675 734B

File: 541.460.000n
C.H.

THE MEMPHIS DEPOT
TENNESSEE

ADMINISTRATIVE RECORD
COVER SHEET

AR File Number 675

Part II of II

675 735

SEVERN TRENT SERVICES

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

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

ANALYTICAL REPORT

PROJECT NO. UXB 7512-060

Dunn Field, Def Depot Memphis

Lot #: C1B090228

Frank Johnson

UXB International

SEVERN TRENT LABORATORIES, INC.

Dave Dunlap
Project Manager

February 22, 2001

CASE NARRATIVE
UXB International Inc.
Dunn Field

LOT # C1B090228

Sample Receiving:
STL Pittsburgh received one sample on February 9, 2001 in good condition and within the proper temperature range.

Volatiles:
Sample DF/S-1/1039/IDW/004 was analyzed undiluted and at a 50X dilution due to the concentration of chloroform detected. Both sets of results were reported.

Semivolatiles:
There were no problems associated with the analysis.

Pesticides:
For the continuing calibration standards analyzed on the RTX-50 column on February 14, 2001 at 21:02 and 21:30, endosulfan sulfate had a %D that was outside of the +/-15%D criteria (+28.2%). The average %D of all of the compounds in the continuing calibration standards was 7.3%. Since the compound was not detected in the sample all results were reported.

For the initial calibration standards analyzed on the RTX-1701 column on February 14, 2001, alpha-BHC, gamma-BHC and delta-BHC had %RSDs outside of the 20% criteria (25.2, 21.5 and 21.9% respectively). The average of the compounds in the calibration mixes was 9.6% therefore the average response factors of the individual compounds were used for quantitation

For the continuing calibration standards analyzed on the RTX-1701 column on February 14, 2001 at 21:02 and 21:30, endosulfan sulfate had a %D that was outside of the +/-15%D criteria (+22.1%). The average %D of all of the compounds in the continuing calibration standards was 4.5%. Since the compound was not detected in the sample all results were reported.

PCBs:
There were no problems associated with the analysis.

Herbicides:
The sample was analyzed at a dilution to reduce matrix interference. The surrogates were diluted out.

Metals:
The sample was over the instrument's linear range for sodium and required dilution.

CASE NARRATIVE
UXB International Inc.
Dunn Field

LOT # C1B090228

For sample DF/S-1/1039/IDW/004 matrix spike and matrix spike duplicate, sodium recoveries were not calculated due to the concentration of analyte in the sample being >4 times the concentration of spike added.

The matrix spike and matrix spike duplicate for sample DF/S-1/1039/IDW/004 had the recovery of aluminum above the control limits. All of the associated results are flagged with an "N" qualifier.

General Chemistry:
There were no problems associated with the analyses.

METHODS SUMMARY

C1B090228

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
pH Aqueous	SW846 9040	SW846 9040
Chlorinated Herbicides by GC	SW846 8151A	SW846 8151A
Cyanide, Total	SW846 9012A	SW846 9012A
Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A	SW846 7470A
Organochlorine Pesticides	SW846 8081A	SW846 3510C
Pensky-Martens Method for Determining Ignitability	SW846 1010	SW846 1010
PCBs by SW-846 8082	SW846 8082	SW846 3510C
Semivolatile Organic Compounds by GC/MS	SW846 8270C	SW846 3520C
Sulfide	MCAWW 376.1	MCAWW 376.1
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B	SW846 3010A
Volatile Organics by GC/MS	SW846 8260B	SW846 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

C1B090228

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
DVWJE	001	DF/S-1/1039/IDW/004	02/08/01	10:40

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

STL Pittsburgh

675 740

Chain of Custody Record

SEVERN TRENT SERVICES

Severn Trent Laboratories, Inc.

STL 4124 (0700)

Client: IXB	Project Manager: Frank Johnson	Date: 2/8/01	Chain of Custody Number: 001757
Address: 1708 Dunn Ave	Telephone Number (Area Code)/Fax Number: (901) 745-4999 Fax -4280	Lab Number:	Page 1 of 1
City: Memphis / State: TN / Zip Code: 38106	Site Contact: Jim Dunkle	Lab Contact: Dave Dunlap	
Project Name and Location (State): Dunn Field TN	Carrier/Waybill Number: 813523714837		
Contract/Purchase Order/Quote No:			

Sample I D No and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	HNO3	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): TCL VOAs	TCL BNAPyrkline	TCL Pesticides/PCBs	Herbicides	TAL Metals	Total Cyanide	Total Sulfide	PH	Flashpoint	Special Instructions/ Conditions of Receipt
DF/S-1/1039/IDW/001	2/8/01	1040		✓			8	1		2	1	1										

Possible Hazard Identification
☒ Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 3 months)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time
1 Relinquished By: James A Dunkle	2/8/01	
2 Relinquished By:		
3 Relinquished By:		

	Date	Time
1 Received By: P. Nelson	2/9/01	0930
2 Received By:		
3 Received By:		

Comments

9

Cooler Receipt Form

STL Pittsburgh

675 741

Client UXB Project Dead Field Quote 34878

Cooler Rec'd & Opened for Temp Check on 2/9/01

Coolers Opened and Unpacked on 2/9/01 By P. Pinkosky (Signature)

STL Pittsburgh Lot Number C1B090228

		Yes	No
1	Were custody seals on the outside of the cooler?	✓	
	If YES, how many and where? Quantity 2 Location Top		
	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? BUBBLE WRAP		
7.	Were the samples chilled? (Record temperatures on reverse side.)	✓	
8	Were the samples appropriately preserved?	✓	
9.	Were all bottles sealed in separate plastic bags?	✓	
10.	Did all bottles arrive in good condition (unbroken)?	✓	
11.	Were all bottle labels complete (sample ID, preservatives, etc.)?	✓	
12	Did all bottle labels and/or tags agree with custody papers?	✓	
13	Were correct bottles used for tests indicated?	✓	
14	Were all VOA vials checked for the presence of air bubbles?	✓	
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

Cooler Receipt Form

675 742

STL Pittsburgh

P: Preserved

UP: Unpreserved

Sample ID	TMET PH<2	DMET PH<2	HG PH<2	NUT(1) PH<2	CN PH≥12	OG TPHC PH<2	PHEN PH<2	SULF PH≥12	TOC PH<2	TOX PH<2	VOA P,UP	hrdnss PH<2			
DF/S-1/0001/		i			14			14			P				
D1/004															

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

Comments: _____

Cooler Number	Temperature
1	3°

Bottle Type	Lot Number*

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

STL Pittsburgh

FedEx

FedEx Tracking Number 813523714837

Form I.D. No. 0200

1 From UXB Dunkle [redacted]

Date 2/8/01

Sender's Name James Dunkle Phone 901 745-4999

Company UXB International Inc

Address 1708 Dunn Ave Dept/Floor/Suite/Room

City Memphis State TN ZIP 38106

2 Your Internal Billing Reference

3 To

Recipient's Name Rusty Vinaine Phone 412 820-2091

Company Severn Trent

Address 450 William Pitt Way Dept/Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

To HOLD at FedEx location, print FedEx address here

City Pittsburgh State PA ZIP 15238

8135 2371 4837

4a Express Package Service — Packages up to 150 lbs.

Delivery commitment may be later in some areas

- [X] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day* — Second business day
- [ ] FedEx Express Saver* — Third business day

* FedEx Letter Rate not available. Minimum charge: One-pound rate

4b Express Freight Service — Packages over 150 lbs.

Delivery commitment may be later in some areas

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation

5 Packaging — Declared value limit $500

- [ ] FedEx Letter*
- [ ] FedEx Pak*
- [X] Other Pkg — Includes FedEx Box, FedEx Tube and customer pkg

6 Special Handling

- [ ] Saturday Delivery — Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] Sunday Delivery — Available to FedEx Priority Overnight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — Not available with FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous Goods cannot be shipped in FedEx packaging.

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below — Obtain Rate Acct. No.

- [X] Sender — Acct. No. in Section 1 will be billed
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages	Total Weight	Total Declared Value†	Total Charges
1	27	$ 00	

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

Credit Card Auth.

8 Release Signature — Sign to authorize delivery without obtaining signature

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

Questions? Call 1-800-Go-FedEx (800-463-3339)

Visit our Web site at www.fedex.com

360

675 743

9

675 744

SBCCOM
Monit ring Branch Laboratory

CLEARANCE REPORT

8 February 2001
Dunn Field, Memphis Defense Depot
Results for CWM Soil Sample Analysis
Analyst: Elwyn Chadwick

Sample#		1,4-Thioxane	1,4-Dithiane	TDG	Mustard	
DF/SI/1039 IDW/004		ND	ND	N/A	ND	

ND= Not detected at or above the method detection limit (MDL)
MDL= 200 ppb
BDL= Below detection limit, results > 100ppb, but < 200 ppb
MS= matrix spike % recovery
MSD= matrix spike duplicate % recovery
DUP= duplicate
* These duplicates run on 2/8/01

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

Lab Name Severn Trent Laboratories, Inc. SDG Number:

Matrix. (soil/water) WATER Lab Sample ID C1B090228 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 02/09/01
Work Order: DVWJE1AA Date Extracted:02/13/01
Dilution factor: 1 Date Analyzed: 02/13/01

QC Batch: 1044112

Client Sample Id. DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	**Acetone**	**24**	
71-43-2	Benzene	5.0	U
75-27-4	**Bromodichloromethane**	**33**	
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	**2-Butanone**	**32**	
75-15-0	**Carbon disulfide**	**1.7**	**J**
56-23-5	Carbon tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
75-00-3	**Chloroethane**	**3.6**	**J**
67-66-3	**Chloroform**	**3000**	**E**
74-87-3	**Chloromethane**	**1.6**	**J**
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	5.0	U
591-78-6	2-Hexanone	20	U
75-09-2	**Methylene chloride**	**2.9**	**J**
108-10-1	4-Methyl-2-pentanone	20	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U

675 748

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc SDG Number:

Matrix: (soil/water) WATER Lab Sample ID: C1B090228 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received. 02/09/01
Work Order: DVWJE1AA Date Extracted: 02/13/01
Dilution factor: 1 Date Analyzed: 02/13/01

QC Batch: 1044112

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Xylenes (total)	5.0	U

Lab Name:Severn Trent Laboratories, Inc SDG Number

Matrix: (soil/water) WATER Lab Sample ID C1B090228 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 02/09/01
Work Order: DVWJE2AA Date Extracted:02/13/01
Dilution factor: 50 Date Analyzed: 02/13/01

QC Batch. 1044112
Client Sample Id: DF/S-1/1039/IDW/004 -RE 1

CAS NO	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	**Acetone**	**79**	**J**
71-43-2	Benzene	250	U
75-27-4	Bromodichloromethane	250	U
75-25-2	Bromoform	250	U
74-83-9	Bromomethane	500	U
78-93-3	2-Butanone	1000	U
75-15-0	Carbon disulfide.	250	U
56-23-5	Carbon tetrachloride	250	U
108-90-7	Chlorobenzene	250	U
124-48-1	Dibromochloromethane	250	U
75-00-3	Chloroethane	500	U
67-66-3	**Chloroform**	**8800**	
74-87-3	Chloromethane	500	U
75-34-3	1,1-Dichloroethane	250	U
107-06-2	1,2-Dichloroethane	250	U
75-35-4	1,1-Dichloroethene	250	U
540-59-0	1,2-Dichloroethene (total)	250	U
78-87-5	1,2-Dichloropropane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
100-41-4	Ethylbenzene	250	U
591-78-6	2-Hexanone	1000	U
75-09-2	Methylene chloride	250	U
108-10-1	4-Methyl-2-pentanone	1000	U
100-42-5	Styrene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
127-18-4	Tetrachloroethene	250	U
108-88-3	Toluene	250	U

UXB INTERNATIONAL

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

Matrix: (soil/water) WATER Lab Sample ID: C1B090228 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 02/09/01
Work Order: DVWJE2AA Date Extracted: 02/13/01
Dilution factor: 50 Date Analyzed: 02/13/01

QC Batch: 1044112

Client Sample Id: DF/S-1/1039/IDW/004 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
71-55-6	1,1,1-Trichloroethane	250	U
79-00-5	1,1,2-Trichloroethane	250	U
79-01-6	Trichloroethene	250	U
75-01-4	Vinyl chloride	500	U
1330-20-7	Xylenes (total)	250	U

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name.Severn Trent Laboratories, Inc SDG Number.

Matrix: (soil/water) WATER Lab Sample ID C1B130000 112
Method. SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 02/09/01
Work Order. DV1WQ1AC Date Extracted:02/13/01
Dilution factor: 1 Date Analyzed: 02/13/01

QC Batch: 1044112

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
71-43-2	Benzene	43.9	
108-90-7	Chlorobenzene	47.8	
75-35-4	1,1-Dichloroethene	38.5	
108-88-3	Toluene	50.1	
79-01-6	Trichloroethene	43 6	

SW846 8260B SURROGATE RECOVERY

Lab Name Severn Trent Laboratories, Inc Client· UXB INTERNATIONAL

Lab Code: STLPIT SDG No:

Lot #: C1B090228

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	TOT OUT
01	DF/S-1/1039/IDW/004	111	100	111	107	00
02	DF/S-1/1039/IDW/004 RE-1	105	100	92	97	00
03	INTRA-LAB QC	106	102	97	97	00
04	METHOD BLK. DV1WQ1AA	105	100	95	95	00
05	LCS DV1WQ1AC	103	100	95	92	00
06	LAB MS/MSD D	111	100	94	91	00
07	LAB MS/MSD S	103	105	99	94	00

SURROGATES		QC LIMITS
SRG01	= 1,2-Dichloroethane-d4	(77-120)
SRG02	= Toluene-d8	(78-111)
SRG03	= 4-Bromofluorobenzene	(80-114)
SRG04	= Dibromofluoromethane	(78-110)

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

FORM II

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

Lab Code. STLPIT SDG No:

Lot #: C1B130000 WO #: DV1WQ1AC
BATCH: 1044112

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	50.0	38.5	77	65 - 119	
Trichloroethene	50.0	43.6	87	80 - 122	
Benzene	50.0	43.9	88	79 - 116	
Toluene	50.0	50.1	100	76 - 119	
Chlorobenzene	50.0	47 8	96	81 - 115	

NOTES (S) :

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name Severn Trent Laboratories, Inc Client: UXB INTERNATIONAL

Lab Code: STLPIT SDG No

Matrix Spike ID: LAB MS/MSD

Lot #: C1B120128 WO #: DV0091AC
BATCH: 1044112

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT (ug/L)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	50.0	ND	44.4	89	57 - 138	
Trichloroethene	50.0	ND	49.8	100	58 - 141	
Benzene	50.0	ND	49.8	100	73 - 123	
Toluene	50.0	ND	59.3	119	67 - 129	
Chlorobenzene	50.0	ND	55.6	111	70 - 122	

NOTES(S):

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

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

COMMENTS.

