707	(1.181)	962222		1000.00	1133
100 1,2,3-Trichlorobenzene	180	14 958	14 958	(1.201)	415080		1000.00	987.5

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

671 155

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0H220139

Instrument ID: HP4 Calibration Date: 08/24/00 Time: 0703

Lab File ID: CC40824 Init. Calib. Date(s): 08/10/00 08/10/00

Heated Purge: (Y/N) N Init. Calib. Times: 1235 1611

GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.359	0.296	0.1	17.5	50.0
Vinyl Chloride	0.311	0.259	0.01	16.7	20.0
Bromomethane	0.048	0.040	0.01	16.7	50.0
Chloroethane	0.058	0.057	0.01	1.7	50.0
1,1-Dichloroethene	0.198	0.169	0.01	14.6	20.0
Methylene Chloride	0.252	0.177	0.01	29.8	50.0
trans-1,2-Dichloroethene	0.255	0.218	0.01	14.5	50.0
1,1-Dichloroethane	0.439	0.384	0.1	12.5	50.0
cis-1,2-dichloroethene	0.282	0.246	0.01	12.8	50.0
Chloroform	0.375	0.345	0.01	8.0	20.0
1,1,1-Trichloroethane	0.320	0.294	0.01	8.1	50.0
Carbon Tetrachloride	0.259	0.234	0.01	9.6	50.0
1,2-Dichloroethane	0.289	0.267	0.01	7.6	50.0
Benzene	1.074	0.938	0.01	12.7	50.0
Trichloroethene	0.283	0.235	0.01	17.0	50.0
1,2-Dichloropropane	0.274	0.234	0.01	14.6	20.0
Bromodichloromethane	0.265	0.239	0.01	9.8	50.0
cis-1,3-Dichloropropene	0.347	0.308	0.01	11.2	50.0
Toluene	4.837	4.316	0.01	10.8	20.0
trans-1,3-Dichloropropene	1.383	1.249	0.01	9.7	50.0
1,1,2-Trichloroethane	0.936	0.845	0.01	9.7	50.0
Tetrachloroethene	0.957	0.752	0.01	21.4	50.0
Dibromochloromethane	0.828	0.718	0.01	13.3	50.0
Chlorobenzene	3.281	2.902	0.3	11.6	50.0
Ethylbenzene	1.809	1.587	0.01	12.3	20.0
Styrene	3.631	3.326	0.01	8.4	50.0
Bromoform	0.510	0.465	0.1	8.8	50.0
1,1,2,2-Tetrachloroethane	0.701	0.668	0.3	4.7	50.0
Acetone	0.085	0.082	0.01	3.5	50.0
Carbon Disulfide	0.580	0.530	0.01	8.6	50.0
2-Butanone	0.126	0.144	0.01	14.3	50.0
4-Methyl-2-Pentanone	1.027	1.201	0.01	16.9	50.0
2-Hexanone	0.691	0.834	0.01	20.7	50.0
1,2-Dichloroethene (total)	0.269	0.232	0.01	13.8	50.0
Xylenes (total)	2.151	1.878	0.01	12.7	50.0
Dibromofluoromethane	0.209	0.210	0.01	0.5	50.0

671 156

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: COH220139

Instrument ID: HP4

Calibration Date: 08/24/00 Time: 0703

Lab File ID: CC40824

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

Heated Purge: (Y/N) N

Init. Calib. Times: 1235 1611

GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
1,2-Dichloroethane-d4	0.226	0.234	0.01	3.5	50.0
Toluene-d8	3.925	4.029	0.01	2.6	50.0
Bromofluorobenzene	1.514	1.480	0.01	2.2	50.0

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\CC40824.D
 Report Date: 08/24/2000

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: hp4.i
 Lab File ID: CC40824.D
 Analysis Type: WATER

Injection Date: 24-AUG-2000 07:03
 Lab Sample ID: vstd50
 Method File: \\QPITPA02\D\chem\hp4.i\40824d.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
153 1,2-Dichloroethene (total)	500.0000	430.9182	13.8	50.0
154 Xylenes (total)	750.0000	668.3653	10.9	50.0
2 Chloromethane	250.0000	205.9040	17.6	50.0
3 Vinyl Chloride	250.0000	208.5691	16.6	20.0
4 Bromomethane	250.0000	205.7443	17.7	50.0
5 Chloroethane	250.0000	244.2514	2.3	50.0
9 1,1-Dichloroethene	250.0000	212.7595	14.9	20.0
107 Carbon Disulfide	250.0000	228.4631	8.6	50.0
106 Acetone	250.0000	243.4328	2.6	50.0
10 Methylene Chloride	250.0000	175.7547	29.7	50.0
13 trans-1,2-Dichloroethene	250.0000	212.8050	14.9	50.0
15 1,1-Dichloroethane	250.0000	218.5901	12.6	50.0
17 cis-1,2-dichloroethene	250.0000	217.8607	12.9	50.0
108 2-Butanone	250.0000	285.5577	14.2	50.0
18 Chloroform	250.0000	229.9974	8.0	20.0
20 1,1,1-Trichloroethane	250.0000	229.8908	8.0	50.0
149 Dibromofluoromethane	250.0000	251.3868	0.6	50.0
21 Carbon Tetrachloride	250.0000	225.8966	9.6	50.0
24 Benzene	250.0000	218.4608	12.6	50.0
150 1,2-Dichloroethane-d4	250.0000	259.2536	3.7	50.0
23 1,2-Dichloroethane	250.0000	231.4488	7.4	50.0
137 Fluorobenzene	250.0000	250.0000	0.0	50.0
26 Trichloroethene	250.0000	207.4175	17.0	50.0
27 1,2-Dichloropropane	250.0000	213.7037	14.5	20.0
28 Bromodichloromethane	250.0000	225.6035	9.8	50.0
34 trans-1,3-Dichloropropene	250.0000	225.6454	9.7	50.0
31 cis-1,3-Dichloropropene	250.0000	221.6636	11.3	50.0
110 4-Methyl-2-Pentanone	250.0000	292.3563	16.9	50.0
151 Toluene-d8	250.0000	256.5924	2.6	50.0
33 Toluene	250.0000	223.1086	10.8	20.0
36 1,1,2-Trichloroethane	250.0000	225.9339	9.6	50.0
38 Dibromochloromethane	250.0000	216.9486	13.2	50.0
37 Tetrachloroethene	250.0000	196.6299	21.3	50.0
111 2-Hexanone	250.0000	301.7159	20.7	50.0
101 Chlorobenzene-d5	250.0000	250.0000	0.0	50.0
40 Chlorobenzene	250.0000	221.0658	11.6	50.0
41 Ethylbenzene	250.0000	219.3329	12.3	20.0
o m + p-Xylene	500.0000	443.7449	11.3	50.0
o Xylene-o	250.0000	218.2940	12.7	50.0

671 158

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\CC40824.D
Report Date: 08/24/2000

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

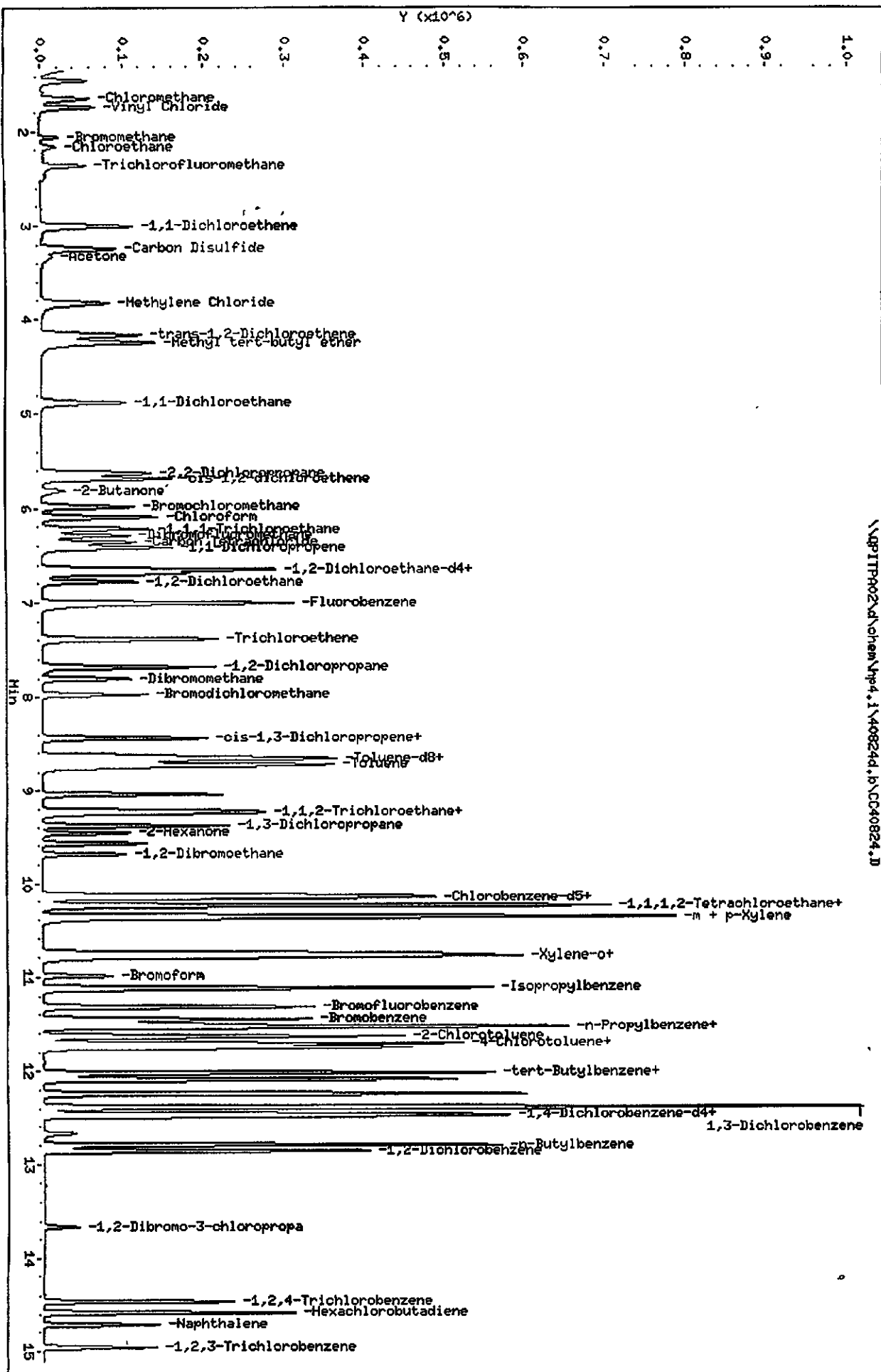
Instrument ID: hp4.i
Lab File ID: CC40824.D
Analysis Type: WATER

Injection Date: 24-AUG-2000 07:03
Lab Sample ID: vstd50
Method File: \\QPITPA02\D\chem\hp4.i\40824d.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
44 Styrene	250.0000	228.9616	8.4	50.0
45 Bromoform	250.0000	227.9487	8.8	50.0
152 Bromofluorobenzene	250.0000	244.4098	2.2	50.0
46 1,1,2,2-Tetrachloroethane	250.0000	238.4929	4.6	50.0
102 1,4-Dichlorobenzene-d4	250.0000	250.0000	0.0	50.0

Data File: \NPITPA02\chem\hp4.1\40824d.b\CC40824.D
 Date : 24-AUG-2000 07:03
 Client ID: vstd50
 Sample Info: vstd50 Sm1
 Volume Injected (uL): 5.0
 Column phase: DB 624

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



STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40824d.b\CC40824.D
 Lab Smp Id: vstd50 Client Smp ID: vstd50
 Inj Date : 24-AUG-2000 07:03
 Operator : 16328 Inst ID: hp4.i
 Smp Info : vstd50 5ml
 Misc Info : vstd50,40824d.b,8260bh2o.M
 Comment :
 Method : \\QPITPA02\d\chem\hp4.i\40824d.b\8260bh2o.m
 Meth Date : 24-Aug-2000 07:56 dudeckk Quant Type: ISID
 Cal Date : 10-AUG-2000 12:35 Cal File: 3C40810.D
 Als bottle: 2 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: 6-br.sub
 Target Version: 4.04
 Processing Host: PITPC077

K 8/24/00

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	7.001	7.001	(1.000)	393004	250.000	
* 69 Chlorobenzene-d5	119	10.125	10.125	(1.000)	96831	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.460	12.460	(1.000)	154713	250.000	
\$ 39 Dibromofluoromethane	113	6.286	6.286	(0.898)	82737	250.000	251.4
\$ 43 1,2-Dichloroethane-d4	65	6.689	6.689	(0.955)	92080	250.000	259.2
\$ 59 Toluene-d8	98	8.651	8.651	(0.854)	390105	250.000	256.6
\$ 80 Bromofluorobenzene	95	11.311	11.311	(1.117)	143281	250.000	244.4
2 Chloromethane	50	1.646	1.646	(0.235)	116282	250.000	205.9
3 Vinyl Chloride	62	1.743	1.743	(0.249)	101954	250.000	208.6
4 Bromomethane	94	2.061	2.061	(0.294)	15588	250.000	205.7
5 Chloroethane	64	2.159	2.159	(0.308)	22502	250.000	244.2
12 1,1-Dichloroethene	96	3.003	3.003	(0.429)	66367	250.000	212.8
13 Acetone	43	3.327	3.327	(0.475)	32386	250.000	243.4
15 Carbon Disulfide	76	3.241	3.241	(0.463)	208353	250.000	228.5
18 Methylene Chloride	84	3.822	3.822	(0.546)	69547	250.000	175.8

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\CC40824.D
Report Date: 24-Aug-2000 07:56

Page 2

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ng)	(ng)
=====	----	==	=====	-----	=====	-----	=====	
19 trans-1,2-Dichloroethene	96	4.164	4.164	(0.595)	85488	250.000	212.8	
24 1,1-Dichloroethane	63	4.879	4.879	(0.697)	150823	250.000	218.6	
28 cis-1,2-dichloroethene	96	5.680	5.680	(0.811)	96722	250.000	217.9	
M 29 1,2-Dichloroethene (total)	100				182210	500.000	430.9	
31 2-Butanone	43	5.809	5.809	(0.830)	56432	250.000	285.6	
37 Chloroform	83	6.090	6.090	(0.870)	135556	250.000	230.0	
38 1,1,1-Trichloroethane	97	6.218	6.218	(0.888)	115763	250.000	229.9	
41 Carbon Tetrachloride	117	6.359	6.359	(0.908)	91889	250.000	225.9	
42 Benzene	78	6.646	6.646	(0.949)	368736	250.000	218.5	
45 1,2-Dichloroethane	62	6.775	6.775	(0.968)	105122	250.000	231.4	
47 Trichloroethene	130	7.386	7.386	(1.055)	92319	250.000	207.4	
49 1,2-Dichloropropane	63	7.673	7.673	(1.096)	91982	250.000	213.7	
53 Bromodichloromethane	83	7.973	7.973	(1.139)	94096	250.000	225.6	
57 cis-1,3-Dichloropropene	75	8.437	8.437	(1.205)	120907	250.000	221.7	
58 4-Methyl-2-Pentanone	43	8.615	8.615	(0.851)	116317	250.000	292.4	
60 Toluene	91	8.719	8.719	(0.861)	417953	250.000	223.1	
61 trans-1,3-Dichloropropene	75	8.437	8.437	(0.833)	120907	250.000	225.6	
64 1,1,2-Trichloroethane	97	9.208	9.208	(0.909)	81870	250.000	225.9	
65 Tetrachloroethene	164	9.238	9.238	(0.912)	72862	250.000	196.6	
66 2-Hexanone	43	9.452	9.452	(0.934)	80741	250.000	301.7	
67 Dibromochloromethane	129	9.238	9.238	(0.912)	69577	250.000	216.9	
70 Chlorobenzene	112	10.155	10.155	(1.003)	280956	250.000	221.1	
72 Ethylbenzene	106	10.235	10.235	(1.011)	153676	250.000	219.3	
73 m + p-Xylene	106	10.363	10.363	(1.024)	374924	500.000	443.7	
74 Xylene-o	106	10.754	10.754	(1.062)	181846	250.000	218.3	
M 75 Xylenes (total)	106				556770	250.000	668.4	
76 Styrene	104	10.785	10.785	(1.065)	322020	250.000	229.0	
77 Bromoform	173	10.987	10.987	(1.085)	45028	250.000	227.9	
83 1,1,2,2-Tetrachloroethane	83	11.488	11.488	(0.922)	103393	250.000	238.5	

GC/MS VOLATILE
QC DATA

Data File: \\QPITPA02\ID\chem\hp4.1\40810d.b\CF40810.D

Page 2

Date : 10-AUG-2000 12:00

Client ID: 50NGBFB

Instrument: hp4.1

Sample Info: bfb 1ul inj

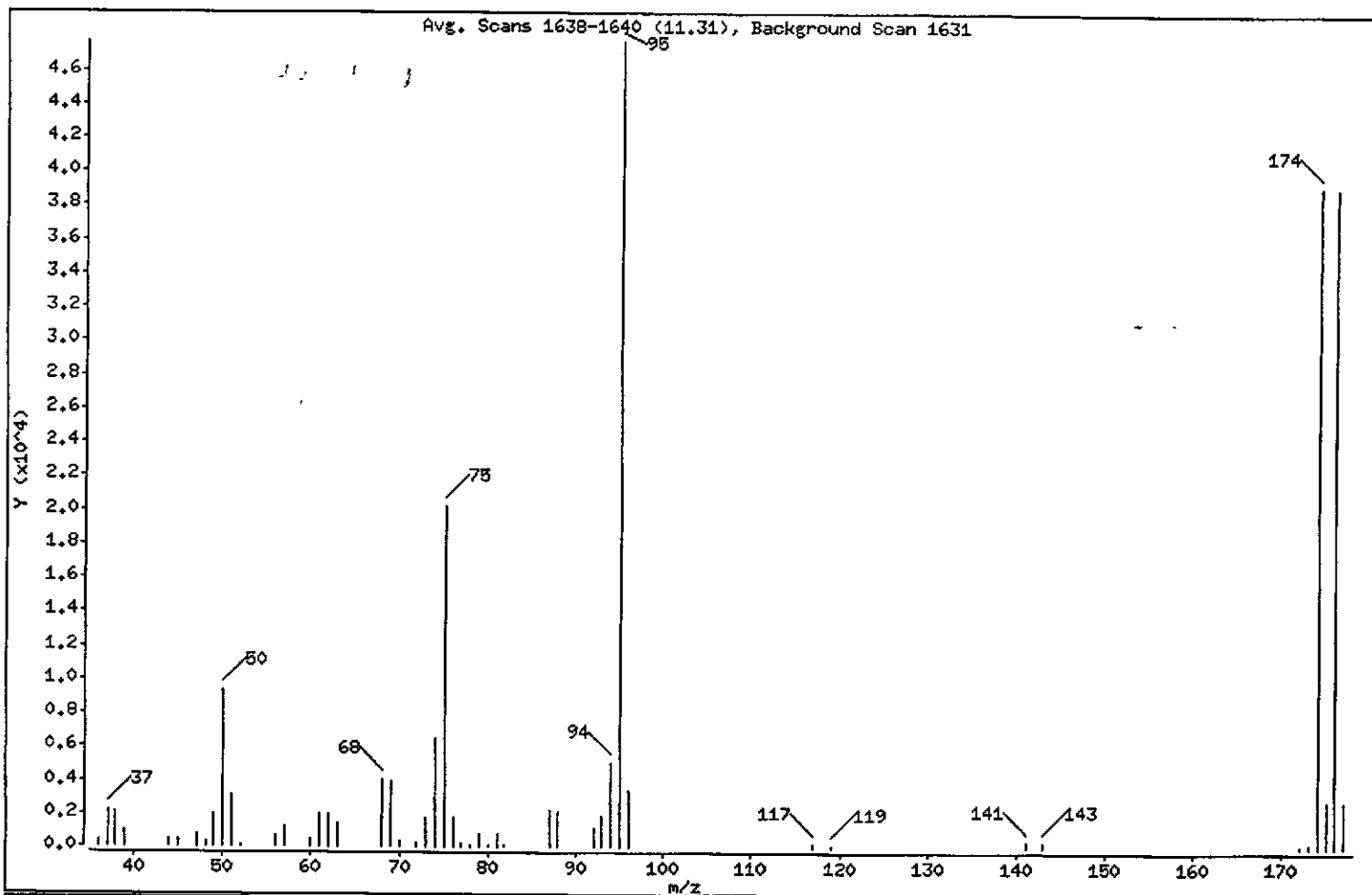
Volume Injected (uL): 1.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.51
75	30.00 - 60.00% of mass 95	42.21
96	5.00 - 9.00% of mass 95	7.20
173	Less than 2.00% of mass 174	0.37 (0.45)
174	50.00 - 100.00% of mass 95	81.99
175	5.00 - 9.00% of mass 174	5.65 (6.89)
176	95.00 - 101.00% of mass 174	81.79 (99.76)
177	5.00 - 9.00% of mass 176	5.80 (7.09)

Data File: \\QPITPA02\ID\chem\hp4.1\40810d.b\CF40810.D

Page 3

Date : 10-AUG-2000 12:00

Client ID: 50NCBFB

Instrument: hp4.1

Sample Info: bfb 1ul inj

Volume Injected (uL): 1.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.18

Data File: CF40810.D

Spectrum: Avg. Scans 1638-1640 (11.31), Background Scan 1631

Location of Maximum: 95.00

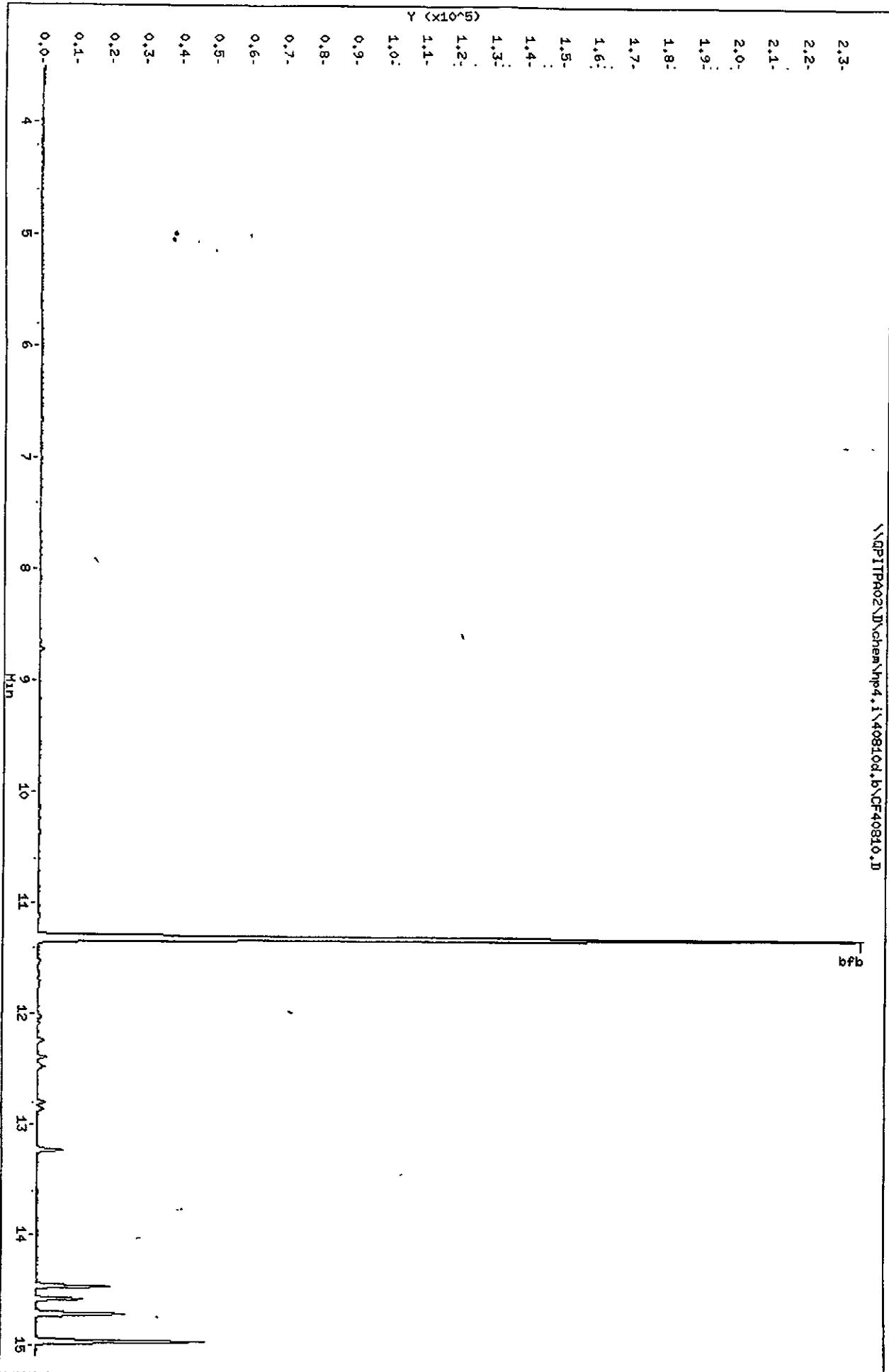
Number of points: 49

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	473	57.00	1184	77.00	272	117.00	175
37.00	2196	60.00	430	78.00	148	119.00	188
38.00	2037	61.00	1977	79.00	774	141.00	349
39.00	933	62.00	1941	80.00	149	143.00	362
44.00	415	63.00	1417	81.00	783	172.00	185
45.00	397	68.00	4008	82.00	67	173.00	176
47.00	788	69.00	3910	87.00	2228	174.00	3912
48.00	297	70.00	281	88.00	2125	175.00	2645
49.00	1951	72.00	235	92.00	1080	176.00	3906
50.00	9308	73.00	1752	93.00	1826	177.00	2766
51.00	3097	74.00	6463	94.00	5013		
52.00	75	75.00	20136	95.00	47704		
56.00	665	76.00	1791	96.00	3437		

Data File: \\NPITPA02\chem\hpd,1\40810d,b\CF40810.D
 Date : 10-AUG-2000 12:00
 Client ID: SONGBFB
 Sample Info: bfb 1u1 iny
 Volume Injected (uL): 1.0
 Column phase: DB624 20m

Instrument: hpd,1
 Operator: 10099
 Column diameter: 0.18

\\NPITPA02\chem\hpd,1\40810d,b\CF40810.D



Data File: \\QPITPA02\B\chem\hp4.1\40824d.b\BF40824.D

Page 2

Date : 24-AUG-2000 06:33

Client ID: 50NGBFB

Instrument: hp4.1

Sample Info: bfb 1ul inj

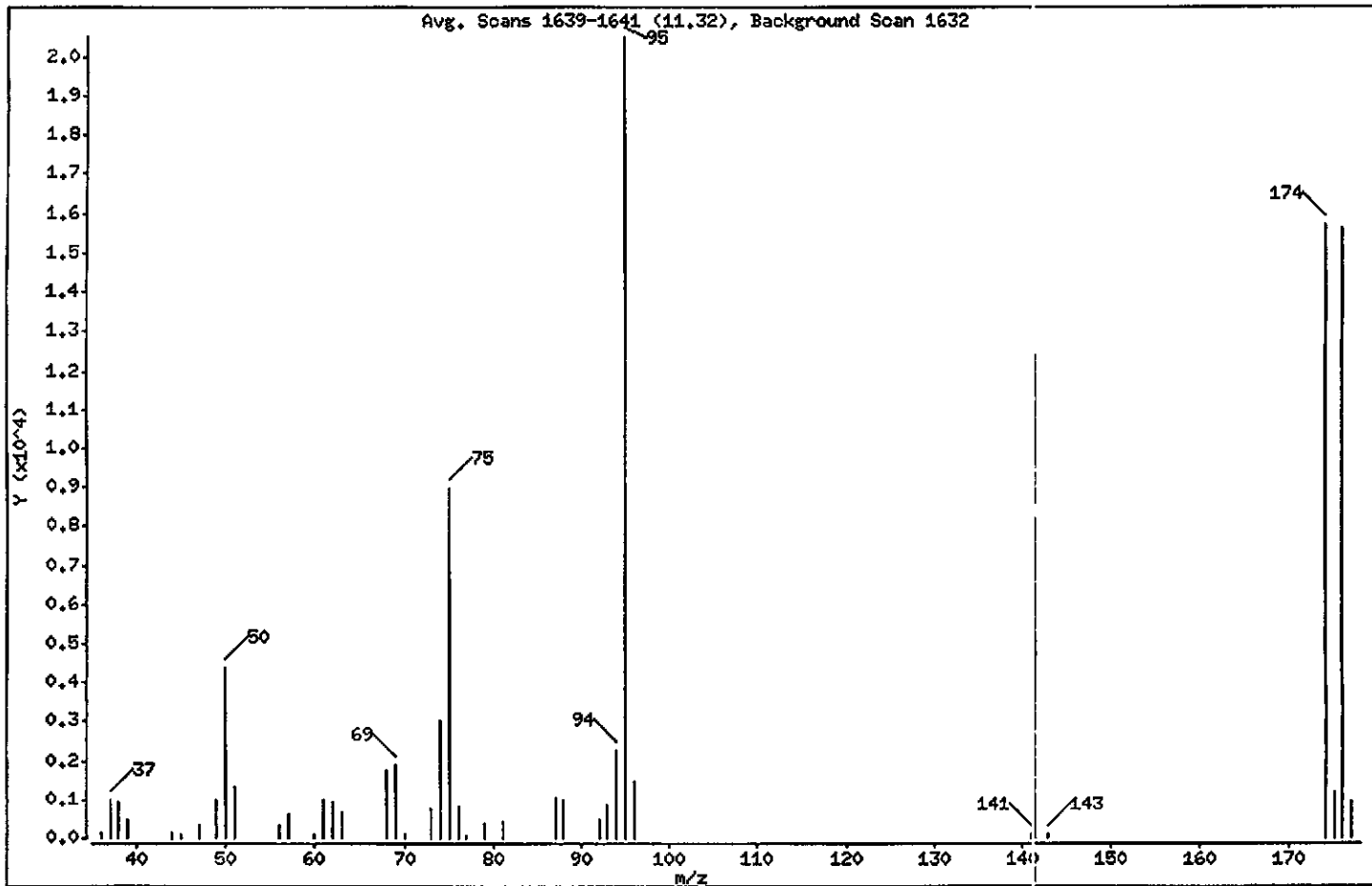
Volume Injected (uL): 1.0

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.35
75	30.00 - 60.00% of mass 95	43.78
96	5.00 - 9.00% of mass 95	7.08
173	Less than 2.00% of mass 174	0.00 (0.00)
174	50.00 - 100.00% of mass 95	76.65
175	5.00 - 9.00% of mass 174	5.68 (7.42)
176	95.00 - 101.00% of mass 174	76.19 (99.40)
177	5.00 - 9.00% of mass 176	4.58 (6.01)

Data File: \\QPITPA02\D\chem\hp4.1\40824d.b\BF40824.D

Page 3

Date : 24-AUG-2000 06:33

Client ID: 50NCBFB

Instrument: hp4.1

Sample Info: bfb 1ul inj

Volume Injected (uL): 1.0

Operator: 16328

Column phase: DB624 20m

Column diameter: 0.18

Data File: BF40824.D

Spectrum: Avg. Scans 1639-1641 (11.32), Background Scan 1632

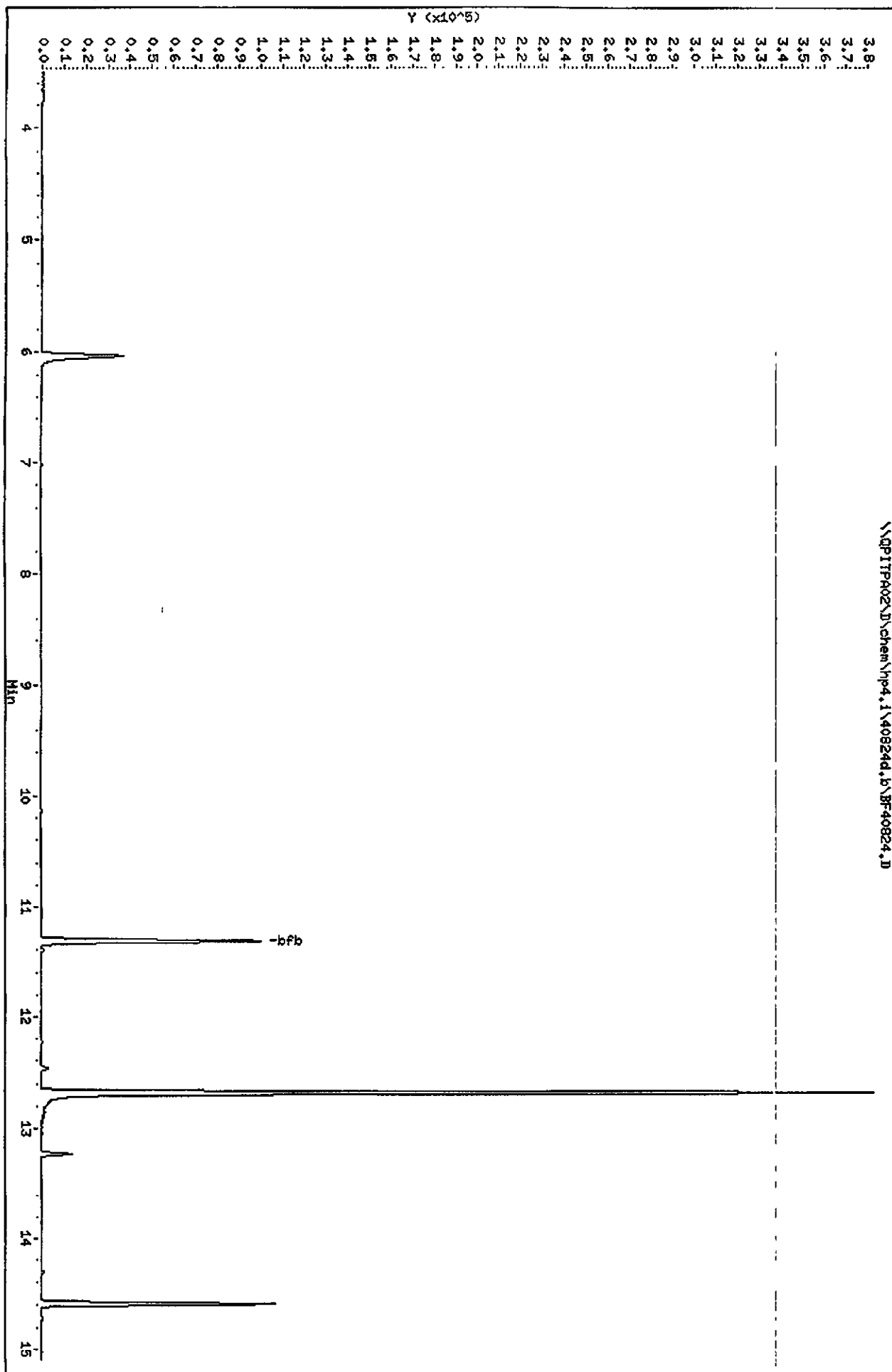
Location of Maximum: 98.00

Number of points: 39

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	157	56.00	320	74.00	3025	94.00	2285
37.00	974	57.00	613	75.00	8981	98.00	20512
38.00	945	60.00	73	76.00	797	96.00	1483
39.00	459	61.00	971	77.00	69	141.00	105
44.00	164	62.00	959	79.00	398	143.00	87
45.00	93	63.00	669	81.00	447	174.00	15723
47.00	353	68.00	1722	87.00	1027	178.00	1166
49.00	972	69.00	1876	88.00	976	176.00	15629
50.00	4379	70.00	79	92.00	482	177.00	940
51.00	1343	73.00	745	93.00	850		

Data File: \\QIPITPA02\chem\hp4.i\40824d.b\BF40824.D
Date : 24-AUG-2000 06:33
Client ID: BONEBFB
Sample Info: bfb 1ul inj
Volume Injected (ul): 1.0
Column phase: DB624 20m

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



UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

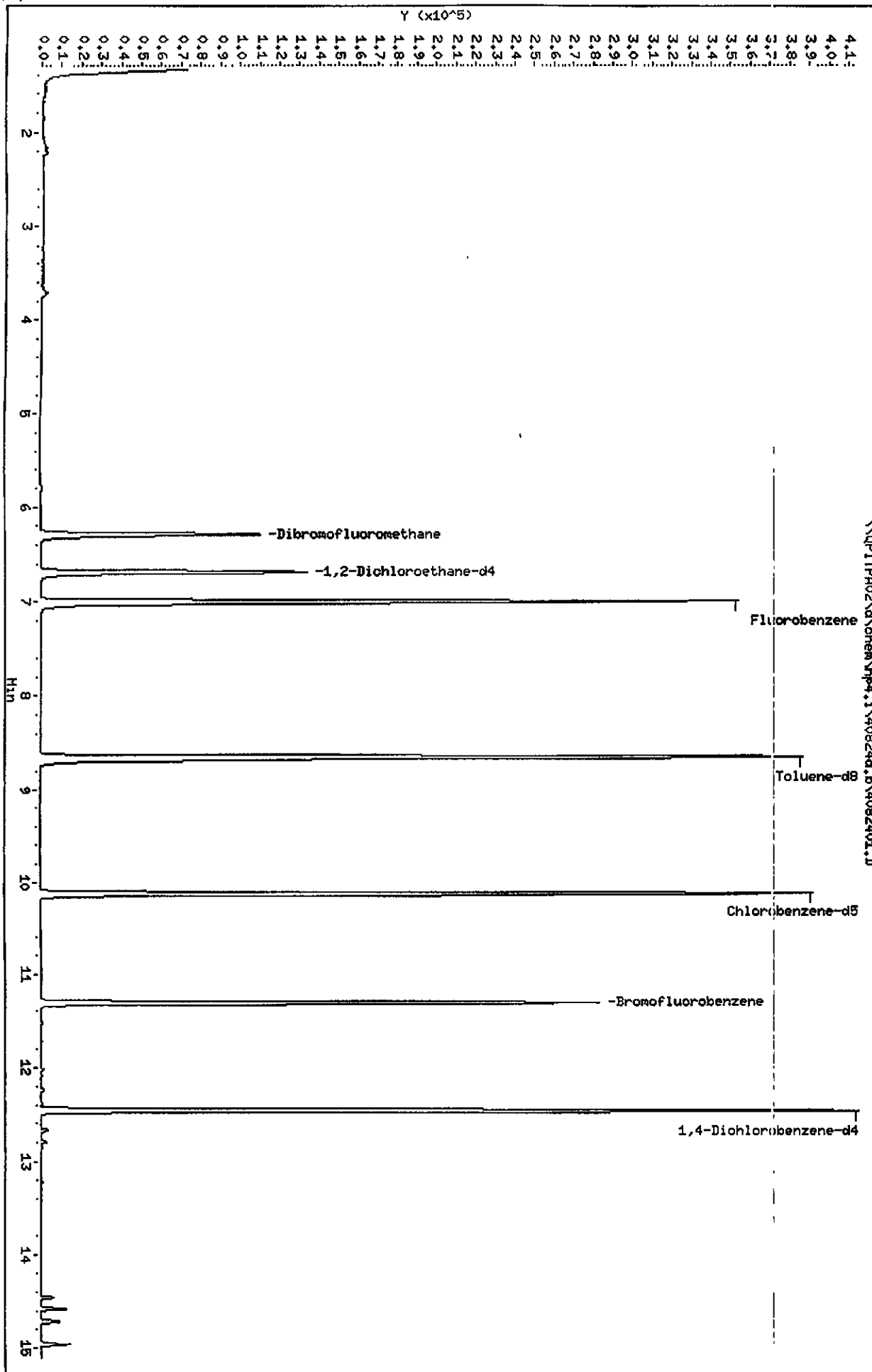
Matrix: (soil/water) SOLID Lab Sample ID: COH240000 121
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 08/22/00
Work Order: DJC6Q101 Date Extracted: 08/24/00
Dilution factor: 1 Date Analyzed: 08/24/00
Moisture %: NA

QC Batch: 0237125

Client Sample Id: INTRA-LAB BLANK

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



Data File: \\QIPITPA02\chem\hp4.i\40824d.b\4082401.D
Date : 24-AUG-2000 07:37
Client ID:
Sample Info: pb blk (1ml/10ml)/5ml
Volume Injected (ul): 5.0
Column phase: DB 624

Instrument: hp4.i
Operator: 46328
Column diameter: 0.18

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082401.D
 Report Date: 24-Aug-2000 08:00

Page 1

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40824d.b\4082401.D

Lab Smp Id: vstd50

Inj Date : 24-AUG-2000 07:37

Operator : 16328

Inst ID: hp4.i

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

Misc Info : vstd50,40824d.b,8260bh2o.M

Comment :

Method : \\QPITPA02\D\chem\hp4.i\40824d.b\8260bh2o.m

Meth Date : 24-Aug-2000 07:56 dudeckk Quant Type: ISTD

Cal Date : 10-AUG-2000 12:35

Cal File: 3C40810.D

Als bottle: 3

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: tclp.sub

Target Version: 4.04

Processing Host: PITPC077

K8/24/0

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

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

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(UG/L)
* 46 Fluorobenzene	96	7.006	7.001	(1.000)	402454	250.000	
* 69 Chlorobenzene-d5	119	10.124	10.125	(1.000)	90205	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.460	12.460	(1.000)	130508	250.000	
\$ 43 1,2-Dichloroethane-d4	65	6.689	6.689	(0.955)	103153	283.610	56.72
\$ 39 Dibromofluoromethane	113	6.291	6.286	(0.898)	84334	250.222	50.04
\$ 59 Toluene-d8	98	8.651	8.651	(0.854)	363657	256.766	51.35
\$ 80 Bromofluorobenzene	95	11.310	11.311	(1.117)	122255	223.862	44.77
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.		

671 172

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082401.D
Report Date: 24-Aug-2000 08:00

Page 2

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

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COH240000 125
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

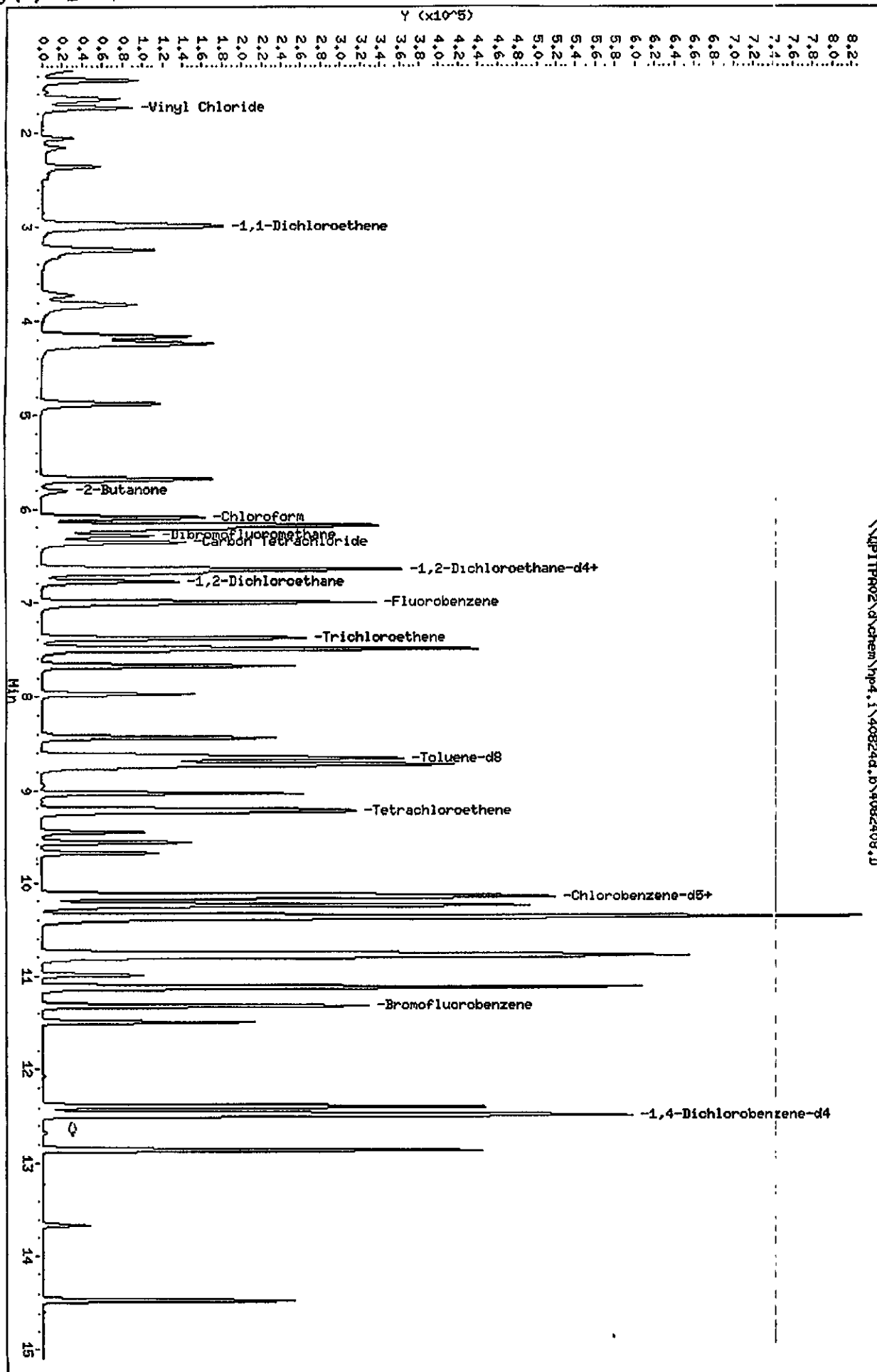
Sample WT/Vol: 5 / mL Date Received: 08/22/00
Work Order: DJC74101 Date Extracted: 08/24/00
Dilution factor: 1 Date Analyzed: 08/24/00
Moisture %: NA

QC Batch: 0237125

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.495	
78-93-3	2-Butanone	0.516	
56-23-5	Carbon tetrachloride	0.547	
108-90-7	Chlorobenzene	0.494	
67-66-3	Chloroform	0.525	
107-06-2	1,2-Dichloroethane	0.530	
75-35-4	1,1-Dichloroethene	0.516	
127-18-4	Tetrachloroethene	0.457	
79-01-6	Trichloroethene	0.477	
75-01-4	Vinyl chloride	0.536	

0



Data File: \\PIPP02\chem\hp4.1\40824d.b\4082408.D
 Date : 24-AUG-2000 10:36
 Client ID: INTRA-LAB CHECK
 Sample Info: blk ms (1ml/10ml)/5ml
 Volume Injected (ul): 5.0
 Column phase: DB 624

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

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082408.D
Report Date: 24-Aug-2000 11:12

Page 1

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40824d.b\4082408.D
Lab Smp Id: DJC74101 Client Smp ID: INTRA-LAB CHECK
Inj Date : 24-AUG-2000 10:36
Operator : 16328 Inst ID: hp4.i
Smp Info : blk ms (1ml/10ml)/5ml
Misc Info : djc74101,40824d.b,8260bh2o.M
Comment :
Method : \\QPITPA02\D\chem\hp4.i\40824d.b\8260bh2o.m K₂/24/0
Meth Date : 24-Aug-2000 07:56 dudeckk Quant Type: ISTD
Cal Date : 10-AUG-2000 12:35 Cal File: 3C40810.D
Als bottle: 10 QC Sample: METHOD SPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tc1p.sub
Target Version: 4.04
Processing Host: PITPC077

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

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

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	7.000	7.001	(1.000)	392590	250.000	
* 69 Chlorobenzene-d5	119	10.124	10.125	(1.000)	96364	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.459	12.460	(1.000)	147128	250.000	
\$ 43 1,2-Dichloroethane-d4	65	6.688	6.689	(0.955)	93871	264.576	52.92
\$ 39 Dibromofluoromethane	113	6.285	6.286	(0.898)	82731	251.634	50.33
\$ 59 Toluene-d8	98	8.651	8.651	(0.854)	381317	252.027	50.40
\$ 80 Bromofluorobenzene	95	11.310	11.311	(1.117)	144533	247.740	49.55
3 Vinyl Chloride	62	1.737	1.743	(0.248)	130901	268.069	53.61
12 1,1-Dichloroethene	96	3.002	3.003	(0.429)	80315	257.747	51.55
31 2-Butanone	43	5.802	5.809	(0.829)	50966	258.171	51.63
37 Chloroform	83	6.089	6.090	(0.870)	154486	262.394	52.48
41 Carbon Tetrachloride	117	6.358	6.359	(0.908)	111172	273.591	54.72
42 Benzene	78	6.646	6.646	(0.949)	417165	247.414	49.48
45 1,2-Dichloroethane	62	6.774	6.775	(0.968)	120316	265.182	53.04
47 Trichloroethene	130	7.379	7.386	(1.054)	106114	238.664	47.73

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Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082408.D
Report Date: 24-Aug-2000 11:12

Page 2

Compounds	QUANT SIG	CONCENTRATIONS					
		ON-COLUMN	FINAL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(UG/L)
-----	----	--	-----	-----	-----	-----	-----
65 Tetrachloroethene	164	9.238	9.238	(0.912)	84306	228.618	45.72
70 Chlorobenzene	112	10.155	10.155	(1.003)	312396	246.995	49.40

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

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

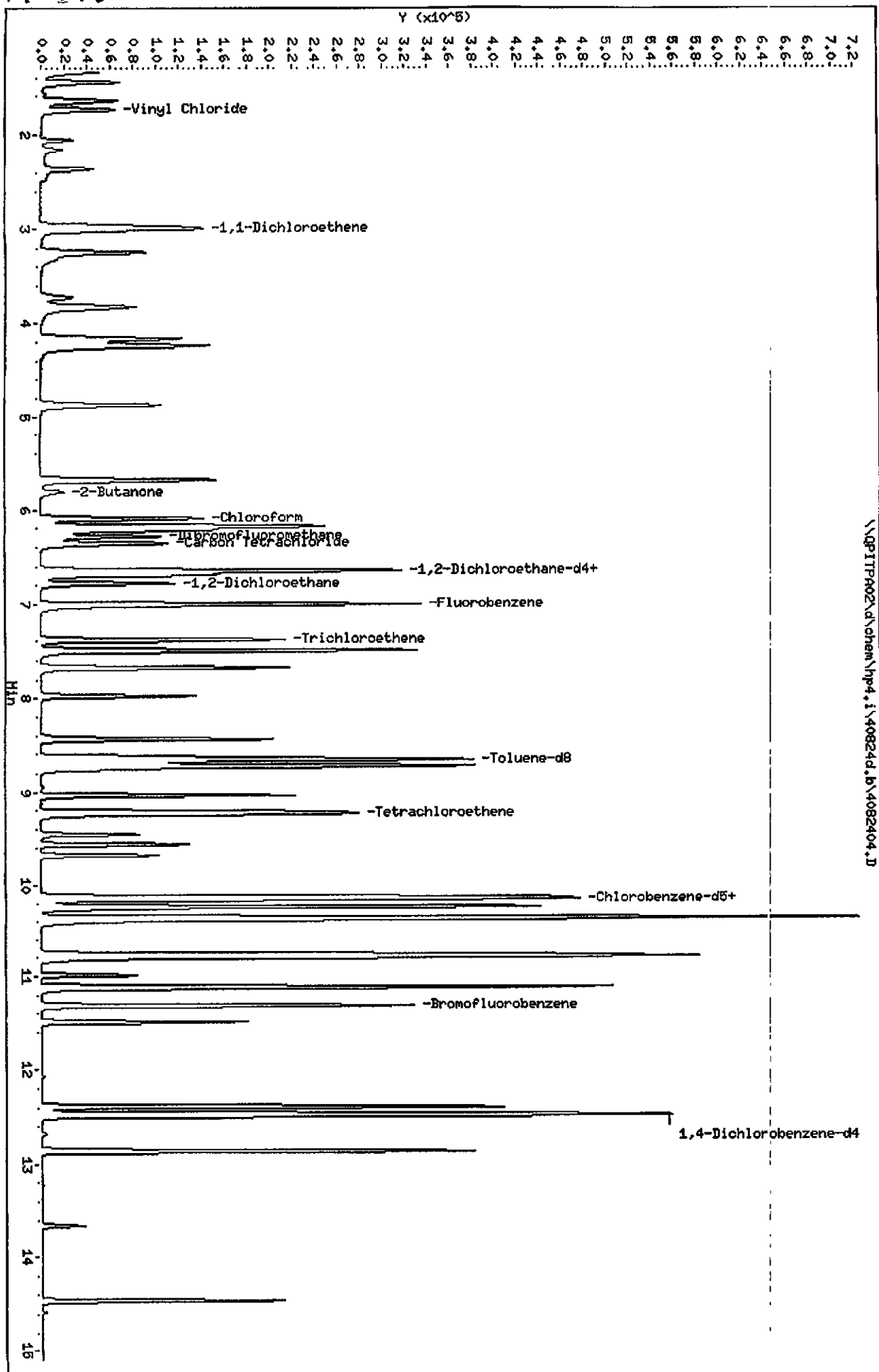
Matrix: (soil/water) SOLID Lab Sample ID: COH220139 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 08/22/00
Work Order: DJ7C810Q Date Extracted: 08/24/00
Dilution factor: 1 Date Analyzed: 08/24/00
Moisture %: 14

QC Batch: 0237125

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.444	
78-93-3	2-Butanone	0.452	
56-23-5	Carbon tetrachloride	0.437	
108-90-7	Chlorobenzene	0.451	
67-66-3	Chloroform	0.478	
107-06-2	1,2-Dichloroethane	0.486	
75-35-4	1,1-Dichloroethene	0.426	
127-18-4	Tetrachloroethene	0.370	
79-01-6	Trichloroethene	0.409	
75-01-4	Vinyl chloride	0.428	



Data File: \\QPIF002\chem\hp4.i\40824d.b\4082404.D
 Date: 24-AUG-2000 08:54
 Client ID: DF/SI/0234/SID/029
 Sample Info: con20139-001.ms (1ml/10ml)/5ml
 Volume Injected (ul): 5.0
 Column phase: DB 624

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

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082404.D
Report Date: 24-Aug-2000 09:13

Page 1

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40824d.b\4082404.D
Lab Smp Id: DJ7C8102 Client Smp ID: DF/S1/0234/SDC/029
Inj Date : 24-AUG-2000 08:54
Operator : 16328 Inst ID: hp4.i
Smp Info : c0h220139-001 ms (1ml/10ml)/5ml
Misc Info : dj7c8102,40824d.b,8260bh2o.M
Comment :
Method : \\QPITPA02\D\chem\hp4.i\40824d.b\8260bh2o.m
Meth Date : 24-Aug-2000 07:56 dudeckk Quant Type: ISTD
Cal Date : 10-AUG-2000 12:35 Cal File: 3C40810.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC077

K. 8/24/00

Compound Sublist: tclp.sub

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

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

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.999	7.001	(1.000)	377264	250.000	
* 69 Chlorobenzene-d5	119	10.123	10.125	(1.000)	92952	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.458	12.460	(1.000)	143612	250.000	
\$ 43 1,2-Dichloroethane-d4	65	6.687	6.689	(0.955)	91299	267.779	53.56
\$ 39 Dibromofluoromethane	113	6.284	6.286	(0.898)	80223	253.918	50.78
\$ 59 Toluene-d8	98	8.650	8.651	(0.854)	366116	250.863	50.17
\$ 80 Bromofluorobenzene	95	11.309	11.311	(1.117)	139523	247.931	49.59
3 Vinyl Chloride	62	1.735	1.743	(0.248)	100355	213.863	42.77
12 1,1-Dichloroethene	96	3.007	3.003	(0.430)	63751	212.900	42.58
31 2-Butanone	43	5.807	5.809	(0.830)	42832	225.782	45.16
37 Chloroform	83	6.088	6.090	(0.870)	135170	238.911	47.78
41 Carbon Tetrachloride	117	6.357	6.359	(0.908)	85273	218.378	43.68
42 Benzene	78	6.644	6.646	(0.949)	359859	222.097	44.42
45 1,2-Dichloroethane	62	6.773	6.775	(0.968)	105977	243.066	48.61
47 Trichloroethene	130	7.384	7.386	(1.055)	87471	204.725	40.94

671 180

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082404.D
Report Date: 24-Aug-2000 09:13

Page 2

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ng)	(UG/L)	
65 Tetrachloroethene	164	9.236	9.238	(0.912)	65806	184.999	37.00	
70 Chlorobenzene	112	10.153	10.155	(1.003)	275051	225.151	45.09	

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8260B

Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL

Date Received: 08/22/00

Work Order: DJ7C810R

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: 14

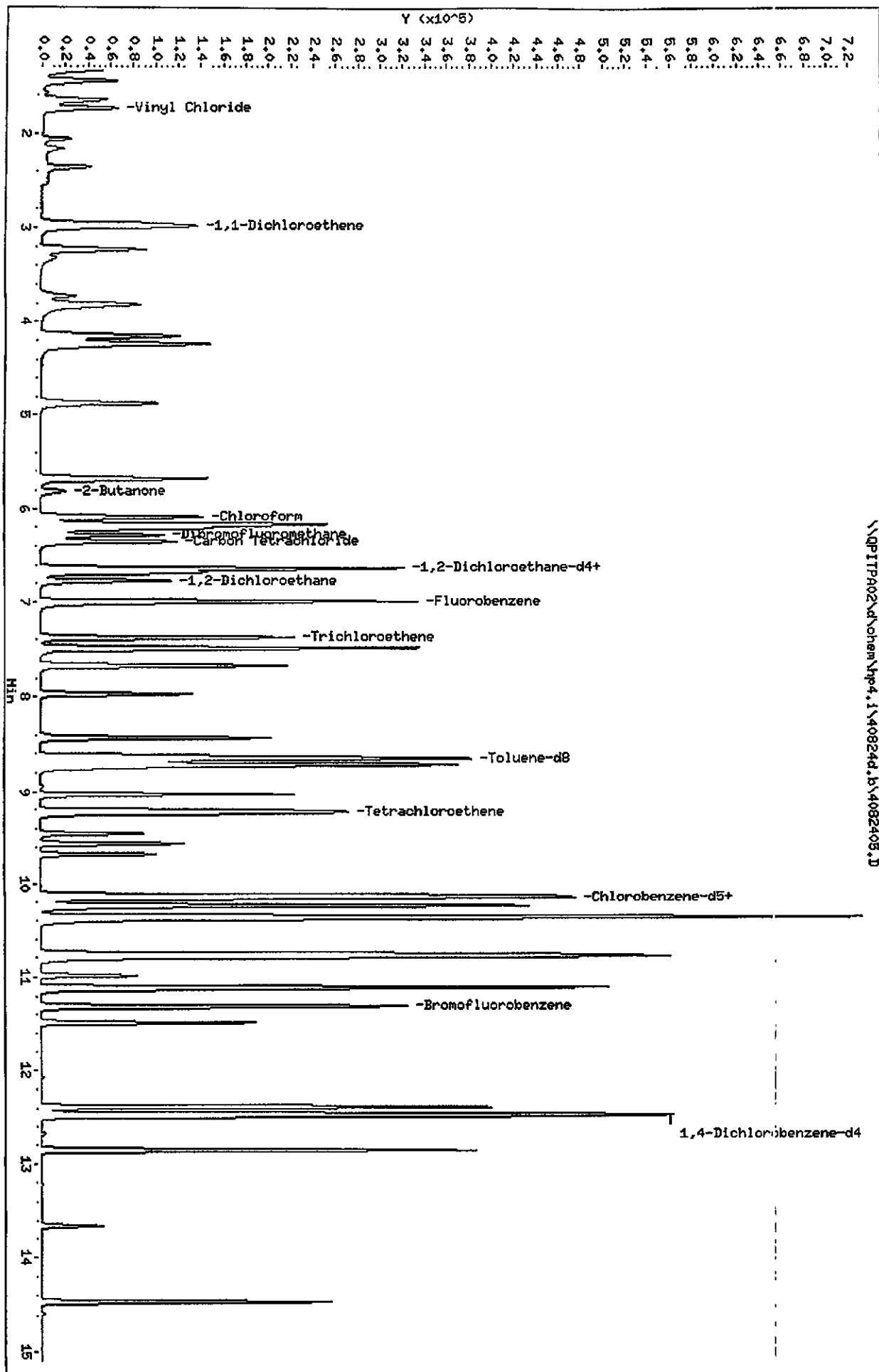
QC Batch: 0237125

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
71-43-2	Benzene	0.437	
78-93-3	2-Butanone	0.481	
56-23-5	Carbon tetrachloride	0.438	
108-90-7	Chlorobenzene	0.439	
67-66-3	Chloroform	0.473	
107-06-2	1,2-Dichloroethane	0.480	
75-35-4	1,1-Dichloroethene	0.427	
127-18-4	Tetrachloroethene	0.363	
79-01-6	Trichloroethene	0.410	
75-01-4	Vinyl chloride	0.434	

Data File: \\QIPITPA02\chem\hp4.1\40824d.b\4082405.D
Date: 24-AUG-2000 09:19
Client ID: DF/SL/0234/SDC/029
Sample Info: c0h220139-001.msd (1ml/10ml)/5ml
Volume Injected (uL): 5.0
Column phase: DB 624

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



Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082405.D
Report Date: 24-Aug-2000 09:53

Page 1

STL - Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\QPITPA02\d\chem\hp4.i\40824d.b\4082405.D
Lab Smp Id: DJ7C8102 Client Smp ID: DF/S1/0234/SDC/029
Inj Date : 24-AUG-2000 09:19
Operator : 16328 Inst ID: hp4.i
Smp Info : c0h220139-001 msd (1ml/10ml)/5ml
Misc Info : dj7c8102,40824d.b,8260bh2o.M
Comment :
Method : \\QPITPA02\D\chem\hp4.i\40824d.b\8260bh2o.m
Meth Date : 24-Aug-2000 07:56 dudeckk Quant Type: ISTD
Cal Date : 10-AUG-2000 12:35 Cal File: 3C40810.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: tclp.sub
Target Version: 4.04
Processing Host: PITPC077

Kf/24/w

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	7.000	7.001	(1.000)	378654	250.000		
* 69 Chlorobenzene-d5	119	10.124	10.125	(1.000)	93793	250.000		
* 92 1,4-Dichlorobenzene-d4	152	12.459	12.460	(1.000)	148108	250.000		
\$ 43 1,2-Dichloroethane-d4	65	6.682	6.689	(0.955)	92875	271.403	54.28	
\$ 39 Dibromofluoromethane	113	6.285	6.286	(0.898)	81512	257.052	51.41	
\$ 59 Toluene-d8	98	8.650	8.651	(0.854)	369374	250.826	50.16	
\$ 80 Bromofluorobenzene	95	11.310	11.311	(1.117)	141365	248.953	49.79	
3 Vinyl Chloride	62	1.742	1.743	(0.249)	102146	216.882	43.38	
12 1,1-Dichloroethene	96	2.996	3.003	(0.428)	64226	213.699	42.74	
31 2-Butanone	43	5.808	5.809	(0.830)	45819	240.641	48.13	
37 Chloroform	83	6.089	6.090	(0.870)	134195	236.317	47.26	
41 Carbon Tetrachloride	117	6.358	6.359	(0.908)	85847	219.042	43.81	
42 Benzene	78	6.639	6.646	(0.948)	355399	218.539	43.71	
45 1,2-Dichloroethane	62	6.767	6.775	(0.967)	104926	239.774	47.95	
47 Trichloroethene	130	7.385	7.386	(1.055)	87902	204.978	41.00	

671 184

Data File: \\QPITPA02\d\chem\hp4.i\40824d.b\4082405.D
Report Date: 24-Aug-2000 09:53

Page 2

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	(ug)	FINAL
65 Tetrachloroethene	164	9.237	9.238	(0.912)	65073	181.198		36.26
70 Chlorobenzene	112	10.148	10.155	(1.002)	270217	219.103		43.90

GC/MS VOLATILE
MISCELLANEOUS

GCMS Volatile Run Log

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



Method: 8260B

Inst. ID HP4

Analyst KLG

Reviewed by:

Date:

Std: 192-188-2 BFB Std: 192-187-5 Int Std: 192-187-6 SUR Std: 192-188-10 MTBE KS Std: 192-186-6 Ketone
Std: 192-187-8 NIS Std: 192-188-11 NQA Std: Std: Std:

Date	File ID	Lot No. / Sample No.	Vol. / Wt.	pH	Port#	Comments
5/10/00	1. BFB	BFB	50ng			0935
	2. 3C40810	V5050	5ml			
	3. 4081001	TCLP Prep Blank 8/9/00 (5ml/10ml) 5ml				not run
	4. 4081002 CF40810	BFB	50ng			1200
	5. 3C40810	V5050	5ml			
	6. 1A40810	V5050	5ml			
	7. 1B40810	V5050	5ml			
	8. 1D40810	V5050	5ml			
	9. 1E40810	V5050	5ml			
	10. 4081001	V5050	5ml			
	11. 4081002	V5050	5ml			
	12. 2A40810	V5050	5ml			
	13. 4081003	PB BLC	(12/100) 5.0	5		
	14.					
	15.					
	16.					
	17.					
	18.					
	19.					
	20.					
	21.					
	22.					



G⁺MS Volatile
Run Log

Analyst KWD
Std: 192-189-5 BFB Std: 192-189-2 SW
Std: 192-189-1 DJT Std: 192-189-4 Kabe

Inst. ID HP-4 Date: _____
Reviewed by: _____
Std: 192-189-10 MDE/CJ-Std: 192-187-8 MS
Std: 192-189-11 VIA Std: _____

Date	File ID	Lot No. / Sample No.	Vol. / Wt.	pH	Port#	Comments
8/24/00	1. BFB40824	BFB	1 mL			633 0237125
	2. CC40824	V8D50	5 mL			
	3. 4082401	V8LK	(1.0/10.0)/5.0	5		
	4. 4082402	BULKMS	(1.0/1.0)/5.0	5		24
	5. 4082403	COH220139-001	(1.0/10.0)/5.0	7		
	6. 4082404	COH220139-001 M1	(1.0/10.0)/5.0	7		
	7. 4082405	COH220139-001 M30	(1.0/10.0)/5.0	7		
	8. 4082406	BULKMS	(1.0/10.0)/5.0	5		Spiked w/veg
	9. 4082407	COH220139-002	(1.0/10.0)/5.0	6		
	10. 4082408	K ⁺ COH-BULKMS	(1.0/10.0)/5.0	5		
	11. 4082409	COH220139-003	(1.0/10.0)/5.0	6		
	12. 4082410	COH220134-001	(1.0/10.0)/5.0	5		
	13. 4082411	V8LK	5 mL			
	14.					
	15.					
	16.					
	17.					
	18.					
	19.					
	20.					
	21.					
	22.					

ZHE Leachate Worksheet
(Method 1311)

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

P023701



Lab Sample ID #	Client ID	Weight (gm)	Vessel	Extraction Fluid No. / Volume	pH	On		Off	
						Date	Time	Date	Time
1. COH220139	BIK 4.91	—	YX	TELA #1	5.51	8/23/2000	10:05	8/24/2000	06:35
2. ↓	001 7.33	25.0g	SS	↓	5.51	↓	↓	↓	↓
3. ↓	002	↓	AA	↓	6.18	↓	↓	↓	↓
4. ↓	003	↓	G	↓	5.93	↓	↓	↓	↓
5. COH220134	001	↓	ZZ	↓	5.21	↓	↓	↓	↓
6. ↓									
7. ↓									
8. ↓									
9. ↓									
10. ↓									
11. ↓									
12. ↓									
13. ↓									
14. ↓									
15. ↓									
16. ↓									
17. ↓									
18. ↓									

Extract(s)	Extract(s) Received		Extract(s) Relinquished	
	Date	Time	Date	Time
All Above	8/24/2000	07:10	8/24/2000	07:15
All above	8/24/2000	07:15	8/24/2000	14:00

Room Temp: 19	PH Calibration		Tumbler RPMs: 30	
	Date	Time	(4.0)	(7.0)
	8/23/2000		4.00	7.02
	8/24/2000		4.00	7.02

• = Sample determined to have free-liquid, % solid determination was performed
 <5 = Extraction Fluid No. 1 5.7 mL Glacial Acetic Acid dil 500mL + 64.3 mL of 1 N Na OH dil to 1 L (pH 4.93+ 0.05)

Reviewed by: <i>James M. Miller</i>	Date: 8-24-00	Comments

PSR024 8/23/00 4:37:34 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: TROUTB

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

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
CLP1	DJ7AG-1-01	___	261033	027262	A-58-QK	COH220134	001		SOLID	0	1 1
2F CLP1	DJ7C8-1-02	___	261030	399411	A-58-QK	COH220139	001		SOLID	0	3 1
2F CLP1	DJ7C9-1-02	___	261031	399411	A-58-QK	COH220139	002		SOLID	0	3 1
2F CLP1	DJ7CC-1-02	___	261032	399411	A-58-QK	COH220139	003		SOLID	0	3 1

RELINQUISHED BY

Ken Seely
B Trout

RECEIVED BY

B Trout
Ken Seely

DATE/TIME

8/23/2000 07:15
8/23/2000 10:20

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

GC/MS SEMIVOLATILE DATA

**GC/MS SEMIVOLATILE
QC SUMMARY**

SW846 8270C SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

QESSDG:

Lot #: C0H220139

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	SRG07	SRG08	SRG09	SRG10	TOT OUT
01	DF/S1/0234/SDC/032	54	49	78	46	55	69					00
02	DF/S1/0234/SDC/029	67	60	84	50	71	77					00
03	DF/S1/0234/SDC/030	71	65	83	58	76	85					00
04	METHOD BLK. DJE32101	69	70	77	55	76	66					00
05	LCS DJE32102	67	71	76	57	75	77					00
06	DF/S1/0234/SDC/029 D	57	56	77	49	59	74					00
07	DF/S1/0234/SDC/029 S	61	62	81	48	64	77					00

SURROGATES

SRG01 = Nitrobenzene-d5
 SRG02 = 2-Fluorobiphenyl
 SRG03 = Terphenyl-d14
 SRG04 = 2-Fluorophenol
 SRG05 = Phenol-d5
 SRG06 = 2,4,6-Tribromophenol
 SRG07 = Bromofluorobenzene
 SRG08 = 1,2-Dichloroethane-d4
 SRG09 = Toluene-d8
 SRG10 = Dibromofluoromethane

QC LIMITS

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

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0H250000

WO #: DJE32102

BATCH: 0238114

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	0.183	73	28- 110	
2,4-Dinitrotoluene	0.250	0.184	74	47- 131	
Hexachlorobenzene	0.250	0.212	85	57- 128	
Hexachlorobutadiene	0.250	0.167	67	36- 116	
Hexachloroethane	0.250	0.174	70	30- 110	
Nitrobenzene	0.250	0.174	69	45- 130	
Pentachlorophenol	0.250	0.225	90	10- 140	
Pyridine	0.250	0.170	68	10- 148	
2,4,5-Trichlorophenol	0.250	0.180	72	41- 125	
2,4,6-Trichlorophenol	0.250	0.182	73	46- 135	
Cresols (total)	0.750	0.589	78	29- 144	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

671 194

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: C0H220139

WO #: DJ7C811G

BATCH: 0238114

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
1,4-Dichlorobenzene	0.250	ND	0.146	58	18- 110	
2,4-Dinitrotoluene	0.250	ND	0.188	75	31- 131	
Hexachlorobenzene	0.250	ND	0.213	85	36- 132	
Hexachlorobutadiene	0.250	ND	0.126	50	18- 116	
Hexachloroethane	0.250	ND	0.134	54	18- 110	
Nitrobenzene	0.250	ND	0.156	62	10- 111	
Pentachlorophenol	0.250	ND	0.240	96	10- 140	
Pyridine	0.250	ND	0.157	63	10- 148	
2,4,5-Trichlorophenol	0.250	ND	0.187	75	24- 143	
2,4,6-Trichlorophenol	0.250	ND	0.167	67	36- 135	
Cresols (total)	0.750	ND	0.514	69	25- 144	

NOTES (S) :

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

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

SW846 8270C MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: C0H220139

WO #: DJ7C811H

BATCH: 0238114

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
=====	=====	=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.250	0.137	55	6.5	36	18 - 110	
2,4-Dinitrotoluene	0.250	0.169	68	11	32	31 - 131	
Hexachlorobenzene	0.250	0.198	79	7.6	22	36 - 132	
Hexachlorobutadiene	0.250	0.116	46	8.4	32	18 - 116	
Hexachloroethane	0.250	0.127	51	5.2	33	18 - 110	
Nitrobenzene	0.250	0.143	57	8.8	50	10 - 211	
Pentachlorophenol	0.250	0.221	88	8.2	56	10 - 140	
Pyridine	0.250	0.142	57	9.6	65	10 - 148	
2,4,5-Trichlorophenol	0.250	0.160	64	15	22	24 - 143	
2,4,6-Trichlorophenol	0.250	0.154	62	7.8	27	36 - 135	
Cresols (total)	0.750	0.467	62	9.6	33	25 - 144	

NOTES (S) :

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

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

COMMENTS:

671 196

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DJE32101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: D0828011.

Lot Number: C0H220139

Date Analyzed: 08/28/00

Time Analyzed: 19:39

Matrix: SOLID

Date Extracted: 08/24/00

GC Column: HP5MS ID: .25

Extraction Method: 1311/3520C

Instrument ID: 721

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	CHECK SAMPLE	DJE32102 C	D0828012.	08/28/00	20:07
02	DF/S1/0234/SDC/032	DJ7CC103	D0828017.	08/28/00	22:32
03	DF/S1/0234/SDC/029	DJ7C8103	D0828013.	08/28/00	20:36
04	DF/S1/0234/SDC/029	DJ7C811G S	D0828014.	08/28/00	21:05
05	DF/S1/0234/SDC/029	DJ7C811H D	D0828015.	08/28/00	21:34
06	DF/S1/0234/SDC/030	DJ7C9103	D0828016.	08/28/00	22:03
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

671 197

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SDG No.: -

Lab File ID: D0824DFT

DFTPP Injection Date: 08/24/00

Instrument ID: 721

DFTPP Injection Time: 1356

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	42.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	52.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	45.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 30.0% of mass 198	25.6
365	Greater than 1.0% of mass 198	3.44
441	Present, but less than mass 443	15.5
442	Greater than 40.0% of mass 198	90.5
443	17.0 - 23.0% of mass 442	17.7 (19.5)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	SSTD50	D0824CCC	08/24/00	1416
02	SSTD020	SSTD20	D0824CC1	08/24/00	1445
03	SSTD080	SSTD80	D0824CC2	08/24/00	1514
04	SSTD120	SSTD120	D0824CC3	08/24/00	1543
05	SSTD160	SSTD160	D0824CC4	08/24/00	1613
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

671 198 FORM 5 SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SDG No.: C0H220139

Lab File ID: D0828DFT

DFTPP Injection Date: 08/28/00

Instrument ID: 721

DFTPP Injection Time: 1358

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	54.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	64.6
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	52.0
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	7.4
275	10.0 - 30.0% of mass 198	26.5
365	Greater than 1.0% of mass 198	2.80
441	Present, but less than mass 443	8.7
442	Greater than 40.0% of mass 198	97.3
443	17.0 - 23.0% of mass 442	18.0 (18.5)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	SSTD50	D0828CCC	08/28/00	1419
02	INTRA-LAB BL	DJE32101	D0828011	08/28/00	1939
03	LCS	DJE32102	D0828012	08/28/00	2007
04	DF/S1/0234/S	DJ7C8103	D0828013	08/28/00	2036
05	DF/S1/0234/S	DJ7C811G	D0828014	08/28/00	2105
06	DF/S1/0234/S	DJ7C811H	D0828015	08/28/00	2134
07	DF/S1/0234/S	DJ7C9103	D0828016	08/28/00	2203
08	DF/S1/0234/S	DJ7CC103	D0828017	08/28/00	2232
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

671 199

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SDG No.: C0H220139

Lab File ID (Standard): D0828CCC

Date Analyzed: 08/28/00

Instrument ID: 721

Time Analyzed: 1419

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	127294	3.92	406842	4.97	239347	7.22
UPPER LIMIT	254588	4.42	813684	5.47	478694	7.72
LOWER LIMIT	63647	3.42	203421	4.47	119674	6.72
=====	=====	=====	=====	=====	=====	=====
CLIENT SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	72955	3.91	261172	4.97	155193	7.21
02 LCS	76257	3.91	268224	4.97	162809	7.21
03 DF/S1/0234/S	66484	3.91	236168	4.97	140166	7.21
04 DF/S1/0234/S	98658	3.92	340247	4.97	201124	7.21
05 DF/S1/0234/S	129127	3.92	444276	4.97	258193	7.22
06 DF/S1/0234/S	68945	3.91	240503	4.97	140824	7.21
07 DF/S1/0234/S	76230	3.91	275088	4.97	160328	7.21
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

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

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

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

* Values outside of QC limits.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SDG No.: C0H220139

Lab File ID (Standard): D0828CCC

Date Analyzed: 08/28/00

Instrument ID: 721

Time Analyzed: 1419

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	411784	9.93	370866	15.64	290991	18.56
UPPER LIMIT	823568	10.43	741732	16.14	581982	19.06
LOWER LIMIT	205892	9.43	185433	15.14	145496	18.06
=====	=====	=====	=====	=====	=====	=====
CLIENT						
SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	278704	9.91	254923	15.63	206524	18.56
02 LCS	295622	9.91	275682	15.63	244322	18.55
03 DF/S1/0234/S	250927	9.91	222108	15.63	209864	18.56
04 DF/S1/0234/S	347901	9.92	284853	15.63	266223	18.56
05 DF/S1/0234/S	431942	9.92	333390	15.64	312190	18.56
06 DF/S1/0234/S	246247	9.91	217231	15.62	204591	18.55
07 DF/S1/0234/S	277383	9.91	235539	15.63	228383	18.55
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

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

* Values outside of QC limits.

**GC/MS SEMIVOLATILE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJ7C8103

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

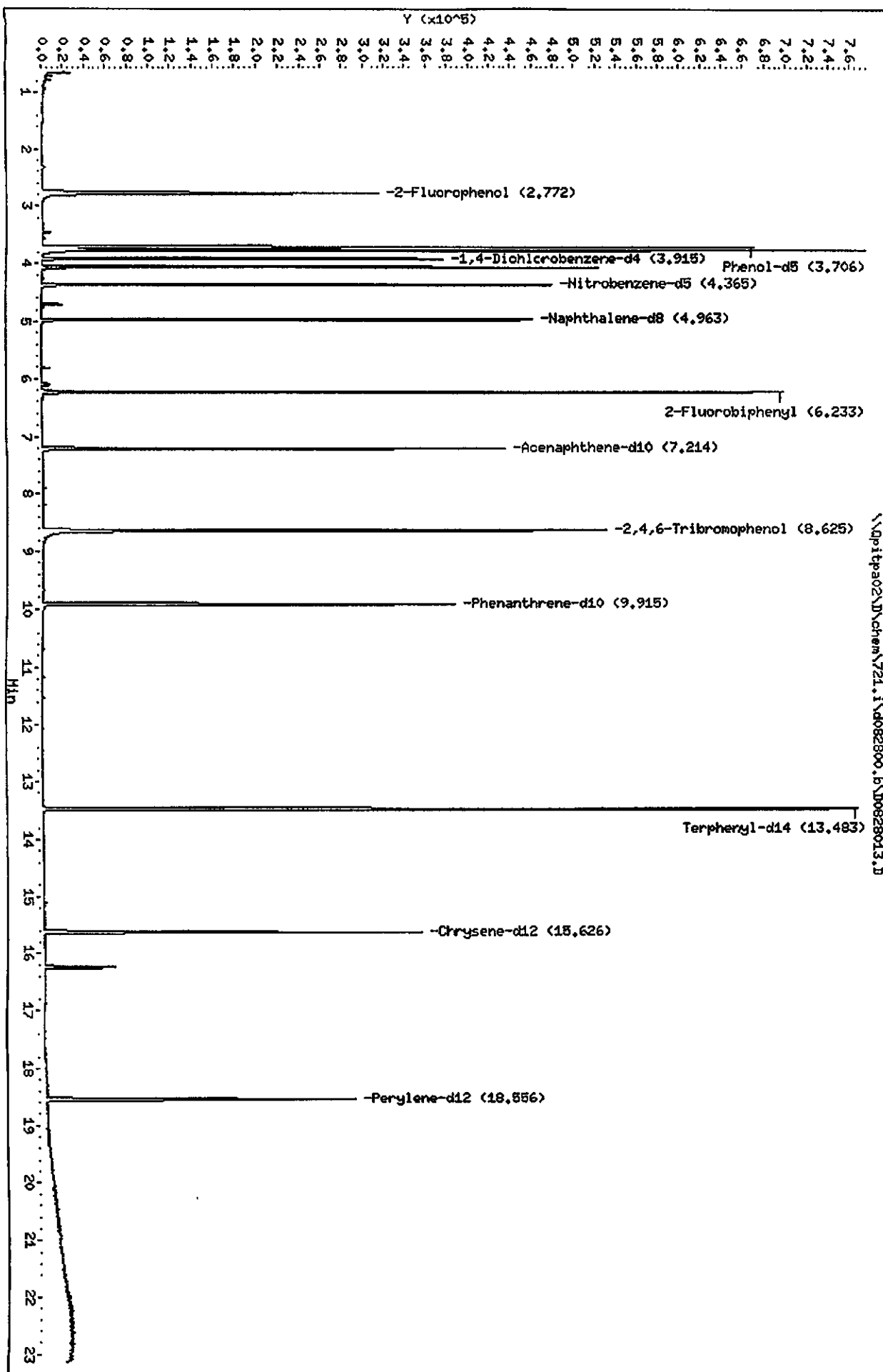
QC Batch: 0238114

Client Sample Id: DF/S1/0234/SDC/029

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

Data File: \\Opitpa02\J\chem\721.i\4082800.b\40828013.D
Date: 28-AUG-2000 20:36
Client ID: DF/SL/0234/SDC/029
Sample Info: 00h220139-001 tcip 8/24/00 8270c
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 721.i
Operator: 001562, MLF
Column diameter: 0.25



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Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082800.b\D0828013.D
 Lab Smp Id: DJ7C8103 Client Smp ID: DF/S1/0234/SDC/029
 Inj Date : 28-AUG-2000 20:36
 Operator : 001562, DLF Inst ID: 721.i
 Smp Info : c0h220139-001 tclp 8/24/00 8270c
 Misc Info : dj7c8103,d082800.b,8270c.m,tclp.sub
 Comment :
 Method : \\Qpitpa02\D\chem\721.i\d082800.b\8270c.m
 Meth Date : 28-Aug-2000 15:11 ferguson Quant Type: ISTD
 Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
 Als bottle: 15
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC013

Compound Sublist: tclp.sub

und sps/w

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
* 1 1,4-Dichlorobenzene-d4	152	3.914	3.918	(1.000)	66484	40.0000	(a)
* 2 Naphthalene-d8	136	4.969	4.973	(1.000)	236168	40.0000	(a)
* 3 Acenaphthene-d10	164	7.213	7.218	(1.000)	140166	40.0000	(a)
* 4 Phenanthrene-d10	188	9.914	9.925	(1.000)	250927	40.0000	(a)
* 5 Chrysene-d12	240	15.626	15.643	(1.000)	222108	40.0000	(a)
* 6 Perylene-d12	264	18.555	18.560	(1.000)	209864	40.0000	(a)
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.					
34 Hexachloroethane	117	Compound Not Detected.					
35 Nitrobenzene	77	Compound Not Detected.					
56 Hexachlorobutadiene	224	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (ug/L)
-----	----	--	-----	-----	-----	-----	-----
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	4.371	4.375	(0.880)	154432	66.6971	0.16674(a)
\$ 155 2-Fluorobiphenyl	172	6.232	6.243	(0.864)	273306	59.7463	0.14936(a)
\$ 156 Terphenyl-d14	244	13.482	13.480	(0.863)	467823	83.8575	0.20964(a)
\$ 157 Phenol-d5	99	3.706	3.710	(0.947)	264859	107.186	0.26796(a)
\$ 158 2-Fluorophenol	112	2.772	2.776	(0.708)	156917	74.2530	0.18563(a)
\$ 159 2,4,6-Tribromophenol	330	8.624	8.635	(0.870)	124731	116.019	0.29005(a)

QC Flag Legend

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 002

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJ7C9103

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

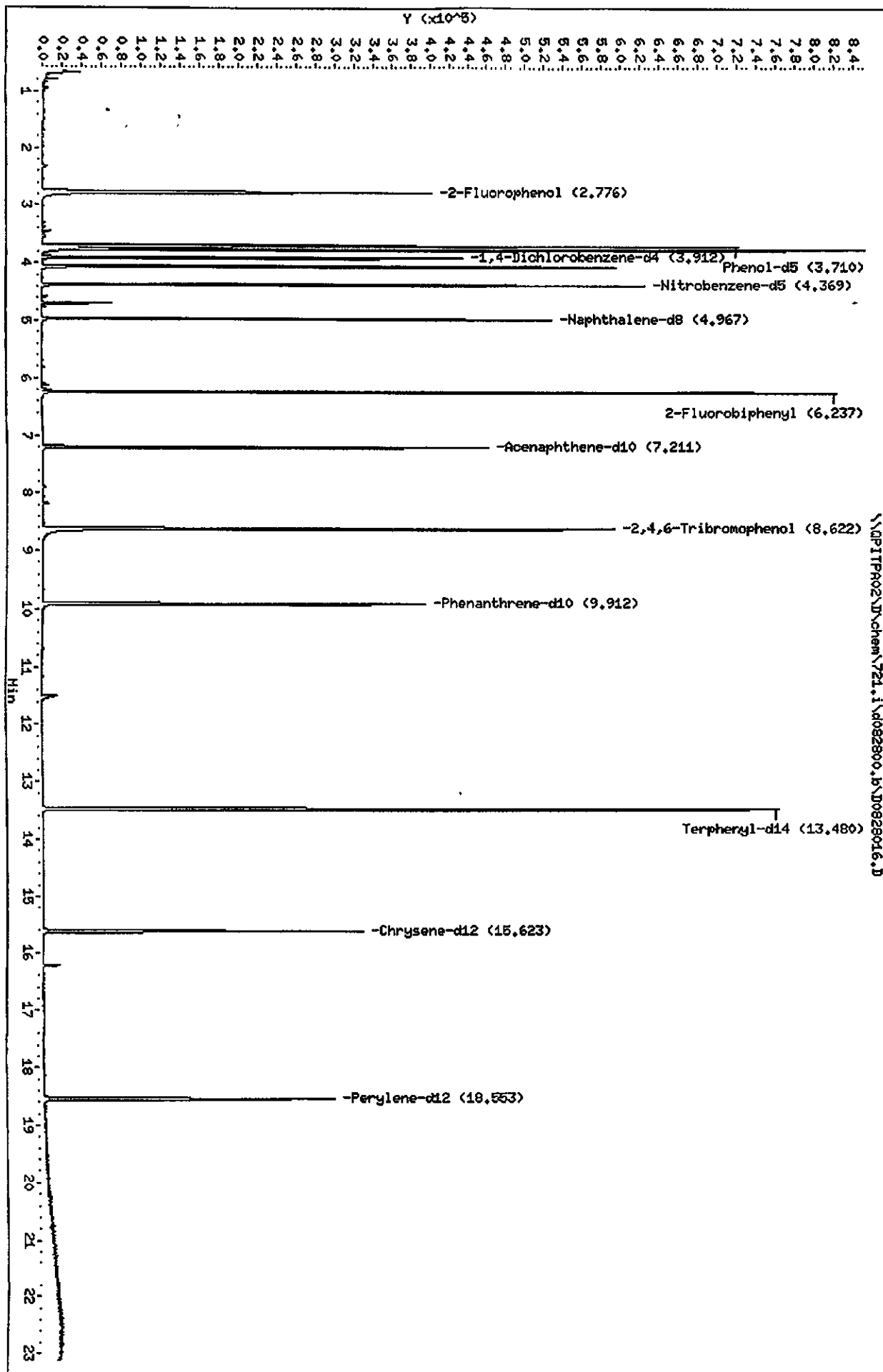
QC Batch: 0238114

Client Sample Id: DF/S1/0234/SDC/030

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

Data File: \\QIPITP002\chem\721.i\4082800.b\0828016.D
 Date: 28-JUL-2000 22:03
 Client ID: DF/SL/0234/SLC/030
 Sample Info: 00h220139-002 tolp 8/24/00 8270c
 Volume Injected (ul): 2.0
 Column phase: Hp5-MS

Instrument: 721.i
 Operator: 001562, ILF
 Column diameter: 0.25



671 208

Data File: \\Qpitpa02\D\chem\721.i\d082800.b\D0828016.D
Report Date: 29-Aug-2000 08:44

Page 1

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Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082800.b\D0828016.D
 Lab Smp Id: DJ7C9103 Client Smp ID: DF/S1/0234/SDC/030
 Inj Date : 28-AUG-2000 22:03
 Operator : 001562, DLF Inst ID: 721.i
 Smp Info : c0h220139-002 tclp 8/24/00 8270c
 Misc Info : dj7c9103,d082800.b,8270c.m,tclp.sub
 Comment :
 Method : \\Qpitpa02\D\chem\721.i\d082800.b\8270c.m
 Meth Date : 28-Aug-2000 15:11 ferguson Quant Type: ISTD
 Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC013

DLH

8-29-00

Compound Sublist: tclp.sub

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ng)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	3.911	3.918	(1.000)	68945	40.0000	(a)	
* 2 Naphthalene-d8	136	4.966	4.973	(1.000)	240503	40.0000	(a)	
* 3 Acenaphthene-d10	164	7.210	7.218	(1.000)	140824	40.0000	(a)	
* 4 Phenanthrene-d10	188	9.911	9.925	(1.000)	246247	40.0000	(a)	
* 5 Chrysene-d12	240	15.623	15.643	(1.000)	217231	40.0000	(a)	
* 6 Perylene-d12	264	18.552	18.560	(1.000)	204591	40.0000	(a)	
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.			
34 Hexachloroethane	117				Compound Not Detected.			
35 Nitrobenzene	77				Compound Not Detected.			
56 Hexachlorobutadiene	224				Compound Not Detected.			

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
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	4.368	4.375	(0.880)	167411	70.9993	0.17750 (a)
\$ 155 2-Fluorobiphenyl	172	6.236	6.243	(0.865)	300052	65.2867	0.16322 (a)
\$ 156 Terphenyl-d14	244	13.479	13.480	(0.863)	452943	83.0131	0.20753 (a)
\$ 157 Phenol-d5	99	3.710	3.710	(0.948)	292797	114.263	0.28566 (a)
\$ 158 2-Fluorophenol	112	2.776	2.776	(0.710)	191078	87.1904	0.21798 (a)
\$ 159 2,4,6-Tribromophenol	330	8.621	8.635	(0.870)	134833	127.799	0.31950 (a)

QC Flag Legend

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

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 003

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJ7CC103

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

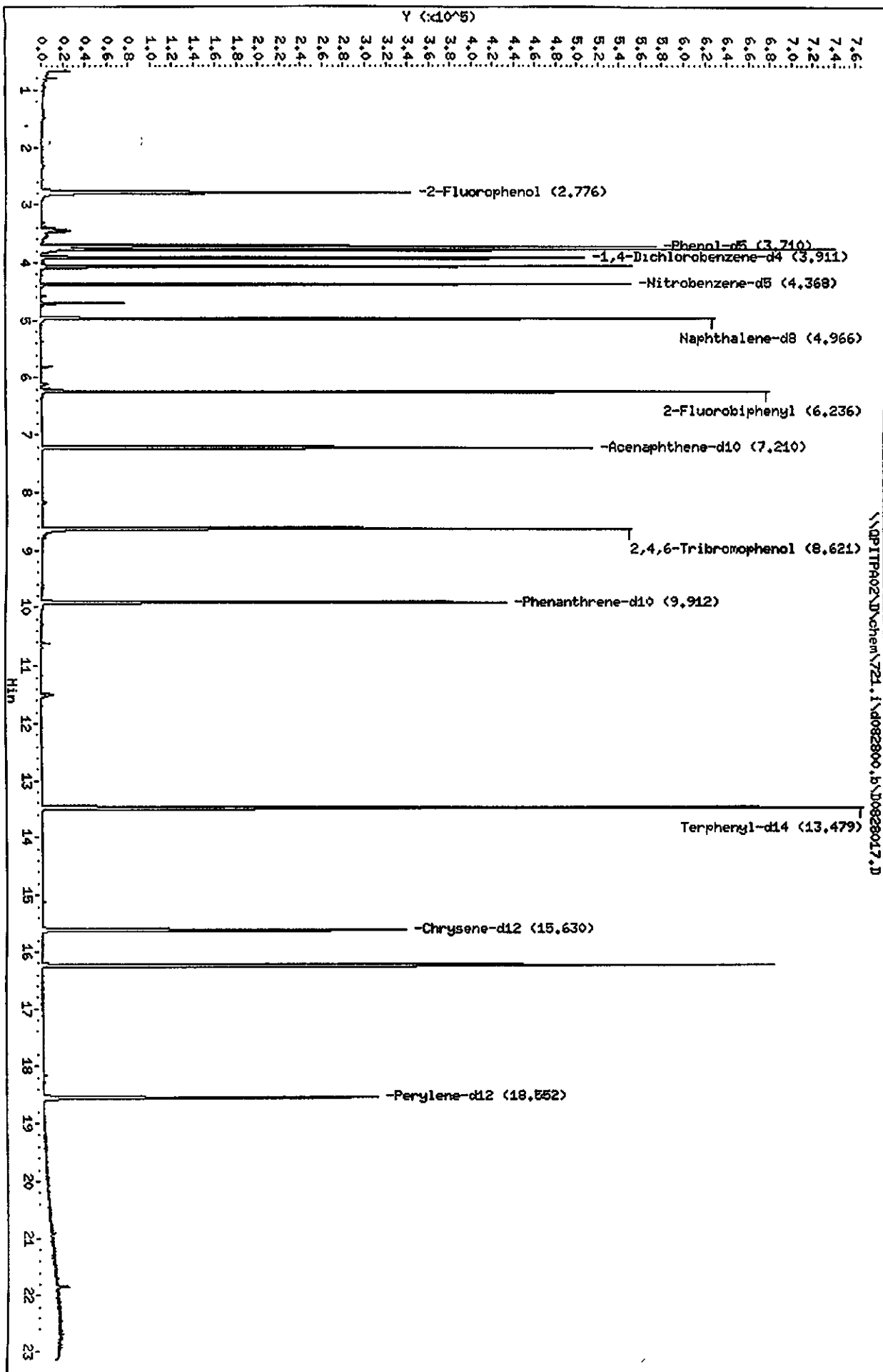
QC Batch: 0238114

Client Sample Id: DF/S1/0234/SDC/032

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

Data File: \\QIPITPA02\N\chem\721.1\4082800.b\40828017.D
Date: 28-AUG-2000 22:32
Client ID: DF/S1/0234/SDC/032
Sample Info: 004220139-003 tolp 8/24/00 8270g
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 721.1
Operator: 001562, MLF
Column diameter: 0.25



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Data File: \\Qpitpa02\D\chem\721.i\d082800.b\D0828017.D
Report Date: 29-Aug-2000 08:45

Page 1

STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082800.b\D0828017.D
 Lab Smp Id: DJ7CC103 Client Smp ID: DF/S1/0234/SDC/032
 Inj Date : 28-AUG-2000 22:32
 Operator : 001562, DLF Inst ID: 721.i
 Smp Info : c0h220139-003 tclp 8/24/00 8270c
 Misc Info : dj7cc103,d082800.b,8270c.m,tclp.sub
 Comment :
 Method : \\Qpitpa02\D\chem\721.i\d082800.b\8270c.m
 Meth Date : 28-Aug-2000 15:11 ferguson Quant Type: ISTD
 Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
 Als bottle: 19
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC013

DLH
8-29-00

Compound Sublist: tclp.sub

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	3.911	3.918	(1.000)	76230	40.0000	(a)
* 2 Naphthalene-d8	136	4.966	4.973	(1.000)	275088	40.0000	(a)
* 3 Acenaphthene-d10	164	7.210	7.218	(1.000)	160328	40.0000	(a)
* 4 Phenanthrene-d10	188	9.911	9.925	(1.000)	277383	40.0000	(a)
* 5 Chrysene-d12	240	15.629	15.643	(1.000)	235539	40.0000	(a)
* 6 Perylene-d12	264	18.552	18.560	(1.000)	228383	40.0000	(a)
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.					
34 Hexachloroethane	117	Compound Not Detected.					
35 Nitrobenzene	77	Compound Not Detected.					
56 Hexachlorobutadiene	224	Compound Not Detected.					

Data File: \\Opitpa02\D\chem\721.i\d082800.b\D0828017.D
 Report Date: 29-Aug-2000 08:45

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
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	4.368	4.375	(0.880)	145473	53.9388	0.13485 (a)
\$ 155 2-Fluorobiphenyl	172	6.236	6.243	(0.865)	256765	49.0717	0.12268 (a)
\$ 156 Terphenyl-d14	244	13.486	13.480	(0.863)	460999	77.9223	0.19480 (a)
\$ 157 Phenol-d5	99	3.709	3.710	(0.948)	234797	82.8720	0.20718 (a)
\$ 158 2-Fluorophenol	112	2.775	2.776	(0.710)	166607	68.7588	0.17190 (a)
\$ 159 2,4,6-Tribromophenol	330	8.621	8.635	(0.870)	122690	103.236	0.25809 (a)

QC Flag Legend

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

671 214

**GC/MS SEMIVOLATILE
CALIBRATION DATA**

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SDG No.: -

Instrument ID: 721

Calibration Date(s): 08/24/00

Min RRF for SPCC(#) = 0.050

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:	RRF1 =D0824CC1.D	RRF2 =D0824CCC.D
RRF3 =D0824CC2.D	RRF4 =D0824CC3.D	RRF5 =D0824CC4.D

COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	RRF	% RSD
Phenol	* 1.524	1.593	1.523	1.485	1.480	1.521	3.0*
bis(2-Chloroethyl) ether	1.175	1.187	1.097	1.098	1.070	1.125	4.6
2-Chlorophenol	1.276	1.358	1.330	1.348	1.332	1.329	2.4
1,3-Dichlorobenzene	1.382	1.476	1.403	1.434	1.404	1.420	2.6
1,4-Dichlorobenzene	* 1.425	1.467	1.418	1.418	1.396	1.425	1.8*
1,2-Dichlorobenzene	1.334	1.399	1.347	1.380	1.360	1.364	1.9
2-Methylphenol	1.073	1.129	1.058	1.060	1.033	1.071	3.3
2,2'-oxybis(1-Chloropropane	1.449	1.433	1.241	1.215	1.125	1.293	11.0
4-Methylphenol	1.115	1.152	1.058	1.053	1.097	1.095	3.7
Hexachloroethane	0.636	0.669	0.662	0.665	0.655	0.657	2.0
Nitrobenzene	0.373	0.387	0.377	0.389	0.381	0.381	1.7
Isophorone	0.619	0.636	0.611	0.647	0.634	0.629	2.3
2-Nitrophenol	* 0.210	0.225	0.212	0.224	0.222	0.219	3.2*
2,4-Dimethylphenol	0.361	0.385	0.366	0.378	0.384	0.375	2.9
bis(2-Chloroethoxy)methane	0.377	0.400	0.384	0.393	0.385	0.388	2.3
N-Nitroso-di-n-propylamine	# 0.774	0.805	0.726	0.744	0.751	0.760	4.0#
2,4-Dichlorophenol	* 0.296	0.318	0.304	0.323	0.321	0.312	3.8*
1,2,4-Trichlorobenzene	0.348	0.373	0.360	0.378	0.378	0.367	3.5
Naphthalene	0.972	1.033	1.015	1.037	1.029	1.017	2.6
4-Chloroaniline	0.401	0.427	0.412	0.421	0.416	0.415	2.4
Hexachlorobutadiene	* 0.221	0.239	0.242	0.254	0.252	0.242	5.4*
4-Chloro-3-Methylphenol	0.297	0.316	0.310	0.320	0.309	0.310	2.7
2-Methylnaphthalene	0.640	0.657	0.640	0.665	0.661	0.653	1.8
Hexachlorocyclopentadiene	# 0.420	0.463	0.473	0.505	0.513	0.475	7.8#
2,4,6-Trichlorophenol	* 0.376	0.412	0.401	0.422	0.432	0.409	5.2*
2,4,5-Trichlorophenol	0.398	0.443	0.435	0.456	0.451	0.437	5.2
2-Chloronaphthalene	1.108	1.171	1.135	1.191	1.183	1.158	3.0
2-Nitroaniline	0.346	0.369	0.359	0.366	0.361	0.360	2.4
Dimethylphthalate	1.325	1.404	1.351	1.417	1.405	1.380	2.9
Acenaphthylene	1.636	1.719	1.663	1.732	1.719	1.694	2.5
2,6-Dinitrotoluene	0.312	0.326	0.322	0.328	0.331	0.324	2.3
3-Nitroaniline	0.326	0.348	0.338	0.345	0.346	0.341	2.6
Acenaphthene	* 0.996	1.048	1.034	1.059	1.070	1.041	2.7*
2,4-Dinitrophenol	# 0.105	0.188	0.213	0.231	0.239	0.195	27.8#
4-Nitrophenol	# 0.229	0.267	0.265	0.266	0.266	0.259	6.5#
Dibenzofuran	1.559	1.663	1.627	1.671	1.664	1.637	2.8
2,4-Dinitrotoluene	0.418	0.451	0.454	0.478	0.456	0.451	4.8

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

671 216

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SIG No.: -

Instrument ID: 721

Calibration Date(s): 08/24/00

Min RRF for SPCC(#) = 0.050

Max %RSD for CCC(*) = 30.0%

LAB FILE ID:		RRF1	=D0824CC1.D	RRF2	=D0824CCC.D		
RRF3		=D0824CC2.D	RRF4	=D0824CC3.D	RRF5	=D0824CC4.D	
COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	RRF	% RSD
Diethylphthalate	1.377	1.472	1.455	1.486	1.478	1.454	3.0
4-Chlorophenyl-phenylether	0.601	0.649	0.652	0.679	0.686	0.653	5.1
Fluorene	1.209	1.290	1.274	1.312	1.297	1.276	3.2
4-Nitroaniline	0.304	0.338	0.342	0.344	0.339	0.333	4.9
4,6-Dinitro-2-methylphenol	0.110	0.150	0.153	0.166	0.165	0.149	15.4
N-Nitrosodiphenylamine (1)	0.476	0.496	0.487	0.501	0.498	0.492	2.0*
4-Bromophenyl-phenylether	0.203	0.224	0.215	0.221	0.224	0.217	4.1
Hexachlorobenzene	0.261	0.288	0.280	0.291	0.293	0.283	4.7
Pentachlorophenol	0.080	0.137	0.151	0.164	0.173	0.141	25.9*
Phenanthrene	0.912	0.983	0.947	0.978	0.972	0.958	3.1
Anthracene	0.943	0.987	0.939	0.955	0.956	0.956	2.0
Carbazole	0.807	0.855	0.824	0.815	0.831	0.826	2.2
Di-n-Butylphthalate	1.164	1.231	1.169	1.176	1.187	1.185	2.3
Fluoranthene	0.904	0.972	0.929	0.929	0.933	0.933	2.6*
Pyrene	1.144	1.252	1.224	1.289	1.266	1.235	4.5
Butylbenzylphthalate	0.610	0.659	0.648	0.664	0.658	0.648	3.4
3,3'-Dichlorobenzidine	0.402	0.437	0.459	0.484	0.474	0.451	7.3
Benzo(a) Anthracene	1.018	1.078	1.076	1.107	1.103	1.076	3.3
Chrysene	0.894	0.963	0.967	1.018	1.017	0.972	5.2
bis(2-ethylhexyl) Phthalate	0.792	0.873	0.875	0.930	0.923	0.879	6.2
Di-n-octylphthalate	1.692	1.869	1.820	1.924	1.877	1.836	4.8*
Benzo(b) fluoranthene	1.124	1.238	1.516	1.598	1.547	1.405	15.0
Benzo(k) fluoranthene	1.160	1.250	0.930	0.980	1.034	1.071	12.3
Benzo(a) pyrene	1.029	1.120	1.090	1.145	1.144	1.106	4.4*
Indeno(1,2,3-cd) pyrene	0.891	1.052	1.076	1.162	1.289	1.094	13.4
Dibenz(a,h) anthracene	0.905	1.047	1.088	1.226	1.325	1.118	14.6
Benzo(g,h,i) perylene	0.882	1.037	1.059	1.184	1.306	1.094	14.6
Pyridine	0.391	0.437	0.432	0.442	0.430	0.426	4.8
N-Nitrosodimethylamine	0.250	0.270	0.264	0.274	0.270	0.266	3.5
Aniline	1.466	1.470	1.419	1.404	1.328	1.417	4.1
Benzyl Alcohol	0.842	0.884	0.829	0.848	0.835	0.848	2.5
Benzoic Acid	0.041	0.092	0.174	0.222	0.242	0.154	55.7 <-
1-Methylnaphthalene	0.586	0.602	0.591	0.610	0.599	0.598	1.6
2,3,4,6-Tetrachlorophenol	0.325	0.357	0.377	0.387	0.384	0.366	7.0
2,3,5,6-Tetrachlorophenol	0.314	0.367	0.385	0.411	0.407	0.377	10.4

Contract :

SDG No.: -

Calibration Date(s): 08/24/00

Max %RSD for CCC(*) = 30.0%

[illegible]

671 218
Data File: \\Qpitpa02\D\chem\721.i\d082400.b/D0824CCC.D
Report Date: 08/25/2000

INITIAL CALIBRATION REPORT

Instrument ID: 721.i
Lab File ID: D0824CCC.D
Analysis Type: NONE

Injection Date: 24-AUG-2000 14:16
Lab Sample ID: sstd50
Method File: \\Qpitpa02\D\chem\721.i\d082400.b

COMPOUND	%RSD
-----	-----
Benzo(b)fluoranthene	15.0
Benzo(k)fluoranthene	12.3
7,12-dimethylbenz(a)anthracene	11.8
Benzo(a)pyrene	4.4
Indeno(1,2,3-cd)pyrene	13.4
Dibenz(a,h)anthracene	14.6
Benzo(g,h,i)perylene	14.6

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

INITIAL CALIBRATION REPORT

Instrument ID: 721.i
 Lab File ID: D0824CCC.D
 Analysis Type: NONE

Injection Date: 24-AUG-2000 14:16
 Lab Sample ID: sstd50
 Method File: \\Qpitpa02\D\chem\721.i\d082400.b\8270c.