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY 675 755

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

Lab Code: STLPIT SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #· C1B120128 WO #· DV0091AD
BATCH 1044112

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENT. (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
1,1-Dichloroethene	50.0	45.4	91	2.3	20	57- 138	
Trichloroethene	50.0	52 4	105	5 0	20	58- 141	
Benzene	50.0	51.2	102	2.8	20	73- 123	
Toluene	50.0	52 8	106	12	20	67- 129	
Chlorobenzene	50 0	49 6	99	11	20	70- 122	

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 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: DV1WQ1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIT

Lab File ID: WB30213.D

Date Analyzed: 02/13/01

Matrix: WATER

GC Column: RTX-624 ID: .18

Instrument ID: HP3

SDG Number:

Lot Number: C1B090228

Time Analyzed: 06:49

Date Extracted: 02/13/01

Extraction Method: 5030

Level (low/med): LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	DF/S-1/1039/IDW/004	DVWJE1AA	3021302.D	02/13/01	07.46
02	DF/S-1/1039/IDW/004	DVWJE2AA	3021307.D	02/13/01	09 40
03	INTRA-LAB QC	DV0091AA	3021306.D	02/13/01	09 16
04	LAB MS/MSD	DV0091AC S	3021308 D	02/13/01	10:02
05	LAB MS/MSD	DV0091AD D	3021309.D	02/13/01	10 26
06	CHECK SAMPLE	DV1WQ1AC C	3021301.D	02/13/01	07 19
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

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER Lab Sample ID C1B130000 112
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol. 5 / mL Date Received: 02/09/01
Work Order: DV1WQ1AA Date Extracted.02/13/01
Dilution factor: 1 Date Analyzed: 02/13/01

QC Batch: 1044112

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS. (ug/L or ug/kg) ug/L	Q
67-64-1	Acetone	20	U
71-43-2	Benzene	5.0	U
75-27-4	Bromodichloromethane	5 0	U
75-25-2	Bromoform	5 0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	20	U
75-15-0	Carbon disulfide	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
108-90-7	Chlorobenzene	5 0	U
124-48-1	Dibromochloromethane	5 0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5 0	U
107-06-2	1,2-Dichloroethane	5 0	U
75-35-4	1,1-Dichloroethene	5 0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	5.0	U
591-78-6	2-Hexanone	20	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	20	U
100-42-5	Styrene	5 0	U
79-34-5	1,1,2,2-Tetrachloroethane	5 0	U
127-18-4	Tetrachloroethene	5 0	U
108-88-3	Toluene	5 0	U

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER Lab Sample ID.C1B130000 112
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 02/09/01
Work Order DV1WQ1AA Date Extracted:02/13/01
Dilution factor. 1 Date Analyzed: 02/13/01

QC Batch. 1044112

Client Sample Id. INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
71-55-6	1,1,1-Trichloroethane	5 0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5 0	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Xylenes (total)	5.0	U

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

675 759

Lab Name: STL PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Lab File ID (Standard): CC30213 Date Analyzed: 02/13/01

Instrument ID: HP3 Time Analyzed: 0618

GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1(CBZ) AREA #	RT #	IS2(DCB) AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	164557	9.74	288411	12.05	664169	6.61
	UPPER LIMIT	329114	9.94	576822	12.25	1328338	6.81
	LOWER LIMIT	82279	9.54	144206	11.85	332085	6.41
	EPA SAMPLE NO.						
01	INTRA-LAB BL	152545	9.74	233667	12.06	635836	6.61
02	INTRA-LAB CH	157697	9.74	236283	12.05	661260	6.61
03	DF/S-1/1039/	166587	9.74	297610	12.06	652763	6.61
04	DF/S-1/1039/	161377	9.74	244808	12.05	681417	6.62
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

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

GC/MS SEMIVOLATILE SUMMARY

UXB INTERNATIONAL

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

Matrix (soil/water) WATER Lab Sample ID:C1B090228 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 02/09/01
Work Order: DVWJE1AC Date Extracted:02/12/01
Dilution factor: 1 Date Analyzed: 02/16/01
Moisture %:NA

QC Batch: 1043285

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
110-86-1	Pyridine	20	U
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
50-32-8	Benzo(a)pyrene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
111-44-4	**bis(2-Chloroethyl) ether**	**6.9**	J
117-81-7	**bis(2-Ethylhexyl) phthalate**	**23**	
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
86-74-8	Carbazole	10	U
106-47-8	4-Chloroaniline	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	50	U
120-83-2	2,4-Dichlorophenol	10	U

UXB INTERNATIONAL

Lab Name Severn Trent Laboratories, Inc. SDG Number:

Matrix. (soil/water) WATER Lab Sample ID·C1B090228 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol· 1000 / mL Date Received: 02/09/01
Work Order DVWJE1AC Date Extracted:02/12/01
Dilution factor: 1 Date Analyzed: 02/16/01
Moisture %:NA

QC Batch: 1043285

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U
131-11-3	Dimethyl phthalate	10	U
84-74-2	Di-n-butyl phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
51-28-5	2,4-Dinitrophenol	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
206-44-0	Fluoranthene	10	U
86 73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	50	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	10	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
621-64-7	N-Nitrosodi-n-propylamine	10	U

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

Matrix. (soil/water) WATER Lab Sample ID: C1B090228 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 02/09/01
Work Order. DVWJE1AC Date Extracted: 02/12/01
Dilution factor 1 Date Analyzed: 02/16/01
Moisture %. NA

QC Batch: 1043285

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
86-30-6	N-Nitrosodiphenylamine	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	3.9	J
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
88-06-2	2,4,6-Trichlorophenol	10	U

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name Severn Trent Laboratories, Inc. SDG Number.

Matrix: (soil/water) WATER
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:C1B120000 285

Sample WT/Vol. 1000 / mL
Work Order DV03C1AC
Dilution factor. 1
Moisture %.NA

Date Received. 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/16/01

QC Batch: 1043285

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
83-32-9	Acenaphthene	42.7	
59-50-7	4-Chloro-3-methylphenol	68.6	
95-57-8	2-Chlorophenol	62.4	
106-46-7	1,4-Dichlorobenzene	41.2	
121-14-2	2,4-Dinitrotoluene	43.6	
100-02-7	4-Nitrophenol	69 6	
621-64-7	N-Nitrosodi-n-propylamine	42.1	
87-86-5	Pentachlorophenol	76.5	
108-95-2	Phenol	60.5	
129-00-0	Pyrene	50.4	
120-82-1	1,2,4-Trichlorobenzene	40.6	

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) WATER Lab Sample ID: C1B120000 285
Method SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol. 1000 / mL Date Received: 02/09/01
Work Order DV03C1AD Date Extracted: 02/12/01
Dilution factor. 1 Date Analyzed. 02/16/01
Moisture %: NA

QC Batch: 1043285

Client Sample Id: DUPLICATE CHECK

CAS NO	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
83-32-9	Acenaphthene	43.3	
59-50-7	4-Chloro-3-methylphenol	71.8	
95-57-8	2-Chlorophenol	65.1	
106-46-7	1,4-Dichlorobenzene	42.3	
121-14-2	2,4-Dinitrotoluene	44.8	
100-02-7	4-Nitrophenol	71.3	
621-64-7	N-Nitrosodi-n-propylamine	44.3	
87-86-5	Pentachlorophenol	73.9	
108-95-2	Phenol	63.3	
129-00-0	Pyrene	51.9	
120-82-1	1,2,4-Trichlorobenzene	41.9	

SW846 8270C SURROGATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B090228

	CLIENT ID	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
01	DF/S-1/1039/IDW/004	74	58	69	35	60	91	00
02	METHOD BLK. DV03C1AA	89	78	79	103	89	87	00
03	LCS DV03C1AC	85	79	78	97	87	86	00
04	LCSD DV03C1AD	89	80	81	101	90	89	00

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

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

FORM II

SW846 8270C CHECK SAMPLE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV03C1AC
BATCH: 1043285

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Phenol	75.0	60.5	81	10- 131	
2-Chlorophenol	75.0	62.4	83	19- 124	
1,4-Dichlorobenzene	50.0	41.2	82	28- 110	
N-Nitrosodi-n-propylamine	50.0	42.1	84	30- 115	
1,2,4-Trichlorobenzene	50.0	40.6	81	31- 110	
4-Chloro-3-methylphenol	75.0	68.6	91	29- 124	
Acenaphthene	50.0	42.7	85	39- 118	
4-Nitrophenol	75.0	69.6	93	19- 144	
2,4-Dinitrotoluene	50.0	43.6	87	47- 131	
Pentachlorophenol	75.0	76.5	102	10- 140	
Pyrene	50.0	50.4	101	46- 130	

NOTES(S):

* Values outside of QC limits

Spike Recovery 0 out of 11 outside limits

COMMENTS

FORM III

SW846 8270C CHECK SAMPLE DUPLICATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV03C1AD
BATCH: 1043285

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
2,4-Dinitrotoluene	50.0	44.8	90	47- 131	
Pentachlorophenol	75.0	73.9	99	10- 140	
Pyrene	50.0	51 9	104	46- 130	
Phenol	75.0	63.3	84	10- 131	
2-Chlorophenol	75.0	65.1	87	19- 124	
1,4-Dichlorobenzene	50.0	42.3	85	28- 110	
N-Nitrosodi-n-propylamine	50 0	44.3	89	30- 115	
1,2,4-Trichlorobenzene	50.0	41.9	84	31- 110	
4-Chloro-3-methylphenol	75.0	71.8	96	29- 124	
Acenaphthene	50.0	43.3	87	39- 118	
4-Nitrophenol	75.0	71.3	95	19- 144	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.: DV03C1AA

Lab Name: Severn Trent Laboratories, Inc

Lab Code: STLPIT

SDG Number:

Lab File ID: S0216S01.

Lot Number: C1B090228

Date Analyzed: 02/16/01

Time Analyzed: 11:05

Matrix: WATER

Date Extracted: 02/12/01

GC Column: DB5MS ID: .25

Extraction Method: 3520C

Instrument ID: 71

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	DF/S-1/1039/IDW/004	DVWJE1AC	S0216S04.	02/16/01	12:40
02	CHECK SAMPLE	DV03C1AC C	S0216S02.	02/16/01	11:37
03	DUPLICATE CHECK	DV03C1AD L	S0216S03.	02/16/01	12:09
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:C1B120000 285

Sample WT/Vol: 1000 / mL
Work Order: DV03C1AA
Dilution factor: 1
Moisture %·NA

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/16/01

QC Batch: 1043285

Client Sample Id· INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
110-86-1	Pyridine	20	U
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
50-32-8	Benzo(a)pyrene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
111-44-4	bis(2-Chloroethyl) ether	10	U
117-81-7	bis(2-Ethylhexyl) phthalate	10	U
101-55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
86-74-8	Carbazole	10	U
106-47-8	4-Chloroaniline	10	U
59-50 7	4-Chloro-3-methylphenol	10	U
91-58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	50	U
120-83-2	2,4-Dichlorophenol	10	U

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix (soil/water) WATER Lab Sample ID: C1B120000 285
Method. SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 02/09/01
Work Order: DV03C1AA Date Extracted: 02/12/01
Dilution factor: 1 Date Analyzed: 02/16/01
Moisture %. NA

QC Batch: 1043285

Client Sample Id. INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U
131-11-3	Dimethyl phthalate	10	U
84-74-2	Di-n-butyl phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
51-28-5	2,4-Dinitrophenol	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	50	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	10	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98 95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
621-64-7	N-Nitrosodi-n-propylamine	10	U

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix (soil/water) WATER
Method SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:C1B120000 285

Sample WT/Vol. 1000 / mL
Work Order: DV03C1AA
Dilution factor. 1
Moisture %:NA

Date Received· 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/16/01

QC Batch: 1043285

Client Sample Id INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
86-30-6	N-Nitrosodiphenylamine	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
88-06-2	2,4,6-Trichlorophenol	10	U

FORM 8

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY 675 773

Lab Name: STL-PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Lab File ID (Standard): S0216CC1 Date Analyzed: 02/16/01

Instrument ID: 71 Time Analyzed: 1034

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	96354		4.91		349739		6.42		192641		9.40	
	UPPER LIMIT	192708		5.41		699478		6.92		385282		9.90	
	LOWER LIMIT	48177		4.41		174870		5.92		96321		8.90	
	CLIENT SAMPLE NO.												
01	INTRA-LAB BL	78101		4.91		289720		6.42		151773		9.41	
02	INTRA-LAB CH	73025		4.91		279101		6.42		151292		9.41	
03	INTRA-LAB CH	71482		4.91		276512		6.42		153181		9.41	
04	DF/S-1/1039/	65389		4.90		239249		6.41		141641		9.42	
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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

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

FORM 8

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Lab File ID (Standard): S0216CC1 Date Analyzed: 02/16/01

Instrument ID: 71 Time Analyzed: 1034

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	328514		12.68		426597		19.30		460025		22.65	
	UPPER LIMIT	657028		13.18		853194		19.80		920050		23.15	
	LOWER LIMIT	164257		12.18		213299		18.80		230013		22.15	
	CLIENT SAMPLE NO.												
01	INTRA LAB BL	241464		12.69		244376		19.30		271142		22.65	
02	INTRA-LAB CH	257538		12.69		269280		19.30		291183		22.65	
03	INTRA-LAB CH	260961		12.69		268074		19.30		282012		22.65	
04	DF/S-1/1039/	287178		12.72		508635		19.34		595633		22.69	
05													
06													
07													
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