COMPOUND	%RSD
Pyridine	4.8
N-Nitrosodimethylamine	3.5
Methyl methanesulfonate	2.4
2-Fluorophenol	2.9
Aniline	4.1
Phenol-d5	3.3
Phenol	3.0
bis(2-Chloroethyl) ether	4.6
2-Chlorophenol-d4	1.7
2-Chlorophenol	2.4
1,3-Dichlorobenzene	2.6
1,4-Dichlorobenzene	1.8
Benzyl Alcohol	2.5
1,2-Dichlorobenzene-d4	2.0
1,2-Dichlorobenzene	1.9
2-Methylphenol	3.3
2,2'-oxybis(1-Chloropropane)	11.0
4-Methylphenol	3.7
N-Nitroso-di-n-propylamine	4.0
Hexachloroethane	2.0
Nitrobenzene-d5	1.9
Nitrobenzene	1.7
Isophorone	2.3
2-Nitrophenol	3.2
2,4-Dimethylphenol	2.9
bis(2-Chloroethoxy) methane	2.3
2,4-Dichlorophenol	3.8
Benzoic Acid	55.7
1,2,4-Trichlorobenzene	3.5
Naphthalene	2.6
4-Chloroaniline	2.4
Hexachlorobutadiene	5.4
4-Chloro-3-Methylphenol	2.7
2-Methylnaphthalene	1.8
1-Methylnaphthalene	1.6
Hexachlorocyclopentadiene	7.8
2,4,6-Trichlorophenol	5.2
2,4,5-Trichlorophenol	5.2
2-Fluorobiphenyl	2.5

INITIAL CALIBRATION REPORT

Instrument ID: 721.i
Lab File ID: D0824CCC.D
Analysis Type: NONE

Injection Date: 24-AUG-2000 14:16
Lab Sample ID: sstd50
Method File: \\Qpitpa02\D\chem\721.i\d082400.b

COMPOUND	%RSD
2-Chloronaphthalene	3.0
2-Nitroaniline	2.4
Dimethylphthalate	2.9
Acenaphthylene	2.5
2,6-Dinitrotoluene	2.3
3-Nitroaniline	2.6
Acenaphthene	2.7
2,4-Dinitrophenol	27.8
Dibenzofuran	2.8
4-Nitrophenol	6.5
2,4-Dinitrotoluene	4.8
2,3,5,6-Tetrachlorophenol	10.4
2-Naphthylamine	13.6
2,3,4,6-Tetrachlorophenol	7.0
Fluorene	3.2
Diethylphthalate	3.0
4-Chlorophenyl-phenylether	5.1
4-Nitroaniline	4.9
4,6-Dinitro-2-methylphenol	15.4
N-Nitrosodiphenylamine (1)	2.0
1,2-Diphenylhydrazine	5.8
2,4,6-Tribromophenol	6.9
4-Bromophenyl-phenylether	4.1
Hexachlorobenzene	4.7
Pentachlorophenol	25.9
Phenanthrene	3.1
Anthracene	2.0
Carbazole	2.2
Di-n-Butylphthalate	2.3
Fluoranthene	2.6
Benzidine	1.1
Pyrene	4.5
Terphenyl-d14	4.5
Butylbenzylphthalate	3.4
Benzo(a)Anthracene	3.3
Chrysene	5.2
3,3'-Dichlorobenzidine	7.3
bis(2-ethylhexyl)Phthalate	6.2
Di-n-octylphthalate	4.8

STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082400.b\D0824CC1.D
 Lab Smp Id: sstd20 Client Smp ID: SSTD020
 Inj Date : 24-AUG-2000 14:45
 Operator : 001562, DLF Inst ID: 721.i
 Smp Info : sstd020 (10UG/ML) 194-188-3 8270/clp/625
 Misc Info : sstd20,d082400.b,8270c.m,3-root.sub,1,1
 Comment :
 Method : \\Qpitpa02\D\chem\721.i\d082400.b\8270c.m
 Meth Date : 25-Aug-2000 08:45 ferguson Quant Type: ISTD
 Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
 Als bottle: 3 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC013

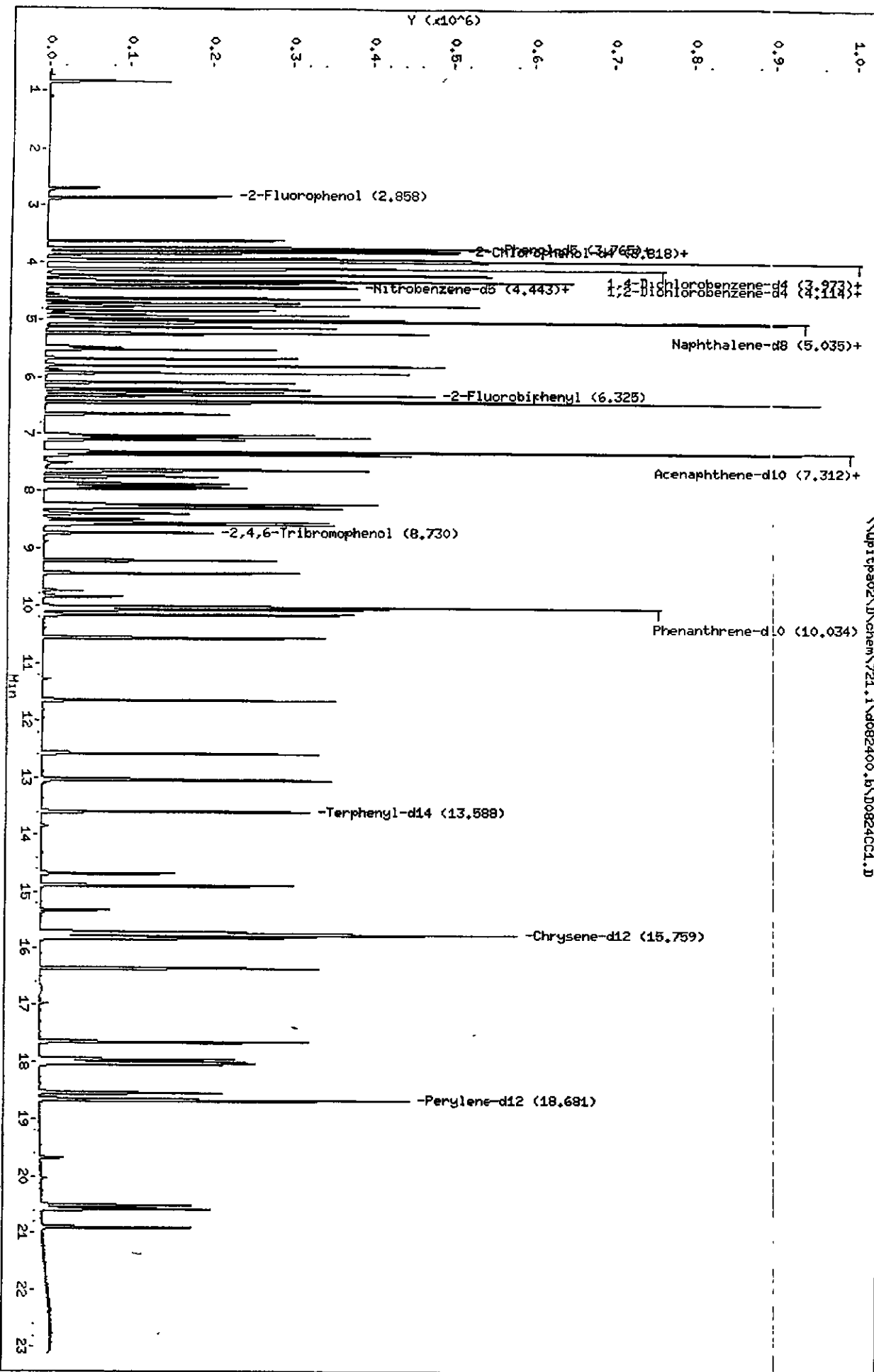
DL
8-25-00

Compound Sublist: 3-root.sub

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(NG)	(NG)
=====	=====	==	=====	=====	=====	=====	=====
* 1 1,4-Dichlorobenzene-d4	152	3.973	3.973	(1.000)	141945	40.0000	
* 2 Naphthalene-d8	136	5.034	5.034	(1.000)	472108	40.0000	
* 3 Acenaphthene-d10	164	7.319	7.319	(1.000)	277199	40.0000	
* 4 Phenanthrene-d10	188	10.033	10.033	(1.000)	521515	40.0000	
* 5 Chrysene-d12	240	15.758	15.758	(1.000)	407035	40.0000	
* 6 Perylene-d12	264	18.674	18.674	(1.000)	332612	40.0000	
10 N-Nitrosodimethylamine	74	0.862	0.862	(0.217)	17773	20.0000	18.835
9 Pyridine	79	0.855	0.855	(0.215)	27739	20.0000	18.337
16 Methyl methanesulfonate	80	2.689	2.689	(0.677)	32866	20.0000	19.947
21 Aniline	93	3.751	3.751	(0.944)	104047	20.0000	20.684 (Q)
22 Phenol	94	3.771	3.771	(0.949)	108198	20.0000	20.048
23 bis(2-Chloroethyl)ether	93	3.818	3.818	(0.961)	83385	20.0000	20.882 (Q)
24 2-Chlorophenol	128	3.838	3.838	(0.966)	90590	20.0000	19.210
26 1,3-Dichlorobenzene	146	3.939	3.939	(0.992)	98115	20.0000	19.471
27 1,4-Dichlorobenzene	146	3.979	3.979	(1.002)	101166	20.0000	20.007
28 1,2-Dichlorobenzene	146	4.127	4.127	(1.039)	94719	20.0000	19.567
29 Benzyl Alcohol	108	4.107	4.107	(1.034)	59788	20.0000	19.874
30 2-Methylphenol	108	4.221	4.221	(1.063)	76175	20.0000	20.051
31 2,2'-oxybis(1-Chloropropane)	45	4.228	4.228	(1.064)	102873	20.0000	22.424
32 N-Nitroso-di-n-propylamine	70	4.342	4.342	(1.093)	54918	20.0000	20.363
192 4-Methylphenol	108	4.335	4.335	(1.091)	79124	20.0000	20.364
34 Hexachloroethane	117	4.362	4.362	(1.098)	45153	20.0000	19.356
35 Nitrobenzene	77	4.443	4.443	(0.883)	88109	20.0000	19.572
41 Isophorone	82	4.638	4.638	(0.921)	146123	20.0000	19.669
42 2-Nitrophenol	139	4.712	4.712	(0.936)	49539	20.0000	19.196
43 2,4-Dimethylphenol	107	4.765	4.765	(0.947)	85144	20.0000	19.251

Date File: \\Qp1tpa02\\J\\chem\\721.1\\0082400.b\\00824001.D
 Date: 24-AUG-2000 14:45
 Client ID: SST020
 Sample Info: sst020 (10UG/ML) 194-188-3 8270/01p/625
 Column phase: Hp5-MS

Instrument: 721.i
 Operator: 001562, DLF
 Column diameter: 0.25



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	4.846	4.846	(0.963)	88911	20.0000	19.433
48 2,4-Dichlorophenol	162	4.927	4.927	(0.979)	69757	20.0000	18.919
49 Benzoic Acid	122	4.886	4.886	(0.971)	9674	20.0000	5.3100 (MH)
50 1,2,4-Trichlorobenzene	180	5.001	5.001	(0.993)	82163	20.0000	18.950
51 Naphthalene	128	5.054	5.054	(1.004)	229342	20.0000	19.101
52 4-Chloroaniline	127	5.135	5.135	(1.020)	94629	20.0000	19.304
56 Hexachlorobutadiene	225	5.242	5.242	(1.041)	52232	20.0000	18.322 (Q)
59 4-Chloro-3-Methylphenol	107	5.679	5.679	(1.128)	70226	20.0000	19.161
62 2-Methylnaphthalene	142	5.807	5.807	(1.153)	150987	20.0000	19.597
63 1-Methylnaphthalene	142	5.935	5.935	(1.179)	138272	20.0000	19.600
64 Hexachlorocyclopentadiene	237	6.103	6.103	(0.834)	58208	20.0000	17.683
66 2,4,6-Trichlorophenol	196	6.217	6.217	(0.849)	52189	20.0000	18.434
67 2,4,5-Trichlorophenol	196	6.271	6.271	(0.857)	55223	20.0000	18.255
70 2-Chloronaphthalene	162	6.438	6.438	(0.880)	153506	20.0000	19.133
73 2-Nitroaniline	65	6.653	6.653	(0.909)	48019	20.0000	19.242
76 Dimethylphthalate	163	7.023	7.023	(0.960)	183620	20.0000	19.198
78 2,6-Dinitrotoluene	165	7.110	7.110	(0.972)	43262	20.0000	19.274
79 Acenaphthylene	152	7.057	7.057	(0.964)	226685	20.0000	19.311
81 3-Nitroaniline	138	7.312	7.312	(0.999)	45219	20.0000	19.155
82 Acenaphthene	153	7.366	7.366	(1.006)	138039	20.0000	19.127
83 2,4-Dinitrophenol	184	7.500	7.500	(1.025)	14533	20.0000	10.736 (M)
85 4-Nitrophenol	109	7.661	7.661	(1.047)	31709	20.0000	17.689
86 Dibenzofuran	168	7.634	7.634	(1.043)	216124	20.0000	19.054
87 2,4-Dinitrotoluene	165	7.755	7.755	(1.060)	57911	20.0000	18.508
91 2,3,5,6-Tetrachlorophenol	232	7.883	7.883	(1.077)	43569	20.0000	16.691
88 2,3,4,6-Tetrachlorophenol	232	7.957	7.957	(1.087)	45084	20.0000	17.777
92 2-Naphthylamine	143	7.917	7.917	(1.082)	104846	20.0000	24.097
93 Diethylphthalate	149	8.273	8.273	(1.130)	190854	20.0000	18.948
94 Fluorene	166	8.239	8.239	(1.126)	167564	20.0000	18.939
95 4-Chlorophenyl-phenylether	204	8.300	8.300	(1.134)	83273	20.0000	18.392
96 4-Nitroaniline	138	8.394	8.394	(1.147)	42145	20.0000	18.251
98 4,6-Dinitro-2-methylphenol	198	8.488	8.488	(0.846)	28620	20.0000	14.757
99 N-Nitrosodiphenylamine (1)	169	8.548	8.548	(0.852)	124235	20.0000	19.382
100 1,2-Diphenylhydrazine	77	8.589	8.589	(0.856)	184238	20.0000	18.384
106 4-Bromophenyl-phenylether	248	9.220	9.220	(0.919)	52834	20.0000	18.643
107 Hexachlorobenzene	284	9.442	9.442	(0.941)	67998	20.0000	18.449
111 Pentachlorophenol	266	9.845	9.845	(0.981)	20985	20.0000	11.399 (Q)
115 Phenanthrene	178	10.074	10.074	(1.004)	237813	20.0000	19.031
116 Anthracene	178	10.161	10.161	(1.013)	246019	20.0000	19.736
119 Carbazole	167	10.564	10.564	(1.053)	210384	20.0000	19.527 (Q)
120 Di-n-Butylphthalate	149	11.653	11.653	(1.161)	303433	20.0000	19.633
123 Fluoranthene	202	12.580	12.580	(1.254)	235847	20.0000	19.378
124 Benzinidine	184	13.017	13.017	(0.826)	78273	20.0000	19.758
125 Pyrene	202	13.037	13.037	(0.827)	232727	20.0000	18.521
131 Butylbenzylphthalate	149	14.898	14.898	(0.945)	124046	20.0000	18.820
135 3,3'-Dichlorobenzidine	252	15.832	15.832	(1.005)	81763	20.0000	17.807
136 Benzo(a)Anthracene	228	15.718	15.718	(0.997)	207251	20.0000	18.922

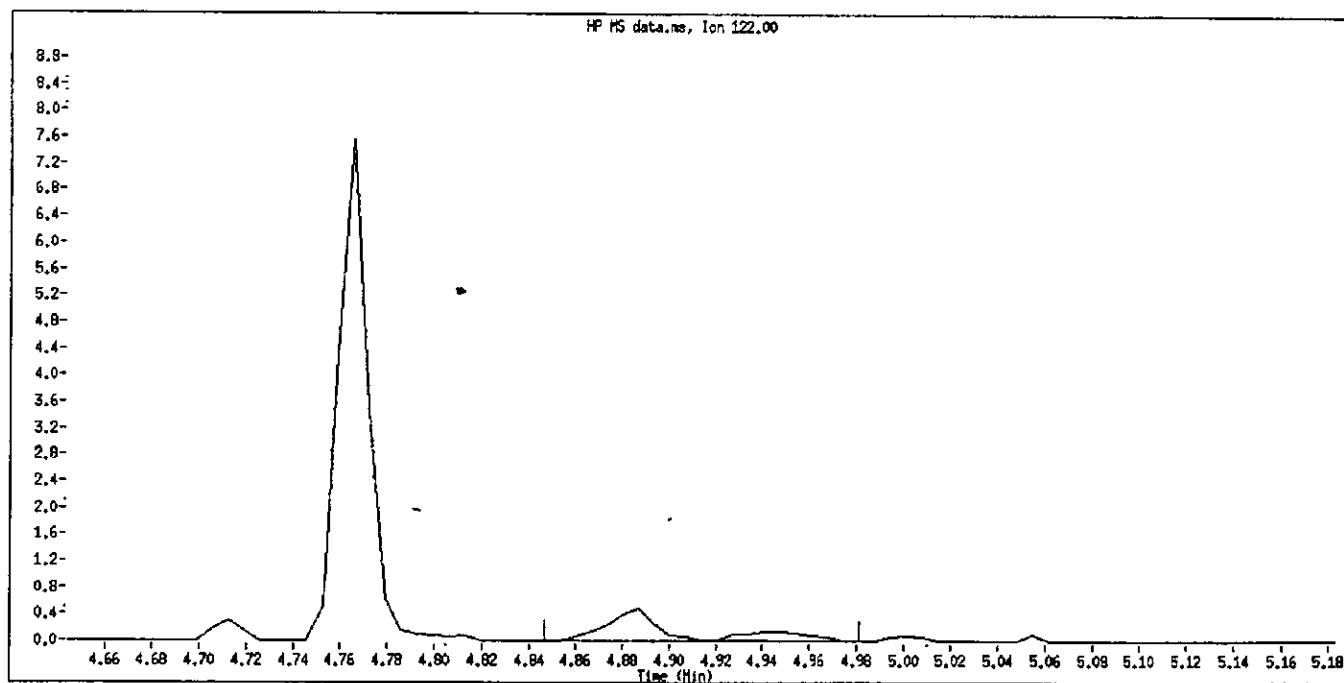
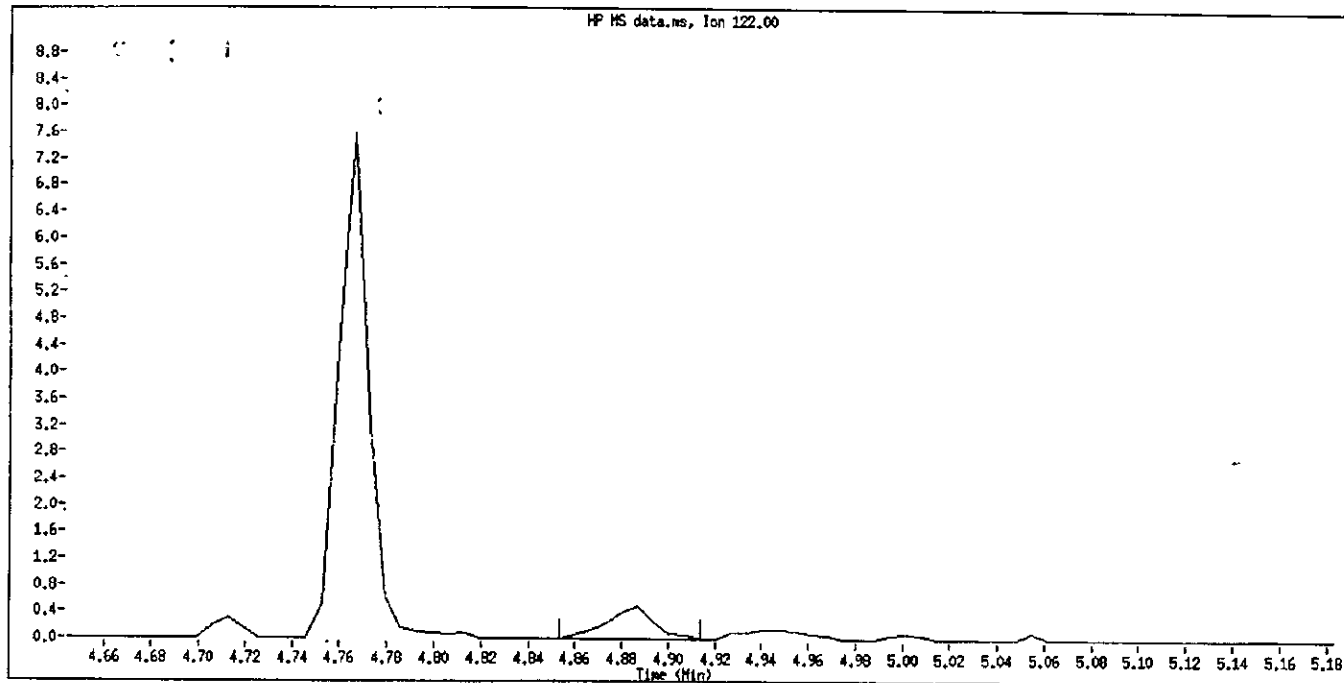
Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	(NG)	(NG)	(NG)	(NG)	(NG)	(NG)	(NG)
137 Chrysene	228	15.805	15.805	(1.003)	181910	20.0000	18.397
139 bis(2-ethylhexyl)Phthalate	149	16.349	16.349	(1.038)	161279	20.0000	18.039
140 Di-n-octylphthalate	149	17.646	17.646	(0.945)	281312	20.0000	18.424
141 Benzo(b)fluoranthene	252	17.962	17.962	(0.962)	186889	20.0000	15.998
142 Benzo(k)fluoranthene	252	18.009	18.009	(0.964)	192904	20.0000	21.660
143 7,12-dimethylbenz[a]anthracene	256	18.036	18.036	(0.966)	77831	20.0000	16.287
146 Benzo(a)pyrene	252	18.553	18.553	(0.994)	171164	20.0000	18.614
149 Indeno(1,2,3-cd)pyrene	276	20.515	20.515	(1.099)	148225	20.0000	16.294
150 Dibenz(a,h)anthracene	278	20.582	20.582	(1.102)	150457	20.0000	16.181
151 Benzo(g,h,i)perylene	276	20.912	20.912	(1.120)	146684	20.0000	16.130
\$ 154 Nitrobenzene-d5	82	4.429	4.429	(0.880)	90530	20.0000	19.559
\$ 155 2-Fluorobiphenyl	172	6.324	6.324	(0.864)	175444	20.0000	19.393
\$ 156 Terphenyl-d14	244	13.588	13.588	(0.862)	189216	20.0000	18.508
\$ 157 Phenol-d5	99	3.758	3.758	(0.946)	108194	20.0000	20.508
\$ 158 2-Fluorophenol	112	2.857	2.857	(0.719)	87173	20.0000	19.321
\$ 159 2,4,6-Tribromophenol	330	8.730	8.730	(0.870)	39651	20.0000	17.745
\$ 186 2-Chlorophenol-d4	132	3.825	3.825	(0.963)	85998	20.0000	19.849
\$ 187 1,2-Dichlorobenzene-d4	152	4.114	4.114	(1.036)	64222	20.0000	20.072

QC Flag Legend

Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File Name D0824CC1.D
Inj Date and Time 24-AUG-2000 14:45
Instrument ID 721 1
Client ID SSTD020
Compound Name Benzoic Acid
CAS # 65-85-0
Report Date 08/25/2000

671 225



Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name. D0824CC1.D

Inj Date and Time: 24-AUG-2000 14 45

Instrument ID 721.1

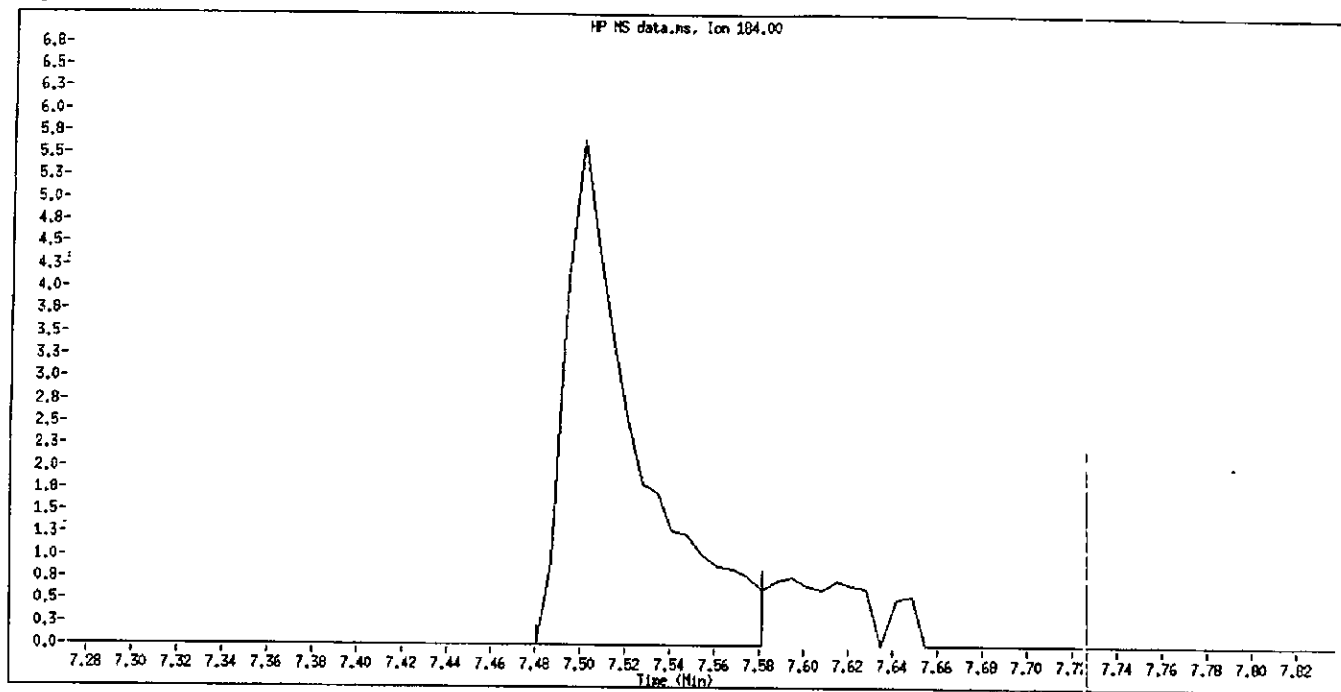
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Compound Name 2,4-Dinitrophenol

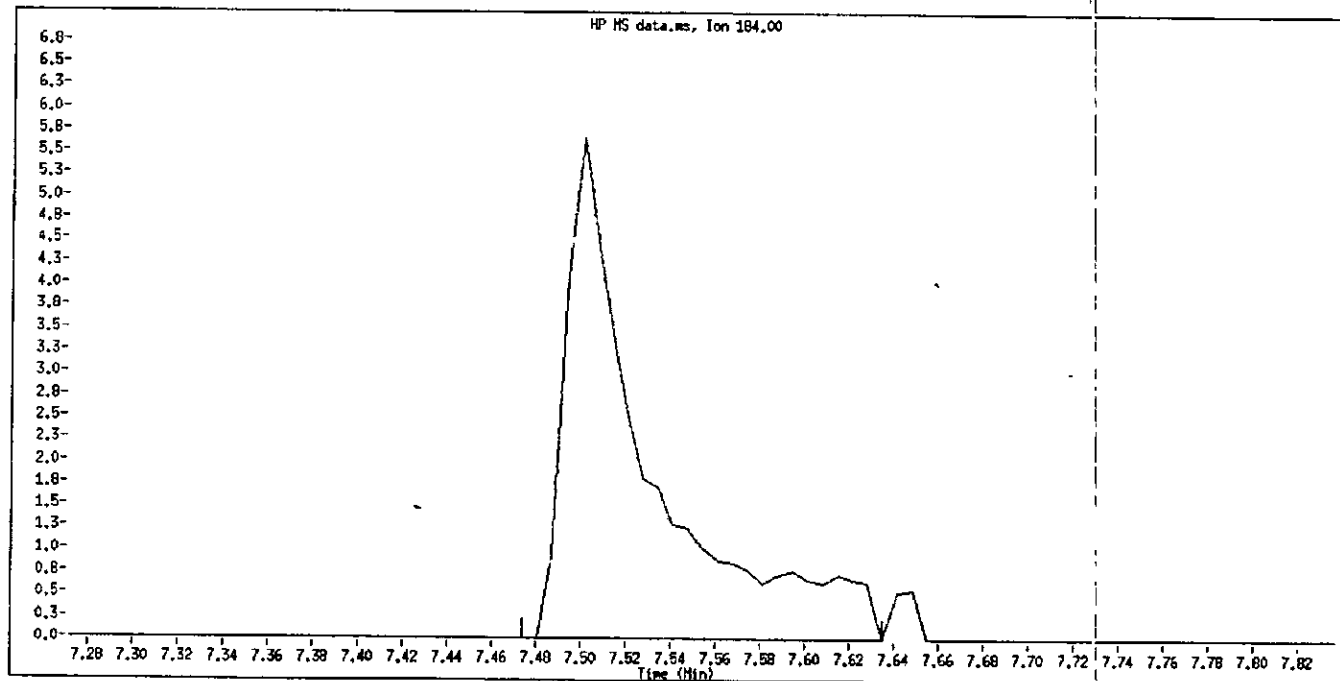
CAS # 51-28-5

Report Date 08/25/2000

671 226



Original Integration



Manual Integration

Manually Integrated By. FergusonD

Manual Integration Reason Poor Chromatography

Data File: \\Dp1tpa02\chem\721.1\4082400.b\4082400CC.D

Date : 24-AUG-2000 14:16

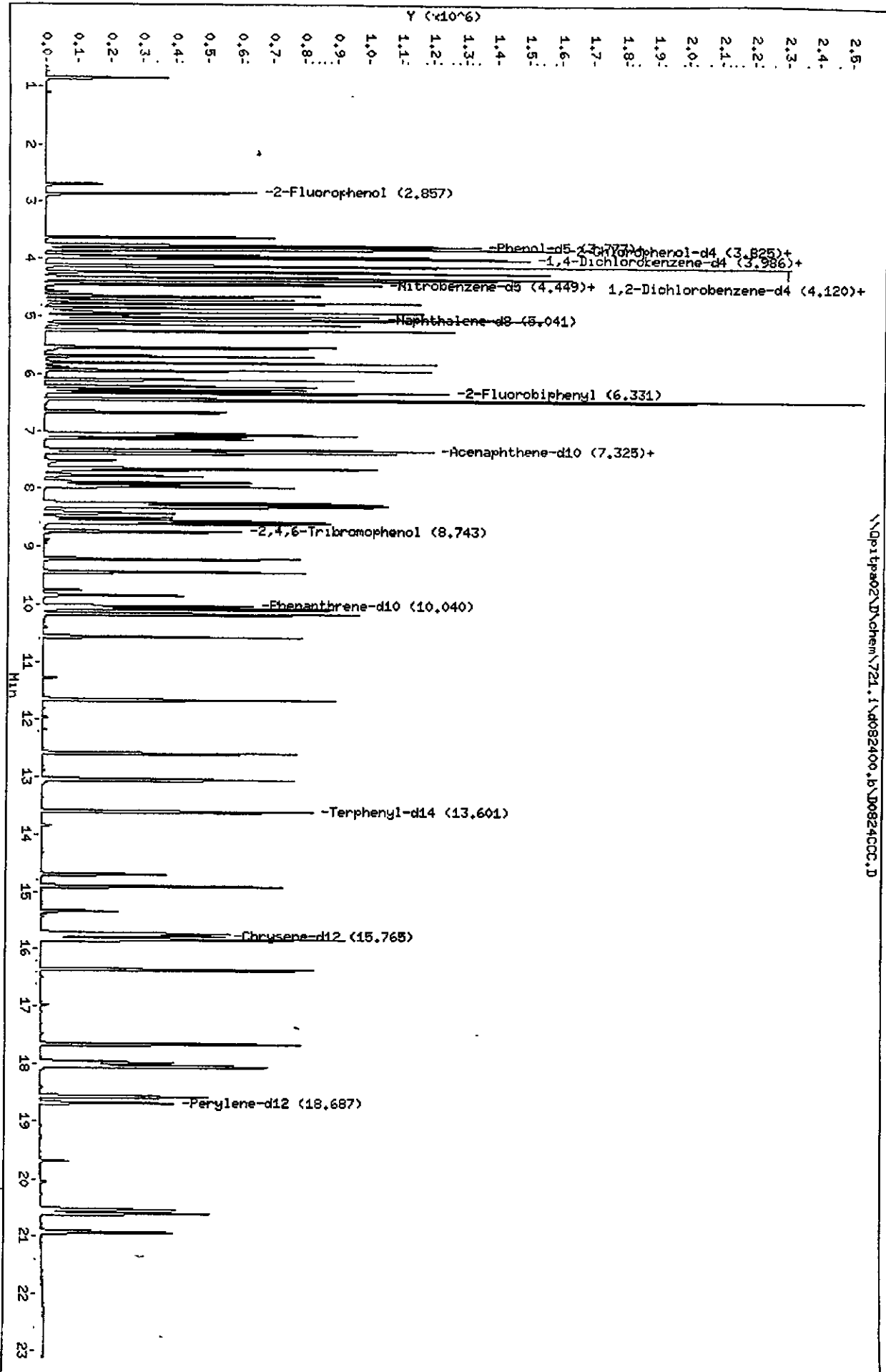
Client ID: SST0050

Sample Info: sstd050 (25UG/ML) 194-183-7 8270/c1p/625

Column phase: Hp5-MS

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25



STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082400.b\D0824CCC.D
 Lab Smp Id: sstd50 Client Smp ID: SSTD050
 Inj Date : 24-AUG-2000 14:16
 Operator : 001562, DLF Inst ID: 721.i
 Smp Info : sstd050 (25UG/ML) 194-183-7 8270/clp/625
 Misc Info : sstd50,d082400.b,8270c.m,3-root.sub,1,2
 Comment :
 Method : \\Qpitpa02\D\chem\721.i\d082400.b\8270c.m
 Meth Date : 25-Aug-2000 08:43 ferguson Quant Type: ISTD
 Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
 Als bottle: 2 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC013

Compound Sublist: 3-root.sub

DL 2
8-25-00

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL- AMT	ON-COL	
						(NG)	(NG)	
*****	----	==	=====	=====	=====	=====	=====	-----
* 1 1,4-Dichlorobenzene-d4	152	3.972	3.972	(1.000)	150123	40.0000		
* 2 Naphthalene-d8	136	5.040	5.040	(1.000)	490844	40.0000		
* 3 Acenaphthene-d10	164	7.318	7.318	(1.000)	282378	40.0000		
* 4 Phenanthrene-d10	188	10.039	10.039	(1.000)	516082	40.0000		
* 5 Chrysene-d12	240	15.771	15.771	(1.000)	386828	40.0000		
* 6 Perylene-d12	264	18.687	18.687	(1.000)	303223	40.0000		
10 N-Nitrosodimethylamine	74	0.861	0.861	(0.217)	50777	50.0000	50.879	
9 Pyridine	79	0.854	0.854	(0.215)	81980	50.0000	51.241	
16 Methyl methanesulfonate	80	2.695	2.695	(0.679)	90039	50.0000	51.670	
21 Aniline	93	3.757	3.757	(0.946)	275829	50.0000	51.846	
22 Phenol	94	3.777	3.777	(0.951)	298863	50.0000	52.358	
23 bis(2-Chloroethyl)ether	93	3.824	3.824	(0.963)	222707	50.0000	52.733	
24 2-Chlorophenol	128	3.837	3.837	(0.966)	254764	50.0000	51.080	
26 1,3-Dichlorobenzene	146	3.945	3.945	(0.993)	277015	50.0000	51.978	
27 1,4-Dichlorobenzene	146	3.985	3.985	(1.003)	275355	50.0000	51.489	
28 1,2-Dichlorobenzene	146	4.126	4.126	(1.039)	262581	50.0000	51.290	
29 Benzyl Alcohol	108	4.113	4.113	(1.036)	165899	50.0000	52.142	
30 2-Methylphenol	108	4.227	4.227	(1.064)	211797	50.0000	52.714	
31 2,2'-oxybis(1-Chloropropane)	45	4.234	4.234	(1.066)	268996	50.0000	55.441	
32 N-Nitroso-di-n-propylamine	70	4.355	4.355	(1.096)	151101	50.0000	52.976	
192 4-Methylphenol	108	4.341	4.341	(1.093)	216084	50.0000	52.584	
34 Hexachloroethane	117	4.362	4.362	(1.098)	125515	50.0000	50.875	
35 Nitrobenzene	77	4.449	4.449	(0.883)	237507	50.0000	50.743	
41 Isophorone	82	4.650	4.650	(0.923)	390306	50.0000	50.533	
42 2-Nitrophenol	139	4.718	4.718	(0.936)	137952	50.0000	51.416	
43 2,4-Dimethylphenol	107	4.771	4.771	(0.947)	236258	50.0000	51.379	

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
44 bis(2-Chloroethoxy)methane	93	4.859	4.859 (0.964)		245285	50.0000	51.566
48 2,4-Dichlorophenol	162	4.933	4.933 (0.979)		195173	50.0000	50.912
49 Benzoic Acid	122	4.939	4.939 (0.980)		56253	50.0000	29.699 (H)
50 1,2,4-Trichlorobenzene	180	5.007	5.007 (0.993)		228745	50.0000	50.743
51 Naphthalene	128	5.060	5.060 (1.004)		633928	50.0000	50.782
52 4-Chloroaniline	127	5.141	5.141 (1.020)		261781	50.0000	51.364
56 Hexachlorobutadiene	225	5.248	5.248 (1.041)		146524	50.0000	49.435
59 4-Chloro-3-Methylphenol	107	5.692	5.692 (1.129)		193894	50.0000	50.884
62 2-Methylnaphthalene	142	5.813	5.813 (1.153)		403215	50.0000	50.338
63 1-Methylnaphthalene	142	5.941	5.941 (1.179)		369268	50.0000	50.346
64 Hexachlorocyclopentadiene	237	6.102	6.102 (0.834)		163514	50.0000	48.763
66 2,4,6-Trichlorophenol	196	6.223	6.223 (0.850)		145312	50.0000	50.385
67 2,4,5-Trichlorophenol	196	6.277	6.277 (0.858)		156237	50.0000	50.700
70 2-Chloronaphthalene	162	6.445	6.445 (0.881)		413507	50.0000	50.594
73 2-Nitroaniline	65	6.660	6.660 (0.910)		130347	50.0000	51.274
76 Dimethylphthalate	163	7.036	7.036 (0.961)		495399	50.0000	50.846
78 2,6-Dinitrotoluene	165	7.123	7.123 (0.973)		115221	50.0000	50.391
79 Acenaphthylene	152	7.063	7.063 (0.965)		606894	50.0000	50.752
81 3-Nitroaniline	138	7.325	7.325 (1.001)		122858	50.0000	51.088
82 Acenaphthene	153	7.372	7.372 (1.007)		370087	50.0000	50.339
83 2,4-Dinitrophenol	184	7.506	7.506 (1.026)		66495	50.0000	48.223 (M)
85 4-Nitrophenol	109	7.681	7.681 (1.050)		94379	50.0000	51.683
86 Dibenzofuran	168	7.641	7.641 (1.044)		587009	50.0000	50.802
87 2,4-Dinitrotoluene	165	7.775	7.775 (1.062)		159328	50.0000	49.987
91 2,3,5,6-Tetrachlorophenol	232	7.889	7.889 (1.078)		129452	50.0000	48.683
88 2,3,4,6-Tetrachlorophenol	232	7.970	7.970 (1.089)		125890	50.0000	48.729
92 2-Naphthylamine	143	7.936	7.936 (1.084)		234825	50.0000	52.980
93 Diethylphthalate	149	8.292	8.292 (1.133)		519582	50.0000	50.638
94 Fluorene	166	8.252	8.252 (1.128)		455426	50.0000	50.531
95 4-Chlorophenyl-phenylether	204	8.312	8.312 (1.136)		228991	50.0000	49.648
96 4-Nitroaniline	138	8.427	8.427 (1.151)		119411	50.0000	50.763
98 4,6-Dinitro-2-methylphenol	198	8.507	8.507 (0.847)		97021	50.0000	50.553
99 N-Nitrosodiphenylamine (1)	169	8.568	8.568 (0.853)		319830	50.0000	50.423
100 1,2-Diphenylhydrazine	77	8.601	8.601 (0.857)		514949	50.0000	51.923
106 4-Bromophenyl-phenylether	248	9.226	9.226 (0.919)		144434	50.0000	51.501
107 Hexachlorobenzene	284	9.455	9.455 (0.942)		186153	50.0000	51.038
111 Pentachlorophenol	266	9.851	9.851 (0.981)		88328	50.0000	48.486
115 Phenanthrene	178	10.093	10.093 (1.005)		634166	50.0000	51.283
116 Anthracene	178	10.180	10.180 (1.014)		636622	50.0000	51.608
119 Carbazole	167	10.577	10.577 (1.054)		551432	50.0000	51.721
120 Di-n-Butylphthalate	149	11.659	11.659 (1.161)		794031	50.0000	51.917
123 Fluoranthene	202	12.599	12.599 (1.255)		626823	50.0000	52.045
124 Benzidine	184	13.023	13.023 (0.826)		188536	50.0000	50.078
125 Pyrene	202	13.049	13.049 (0.827)		605405	50.0000	50.696
131 Butylbenzylphthalate	149	14.911	14.911 (0.945)		318794	50.0000	50.894
135 3,3'-Dichlorobenzidine	252	15.845	15.845 (1.005)		211497	50.0000	48.468
136 Benzo(a)Anthracene	228	15.730	15.730 (0.997)		521014	50.0000	50.054

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
	=====	=====	=====	=====	=====	=====	=====
137 Chrysene	228	15.825	15.825	(1.003)	465575	50.0000	49.544
139 bis(2-ethylhexyl)Phthalate	149	16.355	16.355	(1.037)	422098	50.0000	49.679
140 Di-n-octylphthalate	149	17.666	17.666	(0.945)	708309	50.0000	50.885
141 Benzo(b)fluoranthene	252	17.981	17.981	(0.962)	469424	50.0000	44.077 (H)
142 Benzo(k)fluoranthene	252	18.042	18.042	(0.965)	473790	50.0000	58.354 (H)
143 7,12-dimethylbenz[a]anthracen	256	18.062	18.062	(0.967)	209628	50.0000	48.118
146 Benzo(a)pyrene	252	18.579	18.579	(0.994)	424570	50.0000	50.646
149 Indeno(1,2,3-cd)pyrene	276	20.541	20.541	(1.099)	398700	50.0000	48.077
150 Dibenz(a,h)anthracene	278	20.609	20.609	(1.103)	396747	50.0000	46.804
151 Benzo(g,h,i)perylene	276	20.938	20.938	(1.120)	393163	50.0000	47.424
\$ 154 Nitrobenzene-d5	82	4.435	4.435	(0.880)	246545	50.0000	51.232
\$ 155 2-Fluorobiphenyl	172	6.330	6.330	(0.865)	463266	50.0000	50.269
\$ 156 Terphenyl-d14	244	13.600	13.600	(0.862)	490441	50.0000	50.477
\$ 157 Phenol-d5	99	3.770	3.770	(0.949)	288597	50.0000	51.723
\$ 158 2-Fluorophenol	112	2.856	2.856	(0.719)	248638	50.0000	52.105
\$ 159 2,4,6-Tribromophenol	330	8.742	8.742	(0.871)	112457	50.0000	50.859
\$ 186 2-Chlorophenol-d4	132	3.824	3.824	(0.963)	234769	50.0000	51.234
\$ 187 1,2-Dichlorobenzene-d4	152	4.120	4.120	(1.037)	174635	50.0000	51.607

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Inj Date and Time: 24-AUG-2000 14:16

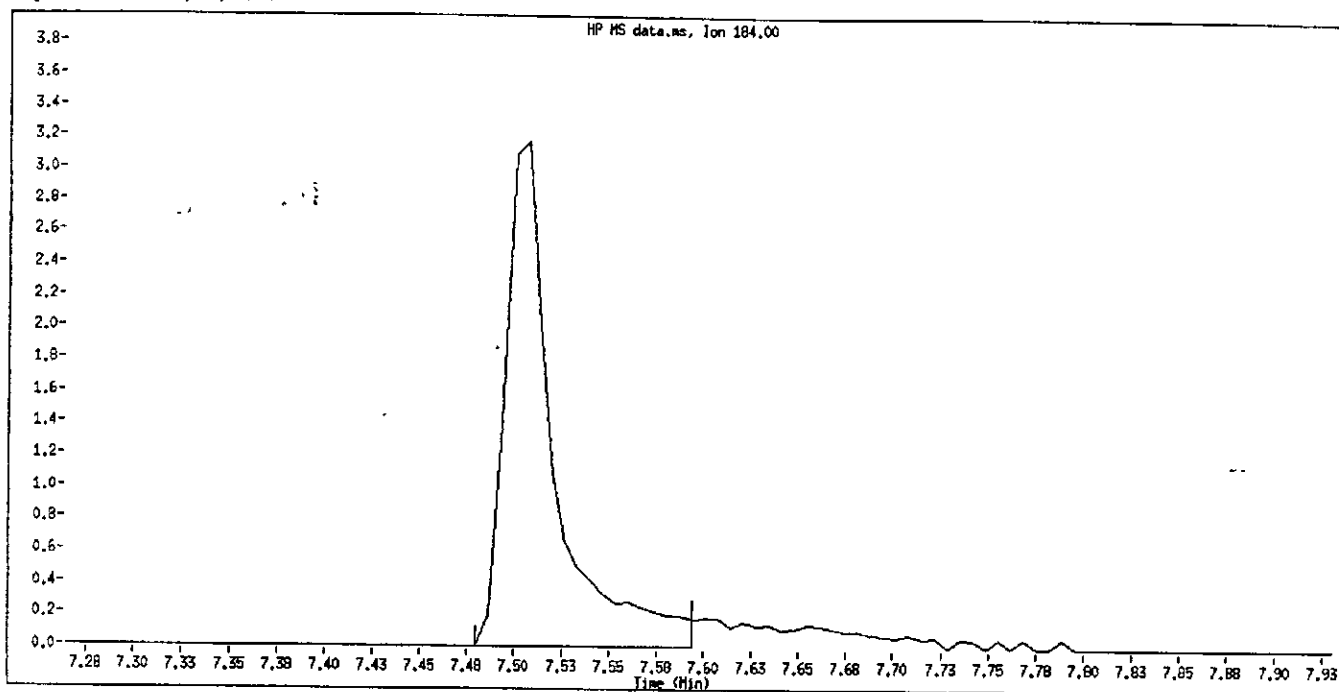
Instrument ID: 721.1

Client ID SST0050

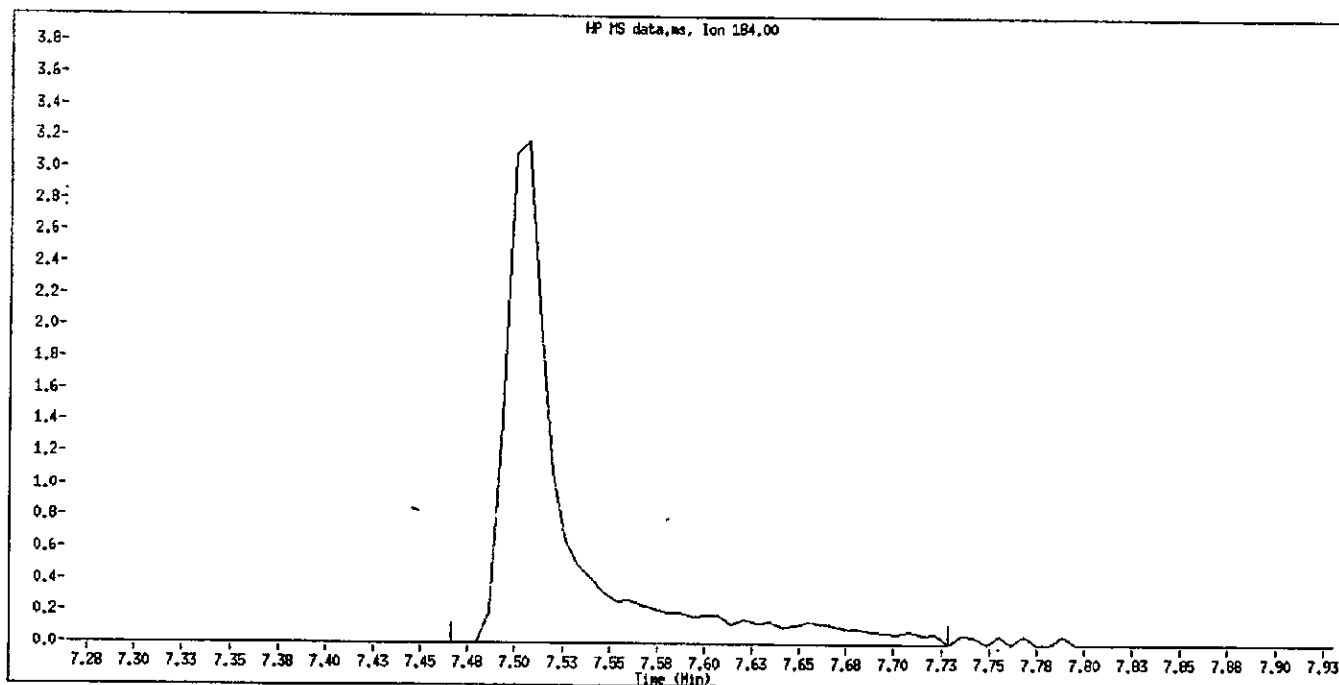
Compound Name 2,4-Dinitrophenol

CAS # 51-28-5

Report Date 08/25/2000



Original Integration



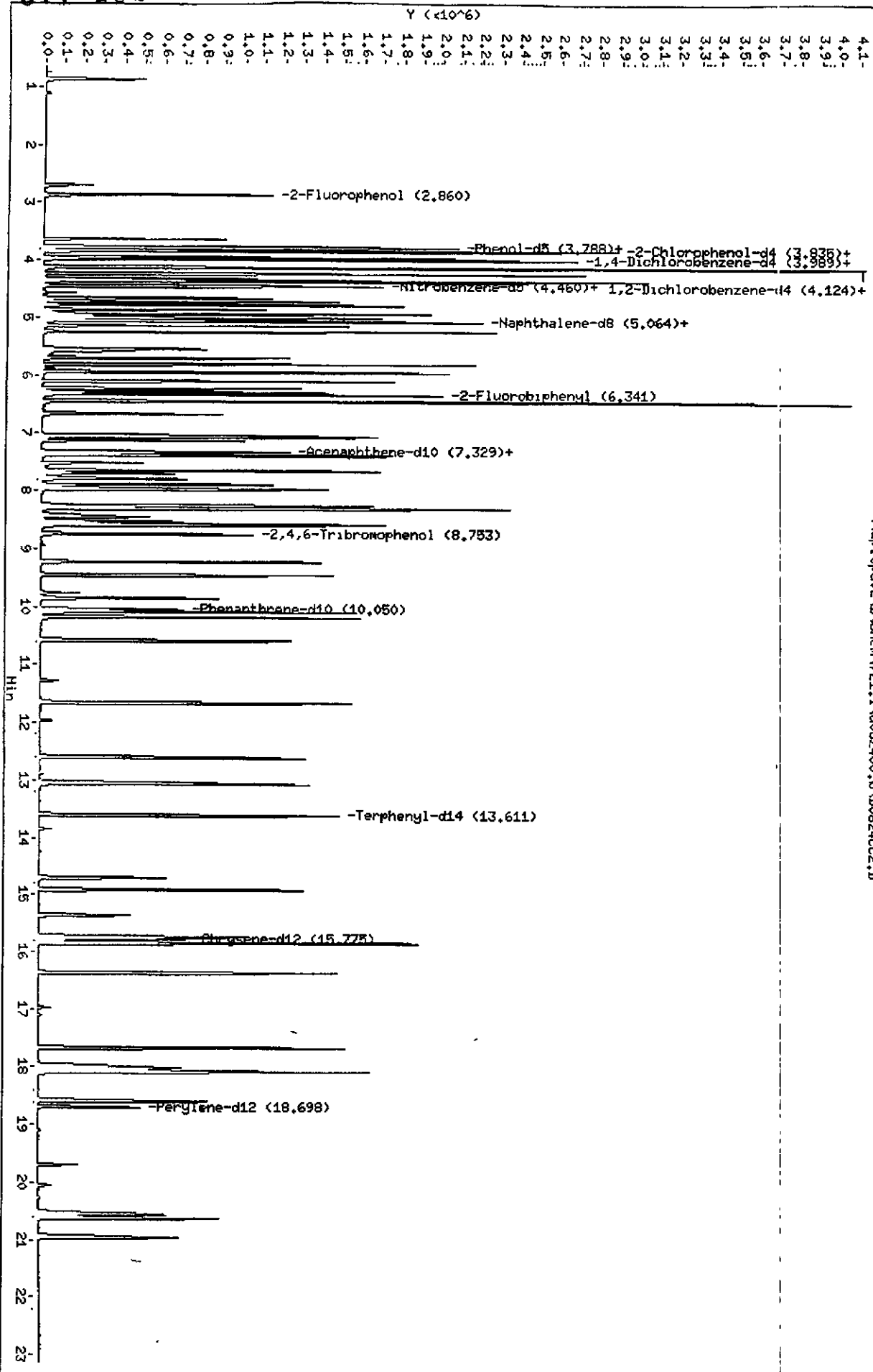
Manual Integration

Manually Integrated By: FergusonD

Manual Integration Reason: Unknown

Data File: \\Optipace2\chem\721.1\0082400.b\008240C2.D
 Date: 24-AUG-2000 18:14
 Client ID: SST080
 Sample Info: sstd080 (40UG/ML) 194-188-5 8270/olp/625
 Column Phase: HP5-MS

Instrument: 721.1
 Operator: 001562, JLF
 Column diameter: 0.25



STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082400.b\D0824CC2.D
Lab Smp Id: sstd80 Client Smp ID: SSTD080
Inj Date : 24-AUG-2000 15:14
Operator : 001562, DLF Inst ID: 721.i
Smp Info : sstd080 (40UG/ML) 194-188-5 8270/clp/625
Misc Info : sstd80,d082400.b,8270c.m,3-root.sub,1,3
Comment :
Method : \\Qpitpa02\D\chem\721.i\d082400.b\8270c.m
Meth Date : 25-Aug-2000 08:47 ferguson Quant Type: ISTD
Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC013

DL1

8-25-00

Compound Sublist: 3-root.sub

Compounds	QUANT	SIG						AMOUNTS	
			MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
								(NG)	(NG)
*****	----	--	-----	-----	-----	-----	-----	-----	-----
* 1 1,4-Dichlorobenzene-d4	152		3.975	3.975	(1.000)	173444	40.0000		
* 2 Naphthalene-d8	136		5.044	5.044	(1.000)	555002	40.0000		
* 3 Acenaphthene-d10	164		7.321	7.321	(1.000)	326062	40.0000		
* 4 Phenanthrene-d10	188		10.049	10.049	(1.000)	625304	40.0000		
* 5 Chrysene-d12	240		15.781	15.781	(1.000)	463019	40.0000		
* 6 Perylene-d12	264		18.697	18.697	(1.000)	379804	40.0000		
10 N-Nitrosodimethylamine	74		0.871	0.871	(0.219)	91719	80.0000		79.546
9 Pyridine	79		0.858	0.858	(0.216)	149747	80.0000		81.013
16 Methyl methanesulfonate	80		2.705	2.705	(0.681)	162138	80.0000		80.534
21 Aniline	93		3.760	3.760	(0.946)	492389	80.0000		80.107
22 Phenol	94		3.787	3.787	(0.953)	528227	80.0000		80.098
23 bis(2-Chloroethyl)ether	93		3.834	3.834	(0.965)	380523	80.0000		77.986
24 2-Chlorophenol	128		3.848	3.848	(0.968)	461486	80.0000		80.087
26 1,3-Dichlorobenzene	146		3.948	3.948	(0.993)	486647	80.0000		79.035
27 1,4-Dichlorobenzene	146		3.989	3.989	(1.003)	491843	80.0000		79.604
28 1,2-Dichlorobenzene	146		4.130	4.130	(1.039)	467304	80.0000		79.005
29 Benzyl Alcohol	108		4.123	4.123	(1.037)	287576	80.0000		78.231
30 2-Methylphenol	108		4.237	4.237	(1.066)	367203	80.0000		79.104
31 2,2'-oxybis(1-Chloropropane)	45		4.237	4.237	(1.066)	430620	80.0000		76.819
32 N-Nitroso-di-n-propylamine	70		4.365	4.365	(1.098)	251861	80.0000		76.429
192 4-Methylphenol	108		4.352	4.352	(1.095)	367138	80.0000		77.331
34 Hexachloroethane	117		4.365	4.365	(1.098)	229513	80.0000		80.521
35 Nitrobenzene	77		4.459	4.459	(0.884)	418680	80.0000		79.110
41 Isophorone	82		4.661	4.661	(0.924)	678257	80.0000		77.663
42 2-Nitrophenol	139		4.721	4.721	(0.936)	235892	80.0000		77.756
43 2,4-Dimethylphenol	107		4.782	4.782	(0.948)	405939	80.0000		78.075

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
44 bis(2-Chloroethoxy)methane	93	4.862	4.862	(0.964)	425802	80.0000	79.167
48 2,4-Dichlorophenol	162	4.943	4.943	(0.980)	338068	80.0000	77.993
49 Benzoic Acid	122	4.990	4.990	(0.989)	193470	80.0000	90.334
50 1,2,4-Trichlorobenzene	180	5.010	5.010	(0.993)	400252	80.0000	78.525
51 Naphthalene	128	5.064	5.064	(1.004)	1126620	80.0000	79.817
52 4-Chloroaniline	127	5.151	5.151	(1.021)	457176	80.0000	79.332
56 Hexachlorobutadiene	225	5.252	5.252	(1.041)	268150	80.0000	80.011 (Q)
59 4-Chloro-3-Methylphenol	107	5.709	5.709	(1.132)	344524	80.0000	79.962
62 2-Methylnaphthalene	142	5.816	5.816	(1.153)	711011	80.0000	78.502
63 1-Methylnaphthalene	142	5.951	5.951	(1.180)	656030	80.0000	79.103
64 Hexachlorocyclopentadiene	237	6.105	6.105	(0.834)	308657	80.0000	79.715
66 2,4,6-Trichlorophenol	196	6.233	6.233	(0.851)	261315	80.0000	78.468
67 2,4,5-Trichlorophenol	196	6.293	6.293	(0.860)	283468	80.0000	79.664
70 2-Chloronaphthalene	162	6.455	6.455	(0.882)	740304	80.0000	78.444
73 2-Nitroaniline	65	6.676	6.676	(0.912)	233855	80.0000	79.666
76 Dimethylphthalate	163	7.046	7.046	(0.962)	881041	80.0000	78.312
78 2,6-Dinitrotoluene	165	7.140	7.140	(0.975)	209846	80.0000	79.479
79 Acenaphthylene	152	7.073	7.073	(0.966)	1084764	80.0000	78.560
81 3-Nitroaniline	138	7.348	7.348	(1.004)	220537	80.0000	79.419
82 Acenaphthene	153	7.382	7.382	(1.008)	674333	80.0000	79.434
83 2,4-Dinitrophenol	184	7.516	7.516	(1.027)	138735	80.0000	87.133 (M)
85 4-Nitrophenol	109	7.711	7.711	(1.053)	173026	80.0000	82.057 (H)
86 Dibenzofuran	168	7.657	7.657	(1.046)	1061154	80.0000	79.533
87 2,4-Dinitrotoluene	165	7.799	7.799	(1.065)	296026	80.0000	80.431
91 2,3,5,6-Tetrachlorophenol	232	7.899	7.899	(1.079)	250997	80.0000	81.746
88 2,3,4,6-Tetrachlorophenol	232	7.980	7.980	(1.090)	245855	80.0000	82.415
92 2-Naphthylamine	143	7.960	7.960	(1.087)	392702	80.0000	76.729 (H)
93 Diethylphthalate	149	8.309	8.309	(1.135)	948692	80.0000	80.072
94 Fluorene	166	8.269	8.269	(1.129)	831138	80.0000	79.862
95 4-Chlorophenyl-phenylether	204	8.323	8.323	(1.137)	425193	80.0000	79.836
96 4-Nitroaniline	138	8.464	8.464	(1.156)	222702	80.0000	81.989
98 4,6-Dinitro-2-methylphenol	198	8.538	8.538	(0.850)	191411	80.0000	82.314
99 N-Nitrosodiphenylamine (1)	169	8.585	8.585	(0.854)	609550	80.0000	79.314
100 1,2-Diphenylhydrazine	77	8.618	8.618	(0.858)	929739	80.0000	77.372
106 4-Bromophenyl-phenylether	248	9.236	9.236	(0.919)	268886	80.0000	79.130
107 Hexachlorobenzene	284	9.465	9.465	(0.942)	350442	80.0000	79.299
111 Pentachlorophenol	266	9.861	9.861	(0.981)	189247	80.0000	85.739 (Q)
115 Phenanthrene	178	10.103	10.103	(1.005)	1184549	80.0000	79.059
116 Anthracene	178	10.197	10.197	(1.015)	1174162	80.0000	78.559
119 Carbazole	167	10.594	10.594	(1.054)	1030476	80.0000	79.771 (Q)
120 Di-n-Butylphthalate	149	11.669	11.669	(1.161)	1462467	80.0000	78.919
123 Fluoranthene	202	12.609	12.609	(1.255)	1162189	80.0000	79.641
124 Benzidine	184	13.033	13.033	(0.826)	359935	80.0000	79.873
125 Pyrene	202	13.066	13.066	(0.828)	1133551	80.0000	79.304
131 Butylbenzylphthalate	149	14.914	14.914	(0.945)	600316	80.0000	80.068
135 3,3'-Dichlorobenzidine	252	15.862	15.862	(1.005)	424893	80.0000	81.348
136 Benzo(a)Anthracene	228	15.747	15.747	(0.998)	996685	80.0000	79.995

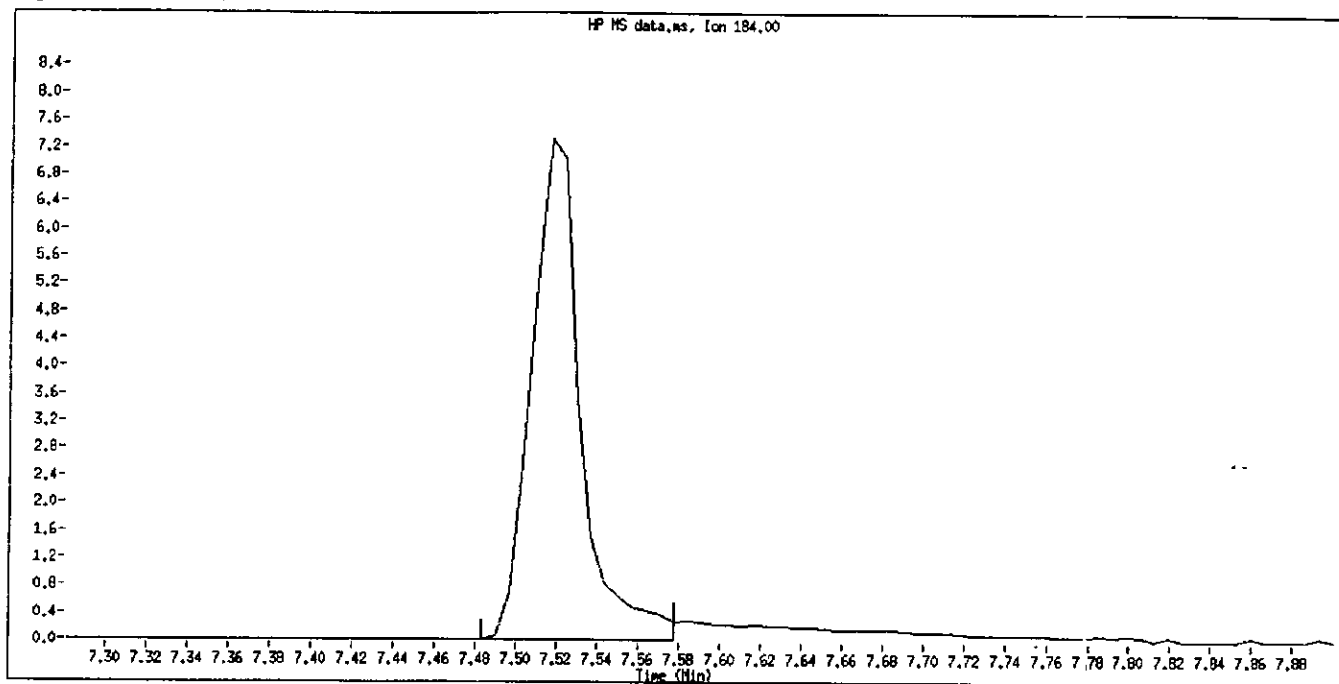
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (NG)	ON-COL (NG)
	=====	==	=====	=====	=====	=====	=====
137 Chrysene	228	15.841	15.841	(1.004)	895320	80.0000	79.598
139 bis(2-ethylhexyl)Phthalate	149	16.366	16.366	(1.037)	810296	80.0000	79.675
140 Di-n-octylphthalate	149	17.676	17.676	(0.945)	1382192	80.0000	79.275
141 Benzo(b)fluoranthene	252	18.012	18.012	(0.963)	1151798	80.0000	86.344
142 Benzo(k)fluoranthene	252	18.072	18.072	(0.967)	706719	80.0000	69.492 (H)
143 7,12-dimethylbenz[a]anthracen	256	18.092	18.092	(0.968)	451302	80.0000	82.704
146 Benzo(a)pyrene	252	18.596	18.596	(0.995)	828061	80.0000	78.861
149 Indeno(1,2,3-cd)pyrene	276	20.565	20.565	(1.100)	817250	80.0000	78.677
150 Dibenz(a,h)anthracene	278	20.632	20.632	(1.103)	826386	80.0000	77.831
151 Benzo(g,h,i)perylene	276	20.968	20.968	(1.121)	804497	80.0000	77.473
\$ 154 Nitrobenzene-d5	82	4.446	4.446	(0.881)	429253	80.0000	78.888
\$ 155 2-Fluorobiphenyl	172	6.340	6.340	(0.866)	834967	80.0000	78.465
\$ 156 Terphenyl-d14	244	13.611	13.611	(0.862)	925167	80.0000	79.551
\$ 157 Phenol-d5	99	3.780	3.780	(0.951)	512957	80.0000	79.572
\$ 158 2-Fluorophenol	112	2.860	2.860	(0.719)	437967	80.0000	79.441
\$ 159 2,4,6-Tribromophenol	330	8.759	8.759	(0.872)	211606	80.0000	78.984
\$ 186 2-Chlorophenol-d4	132	3.834	3.834	(0.965)	423571	80.0000	80.008
\$ 187 1,2-Dichlorobenzene-d4	152	4.123	4.123	(1.037)	307249	80.0000	78.588

QC Flag Legend

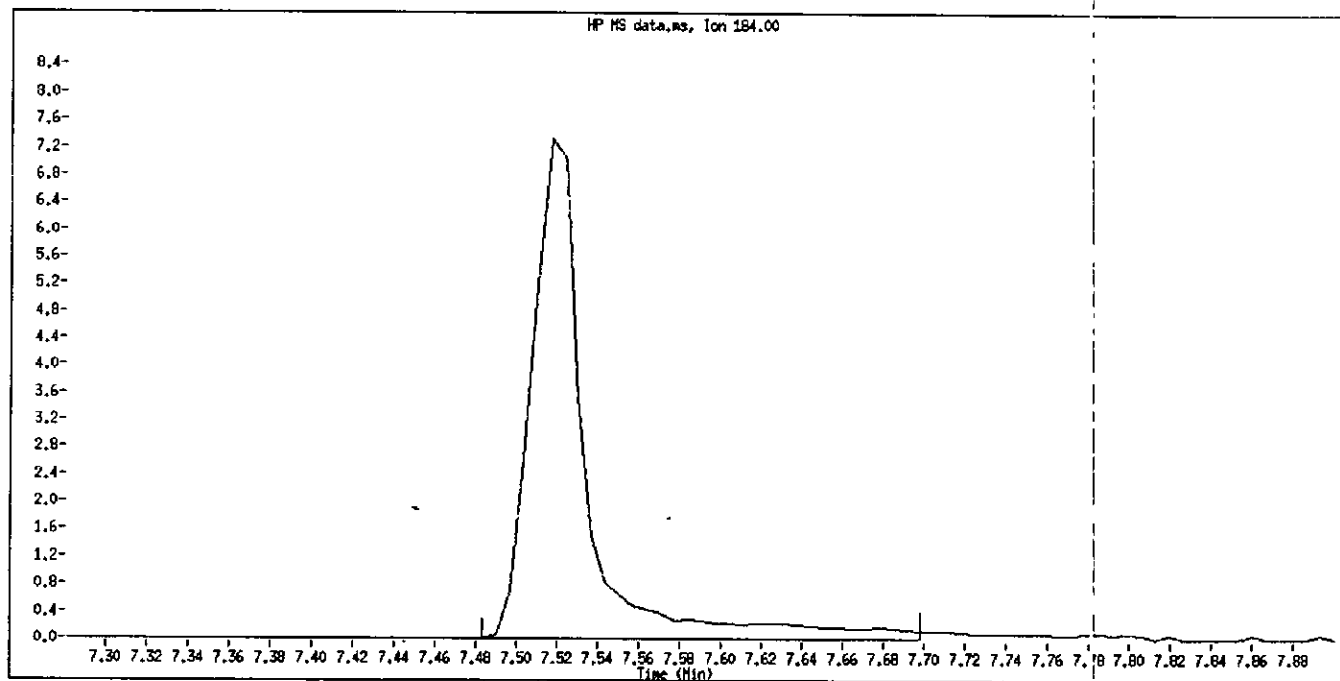
Q - Qualifier signal failed the ratio test.
 M - Compound response manually integrated.
 H - Operator selected an alternate compound hit.

671 236

Data File Name: D0824CC2.D
Inj Date and Time: 24-AUG-2000 15:14
Instrument ID: 721.1
Client ID: SST080
Compound Name: 2,4-Dinitrophenol
CAS #: 51-28-5
Report Date: 08/25/2000



Original Integration



Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File: \\Apitpa02\chem\721.1\082400.b\0824003.D

Date: 24-AUG-2000 15:43

Client ID: SSTDA20

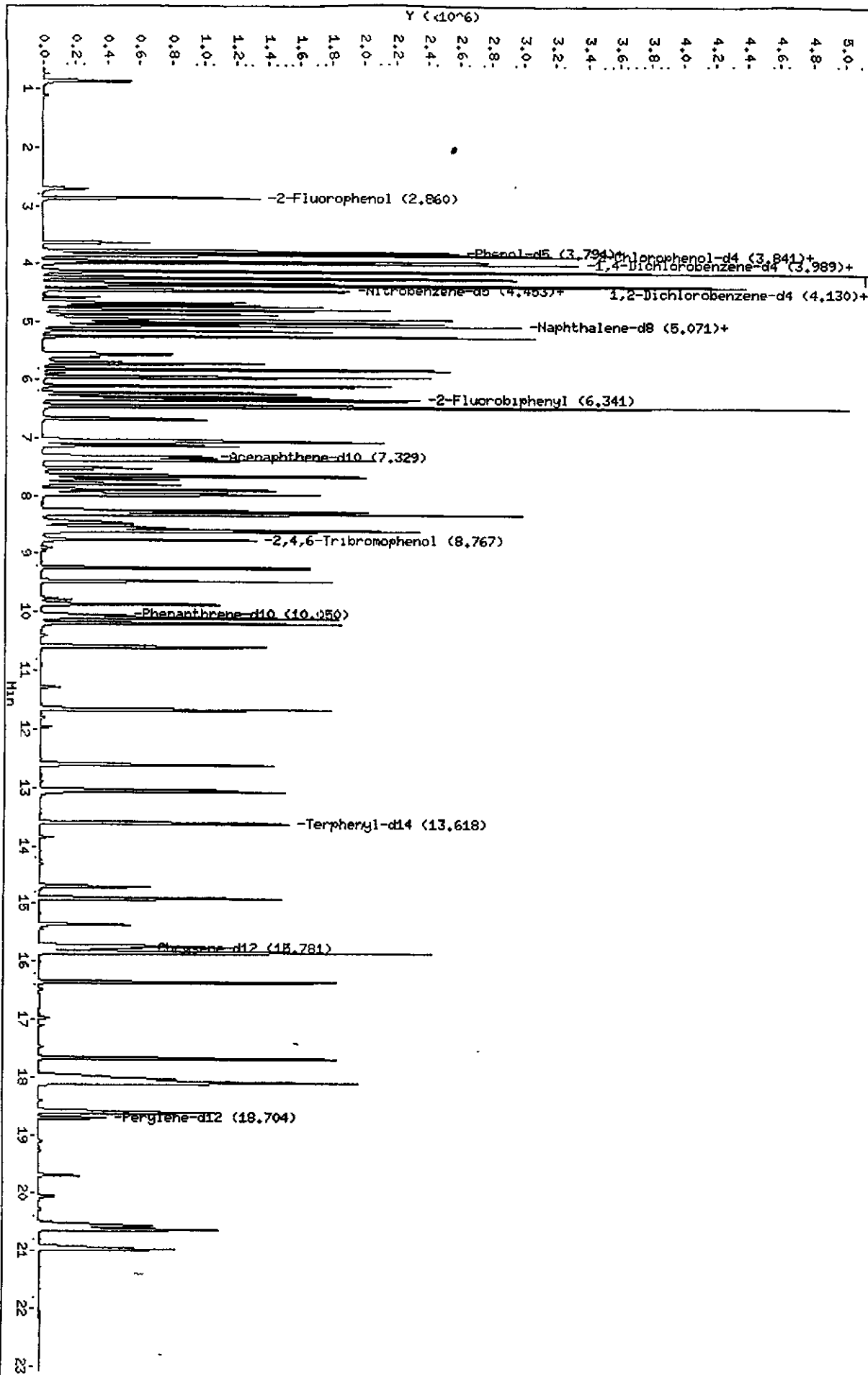
Sample Info: sstd120 (60UG/ML) 194-188-6 8270/cjp/625

Column phase: Hp5-MS

Instrument: 721.i

Operator: 001562, DLF

Column diameter: 0.25



671 238

Data File: \\Qpitpa02\D\chem\721.i\d082400.b\D0824CC3.D
Report Date: 25-Aug-2000 08:50

Page 1

STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082400.b\D0824CC3.D
 Lab Smp Id: sstd120 Client Smp ID: SSTD120
 Inj Date : 24-AUG-2000 15:43
 Operator : 001562, DLF Inst ID: 721.i
 Smp Info : sstd120 (60UG/ML) 194-188-6 8270/clp/625
 Misc Info : sstd120,d082400.b,8270c.m,3-root.sub,1,4
 Comment :
 Method : \\Qpitpa02\D\chem\721.i\d082400.b\8270c.m
 Meth Date : 25-Aug-2000 08:49 ferguson Quant Type: ISTD
 Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
 Als bottle: 5 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC013

DL
8-25-00

Compound Sublist: 3-root.sub

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
* 1 1,4-Dichlorobenzene-d4	152	3.975	3.975	(1.000)	146463	40.0000	(Q)
* 2 Naphthalene-d8	136	5.050	5.050	(1.000)	458585	40.0000	
* 3 Acenaphthene-d10	164	7.328	7.328	(1.000)	266972	40.0000	
* 4 Phenanthrene-d10	188	10.049	10.049	(1.000)	509374	40.0000	
* 5 Chrysene-d12	240	15.781	15.781	(1.000)	359051	40.0000	
* 6 Perylene-d12	264	18.704	18.704	(1.000)	295598	40.0000	
10 N-Nitrosodimethylamine	74	0.871	0.871	(0.219)	120250	120.0000	123.50
9 Pyridine	79	0.858	0.858	(0.216)	194429	120.0000	124.56
16 Methyl methanesulfonate	80	2.705	2.705	(0.681)	203510	120.0000	119.70
21 Aniline	93	3.767	3.767	(0.948)	617074	120.0000	118.88(Q)
22 Phenol	94	3.794	3.794	(0.954)	652491	120.0000	117.17
23 bis(2-Chloroethyl)ether	93	3.834	3.834	(0.965)	482397	120.0000	117.08
24 2-Chlorophenol	128	3.848	3.848	(0.968)	592226	120.0000	121.71
26 1,3-Dichlorobenzene	146	3.948	3.948	(0.993)	630096	120.0000	121.18
27 1,4-Dichlorobenzene	146	3.989	3.989	(1.003)	623016	120.0000	119.41
28 1,2-Dichlorobenzene	146	4.130	4.130	(1.039)	606242	120.0000	121.38
29 Benzyl Alcohol	108	4.130	4.130	(1.039)	372706	120.0000	120.07
30 2-Methylphenol	108	4.244	4.244	(1.068)	465554	120.0000	118.77
31 2,2'-oxybis(1-Chloropropane)	45	4.237	4.237	(1.066)	533834	120.0000	112.78
32 N-Nitroso-di-n-propylamine	70	4.372	4.372	(1.100)	326873	120.0000	117.46
192 4-Methylphenol	108	4.358	4.358	(1.096)	462684	120.0000	115.41
34 Hexachloroethane	117	4.365	4.365	(1.098)	292302	120.0000	121.44
35 Nitrobenzene	77	4.466	4.466	(0.884)	534816	120.0000	122.30
41 Isophorone	82	4.667	4.667	(0.924)	890552	120.0000	123.41
42 2-Nitrophenol	139	4.721	4.721	(0.935)	307970	120.0000	122.86
43 2,4-Dimethylphenol	107	4.788	4.788	(0.948)	520172	120.0000	121.08

Data File: \\Opitpa02\D\chem\721.i\d082400.b\D0824CC3.D
Report Date: 25-Aug-2000 08:50

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
44 bis(2-Chloroethoxy)methane	93	4.869	4.869	(0.964)	540604	120.000	121.64
48 2,4-Dichlorophenol	162	4.950	4.950	(0.980)	443855	120.000	123.93
49 Benzoic Acid	122	5.010	5.010	(0.992)	306118	120.000	172.98 (A)
50 1,2,4-Trichlorobenzene	180	5.010	5.010	(0.992)	519409	120.000	123.33
51 Naphthalene	128	5.070	5.070	(1.004)	1427310	120.000	122.38
52 4-Chloroaniline	127	5.151	5.151	(1.020)	579472	120.000	121.70
56 Hexachlorobutadiene	225	5.252	5.252	(1.040)	349891	120.000	126.35 (Q)
59 4-Chloro-3-Methylphenol	107	5.722	5.722	(1.133)	440021	120.000	123.60
62 2-Methylnaphthalene	142	5.823	5.823	(1.153)	914901	120.000	122.25
63 1-Methylnaphthalene	142	5.957	5.957	(1.180)	839912	120.000	122.57
64 Hexachlorocyclopentadiene	237	6.105	6.105	(0.833)	404633	120.000	127.63
66 2,4,6-Trichlorophenol	196	6.240	6.240	(0.851)	338053	120.000	123.98
67 2,4,5-Trichlorophenol	196	6.300	6.300	(0.860)	365166	120.000	125.34
70 2-Chloronaphthalene	162	6.455	6.455	(0.881)	953940	120.000	123.45
73 2-Nitroaniline	65	6.683	6.683	(0.912)	292759	120.000	121.81
76 Dimethylphthalate	163	7.053	7.053	(0.962)	1134699	120.000	123.18
78 2,6-Dinitrotoluene	165	7.147	7.147	(0.975)	262719	120.000	121.53
79 Acenaphthylene	152	7.080	7.080	(0.966)	1387082	120.000	122.69 (Q)
81 3-Nitroaniline	138	7.355	7.355	(1.004)	276390	120.000	121.56
82 Acenaphthene	153	7.395	7.395	(1.009)	848104	120.000	122.02
83 2,4-Dinitrophenol	184	7.530	7.530	(1.028)	185279	120.000	142.12 (M)
85 4-Nitrophenol	109	7.725	7.725	(1.054)	213312	120.000	123.55 (H)
86 Dibenzofuran	168	7.664	7.664	(1.046)	1338031	120.000	122.48
87 2,4-Dinitrotoluene	165	7.812	7.812	(1.066)	383107	120.000	127.13
91 2,3,5,6-Tetrachlorophenol	232	7.906	7.906	(1.079)	328923	120.000	130.84
98 2,3,4,6-Tetrachlorophenol	232	7.993	7.993	(1.091)	309679	120.000	126.79
92 2-Naphthylamine	143	7.966	7.966	(1.087)	461549	120.000	110.14 (H)
93 Diethylphthalate	149	8.316	8.316	(1.135)	1189792	120.000	122.65
94 Fluorene	166	8.276	8.276	(1.129)	1051109	120.000	123.35
95 4-Chlorophenyl-phenylether	204	8.329	8.329	(1.137)	543772	120.000	124.70
96 4-Nitroaniline	138	8.484	8.484	(1.158)	275179	120.000	123.73
98 4,6-Dinitro-2-methylphenol	198	8.558	8.558	(0.852)	252954	120.000	133.54
99 N-Nitrosodiphenylamine (1)	169	8.598	8.598	(0.856)	764985	120.000	122.19
100 1,2-Diphenylhydrazine	77	8.625	8.625	(0.858)	1188005	120.000	121.37
106 4-Bromophenyl-phenylether	248	9.243	9.243	(0.920)	338315	120.000	122.22
107 Hexachlorobenzene	284	9.472	9.472	(0.943)	444181	120.000	123.38
111 Pentachlorophenol	266	9.868	9.868	(0.982)	251506	120.000	139.88 (Q)
115 Phenanthrene	178	10.110	10.110	(1.006)	1493780	120.000	122.39
116 Anthracene	178	10.204	10.204	(1.015)	1459905	120.000	119.91
119 Carbazole	167	10.600	10.600	(1.055)	1246132	120.000	118.42 (Q)
120 Di-n-Butylphthalate	149	11.675	11.675	(1.162)	1796648	120.000	119.02
123 Fluoranthene	202	12.616	12.616	(1.255)	1419689	120.000	119.43
124 Benzidine	184	13.039	13.039	(0.826)	426850	120.000	122.15
125 Pyrene	202	13.073	13.073	(0.828)	1388190	120.000	125.24
131 Butylbenzylphthalate	149	14.921	14.921	(0.946)	715021	120.000	122.98
135 3,3'-Dichlorobenzidine	252	15.862	15.862	(1.005)	520910	120.000	128.61
136 Benzo(a)Anthracene	228	15.754	15.754	(0.998)	1192038	120.000	123.38

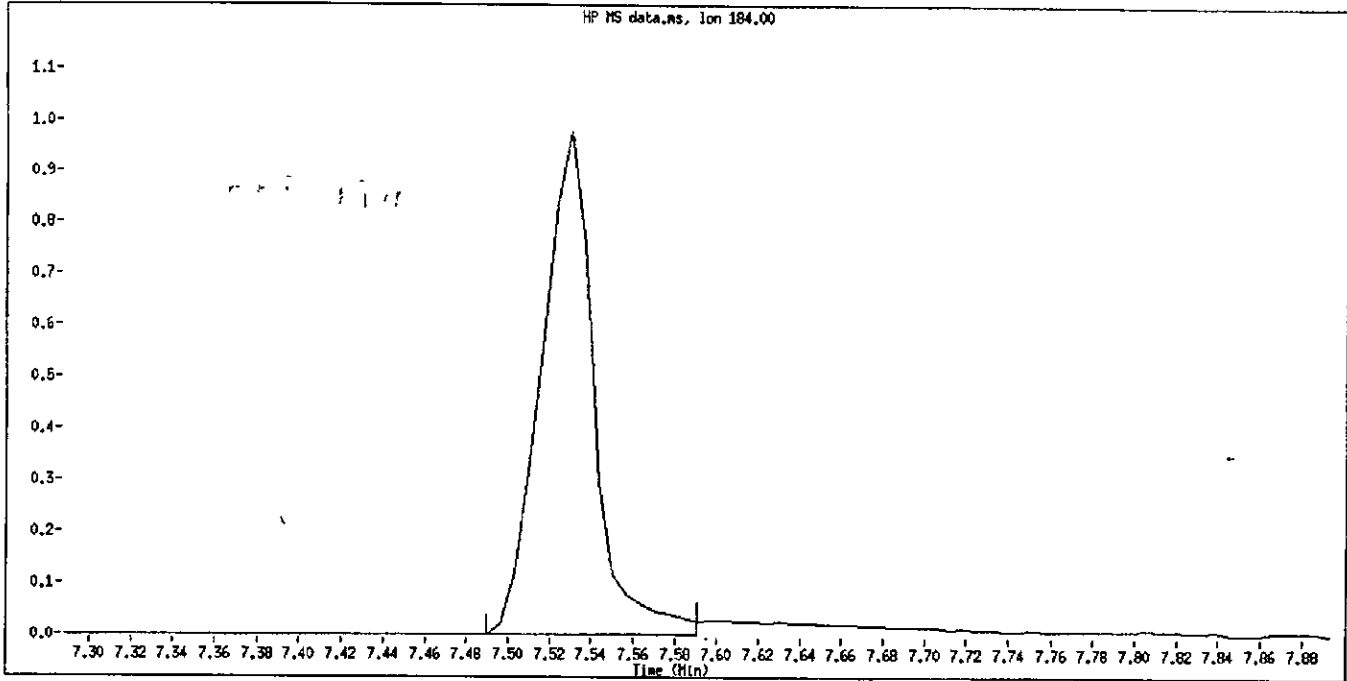
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
=====	=====	==	=====	=====	=====	=====	=====
137 Chrysene	228	15.855	15 855	(1 005)	1096882	120.000	125 75
139 bis(2-ethylhexyl)Phthalate	149	16.365	16 365	(1 037)	1001351	120.000	126 97
140 Di-n-octylphthalate	149	17.682	17 682	(0.945)	1706256	120.000	125 74
141 Benzo(b)fluoranthene	252	18.025	18 025	(0.964)	1417586	120.000	136 54
142 Benzo(k)fluoranthene	252	18.092	18.092	(0.967)	869421	120.000	109.84 (H)
143 7,12-dimethylbenz[a]anthracen	256	18.106	18 106	(0.968)	563724	120.000	132.73
146 Benzo(a)pyrene	252	18.610	18 610	(0.995)	1015620	120.000	124 28
149 Indeno(1,2,3-cd)pyrene	276	20.572	20.572	(1 100)	1030448	120.000	127 46
150 Dibenz(a,h)anthracene	278	20.646	20 646	(1 104)	1087533	120.000	131.60
151 Benzo(g,h,i)perylene	276	20.982	20 982	(1.122)	1049818	120.000	129 90
\$ 154 Nitrobenzene-d5	82	4.446	4.446	(0.880)	545212	120.000	121 26
\$ 155 2-Fluorobiphenyl	172	6.347	6 347	(0.866)	1077275	120.000	123 64
\$ 156 Terphenyl-d14	244	13.617	13 617	(0.863)	1114448	120.000	123 57
\$ 157 Phenol-d5	99	3.787	3.787	(0.953)	650867	120.000	119.56
\$ 158 2-Fluorophenol	112	2.860	2.860	(0.719)	566287	120.000	121.64
\$ 159 2,4,6-Tribromophenol	330	8.766	8 766	(0.872)	277137	120.000	126.99
\$ 186 2-Chlorophenol-d4	132	3.834	3 834	(0.965)	538969	120.000	120 56
\$ 187 1,2-Dichlorobenzene-d4	152	4.123	4 123	(1.037)	394623	120.000	119 53

QC Flag Legend

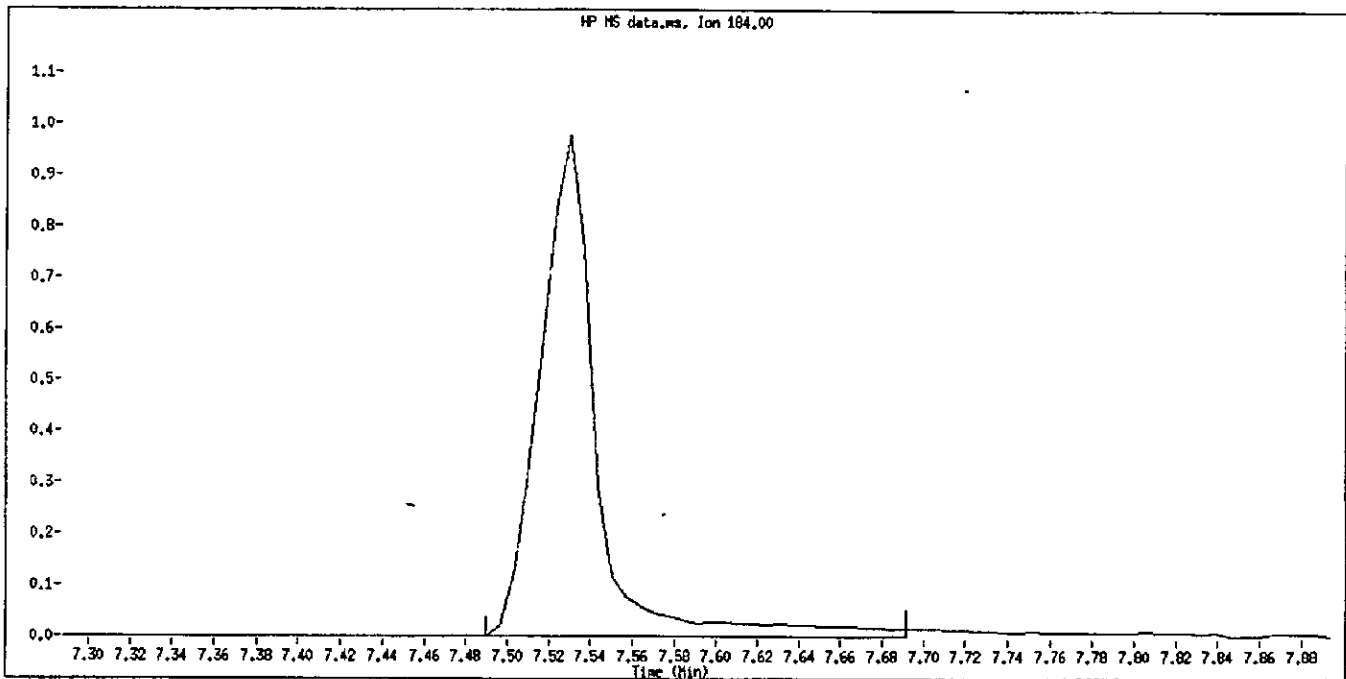
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File Name: D0824CC3.D
Inj Date and Time 24-AUG-2000 15.43
Instrument ID: 721.1
Client ID SST0120
Compound Name 2,4-Dinitrophenol
CAS #: 51-28-5
Report Date: 08/25/2000

671 241



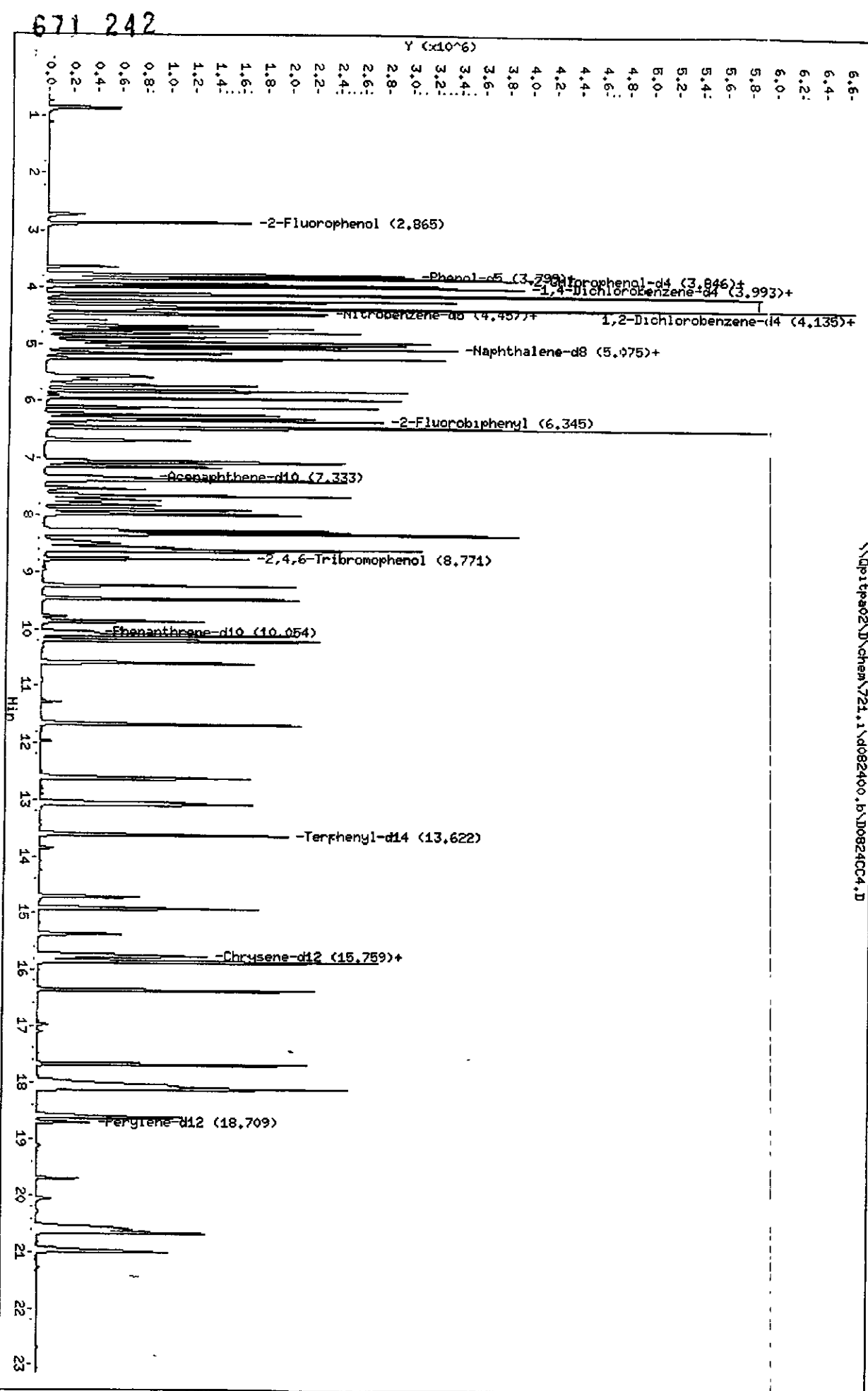
Original Integration



Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

\\Qp1tpa02\chem\721.1\0082400.b\00824004.D



STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082400.b\D0824CC4.D
Lab Smp Id: sstd160 Client Smp ID: SSTD160
Inj Date : 24-AUG-2000 16:13
Operator : 001562, DLF Inst ID: 721.i
Smp Info : sstd160 (80UG/ML) 194-188-7 8270/clp/625
Misc Info : sstd160,d082400.b,8270c.m,3-root.sub,1,5
Comment :
Method : \\Qpitpa02\D\chem\721.i\d082400.b\8270c.m
Meth Date : 25-Aug-2000 08:51 ferguson Quant Type: ISTD
Cal Date : 24-AUG-2000 16:13 Cal File: D0824CC4.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC013

DL 1
8-25-00

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
*****	****	---	-----	-----	-----	-----	-----
* 1 1,4-Dichlorobenzene-d4	152	3.980	3.980	(1.000)	140732	40.0000	(Q)
* 2 Naphthalene-d8	136	5.048	5.048	(1.000)	434867	40.0000	
* 3 Acenaphthene-d10	164	7.326	7.326	(1.000)	250220	40.0000	
* 4 Phenanthrene-d10	188	10.054	10.054	(1.000)	472641	40.0000	
* 5 Chrysene-d12	240	15.785	15.785	(1.000)	339953	40.0000	
* 6 Perylene-d12	264	18.708	18.708	(1.000)	283785	40.0000	
10 N-Nitrosodimethylamine	74	0.875	0.875	(0.220)	152256	160.000	162.74 (A)
9 Pyridine	79	0.855	0.855	(0.215)	241803	160.000	161.22 (A)
16 Methyl methanesulfonate	80	2.710	2.710	(0.681)	252232	160.000	154.40
21 Aniline	93	3.765	3.765	(0.946)	747584	160.000	149.90 (Q)
22 Phenol	94	3.805	3.805	(0.956)	832880	160.000	155.65 (Q)
23 bis(2-Chloroethyl)ether	93	3.838	3.838	(0.965)	602273	160.000	152.12
24 2-Chlorophenol	128	3.852	3.852	(0.968)	749995	160.000	160.41 (A)
26 1,3-Dichlorobenzene	146	3.953	3.953	(0.993)	790642	160.000	158.25
27 1,4-Dichlorobenzene	146	3.993	3.993	(1.003)	785877	160.000	156.76
28 1,2-Dichlorobenzene	146	4.134	4.134	(1.039)	765426	160.000	159.49
29 Benzyl Alcohol	108	4.134	4.134	(1.039)	470080	160.000	157.60
30 2-Methylphenol	108	4.248	4.248	(1.068)	581333	160.000	154.34
31 2,2'-oxybis(1-Chloropropane)	45	4.242	4.242	(1.066)	633082	160.000	139.19
32 N-Nitroso-di-n-propylamine	70	4.376	4.376	(1.100)	422722	160.000	158.09
192 4-Methylphenol	108	4.369	4.369	(1.098)	617409	160.000	160.27 (A)
34 Hexachloroethane	117	4.369	4.369	(1.098)	368623	160.000	159.38
35 Nitrobenzene	77	4.470	4.470	(0.886)	662488	160.000	159.76
41 Isophorone	82	4.678	4.678	(0.927)	1102149	160.000	161.06 (A)
42 2-Nitrophenol	139	4.725	4.725	(0.936)	386436	160.000	162.57 (A)
43 2,4-Dimethylphenol	107	4.793	4.793	(0.949)	668061	160.000	163.98 (A)

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	4.873	4.873	(0.965)	670059	160.000	159.00
48 2,4-Dichlorophenol	162	4.954	4.954	(0.981)	558738	160.000	164.51(A)
49 Benzoic Acid	122	5.028	5.028	(0.996)	421495	160.000	251.17(A)
50 1,2,4-Trichlorobenzene	180	5.014	5.014	(0.993)	657132	160.000	164.54(A)
51 Naphthalene	128	5.075	5.075	(1.005)	1790335	160.000	161.88(A)
52 4-Chloroaniline	127	5.155	5.155	(1.021)	723737	160.000	160.28(A)
56 Hexachlorobutadiene	225	5.256	5.256	(1.041)	437864	160.000	166.74(AQ)
59 4-Chloro-3-Methylphenol	107	5.727	5.727	(1.134)	537331	160.000	159.16
62 2-Methylnaphthalene	142	5.827	5.827	(1.154)	1150609	160.000	162.13(A)
63 1-Methylnaphthalene	142	5.955	5.955	(1.180)	1042732	160.000	160.46(A)
64 Hexachlorocyclopentadiene	237	6.110	6.110	(0.834)	513707	160.000	172.89(A)
66 2,4,6-Trichlorophenol	196	6.244	6.244	(0.852)	432041	160.000	169.06(A)
67 2,4,5-Trichlorophenol	196	6.304	6.304	(0.861)	451309	160.000	165.28(A)
70 2-Chloronaphthalene	162	6.459	6.459	(0.882)	1184425	160.000	163.54(A)
73 2-Nitroaniline	65	6.694	6.694	(0.914)	360981	160.000	160.25(A)
76 Dimethylphthalate	163	7.064	7.064	(0.964)	1405880	160.000	162.84(A)
78 2,6-Dinitrotoluene	165	7.151	7.151	(0.976)	331403	160.000	163.56(A)
79 Acenaphthylene	152	7.084	7.084	(0.967)	1720886	160.000	162.40(A)
81 3-Nitroaniline	138	7.366	7.366	(1.006)	345981	160.000	162.36(A)
82 Acenaphthene	153	7.400	7.400	(1.010)	1070609	160.000	164.34(A)
83 2,4-Dinitrophenol	184	7.541	7.541	(1.029)	239529	160.000	196.03(AM)
85 4-Nitrophenol	109	7.736	7.736	(1.056)	265787	160.000	164.25(AH)
86 Dibenzofuran	168	7.668	7.668	(1.047)	1665129	160.000	162.63(A)
87 2,4-Dinitrotoluene	165	7.823	7.823	(1.068)	456445	160.000	161.61(A)
91 2,3,5,6-Tetrachlorophenol	232	7.910	7.910	(1.080)	407027	160.000	172.74(A)
88 2,3,4,6-Tetrachlorophenol	232	7.998	7.998	(1.092)	384528	160.000	167.97(A)
92 2-Naphthylamine	143	7.984	7.984	(1.090)	539555	160.000	137.38(H)
93 Diethylphthalate	149	8.327	8.327	(1.137)	1479263	160.000	162.70(A)
94 Fluorene	166	8.280	8.280	(1.130)	1298524	160.000	162.59(A)
95 4-Chlorophenyl-phenylether	204	8.334	8.334	(1.138)	686860	160.000	168.06(A)
96 4-Nitroaniline	138	8.508	8.508	(1.161)	338923	160.000	162.60(A)
98 4,6-Dinitro-2-methylphenol	198	8.575	8.575	(0.853)	311976	160.000	177.50(A)
99 N-Nitrosodiphenylamine (1)	169	8.609	8.609	(0.856)	941257	160.000	162.03(A)
100 1,2-Diphenylhydrazine	77	8.629	8.629	(0.858)	1545980	160.000	170.21(A)
106 4-Bromophenyl-phenylether	248	9.247	9.247	(0.920)	423368	160.000	164.83(A)
107 Hexachlorobenzene	284	9.476	9.476	(0.943)	554418	160.000	165.98(A)
111 Pentachlorophenol	266	9.872	9.872	(0.982)	326442	160.000	195.66(AQ)
115 Phenanthrene	178	10.121	10.121	(1.007)	1838588	160.000	162.35(A)
116 Anthracene	178	10.208	10.208	(1.015)	1807244	160.000	159.97
119 Carbazole	167	10.611	10.611	(1.055)	1570445	160.000	160.84(AQ)
120 Di-n-Butylphthalate	149	11.680	11.680	(1.162)	2244921	160.000	160.27(A)
123 Fluoranthene	202	12.627	12.627	(1.256)	1763802	160.000	159.91
124 Benzidine	184	13.044	13.044	(0.826)	526298	160.000	159.07
125 Pyrene	202	13.084	13.084	(0.829)	1721216	160.000	164.01(A)
131 Butylbenzylphthalate	149	14.925	14.925	(0.946)	894338	160.000	162.46(A)
135 3,3'-Dichlorobenzidine	252	15.866	15.866	(1.005)	645308	160.000	168.27(A)
136 Benzo(a)Anthracene	228	15.758	15.758	(0.998)	1499856	160.000	163.96(A)

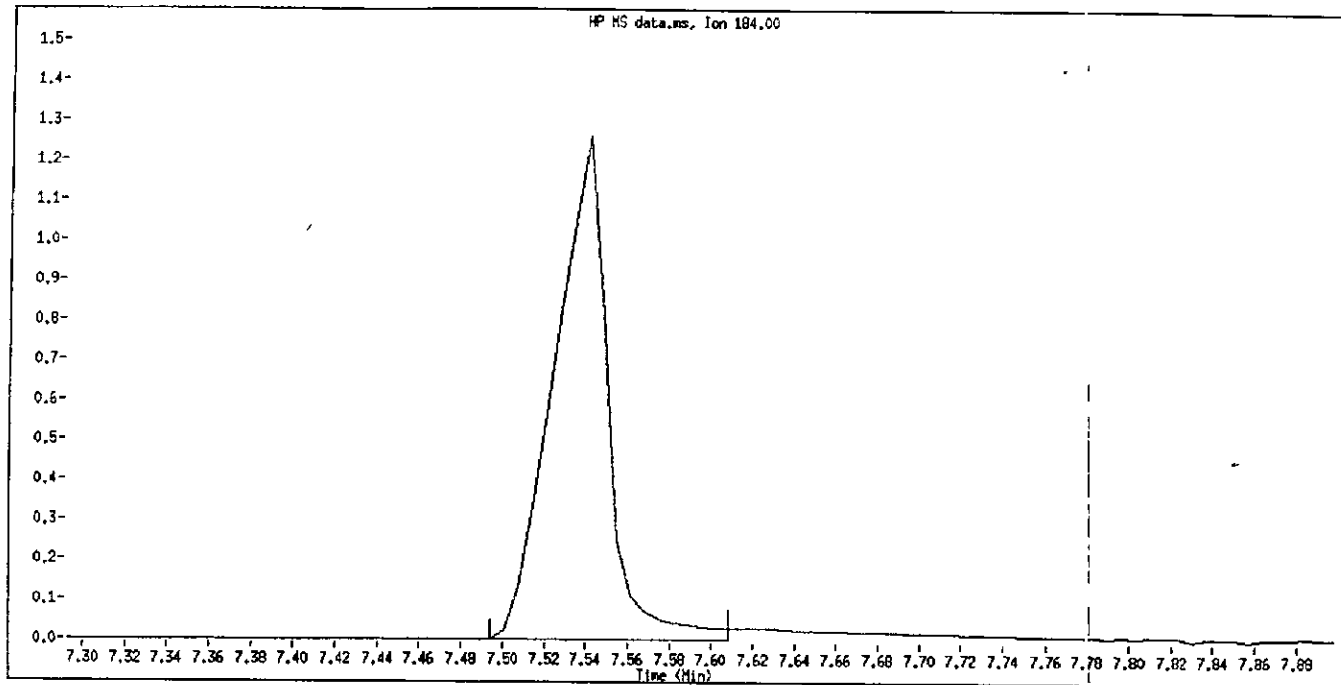
Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(NG)	(NG)
=====	====	==	=====	=====	=====	=====	=====	
137 Chrysene	228	15.859	15.859	(1.005)	1382591	160.000	167.42 (A)	
139 bis(2-ethylhexyl)Phthalate	149	16.370	16.370	(1.037)	1254947	160.000	168.07 (A)	
140 Di-n-octylphthalate	149	17.687	17.687	(0.945)	2130965	160.000	163.57 (A)	
141 Benzo(b)fluoranthene	252	18.050	18.050	(0.965)	1756516	160.000	176.23 (A)	
142 Benzo(k)fluoranthene	252	18.103	18.103	(0.968)	1174399	160.000	154.55 (H)	
143 7,12-dimethylbenz[a]anthracen	256	18.117	18.117	(0.968)	706783	160.000	173.34 (A)	
146 Benzo(a)pyrene	252	18.621	18.621	(0.995)	1299216	160.000	165.60 (A)	
149 Indeno(1,2,3-cd)pyrene	276	20.576	20.576	(1.100)	1462980	160.000	188.50 (AM)	
150 Dibenz(a,h)anthracene	278	20.663	20.663	(1.105)	1504571	160.000	189.65 (A)	
151 Benzo(g,h,i)perylene	276	20.999	20.999	(1.122)	1482422	160.000	191.06 (A)	
\$ 154 Nitrobenzene-d5	82	4.450	4.450	(0.882)	682689	160.000	160.12 (A)	
\$ 155 2-Fluorobiphenyl	172	6.345	6.345	(0.866)	1324599	160.000	162.21 (A)	
\$ 156 Terphenyl-d14	244	13.622	13.622	(0.863)	1422083	160.000	166.54 (A)	
\$ 157 Phenol-d5	99	3.791	3.791	(0.953)	794299	160.000	151.86	
\$ 158 2-Fluorophenol	112	2.864	2.864	(0.720)	705143	160.000	157.63	
\$ 159 2,4,6-Tribromophenol	330	8.770	8.770	(0.872)	340212	160.000	168.00 (A)	
\$ 186 2-Chlorophenol-d4	132	3.838	3.838	(0.965)	672276	160.000	156.50	
\$ 187 1,2-Dichlorobenzene-d4	152	4.127	4.127	(1.037)	500379	160.000	157.74	

QC Flag Legend

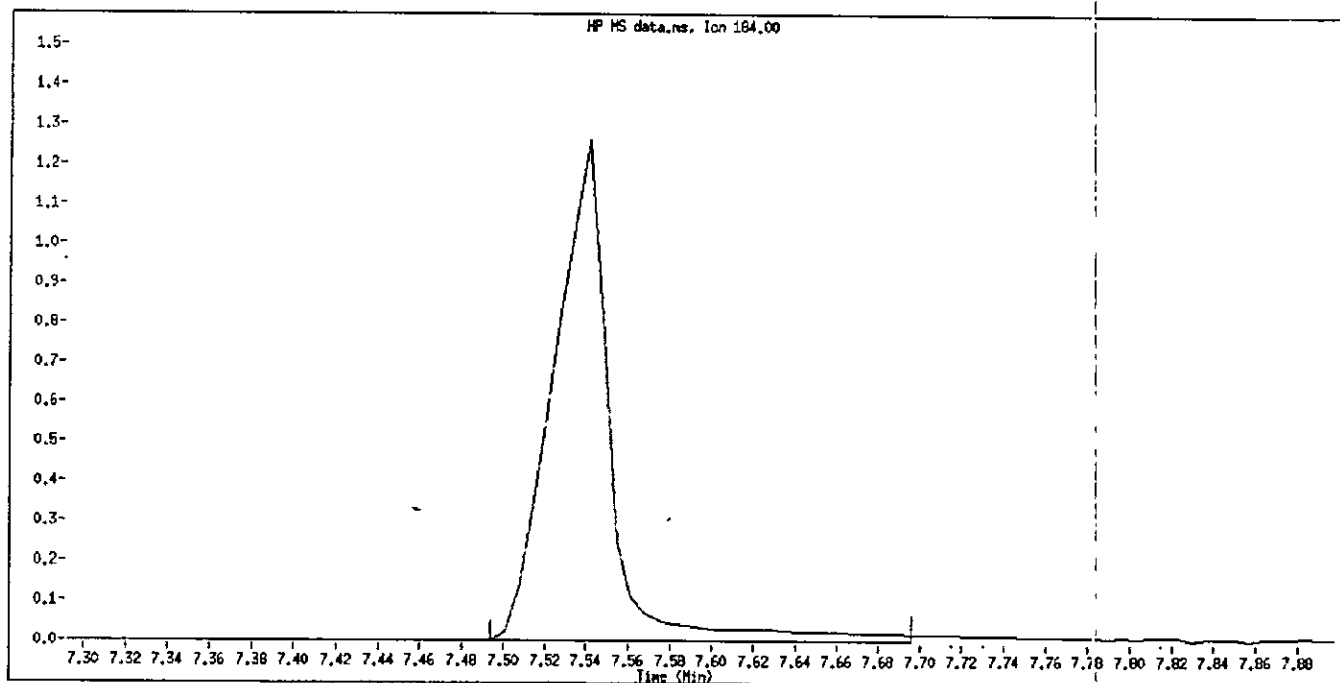
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

671 246

Data File Name: D0824CC4.D
Inj Date and Time: 24-AUG-2000 16:13
Instrument ID: 721.1
Client ID: SSTDL60
Compound Name: 2,4-Dinitrophenol
CAS #: 51-28-5
Report Date: 08/25/2000



Original Integration

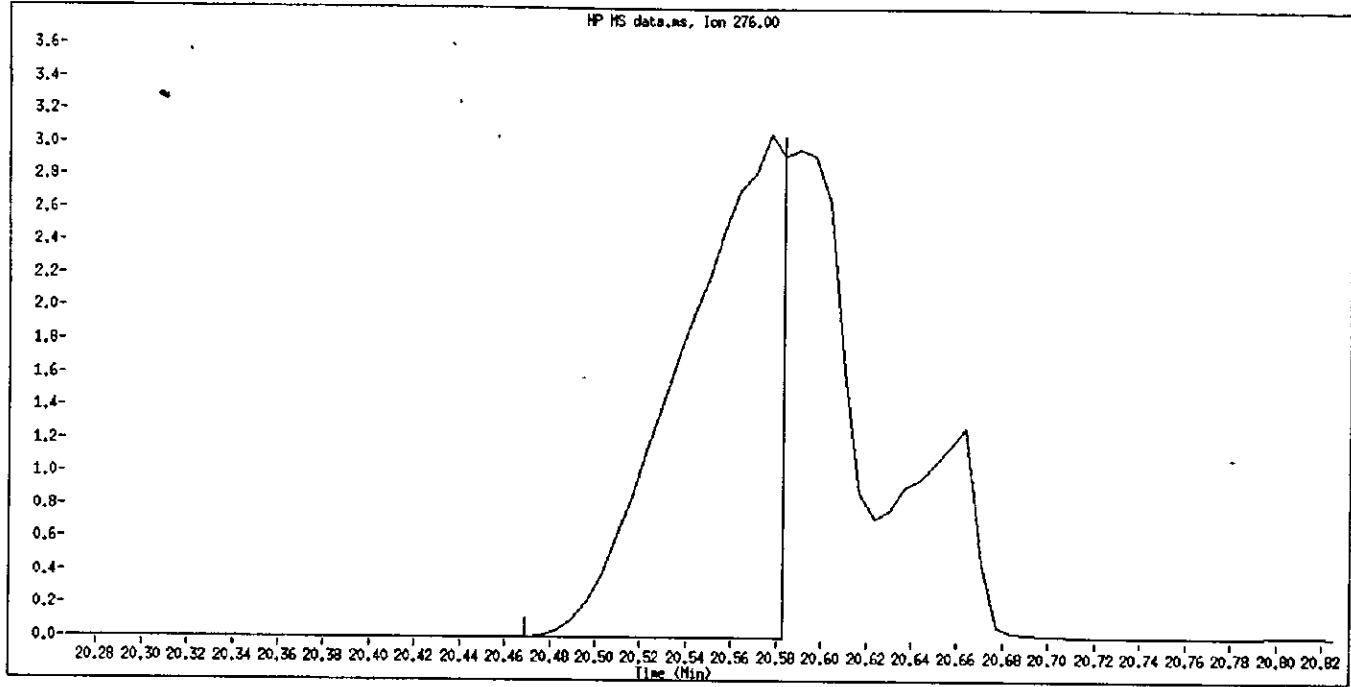


Manual Integration

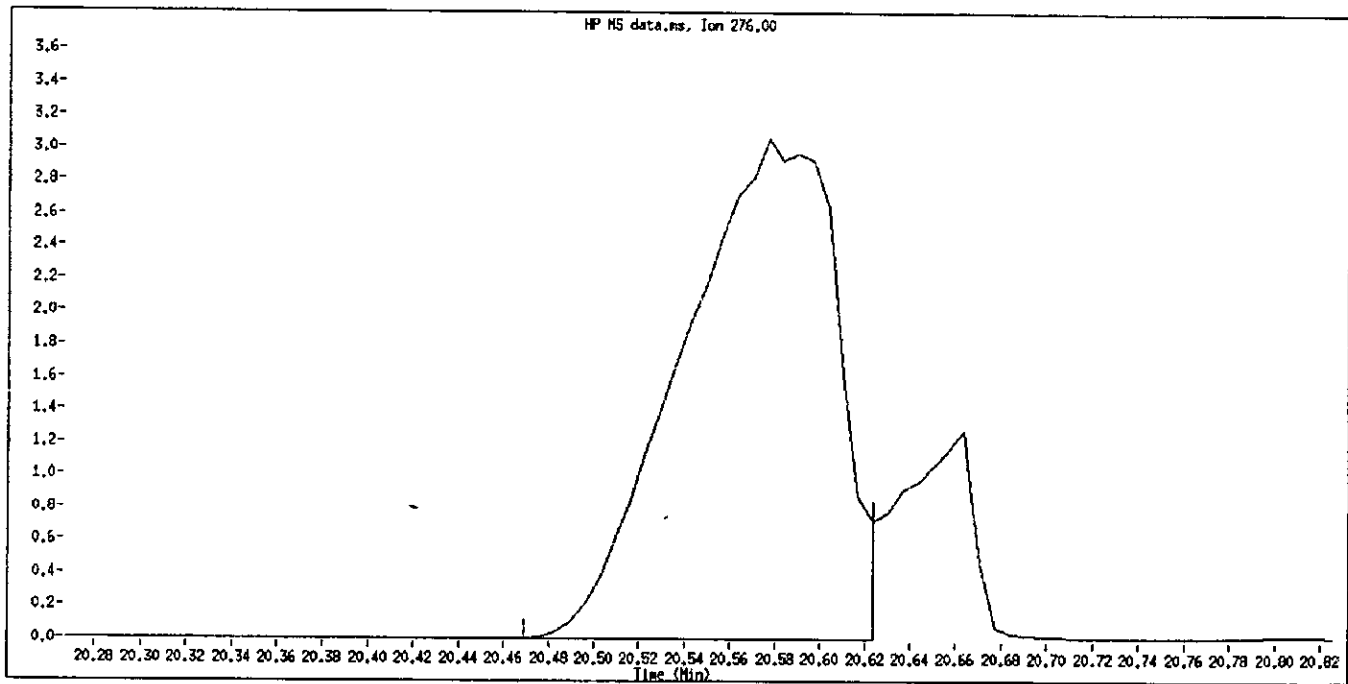
Manually Integrated By: FergusonD
Manual Integration Reason: Unknown

Data File Name. D0824CC4.D
Inj Date and Time. 24-AUG-2000 16:13
Instrument ID 721 1
Client ID. SST0160
Compound Name. Indeno(1,2,3-cd)pyrene
CAS # 193-39-5
Report Date. 08/25/2000

671 247



Original Integration



Manual Integration

Manually Integrated By. FergusonD
Manual Integration Reason Poor Chromatography

671 248

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SDG No.: C0H220139

Instrument ID: 721

Calibration Date: 08/28/00

Time: 1419

Lab File ID: D0828CCC

Init. Calib. Date(s): 08/24/00

08/24/00

Init. Calib. Times: 1416

1613

GC Column: HP5-MS

ID: 0.25 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.521	1.608	0.01	5.7	20.0
bis(2-Chloroethyl) ether	1.125	1.231	0.01	9.4	50.0
2-Chlorophenol	1.329	1.237	0.01	6.9	50.0
1,3-Dichlorobenzene	1.420	1.423	0.01	0.2	50.0
1,4-Dichlorobenzene	1.425	1.492	0.01	4.7	20.0
1,2-Dichlorobenzene	1.364	1.378	0.01	1.0	50.0
2-Methylphenol	1.071	1.086	0.01	1.4	50.0
2,2'-oxybis(1-Chloropropane)	1.293	1.488	0.01	15.1	50.0
4-Methylphenol	1.095	1.126	0.01	2.8	50.0
Hexachloroethane	0.657	0.632	0.01	3.8	50.0
Nitrobenzene	0.381	0.380	0.01	0.3	50.0
Isophorone	0.629	0.656	0.01	4.3	50.0
2-Nitrophenol	0.219	0.211	0.01	3.6	20.0
2,4-Dimethylphenol	0.375	0.368	0.01	1.9	50.0
bis(2-Chloroethoxy) methane	0.388	0.420	0.01	8.2	50.0
N-Nitroso-di-n-propylamine	0.760	0.772	0.05	1.6	50.0
2,4-Dichlorophenol	0.312	0.325	0.01	4.2	20.0
1,2,4-Trichlorobenzene	0.367	0.360	0.01	1.9	50.0
Naphthalene	1.017	1.006	0.01	1.1	50.0
4-Chloroaniline	0.415	0.409	0.01	1.4	50.0
Hexachlorobutadiene	0.242	0.222	0.01	8.3	20.0
4-Chloro-3-Methylphenol	0.310	0.299	0.01	3.5	20.0
2-Methylnaphthalene	0.653	0.632	0.01	3.2	50.0
Hexachlorocyclopentadiene	0.475	0.413	0.05	13.0	50.0
2,4,6-Trichlorophenol	0.409	0.385	0.01	5.9	20.0
2,4,5-Trichlorophenol	0.437	0.421	0.01	3.7	50.0
2-Chloronaphthalene	1.158	1.174	0.01	1.4	50.0
2-Nitroaniline	0.360	0.335	0.01	6.9	50.0
Dimethylphthalate	1.380	1.378	0.01	0.1	50.0
Acenaphthylene	1.694	1.700	0.01	0.4	50.0
2,6-Dinitrotoluene	0.324	0.318	0.01	1.8	50.0
3-Nitroaniline	0.341	0.327	0.01	4.1	50.0
Acenaphthene	1.041	1.056	0.01	1.4	20.0
2,4-Dinitrophenol	0.195	0.191	0.05	2.0	50.0
4-Nitrophenol	0.259	0.244	0.05	5.8	50.0
Dibenzofuran	1.637	1.600	0.01	2.3	50.0
2,4-Dinitrotoluene	0.451	0.437	0.01	3.1	50.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

671 249

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SDG No.: C0H220139

Instrument ID: 721

Calibration Date: 08/28/00

Time: 1419

Lab File ID: D0828CCC

Init. Calib. Date(s): 08/24/00

08/24/00

Init. Calib. Times: 1416

1613

GC Column: HP5-MS

ID: 0.25 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.454	1.412	0.01	2.9	50.0
4-Chlorophenyl-phenylether	0.653	0.597	0.01	8.6	50.0
Fluorene	1.276	1.258	0.01	1.4	50.0
4-Nitroaniline	0.333	0.309	0.01	7.2	50.0
4,6-Dinitro-2-methylphenol	0.149	0.152	0.01	2.0	50.0
N-Nitrosodiphenylamine (1)	0.492	0.523	0.01	6.3	20.0
4-Bromophenyl-phenylether	0.217	0.229	0.01	5.5	50.0
Hexachlorobenzene	0.283	0.296	0.01	4.6	50.0
Pentachlorophenol	0.141	0.166	0.01	17.7	20.0
Phenanthrene	0.958	1.017	0.01	6.2	50.0
Anthracene	0.956	1.038	0.01	8.6	50.0
Carbazole	0.826	0.939	0.01	13.7	50.0
Di-n-Butylphthalate	1.185	1.334	0.01	12.6	50.0
Fluoranthene	0.933	1.017	0.01	9.0	20.0
Pyrene	1.235	1.107	0.01	10.4	50.0
Butylbenzylphthalate	0.648	0.605	0.01	6.6	50.0
3,3'-Dichlorobenzidine	0.451	0.381	0.01	15.5	50.0
Benzo (a) Anthracene	1.076	0.993	0.01	7.7	50.0
Chrysene	0.972	0.910	0.01	6.4	50.0
bis(2-ethylhexyl) Phthalate	0.879	0.793	0.01	9.8	50.0
Di-n-octylphthalate	1.836	1.687	0.01	8.1	20.0
Benzo (b) fluoranthene	1.405	1.147	0.01	18.4	50.0
Benzo (k) fluoranthene	1.071	1.219	0.01	13.8	50.0
Benzo (a) pyrene	1.106	1.081	0.01	2.3	20.0
Indeno (1,2,3-cd) pyrene	1.094	1.046	0.01	4.4	50.0
Dibenz (a,h) anthracene	1.118	1.030	0.01	7.9	50.0
Benzo (g,h,i) perylene	1.094	1.049	0.01	4.1	50.0
Pyridine	0.426	0.414	0.01	2.8	50.0
N-Nitrosodimethylamine	0.266	0.259	0.01	2.6	50.0
Aniline	1.417	1.473	0.01	4.0	50.0
Benzyl Alcohol	0.848	0.838	0.01	1.2	50.0
Benzoic Acid	0.154	0.160	0.01	3.9	50.0
1-Methylnaphthalene	0.598	0.605	0.01	1.2	50.0
2,3,4,6-Tetrachlorophenol	0.366	0.362	0.01	1.1	50.0
2,3,5,6-Tetrachlorophenol	0.377	0.361	0.01	4.2	50.0
1,2-Diphenylhydrazine	0.768	0.856	0.01	11.4	50.0
Benzidine	0.389	0.247	0.01	36.5	50.0

SEMIVOLATILE CONTINUING CALIBRATION CHECK

671 250

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL PIT

Case No.:

SAS No.:

SDG No.: COH220139

Instrument ID: 721

Calibration Date: 08/28/00

Time: 1419

Lab File ID: D0828CCC

Init. Calib. Date(s): 08/24/00

08/24/00

Init. Calib. Times: 1416

1613

GC Column: HP5-MS

ID: 0.25 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Methyl methanesulfonate	0.464	0.421	0.01	9.3	50.0
2-Naphthylamine	0.628	0.672	0.01	7.0	50.0
7,12-dimethylbenz[a]anthracene	0.575	0.549	0.01	4.5	50.0
Nitrobenzene-d5	0.392	0.388	0.01	1.0	50.0
2-Fluorobiphenyl	1.305	1.278	0.01	2.1	50.0
Terphenyl-d14	1.005	0.922	0.01	8.2	50.0
Phenol-d5	1.487	1.564	0.01	5.2	50.0
2-Fluorophenol	1.271	1.171	0.01	7.9	50.0
2,4,6-Tribromophenol	0.171	0.172	0.01	0.6	50.0
2-Chlorophenol-d4	1.221	1.166	0.01	4.5	50.0
1,2-Dichlorobenzene-d4	0.902	0.932	0.01	3.3	50.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 721.i
Lab File ID: D0828CCC.D
Analysis Type: NONE

Injection Date: 28-AUG-2000 14:19
Lab Sample ID: sstd50
Method File: \\Qpitpa02\D\chem\721.i\d082800.b\8270c.

8270c

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
66 Pyridine	50.0000	48.5103	3.0	50.0
67 N-Nitrosodimethylamine	50.0000	48.6347	2.7	50.0
87 Methyl methanesulfonate	50.0000	45.3536	9.3	50.0
185 2-Fluorophenol	50.0000	46.0571	7.9	50.0
68 Aniline	50.0000	51.9459	3.9	50.0
184 Phenol-d5	50.0000	52.5980	5.2	50.0
1 Phenol	50.0000	52.8707	5.7	20.0
2 bis(2-Chloroethyl)ether	50.0000	54.7035	9.4	50.0
187 2-Chlorophenol-d4	50.0000	47.7566	4.5	50.0
3 2-Chlorophenol	50.0000	46.5310	6.9	50.0
4 1,3-Dichlorobenzene	50.0000	50.1190	0.2	50.0
11 1,4-Dichlorobenzene-d4	40.0000	40.0000	0.0	50.0
5 1,4-Dichlorobenzene	50.0000	52.3681	4.7	20.0
188 1,2-Dichlorobenzene-d4	50.0000	51.6700	3.3	50.0
69 Benzyl Alcohol	50.0000	49.4554	1.1	50.0
6 1,2-Dichlorobenzene	50.0000	50.5220	1.0	50.0
7 2-Methylphenol	50.0000	50.7071	1.4	50.0
8 2,2'-oxybis(1-Chloropropane)	50.0000	57.5444	15.1	50.0
9 4-Methylphenol	50.0000	51.3983	2.8	50.0
18 N-Nitroso-di-n-propylamine	50.0000	50.8229	1.6	50.0
12 Hexachloroethane	50.0000	48.0449	3.9	50.0
181 Nitrobenzene-d5	50.0000	49.4397	1.1	50.0
13 Nitrobenzene	50.0000	49.7833	0.4	50.0
14 Isophorone	50.0000	52.1516	4.3	50.0
15 2-Nitrophenol	50.0000	48.1707	3.7	20.0
16 2,4-Dimethylphenol	50.0000	49.1329	1.7	50.0
17 bis(2-Chloroethoxy)methane	50.0000	54.2190	8.4	50.0
18 2,4-Dichlorophenol	50.0000	52.0178	4.0	20.0
71 Benzoic Acid	50.0000	51.7436	3.5	50.0
19 1,2,4-Trichlorobenzene	50.0000	49.0701	1.9	50.0
32 Naphthalene-d8	40.0000	40.0000	0.0	50.0
20 Naphthalene	50.0000	49.4513	1.1	50.0
21 4-Chloroaniline	50.0000	49.2943	1.4	50.0
22 Hexachlorobutadiene	50.0000	45.8630	8.3	20.0
23 4-Chloro-3-Methylphenol	50.0000	48.1136	3.8	20.0
24 2-Methylnaphthalene	50.0000	48.3997	3.2	50.0
72 1-Methylnaphthalene	50.0000	50.6232	1.2	50.0
25 Hexachlorocyclopentadiene	50.0000	43.4889	13.0	50.0
26 2,4,6-Trichlorophenol	50.0000	47.1571	5.7	20.0

671 252

Data File: \\Qpitpa02\D\chem\721.i\d082800.b\D0828CCC.D
 Report Date: 08/28/2000

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: 721.i
 Lab File ID: D0828CCC.D
 Analysis Type: NONE

Injection Date: 28-AUG-2000 14:19
 Lab Sample ID: sstd50
 Method File: \\Qpitpa02\D\chem\721.i\d082800.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
27 2,4,5-Trichlorophenol	50.0000	48.2069	3.6	50.0
182 2-Fluorobiphenyl	50.0000	48.9588	2.1	50.0
28 2-Chloronaphthalene	50.0000	50.7083	1.4	50.0
29 2-Nitroaniline	50.0000	46.4987	7.0	50.0
30 Dimethylphthalate	50.0000	49.9301	0.1	50.0
31 Acenaphthylene	50.0000	50.1959	0.4	50.0
32 2,6-Dinitrotoluene	50.0000	49.0717	1.9	50.0
52 Acenaphthene-d10	40.0000	40.0000	0.0	50.0
33 3-Nitroaniline	50.0000	47.9575	4.1	50.0
34 Acenaphthene	50.0000	50.7191	1.4	20.0
35 2,4-Dinitrophenol	50.0000	48.8460	2.3	50.0
37 Dibenzofuran	50.0000	48.8916	2.2	50.0
36 4-Nitrophenol	50.0000	47.1084	5.8	50.0
38 2,4-Dinitrotoluene	50.0000	48.3570	3.3	50.0
77 2,3,5,6-Tetrachlorophenol	50.0000	47.9115	4.2	50.0
114 2-Naphthylamine	50.0000	53.5242	7.0	50.0
76 2,3,4,6-Tetrachlorophenol	50.0000	49.5078	1.0	50.0
41 Fluorene	50.0000	49.2620	1.5	50.0
39 Diethylphthalate	50.0000	48.5718	2.9	50.0
40 4-Chlorophenyl-phenylether	50.0000	45.7140	8.6	50.0
42 4-Nitroaniline	50.0000	46.3352	7.3	50.0
43 4,6-Dinitro-2-methylphenol	50.0000	51.2624	2.5	50.0
44 N-Nitrosodiphenylamine (1)	50.0000	53.1805	6.4	20.0
78 1,2-Diphenylhydrazine	50.0000	55.6638	11.3	50.0
186 2,4,6-Tribromophenol	50.0000	50.3507	0.7	50.0
45 4-Bromophenyl-phenylether	50.0000	52.6570	5.3	50.0
46 Hexachlorobenzene	50.0000	52.3036	4.6	50.0
47 Pentachlorophenol	50.0000	58.7913	17.6	20.0
78 Phenanthrene-d10	40.0000	40.0000	0.0	50.0
48 Phenanthrene	50.0000	53.0396	6.1	50.0
49 Anthracene	50.0000	54.2994	8.6	50.0
50 Carbazole	50.0000	56.8266	13.7	50.0
51 Di-n-Butylphthalate	50.0000	56.2784	12.6	50.0
52 Fluoranthene	50.0000	54.4538	8.9	20.0
79 Benzidine	50.0000	31.7687	36.5	50.0
53 Pyrene	50.0000	44.8143	10.4	50.0
183 Terphenyl-d14	50.0000	45.8751	8.2	50.0
54 Butylbenzylphthalate	50.0000	46.7248	6.6	50.0
56 Benzo(a)Anthracene	50.0000	46.1199	7.8	50.0

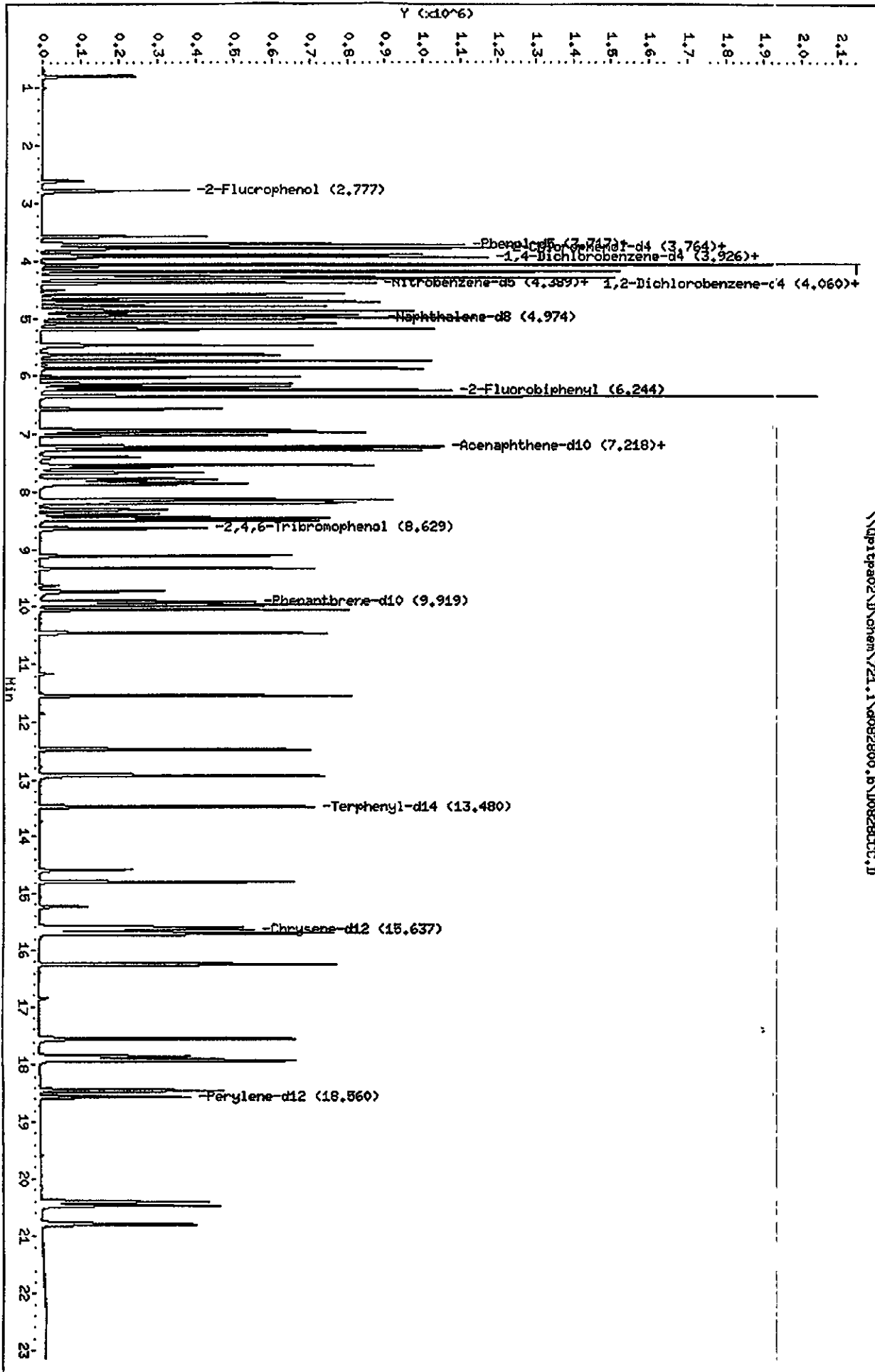
Data File: \\Qpitpa02\D\chem\721.i\d082800.b/D0828CCC.D
 Report Date: 08/28/2000

CONTINUING CALIBRATION COMPOUNDS
 PERCENT DRIFT REPORT

Instrument ID: 721.i
 Lab File ID: D0828CCC.D
 Analysis Type: NONE

Injection Date: 28-AUG-2000 14:19
 Lab Sample ID: sstd50
 Method File: \\Qpitpa02\D\chem\721.i\d082800.b

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
90 Chrysene-d12	40.0000	40.0000	0.0	50.0
57 Chrysene	50.0000	46.8318	6.3	50.0
55 3,3'-Dichlorobenzidine	50.0000	42.2702	15.5	50.0
58 bis(2-ethylhexyl) Phthalate	50.0000	45.1206	9.8	50.0
59 Di-n-octylphthalate	50.0000	45.9365	8.1	20.0
60 Benzo(b)fluoranthene	50.0000	40.8225	18.4	50.0
61 Benzo(k)fluoranthene	50.0000	56.9090	13.8	50.0
143 7,12-dimethylbenz(a)anthracen	50.0000	47.7400	4.5	50.0
62 Benzo(a)pyrene	50.0000	48.8584	2.3	20.0
101 Perylene-d12	40.0000	40.0000	0.0	50.0
63 Indeno(1,2,3-cd)pyrene	50.0000	47.8249	4.4	50.0
64 Dibenz(a,h)anthracene	50.0000	46.0387	7.9	50.0
65 Benzo(g,h,i)perylene	50.0000	47.9766	4.0	50.0



Data File: \\npitpa02\binchem\721.1\0082800.b\00828000.D
 Date: 28-Aug-2000 14:19
 Client ID: SST0050
 Sample Info: sst0050 (28UG/ML) 194-183-14 8270/olp/625
 Column phase: Hp5-MS

Instrument: 721.1
 Operator: 001562, ILF
 Column diameter: 0.25

STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082800.b\D0828CCC.D
Lab Smp Id: sstd50 Client Smp ID: SSTD050
Inj Date : 28-AUG-2000 14:19
Operator : 001562, DLF Inst ID: 721.i
Smp Info : sstd050 (25UG/ML) 194-183-14 8270/clp/625
Misc Info : sstd50,d082800.b,8270c.m,3-root.sub,2
Comment :
Method : \\Qpitpa02\D\chem\721.i\d082800.b\8270c.m
Meth Date : 28-Aug-2000 15:03 ferguson Quant Type: ISTD
Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC013

SK 1
8-28-00

Compound Sublist: 3-root.sub

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (NG)	ON-COL (NG)
* 1 1,4-Dichlorobenzene-d4	152	3.918	3.918	(1.000)	127294	40.0000	
* 2 Naphthalene-d8	136	4.973	4.973	(1.000)	406842	40.0000	
* 3 Acenaphthene-d10	164	7.218	7.218	(1.000)	239347	40.0000	
* 4 Phenanthrene-d10	188	9.925	9.925	(1.000)	411784	40.0000	
* 5 Chrysene-d12	240	15.643	15.643	(1.000)	370866	40.0000	
* 6 Perylene-d12	264	18.560	18.560	(1.000)	290991	40.0000	
10 N-Nitrosodimethylamine	74	0.807	0.807	(0.206)	41156	50.0000	48.635
9 Pyridine	79	0.801	0.801	(0.204)	65809	50.0000	48.510
16 Methyl methanesulfonate	80	2.608	2.608	(0.666)	67014	50.0000	45.354
21 Aniline	93	3.697	3.697	(0.943)	234336	50.0000	51.946
22 Phenol	94	3.724	3.724	(0.950)	255894	50.0000	52.871
23 bis(2-Chloroethyl)ether	93	3.764	3.764	(0.961)	195896	50.0000	54.703
24 2-Chlorophenol	128	3.784	3.784	(0.966)	196782	50.0000	46.531
26 1,3-Dichlorobenzene	146	3.885	3.885	(0.991)	226487	50.0000	50.119
27 1,4-Dichlorobenzene	146	3.925	3.925	(1.002)	237469	50.0000	52.368
28 1,2-Dichlorobenzene	146	4.073	4.073	(1.039)	219317	50.0000	50.522
29 Benzyl Alcohol	108	4.059	4.059	(1.036)	133424	50.0000	49.455
30 2-Methylphenol	108	4.174	4.174	(1.065)	172753	50.0000	50.707
31 2,2'-oxybis(1-Chloropropane)	45	4.180	4.180	(1.067)	236742	50.0000	57.544
32 N-Nitroso-di-n-propylamine	70	4.295	4.295	(1.096)	122917	50.0000	50.823
192 4-Methylphenol	108	4.288	4.288	(1.094)	179091	50.0000	51.398
34 Hexachloroethane	117	4.301	4.301	(1.098)	100507	50.0000	48.045
35 Nitrobenzene	77	4.389	4.389	(0.882)	193136	50.0000	49.783
41 Isophorone	82	4.584	4.584	(0.922)	333871	50.0000	52.152
42 2-Nitrophenol	139	4.651	4.651	(0.935)	107125	50.0000	48.171
43 2,4-Dimethylphenol	107	4.711	4.711	(0.947)	187263	50.0000	49.133

671 256

Data File: \\Opitpa02\D\chem\721.i\d082800.b\D0828CCC.D
Report Date: 28-Aug-2000 15:03

Page 2

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (NG)	ON-COL (NG)
44 bis(2-Chloroethoxy)methane	93	4.792	4.792	(0.964)	213769	50.0000	54.219
48 2,4-Dichlorophenol	162	4.866	4.866	(0.978)	165285	50.0000	52.018
49 Benzoic Acid	122	4.873	4.873	(0.980)	81236	50.0000	51.744
50 1,2,4-Trichlorobenzene	180	4.940	4.940	(0.993)	183347	50.0000	49.070
51 Naphthalene	128	4.993	4.993	(1.004)	511669	50.0000	49.451
52 4-Chloroaniline	127	5.074	5.074	(1.020)	208239	50.0000	49.294
56 Hexachlorobutadiene	225	5.175	5.175	(1.041)	112673	50.0000	45.863
59 4-Chloro-3-Methylphenol	107	5.618	5.618	(1.130)	151962	50.0000	48.114
62 2-Methylnaphthalene	142	5.726	5.726	(1.151)	321342	50.0000	48.400
63 1-Methylnaphthalene	142	5.860	5.860	(1.178)	307760	50.0000	50.623
64 Hexachlorocyclopentadiene	237	6.015	6.015	(0.833)	123606	50.0000	43.489
66 2,4,6-Trichlorophenol	196	6.136	6.136	(0.850)	115278	50.0000	47.157
67 2,4,5-Trichlorophenol	196	6.189	6.189	(0.858)	125916	50.0000	48.207
70 2-Chloronaphthalene	162	6.351	6.351	(0.880)	351285	50.0000	50.708
73 2-Nitroaniline	65	6.572	6.572	(0.911)	100194	50.0000	46.499
76 Dimethylphthalate	163	6.935	6.935	(0.961)	412342	50.0000	49.930
78 2,6-Dinitrotoluene	165	7.023	7.023	(0.973)	95106	50.0000	49.072
79 Acenaphthylene	152	6.969	6.969	(0.966)	508779	50.0000	50.196
81 3-Nitroaniline	138	7.224	7.224	(1.001)	97755	50.0000	47.957
82 Acenaphthene	153	7.271	7.271	(1.007)	316056	50.0000	50.719
83 2,4-Dinitrophenol	184	7.392	7.392	(1.024)	57090	50.0000	48.846
85 4-Nitrophenol	109	7.580	7.580	(1.050)	72916	50.0000	47.108
86 Dibenzofuran	168	7.540	7.540	(1.045)	478843	50.0000	48.892
87 2,4-Dinitrotoluene	165	7.668	7.668	(1.062)	130645	50.0000	48.357
91 2,3,5,6-Tetrachlorophenol	232	7.782	7.782	(1.078)	107986	50.0000	47.912
88 2,3,4,6-Tetrachlorophenol	232	7.863	7.863	(1.089)	108411	50.0000	49.508
92 2-Naphthylamine	143	7.829	7.829	(1.085)	201085	50.0000	53.524
93 Diethylphthalate	149	8.185	8.185	(1.134)	422431	50.0000	48.572
94 Fluorene	166	8.145	8.145	(1.128)	376331	50.0000	49.262
95 4-Chlorophenyl-phenylether	204	8.205	8.205	(1.137)	178717	50.0000	45.714
96 4-Nitroaniline	138	8.313	8.313	(1.152)	92386	50.0000	46.335
98 4,6-Dinitro-2-methylphenol	198	8.393	8.393	(0.846)	78500	50.0000	51.262
99 N-Nitrosodiphenylamine (1)	169	8.454	8.454	(0.852)	269148	50.0000	53.180
100 1,2-Diphenylhydrazine	77	8.494	8.494	(0.856)	440480	50.0000	55.664
106 4-Bromophenyl-phenylether	248	9.112	9.112	(0.918)	117832	50.0000	52.657
107 Hexachlorobenzene	284	9.334	9.334	(0.940)	152216	50.0000	52.304
111 Pentachlorophenol	266	9.731	9.731	(0.980)	85456	50.0000	58.791(M)
115 Phenanthrene	178	9.972	9.972	(1.005)	523336	50.0000	53.040
116 Anthracene	178	10.060	10.060	(1.014)	534450	50.0000	54.299
119 Carbazole	167	10.463	10.463	(1.054)	483419	50.0000	56.826
120 Di-n-Butylphthalate	149	11.545	11.545	(1.163)	686787	50.0000	56.278
123 Fluoranthene	202	12.472	12.472	(1.257)	523293	50.0000	54.454
124 Benzidine	184	12.909	12.909	(0.825)	114668	50.0000	31.769
125 Pyrene	202	12.929	12.929	(0.826)	513078	50.0000	44.814
131 Butylbenzylphthalate	149	14.790	14.790	(0.945)	280600	50.0000	46.725
135 3,3'-Dichlorobenzidine	252	15.724	15.724	(1.005)	176842	50.0000	42.270
136 Benzo(a)Anthracene	228	15.603	15.603	(0.997)	460259	50.0000	46.120

Data File: \\Qpitpa02\D\chem\721.i\d082800.b\D0828CCC.D
 Report Date: 28-Aug-2000 15:03

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(NG)	(NG)
-----	----	**	-----	-----	-----	-----	-----
137 Chrysene	228	15.697	15.697	(1.003)	421927	50.0000	46.832
139 bis(2-ethylhexyl)Phthalate	149	16.241	16.241	(1.038)	367549	50.0000	45.120
140 Di-n-octylphthalate	149	17.552	17.552	(0.946)	613633	50.0000	45.936
141 Benzo(b)fluoranthene	252	17.854	17.854	(0.962)	417220	50.0000	40.822
142 Benzo(k)fluoranthene	252	17.915	17.915	(0.965)	443420	50.0000	56.909
143 7,12-dimethylbenz[a]anthracen	256	17.935	17.935	(0.966)	199593	50.0000	47.740
146 Benzo(a)pyrene	252	18.445	18.445	(0.994)	393060	50.0000	48.858
149 Indeno(1,2,3-cd)pyrene	276	20.414	20.414	(1.100)	380610	50.0000	47.825
150 Dibenz(a,h)anthracene	278	20.481	20.481	(1.104)	374520	50.0000	46.039
151 Benzo(g,h,i)perylene	276	20.811	20.811	(1.121)	381699	50.0000	47.976
\$ 154 Nitrobenzene-d5	82	4.375	4.375	(0.880)	197202	50.0000	49.440
\$ 155 2-Fluorobiphenyl	172	6.243	6.243	(0.865)	382432	50.0000	48.959
\$ 156 Terphenyl-d14	244	13.480	13.480	(0.862)	427336	50.0000	45.875
\$ 157 Phenol-d5	99	3.710	3.710	(0.947)	248849	50.0000	52.598
\$ 158 2-Fluorophenol	112	2.776	2.776	(0.709)	186356	50.0000	46.057
\$ 159 2,4,6-Tribromophenol	330	8.635	8.635	(0.870)	88833	50.0000	50.351
\$ 186 2-Chlorophenol-d4	132	3.771	3.771	(0.962)	185557	50.0000	47.756
\$ 187 1,2-Dichlorobenzene-d4	152	4.059	4.059	(1.036)	148260	50.0000	51.670

QC Flag Legend

M - Compound response manually integrated.

671 258

Data File Name: D0828CCC.D

Inj Date and Time: 28-AUG-2000 14.19

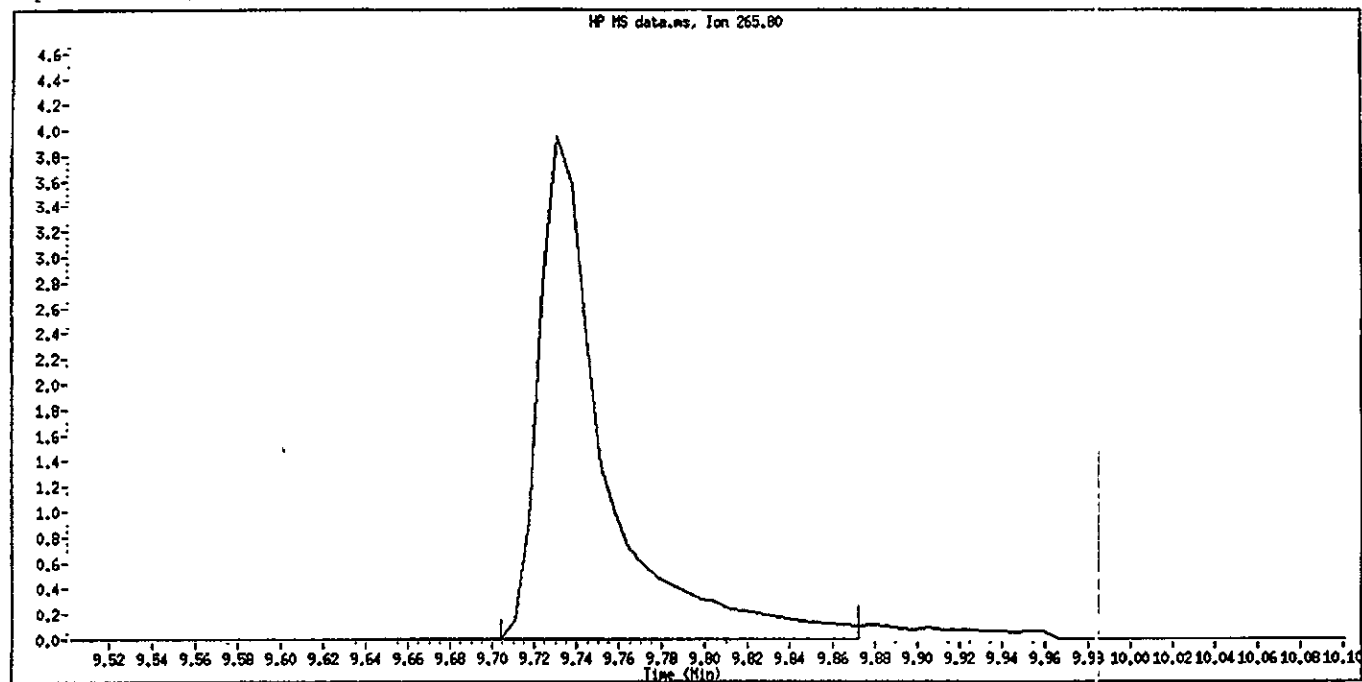
Instrument ID: 721.1

Client ID: SST0050

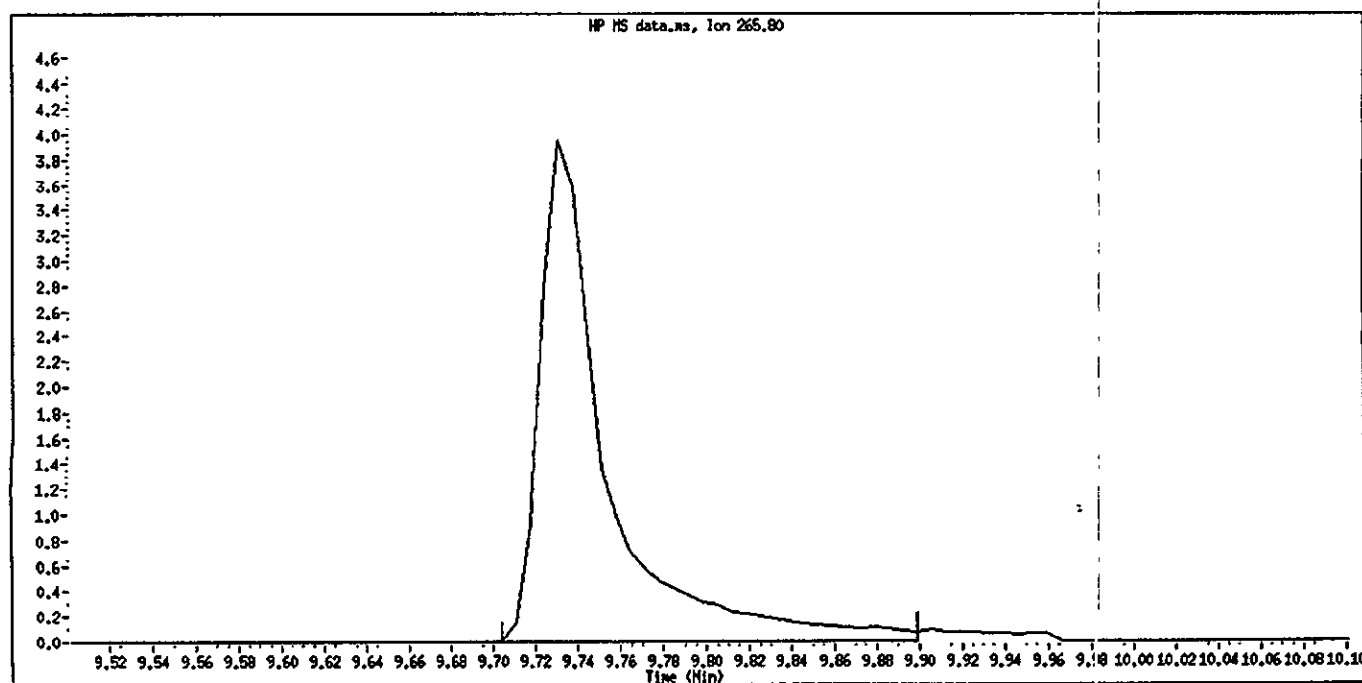
Compound Name: Pentachlorophenol

CAS #: 87-86-5

Report Date: 08/28/2000



Original Integration



Manual Integration

Manually Integrated By: FergusonD

Manual Integration Reason: Poor Chromatography

**GC/MS SEMIVOLATILE
QC DATA**

Date : 24-AUG-2000 13:56

Client ID: DFTPP02

Instrument: 721.1

Sample Info: dftpp (25ug/ml) 194-175-8

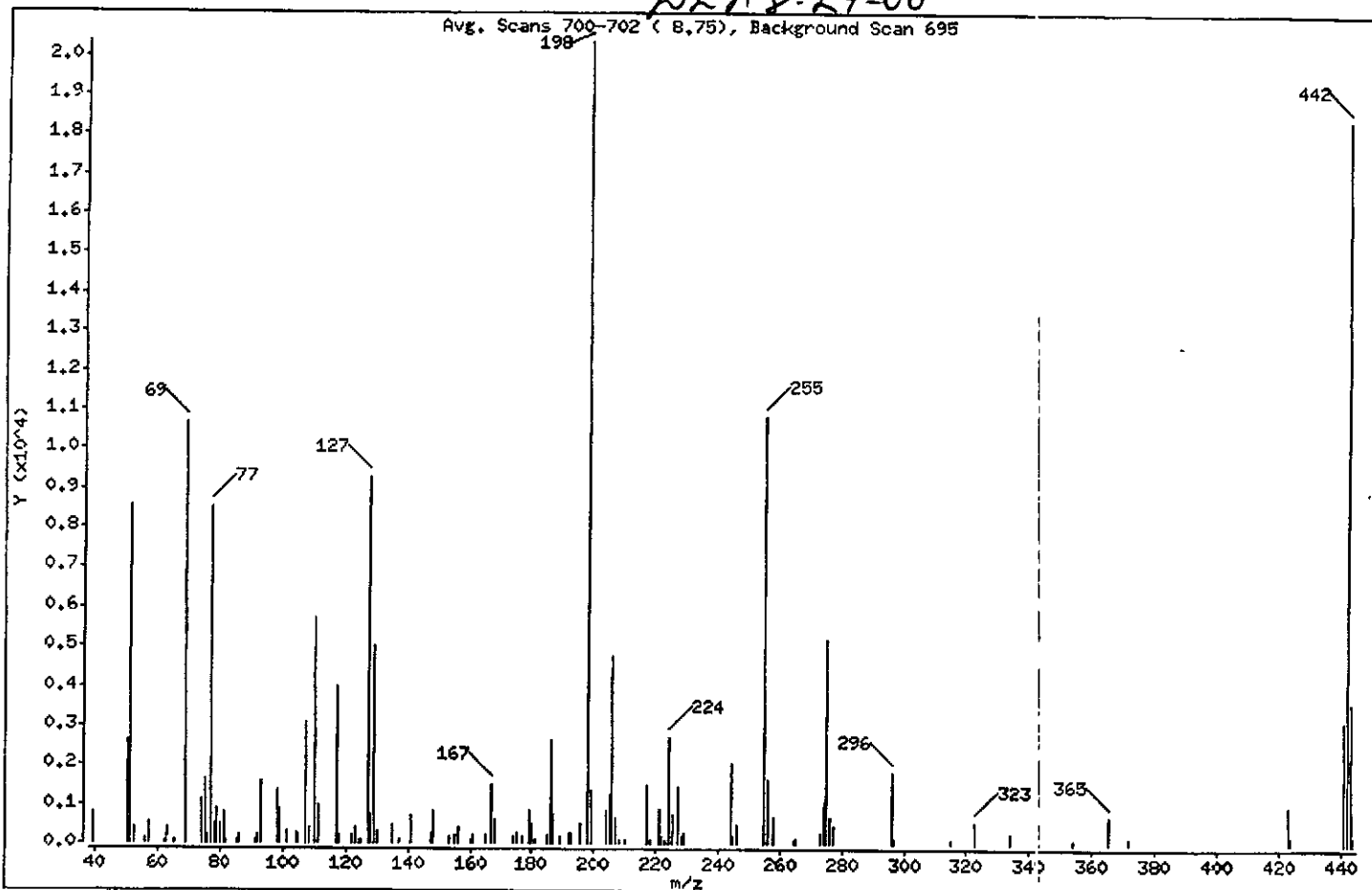
Operator: 001562, DLF

Column phase:

Column diameter: 0.25

1 dftpp

DL 28-24-00



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	42.11
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	52.48
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	48.61
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.72
275	10.00 - 30.00% of mass 198	25.61
365	Greater than 1.00% of mass 198	3.44
441	Present, but less than mass 443	15.47
442	Greater than 40.00% of mass 198	90.46
443	17.00 - 23.00% of mass 442	17.66 (19.62)

Date : 24-AUG-2000 13:56

Client ID: DFTPP02

Instrument: 721.i

Sample Info: dftpp (25ug/ml) 194-175-8

Operator: 001562, DLF

Column phase:

Column diameter: 0.25

Data File: D0824DFT.D

Spectrum: Avg. Scans 700-702 (8.75), Background Scan 695

Location of Maximum: 198.00

Number of points: 114

m/z	Y	m/z	Y	m/z	Y	m/z	Y

39.00	802	107.00	3078	177.00	209	244.00	2081
50.00	2631	108.00	410	179.00	859	245.00	195
51.00	8571	110.00	5725	180.00	519	246.00	529
52.00	399	111.00	972	181.00	94	255.00	10789
56.00	137	117.00	3969	185.00	247	256.00	1616

57.00	562	118.00	232	186.00	2628	258.00	695
62.00	86	122.00	248	187.00	765	264.00	89
63.00	409	123.00	430	189.00	194	265.00	131
65.00	84	124.00	94	192.00	263	273.00	278
69.00	10683	125.00	92	193.00	272	274.00	1054

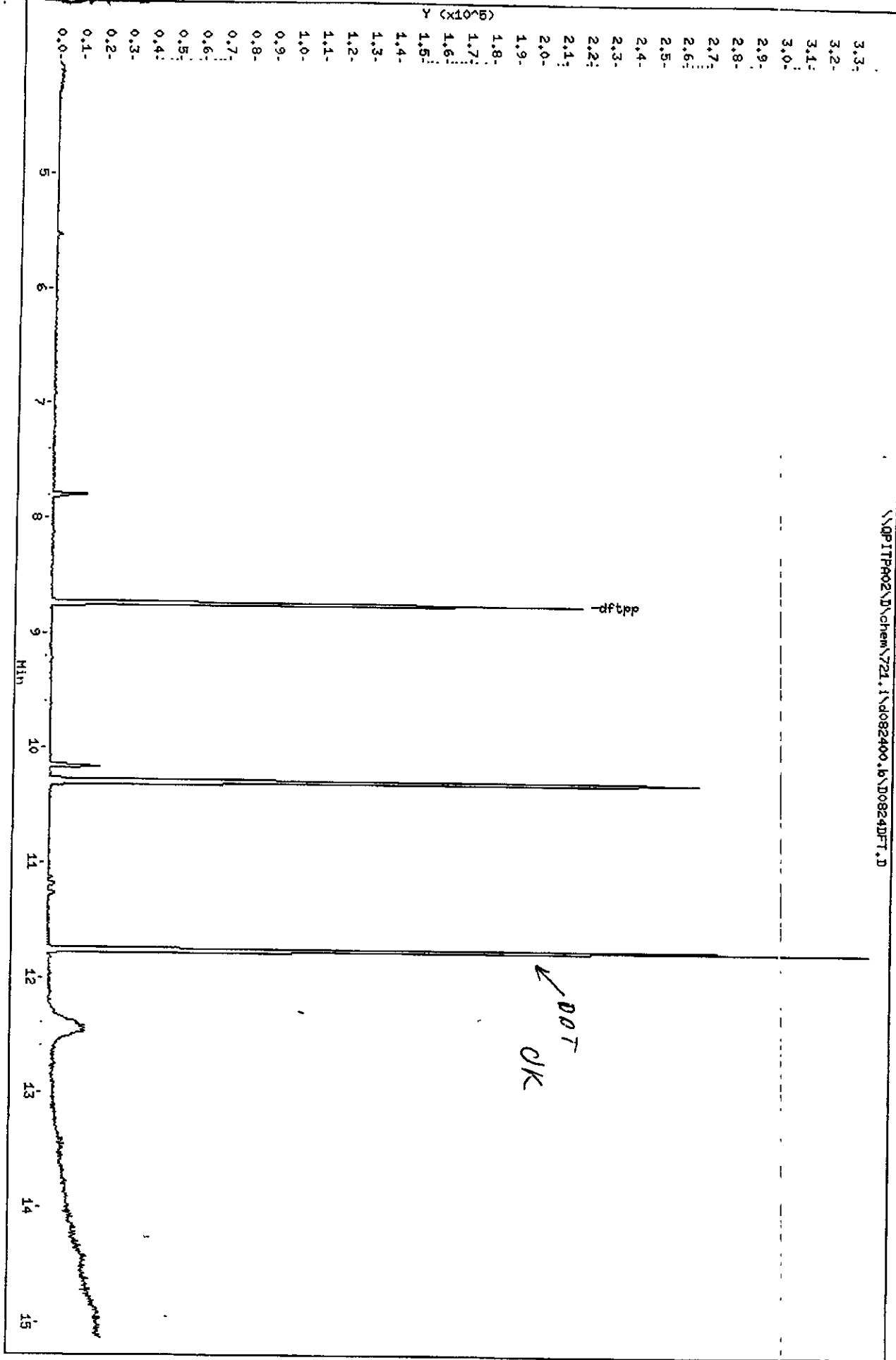
74.00	1129	127.00	9283	196.00	538	275.00	5212
75.00	1630	128.00	765	198.00	20352	276.00	723
76.00	253	129.00	4987	199.00	1368	277.00	461
77.00	8533	130.00	349	204.00	865	296.00	1829
78.00	531	135.00	446	205.00	1265	297.00	126

79.00	884	137.00	89	206.00	4785	315.00	93
80.00	512	141.00	685	207.00	639	323.00	565
81.00	816	147.00	268	208.00	90	334.00	299
82.00	91	148.00	843	210.00	95	354.00	87
85.00	85	153.00	179	217.00	1505	365.00	701

86.00	219	155.00	250	218.00	99	372.00	149
91.00	91	156.00	425	221.00	881	423.00	1000
92.00	220	160.00	87	222.00	190	424.00	179
93.00	1604	161.00	223	223.00	114	441.00	3149
98.00	1348	165.00	248	224.00	2710	442.00	18408

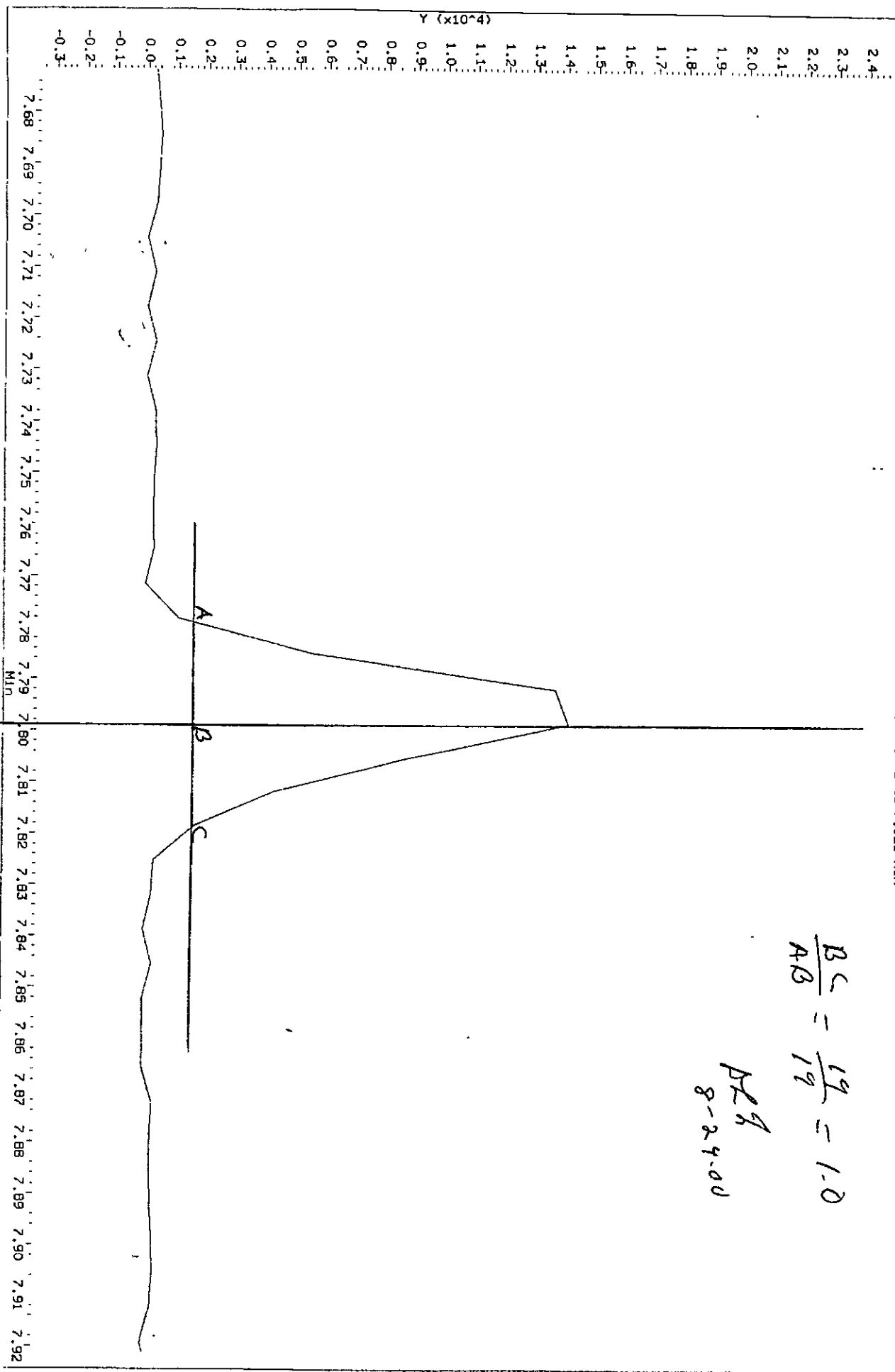
99.00	872	167.00	1487	225.00	731	443.00	3595
101.00	344	168.00	607	227.00	1437	444.00	180
104.00	284	174.00	208	228.00	188		
105.00	235	175.00	292	229.00	263		

\\NPITP002\1\chem\721.1\0082400.b\00824DFT.D



Data File: \\Ap1tpa02\Nchem\721.1\0082400.D
 Injection Date: 24-AUG-2000 13:56
 Instrument: 721.1
 Client Sample ID: DFTPP02

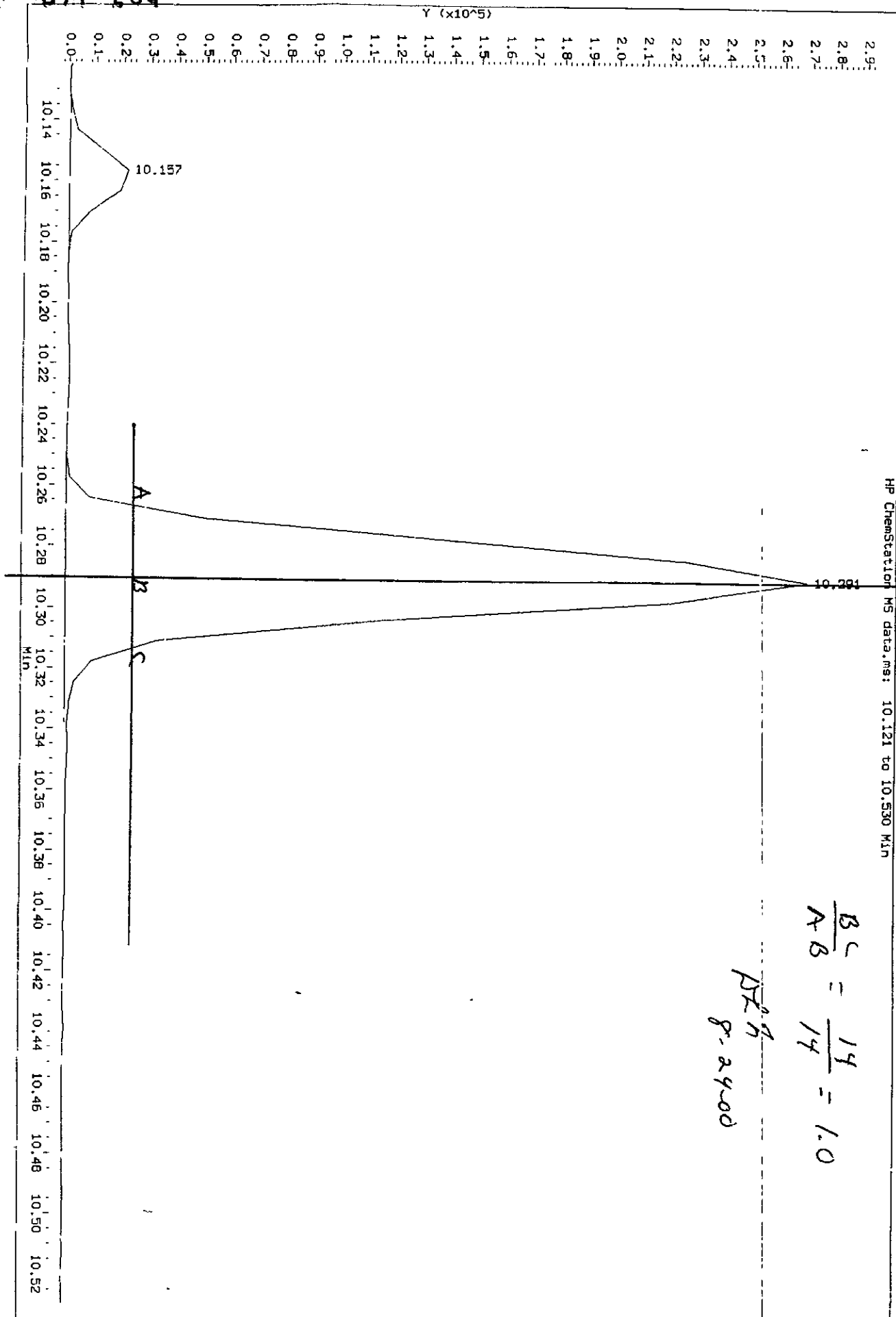
HP ChemStation MS data.ms: 7.672 to 7.921 Min



$$\frac{B_C}{A_B} = \frac{19}{19} = 1.0$$

PLA
 8-24-00

Data File: \\D:\ptp02\N\chem\721.1\0082400.b\0082400.D
Injection Date: 24-AUG-2000 13:56
Instrument: 721.1
Client Sample ID: DFTPP02



Data File: \\QPITPA02\chem\721.i\082800.b\0828DFT.D

Page 3

Date : 28-AUG-2000 13:58

Client ID: DFTPP02

Instrument: 721.i

Sample Info: dftpp (28ug/ml) 194-175-8

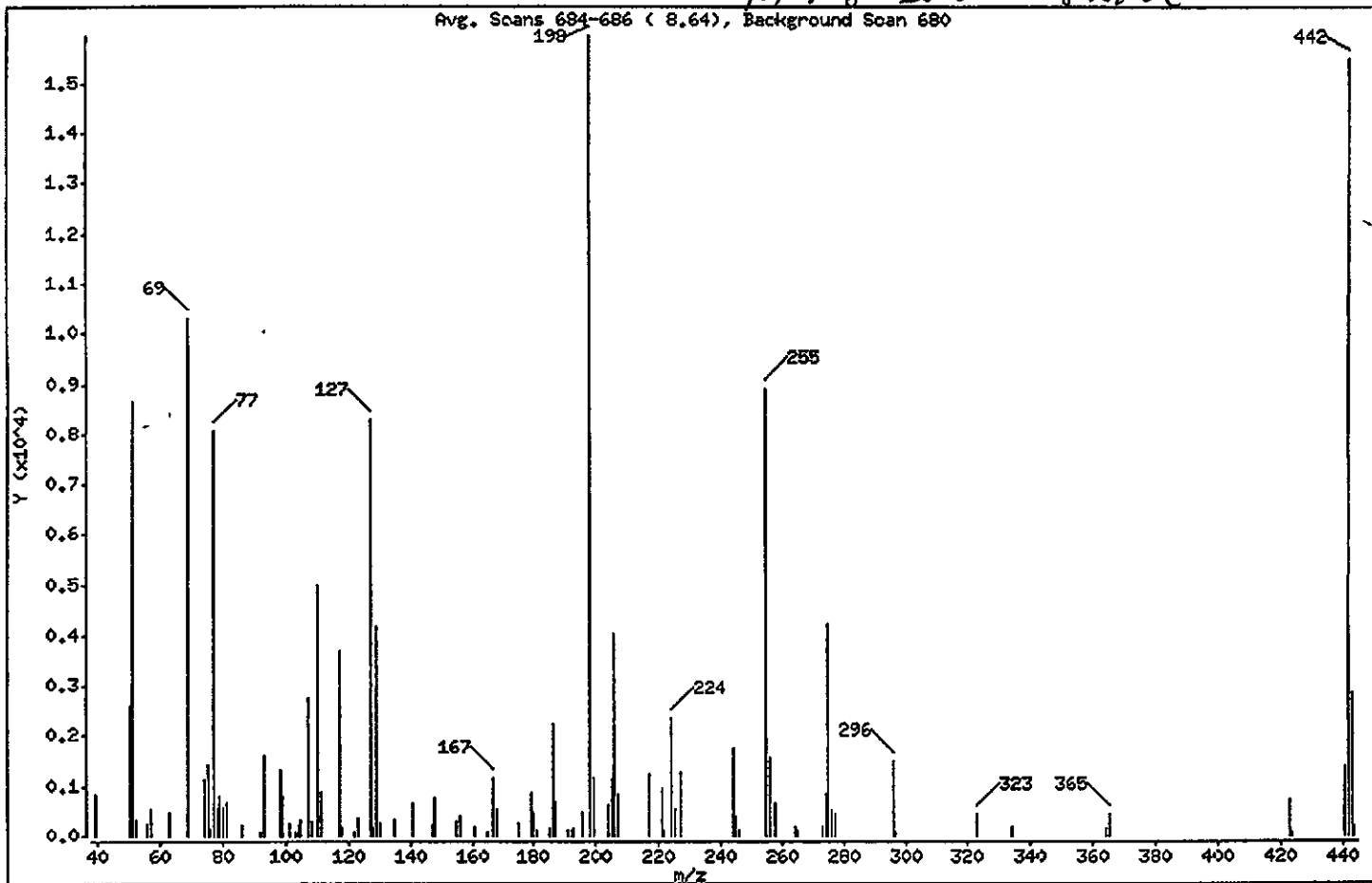
Operator: 001562, DLF

Column phase:

Column diameter: 0.25

1 dftpp

DL 28-28-00 8270c



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	54.33
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	64.60
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	51.96
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.40
275	10.00 - 30.00% of mass 198	26.47
365	Greater than 1.00% of mass 198	2.80
441	Present, but less than mass 443	8.72
442	Greater than 40.00% of mass 198	97.27
443	17.00 - 23.00% of mass 442	17.97 (18.47)

Data File: \\QPITPA02\B\chem\721.i\d082800.b\D0828DFT.D

Page 4

Date : 28-AUG-2000 13:58

Client ID: DFTPP02

Instrument: 721.i

Sample Info: dftpp (25ug/ml) 194-175-8

Operator: 001562, DLF

Column phase:

Column diameter: 0.25

Data File: D0828DFT.D

Spectrum: Avg. Scans 684-686 (8.64), Background Scan 680

Location of Maximum: 198.00

Number of points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y

39.00	842	105.00	315	179.00	872	246.00	108
50.00	2601	107.00	2751	180.00	466	255.00	8923
81.00	8667	108.00	292	181.00	100	256.00	1513
52.00	326	110.00	4993	185.00	143	258.00	647
56.00	278	111.00	870	186.00	2251	264.00	109

57.00	533	117.00	3697	187.00	707	265.00	100
63.00	466	118.00	201	191.00	96	273.00	171
69.00	10305	122.00	91	192.00	97	274.00	852
74.00	1137	123.00	373	193.00	136	275.00	4223
75.00	1445	127.00	8288	196.00	459	276.00	518

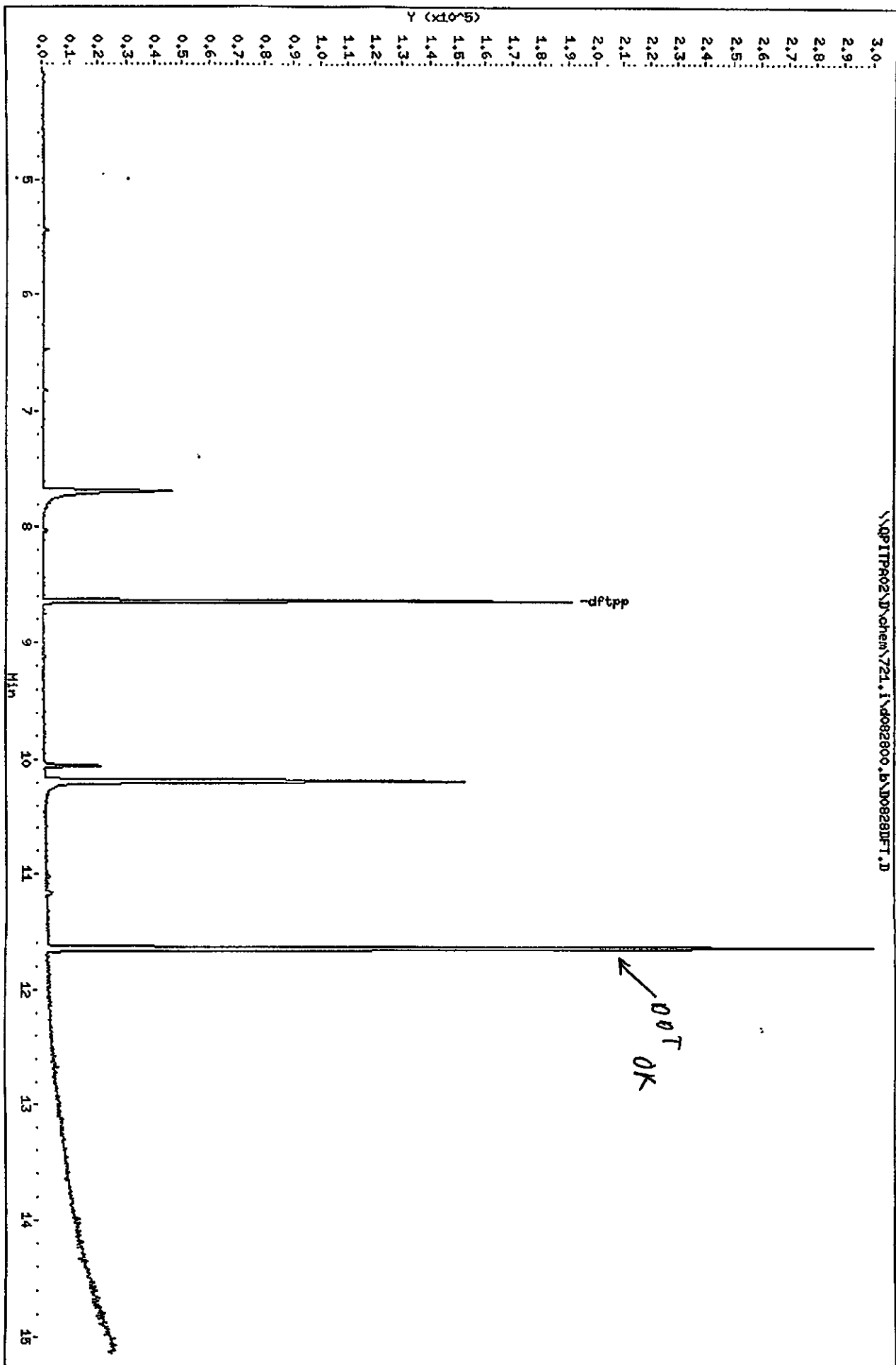
76.00	162	128.00	185	198.00	15952	277.00	426
77.00	8058	129.00	4176	199.00	1180	296.00	1517
78.00	545	130.00	251	204.00	623	297.00	134
79.00	819	135.00	315	205.00	1123	323.00	427
80.00	566	141.00	644	206.00	4027	334.00	192

81.00	643	147.00	231	207.00	850	364.00	129
86.00	214	148.00	764	217.00	1241	365.00	416
92.00	87	155.00	299	221.00	940	423.00	751
93.00	1631	156.00	397	222.00	98	424.00	90
98.00	1305	161.00	191	224.00	2359	441.00	1391

99.00	823	165.00	88	225.00	564	442.00	15317
101.00	249	167.00	1184	227.00	1285	443.00	2856
103.00	89	168.00	547	244.00	1749	444.00	196
104.00	226	175.00	245	245.00	411		

Data File: \\GPITPA02\chem\721.1\082800.b\082800.D
Date: 28-AUG-2000 13:58
Client ID: DFTPP02
Sample Info: dftpp (25ug/ml) 194-175-8
Column phase:

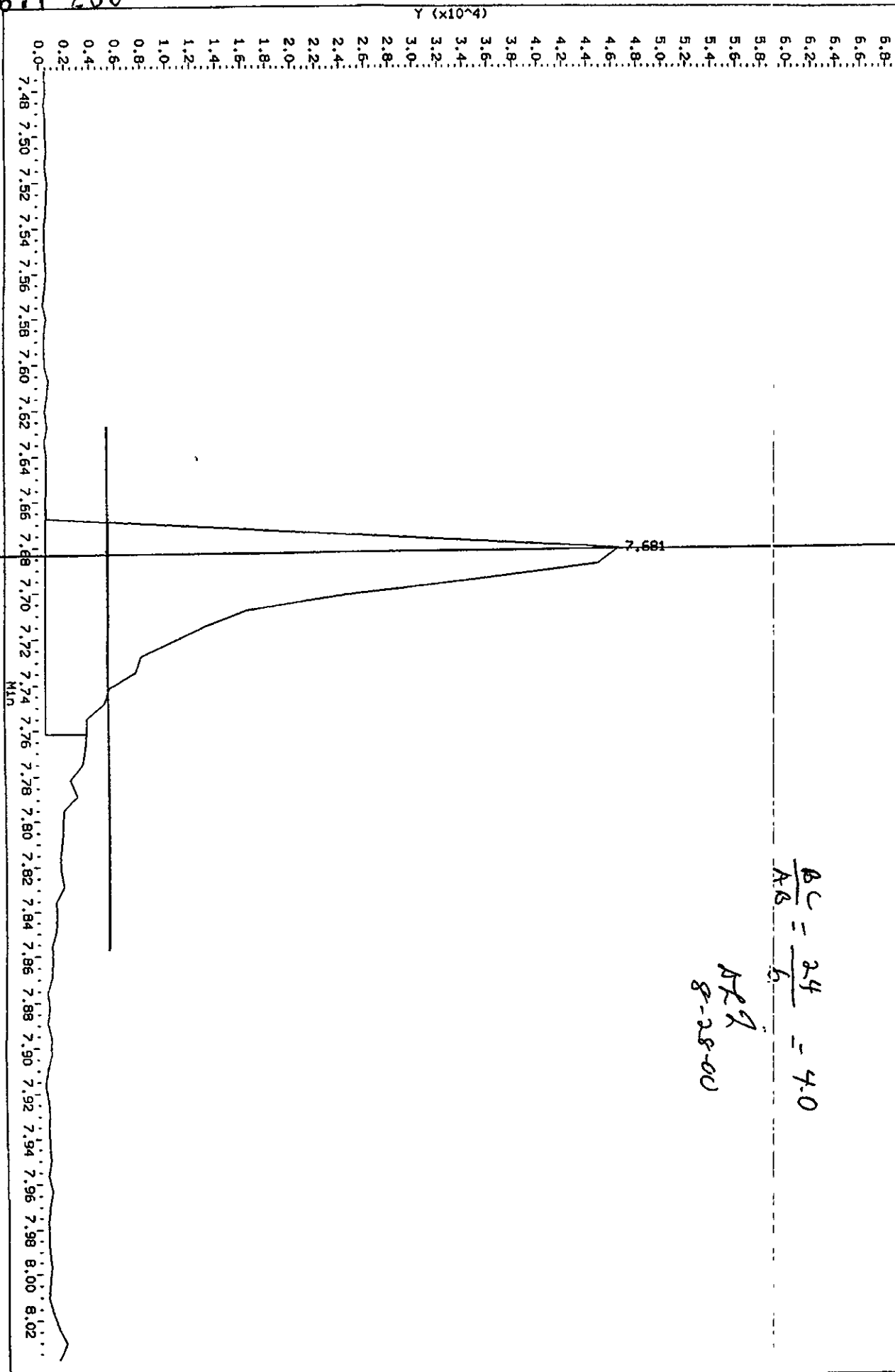
Instrument: 721.1
Operator: 001562, DLF
Column diameter: 0.25



Data File: \\np1tpa02\N\chem\721.1\0082800.b\0082800.FT.B
Injection Date: 28-AUG-2000 13:58
Instrument: 721.1
Client Sample ID: DTFP02

HP ChemStation MS data.ms: 7.471 to 8.038 Min

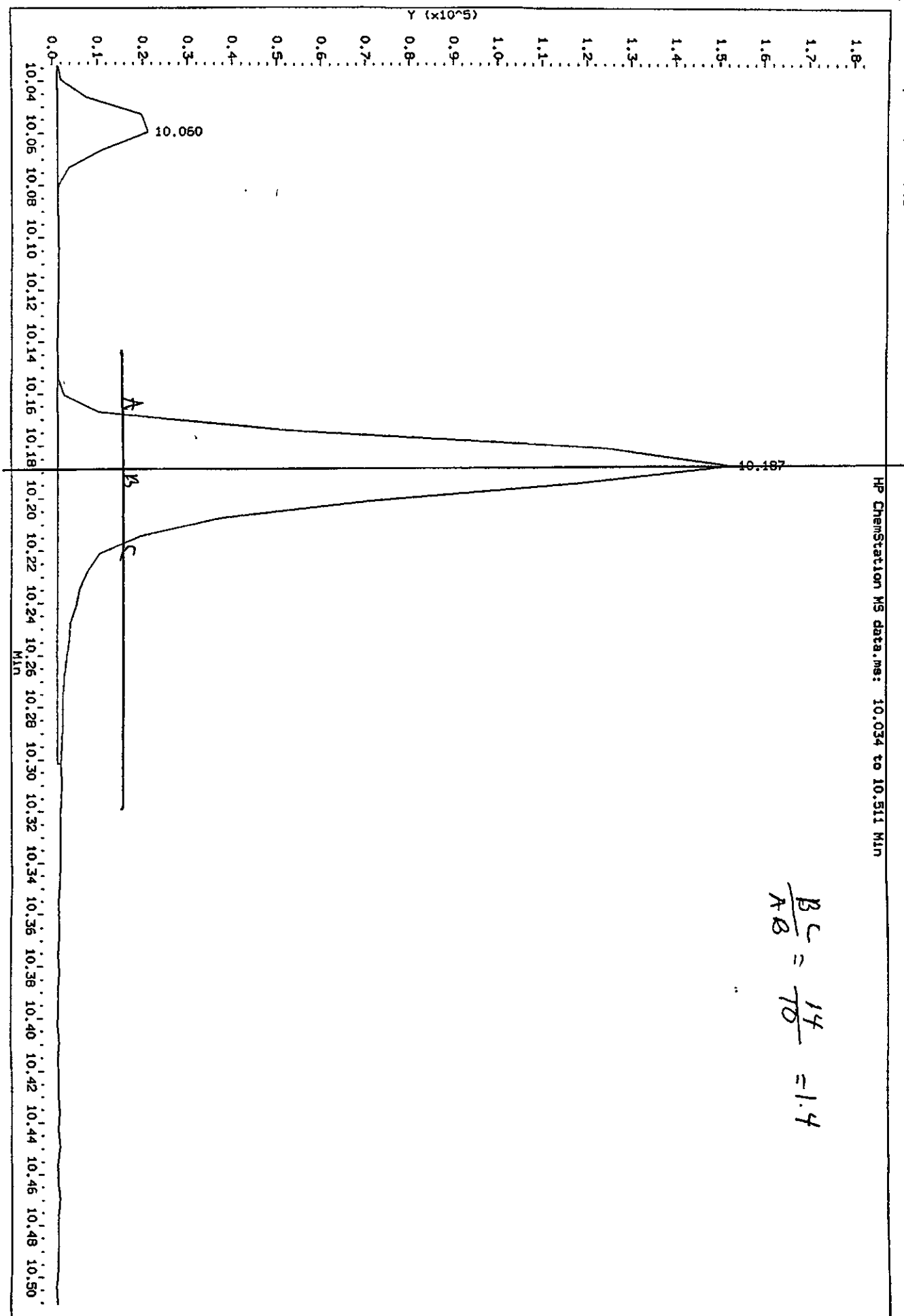
671 268



$$\frac{AC}{AB} = \frac{24}{6} = 4.0$$

AKA
8-28-00

Data File: \\gpltpa02\chem\721.1\0082800.b\00828001.D
 Injection Date: 28-AUG-2000 13:58
 Instrument: 721.1
 Client Sample ID: DFTPP02



671 270

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H250000 114

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJE32101

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

QC Batch: 0238114

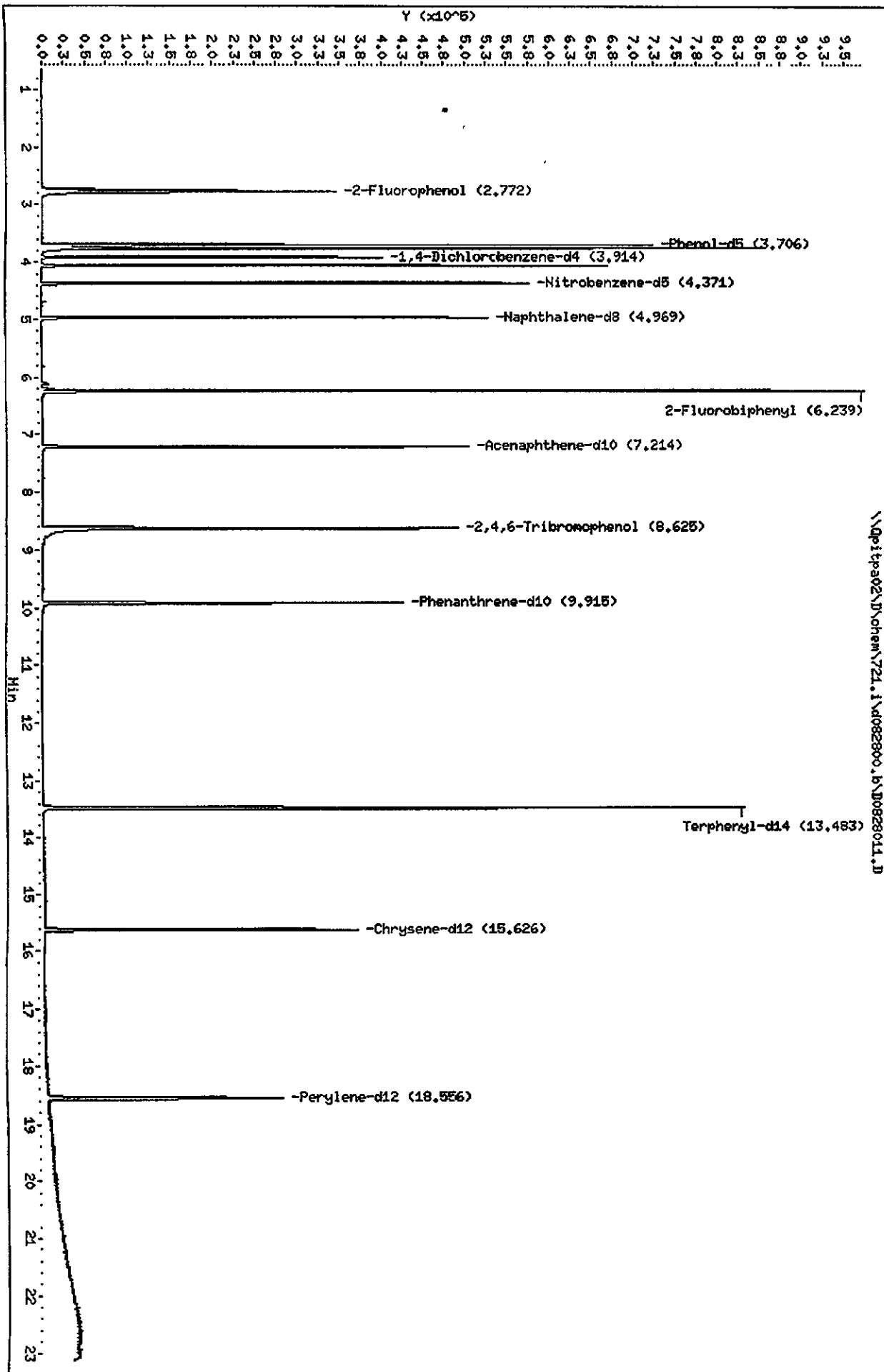
Client Sample Id: INTRA-LAB BLANK

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 I

Data File: \\qptp02\chem\721.i\0082800.b\00828011.D
 Date: 28-AUG-2000 19:39
 Client ID: INTRA-LAB BLANK
 Sample Info: 008220139-solk tolp 8/24/00 82700
 Volume Injected (ul): 2.0
 Column phase: Hp5-MS

Instrument: 721.i
 Operator: 001562, JLF
 Column diameter: 0.25



671 272

Data File: \\Qpitpa02\D\chem\721.i\d082800.b\D0828011.D
 Report Date: 28-Aug-2000 20:13

Page 1

STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082800.b\D0828011.D
 Lab Smp Id: DJE32101 Client Smp ID: INTRA-LAB BLANK
 Inj Date : 28-AUG-2000 19:39
 Operator : 001562, DLF Inst ID: 721.i
 Smp Info : c0h220139-sblk tclp 8/24/00 8270c
 Misc Info : dje32101,d082800.b,8270c.m,tclp.sub
 Comment :
 Method : \\Qpitpa02\D\chem\721.i\d082800.b\8270c.m
 Meth Date : 28-Aug-2000 15:11 ferguson Quant Type: ISTD
 Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
 Als bottle: 13 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC013

Compound Sublist: tclp.sub

8/28/00

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	3.914	3.918	(1.000)	72955	40.0000	(a)	
* 2 Naphthalene-d8	136	4.969	4.973	(1.000)	261172	40.0000	(a)	
* 3 Acenaphthene-d10	164	7.213	7.218	(1.000)	155193	40.0000	(a)	
* 4 Phenanthrene-d10	188	9.914	9.925	(1.000)	278704	40.0000	(a)	
* 5 Chrysene-d12	240	15.625	15.643	(1.000)	254923	40.0000	(a)	
* 6 Perylene-d12	264	18.555	18.560	(1.000)	206524	40.0000	(a)	
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.			
34 Hexachloroethane	117				Compound Not Detected.			
35 Nitrobenzene	77				Compound Not Detected.			
56 Hexachlorobutadiene	224				Compound Not Detected.			

Compounds	QUANT SIG MASS						CONCENTRATIONS	
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (NG)	FINAL (mg/L)	
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	4.371	4.375	{0.880}	177849	69.4569	0.17364 (a)	
\$ 155 2-Fluorobiphenyl	172	6.239	6.243	{0.865}	356770	70.4403	0.17610 (a)	
\$ 156 Terphenyl-d14	244	13.482	13.480	{0.863}	494892	77.2905	0.19323 (a)	
\$ 157 Phenol-d5	99	3.706	3.710	{0.947}	309574	114.170	0.28542 (a)	
\$ 158 2-Fluorophenol	112	2.772	2.776	{0.708}	192104	82.8404	0.20710 (a)	
\$ 159 2,4,6-Tribromophenol	330	8.624	8.635	{0.870}	118561	99.2886	0.24822 (a)	

QC Flag Legend

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

671 274

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH250000 114

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJE32102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

QC Batch: 0238114

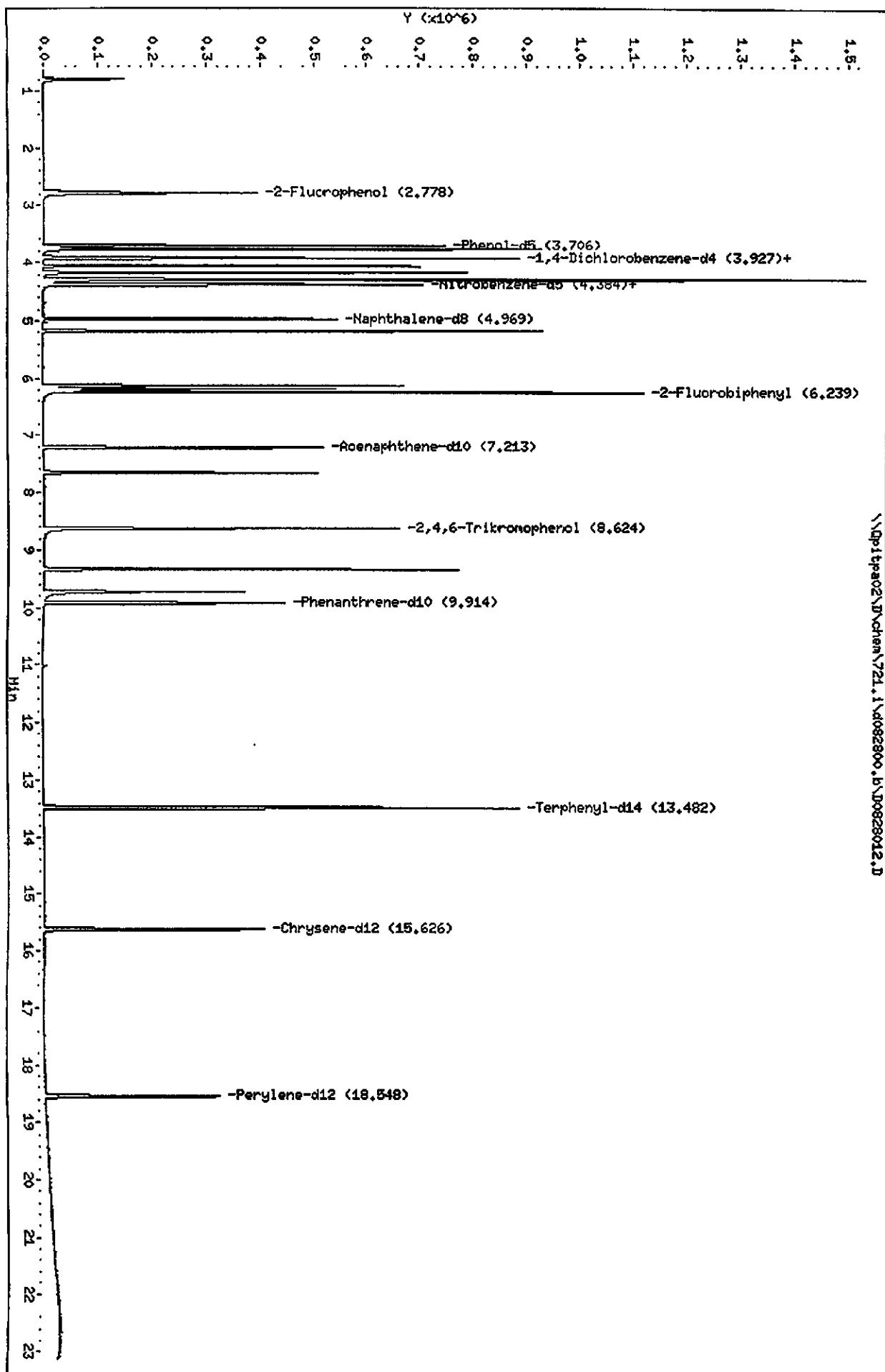
Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.183	
121-14-2	2,4-Dinitrotoluene	0.184	
118-74-1	Hexachlorobenzene	0.212	
87-68-3	Hexachlorobutadiene	0.167	
67-72-1	Hexachloroethane	0.174	
98-95-3	Nitrobenzene	0.174	
87-86-5	Pentachlorophenol	0.225	
110-86-1	Pyridine	0.170	
95-95-4	2,4,5-Trichlorophenol	0.180	
88-06-2	2,4,6-Trichlorophenol	0.182	
1319-77-3	Cresols (total)	0.589	

FORM I

Data File: \\Op1tpa02\Nchem\721.1\4082800.1\J0828012.D
Date: 28-AUG-2000 20:07
Client ID: LCS
Sample Info: 00H220139-105 tcip 8/24/00 82700
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 721.i
Operator: 001562, BLF
Column diameter: 0.25



STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082800.b\D0828012.D
 Lab Smp Id: DJE32102 Client Smp ID: LCS
 Inj Date : 28-AUG-2000 20:07
 Operator : 001562, DLF Inst ID: 721.i
 Smp Info : c0h220139-lcs tclp 8/24/00 8270c
 Misc Info : dje32102,d082800.b,8270c.m,tclp.sub
 Comment :
 Method : \\Qpitpa02\D\chem\721.i\d082800.b\8270c.m
 Meth Date : 28-Aug-2000 15:11 ferguson Quant Type: ISTD
 Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
 Als bottle: 14 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC013

DLF
8-29-00

Compound Sublist: tclp.sub

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

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

Compounds	QUANT SIG				RESPONSE	CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT		ON-COLUMN (ng)	FINAL (mg/L)
* 1 1,4-Dichlorobenzene-d4	152	3.914	3.918	(1.000)	76257	40.0000	(a)
* 2 Naphthalene-d8	136	4.968	4.973	(1.000)	268224	40.0000	(a)
* 3 Acenaphthene-d10	164	7.213	7.218	(1.000)	162809	40.0000	(a)
* 4 Phenanthrene-d10	188	9.914	9.925	(1.000)	295622	40.0000	(a)
* 5 Chrysene-d12	240	15.625	15.643	(1.000)	275682	40.0000	(a)
* 6 Perylene-d12	264	18.548	18.560	(1.000)	244322	40.0000	(a)
9 Pyridine	79	0.796	0.801	(0.203)	55237	67.9084	0.16992 (a)
27 1,4-Dichlorobenzene	146	3.927	3.925	(1.003)	198610	73.1122	0.18278 (a)
M 195 Cresols, total	100				487993	235.500	0.58875 (a)
30 2-Methylphenol	108	4.169	4.174	(1.065)	157373	77.1085	0.19277 (a)
192 4-Methylphenol	108	4.290	4.288	(1.096)	330620	158.192	0.39598 (a)
34 Hexachloroethane	117	4.303	4.301	(1.100)	87465	69.7933	0.17448 (a)
35 Nitrobenzene	77	4.384	4.389	(0.882)	177670	69.4044	0.17366 (a)
56 Hexachlorobutadiene	225	5.177	5.175	(1.042)	108049	66.7000	0.16678 (a)

Data File: \\Qpitpa02\D\chem\721.i\d082800.b\D0828012.D
 Report Date: 29-Aug-2000 08:57

Page 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (NG)	FINAL (mg/L)
=====	=====	==	=====	=====	=====	=====	=====
66 2,4,6-Trichlorophenol	196	6.131	6.136	(0.850)	121130	72.8454	0.18211 (a)
67 2,4,5-Trichlorophenol	196	6.178	6.189	(0.857)	128088	72.0918	0.18023 (a)
87 2,4-Dinitrotoluene	165	7.656	7.668	(1.061)	135080	73.5034	0.18376 (a)
107 Hexachlorobenzene	284	9.336	9.334	(0.942)	177302	84.8629	0.21216 (a)
111 Pentachlorophenol	266	9.726	9.731	(0.981)	93756	89.8467	0.22462 (aM)
\$ 154 Nitrobenzene-d5	82	4.370	4.375	(0.880)	177316	67.4281	0.16857 (a)
\$ 155 2-Fluorobiphenyl	172	6.238	6.243	(0.865)	379138	71.3549	0.17839 (a)
\$ 156 Terphenyl-d14	244	13.482	13.480	(0.863)	523409	75.5888	0.18897 (a)
\$ 157 Phenol-d5	99	3.705	3.710	(0.947)	320674	113.142	0.28286 (a)
\$ 158 2-Fluorophenol	112	2.778	2.776	(0.710)	207044	85.4169	0.21354 (a)
\$ 159 2,4,6-Tribromophenol	330	8.624	8.635	(0.870)	146216	115.441	0.28860 (a)

QC Flag Legend

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

671 278

Data File Name: D0828012.D

Inj. Date and Time: 28-AUG-2000 20:07

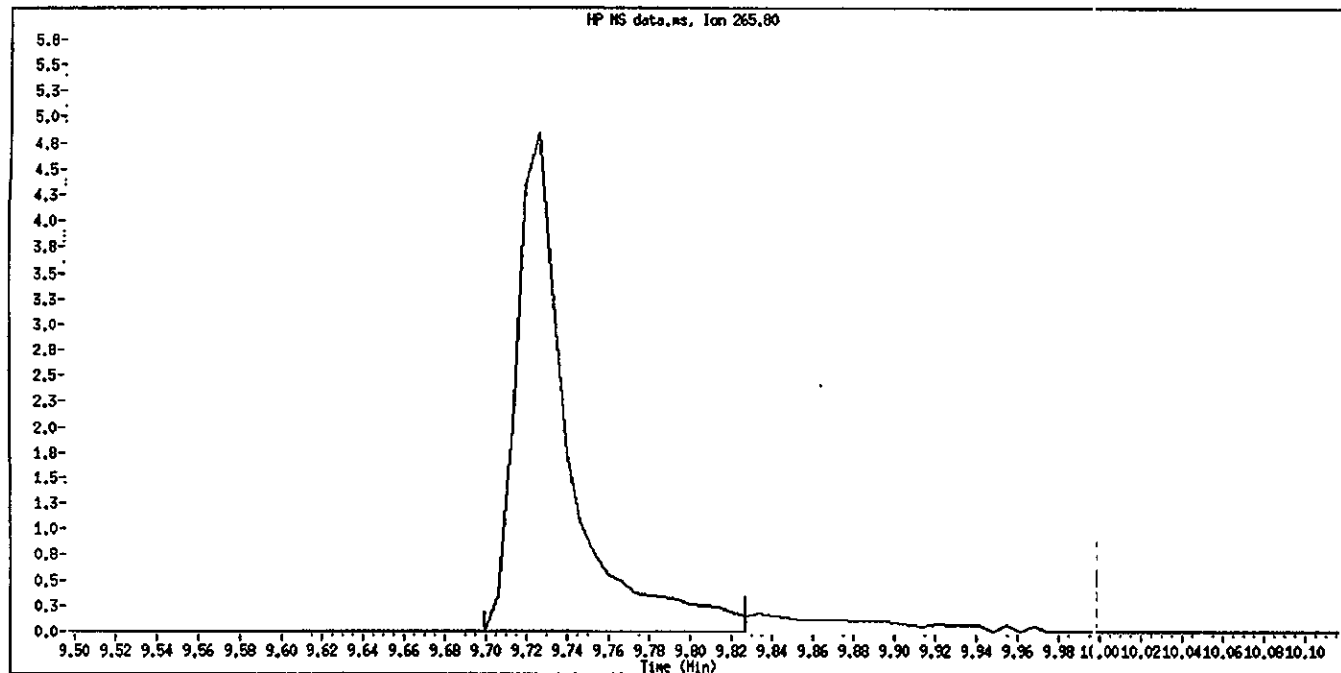
Instrument ID 721.i

Client ID: LCS

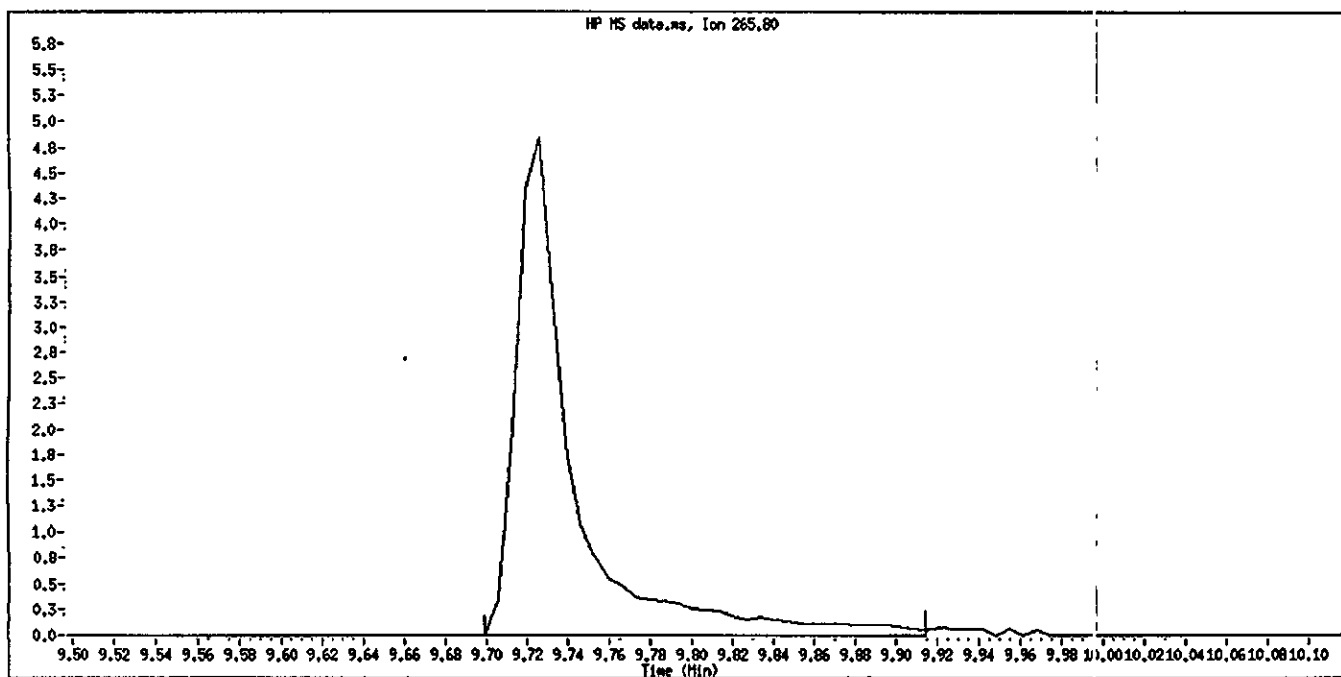
Compound Name: Pentachlorophenol

CAS #: 87-86-5

Report Date: 08/29/2000



Original Integration



Manual Integration

Manually Integrated By: FergusonD

Manual Integration Reason: Poor Chromatography

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0H220139 001

Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJ7C811G

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

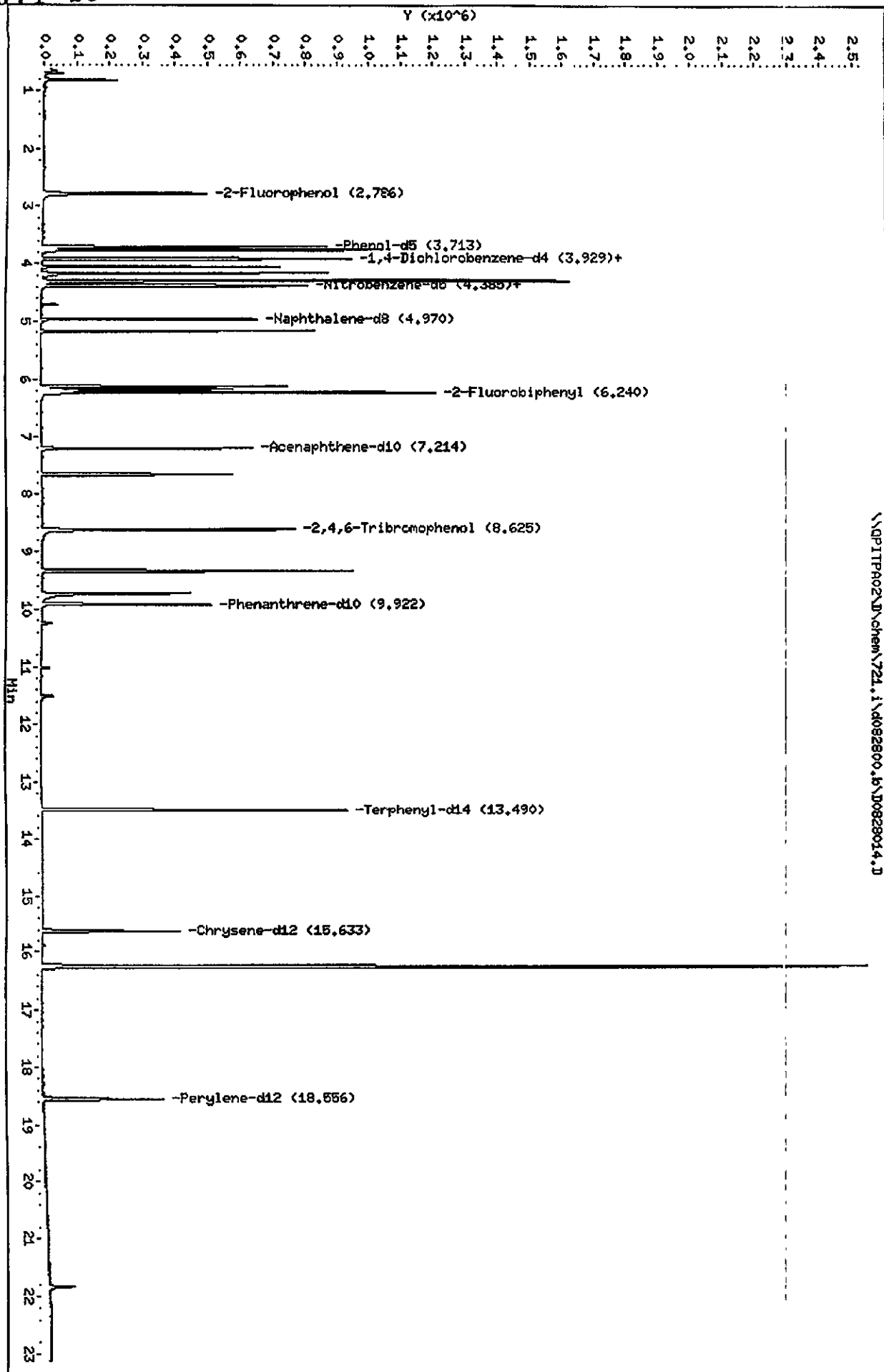
QC Batch: 0238114

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
106-46-7	1,4-Dichlorobenzene	0.146	
121-14-2	2,4-Dinitrotoluene	0.188	
118-74-1	Hexachlorobenzene	0.213	
87-68-3	Hexachlorobutadiene	0.126	
67-72-1	Hexachloroethane	0.134	
98-95-3	Nitrobenzene	0.156	
87-86-5	Pentachlorophenol	0.240	
110-86-1	Pyridine	0.157	
95-95-4	2,4,5-Trichlorophenol	0.187	
88-06-2	2,4,6-Trichlorophenol	0.167	
1319-77-3	Cresols (total)	0.514	

Date File: \\QIPITP002\N\chem\721.i\4082800.b\40828014.D
Date: 28-AUG-2000 21:05
Client ID: DF/S1/0234/SDC/029
Sample Info: con220139-001ms tolp 8/24/00 82700
Volume Injected (uL): 2.0
Column phase: HBE-MS

Instrument: 721.i
Operator: 001862, DLF
Column diameter: 0.25



\\QIPITP002\N\chem\721.i\4082800.b\40828014.D

STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082800.b\D0828014.D
Lab Smp Id: DJ7C811G Client Smp ID: DF/S1/0234/SDC/029M
Inj Date : 28-AUG-2000 21:05
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0h220139-001ms tclp 8/24/00 8270c
Misc Info : dj7c811g,d082800.b,8270c.m,tclp.sub
Comment :
Method : \\Qpitpa02\D\chem\721.i\d082800.b\8270c.m
Meth Date : 28-Aug-2000 15:11 ferguson Quant Type: ISTD
Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
Als bottle: 16 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC013

DL

8-29-00

Compound Sublist: tclp.sub

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

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

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(NG)	(mg/L)
* 1 1,4-Dichlorobenzene-d4		152	3.915	3.918	(1.000)	98658	40.0000	(a)
* 2 Naphthalene-d8		136	4.969	4.973	(1.000)	340247	40.0000	(a)
* 3 Acenaphthene-d10		164	7.214	7.218	(1.000)	201124	40.0000	(a)
* 4 Phenanthrene-d10		188	9.922	9.925	(1.000)	347901	40.0000	(a)
* 5 Chrysene-d12		240	15.633	15.643	(1.000)	284853	40.0000	(a)
* 6 Perylene-d12		264	18.556	18.560	(1.000)	266223	40.0000	(a)
9 Pyridine		79	0.824	0.801	(0.211)	65877	62.6554	0.15664 (a)
27 1,4-Dichlorobenzene		146	3.928	3.925	(1.003)	205548	58.4856	0.14621 (a)
M 195 Cresols, total		100				551117	205.538	0.51384 (a)
30 2-Methylphenol		108	4.170	4.174	(1.065)	173410	65.6740	0.16418 (a)
192 4-Methylphenol		108	4.291	4.288	(1.096)	377707	139.864	0.34966 (aQ)
34 Hexachloroethane		117	4.304	4.301	(1.100)	86875	53.5823	0.13396 (a)
35 Nitrobenzene		77	4.385	4.389	(0.882)	202034	62.2696	0.15567 (a)
56 Hexachlorobutadiene		225	5.178	5.175	(1.042)	103608	50.4274	0.12607 (a)

671 282

Data File: \\Qpita02\D\chem\721.i\d082800.b\D0828014.D
Report Date: 29-Aug-2000 08:41

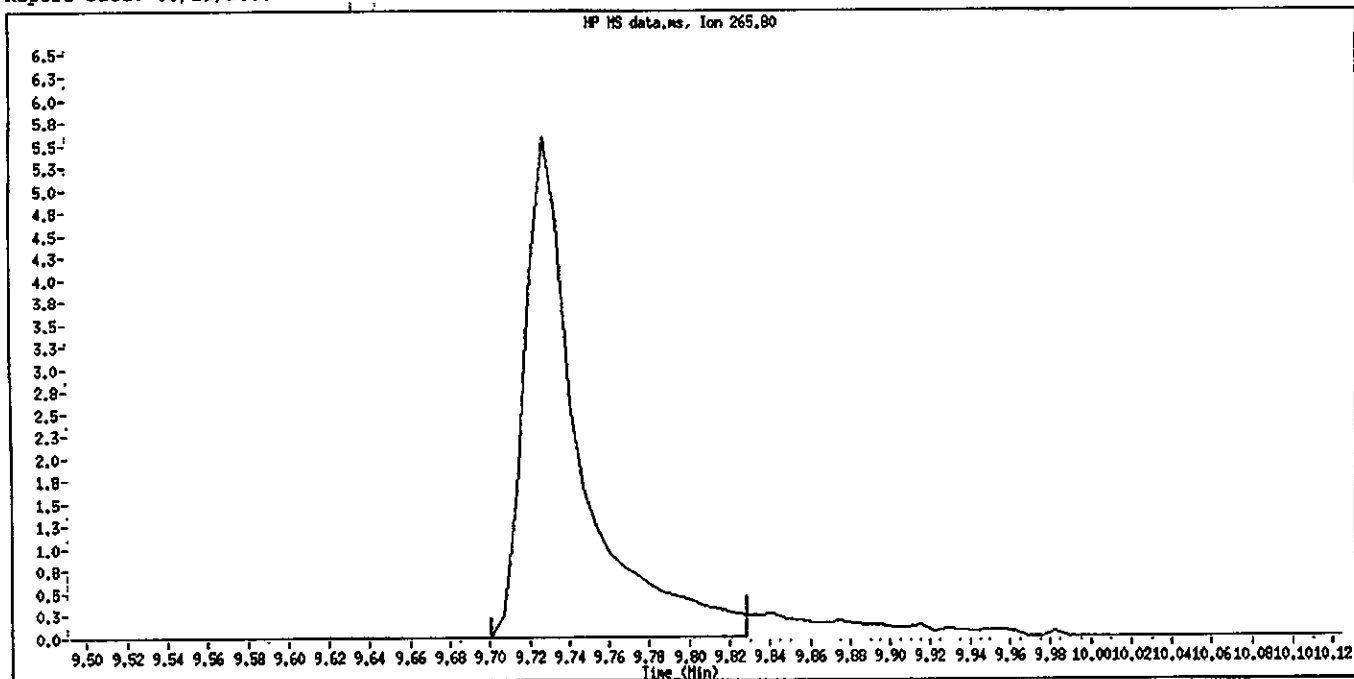
Page 2

Compounds	QUANT SIG			CONCENTRATIONS			
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (mg/L)
=====	====	==	=====	=====	=====	=====	=====
66 2,4,6-Trichlorophenol	196	6.132	6.136	(0.850)	136916	66.6129	0.16663 (a)
67 2,4,5-Trichlorophenol	196	6.179	6.189	(0.857)	164094	74.7626	0.18691 (a)
87 2,4-Dinitrotoluene	165	7.664	7.668	(1.062)	170649	75.1182	0.18792 (a)
107 Hexachlorobenzene	284	9.337	9.334	(0.941)	209962	85.3137	0.21348 (a)
111 Pentachlorophenol	266	9.727	9.731	(0.980)	117667	95.8.62	0.23954 (aM)
\$ 154 Nitrobenzene-d5	82	4.371	4.375	(0.880)	202371	60.6159	0.15166 (a)
\$ 155 2-Fluorobiphenyl	172	6.239	6.243	(0.865)	406204	61.8150	0.15471 (a)
\$ 156 Terphenyl-d14	244	13.489	13.480	(0.863)	577253	80.6108	0.20170 (a)
\$ 157 Phenol-d5	99	3.713	3.710	(0.949)	349932	95.4116	0.23858 (a)
\$ 158 2-Fluorophenol	112	2.786	2.776	(0.712)	223903	71.3184	0.17850 (a)
\$ 159 2,4,6-Tribromophenol	330	8.625	8.635	(0.869)	173086	116.120	0.29030 (a)

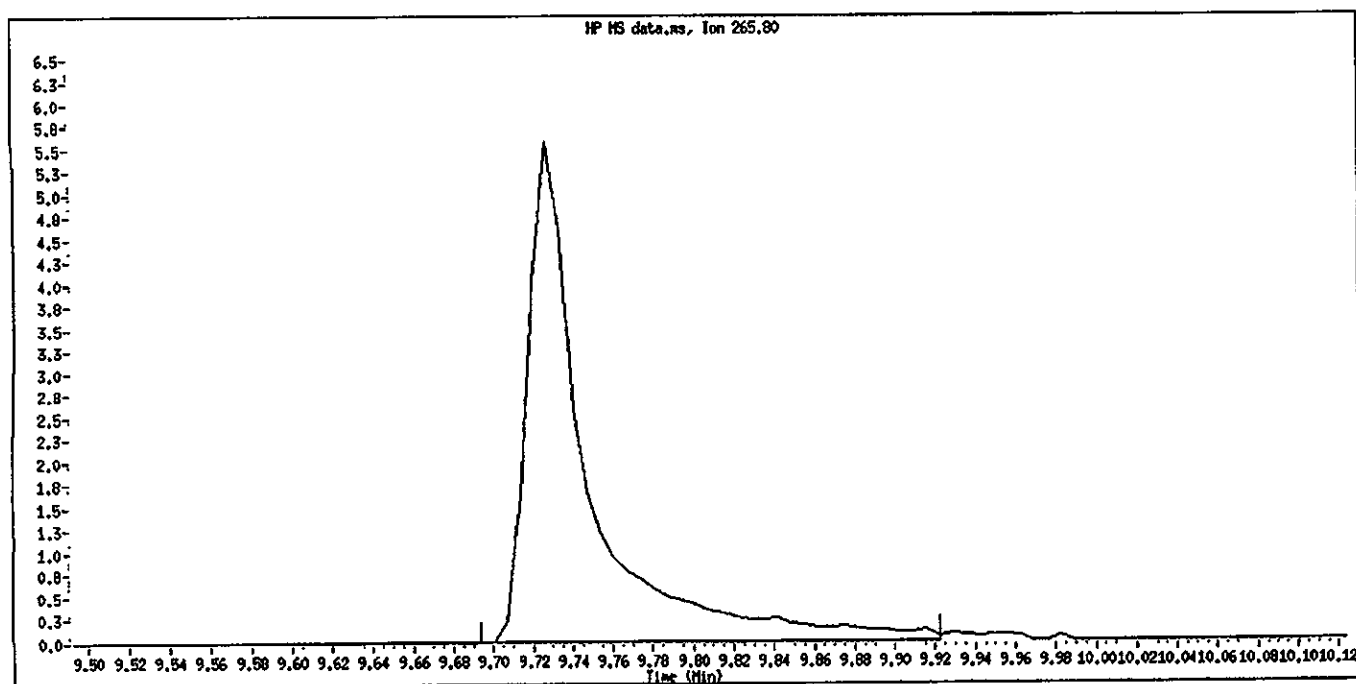
QC Flag Legend

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

Data File Name: D0828014.D
Inj. Date and Time: 28-AUG-2000 21:05
Instrument ID: 721.i
Client ID: DF/S1/0234/SDC/029M
Compound Name: Pentachlorophenol
CAS #: 87-86-5
Report Date: 08/29/2000



Original Integration



Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

671 284

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8270C

Base/Neutrals and Acids (8270C)

Sample WT/Vol: 200 / mL

Date Received: 08/22/00

Work Order: DJ7C811H

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

QC Batch: 0238114

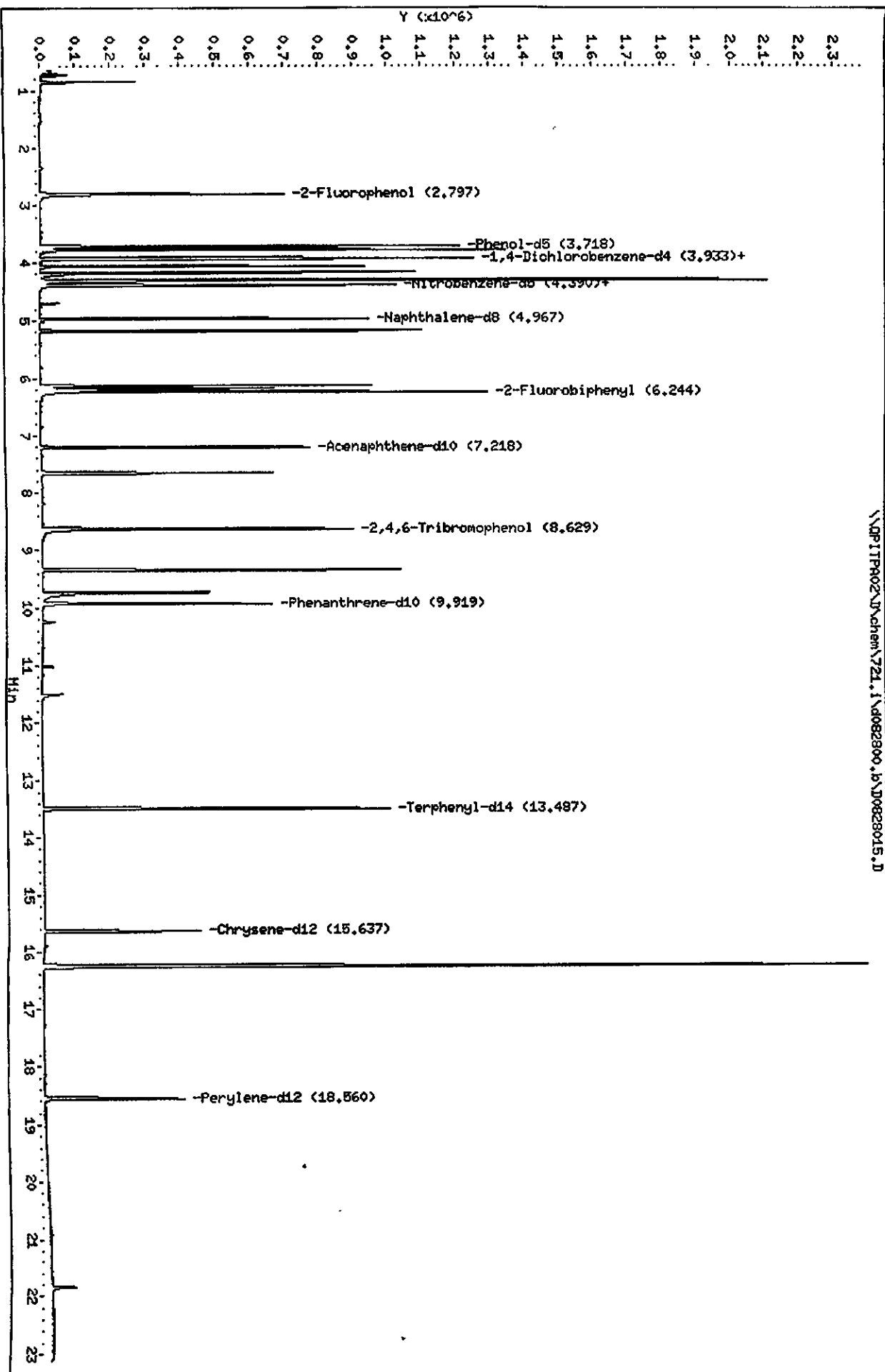
Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	mg/L	
106-46-7	1,4-Dichlorobenzene	0.137		
121-14-2	2,4-Dinitrotoluene	0.169		
118-74-1	Hexachlorobenzene	0.198		
87-68-3	Hexachlorobutadiene	0.116		
67-72-1	Hexachloroethane	0.127		
98-95-3	Nitrobenzene	0.143		
87-86-5	Pentachlorophenol	0.221		
110-86-1	Pyridine	0.142		
95-95-4	2,4,5-Trichlorophenol	0.160		
88-06-2	2,4,6-Trichlorophenol	0.154		
1319-77-3	Cresols (total)	0.467		

FORM I

Data File: \\NPITPA02\chem\721.1\0082800.b\00828015.D
Date: 28-AUG-2000 21:34
Client ID: DF/SI/0234/SDC/029
Sample Info: c0h20133-001msd tolp 8/24/00 82700
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 721.1
Operator: 001562, JLF
Column diameter: 0.25



STL - Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\Qpitpa02\D\chem\721.i\d082800.b\D0828015.D
 Lab Smp Id: DJ7C811H Client Smp ID: DF/S1/0234/SDC/029M
 Inj Date : 28-AUG-2000 21:34
 Operator : 001562, DLF Inst ID: 721.i
 Smp Info : c0h220139-001msd tclp 8/24/00 8270c
 Misc Info : dj7c811h,d082800.b,8270c.m,tclp.sub
 Comment :
 Method : \\Qpitpa02\D\chem\721.i\d082800.b\8270c.m
 Meth Date : 28-Aug-2000 15:11 ferguson Quant Type: ISTD
 Cal Date : 24-AUG-2000 14:16 Cal File: D0824CCC.D
 Als bottle: 17 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: HP RTE
 Target Version: 4.04
 Processing Host: PITPC013

DL 1
8-29-00

Compound Sublist: tclp.sub

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

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

Compounds	QUANT SIG				CONCENTRATIONS		
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (IKG)	FINAL (mg/L)
*****	*****	---	-----	-----	-----	-----	-----
* 1 1,4-Dichlorobenzene-d4	152	3.919	3.918	(1.000)	129127	40.0000	(a)
* 2 Naphthalene-d8	136	4.967	4.973	(1.000)	444276	40.0000	(a)
* 3 Acenaphthene-d10	164	7.218	7.218	(1.000)	258193	40.0000	(a)
* 4 Phenanthrene-d10	188	9.919	9.925	(1.000)	431942	40.0000	(a)
* 5 Chrysene-d12	240	15.637	15.643	(1.000)	333390	40.0000	(a)
* 6 Perylene-d12	264	18.560	18.560	(1.000)	312190	40.0000	(a)
9 Pyridine	79	0.841	0.801	(0.215)	78280	56.8041	0.14221(a)
27 1,4-Dichlorobenzene	146	3.932	3.925	(1.003)	252081	54.8013	0.13700(a)
M 195 Cresols, total	100				654989	186.059	0.46665(a)
30 2-Methylphenol	108	4.174	4.174	(1.065)	209467	60.6108	0.15153(a)
192 4-Methylphenol	108	4.295	4.288	(1.096)	445522	126.048	0.31512(a)
34 Hexachloroethane	117	4.308	4.301	(1.099)	107924	50.8081	0.12714(a)
35 Nitrobenzene	77	4.389	4.389	(0.884)	241615	57.0118	0.14258(a)
56 Hexachlorobutadiene	225	5.175	5.175	(1.042)	124374	46.3001	0.11590(a)

Data File: \\Qpitpa02\D\chem\721.i\d082800.b\D0828015.D
 Report Date: 29-Aug-2000 08:43

Page 2

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(NG)	(mg/L)
-----	----	--	-----	-----	-----	-----	-----
66 2,4,6-Trichlorophenol	196	6.129	6.136 (0.849)		162491	61.6189	0.15405 (a)
67 2,4,5-Trichlorophenol	196	6.183	6.189 (0.857)		180807	64.1692	0.16042 (a)
87 2,4-Dinitrotoluene	165	7.661	7.668 (1.061)		197069	67.6189	0.16905 (a)
107 Hexachlorobenzene	284	9.341	9.334 (0.942)		241520	79.1168	0.19779 (a)
111 Pentachlorophenol	256	9.731	9.731 (0.981)		134646	88.3096	0.22077 (aM)
\$ 154 Nitrobenzene-d5	82	4.376	4.375 (0.881)		247303	56.7763	0.14194 (a)
\$ 155 2-Fluorobiphenyl	172	6.244	6.243 (0.865)		474899	56.3588	0.14090 (a)
\$ 156 Terphenyl-d14	244	13.487	13.480 (0.863)		642877	76.7715	0.19193 (a)
\$ 157 Phenol-d5	99	3.717	3.710 (0.949)		421805	87.8892	0.21972 (a)
\$ 158 2-Fluorophenol	112	2.797	2.776 (0.714)		298651	72.7625	0.18191 (a)
\$ 159 2,4,6-Tribromophenol	330	8.629	8.635 (0.870)		205058	110.803	0.27701 (a)

QC Flag Legend

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

671 288

Data File Name: D0828015.D

Inj. Date and Time: 28-AUG-2000 21:34

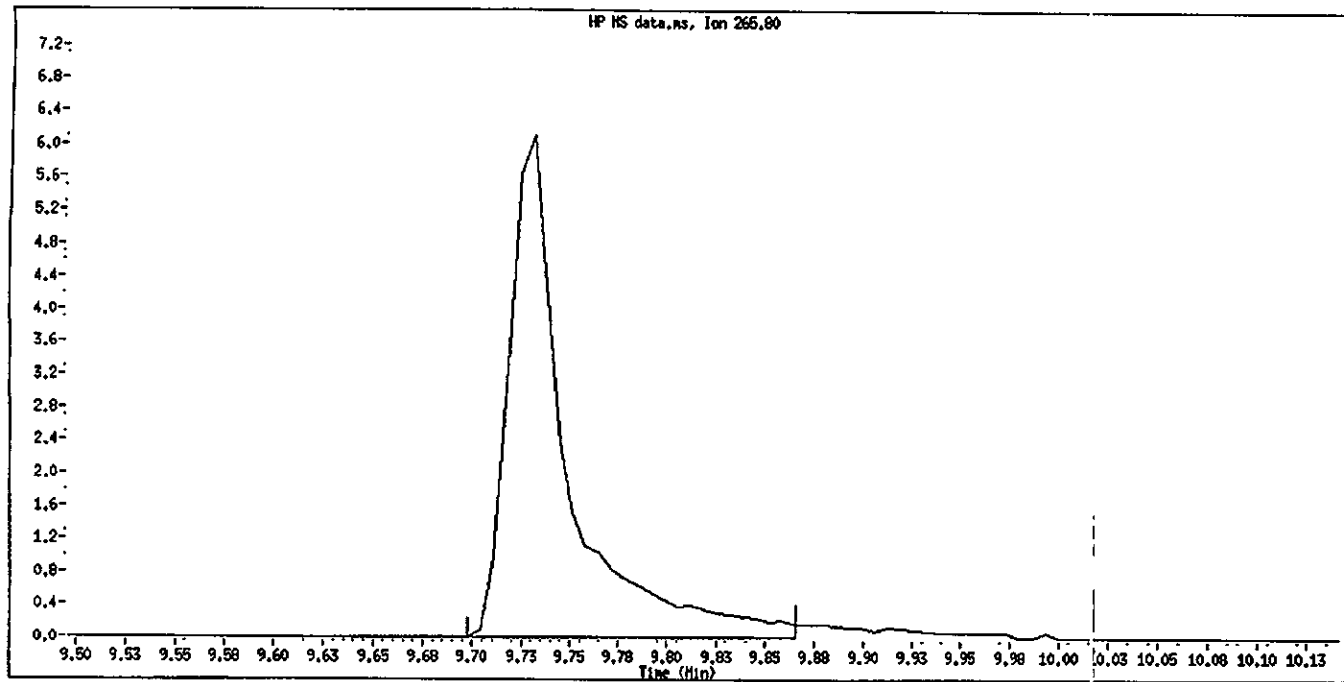
Instrument ID: 721.i

Client ID DF/S1/0234/SDC/029M

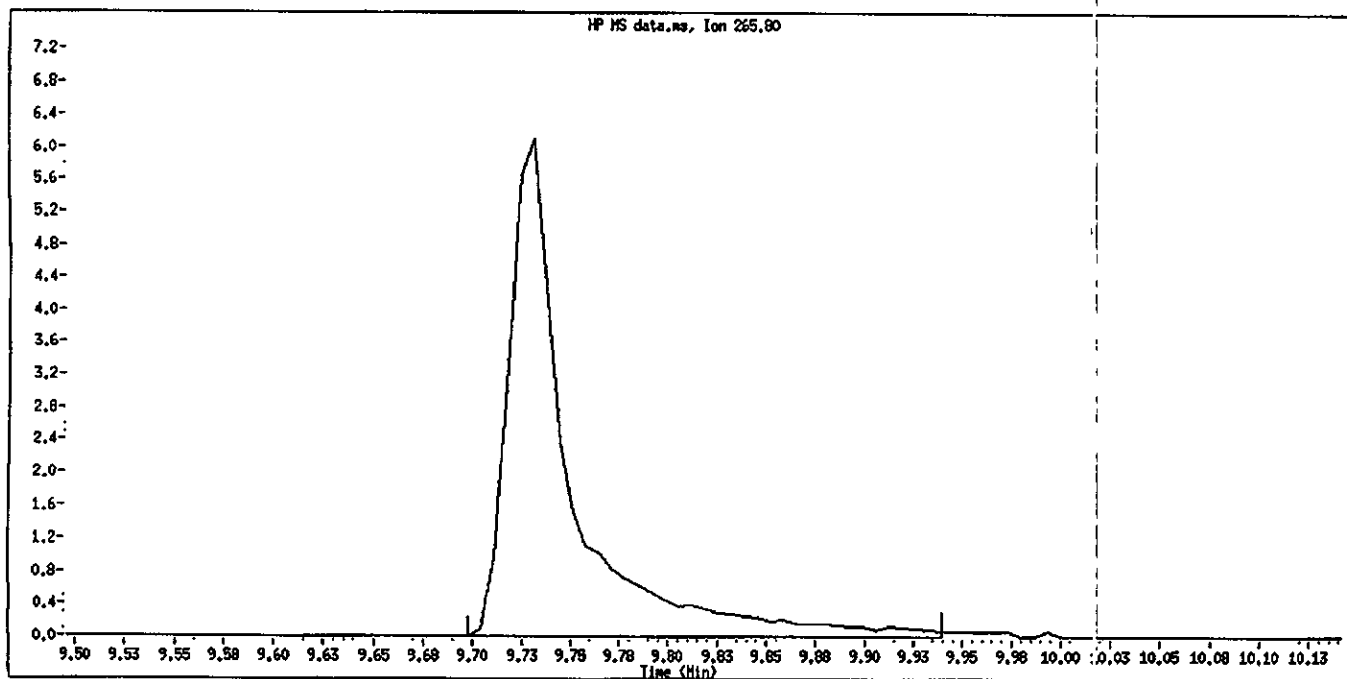
Compound Name: Pentachlorophenol

CAS #: 87-86-5

Report Date: 08/29/2000



Original Integration



Manual Integration

Manually Integrated By: FergusonD

Manual Integration Reason: Poor Chromatography

**GC/MS SEMIVOLATILE
MISCELLANEOUS**

TCLP (Method 1311)

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412826-5477 FAX: 412826-5571



QUA-4181

Filter Lot # 6320701W

Project Number	Lot Number	Date	Checked by	Date	pH Instrument	Probe	Serial Number	Log Book Number
Jamaal Murphy	60422039	8-23-00	Jeffrey D. Grant	8-24-00	Accumet ADS	SP0051607	087	96-MT-526
Solution Number 1 - Log Book Number			Solution Number 2 - Log Book Number					
0044497-12								

Fluid Determination

Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1, or #2	Conc.: HNO ₃ to Acidity (for Metals)	Sample ID	Wgt (g) Wet/Dry	Fluid Vol.	Final pH After Tumbling
DJ1C8	5.00g / 96.5ml	9.97	1.75	Soln #1		1. PB-TCLP 4-23-00	—	200ml	4.98
DJ1C9	↓	9.83	1.58	↓		2. DJ1C8	100.0g	↓	6.24
DJ1C6	↓	9.68	1.64	↓		3. ↓	↓	↓	6.14
						4. DJ1C9	↓	↓	5.60
						5. DJ1C6	↓	↓	5.56
						6. ↓			
						7. ↓			
						8. ↓			
						9. ↓			
						10. ↓			
						11. ↓			
						12. ↓			
						13. ↓			

Extract(s) Received

Time	Location	Date	Time	Analyst	Location
00	Jamaal Murphy	8-23-00	9:30	Jeffrey D. Grant	185

Date/Time On	Date/Time Off	Agitation Apparatus RPMs
8-23-00 12:00	8-24-00 4:00	30 ± 2 JN 3-23-00
Date	pH Calibration	(4.0)
8-23-00		(7.0)
Date		(10.0)
8-24-00		
Comments		
4.98		

Continuous L-L Extraction Worksheet

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



Began 8/24/2000		Time 14:00		TCLP		Prep Meth # 3520C		H2SO4 186-16-3		Solvent N/E C/A		Solvent Lot T19271		NaSO4 Lot Number T03265		Clean up Method NA	
Change over 8/25/2000		Time 13:15		Analysis 8270		Client ID NA		NaOH 0166-19		Final Volume mL 1.0		Surrogate Lot # 194-183-2		Sur Vol (mL) 0.5		Matrix Spike Lot # NA	
Completed 8-28-00		Time 10:00		Sample ID		Extract Vol (mL) 200		pH 5/2/11		Solvent Mfg. Baker		Surrogate Lot # 194-178-3		MS Vol (mL) 0.5		Cleanup Init/Date NA	
1.	COH220139	BIK															
2.		LCS															
3.		M5 (001)															
4.		M50 (001)															
5.		001															
6.		002															
7.		003															
8.																	
9.																	
10.																	
11.																	
12.																	
13.																	
14.																	
15.																	
16.																	
17.																	
18.																	
19.																	
20.																	
21.																	
22.																	
23.																	
Prep Analyst: WT		WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT	WT
Extract(s)		WT		WT		WT		WT		WT		WT		WT		WT	
(Record line number from above)		8-28-00		09:50		8-28-00		09:50		8-28-00		09:50		8-28-00		09:50	
All Above		8-28-00		13:30		8-28-00		13:30		8-28-00		13:30		8-28-00		13:30	
all above		8-28-00		13:30		8-28-00		13:30		8-28-00		13:30		8-28-00		13:30	
Batch Number: 0238114		Reviewed By: K. M. D. D.		Date: 8-28-00		Time: 16:30		Date: 8-28-00		Time: 16:30		Date: 8-28-00		Time: 16:30		Date: 8-28-00	

671 292 Comment: STL PITT HP5972-1 Log 2ul inj 100ul + 1ul IS
 Operator: 001562, DLF
 Data Path: D:\HPCHEM\1\DATA\d082400.b\
 Pre-Seq Cmd:
 Post-Seq Cmd:

AZ 28-24-00

NEW 5 PT

Method Sections To Run On A Barcode Mismatch
 (X) Full Method (X) Inject Anyway
 () Reprocessing Only () Don't Inject

I.S. = 194-183-6

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	D0824WUP	70EARLY	warm up 50
2 Sample	100	D0824WU2	70EARLY	warm up 50
3 Sample ✓ 1356	1	D0824DFT	DFTHP90	dftpp (25ug/ml) 194-175-8
4 Sample ✓	2	D0824CCC	70EARLY	sstd050 (25UG/ML) 194-183-7 8
5 Sample ✓	3	D0824CC1	70EARLY	sstd020 (10UG/ML) 194-188-3 8
6 Sample ✓	4	D0824CC2	70EARLY	sstd080 (40UG/ML) 194-188-5 8
7 Sample ✓	5	D0824CC3	70EARLY	sstd120 (60UG/ML) 194-188-6 8
8 Sample ✓	6	D0824CC4	70EARLY	sstd160 (80UG/ML) 194-188-7 8
9 Sample 21	7	D0824001	8270C	c0h100137-012 soil 8/11/00 82
10 Sample 21	8	D0824002	70EARLY	c0h090145-001ms 5x tclp 8/15/
11 Sample	9	D0824003	8270C	c0h160169-001 h2o 8/17/00 827
12 Sample	10	D0824004	8270C	c0h170215-sblk soil 8/23/00 8
13 Sample	10	D082404B	8270C	c0h170215-sblk soil 8/23/00 8
14 Sample	11	D0824005	8270C	c0h170215-lcs soil 8/23/00 82
15 Sample	12	D0824006	8270C	c0h170215-001 soil 8/23/00 82
16 Sample	13	D0824007	8270C	c0h170215-002 soil 8/23/00 82
17 Sample	14	D0824008	8270C	c0h170215-003 soil 8/23/00 82
18 Sample	15	D0824009	8270C	c0h170215-003ms soil 8/23/00
19 Sample	16	D0824010	8270C	c0h170215-003msd soil 8/23/00
20 Sample	17	D0824011	8270C	c0h170215-004 soil 8/23/00 82
21 Sample	18	D0824012	8270C	c0h170215-005 soil 8/23/00 82
22 Sample	19	D0824013	8270C	c0h170215-006 soil 8/23/00 82
23 Sample	20	D0824014	8270C	c0h080195-004/re soil 8/23/00
24 Sample	21	D0824015	8270C	c0h100137-009/re soil 8/23/00
25 Sample	22	D0824016	8270C	c0h100137-011 soil 8/23/00 82
26 Sample	23	D0824017	8270C	c0h100137-013 10x soil 8/23/0
27 Sample	24	D0824018	8270C	c0h170209-001 soil 8/23/00 82
28 Sample	25	D0824019	8270C	c0h180281-001 soil 8/23/00 82
29 Sample	26	D0824020	8270C	c0h180281-002 soil 8/23/00 82
30 Sample	27	D0824021	8270C	blank
31 Sample	27	D0824022	8270C	blank

Sequence Name: D:\HPCHEM\1\SEQUENCE\D082800.S
Comment: STL PITT HP5972-1 Log 2ul inj 100ul + 1ul IS
Operator: 001562, DLF
Data Path: D:\HPCHEM\1\DATA\d082800.b\
Pre-Seq Cmd:
Post-Seq Cmd:

671 293

DL 8.28-00

8270c

Method Sections To Run On A Barcode Mismatch
(X) Full Method (X) Inject Anyway
() Reprocessing Only () Don't Inject

I.S. = 194-183-6

Line Type	Vial	DataFile	Method	Sample Name
1 Sample	100	D0828WUP	70EARLY	warm up 50
2 Sample ✓ 1358 828001	1	D0828DFT	DFTHP90	dftpp (25ug/ml) 194-175-8
3 Sample ✓ 8270c	2	D0828CCC	70EARLY	sstd050 (25UG/ML) 194-183-14
4 Sample P&T CLEAN	3	D0828001	8270C	c0h240148-sblk h2o 8/25/00 82
5 Sample P&T	4	D0828002	8270C	c0h240148-lcs h2o 8/25/00 827
6 Sample P&T	5	D0828003	8270C	c0h240148-lcsd h2o 8/25/00 82
7 Sample P&T	6	D0828004	8270C	c0h240148-003 h2o 8/25/00 827
8 Sample P&T	7	D0828005	8270C	c0h240148-005 h2o 8/25/00 827
9 Sample P&T-CLEAN	8	D0828006	8270C	c0h240148-sblk soil 8/25/00 8
10 Sample P&T	9	D0828007	8270C	c0h240148-lcs soil 8/25/00 82
11 Sample P&T	10	D0828008	8270C	c0h240148-007 soil 8/25/00 82
12 Sample P&T	11	D0828009	8270C	c0h240148-007ms soil 8/25/00
13 Sample P&T 3X OK	12	D0828010	8270C	c0h240148-007msd soil 8/25/00
14 Sample P&T	13	D0828011	70EARLY	c0h220139-sblk tclp 8/24/00 8
15 Sample P&T	14	D0828012	70EARLY	c0h220139-lcs tclp 8/24/00 82
16 Sample P&T	15	D0828013	70EARLY	c0h220139-001 tclp 8/24/00 82
17 Sample P&T	16	D0828014	70EARLY	c0h220139-001ms tclp 8/24/00
18 Sample P&T	17	D0828015	70EARLY	c0h220139-001msd tclp 8/24/00
19 Sample P&T	18	D0828016	70EARLY	c0h220139-002 tclp 8/24/00 82
20 Sample P&T	19	D0828017	70EARLY	c0h220139-003 tclp 8/24/00 82
21 Sample	20	D0828018	8270C	c0h170241-sblk h2o 8/21/00 82
22 Sample	21	D0828019	8270C	c0h170241-003 10x h2o 8/21/00
23 Sample	22	D0828020	8270C	c0h170241-004 2x h2o 8/21/00
24 Sample	23	D0828021	8270C	c0h170241-009 200x h2o 8/21/0
25 Sample	24	D0828022	8270C	c0h170241-010 2x h2o 8/21/00
26 Sample	25	D0828023	8270C	c0h170241-012 h2o 8/21/00 827
27 Sample	26	D0828024	8270C	blank
28 Sample	26	D0828025	8270C	blank

671 294

PSR024 8/24/00 8:33:50 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: MILLERJ

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

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
2F CLP1	DJ7C8-1-03	___	261286	399411	A-59-QL	COH220139	001		SOLID	0	3 1
2F CLP1	DJ7C9-1-03	___	261287	399411	A-59-QL	COH220139	002		SOLID	0	3 1
2F CLP1	DJ7CC-1-03	___	261288	399411	A-59-QL	COH220139	003		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Alen
B Trout

B Trout
Alen

8/24/2000 *11:05*
8/24/2000 *14:05*

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

PESTICIDE DATA

671 296

**PESTICIDE
QC SUMMARY**

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT , QESSPG:

Lot #: C0H220139

	CLIENT ID.	SRG01	SRG02	TOT OUT
	=====	=====	=====	=====
01	DF/S1/0234/SDC/032	92	84	00
02	DF/S1/0234/SDC/029	90	82	00
03	DF/S1/0234/SDC/030	91	82	00
04	METHOD BLK. DJDTA101	100	93	00
05	LCS DJDTA102	95	87	00
06	DF/S1/0234/SDC/029 D	94	82	00
07	DF/S1/0234/SDC/029 S	91	80	00

SURROGATES

SRG01 = Decachlorobiphenyl
 SRG02 = Tetrachloro-m-xylene

QC LIMITS

(10-147)
 (39-130)

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

FORM II

671-298 SW846 8081A CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0H240000

WO #: DJDTA102

BATCH: 0237479

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
Lindane	0.00250	0.00157	63	49 - 137	
Heptachlor	0.00250	0.00225	90	57 - 124	
Heptachlor epoxide	0.00250	0.00227	91	53 - 135	
Endrin	0.00250	0.00222	89	46 - 137	
Methoxychlor	0.00250	0.00210	84	12 - 154	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: C0H220139

WO #: DJ7C810V

BATCH: 0237479

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
Lindane	0.00250	ND	0.00147	59	30 - 148	
Heptachlor	0.00250	ND	0.00209	84	25 - 135	
Heptachlor epoxide	0.00250	ND	0.00216	86	38 - 138	
Endrin	0.00250	ND	0.00216	86	28 - 148	
Methoxychlor	0.00250	ND	0.00196	78	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:

671-300 SW846 8081A MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Level: (low/med) LOW

Lot #: C0H220139

WO #: DJ7C810W

BATCH: 0237479

COMPOUND	SPIKE ADDED (mg/L)	MSD CONCENT. (mg/L)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
Lindane	0.00250	0.00150	60	1.8	22	30 - 148	
Heptachlor	0.00250	0.00211	85	0.99	32	25 - 135	
Heptachlor epoxide	0.00250	0.00216	86	0.090	31	38 - 138	
Endrin	0.00250	0.00235	94	8.4	40	28 - 148	
Methoxychlor	0.00250	0.00200	80	2.3	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.