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

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

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

PESTICIDE SUMMARY

UXB INTERNATIONAL

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

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

Lab Sample ID:C1B090228 001

Sample WT/Vol: 1000 / mL
Work Order: DVWJE1AD
Dilution factor: 1

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/14/01

QC Batch: 1043326

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
309-00-2	Aldrin	0.050	U
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	**delta-BHC**	**0.015**	**J P**
58-89-9	**gamma-BHC (Lindane)**	**0.014**	**J P**
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	**gamma-Chlordane**	**0.079**	**P**
72-54-8	**4,4'-DDD**	**0.017**	**J P**
72-55-9	**4,4'-DDE**	**0.0051**	**J P**
50-29-3	4,4'-DDT	0.050	U
60-57-1	**Dieldrin**	**0.014**	**J P**
959-98-8	Endosulfan I	0.050	U
33213-65-9	Endosulfan II	0.050	U
1031-07-8	Endosulfan sulfate	0.050	U
72-20-8	**Endrin**	**0.053**	**P**
7421-93-4	Endrin aldehyde	0.050	U
53494-70-5	Endrin ketone	0.050	U
76-44-8	Heptachlor	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
72-43-5	Methoxychlor	0.10	U
8001-35-2	Toxaphene	2.0	U

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

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

Lab Sample ID:C1B120000 326

Sample WT/Vol: 1000 / mL
Work Order: DV05T1AC
Dilution factor: 1

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/14/01

QC Batch: 1043326

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
309-00-2	Aldrin	0.223	
58-89-9	gamma-BHC (Lindane)	0.226	
50-29-3	4,4'-DDT	0.522	
60-57-1	Dieldrin	0.518	
72-20-8	Endrin	0.488	
76-44-8	Heptachlor	0.229	

675 778

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

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

Lab Sample ID:C1B120000 326

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

Sample WT/Vol: 1000 / mL
Work Order: DV05T1AD
Dilution factor: 1

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/14/01

QC Batch: 1043326

Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
309-00-2	Aldrin	0.209	
58-89-9	gamma-BHC (Lindane)	0.213	
50-29-3	4,4'-DDT	0.491	
60-57-1	Dieldrin	0.483	
72-20-8	Endrin	0.436	
76-44-8	Heptachlor	0.217	

WATER PESTICIDE SURROGATE RECOVERY

675 779

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

GC Column(1): RTX-50 ID: 0.53 (mm) GC Column(2): RTX-1701 ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	DF/S-1/1039/	74	55	89	90			0
02	PBLK3326	73	73	98	95			0
03	LCS3326	78	77	101	100			0
04	LCD3326	76	75	96	94			0
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (39-130)
S2 (DCB) = Decachlorobiphenyl (10-147)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

SW846 8081A CHECK SAMPLE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV05T1AC
BATCH: 1043326

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
gamma-BHC (Lindane)	0.250	0.226	90	49- 137	
Heptachlor	0.250	0.229	92	57- 124	
Aldrin	0.250	0.223	89	62- 120	
Dieldrin	0.500	0.518	104	68- 130	
Endrin	0.500	0.488	98	46- 137	
4,4'-DDT	0.500	0.522	104	60- 140	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits

COMMENTS:

SW846 8081A CHECK SAMPLE DUPLICATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV05T1AD
BATCH: 1043326

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
gamma-BHC (Lindane)	0.250	0.213	85	49- 137	
Heptachlor	0.250	0.217	87	57- 124	
Aldrin	0.250	0.209	83	62- 120	
Dieldrin	0.500	0.483	97	68- 130	
Endrin	0.500	0.436	87	46- 137	
4,4'-DDT	0.500	0.491	98	60- 140	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits

COMMENTS:

FORM III

675 782

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO

PBLK3326

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

Lab Sample ID: DV05T1AA Lab File ID: D-A1453

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SW3510

Sulfur Cleanup (Y/N) N Date Extracted: 02/12/01

Date Analyzed (1): 02/14/01 Date Analyzed (2): 02/14/01

Time Analyzed (1): 1527 Time Analyzed (2): 1527

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

GC Column (1): RTX-50 ID: 0.53(mm) GC Column (2): RTX-1701 ID: 0.53(mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	DF/S-1/1039/	DVWJE1AD	02/14/01	02/14/01
02	LCS3326	DV05T1AC	02/14/01	02/14/01
03	LCD3326	DV05T1AD	02/14/01	02/14/01
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

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

Lab Sample ID: C1B120000 326

Sample WT/Vol: 1000 / mL
Work Order: DV05T1AA
Dilution factor: 1

Date Received: 02/09/01
Date Extracted: 02/12/01
Date Analyzed: 02/14/01

QC Batch: 1043326

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
309-00-2	Aldrin	0.050	U
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
72-54-8	4,4'-DDD	0.050	U
72-55-9	4,4'-DDE	0.050	U
50-29-3	4,4'-DDT	0.050	U
60-57-1	Dieldrin	0.050	U
959-98-8	Endosulfan I	0.050	U
33213-65-9	Endosulfan II	0.050	U
1031-07-8	Endosulfan sulfate	0.050	U
72-20-8	Endrin	0.050	U
7421-93-4	Endrin aldehyde	0.050	U
53494-70-5	Endrin ketone	0.050	U
76-44-8	Heptachlor	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
72-43-5	Methoxychlor	0.10	U
8001-35-2	Toxaphene	2.0	U

PCB SUMMARY

UXB INTERNATIONAL

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

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:C1B090228 001

Sample WT/Vol: 1000 / mL
Work Order: DVWJE1AE
Dilution factor: 1
Moisture %:NA

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/13/01

QC Batch: 1043329

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	1.0	U
11104-28-2	Aroclor 1221	1.0	U
11141-16-5	Aroclor 1232	1.0	U
53469-21-9	Aroclor 1242	1.0	U
12672-29-6	Aroclor 1248	1.0	U
11097-69-1	Aroclor 1254	1.0	U
11096-82-5	Aroclor 1260	1.0	U

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:C1B120000 329

Sample WT/Vol: 1000 / mL
Work Order: DV05X1AC
Dilution factor: 1
Moisture %:NA

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/13/01

QC Batch: 1043329

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	8.48	
11096-82-5	Aroclor 1260	8.94	

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:C1B120000 329

Sample WT/Vol: 1000 / mL
Work Order: DV05X1AD
Dilution factor: 1
Moisture %:NA

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/13/01

QC Batch: 1043329

Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	8.34	
11096-82-5	Aroclor 1260	8.75	

SW846 8082 SURROGATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B090228

	CLIENT ID.	SRG01	SRG02	TOT OUT
01	DF/S-1/1039/IDW/004	104	90	00
02	METHOD BLK. DV05X1AA	86	91	00
03	LCS DV05X1AC	85	92	00
04	LCSD DV05X1AD	83	89	00

SURROGATES		QC LIMITS
SRG01	= Tetrachloro-m-xylene	(45-120)
SRG02	= Decachlorobiphenyl	(24-128)

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

FORM II

SW846 8082 CHECK SAMPLE RECOVERY

675 789

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV05X1AC

BATCH: 1043329

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Aroclor 1016	10.0	8.48	85	61- 118	
Aroclor 1260	10.0	8.94	89	61- 124	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

675 790

SW846 8082 CHECK SAMPLE DUPLICATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV05X1AD
BATCH: 1043329

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Aroclor 1016	10.0	8.34	83	61- 118	
Aroclor 1260	10.0	8.75	88	61- 124	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

BLANK WORKORDER NO.
DV05X1AA

SW846 8082 METHOD BLANK SUMMARY

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIT

SDG Number:

Lab File ID: H-A10328.

Lot Number: C1B090228

Matrix: WATER

Extraction Method:

Date Extracted: 02/12/01

Date Analyzed(1): 02/13/01

Date Analyzed(2): N/A

Time Analyzed(1): 13:04

Time Analyzed(2): N/A

Instrument ID(1): M/N

Instrument ID(2): N/A

GC Column(1): N/A ID: N/A GC Column(2): N/A ID: N/A

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

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED(1)	DATE ANALYZED(2)
01	DF/S-1/1039/IDW/004	DVWJE1AE	02/13/01	N/A
02	CHECK SAMPLE	DV05X1AC C	02/13/01	N/A
03	DUPLICATE CHECK	DV05X1AD L	02/13/01	N/A
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:C1B120000 329

Sample WT/Vol: 1000 / mL
Work Order: DV05X1AA
Dilution factor: 1
Moisture %:NA

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/13/01

QC Batch: 1043329

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	1.0	U
11104-28-2	Aroclor 1221	1.0	U
11141-16-5	Aroclor 1232	1.0	U
53469-21-9	Aroclor 1242	1.0	U
12672-29-6	Aroclor 1248	1.0	U
11097-69-1	Aroclor 1254	1.0	U
11096-82-5	Aroclor 1260	1.0	U

HERBICIDE SUMMARY

UXB INTERNATIONAL

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

Lab Sample ID: C1B090228 001

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

Date Received: 02/09/01
Date Extracted: 02/14/01
Date Analyzed: 02/16/01

Sample WT/Vol: 1000 / mL
Work Order: DVWJE1CC
Dilution factor: 5
Moisture %: NA

QC Batch: 1045443

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q	
94-75-7	2,4-D	2.7	J	P
93-72-1	2,4,5-TP (Silvex)	1.4	J	P

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Lab Sample ID:C1B140000 443

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

Sample WT/Vol: 1000 / mL
Work Order: DV5LH1AC
Dilution factor: 1
Moisture %:NA

Date Received: 02/09/01
Date Extracted:02/14/01
Date Analyzed: 02/15/01

QC Batch: 1045443

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
94-75-7	2,4-D	9.63	
93-72-1	2,4,5-TP (Silvex)	2.61	

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

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

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

Lab Sample ID: C1B140000 443

Sample WT/Vol: 1000 / mL
Work Order: DV5LH1AD
Dilution factor: 1
Moisture %: NA

Date Received: 02/09/01
Date Extracted: 02/14/01
Date Analyzed: 02/15/01

QC Batch: 1045443

Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
94-75-7	2,4-D	10.4	
93-72-1	2,4,5-TP (Silvex)	2.74	

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

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

	EPA SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	S3 1 %REC #	S3 2 %REC #	TOT OUT
01	LCS5443	72						0
02	LCD5443	75						0
03	BLK5443		73					0
04	PBLK5443	72						0
05	DF/S-1/1039/	398*D	75D					2
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

JP 2/19/01

ADVISORY
QC LIMITS
(~~0-119~~ 42-125) JP 2/19/01

S1 = DCAA

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

SW846 8151A CHECK SAMPLE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B140000 WO #: DV5LH1AC
BATCH: 1045443

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
2,4-D	16.0	9.63	60	46 - 124	
2,4,5-TP (Silvex)	4.00	2.61	65	53 - 127	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

SW846 8151A CHECK SAMPLE DUPLICATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B140000 WO #: DV5LH1AD
BATCH: 1045443

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
2,4-D	16.0	10.4	65	46- 124	
2,4,5-TP (Silvex)	4.00	2.74	69	53- 127	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLK5443

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

Lab Sample ID: DV5LH1AA Lab File ID: A-A01050

Matrix (soil/water) WATER Extraction: (SepF/Cont/Sonc) SW846 8151A

Sulfur Cleanup (Y/N) N Date Extracted: 02/14/01

Date Analyzed (1): 02/15/01 Date Analyzed (2):

Time Analyzed (1): 1323 Time Analyzed (2):

Instrument ID (1): GC1 Instrument ID (2):

GC Column (1): RTX-50 ID: 0.53(mm) GC Column (2): ID:

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	LCS5443	DV5LH1AC		02/15/01
02	LCD5443	DV5LH1AD		02/15/01
03	DF/S-1/1039/	DVWJE1CC	02/16/01	02/16/01
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK5443

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

Lab Sample ID: DV5LH1AA Lab File ID: A-B00525

Matrix (soil/water) WATER Extraction: (SepF/Cont/Sonc) SW846 8151A

Sulfur Cleanup (Y/N) N Date Extracted: 02/14/01

Date Analyzed (1): 02/15/01 Date Analyzed (2):

Time Analyzed (1): 1352 Time Analyzed (2):

Instrument ID (1): GC1 Instrument ID (2):

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	LCS5443	DV5LH1AC	02/15/01	
02	LCD5443	DV5LH1AD	02/15/01	
03	DF/S-1/1039/	DVWJE1CC	02/16/01	02/16/01
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Lab Sample ID: C1B140000 443

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

Sample WT/Vol: 1000 / mL
Work Order: DV5LH1AA
Dilution factor: 1
Moisture %: NA

Date Received: 02/09/01
Date Extracted: 02/14/01
Date Analyzed: 02/15/01

QC Batch: 1045443

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
94-75-7	2,4-D	4.0	U
93-72-1	2,4,5-TP (Silvex)	1.0	U

METALS SUMMARY

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DVWJE **Client ID:** DF/S-1/1039/IDW/004

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

Weight: NA **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	**308.22**	**12.7**	**200**	**1580**	**N**	**1**	**ICP**	**2/14/01**	**10:44**
Antimony	**220.35**	**1.5**	**60.0**	**30.0**	**B**	**1**	**ICPST**	**2/13/01**	**13:52**
Arsenic	**189.04**	**2.6**	**10.0**	**8.0**	**B**	**1**	**ICPST**	**2/13/01**	**13:52**
Barium	**493.41**	**0.41**	**200**	**218**		**1**	**ICP**	**2/14/01**	**10:44**
Beryllium	313.04	0 071	5.0	0.071	U	1	ICP	2/14/01	10:44
Cadmium	**226.50**	**0.49**	**5.0**	**0.56**	**B**	**1**	**ICPST**	**2/13/01**	**13:52**
Calcium	**317.93**	**37.9**	**5000**	**71900**		**1**	**ICP**	**2/14/01**	**10:44**
Chromium	**267.72**	**1.0**	**10.0**	**23.5**		**1**	**ICPST**	**2/13/01**	**13:52**
Cobalt	228.62	3.2	50 0	3.2	U	1	ICP	2/14/01	10:44
Copper	**324.75**	**2.2**	**25.0**	**51.8**		**1**	**ICP**	**2/14/01**	**10:44**
Iron	**259.94**	**8.8**	**100**	**2970**		**1**	**ICP**	**2/14/01**	**10:44**
Lead	**220.35**	**1.9**	**3.0**	**13.3**		**1**	**ICPST**	**2/13/01**	**13:52**
Magnesium	**279.08**	**19.9**	**5000**	**16700**		**1**	**ICP**	**2/14/01**	**10:44**
Manganese	**257.61**	**0.87**	**15.0**	**898**		**1**	**ICP**	**2/14/01**	**10:44**
Nickel	**231.60**	**6.1**	**40.0**	**20.0**	**B**	**1**	**ICP**	**2/14/01**	**10:44**
Potassium	**766.49**	**496**	**5000**	**4600**	**B**	**1**	**ICP**	**2/14/01**	**10:44**
Selenium	220.35	2.1	5.0	2 1	U	1	ICPST	2/13/01	13:52
Silver	328.07	0 94	10.0	0 94	U	1	ICPST	2/13/01	13:52
Sodium	**589**	**29.0**	**10000**	**489000**		**2**	**ICP**	**2/14/01**	**12:54**
Thallium	190.86	3.9	10.0	3 9	U	1	ICPST	2/13/01	13:52
Vanadium	**292.40**	**1.8**	**50.0**	**3.9**	**B**	**1**	**ICP**	**2/14/01**	**10:44**
Zinc	**213.86**	**3.1**	**20.0**	**203**		**1**	**ICP**	**2/14/01**	**10:44**

Comments: Lot # C1B090228 Sample #: 1

Version 4 10 2

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DVWJE **Client ID:** DF/S-1/1039/IDW/004

Matrix: Water **Units:** ug/L **Prep Date:** 2/13/01 **Prep Batch:** 1043191

Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.054	0.20	0.16	B	1	CVAA	2/13/01	9:07

Comments Lot # C1B090228 Sample #. 1

Version 4.10 2

U Result is less than the MDL.