671 301

DJDTA101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: D-B5706.d

Lot Number: C0H220139

Matrix: SOLID

Extraction Method: 1311/3510

Date Extracted: 08/24/00

Date Analyzed(1): 08/26/00

Date Analyzed(2): N/A

Time Analyzed(1): 12:06

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 CHECK SAMPLE	DJDTA102 C	08/26/00	N/A
02 DF/S1/0234/SDC/032	DJ7CC104	08/26/00	N/A
03 DF/S1/0234/SDC/029	DJ7C810V S	08/26/00	N/A
04 DF/S1/0234/SDC/029	DJ7C810W D	08/26/00	N/A
05 DF/S1/0234/SDC/029	DJ7C8104	08/26/00	N/A
06 DF/S1/0234/SDC/030	DJ7C9104	08/26/00	N/A
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

COMMENTS:

FORM IV

671 302

**PESTICIDE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C8104

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: 14

QC Batch: 0237479

Client Sample Id: DF/S1/0234/SDC/029

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

671 304

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5704.d
Report Date: 28-Aug-2000 13:58

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5704.d
 Lab Smp Id: DJ7C8104 Client Smp ID: DF/S1/0234/SDC/029
 Inj Date : 26-AUG-2000 11:10
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJ7C8104,5280-G.b,,PEST.sub,,,
 Misc Info : 220139001
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Meth Date : 28-Aug-2000 13:53 gc Quant Type: ESTD
 Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC043

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	5.633	5.633	0.000	37489	0.01640	0.001640(aR)
5 alpha-BHC				Compound Not Detected		
6 gamma-BHC (Lindane)				Compound Not Detected		
9 Chlordane				Compound Not Detected		
10 Heptachlor				Compound Not Detected		
11 Aldrin				Compound Not Detected		
7 beta-BHC				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin	14.500	14.500	0.000	7181	0.00211	0.0002115(a)
20 Endrin				Compound Not Detected.		

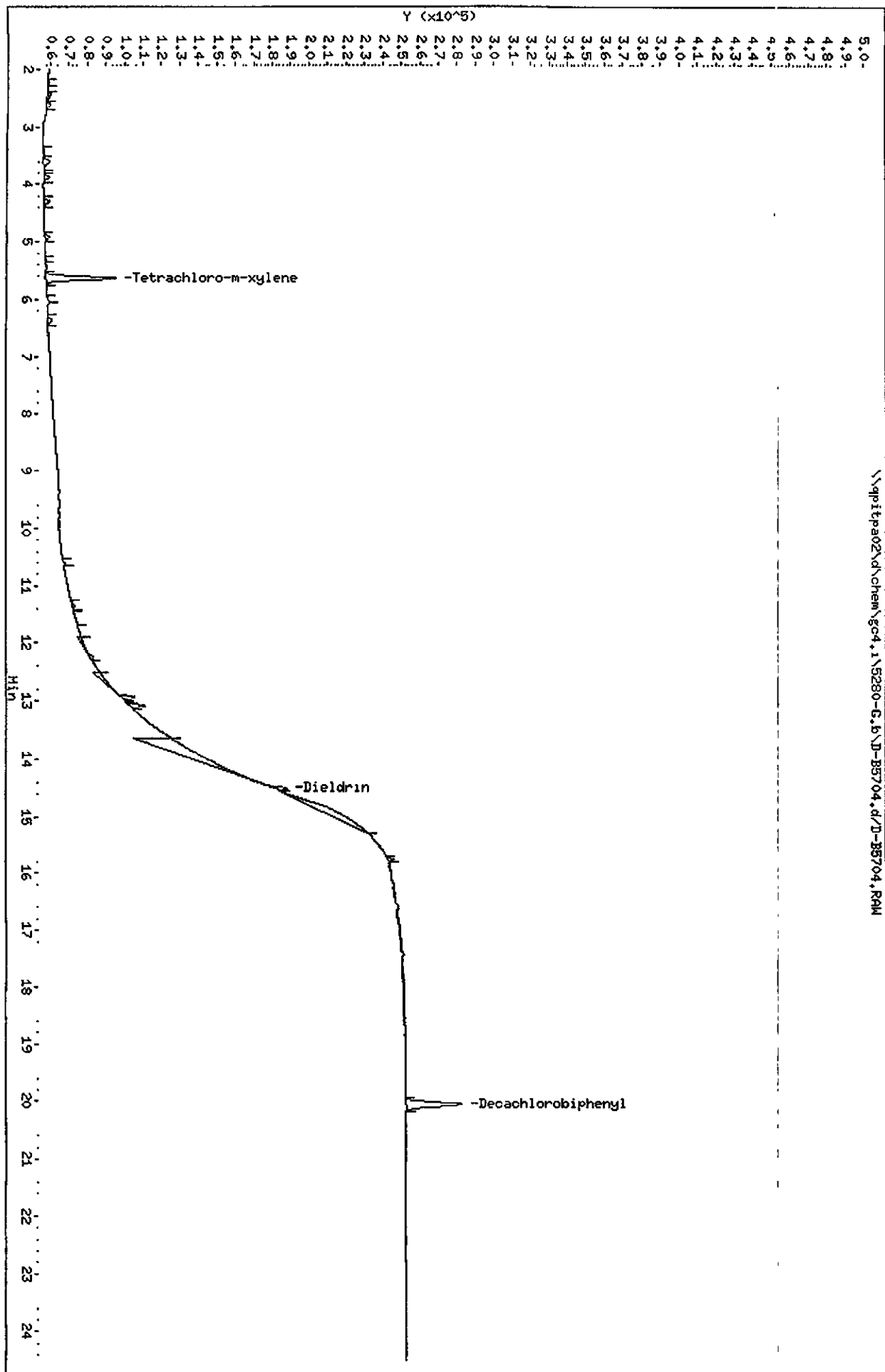
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
18 Toxaphene				Compound Not Detected.		
21 4,4'-DDD				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected		
23 4,4'-DDT				Compound Not Detected		
24 Endrin aldehyde				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected		
26 Endosulfan sulfate				Compound Not Detected.		
58 MIREX				Compound Not Detected		
29 Kepone				Compound Not Detected		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	20.060	20.066	-0.006	30527	0.01805	0.001805 (aR)

QC Flag Legend

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

Data File: \\ppitpa02\chem\gc4.1\5280-G.b.D-B5704.d
Date: 26-AUG-2000 11:10
Client ID: DF/SL/0234/SDC/029
Sample Info: DJ7C8104, 5280-G.b., PEST, sub.,
Volume Injected (uL): 1.0
Column phase: DB1701

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



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water)* SOLID

Lab Sample ID: COH220139 002

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C9104

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: 15

QC Batch: 0237479

Client Sample Id: DF/S1/0234/SDC/030

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

671 308

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5705.d
 Report Date: 28-Aug-2000 13:58

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5705.d
 Lab Smp Id: DJ7C9104 Client Smp ID: DF/S1/0234/SDC/030
 Inj Date : 26-AUG-2000 11:38
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJ7C9104,5280-G.b,,PEST.sub,,,
 Misc Info : 220139002
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Meth Date : 28-Aug-2000 13:53 gc Quant Type: ESTD
 Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC043

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	5.633	5.633	0.000	37669	0.01648	0.001648 (aR)
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
11 Aldrin				Compound Not Detected.		
7 beta-BHC				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin	14 506	14 500	0 006	3137	<0.0	0.00009233 (a)
20 Endrin				Compound Not Detected.		

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
18 Toxaphene				Compound Not Detected.		
21 4,4'-DDD				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
58 MIREX				Compound Not Detected.		
29 Kepone				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	20.060	20.066	-0.006	30903	0 01827	0.001827(aR)

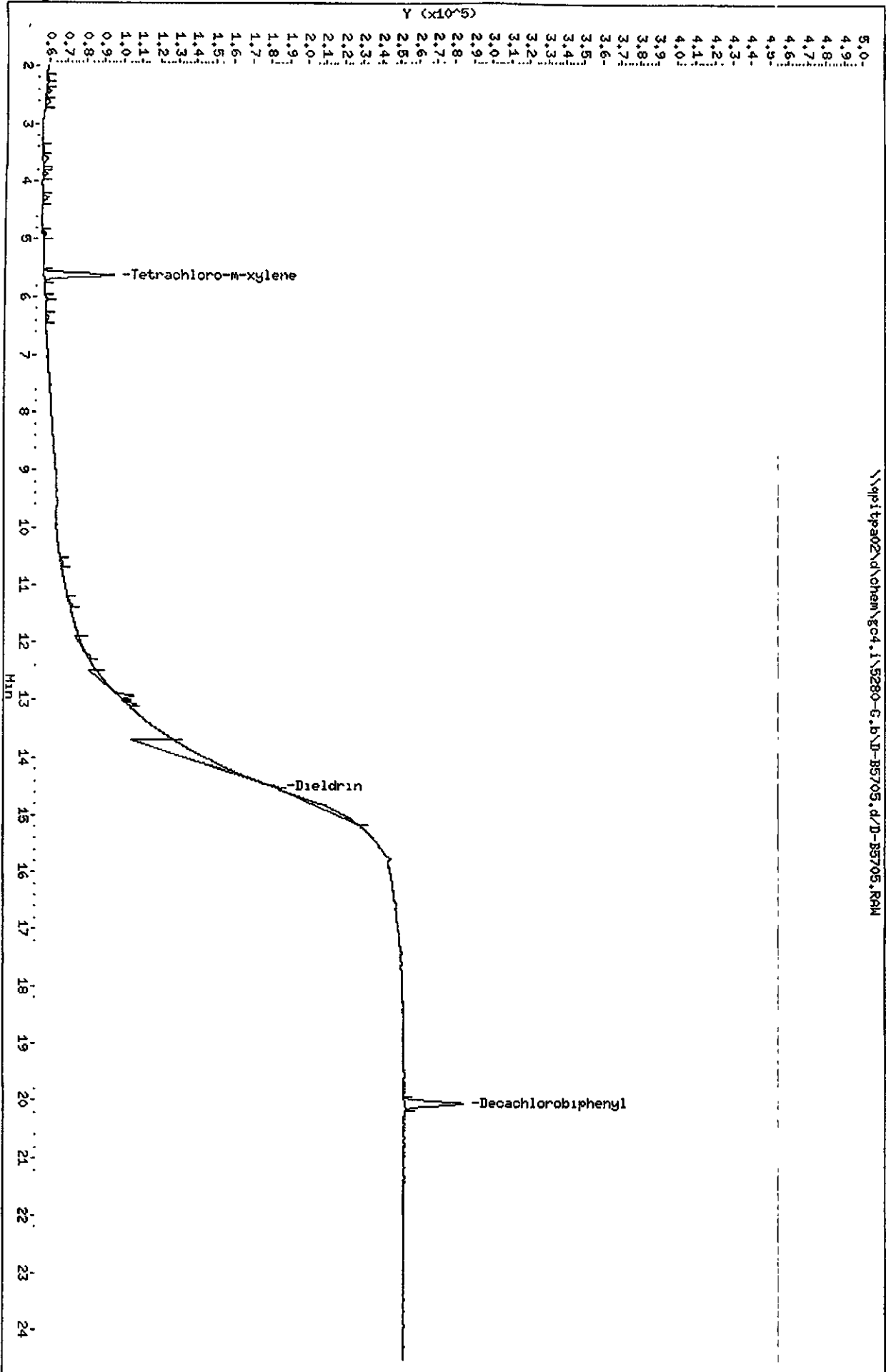
QC Flag Legend

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

671 310

Data File: \\p1tpa02\chem\gc4.i\5280-G.b.D-B5705.d
Date: 26-AUG-2000 11:38
Client ID: DF/SL/0234/SDC/030
Sample Info: DJ7C9104,5280-G.b.,PEST,sub,,
Volume Injected (uL): 1.0
Column phase: DB1701

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



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 003

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7CC104

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: 15

QC Batch: 0237479

Client Sample Id: DF/S1/0234/SDC/032

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\5280-G.b\D-B5711.d
 Report Date: 28-Aug-2000 13:59

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5711.d
 Lab Smp Id: DJ7CC104 Client Smp ID: DF/S1/0234/SDC/032
 Inj Date : 26-AUG-2000 14:24
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJ7CC104,5280-G.b,,PEST.sub,,
 Misc Info : 220139003
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Meth Date : 28-Aug-2000 13:53 gc Quant Type: ESTD
 Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC043

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	5.626	5.633	-0.007	38630	0.01690	0.001690(aR)
5 alpha-BHC				Compound Not Detected.		
6 gamma-BHC (Lindane)				Compound Not Detected.		
9 Chlordane				Compound Not Detected.		
10 Heptachlor				Compound Not Detected.		
11 Aldrin				Compound Not Detected.		
7 beta-BHC				Compound Not Detected.		
8 delta-BHC				Compound Not Detected.		
12 Heptachlor epoxide				Compound Not Detected.		
15 Endosulfan I				Compound Not Detected.		
13 gamma-Chlordane				Compound Not Detected.		
14 alpha-Chlordane				Compound Not Detected.		
16 4,4'-DDE				Compound Not Detected.		
17 Dieldrin	14.506	14.500	0.006	4598	0.00135	0.0001354(a)
20 Endrin				Compound Not Detected.		

Data File: \\gpitpa02\d\chem\gc4.i\5280-G.b\D-B5711.d
 Report Date: 28-Aug-2000 13:59

Compound	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
18 Toxaphene				Compound Not Detected.		
21 4,4'-DDD				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
58 MIREX				Compound Not Detected.		
29 Kepone				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	20.060	20.066	-0.006	31246	0.01848	0.001848(aR)

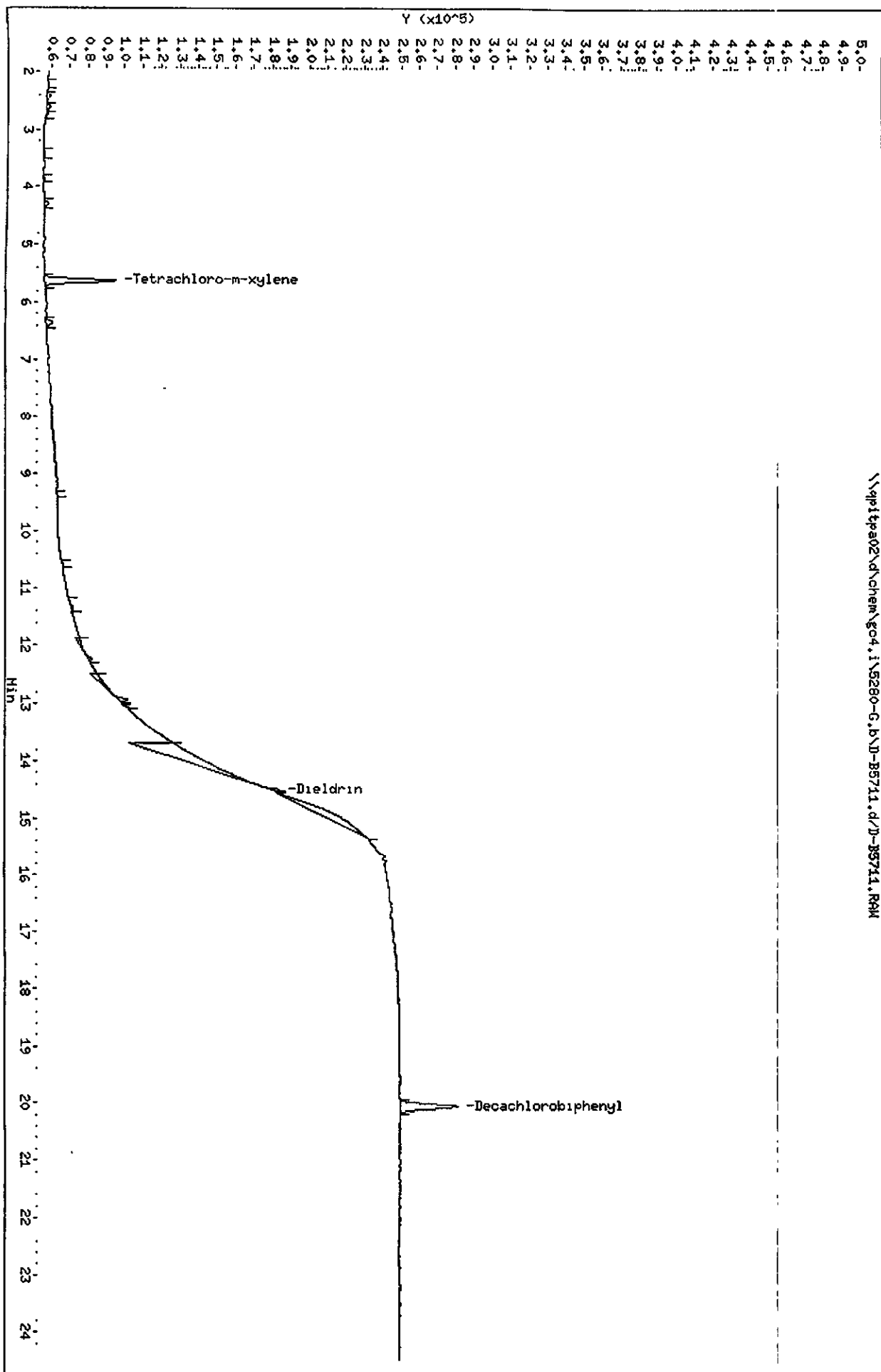
QC Flag Legend

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

671 314

Data File: \\p1tpa02\chem\gc4.1\5280-G.b\D-85711.d
Date: 26-AUG-2000 14:24
Client ID: DF/SI/0234/SDC/032
Sample Info: DJ7C104,5280-G.b.,PEST.sub.,,
Volume Injected (uL): 1.0
Column phase: DB1701

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



**PESTICIDE
CALIBRATION DATA**

671 316

Report Date : 28-Aug-2000 11:49

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STL - Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTE.m
 Quant Method : ESTD Target Version : 4.04
 Last Update : 28-Aug-2000 11:31 Number of Cpnds : 31
 Data Type : GC MULTI COMP

Global Integrator : Falcon

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

Compound	RT	RT Window	RF
\$ 1 Tetrachloro-m-xylene	5.633	5.583-5.683	2.29e+006
58 MIREX	16.827	16.777-16.877	1.78e+006
2 Diallate A	7.087	7.037-7.137	9.30e+004
3 Diallate B	7.667	7.617-7.717	2.03e+004
4 HEXACHLORO BENZENE	6.987	6.937-7.037	4.59e+006
5 alpha-BHC	8.380	8.330-8.430	3.06e+006
6 gamma-BHC (Lindane)	9.760	9.710-9.810	2.65e+006
7 beta-BHC	12.187	12.137-12.237	1.66e+006
8 delta-BHC	12.860	12.810-12.910	3.44e+006
9 Chlordane	10.093	10.043-10.143	8.23e+004
	10.687	10.637-10.737	1.74e+005
	13.967	13.917-14.017	3.26e+005
	14.073	14.023-14.123	4.55e+005
10 Heptachlor	10.687	10.637-10.737	2.94e+006
11 Aldrin	11.660	11.610-11.710	2.85e+006
12 Heptachlor epoxide	13.360	13.310-13.410	3.31e+006
13 gamma-Chlordane	13.967	13.917-14.017	3.39e+006
14 alpha-Chlordane	14.067	14.017-14.117	3.31e+006
15 Endosulfan I	13.907	13.857-13.957	3.20e+006
16 4,4'-DDE	14.220	14.170-14.270	3.37e+006
17 Dieldrin	14.507	14.457-14.557	3.40e+006

Report Date : 28-Aug-2000 11:49

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STL - Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

Compound	RT	RT Window	RF
18 Toxaphene	15.253	15.203-15.303	3.96e+004
	15.560	15.510-15.610	4.93e+004
	16.020	15.970-16.070	5.17e+004
	16.753	16.703-16.803	4.68e+004
19 Isodrin	12.807	12.757-12.857	3.02e+006
20 Endrin	14.820	14.770-14.870	3.16e+006
21 4,4'-DDD	15.367	15.317-15.417	2.46e+006
22 Endosulfan II	15.520	15.470-15.570	2.86e+006
23 4,4'-DDT	15.660	15.610-15.710	2.48e+006
24 Endrin aldehyde	16.187	16.137-16.237	1.34e+006
25 Methoxychlor	16.700	16.650-16.750	1.17e+006
26 Endosulfan sulfate	16.773	16.723-16.823	1.75e+006
27 Endrin ketone	17.740	17.690-17.790	2.06e+006
28 Chlorobenzilate	15.133	15.083-15.183	1.73e+005
29 Kepone	17.753	17.703-17.803	3.85e+003
\$ 30 Decachlorobiphenyl	20.060	20.010-20.110	1.69e+006

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Report Date : 28-Aug-2000 11:51

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STL - Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\5280-G.b\PEST3.m
 Quant Method : ESTD Target Version : 4.04
 Last Update : 28-Aug-2000 11:50 Number of Cpnds : 31
 Data Type : GC MULTI COMP

Global Integrator : Falcon

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

Compound	RT	RT Window	RF
\$ 1 Tetrachloro-m-xylene	5.633	5.583-5.683	2.29e+006
58 MIREX	16.827	16.777-16.877	1.78e+006
2 Diallate A	7.087	7.037-7.137	9.30e+004
3 Diallate B	7.667	7.617-7.717	2.03e+004
4 HEXACHLORO BENZENE	6.987	6.937-7.037	4.59e+006
5 alpha-BHC	8.380	8.330-8.430	3.06e+006
6 gamma-BHC (Lindane)	9.760	9.710-9.810	2.65e+006
7 beta-BHC	12.180	12.130-12.230	1.66e+006
8 delta-BHC	12.853	12.803-12.903	3.44e+006
9 Chlordane	10.093	10.043-10.143	8.23e+004
	10.687	10.637-10.737	1.74e+005
	13.967	13.917-14.017	3.26e+005
	14.073	14.023-14.123	4.55e+005
10 Heptachlor	10.687	10.637-10.737	2.94e+006
11 Aldrin	11.660	11.610-11.710	2.85e+006
12 Heptachlor epoxide	13.360	13.310-13.410	3.31e+006
13 gamma-Chlordane	13.967	13.917-14.017	3.39e+006
14 alpha-Chlordane	14.067	14.017-14.117	3.31e+006
15 Endosulfan I	13.907	13.857-13.957	3.20e+006
16 4,4'-DDE	14.220	14.170-14.270	3.37e+006
17 Dieldrin	14.507	14.457-14.557	3.40e+006

Report Date : 28-Aug-2000 11:51

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STL - Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

Compound	RT	RT Window	RF
18 Toxaphene	15.253	15.203-15.303	3.96e+004
	15.560	15.510-15.610	4.93e+004
	16.020	15.970-16.070	5.17e+004
	16.753	16.703-16.803	4.68e+004
19 Isodrin	12.807	12.757-12.857	3.02e+006
20 Endrin	14.820	14.770-14.870	3.16e+006
21 4,4'-DDD	15.367	15.317-15.417	2.46e+006
22 Endosulfan II	15.520	15.470-15.570	2.86e+006
23 4,4'-DDT	15.660	15.610-15.710	2.48e+006
24 Endrin aldehyde	16.187	16.137-16.237	1.34e+006
25 Methoxychlor	16.700	16.650-16.750	1.17e+006
26 Endosulfan sulfate	16.767	16.717-16.817	1.75e+006
27 Endrin ketone	17.733	17.683-17.783	2.06e+006
28 Chlorobenzilate	15.133	15.083-15.183	1.73e+005
29 Kepone	17.753	17.703-17.803	3.85e+003
\$ 30 Decachlorobiphenyl	20.067	20.017-20.117	1.69e+006

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Report Date : 28-Aug-2000 13:32

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STL - Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Quant Method : ESTD Target Version : 4.04
 Last Update : 28-Aug-2000 13:31 Number of Cpnds : 31
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events