B Result is between MDL and RL.

Form I Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: 0213HGA.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB1 2/13/01 8 59 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0 2	0 1	U								

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: J10214B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB1 2/14/01 10:26 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308 215	200	12 7	U								
Barium	493 409	200	0 4	U								
Beryllium	313 042	5	0.1	U								
Calcium	317.933	5000	37.9	U								
Cobalt	228 616	50	3 2	U								
Copper	324.754	25	**2.2**	**U**								
Iron	259.94	100	**11.5**	**B**								
Magnesium	279 079	5000	19 9	U								
Manganese	257 61	15	0.9	U								
Nickel	231 604	40	6 1	U								
Potassium	766 491	5000	496.0	U								
Sodium	588.995	5000	14 5	U								
Vanadium	292.402	50	**1.8**	**U**								
Zinc	213 856	20	**3.1**	**U**								

U Result is less than the MDL

B Result is between MDL and RL

Version 4.10.2

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: T10213B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB1 2/13/01 1.29 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Antimony	220.353	60	1.5	U								
Arsenic	189 042	10	2.6	U								
Cadmium	226 502	5	0 5	U								
Chromium	267 716	10	1.0	U								
Lead	220 353	3	1.9	U								
Selenium	220 353	5	2.1	U								
Silver	328.068	10	0.9	U								
Thallium	190.864	10	3.9	U								

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: 0213HGA PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB1 2/13/01 9:01 AM Found	Q	CCB2 2/13/01 9 20 AM Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0 2	0.1	U	0.1	U						

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

Continuing Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: J10214B.ARC

Standard Source: _____ **Standard ID:** _____

mw 2-15-01

Element	WL/ Mass	Report Limit	CCB1 2/14/01 11.06 AM Found	Q	CCB2 2/14/01 11:44 Am Found	Q	CCB3 2/14/01 12 22pm Found	Q	CCB4 2/14/01 1.10 Pm Found	Q	Found	Q
Aluminum	308 215	200	12 7	U								
Barium	493 409	200	0 4	U								
Beryllium	313 042	5	**0.3**	**B**								
Calcium	317.933	5000	37.9	U								
Cobalt	228 616	50	3 2	U								
Copper	324.754	25	**2.2**	**U**								
Iron	259.94	100	8 8	U								
Magnesium	279 079	5000	19 9	U								
Manganese	257 61	15	0 9	U								
Nickel	231.604	40	6 1	U								
Potassium	766.491	5000	-520.0	B								
Sodium	588 995	5000	14 5	U	14 5	U	14.5	U	14 5	U		
Vanadium	292.402	50	**1.8**	**U**								
Zinc	213.856	20	**3.1**	**U**								

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: T10213B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB1 2/13/01 2:13 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Antimony	220 353	60	1.5	U								
Arsenic	189 042	10	2.6	U								
Cadmium	226 502	5	0 5	U								
Chromium	267.716	10	1.0	U								
Lead	220.353	3	1.9	U								
Selenium	220.353	5	2.1	U								
Silver	328.068	10	0.9	U								
Thallium	190.864	10	3.9	U								

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DV0HRB

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

Weight: NA **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308 215	12 7	200	12.7	U	1	ICP	2/14/01	10:38
Antimony	220 353	1.5	60.0	-1.6	B	1	ICPST	2/13/01	13·44
Arsenic	189 042	2.6	10.0	2.6	U	1	ICPST	2/13/01	13:44
Barium	493 409	0.41	200	0.41	U	1	ICP	2/14/01	10:38
Beryllium	313.042	0.071	5 0	0 071	U	1	ICP	2/14/01	10:38
Cadmium	226 502	0.49	5 0	0.49	U	1	ICPST	2/13/01	13:44
Calcium	**317.933**	**37.9**	**5000**	**49.2**	**B**	**1**	**ICP**	**2/14/01**	**10:38**
Chromium	267.716	1.0	10 0	1.0	U	1	ICPST	2/13/01	13 44
Cobalt	228.616	3.2	50 0	3 2	U	1	ICP	2/14/01	10:38
Copper	324 754	2 2	25.0	2 2	U	1	ICP	2/14/01	10 38
Iron	**259.94**	**8.8**	**100**	**10.0**	**B**	**1**	**ICP**	**2/14/01**	**10:38**
Lead	220.353	1.9	3.0	1 9	U	1	ICPST	2/13/01	13 44
Magnesium	279.079	19.9	5000	19.9	U	1	ICP	2/14/01	10:38
Manganese	257.61	0.87	15.0	0 87	U	1	ICP	2/14/01	10:38
Nickel	231 604	6.1	40.0	6.1	U	1	ICP	2/14/01	10:38
Potassium	766 491	496	5000	496	U	1	ICP	2/14/01	10:38
Selenium	220.353	2.1	5 0	2 1	U	1	ICPST	2/13/01	13.44
Silver	328.068	0.94	10.0	0.94	U	1	ICPST	2/13/01	13:44
Sodium	588.995	14 5	5000	14 5	U	1	ICP	2/14/01	10:38
Thallium	190 864	3 9	10 0	-8.2	B	1	ICPST	2/13/01	13 44
Vanadium	292 402	1 8	50.0	1.8	U	1	ICP	2/14/01	10:38
Zinc	**213.856**	**3.1**	**20.0**	**6.7**	**B**	**1**	**ICP**	**2/14/01**	**10:38**

Comments: Lot # C1B090228

U Result is less than the MDL

B Result is between MDL and RL

Version 4 10 2

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DV0L9B

Matrix: Water **Units:** ug/L **Prep Date:** 2/13/01 **Prep Batch:** 1043191

Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253 7	0.054	0.20	0.054	U	1	CVAA	2/13/01	9.03

Comments. Lot # C1B090228

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: DVWJES

Original Sample ID: DVWJE **Client ID:** DF/S-1/1039/IDW/004S

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

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
Aluminum	308 2	1580		4150	N	2000	128.8	1	1	ICP	2/14/01	10.44	2/14/01	10.51
Antimony	220.4	30.0	B	556		500	105 2	1	1	ICPST	2/13/01	13:52	2/13/01	14 01
Arsenic	189.0	8 0	B	2080		2000	103 8	1	1	ICPST	2/13/01	13 52	2/13/01	14.01
Barium	493 4	218		2100		2000	94 2	1	1	ICP	2/14/01	10·44	2/14/01	10.51
Beryllium	313.0	0 071	U	47 5		50	95 0	1	1	ICP	2/14/01	10:44	2/14/01	10:51
Cadmium	226.5	0.56	B	47 6		50	94.1	1	1	ICPST	2/13/01	13:52	2/13/01	14.01
Calcium	317.9	71900		121000		50000	97.6	1	1	ICP	2/14/01	10:44	2/14/01	10.51
Chromium	267 7	23.5		225		200	100.8	1	1	ICPST	2/13/01	13 52	2/13/01	14 01
Cobalt	228.6	3.2	U	468		500	93.6	1	1	ICP	2/14/01	10 44	2/14/01	10:51
Copper	324.8	51.8		293		250	96 5	1	1	ICP	2/14/01	10:44	2/14/01	10:51
Iron	259.9	2970		4020		1000	104 5	1	1	ICP	2/14/01	10.44	2/14/01	10·51
Lead	220.4	13 3		525		500	102.4	1	1	ICPST	2/13/01	13:52	2/13/01	14:01
Magnesium	279.1	16700		64900		50000	96.4	1	1	ICP	2/14/01	10:44	2/14/01	10:51
Manganese	257 6	898		1360		500	92.9	1	1	ICP	2/14/01	10:44	2/14/01	10:51
Nickel	231.6	20.0	B	476		500	91 1	1	1	ICP	2/14/01	10·44	2/14/01	10.51
Potassium	766.5	4600	B	55200		50000	101.1	1	1	ICP	2/14/01	10·44	2/14/01	10.51
Selenium	220.4	2 1	U	2090		2000	104.2	1	1	ICPST	2/13/01	13.52	2/13/01	14:01
Silver	328.1	0.94	U	54.2		50	108 3	1	1	ICPST	2/13/01	13:52	2/13/01	14:01
Sodium	589	489000		545000	NC	50000		2	2	ICP	2/14/01	12:54	2/14/01	13.01
Thallium	190 9	3.9	U	2220		2000	110.8	1	1	ICPST	2/13/01	13:52	2/13/01	14:01
Vanadium	292 4	3 9	B	475		500	94.2	1	1	ICP	2/14/01	10:44	2/14/01	10 51
Zinc	213.9	203		680		500	95.5	1	1	ICP	2/14/01	10:44	2/14/01	10:51

Comments: Lot #: C1B090228 Sample #: 1

Version 4 10.2

Form 5A Equivalent

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

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DVWJED

Original Sample ID: DVWJE **Client ID:** DF/S-1/1039/IDW/004SD

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

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
Aluminum	308 2	1580	N	4180	N	2000	130.4	1	1	ICP	2/14/01	10.44	2/14/01	10:54
Antimony	220 4	30.0	B	556		500	105.2	1	1	ICPST	2/13/01	13 52	2/13/01	14 05
Arsenic	189 0	8.0	B	2090		2000	104.1	1	1	ICPST	2/13/01	13·52	2/13/01	14.05
Barium	493.4	218		2110		2000	94.8	1	1	ICP	2/14/01	10·44	2/14/01	10.54
Beryllium	313.0	0 071	U	48.2		50	96.4	1	1	ICP	2/14/01	10:44	2/14/01	10 54
Cadmium	226.5	0 56	B	48 1		50	95 0	1	1	ICPST	2/13/01	13 52	2/13/01	14.05
Calcium	317 9	71900		122000		50000	99 7	1	1	ICP	2/14/01	10:44	2/14/01	10·54
Chromium	267 7	23 5		224		200	100.1	1	1	ICPST	2/13/01	13:52	2/13/01	14.05
Cobalt	228.6	3.2	U	480		500	96.0	1	1	ICP	2/14/01	10:44	2/14/01	10:54
Copper	324.8	51.8		327		250	110.1	1	1	ICP	2/14/01	10·44	2/14/01	10:54
Iron	259 9	2970		4020		1000	104 5	1	1	ICP	2/14/01	10:44	2/14/01	10·54
Lead	220 4	13 3		525		500	102 3	1	1	ICPST	2/13/01	13:52	2/13/01	14:05
Magnesium	279.1	16700		65000		50000	96.7	1	1	ICP	2/14/01	10.44	2/14/01	10·54
Manganese	257.6	898		1370		500	95.1	1	1	ICP	2/14/01	10·44	2/14/01	10 54
Nickel	231 6	20.0	B	496		500	95 2	1	1	ICP	2/14/01	10:44	2/14/01	10:54
Potassium	766.5	4600	B	55300		50000	101.5	1	1	ICP	2/14/01	10·44	2/14/01	10:54
Selenium	220.4	2 1	U	2100		2000	105 1	1	1	ICPST	2/13/01	13 52	2/13/01	14.05
Silver	328.1	0 94	U	53 5		50	107 0	1	1	ICPST	2/13/01	13·52	2/13/01	14·05
Sodium	589	489000		543000	NC	50000		2	2	ICP	2/14/01	12·54	2/14/01	13 04
Thallium	190.9	3 9	U	2230		2000	111 6	1	1	ICPST	2/13/01	13.52	2/13/01	14:05
Vanadium	292 4	3.9	B	483		500	95.8	1	1	ICP	2/14/01	10.44	2/14/01	10 54
Zinc	213.9	203		707		500	100 9	1	1	ICP	2/14/01	10·44	2/14/01	10:54

Comments: Lot # C1B090228 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

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DVWJED

Matrix Spike Sample ID: DVWJES **Client ID:** DF/S-1/1039/IDW/004SD

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

Weight: 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
Aluminum	308.215	4150	N	4180	N	1.2 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Antimony	220 353	556		556		0.1 %	1	1	ICPST	2/13/01	14 01	2/13/01	14:05
Arsenic	189 042	2080		2090		0.3 %	1	1	ICPST	2/13/01	14 01	2/13/01	14.05
Barium	493 409	2100		2110		0 6 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Beryllium	313 042	47 5		48 2		1 5 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Cadmium	226.502	47.6		48.1		1.0 %	1	1	ICPST	2/13/01	14:01	2/13/01	14:05
Calcium	317.933	121000		122000		2.1 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Chromium	267.716	225		224		0.8 %	1	1	ICPST	2/13/01	14:01	2/13/01	14:05
Cobalt	228 616	468		480		2.5 %	1	1	ICP	2/14/01	10.51	2/14/01	10:54
Copper	324 754	293		327		13 1 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Iron	259.94	4020		4020		0.0 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Lead	220 353	525		525		0.1 %	1	1	ICPST	2/13/01	14:01	2/13/01	14 05
Magnesium	279.079	64900		65000		0.2 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Manganese	257.61	1360		1370		2.3 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Nickel	231 604	476		496		4.4 %	1	1	ICP	2/14/01	10.51	2/14/01	10:54
Potassium	766.491	55200		55300		0.4 %	1	1	ICP	2/14/01	10 51	2/14/01	10 54
Selenium	220.353	2090		2100		0 9 %	1	1	ICPST	2/13/01	14 01	2/13/01	14 05
Silver	328.068	54 2		53.5		1 3 %	1	1	ICPST	2/13/01	14:01	2/13/01	14:05
Sodium	588.995	545000	NC	543000	NC		2	2	ICP	2/14/01	13:01	2/14/01	13:04
Thallium	190 864	2220		2230		0.7 %	1	1	ICPST	2/13/01	14:01	2/13/01	14 05
Vanadium	292 402	475		483		1.7 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Zinc	213 856	680		707		5.5 %	1	1	ICP	2/14/01	10·51	2/14/01	10:54