Values

```

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

Compound	RT	RT Window	RF
\$ 1 Tetrachloro-m-xylene	5.633	5.583-5.683	2.29e+006
58 MIREX	16.827	16.777-16.877	1.78e+006
2 Diallate A	7.087	7.037-7.137	9.30e+004
3 Diallate B	7.667	7.617-7.717	2.03e+004
4 HEXACHLORO BENZENE	6.987	6.937-7.037	4.59e+006
5 alpha-BHC	8.373	8.323-8.423	3.06e+006
6 gamma-BHC (Lindane)	9.753	9.703-9.803	2.65e+006
7 beta-BHC	12.180	12.130-12.230	1.66e+006
8 delta-BHC	12.847	12.797-12.897	3.44e+006
9 Chlordane	10.093	10.043-10.143	8.23e+004
	10.687	10.637-10.737	1.74e+005
	13.967	13.917-14.017	3.26e+005
	14.073	14.023-14.123	4.55e+005
10 Heptachlor	10.687	10.637-10.737	2.94e+006
11 Aldrin	11.660	11.610-11.710	2.85e+006
12 Heptachlor epoxide	13.353	13.303-13.403	3.31e+006
13 gamma-Chlordane	13.960	13.910-14.010	3.39e+006
14 alpha-Chlordane	14.067	14.017-14.117	3.31e+006
15 Endosulfan I	13.907	13.857-13.957	3.20e+006
16 4,4'-DDE	14.220	14.170-14.270	3.37e+006
17 Dieldrin	14.500	14.450-14.550	3.40e+006

Report Date : 28-Aug-2000 13:32

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STL - Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

Compound	RT	RT Window	RF
18 Toxaphene	15.253	15.203-15.303	3.96e+004
	15.560	15.510-15.610	4.93e+004
	16.020	15.970-16.070	5.17e+004
	16.753	16.703-16.803	4.68e+004
19 Isodrin	12.807	12.757-12.857	3.02e+006
20 Endrin	14.820	14.770-14.870	3.16e+006
21 4,4'-DDD	15.360	15.310-15.410	2.46e+006
22 Endosulfan II	15.513	15.463-15.563	2.86e+006
23 4,4'-DDT	15.660	15.610-15.710	2.48e+006
24 Endrin aldehyde	16.180	16.130-16.230	1.34e+006
25 Methoxychlor	16.700	16.650-16.750	1.17e+006
26 Endosulfan sulfate	16.767	16.717-16.817	1.75e+006
27 Endrin ketone	17.727	17.677-17.777	2.06e+006
28 Chlorobenzilate	15.133	15.083-15.183	1.73e+005
29 Kepone	17.753	17.703-17.803	3.85e+003
\$ 30 Decachlorobiphenyl	20.067	20.017-20.117	1.69e+006

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Report Date : 10-Aug-2000 10:15

STL Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 07-AUG-2000 15:52
 End Cal Date : 08-AUG-2000 01:35
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTE.m
 Cal Date : 10-Aug-2000 10:13 colussyj
 Curve Type : Average

Calibration File Names:

Level 1: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5169.d
 Level 2: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5170.d
 Level 3: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5171.d
 Level 4: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5172.d
 Level 5: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5173.d

Compound	0 00500 Level 1	0.01000 Level 2	0 02500 Level 3	0.05000 Level 4	0.10000 Level 5	RRF	% RSD
58 MIREX	1717200	1905900	1858960	1704380	1699680	1777224	5.496
2 Diallylate A	103950	93024	99998	82384	85644	93000	9.850
3 Diallylate B	20490	19356	22592	18885	20126	20290	7.062
4 HEXACHLOROBENZENE	4802600	5203200	4812200	4191820	3941180	4590200	11.162
5 alpha-BHC	2667000	2830800	3055520	3330260	3438180	3064352	10.612
6 gamma-BHC (Lindane)	2382000	2511200	2643320	2831260	2893030	2652162	8.065
7 beta-BHC	1626400	1702800	1618720	1725080	1640460	1662692	2.892
8 delta-BHC	2971800	3297300	3341200	3772520	3793980	3435360	10.137
9 Chlordane(1)	+++++	+++++	82268	+++++	+++++	82268	0.000
(2)	+++++	+++++	173988	+++++	+++++	173988	0.000
(3)	+++++	+++++	326140	+++++	+++++	326140	0.000
(4)	+++++	+++++	455048	+++++	+++++	455048	0.000
10 Heptachlor	2845000	2881500	2932480	3021840	3018560	2939876	2.709
11 Aldrin	2564400	2788000	2758080	3062260	3068470	2848242	7.584
12 Heptachlor epoxide	3088200	3294800	3215840	3521580	3447520	3313588	5.268
13 gamma-Chlordane	3213400	3424900	3273400	3491400	3557250	3392070	4.278
14 alpha-Chlordane	3213400	3331200	3185280	3357060	3451710	3307730	3.298
15 Endosulfan I	3116400	3197300	3153200	3268060	3244960	3195984	1.964
16 4,4'-DDE	3204200	3353600	3274240	3502640	3506290	3368194	4.013
17 Dieldrin	3261600	3314800	3365760	3501500	3534780	3395688	3.483
18 Toxaphene(1)	+++++	+++++	39627	+++++	+++++	39627	0.000
(2)	+++++	+++++	49318	+++++	+++++	49318	0.000
(3)	+++++	+++++	51662	+++++	+++++	51662	0.000
(4)	+++++	+++++	46756	+++++	+++++	46756	0.000
19 Isodrin	2860600	2804280	3396740	2897987	3140960	3020113	8.168
20 Endrin	3703000	3244100	2903400	2961360	2997380	3161848	10.414

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 4140-G
 GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 08/07/00 08/08/00

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

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

EPA Sample No. (PEM): _____ Date Analyzed : 08/23/00

Lab Sample ID (PEM): EVALB Time Analyzed : 0930

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	14.82	14.77	14.87	0.02254	0.02500	-9.8
4,4'-DDT	15.66	15.61	15.71	0.02395	0.02500	-4.2

4,4'-DDT % breakdown (1): ~~2.07~~ 2.8 Endrin % breakdown (1): 0.00

Combined % breakdown (1): ~~2.07~~ 2.8

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8/29/00

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7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: 4140-G

GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 08/07/00 08/08/00

EPA Sample No. (PIBLK): _____

Date Analyzed: _____

Lab Sample ID (PIBLK): _____

Time Analyzed: _____

EPA Sample No. (PEM): _____

Date Analyzed: 08/26/00

Lab Sample ID (PEM): EVALB

Time Analyzed: 0320

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	14.82	14.77	14.87	0.02416	0.02500	-3.4
4,4'-DDT	15.66	15.61	15.71	0.02420	0.02500	-3.2

4,4'-DDT % breakdown (1): ~~4.74~~ 4.6 Endrin % breakdown (1): 0.00Combined % breakdown (1): ~~4.74~~ 4.6LM
8/29/00

FORM VII PEST-1

OLM03.0

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

671 325

Lab Name: _____ Contract: _____
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 4140-G
 GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 08/07/00 08/08/00

EPA Sample No. (PIBLK): _____ Date Analyzed : _____
 Lab Sample ID (PIBLK): _____ Time Analyzed : _____
 EPA Sample No. (PEM): _____ Date Analyzed : 08/26/00
 Lab Sample ID (PEM): EVALB Time Analyzed : 1357

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
=====	=====	=====	=====	=====	=====	=====
Endrin	14.82	14.77	14.87	0.02382	0.02500	-4.7
4,4'-DDT	15.66	15.61	15.71	0.02458	0.02500	-1.7

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

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Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5546.d
Report Date: 28-Aug-2000 10:42

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STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 23-AUG-2000 09:58
Lab File ID: D-B5546.d Init. Cal. Date(s): 07-AUG-2000 08-AUG-2000
Analysis Type: Init. Cal. Times: 15:52 01:35
Lab Sample ID: MEDTOX Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN	MAX
	RRF	RFO	RRF	%D
18 Toxaphene(1)	39627	41452	0.010	4.6
(2)	49318	51889	0.010	5.2
(3)	51662	51653	0.010	-0.0
(4)	46756	45873	0.010	-1.9
\$ 1 Tetrachloro-m-xylene	2286274	2432280	0.000	6.4
\$ 30 Decachlorobiphenyl	1691118	1767680	0.010	4.5

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5547.d
Report Date: 28-Aug-2000 10:33

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STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 23-AUG-2000 10:26
Lab File ID: D-B5547.d Init. Cal. Date(s): 07-AUG-2000 08-AUG-2000
Analysis Type: Init. Cal. Times: 15:52 01:35
Lab Sample ID: MEDCHLOR Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN RRF	MAX %D	MAX %D
9 Chlordane(1)	82268	90056	0.010	9.5	15.0
(2)	173988	185328	0.010	6.5	15.0
(3)	326140	335012	0.010	2.7	15.0
(4)	455048	454768	0.010	-0.1	15.0
\$ 1 Tetrachloro-m-xylene	2286274	2506400	0.000	9.6	15.0
\$ 30 Decachlorobiphenyl	1691118	1804360	0.010	6.7	15.0

871.328

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5548.d
Report Date: 28-Aug-2000 10:3312
589048

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STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 23-AUG-2000 10:54
Lab File ID: D-B5548.d Init. Cal. Date(s): 07-AUG-2000 08-AUG-2000
Analysis Type: Init. Cal. Times: 15:52 01:35
Lab Sample ID: MEDA Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN	MAX
			RRF	%D
\$ 1 Tetrachloro-m-xylene	2286274	2457880	0.000	7.5
5 alpha-BHC	3064352	3275640	0.010	6.9
6 gamma-BHC (Lindane)	2652162	2893720	0.010	9.1
10 Heptachlor	2939876	3144200	0.010	7.0
15 Endosulfan I	3195984	3393120	0.010	6.2
17 Dieldrin	3395688	3568680	0.010	5.1
20 Endrin	3161848	2983760	0.010	-5.6
21 4,4'-DDD	2458664	2523760	0.010	2.6
23 4,4'-DDT	2484688	2414760	0.010	-2.8
25 Methoxychlor	1167724	1157240	0.010	-0.9
\$ 30 Decachlorobiphenyl	1691118	1822160	0.010	7.7

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5549.d
Report Date: 28-Aug-2000 10:33

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STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 23-AUG-2000 11:21
Lab File ID: D-B5549.d Init. Cal. Date(s): 07-AUG-2000 08-AUG-2000
Analysis Type: Init. Cal. Times: 15:52 01:35
Lab Sample ID: MEDB Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

COMPOUND	RRF	RF0	MIN	RRF	%D	MAX
11 Aldrin	2848242	3039800	0.010	6.7	15.0	
7 beta-BHC	1662692	1705040	0.010	2.5	15.0	
8 delta-BHC	3435360	3235560	0.010	-5.8	15.0	
12 Heptachlor epoxide	3313588	3540520	0.010	6.8	15.0	
13 gamma-Chlordane	3392070	3545160	0.010	4.5	15.0	
14 alpha-Chlordane	3307730	3486280	0.010	5.4	15.0	
16 4,4'-DDE	3368194	3558040	0.010	5.6	15.0	
22 Endosulfan II	2862696	2822720	0.010	-1.4	15.0	
24 Endrin aldehyde	1340518	1378280	0.010	2.8	15.0	
26 Endosulfan sulfate	1751636	1597600	0.010	-8.8	15.0	
27 Endrin ketone	2064352	2139560	0.010	3.6	15.0	

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 Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5685.d
 Report Date: 28-Aug-2000 13:17

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STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 26-AUG-2000 02:24
 Lab File ID: D-B5685.d Init. Cal. Date(s): 07-AUG-2000 08-AUG-2000
 Analysis Type: Init. Cal. Times: 15:52 01:35
 Lab Sample ID: MEDA Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

COMPOUND	RRF	RPO	MIN RRF	%D	MAX %D
\$ 1 Tetrachloro-m-xylene	2286274	2381480	0.000	4.2	15.0
5 alpha-BHC	3064352	3163520	0.010	3.2	15.0
6 gamma-BHC (Lindane)	2652162	2749880	0.010	3.7	15.0
10 Heptachlor	2939876	2929360	0.010	-0.4	15.0
15 Endosulfan I	3195984	3207560	0.010	0.4	15.0
17 Dieldrin	3395688	3482840	0.010	2.6	15.0
20 Endrin	3161848	3188600	0.010	0.8	15.0
21 4,4'-DDD	2458664	2598920	0.010	5.7	15.0
23 4,4'-DDT	2484688	2444600	0.010	-1.6	15.0
25 Methoxychlor	1167724	1192980	0.010	2.2	15.0
\$ 30 Decachlorobiphenyl	1691118	1759160	0.010	4.0	15.0

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5686.d
Report Date: 28-Aug-2000 13:18

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STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 26-AUG-2000 02:52
Lab File ID: D-B5686.d Init. Cal. Date(s): 07-AUG-2000 08-AUG-2000
Analysis Type: Init. Cal. Times: 15:52 01:35
Lab Sample ID: MEDB Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN	MAX
11 Aldrin	2848242	2855760	0.010	0.3
7 beta-BHC	1662692	1572360	0.010	-5.4
8 delta-BHC	3435360	3273560	0.010	-4.7
12 Heptachlor epoxide	3313588	3357680	0.010	1.3
13 gamma-Chlordane	3392070	3365640	0.010	-0.8
14 alpha-Chlordane	3307730	3334680	0.010	0.8
16 4,4'-DDE	3368194	3524080	0.010	4.6
22 Endosulfan II	2862696	2810560	0.010	-1.8
24 Endrin aldehyde	1340518	1432560	0.010	6.9
26 Endosulfan sulfate	1751636	1773480	0.010	1.2
27 Endrin ketone	2064352	2223040	0.010	7.7

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Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5708.d
 Report Date: 28-Aug-2000 13:50

STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 26-AUG-2000 13:01
 Lab File ID: D-B5708.d Init. Cal. Date(s): 07-AUG-2000 08-AUG-2000
 Analysis Type: Init. Cal. Times: 15:52 01:35
 Lab Sample ID: MEDA Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

COMPOUND	RRF	RFO	MIN	MAX
RRF	RFO	RRF	%D	%D
1 Tetrachloro-m-xylene	2286274	2453760	0.000	7.3
5 alpha-BHC	3064352	3236520	0.010	5.6
6 gamma-BHC (Lindane)	2652162	2882160	0.010	8.7
10 Heptachlor	2939876	3019640	0.010	2.7
15 Endosulfan I	3195984	3275760	0.010	2.5
17 Dieldrin	3395688	3670760	0.010	8.1
20 Endrin	3161848	3197240	0.010	1.1
21 4,4'-DDD	2458664	2698160	0.010	9.7
23 4,4'-DDT	2484688	2471280	0.010	-0.5
25 Methoxychlor	1167724	1226660	0.010	5.0
30 Decachlorobiphenyl	1691118	1834680	0.010	8.5

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5709.d
Report Date: 28-Aug-2000 13:51

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STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i Injection Date: 26-AUG-2000 13:29
Lab File ID: D-B5709.d Init. Cal. Date(s): 07-AUG-2000 08-AUG-2000
Analysis Type: Init. Cal. Times: 15:52 01:35
Lab Sample ID: MEDE Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

COMPOUND	RRF	RF0	MIN	MAX
11 Aldrin	2848242	2907120	0.010	2.1 15.0
7 beta-BHC	1662692	1622120	0.010	-2.4 15.0
8 delta-BHC	3435360	3233680	0.010	-5.9 15.0
12 Heptachlor epoxide	3313588	3378240	0.010	2.0 15.0
13 gamma-Chlordane	3392070	3489520	0.010	2.9 15.0
14 alpha-Chlordane	3307730	3427240	0.010	3.6 15.0
16 4,4'-DDE	3368194	3500680	0.010	3.9 15.0
22 Endosulfan II	2862696	2937760	0.010	2.6 15.0
24 Endrin aldehyde	1340518	1446560	0.010	7.9 15.0
26 Endosulfan sulfate	1751636	1722960	0.010	-1.6 15.0
27 Endrin ketone	2064352	2237040	0.010	8.4 15.0

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8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: C0H220139

GC Column: DB1701

ID: 0.53

(mm)

Init. Calib. Date(s): 08/07/00 08/08/00

Instrument ID: GC4

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
TCX: 5.63			DCB: 20.06		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	EVALB	08/07/00	1525	5.73*	20.28*
02	MEDTOX	08/07/00	1552	5.72*	20.28*
03	MEDCHLOR	08/07/00	1620	5.73*	20.29*
04	LOWIX	08/07/00	1648		
05	MLOWIX	08/07/00	1716		
06	MEDIX	08/07/00	1743		
07	MHIGHIX	08/07/00	1811		
08	HIGHIX	08/07/00	1839		
09	LOWF	08/07/00	1907		
10	MLOWF	08/07/00	1934		
11	MEDF	08/07/00	2002		
12	MHIGHF	08/07/00	2030		
13	HIGHF	08/07/00	2058		
14	LOWA	08/07/00	2125	5.73*	20.27*
15	MLOWA	08/07/00	2153	5.73*	20.27*
16	MEDA	08/07/00	2221	5.73*	20.27*
17	MHIGHA	08/07/00	2249	5.74*	20.27*
18	HIGHA	08/07/00	2316	5.73*	20.27*
19	LOWB	08/07/00	2344		
20	MLOWB	08/08/00	0012		
21	MEDB	08/08/00	0039		
22	MHIGHB	08/08/00	0107		
23	HIGHB	08/08/00	0135		
24	2ND A	08/08/00	0203	5.73*	20.26*
25	2ND B	08/08/00	0230		
26	EVALB	08/08/00	0258	5.75*	20.27*
27	EVALB	08/23/00	0930	5.63	20.06
28	MEDTOX	08/23/00	0958	5.63	20.06
29	MEDCHLOR	08/23/00	1026	5.63	20.06
30	MEDA	08/23/00	1054	5.63	20.06
31	MEDB	08/23/00	1121		
32	MEDA	08/26/00	0224	5.63	20.07

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.

8D
PESTICIDE ANALYTICAL SEQUENCE

671 335

Lab Name: STL-PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.: 40325

SDG No.: COH220139

GC Column: DB1701

ID: 0.53

(mm)

Init. Calib. Date(s): 08/07/00 08/08/00

Instrument ID: GC4

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
TCX: 5.63			DCB: 20.06		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	MEDB	08/26/00	0252		
02	EVALB	08/26/00	0320	5.63	20.06
03	DF/S1/0234/S	08/26/00	1015	5.63	20.06
04	DF/S1/0234/S	08/26/00	1043	5.63	20.06
05	DF/S1/0234/S	08/26/00	1110	5.63	20.06
06	DF/S1/0234/S	08/26/00	1138	5.63	20.06
07	PBLK7479	08/26/00	1206	5.63	20.06
08	LCS7479	08/26/00	1233	5.63	20.06
09	MEDA	08/26/00	1301	5.63	20.06
10	MEDB	08/26/00	1329		
11	EVALB	08/26/00	1357	5.63	20.06
12					
13					
14					
15					
16					
17					
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27					
28					
29					
30					
31					
32					

QC LIMITS

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

DCB = Decachlorobiphenyl (+/- 0.05 MINUTES)

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

Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5151.d
Report Date: 10-Aug-2000 10:41

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5151.d
Lab Smp Id: EVALB
Inj Date : 07-AUG-2000 15:25
Operator : 1891
Smp Info : EVALB,5080-G.b,,EVALBR.sub,,3,1
Misc Info : 190-88-8
Comment :
Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
Meth Date : 10-Aug-2000 10:37 colussyj
Cal Date : 08-AUG-2000 01:35
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085

Inst ID: gc4.i
Quant Type: ESTD
Cal File: D-B5173.d
QC Sample: PEM
Compound Sublist: EVALBR.sub

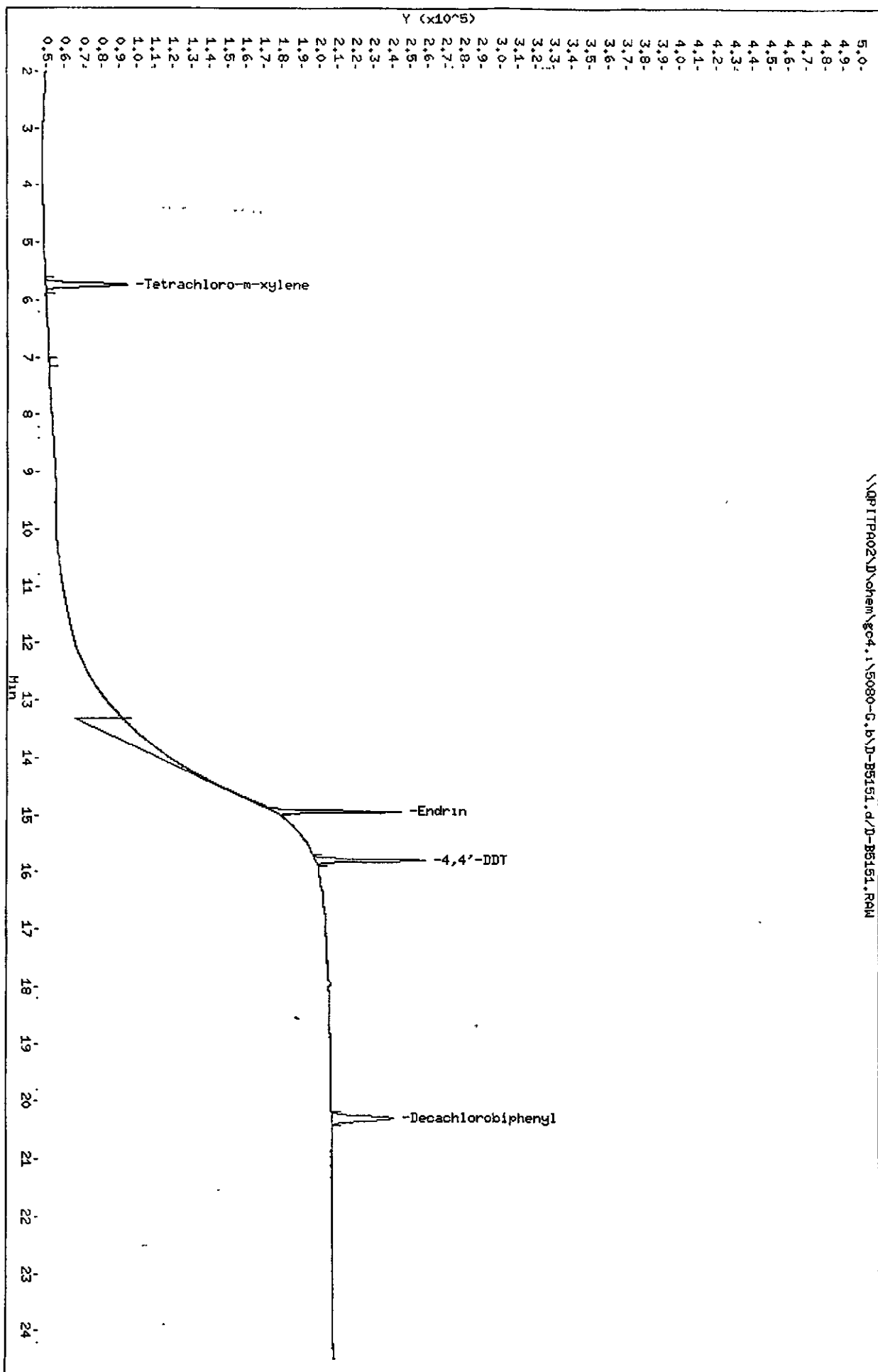
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ng)
\$ 1 Tetrachloro-m-xylene	5.726	5.720	0.006	45388	0.01985	0.01985 (R)
16 4,4'-DDE				Compound Not Detected		
20 Endrin	14.913	14.913	0.000	70927	0.02243	0.02243
21 4,4'-DDD				Compound Not Detected.		
23 4,4'-DDT	15.766	15.766	0.000	61058	0.02457	0.02457
24 Endrin aldehyde				Compound Not Detected		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	20.280	20.280	0.000	34261	0.02026	0.02026 (R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\NPITPA02\Nchem\gc4.1\5080-G.b\D-B5151.d
Date: 07-AUG-2000 15:25
Client ID:
Sample Info: EVALB,5080-G.b,EVALBR,sub,,3,1
Column Phase: DB1701

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



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Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5152.d
Report Date: 10-Aug-2000 10:41

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5152.d
Lab Smp Id: MEDTOX
Inj Date : 07-AUG-2000 15:52
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDTOX,5080-G.b,,1-TOX.sub,,1,3
Misc Info : 190-98-12
Comment :
Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD
Cal Date : 07-AUG-2000 15:52 Cal File: D-B5152.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

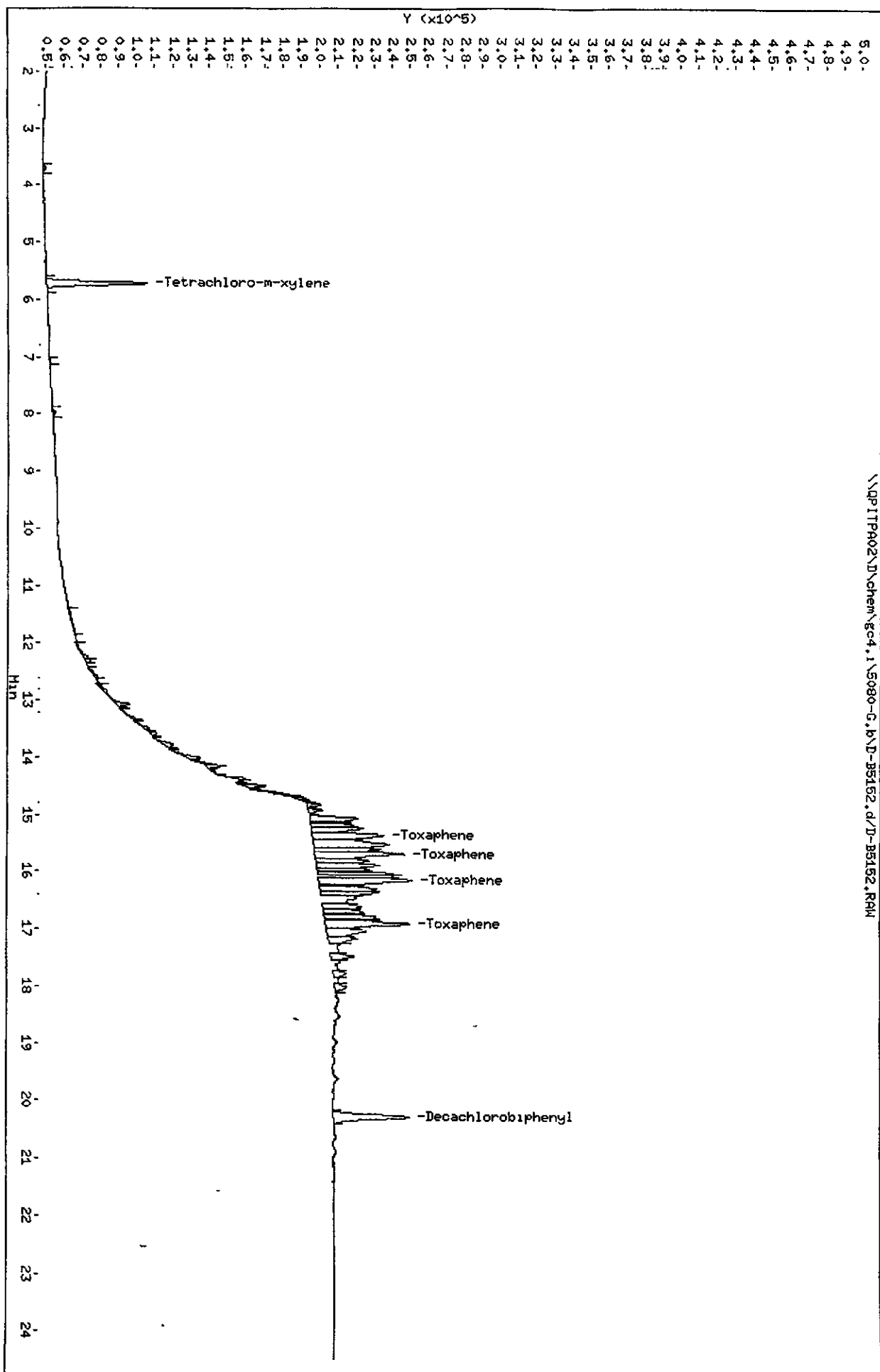
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
*****	==	*****	*****	*****	*****	*****
18 Toxaphene	15 353	15 353	0 000	39627	1 00000	1 000 (M)
\$ 1 Tetrachloro-m-xylene	5 720	5 720	0 000	56063	0.02500	0 02500
\$ 30 Decachlorobiphenyl	20 280	20.280	0 000	41913	0 02500	0 02500

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NPITPA02\chem\gc4,1\5080-G,b\D-B5152.d
Date: 07-AUG-2000 15:52
Client ID:
Sample Info: MEDTOX,5080-G,b,1-TOX,sub,1,3
Column phase: DB1701

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



Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5153.d
Report Date: 10-Aug-2000 10:41

STL Pittsburgh

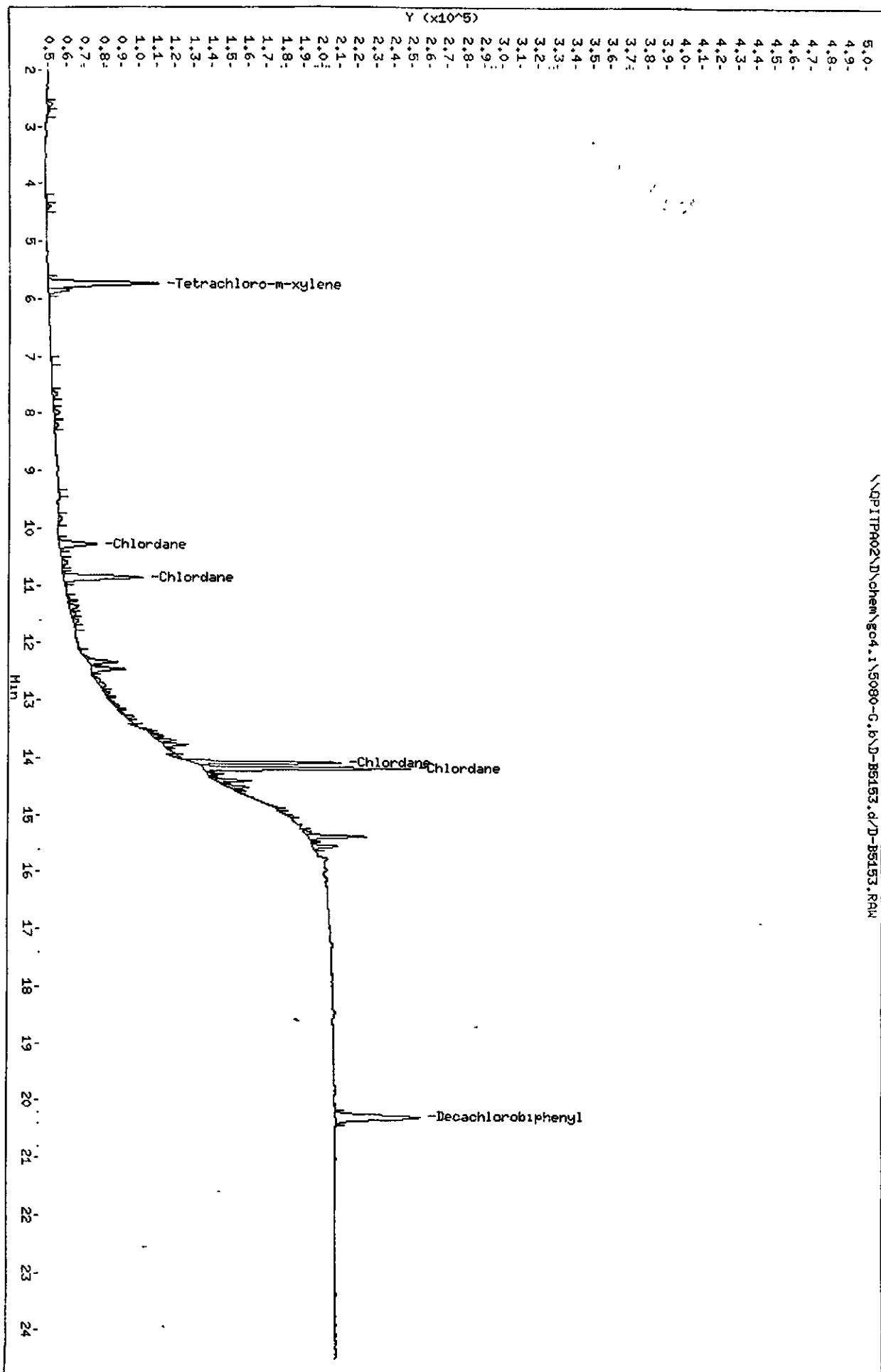
Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5153.d
Lab Smp Id: MEDCHLOR
Inj Date : 07-AUG-2000 16:20
Operator : 1891
Smp Info : MEDCHLOR,5080-G.b,,2-CHLO.sub,,1,3
Misc Info : 190-85-10
Comment :
Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
Meth Date : 10-Aug-2000 10:37 colussyj
Cal Date : 07-AUG-2000 16:20
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085

Inst ID: gc4.i
Quant Type: ESTD
Cal File: D-B5153.d
Calibration Sample, Level: 3
Compound Sublist: 2-CHLO.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
9 Chlordane	10.280	10.280	0.000	20567	0.25000	0.2500
\$ 1 Tetrachloro m xylene	5.726	5.720	0.006	61356	0.02500	0.02500
\$ 30 Decachlorobiphenyl	20.286	20.280	0.006	46912	0.02500	0.02500

Data File: \\NPITPA02\Nchem\gc4.1\5080-G.b\D-B5153.d
Date: 07-AUG-2000 16:20
Client ID:
Sample Info: MEDCHLOR,5080-G.b.,2-CHLO.sub,1,3
Column Phase: DB1701

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



671 342
 Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5164.d
 Report Date: 10-Aug-2000 10:44

STL Pittsburgh

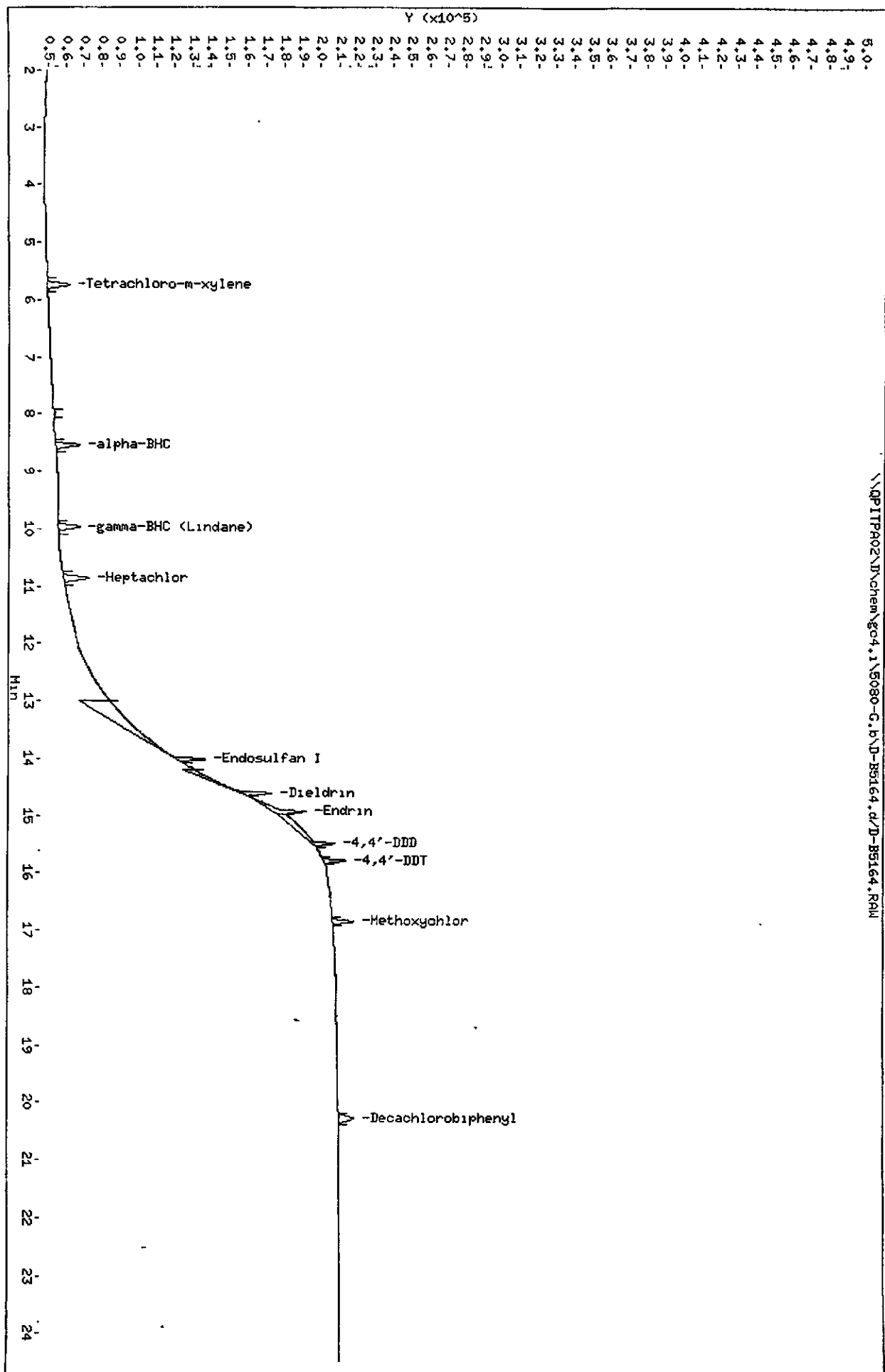
Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5164.d
 Lab Smp Id: LOWA
 Inj Date : 07-AUG-2000 21:25
 Operator : 1891 Inst ID: gc4.i
 Smp Info : LOWA,5080-G.b,,3-INDA.sub,,1,1
 Misc Info : 190-84-1
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
 Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD
 Cal Date : 08-AUG-2000 00:39 Cal File: D-B5171.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	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
\$ 1 Tetrachloro m xylene	5.733	5.720	0.013	12042	0.00500	0.005178
5 alpha-BHC	8.546	8.546	0.000	13335	0.00500	0.004660
6 gamma-BHC (Lindane)	9.966	9.960	0.006	11910	0.00500	0.004740
10 Heptachlor	10.860	10.860	0.000	14225	0.00500	0.004924
15 Endosulfan I	14.006	14.006	0.000	15582	0.00500	0.004971
17 Dieldrin	14.600	14.600	0.000	16308	0.00500	0.004921
20 Endrin	14.913	14.913	0.000	18515	0.00500	0.005605
21 4,4'-DDD	15.466	15.466	0.000	12888	0.00500	0.005228
23 4,4'-DDT	15.766	15.766	0.000	12280	0.00500	0.005034
25 Methoxychlor	16.833	16.833	0.000	11590	0.01000	0.01001
\$ 30 Decachlorobiphenyl	20.266	20.280	-0.014	8347	0.00500	0.004989

671 343

Data File: \\QPITPA02\N\chem\gc4.1\5080-G.b.D-B5164.d
Date: 07-AUG-2000 21:25
Client ID:
Sample Info: LOMA, 5080-G.b., 3-INDA, sub, 1,1
Column phase: DB1701

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



Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5165.d
 Report Date: 10-Aug-2000 10:44

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5165.d
 Lab Smp Id: MLOWA
 Inj Date : 07-AUG-2000 21:53
 Operator : 1891
 Smp Info : MLOWA,5080-G.b,,3-INDA.sub,,1,2
 Misc Info : 190-84-2
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
 Meth Date : 10-Aug-2000 10:37 colussyj
 Cal Date : 08-AUG-2000 00:39
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

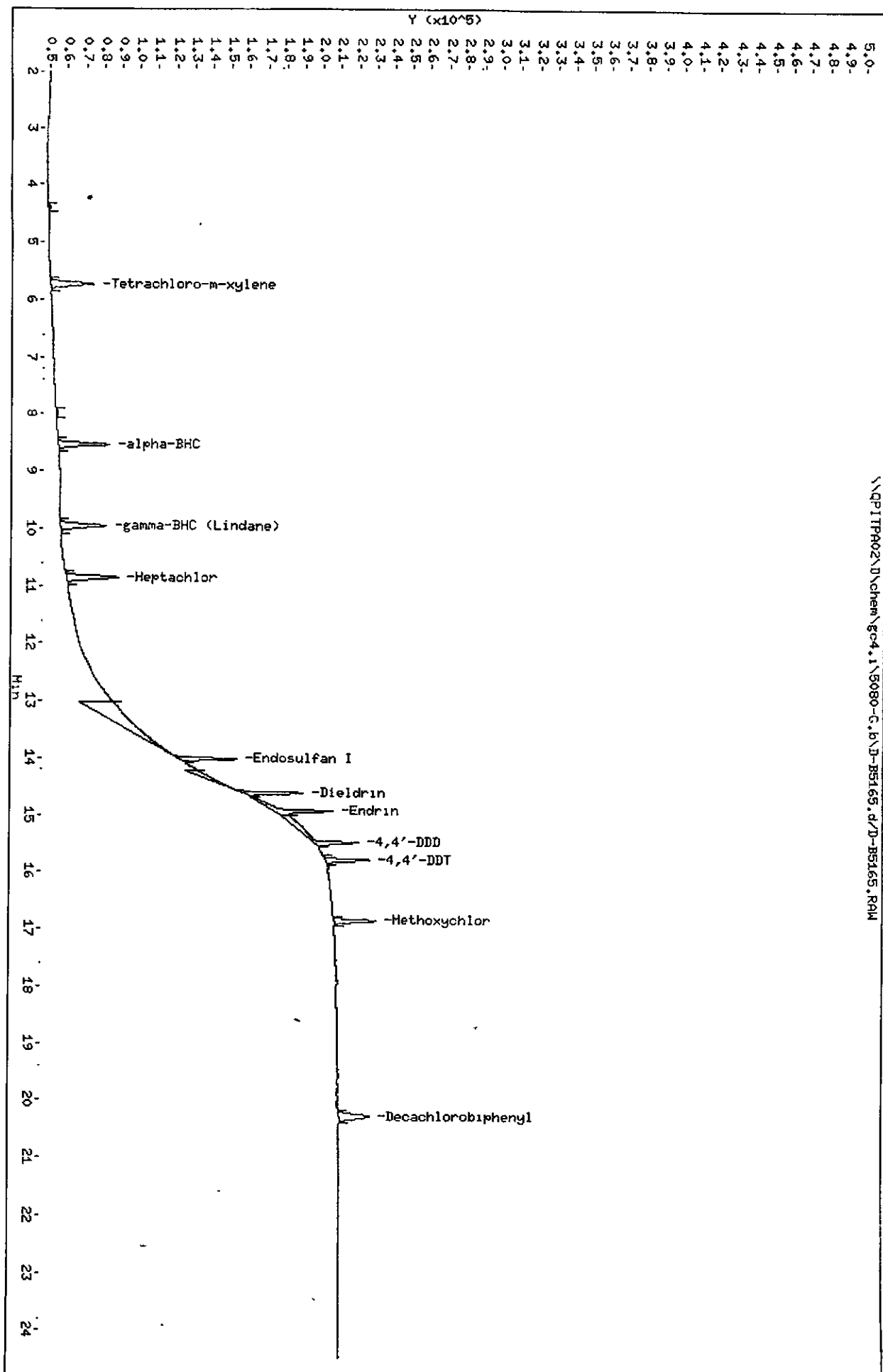
Inst ID: gc4.i
 Quant Type: ESTD
 Cal File: D-B5171.d
 Calibration Sample, Level: 2
 Compound Sublist: 3-INDA.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5 726	5 720	0.006	24109	0 01000	0 01024
5 alpha-BHC	8.540	8 546	-0.006	28308	0 01000	0 009929
6 gamma-BHC (Lindane)	9 960	9.960	0 000	25112	0 01000	0 009996
10 Heptachlor	10 860	10 860	0.000	28815	0 01000	0 009983
15 Endosulfan I	14 006	14 006	0 000	31973	0 01000	0 01013
17 Dieldrin	14.600	14 600	0 000	33148	0.01000	0 01000
20 Endrin	14 913	14 913	0 000	32441	0.01000	0 009880
21 4,4' DDD	15 466	15 466	0 000	24879	0 01000	0 01006
23 4,4'-DDT	15 766	15 766	0 000	24649	0 01000	0 01007
25 Methoxychlor	16 833	16 833	0 000	23322	0 02000	0.02010
\$ 30 Decachlorobiphenyl	20 266	20.280	-0.014	17473	0 01000	0 01029

671 345

Data File: \\QPIFPR02\Nchem\gc4.1\5080-G.b\J-B5165.d
Date: 07-AUG-2000 21:53
Client ID:
Sample Info: HL044,5080-G.b,3-INDR.sub,1,2
Column phase: DB1701

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



Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5166.d
 Report Date: 10-Aug-2000 10:44

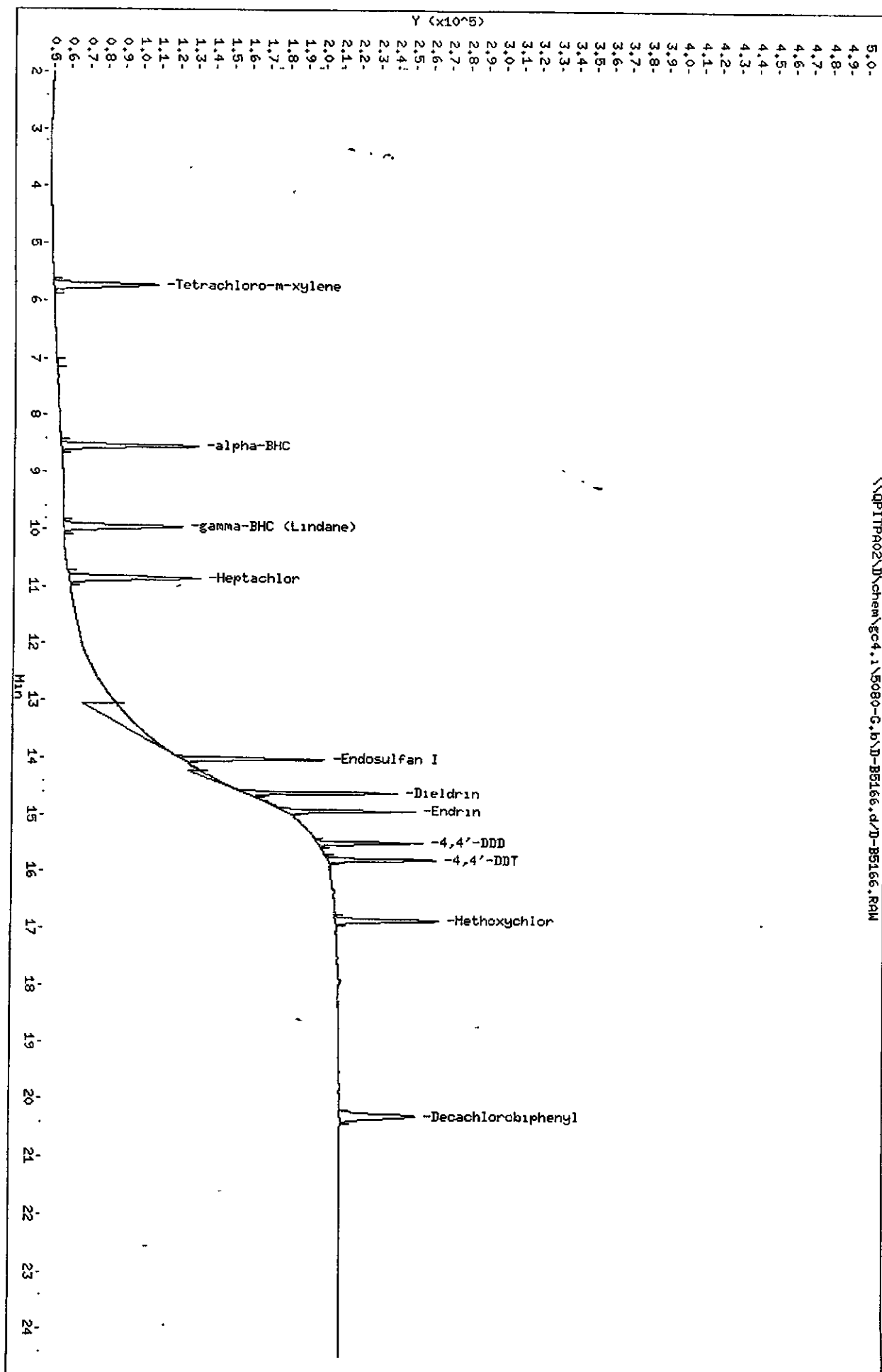
STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5166.d
 Lab Smp Id: MEDA
 Inj Date : 07-AUG-2000 22:21
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDA,5080-G.b,,3-INDA.sub,,1,3
 Misc Info : 190-84-3
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
 Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD
 Cal Date : 07-AUG-2000 22:21 Cal File: D-B5166.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	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON COL (ng)
\$ 1 Tetrachloro m xylene	5.733	5.720	0.013	57884	0.02500	0.02500
5 alpha-BHC	8.546	8.546	0.000	76388	0.02500	0.02500
6 gamma-BHC (Lindane)	9.960	9.960	0.000	66083	0.02500	0.02500
10 Heptachlor	10.860	10.860	0.000	73312	0.02500	0.02500
15 Endosulfan I	14.006	14.006	0.000	78830	0.02500	0.02500
17 Dieldrin	14.600	14.600	0.000	84144	0.02500	0.02500
20 Endrin	14.913	14.913	0.000	72585	0.02500	0.02500
21 4,4'-DDD	15.466	15.466	0.000	58819	0.02500	0.02500
23 4,4'-DDT	15.766	15.766	0.000	60566	0.02500	0.02500
25 Methoxychlor	16.833	16.833	0.000	57779	0.05000	0.05000
\$ 30 Decachlorobiphenyl	20.266	20.280	0.014	42252	0.02500	0.02500

Data File: \NPI\TPA02\Nchem\gc4.1\5080-G.b\D-B5166.d
Date: 07-AUG-2000 22:24
Client ID:
Sample Info: HEDR,5080-G.b,,3-INDR,sub,,1,3
Column phase: DB1.701

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



671 348

Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5167.d
Report Date: 10-Aug-2000 10:45

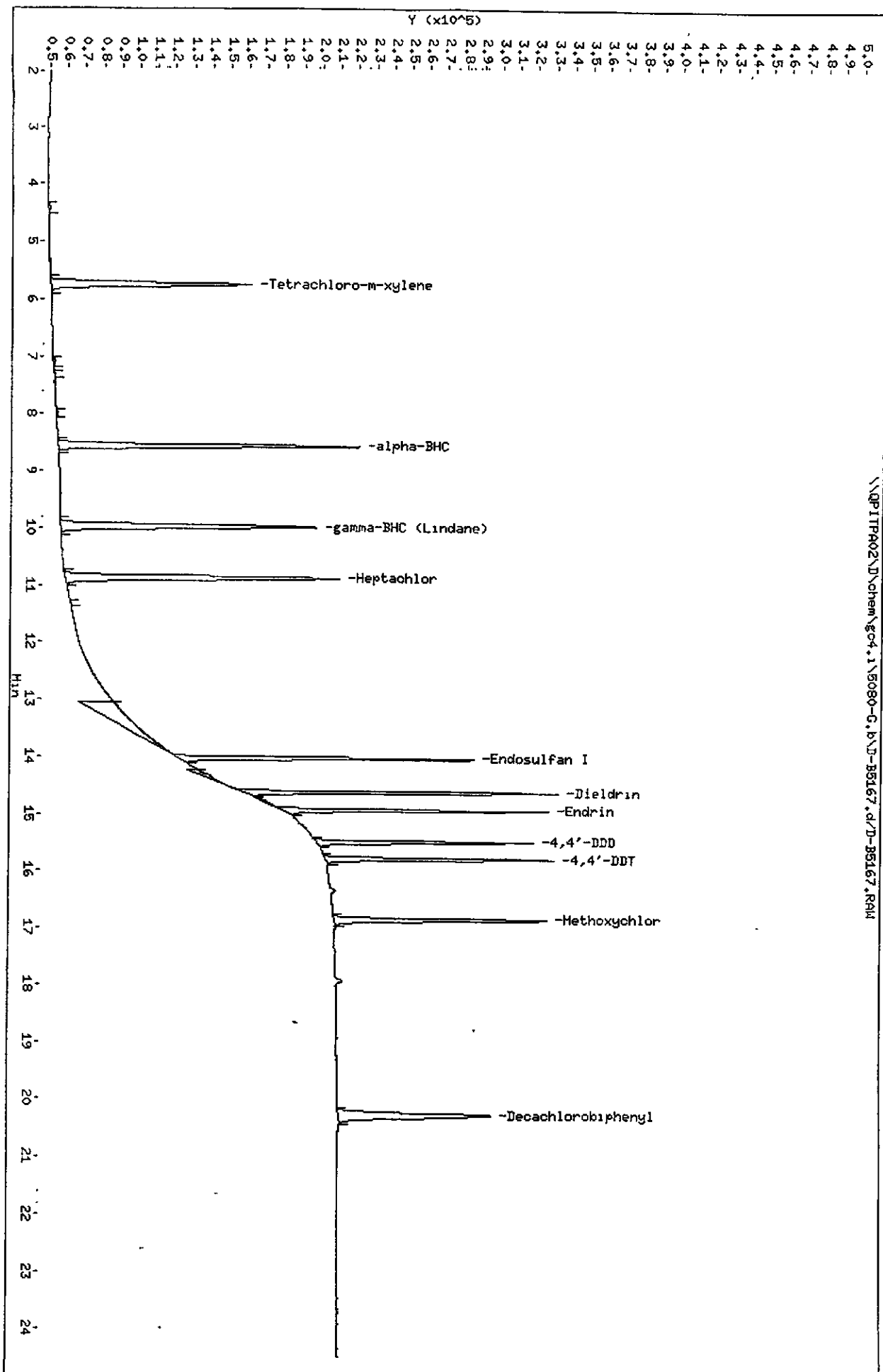
STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5167.d
 Lab Smp Id: MHIGHA
 Inj Date : 07-AUG-2000 22:49
 Operator : 1891 Inst ID: gc4.1
 Smp Info : MHIGHA,5080-G.b,,3-INDA.sub,,1,4
 Misc Info : 190-84-4
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
 Meth Date : 10-Aug-2000 10:37 colussy] Quant Type: ESTD
 Cal Date : 08-AUG-2000 00:39 Cal File: D-B5171.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	5.740	5.720	0.020	110926	0.05000	0.04781
5 alpha BHC	8.546	8.546	0.000	166513	0.05000	0.05605
6 gamma-BHC (Lindane)	9.966	9.960	0.006	141563	0.05000	0.05462
10 Heptachlor	10.866	10.860	0.006	151092	0.05000	0.05174
15 Endosulfan I	14.006	14.006	0.000	163403	0.05000	0.05132
17 Dieldrin	14.600	14.600	0.000	175075	0.05000	0.05209
20 Endrin	14.913	14.913	0.000	148068	0.05000	0.04623
21 4,4'-DDD	15.466	15.466	0.000	120911	0.05000	0.04917
23 4,4'-DDT	15.766	15.766	0.000	126855	0.05000	0.05135
25 Methoxychlor	16.833	16.833	0.000	118661	0.10000	0.1017
\$ 30 Decachlorobiphenyl	20.266	20.280	-0.014	85130	0.05000	0.05011

Data File: \\QPIITPA02\Nchem\gc4.1\5080-G.b\D-B5167.d
Date : 07-AUG-2000 22:49
Client ID:
Sample Info: MHIGHA,5080-G,b,,3-INDA,sub,,1,4
Column phase: DB1701

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



671 350

Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5168.d

Report Date: 10-Aug-2000 10:45

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5168.d

Lab Smp Id: HIGHA

Inj Date : 07-AUG-2000 23:16

Operator : 1891

Inst ID: gc4.i

Smp Info : HIGHA, 5080-G.b,, 3-INDA.sub,, 1,5

Misc Info : 190-84-5

Comment :

Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m

Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD

Cal Date : 08-AUG-2000 00:39

Cal File: D-B5171.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	5.733	5.720	0.013	215103	0 10000	0 09408
5 alpha-BHC	8.546	8.546	0.000	343818	0.10000	0 1122(A)
6 gamma-BHC (Lindane)	9.966	9.960	0.006	289303	0 10000	0 1091(A)
10 Heptachlor	10.860	10.860	0.000	301856	0 10000	0.1027(A)
15 Endosulfan I	14.006	14.006	0.000	324496	0 10000	0.1015(A)
17 Dieldrin	14.600	14.600	0.000	353478	0 10000	0 1041(A)
20 Endrin	14.913	14.913	0.000	299738	0.10000	0.09480
21 4,4'-DDD	15.466	15.466	0.000	245684	0 10000	0 09992
23 4,4'-DDT	15.766	15.766	0.000	254280	0 10000	0 1023(A)
25 Methoxychlor	16.833	16.833	0.000	234266	0 20000	0 2006(A)
\$ 30 Decachlorobiphenyl	20.266	20.280	-0.014	165977	0 10000	0 09815

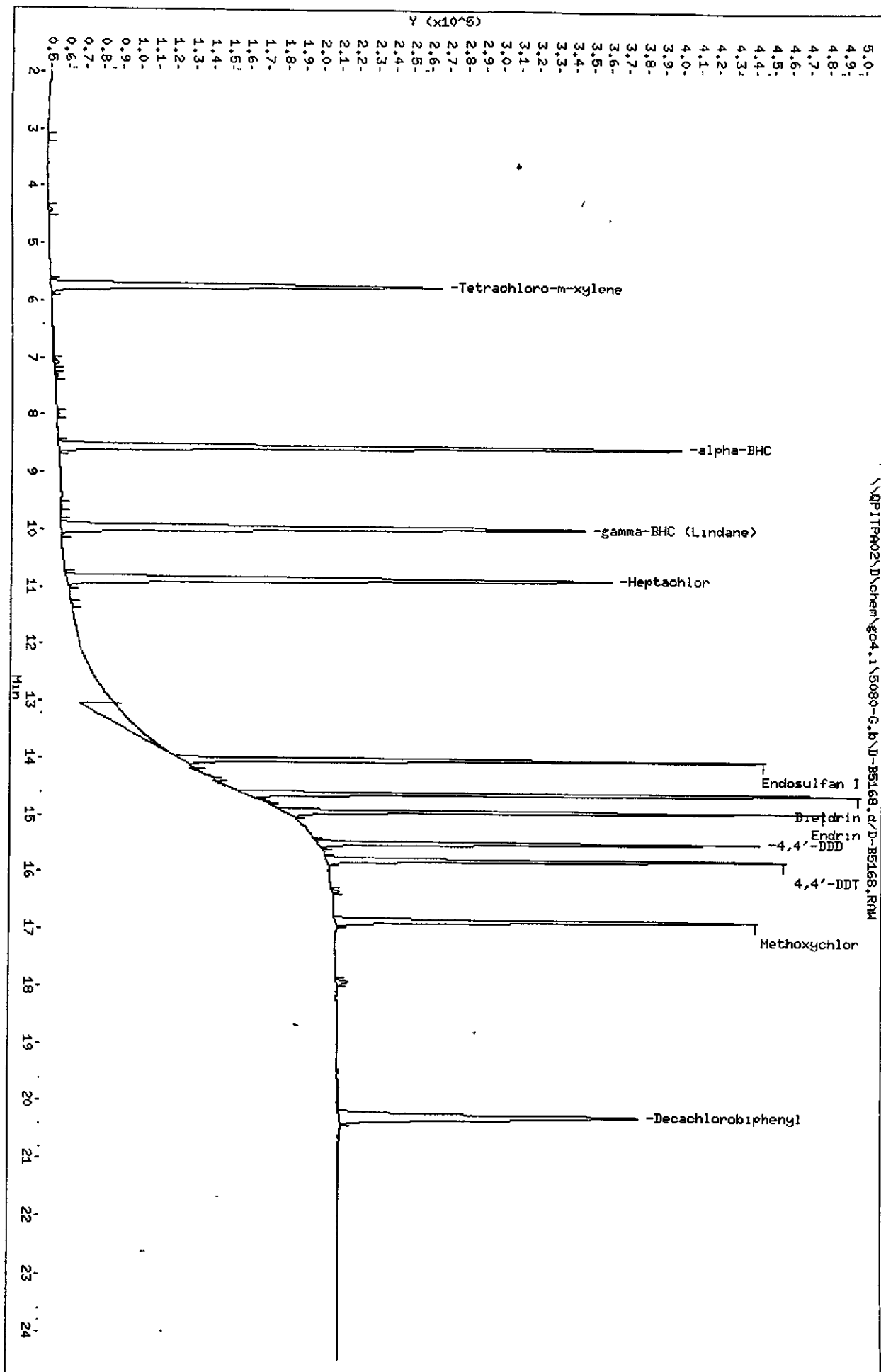
QC Flag Legend

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

671 351

Data File: \\APITPA02\chem\gc4.1\5080-G.b.D-B5168.d
Date : 07-AUG-2000 23:16
Client ID:
Sample Info: HIGH6,5080-G.b,,3-INDA,sub,,1.5
Column phase: DB1701

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



671 352

Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5169.d
Report Date: 10-Aug-2000 10:45

STL Pittsburgh

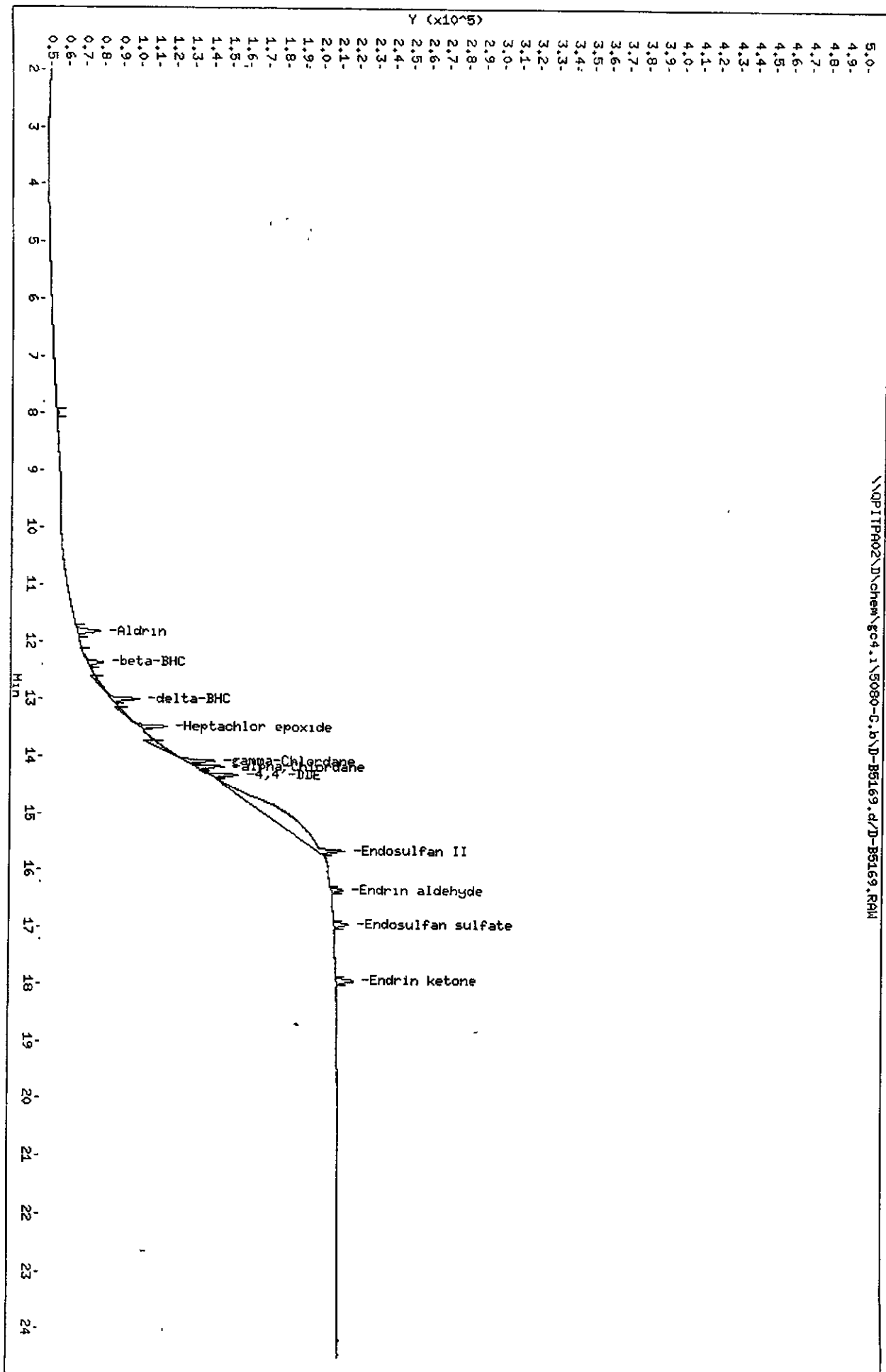
Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5169.d
Lab Smp Id: LOWB
Inj Date : 07-AUG-2000 23:44
Operator : 1891 Inst ID: gc4.i
Smp Info : LOWB,5080-G.b,,4-INDB.sub,,1,1
Misc Info : 190-84-7
Comment :
Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD
Cal Date : 08-AUG-2000 00:39 Cal File: D-B5171.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	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11 820	11 820	0 000	12822	0 00500	0 004818
7 beta-BHC	12 360	12 360	0 000	8132	0 00500	0 005012
8 delta-BHC	13 000	13.000	0.000	14859	0 00500	0.004707
12 Heptachlor epoxide	13 473	13 473	0 000	15441	0 00500	0 004899
13 gamma-Chlordane	14 066	14 066	0 000	16067	0 00500	0 004954
14 alpha-Chlordane	14.166	14 166	0 000	16067	0.00500	0 005022
16 4,4'-DDE	14 313	14.313	0.000	16021	0 00500	0 004946
22 Endosulfan II	15 626	15 626	0 000	14972	0 00500	0 005250
24 Endrin aldehyde	16 320	16 313	0 007	6203	0.00500	0 004871
26 Endosulfan sulfate	16 920	16 913	0 007	8085	0 00500	0.004882
27 Endrin ketone	17 913	17 906	0 007	9725	0 00500	0 004912

671 353

Data File: \\NPITP002\\D\\chem\\gc4.1\\5080-G.b.D-B5169.d
Date: 07-AUG-2000 23:44
Client ID:
Sample Info: LOWB,5080-G.b.,4-INDB,sub.,1,1
Column phase: DB1701

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



671 354

Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5170.d
Report Date: 10-Aug-2000 10:45

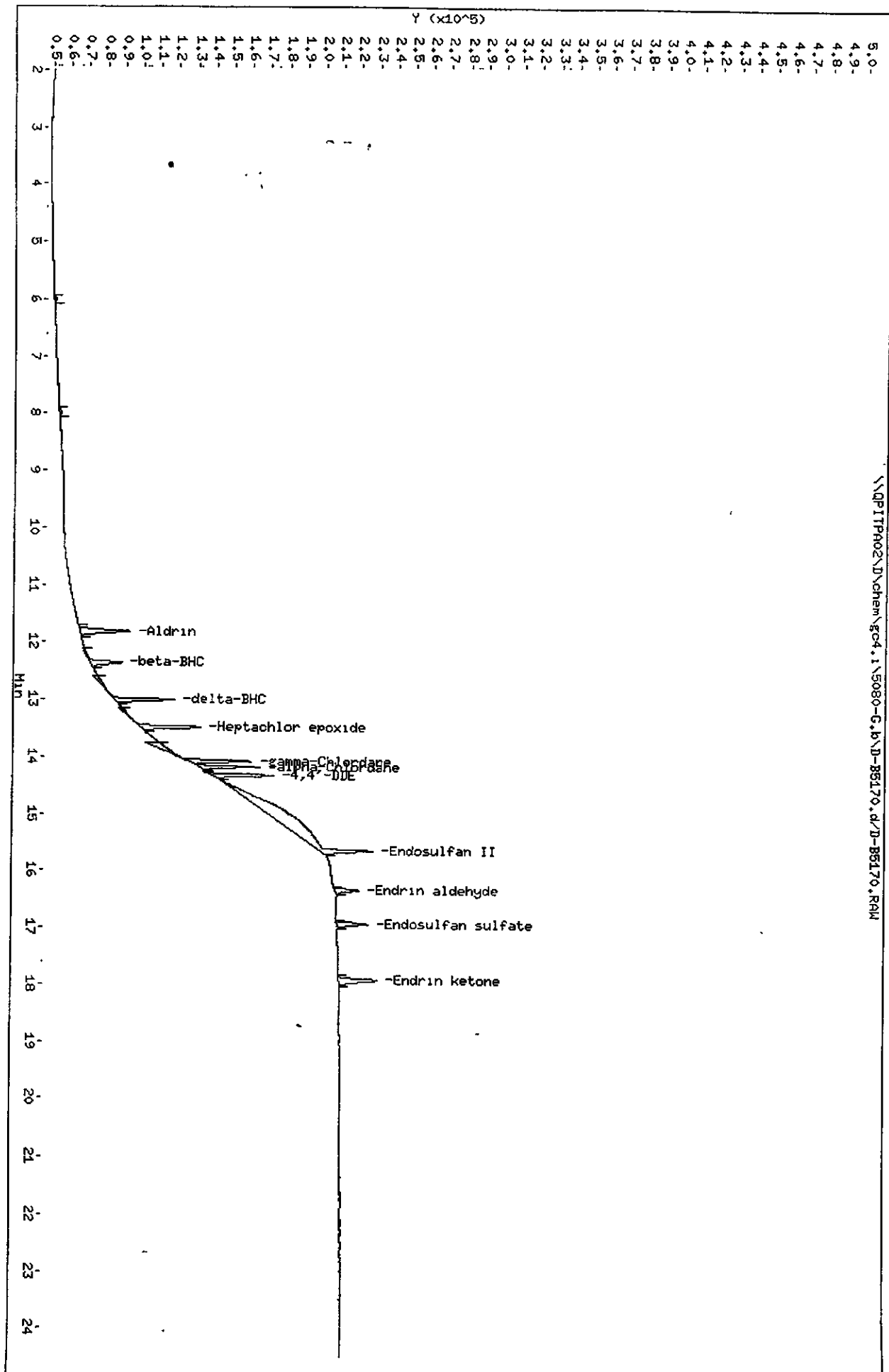
STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5170.d
Lab Smp Id: MLOWB
Inj Date : 08-AUG-2000 00:12
Operator : 1891 Inst ID: gc4.i
Smp Info : MLOWB, 5080-G.b,, 4-INDB.sub,, 1,2
Misc Info : 190-84-8
Comment :
Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD
Cal Date : 08-AUG-2000 00:39 Cal File: D-B5171.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	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL AMT (ng)	ON COL (ng)
11 Aldrin	11.813	11.820	-0.007	27880	0.01000	0.01031
7 beta-BHC	12.360	12.360	0.000	17028	0.01000	0.01032
8 delta-BHC	13.000	13.000	0.000	32973	0.01000	0.01029
12 Heptachlor epoxide	13.473	13.473	0.000	32948	0.01000	0.01030
13 gamma-Chlordane	14.066	14.066	0.000	34249	0.01000	0.01037
14 alpha-Chlordane	14.166	14.166	0.000	33312	0.01000	0.01027
16 4,4' DDE	14.313	14.313	0.000	33536	0.01000	0.01023
22 Endosulfan II	15.626	15.626	0.000	28945	0.01000	0.01010
24 Endrin aldehyde	16.313	16.313	0.000	13343	0.01000	0.01031
26 Endosulfan sulfate	16.920	16.913	0.007	17358	0.01000	0.01032
27 Endrin ketone	17.906	17.906	0.000	21065	0.01000	0.01042

Data File: \\QP1TPA02\J\chem\gc4.1\5080-G.b\D-B5170.d
 Date : 08-AUG-2000 00:12
 Client ID:
 Sample Info: HLOMB,5080-G.b,4-INDB.sub,1,2
 Column phase: DB1701

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



671 356

Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5171.d
Report Date: 10-Aug-2000 10:46

STL Pittsburgh

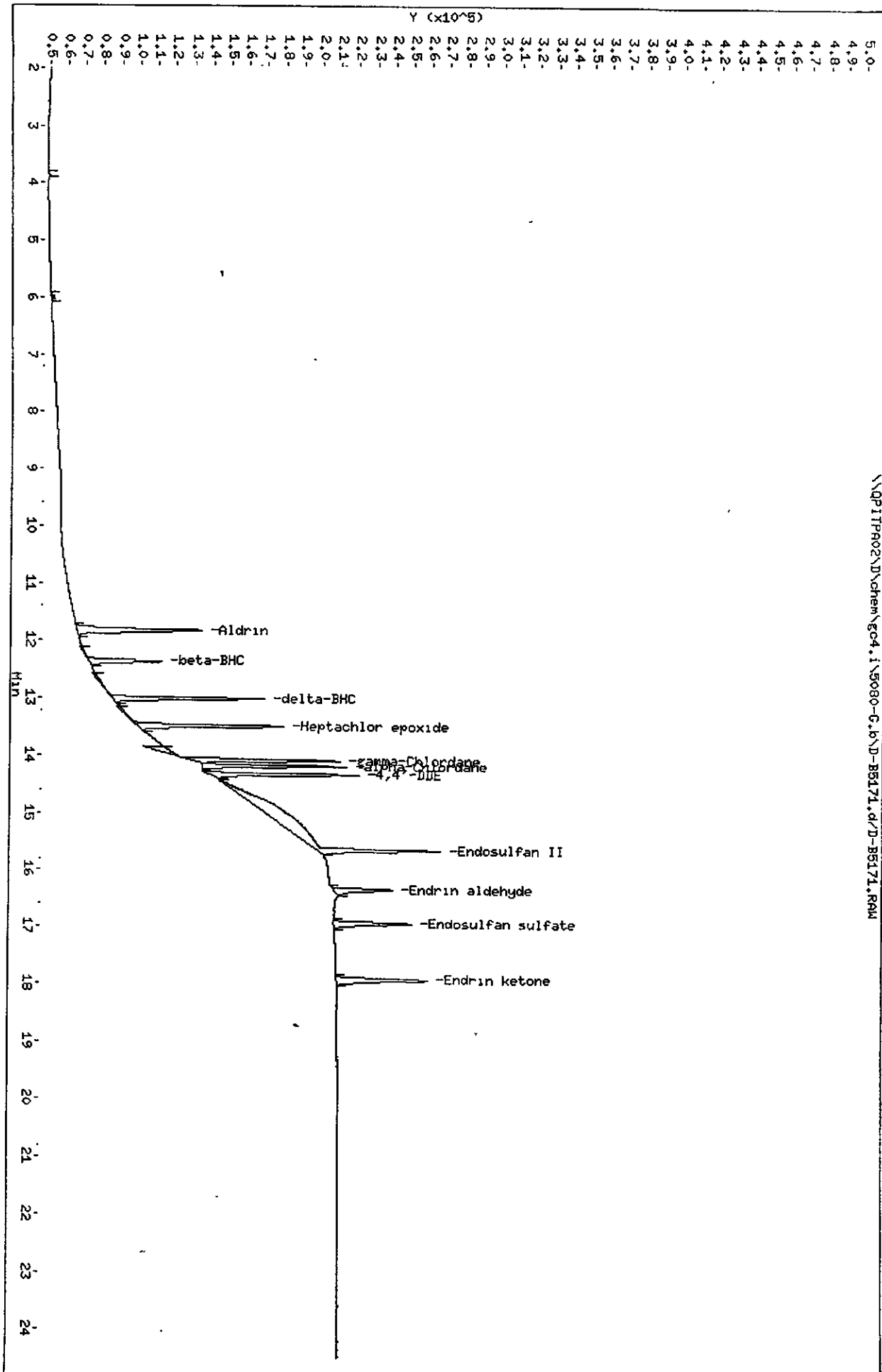
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Lab Smp Id: MEDB
Inj Date : 08-AUG-2000 00:39
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDB,5080-G.b,,4-INDB.sub,,1,3
Misc Info : 190-84-9
Comment :
Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD
Cal Date : 08-AUG-2000 00:39 Cal File: D-B5171.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	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL AMT (ng)	ON COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.820	11.820	0.000	68952	0.02500	0.02500
7 beta-BHC	12.360	12.360	0.000	40468	0.02500	0.02500
8 delta BHC	13.000	13.000	0.000	83530	0.02500	0.02500
12 Heptachlor epoxide	13.473	13.473	0.000	80396	0.02500	0.02500
13 gamma-Chlordane	14.066	14.066	0.000	81835	0.02500	0.02500
14 alpha-Chlordane	14.166	14.166	0.000	79632	0.02500	0.02500
16 4,4'-DDE	14.313	14.313	0.000	81856	0.02500	0.02500
22 Endosulfan II	15.626	15.626	0.000	67732	0.02500	0.02500
24 Endrin aldehyde	16.313	16.313	0.000	32658	0.02500	0.02500
26 Endosulfan sulfate	16.913	16.913	0.000	42382	0.02500	0.02500
27 Endrin ketone	17.906	17.906	0.000	50362	0.02500	0.02500

671 357

Data File: \\QP1TPA02\\chem\\gc4.1\\5080-G.b\\D-B5171.d
Date : 08-AUG-2000 00:39
Client ID:
Sample Info: MEDB,5080-G.b,4-INDB,sub,1,3
Column phase: DB1701

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



671 358

Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5172.d
Report Date: 10-Aug-2000 10:46

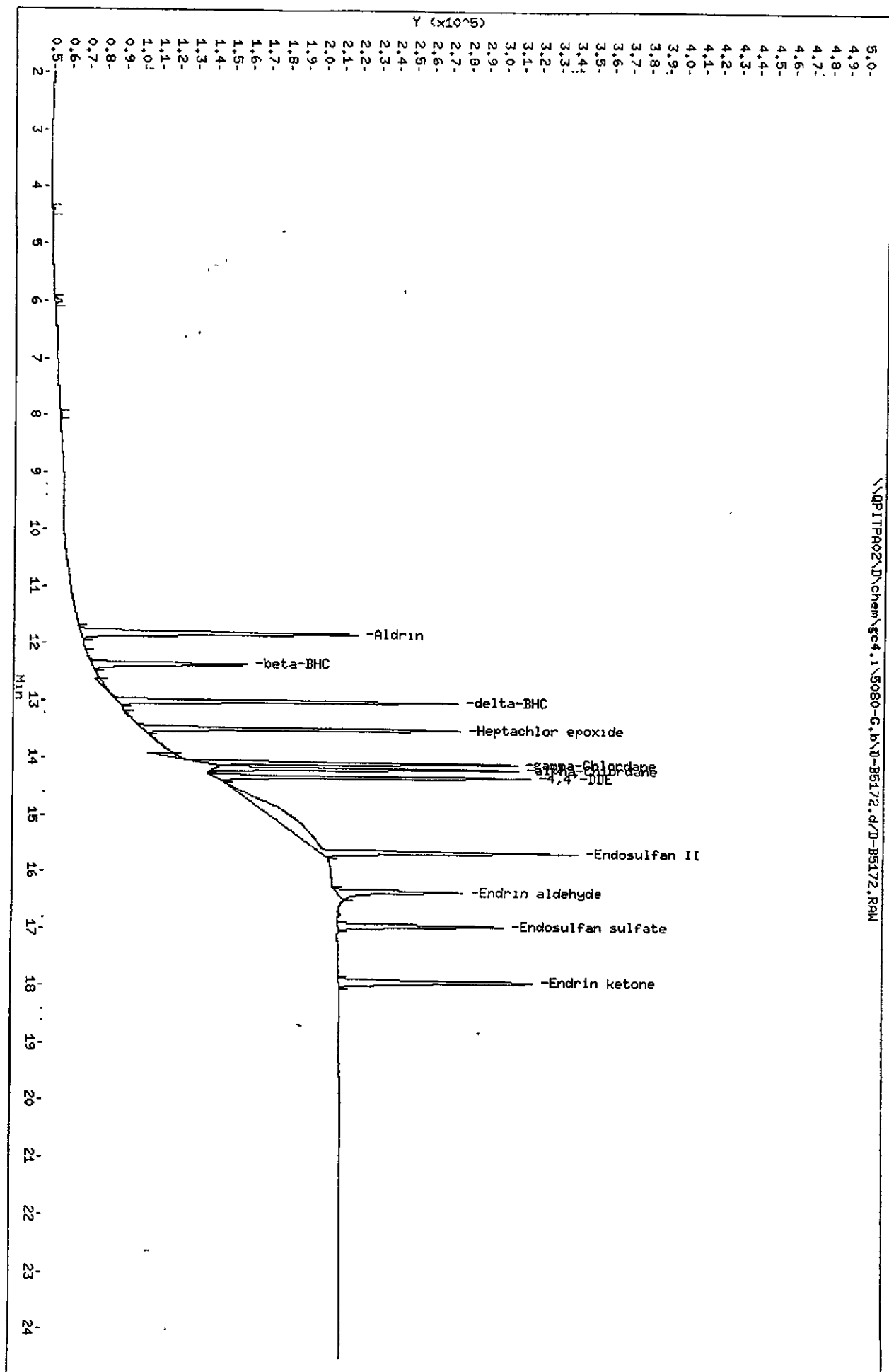
STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5172.d
Lab Smp Id: MHIGHB
Inj Date : 08-AUG-2000 01:07
Operator : 1891 Inst ID: gc4.i
Smp Info : MHIGHB,5080-G.b,,4-INDB.sub,,1,4
Misc Info : 190-84-10
Comment :
Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD
Cal Date : 08-AUG-2000 01:07 Cal File: D-B5172.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	11 820	11 820	0 000	153113	0.05000	0 05482
7 beta-BHC	12 360	12 360	0 000	86254	0 05000	0.05170
8 delta BHC	13 000	13.000	0 000	188626	0 05000	0 05638
12 Heptachlor epoxide	13 473	13 473	0 000	176079	0 05000	0 05368
13 gamma-Chlordane	14 066	14.066	0 000	174570	0.05000	0 05210
14 alpha-Chlordane	14 160	14 166	-0.006	167853	0 05000	0.05130
16 4,4'-DDE	14 313	14 313	0.000	175132	0 05000	0 05253
22 Endosulfan II	15 626	15 626	0 300	142620	0 05000	0.04982
24 Endrin aldehyde	16 313	16 313	0 000	70141	0.05000	0 05310
26 Endosulfan sulfate	16 920	16 913	0.007	92379	0 05000	0.05359
✓ 27 Endrin ketone	17 906	17.906	0 000	107443	0 05000	0 05232

Data File: \\QPI1PA02\chem\gc4.1\5080-G.b\B5172.d
Date : 08-AUG-2000 01:07
Client ID:
Sample Info: HHICHB,5080-G.b,,4-INDB,sub,,1.4
Column phase: DB1701

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



671 360

Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5173.d

Report Date: 10-Aug-2000 10:46

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5173.d

Lab Smp Id: HIGHB

Inj Date : 08-AUG-2000 01:35

Operator : 1891

Inst ID: gc4.i

Smp Info : HIGHB,5080-G.b,,4-INDB.sub,,1,5

Misc Info : 190-84-11

Comment :

Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m

Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD

Cal Date : 08-AUG-2000 01:35

Cal File: D-B5173.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	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.820	11.820	0.000	306847	0.10000	0.1077(A)
7 beta-BHC	12.360	12.360	0.000	164046	0.10000	0.09866
8 delta-BHC	13.000	13.000	0.000	379398	0.10000	0.1104(A)
12 Heptachlor epoxide	13.473	13.473	0.000	344752	0.10000	0.1040(A)
13 gamma-Chlordane	14.066	14.066	0.000	355725	0.10000	0.1049(A)
14 alpha-Chlordane	14.166	14.166	0.000	345171	0.10000	0.1044(A)
16 4,4'-DDE	14.313	14.313	0.000	350629	0.10000	0.1041(A)
22 Endosulfan II	15.626	15.626	0.000	286290	0.10000	0.1000(A)
24 Endrin aldehyde	16.313	16.313	0.000	141855	0.10000	0.1058(A)
26 Endosulfan sulfate	16.913	16.913	0.000	186252	0.10000	0.1063(A)
27 Endrin ketone	17.906	17.906	0.000	210692	0.10000	0.1021(A)

QC Flag Legend

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

671 361

Data File: \\QPI1P002\chem\gc4.1\5080-G.b\D-B5173.d
Date: 08-AUG-2000 01:35

Client ID:

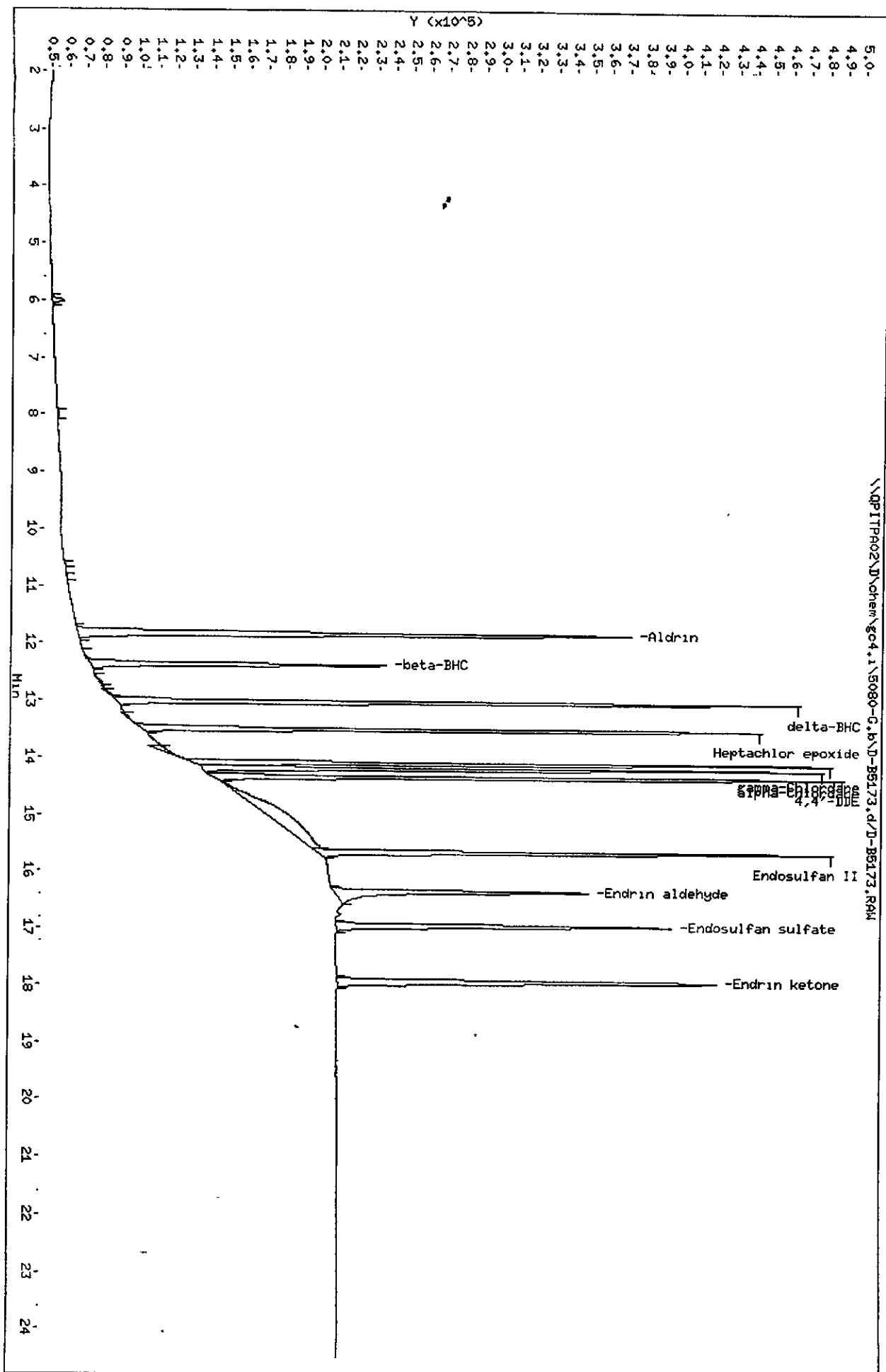
Sample Info: HIGHB.5080-G.b, 4-INDB.sub, 1.5

Column phase: DB1701

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



671 362
 Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5174.d
 Report Date: 10-Aug-2000 10:46

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5174.d
 Lab Smp Id: 2ND A
 Inj Date : 08-AUG-2000 02:03
 Operator : 1891 Inst ID: gc4.i
 Smp Info : 2ND A, 5080-G.b, , INDA.sub, , 2, 3
 Misc Info : 190-82-2
 Comment :
 Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
 Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD
 Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: INDA.sub
 Target Version: 4.04
 Processing Host: PITPC085

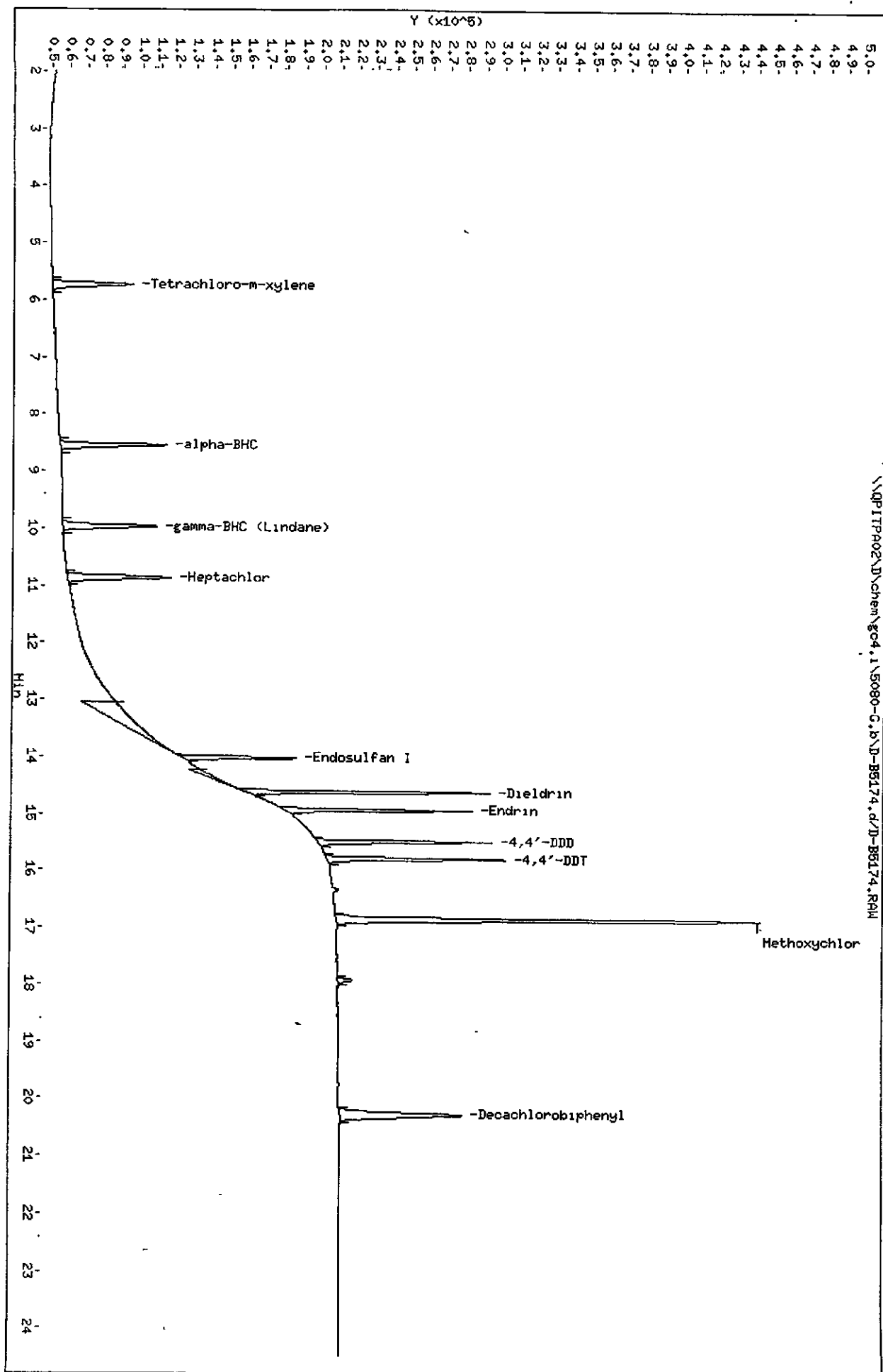
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
\$ 1 Tetrachloro m-xylene	5 733	5.720	0.013	44383	0.02500	0 01941
5 alpha-BHC	8 546	8 546	0 000	58751	0 02500	0 01917
6 gamma-BHC (Lindane)	9 966	9.960	0 006	51828	0 02500	0 01954
10 Heptachlor	10 860	10 860	0 000	56981	0.02500	0 01938
15 Endosulfan I	14 006	14 006	0 000	63340	0 02500	0 01982
17 Dieldrin	14 593	14 600	-0 007	135880	0 02500	0 04002
20 Endrin	14 913	14.913	0 000	104632	0.02500	0 03309
21 4,4'-DDD	15 466	15 466	0 000	97158	0 02500	0.03952
23 4,4'-DDT	15 766	15.766	0 000	99074	0 02500	0 03987
25 Methoxychlor	16.826	16 833	-0 007	234483	0 05000	0 2008 (A)
\$ 30 Decachlorobiphenyl	20 260	20.280	-0.020	68326	0.02500	0.04040

QC Flag Legend

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

Data File: \\QP1TPA02\chem\gc4.1\5080-G.b\J-B5174.d
Date: 08-AUG-2000 02:03
Client ID:
Sample Info: 2ND A,5080-G.b,,INDA,sub,,2,3
Column phase: DB1701

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



671 364

Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5175.d
Report Date: 10-Aug-2000 10:47

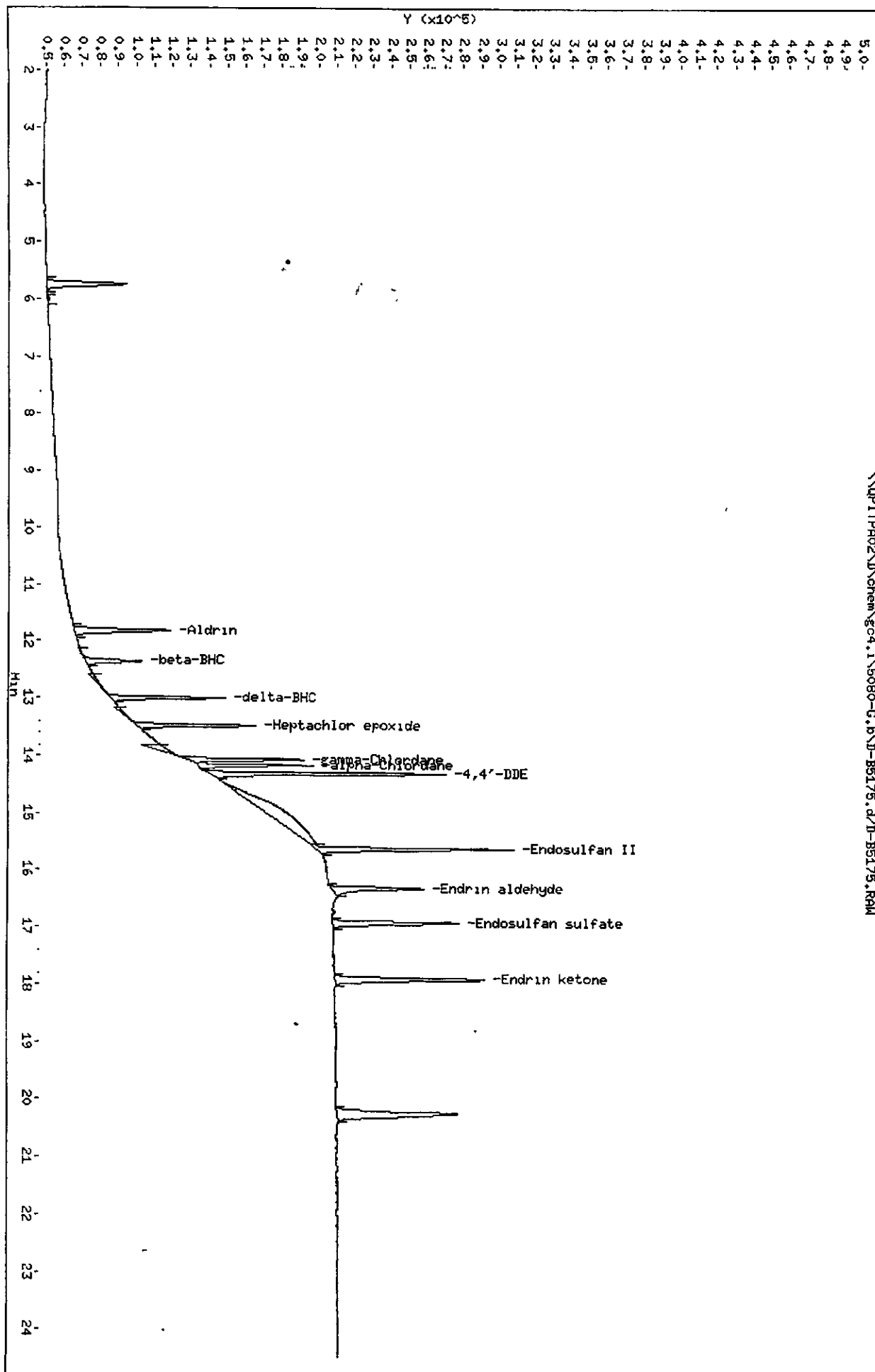
STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5175.d
Lab Smp Id: 2ND B
Inj Date : 08-AUG-2000 02:30
Operator : 1891 Inst ID: gc4.i
Smp Info : 2ND B, 5080-G.b,, INDB.sub,, 2, 3
Misc Info : 190-82-5
Comment :
Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD
Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.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	11 820	11 820	0 000	53398	0 02500	0 01875
7 beta-BHC	12 360	12 360	0.000	31209	0 02500	0.01877
8 delta-BHC	13.000	13 000	0 000	63116	0 02500	0 01837
12 Heptachlor epoxide	13 473	13 473	0.000	65691	0 02500	0 01982
13 gamma-Chlordane	14 066	14 066	0 000	64462	0 02500	0 01900
14 alpha-Chlordane	14 166	14 166	0 000	63421	0 02500	0 01917
16 4,4'-DDE	14 313	14 313	0.000	131487	0 02500	0 03904
22 Endosulfan II	15 626	15 626	0.000	109592	0 02500	0 03828
24 Endrin aldehyde	16 313	16 313	0 000	50887	0 02500	0 03796
26 Endosulfan sulfate	16 920	16 913	0 007	69841	0 02500	0 03987
27 Endrin ketone	17.913	17 906	0 007	83392	0 02500	0.04040

Data File: \\QPIITPA02\chem\gc4.1\5080-G.b.D-B5175.d
 Date : 08-AUG-2000 02:30
 Client ID:
 Sample Info: 2ND B,5080-G.b.,JNDB,sub,,2,3
 Column phase: DB1701

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



671 366

Data File: \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5176.d
Report Date: 10-Aug-2000 10:47

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc4.i\5080-G.b\D-B5176.d
Lab Smp Id: EVALB
Inj Date : 08-AUG-2000 02:58
Operator : 1891 Inst ID: gc4.i
Smp Info : EVALB,5080-G.b,,EVALBR.sub,,3,1
Misc Info : 190-88-8
Comment :
Method : \\QPITPA02\D\chem\gc4.i\5080-G.b\PESTB.m
Meth Date : 10-Aug-2000 10:37 colussyj Quant Type: ESTD
Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: EVALBR.sub
Target Version: 4.04
Processing Host: PITPC085

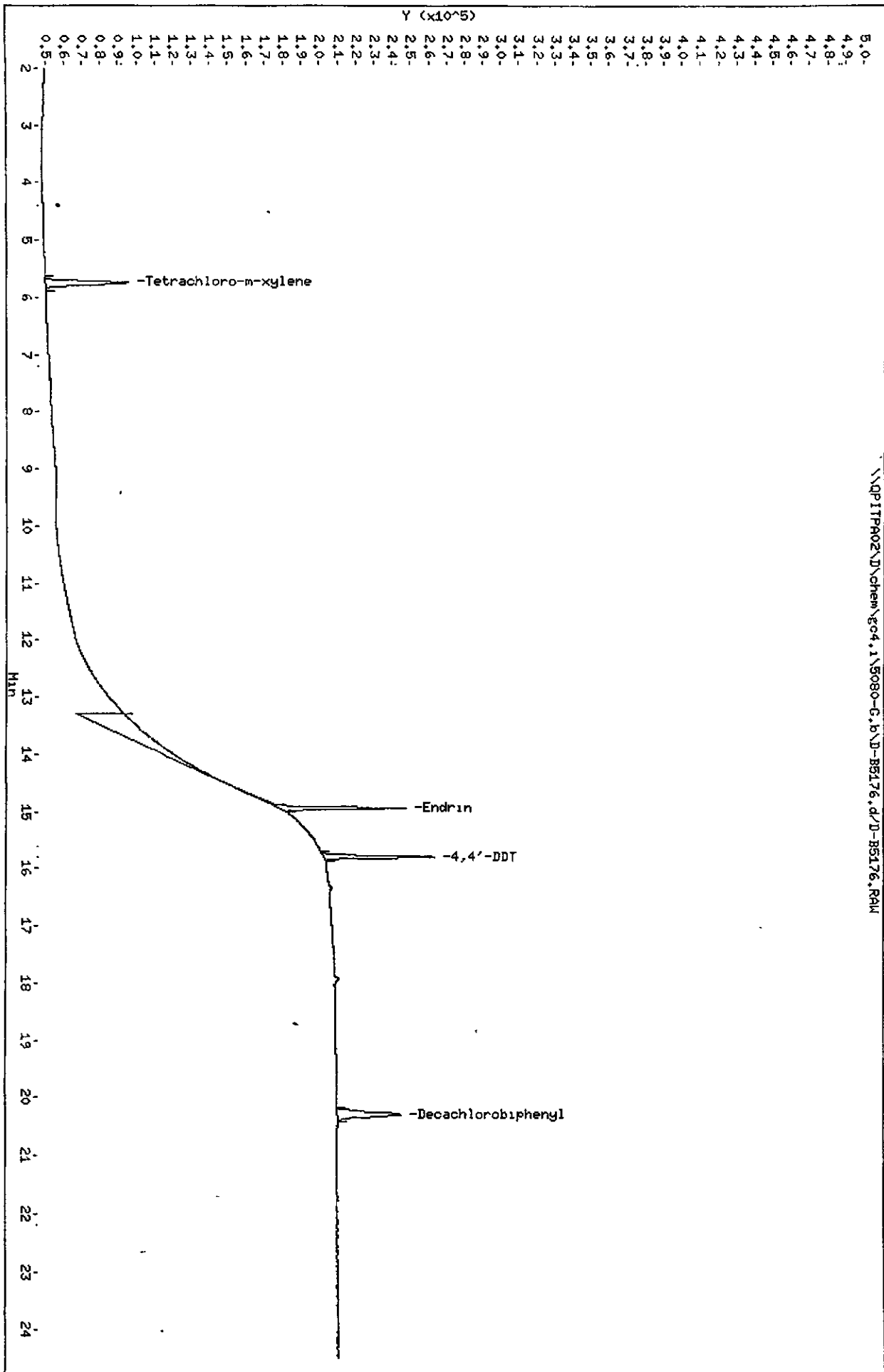
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.746	5.720	0.026	45881	0.02007	0.02007(R)
16 4,4'-DDE	Compound Not Detected					
20 Endrin	14.913	14.913	0.000	70054	0.02216	0.02216
21 4,4'-DDD	Compound Not Detected					
23 4,4' DDT	15.766	15.766	0.000	61493	0.02475	0.02475
24 Endrin aldehyde	Compound Not Detected					
27 Endrin ketone	Compound Not Detected					
\$ 30 Decachlorobiphenyl	20.266	20.280	-0.014	34851	0.02061	0.02061(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\QPITPA02\chem\gc4.1\5080-G.b.D-B5176.d
Date : 08-AUG-2000 02:58
Client ID:
Sample Info: EVALB,5080-G.b.,EVALBR,sub,3,1
Column phase: DB1701

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



671 368

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5545.d
Report Date: 28-Aug-2000 10:43

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5545.d
Lab Smp Id: EVALB
Inj Date : 23-AUG-2000 09:30
Operator : 1891
Smp Info : EVALB, 5280-G.b, , EVALBR.sub, , 3, 1
Misc Info : 190-88-8
Comment :
Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
Meth Date : 28-Aug-2000 10:43 gc
Cal Date : 08-AUG-2000 01:35
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC043

Inst ID: gc4.i
Quant Type: ESTD
Cal File: D-B5173.d
QC Sample: PEM
Compound Sublist: EVALBR.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ng)
\$ 1 Tetrachloro-m-xylene	5.633	5.633	0.000	50750	0.02220	0.02220(R)
16 4,4'-DDB	14.226	14.220	0.006	1744	<0.0	0.0005178
20 Endrin	14.820	14.820	0.000	71266	0.02254	0.02254
21 4,4'-DDD	Compound Not Detected.					
23 4,4'-DDT	15.660	15.660	0.000	59511	0.02395	0.02395
24 Endrin aldehyde	Compound Not Detected.					
27 Endrin ketone	Compound Not Detected.					
\$ 30 Decachlorobiphenyl	20.060	20.060	0.000	36326	0.02148	0.02148(R)

QC Flag Legend

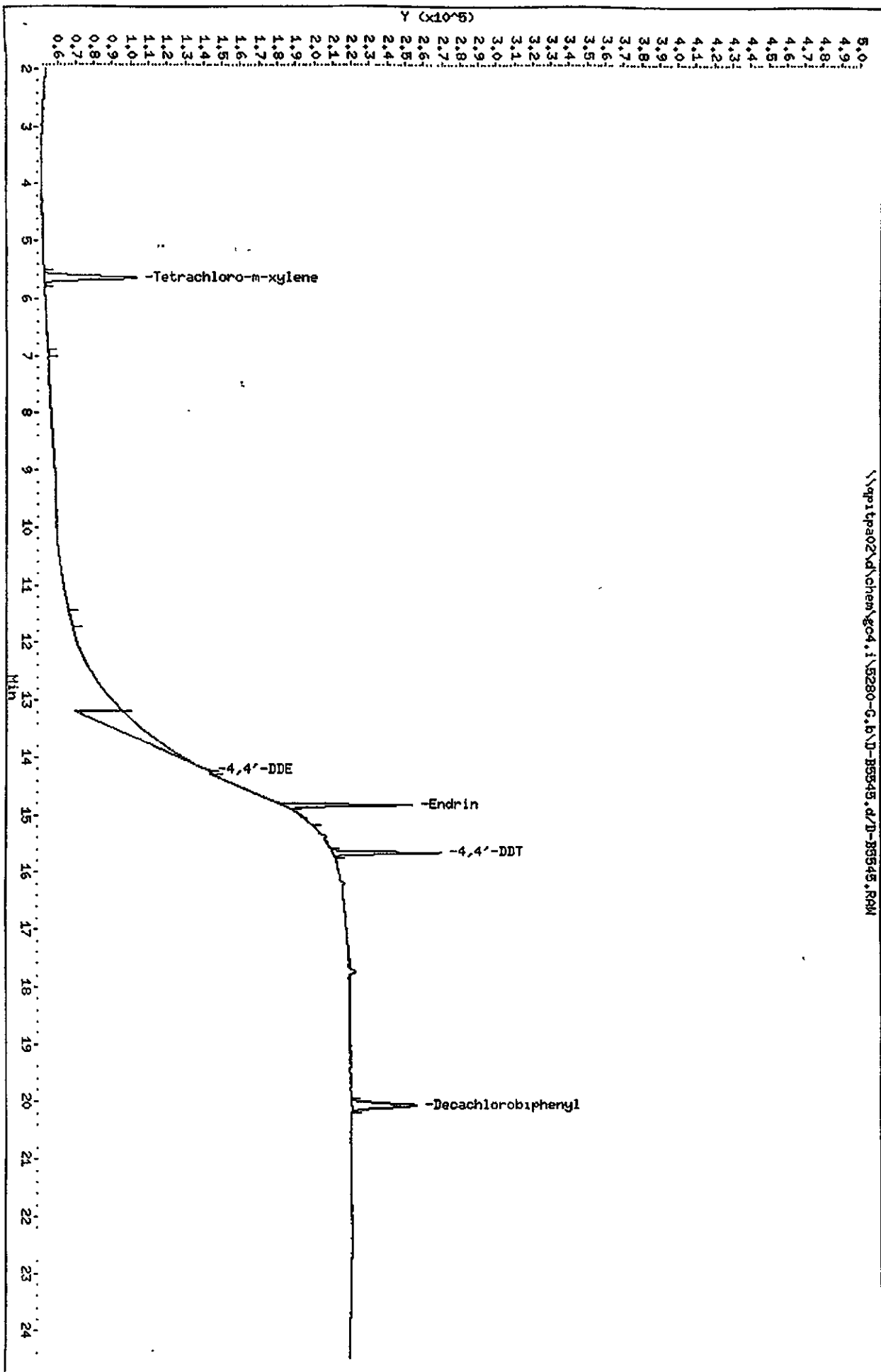
R - Spike/Surrogate failed recovery limits.

-- DDT = 2.8
Endrin = 0

671 369

Data File: \\q1tpa02\chem\gc4.i\5280-G.b\D-85545.d
 Date: 23-AUG-2000 09:30
 Client ID:
 Sample Info: EVALB,5280-G.b,,EVALBR.sub,,3,1
 Column Phase: DB1701

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



671 370

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5546.d
Report Date: 28-Aug-2000 10:44

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5546.d
Lab Smp Id: MEDTOX
Inj Date : 23-AUG-2000 09:58
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDTOX,5280-G.b,,1-TOX.sub,,2,3
Misc Info : 190-98-12
Comment :
Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
Meth Date : 28-Aug-2000 10:43 gc Quant Type: ESTD
Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-TOX.sub
Target Version: 4.04
Processing Host: PITPC043

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
18 Toxaphene	15.253	15.253	0.000	41452	1.00000	1.046(M)
\$ 1 Tetrachloro-m-xylene	5.633	5.633	0.000	60807	0.02500	0.02660
\$ 30 Decachlorobiphenyl	20.060	20.060	0.000	44192	0.02500	0.02613

QC Flag Legend

M - Compound response manually integrated.

Data File: \\ppipa02\chem\gc4.1\B280-G.b.D-B5546.d

Date: 23-AUG-2000 09:58

Client ID:

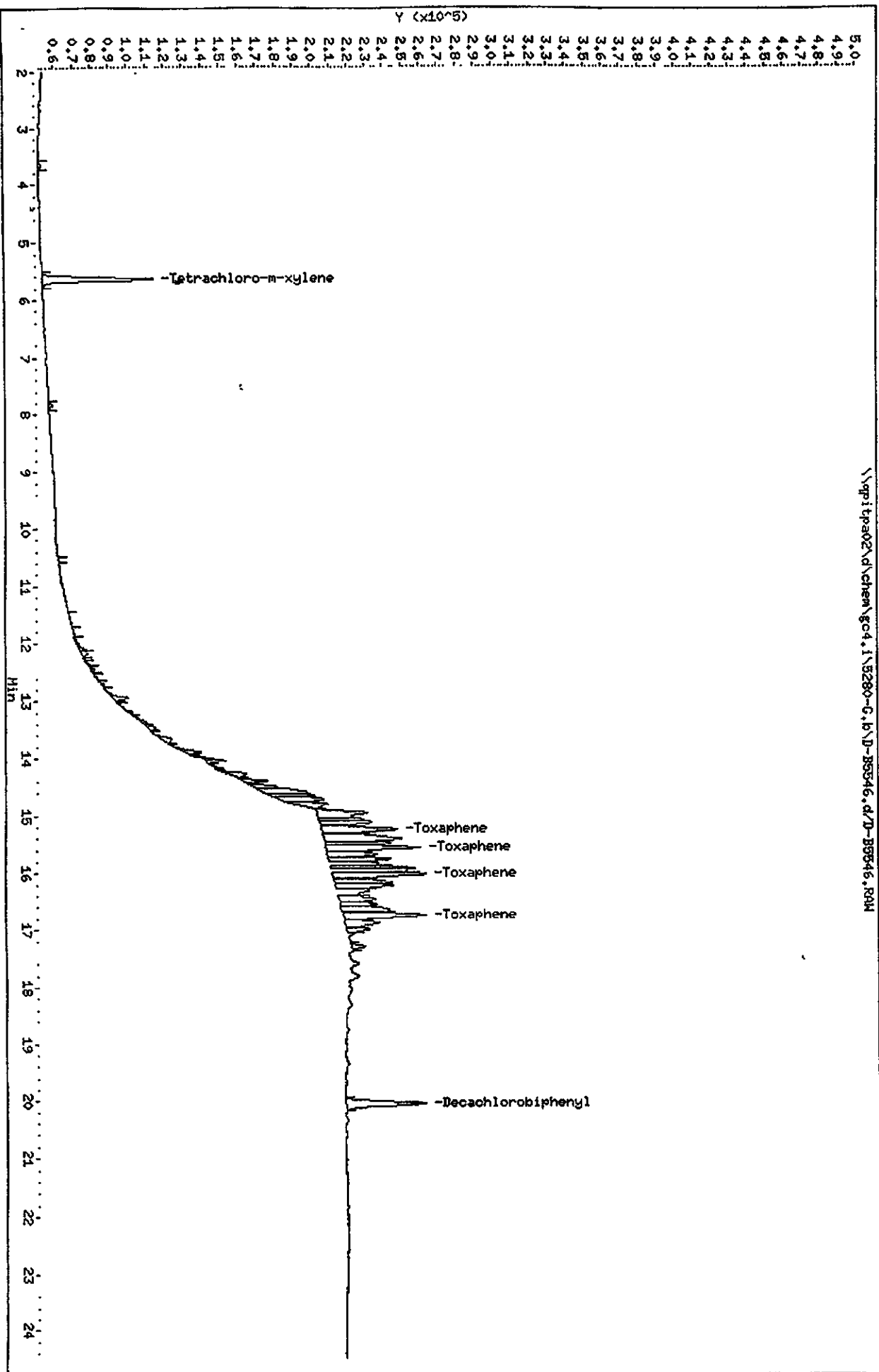
Sample Info: HEDTOX, B280-G.b., 1-TOX, sub., 2,3

Column phase: DB1701

Instrument: gc4.1

Operator: 1891

Column diameter: 0.53



671 372

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5547.d
Report Date: 28-Aug-2000 10:44

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5547.d
Lab Smp Id: MEDCHLOR
Inj Date : 23-AUG-2000 10:26
Operator : 1891
Smp Info : MEDCHLOR, 5280-G.b, , 2-CHLO.sub, , 2, 3
Misc Info : 190-85-10
Comment :
Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
Meth Date : 28-Aug-2000 10:43 gc
Cal Date : 08-AUG-2000 01:35
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC043

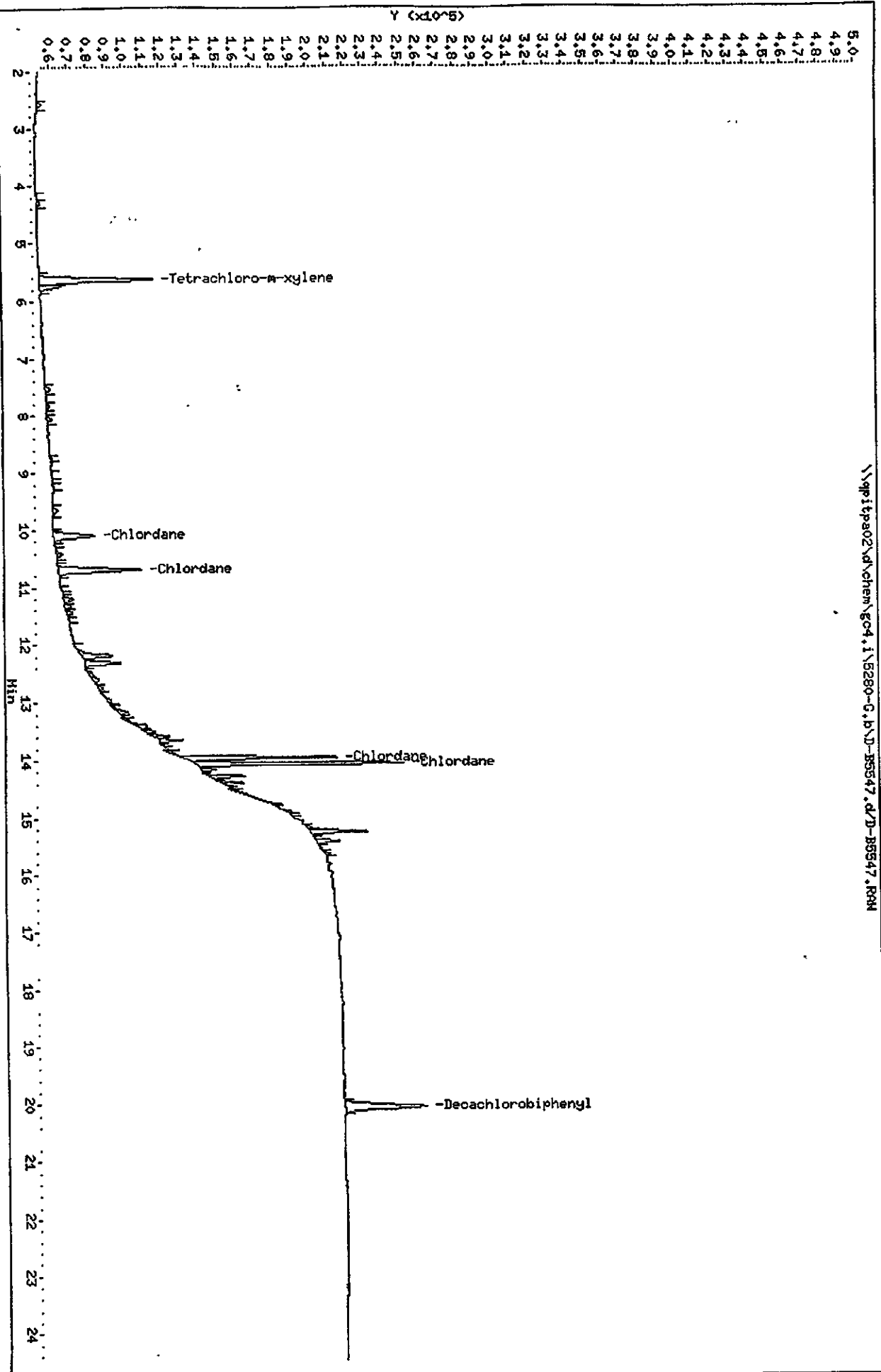
Inst ID: gc4.i
Quant Type: ESID
Cal File: D-B5173.d
Continuing Calibration Sample
Compound Sublist: 2-CHLO.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
9 Chlordane	10.093	10.093	0.000	22514	0.25000	0.2737
\$ 1 Tetrachloro-m-xylene	5.633	5.633	0.000	62660	0.02500	0.02741
\$ 30 Decachlorobiphenyl	20.060	20.060	0.000	45109	0.02500	0.02667

671 373

Data File: \\apitpa02\chem\gc4.1\5280-G.b.D-B5547.d
Date: 23-AUG-2000 10:26
Client ID:
Sample Info: HEDCHLOR, 5280-G.b., 2-CHL.O. sub., 2,3
Column phase: DB1701

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



671 374

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5548.d
 Report Date: 28-Aug-2000 10:44

STL - Pittsburgh

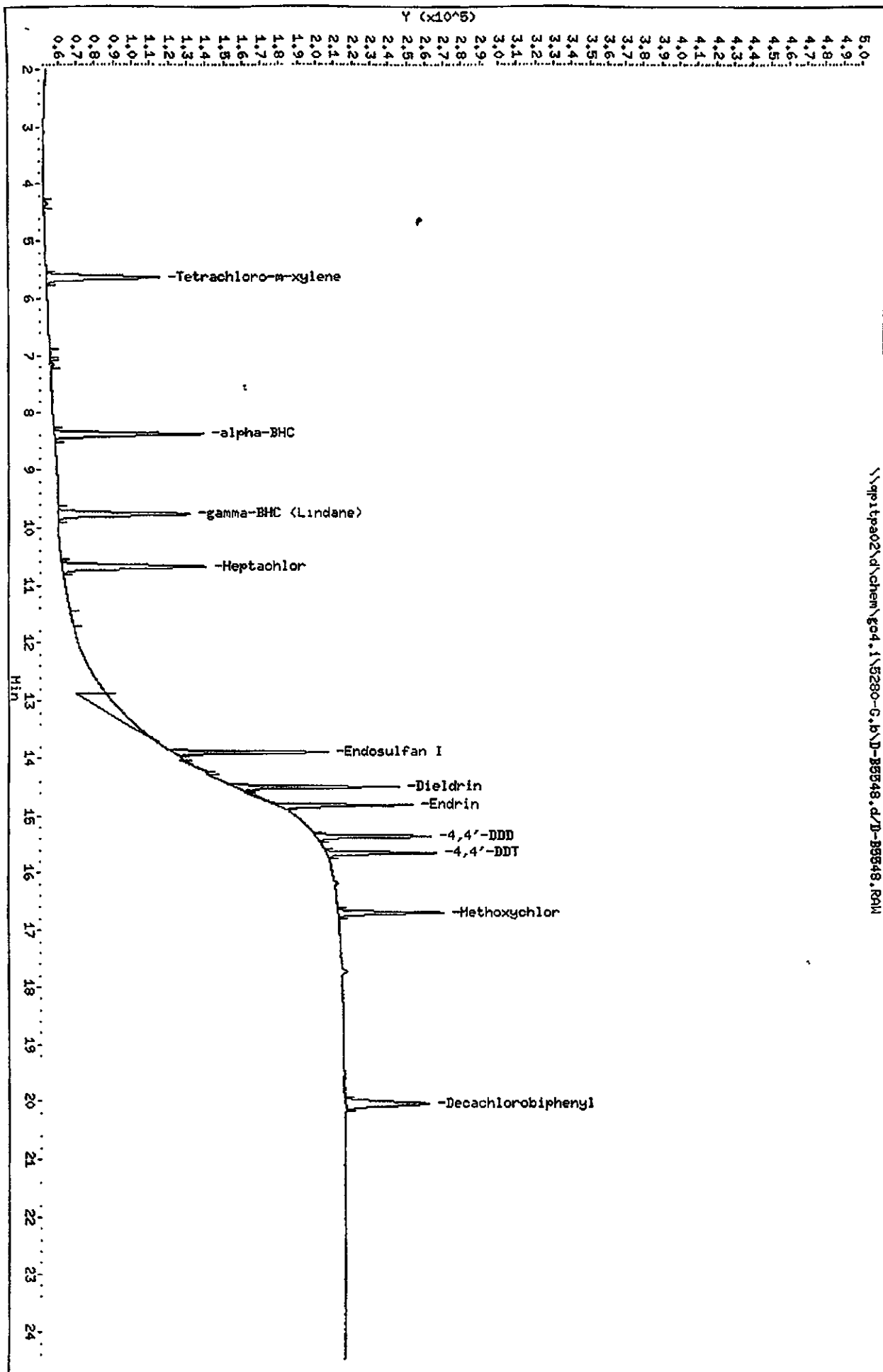
Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5548.d
 Lab Smp Id: MEDA
 Inj Date : 23-AUG-2000 10:54
 Operator : 1891
 Smp Info : MEDA, 5280-G.b, , 3-INDA.sub, , 2, 3
 Misc Info : 190-84-3
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Meth Date : 28-Aug-2000 10:43 gc
 Cal Date : 08-AUG-2000 01:35
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC043

Inst ID: gc4.i
 Quant Type: ESTD
 Cal File: D-B5173.d
 Continuing Calibration Sample
 Compound Sublist: 3-INDA.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
*****	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.633	5.633	0.000	61447	0.02500	0.02688
5 alpha-BHC	8.380	8.380	0.000	81891	0.02500	0.02672
6 gamma-BHC (Lindane)	9.760	9.760	0.000	72343	0.02500	0.02728
10 Heptachlor	10.686	10.686	0.000	78605	0.02500	0.02674
15 Endosulfan I	13.906	13.906	0.000	84828	0.02500	0.02654
17 Dieldrin	14.506	14.506	0.000	89217	0.02500	0.02627
20 Endrin	14.820	14.820	0.000	74594	0.02500	0.02359
21 4,4'-DDD	15.366	15.366	0.000	63094	0.02500	0.02566
23 4,4'-DDT	15.660	15.660	0.000	60369	0.02500	0.02430
25 Methoxychlor	16.700	16.700	0.000	57862	0.05000	0.04955
\$ 30 Decachlorobiphenyl	20.060	20.060	0.000	45554	0.02500	0.02694

Data File: \\gpi1pa02\chem\gc4.1\5280-G.b.D-B5548.d
Date: 23-AUG-2000 10:54
Client ID:
Sample Info: HEDA, 5280-G.b., 3-INDA, sub., 2,3
Column phase: DB1701

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



671 376

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5549.d
 Report Date: 28-Aug-2000 10:44

STL - Pittsburgh

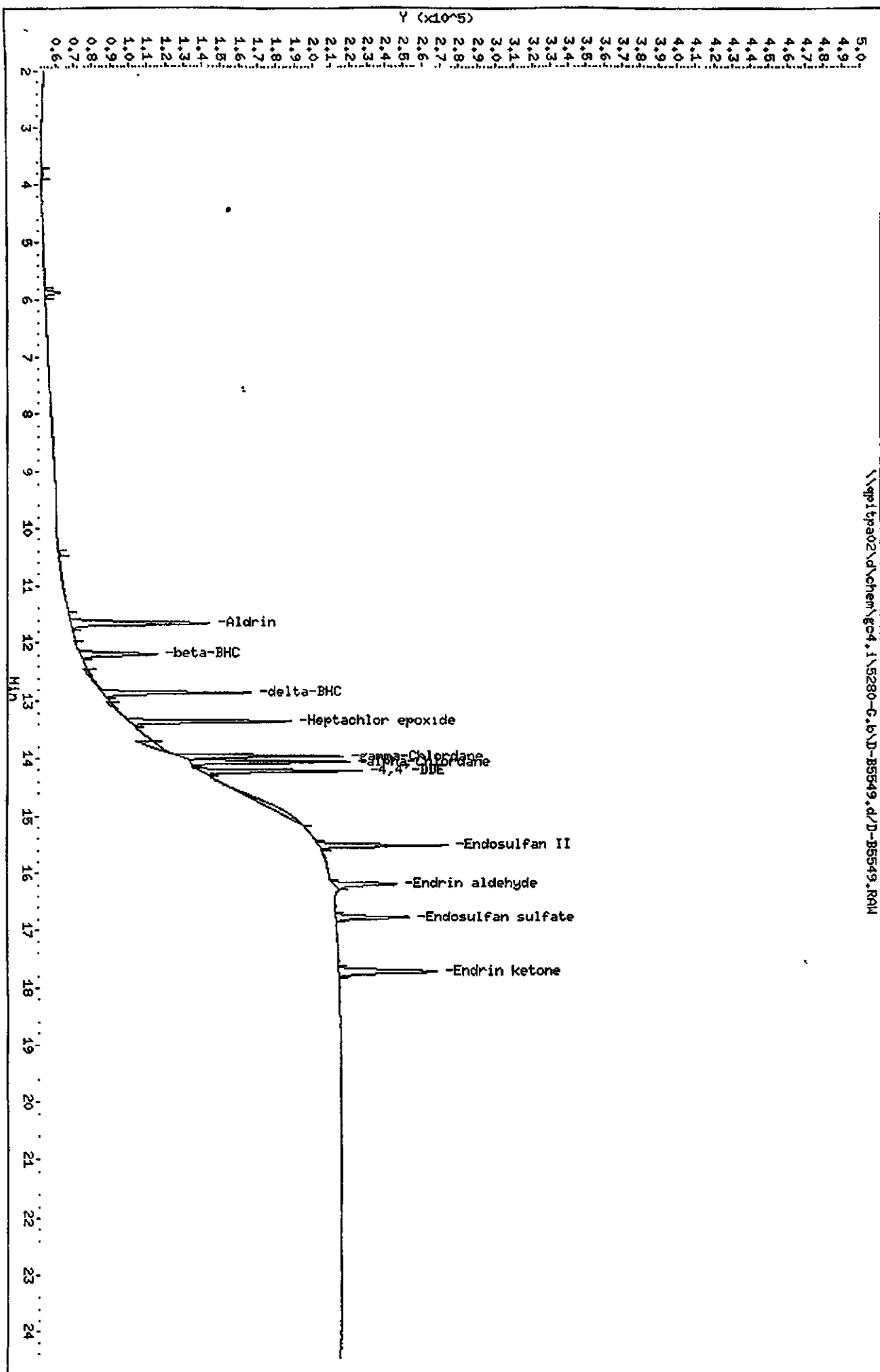
Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5549.d
 Lab Smp Id: MEDB
 Inj Date : 23-AUG-2000 11:21
 Operator : 1891 Inst ID: gc4.i
 Smp Info : MEDB,5280-G.b,,4-INDB.sub,,2,3
 Misc Info : 190-84-9
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Meth Date : 28-Aug-2000 10:43 gc Quant Type: ESTD
 Cal Date : 08-AUG-2000 01:35 Cal File: D-B5573.d
 Als bottle: 1 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 4-INDB.sub
 Target Version: 4.04
 Processing Host: PITPC043

Compounds	AMOUNTS					
	RT	BXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.660	11.660	0.000	75995	0.02500	0.02666
7 beta-BHC	12.186	12.186	0.000	42626	0.02500	0.02564
8 delta-BHC	12.860	12.860	0.000	80889	0.02500	0.02355
12 Heptachlor epoxide	13.360	13.360	0.000	88513	0.02500	0.02673
13 gamma-Chlordane	13.966	13.966	0.000	88629	0.02500	0.02613
14 alpha-Chlordane	14.066	14.066	0.000	87157	0.02500	0.02635
16 4,4'-DDE	14.220	14.220	0.000	88951	0.02500	0.02643
22 Endosulfan II	15.520	15.520	0.000	70568	0.02500	0.02465
24 Endrin aldehyde	16.186	16.186	0.000	34457	0.02500	0.02570
26 Endosulfan sulfate	16.773	16.773	0.000	39940	0.02500	0.02280
27 Endrin ketone	17.740	17.740	0.000	53489	0.02500	0.02591

671 377

Data File: \\pp1tpa02\chem\g04.1\5280-G.b.D-B5549.d
 Date: 23-AUG-2000 14:21
 Client ID:
 Sample Info: MEDB,5280-G.b.,4-INDB,sub,2,3
 Column phase: DB4701

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



671 378

Data File: \\gpitpa02\d\chem\gc4.i\5280-G.b\D-B5685.d
 Report Date: 28-Aug-2000 13:23

STL - Pittsburgh

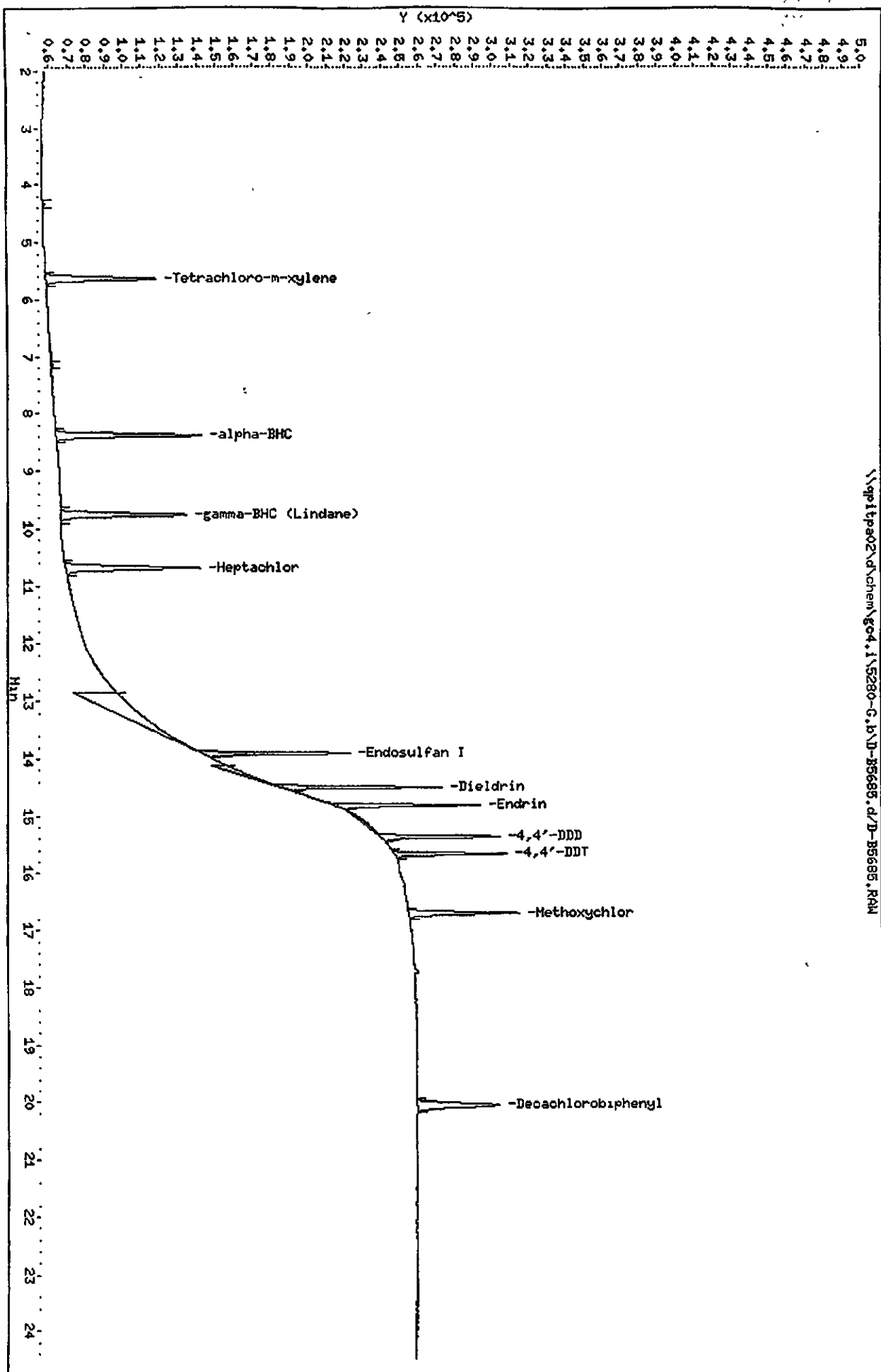
Data file : \\gpitpa02\d\chem\gc4.i\5280-G.b\D-B5685.d
 Lab Smp Id: MEDA
 Inj Date : 26-AUG-2000 02:24
 Operator : 1891
 Smp Info : MEDA,5280-G.b,,INDA.sub,,2,3
 Misc Info : 190-84-3
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Meth Date : 28-Aug-2000 13:17 gc
 Cal Date : 08-AUG-2000 01:35
 Als bottle: 1
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC043

Inst ID: gc4.i
 Quant Type: ESTD
 Cal File: D-B5173.d
 Continuing Calibration Sample
 Compound Sublist: INDA.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.633	5.633	0.000	59537	0.02500	0.02604
5 alpha-BHC	8.373	8.380	-0.007	79088	0.02500	0.02581
6 gamma-BHC (Lindane)	9.753	9.760	-0.007	68747	0.02500	0.02592
10 Heptachlor	10.686	10.686	0.000	73234	0.02500	0.02491
15 Endosulfan I	13.906	13.906	0.000	80189	0.02500	0.02509
17 Dieldrin	14.500	14.506	-0.006	87071	0.02500	0.02564
20 Endrin	14.820	14.820	0.000	79715	0.02500	0.02521
21 4,4'-DDD	15.360	15.366	-0.006	64973	0.02500	0.02643
23 4,4'-DDT	15.660	15.660	0.000	61115	0.02500	0.02460
25 Methoxychlor	16.700	16.700	0.000	59649	0.05000	0.05108
\$ 30 Decachlorobiphenyl	20.066	20.066	0.000	43979	0.02500	0.02600

Data File: \\pptpa02\chem\gc4.1\5280-G.b\B-5665.d
 Date: 26-AUG-2000 02:24
 Client ID:
 Sample Info: MEDA, 5280-G.b, 1INDR, sub, 2,3
 Column phase: DB1701

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



671 380

Data File: \\gpitpa02\d\chem\gc4.i\5280-G.b\D-B5686.d
Report Date: 28-Aug-2000 13:23

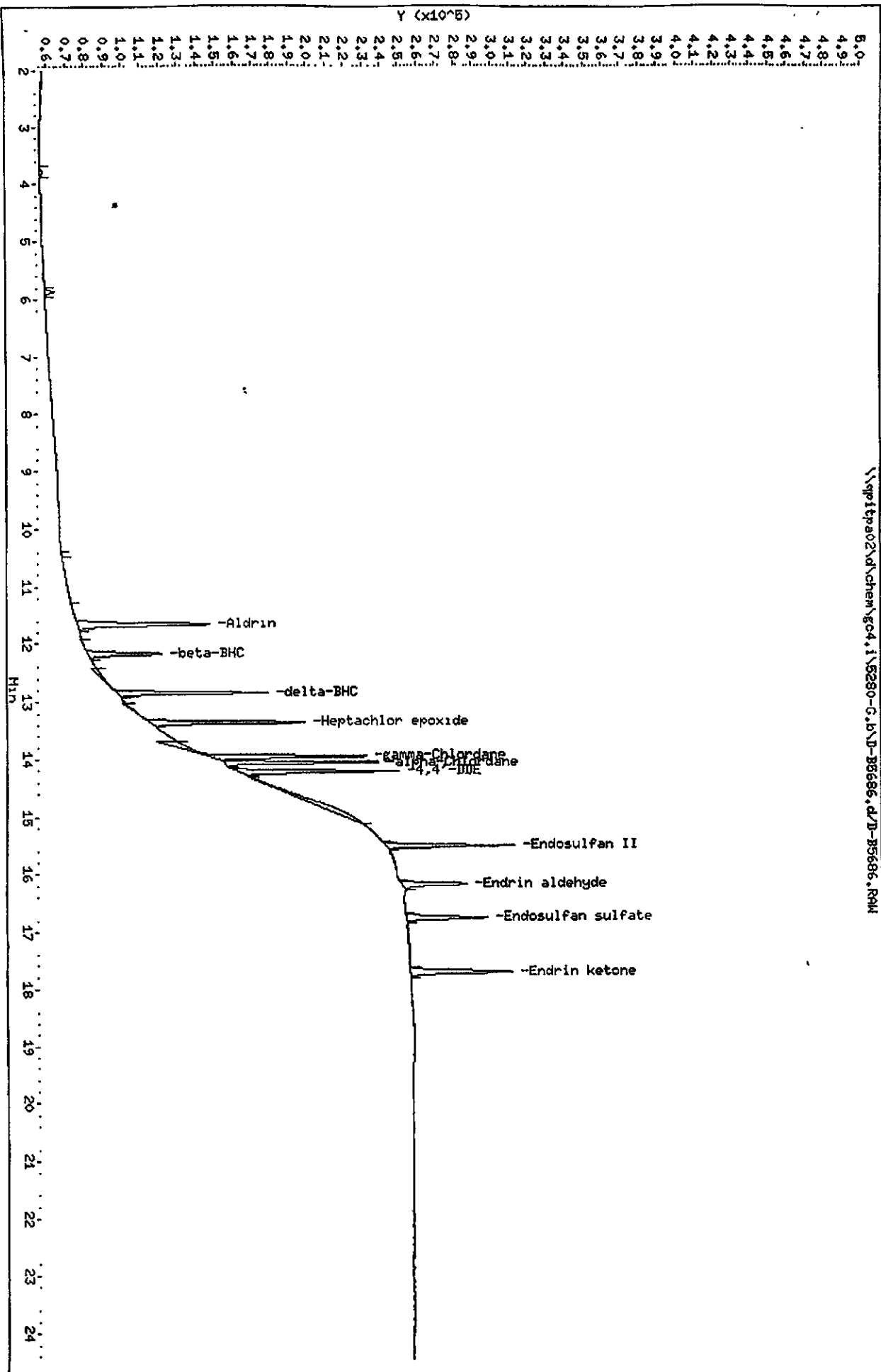
STL - Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\5280-G.b\D-B5686.d
Lab Smp Id: MEDB
Inj Date : 26-AUG-2000 02:52
Operator : 1891 Inst ID: gc4.i
Smp Info : MEDB, 5280-G.b,, INDB.sub,, 2, 3
Misc Info : 190-84-9
Comment :
Method : \\gpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
Meth Date : 28-Aug-2000 13:17 gc Quant Type: ESTD
Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDB.sub
Target Version: 4.04
Processing Host: PITPC043

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
11 Aldrin	11.660	11.660	0.000	71394	0.02500	0.02506
7 beta-BHC	12.180	12.180	0.000	39309	0.02500	0.02364
8 delta-BHC	12.846	12.853	-0.007	81839	0.02500	0.02382
12 Heptachlor epoxide	13.353	13.360	-0.007	83942	0.02500	0.02533
13 gamma-Chlordane	13.960	13.966	-0.006	84141	0.02500	0.02480
14 alpha-Chlordane	14.066	14.066	0.000	83367	0.02500	0.02520
16 4,4'-DDE	14.220	14.220	0.000	88102	0.02500	0.02616
22 Endosulfan II	15.513	15.520	-0.007	70264	0.02500	0.02454
24 Endrin aldehyde	16.180	16.186	-0.006	35814	0.02500	0.02672
26 Endosulfan sulfate	16.766	16.766	0.000	44337	0.02500	0.02531
27 Endrin ketone	17.726	17.733	-0.007	55576	0.02500	0.02692

Data File: \\spitpa02\chem\gc4.1\5280-G.b.D-B5686.d
 Date: 26-AUG-2000 02:52
 Client ID:
 Sample Info: HEDB, 5280-G.b, INDB, sub, 2,3
 Column phase: DB1701

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



671 382

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5687.d
 Report Date: 28-Aug-2000 13:55

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5687.d

Lab Smp Id: EVALB

Inj Date : 26-AUG-2000 03:20

Operator : 1891

Inst ID: gc4.i

Smp Info : EVALB, 5280-G.b, , EVALBR.sub, , 3, 1

Misc Info : 190-88-8

Comment :

Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m

Meth Date : 28-Aug-2000 13:53 gc

Quant Type: ESTD

Cal Date : 08-AUG-2000 01:35

Cal File: D-B5173.d

Als bottle: 1

QC Sample: PEM

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: EVALBR.sub

Target Version: 4.04

Processing Host: PITPC043

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ng)
=====	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.633	5.633	0.000	47325	0.02070	0.02070 (R)
16 4,4'-DDE	Compound Not Detected.					
20 Endrin	14.820	14.820	0.000	76382	0.02416	0.02416
21 4,4'-DDD	15.366	15.366	0.006	2915	0.00119	0.001186
23 4,4'-DDT	15.660	15.660	0.000	60137	0.02420	0.02420
24 Endrin aldehyde	Compound Not Detected.					
27 Endrin ketone	Compound Not Detected.					
\$ 30 Decachlorobiphenyl	20.060	20.066	-0.006	35093	0.02075	0.02075 (R)

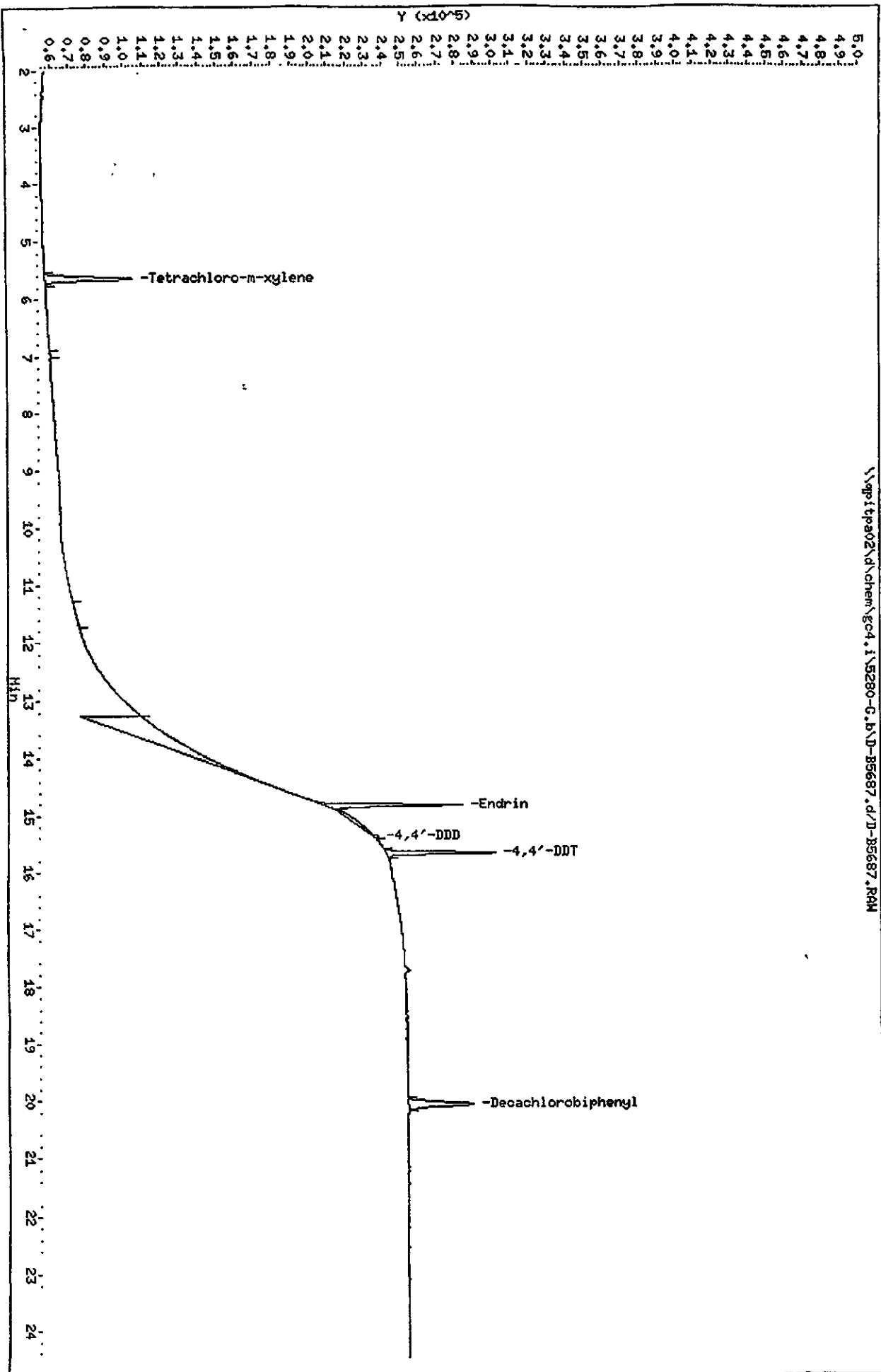
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Endrin = 0
DDT = 4.6

Data File: \\pptp02\chem\gc4.i\B280-G.b\B5687.d
Date: 26-AUG-2000 03:20
Client ID:
Sample Info: EVAL.B, B280-G.b, EVAL.BR, sub, 3.1
Column phase: DB1701

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



671 384

Data File: \\gpitpa02\d\chem\gc4.i\5280-G.b\D-B5708.d
Report Date: 28-Aug-2000 13:59

STL - Pittsburgh

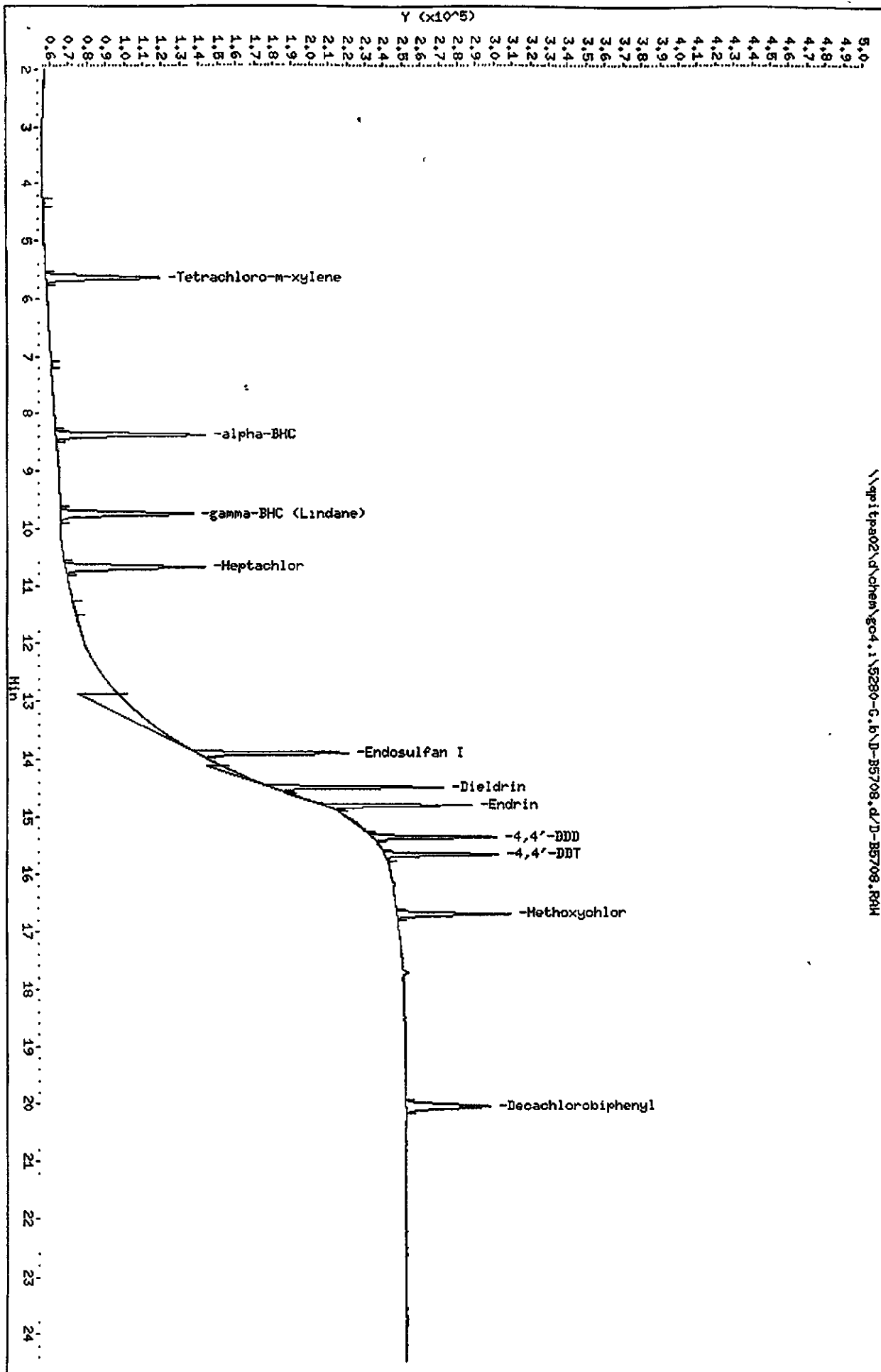
Data file : \\gpitpa02\d\chem\gc4.i\5280-G.b\D-B5708.d
Lab Smp Id: MEDA
Inj Date : 26-AUG-2000 13:01
Operator : 1891
Smp Info : MEDA, 5280-G.b, , INDA.sub, , 2, 3
Misc Info : 190-84-3
Comment :
Method : \\gpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
Meth Date : 28-Aug-2000 13:53 gc
Cal Date : 08-AUG-2000 01:35
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC043

Inst ID: gc4.i
Quant Type: ESTD
Cal File: D-B5173.d
Continuing Calibration Sample
Compound Sublist: INDA.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
*****	***	*****	*****	*****	*****	*****
\$ 1 Tetrachloro-m-xylene	5.633	5.633	0.000	61344	0.02500	0.02683
5 alpha-BHC	8.366	8.373	-0.007	80913	0.02500	0.02640
6 gamma-BHC (Lindane)	9.753	9.753	0.000	72054	0.02500	0.02717
10 Heptachlor	10.680	10.686	-0.006	75491	0.02500	0.02568
15 Endosulfan I	13.900	13.906	-0.006	81894	0.02500	0.02562
17 Dieldrin	14.500	14.500	0.000	91769	0.02500	0.02702
20 Endrin	14.820	14.820	0.000	79931	0.02500	0.02528
21 4,4'-DDD	15.360	15.360	0.000	67454	0.02500	0.02744
23 4,4'-DDT	15.660	15.660	0.000	61782	0.02500	0.02486
25 Methoxychlor	16.693	16.700	-0.007	61333	0.05000	0.05252
\$ 30 Decachlorobiphenyl	20.060	20.066	-0.006	45867	0.02500	0.02712

Data File: \\qpitpa02\chem\g04.1\5280-G.b\B-85708.d
Date: 26-AUG-2000 13:01
Client ID:
Sample Info: HEDR, 5280-G.b., INDA, sub, 2,3
Column phase: DB1701

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



671 386

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5709.d
Report Date: 28-Aug-2000 13:59

STL - Pittsburgh

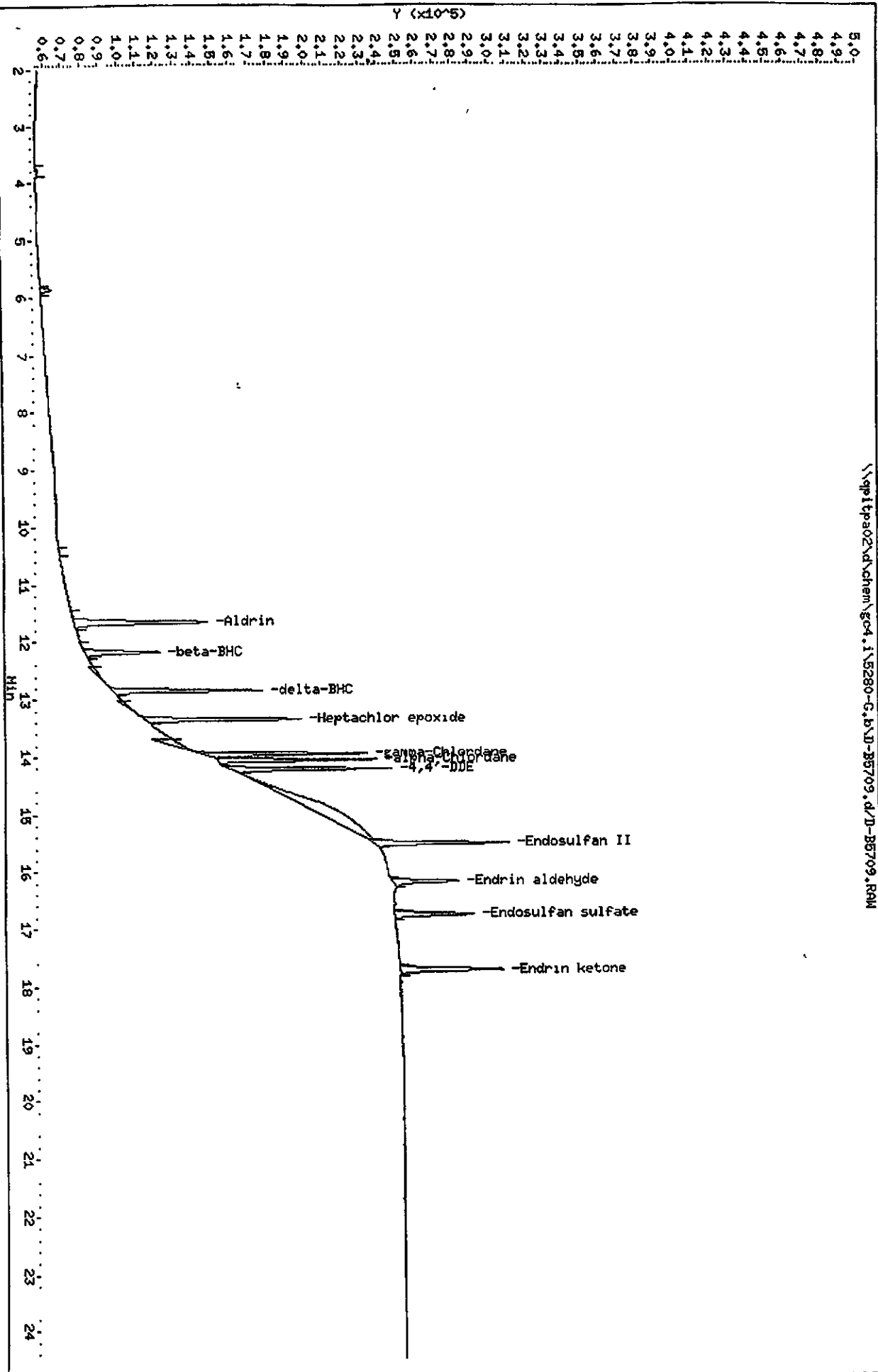
Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5709.d
Lab Smp Id: MEDB
Inj Date : 26-AUG-2000 13:29
Operator : 1891
Smp Info : MEDB, 5280-G.b, , INDB.sub, , 2, 3
Misc Info : 190-84-9
Comment :
Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
Meth Date : 28-Aug-2000 13:53 gc
Cal Date : 08-AUG-2000 01:35
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC043

Inst ID: gc4.i
Quant Type: ESTD
Cal File: D-B5173.d
Continuing Calibration Sample
Compound Sublist: INDB.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
11 Aldrin	11.653	11.660	-0.007	72678	0.02500	0.02552
7 beta-BHC	12.173	12.180	-0.007	40553	0.02500	0.02439
8 delta-BHC	12.846	12.846	0.000	80842	0.02500	0.02353
12 Heptachlor epoxide	13.353	13.353	0.000	84456	0.02500	0.02549
13 gamma-Chlordane	13.960	13.960	0.000	87238	0.02500	0.02572
14 alpha-Chlordane	14.060	14.066	-0.006	85681	0.02500	0.02590
16 4,4'-DDE	14.220	14.220	0.000	87517	0.02500	0.02598
22 Endosulfan II	15.513	15.513	0.000	73444	0.02500	0.02566
24 Endrin aldehyde	16.173	16.180	-0.007	36164	0.02500	0.02698
26 Endosulfan sulfate	16.760	16.766	-0.006	43074	0.02500	0.02459
27 Endrin ketone	17.726	17.726	0.000	55926	0.02500	0.02709

Data File: \\ppitpa02\chem\gc4.1\5280-G.b\B-85709.d
 Date: 26-AUG-2000 13:29
 Client ID:
 Sample Info: HEDB, 5280-G.b, INDB, sub, 2,3
 Column phase: DB1701

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



671 388

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5710.d
Report Date: 28-Aug-2000 13:59

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5710.d
Lab Smp Id: EVALB
Inj Date : 26-AUG-2000 13:57
Operator : 1891 Inst ID: gc4.i
Smp Info : EVALB,5280-G.b,,EVALBR.sub,,3,1
Misc Info : 190-88-8
Comment :
Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
Meth Date : 28-Aug-2000 13:53 gc Quant Type: ESTD
Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: EVALBR.sub
Target Version: 4.04
Processing Host: PITPC043

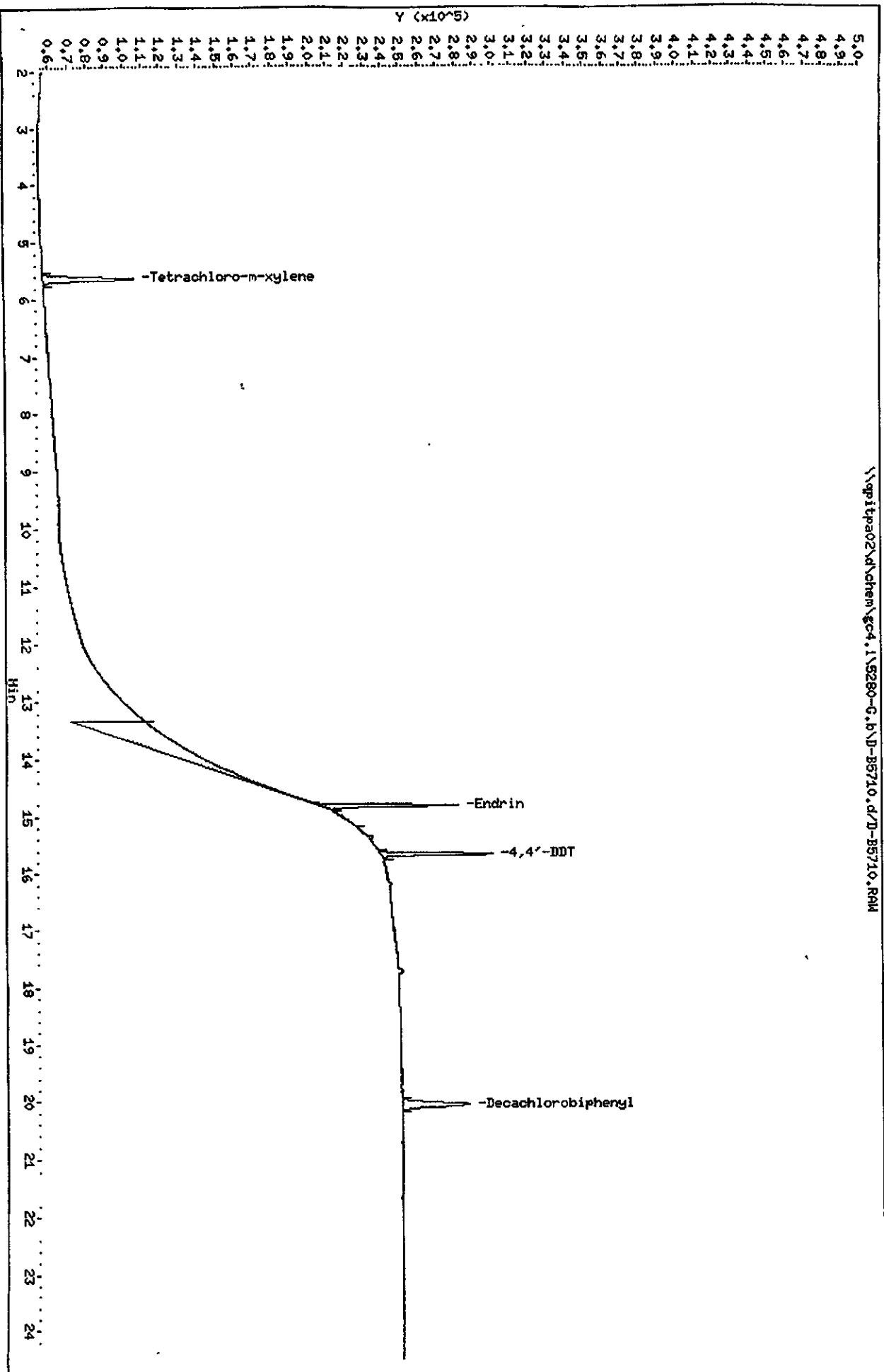
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ng)
*****	***	*****	*****	*****	*****	*****
\$ 1 Tetrachloro-m-xylene	5.626	5.633	-0.007	48756	0.02133	0.02132(R)
16 4,4'-DDE	Compound Not Detected.					
20 Endrin	14.820	14.820	0.000	75301	0.02382	0.02382
21 4,4'-DDD	Compound Not Detected.					
23 4,4'-DDT	15.660	15.660	0.000	61081	0.02458	0.02458
24 Endrin aldehyde	Compound Not Detected.					
27 Endrin ketone	Compound Not Detected.					
\$ 30 Decachlorobiphenyl	20.060	20.066	-0.006	36766	0.02174	0.02174(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\qpi1pa02\chem\gc04.1\5280-G.b\D-85710.d
Date: 26-AUG-2000 13:57
Client ID:
Sample Info: EVRLB, 8280-G.b, EVRLBR, sub, 3.1
Column phase: DB1701

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



671 390

**PESTICIDE
QC DATA**

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

671 391

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

Matrix: (soil/water) SOLID

Lab Sample ID: COH240000 479

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJDTA101

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: NA

QC Batch: 0237479

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

FORM I

671 392

Data File: \\gpitpa02\d\chem\gc4.i\5280-G.b\D-B5706.d
 Report Date: 28-Aug-2000 13:58

STL - Pittsburgh

Data file : \\gpitpa02\d\chem\gc4.i\5280-G.b\D-B5706.d
 Lab Smp Id: DJDTA101 Client Smp ID: PBLK7479
 Inj Date : 26-AUG-2000 12:06
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJDTA101,5280-G.b,,PEST.sub,,3,
 Misc Info : 220139BLK
 Comment :
 Method : \\gpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Meth Date : 28-Aug-2000 13:53 gc Quant Type: ESTD
 Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
 Als bottle: 1 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC043

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	5.633	5.633	0.000	42741	0.01869	0.001869 (aR)
5 alpha-BHC						
6 gamma-BHC (Lindane)						
9 Chlordane						
10 Heptachlor						
11 Aldrin						
7 beta-BHC						
8 delta-BHC						
12 Heptachlor epoxide						
15 Endosulfan I						
13 gamma-Chlordane						
14 alpha-Chlordane						
16 4,4'-DDE						
17 Dieldrin						
20 Endrin						

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
18 Toxaphene				Compound Not Detected.		
21 4,4'-DDD				Compound Not Detected.		
22 Endosulfan II				Compound Not Detected.		
23 4,4'-DDT				Compound Not Detected.		
24 Endrin aldehyde				Compound Not Detected.		
25 Methoxychlor				Compound Not Detected.		
26 Endosulfan sulfate				Compound Not Detected.		
58 MIREX				Compound Not Detected.		
29 Kepone				Compound Not Detected.		
27 Endrin ketone				Compound Not Detected.		
\$ 30 Decachlorobiphenyl	20.060	20.066	-0.006	33932	0.02006	0.002006(aR)

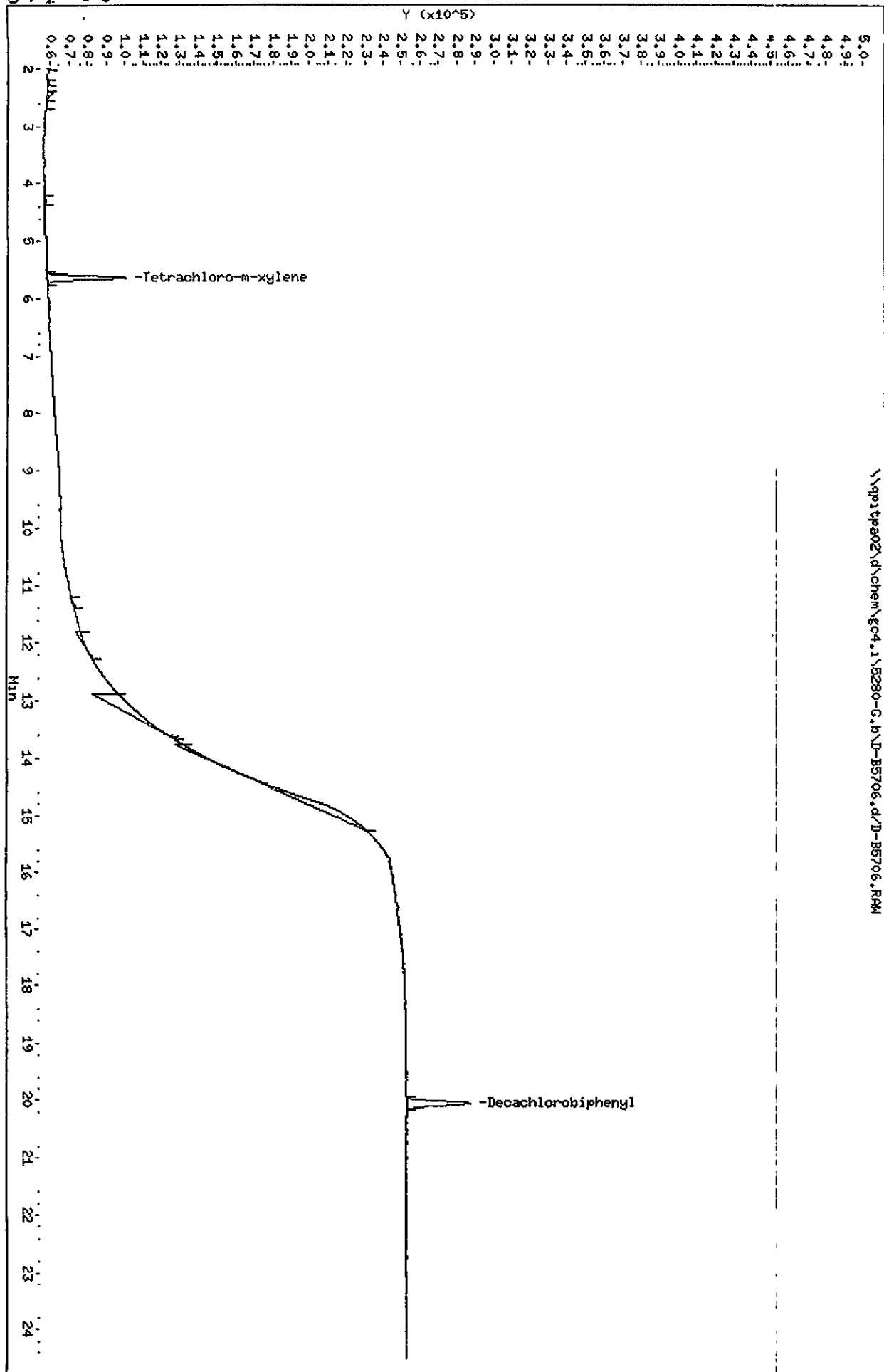
QC Flag Legend

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

671 394

Data File: \\p1tpa02\chem\gc4.1\5280-G.b\B-5706.d
 Date : 26-AUG-2000 12:06
 Client ID: PBLK7479
 Sample Info: DJDTA101,5280-G.b,,PEST,sub,,3,
 Volume Injected (uL): 1.0
 Column Phase: DB1701

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



UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

671 395

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH240000 479

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJDTA102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: NA

QC Batch: 0237479

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	mg/L
72-20-8	Endrin	0.00222	Q
76-44-8	Heptachlor	0.00225	
1024-57-3	Heptachlor epoxide	0.00227	
58-89-9	Lindane	0.00157	
72-43-5	Methoxychlor	0.00210	

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5707.d
 Report Date: 28-Aug-2000 13:58

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5707.d
 Lab Smp Id: DJDTA102 Client Smp ID: LCS7479
 Inj Date : 26-AUG-2000 12:33
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJDTA102, 5280-G.b, , PEST.sub, , 3,
 Misc Info : 220139LCS
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Meth Date : 28-Aug-2000 13:53 gc Quant Type: ESTD
 Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
 Als bottle: 1 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC043

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	5.633	5.633	0.000	89220	0.03902	0.003902(aR)
5 alpha-BHC	8.366	8.373	-0.007	37523	0.01225	0.001224(a)
6 gamma-BHC (Lindane)	9.753	9.753	0.000	41602	0.01569	0.001569(aR)
9 Chlordane	Compound Not Detected.					
10 Heptachlor	10.680	10.686	-0.006	66208	0.02252	0.002252(aR)
11 Aldrin	11.653	11.660	-0.007	63445	0.02228	0.002228(aR)
7 beta-BHC	12.173	12.180	-0.007	35986	0.02164	0.002164(a)
8 delta-BHC	Compound Not Detected.					
12 Heptachlor epoxide	13.353	13.353	0.000	75238	0.02271	0.002270(a)
15 Endosulfan I	13.906	13.906	0.000	48240	0.01509	0.001509(a)
13 gamma-Chlordane	13.960	13.960	0.000	60684	0.01789	0.001789(a)
14 alpha-Chlordane	14.060	14.066	-0.006	77337	0.02338	0.002338(a)
16 4,4'-DDE	14.220	14.220	0.000	86326	0.02563	0.002563(a)
17 Dieldrin	14.500	14.500	0.000	82365	0.02426	0.002426(aR)
20 Endrin	14.820	14.820	0.000	70175	0.02219	0.002219(aR)
18 Toxaphene	Compound Not Detected.					

Data File: \\ppitpa02\d\chem\gc4.i\5280-G.b\D-B5707.d
 Report Date: 28-Aug-2000 13:58

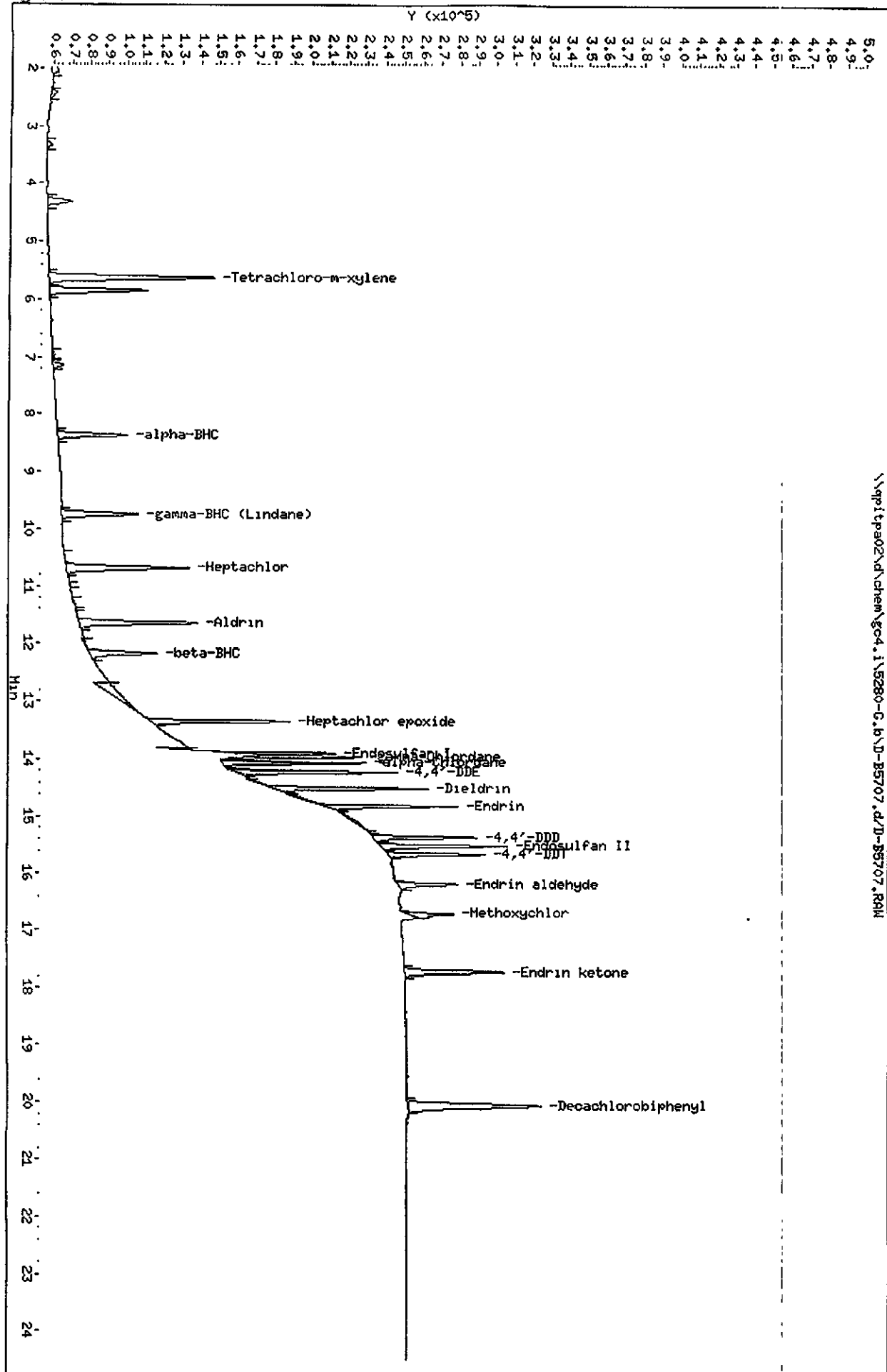
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
21 4,4'-DDD	15.360	15.360	0.000	56148	0.02284	0.002284(a)
22 Endosulfan II	15.513	15.513	0.000	68408	0.02390	0.002390(a)
23 4,4'-DDT	15.660	15.660	0.000	52858	0.02127	0.002127(aR)
24 Endrin aldehyde	16.173	16.180	-0.007	32775	0.02445	0.002445(a)
25 Methoxychlor	16.693	16.700	-0.007	24571	0.02104	0.002104(a)
26 Endosulfan sulfate	Compound Not Detected.					
58 MIREX	Compound Not Detected					
29 Kepone	Compound Not Detected.					
27 Endrin ketone	17.726	17.726	0.000	53549	0.02594	0.002594(a)
\$ 30 Decachlorobiphenyl	20.060	20.066	-0.006	72373	0.04280	0.004280(aR)

QC Flag Legend

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

Data File: \\npitpa02\chem\gc4.1\5280-G.b\B5707.d
 Date: 26-AUG-2000 12:33
 Client ID: LCS7479
 Sample Info: BUDHA02,5280-G.b,,PEST,sub,,3,
 Volume Injected (ul): 1.0
 Column phase: DB1701

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



UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C810V

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: 14

QC Batch: 0237479

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00216	
76-44-8	Heptachlor	0.00209	
1024-57-3	Heptachlor epoxide	0.00216	
58-89-9	Lindane	0.00147	
72-43-5	Methoxychlor	0.00196	

671 400

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5702.d
 Report Date: 28-Aug-2000 13:58

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5702.d
 Lab Smp Id: DJ7C810V Client Smp ID: DF/S1/0234/SDC/029S
 Inj Date : 26-AUG-2000 10:15
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJ7C810V,5280-G.b,,PEST.sub,,3,
 Misc Info : 220139001S
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Meth Date : 28-Aug-2000 13:53 gc Quant Type: ESTD
 Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
 Als bottle: 1 QC Sample: MS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC043

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	5.633	5.633	0.000	82507	0.03609	0.003609(aR)
5 alpha-BHC	8.366	8.373	-0.007	35019	0.01143	0.001143(a)
6 gamma-BHC (Lindane)	9.753	9.753	0.000	39050	0.01472	0.001472(aR)
9 Chlordane	Compound Not Detected					
10 Heptachlor	10.680	10.686	-0.006	61544	0.02093	0.002093(aR)
11 Aldrin	11.653	11.660	-0.007	59355	0.02084	0.002084(aR)
7 beta-BHC	12.173	12.180	-0.007	34445	0.02072	0.002072(a)
8 delta-BHC	Compound Not Detected.					
12 Heptachlor epoxide	13.353	13.353	0.000	71427	0.02156	0.002156(a)
15 Endosulfan I	13.906	13.906	0.000	49271	0.01542	0.001542(a)
13 gamma-Chlordane	13.960	13.960	0.000	56804	0.01675	0.001675(a)
14 alpha-Chlordane	14.060	14.066	-0.006	73326	0.02217	0.002217(a)
16 4,4'-DDE	14.220	14.220	0.000	82156	0.02439	0.002439(a)
17 Dieldrin	14.500	14.500	0.000	85242	0.02510	0.002510(aR)
20 Endrin	14.820	14.820	0.000	68228	0.02158	0.002158(aR)
18 Toxaphene	Compound Not Detected.					

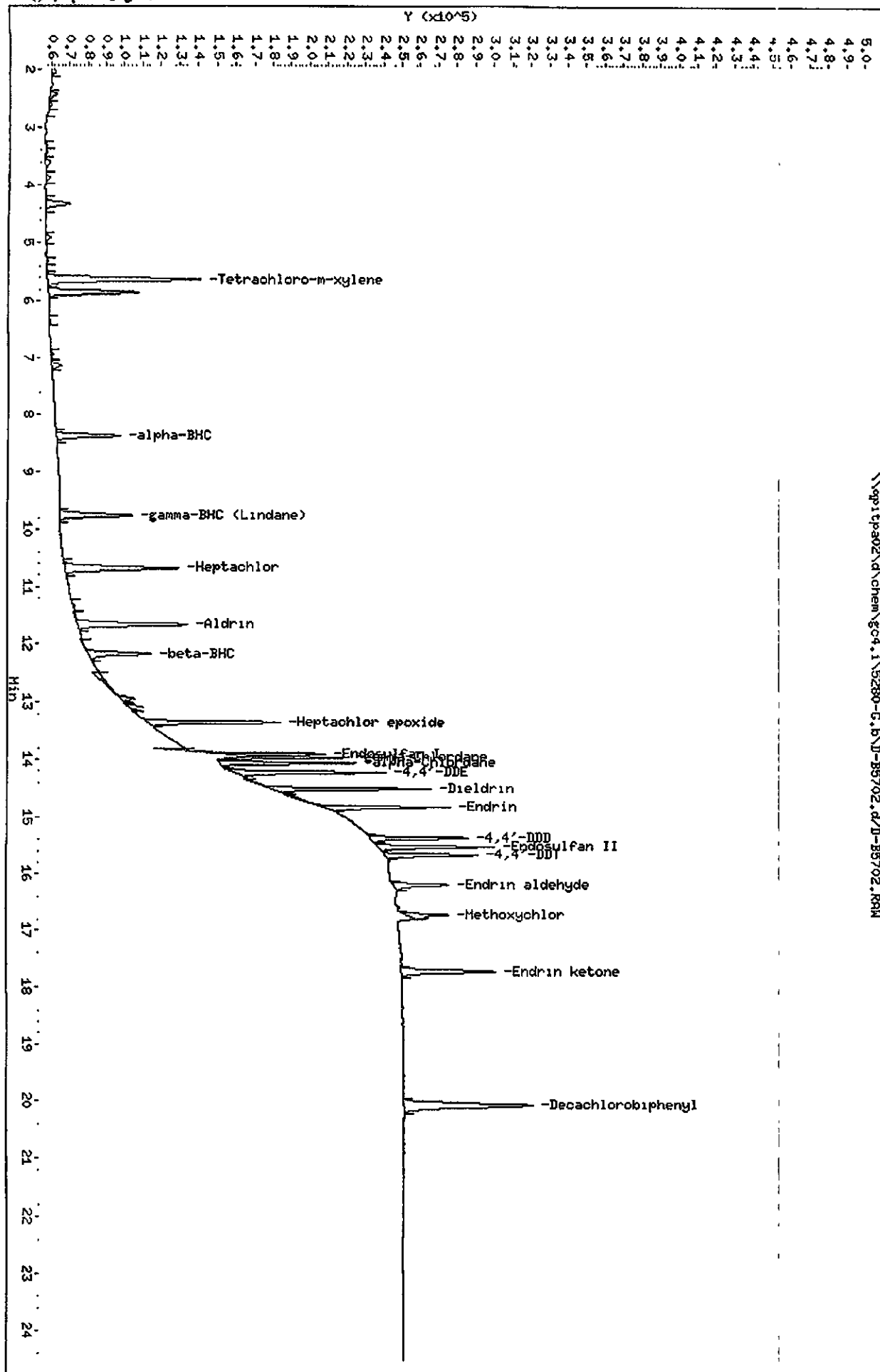
Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5702.d
 Report Date: 28-Aug-2000 13:58

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
*****	==	=====	=====	=====	=====	=====
21 4,4'-DDD	15.360	15.360	0.000	53822	0.02189	0.002189(a)
22 Endosulfan II	15.513	15.513	0.000	63676	0.02224	0.002224(a)
23 4,4'-DDT	15.660	15.660	0.000	50493	0.02032	0.002032(aR)
24 Endrin aldehyde	16.180	16.180	0.000	30075	0.02244	0.002244(a)
25 Methoxychlor	16.700	16.700	0.000	22862	0.01958	0.001958(a)
26 Endosulfan sulfate	Compound Not Detected.					
58 MIREX	Compound Not Detected.					
29 Kepone	Compound Not Detected.					
27 Endrin ketone	17.726	17.726	0.000	50474	0.02445	0.002445(a)
\$ 30 Decachlorobiphenyl	20.060	20.066	-0.006	69425	0.04105	0.004105(aR)

QC Flag Legend

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

671 402



Data File: \\pp1tpa02\chem\gc4.1\5280-G.b\D-B5702.d
 Date : 26-AUG-2000 10:15
 Client ID: DF/S1/0234/SDC/029S
 Sample Info: D37C810V,5280-G.b,,PEST,sub,,3,
 Volume Injected (uL): 1.0
 Column Phase: DB1701

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

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8081A

Pesticides (8081A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C810W

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/26/00

Moisture %: 14

QC Batch: 0237479

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
72-20-8	Endrin	0.00235	
76-44-8	Heptachlor	0.00211	
1024-57-3	Heptachlor epoxide	0.00216	
58-89-9	Lindane	0.00150	
72-43-5	Methoxychlor	0.00200	

671 404

Data File: \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5703.d
 Report Date: 28-Aug-2000 13:58

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\5280-G.b\D-B5703.d
 Lab Smp Id: DJ7C810W Client Smp ID: DF/S1/0234/SDC/029D
 Inj Date : 26-AUG-2000 10:43
 Operator : 1891 Inst ID: gc4.i
 Smp Info : DJ7C810W,5280-G.b,,PEST.sub,,3,
 Misc Info : 220139001D
 Comment :
 Method : \\qpitpa02\d\chem\gc4.i\5280-G.b\PESTB.m
 Meth Date : 28-Aug-2000 13:53 gc Quant Type: ESTD
 Cal Date : 08-AUG-2000 01:35 Cal File: D-B5173.d
 Als bottle: 1 QC Sample: MSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: PEST.sub
 Target Version: 4.04
 Processing Host: PITPC043

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 (uL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
*****	==	=====	=====	=====	=====	=====
\$ 1 Tetrachloro-m-xylene	5.626	5.633	-0.007	84230	0.03684	0.003684(aR)
5 alpha-BHC	8.366	8.373	-0.007	35561	0.01160	0.001160(a)
6 gamma-BHC (Lindane)	9.753	9.753	0.000	39736	0.01498	0.001498(aR)
9 Chlordane	Compound Not Detected.					
10 Heptachlor	10.680	10.686	-0.006	62147	0.02114	0.002114(aR)
11 Aldrin	11.653	11.660	-0.007	59511	0.02089	0.002089(aR)
7 beta-BHC	12.173	12.180	-0.007	35259	0.02121	0.002120(a)
8 delta-BHC	Compound Not Detected.					
12 Heptachlor epoxide	13.353	13.353	0.000	71521	0.02158	0.002158(a)
15 Endosulfan I	13.906	13.906	0.000	51097	0.01599	0.001599(a)
13 gamma-Chlordane	13.960	13.960	0.000	61673	0.01818	0.001818(a)
14 alpha-Chlordane	14.060	14.066	-0.006	73352	0.02218	0.002218(a)
16 4,4'-DDE	14.220	14.220	0.000	82639	0.02454	0.002454(a)
17 Dieldrin	14.500	14.500	0.000	86706	0.02553	0.002553(aR)
20 Endrin	14.820	14.820	0.000	74235	0.02348	0.002348(aR)
18 Toxaphene	Compound Not Detected.					

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (mg/L)
=====	==	=====	=====	=====	=====	=====
21 4,4'-DDD	15.360	15.360	0.000	59347	0.02414	0.002414(a)
22 Endosulfan II	15.513	15.513	0.000	67697	0.02365	0.002365(a)
23 4,4'-DDT	15.660	15.660	0.000	50979	0.02052	0.002052(aR)
24 Endrin aldehyde	16.173	16.180	-0.007	30682	0.02289	0.002289(a)
25 Methoxychlor	16.693	16.700	-0.007	23389	0.02003	0.002003(a)
26 Endosulfan sulfate	Compound Not Detected.					
28 MIREX	Compound Not Detected.					
29 Kepone	Compound Not Detected.					
27 Endrin ketone	17.726	17.726	0.000	50842	0.02463	0.002463(a)
\$ 30 Decachlorobiphenyl	20.060	20.066	-0.006	71512	0.04229	0.004229(aR)

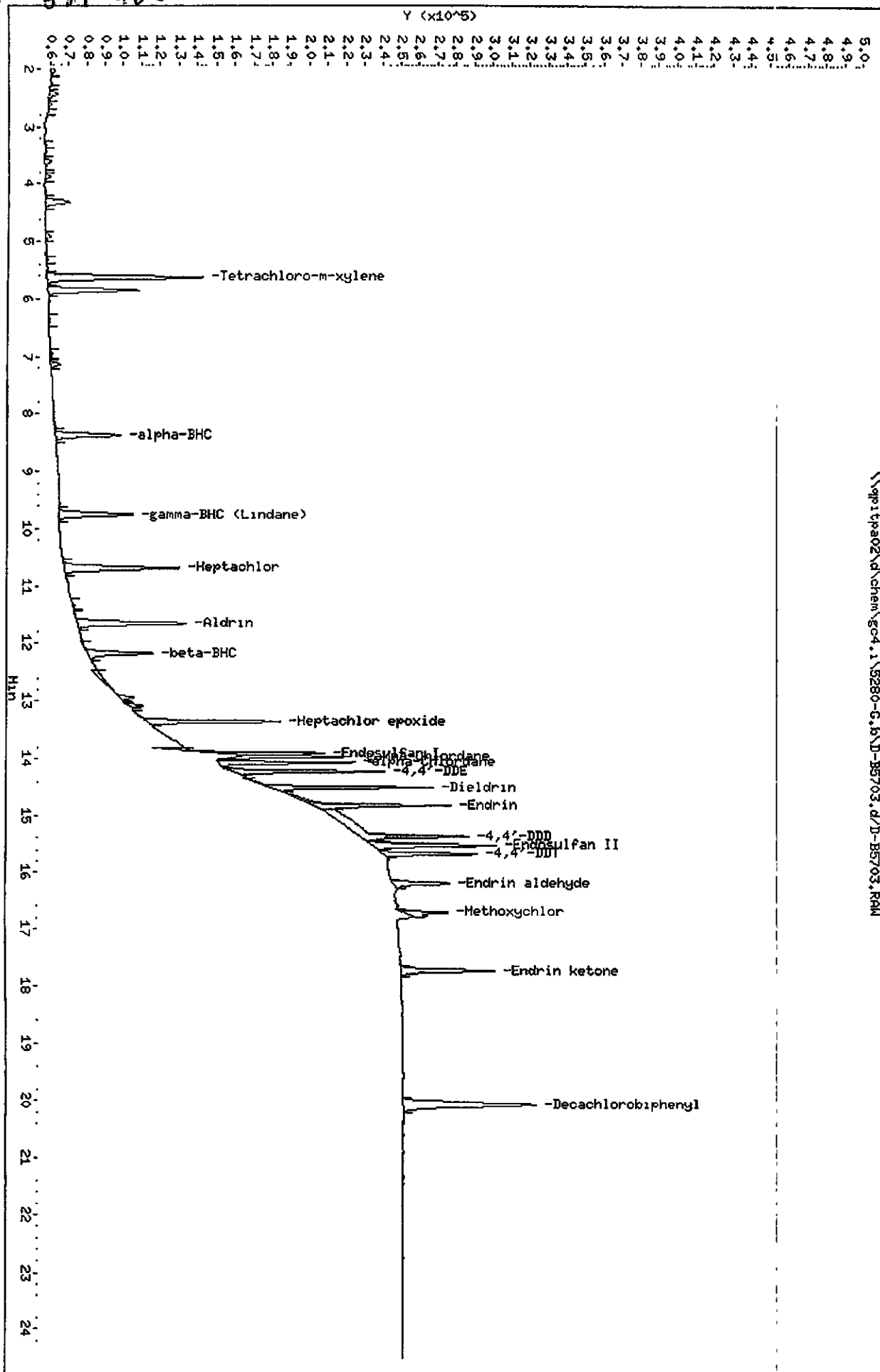
QC Flag Legend

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

871 406

Data File: \\spitpa02\chem\gc04.1\5280-G.b\B-85703.d
 Date : 26-AUG-2000 10:43
 Client ID: DF/SL/0234/SDC/029D
 Sample Info: DJ7C810M,5280-G.b,,PEST,sub,,3,
 Volume injected (uL): 1.0
 Column phase: DB1701

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



671 407

**PESTICIDE
MISCELLANEOUS**

671 408

Separatory Funnel Extraction Worksheet

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

B#023747

ITCP

Hexani 703268

Date Extraction Began	Date Completed	Method	Solvent	Solvent Lot	Solvent Mfg.	Clean up Method
		~~Prep~~	~~CH₂Cl₂~~			

[illegible]

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\5080-G.SEQ
 Created by : DE11/02/98 on : 8/7/00 18:00
 Edited by : DE08/07/00 on : 8/7/00 18:19
 Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
 REVIEWED BY:

Number of Times Edited : 1

Sequence File Header Information:

Number of Rows : 54
 Instrument Type : 760 / 900 Series Intelligent Interface
 Injection Type : SINGLE

Sequence Sample Descriptions - Channel B											
Row	Type	Sample Name	Sample Number	Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Norm. factor
1	Std Check	EVALB, 5080-G.b,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	100.000
2	Cal: Replace	MEDTOX, 5080-G.b	190-98-12		1.000	1.000	1.000	1.000	333.000	1.000	100.000
3	Cal: Replace	MEDCHLOR, 5080-G	190-85-10		1.000	1.000	1.000	1.000	333.000	1.000	100.000
4	Cal: Replace	LOWIX, 5080-G.b,	190-80-6		1.000	1.000	1.000	1.000	1.000	1.000	100.000
5	Cal: Replace	MLOWIX, 5080-G.b	190-80-7		1.000	1.000	1.000	1.000	1.000	1.000	100.000
6	Cal: Replace	MEDIX, 5080-G.b,	190-80-8		1.000	1.000	1.000	1.000	1.000	1.000	100.000
7	Cal: Replace	MHIGHIX, 5080-G.	190-80-9		1.000	1.000	1.000	1.000	1.000	1.000	100.000
8	Cal: Replace	HIGHIX, 5080-G.b	190-80-10		1.000	1.000	1.000	1.000	1.000	1.000	100.000
9	Cal: Replace	LOWF, 5080-G.b,,	190-74-1		1.000	1.000	1.000	1.000	1.000	1.000	100.000
10	Cal: Replace	MLOWF, 5080-G.b,	190-74-2		1.000	1.000	1.000	1.000	1.000	1.000	100.000
11	Cal: Replace	MEDF, 5080-G.b,,	190-74-3		1.000	1.000	1.000	1.000	1.000	1.000	100.000
12	Cal: Replace	MHIGHF, 5080-G b	190-74-4		1.000	1.000	1.000	1.000	1.000	1.000	100.000
13	Cal: Replace	HIGHF, 5080-G.b,	190-74-5		1.000	1.000	1.000	1.000	1.000	1.000	100.000
14	Cal: Replace	LOWA, 5080-G.b,,	190-84-1		1.000	1.000	1.000	1.000	1.000	1.000	100.000
15	Cal: Replace	MLOWA, 5080-G.b,	190-84-2		1.000	1.000	1.000	1.000	1.000	1.000	100.000
16	Cal: Replace	MEDA, 5080-G.b,,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	100.000
17	Cal: Replace	MHIGHA, 5080-G.b	190-84-4		1.000	1.000	1.000	1.000	1.000	1.000	100.000
18	Cal: Replace	HIGHA, 5080-G.b,	190-84-5		1.000	1.000	1.000	1.000	1.000	1.000	100.000
19	Cal: Replace	LOWB, 5080-G.b,,	190-84-7		1.000	1.000	1.000	1.000	1.000	1.000	100.000
20	Cal: Replace	MLOWB, 5080-G.b,	190-84-8		1.000	1.000	1.000	1.000	1.000	1.000	100.000
21	Cal: Replace	MEDB, 5080-G.b,,	190-84-9		1.000	1.000	1.000	1.000	1.000	1.000	100.000
22	Cal: Replace	MHIGHB, 5080-G.b	190-84-10		1.000	1.000	1.000	1.000	1.000	1.000	100.000
23	Cal: Replace	HIGHB, 5080-G.b,	190-84-11		1.000	1.000	1.000	1.000	1.000	1.000	100.000
24	Std Check	2ND A, 5080-G.b,	190-82-2		1.000	1.000	1.000	1.000	1.000	1.000	100.000
25	Std Check	2ND B, 5080-G.b,	190-82-5		1.000	1.000	1.000	1.000	1.000	1.000	100.000
26	Std Check	EVALB, 5080-G.b,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	100.000
27	Sample	DGRCL101, 5080-G	140198BLK		1.000	1.000	1.000	1.000	1.000	1.000	100.000
28	Sample	DGRCL102, 5080-G	140198LCS		1.000	1.000	1.000	1.000	1.000	1.000	100.000
29	Sample	DGRCL103, 5080-G	140198LCD		1.000	1.000	1.000	1.000	1.000	1.000	100.000
30	Sample	DG7T7101, 5080-G	140198018		1.000	1.000	1.000	1.000	1.000	1.000	100.000
31	Sample	DG7T7101, 5080-G	140198018		1.000	1.000	1.000	1.000	1.000	1.000	100.000
32	Sample	DG7T7101, 5080-G	140198018		1.000	1.000	1.000	1.000	1.000	1.000	100.000
33	Sample	DG7TA101, 5080-G	140198019		1.000	1.000	1.000	1.000	1.000	1.000	100.000
34	Sample	DG7TA101, 5080-G	140198019		1.000	1.000	1.000	1.000	1.000	1.000	100.000
35	Sample	DG7TA101, 5080-G	140198019		1.000	1.000	1.000	1.000	1.000	1.000	100.000
36	Sample	DG7TC101, 5080-G	140198020		1.000	1.000	1.000	1.000	1.000	1.000	100.000
37	Sample	DG7TC101, 5080-G	140198020		1.000	1.000	1.000	1.000	1.000	1.000	100.000
38	Sample	DG7TC101, 5080-G	140198020		1.000	1.000	1.000	1.000	1.000	1.000	100.000
39	Sample	~~DG7B101, 5080-G~~	~~180137004~~		1.000	1.000	1.000	1.000	1.000	1.000	100.000
40	Sample	DGD7P10L, 5080-G	180137004S		1.000	1.000	1.000	1.000	1.000	1.000	100.000
41	Sample	DGD7P10M, 5080-G	180137004D		1.000	1.000	1.000	1.000	1.000	1.000	100.000
42	Sample	DGM9M101, 5080-G	180137BLK		1.000	1.000	1.000	1.000	1.000	1.000	100.000
43	Sample	~~DGM9M102, 5080-G~~	~~180137LCS~~		1.000	1.000	1.000	1.000	1.000	1.000	100.000
44	Sample	DHEH6101, 5080-G	030147BLK		1.000	1.000	1.000	1.000	1.000	1.000	100.000
45	Sample	DHEH6102, 5080-G	030147LCS		1.000	1.000	1.000	1.000	1.000	1.000	100.000
46	Sample	DHEH6103, 5080-G	030147LCD		1.000	1.000	1.000	1.000	1.000	1.000	100.000
47	Std Check	MEDA, 5080-G.b,,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	100.000
48	Std Check	MEDB, 5080-G.b,,	190-84-9		1.000	1.000	1.000	1.000	1.000	1.000	100.000
49	Std Check	EVALB, 5080-G.b,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	100.000
50	Sample	DH991102, 5080-G	030147019		1.000	1.000	1.000	1.000	1.000	1.000	100.000
51	Sample	DHA8R102, 5080-G	030241009		1.000	1.000	1.000	1.000	1.000	1.000	100.000
52	Sample	DHA9A102, 5080-G	030241012		1.000	1.000	1.000	1.000	1.000	1.000	100.000
53	Std Check	MEDA, 5080-G.b,,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	100.000
54	Std Check	MEDB, 5080-G.b,,	190-84-9		1.000	1.000	1.000	1.000	1.000	1.000	100.000

671 410

			Method	Method	Method	Format	File	File	File	Raw File	Rpt	Name	RT	Dev
1	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5151	D-B5151	D-B5151	-	-	-	LPT1:
2	-	1	2	GEN4C	GEN4B	122190A	TOX	D-B5152	D-B5152	D-B5152	N	MED	N	LPT1:,,LP
3	-	1	2	GEN4C	GEN4B	122190A	TOX	D-B5153	D-B5153	D-B5153	N	MED	N	LPT1:,,LP
4	-	1	9	GEN4C	GEN4B	122190A	INDA	D-B5154	D-B5154	D-B5154	N	LOW	N	LPT1:
5	-	1	10	GEN4C	GEN4B	122190A	INDA	D-B5155	D-B5155	D-B5155	N	MLOW	N	LPT1:
6	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5156	D-B5156	D-B5156	N	MLOW	N	LPT1:
7	-	1	12	GEN4C	GEN4B	122190A	INDA	D-B5157	D-B5157	D-B5157	N	MLOW	N	LPT1:
8	-	1	13	GEN4C	GEN4B	122190A	INDA	D-B5158	D-B5158	D-B5158	N	MLOW	N	LPT1:
9	-	1	4	GEN4C	GEN4B	122190A	INDA	D-B5159	D-B5159	D-B5159	N	LOW	N	LPT1:
10	-	1	5	GEN4C	GEN4B	122190A	INDA	D-B5160	D-B5160	D-B5160	N	MLOW	N	LPT1:
11	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5161	D-B5161	D-B5161	N	MLOW	N	LPT1:
12	-	1	7	GEN4C	GEN4B	122190A	INDA	D-B5162	D-B5162	D-B5162	N	MLOW	N	LPT1:
13	-	1	8	GEN4C	GEN4B	122190A	INDA	D-B5163	D-B5163	D-B5163	N	MLOW	N	LPT1:
14	-	1	4	GEN4C	GEN4B	122190A	INDA	D-B5164	D-B5164	D-B5164	N	LOW	N	LPT1:
15	-	1	5	GEN4C	GEN4B	122190A	INDA	D-B5165	D-B5165	D-B5165	N	MLOW	N	LPT1:
16	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5166	D-B5166	D-B5166	N	MLOW	N	LPT1:
17	-	1	7	GEN4C	GEN4B	122190A	INDA	D-B5167	D-B5167	D-B5167	N	MLOW	N	LPT1:
18	-	1	8	GEN4C	GEN4B	122190A	INDA	D-B5168	D-B5168	D-B5168	N	MLOW	N	LPT1:
19	-	1	9	GEN4C	GEN4B	122190A	INDA	D-B5169	D-B5169	D-B5169	N	LOW	N	LPT1:
20	-	1	10	GEN4C	GEN4B	122190A	INDA	D-B5170	D-B5170	D-B5170	N	MLOW	N	LPT1:
21	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5171	D-B5171	D-B5171	N	MLOW	N	LPT1:
22	-	1	12	GEN4C	GEN4B	122190A	INDA	D-B5172	D-B5172	D-B5172	N	MLOW	N	LPT1:
23	-	1	13	GEN4C	GEN4B	122190A	INDA	D-B5173	D-B5173	D-B5173	N	MLOW	N	LPT1:
24	-	1	23	GEN4C	GEN4B	122190A	INDA	D-B5174	D-B5174	D-B5174	-	-	-	LPT1:
25	-	1	24	GEN4C	GEN4B	122190A	INDA	D-B5175	D-B5175	D-B5175	-	-	-	LPT1:
26	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5176	D-B5176	D-B5176	-	-	-	LPT1:
27	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5177	D-B5177	D-B5177	-	-	-	LPT1:
28	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5178	D-B5178	D-B5178	-	-	-	LPT1:
29	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5179	D-B5179	D-B5179	-	-	-	LPT1:
30	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5180	D-B5180	D-B5180	-	-	-	LPT1:
31	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5181	D-B5181	D-B5181	-	-	-	LPT1:
32	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5182	D-B5182	D-B5182	-	-	-	LPT1:
33	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5183	D-B5183	D-B5183	-	-	-	LPT1:
34	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5184	D-B5184	D-B5184	-	-	-	LPT1:
35	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5185	D-B5185	D-B5185	-	-	-	LPT1:
36	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5186	D-B5186	D-B5186	-	-	-	LPT1:
37	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5187	D-B5187	D-B5187	-	-	-	LPT1:
38	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5188	D-B5188	D-B5188	-	-	-	LPT1:
39	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5189	D-B5189	D-B5189	-	-	-	LPT1:
40	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5190	D-B5190	D-B5190	-	-	-	LPT1:
41	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5191	D-B5191	D-B5191	-	-	-	LPT1:
42	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5192	D-B5192	D-B5192	-	-	-	LPT1:
43	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5193	D-B5193	D-B5193	-	-	-	LPT1:
44	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5194	D-B5194	D-B5194	-	-	-	LPT1:
45	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5195	D-B5195	D-B5195	-	-	-	LPT1:
46	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5196	D-B5196	D-B5196	-	-	-	LPT1:
47	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5197	D-B5197	D-B5197	-	-	-	LPT1:
48	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5198	D-B5198	D-B5198	-	-	-	LPT1:
49	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5199	D-B5199	D-B5199	-	-	-	LPT1:
50	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5200	D-B5200	D-B5200	-	-	-	LPT1:
51	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5201	D-B5201	D-B5201	-	-	-	LPT1:
52	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5202	D-B5202	D-B5202	-	-	-	LPT1:
53	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5203	D-B5203	D-B5203	-	-	-	LPT1:
54	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5204	D-B5204	D-B5204	-	-	-	LPT1:

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\5230-G.SEQ
Created by : DE11/02/98 on : 8/23/00 11:07
Edited by : LM08/23/00 on : 8/28/00 09:39
Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
REVIEWED BY:

671 411

Number of Times Edited : 8

Sequence File Header Information:

Number of Rows : 177
Instrument Type : 760 / 900 Series Intelligent Interface
Injection Type : SINGLE

Sequence Sample Descriptions - Channel B												
Row	Type	Sample Name	Sample Number	Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend	Norm. factor
1	Std Check	EVALB, 5280-G.b.,	190-88-8	545	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Cal:Replace	MEDTOX, 5280-G.b	190-98-12		1.000	1.000	1.000	1.000	333.000	1.000	0.000	100.000
3	Cal:Replace	MEDCHLOR, 5280-G	190-85-10		1.000	1.000	1.000	1.000	333.000	1.000	0.000	100.000
4	Cal:Replace	MEDA, 5280-G.b.,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Cal:Replace	MEDB, 5280-G.b.,	190-84-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Sample	DGLF4113, 5280-G	210212001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Sample	DHN8F10A, 5280-G	100270006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Sample	DHV7M103, 5280-G	150146001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Sample	~~DHLXK108, 5280-G~~	~~100137001~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Sample	DHLXR108, 5280-G	100137002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Sample	~~DHLXT108, 5280-G~~	~~100137003~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Sample	~~DHLXW108, 5280-G~~	~~100137004~~		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Sample	DHMO3108, 5280-G	100137005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Sample	DHMO6108, 5280-G	100137006		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Sample	DHMO7108, 5280-G	100137007		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
16	Sample	DHMOA108, 5280-G	100137008		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
17	Sample	DHMOA11G, 5280-G	100137008S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
18	Sample	DHMOA11H, 5280-G	100137008D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
19	Sample	DHMOE108, 5280-G	100137009		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
20	Sample	DHMOF108, 5280-G	100137010		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Sample	DHMOH108, 5280-G	100137012		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
22	Sample	DHMOR108, 5280-G	100137014		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
23	Sample	DJ412115, 5280-G	180213004S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
24	Sample	DHQEW101, 5280-G	100137BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
25	Sample	DHQEW102, 5280-G	100137LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
26	Std Check	MEDA, 5280-G.b.,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
27	Std Check	MEDB, 5280-G.b.,	190-84-9	571	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
28	Std Check	EVALB, 5280-G.b.,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
29	Sample	DJ412116, 5280-G	180213004D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
30	Sample	DJ412104, 5280-G	180213004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
31	Sample	DJ417104, 5280-G	180213005		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
32	Sample	DJ4WJ101, 5280-G	180213BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
33	Sample	DJ4WJ102, 5280-G	180213LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
34	Sample	DJ52C101, 5280-G	180213BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
35	Sample	DJ52C102, 5280-G	180213LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
36	Sample	DJ52C103, 5280-G	180213LCD		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
37	Sample	DJ401103, 5280-G	180213001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
38	Sample	DJ6M5101, 5280-G	160154BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
39	Sample	DJ6M5102, 5280-G	160154LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
40	Sample	DHX40119, 5280-G	160154001S		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
41	Sample	DHX4011A, 5280-G	160154001D		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
42	Sample	DHX40104, 5280-G	160154001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
43	Sample	DHX47104, 5280-G	160154002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
44	Sample	DHX4A104, 5280-G	160154003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
45	Sample	DJ0QL104, 5280-G	170113001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
46	Sample	DJ4C3101, 5280-G	170224BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
47	Sample	DJ4C3102, 5280-G	170224LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
48	Sample	DJ4C3103, 5280-G	170224LCD		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
49	Std Check	MEDA, 5280-G.b.,	190-84-3		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
50	Std Check	MEDB, 5280-G.b.,	190-84-9	594	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
51	Std Check	EVALB, 5280-G.b.,	190-88-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
52	Sample	DJ1RT103, 5280-G	170224001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
53	Sample	DJ1WG103, 5280-G	170224003		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
54	Sample	DJ1X0103, 5280-G	170224004		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
55	Sample	DJ2N3101, 5280-G	160223BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
56	Sample	DJ2N3102, 5280-G	160223LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
57	Sample	DJ2N3103, 5280-G	160223LCD		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
58	Sample	DHXN9104, 5280-G	160223001		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
59	Sample	DHXND104, 5280-G	160223002		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

147	Sample	DHV5K104, 5280-G	150136006	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
148	Sample	DHV5M104, 5280-G	150136007	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
149	Sample	~~DHV5Q104, 5280-G~~	~~150136008~~	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
150	Sample	DHV5T104, 5280-G	150136009	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
151	Sample	DHV5X104, 5280-G	150136010	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
152	Sample	DHV60104, 5280-G	150136011	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
153	Sample	DJAN5101, 5280-G	180278BLK	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
154	Sample	DJAN5102, 5280-G	180278LCS	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
155	Sample	DJ4M410M, 5280-G	180278001S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
156	Sample	DJ4M410N, 5280-G	180278001D	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