Comments: Lot # C1B090228 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

STL-Pittsburgh

Metals Data Reporting Form

Duplicate LCS RPD Report

Duplicate LCS ID: DV0L9L

Original LCS ID: DV0L9C

Matrix: Water **Units:** ug/L **Prep Date:** 2/13/01 **Prep Batch:** 1043191

Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	LCS Conc	Q	LCS Dupe Conc	Q	RPD	LCS DF	LCS Dupe DF	Instr	LCS Anal Date	LCS Anal Time	LCS Dupe Anal Date	LCS Dupe Anal Time
Mercury	253 7	2.5		2 5		1 2 %	1	1	CVAA	2/13/01	9:05	2/13/01	9.06

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DV0HRC

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

Weight: NA **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Aluminum	308 215	2000	2000	99 8		80-120	1	ICP	2/14/01	10:41
Antimony	220.353	500	529	105 7		80-120	1	ICPST	2/13/01	13.48
Arsenic	189.042	2000	2110	105.4		80-120	1	ICPST	2/13/01	13:48
Barium	493 409	2000	2000	99.9		80-120	1	ICP	2/14/01	10.41
Beryllium	313 042	50.0	49 8	99.5		80-120	1	ICP	2/14/01	10:41
Cadmium	226.502	50.0	50 0	99.9		80-120	1	ICPST	2/13/01	13:48
Calcium	317.933	50000	50200	100.3		80-120	1	ICP	2/14/01	10.41
Chromium	267 716	200	210	104 8		80-120	1	ICPST	2/13/01	13·48
Cobalt	228.616	500	491	98 2		80-120	1	ICP	2/14/01	10 41
Copper	324 754	250	248	99 2		80-120	1	ICP	2/14/01	10.41
Iron	259.94	1000	1050	105 0		80-120	1	ICP	2/14/01	10:41
Lead	220.353	500	530	106 0		80-120	1	ICPST	2/13/01	13 48
Magnesium	279 079	50000	50400	100 8		80-120	1	ICP	2/14/01	10:41
Manganese	257.61	500	495	99.0		80-120	1	ICP	2/14/01	10:41
Nickel	231.604	500	485	97.0		80-120	1	ICP	2/14/01	10:41
Potassium	766.491	50000	49700	99 5		80-120	1	ICP	2/14/01	10·41
Selenium	220 353	2000	2090	104.5		80-120	1	ICPST	2/13/01	13 48
Silver	328.068	50 0	54.1	108 2		80-120	1	ICPST	2/13/01	13 48
Sodium	588 995	50000	50800	101.5		80-120	1	ICP	2/14/01	10 41
Thallium	190 864	2000	2210	110 3		80-120	1	ICPST	2/13/01	13.48
Vanadium	292.402	500	496	99.1		80-120	1	ICP	2/14/01	10:41
Zinc	213 856	500	501	100 2		80-120	1	ICP	2/14/01	10·41

Comments. Lot #: C1B090228

Version 4.10 2

U Result is less than the MDL.

B Result is between MDL and RL.

Form 7 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DV0L9C

Matrix: Water **Units:** ug/L **Prep Date:** 2/13/01 **Prep Batch:** 1043191

Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253 7	2 5	2 5	100.0		80-120	1	CVAA	2/13/01	9 05

Comments Lot # C1B090228

Version 4 10 2

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Duplicate Results

Lab Sample ID: DV0L9L

Matrix: Water **Units:** ug/L **Prep Date:** 2/13/01 **Prep Batch:** 1043191

Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	2 5	2 5	98 8		80-120	1	CVAA	2/13/01	9:06

Comments. Lot #: C1B090228

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/S-1/1039/IDW/004

General Chemistry

Lot-Sample #...: C1B090228-001 Work Order #...: DVWJE Matrix.....: WATER
Date Sampled...: 02/08/01 Date Received..: 02/09/01

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH	6.8		No Units	SW846 9040	02/09/01	1040278
	Dilution Factor 1			MS Run # . 1040127		
Cyanide, Total	ND	10.0	ug/L	SW846 9012A	02/12-02/15/01	1043164
	Dilution Factor 1			MS Run #. . 1043057		
Flashpoint	>201		deg F	SW846 1010	02/16/01	1047359
	Dilution Factor 1			MS Run #. 1047165		
Total Sulfide	5.0	1.0	mg/L	MCAWW 376.1	02/13/01	1044274
	Dilution Factor 1			MS Run # .. 1044147		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C1B090228 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: DV0KJ1AA		MB Lot-Sample #:	C1B120000-164	
	ND	10.0	ug/L	SW846 9012A	02/12-02/15/01	1043164
		Dilution Factor 1				
Total Sulfide		Work Order #: DV22P1AA		MB Lot-Sample #:	C1B130000-274	
	ND	1.0	mg/L	MCAWW 376.1	02/13/01	1044274
		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 #...: C1B090228 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
		Work Order #: DVWCW1AA		LCS Lot-Sample#: C1B090000-278	
pH	101	(85 - 115)	SW846 9040	02/09/01	1040278
		Dilution Factor 1			
		Work Order #: DV0KJ1AC		LCS Lot-Sample#: C1B120000-164	
Cyanide, Total	100	(85 - 115)	SW846 9012A	02/12-02/15/01	1043164
		Dilution Factor 1			
		Work Order #: DV8191AA		LCS Lot-Sample#: C1B160000-359	
Flashpoint	101	(85 - 115)	SW846 1010	02/16/01	1047359
		Dilution Factor 1			
		Work Order #: DV22P1AC		LCS Lot-Sample#: C1B130000-274	
Total Sulfide	95	(75 - 125)	MCAWW 376.1	02/13/01	1044274
		Dilution Factor 1			

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C1B090228 **Matrix.....:** WATER
Date Sampled...: 02/07/01 **Date Received..:** 02/09/01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: DVV861D8-MS/DVV861D9-MSD				MS Lot-Sample #: C1B090189-003	
	104	(75 - 125)			SW846 9012A	02/12-02/15/01	1043164
	102	(75 - 125)	1 7	(0-20)	SW846 9012A	02/12-02/15/01	1043164
		Dilution Factor 1					
		MS Run # 1043057					
Total Sulfide		WO#: DVWJE1DU-MS/DVWJE1DV-MSD				MS Lot-Sample #: C1B090228-001	
	83	(75 - 125)			MCAWW 376.1	02/13/01	1044274
	79	(75 - 125)	3.9	(0-20)	MCAWW 376.1	02/13/01	1044274
		Dilution Factor 1					
		MS Run # 1044147					

NOTE(S):

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

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C1B090228 **Work Order #...:** DVV2K-SMP DVV2K-DUP **Matrix.....:** WATER

Date Sampled...: 02/08/01 **Date Received..:** 02/09/01

% Moisture.....: 100 **Dilution Factor:** **Initial Wgt/Vol:**

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH						SD Lot-Sample #:	C1B090178-002	
	8.3	8.2	No Units	0.97	(0-20)	SW846 9040	02/09/01	1040278

Dilution Factor 1 MS Run Number . 1040127

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C1B090228 **Work Order #...:** DVWJE-SMP DVWJE-DUP **Matrix.....:** WATER

Date Sampled...: 02/08/01 **Date Received..:** 02/09/01

% Moisture.....: **Dilution Factor:** **Initial Wgt/Vol:**

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Flashpoint						SD Lot-Sample #: C1B090228-001		
	>201	>201	deg F	0.0	(0-20)	SW846 1010	02/16/01	1047359

Dilution Factor: 1 MS Run Number 1047165

GC/MS VOLATILE DATA

GC/MS VOLATILE
QC SUMMARY

SW846 8260B SURROGATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B090228

	CLIENT ID	SRG01	SRG02	SRG03	SRG04	TOT OUT
01	DF/S-1/1039/IDW/004	111	100	111	107	00
02	DF/S-1/1039/IDW/004 RE-1	105	100	92	97	00
03	INTRA-LAB QC	106	102	97	97	00
04	METHOD BLK. DV1WQ1AA	105	100	95	95	00
05	LCS DV1WQ1AC	103	100	95	92	00
06	LAB MS/MSD D	111	100	94	91	00
07	LAB MS/MSD S	103	105	99	94	00

SURROGATES		QC LIMITS
SRG01	= 1,2-Dichloroethane-d4	(77-120)
SRG02	= Toluene-d8	(78-111)
SRG03	= 4-Bromofluorobenzene	(80-114)
SRG04	= Dibromofluoromethane	(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: STLPIT SDG No.

Lot #: C1B130000 WO #: DV1WQ1AC
BATCH: 1044112

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
1,1-Dichloroethene	50.0	38.5	77	65 - 119	
Trichloroethene	50.0	43.6	87	80 - 122	
Benzene	50.0	43.9	88	79 - 116	
Toluene	50.0	50.1	100	76 - 119	
Chlorobenzene	50.0	47.8	96	81 - 115	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

675 832

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc Client UXB INTERNATIONAL

Lab Code: STLPIT SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #. C1B120128 WO #: DV0091AC
BATCH: 1044112

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	MS CONCENT (ug/L)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	50.0	ND	44.4	89	57 - 138	
Trichloroethene	50.0	ND	49.8	100	58 - 141	
Benzene	50 0	ND	49.8	100	73 - 123	
Toluene	50.0	ND	59.3	119	67 - 129	
Chlorobenzene	50.0	ND	55.6	111	70 - 122	

NOTES(S):

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

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

COMMENTS.

FORM III

SW846 8260B MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

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

Lab Code: STLPIT SDG No:

Matrix Spike ID: LAB MS/MSD

Lot #: C1B120128 WO #: DV0091AD
BATCH: 1044112

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENT. (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
1,1-Dichloroethene	50.0	45.4	91	2 3	20	57- 138	
Trichloroethene	50.0	52.4	105	5.0	20	58- 141	
Benzene	50.0	51.2	102	2.8	20	73- 123	
Toluene	50.0	52 8	106	12	20	67- 129	
Chlorobenzene	50.0	49.6	99	11	20	70- 122	

NOTES(S):

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

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

COMMENTS:

FORM III

675 834

SW846 8260B METHOD BLANK SUMMARY

BLANK WORKORDER NO.: DV1WQ1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIT

Lab File ID: WB30213.D

Date Analyzed. 02/13/01

Matrix: WATER

GC Column: RTX-624 ID: .18

Instrument ID: HP3

SDG Number:

Lot Number: C1B090228

Time Analyzed: 06:49

Date Extracted:02/13/01

Extraction Method. 5030

Level:(low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	DF/S-1/1039/IDW/004	DVWJE1AA	3021302.D	02/13/01	07:46
02	DF/S-1/1039/IDW/004	DVWJE2AA	3021307.D	02/13/01	09:40
03	INTRA-LAB QC	DV0091AA	3021306.D	02/13/01	09:16
04	LAB MS/MSD	DV0091AC S	3021308.D	02/13/01	10:02
05	LAB MS/MSD	DV0091AD D	3021309.D	02/13/01	10:26
06	CHECK SAMPLE	DV1WQ1AC C	3021301.D	02/13/01	07:19
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)

Lab Name: STL PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: 30111D

Lab File ID: BF30111 BFB Injection Date: 01/11/01

Instrument ID: HP3 BFB Injection Time: 0844

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	22.0
75	30.0 - 60.0% of mass 95	45.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.9 (1.2)1
174	50.0 - 100.0% of mass 95	77.7
175	5.0 - 9.0% of mass 174	5.5 (7.1)1
176	95.0 - 101.0% of mass 174	76.4 (98.3)1
177	5.0 - 9.0% of mass 176	5.1 (6.6)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	CC30111	01/11/01	0910
02	VSTD5	VSTD5	1A30111	01/11/01	0941
03	VSTD20	VSTD20	1B30111	01/11/01	1004
04	VSTD100	VSTD100	1D30111	01/11/01	1027
05	VSTD200	VSTD200	1E30111	01/11/01	1049
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Lab File ID: BF30213 BFB Injection Date: 02/13/01

Instrument ID: HP3 BFB Injection Time: 0550

GC Column: DB624 20M ID: 0.18 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.2
75	30.0 - 60.0% of mass 95	41.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.7 (0.8)1
174	50.0 - 100.0% of mass 95	89.8
175	5.0 - 9.0% of mass 174	6.6 (7.4)1
176	95.0 - 101.0% of mass 174	89.9 (100.0)1
177	5.0 - 9.0% of mass 176	5.5 (6.1)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	CC30213	02/13/01	0618
02	INTRA-LAB BL	DV1WQ1AA	WB30213	02/13/01	0649
03	INTRA-LAB CH	DV1WQ1AC	3021301	02/13/01	0719
04	DF/S-1/1039/	DVWJE1AA	3021302	02/13/01	0746
05	DF/S-1/1039/	DVWJE2AA	3021307	02/13/01	0940
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Lab File ID (Standard): CC30213 Date Analyzed: 02/13/01

Instrument ID: HP3 Time Analyzed: 0618

GC Column: DB 624 ID: 0.18 (mm) Heated Purge: (Y/N) N

		IS1(CBZ) AREA #	RT #	IS2(DCB) AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	164557	9.74	288411	12.05	664169	6.61
	UPPER LIMIT	329114	9.94	576822	12.25	1328338	6.81
	LOWER LIMIT	82279	9.54	144206	11.85	332085	6.41
	EPA SAMPLE NO.						
01	INTRA-LAB BL	152545	9.74	233667	12.06	635836	6.61
02	INTRA-LAB CH	157697	9.74	236283	12.05	661260	6.61
03	DF/S-1/1039/	166587	9.74	297610	12.06	652763	6.61
04	DF/S-1/1039/	161377	9.74	244808	12.05	681417	6.62
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

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

GC/MS VOLATILE
SAMPLE DATA

UXB INTERNATIONAL

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

Matrix: (soil/water) WATER Lab Sample ID: C1B090228 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol. 5 / mL Date Received: 02/09/01
Work Order: DVWJE1AA Date Extracted: 02/13/01
Dilution factor: 1 Date Analyzed: 02/13/01

QC Batch: 1044112

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	**Acetone**	**24**	
71-43-2	Benzene	5 0	U
75-27-4	**Bromodichloromethane**	**33**	
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	**2-Butanone**	**32**	
75-15-0	**Carbon disulfide**	**1.7**	**J**
56-23-5	Carbon tetrachloride	5.0	U
108-90-7	Chlorobenzene	5 0	U
124-48-1	Dibromochloromethane	5.0	U
75-00-3	**Chloroethane**	**3.6**	**J**
67-66-3	**Chloroform**	**3000**	**E**
74-87-3	**Chloromethane**	**1.6**	**J**
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	5.0	U
591-78-6	2-Hexanone	20	U
75-09-2	**Methylene chloride**	**2.9**	**J**
108-10-1	4-Methyl-2-pentanone	20	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5 0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U

UXB INTERNATIONAL

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

Matrix: (soil/water) WATER
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Lab Sample ID:C1B090228 001

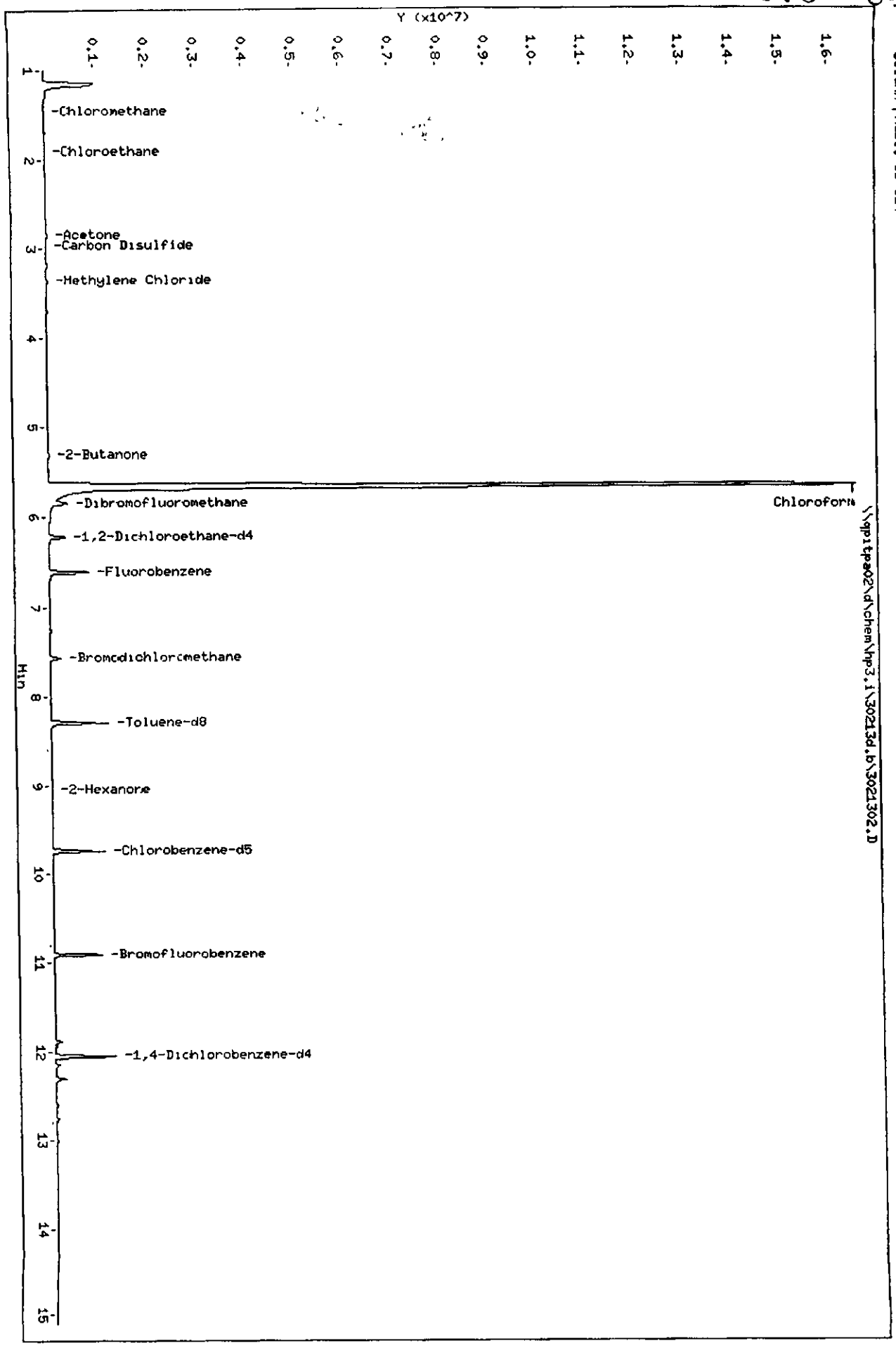
Sample WT/Vol: 5 / mL
Work Order: DVWJE1AA
Dilution factor: 1

Date Received: 02/09/01
Date Extracted:02/13/01
Date Analyzed· 02/13/01

QC Batch: 1044112

Client Sample Id· DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Xylenes (total)	5.0	U



Data File: \\qpitpa02\d\chem\hp3.i\30213d.b\3021302.D
Date : 13-FEB-2001 07:46
Client ID: DF/S-1/1039/IDW/004
Sample Info: C1B090228-001 5ML
Purge Volume: 5.0
Column phase: DB 624

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

Data File: \\qpitpa02\d\chem\hp3.i\30213d.b\3021302.D
Report Date: 13-Feb-2001 08:15

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30213d.b\3021302.D
Lab Smp Id: DVWJE1AA — Client Smp ID: DF/S-1/1039/IDW/004
Inj Date : 13-FEB-2001 07:46 — MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 — Inst ID: hp3.i
Smp Info : C1B090228-001 5ML
Misc Info : dvwje1aa,30213d.b,8260bh2o.m,4-dwh20.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30213d.b\8260bh2o.m
Meth Date : 13-Feb-2001 06:51 gordonk — Quant Type: ISTD
Cal Date : 11-JAN-2001 10:49 — Cal File: 1E30111.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE — Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC076

KG 2/8/01

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

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

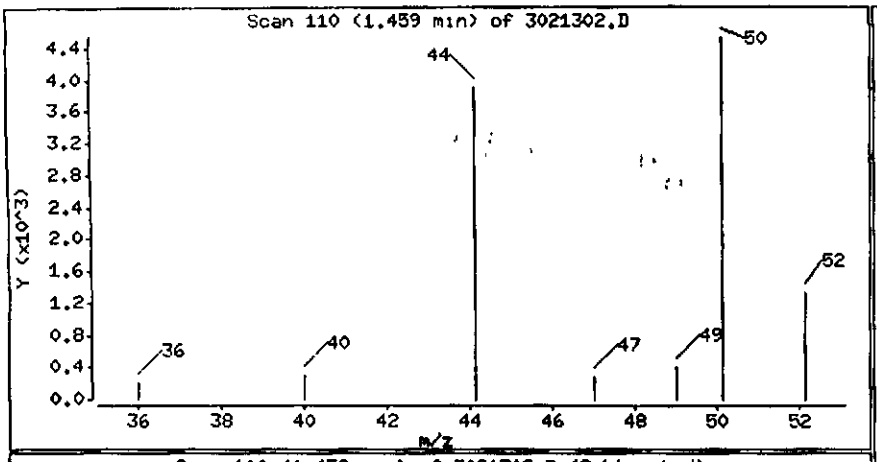
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (UG/L)
* 46 Fluorobenzene	96	6 611	6 608	(1.000)	652763	250 000	
* 69 Chlorobenzene-d5	119	9 738	9.735	(1 000)	166587	250 000	
* 92 1,4-Dichlorobenzene-d4	152	12 056	12 053	(1.000)	297610	250 000	
$ 39 Dibromofluoromethane	113	5 845	5.842	(0 884)	177330	266 798	53 36
$ 43 1,2-Dichloroethane-d4	65	6 222	6 219	(0 941)	209152	278 034	55.61
$ 59 Toluene-d8	98	8 296	8.293	(0 852)	665896	250.457	50 09
$ 80 Bromofluorobenzene	95	10 906	10 909	(1 120)	299477	276 337	55 27
1 Dichlorodifluoromethane	85	Compound Not Detected					
2 Chloromethane	50	1.458	1.455	(0.221)	12155	8 14478	1.629
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected					
5 Chloroethane	64	1.921	1 918	(0 291)	3437	17 7874	3.557
6 Trichlorofluoromethane	101	Compound Not Detected					
12 1,1-Dichloroethene	96	Compound Not Detected					
15 Carbon Disulfide	76	2 967	2 946	(0.449)	16442	8 65311	1.731
13 Acetone	43	2 845	2 873	(0 430)	65163	119 660	23.93

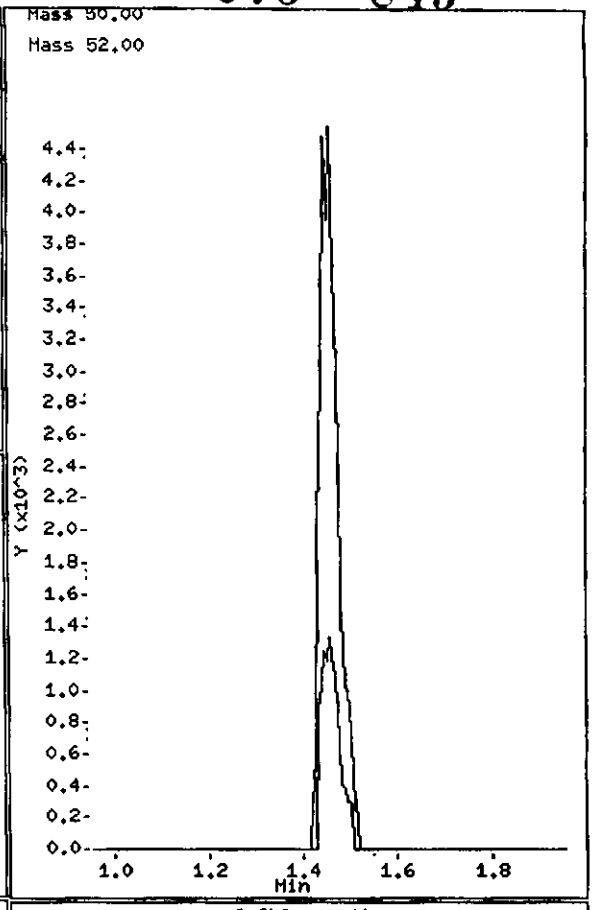
675 843

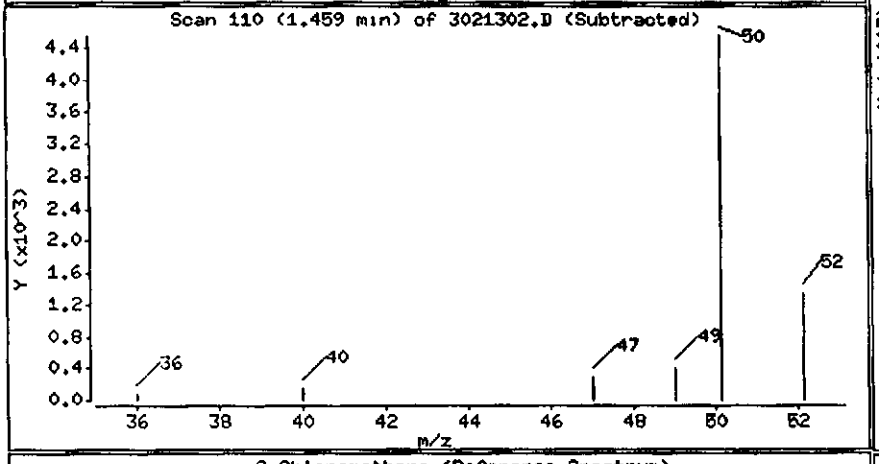
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (UG/L)
	18 Methylene Chloride	84	3.363	3 360	(0 509)	9762	14 5362	2 907
	19 trans-1,2-Dichloroethene	96	Compound Not Detected					
	20 Methyl tert-butyl ether	73	Compound Not Detected					
	24 1,1-Dichloroethane	63	Compound Not Detected					
	27 2,2 Dichloropropane	77	Compound Not Detected					
	28 cis-1,2-dichloroethene	96	Compound Not Detected					
M	29 1,2 Dichloroethene (total)	96	Compound Not Detected					
	30 Bromochloromethane	128	Compound Not Detected					
	31 2-Butanone	43	5 309	5.312	(0.803)	72580	161 534	32.31
	37 Chloroform	83	5 656	5 653	(0 856)	18217940	14956 4	2991
	38 1,1,1-Trichloroethane	97	Compound Not Detected.					
	40 1,1 Dichloropropene	75	Compound Not Detected					
	41 Carbon Tetrachloride	117	Compound Not Detected					
	42 Benzene	78	Compound Not Detected					
	45 1,2-Dichloroethane	62	Compound Not Detected					
	47 Trichloroethene	130	Compound Not Detected					
	49 1,2 Dichloropropane	63	Compound Not Detected.					
	50 Dibromomethane	93	Compound Not Detected					
	53 Bromodichloromethane	83	7 560	7 557	(1 144)	139709	164.312	32 86
	57 cis-1,3-Dichloropropene	75	Compound Not Detected.					
	58 4-Methyl-2 Pentanone	43	Compound Not Detected.					
	60 Toluene	91	Compound Not Detected					
	61 trans-1,3-Dichloropropene	75	Compound Not Detected.					
	63 1,3-Dichloropropane	76	Compound Not Detected					
	64 1,1,2 Trichloroethane	97	Compound Not Detected					
	65 Tetrachloroethene	164	Compound Not Detected					
	66 2-Hexanone	43	9 051	9 054	(0 929)	9314	16.4245	3 285
	67 Dibromochloromethane	129	Compound Not Detected.					
	68 1,2-Dibromoethane	107	Compound Not Detected.					
	70 Chlorobenzene	112	Compound Not Detected.					
	71 1,1,1,2-Tetrachloroethane	131	Compound Not Detected					
	72 Ethylbenzene	106	Compound Not Detected					
	73 m + p-Xylene	106	Compound Not Detected					
	74 Xylene-o	106	Compound Not Detected					
M	75 Xylenes (total)	106	Compound Not Detected					
	76 Styrene	104	Compound Not Detected					
	77 Bromoform	173	Compound Not Detected.					
	78 Isopropylbenzene	105	Compound Not Detected					
	79 Bromobenzene	156	Compound Not Detected.					
	81 n-Propylbenzene	120	Compound Not Detected					
	82 2-Chlorotoluene	126	Compound Not Detected					
	83 1,1,2,2-Tetrachloroethane	83	Compound Not Detected					
	84 1,2 3 Trichloropropane	110	Compound Not Detected					
	85 4-Chlorotoluene	126	Compound Not Detected					
	86 1,3,5 Trimethylbenzene	105	Compound Not Detected.					
	87 tert-Butylbenzene	119	Compound Not Detected					
	88 1,2,4-Trimethylbenzene	105	Compound Not Detected.					