157	Sample	DJ4M4103, 5280-G	180278001	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
158	Sample	DJ7C810V, 5280-G	220139001S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
159	Sample	DJ7C810W, 5280-G	220139001D	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
160	Sample	DJ7C8104, 5280-G	220139001	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
161	Sample	DJ7C9104, 5280-G	220139002	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
162	Sample	DJDTA101, 5280-G	220139BLK	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
163	Sample	DJDTA102, 5280-G	220139LCS	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
164	Std Check	MEDA, 5280-G.b.,	190-84-3	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
165	Std Check	MEDB, 5280-G.b.,	190-84-9	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
166	Std Check	EVALB, 5280-G.b.,	190-88-8	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
167	Sample	DJ7CC104, 5280-G	220139003	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
168	Sample	DHLXK108, 5280-G	100137001	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
169	Sample	~~DHLXK108, 5280-G~~	~~100137002~~	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
170	Sample	DHLXK108, 5280-G	100137003	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
171	Sample	DHLXK108, 5280-G	100137004	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
172	Sample	~~DHLXK108, 5280-G~~	~~100137005~~	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
173	Sample	DHMOA108, 5280-G	100137008	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
174	Sample	DHMOA11G, 5280-G	100137008S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
175	Sample	~~DHMOA11G, 5280-G~~	~~100137008D~~	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
176	Std Check	MEDA, 5280-G.b.,	190-84-3	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
177	Std Check	MEDB, 5280-G.b.,	190-84-9	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

Sequence Process Information - Channel B

Row	Site	Rack	Vial	Inst Method	Process Method	Calib Method	Report Format	Raw File	Result File	Baseline File	Modified Raw File	Cal Rpt	Level Name	Update RT	Out Dev
1	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5545	D-B5545		D-B5545	-	-	-	LPT1:
2	-	1	2	GEN4C	GEN4B	122190A	TOX	D-B5546	D-B5546		D-B5546	N	MED	N	LPT1:,LP
3	-	1	2	GEN4C	GEN4B	122190A	TOX	D-B5547	D-B5547		D-B5547	N	MED	N	LPT1:,LP
4	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5548	D-B5548		D-B5548	N	MLOW	N	LPT1:
5	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5549	D-B5549		D-B5549	N	MLOW	N	LPT1:
6	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5550	D-B5550		D-B5550	-	-	-	LPT1:
7	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5551	D-B5551		D-B5551	-	-	-	LPT1:
8	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5552	D-B5552		D-B5552	-	-	-	LPT1:
9	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5553	D-B5553		D-B5553	-	-	-	LPT1:
10	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5554	D-B5554		D-B5554	-	-	-	LPT1:
11	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5555	D-B5555		D-B5555	-	-	-	LPT1:
12	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5556	D-B5556		D-B5556	-	-	-	LPT1:
13	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5557	D-B5557		D-B5557	-	-	-	LPT1:
14	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5558	D-B5558		D-B5558	-	-	-	LPT1:
15	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5559	D-B5559		D-B5559	-	-	-	LPT1:
16	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5560	D-B5560		D-B5560	-	-	-	LPT1:
17	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5561	D-B5561		D-B5561	-	-	-	LPT1:
18	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5562	D-B5562		D-B5562	-	-	-	LPT1:
19	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5563	D-B5563		D-B5563	-	-	-	LPT1:
20	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5564	D-B5564		D-B5564	-	-	-	LPT1:
21	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5565	D-B5565		D-B5565	-	-	-	LPT1:
22	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5566	D-B5566		D-B5566	-	-	-	LPT1:
23	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5567	D-B5567		D-B5567	-	-	-	LPT1:
24	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5568	D-B5568		D-B5568	-	-	-	LPT1:
25	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5569	D-B5569		D-B5569	-	-	-	LPT1:
26	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5570	D-B5570		D-B5570	-	-	-	LPT1:
27	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5571	D-B5571		D-B5571	-	-	-	LPT1:
28	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5572	D-B5572		D-B5572	-	-	-	LPT1:
29	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5573	D-B5573		D-B5573	-	-	-	LPT1:
30	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5574	D-B5574		D-B5574	-	-	-	LPT1:
31	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5575	D-B5575		D-B5575	-	-	-	LPT1:
32	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5576	D-B5576		D-B5576	-	-	-	LPT1:
33	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5577	D-B5577		D-B5577	-	-	-	LPT1:
34	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5578	D-B5578		D-B5578	-	-	-	LPT1:
35	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5579	D-B5579		D-B5579	-	-	-	LPT1:
36	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5580	D-B5580		D-B5580	-	-	-	LPT1:
37	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5581	D-B5581		D-B5581	-	-	-	LPT1:
38	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5582	D-B5582		D-B5582	-	-	-	LPT1:
39	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5583	D-B5583		D-B5583	-	-	-	LPT1:
40	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5584	D-B5584		D-B5584	-	-	-	LPT1:
41	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5585	D-B5585		D-B5585	-	-	-	LPT1:
42	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5586	D-B5586		D-B5586	-	-	-	LPT1:
43	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5587	D-B5587		D-B5587	-	-	-	LPT1:
44	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5588	D-B5588		D-B5588	-	-	-	LPT1:
45	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5589	D-B5589		D-B5589	-	-	-	LPT1:
46	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5590	D-B5590		D-B5590	-	-	-	LPT1:
47	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5591	D-B5591		D-B5591	-	-	-	LPT1:
48	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5592	D-B5592		D-B5592	-	-	-	LPT1:
49	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5593	D-B5593		D-B5593	-	-	-	LPT1:

50	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5594	D-B5594	D-B5594	-	-	-	LPT1:
51	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5595	D-B5595	D-B5595	-	-	-	LPT1:
52	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5596	D-B5596	D-B5596	-	-	-	LPT1:
53	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5597	D-B5597	D-B5597	-	-	-	LPT1:
54	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5598	D-B5598	D-B5598	-	-	-	LPT1:
55	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5599	D-B5599	D-B5599	-	-	-	LPT1:
56	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5600	D-B5600	D-B5600	-	-	-	LPT1:
57	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5601	D-B5601	D-B5601	-	-	-	LPT1:
58	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5602	D-B5602	D-B5602	-	-	-	LPT1:
59	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5603	D-B5603	D-B5603	-	-	-	LPT1:
60	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5604	D-B5604	D-B5604	-	-	-	LPT1:
61	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5605	D-B5605	D-B5605	-	-	-	LPT1:
62	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5606	D-B5606	D-B5606	-	-	-	LPT1:
63	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5607	D-B5607	D-B5607	-	-	-	LPT1:
64	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5608	D-B5608	D-B5608	-	-	-	LPT1:
65	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5609	D-B5609	D-B5609	-	-	-	LPT1:
66	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5610	D-B5610	D-B5610	-	-	-	LPT1:
67	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5611	D-B5611	D-B5611	-	-	-	LPT1:
68	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5612	D-B5612	D-B5612	-	-	-	LPT1:
69	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5613	D-B5613	D-B5613	-	-	-	LPT1:
70	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5614	D-B5614	D-B5614	-	-	-	LPT1:
71	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5615	D-B5615	D-B5615	-	-	-	LPT1:
72	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5616	D-B5616	D-B5616	-	-	-	LPT1:
73	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5617	D-B5617	D-B5617	-	-	-	LPT1:
74	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5618	D-B5618	D-B5618	-	-	-	LPT1:
75	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5619	D-B5619	D-B5619	-	-	-	LPT1:
76	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5620	D-B5620	D-B5620	-	-	-	LPT1:
77	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5621	D-B5621	D-B5621	-	-	-	LPT1:
78	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5622	D-B5622	D-B5622	-	-	-	LPT1:
79	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5623	D-B5623	D-B5623	-	-	-	LPT1:
80	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5624	D-B5624	D-B5624	-	-	-	LPT1:
81	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5625	D-B5625	D-B5625	-	-	-	LPT1:
82	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5626	D-B5626	D-B5626	-	-	-	LPT1:
83	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5627	D-B5627	D-B5627	-	-	-	LPT1:
84	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5628	D-B5628	D-B5628	-	-	-	LPT1:
85	-	1	1	GEN4C	GEN4B	122190A	EVAL							

137	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5681	D-B5681	D-B5681	-	-	-	LPT1:
138	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5682	D-B5682	D-B5682	-	-	-	LPT1:
139	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5683	D-B5683	D-B5683	-	-	-	LPT1:
140	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5684	D-B5684	D-B5684	-	-	-	LPT1:
141	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5685	D-B5685	D-B5685	-	-	-	LPT1:
142	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5686	D-B5686	D-B5686	-	-	-	LPT1:
143	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5687	D-B5687	D-B5687	-	-	-	LPT1:
144	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5688	D-B5688	D-B5688	-	-	-	LPT1:
145	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5689	D-B5689	D-B5689	-	-	-	LPT1:
146	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5690	D-B5690	D-B5690	-	-	-	LPT1:
147	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5691	D-B5691	D-B5691	-	-	-	LPT1:
148	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5692	D-B5692	D-B5692	-	-	-	LPT1:
149	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5693	D-B5693	D-B5693	-	-	-	LPT1:
150	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5694	D-B5694	D-B5694	-	-	-	LPT1:
151	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5695	D-B5695	D-B5695	-	-	-	LPT1:
152	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5696	D-B5696	D-B5696	-	-	-	LPT1:
153	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5697	D-B5697	D-B5697	-	-	-	LPT1:
154	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5698	D-B5698	D-B5698	-	-	-	LPT1:
155	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5699	D-B5699	D-B5699	-	-	-	LPT1:
156	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5700	D-B5700	D-B5700	-	-	-	LPT1:
157	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5701	D-B5701	D-B5701	-	-	-	LPT1:
158	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5702	D-B5702	D-B5702	-	-	-	LPT1:
159	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5703	D-B5703	D-B5703	-	-	-	LPT1:
160	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5704	D-B5704	D-B5704	-	-	-	LPT1:
161	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5705	D-B5705	D-B5705	-	-	-	LPT1:
162	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5706	D-B5706	D-B5706	-	-	-	LPT1:
163	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5707	D-B5707	D-B5707	-	-	-	LPT1:
164	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5708	D-B5708	D-B5708	-	-	-	LPT1:
165	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5709	D-B5709	D-B5709	-	-	-	LPT1:
166	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5710	D-B5710	D-B5710	-	-	-	LPT1:
167	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5711	D-B5711	D-B5711	-	-	-	LPT1:
168	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5712	D-B5712	D-B5712	-	-	-	LPT1:
169	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5713	D-B5713	D-B5713	-	-	-	LPT1:
170	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5714	D-B5714	D-B5714	-	-	-	LPT1:
171	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5715	D-B5715	D-B5715	-	-	-	LPT1:
172	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5716	D-B5716	D-B5716	-	-	-	LPT1:
173	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5717	D-B5717	D-B5717	-	-	-	LPT1:
174	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5718	D-B5718	D-B5718	-	-	-	LPT1:
175	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B5719	D-B5719	D-B5719	-	-	-	LPT1:
176	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B5720	D-B5720	D-B5720	-	-	-	LPT1:
177	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B5721	D-B5721	D-B5721	-	-	-	LPT1:

676 415

671 416

PSR024 8/24/00 12:42:59 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: YUSHINSC

METHOD: QJ Pesticides (8081A)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
2F CLP1	DJ7C8-1-04	___	261331	399411	A-36-QJ	COH220139	001		SOLID	0	3
2F CLP1	DJ7C9-1-04	___	261332	399411	A-36-QJ	COH220139	002		SOLID	0	3
2F CLP1	DJ7CC-1-04	___	261333	399411	A-36-QJ	COH220139	003		SOLID	0	3

RELINQUISHED BY

RECEIVED BY

DATE/TIME

P. Yushinski
P. Yushinski

P. Yushinski
P. Yushinski

8-24-00 1510
8-24-00 2015

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

HERBICIDE DATA

671 418

HERBICIDE
QC SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT QESSDG:

Lot #: COH220139

	CLIENT ID.	SRG01	TOT OUT
	=====	=====	=====
01	DF/S1/0234/SDC/032	59	00
02	DF/S1/0234/SDC/029	52	00
03	DF/S1/0234/SDC/030	51	00
04	METHOD BLK. DJDTD101	93	00
05	LCS DJDTD102	86	00
06	DF/S1/0234/SDC/029 D	69	00
07	DF/S1/0234/SDC/029 S	71	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

671 420

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0H240000

WO #: DJDTD102

BATCH: 0237484

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	% REC	QC LIMITS REC	QUAL
2,4-D	0.160	0.122	76	28 - 136	
2,4,5-TP (Silvex)	0.0400	0.0322	80	50 - 128	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Lot #: C0H220139

WO #: DJ7C810X

BATCH: 0237484

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE CONCENT. (mg/L)	MS CONCENT. (mg/L)	MS % REC	LIMITS REC	QUAL
2,4-D	0.160	ND	0.150	94	35 - 133	
2,4,5-TP (Silvex)	0.0400	ND	0.0342	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

671-422

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Matrix Spike ID: DF/S1/0234/SDC/029

Lot #: C0H220139

WO #: DJ7C8110

BATCH: 0237484

COMPOUND	SPIKE ADDED	MSD CONCENT.	MSD %	QC LIMITS	QUAL
	(mg/L)	(mg/L)	REC RPD	RPD REC	
2,4-D	0.160	0.153	96 2.0	20 35 - 133	
2,4,5-TP (Silvex)	0.0400	0.0339	85 0.70	20 50 - 131	

NOTES(S):

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

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

COMMENTS:

FORM III

SW846 8151A METHOD BLANK SUMMARY

BLANK WORKORDER NO.

671 423

DJDTD101

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: A-A50349.

Lot Number: COH220139

Matrix: SOLID

Extraction Method:

Date Extracted: 08/24/00

Date Analyzed(1): 08/28/00

Date Analyzed(2): N/A

Time Analyzed(1): 14:12

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	CHECK SAMPLE	DJDTD102 C	08/28/00	N/A
02	DF/S1/0234/SDC/032	DJ7CC105	08/28/00	N/A
03	DF/S1/0234/SDC/029	DJ7C810X S	08/28/00	N/A
04	DF/S1/0234/SDC/029	DJ7C8105	08/28/00	N/A
05	DF/S1/0234/SDC/029	DJ7C8110 D	08/28/00	N/A
06	DF/S1/0234/SDC/030	DJ7C9105	08/28/00	N/A
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

FORM IV

671 424

**HERBICIDE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C8105

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: 14

QC Batch: 0237484

Client Sample Id: DF/S1/0234/SDC/029

		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

671 426

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50343.D

Report Date: 28-Aug-2000 12:59

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50343.D
 Lab Smp Id: DJ7C8105 Client Smp ID: DF/S1/0234/SDC/029
 Inj Date : 28-AUG-2000 11:20
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJ7C8105,5240.b
 Misc Info : 22013901
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 28-Aug-2000 12:51 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:10 Cal File: A-A50312.D
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON				Compound Not Detected.		
\$ 2 DCAA	10.585	10.570	0.015	827374	0.02603	0.05206 (aR)
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected.		
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				Compound Not Detected.		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected.		
9 2,4,5-TP (SILVEX)				Compound Not Detected.		
10 2,4,5-T				Compound Not Detected.		
11 DINOSEB				Compound Not Detected.		
12 2,4-DB	18.529	18.562	-0.033	29842	0.00219	0.004377 (a)

Data File: \\QPITPA02\D\chem\gcl.i\5240.b\A-A50343.D
Report Date: 28-Aug-2000 12:59

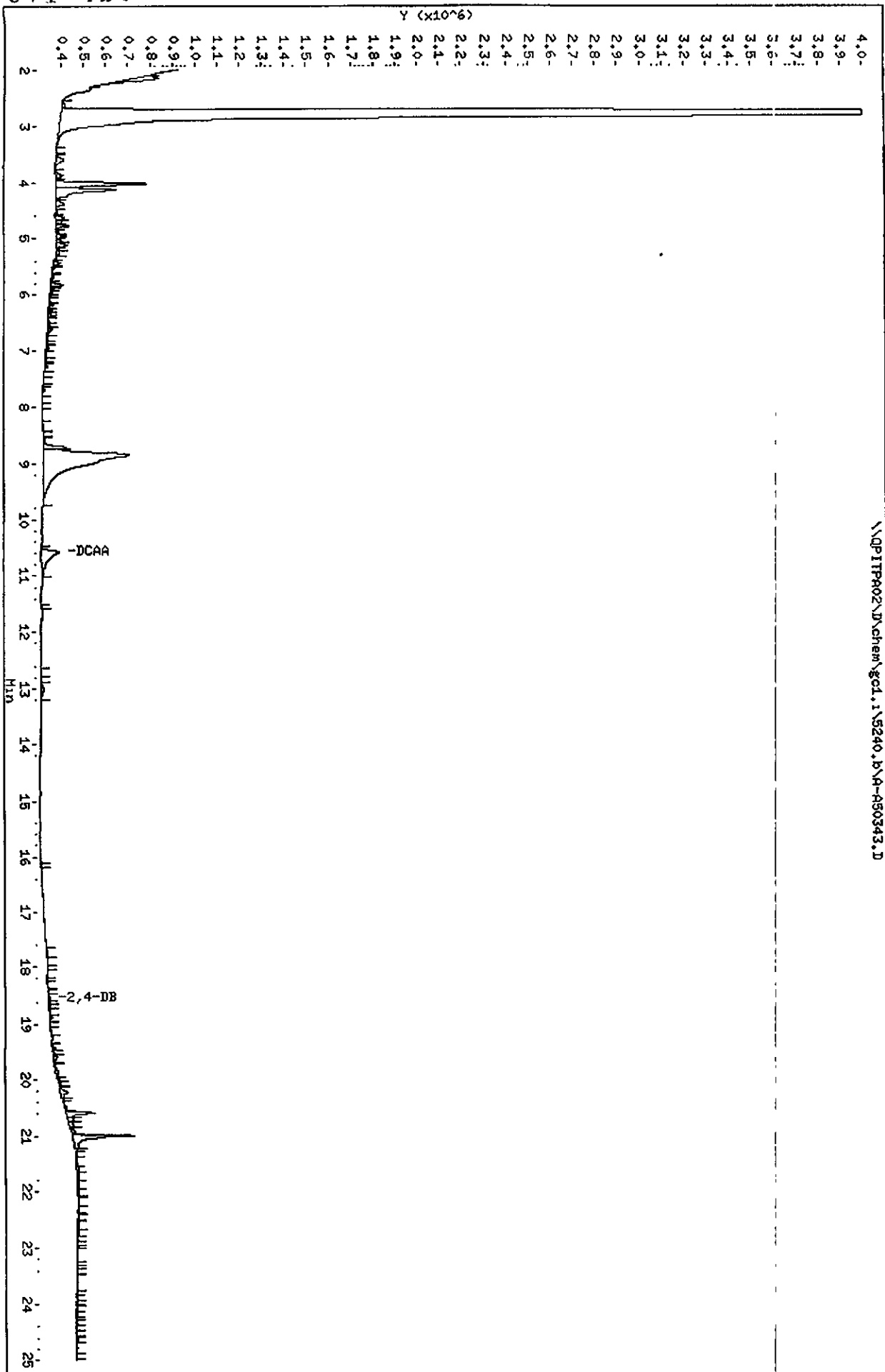
QC Flag Legend

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

Data File: \\QP1TPA02\B\chem\gc1.1\5240.b\A-A50343.D
 Date : 28-AUG-2000 11:20
 Client ID: DF/S1/0234/SDC/029
 Sample Info: DJ7C8105.5240.b
 Volume Injected (uL): 1.0
 Column phase: DB608

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

\\QP1TPA02\B\chem\gc1.1\5240.b\A-A50343.D



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 002

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C9105

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: 15

QC Batch: 0237484

Client Sample Id: DF/S1/0234/SDC/030

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

671 430

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50346.D
 Report Date: 28-Aug-2000 13:50

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50346.D
 Lab Smp Id: DJ7C9105 Client Smp ID: DF/S1/0234/SDC/030
 Inj Date : 28-AUG-2000 12:46
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJ7C9105,5240.b
 Misc Info : 22013902
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 28-Aug-2000 12:51 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:10 Cal File: A-A50312.D
 Als bottle: 7
 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	10.585	10.570	0.015	810055	0.02548	0.05097(aR)
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected.		
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				Compound Not Detected.		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected.		
9 2,4,5-TP(SILVEX)				Compound Not Detected.		
10 2,4,5-T				Compound Not Detected.		
11 DINOSEB				Compound Not Detected.		
12 2,4-DB	18.528	18.562	-0.034	29279	0.00215	0.00429(a)

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50346.D
Report Date: 28-Aug-2000 13:50

671 431

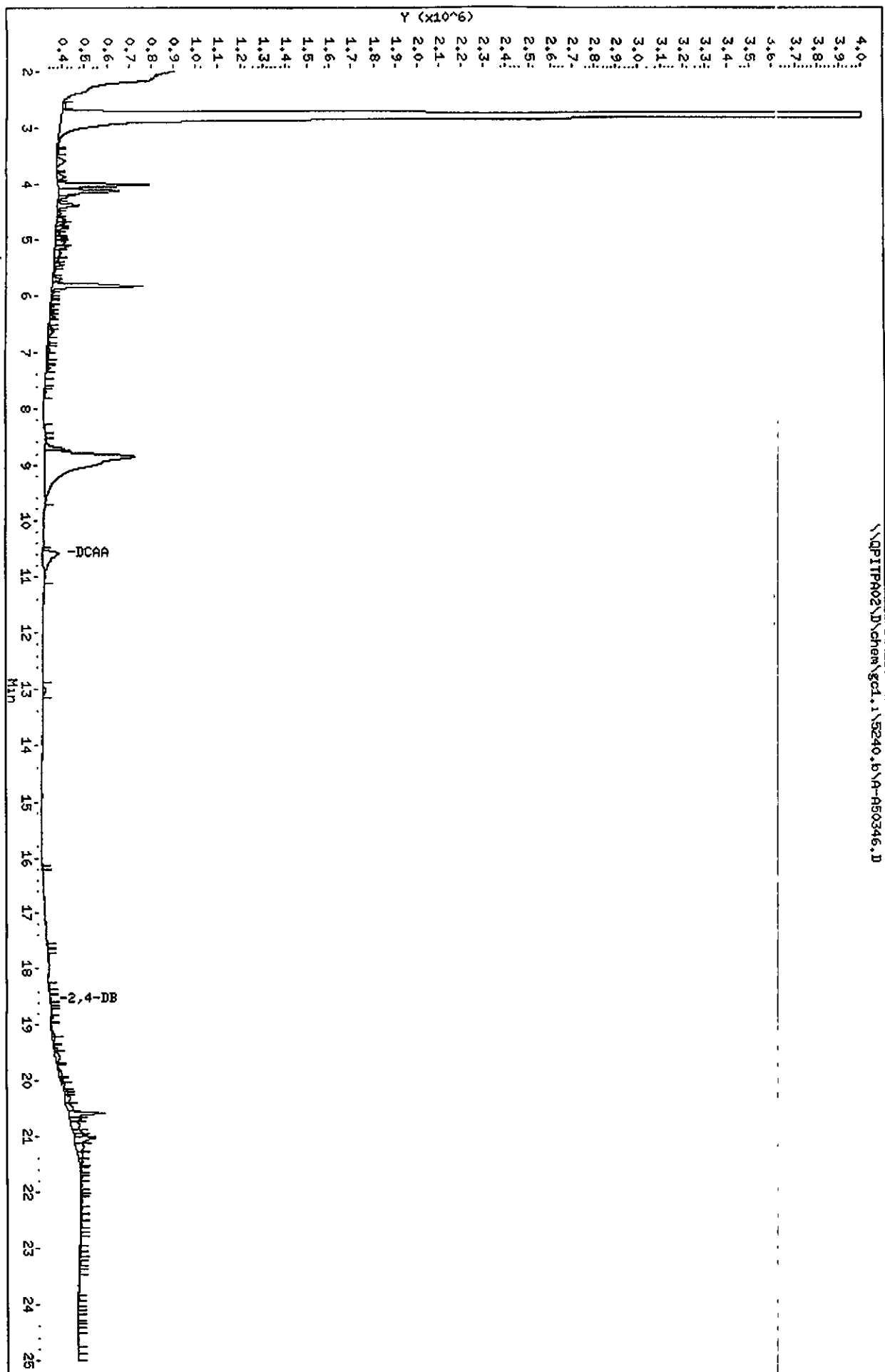
QC Flag Legend

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

671 432

Data File: \\APITPA02\chem\gc1.1\5240.b\A-A50346.D
Date: 28-AUG-2000 12:46
Client ID: DF/S4/0234/SDC/030
Sample Info: DJC9105,5240.b
Volume Injected (uL): 1.0
Column phase: DB608

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



UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 003

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7CC105

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: 15

QC Batch: 0237484

Client Sample Id: DF/S1/0234/SDC/032

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

FORM I

671 434

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50347.D

Report Date: 28-Aug-2000 13:51

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50347.D
 Lab Smp Id: DJ7CC105 Client Smp ID: DF/S1/0234/SDC/032
 Inj Date : 28-AUG-2000 13:14
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJ7CC105,5240.b
 Misc Info : 22013903
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 28-Aug-2000 12:51 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:10 Cal File: A-A50312.D
 Als bottle: 8
 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	10.584	10.570	0.014	930163	0.02926	0.05852 (aR)
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected		
5 MCPA				Compound Not Detected		
6 DICHLOROPROP				Compound Not Detected		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected.		
9 2,4,5-TP(SILVEX)				Compound Not Detected.		
10 2,4,5-T				Compound Not Detected.		
11 DINOSEB				Compound Not Detected.		
12 2,4-DB	18.518	18.562	-0.044	35069	0.00257	0.005144 (a)

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50347.D
Report Date: 28-Aug-2000 13:51

671 435

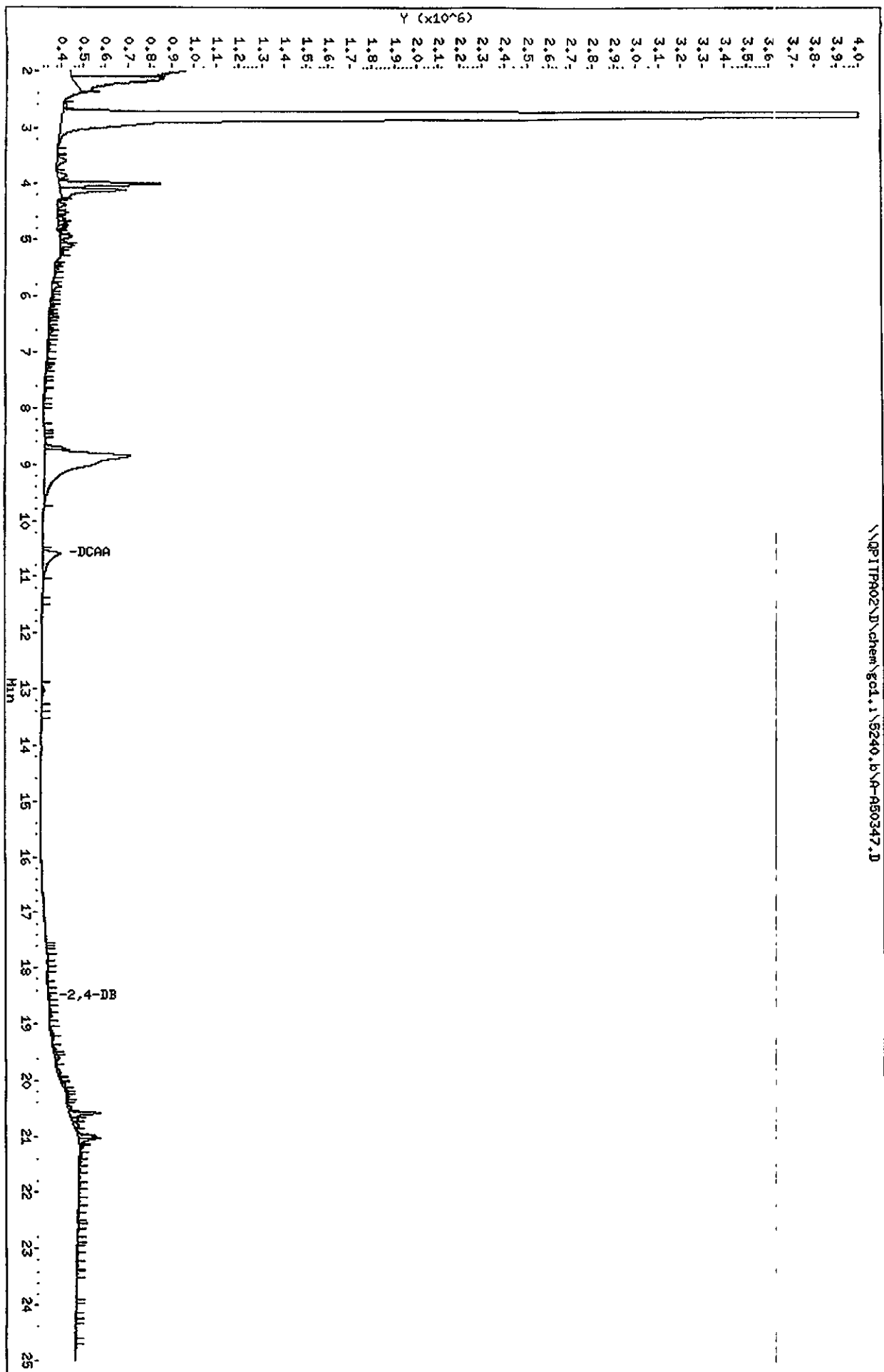
QC Flag Legend

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

671 436

Data File: \\QPI1P802\N\chem\gc1.1\5240.b\A-A50347.D
Date: 28-AUG-2000 13:14
Client ID: MF/S1/0234/SDC/032
Sample Info: DJ7CC405.5240.b
Volume Injected (uL): 1.0
Column phase: DB608

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



HERBICIDE
CALIBRATION DATA

: —

671 438

60

68901A

DB 608

Report Date : 28-Aug-2000 12:50

STL - Pittsburgh

COMPOUND LISTING

Method file : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
 Quant Method : ESTD Target Version : 4.04
 Last Update : 28-Aug-2000 12:47 Number of Cpnds : 12
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

 Initial:Start Threshold 376.000000
 Initial:End Threshold 188.000000
 Initial:Area Threshold 3760.000000
 Initial:P-P Resolution 1.000000
 Initial:Bunch Factor 9.000000
 Initial:Negative Peaks ON
 Initial:Tension 0.200000

Compound	RT	RT Window	RF
1 DALAPON	3.730	3.660-3.800	9.61e+006
\$ 2 DCAA	10.570	10.500-10.640	3.18e+007
3 MCPP	11.011	10.941-11.081	4.82e+004
4 DICAMBA	11.184	11.114-11.254	2.17e+007
5 MCPA	11.970	11.900-12.040	5.32e+004
6 DICHLOROPROP	12.804	12.734-12.874	4.46e+006
7 2,4-D	14.305	14.235-14.375	3.81e+006
8 PENTACHLOROPHENOL	15.526	15.456-15.596	5.32e+007
9 2,4,5-TP(SILVEX)	16.759	16.689-16.829	1.77e+008
10 2,4,5-T	17.886	17.816-17.956	1.14e+008
11 DINOSEB	18.064	17.994-18.134	1.59e+008
12 2,4-DB	18.563	18.493-18.633	1.36e+007

6E
68901A
DB608

671 439

Report Date : 24-Aug-2000 14:35

STL - Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 24-AUG-2000 07:14
End Cal Date : 24-AUG-2000 09:10
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
Cal Date : 24-Aug-2000 14:34 gc
Curve Type : Average

Calibration File Names:

Level 1: \\qpitpa02\d\chem\gc1.i\5240.b\A-A50308.D
Level 2: \\qpitpa02\d\chem\gc1.i\5240.b\A-A50309.D
Level 3: \\qpitpa02\d\chem\gc1.i\5240.b\A-A50310.D
Level 4: \\qpitpa02\d\chem\gc1.i\5240.b\A-A50311.D
Level 5: \\qpitpa02\d\chem\gc1.i\5240.b\A-A50312.D

	0.00500	0.01000	0.02500	0.05000	0.10000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
1 DALAPON	10507000	10144273	9662779	8981185	8768824	9612812	7.708
3 MCPP	60855	60905	51317	38760	29206	48209	28.988<-
4 DICAMBA	19703019	21195070	22430329	22312585	22877459	21703693	5.891
5 MCPA	66843	66168	56547	42890	33763	53242	27.372<-
6 DICHLOROPROP	4031038	4468160	4686050	4573912	4538761	4459584	5.654
7 2,4-D	3234739	3679741	3959330	4009324	4147626	3806152	9.508
8 PENTACHLOROPHENOL	43901128	49021053	54577820	56904840	61608790	53202726	12.963
9 2,4,5-TP(SILVEX)	176310857	177345619	180678199	174235107	178195393	177353035	1.339
10 2,4,5-T	103483302	112905143	113286635	115619692	126644704	114387895	7.236
11 DINOSEB	164995268	156852598	166286063	152838150	153477874	158889991	4.006
12 2,4-DB	10894171	13972820	14292509	13497722	15522456	13635935	12.510
\$ 2 DCAA	33862535	34516259	32770740	29724782	28063179	31787499	8.736

10.99%
RSD

671 440

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50342.D
 Report Date: 28-Aug-2000 12:48

7E
 68901A
 DB608

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 28-AUG-2000 10:51
 Lab File ID: A-A50342.D Init. Cal. Date(s): 24-AUG-2000 24-AUG-2000
 Analysis Type: Init. Cal. Times: 07:14 09:10
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m

COMPOUND	RRF	RFO	MIN	MAX
=====	=====	=====	=====	=====
1 DALAPON	9612812	9700387	0.010	15.0
2 DCAA	31787499	31651257	0.010	15.0
3 MCPP	48209	50310	0.010	15.0
4 DICAMBA	21703693	22083059	0.010	15.0
5 MCPA	53242	55973	0.010	15.0
6 DICHLOROPROP	4459584	4570672	0.010	15.0
7 2,4-D	3806152	3981081	0.010	15.0
8 PENTACHLOROPHENOL	53202726	53978383	0.010	15.0
9 2,4,5-TP (SILVEX)	177353035	173464976	0.010	15.0
10 2,4,5-T	114387895	115031706	0.010	15.0
11 DINOSEB	158889991	150799370	0.010	15.0
12 2,4-DB	13635935	14364970	0.010	15.0

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50350.D
 Report Date: 28-Aug-2000 15:54

1E
 68901A
 DB608

671 441

STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 28-AUG-2000 14:40
 Lab File ID: A-A50350.D Init. Cal. Date(s): 24-AUG-2000 24-AUG-2000
 Analysis Type: Init. Cal. Times: 07:14 09:10
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m

COMPOUND	RRF	RFO	MIN	MAX
1 DALAPON	9612812	10173075	0.010	5.8 15.0
\$ 2 DCAA	31787499	33761163	0.010	6.2 15.0
3 MCPP	48209	52593	0.010	9.1 15.0
4 DICAMBA	21703693	23167459	0.010	6.7 15.0
5 MCPA	53242	57211	0.010	7.5 15.0
6 DICHLOROPROP	4459584	4885861	0.010	9.6 15.0
7 2,4-D	3806152	4176052	0.010	9.7 15.0
8 PENTACHLOROPHENOL	53202726	55139662	0.010	3.6 15.0
9 2,4,5-TP(SILVEX)	177353035	181739763	0.010	2.5 15.0
10 2,4,5-T	114387895	121479052	0.010	6.2 15.0
11 DINOSBB	158889991	164348425	0.010	3.4 15.0
12 2,4-DB	13635935	14867917	0.010	9.0 15.0

671 442

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SD3 No.: C0H220139

GC Column: DB608

ID: 0.53 (mm) Init. Calib. Date(s): 08/24/00 08/24/00

Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 10.57							
EPA SAMPLE NO.		LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #	
=====		=====	=====	=====	=====	=====	
01		LHERB	08/24/00	0714	10.58		
02		MLHERB	08/24/00	0743	10.58		
03		MHERB	08/24/00	0812	10.58		
04		MHHERB	08/24/00	0841	10.57		
05		HHERB	08/24/00	0910	10.57		
06		MHERB	08/28/00	1051	10.57		
07	DF/S1/0234/S	DJ7C8105	08/28/00	1120	10.59		
08	DF/S1/0234/S	DJ7C810X	08/28/00	1148	10.58		
09	DF/S1/0234/S	DJ7C8110	08/28/00	1217	10.57		
10	DF/S1/0234/S	DJ7C9105	08/28/00	1246	10.59		
11	DF/S1/0234/S	DJ7CC105	08/28/00	1314	10.58		
12	LCS	DJDTD102	08/28/00	1343	10.58		
13	BLK	DJDTD101	08/28/00	1412	10.59		
14		MHERB	08/28/00	1440	10.57		
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\5240.b\A-A50308.D
 Report Date: 24-Aug-2000 15:00

STL - Pittsburgh

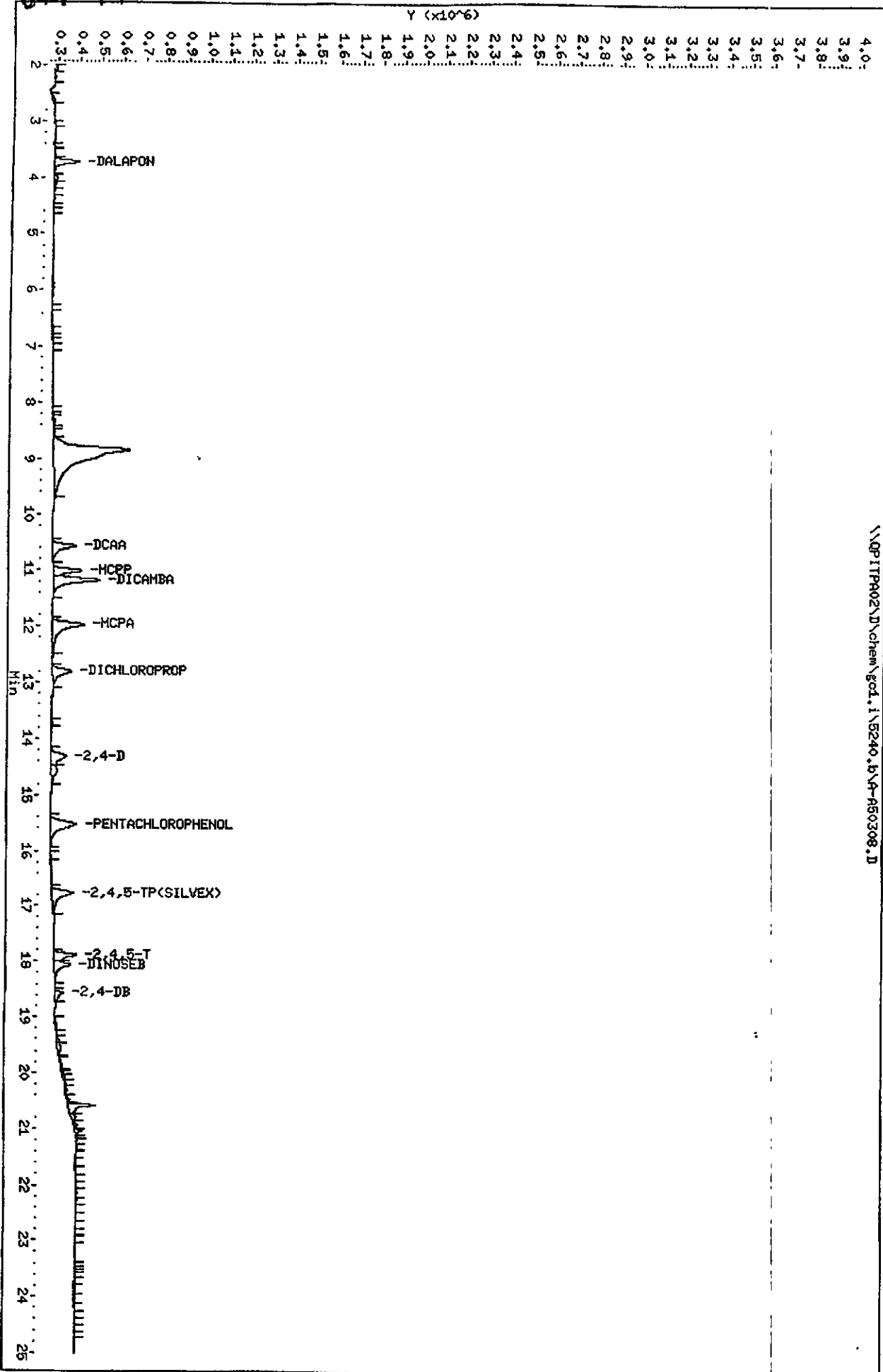
Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50308.D
 Lab Smp Id: Lherb
 Inj Date : 24-AUG-2000 07:14
 Operator : 01797
 Smp Info : Lherb, 5240.b
 Misc Info : 190-94-1
 Comment :
 Method : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 24-Aug-2000 14:35 gc
 Cal Date : 24-AUG-2000 07:14
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC043

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A50308.D
 Calibration Sample, Level: 1
 Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.729	3.732	-0.003	115577	0.01100	0.001930
\$ 2 DCAA	10.576	10.576	0.000	721272	0.02130	0.003672
3 MCPP	11.014	11.016	-0.002	129012	2.12000	0.4630
4 DICAMBA	11.187	11.188	-0.001	208852	0.01060	0.001482
5 MCPA	11.975	11.977	-0.002	143045	2.14000	0.4608
6 DICHLOROPROP	12.803	12.807	-0.004	85458	0.02120	0.002957
7 2,4-D	14.323	14.315	0.008	68253	0.02110	0.002717
8 PENTACHLOROPHENOL	15.538	15.536	0.002	116777	0.00266	0.0003290
9 2,4,5-TP(SILVEX)	16.769	16.754	0.015	925632	0.00525	0.0008279
10 2,4,5-T	17.886	17.890	-0.004	545357	0.00527	0.0007215
11 DINOSEB	18.066	18.065	0.001	523035	0.00317	0.0005199
12 2,4-DB	18.566	18.567	-0.001	229867	0.02110	0.002463

Data File: \\NPITPA02\chem\gcl.i\5240.b\A-A50308.D
 Date: 24-AUG-2000 07:14
 Client ID:
 Sample Info: Lherb,5240.b
 Column phase: DB608

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



Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50309.D
Report Date: 24-Aug-2000 15:00

671 445

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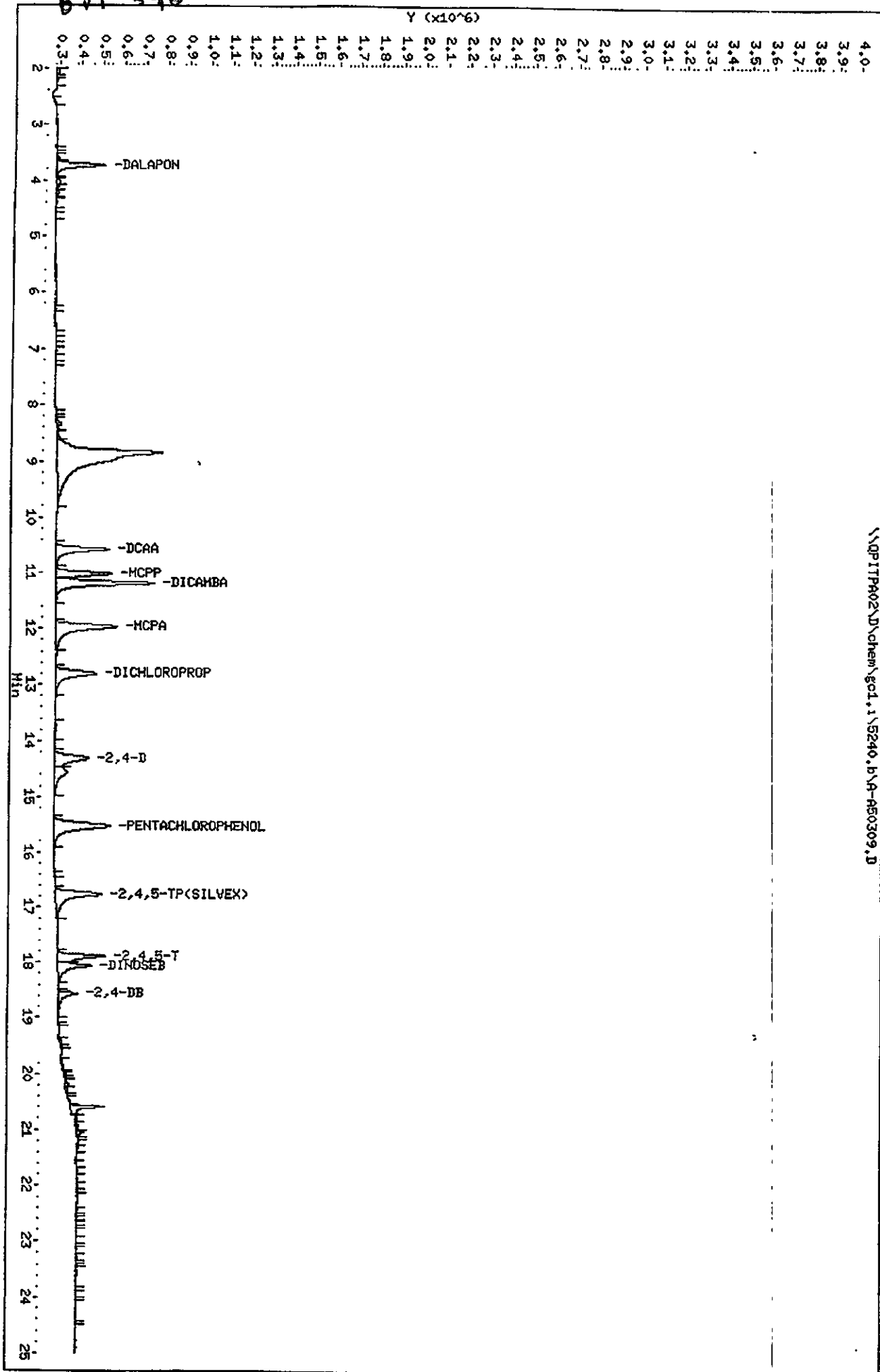
Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50309.D
Lab Smp Id: MLherb
Inj Date : 24-AUG-2000 07:43
Operator : 01797
Smp Info : MLherb,5240.b
Misc Info : 190-94-2
Comment :
Method : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
Meth Date : 24-Aug-2000 14:35 gc
Cal Date : 24-AUG-2000 07:14
Als bottle: 3
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC043

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-A50308.D
Calibration Sample, Level: 2
Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
*****	==	=====	=====	=====	=====	=====
1 DALAPON	3.728	3.732	-0.004	223174	0.02200	0.005373
\$ 2 DCAA	10.575	10.576	-0.001	1466941	0.04250	0.01080
3 MCPP	11.011	11.016	-0.005	259456	4.26000	1.521
4 DICAMBA	11.184	11.188	-0.004	451455	0.02130	0.004381
5 MCPA	11.975	11.977	-0.002	283197	4.28000	1.480
6 DICHLOROPROP	12.804	12.807	-0.003	189450	0.04240	0.009083
7 2,4-D	14.315	14.315	0.000	156389	0.04250	0.008454
8 PENTACHLOROPHENOL	15.535	15.536	-0.001	260792	0.00532	0.0009779
9 2,4,5-TP(SILVEX)	16.766	16.754	0.012	1862129	0.01050	0.002302
10 2,4,5-T	17.895	17.890	0.005	1185504	0.01050	0.002147
11 DINOSEB	18.064	18.065	-0.001	996014	0.00635	0.001379
12 2,4-DB	18.567	18.567	0.000	589653	0.04220	0.008583

Data File: \\QPIPPA02\chem\gcl.i\5240.6\A-A50309.D
 Date: 24-AUG-2000 07:43
 Client ID:
 Sample Info: MLherb, 5240.b
 Column phase: DB608

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



Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50310.D
Report Date: 24-Aug-2000 15:00

671 447

STL - Pittsburgh

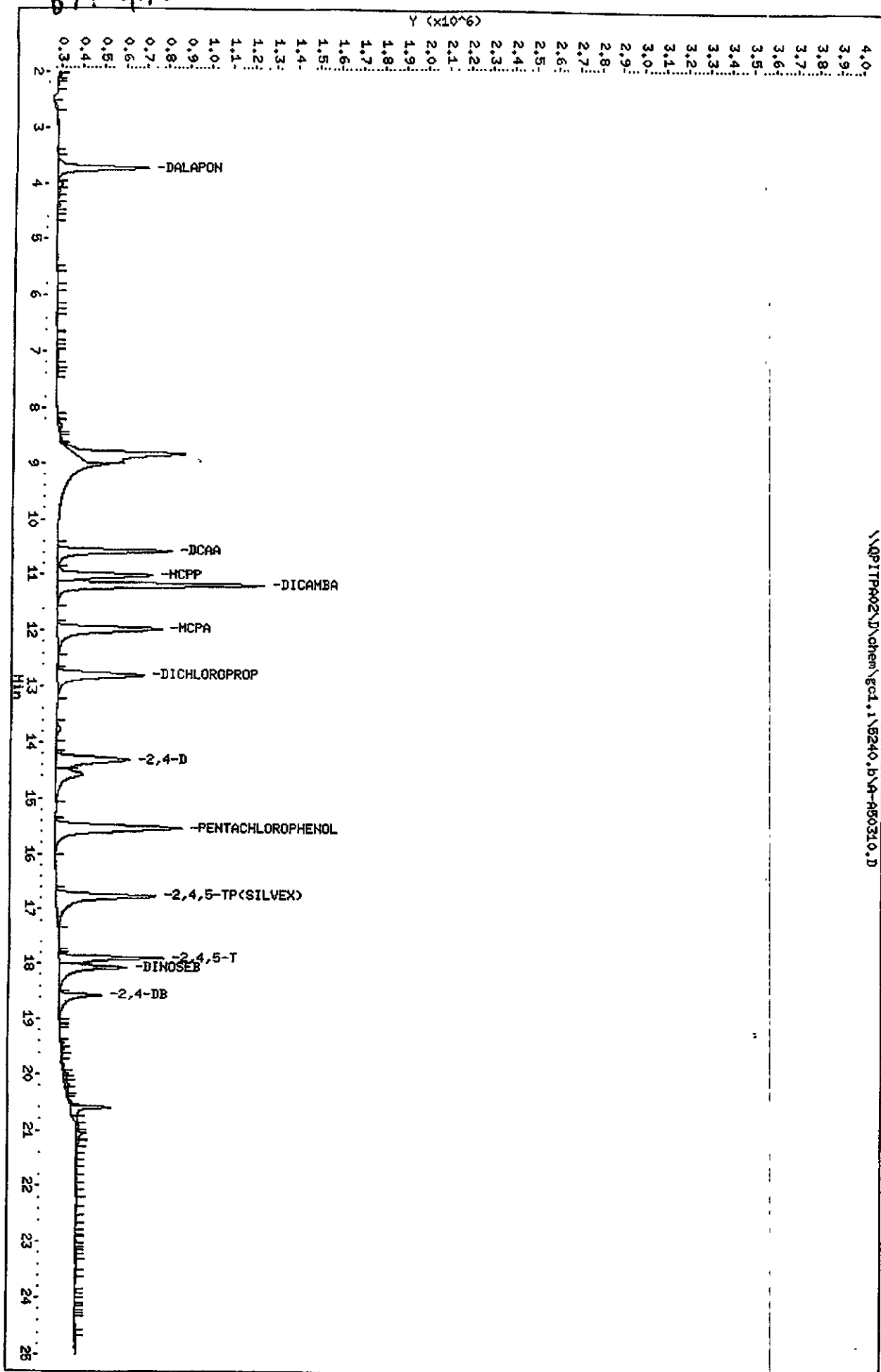
Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50310.D
Lab Smp Id: Mherb
Inj Date : 24-AUG-2000 08:12
Operator : 01797
Smp Info : Mherb,5240.b
Misc Info : 190-94-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
Meth Date : 24-Aug-2000 14:35 gc
Cal Date : 24-AUG-2000 09:10
Als bottle: 4
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-A50312.D
Calibration Sample, Level: 3
Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	3.732	3.732	0.000	424196	0.04390	0.005369
\$ 2 DCAA	10.576	10.576	0.000	2788790	0.08510	0.01082
3 MCPP	11.016	11.016	0.000	437225	8.52000	1.128
4 DICAMBA	11.188	11.188	0.000	953289	0.04250	0.005408
5 MCPA	11.977	11.977	0.000	484040	8.56000	1.124
6 DICHLOROPROP	12.807	12.807	0.000	397377	0.08480	0.01099
7 2,4-D	14.315	14.315	0.000	336939	0.08510	0.01089
8 PENTACHLOROPHENOL	15.536	15.536	0.000	580708	0.01064	0.001338
9 2,4,5-TP(SILVEX)	16.754	16.754	0.000	3812310	0.02110	0.002669
10 2,4,5-T	17.890	17.890	0.000	2390348	0.02110	0.002540
11 DINOSBB	18.065	18.065	0.000	2111833	0.01270	0.001640
12 2,4-DB	18.567	18.567	0.000	1207717	0.08450	0.01050

Data File: \NPI\TFA02\Nchem\gc1.i\5240.b\A-A50310.D
 Date: 24-AUG-2000 08:12
 Client ID:
 Sample Info: Herb,5240.b
 Column phase: DB608

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



Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50311.D
Report Date: 24-Aug-2000 15:00

671 449

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50311.D
Lab Smp Id: MHherb
Inj Date : 24-AUG-2000 08:41
Operator : 01797
Smp Info : MHherb,5240.b
Misc Info : 190-94-4
Comment :
Method : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
Meth Date : 24-Aug-2000 14:35 gc
Cal Date : 24-AUG-2000 07:14
Als bottle: 5
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC043

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-A50308.D
Calibration Sample, Level: 4
Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.731	3.732	-0.001	788548	0.08780	0.03109
\$ 2 DCAA	10.570	10.576	-0.006	5053213	0.17000	0.06140
3 MCPP	11.013	11.016	-0.003	658915	17.0000	6.538
4 DICAMBA	11.184	11.188	-0.004	1898801	0.08510	0.03020
5 MCPA	11.973	11.977	-0.004	733427	17.1000	6.431
6 DICHLOROPROP	12.803	12.807	-0.004	777565	0.17000	0.06158
7 2,4-D	14.303	14.315	-0.012	681585	0.17000	0.06042
8 PENTACHLOROPHENOL	15.528	15.536	-0.008	1210935	0.02128	0.007372
9 2,4,5-TP(SILVEX)	16.759	16.754	0.005	7335298	0.04210	0.01466
10 2,4,5-T	17.887	17.890	-0.003	4879151	0.04220	0.01424
11 DINOSEB	18.063	18.065	-0.002	3882089	0.02540	0.008895
12 2,4-DB	18.564	18.567	-0.003	2281115	0.16900	0.05450

Data File: \\QPIF002\\chem\\gcl.i\\5240.b\\A-050311.D

Date: 24-AUG-2000 08:41

Client ID:

Sample Info: Hherb,5240.b

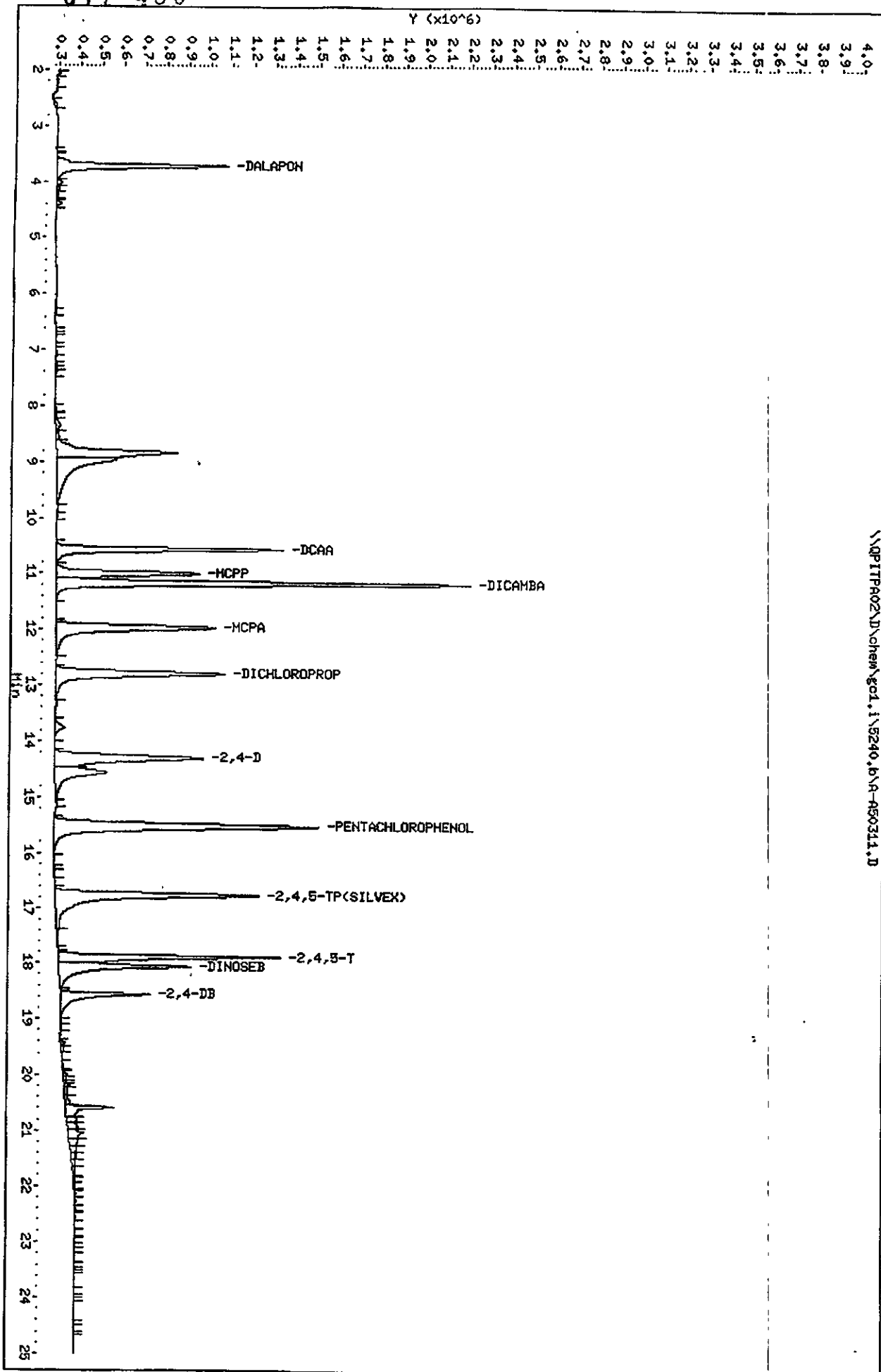
Column phase: DB608

Instrument: gcl.i

Operator: 01797

Column diameter: 0.53

\\QPIF002\\chem\\gcl.i\\5240.b\\A-050311.D



Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50312.D
 Report Date: 24-Aug-2000 15:00

STL - Pittsburgh

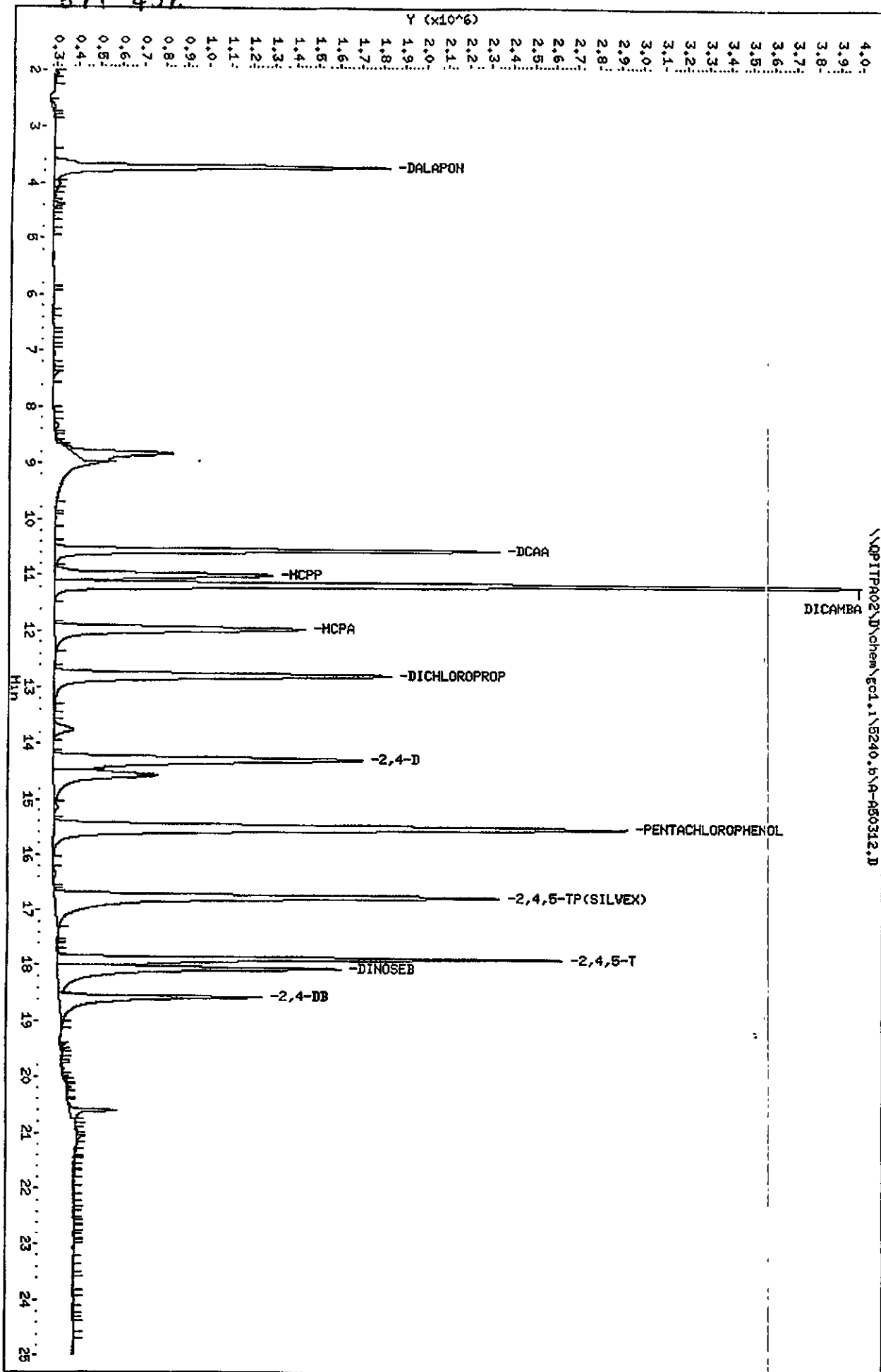
Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50312.D
 Lab Smp Id: Hherb
 Inj Date : 24-AUG-2000 09:10
 Operator : 01797
 Smp Info : Hherb,5240.b
 Misc Info : 190-94-5
 Comment :
 Method : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 24-Aug-2000 14:35 gc
 Cal Date : 24-AUG-2000 09:10
 Als bottle: 6
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC043

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A50312.D
 Calibration Sample, Level: 5
 Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	3.732	3.732	0.000	1543313	0.17600	0.1605
\$ 2 DCAA	10.573	10.576	-0.003	9541481	0.34000	0.3002
3 MCPP	11.011	11.016	-0.005	995927	34.1000	20.66
4 DICAMBA	11.185	11.188	-0.003	3889168	0.17000	0.1792
5 MCPA	11.970	11.977	-0.007	1147958	34.0000	21.56
6 DICHLOROPROP	12.797	12.807	-0.010	1538640	0.33900	0.3450
7 2,4-D	14.305	14.315	-0.010	1410193	0.34000	0.3705
8 PENTACHLOROPHENOL	15.530	15.536	-0.006	2621454	0.04255	0.04927
9 2,4,5-TP(SILVEX)	16.762	16.754	0.008	14968413	0.08400	0.08440
10 2,4,5-T	17.887	17.890	-0.003	10688813	0.08440	0.09344
11 DINOSBB	18.061	18.065	-0.004	7796676	0.05080	0.04907
12 2,4-DB	18.561	18.567	-0.006	5246590	0.33800	0.3848

Data File: \AQITPA02\chem\col.1\5240.b\A-850312.D
 Date: 24-AUG-2000 09:10
 Client ID:
 Sample Info: Herb, 5240.b
 Column phase: DB608

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



STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50342.D
Lab Smp Id: MHERB
Inj Date : 28-AUG-2000 10:51
Operator : 01797
Smp Info : MHERB,5240.b
Misc Info : 190-94-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
Meth Date : 28-Aug-2000 12:47 colussyj
Cal Date : 24-AUG-2000 09:10
Als bottle: 3
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-A50312.D
Continuing Calibration Sample
Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.729	3.729	0.000	425847	0.04390	0.04430
\$ 2 DCAA	10.570	10.570	0.000	2693522	0.08510	0.08474
3 MCPP	11.011	11.011	0.000	428638	8.52000	8.891
4 DICAMBA	11.183	11.183	0.000	938530	0.04250	0.04324
5 MCPA	11.970	11.970	0.000	479125	8.56000	8.999
6 DICHLOROPROP	12.803	12.803	0.000	387593	0.08480	0.08691
7 2,4-D	14.305	14.305	0.000	338790	0.08510	0.08901
8 PENTACHLOROPHENOL	15.526	15.526	0.000	574330	0.01064	0.01080
9 2,4,5-TP (SILVEX)	16.758	16.758	0.000	3660111	0.02110	0.02064
10 2,4,5-T	17.886	17.886	0.000	2427169	0.02110	0.02122
11 DINOSEB	18.063	18.063	0.000	1915152	0.01270	0.01205
12 2,4-DB	18.562	18.562	0.000	1213840	0.08450	0.08902

Data File: \\NPITPA02\chem\col.1\5240.b\A-A50342.D
Date: 28-AUG-2000 10:51

Client ID:
Sample Info: MHERB,5240.b

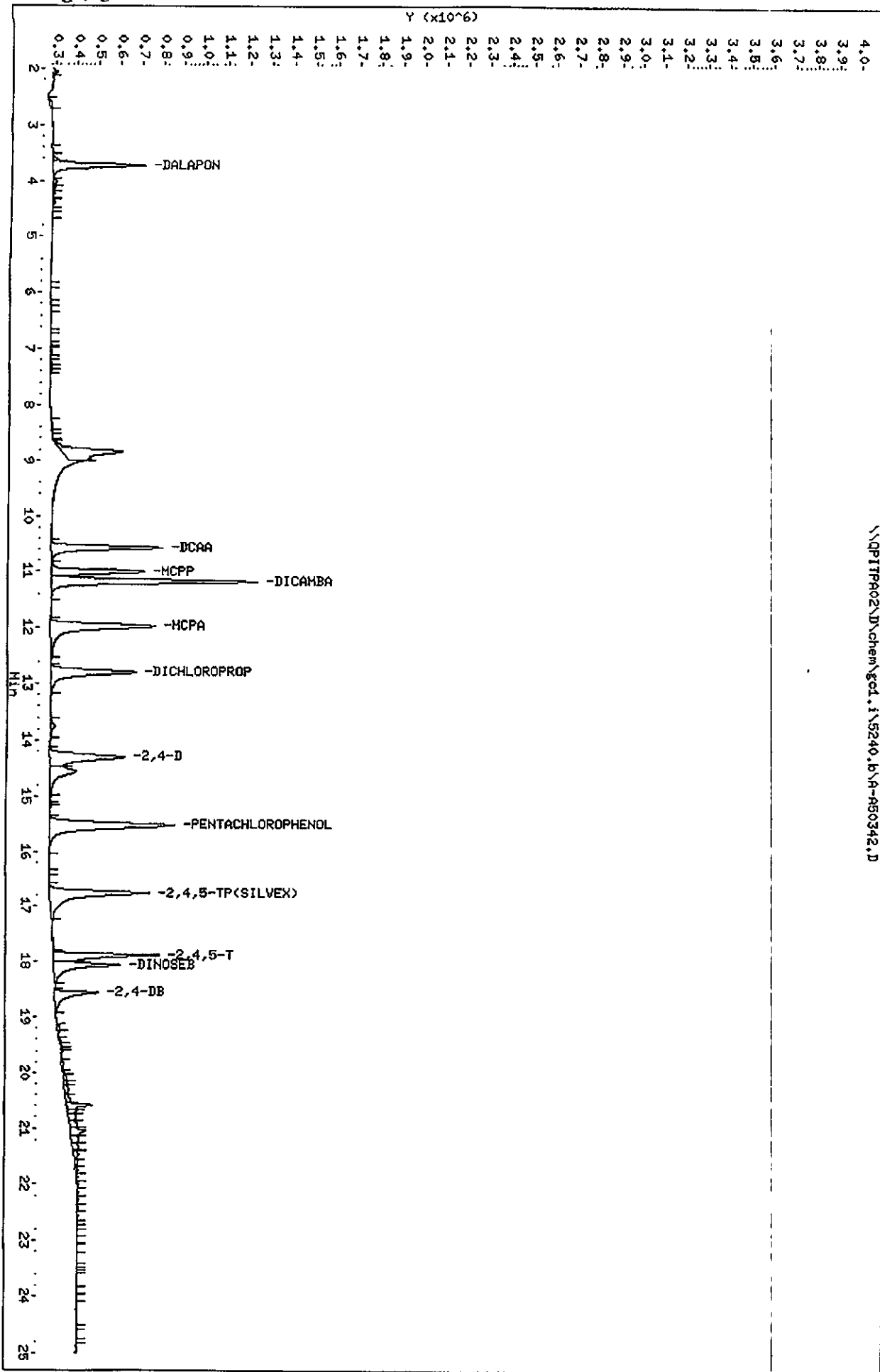
Column phase: DB608

Instrument: col.1

Operator: 01797

Column diameter: 0.53

\\NPITPA02\chem\col.1\5240.b\A-A50342.D



Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50350.D
 Report Date: 28-Aug-2000 15:54

STL - Pittsburgh

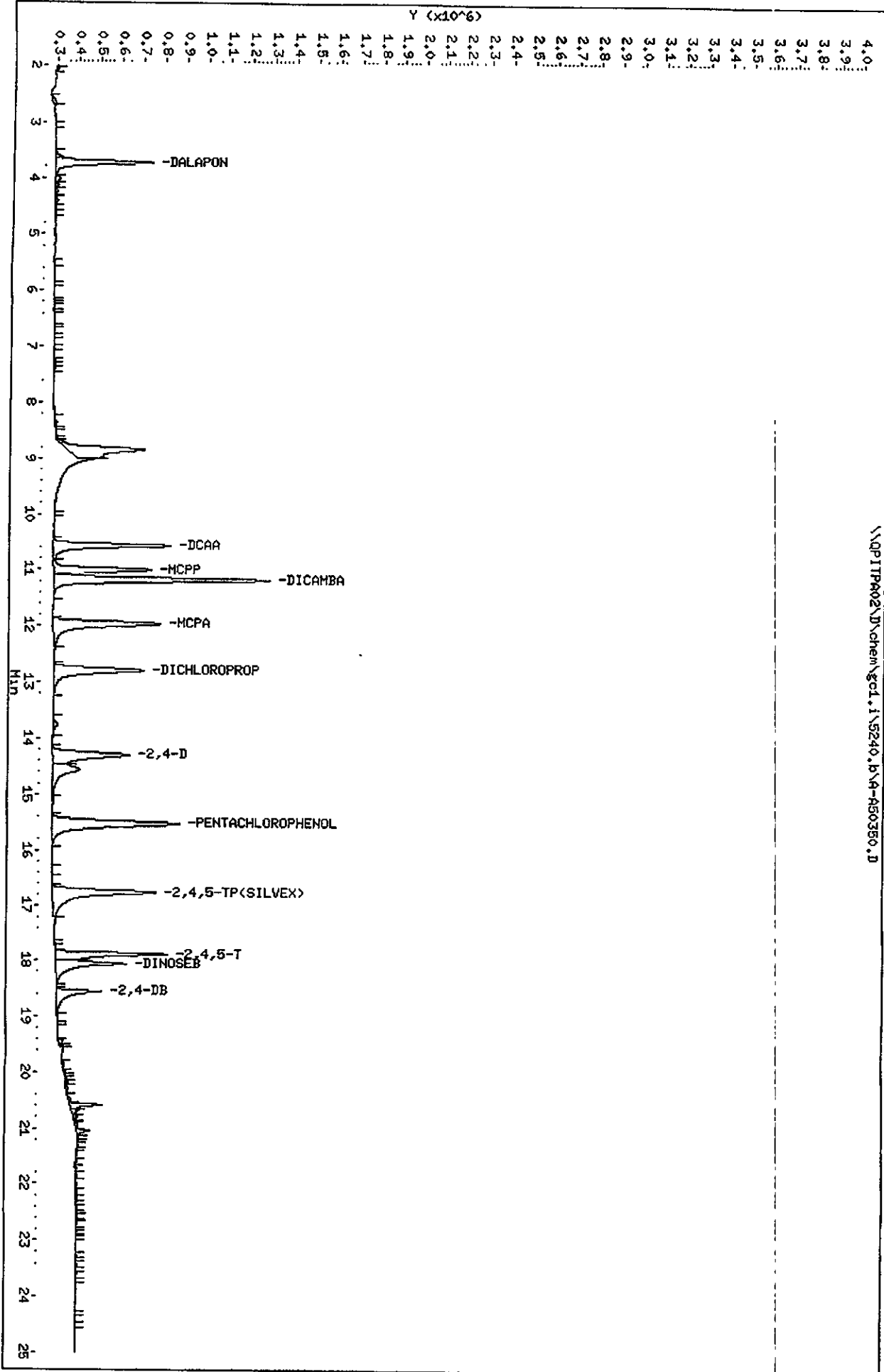
Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50350.D
 Lab Smp Id: MHERB
 Inj Date : 28-AUG-2000 14:40
 Operator : 01797
 Smp Info : MHERB,5240.b
 Misc Info : 190-94-3
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 28-Aug-2000 15:51 colussyj
 Cal Date : 24-AUG-2000 09:10
 Als bottle: 11
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A50312.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.732	3.729	0.003	446598	0.04390	0.04646
\$ 2 DCAA	10.573	10.570	0.003	2873075	0.08510	0.09038
3 MCPP	11.014	11.011	0.003	448093	8.52000	9.295
4 DICAMBA	11.186	11.183	0.003	984617	0.04250	0.04537
5 MCPA	11.972	11.970	0.002	489727	8.56000	9.198
6 DICHLOROPROP	12.801	12.803	-0.002	414321	0.08480	0.09290
7 2,4-D	14.303	14.305	-0.002	355382	0.08510	0.09337
8 PENTACHLOROPHENOL	15.530	15.526	0.004	586686	0.01064	0.01103
9 2,4,5-TP (SILVEX)	16.762	16.758	0.004	3834709	0.02110	0.02162
10 2,4,5-T	17.890	17.886	0.004	2563208	0.02110	0.02241
11 DINOSEB	18.063	18.063	0.000	2087225	0.01270	0.01314
12 2,4-DB	18.567	18.562	0.005	1256339	0.08450	0.09213

Data File: \\QPI1FA02\\chem\\gc1.i\\5240.b\\A-850350.D
Date: 28-AUG-2000 14:40
Client ID:
Sample Info: MHERB,5240.b
Column phase: DB608

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



HERBICIDE
QC DATA

671 458

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH240000 '84

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJD101

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: NA

QC Batch: 0237484

Client Sample Id: INTRA-LAB BLANK

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

FORM I

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50349.D
 Lab Smp Id: DJDTD101 Client Smp ID: BLK
 Inj Date : 28-AUG-2000 14:12
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJDTD101,5240.b
 Misc Info : 220139BLK
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 28-Aug-2000 13:54 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:10 Cal File: A-A50312.D
 Als bottle: 10 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON				Compound Not Detected.		
\$ 2 DCAA	10.585	10.570	0.015	1473984	0.04637	0.09274(aR)
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected.		
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				Compound Not Detected.		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected.		
9 2,4,5-TP(SILVEX)				Compound Not Detected.		
10 2,4,5-T				Compound Not Detected.		
11 DINOSEB				Compound Not Detected.		
12 2,4-DB	18.532	18.562	-0.030	19830	0.00145	0.002908(a)

671 460

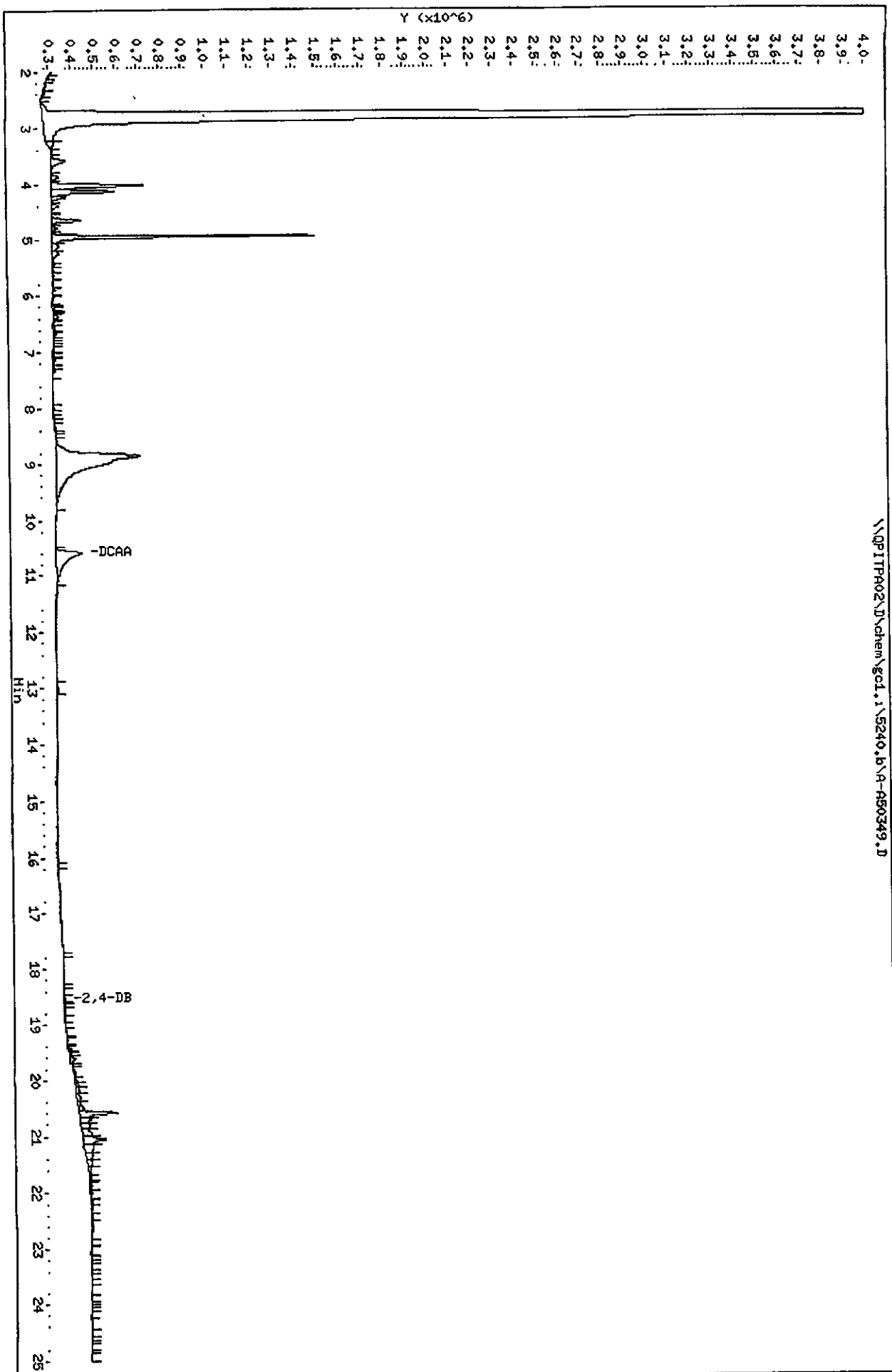
Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50349.D
Report Date: 28-Aug-2000 14:41

QC Flag Legend

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

Data File: \\QIPITP002\J\chem\gcl.1\5240.b\A-850349.D
Date: 28-AUG-2000 14:12
Client ID: BLK
Sample Info: DJUTD101,5240.b
Volume Injected (uL): 1.0
Column phase: DB608

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



671 462

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH240000 484

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJDTD102

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: NA

QC Batch: 0237484

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.122	
93-72-1	2,4,5-TP (Silvex)	0.0322	

FORM I

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50348.D
 Report Date: 28-Aug-2000 14:41

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50348.D
 Lab Smp Id: DJDTD102 Client Smp ID: LCS
 Inj Date : 28-AUG-2000 13:43
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJDTD102,5240.b
 Misc Info : 220139LCS
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 28-Aug-2000 13:54 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:10 Cal File: A-A50312.D
 Als bottle: 9 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	3.732	3.729	0.003	309422	0.03219	0.06438 (aR)
2 DCAA	10.575	10.570	0.005	1372303	0.04317	0.08634 (aR)
3 MCPP	11.012	11.011	0.001	373385	7.74519	15.49
4 DICAMBA	11.185	11.183	0.002	740473	0.03412	0.06823 (a)
5 MCPA	11.970	11.970	0.000	403746	7.58318	15.17
6 DICHLOROPROP	12.802	12.803	-0.001	300554	0.06740	0.1348 (a)
7 2,4-D	14.307	14.305	0.002	231951	0.06094	0.1219 (aR)
8 PENTACHLOROPHENOL	15.529	15.526	0.003	486315	0.00914	0.01828 (a)
9 2,4,5-TP (SILVEX)	16.757	16.758	-0.001	2855047	0.01610	0.03220 (aR)
10 2,4,5-T	17.885	17.886	-0.001	1854761	0.01621	0.03243 (aR)
11 DINOSEB	18.063	18.063	0.000	676838	0.00426	0.008520 (a)
12 2,4-DB	18.564	18.562	0.002	922288	0.06764	0.1353 (a)

671 464

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50348.D
Report Date: 28-Aug-2000 14:41

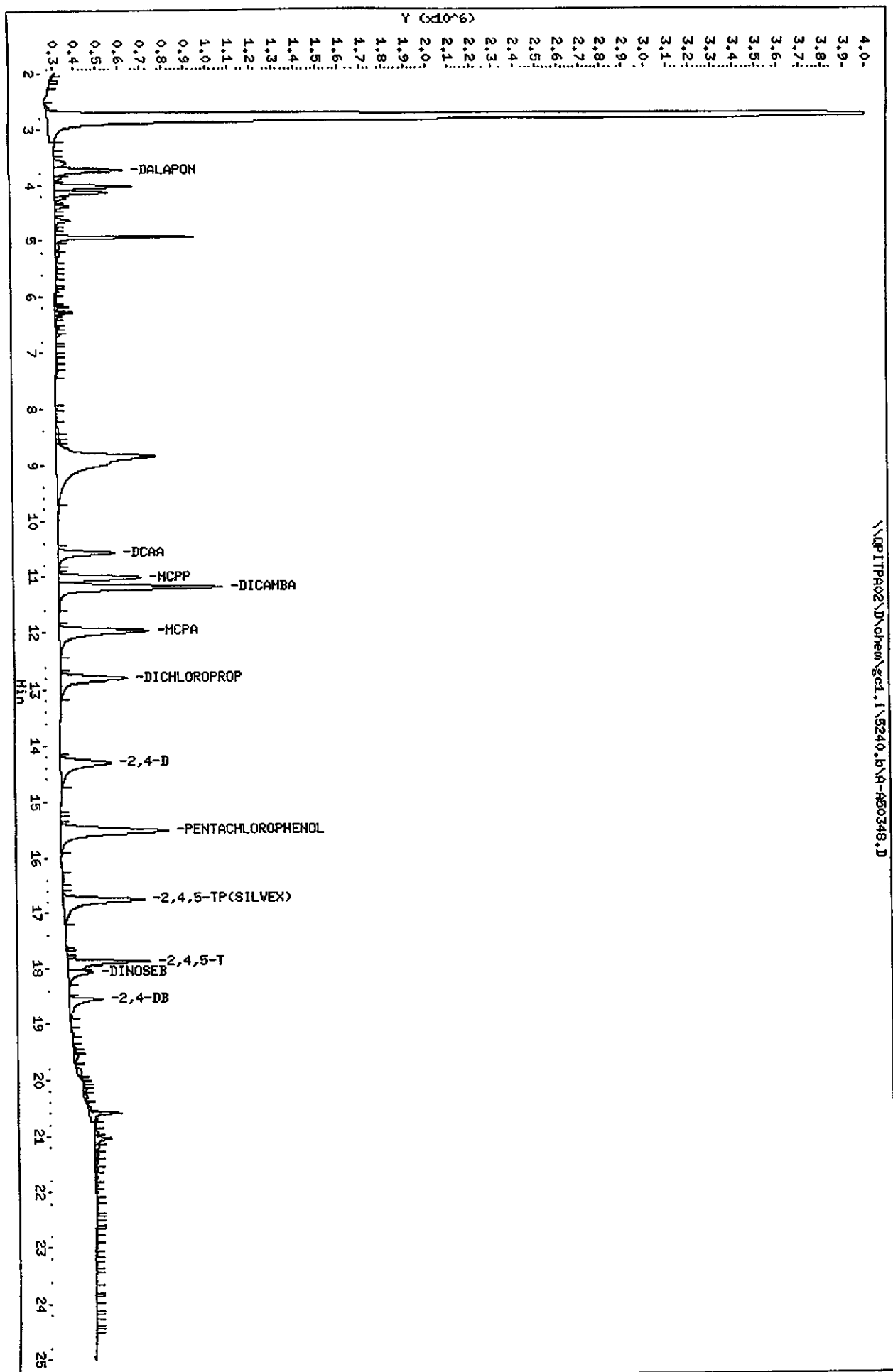
QC Flag Legend

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

671 465

Data File: \\QPITPR02\chem\gc1.1\5240.b\A-A50348.D
Date: 28-AUG-2000 13:43
Client ID: LCS
Sample Info: DDD102,5240.b
Volume Injected (uL): 1.0
Column phase: DB608

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



671 466

UXB INTERNATIONAL
MATRIX SPIKE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: COH220139 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C810X

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: 14

QC Batch: 0237484

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.150	
93-72-1	2,4,5-TP (Silvex)	0.0342	

FORM I

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50344.D
 Report Date: 28-Aug-2000 12:59

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50344.D
 Lab Smp Id: DJ7C810X Client Smp ID: DF/S1/0234/SDC/02MS
 Inj Date : 28-AUG-2000 11:48
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJ7C810X ,5240.b
 Misc Info : 22013901MS
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 28-Aug-2000 12:51 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:10 Cal File: A-A50312.D
 Als bottle: 5 QC Sample: MS
 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	3.730	3.729	0.001	262540	0.02731	0.05462 (aR)
\$ 2 DCAA	10.576	10.570	0.006	1128576	0.03550	0.07101 (aR)
3 MCPP	11.013	11.011	0.002	388686	8.06258	16.12
4 DICAMBA	11.185	11.183	0.002	806274	0.03715	0.07430 (a)
5 MCPA	11.976	11.970	0.006	435795	8.18512	16.37
6 DICHLOROPROP	12.805	12.803	0.002	332055	0.07446	0.1489 (a)
7 2,4-D	14.306	14.305	0.001	286191	0.07519	0.1504 (aR)
8 PENTACHLOROPHENOL	15.535	15.526	0.009	135560	0.00255	0.005096 (a)
9 2,4,5-TP (SILVEX)	16.762	16.758	0.004	3029570	0.01708	0.03416 (aR)
10 2,4,5-T	17.884	17.886	-0.002	2614878	0.02286	0.04572 (aR)
11 DINOSEB	Compound Not Detected.					
12 2,4-DB	18.566	18.562	0.004	816852	0.05990	0.1198 (a)

671 468

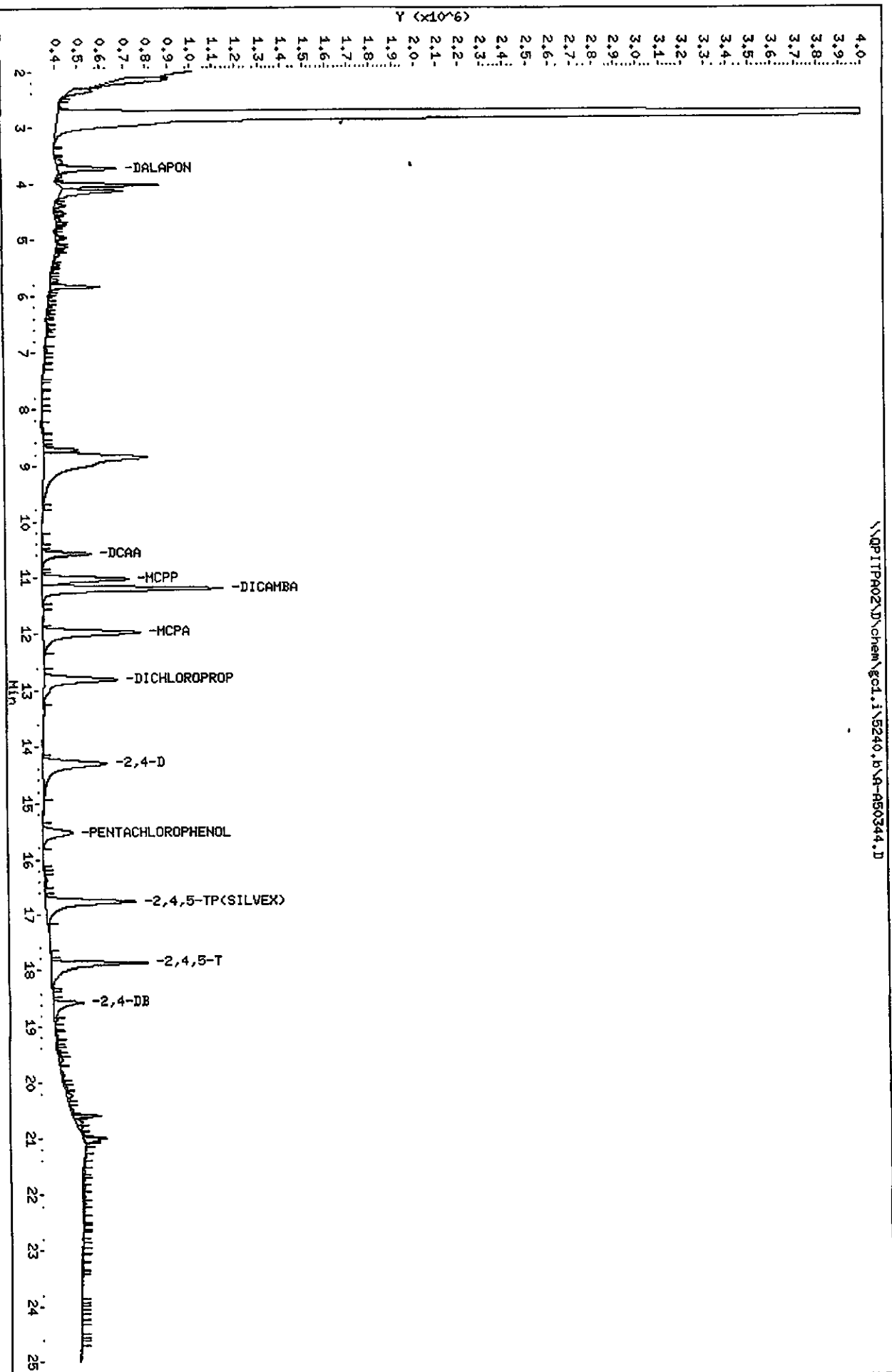
Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50344.D
Report Date: 28-Aug-2000 12:59

QC Flag Legend

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

Data File: \\NPITPA02\chem\ec1.1\5240.b\A-A50344.D
Date: 28-AUG-2000 11:48
Client ID: MF/SL/0234/SDC/02HS
Sample Info: DJ7C810X, 5240.b
Volume Injected (ul): 1.0
Column phase: DB608

Instrument: ec1.1
Operator: 01797
Column diameter: 0.53



671 470

UXB INTERNATIONAL
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0H220139 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 100 / mL

Date Received: 08/22/00

Work Order: DJ7C8110

Date Extracted: 08/24/00

Dilution factor: 1

Date Analyzed: 08/28/00

Moisture %: 14

QC Batch: 0237484

Client Sample Id: DF/S1/0234/SDC/029

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) mg/L	Q
94-75-7	2,4-D	0.153	
93-72-1	2,4,5-TP (Silvex)	0.0339	

FORM I

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50345.D
 Report Date: 28-Aug-2000 13:00

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50345.D
 Lab Smp Id: DJ7C8110 Client Smp ID: DF/S1/0234/SDC/OMSD
 Inj Date : 28-AUG-2000 12:17
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJ7C8110,5240.b
 Misc Info : 22013901MSD
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 28-Aug-2000 12:51 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:10 Cal File: A-A50312.D
 Als bottle: 6 QC Sample: MSD
 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	3.730	3.729	0.001	272998	0.02840	0.05680 (aR)
2 DCAA	10.573	10.570	0.003	1095207	0.03445	0.06891 (aR)
3 MCPP	11.010	11.011	-0.001	391310	8.11701	16.23
4 DICAMBA	11.183	11.183	0.000	812883	0.03745	0.07491 (a)
5 MCPA	11.971	11.970	0.001	440889	8.28080	16.56
6 DICHLOROPROP	12.798	12.803	-0.005	336578	0.07547	0.1509 (a)
7 2,4-D	14.305	14.305	0.000	291982	0.07671	0.1534 (aR)
8 PENTACHLOROPHENOL	15.525	15.526	-0.001	120566	0.00227	0.004532 (a)
9 2,4,5-TP(SILVEX)	16.761	16.758	0.003	3008131	0.01696	0.03392 (aR)
10 2,4,5-T	17.884	17.886	-0.002	2590770	0.02265	0.04530 (aR)
11 DINOSEB				Compound Not Detected.		
12 2,4-DB	18.561	18.562	-0.001	697149	0.05113	0.1022 (a)

671 472

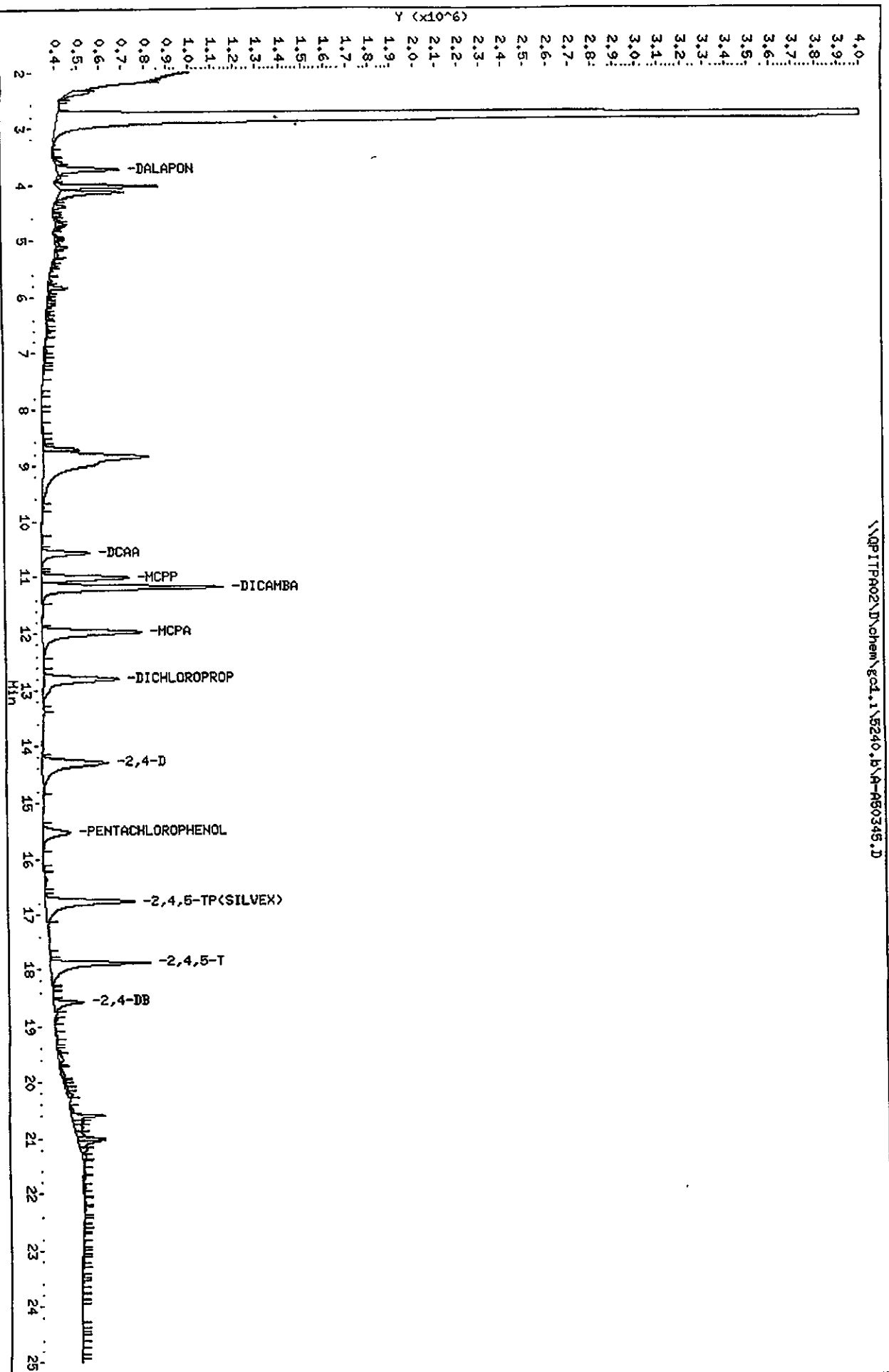
Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50345.D
Report Date: 28-Aug-2000 13:00

QC Flag Legend

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

Data File: \\QPITPA02\chem\gc1.1\5240.b\A-850345.D
Date: 28-AUG-2000 12:17
Client ID: DF/SI/0234/SDC/OHSD
Sample Info: DJ7C8140,5240.b
Volume Injected (uL): 1.0
Column phase: DB608

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



671 474

HERBICIDE
MISCELLANEOUS

TCLP (Method 1311)

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



Project Number	Lot Number	Date	Checked by	Filter List #	Serial Number	Log Book Number
James O. Murphy	C01220039	8-33-00	James O. Grant	8320201W	087	96-MT-526
Client Code					Probe	Balance
					SN 0051607	034817
					Solution Number 1 - Log Book Number	Solution Number 2 - Log Book Number
					004491-12	

Fluid Determination				TCLP Extraction			
Sample ID	Wgt/Vol	Init. pH	Final pH	Extract Fluid #1, or #2	Conc.: HNO ₃ to Acidity (for Metals)	Sample ID	Wgt (g) Wet/Dry
D17C8	5.00g / 96.5ml	9.97	1.73	Soln #1		1. PB-TCLP 8-23-00	200.0ml
D17C9	↓	9.83	1.58	↓		2. D17C8	100.0g
D17C6	↓	9.88	1.64	↓		3. ↓	
						4. D17C9	
						5. D17C6	
						6. ↓	
						7. ↓	
						8. ↓	
						9. ↓	
						10. ↓	
						11. ↓	
						12. ↓	
						13. ↓	

Extract(s) Received			Extract(s) Relinquished		
Record line number from above)	Date	Time	Analyst	Date	Time
All above	8-23-00	9:00	James O. Murphy	8-23-00	9:30

Date/Time On		Date/Time Off		Agitation Apparatus RPMs:	
8-23-00 12:00		8-24-00 4:00		30 ± 2 14 3000	
pH Calibration		(4.0)		(7.0) (10.0)	
Date	8-23-00	Date	8-24-00	Date	8-24-00
Date	8-24-00	Date	8-24-00	Date	8-24-00
Comments					
* = Sample determined to have free-liquid, % solid determination was performed. <5 = Extraction Fluid No. 1 5.7 mL Glacial Acetic Acid dil 500 mL + 64.3 mL of 1N Na OH dil to 1L (pH 4.93 + 0.05) >5 = Extraction Fluid No. 2 5.7 mL Glacial Acetic Acid dil to 1L (pH 2.88 + 0.05) Room temp 20°C pH extraction fluid = 4.98					

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

Submitted To Your Nearest

**STL...burgh
450 William Pitt
Pittsburgh, PA
412-820-8380**

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

Submitted To Your Nearest

**STL...burgh
450 William Pitt
Pittsburgh, PA
412-820-8380**

[illegible]

Sequence Table (Front Injector):

Vial Information Part:

Line Vial Vial Information

1 1 8151 HERB ANALYSIS

2 2 190-94-1 308

3 3 190-94-2 309

4 4 190-94-3 310

5 5 190-94-4 311

6 6 190-94-5 312

~~7 7 220143001 313~~~~8 8 220143002 314~~~~9 9 220143002S 315~~~~10 10 220143002D 316~~~~11 11 220142001 317~~~~12 12 220143BLK 318~~~~13 13 220143LCS 319~~

14 14 09014201 320 ✓

15 15 03014201 10XDL 321 ✓

16 16 15014601 10XDL 322 A+B

~~17 17 09013304 4XDL 323~~~~18 18 09013306 10XDL 324~~~~19 19 150146LCS 325~~~~20 20 150146LCSD 326~~~~21 21 150146BLK 327~~

22 22 190-94-3 328 ✓

23 23 09013304 10XDL 329 A+B

24 24 09013306 20XDL 330 A+B (A)

25 25 ~~190-94-3~~
~~09013306 20XDL~~ 331
190-94-3
190-94-3

Created: mm 8-24-00

A

✓ DE
8-25-00

671 478

Line Vial Vial Information

====
26 26 ~~09013306-20XDL~~ ^{Rinse} 3
 num 8-25-00

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	==	=====	=====	=====
1	1	HEXANE	HERB	1	Sample		
2	2	Lherb,5240.b	HERB	1	Sample		
3	3	MLherb,5240.b	HERB	1	Sample		
4	4	Mherb,5240.b	HERB	1	Sample		
5	5	MHherb,5240.b	HERB	1	Sample		
6	6	Hherb,5240.b	HERB	1	Sample		
7	7	DJ7CX103,5240.b	HERB	1	Sample		
8	8	DJ7D2103,5240.b	HERB	1	Sample		
9	9	DJ7D2105,5240.b	HERB	1	Sample		
10	10	DJ7D2106,5240.b	HERB	1	Sample		
11	11	DJ7CM102,5240.b	HERB	1	Sample		
12	12	DJ831101,5240.b	HERB	1	Sample		
13	13	DJ831102,5240.b	HERB	1	Sample		
14	14	DHK3611D,5240.b	HERBA	1	Sample		
15	15	DH96H11D,5240.b	HERBA	1	Sample		
16	16	DHV7M112,5240.b	HERBA	1	Sample		
17	17	DHK1C101,5240.b	HERBA	1	Sample		
18	18	DHK1E101,5240.b	HERBA	1	Sample		
19	19	DJ0KL102,5240.b	HERBA	1	Sample		
20	20	DJ0KL103,5240.b	HERBA	1	Sample		
21	21	DJ0KL101,5240.b	HERBA	1	Sample		
22	22	MHERB,5240.b	HERBA	1	Sample		
23	23	DHK1C101,5240.b	HERB	1	Sample		
24	24	DHK1E101,5240.b	HERB	1	Sample		
25	25	MHERB,5240.b	HERB	1	Sample		
26	26	RINSE	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line Vial Vial Information

====
1 100 8151 HERB ANALYSIS
2 1 RINSE
3 2 190-94-1
4 3 190-94-2
5 4 190-94-3
6 5 190-94-4
7 6 190-94-5

Line	Vial	Vial Information

====	====	=====

26	26	09013306 20XDL

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
1	1	HEXANE	HERB	1	Sample		
2	2	Lherb,5240.b	HERB	1	Sample		
3	3	MLherb,5240.b	HERB	1	Sample		
4	4	Mherb,5240.b	HERB	1	Sample		
5	5	MHherb,5240.b	HERB	1	Sample		
6	6	Hherb,5240.b	HERB	1	Sample		
7	7	DJ7CX103,5240.b	HERB	1	Sample		
8	8	DJ7D2103,5240.b	HERB	1	Sample		
9	9	DJ7D2105,5240.b	HERB	1	Sample		
10	10	DJ7D2106,5240.b	HERB	1	Sample		
11	11	DJ7CM102,5240.b	HERB	1	Sample		
12	12	DJ831101,5240.b	HERB	1	Sample		
13	13	DJ831102,5240.b	HERB	1	Sample		
14	14	DHK3611D,5240.b	HERBA	1	Sample		
15	15	DH96H11D,5240.b	HERBA	1	Sample		
16	16	DHV7M112,5240.b	HERBA	1	Sample		
17	17	DHK1C101,5240.b	HERBA	1	Sample		
18	18	DHK1E101,5240.b	HERBA	1	Sample		
19	19	DJ0KL102,5240.b	HERBA	1	Sample		
20	20	DJ0KL103,5240.b	HERBA	1	Sample		
21	21	DJ0KL101,5240.b	HERBA	1	Sample		
22	22	MHERB,5240.b	HERBA	1	Sample		
23	23	DHK1C101,5240.b	HERB	1	Sample		
24	24	DHK1E101,5240.b	HERB	1	Sample		
25	25	MHERB,5240.b	HERB	1	Sample		
26	26	RINSE	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information

====	====	=====

1	100	8151 HERB ANALYSIS

2	1	RINSE

3	2	190-94-1 212

4	3	190-94-2 213

5	4	190-94-3 214

6	5	190-94-4 215

7	6	190-94-5 216

created: wwm 8-24-00

671 480 Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information
1	1	8151 HERB ANALYSIS
2	2	8151 HERB ANALYSIS
3	3	190-94-3 342 ✓
4	4	22013901 343 ✓
5	5	22013901MS 344 ✓
6	6	22013901MSD 345 ✓
7	7	22013902 346 ✓
8	8	22013903 347 ✓
9	9	220139LCS 348 ✓
10	10	220139BLK 349 ✓
11	11	190-94-3 350 ✓

=====

=====

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	HERB	1	Sample		
2	2	HEXANE	HERB	1	Sample		
3	3	MHERB,5240.b	HERB	1	Sample		
4	4	DJ7C8105,5240.b	HERB	1	Sample		
5	5	DJ7C810X,5240.b	HERB	1	Sample		
6	6	DJ7C8110,5240.b	HERB	1	Sample		
7	7	DJ7C9105,5240.b	HERB	1	Sample		
8	8	DJ7CC105,5240.b	HERB	1	Sample		
9	9	DJDTD102,5240.b	HERB	1	Sample		
10	10	DJDTD101,5240.b	HERB	1	Sample		
11	11	MHERB,5240.b	HERB	1	Sample		

=====

=====

=====

=====

=====

=====

Sequence Table (Back Injector):

No entries - empty table!

created: wum 8-28-00

A

✓ DE
8-28-00

REQUESTED BY: YUSHINSC

METHOD: QS Herbicides (8151A)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
2F CLP1	DJ7C8-1-05	___	261334	399411	A-64-QS	COH220139	001		SOLID	0	3 1
2F CLP1	DJ7C9-1-05	___	261335	399411	A-64-QS	COH220139	002		SOLID	0	3 1
2F CLP1	DJ7CC-1-05	___	261336	399411	A-64-QS	COH220139	003		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

P. Yushinski
P. Yushinski

P. Yushinski
P. Yushinski

8-24-00 1510
8-24-00 2015

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

671 482

METALS DATA

STL-Pittsburgh**Cover Page - Inorganic Analysis Data Package**

Client ID	Lab Sample ID:
DF/S1/0234/SDC/029	DJ7C8
DF/S1/0234/SDC/029D	DJ7C8D
DF/S1/0234/SDC/029S	DJ7C8S
DF/S1/0234/SDC/030	DJ7C9
DF/S1/0234/SDC/032	DJ7CC

Comments: UXB DUNN FIELD
COH220139
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: 8-28-00

671 484

**METALS
RESULTS**

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C8 Client ID: DF/S1/0234/SDC/029
Matrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322
Weight: 1.00 Volume: 100 Percent Moisture: 13.99

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	8.0		1	ICPST	8/25/00	12:48

Comments: Lot #: C0H220139 Sample #: 1

Version 4.10.2

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

Form 1 Equivalent

671 486

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C9 Client ID: DF/S1/0234/SDC/030
Matrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322
Weight: 1.00 Volume: 100 Percent Moisture: 14.57

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	9.3		1	ICPST	8/25/00	13:04

Comments: Lot #: C0H220139 Sample #: 2

Version 4.10.2

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

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7CC Client ID: DF/S1/0234/SDC/032
Matrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322
Weight: 1.00 Volume: 100 Percent Moisture: 15.31

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.30	1.2	13.9		1	ICPST	8/25/00	13:08

Comments: Lot #: C0H220139 Sample #: 3

Version 4.10.2

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

Form 1 Equivalent

671 488

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPSTUnits: ug/LChart Number: T00825B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-022-8

			ICV3-1 8/25/00 10:43 AM							
Element	WL/ Mass	True Conc	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	250.0	257.17	102.9						

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPSTUnits: ug/LChart Number: T00825B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-023-9

Element	WL/ Mass	True Conc	CCV3-1 8/25/00 11:33 AM		CCV3-2 8/25/00 12:23 PM		CCV3-3 8/25/00 1:12 PM			
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	500.0	504.41	100.9	500.96	100.2	493.65	98.7		

671 490

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00825B.ARC

Standard Source: _____

Standard ID: _____

			ICB1 8/25/00 10:47 AM					
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	2.6	U				

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00825B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/25/00 11:37 AM	CCB2 8/25/00 12:27 PM	CCB3 8/25/00 1:17 PM		
			Found Q	Found Q	Found Q	Found Q	Found Q
Arsenic	189.042	10	2.6 U	2.6 U	2.6 U		

671 492

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJA1QBMatrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322Weight: 1.00 Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	0.26	1.0	0.26	U	1	ICPST	8/25/00	12:39

Comments: Lot #: C0H220139

Version 4.10.2

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

Form 3 Equivalent

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPSTUnits: ug/LChart Number: T00825B.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0057-011-1

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 8/25/00 10:51 AM				
				Found	Found	Found	Found	Found
Arsenic	189.042	10		1				

STL-Pittsburgh

671 494

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST

Units: ug/L

Chart Number: T00825B.ARC

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0014-197-7

Element	WL/ Mass	True Conc	ICSAB 8/25/00 10:56 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	1000	1001.8	100.2								

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DJ7C8S
 Original Sample ID: DJ7C8 Client ID: DF/S1/0234/SDC/029S
 Matrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322
 Weight: 1.00 Volume: 100 Percent Moisture: 13.99

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	8.0		211		232.53	87.1	1	1	ICPST	8/25/00	12:48	8/25/00	12:56

Comments: Lot #: C0H220139 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

671 496

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DJ7C8DOriginal Sample ID: DJ7C8 Client ID: DF/S1/0234/SDC/029DMatrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322Weight: 1.00 Volume: 100 Percent Moisture: 13.99

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	8.0		213		232.53	88.1	1	1	ICPST	8/25/00	12:48	8/25/00	13:00

Comments: Lot #: C0H220139 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 RPD Report

Matrix Spike Duplicate Sample ID: DJ7C8DMatrix Spike Sample ID: DJ7C8S Client ID: DF/S1/0234/SDC/029DMatrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322Weight: 1.00 Volume: 100 Percent Moisture: 13.99

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	211		213		1.1 %	1	1	ICPST	8/25/00	12:56	8/25/00	13:00

Comments: Lot #: C0H220139 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

671 498

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJA1QCMatrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322Weight: 1.00 Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	200	193	96.3		80-120	1	ICPST	8/25/00	12:43

Comments: Lot #: C0H220139

Version 4.10.2

STL Pittsburgh

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

5017

STL-Pittsburgh
Metals Data Reporting Form

Serial Dilution RPD ReportSerial Dilution Sample ID: DJ7C8POriginal Sample ID: DJ7C8 Client ID: DF/S1/0234/SDC/029Matrix: Soil Units: mg/kg Prep Date: 8/23/00 Prep Batch: 0236322Weight: 1.00 Volume: 100 Percent Moisture: 13.99

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	8.0		7.6			1	5	ICPST	8/25/00	12:48	8/25/00	12:52

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

671 500

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST

Units: ppb

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

Metals Data Reporting Form

Inter-Element Correction FactorsInstrument: ICPSTDate of IEC's: 8/1/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(0.00055), Se(0.00001), Tl(-0.00002)
Aluminum	308.215	Pb(-0.000197), Se(0.000011)
Chromium	267.716	Sb(0.007006)
Chromium	267.716	As(-0.002615), Sb(0.012173)
Cobalt	228.616	Se(-0.000381)
Cobalt	228.616	Cd(-0.00009), Fe(0.089705), Ni(-0.00066), Pb(0.000077), Se(0.000351), Tl(0.002179)
Iron	271.441	Cd(0.000088), Pb(0.000086), Sb(0.000019), Se(-0.000016), Tl(-0.000034), V(-0.000349), Zn(0.000127)
Iron	271.441	Pb(0.000047), Sb(0.000021), Se(-0.00029)
Magnesium	279.078	Fe(-0.000306)
Manganese	257.61	Se(0.000579), Tl(-0.004577)
Molybdenum	202.03	Pb(-0.00087), Sb(-0.010184)
Molybdenum	202.03	Al(0.011136), As(-0.000847), Cr(-0.000312), Pb(-0.000331), Sb(-0.003352)
Nickel	231.604	Pb(0.000274), Sb(-0.000886), Zn(0.004694)
Nickel	231.604	Pb(0.000086)
Vanadium	292.402	Al(0.019591), Be(-0.00787), Cr(-0.000183), Fe(0.007812), Sb(-0.008005), Se(0.000216), Tl(0.001386)
Vanadium	292.402	Pb(-0.000428), Se(0.000099)

671 502

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189.04	10000	6/15/00

STL-Pittsburgh
Metals Data Reporting Form

671.503

Preparation Log

Preparation Batch: 0236322 **Instrument:** ICP **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJA1QB	8/23/00	1.00	100	NA
DJA1QC	8/23/00	1.00	100	NA
DJ7C8	8/23/00	1.00	100	13.99
DJ7C8D	8/23/00	1.00	100	13.99
DJ7C8S	8/23/00	1.00	100	13.99
DJ7C9	8/23/00	1.00	100	14.57
DJ7CC	8/23/00	1.00	100	15.31

STL-Pittsburgh

671 504

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPSTChart Number: T00825B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/25/00	9:44
ZZZZZZ		8/25/00	9:48
ZZZZZZ		8/25/00	9:52
ZZZZZZ		8/25/00	9:56
ZZZZZZ		8/25/00	10:00
ZZZZZZ		8/25/00	10:04
ZZZZZZ		8/25/00	10:08
STD1		8/25/00	10:31
STD6		8/25/00	10:35
STD7		8/25/00	10:39
ICV3-1		8/25/00	10:43
ICB1		8/25/00	10:47
ICSA		8/25/00	10:51
ICSAB		8/25/00	10:56
ZZZZZZ		8/25/00	11:00
ZZZZZZ		8/25/00	11:04
ZZZZZZ		8/25/00	11:08
ZZZZZZ		8/25/00	11:12
ZZZZZZ		8/25/00	11:16
ZZZZZZ		8/25/00	11:20
ZZZZZZ		8/25/00	11:25
ZZZZZZ		8/25/00	11:29
CCV3-1		8/25/00	11:33
CCB1		8/25/00	11:37
ZZZZZZ		8/25/00	11:41
ZZZZZZ		8/25/00	11:45
ZZZZZZ		8/25/00	11:49
ZZZZZZ		8/25/00	11:54
ZZZZZZ		8/25/00	11:58
ZZZZZZ		8/25/00	12:02
ZZZZZZ		8/25/00	12:06
ZZZZZZ		8/25/00	12:10
ZZZZZZ		8/25/00	12:14
ZZZZZZ		8/25/00	12:19
CCV3-2		8/25/00	12:23
CCB2		8/25/00	12:27
ZZZZZZ		8/25/00	12:31
ZZZZZZ		8/25/00	12:35
DJA1QB		8/25/00	12:39

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPSTChart Number: T00825B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
DJA1QC		8/25/00	12:43
DJ7C8	DF/S1/0234/SDC/029	8/25/00	12:48
DJ7C8P	DF/S1/0234/SDC/029	8/25/00	12:52
DJ7C8S	DF/S1/0234/SDC/029S	8/25/00	12:56
DJ7C8D	DF/S1/0234/SDC/029D	8/25/00	13:00
DJ7C9	DF/S1/0234/SDC/030	8/25/00	13:04
DJ7CC	DF/S1/0234/SDC/032	8/25/00	13:08
CCV3-3		8/25/00	13:12
CCB3		8/25/00	13:17
ZZZZZZ		8/25/00	13:21
ZZZZZZ		8/25/00	13:25
ZZZZZZ		8/25/00	13:29
ZZZZZZ		8/25/00	13:33
ZZZZZZ		8/25/00	13:37
ZZZZZZ		8/25/00	13:42
ZZZZZZ		8/25/00	13:46
ZZZZZZ		8/25/00	13:50

671 506

**METALS
RAW DATA**

Revised 82500

Sample Name AS

1	STD1	-.01103
2	STD6	6.15101
3	STD7	
4	ICV3-1 0057-022-8	.25717
5	ICB1	.00018
6	ICSA 0057-011-1	.00070
7	ICSAB 0014-197-7	1.0018
8	DJ87XB	.00038
9	DJ87XC	2.0068
10	DH6EC	.00691
11	DH6ECP5	.00119
12	DH6ECS	2.0889
13	DH6ECD	2.0698
14	DJ32FB	-.00001
15	DJ32FC	2.0697
16	CCV3-1 0057-023-9	.50441
17	CCB1	-.00008
18	DJ0RQ	.00172
19	DJ0RQP5	.00035
20	DJ0RQS	1.7008
21	DJ0RQD	1.7049
22	DJ0TL	.00163
23	DJ0VA	.00095
24	DJ0VH	-.00119
25	DJ0RQF	.00192
26	DJ0RQP5F	-.00083
27	DJ0RQSF	1.6873
28	CCV3-2	.50096
29	CCB2	-.00104
30	DJ0RQDF	1.7098
31	DJ0TLF	.00089
32	DJA1QB	-.00058
33	DJA1QC	1.9259
34	DJ7C8	.06844
35	DJ7C8P5	.01298
36	DJ7C8S	1.8109
37	DJ7C8D	1.8309
38	DJ7C9	.07971
39	DJ7CC	.11727
40	CCV3-3	.49365
41	CCB3	-.00026
42	DJE2GB	-.00041
43	DJE2GC	1.9461
44	DJCX8	.00891
45	DJCX8P5	.00167
46	DJCX8S	1.8780
47	DJCX8D	1.9123
48	CCV3-4	.49758
49	CCB4	.00101

R682500

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T00825B	METTRA	08/25/00	10:31		X	IR
2	STD6	T00825B	METTRA	08/25/00	10:35		X	IR
3	STD7	T00825B	METTRA	08/25/00	10:39		X	IR
4	ICV3-1 0057-022-8	T00825B	METTRA	08/25/00	10:43	RJG	S	CONC
5	ICB1	T00825B	METTRA	08/25/00	10:47	RJG	S	CONC
6	ICSA 0057-011-1	T00825B	METTRA	08/25/00	10:51	RJG	Q	CONC
7	ICSAB 0014-197-7	T00825B	METTRA	08/25/00	10:56	RJG	Q	CONC
8	DJ87XB	T00825B	METTRA	08/25/00	11:00	RJG	S	CONC
9	DJ87XC	T00825B	METTRA	08/25/00	11:04	RJG	S	CONC
10	DH6EC	T00825B	METTRA	08/25/00	11:08	RJG	S	CONC
11	DH6ECP5	T00825B	METTRA	08/25/00	11:12	RJG	S	CONC
12	DH6ECS	T00825B	METTRA	08/25/00	11:16	RJG	S	CONC
13	DH6ECD	T00825B	METTRA	08/25/00	11:20	RJG	S	CONC
14	DJ32FB	T00825B	METTRA	08/25/00	11:25	RJG	S	CONC
15	DJ32FC	T00825B	METTRA	08/25/00	11:29	RJG	S	CONC
16	CCV3-1 0057-023-9	T00825B	METTRA	08/25/00	11:33	RJG	S	CONC
17	CCB1	T00825B	METTRA	08/25/00	11:37	RJG	S	CONC
18	DJ0RQ	T00825B	METTRA	08/25/00	11:41	RJG	S	CONC
19	DJ0RQP5	T00825B	METTRA	08/25/00	11:45	RJG	S	CONC
20	DJ0RQS	T00825B	METTRA	08/25/00	11:49	RJG	S	CONC
21	DJ0RQD	T00825B	METTRA	08/25/00	11:54	RJG	S	CONC
22	DJ0TL	T00825B	METTRA	08/25/00	11:58	RJG	S	CONC
23	DJ0VA	T00825B	METTRA	08/25/00	12:02	RJG	S	CONC
24	DJ0VH	T00825B	METTRA	08/25/00	12:06	RJG	S	CONC
25	DJ0RQF	T00825B	METTRA	08/25/00	12:10	RJG	S	CONC
26	DJ0RQP5F	T00825B	METTRA	08/25/00	12:14	RJG	S	CONC
27	DJ0RQSF	T00825B	METTRA	08/25/00	12:19	RJG	S	CONC
28	CCV3-2	T00825B	METTRA	08/25/00	12:23	RJG	S	CONC
29	CCB2	T00825B	METTRA	08/25/00	12:27	RJG	S	CONC
30	DJ0RQDF	T00825B	METTRA	08/25/00	12:31	RJG	S	CONC
31	DJ0TLF	T00825B	METTRA	08/25/00	12:35	RJG	S	CONC
32	DJA1QB	T00825B	METTRA	08/25/00	12:39	RJG	S	CONC
33	DJA1QC	T00825B	METTRA	08/25/00	12:43	RJG	S	CONC
34	DJ7C8	T00825B	METTRA	08/25/00	12:48	RJG	S	CONC
35	DJ7C8P5	T00825B	METTRA	08/25/00	12:52	RJG	S	CONC
36	DJ7C8S	T00825B	METTRA	08/25/00	12:56	RJG	S	CONC
37	DJ7C8D	T00825B	METTRA	08/25/00	13:00	RJG	S	CONC
38	DJ7C9	T00825B	METTRA	08/25/00	13:04	RJG	S	CONC
39	DJ7CC	T00825B	METTRA	08/25/00	13:08	RJG	S	CONC
40	CCV3-3	T00825B	METTRA	08/25/00	13:12	RJG	S	CONC
41	CCB3	T00825B	METTRA	08/25/00	13:17	RJG	S	CONC
42	DJE2GB	T00825B	METTRA	08/25/00	13:21	RJG	S	CONC
43	DJE2GC	T00825B	METTRA	08/25/00	13:25	RJG	S	CONC
44	DJCX8	T00825B	METTRA	08/25/00	13:29	RJG	S	CONC
45	DJCX8P5	T00825B	METTRA	08/25/00	13:33	RJG	S	CONC
46	DJCX8S	T00825B	METTRA	08/25/00	13:37	RJG	S	CONC
47	DJCX8D	T00825B	METTRA	08/25/00	13:42	RJG	S	CONC
48	CCV3-4	T00825B	METTRA	08/25/00	13:46	RJG	S	CONC
49	CCB4	T00825B	METTRA	08/25/00	13:50	RJG	S	CONC

Standardization Rpt.

08/25/00 10:35:37 AM

Method: METTRA Standard: STD1
 Run Time: 08/25/00 10:31:31

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	.00114	.04957	-.01104	.00067	-.07972	.00502	.00201
SDev	.00258	.01048	.00694	.00016	.00110	.00016	.00175
%RSD	225.57	21.133	62.872	24.261	1.3806	3.2234	86.926
#1	.00297	.05698	-.01594	.00079	-.08050	.00491	.00324
#2	-.00068	.04216	-.00613	.00056	-.07894	.00514	.00077
Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00100	-.00213	.02709	-.00171	-.00132	.00086	.00144
SDev	.00017	.00181	.00205	.00049	.00084	.00001	.00037
%RSD	16.710	84.997	7.5749	28.871	63.689	1.4992	25.634
#1	-.00088	-.00085	.02564	-.00206	-.00073	.00085	.00170
#2	-.00111	-.00341	.02854	-.00136	-.00192	.00087	.00118
Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00033	.01452	-.01329	-.07705	.01370	-.12598	.08500
SDev	.00056	.01256	.00426	.00976	.01114	.00826	.02172
%RSD	167.74	86.530	32.067	12.668	81.342	6.5536	25.551
#1	.00073	.02340	-.01631	-.08395	.02158	-.12014	.06965
#2	-.00006	.00563	-.01028	-.07015	.00582	-.13182	.10036
Elem	TL	V	ZN				
Avge	-.04624	.00015	-.00038				
SDev	.00481	.00013	.00020				
%RSD	10.397	83.887	52.212				
#1	-.04964	.00024	-.00024				
#2	-.04284	.00006	-.00053				

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16324	--	--	--	--	--	--
SDev	244.7294	--	--	--	--	--	--
%RSD	1.499159	--	--	--	--	--	--
#1	16498	--	--	--	--	--	--
#2	16151	--	--	--	--	--	--

Method: METTRA Standard: STD6
Run Time: 08/25/00 10:35:42

0051.02310

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	12.285	6.1510	14.701	6.1695	7.7446	10.346	7.4485
SDev	.035	.0090	.018	.0135	.0973	.137	.0347
%RSD	.28766	.14562	.12438	.21824	1.2561	1.3238	.46590

#1	12.261	6.1447	14.688	6.1600	7.6758	10.250	7.4239
#2	12.310	6.1573	14.714	6.1790	7.8133	10.443	7.4730

Elem	SE/1	SE/2	TL
Avge	5.9127	5.7906	4.4047
SDev	.0390	.0713	.0053
%RSD	.65919	1.2321	.12027

#1	5.8851	5.7402	4.4084
#2	5.9403	5.8411	4.4009

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15723	--	--	--	--	--	--
SDev	65.37216	--	--	--	--	--	--
%RSD	.4157840	--	--	--	--	--	--
#1	15769	--	--	--	--	--	--
#2	15676	--	--	--	--	--	--

Method: METTRA Standard: STD7
Run Time: 08/25/00 10:39:53

0057.0241

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	8.2257	15.670	12.150	4.9019	3.3854	13.079	4.0513
SDev	.0069	.032	.017	.0020	.0056	.019	.0030
%RSD	.08438	.20168	.14257	.04081	.16567	.14791	.07317
#1	8.2208	15.692	12.162	4.9033	3.3814	13.065	4.0534
#2	8.2306	15.648	12.138	4.9005	3.3893	13.093	4.0492
Elem	FE	MG	MN	MO	NI	V	ZN
Avge	4.3394	14.493	11.048	2.4408	2.7931	.92845	3.3995
SDev	.0046	.015	.003	.0213	.0068	.00102	.0003
%RSD	.10673	.10041	.03099	.87446	.24347	.10953	.00747
#1	4.3361	14.503	11.046	2.4257	2.7979	.92917	3.3994
#2	4.3427	14.482	11.051	2.4559	2.7883	.92773	3.3997
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15818	--	--	--	--	--	--
SDev	10.85381	--	--	--	--	--	--
%RSD	.0686157	--	--	--	--	--	--
#1	15826	--	--	--	--	--	--
#2	15811	--	--	--	--	--	--

Standardization

Report

08/25/00 10:43:30 AM

page 1

Method: METTRA

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.162809	-.000186	08/25/00 10:39:53
AL	308.215	STD7	STD1	6.13039	-.303889	08/25/00 10:39:53
AS	189.042	STD6	STD1	.162284	.001791	08/25/00 10:39:53
BA	493.409	STD7	STD1	.255274	-.000172	08/25/00 10:39:53
BE	313.042	STD7	STD1	.324492	.025868	08/25/00 10:39:53
CA	317.933	STD7	STD1	20.4211	-.102603	08/25/00 10:39:53
CD	226.502	STD6	STD1	.068034	-.000137	08/25/00 10:39:53
CO	228.616	STD7	STD1	1.18121	.001177	08/25/00 10:39:53
CR	267.716	STD7	STD1	.305636	.000650	08/25/00 10:39:53
CU	324.753	STD7	STD1	.993990	-.026929	08/25/00 10:39:53
FE	271.441	STD7	STD1	11.6006	.019855	08/25/00 10:39:53
MG	279.078	STD7	STD1	6.89944	.009130	08/25/00 10:39:53
MN	257.610	STD7	STD1	.362076	-.000311	08/25/00 10:39:53
MO	202.030	STD7	STD1	1.63978	-.002356	08/25/00 10:39:53
NI	231.604	STD7	STD1	1.43131	-.000476	08/25/00 10:39:53
PB/1	220.351	STD6	STD1	.162470	-.002358	08/25/00 10:39:53
PB/2	220.352	STD6	STD1	.128902	.001713	08/25/00 10:39:53
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.095937	.007392	08/25/00 10:39:53
SB/2	206.832	STD6	STD1	.134503	-.001843	08/25/00 10:39:53
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.165599	.020862	08/25/00 10:39:53
SE/2	196.022	STD6	STD1	.175266	-.014898	08/25/00 10:39:53
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.449344	.020780	08/25/00 10:39:53
V	292.402	STD7	STD1	4.29015	-.000653	08/25/00 10:39:53
ZN	213.856	STD7	STD1	1.18389	.000455	08/25/00 10:39:53

Method: METTRA Sample Name: ICV3-1 0057-022-8 Operator: RJG
 Run Time: 08/25/00 10:43:33
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACE ICP
 Mode: CONC Corr. Factor: 1

Revised
82500

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51082	11.994	.25718	1.0156	1.0319	25.762	.25118
SDev	.00422	.068	.00002	.0036	.0246	.524	.00141
%RSD	.82529	.56556	.00898	.35332	2.3844	2.0335	.56072
#1	.50784	11.946	.25716	1.0182	1.0493	26.133	.25019
#2	.51380	12.042	.25719	1.0131	1.0145	25.392	.25218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	13.750	.27500	1.1000	1.1000	27.500	.27500
Low	.45000	11.250	.22500	.90000	.90000	22.500	.22500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0288	1.0347	.98160	12.677	24.693	1.0105	1.0461
SDev	.0159	.0141	.00079	.101	.334	.0027	.0245
%RSD	1.5454	1.3640	.08056	.79648	1.3544	.26978	2.3416
#1	1.0176	1.0247	.98216	12.748	24.929	1.0085	1.0288
#2	1.0400	1.0447	.98105	12.605	24.456	1.0124	1.0634
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	13.750	27.500	1.1000	1.1000
Low	.90000	.90000	.90000	11.250	22.500	.90000	.90000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0390	.25688	.25987	.25887	.26102	.25535	.25724
SDev	.0281	.00409	.00121	.00055	.00357	.00452	.00183
%RSD	2.7081	1.5901	.46550	.21374	1.3660	1.7707	.71083
#1	1.0589	.25399	.26072	.25848	.26355	.25216	.25595
#2	1.0191	.25977	.25901	.25926	.25850	.25855	.25853
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	1.1000			.27500			.27500
Low	.90000			.22500			.22500
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.25372	.26169	.25904	.53597	1.0304	1.0775	
SDev	.00308	.00400	.00164	.01407	.0188	.0075	
%RSD	1.2131	1.5278	.63376	2.6253	1.8277	.69976	
#1	.25154	.26452	.26020	.54592	1.0437	1.0829	
#2	.25590	.25887	.25788	.52602	1.0171	1.0722	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.27500	.55000	1.1000	1.1000	
Low			.22500	.45000	.90000	.90000	

08/25/00 10:47:39 AM

Analysis Report

	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	371.030	--	--	--	--	--	--
Wavlen	15907	--	--	--	--	--	--
Avge	299.7428	--	--	--	--	--	--
SDev	1.884387	--	--	--	--	--	--
%RSD							
#1	16119	--	--	--	--	--	--
#2	15695	--	--	--	--	--	--

Method: METTRA Sample Name: ICB1

Operator: RJG

Run Time: 08/25/00 10:47:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	-.03833	.00019	.00056	.00085	.01445	.00010
SDev	.00025	.00123	.00048	.00023	.00032	.00527	.00010
%RSD	112.93	3.1980	256.90	40.944	38.182	36.445	108.25
#1	.00040	-.03747	-.00015	.00039	.00062	.01073	.00002
#2	.00004	-.03920	.00053	.00072	.00108	.01817	.00017
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	.00069	.00105	.00157	.00907	.01147	.00058	.00533
SDev	.00008	.00021	.00026	.00507	.00150	.00022	.00058
%RSD	11.213	20.305	16.743	55.940	13.096	37.860	10.827
#1	.00074	.00090	.00139	.00548	.01041	.00043	.00573
#2	.00063	.00120	.00176	.01265	.01253	.00074	.00492
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	.00204	.00169	-.00046	.00026	.00037	.00115	.00089
SDev	.00019	.00380	.00109	.00054	.00135	.00074	.00004
%RSD	9.2605	224.74	237.37	209.65	363.66	64.447	4.9851
#1	.00217	.00438	-.00123	.00064	-.00058	.00168	.00092
#2	.00191	-.00100	.00031	-.00012	.00133	.00063	.00086
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	.00028	-.00015	-.00001	.00315	.00054	.00066	
SDev	.00456	.00170	.00265	.00103	.00019	.00026	
%RSD	1652.1	1096.3	23632.	32.528	34.422	38.918	
#1	.00350	.00104	.00186	.00388	.00067	.00048	
#2	-.00295	-.00135	-.00189	.00243	.00041	.00085	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

08/25/00 10:51:49 AM

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	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem		--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16225	--	--	--	--	--	--
SDev	10.21783	--	--	--	--	--	--
%RSD	.0629773	--	--	--	--	--	--
#1	16217	--	--	--	--	--	--
#2	16232	--	--	--	--	--	--

Method: METTRA Sample Name: ICSA 0057-011-1 Operator: RJG
 Run Time: 08/25/00 10:51:52
 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	.00003	519.39	.00070	.00178	-.00166	482.43	.00001
SDev	.00033	1.70	.00288	.00005	.00004	.56	.00064
%RSD	1306.9	.32676	409.13	2.7471	2.2730	.11653	4913.6
#1	.00026	518.19	.00274	.00174	-.00163	482.83	-.00044
#2	-.00021	520.59	-.00133	.00181	-.00168	482.04	.00047
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	.00080	.00384	.00378	206.63	528.55	.00864	-.00066
SDev	.00014	.00021	.00032	.03	.53	.00004	.00069
%RSD	17.555	5.5334	8.3525	.01370	.09941	.44069	105.00
#1	.00090	.00369	.00355	206.61	528.92	.00867	-.00017
#2	.00070	.00399	.00400	206.65	528.18	.00862	-.00115
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	.00311	-.04920	.02785	.00220	-.00228	.00036	-.00052
SDev	.00073	.00377	.00666	.00319	.00442	.00208	.00009
%RSD	23.535	7.6555	23.912	145.24	193.57	582.41	16.333
#1	.00363	-.04653	.02314	-.00006	-.00541	.00183	-.00058
#2	.00259	-.05186	.03256	.00445	.00084	-.00111	-.00046
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	.00008	-.00736	-.00488	.00446	.00068	.00522	
SDev	.00704	.00096	.00170	.00373	.00266	.00027	
%RSD	8929.4	13.022	34.927	83.514	394.42	5.2334	
#1	.00505	-.00803	-.00367	.00183	.00256	.00502	
#2	-.00490	-.00668	-.00608	.00709	-.00121	.00541	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value							
Range							

Analysis Report

QC Standard

08/25/00 10:55:58 AM

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14964	--	--	--	--	--	--
SDev	50.73491	--	--	--	--	--	--
%RSD	.3390436	--	--	--	--	--	--
#1	15000	--	--	--	--	--	--
#2	14928	--	--	--	--	--	--

Method: METTRA Sample Name: ICSAB 0014-197-7 Operator: RJG
 Run Time: 08/25/00 10:56:02
 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
Avg	1.0996	515.37	1.0018	.52664	.48861	477.78	.91439
SDev	.0057	2.56	.0121	.00512	.00589	5.11	.00725
%RSD	.51488	.49674	1.2099	.97295	1.2058	1.0698	.79275
#1	1.1036	517.18	1.0104	.53027	.49278	481.40	.91952
#2	1.0956	513.56	.99321	.52302	.48445	474.17	.90927
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
Avg	.49490	.50550	.55167	205.35	522.70	.50823	.99419
SDev	.00085	.00207	.00532	2.04	5.25	.00345	.00156
%RSD	.17108	.40984	.96468	.99355	1.0038	.67811	.15730
#1	.49550	.50697	.55543	206.80	526.41	.51067	.99308
#2	.49430	.50404	.54790	203.91	518.99	.50580	.99529
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
Avg	.98711	.98139	1.0348	1.0170	1.0613	1.0372	1.0452
SDev	.01173	.01215	.0044	.0011	.0039	.0024	.0003
%RSD	1.1884	1.2382	.42300	.11079	.36369	.22680	.02713
#1	.99541	.97280	1.0379	1.0162	1.0586	1.0389	1.0454
#2	.97882	.98998	1.0317	1.0178	1.0640	1.0355	1.0450
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	
Avg	.98414	1.0323	1.0163	1.0757	.50685	1.0660	
SDev	.00021	.0014	.0009	.0007	.00726	.0090	
%RSD	.02144	.14032	.08816	.06378	1.4322	.84786	
#1	.98399	1.0333	1.0169	1.0762	.51198	1.0724	
#2	.98429	1.0313	1.0156	1.0752	.50172	1.0596	
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	

Analysis Report

QC Standard

08/25/00 11:00:08 AM

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15037	--	--	--	--	--	--
SDev	3.817962	--	--	--	--	--	--
%RSD	.0253903	--	--	--	--	--	--
#1	15040	--	--	--	--	--	--
#2	15034	--	--	--	--	--	--

Method: METTRA Sample Name: DJ87XB

Operator: RJG

Run Time: 08/25/00 11:00:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00007	-.00609	.00039	.00017	.00083	.07525	.00013
SDev	.00006	.02390	.00112	.00002	.00006	.01442	.00006
%RSD	85.390	392.23	286.60	9.9893	6.9368	19.159	50.350
#1	.00003	.01081	.00118	.00016	.00087	.08545	.00008
#2	.00012	-.02300	-.00040	.00018	.00079	.06506	.00018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00052	.00081	.00230	.02611	.05819	.00026	.00160
SDev	.00022	.00059	.00021	.01088	.01283	.00006	.00125
%RSD	43.389	72.551	9.1728	41.690	22.056	24.494	78.282
#1	.00036	.00039	.00215	.03380	.06727	.00021	.00248
#2	.00068	.00122	.00244	.01841	.04912	.00030	.00071
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	.00073	-.00123	.00035	-.00018	.00195	.00043	.00037
SDev	.00000	.00168	.00041	.00029	.00140	.00158	.00152
%RSD	.37198	136.56	117.62	161.17	71.941	369.23	416.43
#1	.00073	-.00243	.00064	-.00038	.00295	.00069	.00144
#2	.00073	-.00004	.00006	.00002	.00096	.00154	-.00071
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	.00732	-.00335	.00021	.00712	.00000	.00132	
SDev	.00085	.00153	.00074	.00022	.00055	.00008	
%RSD	11.568	45.798	360.12	3.0857	25900.	5.9678	
#1	.00672	-.00226	.00073	.00696	.00039	.00127	
#2	.00792	-.00443	-.00032	.00727	-.00039	.00138	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

08/25/00 11:04:17 AM

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	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16590	--	--	--	--	--	--
SDev	35.35534	--	--	--	--	--	--
%RSD	.2131143	--	--	--	--	--	--
#1	16615	--	--	--	--	--	--
#2	16565	--	--	--	--	--	--

Method: METTRA Sample Name: DJ87XC

Operator: RJG

Run Time: 08/25/00 11:04:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04877	1.7500	2.0068	1.9192	.05048	L.06264	.04840
SDev	.00009	.0023	.0020	.0038	.00006	.00252	.00025
%RSD	.17727	.13006	.09973	.19660	.11307	4.0293	.51998
#1	.04883	1.7516	2.0054	1.9166	.05044	L.06442	.04858
#2	.04871	1.7484	2.0082	1.9219	.05053	L.06085	.04822
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	.50585	.20147	.22908	.98269	L.03736	.48707	1.0104
SDev	.00153	.00006	.00004	.00459	.00351	.00064	.0118
%RSD	.30295	.03221	.01870	.46697	9.3911	.13202	1.1683
#1	.50477	.20142	.22905	.98593	L.03984	.48661	1.0021
#2	.50694	.20152	.22911	.97944	L.03487	.48752	1.0188
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	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	.49555	.49165	.49570	.49435	.50680	.50269	.50406
SDev	.00042	.00005	.00037	.00026	.00173	.00437	.00349
%RSD	.08517	.01046	.07493	.05358	.34187	.86956	.69288
#1	.49585	.49162	.49544	.49417	.50803	.50578	.50653
#2	.49525	.49169	.49597	.49454	.50558	.49960	.50159
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	2.1199	2.1210	2.1206	1.9859	.48364	.52701	
SDev	.0001	.0145	.0096	.0046	.00243	.00014	
%RSD	.00370	.68183	.45362	.23203	.50231	.02655	
#1	2.1199	2.1312	2.1274	1.9891	.48192	.52691	
#2	2.1200	2.1107	2.1138	1.9826	.48535	.52711	
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	

08/25/00 11:08:26 AM

Analysis Report

	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16622	--	--	--	--	--	--
SDev	8.272597	--	--	--	--	--	--
%RSD	.0497696	--	--	--	--	--	--
#1	16628	--	--	--	--	--	--
#2	16616	--	--	--	--	--	--

Method: METTRA Sample Name: DH6EC

Operator: RJG

Run Time: 08/25/00 11:08:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACE ICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00035	.17557	.00692	.00366	-.00001	2.5097	-.00033
SDev	.00007	.00973	.00046	.00007	.00004	.0008	.00004
%RSD	20.724	5.5417	6.6725	1.9896	309.86	.03013	11.352
#1	-.00030	.18245	.00659	.00361	-.00004	2.5102	-.00030
#2	-.00040	.16869	.00724	.00371	.00002	2.5091	-.00036
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	.00546	.03107	.03350	17.175	.49621	.05351	.02959
SDev	.00009	.00030	.00039	.010	.00472	.00023	.00150
%RSD	1.6912	.96925	1.1633	.05556	.95189	.43273	5.0792
#1	.00552	.03085	.03322	17.182	.49287	.05335	.03065
#2	.00539	.03128	.03377	17.169	.49955	.05368	.02853
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	.02447	-.00111	.00041	-.00010	.00088	.00327	.00247
SDev	.00108	.00100	.00108	.00039	.00056	.00047	.00013
%RSD	4.4201	90.598	264.68	400.03	63.918	14.463	5.1828
#1	.02370	-.00182	.00117	.00018	.00128	.00294	.00238
#2	.02523	-.00040	-.00036	-.00037	.00048	.00361	.00257
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	.00885	-.00419	.00015	.01329	.02249	.01817	
SDev	.00051	.00204	.00119	.00464	.00005	.00003	
%RSD	5.8066	48.619	786.03	34.912	.19996	.14525	
#1	.00848	-.00275	.00099	.01001	.02246	.01815	
#2	.00921	-.00563	-.00069	.01657	.02252	.01819	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16014	--	--	--	--	--	--
SDev	45.11327	--	--	--	--	--	--
%RSD	.2817150	--	--	--	--	--	--
#1	16046	--	--	--	--	--	--
#2	15982	--	--	--	--	--	--

Method: METTRA Sample Name: DH6ECP5 Operator: RJG
 Run Time: 08/25/00 11:12:38
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00025	-.00134	.00119	.00077	.00056	.49398	-.00011
SDev	.00039	.00792	.00160	.00005	.00016	.00113	.00016
%RSD	153.85	592.74	133.90	6.5101	28.366	.22889	150.02
#1	-.00053	.00426	.00233	.00074	.00068	.49478	-.00023
#2	.00002	-.00693	.00006	.00081	.00045	.49318	.00001

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00078	.00621	.00653	3.2566	.09441	.01028	.00472
SDev	.00025	.00021	.00034	.0065	.00029	.00006	.00033
%RSD	32.022	3.3687	5.1802	.19973	.31169	.56216	7.0113
#1	.00061	.00606	.00629	3.2612	.09420	.01024	.00448
#2	.00096	.00636	.00677	3.2520	.09462	.01032	.00495

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00492	.00052	.00101	.00085	.00178	.00074	.00109
SDev	.00028	.00094	.00051	.00065	.00069	.00090	.00037
%RSD	5.7656	181.47	49.941	76.765	38.978	122.10	34.294
#1	.00471	-.00015	.00065	.00039	.00227	.00010	.00082
#2	.00512	.00118	.00137	.00131	.00129	.00138	.00135

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00391	-.00151	.00030	.00302	.00400	.00377
SDev	.00033	.00080	.00042	.00264	.00021	.00005
%RSD	8.4346	52.834	141.10	87.140	5.1553	1.3496
#1	.00368	-.00094	.00060	.00116	.00386	.00374
#2	.00415	-.00207	.00000	.00489	.00415	.00381

Analysis Report

08/25/00 11:16:43 AM

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16465	--	--	--	--	--	--
SDev	114.0210	--	--	--	--	--	--
%RSD	.6925251	--	--	--	--	--	--
#1	16545	--	--	--	--	--	--
#2	16384	--	--	--	--	--	--

Method: METTRA Sample Name: DH6ECS

Operator: RJG

Run Time: 08/25/00 11:16:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACE ICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05412	2.6526	2.0889	1.9202	.04794	2.4482	.04666
SDev	.00007	.0169	.0012	.0072	.00015	.0090	.00005
%RSD	.12785	.63565	.05861	.37355	.31728	.36635	.10605
#1	.05417	2.6646	2.0898	1.9252	.04805	2.4546	.04669
#2	.05407	2.6407	2.0880	1.9151	.04784	2.4419	.04662