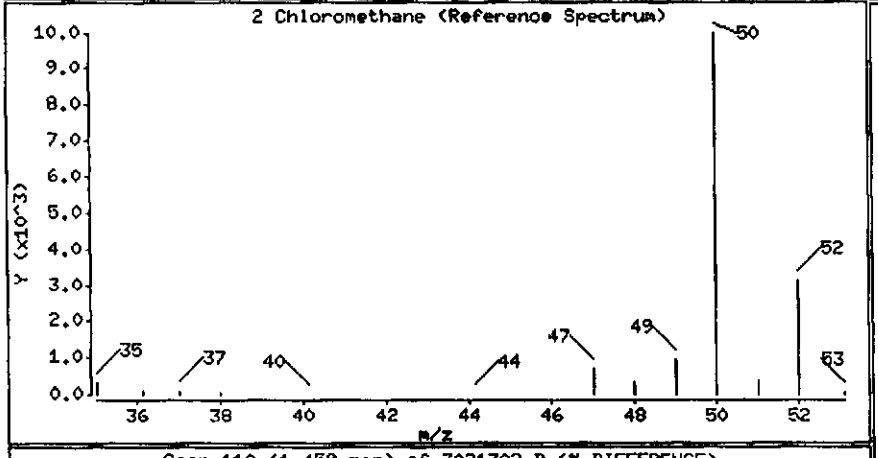
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (UG/L)
89	sec-Butylbenzene	105	Compound Not Detected					
90	4-Isopropyltoluene	119	Compound Not Detected					
91	1,3-Dichlorobenzene	146	Compound Not Detected.					
93	1,4 Dichlorobenzene	146	Compound Not Detected					
94	n-Butylbenzene	91	Compound Not Detected					
95	1,2-Dichlorobenzene	146	Compound Not Detected					
96	1,2-Dibromo-3 chloropropane	157	Compound Not Detected					
97	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
98	Hexachlorobutadiene	225	Compound Not Detected					
99	Naphthalene	128	Compound Not Detected					
100	1,2,3-Trichlorobenzene	180	Compound Not Detected					