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	.52137	.23174	.28794	17.474	.49108	.55740	1.0317
SDev	.00317	.00002	.00016	.065	.00157	.00007	.0066
%RSD	.60724	.00859	.05417	.37436	.31918	.01195	.63656
#1	.51913	.23176	.28805	17.520	.49219	.55735	1.0271
#2	.52361	.23173	.28783	17.428	.48997	.55745	1.0364
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	.52826	.56037	.52704	.53814	.52994	.53314	.53207
SDev	.00092	.00017	.00120	.00074	.00078	.00320	.00188
%RSD	.17426	.03101	.22677	.13738	.14700	.60094	.35288
#1	.52891	.56049	.52620	.53762	.53049	.53088	.53075
#2	.52761	.56025	.52789	.53866	.52939	.53541	.53340
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.1360	2.1671	2.1567	2.3149	.52089	.57175	
SDev	.0129	.0062	.0001	.0150	.00163	.00049	
%RSD	.60368	.28769	.00628	.64648	.31324	.08483	
#1	2.1269	2.1715	2.1566	2.3254	.52205	.57209	
#2	2.1451	2.1627	2.1568	2.3043	.51974	.57141	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16155	--	--	--	--	--	--
SDev	79.05509	--	--	--	--	--	--
%RSD	.4893476	--	--	--	--	--	--
#1	16211	--	--	--	--	--	--
#2	16099	--	--	--	--	--	--

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Analysis Report

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Method: METTRA Sample Name: DH6ECD

Operator: RJG

Run Time: 08/25/00 11:20:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05387	2.6170	2.0698	1.8987	.04808	2.4637	.04632
SDev	.00184	.0915	.0592	.0587	.00056	.0599	.00145
%RSD	3.4118	3.4949	2.8610	3.0924	1.1542	2.4297	3.1199
#1	.05257	2.5523	2.0279	1.8572	.04769	2.4214	.04530
#2	.05517	2.6816	2.1117	1.9402	.04847	2.5060	.04734
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	.52025	.23219	.28538	17.427	.48827	.55577	1.0318
SDev	.01609	.00728	.01066	.495	.01047	.01571	.0337
%RSD	3.0928	3.1349	3.7348	2.8377	2.1440	2.8265	3.2639
#1	.50888	.22704	.27784	17.077	.48087	.54466	1.0080
#2	.53163	.23733	.29292	17.776	.49567	.56687	1.0556
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	.52888	.56229	.52755	.53912	.52958	.53420	.53266
SDev	.01560	.01202	.01321	.01281	.01496	.01553	.01534
%RSD	2.9494	2.1377	2.5039	2.3767	2.8249	2.9071	2.8799
#1	.51785	.55379	.51821	.53006	.51900	.52322	.52182
#2	.53991	.57079	.53689	.54818	.54016	.54519	.54351
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.1381	2.1675	2.1577	2.3038	.51828	.56940	
SDev	.0669	.0553	.0592	.0749	.01436	.01641	
%RSD	3.1286	2.5533	2.7431	3.2515	2.7712	2.8821	
#1	2.0908	2.1283	2.1158	2.2508	.50813	.55779	
#2	2.1854	2.2066	2.1995	2.3567	.52844	.58100	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16146	--	--	--	--	--	--
SDev	393.5056	--	--	--	--	--	--
%RSD	2.437126	--	--	--	--	--	--
#1	16425	--	--	--	--	--	--
#2	15868	--	--	--	--	--	--

Method: METTRA Sample Name: DJ32FB Operator: RJG
Run Time: 08/25/00 11:25:04
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00011	-.04966	-.00002	.00047	.00019	.01812	-.00004
SDev	.00023	.00696	.00079	.00013	.00005	.00002	.00008
%RSD	212.81	14.018	4565.1	27.316	23.908	.11179	200.92
#1	-.00027	-.04474	.00054	.00056	.00022	.01813	-.00010
#2	.00005	-.05458	-.00057	.00038	.00016	.01810	.00002
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	-.00018	.00007	.00144	-.00090	-.00101	.00009	.00215
SDev	.00031	.00030	.00048	.00333	.00008	.00008	.00026
%RSD	171.96	455.26	33.519	371.82	7.4984	83.731	12.224
#1	-.00040	-.00015	.00110	.00146	-.00096	.00015	.00233
#2	.00004	.00028	.00178	-.00325	-.00106	.00004	.00196
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	.00099	.00005	.00014	.00011	-.00046	.00089	.00044
SDev	.00053	.00127	.00049	.00010	.00159	.00263	.00228
%RSD	53.440	2405.6	344.23	87.182	344.22	295.46	519.92
#1	.00062	.00095	-.00020	.00018	.00066	.00275	.00205
#2	.00136	-.00085	.00049	.00004	-.00159	-.00097	-.00118
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	-.00061	.00249	.00146	.00277	-.00065	.00060	
SDev	.00042	.00085	.00070	.00066	.00000	.00005	
%RSD	69.593	33.961	48.325	23.946	.17791	8.7328	
#1	-.00031	.00309	.00196	.00324	-.00065	.00056	
#2	-.00091	.00189	.00096	.00230	-.00065	.00064	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15647	--	--	--	--	--	--
SDev	116.9909	--	--	--	--	--	--
%RSD	.7476667	--	--	--	--	--	--
#1	15730	--	--	--	--	--	--
#2	15565	--	--	--	--	--	--

Method: METTRA Sample Name: DJ32FC

Operator: RJG

Run Time: 08/25/00 11:29:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04685	1.8090	2.0697	1.9883	.05242	L.07483	.05229
SDev	.00005	.0146	.0150	.0090	.00022	.00001	.00067
%RSD	.10409	.80731	.72299	.45084	.41491	.01141	1.2866
#1	.04682	1.7986	2.0592	1.9819	.05226	L.07482	.05182
#2	.04689	1.8193	2.0803	1.9946	.05257	L.07483	.05277
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	.54375	.21745	.24297	1.0600	L.01537	.52261	L.00093
SDev	.00417	.00153	.00118	.0070	.00066	.00286	.00028
%RSD	.76754	.70214	.48657	.66084	4.3158	.54669	30.442
#1	.54080	.21637	.24213	1.0551	L.01490	.52059	L.00113
#2	.54670	.21853	.24380	1.0650	L.01584	.52463	L.00073
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	.53209	.52726	.52666	.52686	-.00002	-.00003	L-.00003
SDev	.00296	.00212	.00540	.00431	.00149	.00056	.00012
%RSD	.55576	.40284	1.0252	.81780	6491.3	1609.9	398.45
#1	.53000	.52576	.52285	.52381	-.00108	.00036	L-.00012
#2	.53418	.52876	.53048	.52991	.00103	-.00043	L.00006
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0135	2.0637	2.0470	2.0845	.52074	.55390	
SDev	.0319	.0054	.0142	.0176	.00120	.00375	
%RSD	1.5837	.26365	.69603	.84527	.23024	.67641	
#1	1.9909	2.0598	2.0369	2.0721	.51989	.55125	
#2	2.0360	2.0675	2.0570	2.0970	.52159	.55655	
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	

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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	15480	--	--	--	--	--	--
SDev	82.13004	--	--	--	--	--	--
%RSD	.5305481	--	--	--	--	--	--
#1	15538	--	--	--	--	--	--
#2	15422	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-1 0057-023-9 Operator: RJG
 Run Time: 08/25/00 11:33:21
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0145	23.872	.50442	1.9510	2.0339	51.078	.49445
SDev	.0021	.022	.00060	.0073	.0136	.341	.00042
%RSD	.20248	.09278	.11882	.37439	.66742	.66704	.08466
#1	1.0159	23.888	.50399	1.9562	2.0435	51.319	.49475
#2	1.0130	23.857	.50484	1.9458	2.0243	50.837	.49415
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	2.0449	2.0457	1.9108	25.053	48.993	2.0131	2.0460
SDev	.0032	.0033	.0067	.103	.263	.0063	.0113
%RSD	.15744	.16217	.34852	.41236	.53762	.31107	.55321
#1	2.0471	2.0481	1.9155	25.126	49.179	2.0175	2.0380
#2	2.0426	2.0434	1.9061	24.980	48.807	2.0086	2.0540
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	2.0130	.51435	.51383	.51400	.51569	.50140	.50616
SDev	.0129	.00151	.00026	.00068	.00461	.00158	.00048
%RSD	.64237	.29342	.05112	.13186	.89373	.31533	.09487
#1	2.0222	.51329	.51364	.51352	.51895	.50028	.50650
#2	2.0039	.51542	.51401	.51448	.51243	.50252	.50582
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.50354	.51656	.51222	1.0263	2.0084	2.0630	
SDev	.00151	.00198	.00082	.0019	.0108	.0073	
%RSD	.29993	.38370	.15991	.18177	.53631	.35523	
#1	.50248	.51796	.51280	1.0277	2.0161	2.0682	
#2	.50461	.51515	.51164	1.0250	2.0008	2.0579	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15796	--	--	--	--	--	--
SDev	8.945177	--	--	--	--	--	--
%RSD	.0566300	--	--	--	--	--	--
#1	15790	--	--	--	--	--	--
#2	15802	--	--	--	--	--	--

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Analysis Report

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Method: METTRA Sample Name: CCB1

Operator: RJG

Run Time: 08/25/00 11:37:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00005	-.04069	-.00009	.00066	.00098	.01445	.00007
SDev	.00019	.01199	.00056	.00019	.00032	.00619	.00008
%RSD	389.05	29.460	631.48	28.982	32.516	42.835	114.28
#1	-.00008	-.03222	.00031	.00052	.00076	.01007	.00001
#2	.00018	-.04917	-.00049	.00079	.00121	.01882	.00012
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	.00088	.00153	.00055	.01107	.00063	.00689
SDev	.00003	.00051	.00036	.00259	.00519	.00021	.00146
%RSD	4.4495	58.278	23.648	472.46	46.903	32.879	21.250
#1	.00058	.00052	.00127	-.00128	.00740	.00048	.00793
#2	.00062	.00124	.00178	.00238	.01474	.00078	.00585
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	.00123	.00161	.00127	.00138	.00117	-.00017	.00027
SDev	.00063	.00129	.00160	.00064	.00220	.00031	.00094
%RSD	51.487	80.119	126.36	46.275	188.22	180.28	343.64
#1	.00078	.00070	.00240	.00183	.00273	.00005	.00094
#2	.00167	.00252	.00014	.00093	-.00039	-.00039	-.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	.00024	.00123	.00090	.00264	-.00052	.00062	
SDev	.00090	.00145	.00067	.00028	.00019	.00018	
%RSD	369.60	117.47	73.810	10.450	36.797	29.230	
#1	-.00039	.00226	.00137	.00283	-.00065	.00049	
#2	.00088	.00021	.00043	.00244	-.00038	.00074	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15963	--	--	--	--	--	--
SDev	19.62221	--	--	--	--	--	--
%RSD	.1229225	--	--	--	--	--	--
#1	15949	--	--	--	--	--	--
#2	15977	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0RQ

Operator: RJG

Run Time: 08/25/00 11:41:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00027	2.5503	.00172	.02939	.00468	32.153	.00141
SDev	.00016	.0042	.00119	.00006	.00004	.010	.00014
%RSD	60.306	.16518	69.362	.20600	.92315	.03162	9.6804
#1	.00015	2.5473	.00256	.02943	.00471	32.146	.00132
#2	.00038	2.5533	.00088	.02935	.00465	32.160	.00151
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	.03258	.00143	.33003	.98702	7.8476	1.7358	.00129
SDev	.00051	.00017	.00024	.00765	.0029	.0026	.00080
%RSD	1.5709	12.252	.07255	.77470	.03743	.14975	62.038
#1	.03221	.00130	.32986	.98162	7.8455	1.7340	.00186
#2	.03294	.00155	.33020	.99243	7.8496	1.7376	.00072
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	.01305	.00970	.00670	.00770	.00017	-.00095	-.00058
SDev	.00008	.00230	.00044	.00047	.00035	.00167	.00123
%RSD	.61758	23.739	6.6482	6.1028	208.29	176.30	213.63
#1	.01310	.00807	.00701	.00736	.00042	.00023	.00029
#2	.01299	.01133	.00638	.00803	-.00008	-.00213	-.00145
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	.00039	.00285	.00203	.00051	-.00031	1.2142	
SDev	.00005	.00247	.00166	.00165	.00000	.0024	
%RSD	13.673	86.765	82.127	320.44	.86604	.19492	
#1	.00035	.00110	.00085	.00168	-.00031	1.2125	
#2	.00042	.00459	.00320	-.00065	-.00031	1.2159	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18660	--	--	--	--	--	--
SDev	38.11333	--	--	--	--	--	--
%RSD	.2042570	--	--	--	--	--	--
#1	18686	--	--	--	--	--	--
#2	18633	--	--	--	--	--	--

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Method: METTRA Sample Name: DJORQP5

Operator: RJG

Run Time: 08/25/00 11:45:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00015	.51533	.00036	.00653	.00152	7.2183	.00023
SDev	.00017	.00421	.00049	.00003	.00002	.0216	.00007
%RSD	113.25	.81651	137.74	.53365	1.5922	.29954	29.556

#1	-.00003	.51831	.00001	.00651	.00154	7.2335	.00018
#2	-.00027	.51236	.00070	.00656	.00150	7.2030	.00028

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00740	.00031	.07213	.21862	1.7278	.38829	.00035
SDev	.00015	.00004	.00058	.00847	.0021	.00064	.00048
%RSD	2.0026	12.010	.80791	3.8763	.12284	.16622	135.39

#1	.00751	.00028	.07172	.22462	1.7293	.38783	.00069
#2	.00730	.00034	.07254	.21263	1.7263	.38874	.00001

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00336	.00255	.00282	.00273	.00108	.00035	.00012
SDev	.00093	.00068	.00093	.00085	.00035	.00018	.00024
%RSD	27.666	26.628	33.065	31.065	32.313	50.351	189.94

#1	.00270	.00303	.00348	.00333	.00084	.00048	-.00004
#2	.00401	.00207	.00216	.00213	.00133	.00023	.00029

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00082	.00075	.00077	.00160	-.00058	.27776
SDev	.00241	.00134	.00170	.00076	.00000	.00026
%RSD	295.40	177.78	219.01	47.261	.51320	.09336

#1	.00252	.00170	.00197	.00214	-.00057	.27757
#2	-.00089	-.00019	-.00042	.00107	-.00058	.27794

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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	16650	--	--	--	--	--	--
SDev	73.11512	--	--	--	--	--	--
%RSD	.4391285	--	--	--	--	--	--
#1	16702	--	--	--	--	--	--
#2	16598	--	--	--	--	--	--

Method: METTRA Sample Name: DJORQS

Operator: RJG

Run Time: 08/25/00 11:49:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03933	4.2252	1.7008	1.6978	.04827	32.750	.04438
SDev	.00013	.0034	.0004	.0047	.00004	.067	.00022
%RSD	.33750	.08056	.02508	.27601	.08384	.20349	.49153
#1	.03924	4.2276	1.7011	1.7011	.04830	32.797	.04422
#2	.03943	4.2228	1.7005	1.6945	.04824	32.703	.04453
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	.47713	.17766	.54688	1.8561	8.0322	2.2017	.00065
SDev	.00101	.00065	.00161	.0002	.0226	.0017	.00024
%RSD	.21103	.36453	.29378	.01052	.28195	.07542	37.186
#1	.47642	.17720	.54802	1.8560	8.0482	2.2005	.00082
#2	.47784	.17812	.54575	1.8562	8.0162	2.2029	.00048
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	.45002	.44833	.44083	.44333	.00054	.00007	.00023
SDev	.00237	.00237	.00501	.00255	.00150	.00023	.00035
%RSD	.52724	.52843	1.1363	.57571	276.87	320.17	152.49
#1	.45170	.45000	.43729	.44152	-.00052	.00023	-.00002
#2	.44835	.44665	.44437	.44513	.00160	-.00009	.00047
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	1.6530	1.6826	1.6728	1.7549	.43177	1.6744	
SDev	.0028	.0139	.0102	.0044	.00188	.0003	
%RSD	.17223	.82787	.61212	.24821	.43644	.01663	
#1	1.6510	1.6728	1.6655	1.7580	.43310	1.6746	
#2	1.6550	1.6925	1.6800	1.7518	.43043	1.6742	
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	18571	--	--	--	--	--	--
SDev	59.46740	--	--	--	--	--	--
%RSD	.3202234	--	--	--	--	--	--
#1	18613	--	--	--	--	--	--
#2	18529	--	--	--	--	--	--

Method: METTRA Sample Name: DJORQD

Operator: RJG

Run Time: 08/25/00 11:54:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03896	4.2631	1.7049	1.7029	.04832	32.958	.04452
SDev	.00042	.0491	.0162	.0166	.00006	.192	.00064
%RSD	1.0917	1.1525	.95049	.97235	.11673	.58230	1.4440
#1	.03866	4.2284	1.6935	1.6912	.04828	32.822	.04407
#2	.03927	4.2979	1.7164	1.7146	.04836	33.094	.04497
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	.47783	.17780	.55187	1.8758	8.1111	2.2137	.00029
SDev	.00671	.00222	.00573	.0093	.0637	.0237	.00022
%RSD	1.4047	1.2470	1.0379	.49497	.78528	1.0706	76.935
#1	.47308	.17623	.54782	1.8692	8.0660	2.1969	.00044
#2	.48257	.17937	.55592	1.8824	8.1561	2.2304	.00013
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	.44872	.44699	.44067	.44277	.00028	-.00030	-.00011
SDev	.00207	.00578	.00405	.00463	.00007	.00001	.00002
%RSD	.46200	1.2938	.91976	1.0455	25.402	2.2338	18.276
#1	.44726	.44290	.43780	.43950	.00033	-.00030	-.00009
#2	.45019	.45108	.44354	.44605	.00023	-.00030	-.00012
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	1.6622	1.6891	1.6802	1.7596	.43139	1.6846	
SDev	.0229	.0177	.0194	.0108	.00358	.0148	
%RSD	1.3776	1.0451	1.1546	.61615	.82877	.38042	
#1	1.6460	1.6767	1.6665	1.7520	.42886	1.6741	
#2	1.6784	1.7016	1.6939	1.7673	.43392	1.6951	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18598	--	--	--	--	--	--
SDev	196.1876	--	--	--	--	--	--
%RSD	1.054887	--	--	--	--	--	--
#1	18737	--	--	--	--	--	--
#2	18459	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0TL

Operator: RJG

Run Time: 08/25/00 11:58:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00013	-.00005	.00163	.06102	-.00035	76.239	-.00022
SDev	.00018	.01091	.00196	.00042	.00002	.313	.00002
%RSD	140.17	24101.	120.01	.68622	4.8494	.41042	9.5013
#1	.00026	.00767	.00302	.06073	-.00036	76.018	-.00024
#2	.00000	-.00776	.00025	.06132	-.00034	76.460	-.00021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-.5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00003	.00140	.00403	.01546	11.021	1.4093	.00021
SDev	.00010	.00020	.00008	.00159	.042	.0106	.00007
%RSD	355.34	14.599	1.9424	10.303	.37996	.75220	31.520
#1	-.00010	.00155	.00409	.01658	10.992	1.4018	.00025
#2	.00004	.00126	.00398	.01433	11.051	1.4168	.00016
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	.00213	.00258	-.00020	.00073	-.00073	-.00040	-.00051
SDev	.00007	.00078	.00065	.00018	.00056	.00263	.00157
%RSD	3.4391	30.119	334.96	24.430	76.790	664.68	308.89
#1	.00208	.00313	-.00066	.00060	-.00033	-.00225	-.00161
#2	.00218	.00203	.00027	.00085	-.00113	.00146	.00060
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	2N	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00398	.00407	.00139	.00147	-.00065	.01066	
SDev	.00053	.00054	.00018	.00174	.00000	.00005	
%RSD	13.217	13.177	13.140	118.16	.08588	.43998	
#1	-.00360	.00369	.00126	.00270	-.00065	.01070	
#2	-.00435	.00445	.00152	.00024	-.00065	.01063	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15666	--	--	--	--	--	--
SDev	51.15890	--	--	--	--	--	--
%RSD	.3265522	--	--	--	--	--	--
#1	15703	--	--	--	--	--	--
#2	15630	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0VA

Operator: RJG

Run Time: 08/25/00 12:02:25

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00012	-.01881	.00096	.01778	.00002	594.22	.00003
SDev	.00015	.00785	.00122	.00021	.00029	4.18	.00011
%RSD	118.80	41.744	127.73	1.1722	1600.8	.70308	343.91
#1	-.00023	-.01326	.00009	.01763	.00022	591.26	-.00005
#2	-.00002	-.02437	.00182	.01793	-.00019	597.17	.00011
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00035	.00080	.00404	-.02211	12.689	.00132	-.00039
SDev	.00019	.00005	.00080	.00226	.135	.00003	.00026
%RSD	53.086	6.4955	19.780	10.209	1.0626	1.9460	67.663
#1	-.00049	.00084	.00347	-.02052	12.594	.00130	-.00020
#2	-.00022	.00077	.00460	-.02371	12.784	.00133	-.00057
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	.00143	.00213	-.00070	.00024	.00026	.00077	.00060
SDev	.00016	.00095	.00158	.00074	.00260	.00110	.00013
%RSD	11.088	44.882	226.82	305.57	1018.5	142.84	21.454
#1	.00131	.00145	.00042	.00076	.00209	-.00001	.00069
#2	.00154	.00280	-.00182	-.00028	-.00158	.00155	.00051
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	.00264	.00200	.00221	.00187	.00124	.00710	
SDev	.00188	.00124	.00020	.00155	.00041	.00003	
%RSD	71.406	61.960	9.0239	82.907	33.246	.39742	
#1	.00131	.00288	.00235	.00077	.00095	.00712	
#2	.00397	.00112	.00207	.00297	.00153	.00708	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15812	--	--	--	--	--	--
SDev	248.9368	--	--	--	--	--	--
%RSD	1.574356	--	--	--	--	--	--
#1	15988	--	--	--	--	--	--
#2	15636	--	--	--	--	--	--

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Method: METTRA Sample Name: DJ0VH

Operator: RJG

Run Time: 08/25/00 12:06:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00092	-.01311	-.00119	.01943	.00011	563.30	-.00006
SDev	.00010	.01283	.00056	.00011	.00022	5.09	.00004
%RSD	11.353	97.841	46.807	.57587	210.22	.90399	58.885
#1	-.00100	-.00404	-.00158	.01951	-.00005	566.90	-.00004
#2	-.00085	-.02218	-.00080	.01936	.00027	559.70	-.00009
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00019	.00023	.00540	-.05721	32.289	.00062	-.00030
SDev	.00010	.00027	.00033	.00220	.182	.00007	.00001
%RSD	50.767	117.61	6.0798	3.8437	.56462	11.074	3.3361
#1	-.00012	.00042	.00517	-.05565	32.418	.00067	-.00029
#2	-.00026	.00004	.00564	-.05876	32.160	.00057	-.00031
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	-.00025	-.00171	.00116	.00020	.00190	-.00044	.00034
SDev	.00070	.00111	.00001	.00037	.00023	.00015	.00003
%RSD	279.61	64.668	.51955	183.41	12.284	34.968	7.3942
#1	.00024	-.00249	.00116	-.00006	.00174	-.00033	.00036
#2	-.00074	-.00093	.00116	.00047	.00207	-.00055	.00032
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00171	.00206	.00194	-.00159	.00013	.00449	
SDev	.00245	.00383	.00174	.00348	.00001	.00001	
%RSD	143.22	186.03	89.492	218.40	3.4764	.22958	
#1	.00344	-.00065	.00071	.00087	.00014	.00449	
#2	-.00002	.00476	.00317	-.00405	.00013	.00450	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15940	--	--	--	--	--	--
SDev	77.18098	--	--	--	--	--	--
%RSD	.4841870	--	--	--	--	--	--
#1	15886	--	--	--	--	--	--
#2	15995	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0RQF

Operator: RJG

Run Time: 08/25/00 12:10:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00020	2.2385	.00192	.03790	.00413	33.483	.00201
SDev	.00005	.0057	.00013	.00011	.00012	.032	.00005
%RSD	26.669	.25572	6.5413	.29505	2.8232	.09545	2.5841
#1	.00024	2.2344	.00201	.03782	.00404	33.506	.00204
#2	.00016	2.2425	.00183	.03798	.00421	33.460	.00197
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	.03530	.00650	.32418	.88726	8.1471	1.7282	.00016
SDev	.00003	.00015	.00102	.00178	.0086	.0025	.00057
%RSD	.07695	2.3085	.31415	.20116	.10550	.14579	366.81
#1	.03528	.00661	.32346	.88600	8.1410	1.7264	-.00025
#2	.03532	.00640	.32490	.88852	8.1532	1.7300	.00056
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	.01965	.00967	.00552	.00690	-.00226	.00087	-.00018
SDev	.00024	.00032	.00097	.00054	.00089	.00027	.00012
%RSD	1.2477	3.3382	17.552	7.8049	39.541	30.984	67.796
#1	.01948	.00944	.00621	.00728	-.00163	.00068	-.00009
#2	.01983	.00990	.00483	.00652	-.00289	.00106	-.00026
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	-.00047	.00198	.00116	-.00144	.00058	1.1935
SDev	.00030	.00069	.00036	.00206	.00032	.0010
%RSD	63.487	35.127	31.309	142.68	55.622	.08223
#1	-.00026	.00149	.00090	.00001	.00081	1.1929
#2	-.00068	.00247	.00142	-.00290	.00035	1.1942
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18615	--	--	--	--	--	--
SDev	76.01398	--	--	--	--	--	--
%RSD	.4083392	--	--	--	--	--	--
#1	18669	--	--	--	--	--	--
#2	18562	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0RQP5F

Operator: RJG

Run Time: 08/25/00 12:14:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00021	.46145	-.00083	.00832	.00106	7.5170	.00038
SDev	.00090	.00751	.00084	.00003	.00014	.0246	.00003
%RSD	419.80	1.6263	101.30	.38812	12.792	.32781	6.5116
#1	-.00085	.46676	-.00143	.00829	.00116	7.4996	.00040
#2	.00042	.45615	-.00024	.00834	.00096	7.5344	.00037
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00795	.00140	.07010	.19553	1.7795	.38580	-.00019
SDev	.00013	.00039	.00077	.01198	.0061	.00158	.00070
%RSD	1.5854	27.961	1.0981	6.1287	.34542	.40845	371.76
#1	.00786	.00113	.06955	.18705	1.7751	.38468	-.00069
#2	.00804	.00168	.07064	.20400	1.7838	.38691	.00031
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00507	.00138	.00259	.00219	.00044	-.00117	-.00064
SDev	.00130	.00588	.00213	.00054	.00129	.00030	.00023
%RSD	25.566	426.57	82.167	24.465	295.55	25.915	35.933
#1	.00416	-.00278	.00410	.00181	.00135	-.00139	-.00047
#2	.00599	.00554	.00109	.00257	-.00048	-.00096	-.00080
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00036	.00164	.00097	-.00074	-.00058	.27377	
SDev	.00177	.00144	.00037	.00364	.00000	.00229	
%RSD	486.86	87.866	38.163	493.59	.71564	.83576	
#1	-.00162	.00266	.00124	-.00331	-.00059	.27216	
#2	.00089	.00062	.00071	.00184	-.00058	.27539	

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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	16661	--	--	--	--	--	--
SDev	63.35649	--	--	--	--	--	--
%RSD	.3802728	--	--	--	--	--	--
#1	16706	--	--	--	--	--	--
#2	16616	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0RQSF Operator: RJG
 Run Time: 08/25/00 12:19:01
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03933	3.8089	1.6873	1.7165	.04757	32.141	.04387
SDev	.00012	.0013	.0004	.0015	.00022	.101	.00003
%RSD	.29841	.03489	.02607	.08900	.45803	.31399	.07003
#1	.03924	3.8080	1.6876	1.7176	.04773	32.212	.04385
#2	.03941	3.8099	1.6870	1.7154	.04742	32.069	.04389
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	.47356	.18125	.52450	1.6745	7.8836	2.0976	-.00017
SDev	.00070	.00045	.00058	.0092	.0175	.0015	.00025
%RSD	.14793	.24756	.11029	.55047	.22220	.07123	145.77
#1	.47307	.18093	.52409	1.6810	7.8959	2.0987	.00001
#2	.47406	.18157	.52491	1.6680	7.8712	2.0965	-.00035
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	.44570	.44441	.43484	.43803	.00065	-.00118	-.00057
SDev	.00101	.00076	.00278	.00211	.00194	.00090	.00125
%RSD	.22567	.17167	.63956	.48149	296.58	76.640	219.26
#1	.44641	.44387	.43288	.43654	-.00072	-.00182	-.00145
#2	.44499	.44495	.43681	.43952	.00202	-.00054	.00031
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	1.6342	1.6633	1.6536	1.7608	.43066	1.5704	
SDev	.0002	.0069	.0046	.0028	.00082	.0036	
%RSD	.01081	.41543	.27516	.15874	.19144	.23104	
#1	1.6344	1.6584	1.6504	1.7628	.43124	1.5730	
#2	1.6341	1.6682	1.6569	1.7588	.43008	1.5679	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18770	--	--	--	--	--	--
SDev	28.74417	--	--	--	--	--	--
%RSD	.1531383	--	--	--	--	--	--
#1	18750	--	--	--	--	--	--
#2	18790	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-2

Operator: RJG

Run Time: 08/25/00 12:23:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0024	23.748	.50097	1.9386	2.0143	50.368	.48594
SDev	.0043	.141	.00052	.0103	.0007	.054	.00084
%RSD	.42984	.59554	.10384	.53052	.03573	.10719	.17279
#1	.99935	23.648	.50060	1.9313	2.0138	50.330	.48534
#2	1.0054	23.848	.50134	1.9459	2.0148	50.406	.48653
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0119	2.0148	1.9038	24.942	48.748	1.9885	2.0130
SDev	.0099	.0085	.0099	.046	.149	.0078	.0251
%RSD	.49369	.42248	.52099	.18347	.30512	.39028	1.2458
#1	2.0049	2.0088	1.8968	24.910	48.643	1.9830	1.9953
#2	2.0189	2.0209	1.9108	24.975	48.854	1.9940	2.0308
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9770	.50914	.50101	.50372	.50536	.49610	.49918
SDev	.0021	.00029	.00368	.00255	.00526	.00129	.00089
%RSD	.10452	.05660	.73552	.50700	1.0403	.26050	.17802
#1	1.9755	.50894	.49841	.50191	.50164	.49701	.49855
#2	1.9784	.50935	.50362	.50553	.50908	.49518	.49981
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.49758	.50720	.50400	1.0242	1.9928	2.0233	
SDev	.00221	.00381	.00328	.0080	.0021	.0047	
%RSD	.44491	.75179	.65090	.78391	.10535	.23147	
#1	.49602	.50451	.50168	1.0185	1.9913	2.0199	
#2	.49915	.50990	.50632	1.0299	1.9943	2.0266	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16252	--	--	--	--	--	--
SDev	39.98675	--	--	--	--	--	--
%RSD	.2460477	--	--	--	--	--	--
#1	16280	--	--	--	--	--	--
#2	16223	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2

Operator: RJG

Run Time: 08/25/00 12:27:19

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACE ICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00025	-.02110	-.00104	.00065	.00109	.02438	.00004
SDev	.00013	.00101	.00012	.00029	.00015	.00949	.00006
%RSD	51.309	4.7974	11.645	44.442	13.867	38.924	148.31
#1	-.00033	-.02182	-.00096	.00045	.00098	.01767	-.00000
#2	-.00016	-.02039	-.00113	.00086	.00120	.03109	.00009
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	.00078	.00032	-.00529	.00809	.00083	.00623
SDev	.00015	.00024	.00034	.00265	.00564	.00033	.00179
%RSD	42.385	30.314	106.21	50.202	69.730	40.377	28.725
#1	.00024	.00062	.00008	-.00341	.00410	.00059	.00750
#2	.00045	.00095	.00056	-.00716	.01209	.00106	.00497
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	.00066	.00147	.00053	.00085	.00055	-.00004	.00015
SDev	.00013	.00004	.00036	.00026	.00102	.00075	.00016
%RSD	19.687	2.7669	68.397	30.358	185.83	1700.8	105.54
#1	.00057	.00144	.00028	.00066	.00128	-.00058	.00004
#2	.00075	.00150	.00079	.00103	-.00017	.00049	.00027
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	.00299	-.00121	.00019	.00260	.00039	.00092	
SDev	.00003	.00066	.00043	.00279	.00074	.00046	
%RSD	1.1113	54.624	230.96	107.26	189.29	50.005	
#1	.00301	-.00168	-.00012	.00457	-.00013	.00060	
#2	.00297	-.00074	.00049	.00063	.00092	.00125	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16406	--	--	--	--	--	--
SDev	89.05955	--	--	--	--	--	--
%RSD	.5428350	--	--	--	--	--	--
#1	16469	--	--	--	--	--	--
#2	16343	--	--	--	--	--	--

Method: METTRA Sample Name: DJORQDF Operator: RJG
 Run Time: 08/25/00 12:31:27
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03971	3.8748	1.7098	1.7179	.04828	33.275	.04430
SDev	.00047	.0059	.0016	.0029	.00015	.026	.00018
%RSD	1.1805	.15154	.09238	.16764	.31171	.07803	.41692
#1	.03938	3.8707	1.7087	1.7199	.04839	33.293	.04417
#2	.04004	3.8790	1.7109	1.7159	.04817	33.256	.04443
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	.48062	.18324	.53157	1.7342	8.1368	2.1548	.00157
SDev	.00193	.00089	.00108	.0035	.0081	.0032	.00023
%RSD	.40179	.48319	.20246	.20359	.09926	.14669	14.596
#1	.47926	.18261	.53081	1.7367	8.1311	2.1526	.00173
#2	.48199	.18386	.53233	1.7317	8.1425	2.1571	.00141
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	.45152	.45244	.44174	.44530	-.00055	-.00016	-.00029
SDev	.00081	.00356	.00459	.00424	.00015	.00011	.00013
%RSD	.17999	.78597	1.0384	.95300	27.924	69.830	43.301
#1	.45095	.44992	.43849	.44230	-.00066	-.00024	-.00038
#2	.45210	.45495	.44498	.44830	-.00044	-.00008	-.00020
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	1.6499	1.6907	1.6771	1.7787	.43462	1.6081	
SDev	.0128	.0243	.0204	.0016	.00061	.0024	
%RSD	.77513	1.4353	1.2190	.08875	.14047	.14811	
#1	1.6409	1.6736	1.6627	1.7775	.43505	1.6064	
#2	1.6590	1.7079	1.6916	1.7798	.43418	1.6097	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	18802	--	--	--	--	--	--
SDev	85.31271	--	--	--	--	--	--
%RSD	.4537336	--	--	--	--	--	--
#1	18863	--	--	--	--	--	--
#2	18742	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0TLF

Operator: RJG

Run Time: 08/25/00 12:35:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00029	.02839	.00090	.06467	.00041	73.567	-.00020
SDev	.00005	.00544	.00076	.00019	.00005	.313	.00003
%RSD	17.003	19.175	84.058	.29977	10.984	.42589	15.538
#1	-.00026	.03224	.00036	.06480	.00038	73.789	-.00017
#2	-.00033	.02454	.00143	.06453	.00045	73.346	-.00022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00110	.00874	.00389	.01520	10.727	1.2790	.00046
SDev	.00015	.00018	.00005	.00806	.036	.0007	.00043
%RSD	13.933	2.0878	1.3255	53.019	.33693	.05412	91.871
#1	.00121	.00887	.00392	.02090	10.752	1.2795	.00077
#2	.00100	.00861	.00385	.00950	10.701	1.2785	.00016
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	.00269	.00147	.00126	.00133	-.00045	-.00092	-.00076
SDev	.00000	.00103	.00023	.00050	.00119	.00067	.00085
%RSD	.04682	70.181	18.275	37.357	267.28	73.229	111.07
#1	.00269	.00220	.00143	.00168	.00040	-.00044	-.00016
#2	.00269	.00074	.00110	.00098	-.00129	-.00140	-.00136
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	-.00088	.00398	.00236	-.00096	-.00065	.01280	
SDev	.00100	.00042	.00006	.00291	.00000	.00006	
%RSD	113.52	10.483	2.3476	302.32	.43464	.45112	
#1	-.00017	.00368	.00240	-.00302	-.00065	.01276	
#2	-.00159	.00427	.00232	.00110	-.00065	.01284	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16282	--	--	--	--	--	--
SDev	7.000633	--	--	--	--	--	--
%RSD	.0429957	--	--	--	--	--	--
#1	16287	--	--	--	--	--	--
#2	16277	--	--	--	--	--	--

Method: METTRA Sample Name: DJA1QB Operator: RJG
Run Time: 08/25/00 12:39:45
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
Avge	.00003	-.01616	-.00059	.00038	.00021	.03099	-.00006
SDev	.00014	.00346	.00034	.00000	.00003	.00103	.00015
%RSD	571.38	21.389	57.704	.63536	14.655	3.3195	272.07
#1	-.00008	-.01372	-.00035	.00039	.00024	.03172	-.00016
#2	.00013	-.01861	-.00083	.00038	.00019	.03027	.00005
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	-.00013	.00025	.00051	.00808	.00211	.00097	.00078
SDev	.00015	.00016	.00035	.00853	.00086	.00010	.00027
%RSD	109.44	61.947	68.551	105.58	40.998	10.611	34.404
#1	-.00024	.00014	.00026	.00205	.00150	.00105	.00097
#2	-.00003	.00037	.00076	.01411	.00272	.00090	.00059
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	.00058	.00183	.00154	.00164	.00218	.00041	.00100
SDev	.00024	.00137	.00130	.00041	.00016	.00015	.00015
%RSD	41.813	74.875	84.071	24.909	7.1502	36.898	15.221
#1	.00076	.00280	.00063	.00135	.00207	.00030	.00089
#2	.00041	.00086	.00246	.00193	.00229	.00051	.00110
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00076	.00198	.00157	.00240	.00014	.00113	
SDev	.00090	.00085	.00087	.00046	.00001	.00003	
%RSD	118.24	43.269	55.346	19.088	5.1692	2.6352	
#1	.00012	.00137	.00096	.00272	.00014	.00111	
#2	.00140	.00258	.00219	.00207	.00015	.00115	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16202	--	--	--	--	--	--
SDev	91.39356	--	--	--	--	--	--
%RSD	.5640751	--	--	--	--	--	--
#1	16267	--	--	--	--	--	--
#2	16138	--	--	--	--	--	--

Method: METTRA Sample Name: DJA1QC Operator: RJG
Run Time: 08/25/00 12:43:54
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	.04710	1.7245	1.9259	1.8505	.04942	L.04345	.04760
SDev	.00044	.0042	.0030	.0050	.00020	.00116	.00005
%RSD	.92324	.24599	.15321	.26814	.40580	2.6734	.11129
#1	.04679	1.7275	1.9238	1.8540	.04956	L.04262	.04763
#2	.04740	1.7215	1.9280	1.8470	.04928	L.04427	.04756
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	.49708	.19862	.22445	.97838	L.00032	.48248	L-.00051
SDev	.00076	.00022	.00003	.00588	.00355	.00010	.00078
%RSD	.15209	.11337	.01206	.60066	1125.4	.01959	153.26
#1	.49654	.19846	.22447	.97423	L-.00219	.48255	L-.00106
#2	.49761	.19878	.22443	.98254	L.00282	.48241	L.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48336	.48577	.47911	.48133	.00040	.00152	L-.00088
SDev	.00202	.00214	.00027	.00089	.00147	.00036	.00025
%RSD	.41812	.44011	.05587	.18501	366.03	23.426	28.481
#1	.48479	.48426	.47892	.48070	.00144	.00178	L-.00070
#2	.48193	.48728	.47930	.48196	-.00064	.00127	L-.00106
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	1.8730	1.9165	1.9020	1.9341	.48199	.51072	
SDev	.0052	.0045	.0047	.0023	.00017	.00068	
%RSD	.27545	.23360	.24733	.11972	.03585	.13333	
#1	1.8693	1.9133	1.8987	1.9358	.48211	.51121	
#2	1.8766	1.9197	1.9053	1.9325	.48186	.51024	
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	16430	--	--	--	--	--	--
SDev	31.78390	--	--	--	--	--	--
%RSD	.1934560	--	--	--	--	--	--
#1	16452	--	--	--	--	--	--
#2	16407	--	--	--	--	--	--

Method: METTRA Sample Name: DJ7C8

Operator: RJG

Run Time: 08/25/00 12:48:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACE ICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00395	184.86	.06844	2.7118	.00610	H753.99	.00049
SDev	.00064	.71	.00116	.0191	.00019	5.04	.00006
%RSD	16.111	.38271	1.6933	.70304	3.0556	.66852	12.268
#1	.00440	185.36	.06926	2.7253	.00596	H757.55	.00045
#2	.00350	184.36	.06762	2.6983	.00623	H750.42	.00054
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	.04631	.21249	.41164	128.43	18.335	2.2983	.00438
SDev	.00028	.00101	.00266	.71	.123	.0102	.00016
%RSD	.61599	.47643	.64656	.55053	.66893	.44342	3.6143
#1	.04652	.21320	.41352	128.93	18.422	2.3055	.00450
#2	.04611	.21177	.40976	127.93	18.249	2.2911	.00427
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	.10421	.59913	.60081	.60025	.02033	.00921	.01291
SDev	.00050	.00349	.00180	.00236	.00267	.00036	.00113
%RSD	.47640	.58228	.29955	.39353	13.155	3.9678	8.7849
#1	.10456	.60160	.60208	.60192	.01844	.00895	.01211
#2	.10386	.59667	.59953	.59858	.02222	.00947	.01371
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	.00008	-.00042	-.00025	.01109	.28646	.73806	
SDev	.00175	.00116	.00019	.00029	.00387	.00418	
%RSD	2161.8	274.34	74.120	2.6024	1.3504	.56581	
#1	.00132	-.00124	-.00039	.01089	.28919	.74101	
#2	-.00116	.00040	-.00012	.01129	.28372	.73510	
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	16788	--	--	--	--	--	--
SDev	50.59404	--	--	--	--	--	--
%RSD	.3013761	--	--	--	--	--	--
#1	16752	--	--	--	--	--	--
#2	16823	--	--	--	--	--	--

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Analysis Report

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Method: METTRA Sample Name: DJ7C8P5 Operator: RJG
 Run Time: 08/25/00 12:52:13
 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	.00060	36.099	.01299	.56072	.00171	170.16	-.00005
SDev	.00008	.194	.00042	.00137	.00010	.27	.00013
%RSD	13.404	.53820	3.2125	.24479	5.6441	.15788	271.34

#1	.00065	35.961	.01328	.55975	.00178	170.35	-.00014
#2	.00054	36.236	.01269	.56169	.00164	169.97	.00004

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00969	.04500	.07957	26.232	3.7166	.47566	.00070
SDev	.00028	.00020	.00072	.119	.0051	.00115	.00041
%RSD	2.9389	.45091	.90566	.45521	.13762	.24120	58.331

#1	.00949	.04485	.07906	26.148	3.7202	.47485	.00098
#2	.00989	.04514	.08008	26.317	3.7130	.47647	.00041

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02127	.12566	.12650	.12622	.00524	.00123	.00256
SDev	.00003	.00215	.00091	.00011	.00137	.00010	.00039
%RSD	.16232	1.7132	.71670	.08884	26.149	3.2127	15.171

#1	.02130	.12718	.12586	.12630	.00427	.00130	.00229
#2	.02125	.12413	.12714	.12614	.00621	.00116	.00284

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00228	.00089	.00135	.00315	.05925	.15393
SDev	.00019	.00208	.00133	.00131	.00024	.00046
%RSD	8.4561	233.92	97.866	41.703	.41233	.29931

#1	.00215	.00236	.00229	.00408	.05908	.15360
#2	.00242	-.00058	.00042	.00222	.05942	.15425

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16655	--	--	--	--	--	--
SDev	66.50394	--	--	--	--	--	--
%RSD	.3992930	--	--	--	--	--	--
#1	16702	--	--	--	--	--	--
#2	16608	--	--	--	--	--	--

Method: METTRA Sample Name: DJ7C8S Operator: RJG
Run Time: 08/25/00 12:56:22
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACE ICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04851	193.56	1.8109	4.1588	.04891	H892.44	.03915
SDev	.00051	.81	.0008	.0083	.00013	.89	.00019
%RSD	1.0550	.41796	.04370	.20001	.27496	.09967	.47591
#1	.04814	192.99	1.8103	4.1530	.04901	H893.07	.03902
#2	.04887	194.14	1.8114	4.1647	.04882	H891.81	.03929
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	.46643	.37211	.46208	133.12	36.045	2.7673	.00516
SDev	.00155	.00201	.00159	.09	.026	.0058	.00043
%RSD	.33194	.54146	.34324	.06565	.07251	.21132	8.3134
#1	.46534	.37069	.46096	133.06	36.027	2.7632	.00546
#2	.46753	.37353	.46320	133.18	36.064	2.7714	.00486
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	.51604	.90048	.88446	.88979	.01756	.00594	.00981
SDev	.00053	.00746	.00154	.00351	.00142	.00109	.00026
%RSD	.10260	.82822	.17387	.39438	8.0769	18.360	2.5959
#1	.51642	.89521	.88337	.88731	.01856	.00517	.00963
#2	.51567	.90575	.88554	.89227	.01656	.00671	.00999
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.7476	1.8128	1.7911	1.8617	.72749	1.0242	
SDev	.0060	.0131	.0107	.0013	.00007	.0000	
%RSD	.34360	.72165	.59881	.07132	.00965	.00243	
#1	1.7433	1.8035	1.7835	1.8608	.72744	1.0242	
#2	1.7518	1.8220	1.7986	1.8627	.72754	1.0242	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17339	--	--	--	--	--	--
SDev	90.01524	--	--	--	--	--	--
%RSD	.5191445	--	--	--	--	--	--
#1	17403	--	--	--	--	--	--
#2	17276	--	--	--	--	--	--

Method: METTRA Sample Name: DJ7C8D Operator: RJG
Run Time: 08/25/00 13:00:32
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05021	186.28	1.8309	4.5609	.04967	H969.14	.04000
SDev	.00027	.33	.0068	.0203	.00012	6.05	.00010
%RSD	.53806	.17454	.37017	.44460	.23763	.62410	.24216
#1	.05040	186.51	1.8357	4.5753	.04976	H973.42	.04007
#2	.05002	186.05	1.8261	4.5466	.04959	H964.86	.03993
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	500.00	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	.49396	.35688	.49043	122.88	20.433	4.0019	.00394
SDev	.00113	.00140	.00225	.38	.107	.0160	.00119
%RSD	.22930	.39218	.45859	.30965	.52323	.39873	30.329
#1	.49477	.35787	.49202	123.15	20.508	4.0132	.00478
#2	.49316	.35589	.48884	122.61	20.357	3.9906	.00309
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	.52849	.98720	.97082	.97627	.01758	.00881	.01173
SDev	.00243	.00402	.00927	.00752	.00376	.00007	.00130
%RSD	.45999	.40706	.95519	.77061	21.393	.80870	11.079
#1	.53021	.99004	.97738	.98159	.02024	.00886	.01265
#2	.52678	.98435	.96426	.97095	.01492	.00876	.01081
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	2N	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.7247	1.8035	1.7772	1.8950	.72375	1.0466	
SDev	.0003	.0260	.0173	.0002	.00357	.0044	
%RSD	.01982	1.4442	.97110	.01303	.49361	.42207	
#1	1.7244	1.8219	1.7894	1.8948	.72627	1.0497	
#2	1.7249	1.7851	1.7650	1.8951	.72122	1.0435	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16808	--	--	--	--	--	--
SDev	58.12501	--	--	--	--	--	--
%RSD	.3458103	--	--	--	--	--	--
#1	16767	--	--	--	--	--	--
#2	16849	--	--	--	--	--	--

Method: METTRA Sample Name: DJ7C9

Operator: RJG

Run Time: 08/25/00 13:04:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACE ICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00441	216.60	.07972	3.2093	.00737	H533.68	.00083
SDev	.00010	1.00	.00059	.0193	.00007	6.50	.00035
%RSD	2.3214	.46221	.74336	.60155	.98995	1.0252	42.059
#1	.00449	217.31	.07930	3.2230	.00732	H538.27	.00058
#2	.00434	215.89	.08014	3.1957	.00742	H529.08	.00107
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	.05913	.24387	.34670	156.64	21.044	3.0917	.00304
SDev	.00042	.00196	.00289	.93	.204	.0237	.00070
%RSD	.70167	.80273	.83354	.59394	.97110	.76711	23.129
#1	.05943	.24525	.34875	157.30	21.189	3.1085	.00254
#2	.05884	.24249	.34466	155.98	20.900	3.0750	.00353
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	.11881	.58363	.59128	.58873	.02133	.00798	.01243
SDev	.00055	.00403	.00829	.00687	.00185	.00082	.00116
%RSD	.46322	.69078	1.4017	1.1670	8.6926	10.255	9.3619
#1	.11920	.58648	.59714	.59359	.02264	.00856	.01325
#2	.11842	.58078	.58542	.58387	.02002	.00740	.01160
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00263	-.00123	.00005	.02022	.34375	.70385	
SDev	.00208	.00016	.00080	.00326	.00614	.00623	
%RSD	79.080	13.059	1478.4	16.121	1.7862	.88476	
#1	.00116	-.00134	-.00051	.01792	.34809	.70825	
#2	.00410	-.00112	.00062	.02253	.33941	.69944	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17482	--	--	--	--	--	--
SDev	89.12998	--	--	--	--	--	--
%RSD	.5098364	--	--	--	--	--	--
#1	17419	--	--	--	--	--	--
#2	17545	--	--	--	--	--	--

Method: METTRA Sample Name: DJ7CC

Operator: RJG

Run Time: 08/25/00 13:08:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACHICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02703	186.83	.11727	5.1547	.00761	H770.68	.04212
SDev	.00005	.48	.00027	.0001	.00005	3.17	.00019
%RSD	.18139	.25511	.22762	.00182	.62977	.41190	.46215
#1	.02700	186.49	.11708	5.1547	.00764	H772.92	.04198
#2	.02707	187.17	.11746	5.1548	.00758	H768.43	.04226
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	.10979	2.3146	3.2024	H784.58	51.223	6.4429	.05326
SDev	.00016	.0009	.0042	2.35	.165	.0029	.00019
%RSD	.14938	.03767	.13190	.29941	.32234	.04560	.36097
#1	.10967	2.3140	3.2053	H782.92	51.340	6.4449	.05313
#2	.10990	2.3153	3.1994	H786.24	51.107	6.4408	.05340
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.33876	19.561	18.401	H18.787	.40421	.39005	.39477
SDev	.00095	.039	.011	.020	.00007	.00271	.00183
%RSD	.27974	.19941	.05850	.10736	.01688	.69457	.46350
#1	.33943	19.589	18.408	H18.801	.40426	.39196	.39606
#2	.33809	19.534	18.393	H18.773	.40417	.38813	.39347
Errors	LC Pass	NOCHECK	NOCHECK	LC High	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	Zn	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00862	-.00812	L-.00829	.00850	.30879	H12.076	
SDev	.00363	.00062	.00079	.00201	.00042	.017	
%RSD	42.067	7.6627	9.5662	23.641	.13499	.14291	
#1	-.00606	-.00856	L-.00773	.00708	.30850	H12.088	
#2	-.01119	-.00768	L-.00885	.00992	.30909	H12.064	
Errors	NOCHECK	NOCHECK	LC Low	LC Pass	LC Pass	LC High	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17159	--	--	--	--	--	--
SDev	24.07616	--	--	--	--	--	--
%RSD	.1403123	--	--	--	--	--	--
#1	17142	--	--	--	--	--	--
#2	17176	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3

Operator: RJG

Run Time: 08/25/00 13:12:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98929	23.467	.49366	1.9205	2.0081	50.161	.47753
SDev	.00327	.011	.00180	.0068	.0169	.309	.00172
%RSD	.33081	.04749	.36515	.35267	.84356	.61504	.35937
#1	.99160	23.475	.49493	1.9253	2.0200	50.379	.47874
#2	.98697	23.459	.49238	1.9157	1.9961	49.943	.47631
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	1.9775	1.9832	1.9977	25.034	48.661	1.9658	1.9776
SDev	.0053	.0059	.0120	.014	.323	.0081	.0049
%RSD	.26995	.29539	.59923	.05498	.66457	.41289	.24764
#1	1.9813	1.9873	2.0061	25.044	48.889	1.9715	1.9741
#2	1.9738	1.9791	1.9892	25.025	48.432	1.9600	1.9810
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	1.9496	.51616	.50884	.51128	.50773	.49038	.49616
SDev	.0158	.00261	.00182	.00208	.00689	.00317	.00441
%RSD	.81111	.50575	.35719	.40713	1.3575	.64657	.88884
#1	1.9608	.51801	.51012	.51275	.51261	.49262	.49928
#2	1.9384	.51432	.50755	.50980	.50286	.48814	.49304
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	.48660	.49934	.49510	1.0180	1.9828	2.0510	
SDev	.00019	.00475	.00323	.0002	.0146	.0115	
%RSD	.03927	.95027	.65211	.01900	.73785	.56249	
#1	.48674	.50270	.49738	1.0178	1.9932	2.0591	
#2	.48647	.49599	.49282	1.0181	1.9725	2.0428	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16490	--	--	--	--	--	--
SDev	69.89723	--	--	--	--	--	--
%RSD	.4238835	--	--	--	--	--	--
#1	16440	--	--	--	--	--	--
#2	16539	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3

Operator: RJG

Run Time: 08/25/00 13:17:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00006	.02039	-.00027	.00079	.00097	.13452	-.00000
SDev	.00013	.00133	.00001	.00020	.00001	.01614	.00002
%RSD	217.08	6.5237	5.4851	25.442	.49041	11.997	1195.7
#1	-.00003	.01945	-.00028	.00065	.00097	.12311	-.00001
#2	.00015	.02133	-.00026	.00094	.00097	.14593	.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	.00042	.00080	-.00050	.03651	.01760	.00108	.00530
SDev	.00037	.00018	.00055	.01572	.00615	.00019	.00165
%RSD	89.287	22.670	109.72	43.054	34.951	17.397	31.088
#1	.00015	.00067	-.00089	.02539	.01325	.00094	.00646
#2	.00068	.00093	-.00011	.04762	.02195	.00121	.00413
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	.00132	-.00032	.00258	.00162	.00214	-.00076	.00021
SDev	.00085	.00024	.00052	.00043	.00207	.00114	.00007
%RSD	64.403	75.675	20.263	26.485	96.827	150.77	35.778
#1	.00072	-.00015	.00295	.00192	.00067	.00005	.00026
#2	.00193	-.00048	.00221	.00132	.00360	-.00157	.00015
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00258	.00132	.00174	.00524	-.00025	.00307	
SDev	.00169	.00041	.00084	.00027	.00019	.00020	
%RSD	65.605	30.838	47.986	5.0823	73.779	6.5505	
#1	.00378	.00161	.00233	.00505	-.00039	.00292	
#2	.00138	.00103	.00115	.00543	-.00012	.00321	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16709	--	--	--	--	--	--
SDev	41.04810	--	--	--	--	--	--
%RSD	.2456657	--	--	--	--	--	--
#1	16738	--	--	--	--	--	--
#2	16680	--	--	--	--	--	--

Method: METTRA Sample Name: DJE2GB

Operator: RJG

Run Time: 08/25/00 13:21:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00002	.01067	-.00041	.00039	.00021	.09730	-.00016
SDev	.00067	.00121	.00059	.00001	.00014	.00279	.00006
%RSD	3299.3	11.354	143.41	3.3692	66.027	2.8687	39.610
#1	-.00046	.01153	-.00083	.00038	.00030	.09927	-.00021
#2	.00050	.00982	.00001	.00040	.00011	.09532	-.00012
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	-.00053	.00019	-.00044	.01599	.00191	.00064	.00214
SDev	.00030	.00038	.00043	.00551	.00237	.00005	.00023
%RSD	56.860	201.77	95.776	34.467	124.12	7.9934	10.826
#1	-.00074	-.00008	-.00075	.01209	.00023	.00060	.00197
#2	-.00032	.00046	-.00014	.01988	.00359	.00067	.00230
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	.00164	.00567	.00082	.00244	-.00014	-.00041	-.00032
SDev	.00026	.00071	.00140	.00117	.00055	.00017	.00030
%RSD	15.715	12.552	170.64	48.088	392.98	40.753	91.762
#1	.00146	.00617	.00181	H.00326	-.00053	-.00053	-.00053
#2	.00182	.00517	-.00017	.00161	.00025	-.00030	-.00011
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	-.00670	.00455	.00080	-.00301	.00001	.00648	
SDev	.00019	.00134	.00095	.00091	.00056	.00010	
%RSD	2.8345	29.356	118.95	30.365	4010.9	1.5205	
#1	-.00684	.00360	.00013	-.00236	-.00039	.00641	
#2	-.00657	.00549	.00148	-.00366	.00041	.00655	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16242	--	--	--	--	--	--
SDev	62.15496	--	--	--	--	--	--
%RSD	.3826699	--	--	--	--	--	--
#1	16286	--	--	--	--	--	--
#2	16198	--	--	--	--	--	--

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Method: METTRA Sample Name: DJE2GC

Operator: RJG

Run Time: 08/25/00 13:25:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04849	1.7788	1.9461	1.8905	.05080	L.10209	.04852
SDev	.00006	.0006	.0026	.0068	.00022	.00061	.00012
%RSD	.11810	.03410	.13317	.35779	.44144	.59708	.24462
#1	.04845	1.7792	1.9479	1.8953	.05095	L.10252	.04843
#2	.04853	1.7784	1.9442	1.8858	.05064	L.10166	.04860
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	.50600	.20297	.23201	1.0122	L.00198	.49337	L.00044
SDev	.00232	.00052	.00024	.0007	.00001	.00012	.00057
%RSD	.45864	.25462	.10181	.06871	.47585	.02464	128.70
#1	.50436	.20260	.23218	1.0117	L.00199	.49328	L.00004
#2	.50764	.20333	.23185	1.0127	L.00198	.49345	L.00084
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	.49681	.49645	.48569	.48927	-.00090	-.00038	L-.00056
SDev	.00033	.00101	.00385	.00290	.00165	.00101	.00122
%RSD	.06620	.20360	.79219	.59332	183.63	263.22	220.27
#1	.49704	.49573	.48297	.48722	-.00207	-.00110	L-.00142
#2	.49658	.49716	.48841	.49132	.00027	.00033	L.00031
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	1.8277	1.8983	1.8748	1.9726	.49678	.51769	
SDev	.0112	.0090	.0097	.0023	.00360	.00048	
%RSD	.61427	.47328	.51905	.11888	.72363	.09345	
#1	1.8198	1.8920	1.8679	1.9709	.49932	.51735	
#2	1.8357	1.9047	1.8817	1.9742	.49424	.51803	
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	

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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	16411	--	--	--	--	--	--
SDev	21.67310	--	--	--	--	--	--
%RSD	.1320631	--	--	--	--	--	--
#1	16426	--	--	--	--	--	--
#2	16396	--	--	--	--	--	--

Method: METTRA Sample Name: DJCX8

Operator: RJG

Run Time: 08/25/00 13:29:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00008	31.321	.00891	.12976	.00090	22.844	.00105
SDev	.00022	.122	.00168	.00051	.00012	.220	.00005
%RSD	285.42	.39105	18.850	.39603	13.414	.96209	4.3967
#1	.00008	31.407	.01010	.13012	.00081	22.999	.00102
#2	-.00024	31.234	.00772	.12940	.00098	22.688	.00108
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	.00253	.04359	.51048	22.668	.99405	.04273	.00239
SDev	.00005	.00088	.00209	.098	.00980	.00037	.00001
%RSD	1.8420	2.0091	.40912	.43294	.98627	.85865	.55203
#1	.00250	.04421	.51196	22.737	1.0010	.04299	.00240
#2	.00256	.04297	.50900	22.599	.98711	.04247	.00238
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	.01015	.19138	.18783	.18901	.00128	-.00052	.00008
SDev	.00009	.00075	.00037	.00000	.00065	.00031	.00042
%RSD	.91269	.38939	.19864	.00037	50.623	59.707	543.93
#1	.01008	.19191	.18757	.18901	.00082	-.00074	-.00022
#2	.01021	.19085	.18810	.18901	.00174	-.00030	.00038
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	-.00095	.00520	.00315	.00288	.05864	.24085	
SDev	.00162	.00213	.00088	.00005	.00073	.00198	
%RSD	171.05	41.014	28.001	1.6441	1.2385	.82126	
#1	.00020	.00369	.00253	.00285	.05916	.24225	
#2	-.00209	.00671	.00378	.00292	.05813	.23945	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16574	--	--	--	--	--	--
SDev	46.10281	--	--	--	--	--	--
%RSD	.2781584	--	--	--	--	--	--
#1	16542	--	--	--	--	--	--
#2	16607	--	--	--	--	--	--

Method: METTRA Sample Name: DJCX8P5 Operator: RJG
Run Time: 08/25/00 13:33:45
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
Avge	-.00030	6.0868	.00167	.02576	.00040	4.5777	.00002
SDev	.00034	.0102	.00013	.00017	.00015	.0245	.00032
%RSD	113.14	.16818	7.7330	.66466	36.427	.53588	1484.0
#1	-.00006	6.0795	.00176	.02564	.00051	4.5950	-.00021
#2	-.00054	6.0940	.00158	.02588	.00030	4.5603	.00025
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00084	.00905	.09723	4.5332	.19508	.00862	.00035
SDev	.00017	.00027	.00021	.0063	.00113	.00003	.00061
%RSD	20.637	2.9844	.21816	.13834	.57944	.37907	176.88
#1	.00072	.00924	.09708	4.5376	.19588	.00865	.00078
#2	.00096	.00885	.09738	4.5287	.19428	.00860	-.00009
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00210	.03625	.03866	.03786	.00420	-.00039	.00114
SDev	.00047	.00393	.00240	.00029	.00311	.00034	.00081
%RSD	22.532	10.839	6.2157	.77774	73.915	88.688	70.563
#1	.00243	.03903	.03696	.03765	.00201	-.00014	.00057
#2	.00176	.03347	.04036	.03807	.00640	-.00063	.00171
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00099	.00242	.00129	-.00003	.01392	.04908	
SDev	.00308	.00263	.00073	.00155	.00085	.00013	
%RSD	312.62	108.69	56.654	5253.1	6.0897	.26629	
#1	.00119	.00056	.00077	-.00113	.01452	.04917	
#2	-.00317	.00429	.00180	.00107	.01332	.04898	

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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	16678	--	--	--	--	--	--
SDev	82.27298	--	--	--	--	--	--
%RSD	.4932943	--	--	--	--	--	--
#1	16736	--	--	--	--	--	--
#2	16620	--	--	--	--	--	--

Method: METTRA Sample Name: DJCX8S Operator: RJG
 Run Time: 08/25/00 13:37:54
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04792	28.528	1.8780	1.9662	.05047	18.621	.04787
SDev	.00013	.014	.0061	.0070	.00009	.068	.00025
%RSD	.27223	.05044	.32621	.35433	.18547	.36428	.52209
#1	.04802	28.538	1.8823	1.9711	.05053	18.669	.04805
#2	.04783	28.518	1.8737	1.9613	.05040	18.573	.04770
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	.49613	.23606	.26732	18.516	.82423	.51747	.00194
SDev	.00021	.00015	.00007	.010	.00056	.00083	.00007
%RSD	.04179	.06228	.02643	.05481	.06764	.16112	3.6689
#1	.49628	.23596	.26727	18.508	.82383	.51806	.00189
#2	.49598	.23617	.26737	18.523	.82462	.51688	.00199
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	.49354	.62409	.61036	.61493	.00034	.00262	.00186
SDev	.00327	.00008	.00288	.00194	.00107	.00015	.00046
%RSD	.66334	.01269	.47128	.31629	310.97	5.7863	24.520
#1	.49585	.62403	.60832	.61356	-.00041	.00251	.00154
#2	.49122	.62414	.61239	.61631	.00110	.00273	.00219
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.7668	1.8418	1.8168	1.9605	.53898	.60496	
SDev	.0033	.0088	.0069	.0048	.00096	.00041	
%RSD	.18725	.47581	.38236	.24446	.17835	.06720	
#1	1.7645	1.8356	1.8119	1.9571	.53966	.60525	
#2	1.7692	1.8480	1.8217	1.9639	.53830	.60467	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16210	--	--	--	--	--	--
SDev	.8838835	--	--	--	--	--	--
%RSD	.0054528	--	--	--	--	--	--
#1	16209	--	--	--	--	--	--
#2	16210	--	--	--	--	--	--

Method: METTRA Sample Name: DJCX8D Operator: RJG
Run Time: 08/25/00 13:42:03
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04862	28.243	1.9123	1.9907	.05120	23.610	.04840
SDev	.00055	.011	.0055	.0037	.00012	.146	.00001
%RSD	1.1216	.03866	.28999	.18747	.22913	.61654	.02082
#1	.04901	28.251	1.9162	1.9934	.05128	23.713	.04839
#2	.04824	28.235	1.9084	1.9881	.05112	23.507	.04841
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	.50175	.23651	.27449	17.123	.92030	.52715	.00206
SDev	.00003	.00085	.00016	.046	.00546	.00122	.00057
%RSD	.00682	.35709	.06009	.26936	.59324	.23196	27.493
#1	.50177	.23711	.27461	17.156	.92416	.52802	.00246
#2	.50172	.23591	.27438	17.091	.91643	.52629	.00166
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	.49716	.59662	.58251	.58721	.00060	.00034	.00043
SDev	.00366	.00206	.00121	.00012	.00237	.00113	.00004
%RSD	.73667	.34505	.20823	.02104	396.79	328.10	8.8197
#1	.49974	.59807	.58166	.58712	-.00108	.00114	.00040
#2	.49457	.59516	.58337	.58730	.00228	-.00045	.00046
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	1.8045	1.8709	1.8488	1.9910	.53853	.60800	
SDev	.0031	.0087	.0048	.0009	.00305	.00193	
%RSD	.17222	.46517	.25801	.04698	.56585	.31795	
#1	1.8023	1.8770	1.8521	1.9916	.54069	.60936	
#2	1.8067	1.8647	1.8454	1.9903	.53638	.60663	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

08/25/00 01:46:09 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16329	--	--	--	--	--	--
SDev	3.889087	--	--	--	--	--	--
%RSD	.0238167	--	--	--	--	--	--
#1	16332	--	--	--	--	--	--
#2	16326	--	--	--	--	--	--

671 602

Analysis Report

08/25/00 01:50:18 PM

page 1

Method: METTRA Sample Name: CCV3-4

Operator: RJG

Run Time: 08/25/00 13:46:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99122	23.469	.49758	1.9168	2.0178	50.279	.47723
SDev	.00024	.031	.00084	.0034	.0053	.128	.00073
%RSD	.02471	.13129	.16828	.17744	.26111	.25510	.15205
#1	.99140	23.447	.49699	1.9192	2.0216	50.370	.47671
#2	.99105	23.491	.49817	1.9144	2.0141	50.189	.47774
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9780	1.9857	1.8946	24.956	48.966	1.9757	1.9798
SDev	.0043	.0031	.0041	.037	.140	.0005	.0181
%RSD	.21639	.15373	.21766	.14647	.28540	.02701	.91310
#1	1.9750	1.9836	1.8975	24.930	49.064	1.9753	1.9670
#2	1.9811	1.9879	1.8916	24.982	48.867	1.9761	1.9926
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9446	.50487	.49136	.49586	.50501	.48917	.49445
SDev	.0082	.00096	.00009	.00026	.00107	.00401	.00232
%RSD	.42215	.19070	.01883	.05221	.21114	.81985	.46919
#1	1.9504	.50555	.49129	.49604	.50425	.49201	.49609
#2	1.9388	.50419	.49142	.49567	.50576	.48634	.49280
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.48586	.49827	.49414	1.0157	1.9886	1.9904	
SDev	.00551	.00250	.00350	.0100	.0074	.0002	
%RSD	1.1346	.50216	.70922	.98919	.37310	.00949	
#1	.48976	.50004	.49662	1.0229	1.9939	1.9903	
#2	.48196	.49650	.49166	1.0086	1.9834	1.9906	
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	16520	--	--	--	--	--	--
SDev	16.12259	--	--	--	--	--	--
%RSD	.0975943	--	--	--	--	--	--
#1	16531	--	--	--	--	--	--
#2	16509	--	--	--	--	--	--

Method: METTRA Sample Name: CCB4

Operator: RJG

Run Time: 08/25/00 13:50:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00039	.03121	.00102	.00070	.00083	.01493	.00004
SDev	.00002	.00097	.00029	.00027	.00045	.00501	.00004
%RSD	5.8491	3.1208	28.405	38.472	54.388	33.561	85.403
#1	-.00040	.03189	.00081	.00051	.00051	.01138	.00007
#2	-.00037	.03052	.00122	.00089	.00115	.01847	.00002
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	.00004	.00082	-.00075	.00270	.00828	.00070	.00566
SDev	.00011	.00018	.00001	.00361	.00354	.00019	.00217
%RSD	295.81	22.058	1.7328	133.49	42.701	27.193	38.349
#1	-.00004	.00069	-.00076	.00015	.00578	.00057	.00719
#2	.00012	.00094	-.00074	.00526	.01078	.00084	.00413
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	.00107	.00065	.00089	.00081	.00133	-.00080	-.00009
SDev	.00096	.00405	.00012	.00127	.00156	.00047	.00021
%RSD	89.704	627.16	13.591	157.08	117.92	58.563	227.78
#1	.00039	.00351	.00080	.00170	.00022	-.00047	-.00024
#2	.00175	-.00222	.00097	-.00009	.00243	-.00113	.00006
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	.00126	.00166	.00153	.00229	.00012	.00109	
SDev	.00039	.00002	.00014	.00067	.00001	.00019	
%RSD	31.009	1.2228	9.4253	29.359	4.7542	17.502	
#1	.00099	.00165	.00143	.00276	.00013	.00096	
#2	.00154	.00168	.00163	.00181	.00012	.00123	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

08/25/00 01:54:27 PM

671 605

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16590	--	--	--	--	--	--
SDev	152.8773	--	--	--	--	--	--
%RSD	.9214972	--	--	--	--	--	--
#1	16482	--	--	--	--	--	--
#2	16698	--	--	--	--	--	--

Metals Preparation

Log

P.POT # 504524



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

671.608

Method: 3050 B		Matrix: So:1	Start Time: 10:00	SDG: —	Balance: 94817	Reagents:				
Analyst: <i>[Signature]</i>		Date: 8-23-00	Lot Number: COH 220139	Job Log No. (book, page, line) 662142-142-6 0057-033-1		0057-020-6 662142-142-6 0057-033-1 5240243-142-6 0057-033-1 5587441-142-6 0057-033-1				
Reviewed By: <i>[Signature]</i>		Date: 8-23-00	MS		10ml 1:1 HNO ₃ Sol conc HNO ₃ 10ml 30% H ₂ O 10ml conc HCl					
Sampl ID	Init Wt/Vol g/mL	Final Vol mL	Comments		Color		Clarity	Texture	Artifacts	Artifact Codes
			Pre	Post	Pre	Post	Pre	Post		
1. DJ7C8	1.02g	100ml								S=Stones
2. DJ7C8S										O=Organic (plant mat'l)
3. DJ7C8D										W=free H ₂ O
4. DJ7C9										G=Glass
5. DJ7CC										M=Metal Frgm'ts
6. DJA1QB	1.02g H ₂ O									R=Rubber/Plastic
7. DJA1QC										C=Cloth
8.										P=Paper
9.										I=Insects
10.										
11.										
12.										
13.										
14.										
15.										
16.										
17.										
18.										
19.										
20.										
21.										
22.										
23.										
24.										
Digestate(s)	Date	Time	Digestate(s) Received	Date	Time	Digestate(s) Reanalyzed	Location	Hot plate /Block Temp	Correction Factor	Color
1. H3015	8-23-00	12:30	1.02g	8-23-00	16:35	1.02g	MS 1 C 3	150°C	-0.7°C	R=Red BL=Blue BR=Brown BLK=Black Y=Yellow O=Orange
ALL ANAL	8-23-00	01:50	1.02g	8-23-00	13:30	1.02g	MS 1 C 3	150°C		V=Violet P=Pink W=White GY=Gray GN=Green C=Colorless
								Texture	Clarity	
								F=Fine M=Medium C=Coarse	C=Clear CL=Cloudy O=Opaque	

REQUESTED BY: GROVEP

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>
2F CLP1	DJ7C8	_____	261112	399411	A-46-QM	COH220139	001		SOLID	0	3 1
2F CLP1	DJ7C9	_____	261113	399411	A-46-QM	COH220139	002		SOLID	0	3 1
2F CLP1	DJ7CC	_____	261114	399411	A-46-QM	COH220139	003		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

8-21-00 9:30

8-23-00 11:30

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

671 608

**TCLP
METALS DATA**

STL-Pittsburgh**Cover Page - Inorganic Analysis Data Package**

Client ID	Lab Sample ID:
DF/S1/0234/SDC/029	DJ7C8T
DF/S1/0234/SDC/029D	DJ7C8DT
DF/S1/0234/SDC/029S	DJ7C8ST
DF/S1/0234/SDC/1030	DJ7C9T
DF/S1/0234/SDC/1032	DJ7CCT

Comments: UXB DUNN FIELD
C0H220139
6010B, 7470A-TCLP

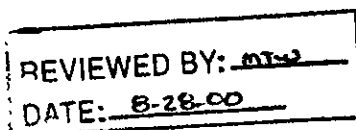
I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____

Name: _____

Date: _____

Title: _____



671 610

**TCLP
METALS
RESULTS**

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C8T **Client ID:** DF/S1/0234/SDC/029
Matrix: TCLP **Units:** mg/L **Prep Date:** 8/25/00 **Prep Batch:** 0237257
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	0.000098	B	1	CVAA	8/25/00	9:39

Comments: _____

671 612

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C9T **Client ID:** DF/S1/0234/SDC/1030
Matrix: TCLP **Units:** mg/L **Prep Date:** 8/25/00 **Prep Batch:** 0237257
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	0.000068	B	1	CVAA	8/25/00	9:44

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7CCT Client ID: DF/S1/0234/SDC/1032
Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000054	B	1	CVAA	8/25/00	9:46

Comments: _____

67i 614

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C8T Client ID: DF/S1/0234/SDC/029
Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095
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	0.15	B	1	ICP	8/25/00	14:31
Barium	493.41	0.00041	10.0	1.3	B	1	ICP	8/25/00	14:31
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	8/25/00	14:31
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	8/25/00	14:31
Lead	220.35	0.025	0.50	0.025	U	1	ICP	8/25/00	14:31
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	8/25/00	14:31
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	8/25/00	14:31

Comments: C0H220139001

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7C9T Client ID: DF/S1/0234/SDC/1030
 Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095
 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	0.17	B	1	ICP	8/25/00	14:47
Barium	493.41	0.00041	10.0	1.2	B	1	ICP	8/25/00	14:47
Cadmium	228.80	0.0028	0.10	0.0028	U	1	ICP	8/25/00	14:47
Chromium	267.72	0.0038	0.50	0.0062	B	1	ICP	8/25/00	14:47
Lead	220.35	0.025	0.50	0.080	B	1	ICP	8/25/00	14:47
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	8/25/00	14:47
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	8/25/00	14:47

Comments: C0H220139002

Version 4.10.2

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

Form 1 Equivalent

671 616

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ7CCT Client ID: DF/S1/0234/SDC/1032
Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095
Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.22	B	1	ICP	8/25/00	14:51
Barium	493.41	0.00041	10.0	1.9	B	1	ICP	8/25/00	14:51
Cadmium	228.80	0.0028	0.10	0.078	B	1	ICP	8/25/00	14:51
Chromium	267.72	0.0038	0.50	0.0038	U	1	ICP	8/25/00	14:51
Lead	220.35	0.025	0.50	80.0		1	ICP	8/25/00	14:51
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	8/25/00	14:51
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	8/25/00	14:51

Comments: C0H220139003

Version 4.10.2

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

Form 1 Equivalent

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAAUnits: ug/LChart Number: 0825HGB.PRNAcceptable Range: 90% - 110%Standard Source: UltraStandard ID: 0057-039-8

Element	WL/ Mass	True Conc	ICV5-1 8/25/00 9:27 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.60	104.0								

STL-Pittsburgh

671 618

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPUnits: ug/LChart Number: J00825B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-005-2

Element	WL/ Mass	True Conc	ICV2-1 8/25/00 1:21 PM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Arsenic	193.696	1000.0	1038.36	103.8								
Barium	493.409	1000.0	1003.98	100.4								
Cadmium	228.802	1000.0	1019.47	101.9								
Chromium	267.716	1000.0	1019.25	101.9								
Lead	220.353	1000.0	1031.68	103.2								
Selenium	196.026	1000.0	1024.66	102.5								
Silver	328.068	500.0	512.94	102.6								

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAAUnits: ug/LChart Number: 0825HGB.PRNAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0057-039-9

Element	WL/ Mass	True Conc	CCV5-1 8/25/00 9:31 AM		CCV5-2 8/25/00 9:51 AM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.40	108.0	5.47	109.4				

671 620

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J00825B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-025-5

Element	WL/ Mass	True Conc	CCV2-1 8/25/00 2:01 PM		CCV2-2 8/25/00 2:13 PM		CCV2-3 8/25/00 2:54 PM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	5000.0	5020.76	100.4	4946.59	98.9	5093.42	101.9				
Barium	493.409	5000.0	4825.16	96.5	4724.00	94.5	4906.17	98.1				
Cadmium	228.802	5000.0	5002.78	100.1	4970.86	99.4	5042.39	100.8				
Chromium	267.716	5000.0	4901.92	98.0	4843.68	96.9	4946.28	98.9				
Lead	220.353	5000.0	4923.88	98.5	4863.22	97.3	4941.22	98.8				
Selenium	196.026	5000.0	5054.72	101.1	4901.25	98.0	5144.48	102.9				
Silver	328.068	1000.0	986.96	98.7	976.40	97.6	994.12	99.4				

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0825HGB.PRN

Standard Source: _____

Standard ID: _____

			ICB1 8/25/00 9:29 AM					
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U				

671 622

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00825B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 8/25/00 1:24 PM							
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U						
Barium	493.409	10000	0.4	U						
Cadmium	228.802	100	2.8	U						
Chromium	267.716	500	3.8	U						
Lead	220.353	500	24.6	U						
Selenium	196.026	250	67.4	U						
Silver	328.068	500	3.1	U						

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0825HGB.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/25/00 9:32 AM		CCB2 8/25/00 9:52 AM					
			Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	B	0.0	U				

STL-Pittsburgh

671 624

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP

Units: ug/L

Chart Number: J00825B.ARC

Standard Source: _____

Standard ID: _____

			CCB1 8/25/00 2:04 PM		CCB2 8/25/00 2:17 PM		CCB3 8/25/00 2:57 PM			
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	44.3	B	44.3	B	53.8	B		
Barium	493.409	10000	0.4	U	0.4	U	0.5	B		
Cadmium	228.802	100	2.8	U	2.8	U	2.8	U		
Chromium	267.716	500	3.8	U	3.8	U	3.8	U		
Lead	220.353	500	24.6	U	24.6	U	24.6	U		
Selenium	196.026	250	67.4	U	67.4	U	67.4	U		
Silver	328.068	500	3.1	U	3.1	U	3.1	U		

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJC8ABTMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257Weight: 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	0.000064	B	1	CVAA	8/25/00	9:37

Comments: _____

671 626

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results**Lab Sample ID:** DJCPABT**Matrix:** TCLP **Units:** mg/L **Prep Date:** 8/25/00 **Prep Batch:** 0237257**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	0.000085	B	1	CVAA	8/25/00	9:33

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJC8ABTMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095Weight: 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	0.17	B	1	ICP	8/25/00	14:25
Barium	493.409	0.00041	10.0	0.0012	B	1	ICP	8/25/00	14:25
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	8/25/00	14:25
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	8/25/00	14:25
Lead	220.353	0.025	0.50	0.025	U	1	ICP	8/25/00	14:25
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	8/25/00	14:25
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	8/25/00	14:25

Comments: _____

671 628

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJE23BTMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.030	U	1	ICP	8/25/00	14:22
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	8/25/00	14:22
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	8/25/00	14:22
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	8/25/00	14:22
Lead	220.353	0.025	0.50	0.025	U	1	ICP	8/25/00	14:22
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	8/25/00	14:22
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	8/25/00	14:22

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

671 629

Interference Check Standard A

Instrument: ICPUnits: ug/LChart Number: J00825B.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0057-011-1

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 8/25/00 1:27 PM				
				Found	Found	Found	Found	Found
Arsenic	193.696	500		-27				
Barium	493.409	10000		2				
Cadmium	228.802	100		-4				
Chromium	267.716	500		-1				
Lead	220.353	500		71				
Selenium	196.026	250		-12				
Silver	328.068	500		0				

STL-Pittsburgh

Metals Data Reporting Form

671 630

Interference Check Standard AB

Instrument: ICP

Units: ug/L

Chart Number: J00825B.ARC

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0014-187-1

Element	WL/ Mass	True Conc	ICSAB 8/25/00 1:30 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000	933.6	93.4								
Barium	493.409	500	461.9	92.4								
Cadmium	228.802	1000	956.6	95.7								
Chromium	267.716	500	440.8	88.2								
Lead	220.353	1000	999.8	100.0								
Selenium	196.026	1000	896.5	89.7								
Silver	328.068	1000	946.5	94.7								

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DJ7C8ST
Original Sample ID: DJ7C8T **Client ID:** DF/S1/0234/SDC/029S
Matrix: TCLP **Units:** mg/L **Prep Date:** 8/25/00 **Prep Batch:** 0237257
Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.000098	B	0.0046		0.005	90.6	1	1	CVAA	8/25/00	9:39	8/25/00	9:41

Comments: _____

Version 4.10.2

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

Form 5A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DJ7C8DTOriginal Sample ID: DJ7C8TClient ID: DF/S1/0234/SDC/029DMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.000098	B	0.0046		0.005	89.2	1	1	CVAA	8/25/00	9:39	8/25/00	9:42

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DJ7C8ST
 Original Sample ID: DJ7C8T Client ID: DF/S1/0234/SDC/029S
 Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	193.7	0.15	B	5.0		5	95.9	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Barium	493.4	1.3	B	45.0		50	87.4	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Cadmium	228.8	0.0028	U	0.96		1	95.9	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Chromium	267.7	0.0038	U	4.3		5	86.7	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Lead	220.4	0.025	U	4.5		5	90.8	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Selenium	196.0	0.067	U	1.0		1	100.1	1	1	ICP	8/25/00	14:31	8/25/00	14:41
Silver	328.1	0.0031	U	0.90		1	89.6	1	1	ICP	8/25/00	14:31	8/25/00	14:41

Comments: _____

Version 4.10.2

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

Form 5A Equivalent

671 634

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DJ7C8DTOriginal Sample ID: DJ7C8T Client ID: DF/S1/0234/SDC/029DMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.7	0.15	B	4.8		5	93.7	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Barium	493.4	1.3	B	44.0		50	85.4	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Cadmium	228.8	0.0028	U	0.95		1	94.9	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Chromium	267.7	0.0038	U	4.3		5	85.6	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Lead	220.4	0.025	U	4.5		5	89.6	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Selenium	196.0	0.067	U	0.98		1	98.4	1	1	ICP	8/25/00	14:31	8/25/00	14:44
Silver	328.1	0.0031	U	0.88		1	88.4	1	1	ICP	8/25/00	14:31	8/25/00	14:44

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DJ7C8DTMatrix Spike Sample ID: DJ7C8ST Client ID: DF/S1/0234/SDC/029DMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.0046		0.0046		1.6 %	1	1	CVAA	8/25/00	9:41	8/25/00	9:42

Comments: _____

Version 4.10.2

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

Form 6 Equivalent

671 636

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DJ7C8DTMatrix Spike Sample ID: DJ7C8ST Client ID: DF/S1/0234/SDC/029DMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Arsenic	193.696	5.0		4.8		2.3 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Barium	493.409	45.0		44.0		2.3 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Cadmium	228.802	0.96		0.95		1.1 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Chromium	267.716	4.3		4.3		1.3 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Lead	220.353	4.5		4.5		1.3 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Selenium	196.026	1.0		0.98		1.6 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44
Silver	328.068	0.90		0.88		1.4 %	1	1	ICP	8/25/00	14:41	8/25/00	14:44

Comments: _____

Version 4.10.2

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

Form 6 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJCPACTMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0237257Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.0025	0.0024	97.2		80-120	1	CVAA	8/25/00	9:36

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

671 638

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJE23CTMatrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095Weight: 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	2.3	112.9		80-120	1	ICP	8/25/00	14:28
Barium	493.409	2.0	1.9	92.7	B	80-120	1	ICP	8/25/00	14:28
Cadmium	228.802	0.050	0.044	88.8	B	80-120	1	ICP	8/25/00	14:28
Chromium	267.716	0.20	0.18	91.7	B	80-120	1	ICP	8/25/00	14:28
Lead	220.353	0.50	0.46	91.5	B	80-120	1	ICP	8/25/00	14:28
Selenium	196.026	2.0	2.1	106.5		80-120	1	ICP	8/25/00	14:28
Silver	328.068	0.050	0.048	95.8	B	80-120	1	ICP	8/25/00	14:28

Comments: _____

Version 4.10.2

STL Pittsburgh

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

6031

STL-Pittsburgh

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DJ7C8PTOriginal Sample ID: DJ7C8T Client ID: DF/S1/0234/SDC/029Matrix: TCLP Units: mg/L Prep Date: 8/25/00 Prep Batch: 0238095Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	193.696	0.15	B	0.29	B	9.1 %	1	5	ICP	8/25/00	14:31	8/25/00	14:38
Barium	493.409	1.3	B	1.4	B		1	5	ICP	8/25/00	14:31	8/25/00	14:38
Cadmium	228.802	0.0028	U	0.014	U		1	5	ICP	8/25/00	14:31	8/25/00	14:38
Chromium	267.716	0.0038	U	0.019	U		1	5	ICP	8/25/00	14:31	8/25/00	14:38
Lead	220.353	0.025	U	0.12	U		1	5	ICP	8/25/00	14:31	8/25/00	14:38
Selenium	196.026	0.067	U	0.34	U		1	5	ICP	8/25/00	14:31	8/25/00	14:38
Silver	328.068	0.0031	U	0.016	U		1	5	ICP	8/25/00	14:31	8/25/00	14:38

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

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

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP

Date of IEC's: 6/22/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(0.008043), Mn(0.00002), Pb(0.000607)
Antimony	206.838	Ni(-0.000449), Pb(-0.001338), Sn(-0.004668)
Arsenic	193.696	Cd(0.011196)
Barium	493.409	Co(0.000506)
Beryllium	313.042	Cd(0.008625)
Cadmium	228.802	Co(0.002633)
Chromium	267.716	Pb(-0.000686), Sb(0.008213), V(-0.001979)
Cobalt	228.616	Al(-0.014067), B(0.00201), Cd(-0.004523), Cu(-0.00091), Pb(-0.027395), Sb(-0.003935), Tl(0.007862)
Copper	324.754	Zn(0.00466)
Iron	259.94	Ag(-0.000239), As(0.001198), B(-0.001921), Cd(-0.000034), Cu(-0.00008), Mn(-0.000288), Mo(-0.00015), Pb(0.000239), Se(-0.002635), Sn(-0.000019), Tl(0.010326), Zn(0.000098)
Manganese	257.61	Ag(0.000201), Tl(-0.005634)
Molybdenum	202.03	Al(0.008699), Cr(-0.000292), Mn(-0.00033), Sb(0.005808), V(-0.019318)
Nickel	231.604	Cd(-0.000409), Sb(-0.009092), Zn(0.003263)
Tin	189.989	Sb(0.002262)
Titanium	334.941	Co(0.001637), Fe(-0.003475), Sb(0.001696), Sn(0.003624)
Vanadium	292.402	Ag(-0.005069), Al(0.012877), As(0.017242), Be(0.00265), Cd(0.000094), Cr(0.000568), Sb(-0.003793), Si(-0.012762), Tl(0.007148), Zn(-0.004494)

STL-Pittsburgh
Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	1/15/00

671 644

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	193.70	100000	4/5/00
Barium	493.41	100000	4/5/00
Cadmium	228.80	100000	4/5/00
Chromium	267.72	100000	4/5/00
Lead	220.35	100000	4/5/00
Selenium	196.03	100000	4/5/00
Silver	328.07	2000	4/5/00

STL-Pittsburgh
Metals Data Reporting Form

671 645

Preparation Log

Preparation Batch: 0237257 **Instrument:** CVAA **Matrix:** TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJC8ABT	8/25/00	NA	100	NA
DJCPABT	8/25/00	NA	100	NA
DJCPACT	8/25/00	NA	100	NA
DJ7C8DT	8/25/00	NA	100	NA
DJ7C8ST	8/25/00	NA	100	NA
DJ7C8T	8/25/00	NA	100	NA
DJ7C9T	8/25/00	NA	100	NA
DJ7CCT	8/25/00	NA	100	NA

STL-Pittsburgh

671 646

Metals Data Reporting Form

Preparation Log

Preparation Batch: 0238095 Instrument: ICP Matrix: TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJC8ABT	8/25/00	NA	50	NA
DJE23BT	8/25/00	NA	50	NA
DJE23CT	8/25/00	NA	50	NA
DJ7C8DT	8/25/00	NA	50	NA
DJ7C8ST	8/25/00	NA	50	NA
DJ7C8T	8/25/00	NA	50	NA
DJ7C9T	8/25/00	NA	50	NA
DJ7CCT	8/25/00	NA	50	NA

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0825HGB.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		8/25/00	9:14
Std2Rep1		8/25/00	9:16
Std3Rep1		8/25/00	9:18
Std4Rep1		8/25/00	9:20
Std5Rep1		8/25/00	9:22
Std6Rep1		8/25/00	9:24
ICV5-1		8/25/00	9:27
ICB1		8/25/00	9:29
CCV5-1		8/25/00	9:31
CCB1		8/25/00	9:32
DJCPABT		8/25/00	9:33
DJCPACT		8/25/00	9:36
DJC8ABT		8/25/00	9:37
DJ7C8T	DF/S1/0234/SDC/029	8/25/00	9:39
DJ7C8ST	DF/S1/0234/SDC/029S	8/25/00	9:41
DJ7C8DT	DF/S1/0234/SDC/029D	8/25/00	9:42
DJ7C9T	DF/S1/0234/SDC/1030	8/25/00	9:44
DJ7CCT	DF/S1/0234/SDC/1032	8/25/00	9:46
ZZZZZZ		8/25/00	9:48
ZZZZZZ		8/25/00	9:49
CCV5-2		8/25/00	9:51
CCB2		8/25/00	9:52
ZZZZZZ		8/25/00	9:54
ZZZZZZ		8/25/00	9:55
ZZZZZZ		8/25/00	9:57
ZZZZZZ		8/25/00	9:58
ZZZZZZ		8/25/00	10:00
ZZZZZZ		8/25/00	10:02
ZZZZZZ		8/25/00	10:04
ZZZZZZ		8/25/00	10:05
ZZZZZZ		8/25/00	10:07
ZZZZZZ		8/25/00	10:08
ZZZZZZ		8/25/00	10:10
ZZZZZZ		8/25/00	10:11
ZZZZZZ		8/25/00	10:13
ZZZZZZ		8/25/00	10:15
ZZZZZZ		8/25/00	10:16
ZZZZZZ		8/25/00	10:18
ZZZZZZ		8/25/00	10:19

671 648

STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0825HGB.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/25/00	10:21
ZZZZZZ		8/25/00	10:23
ZZZZZZ		8/25/00	10:24
ZZZZZZ		8/25/00	10:26
ZZZZZZ		8/25/00	10:28
ZZZZZZ		8/25/00	10:30
ZZZZZZ		8/25/00	10:32
ZZZZZZ		8/25/00	10:34
ZZZZZZ		8/25/00	10:35
ZZZZZZ		8/25/00	10:37
ZZZZZZ		8/25/00	10:39

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00825B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		8/25/00	13:11
STD5A		8/25/00	13:14
STD5B		8/25/00	13:17
ICV2-1		8/25/00	13:21
ICB1		8/25/00	13:24
ICSA		8/25/00	13:27
ICSAB		8/25/00	13:30
ZZZZZZ		8/25/00	13:35
ZZZZZZ		8/25/00	13:39
ZZZZZZ		8/25/00	13:42
ZZZZZZ		8/25/00	13:45
ZZZZZZ		8/25/00	13:48
ZZZZZZ		8/25/00	13:51
ZZZZZZ		8/25/00	13:54
ZZZZZZ		8/25/00	13:58
CCV2-1		8/25/00	14:01
CCB1		8/25/00	14:04
ZZZZZZ		8/25/00	14:07
ZZZZZZ		8/25/00	14:10
CCV2-2		8/25/00	14:13
CCB2		8/25/00	14:17
DJE23BT		8/25/00	14:22
DJC8ABT		8/25/00	14:25
DJE23CT		8/25/00	14:28
DJ7C8T	DF/S1/0234/SDC/029	8/25/00	14:31
DJ7C8PT	DF/S1/0234/SDC/029	8/25/00	14:38
DJ7C8ST	DF/S1/0234/SDC/029S	8/25/00	14:41
DJ7C8DT	DF/S1/0234/SDC/029D	8/25/00	14:44
DJ7C9T	DF/S1/0234/SDC/1030	8/25/00	14:47
DJ7CCT	DF/S1/0234/SDC/1032	8/25/00	14:51
CCV2-3		8/25/00	14:54
CCB3		8/25/00	14:57

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**TCLP
METALS
RAW DATA**

Michael T. W. 8-25-00

#	Sample Name	AG	AS	BA	CD	CR	PB
1	STD1	-.00085	-.00109	-.00002	-.00009	.0013	.00014
2	STD5A	.27195	.537	4.04484	.93512	3.85559	.26135
3	STD5B						
4	ICV2-1 0057-005-2	.51294	1.0384	1.0040	1.0195	1.0193	1.0317
5	ICB1	.00178	.00270	.00007	.00071	-.00311	-.00548
6	ICSA 0057-011-1	.00031	-.02652	.00181	-.00414	-.00078	.07053
7	ICSAB 0014-187-1	.94652	.93360	.46191	.95661	.44080	.99975
8	DJC88BT	.00143	.02732	-.00002	.00177	-.00337	.01123
9	DJ8XEBT	.00143	.21811	.01137	-.00057	.00544	-.00175
10	DJC88CT	.04935	2.2144	1.8411	.04631	.19450	.45019
11	DJ3DET	-.00117	.17271	.63513	.01645	-.00610	.02804
12	DJ3DEP5T	.00055	.03940	.13422	.00400	-.00350	-.00553
13	DJ3DEST	.76599	5.0088	44.164	.97359	4.3510	4.5755
14	DJ3DEDT	.76029	4.9219	43.840	.96304	4.3338	4.5941
15	DJ3DVT	-.00227	.18321	.56832	-.00233	-.00272	.01850
16	CCV2-1 0057-025-5	.98696	5.0208	4.8252	5.0028	4.9019	4.9239
17	CCB1	.00215	.04429	.00037	.00050	-.00012	-.00547
18	DJ4M4T	-.00166	.17298	.53383	-.00105	-.00584	.02475
19	DJ5Q1T	.00112	.25233	.85327	.00369	2.4716	2.7359
20	CCV2-2	.97640	4.9466	4.7240	4.9709	4.8437	4.8632
21	CCB2	.00144	.04431	.00037	.00136	.00220	.00939
22	DJE23BT	-.00035	.01510	.00017	-.00016	-.00181	-.00550
23	DJC8ABT	.00071	.17387	.00118	.00000	-.00155	.00747
24	DJE23CT	.04790	2.2579	1.8542	.04440	.18334	.45754
25	DJ7C8T	-.00170	.15285	1.3062	.00167	-.00052	.02211
26	DJ7C8P5T	.00038	.05765	.28512	.00217	-.00337	.00561
27	DJ7C8ST	.89628	4.9469	45.001	.95919	4.3368	4.5418
28	DJ7C8DT	.88412	4.8391	43.989	.94864	4.2790	4.4822
29	DJ7C9T	-.00046	.17126	1.1802	.00049	.00621	.07999
30	DJ7CCT	-.00043	.22410	1.9005	.07783	-.00298	80.018
31	CCV2-3	.99412	5.0934	4.9062	5.0424	4.9463	4.9412
32	CCB3	.00143	.05375	.00054	.00275	-.00337	-.00548

#	Sample Name	SE
1	STD1	-.00029
2	STD5A	.52474
3	STD5B	
4	ICV2-1 0057-005-2	1.0247
5	ICB1	.01714
6	ICSA 0057-011-1	-.01188
7	ICSAB 0014-187-1	.89655
8	DJC88BT	.00477
9	DJ8XEBT	-.01805
10	DJC88CT	2.1453
11	DJ3DET	-.01692
12	DJ3DEP5T	-.01709
13	DJ3DEST	1.0476
14	DJ3DEDT	1.0343
15	DJ3DVT	-.02817
16	CCV2-1 0057-025-5	5.0547
17	CCB1	.02857

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Analysis Report

Averages

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#	Sample Name	SE
18	DJ4M4T	.00217
19	DJ5Q1T	-.05240
20	CCV2-2	4.9013
21	CCB2	.03619
22	DJE23BT	.02190
23	DJC8ABT	.00764
24	DJE23CT	2.1301
25	DJ7C8T	.02954
26	DJ7C8P5T	-.00454
27	DJ7C8ST	1.0006
28	DJ7C8DT	.98444
29	DJ7C9T	-.01147
30	DJ7CCT	.04508
31	CCV2-3	5.1445
32	CCB3	.00381

MTW 8-25-00

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J00825B	QUANMET	08/25/00	13:11		X	IR
2	STD5A	J00825B	QUANMET	08/25/00	13:14		X	IR
3	STD5B	J00825B	QUANMET	08/25/00	13:17		X	IR
4	ICV2-1 0057-005-2	J00825B	QUANMET	08/25/00	13:21	MTW	S	CONC
5	ICB1	J00825B	QUANMET	08/25/00	13:24	MTW	S	CONC
6	ICSA 0057-011-1	J00825B	QUANMET	08/25/00	13:27	MTW	Q	CONC
7	ICSAB 0014-187-1	J00825B	QUANMET	08/25/00	13:30	MTW	Q	CONC
8	DJC88BT	J00825B	QUANMET	08/25/00	13:35	MTW	S	CONC
9	DJ8XEBT	J00825B	QUANMET	08/25/00	13:39	MTW	S	CONC
10	DJC88CT	J00825B	QUANMET	08/25/00	13:42	MTW	S	CONC
11	DJ3DET	J00825B	QUANMET	08/25/00	13:45	MTW	S	CONC
12	DJ3DEP5T	J00825B	QUANMET	08/25/00	13:48	MTW	S	CONC
13	DJ3DEST	J00825B	QUANMET	08/25/00	13:51	MTW	S	CONC
14	DJ3DEDT	J00825B	QUANMET	08/25/00	13:54	MTW	S	CONC
15	DJ3DVT	J00825B	QUANMET	08/25/00	13:58	MTW	S	CONC
16	CCV2-1 0057-025-5	J00825B	QUANMET	08/25/00	14:01	MTW	S	CONC
17	CCB1	J00825B	QUANMET	08/25/00	14:04	MTW	S	CONC
18	DJ4M4T	J00825B	QUANMET	08/25/00	14:07	MTW	S	CONC
19	DJ5Q1T	J00825B	QUANMET	08/25/00	14:10	MTW	S	CONC
20	CCV2-2	J00825B	QUANMET	08/25/00	14:13	MTW	S	CONC
21	CCB2	J00825B	QUANMET	08/25/00	14:17	MTW	S	CONC
22	DJE23BT	J00825B	QUANMET	08/25/00	14:22	MTW	S	CONC
23	DJC8ABT	J00825B	QUANMET	08/25/00	14:25	MTW	S	CONC
24	DJE23CT	J00825B	QUANMET	08/25/00	14:28	MTW	S	CONC
25	DJ7C8T	J00825B	QUANMET	08/25/00	14:31	MTW	S	CONC
26	DJ7C8P5T	J00825B	QUANMET	08/25/00	14:38	MTW	S	CONC
27	DJ7C8ST	J00825B	QUANMET	08/25/00	14:41	MTW	S	CONC
28	DJ7C8DT	J00825B	QUANMET	08/25/00	14:44	MTW	S	CONC
29	DJ7C9T	J00825B	QUANMET	08/25/00	14:47	MTW	S	CONC
30	DJ7CCT	J00825B	QUANMET	08/25/00	14:51	MTW	S	CONC
31	CCV2-3	J00825B	QUANMET	08/25/00	14:54	MTW	S	CONC
32	CCB3	J00825B	QUANMET	08/25/00	14:57	MTW	S	CONC

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Standardization Rpt.

08/25/00 01:14:44 PM

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Method: QUANMET Standard: STD1
Run Time: 08/25/00 13:11:36

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00085	.00825	-.00110	.00051	-.00003	.00260	.00668
SDev	.00038	.00191	.00125	.00055	.00012	.00023	.00131
%RSD	44.540	23.115	113.55	106.59	408.58	8.8823	19.580
#1	-.00060	.00860	-.00080	.00008	.00000	.00240	.00654
#2	-.00080	.00780	-.00140	.00094	.00000	.00280	.00635
#3	-.00060	.01060	.00040	.00102	.00008	.00280	.00848
#4	-.00140	.00600	-.00260	.00000	-.00020	.00240	.00535
Elem	CD	CO	CR	CU	FE	K	LI
Avge	-.00010	-.00020	.00130	.00035	.00035	-.03320	.00024
SDev	.00008	.00033	.00082	.00019	.00089	.00920	.00055
%RSD	82.911	163.30	63.432	54.710	252.87	27.706	223.20
#1	-.00008	-.00020	.00140	.00020	.00100	-.03880	.00044
#2	-.00012	.00020	.00140	.00040	-.00020	-.03460	.00024
#3	-.00020	-.00020	.00220	.00060	.00120	-.01980	.00080
#4	.00000	-.00060	.00020	.00020	-.00060	-.03960	-.00049
Elem	MG	MN	MO	NA	NI	PB	SB
Avge	.00060	.00005	.00020	.06230	.00035	.00015	-.00045
SDev	.00103	.00010	.00016	.00504	.00142	.00019	.00038
%RSD	172.13	200.00	81.650	8.0811	404.38	127.66	84.132
#1	.00020	.00020	.00020	.06340	-.00100	.00000	-.00020
#2	.00100	.00000	.00000	.06200	.00192	.00020	-.00100
#3	.00180	.00000	.00040	.06800	.00116	.00000	-.00020
#4	-.00060	.00000	.00020	.05580	-.00068	.00040	-.00040
Elem	SE	SI	SN	SR	TI	TL	V
Avge	-.00030	.00105	-.00015	.00000	.00190	.00035	.00000
SDev	.00099	.00124	.00204	.00000	.00053	.00050	.00000
%RSD	328.86	117.80	1361.4	.00000	27.850	142.86	.00000
#1	.00020	.00000	-.00300	.00000	.00200	.00100	.00000
#2	-.00140	.00180	.00160	.00000	.00160	.00040	.00000
#3	.00080	.00240	.00100	.00000	.00260	.00020	.00000
#4	-.00080	.00000	-.00020	.00000	.00140	-.00020	.00000
Elem	ZN						
Avge	.00029						
SDev	.00009						
%RSD	30.995						
#1	.00040						
#2	.00020						
#3	.00032						
#4	.00024						

Method: QUANMET Standard: STD5A 0014-155-1
Run Time: 08/25/00 13:14:48

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.27195	.53700	.59707	4.0448	16.255	.93512	1.4812
SDev	.00111	.00830	.00291	.0476	.090	.00511	.0050
%RSD	.40892	1.5464	.48801	1.1767	.55641	.54653	.33755

#1	.27120	.54200	.59832	4.0903	16.340	.92780	1.4774
#2	.27280	.53120	.59272	3.9854	16.137	.93960	1.4822
#3	.27300	.54600	.59892	4.0753	16.309	.93596	1.4878
#4	.27080	.52880	.59832	4.0284	16.235	.93712	1.4772

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.8556	2.2726	4.2002	2.0856	.41740	1.7707	.26135
SDev	.0114	.0256	.0785	.0046	.00086	.0061	.00178
%RSD	.29475	1.1252	1.8694	.22179	.20702	.34682	.68268

#1	3.8466	2.2974	4.2768	2.0844	.41660	1.7674	.26080
#2	3.8594	2.2390	4.0957	2.0848	.41740	1.7690	.26200
#3	3.8700	2.2864	4.2398	2.0920	.41860	1.7797	.26340
#4	3.8464	2.2674	4.1887	2.0810	.41700	1.7665	.25920

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.19545	.52475	.34060	1.0056	7.8325	6.2254	.35175
SDev	.00140	.00312	.00158	.0077	.0809	.0367	.00179
%RSD	.71569	.59484	.46236	.76230	1.0323	.58951	.50935

#1	.19520	.52900	.33900	.99540	7.9100	6.2580	.35220
#2	.19380	.52500	.34140	1.0138	7.7319	6.1814	.35400
#3	.19720	.52320	.34240	1.0078	7.8841	6.2532	.35100
#4	.19560	.52180	.33960	1.0052	7.8040	6.2090	.34980

Elem	V	ZN
Avge	1.6435	1.5369
SDev	.0066	.0032
%RSD	.40244	.20541

#1	1.6480	1.5352
#2	1.6366	1.5382
#3	1.6502	1.5405
#4	1.6392	1.5334

Method: QUANMET Standard: STD5B 004-155-2
Run Time: 08/25/00 13:17:57

Elem	AL	CA	FE	K	MG	NA
Avge	11.119	25.988	30.656	2.3466	7.4957	44.981
SDev	.028	.018	.040	.0084	.0129	.154
%RSD	.24814	.06991	.13187	.35931	.17268	.34143
#1	11.097	25.979	30.623	2.3380	7.4808	44.859
#2	11.099	25.968	30.629	2.3408	7.4946	44.865
#3	11.155	25.996	30.711	2.3548	7.5124	45.184
#4	11.127	26.009	30.661	2.3528	7.4950	45.015

Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.15295	.006080	08/25/00 01:17:57
AL	308.215	STD5B	STD1	8.99997	-.074250	08/25/00 01:17:57
AS	193.696	STD5A	STD1	18.9043	.020795	08/25/00 01:17:57
B	249.600	STD5A	STD1	16.7966	-.008596	08/25/00 01:17:57
BA	493.409	STD5A	STD1	2.47226	.000073	08/25/00 01:17:57
BE	313.042	STD5A	STD1	.616913	-.001604	08/25/00 01:17:57
CA	317.933	STD5B	STD1	3.84888	-.025720	08/25/00 01:17:57
CD	228.802	STD5A	STD1	10.8529	.001085	08/25/00 01:17:57
CO	228.616	STD5A	STD1	6.78284	.001357	08/25/00 01:17:57
CR	267.716	STD5A	STD1	2.59522	-.003374	08/25/00 01:17:57
CU	324.754	STD5A	STD1	4.39701	-.001539	08/25/00 01:17:57
FE	259.940	STD5B	STD1	3.26206	-.001142	08/25/00 01:17:57
K	766.491	STD5B	STD1	42.0203	1.39508	08/25/00 01:17:57
LI	670.789	STD5A	STD1	2.38095	-.000581	08/25/00 01:17:57
MG	279.079	STD5B	STD1	13.3421	-.008005	08/25/00 01:17:57
MN	257.610	STD5A	STD1	4.79343	-.000240	08/25/00 01:17:57
MO	202.030	STD5A	STD1	23.9693	-.004794	08/25/00 01:17:57
NA	588.995	STD5B	STD1	2.22626	-.138696	08/25/00 01:17:57
NI	231.604	STD5A	STD1	5.64618	-.001976	08/25/00 01:17:57
PB	220.353	STD5A	STD1	37.1585	-.005574	08/25/00 01:17:57
SB	206.838	STD5A	STD1	51.1056	.022998	08/25/00 01:17:57
SE	196.026	STD5A	STD1	19.0458	.005714	08/25/00 01:17:57
SI	288.158	STD5A	STD1	29.0749	-.030529	08/25/00 01:17:57
SN	189.989	STD5A	STD1	9.93295	.001490	08/25/00 01:17:57
SR	409.552	STD5A	STD1	1.27673	.000000	08/25/00 01:17:57
TI	334.941	STD5A	STD1	1.60681	-.003053	08/25/00 01:17:57
TL	190.864	STD5A	STD1	57.1820	-.020014	08/25/00 01:17:57
V	292.402	STD5A	STD1	5.95500	.000000	08/25/00 01:17:57
ZN	213.856	STD5A	STD1	6.53034	-.001882	08/25/00 01:17:57

Analysis Report

08/25/00 01:24:12 PM

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Method: QUANMET Sample Name: ICV2-1 0057-005-2 Operator: MTW
 Run Time: 08/25/00 13:21:06
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51294	25.591	1.0384	1.0257	1.0040	.98568	25.739
SDev	.00380	.085	.0374	.0061	.0058	.00494	.226
%RSD	.74153	.33184	3.6024	.59925	.57892	.50080	.87989
#1	.51362	25.523	1.0447	1.0309	.99907	.98331	25.610
#2	.51798	25.550	1.0593	1.0245	.99936	.98379	26.058
#3	.51082	25.714	1.0656	1.0298	1.0110	.99304	25.736
#4	.50933	25.576	.98381	1.0175	1.0065	.98257	25.551
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	27.500	1.1000	1.1000	1.1000	1.1000	27.500
Low	.45000	22.500	.90000	.90000	.90000	.90000	22.500
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0195	1.0113	1.0193	1.0001	26.386	25.208	1.0087
SDev	.0169	.0057	.0089	.0053	.098	.127	.0106
%RSD	1.6565	.56524	.87373	.52493	.37112	.50524	1.0530
#1	1.0023	1.0072	1.0152	.99785	26.304	25.053	1.0071
#2	1.0421	1.0193	1.0313	.99435	26.481	25.195	.99426
#3	1.0128	1.0113	1.0199	1.0067	26.461	25.363	1.0171
#4	1.0207	1.0072	1.0106	1.0014	26.300	25.221	1.0163
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	27.500	27.500	1.1000
Low	.90000	.90000	.90000	.90000	22.500	22.500	.90000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.611	1.0136	.98669	25.281	1.0056	1.0317	1.0491
SDev	.094	.0040	.01299	.210	.0223	.0432	.0132
%RSD	.36540	.39199	1.3167	.83150	2.2224	4.1880	1.2621
#1	25.494	1.0099	.97709	25.175	.99242	.97588	1.0441
#2	25.646	1.0186	1.0059	25.055	1.0376	1.0728	1.0543
#3	25.715	1.0148	.98191	25.534	1.0043	1.0205	1.0645
#4	25.590	1.0109	.98188	25.360	.98830	1.0576	1.0337
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	27.500	1.1000	1.1000	27.500	1.1000	1.1000	1.1000
Low	22.500	.90000	.90000	22.500	.90000	.90000	.90000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0247	1.0522	.97725	.99902	.99389	4.9903	1.0001
SDev	.0240	.0315	.03130	.00482	.00344	.0579	.0029
%RSD	2.3395	2.9955	3.2033	.48271	.34561	1.1597	.29324
#1	1.0235	1.0638	.94147	.99468	.99092	4.9826	.99750
#2	1.0163	1.0755	1.0170	.99570	.99414	5.0722	1.0029

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#3	1.0011	1.0638	.96938	1.0051	.99863	4.9695	1.0024
#4	1.0578	1.0056	.98115	1.0006	.99189	4.9369	.99759
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 1.0199
SDev .0070
%RSD .68544

#1	1.0203
#2	1.0286
#3	1.0193
#4	1.0115

Errors	LC Pass
High	1.1000
Low	.90000

Method: QUANMET Sample Name: ICB1

Operator: MTW

Run Time: 08/25/00 13:24:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00179	.01576	.00270	.00351	.00007	-.00003	-.02283
SDev	.00234	.01294	.02984	.00828	.00035	.00006	.00428
%RSD	130.57	82.132	1103.1	235.87	483.32	200.00	18.734

#1	.00179	.01218	-.01712	-.00524	.00036	.00000	-.02164
#2	.00179	.01389	.04715	.01058	-.00042	-.00012	-.02653
#3	-.00107	.00313	-.00948	-.00188	.00007	.00000	-.02586
#4	.00465	.03383	-.00973	.01058	.00028	.00000	-.01730

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	.00072	.00203	-.00311	-.00066	.00277	-.12816	-.00063
SDev	.00129	.00282	.00030	.00102	.00192	.23495	.00050
%RSD	179.76	138.90	9.5997	154.79	69.316	183.32	80.031

#1	.00041	.00542	-.00285	.00023	.00277	-.22691	-.00030
#2	.00056	-.00136	-.00337	-.00154	.00082	-.32776	-.00011
#3	-.00059	.00136	-.00337	-.00154	.00212	-.16808	-.00097
#4	.00249	.00270	-.00286	.00022	.00539	.21010	-.00114

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	-.01067	-.00024	.00240	.00022	.00487	-.00548	.03579
SDev	.01509	.00000	.00479	.00984	.00719	.00006	.01937
%RSD	141.42	.56653	199.95	4421.3	147.77	1.1638	54.106

#1	.00000	-.00024	.00479	-.00245	.00674	-.00539	.03320
#2	-.01067	-.00024	.00479	-.00022	.01194	-.00554	H.06394
#3	-.03202	-.00024	.00479	-.01002	-.00515	-.00551	.02289
#4	.00000	-.00024	-.00479	.01358	.00594	-.00549	.02314

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	.01715	-.01454	.01954	.00013	.00040	-.01720	.00004
SDev	.04592	.03198	.02435	.00026	.00080	.08478	.00009
%RSD	267.78	220.00	124.66	200.00	200.00	492.90	229.79

#1	.03619	-.03053	.04336	.00000	.00048	-.11158	.00009
#2	.05904	-.03053	.02165	.00000	.00016	.04861	.00009

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#3	-.04761	-.03053	.02742	.00000	-.00048	.06001	.00009
#4	.02096	.03344	-.01430	.00051	.00145	-.06584	-.00010

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	-.00020
SDev	.00080
%RSD	388.91

#1	-.00060
#2	.00016
#3	-.00109
#4	.00071

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: ICSA 0057-011-1 Operator: MTW
 Run Time: 08/25/00 13:27:23
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	.00032	491.40	-.02653	-.02626	.00181	-.00004	480.88
SDev	.00309	2.42	.21425	.00722	.00066	.00006	3.26
%RSD	970.65	.49200	807.64	27.482	36.311	152.95	.67753
#1	-.00157	490.66	.26253	-.01906	.00147	-.00000	479.36
#2	.00280	488.42	-.06768	-.02512	.00176	-.00001	482.80
#3	.00308	494.04	-.04624	-.03628	.00275	-.00001	484.28
#4	-.00303	492.47	-.25473	-.02460	.00127	-.00012	477.10
Errors Value Range	NOCHECK	QC Pass 500.00 20.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass 500.00 20.000
Elem Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	-.00415	.01157	-.00078	-.00702	184.17	.17649	.00102
SDev	.00094	.00282	.00320	.00128	.71	.49567	.00068
%RSD	22.609	24.387	408.22	18.233	.38350	280.86	66.627
#1	-.00546	.00819	-.00130	-.00706	183.77	.45382	.00065
#2	-.00390	.01496	.00389	-.00615	184.02	.47063	.00180
#3	-.00323	.01089	-.00286	-.00606	185.20	.06723	.00132
#4	-.00401	.01225	-.00286	-.00882	183.67	.65552	.00029
Errors Value Range	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass 200.00 20.000	NOCHECK	NOCHECK
Elem Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	483.83	.00557	-.01201	.01369	-.00922	.07054	-.00489
SDev	1.70	.00087	.00468	.00875	.02138	.05261	.10145
%RSD	.35181	15.677	38.949	63.913	231.96	74.585	2074.6
#1	483.10	.00547	-.01087	.00512	.01338	.00971	.02340
#2	482.15	.00654	-.01563	.02382	.00275	.13754	.02346
#3	486.14	.00582	-.00586	.01803	-.01874	.07436	.08441
#4	483.92	.00444	-.01568	.00779	-.03426	.06054	-.15083
Errors Value Range	QC Pass 500.00 20.000	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Elem Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	-.01188	.06836	-.06181	.01388	-.01952	.51417	.00245
SDev	.05387	.01427	.04138	.00000	.00031	.27507	.00249
%RSD	453.23	20.871	66.949	.00000	1.5760	53.497	101.99
#1	-.07386	.06834	-.06075	.01388	-.01976	.80417	.00098
#2	.03725	.08583	-.11832	.01388	-.01944	.68720	.00447

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#3	.02894	.06839	-.04828	.01388	-.01912	.22899	.00465
#4	-.03986	.05088	-.01987	.01388	-.01976	.33634	-.00031

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	.00031
SDev	.00203
%RSD	647.43

#1	-.00223
#2	.00041
#3	.00275
#4	.00032

Errors	NOCHECK
Value	
Range	

Method: QUANMET Sample Name: ICSAB 0014-187-1 Operator: MTW
 Run Time: 08/25/00 13:30:31
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94652	489.51	.93360	.92977	.46191	.45239	478.64
SDev	.00433	1.19	.08562	.01307	.00130	.00137	1.57
%RSD	.45754	.24332	9.1707	1.4058	.28152	.30389	.32733
#1	.94775	490.50	1.0497	.94147	.46253	.45370	480.95
#2	.94032	487.99	.84441	.91492	.46006	.45063	477.88
#3	.94760	490.42	.93002	.92269	.46303	.45322	477.51
#4	.95041	489.15	.91028	.94002	.46204	.45199	478.21
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	.95662	.45398	.44080	.47216	183.43	9.9630	.99258
SDev	.01304	.00169	.00603	.00210	.45	.1860	.00413
%RSD	1.3633	.37123	1.3676	.44533	.24531	1.8666	.41660
#1	.97535	.45563	.44820	.47177	184.01	9.8748	.98964
#2	.94585	.45436	.43730	.47080	182.95	10.068	.98936
#3	.95021	.45163	.43471	.47524	183.49	9.7487	.99824
#4	.95505	.45433	.44301	.47082	183.26	10.161	.99309
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	480.59	.45364	.88913	10.006	.87827	.99976	1.0215
SDev	.90	.00192	.00606	.023	.03248	.02854	.0984
%RSD	.18709	.42333	.68200	.23414	3.6986	2.8547	9.6286
#1	481.39	.45642	.89041	9.9921	.88451	1.0122	1.1057
#2	479.40	.45233	.88067	9.9846	.91848	.97667	1.0349
#3	481.17	.45340	.89033	10.037	.84036	1.0342	.88052
#4	480.40	.45240	.89509	10.011	.86974	.97593	1.0648
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	.89656	1.0917	.83603	.92711	.88198	9.4638	.45276
SDev	.07561	.0048	.02507	.00271	.00233	.0553	.00241
%RSD	8.4330	.43714	2.9982	.29278	.26443	.58387	.53257
#1	.91715	1.0976	.85490	.93005	.88423	9.4320	.45638
#2	.87244	1.0917	.82657	.92392	.87877	9.4201	.45140

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#3	.98815	1.0917	.85773	.92851	.88294	9.4602	.45158
#4	.80850	1.0859	.80491	.92596	.88198	9.5427	.45169

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 .92820
SDev .00502
%RSD .54116

#1	.93332
#2	.93092
#3	.92664
#4	.92190

Errors	QC Pass
Value	1.0000
Range	20.000

Method: QUANMET Sample Name: DJC88BT Operator: MTW
 Run Time: 08/25/00 13:35:55
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA613
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00144	.00813	.02732	-.00163	-.00002	-.00006	.00669
SDev	.00138	.00802	.01639	.00632	.00024	.00007	.00435
%RSD	96.039	98.595	59.994	388.52	1106.9	104.55	65.025
#1	.00179	.01581	.03579	-.00523	-.00022	-.00012	.00448
#2	.00324	.00315	.04337	-.00524	.00007	-.00001	.00829
#3	.00036	-.00047	.00567	.00780	-.00022	.00000	.00204
#4	.00036	.01405	.02446	-.00384	.00028	-.00012	.01195
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00178	.00203	-.00338	-.00044	.00375	.00840	-.00060
SDev	.00131	.00135	.00000	.00044	.00253	.31987	.00065
%RSD	73.838	66.662	.05648	100.43	67.387	3806.2	107.57
#1	.00159	.00135	-.00338	-.00066	.00277	-.00000	-.00039
#2	.00368	.00406	-.00338	-.00066	.00473	.46222	.00018
#3	.00102	.00135	-.00337	-.00066	.00081	-.18489	-.00134
#4	.00082	.00135	-.00338	.00022	.00669	-.24372	-.00086
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00200	-.00024	-.00240	-.00033	-.00394	.01124	.03069
SDev	.00336	.00000	.00619	.00342	.00755	.02382	.02270
%RSD	167.77	.70154	258.25	1023.4	191.66	212.02	73.974
#1	-.00534	-.00024	-.00479	-.00111	-.00109	-.00548	.05368
#2	.00267	-.00024	.00000	-.00200	.00428	.04658	.02317
#3	-.00267	-.00024	.00479	-.00289	-.01360	.00190	.00244
#4	-.00267	-.00024	-.00959	.00468	-.00534	.00194	.04348
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00477	-.03051	-.00433	.00000	-.00000	-.04867	.00114
SDev	.02665	.00003	.01904	.00000	.00041	.05320	.00242
%RSD	558.46	.09948	440.10	.00000	265e6	109.30	212.26
#1	.01715	-.03053	.01565	.00000	.00016	-.08867	-.00010
#2	-.01332	-.03047	-.03019	.00000	-.00016	-.00869	.00476

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#3	-.02095	-.03053	-.00247	.00000	-.00048	-.10009	.00009
#4	.03620	-.03053	-.00029	.00000	.00048	.00278	-.00019

Errors	LC Pass	.NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00275
SDev	.00102
%RSD	37.236

#1	.00173
#2	.00412
#3	.00285
#4	.00228

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DJ8XEBT Operator: MTW
 Run Time: 08/25/00 13:39:03
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00144	.02436	.21812	.07343	.01137	-.00006	.94170
SDev	.00215	.01128	.04385	.01570	.00043	.00007	.01178
%RSD	149.78	46.330	20.105	21.378	3.7733	104.19	1.2506
#1	.00035	.02663	.28147	.09695	.01095	-.00012	.92722
#2	.00322	.02661	.19070	.06671	.01115	.00000	.95221
#3	.00325	.03554	.18676	.06474	.01145	-.00001	.95031
#4	-.00107	.00865	.21353	.06533	.01194	-.00012	.93704
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00057	.00406	.00545	.00198	.01452	.24582	-.00075
SDev	.00202	.00221	.00153	.00072	.00266	.45327	.00079
%RSD	353.44	54.398	28.046	36.312	18.355	184.39	104.98
#1	-.00206	.00136	.00389	.00110	.01125	-.01681	-.00125
#2	.00114	.00406	.00701	.00198	.01452	.16808	-.00039
#3	.00120	.00677	.00649	.00287	.01778	.90764	.00018
#4	-.00256	.00407	.00441	.00198	.01452	-.07564	-.00153
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.11207	.00096	-.00120	S-.13870	-.00005	-.00175	.00506
SDev	.01997	.00048	.00459	.00000	.00163	.00737	.01534
%RSD	17.817	50.015	383.69	.00000	3438.0	420.06	303.16
#1	.09073	.00072	-.00479	S-.13870	-.00012	.00930	-.00774
#2	.11207	.00072	.00000	S-.13870	-.00011	-.00546	.01281
#3	.13876	.00168	.00480	S-.13870	.00202	-.00538	.02291
#4	.10674	.00072	-.00479	S-.13870	-.00198	-.00548	-.00773
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01806	.14539	.01294	.00204	.00056	-.03449	.00088
SDev	.04941	.00874	.03153	.00000	.00055	.04704	.00272
%RSD	273.66	6.0123	243.72	.00000	97.590	136.39	309.10
#1	-.06663	.13227	.03126	.00204	-.00016	-.03156	-.00128
#2	.04384	.14974	-.03421	.00204	.00112	-.08881	.00001

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#3	-.04757	.14980	.02941	.00204	.00080	-.04315	.00487
#4	-.00187	.14974	.02529	.00204	.00048	.02555	-.00008

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.01207
SDev	.00199
%RSD	16.485

#1	.00932
#2	.01378
#3	.01325
#4	.01194

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DJC88CT Operator: MTW
 Run Time: 08/25/00 13:42:12
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04935	1.9321	2.2145	1.0143	1.8411	.04531	L.93780
SDev	.00185	.0247	.0760	.0008	.0168	.00036	.00540
%RSD	3.7562	1.2762	3.4312	.07875	.91247	.80509	.57609

#1	.05151	1.9515	2.1660	1.0136	1.8574	.04577	L.94003
#2	.04719	1.9479	2.2569	1.0150	1.8512	.04541	L.92998
#3	.04865	1.9316	2.2985	1.0150	1.8359	.04515	L.94230
#4	.05006	1.8975	2.1363	1.0136	1.8198	.04492	L.93890

Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04631	.47341	.19451	.23575	1.0078	L.19960	.93713
SDev	.00527	.00403	.00200	.00263	.0034	.20383	.01314
%RSD	11.374	.85141	1.0306	1.1154	.34061	102.12	1.4024

#1	.05220	.47915	.19567	.23906	1.0127	L.03362	.94673
#2	.04593	.47239	.19567	.23641	1.0062	L.33616	.94863
#3	.04763	.47239	.19515	.23465	1.0075	L.01681	.93253
#4	L.03948	.46971	.19152	.23289	1.0049	L.41180	.92062

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	L.10607	.47096	-.00464	S884.03	.46833	.45019	L.02670
SDev	.01098	.00121	.00554	1768.3	.01137	.02864	.00509
%RSD	10.347	.25653	119.23	200.03	2.4286	6.3608	19.066

#1	L.10940	.47265	.00015	S-.13870	.45345	.42247	L.02906
#2	L.09606	.47072	-.00944	S-.13870	.48048	.42972	L.02943
#3	L.09873	.47073	.00015	S3536.5	.47245	.48175	L.02924
#4	L.12008	.46976	-.00944	S-.13870	.46693	.46682	L.01907

Errors	LC Low	LC Pass	NOCHECK	LC High	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.1453	.14549	.02515	.92551	.00016	1.7979	.46478
SDev	.0209	.02826	.02238	.00739	.00045	.0694	.00286
%RSD	.97280	19.426	89.012	.79816	282.84	3.8616	.61523

#1	2.1720	.16151	.04949	.93246	.00048	1.8750	.46726
#2	2.1377	.15564	-.00216	.92991	.00016	1.8294	.46231

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#3	2.1225	.16151	.03559	.92378	.00048	1.7721	.46726
#4	2.1491	.10330	.01766	.91587	-.00048	1.7150	.46230

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	.49774
SDev	.00406
%RSD	.81559

#1	.50013
#2	.49719
#3	.50140
#4	.49226

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DJ3DET Operator: MTW
Run Time: 08/25/00 13:45:25
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA613
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00117	.12744	.17271	.09905	.63513	.00023	H691.69
SDev	.00185	.01399	.04185	.00001	.00187	.00000	4.79
%RSD	157.60	10.980	24.232	.00526	.29388	.08505	.69282
#1	-.00046	.14370	.17825	.09904	.63550	.00023	H695.03
#2	-.00332	.12195	.16709	.09905	.63699	.00023	H694.97
#3	-.00188	.11122	.12180	.09905	.63254	.00023	H684.84
#4	.00097	.13290	.22371	.09905	.63550	.00023	H691.91
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	.01646	.00784	-.00610	8.9717	.08353	3.9142	.01004
SDev	.00104	.00350	.00115	.0199	.00160	.2509	.00021
%RSD	6.3065	44.678	18.855	.22197	1.9162	6.4110	2.1289
#1	.01523	.01192	-.00442	8.9675	.08418	4.1936	.01009
#2	.01750	.00377	-.00701	9.0000	.08222	3.6137	.01018
#3	.01712	.00649	-.00649	8.9534	.08222	3.8239	.01018
#4	.01599	.00920	-.00649	8.9657	.08549	4.0255	.00973
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.343	4.2623	-.00478	S883.74	.00869	.02804	.04366
SDev	.090	.0249	.00391	1767.8	.00352	.01972	.01446
%RSD	.58488	.58347	81.859	200.03	40.495	70.321	33.111
#1	15.437	4.2803	-.00478	S-.13870	.00541	.05414	.03344
#2	15.354	4.2803	.00001	S-.13870	.01293	.00938	.06410
#3	15.221	4.2276	-.00478	S-.13870	.01019	.03172	.03343
#4	15.359	4.2611	-.00957	S3535.4	.00621	.01693	.04367
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01692	13.965	.02421	.68033	-.04218	-.01697	.00466
SDev	.02901	.051	.00910	.00209	.00071	.04714	.00007
%RSD	171.46	.36519	37.573	.30704	1.6894	277.78	1.6144
#1	.00974	13.995	.01175	.67982	-.04194	-.03120	.00466
#2	-.04740	14.001	.02580	.68268	-.04290	.02606	.00475

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#3	-.03597	13.891	.03360	.67773	-.04258	-.07718	.00466
#4	.00594	13.972	.02570	.68110	-.04130	.01444	.00457
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	3.2610
SDev	.0199
%RSD	.61037

#1	3.2737
#2	3.2756
#3	3.2325
#4	3.2623

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DJ3DEP5T

Operator: MTW

Run Time: 08/25/00 13:48:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	B_ ppm	BA ppm	BE ppm	CA ppm
Avge	.00056	.02520	.03940	.00655	.13423	.00002	142.69
SDev	.00137	.01145	.04195	.00194	.00064	.00006	.89
%RSD	245.02	45.421	106.48	29.624	.47556	317.81	.62466
#1	-.00123	.01211	.03572	.00487	.13349	.00011	141.78
#2	.00163	.02841	-.01356	.00823	.13497	-.00001	143.87
#3	.00020	.02112	.04701	.00487	.13448	-.00001	142.82
#4	.00163	.03915	.08843	.00823	.13398	-.00001	142.29
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 Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K_ ppm	LI ppm
Avge	.00400	.00163	-.00351	1.8032	.01644	.66602	.00092
SDev	.00219	.00068	.00026	.0080	.00130	.18646	.00063
%RSD	54.757	41.400	7.4096	.44232	7.9380	27.996	69.024
#1	.00197	.00130	-.00338	1.7933	.01449	.89924	.00160
#2	.00559	.00264	-.00338	1.8109	.01710	.58828	.00085
#3	.00618	.00129	-.00338	1.8083	.01710	.46222	.00113
#4	.00227	.00130	-.00390	1.8004	.01710	.71435	.00009
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 Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	3.2241	.90692	-.00359	272.38	.00039	-.00553	.01283
SDev	.0096	.00459	.00459	1.08	.00233	.00002	.02044
%RSD	.29745	.50595	127.74	.39577	601.20	.37794	159.29
#1	3.2154	.90189	.00000	270.90	-.00151	-.00555	.00260
#2	3.2368	.91243	-.00959	273.46	.00301	-.00552	.00268
#3	3.2181	.90860	.00000	272.75	-.00164	-.00555	.00256
#4	3.2261	.90476	-.00479	272.39	.00170	-.00551	.04350
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 Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V_ ppm
Avge	-.01710	2.7869	.01450	.14331	-.00828	.00490	.00439
SDev	.01892	.0317	.00842	.00070	.00016	.02358	.00055
%RSD	110.66	1.1366	58.072	.48966	1.9418	481.72	12.625
#1	-.03996	2.7607	.00352	.14260	-.00852	.03062	.00476
#2	-.02091	2.8305	.01345	.14399	-.00819	.00777	.00457

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#3	-.01329	2.7665	.01743	.14384	-.00819	.00777	.00357
#4	.00576	2.7898	.02358	.14281	-.00819	-.02657	.00466
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 .67365
SDev .00629
%RSD .93392

#1 .67831
#2 .67983
#3 .66833
#4 .66813

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DJ3DEST

Operator: MTW

Run Time: 08/25/00 13:51:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.76599	.09006	5.0088	.09898	44.164	.00012	H662.04
SDev	.00471	.00451	.0286	.00000	.488	.00010	2.23
%RSD	.61549	5.0130	.57085	.00218	1.1041	80.035	.33684
#1	.77206	.08421	5.0486	.09898	44.740	.00013	H664.31
#2	.76636	.09143	5.0107	.09898	44.388	.00011	H663.59
#3	.76064	.08955	4.9880	.09898	43.837	.00024	H659.97
#4	.76491	.09504	4.9880	.09898	43.690	.00000	H660.29
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97359	.00468	4.3510	8.5692	.04683	3.3658	.00978
SDev	.00645	.00133	.0198	.1074	.00112	.4593	.00039
%RSD	.66263	28.515	.45596	1.2533	2.3808	13.646	4.0290
#1	.97739	.00336	4.3748	8.6975	.04634	2.9582	.00953
#2	.97477	.00626	4.3587	8.6166	.04700	3.3616	.00961
#3	.97807	.00382	4.3410	8.4953	.04569	4.0087	.00961
#4	.96416	.00528	4.3296	8.4671	.04830	3.1347	.01037
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	14.727	4.0787	-.00119	S3537.9	.00207	4.5755	.03334
SDev	.156	.0214	.00240	.2	.00677	.0424	.03168
%RSD	1.0569	.52395	201.17	.00616	326.26	92736	95.021
#1	14.919	4.1029	.00001	S3537.7	-.00089	4.5755	.05863
#2	14.780	4.0905	-.00479	S3537.9	.00980	4.5755	.03856
#3	14.642	4.0608	.00001	S3538.1	.00506	4.6274	-.01257
#4	14.567	4.0608	.00001	S3538.1	-.00567	4.5234	.04875
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0476	13.328	.01571	.65063	-.04081	.01673	.00144
SDev	.0458	.090	.01992	.00638	.00032	.04979	.00272
%RSD	4.3683	.67338	126.80	.98050	.78741	297.57	188.99
#1	.98098	13.443	.02775	.65807	-.04065	.03691	-.00087
#2	1.0686	13.355	-.01407	.65378	-.04065	.02534	.00377

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#3	1.0572	13.262	.02543	.64586	-.04130	.05952	.00383
#4	1.0838	13.251	.02373	.64479	-.04065	-.05485	-.00096
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 3.1284
SDev .0162
%RSD .51797

#1 3.1511
#2 3.1278
#3 3.1213
#4 3.1136

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DJ3DEDT

Operator: MTW

Run Time: 08/25/00 13:54:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.76029	.09147	4.9219	.09811	43.840	.00015	H644.55
SDev	.00428	.01678	.0718	.00167	.166	.00011	4.60
%RSD	.56316	18.343	1.4590	1.7006	.37890	74.119	.71364
#1	.76209	.10764	4.9501	.09897	43.818	.00024	H646.59
#2	.75921	.09330	4.9616	.09891	43.780	.00013	H645.51
#3	.75492	.06802	4.8145	.09896	44.075	.00000	H637.86
#4	.76495	.09692	4.9615	.09561	43.687	.00024	H648.24
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96305	.00589	4.3338	8.3042	.03917	3.4919	.00937
SDev	.00942	.00141	.0173	.0539	.00350	.3026	.00047
%RSD	.97793	24.013	.40017	.64947	8.9289	8.6654	5.0403
#1	.97366	.00655	4.3415	8.2913	.04179	3.7146	.00914
#2	.96229	.00660	4.3416	8.2869	.03721	3.2188	.00942
#3	.95090	.00377	4.3078	8.3818	.03525	3.2440	.00891
#4	.96535	.00663	4.3441	8.2570	.04244	3.7902	.01001
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	14.285	3.9721	-.00599	S3538.6	.00264	4.5941	.06420
SDev	.012	.0141	.00603	.1	.01101	.0561	.00590
%RSD	.08423	.35497	100.76	.00400	417.72	1.2220	9.1966
#1	14.292	3.9802	-.00479	S3538.6	.00914	4.6350	.05910
#2	14.287	3.9716	-.00479	S3538.7	.01313	4.5904	.05907
#3	14.295	3.9524	.00001	S3538.6	-.01164	4.5160	.06933
#4	14.268	3.9841	-.01438	S3538.4	-.00009	4.6350	.06928
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0343	12.922	.00988	.63370	-.03888	.04098	.00131
SDev	.0300	.042	.01202	.00206	.00133	.04318	.00269
%RSD	2.9001	.32365	121.60	.32485	3.4075	105.37	205.00
#1	1.0000	12.914	.00390	.63314	-.03776	.08959	.00373
#2	1.0381	12.902	.02576	.63288	-.03969	.03238	-.00103

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#3	1.0267	12.890	.01190	.63671	-.04033	-.05531	-.00100
#4	1.0724	12.983	-.00201	.63207	-.03776	.01335	.00355

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	3.0374
SDev	.0126
%RSD	.41355

#1	3.0489
#2	3.0472
#3	3.0239
#4	3.0294

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJ3DVT

Operator: MTW

Run Time: 08/25/00 13:58:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA611E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00227	.45952	.18321	.12605	.56833	.00027	558.98
SDev	.00071	.00837	.07486	.01799	.00451	.00012	3.21
%RSD	31.256	1.8211	40.858	14.270	.79387	45.097	.57349
#1	-.00192	.47120	.11883	.13277	.57073	.00036	562.63
#2	-.00334	.45140	.17949	.09917	.56974	.00011	554.83
#3	-.00193	.45689	.28914	.13613	.57122	.00037	558.93
#4	-.00191	.45858	.14539	.13613	.56163	.00023	559.52
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00234	.00689	-.00273	.00244	.14913	4.2630	.01104
SDev	.00276	.00130	.00209	.00114	.00217	.1891	.00040
%RSD	118.01	18.828	76.703	46.630	1.4523	4.4357	3.5751
#1	-.00110	.00791	-.00026	.00376	.14945	4.5382	.01152
#2	-.00345	.00520	-.00390	.00112	.14619	4.1432	.01113
#3	L-.00556	.00792	-.00493	.00200	.15141	4.2356	.01096
#4	.00077	.00655	-.00182	.00288	.14945	4.1348	.01057
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	24.667	4.4577	-.00237	S2651.8	-.00262	.01851	.04351
SDev	.099	.0208	.00277	1768.0	.00630	.02377	.00836
%RSD	.39955	.46725	116.56	66.670	240.43	128.41	19.220
#1	24.763	4.4845	.00002	S3536.3	.00044	.00926	.05371
#2	24.629	4.4385	-.00477	S-.13870	-.00853	.05377	.04345
#3	24.731	4.4634	-.00477	S3535.0	-.00714	.00923	.03323
#4	24.547	4.4443	.00002	S3536.1	.00475	.00178	.04363
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02818	H32.276	.01873	1.0140	-.03262	.03369	.00382
SDev	.05958	.145	.02353	.0069	.00064	.06360	.00182
%RSD	211.45	.44819	125.64	.68265	1.9704	188.79	47.673
#1	.02896	H32.429	.02573	1.0188	-.03230	.06501	.00476
#2	.00229	H32.243	.02965	1.0152	-.03358	.07665	.00466

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#3	-.10816	H32.341	.03556	1.0182	-.03230	.06068	.00109
#4	-.03579	H32.091	-.01604	1.0039	-.03230	-.05379	.00476
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 .15515
SDev .00155
%RSD 1.00000

#1 .15614
#2 .15511
#3 .15639
#4 .15298

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-1 0057-025-5 Operator: MTW
Run Time: 08/25/00 14:01:24
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98696	49.518	5.0208	4.8928	4.8252	4.8559	50.475
SDev	.00146	.081	.0751	.0016	.0170	.0154	.199
%RSD	.14828	.16328	1.4950	.03217	.35311	.31750	.39400
#1	.98763	49.540	5.0160	4.8945	4.8299	4.8615	50.457
#2	.98777	49.621	5.1169	4.8907	4.8407	4.8722	50.559
#3	.98477	49.465	4.9335	4.8929	4.8291	4.8542	50.209
#4	.98769	49.443	5.0166	4.8930	4.8009	4.8356	50.677
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	5.0028	4.9201	4.9019	4.8336	50.953	48.786	4.8540
SDev	.0188	.0172	.0138	.0215	.105	.370	.0313
%RSD	.37508	.34870	.28050	.44491	.20638	.75914	.64457
#1	4.9788	4.9198	4.9112	4.8358	50.983	48.920	4.8520
#2	5.0050	4.9415	4.9091	4.8534	51.074	49.063	4.8691
#3	5.0027	4.8995	4.8816	4.8419	50.822	48.239	4.8837
#4	5.0246	4.9198	4.9059	4.8033	50.931	48.920	4.8113
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	49.474	4.8919	4.8854	49.291	4.8750	4.9239	4.9721
SDev	.169	.0112	.0198	.187	.0134	.0320	.0175
%RSD	.34159	.22973	.40483	.37893	.27573	.65030	.35129
#1	49.502	4.8929	4.9022	49.365	4.8636	4.9127	4.9641
#2	49.683	4.9034	4.9022	49.401	4.8899	4.9058	4.9950
#3	49.435	4.8765	4.8734	49.385	4.8637	4.9716	4.9543
#4	49.275	4.8948	4.8638	49.011	4.8829	4.9053	4.9749
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	5.0547	5.0633	4.8656	4.8412	4.8473	9.8463	4.8943
SDev	.0758	.0088	.0402	.0139	.0108	.1089	.0101
%RSD	1.4990	.17418	.82686	.28705	.22273	1.1058	.20724
#1	5.0805	5.0559	4.8322	4.8458	4.8553	9.9404	4.8827
#2	5.1493	5.0679	4.9238	4.8539	4.8576	9.8935	4.9065

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#3	4.9811	5.0560	4.8580	4.8438	4.8405	9.6905	4.8904
#4	5.0080	5.0736	4.8482	4.8214	4.8357	9.8608	4.8974
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 4.9213
SDev .0148
%RSD .30093

#1 4.9208
#2 4.9344
#3 4.9007
#4 4.9293

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB1

Operator: MTW

Run Time: 08/25/00 14:04:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA611E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00215	.01305	.04430	-.00020	.00037	.00024	-.01458
SDev	.00317	.01236	.02032	.00193	.00024	.00031	.00533
%RSD	147.48	94.711	45.875	971.59	65.111	128.77	36.546

#1	.00036	.00488	.01697	-.00188	.00007	-.00012	-.02155
#2	.00608	.03018	.04702	.00147	.00028	.00012	-.01449
#3	-.00107	.00319	.06614	.00148	.00057	.00037	-.01367
#4	.00324	.01395	.04706	-.00187	.00057	.00060	-.00860

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	.00051	.00339	-.00013	.00022	.00277	.07774	-.00008
SDev	.00114	.00175	.00389	.00000	.00349	.21984	.00034
%RSD	225.81	51.710	3006.5	.75503	125.92	282.79	405.86

#1	.00090	.00135	-.00337	.00022	.00081	.17649	-.00058
#2	-.00108	.00543	.00182	.00022	.00082	.31095	.00009
#3	.00163	.00271	-.00337	.00022	.00147	-.20170	-.00002
#4	.00057	.00407	.00441	.00022	.00800	.02521	.00018

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	.00467	.00072	.00360	.01391	-.00151	.00548	.01019
SDev	.01031	.00078	.00459	.00784	.00512	.00004	.01745
%RSD	220.70	108.49	127.63	56.365	339.75	.71773	171.27

#1	-.00534	-.00024	.00959	.00289	-.00243	-.00550	.03314
#2	.01067	.00168	.00479	.01714	.00520	-.00543	.01282
#3	-.00267	.00072	.00000	.01447	-.00723	-.00551	-.00773
#4	.01601	.00072	.00000	.02115	-.00158	-.00547	.00253

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	.02858	.02037	.00700	.00064	.00064	-.02007	.00126
SDev	.02657	.02247	.01196	.00049	.00061	.06926	.00234
%RSD	92.994	110.32	170.91	76.594	95.743	345.00	185.92

#1	-.00571	.02762	.01555	.00000	-.00016	-.06578	.00018
#2	.03238	.03344	-.00839	.00051	.00112	.08287	.00010

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#3	.05905	-.01308	.01735	.00102	.00048	-.05436	-.00001
#4	.02859	.03350	.00349	.00102	.00112	-.04303	.00477

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	.00041
SDev	.00113
%RSD	274.62

#1	.00204
#2	-.00006
#3	-.00055
#4	.00022

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DJ4M4T Operator: MTW
Run Time: 08/25/00 14:07:40
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00167	.09027	.17299	.16036	.53383	.00048	541.70
SDev	.00137	.00806	.04369	.01512	.00412	.00010	3.62
%RSD	82.098	8.9312	25.256	9.4264	.77112	20.926	.66811
#1	-.00345	.07909	.17497	.15280	.53769	.00048	536.27
#2	-.00059	.08977	.11061	.15281	.52800	.00048	543.41
#3	-.00203	.09701	.20129	.18304	.53472	.00036	543.46
#4	-.00060	.09520	.20508	.15280	.53493	.00060	543.66
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	-.00105	.02353	-.00584	.01432	.10361	10.829	.00954
SDev	.00165	.00260	.00214	.00072	.00112	.391	.00109
%RSD	156.82	11.030	36.554	5.0146	1.0759	3.6128	11.393
#1	-.00292	.02557	-.00857	.01344	.10312	11.287	.01085
#2	-.00132	.02014	-.00338	.01432	.10378	10.707	.00819
#3	-.00105	.02285	-.00597	.01432	.10247	10.362	.00956
#4	.00109	.02556	-.00545	.01520	.10508	10.959	.00956
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	25.862	4.9677	.00002	S-.13870	.03602	.02475	.02866
SDev	.080	.0174	.00391	.00000	.00846	.02355	.02138
%RSD	.30832	.34988	25263.	.00000	23.495	95.128	74.598
#1	25.929	4.9447	-.00478	S-.13870	.03324	.01737	.02354
#2	25.750	4.9639	.00002	S-.13870	.04122	-.00506	.03380
#3	25.908	4.9821	.00002	S-.13870	.02539	.03956	.00297
#4	25.860	4.9802	.00481	S-.13870	.04421	.04713	.05431
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	.00218	10.098	-.00121	2.6707	-.03439	.06673	.00475
SDev	.06351	.047	.02001	.0184	.00019	.07788	.00008
%RSD	2916.6	.46872	1650.9	.68789	.53958	116.71	1.6455
#1	-.06639	10.088	.01565	2.6851	-.03455	.03920	.00465
#2	-.03591	10.035	-.01211	2.6438	-.03423	.06387	.00476

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#3	.06693	10.140	.01555	2.6777	-.03455	.14402	.00475
#4	.04408	10.128	-.02394	2.6764	-.03423	.09822	.00485
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 .02647
SDev .00123
%RSD 4.6476

#1 .02562
#2 .02536
#3 .02802
#4 .02688

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DJ5Q1T

Operator: MTW

Run Time: 08/25/00 14:10:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00112	1.6153	.25234	.02189	.85328	-.00000	26.745
SDev	.00305	.0287	.04253	.00301	.01160	.00010	.136
%RSD	272.36	1.7753	16.853	13.742	1.3591	24311.	.50746
#1	.00487	1.6563	.21805	.02181	.86792	-.00012	26.919
#2	-.00245	1.6094	.31377	.02248	.85713	.00012	26.636
#3	.00178	1.6058	.24608	.02530	.84527	-.00000	26.787
#4	.00028	1.5896	.23145	.01799	.84279	-.00000	26.639
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	.00370	.04905	2.4716	-.00145	66.495	1.4308	.00287
SDev	.00471	.00234	.0172	.00176	.541	.2182	.00133
%RSD	127.23	4.7732	.69422	121.26	.81304	15.252	46.307
#1	.01041	.05106	2.4958	-.00227	67.224	1.3531	.00418
#2	.00060	.04567	2.4704	.00119	66.538	1.7564	.00289
#3	.00354	.04974	2.4636	-.00235	66.262	1.3110	.00104
#4	.00025	.04975	2.4564	-.00237	65.957	1.3026	.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	.58772	.40810	.00155	S-.13870	.07182	2.7359	.02900
SDev	.01367	.00356	.00451	.00000	.00419	.0268	.00578
%RSD	2.3262	.87341	290.27	.00000	5.8304	.97778	19.925
#1	.57904	.41310	-.00433	S-.13870	.06699	2.7302	.03389
#2	.60306	.40811	.00036	S-.13870	.07589	2.7154	.03411
#3	.59506	.40612	.00511	S-.13870	.06971	2.7750	.02393
#4	.57371	.40507	.00507	S-.13870	.07469	2.7231	.02405
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	-.05241	1.2385	.03109	.04137	.01454	.07009	.00016
SDev	.07902	.0423	.01465	.00059	.00096	.10276	.00006
%RSD	150.79	3.4154	47.111	1.4256	6.5991	146.62	35.442
#1	-.11048	1.2778	.03820	.04188	.01591	.20267	.00009
#2	-.12371	1.2429	.04801	.04188	.01366	.07253	.00013

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#3	.04316	1.2545	.02209	.04086	.01430	.05246	.00021
#4	-.01859	1.1789	.01607	.04086	.01430	-.04732	.00019
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 14.986
SDev .099
%RSD .66371

#1 15.120
#2 14.989
#3 14.954
#4 14.883

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-2

Operator: MTW

Run Time: 08/25/00 14:13:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97640	48.556	4.9466	4.7828	4.7240	4.7396	50.285
SDev	.00428	.349	.0495	.0501	.0497	.0338	.272
%RSD	.43872	.71895	1.0013	1.0465	1.0530	.71368	.54080
#1	.97125	48.452	4.9404	4.7343	4.7229	4.7345	49.889
#2	.97703	48.402	4.8801	4.8006	4.6925	4.7280	50.330
#3	.97567	48.299	4.9714	4.7515	4.6860	4.7085	50.486
#4	.98166	49.071	4.9944	4.8450	4.7946	4.7876	50.436
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9709	4.8526	4.8437	4.7069	50.172	47.496	4.7034
SDev	.0256	.0135	.0250	.0458	.248	.227	.0716
%RSD	.51495	.27754	.51660	.97256	.49492	.47709	1.5219
#1	4.9413	4.8361	4.8105	4.7090	49.981	47.256	4.7249
#2	4.9685	4.8591	4.8406	4.6844	50.070	47.449	4.6531
#3	5.0038	4.8481	4.8546	4.6642	50.100	47.802	4.6405
#4	4.9699	4.8671	4.8691	4.7698	50.536	47.475	4.7952
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.496	4.8279	4.8122	48.003	4.8501	4.8632	4.9085
SDev	.305	.0231	.0299	.511	.0199	.0178	.0377
%RSD	.62828	.47875	.62205	1.0655	.41065	.36571	.76857
#1	48.392	4.8034	4.7726	48.106	4.8452	4.8517	4.9141
#2	48.341	4.8236	4.8061	47.734	4.8253	4.8598	4.9032
#3	48.301	4.8255	4.8301	47.500	4.8725	4.8521	4.8625
#4	48.949	4.8592	4.8398	48.673	4.8573	4.8893	4.9542
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	4.9013	4.9505	4.8580	4.7419	4.7578	9.5921	4.8201
SDev	.0765	.0437	.0357	.0449	.0329	.1653	.0232
%RSD	1.5611	.88296	.73554	.94706	.69244	.7236	.48105
#1	4.8074	4.9618	4.8044	4.7364	4.7441	9.4369	4.8002
#2	4.9296	4.8922	4.8759	4.7136	4.7399	9.6532	4.8081

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#3	4.8801	4.9504	4.8757	4.7105	4.7399	9.4813	4.8193
#4	4.9879	4.9974	4.8760	4.8070	4.8071	9.7968	4.8528
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 4.8619
SDev .0211
%RSD .43330

#1 4.8389
#2 4.8491
#3 4.8783
#4 4.8811

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB2

Operator: MTW

Run Time: 08/25/00 14:17:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA611E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00145	.00582	.04431	-.00237	.00037	.00018	.00338
SDev	.00180	.01104	.03551	.00296	.00024	.00012	.00168
%RSD	124.09	189.68	80.128	124.89	65.111	66.667	49.737
#1	.00179	.00677	.08879	-.00583	.00028	.00000	.00118
#2	.00181	.01928	.04324	-.00385	.00057	.00023	.00376
#3	-.00105	-.00770	.00187	.00009	.00007	.00023	.00335
#4	.00324	.00493	.04335	.00010	.00057	.00023	.00525
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	.00136	.00271	.00220	-.00088	.00212	.04622	-.00015
SDev	.00167	.00111	.00310	.00111	.00092	.28594	.00070
%RSD	122.46	40.908	140.40	126.29	43.455	618.63	454.76
#1	.00009	.00135	-.00234	-.00242	.00147	.32776	-.00067
#2	.00368	.00270	.00441	-.00066	.00212	-.01681	-.00019
#3	.00018	.00407	.00285	-.00066	.00147	.21010	-.00061
#4	.00150	.00271	.00389	.00022	.00343	.31935	.00085
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	.00000	.00048	.00240	.01848	-.00575	.00940	.02804
SDev	.00898	.00048	.00277	.00547	.00466	.02973	.01320
%RSD	1029e6	99.611	115.45	29.577	81.003	316.28	47.073
#1	-.01334	.00072	.00000	.01892	-.00793	-.00548	.04335
#2	.00267	.00072	.00479	.02605	-.00017	.05399	.03320
#3	.00534	-.00024	.00479	.01447	-.00403	-.00544	.01268
#4	.00534	.00072	.00000	.01447	-.01087	-.00547	.02295
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	.03619	.02476	.00112	.00070	.00048	.04568	.00362
SDev	.04067	.02534	.02167	.00024	.00037	.04320	.00242
%RSD	112.37	102.34	1929.7	34.816	76.980	94.566	66.762
#1	.03619	.03344	.01758	.00051	.00080	.10576	-.00000
#2	.09333	-.01302	-.00630	.00077	.00080	.00279	.00487

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#3	.00191	.03931	.01943	.00051	.00016	.03709	.00486
#4	.01334	.03931	-.02622	.00102	.00016	.03708	.00477
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	.00140
SDev	.00068
%RSD	48.451

#1	.00154
#2	.00099
#3	.00230
#4	.00079

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DJE23BT Operator: MTW
Run Time: 08/25/00 14:22:20
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00036	.00231	.01510	.00257	.00017	-.00006	.02514
SDev	.00185	.01545	.04035	.00827	.00012	.00007	.00355
%RSD	516.43	668.08	267.13	321.82	67.358	115.47	14.129

#1	.00179	.01579	-.03605	.00148	.00028	-.00012	.02685
#2	-.00250	-.01661	.00580	-.00187	.00007	-.00012	.02047
#3	-.00107	.01401	.03202	.01453	.00028	.00000	.02871
#4	.00036	-.00395	.05863	-.00386	.00007	.00000	.02454

Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00016	.00136	-.00182	-.00044	.00196	-.09875	-.00087
SDev	.00231	.00192	.00311	.00111	.00063	.22324	.00085
%RSD	1413.1	141.33	171.30	252.84	31.944	226.07	97.786

#1	.00149	-.00000	-.00338	-.00154	.00147	-.31095	.00037
#2	-.00332	.00001	-.00338	-.00066	.00147	-.25212	-.00153
#3	.00163	.00135	-.00338	-.00066	.00277	.16808	-.00125
#4	-.00045	.00407	.00285	.00110	.00212	-.00000	-.00106

Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01067	-.00024	-.00479	.01380	-.00253	-.00551	.02301
SDev	.00950	.00000	.00000	.00326	.00266	.00006	.01448
%RSD	88.976	.12094	.00195	23.631	104.94	1.0781	62.947

#1	-.01601	-.00024	-.00479	.01224	-.00150	-.00554	.03325
#2	-.01868	-.00024	-.00479	.01002	-.00649	-.00556	.00254
#3	-.01067	-.00024	-.00479	.01714	-.00130	-.00550	.03327
#4	.00267	-.00024	-.00479	.01581	-.00084	-.00543	.02297

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						50000	
Low						-.50000	

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02191	.02326	.00656	.00000	-.00000	.00283	-.00010
SDev	.02890	.02438	.00923	.00000	.00032	.04671	.00001
%RSD	131.93	104.83	140.61	.00000	520e6	1651.8	6.4058

#1	.05143	.03925	.00363	.00000	.00016	.04859	-.00010
#2	.03238	.03344	.00548	.00000	-.00048	.03715	-.00010

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#3	-.01713	.03344	-.00233	.00000	.00016	-.04293	-.00010
#4	.02096	-.01308	.01948	.00000	.00016	-.03150	-.00009

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00406
SDev	.00069
%RSD	17.030

#1	.00466
#2	.00337
#3	.00465
#4	.00357

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DJC8ABT Operator: MTW
 Run Time: 08/25/00 14:25:28
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00072	.00410	.17388	.01133	.00119	-.00009	.11010
SDev	.00137	.00453	.09104	.00904	.00015	.00006	.00040
%RSD	191.07	110.51	52.355	79.795	12.412	56.667	.36244
#1	-.00107	-.00219	.14935	.00486	.00135	-.00012	.11044
#2	.00179	.00864	.07365	.02403	.00127	.00000	.10953
#3	.00179	.00499	.29297	.01158	.00106	-.00012	.11012
#4	.00036	.00497	.17954	.00485	.00106	-.00012	.11030
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.00068	-.00156	-.00022	.00832	-.06723	-.00080
SDev	.00168	.00078	.00363	.00088	.00084	.15359	.00044
%RSD	40075.	114.94	233.13	402.14	10.123	228.45	54.537
#1	.00159	.00135	-.00338	-.00066	.00930	-.05883	-.00125
#2	-.00102	.00000	-.00338	-.00066	.00864	-.23531	-.00106
#3	-.00181	.00000	.00389	.00110	.00799	-.10925	-.00058
#4	.00126	.00135	-.00337	-.00066	.00734	.13447	-.00030
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01868	.00048	-.00479	S1768.0	-.00095	.00748	.02302
SDev	.00950	.00048	.00391	2041.7	.00547	.02603	.00834
%RSD	50.843	99.791	81.669	115.48	574.25	348.26	36.222
#1	.01334	-.00024	-.00479	S-.13870	.00202	.04653	.03325
#2	.01067	.00072	-.00959	S-.13870	-.00403	-.00557	.01283
#3	.01868	.00072	-.00479	S3536.2	-.00688	-.00555	.02289
#4	.03202	.00072	.00000	S3536.0	.00508	-.00551	.02310
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00764	.06251	.00657	.00102	.00008	-.00295	-.00010
SDev	.03916	.00000	.01502	.00000	.00016	.03555	.00008
%RSD	512.49	.00000	228.83	.00000	200.00	1206.4	79.395
#1	-.02474	.06251	.01953	.00102	.00016	.01419	-.00010
#2	.05906	.06251	-.00441	.00102	-.00016	.00278	-.00019

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#3	-.02093	.06251	.01948	.00102	.00016	-.05440	-.00008
#4	.01716	.06251	-.00833	.00102	.00016	.02565	-.00001

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00842
SDev	.00080
%RSD	9.5428

#1	.00933
#2	.00804
#3	.00751
#4	.00878

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DJE23CT

Operator: MTW

Run Time: 08/25/00 14:28:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04791	1.9402	2.2579	.94075	1.8542	.04575	L.11175
SDev	.00253	.0146	.0715	.02209	.0044	.00077	.01311
%RSD	5.2739	.74990	3.1661	2.3476	.23992	1.6786	11.726
#1	.04722	1.9352	2.3552	.94643	1.8543	.04614	L.11429
#2	.05154	1.9605	2.2680	.94781	1.8514	.04613	L.12144
#3	.04566	1.9262	2.2045	.90888	1.8604	.04460	L.09260
#4	.04722	1.9389	2.2040	.95987	1.8506	.04614	L.11868
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	.04440	.47137	.18335	.23465	1.0037	L-.40340	.95402
SDev	.00561	.01853	.01088	.00103	.0203	.83808	.02625
%RSD	12.642	3.9321	5.9323	.43794	2.0200	207.76	2.7512
#1	.04791	.47781	.18477	.23378	1.0114	L-.37818	.94421
#2	.04457	.48460	.18892	.23554	1.0173	L.18489	.93861
#3	L.03642	.44392	.16765	.23374	.97356	L-1.5968	.99323
#4	.04871	.47916	.19204	.23554	1.0127	L.17649	.94003
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-.00467	.47144	-.00584	S-.13870	.46123	.45754	L.01655
SDev	.03602	.01209	.00603	.00000	.01045	.05915	.01534
%RSD	771.43	2.5651	103.30	.00000	2.2661	12.927	92.696
#1	L-.00267	.47744	.00015	S-.13870	.47090	.48185	L-.00127
#2	L.02402	.47936	-.00464	S-.13870	.46647	.49693	L.02937
#3	L-.05604	.45346	-.01424	S-.13870	.44686	L.36946	L.00876
#4	L.01601	.47552	-.00464	S-.13870	.46069	.48193	L.02932
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	2.1301	.06114	.00176	.93694	-.00000	1.8694	.46236
SDev	.0894	.01470	.01286	.00115	.00085	.0302	.01302
%RSD	4.1962	24.044	731.70	.12315	599e6	1.6137	2.8169
#1	2.1415	.06847	.00764	.93792	-.00048	1.8293	.46724
#2	2.2291	.06853	.01572	.93741	.00112	1.8978	.47192

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#3	2.0119	.03909	-.00225	.93527	-.00080	1.8643	.44311
#4	2.1377	.06847	-.01407	.93715	.00016	1.8864	.46716
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	.49586						
SDev	.01573						
%RSD	3.1730						
#1	.50217						
#2	.50927						
#3	.47318						
#4	.49882						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DJ7C8T

Operator: MTW

Run Time: 08/25/00 14:31:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00170	.43877	.15285	.15419	1.3062	.00011	768.48
SDev	.00143	.01996	.03516	.00100	.0191	.00010	5.34
%RSD	84.019	4.5491	23.001	.64993	1.4626	90.674	.69464
#1	-.00242	.41360	.16440	.15532	1.3058	-.00001	768.18
#2	-.00242	.43699	.14153	.15335	1.2910	.00011	761.75
#3	.00044	.46212	.19425	.15335	1.2947	.00023	769.22
#4	-.00242	.44239	.11123	.15474	1.3332	.00011	774.77
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00167	.00414	-.00052	.01344	.36881	2.1283	.00064
SDev	.00315	.00079	.00230	.00072	.00299	.0979	.00047
%RSD	188.37	18.962	440.56	5.3383	.80999	4.5978	73.771
#1	.00145	.00482	-.00234	.01257	.36800	2.0170	.00076
#2	-.00264	.00348	.00285	.01344	.36669	2.2187	.00018
#3	.00328	.00482	-.00130	.01344	.36734	2.0758	.00124
#4	.00459	.00344	-.00130	.01432	.37322	2.2019	.00037
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.720	.13335	-.00234	S1768.3	.00397	.02211	.04357
SDev	.097	.00144	.00479	2042.0	.00620	.03232	.01178
%RSD	.90354	1.0784	204.70	115.48	156.13	146.14	27.035
#1	10.740	.13407	-.00474	S-.13870	.00183	-.00571	.05388
#2	10.594	.13215	-.00474	S3536.8	.01132	.05367	.03334
#3	10.719	.13216	.00485	S3536.7	-.00328	.04628	.05366
#4	10.828	.13503	-.00474	S-.13870	.00601	-.00579	.03340
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02954	4.6448	.00786	2.2096	-.03639	-.03743	.00472
SDev	.02694	.0465	.02688	.0294	.00103	.04702	.00009
%RSD	91.206	1.0016	342.14	1.3326	2.8270	125.62	1.9435
#1	.02954	4.6215	-.02587	2.2095	-.03680	-.03457	.00467
#2	.01049	4.6215	.03562	2.1853	-.03712	-.04599	.00468

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#3	.01049	4.6215	.02181	2.1927	-.03680	-.09175	.00486
#4	.06764	4.7146	-.00014	2.2511	-.03487	.02258	.00467

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	ZN
Units	ppm
Avge	.06337
SDev	.00174
%RSD	2.7443

#1	.06150
#2	.06484
#3	.06228
#4	.06486

Errors	NOCHECK
High	
Low	

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Method: QUANMET Sample Name: DJ7C8P5T

Operator: MTW

Run Time: 08/25/00 14:38:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00039	.09904	.05765	.00850	.28512	.00005	165.12
SDev	.00118	.00398	.06217	.00030	.00337	.00007	1.75
%RSD	303.28	4.0161	107.83	3.4810	1.1813	129.43	1.0594
#1	.00039	.10399	-.03315	.00835	.28668	.00011	166.71
#2	-.00106	.09677	.08420	.00836	.28787	.00000	166.16
#3	.00039	.10037	.07274	.00835	.28569	-.00001	164.85
#4	.00183	.09503	.10681	.00894	.28025	.00011	162.78
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	.00218	.00224	-.00338	.00309	.08038	.58408	-.00041
SDev	.00153	.00257	.00000	.00084	.00119	.33676	.00009
%RSD	70.508	114.83	.05035	27.340	1.4828	57.656	21.440
#1	.00403	.00393	-.00338	.00287	.08104	.89083	-.00050
#2	.00231	-.00150	-.00338	.00198	.07973	.21851	-.00039
#3	.00028	.00258	-.00338	.00375	.07908	.37818	-.00047
#4	.00208	.00393	-.00338	.00375	.08169	.84881	-.00030
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.3235	.02926	-.00598	280.59	.00029	.00561	.04351
SDev	.0091	.00048	.00240	3.41	.00633	.00966	.03240
%RSD	.39086	1.6399	40.078	1.2148	2218.5	172.12	74.460
#1	2.3269	.02950	-.00478	281.23	.00749	.01684	.07428
#2	2.3242	.02950	-.00478	283.76	-.00155	.00182	.06392
#3	2.3322	.02950	-.00478	281.61	-.00742	-.00558	.00251
#4	2.3108	.02854	-.00958	275.76	.00262	.00936	.03332
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	-.00455	.94498	.01465	.48420	-.00755	.00787	.00345
SDev	.03341	.03234	.01690	.00557	.00026	.05321	.00237
%RSD	734.33	3.4226	115.39	1.1498	3.4745	676.10	68.592
#1	.03259	.99297	-.00408	.48675	-.00755	-.03218	.00466
#2	-.00931	.92894	.00580	.48905	-.00755	-.04353	-.00010

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#3	-.04741	.93482	.03333	.48471	-.00787	.04790	.00466
#4	.00593	.92319	.02354	.47628	-.00723	.05929	.00457

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	.01403
SDev	.00184
%RSD	13.077

#1	.01138
#2	.01562
#3	.01458
#4	.01455

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJ7C8ST

Operator: MTW

Run Time: 08/25/00 14:41:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA613

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.89628	.35233	4.9469	.15269	45.001	.00017	H735.00
SDev	.00487	.01186	.0338	.00201	.211	.00007	4.07
%RSD	.54328	3.3667	.68371	1.3194	.46791	40.812	.55442
#1	.89592	.35054	4.9894	.15457	44.860	.00011	H736.59
#2	.89449	.35412	4.9327	.15318	44.858	.00024	H732.63
#3	.90308	.36674	4.9552	.14983	45.305	.00011	H739.94
#4	.89163	.33791	4.9101	.15318	44.980	.00024	H730.85
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	.95919	.00361	4.3368	.01344	.28025	2.2691	.00006
SDev	.00474	.00234	.0245	.00072	.00314	.3863	.00103
%RSD	.49391	65.000	.56395	5.3353	1.1201	17.024	1833.7
#1	.96199	.00605	4.3462	.01344	.28253	2.5885	.00132
#2	.96388	.00468	4.3223	.01344	.27862	2.2271	-.00106
#3	.95763	.00311	4.3665	.01256	.28321	1.7396	.00037
#4	.95327	.00059	4.3120	.01431	.27665	2.5212	-.00041
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	10.288	.12614	.00244	S3537.4	.00575	4.5418	.05648
SDev	.052	.00144	.00277	.2	.00831	.0275	.01951
%RSD	.50759	1.1407	113.49	.00434	144.41	60524	34.535
#1	10.289	.12734	.00484	S3537.4	.01313	4.5530	.06926
#2	10.249	.12542	.00484	S3537.3	-.00214	4.5232	.06927
#3	10.361	.12734	.00004	S3537.5	-.00070	4.5752	.02808
#4	10.252	.12446	.00004	S3537.6	.01273	4.5157	.05933
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0006	4.3481	.00690	2.1320	-.03455	-.01653	.00386
SDev	.0594	.0507	.00898	.0101	.00366	.05940	.00007
%RSD	5.9388	1.1659	130.12	.47292	10.606	359.22	1.7552
#1	.99684	4.3190	.00199	2.1247	-.03519	.06920	.00393
#2	.97397	4.3306	.01987	2.1259	-.03551	-.05656	.00388

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#3	1.0845	4.4237	.00575	2.1466	-.02940	-.02227	.00388
#4	.94731	4.3190	-.00003	2.1307	-.03808	-.05651	.00377

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 .06089
SDev .00230
%RSD 3.7765

#1 .06430
#2 .05944
#3 .06020
#4 .05962

Errors LC Pass
High 100.00
Low -.02000

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Method: QUANMET Sample Name: DJ7C8DT

Operator: MTW

Run Time: 08/25/00 14:44:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.88413	.34871	4.8391	.14562	43.989	.00008	H726.31
SDev	.00377	.00762	.0590	.00693	.201	.00006	4.05
%RSD	.42615	2.1856	1.2185	4.7591	.45763	74.828	.55804
#1	.88019	.35411	4.8230	.13974	43.936	.00011	H722.34
#2	.88734	.33792	4.8307	.14982	44.076	-.00001	H724.46
#3	.88162	.34876	4.9214	.13973	43.736	.00011	H726.65
#4	.88736	.35406	4.7814	.15318	44.207	.00010	H731.78
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94865	.00245	4.2790	.01190	.27601	1.8489	.00047
SDev	.01094	.00274	.0208	.00132	.00250	.3435	.00078
%RSD	1.1532	111.95	.48664	11.100	.90450	18.579	166.91
#1	.94302	.00385	4.2585	.01080	.27666	1.8069	-.00019
#2	.94763	-.00166	4.2777	.01079	.27405	1.3867	.00029
#3	.93963	.00396	4.2720	.01344	.27406	2.1767	.00160
#4	.96430	.00366	4.3078	.01256	.27927	2.0254	.00018
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	10.092	.12398	.00124	S3537.9	.00196	4.4822	.04417
SDev	.048	.00055	.00459	.1	.00531	.0301	.01777
%RSD	.47447	.44692	370.25	.00275	270.68	.67081	40.220
#1	10.065	.12351	.00484	S3537.9	.00575	4.5083	.03922
#2	10.113	.12350	-.00475	S3538.0	-.00489	4.4561	.02882
#3	10.041	.12446	.00004	S3537.9	.00656	4.4563	.06983
#4	10.148	.12446	.00484	S3537.8	.00043	4.5083	.03883
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98444	4.2638	-.00210	2.0839	-.03527	-.01078	.00462
SDev	.03053	.0495	.01041	.0093	.00096	.06262	.00187
%RSD	3.1017	1.1604	496.48	.44627	2.7208	580.85	40.517
#1	.99682	4.2492	.01179	2.0807	-.03647	.08070	.00376
#2	1.0082	4.2260	-.01012	2.0879	-.03487	-.04503	.00361

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#3	.93968	4.2434	.00001	2.0727	-.03423	-.05651	.00369
#4	.99302	4.3365	-.01007	2.0943	-.03551	-.02228	.00743
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	.06218
SDev	.00094
%RSD	1.5179

#1	.06257
#2	.06130
#3	.06333
#4	.06152

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJ7C9T

Operator: MTW

Run Time: 08/25/00 14:47:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00047	4.6457	.17126	.25011	1.1802	.00030	477.13
SDev	.00137	.0268	.06271	.00420	.0093	.00006	2.26
%RSD	291.88	.57656	36.617	1.6778	.79085	20.442	.47283
#1	-.00154	4.6758	.08406	.25096	1.1920	.00021	474.78
#2	.00132	4.6128	.17533	.25427	1.1695	.00033	475.63
#3	-.00154	4.6560	.19384	.24427	1.1813	.00033	479.29
#4	-.00011	4.6381	.23182	.25095	1.1779	.00033	478.82
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	.00050	.00296	.00622	.04539	3.9592	2.9414	-.00058
SDev	.00072	.00204	.00273	.00176	.0155	.5309	.00000
%RSD	145.34	68.940	43.906	3.8750	.39181	18.049	.00000
#1	.00066	.00058	.00388	.04451	3.9613	2.3952	-.00058
#2	.00145	.00465	.01011	.04803	3.9398	3.6222	-.00058
#3	-.00005	.00194	.00596	.04451	3.9776	3.0675	-.00058
#4	-.00008	.00466	.00492	.04451	3.9581	2.6809	-.00058
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.952	.27068	-.00300	S2652.6	.00524	.07999	.05096
SDev	.053	.00124	.00239	1768.5	.00383	.03488	.01936
%RSD	.40927	.45844	79.744	66.670	73.214	43.599	37.986
#1	12.974	.27020	-.00420	S3536.7	.00396	.04275	.05352
#2	12.920	.26923	.00059	S-.13870	.00820	.10976	.02284
#3	13.017	.27212	-.00420	S3537.0	.00841	.10970	.06376
#4	12.899	.27116	-.00420	S3536.7	.00038	.05777	.06372
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01147	13.093	.01997	1.6333	.10653	-.01661	.01425
SDev	.02921	.042	.00291	.0124	.00239	.05791	.00005
%RSD	254.65	.32308	14.564	.75650	2.2439	348.63	.36101
#1	.01996	13.053	.01998	1.6481	.10685	-.08237	.01422
#2	.00467	13.077	.01586	1.6193	.10910	.05505	.01432

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#3	-.04475	13.152	.02202	1.6374	.10685	-.00249	.01422
#4	-.02576	13.088	.02203	1.6283	.10332	-.03662	.01422
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	.34200
SDev	.00221
%RSD	.64564

#1	.34130
#2	.34258
#3	.33944
#4	.34469

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJ7CCT Operator: MTW
 Run Time: 08/25/00 14:51:00
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00044	.55021	.22411	.18677	1.9005	.00061	476.11
SDev	.00377	.01754	.05951	.00333	.0093	.00001	3.05
%RSD	861.34	3.1881	26.553	1.7853	.48730	1.0520	.63990
#1	.00279	.55961	.24291	.18643	1.8899	.00060	479.48
#2	-.00296	.55076	.15611	.18307	1.9124	.00062	475.62
#3	.00279	.56505	.29580	.19118	1.9012	.00060	477.13
#4	-.00436	.52543	.20160	.18642	1.8985	.00060	472.21
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	.07783	.02635	-.00299	.72290	.12354	3.6116	-.00058
SDev	.00488	.00067	.00115	.00382	.00195	.1458	.00000
%RSD	6.2743	2.5413	38.546	.52911	1.5803	4.0365	.00000
#1	.07931	.02601	-.00338	.71785	.12404	3.7062	-.00058
#2	.07505	.02601	-.00389	.72664	.12272	3.4709	-.00058
#3	.07297	.02602	-.00338	.72224	.12599	3.5045	-.00058
#4	.08399	.02735	-.00130	.72488	.12142	3.7650	-.00058
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	10.257	2.4099	.00122	S-.13870	.01950	80.018	.38625
SDev	.016	.0066	.00459	.00000	.00475	.285	.01772
%RSD	.15373	.27367	377.15	.00000	24.342	.35559	4.5877
#1	10.263	2.4138	.00481	S-.13870	.02504	80.332	.39135
#2	10.233	2.4109	-.00478	S-.13870	.01687	80.057	.39137
#3	10.263	2.4147	.00002	S-.13870	.01446	80.042	.36068
#4	10.268	2.4003	.00481	S-.13870	.02165	79.641	.40160
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	.04508	8.5234	-.02043	1.2433	-.02555	-.05083	.00359
SDev	.03963	.0766	.01386	.0050	.00131	.06695	.00246
%RSD	87.905	.89817	67.857	.40121	5.1352	131.71	68.534
#1	.02509	8.5117	-.00054	1.2373	-.02458	-.08799	.00485
#2	.00604	8.5349	-.02239	1.2493	-.02651	-.01934	-.00010

Analysis Report

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#3	.05176	8.6164	-.02651	1.2443	-.02426	.02636	.00476
#4	.09745	8.4303	-.03227	1.2423	-.02683	-.12236	.00485
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 3.8694
SDev .0119
%RSD .30866

#1 3.8630
#2 3.8728
#3 3.8844
#4 3.8572

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-3

Operator: MTW

Run Time: 08/25/00 14:54:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99412	50.059	5.0934	4.9535	4.9062	4.9457	50.939
SDev	.00631	.166	.0789	.0253	.0248	.0247	.476
%RSD	.63497	.33075	1.5488	.51054	.50501	.50020	.93437
#1	.99235	50.139	4.9944	4.9640	4.9276	4.9543	50.824
#2	1.0011	50.064	5.1797	4.9327	4.8861	4.9479	51.499
#3	.99676	50.206	5.1257	4.9843	4.9276	4.9695	51.072
#4	.98630	49.826	5.0739	4.9329	4.8834	4.9112	50.360
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	5.0424	4.9569	4.9463	4.9122	51.408	49.592	4.9168
SDev	.0456	.0362	.0397	.0242	.308	.392	.0415
%RSD	.90390	.73006	.80272	.49265	.59916	.79099	.84479
#1	5.0309	4.9467	4.9324	4.9309	51.400	49.693	4.9560
#2	5.0743	4.9900	4.9947	4.8913	51.671	49.912	4.8586
#3	5.0816	4.9805	4.9573	4.9353	51.584	49.744	4.9322
#4	4.9828	4.9103	4.9008	4.8912	50.978	49.021	4.9205
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	50.063	4.9344	4.9094	50.273	4.9451	4.9412	4.9903
SDev	.211	.0337	.0186	.283	.0263	.0563	.0306
%RSD	.42235	.68350	.37907	.56338	.53142	1.1402	.61378
#1	50.006	4.9323	4.9022	50.504	4.9425	4.9130	5.0058
#2	50.203	4.9650	4.9310	49.929	4.9647	5.0257	5.0054
#3	50.254	4.9525	4.9166	50.506	4.9643	4.9139	5.0056
#4	49.790	4.8881	4.8878	50.152	4.9088	4.9122	4.9443
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	5.1445	5.0989	4.8988	4.9210	4.8973	9.7812	4.9460
SDev	.1611	.0512	.0641	.0227	.0226	.1385	.0291
%RSD	3.1316	1.0050	1.3082	.46082	.46097	1.4160	.58878
#1	5.1426	5.0800	4.8701	4.9388	4.9051	9.9128	4.9494
#2	5.1318	5.1733	4.9337	4.9072	4.9045	9.8182	4.9656

Analysis Report

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#3	5.3487	5.0861	4.9674	4.9417	4.9154	9.8077	4.9653
#4	4.9548	5.0562	4.8242	4.8963	4.8643	9.5859	4.9038

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 4.9464
SDev .0303
%RSD .61353

#1 4.9449
#2 4.9730
#3 4.9632
#4 4.9043

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB3

Operator: MTW

Run Time: 08/25/00 14:57:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA6113

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00144	.01261	.05375	-.00069	.00055	.00043	.01649
SDev	.00136	.00445	.02279	.00317	.00045	.00029	.00381
%RSD	94.869	35.299	42.397	460.76	82.896	67.907	23.088
#1	.00038	.01928	.04323	.00149	.00106	.00060	.01802
#2	.00179	.01033	.08499	.00149	.00028	.00012	.01132
#3	.00036	.01047	.03205	-.00050	.00007	.00025	.01635
#4	.00322	.01035	.05473	-.00522	.00077	.00074	.02029
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	.00275	.00169	-.00337	.00022	.00408	.14497	-.00020
SDev	.00346	.00301	.00000	.00072	.00416	.22260	.00013
%RSD	125.81	178.37	.02310	324.64	101.96	153.55	67.386
#1	.00405	.00270	-.00338	.00110	.00799	.34457	-.00011
#2	-.00077	-.00136	-.00337	-.00066	.00082	.08404	-.00011
#3	.00075	.00542	-.00338	.00022	.00017	.29414	-.00039
#4	H.00698	-.00002	-.00337	.00022	.00734	.14287	-.00019
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	.00334	.00048	.00000	.03362	-.00186	.00549	.03836
SDev	.00630	.00048	.00392	.00966	.00512	.00009	.02566
%RSD	189.03	99.933	641990.	28.735	275.63	1.6417	66.890
#1	.00801	.00072	.00480	.03851	-.00515	-.00546	.04345
#2	-.00534	-.00024	.00000	.02070	-.00600	.00553	H.06383
#3	.00801	.00072	-.00479	.03228	-.00156	.00538	.04349
#4	.00267	.00072	.00000	.04297	.00527	-.00558	.00267
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	.00382	.04363	-.00380	.00069	.00080	-.04009	.00118
SDev	.02941	.00875	.01227	.00024	.00000	.06360	.00244
%RSD	769.99	20.064	323.28	34.963	.00000	158.65	206.37
#1	-.02855	.05676	-.01221	.00102	.00080	-.00871	.00485
#2	.03238	.03925	.00774	.00051	.00080	.00286	-.00001

Analysis Report

08/25/00 03:00:21 PM

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#3	.02476	.03925	.00566	.00051	.00080	-.02005	-.00010
#4	-.01331	.03925	-.01638	.00072	-.00080	-.13445	-.00001

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00145
SDev	.00105
%RSD	72.221

#1	.00207
#2	.00229
#3	-.00003
#4	.00148

Errors	LC Pass
High	.02000
Low	-.02000

671 716

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A. Hoyt

Date of Analysis: 8-25-00

File ID: 0825HGB

Matrix: WATER

Lot Number/SDG

Method

СОН220139 (ТСЛР)

7470A

CON:40148

COH140150 (TOT-0155)

STL Pittsburgh

09:14:15 25 Aug 2000

Folder: 0825HGB
Protocol: HGMET

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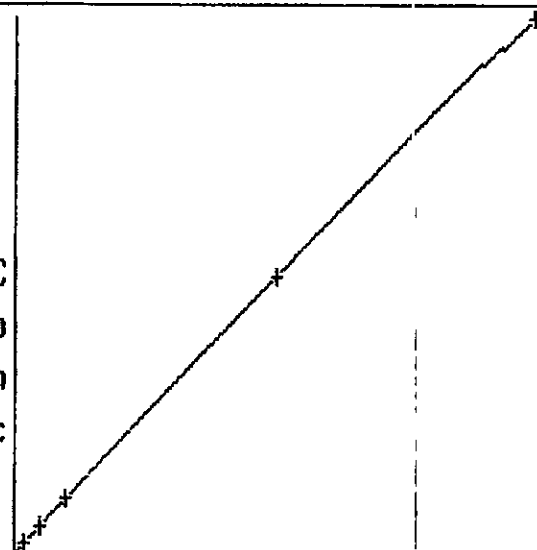
Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0	09:14:15 25 Aug 2000 HG			
Hg	.000	ppb	-9237					
*** Standard: 2 Rep: 1				Seq: 1	09:16:06 25 Aug 2000 HG			
Hg	.200	ppb	23020	0057-039-3				
*** Standard: 3 Rep: 1				Seq: 2	09:18:04 25 Aug 2000 HG			
Hg	.500	ppb	55722	0057-039-4				
*** Standard: 4 Rep: 1				Seq: 3	09:20:10 25 Aug 2000 HG			
Hg	1.00	ppb	108507	0057-039-5				
*** Standard: 5 Rep: 1				Seq: 4	09:22:41 25 Aug 2000 HG			
Hg	5.00	ppb	557317	0057-039-6				
*** Standard: 6 Rep: 1				Seq: 5	09:24:59 25 Aug 2000 HG			
Hg	10.0	ppb	1108633	0057-039-7				

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RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 0025HGB Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 09:25:20 25 Aug 2000 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGMET

	Hg	Conc.	Calc.	Dev.	Accepted
				->linear	
S1	.000	-.061	-.061	Quadratic	
S2	.200	.229	.029	Wtdlinear	
S3	.500	.523	.023		C
S4	1.00	.997	-.003	Accept	o
S5	5.00	5.03	.030		n
S6	10.0	9.98	-.017		c
A	.0000000	r	.999961		
B	8.90518e-6	C	2.19452e-2		



	Mean	SD	%RSD
S1	-9237	-9237	
S2	23020	23020	
S3	55722	55722	
S4	100507	100507	
S5	557317	557317	
S6	1100633	1100633	

New cal coefficients stored

09:27:45 25 Aug 2000

Folder: 0825HGB
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6	09:27:45 25 Aug 2000 HG			
Hg	2.60	ppb	286817	0057-039-8				
*** Sample ID: ICB1				Seq: 7	09:29:29 25 Aug 2000 HG			
Hg	-.008	ppb	-3378					
*** Sample ID: CCV5-1				Seq: 8	09:31:05 25 Aug 2000 HG			
Hg	5.40	ppb	598968	0057-039-9				
*** Sample ID: CCB1				Seq: 9	09:32:30 25 Aug 2000 HG			
Hg	.067	ppb	4977					
*** Sample ID: DJCPABT				Seq: 10	09:33:59 25 Aug 2000 HG			
Hg	.085	ppb	6994					
*** Sample ID: DJCPACT				Seq: 11	09:36:04 25 Aug 2000 HG			
Hg	2.43	ppb	267730	0057-039-10				
*** Sample ID: DJCBA ~~BT~~ ^{WAN 8.25-00}				Seq: 12	09:37:59 25 Aug 2000 HG			
Hg	.064	ppb	4669					
*** Sample ID: DJ7C8T				Seq: 13	09:39:24 25 Aug 2000 HG			
Hg	.098	ppb	8482					
*** Sample ID: DJ7C8ST				Seq: 14	09:41:21 25 Aug 2000 HG			
Hg	4.63	ppb	513161	SP.REC. 91%				
*** Sample ID: DJ7C8DT				Seq: 15	09:42:57 25 Aug 2000 HG			
Hg	4.56	ppb	504588	SP.REC. 89%				
*** Sample ID: DJ7C9T				Seq: 16	09:44:24 25 Aug 2000 HG			
Hg	.068	ppb	5084					
*** Sample ID: DJ7CCT				Seq: 17	09:46:34 25 Aug 2000 HG			
Hg	.054	ppb	3570					

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



Serial Number	Log Book Number	Start Time
066	96-MT-580	07:45-08:00

Start Time

066	Log Book Number 96-MT-

990

Serial Number

1

118

412/820-35

477 FAX:

412/826-5

tsbu

[illegible]

QUA-4169

[illegible]

PSR024 8/25/00 2:49:29 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 002

REQUESTED BY: FAUSTG

METHOD: QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	
										RCVD	REQD
2F CLP1	DJ7C8	___	261361	399411	A-34-QO	COH220139	001		SOLID	0	3 1
2F CLP1	DJ7C9	___	261362	399411	A-34-QO	COH220139	002		SOLID	0	3 1
2F CLP1	DJ7CC	___	261363	399411	A-34-QO	COH220139	003		SOLID	0	3 1
3B CLP1	DJCJM	___	261365	378644	1-05-QO	COH240148	001		WATER	0	1 1
3B CLP1	DJCJR	___	261366	378644	1-05-QO	COH240148	002		WATER	0	2 1
3B CLP1	DJCJV	___	261367	378644	1-05-QO	COH240148	003		WATER	0	5 1
3B CLP1	DJCK2	___	261368	378644	1-05-QO	COH240148	004		WATER	0	1 1
3B CLP1	DJCK5	___	261369	378644	1-05-QO	COH240148	006		WATER	0	1 1
3B CLP1	DJCK8	___	261370	378644	A-46-QO	COH240148	007		SOLID	0	4 1
3B CLP1	DJCKC	___	261371	378644	1-05-QO	COH240148	008		WATER	0	1 1
3B CLP1	DJCKE	___	261372	378644	1-05-QO	COH240148	009		WATER	0	1 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Geoffrey O. Ernst
Geoffrey O. Ernst

Geoffrey O. Ernst
Geoffrey O. Ernst

8-25-00 0455
8-25-00 0655

671 723

PSR024 8/23/00 5:35:23 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: MURPHYJ

METHOD: QO Inductively Coupled Plasma (60108)

<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>
2F CLP1	DJ7C8	— — —	261076	399411	A-34-QO	COH220139	001		SOLID	0	3 1
2F CLP1	DJ7C9	— — —	261077	399411	A-34-QO	COH220139	002		SOLID	0	3 1
2F CLP1	DJ7CC	— — —	261078	399411	A-34-QO	COH220139	003		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>Alan</i>	<i>Janas Murphy</i>	8-23-00 9:00
<i>Janas Murphy</i>	<i>Alan</i>	8-23-00 9:30

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

PSR024 8/24/00 10:45:52 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: HOYLEW

METHOD: 08 Mercury (7470A, Cold Vapor) - Liquid

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
2F CLP1	DJ7C8	___	261296	399411	A-0M-08	COH220139	001		SOLID TCLP	0	3 1
2F CLP1	DJ7C9	___	261297	399411	A-0M-08	COH220139	002		SOLID LEACHATE	0	3 1
2F CLP1	DJ7CC	___	261298	399411	A-0M-08	COH220139	003		SOLID	0	3 1

DJC8A8

RELINQUISHED BY

RECEIVED BY

DATE/TIME

*William A. Hoyle**William A. Hoyle*

8-25-00

06:00

*William A. Hoyle**William A. Hoyle*

8-25-00

06:50

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

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GENERAL CHEMISTRY DATA

UXB INTERNATIONAL

Client Sample ID: DF/S1/0234/SDC/029

General Chemistry

Lot-Sample #...: C0H220139-001 Work Order #...: DJ7C8 Matrix.....: SOLID
 Date Sampled...: 08/21/00 Date Received...: 08/22/00
 % Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.1		No Units	SW846 9045C	08/23/00	0236277
				MS Run #.....: 0236116		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/23/00	0236123
				MS Run #.....: 0236114		
Percent Solids	86.0		%	MCAWW 160.3 MOD	08/23-08/24/00	0236154
				MS Run #.....: 0236031		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/29/00	0242294
				MS Run #.....: 0242132		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/29/00	0242295
				MS Run #.....: 0242127		

671 727

UXB INTERNATIONAL

Client Sample ID: DF/S1/0234/SDC/030

General Chemistry

Lot-Sample #....: COH220139-002 Work Order #....: DJ7C9 Matrix.....: SOLID
Date Sampled....: 08/21/00 Date Received...: 08/22/00
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH	7.8		No Units	SW846 9045C	08/23/00	0236277
			Dilution Factor: 1	MS Run #.....: 0236116		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/23/00	0236123
			Dilution Factor: 1	MS Run #.....: 0236114		
Percent Solids	85.4		%	MCAWW 160.3 MOD	08/23-08/24/00	0236154
			Dilution Factor: 1	MS Run #.....: 0236031		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/29/00	0242294
			Dilution Factor: 1	MS Run #.....: 0242132		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/29/00	0242295
			Dilution Factor: 1	MS Run #.....: 0242127		

UXB INTERNATIONAL

Client Sample ID: DF/S1/0234/SDC/032

General Chemistry

Lot-Sample #....: C0H220139-003 Work Order #....: DJ7CC Matrix.....: SOLID
 Date Sampled....: 08/21/00 Date Received...: 08/22/00
 % Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.8		No Units	SW846 9045C	08/23/00	0236277
			Dilution Factor: 1	MS Run #.....: 0236116		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/23/00	0236123
			Dilution Factor: 1	MS Run #.....: 0236114		
Percent Solids	84.7		%	MCAWW 160.3 MOD	08/23-08/24/00	0236154
			Dilution Factor: 1	MS Run #.....: 0236031		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/29/00	0242294
			Dilution Factor: 1	MS Run #.....: 0242132		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/29/00	0242295
			Dilution Factor: 1	MS Run #.....: 0242127		

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METHOD BLANK REPORT

General Chemistry

Client Lot #....: C0H220139

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	Work Order #: DJK20101 200	mg/kg	MB Lot-Sample #: SW846 7.3.3	A0H290000-294 08/29/00	0242294
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DJK1Q101 200	mg/kg	MB Lot-Sample #: SW846 7.3.4	A0H290000-295 08/29/00	0242295
		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 #...: C0H220139

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	101	Work Order #: DJ9Q8101 (85 - 115)	LCS Lot-Sample#: C0H230000-277 SW846 9045C	08/23/00	0236277
		Dilution Factor: 1			

NOTE(S) :

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

671 731

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #....: C0H220139 Work Order #....: DJ7AW-SMP Matrix.....: SOLID

DJ7AW-DUP

Date Sampled....: 08/21/00

Date Received...: 08/22/00

% Moisture.....: 31

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Solids	69.2	68.3	%	1.3	(0-20)	SD Lot-Sample #: C0H220137-001 MCAWW 160.3 MOD	08/23-08/24/00	0236154

Dilution Factor: 1

Prep Date.....: 0236031 Analysis Date..:

Prep Batch #...:

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H220139

Work Order #...: DJ7C8-SMP
DJ7C8-DUP

Matrix.....: SOLID

Date Sampled...: 08/21/00

Date Received...: 08/22/00

% Moisture.....: 14

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.1	7.2	No Units	1.3	(0-20)	SW846 9045C	08/23/00	0236277

Dilution Factor: 1

Prep Date.....: 0236116 Analysis Date...: Prep Batch #....:

Ignitability

No Units	0	(0-0.0)	SD Lot-Sample #: C0H220139-001	SW846 SECTION 7.1	08/23/00	0236123

Dilution Factor: 1

Prep Date.....: 0236114 Analysis Date...: Prep Batch #....:

Reactive Cyanide

ND

ND

mg/kg	67	(0-20)	SD Lot-Sample #: C0H220139-001	SW846 7.3.3	08/29/00	0242294

Dilution Factor: 1

Prep Date.....: 0242132 Analysis Date...: Prep Batch #....:

Reactive Sulfide

ND

ND

mg/kg	0.0	(0-20)	SD Lot-Sample #: C0H220139-001	SW846 7.3.4	08/29/00	0242295

Dilution Factor: 1

Prep Date.....: 0242127 Analysis Date...: Prep Batch #....:

671 733

Ignitability

Method: IGNITABILITY (907.1.2)

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238

ANALYST: Eric L. Wesoloski

DATE: 8-23-00

BATCH: 0236123

TIME: 00:45

SAMPLE ID

RESULT

COH220139-001

NO

-001-Dup

NO

-002

NO

-003

NO

ELW
8-23-00

Reviewed by P. Johnson Date 8-23-00

WC-00-0060

Page 9 of 100

E. L. Wesoloski
8/23/00

REQUESTED BY: MESOLOSE

METHOD: IQ Ignitability (SW7.1.2)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
2F CLP1	DJ7CC-1-0G	___	261079	399411	A-88-IQ	COH220139	003		SOLID	3	1
2F CLP1	DJ7C8-1-0G	___	261080	399411	A-88-IQ	COH220139	001		SOLID	3	1
2F CLP1	DJ7C9-1-0G	___	261081	399411	A-88-IQ	COH220139	002		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

E. T. Whelan
E. T. Whelan

E. T. Whelan
E. T. Whelan

8/23/00 (08:30)
8/23/00 (08:35)

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

671 735

STL Pittsburgh
TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

816

Lot No.	Lot No.	Lot No.	Batch No.	Analyst:
COH220137			0236154	CLLOHEYDE
COH220138				In: Date 8-23-00 Time 0830
COH220139				Out: Date 8-24-00 Time 0500
COH220144				Balance ID #: C94817
COH220175				Gven Temp: 103°C+2°C

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
C0H220137-001	PUL	1.13	6.10	4.59
-001D	38	1.16	6.15	4.59
C0H220138-001	181	1.12	6.77	4.19
C0H220139-001	1551	1.12	6.91	6.10
-002	166	1.11	6.67	5.86
-003	1241	1.12	7.00	6.10
C0H220144-001	361	1.12	6.14	5.93
-002	28	1.10	6.63	5.98
-003	232	1.04	5.65	5.59
-004	P9	1.05	4.53	2.50
LIMITED SPIRIT -005	A	1.02	2.57	2.48
-006	47	1.15	6.00	5.30
-007	141	1.18	6.14	4.97
C0H220145-001	231	1.11	7.25	7.24

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0008016
 TESTED: CLL
 CHECKED: GUF

23 GUF 8-24-00

8/24/00

8/24/00

CREATED 8/24/00 11:11:01 AM

REVISED 8/24/00 11:15:13 AM

COMMENTS:

C0H220137 C0H220138 C0H220139 C0H210144 C0H220175

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.
C0H220137	001	SMP	PU	1.13	6.1	4.57	8:30	5:00	1.53	30.785	69.215
C0H220137	001D	SMP	38	1.16	6.15	4.57	8:30	5:00	1.58	31.663	68.337
C0H220138	001	SMP	181	1.12	6.77	4.17	8:30	5:00	2.6	46.018	53.982
C0H220139	001	SMP	1551	1.12	6.91	6.1	8:30	5:00	0.81	13.99	86.01
C0H220139	002	SMP	166	1.11	6.67	5.86	8:30	5:00	0.81	14.568	85.432
C0H220139	003	SMP	1241	1.12	7	6.1	8:30	5:00	0.9	15.306	84.694
C0H210144	001	SMP	361	1.12	6.14	5.93	8:30	5:00	0.21	4.183	95.817
C0H210144	002	SMP	28	1.1	6.63	5.98	8:30	5:00	0.65	11.754	88.246
C0H210144	003	SMP	232	1.04	5.65	5.59	8:30	5:00	0.06	1.302	98.698
C0H210144	004	SMP	P9	1.05	4.53	2.5	8:30	5:00	2.03	58.333	41.667
C0H210144	005	SMP	A	1.02	2.57	2.48	8:30	5:00	0.09	5.806	94.194
C0H210144	006	SMP	47	1.15	6	5.3	8:30	5:00	0.7	14.433	85.567
C0H210144	007	SMP	141	1.18	6.14	4.97	8:30	5:00	1.17	23.589	76.411
C0H220175	001	SMP	231	1.11	7.25	7.24	8:30	5:00	0.01	0.163	99.837

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 DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
CLP1 2F	DJ7MC-1-01	___	261017	419151	A-88-SM	COH220175	001		SOLID	2	1
2F	DJ67P-1-01	___	261005	407409	A-88-SM	COH210144	001		SOLID	1	1
2F	DJ67X-1-01	___	261006	407409	A-88-SM	COH210144	002		SOLID	1	1
2F	DJ68C-1-01	___	261007	407409	A-88-SM	COH210144	007		SOLID	1	1
2F	DJ680-1-01	___	261008	407409	A-88-SM	COH210144	003		SOLID	1	1
2F	DJ684-1-01	___	261009	407409	A-88-SM	COH210144	004		SOLID	1	1
2F	DJ686-1-01	___	261010	407409	A-88-SM	COH210144	005		SOLID	1	1
2F	DJ689-1-01	___	261011	407409	A-88-SM	COH210144	006		SOLID	1	1
2F CLP1	DJ7AW-1-05	___	261012	027262	A-88-SM	COH220137	001		SOLID	2	1
2F CLP1	DJ7CC-1-01	___	261013	399411	A-88-SM	COH220139	003		SOLID	3	1
2F CLP1	DJ7C6-1-05	___	261014	027262	A-88-SM	COH220138	001		SOLID	2	1
2F CLP1	DJ7C8-1-01	___	261015	399411	A-88-SM	COH220139	001		SOLID	3	1
2F CLP1	DJ7C9-1-01	___	261016	399411	A-88-SM	COH220139	002		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

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8-23-00 0730
8-23-00 0900

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

STL Pittsburgh
pH LOG SHEET

Page ____ of ____

Lot No.

Batch No.

SDG No.

COH220139

0836227

Analyst: ERIC L. WESOLOSKI

Date: 8-23-00

Start Time: 07:30

pH Meter Calibration

Reading

4.00

7.02

10.03

Buffer

4.0

7.0

10.0

Manf.

Lot No.

LABCHEM 9167-08

0062-04

0047-16

Rec'd

5-19-00

5-19-a

5-19-00

Expire

6-25-01

3-1-02

3-6-02

LCS ID No.: 342-162-3

Relative Percent Difference = $\frac{0.01220139 - 0.01}{0.01} = 1.25\%$

Range = $\pm .05$ pH units

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X₁ =Original Result

X₂ = Duplicate

~~pH Liquid~~

Sample ID LCS	pH Reading
END 9-73-00.	

pH Solid

Sample ID	pH Reading
LCS	7.05
COH220139 - 001	7.13 (1.10)
↓ - 001 Dup	7.22 (1.25)
- 002	7.84
- 003	7.80
LCS	7.04

EN
 8-23-00

REQUESTED BY: MESOLOSE

MOD: OZ pH (9045C) - Non-Aqueous

<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>
2F CLP1	DJ7CC-1-0F	— — —	261034	399411	A-88-OZ	COH220139	003		SOLID	3	1
2F CLP1	DJ7C8-1-0F	— — —	261035	399411	A-88-OZ	COH220139	001		SOLID	3	1
2F CLP1	DJ7C9-1-0F	— — —	261036	399411	A-88-OZ	COH220139	002		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

E. L. W. [Signature]
E. L. W. [Signature]

E. L. W. [Signature]
E. L. W. [Signature]

8/23/00(07:10)
8/23/00(07:30)

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

QUANTERRA- NORTH CANTON
TITRIMETRIC LOGSHEET

671 740

Analysis RXN CN
Prep/ Anal. Date 8/29/00
Analyst SAM/TA/ML

Batch Number 0242294
LCS Number NA
LCS Prep Date NA
RL 200 mg/kg

Titrant Name Silver Nitrate
Titrant Normality 0.0192 N
Titrant Standardization Date/ Initials NA /

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
Blank	10g		0.10		25 mg/kg	
DJ7C8			0.20		25 mg/kg	
DJ7C8 DUP			0.10		25 mg/kg	
DJ7C9			0.05		25 mg/kg	
DJ7CC			0.10		25 mg/kg	
DJ8P8CP			0.05		25 mg/kg	
DJE91			0.05			
DJE93			0.05			
DJE94			0.05			
DJE96			0.05			
DJE97			0.05			
DJDM6			0.05			
DJD4Q	10g		0.05			
DJD6X	10g		0.05			

SAM
8/29/00

SAM
8/29/00

671 741

Batch Number 0242295
LCS Number NA
LCS Prep Date NA
RL 200mg/Kg

Iodine

0.0284

Bu 8/25/00

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
BANK	10g		22.4		ND	
DJ7C8	10g		22.1		3mg/kg	
DJ7C8-Dup	10g		22.1		3mg/kg	
DJ7C9			22.3		ND	
DJ7CC			22.3			
DJ7EP E8P			22.3			
DJ7E91			22.3			
DJ7E93			22.3			
DJ7E94			22.4		ND	
DJ7E96			22.3		ND	
DJ7E97			22.3		ND	
DJ7DM6			22.4		ND	
DJ7D4Q	10g		22.3		ND	
DJ7D6X	10g		22.3		ND	
SAN 8/29/80						
400200						

8/24/0

~~Jan 21/20~~

~~403200~~

$$(\text{mls of iodine} \cdot N \text{ iodine}) - (\text{ml titrant} \cdot N \text{ titrant})$$

Rev. 10/30/98
N:\Metals\Wet Log

STL Pittsburgh
OLKS

7017✓

FINAL PAGE

PART I

ADMINISTRATIVE RECORD

PART I

FINAL PAGE