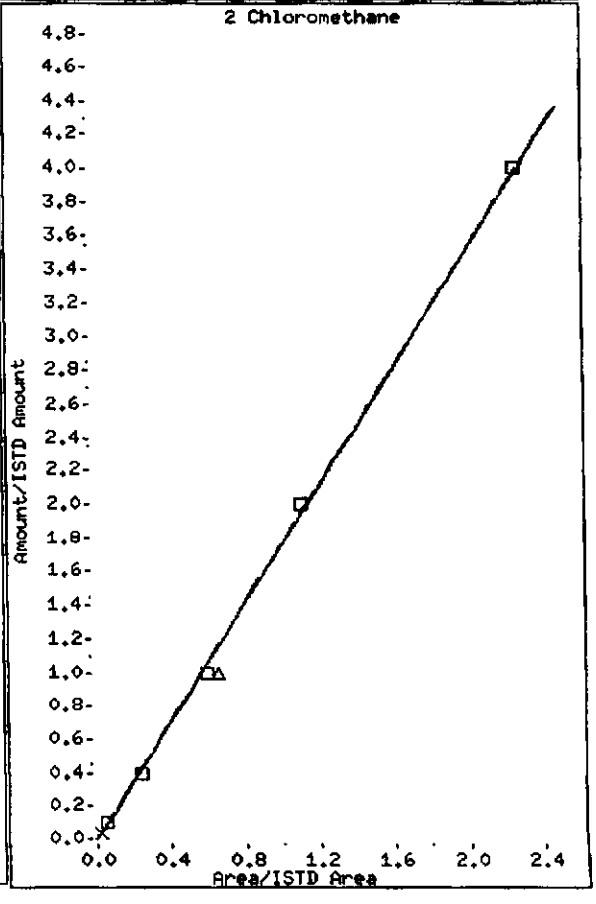
2 Chloromethane

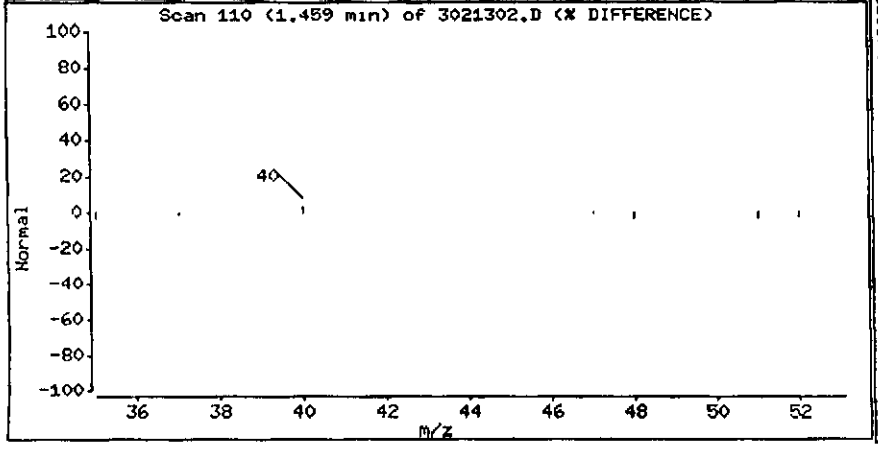




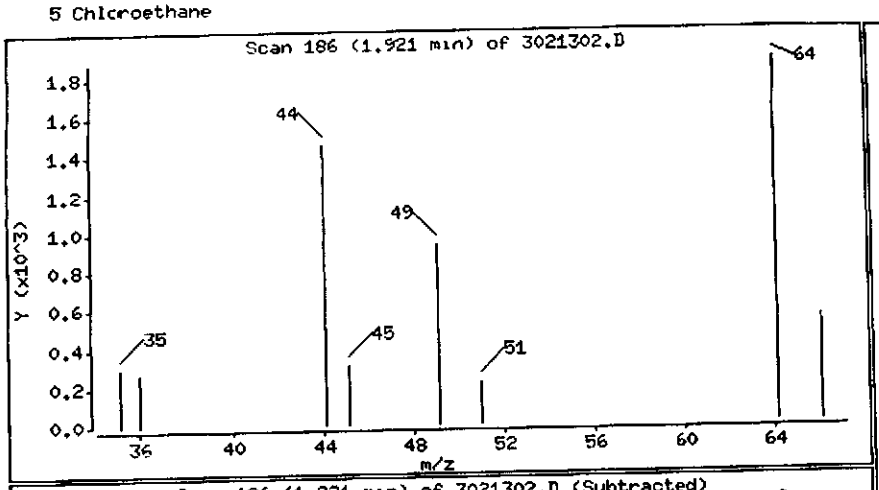


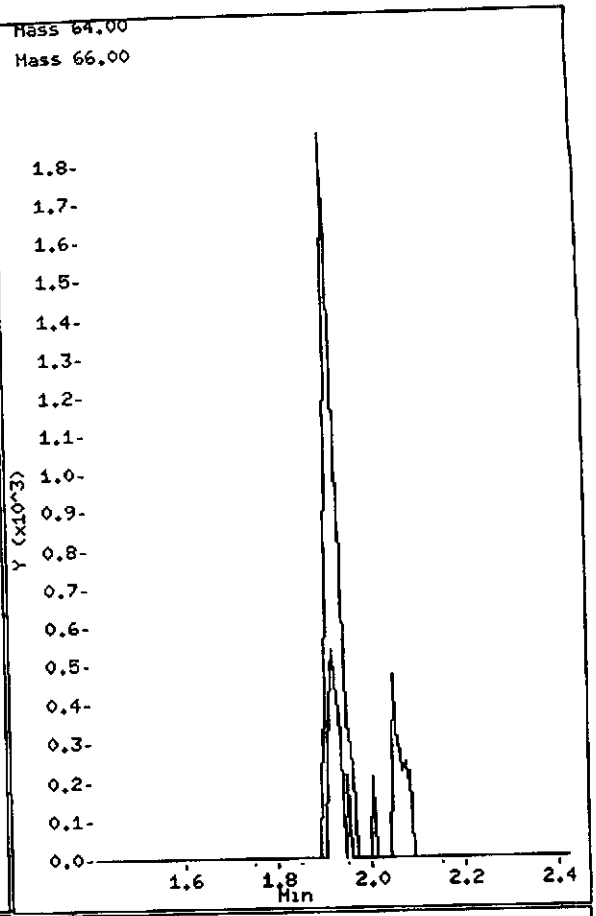


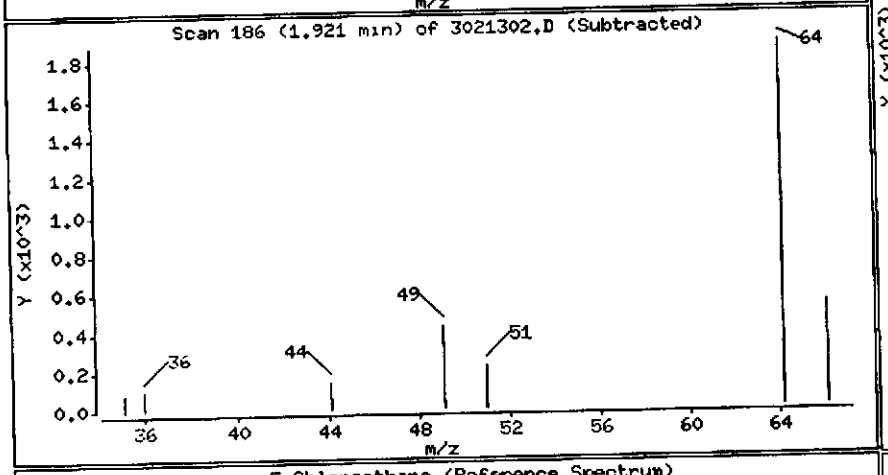


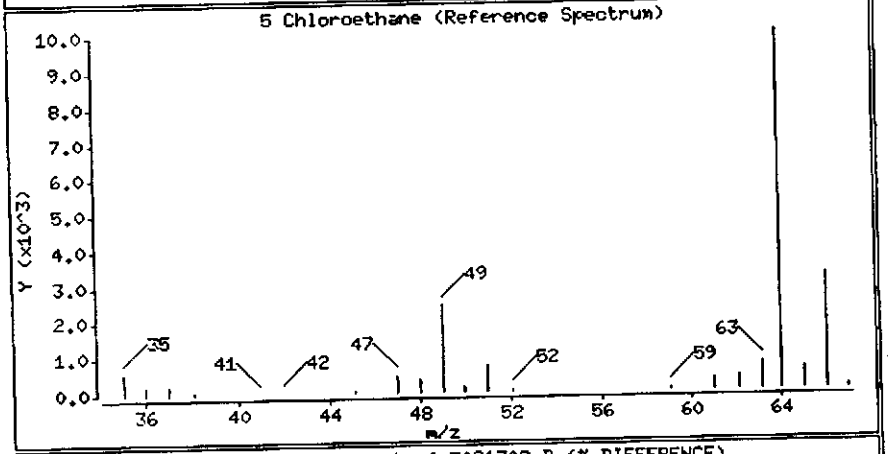


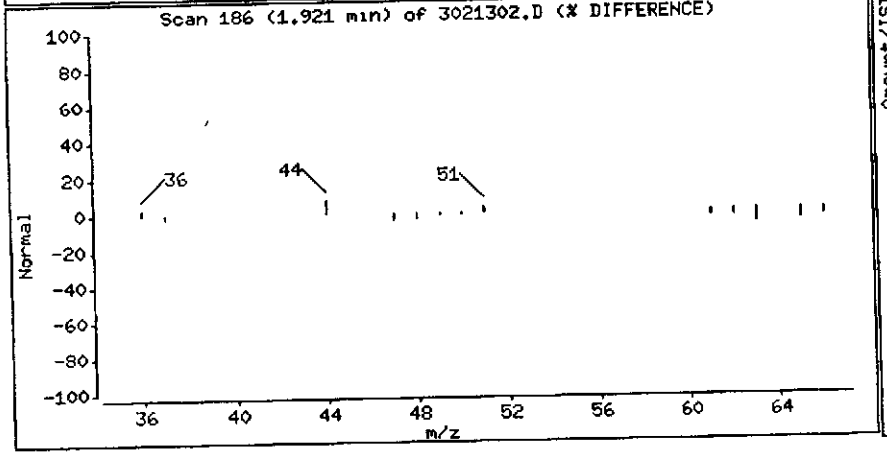
5 Chlcroethane

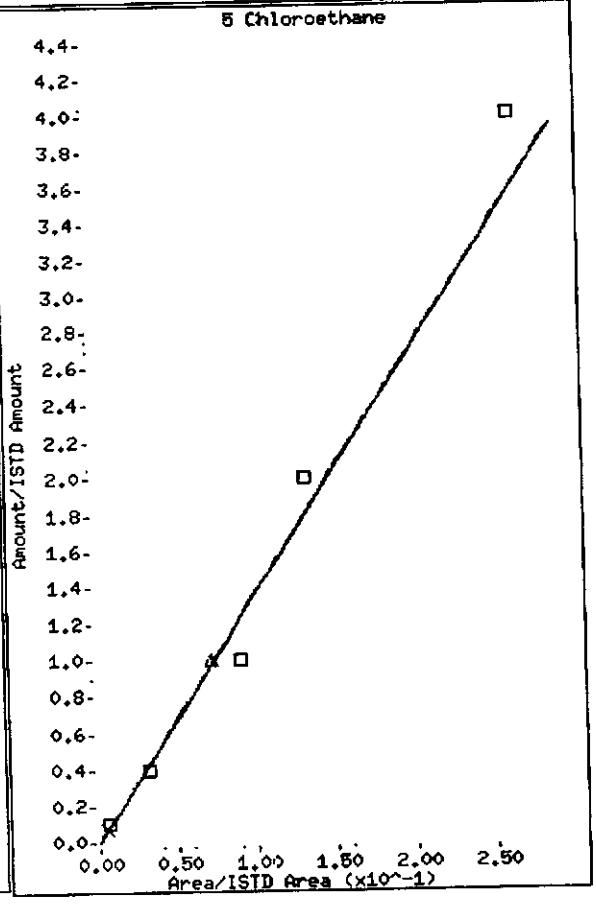


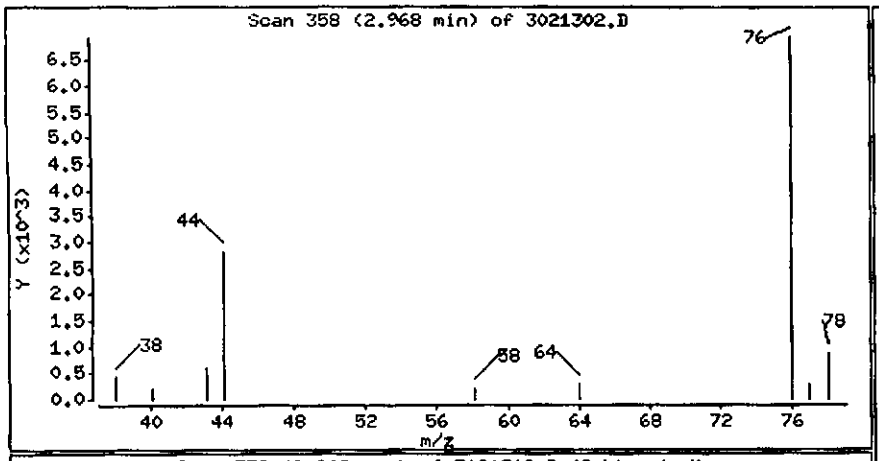


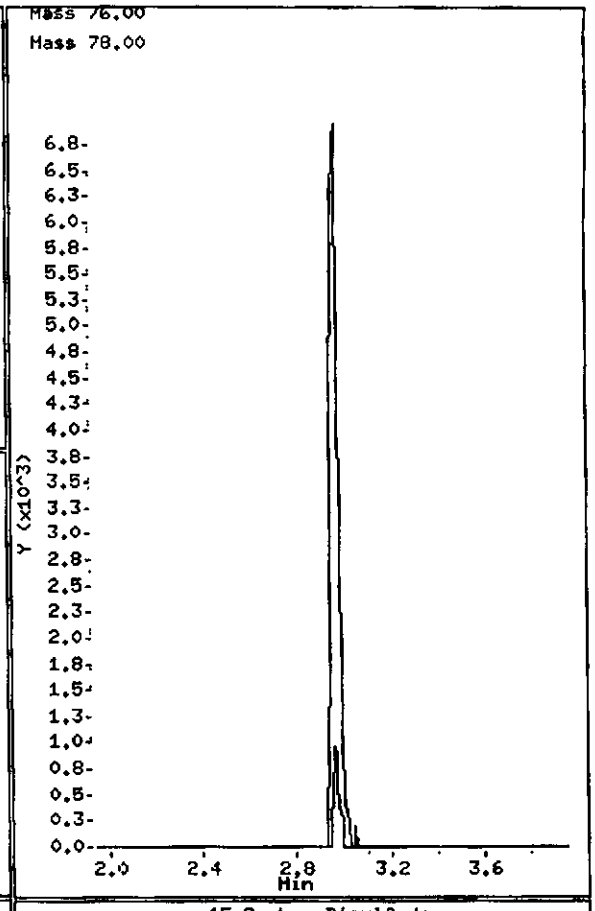


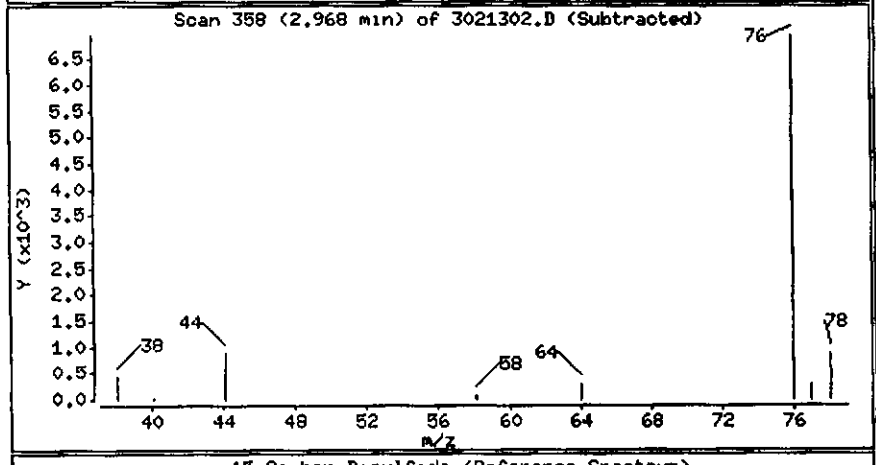


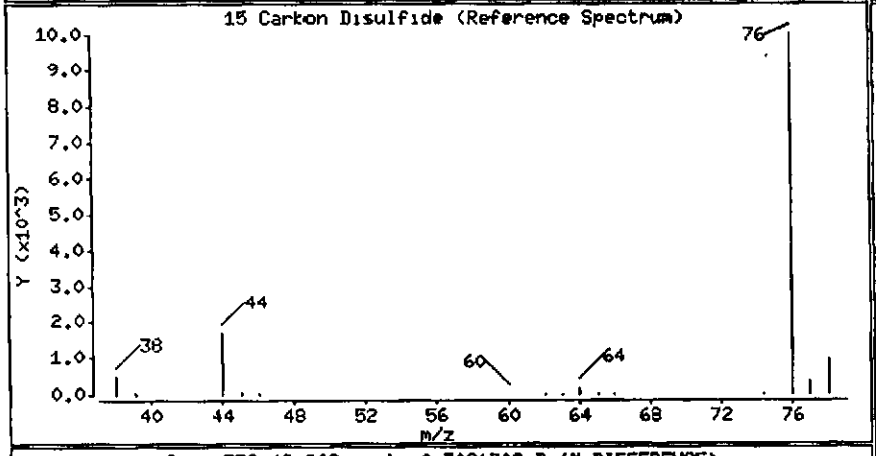


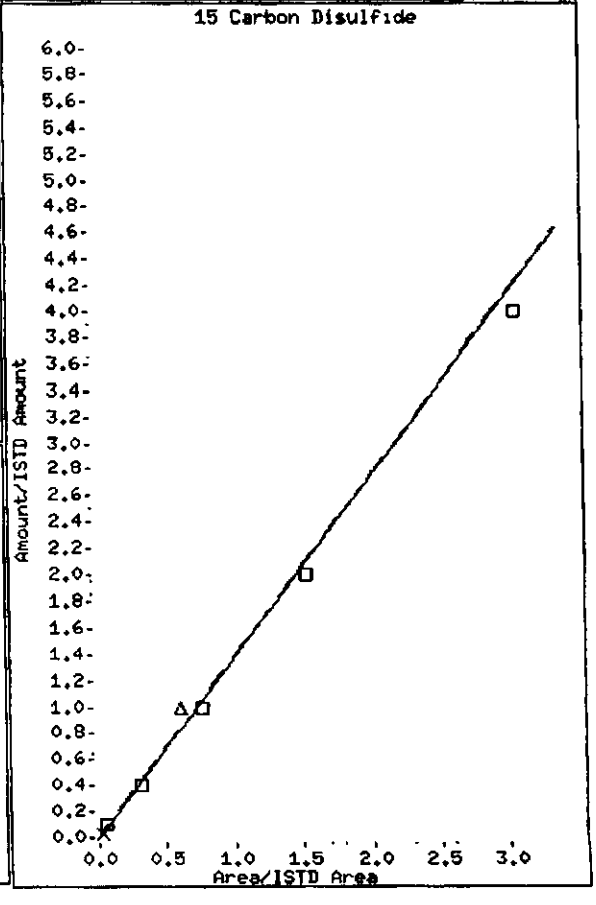


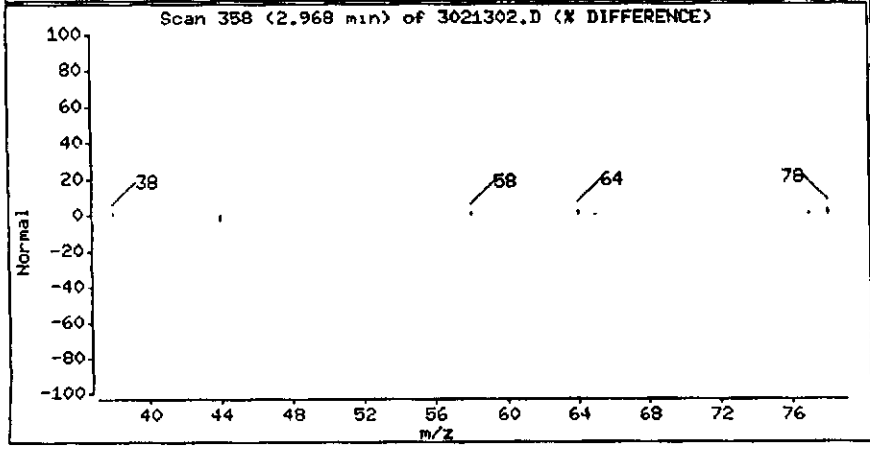

Scan 358 (2.968 min) of 3021302.D
Y (x10^3)
m/z
76
44
38
58
64
78


Mass 76.00
Mass 78.00
Y (x10^3)
Min

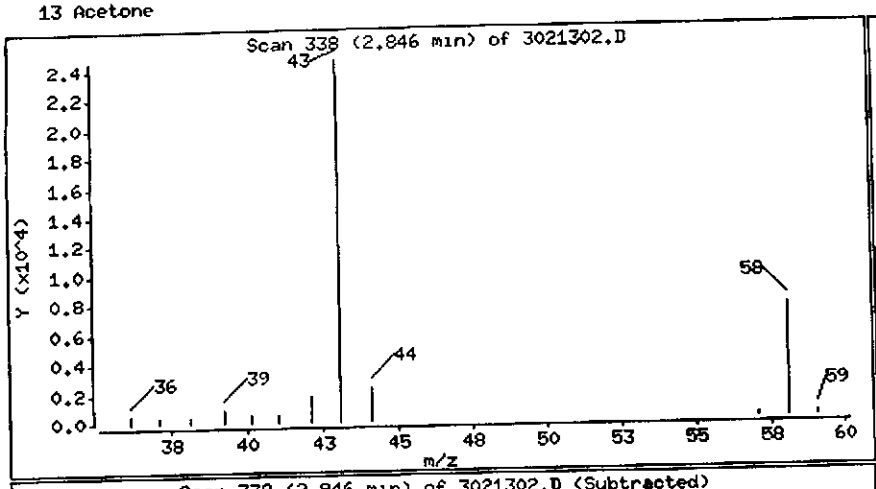

Scan 358 (2.968 min) of 3021302.D (Subtracted)
Y (x10^3)
m/z
76
44
38
58
64
78

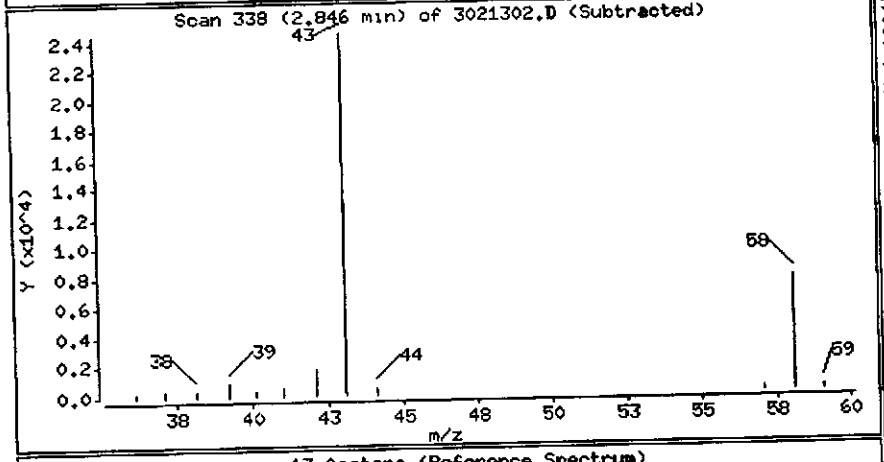

15 Carbon Disulfide (Reference Spectrum)
Y (x10^3)
m/z
76
44
38
60
64

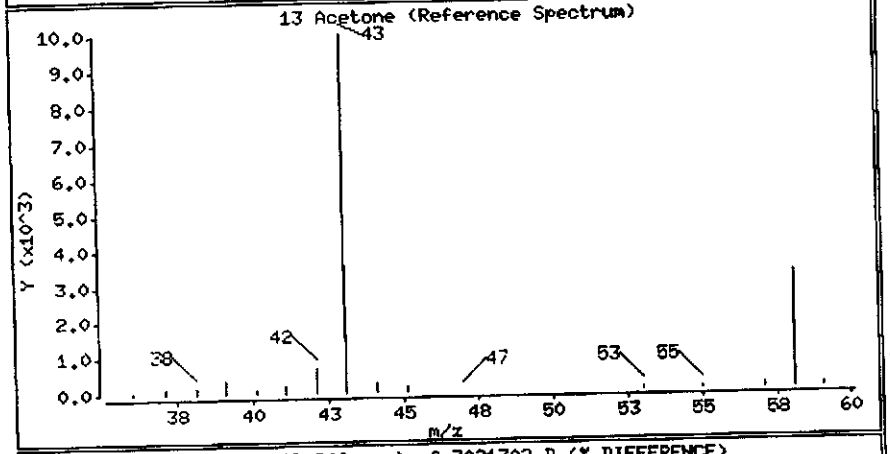

15 Carbon Disulfide
Amount/ISTD Amount
Area/ISTD Area

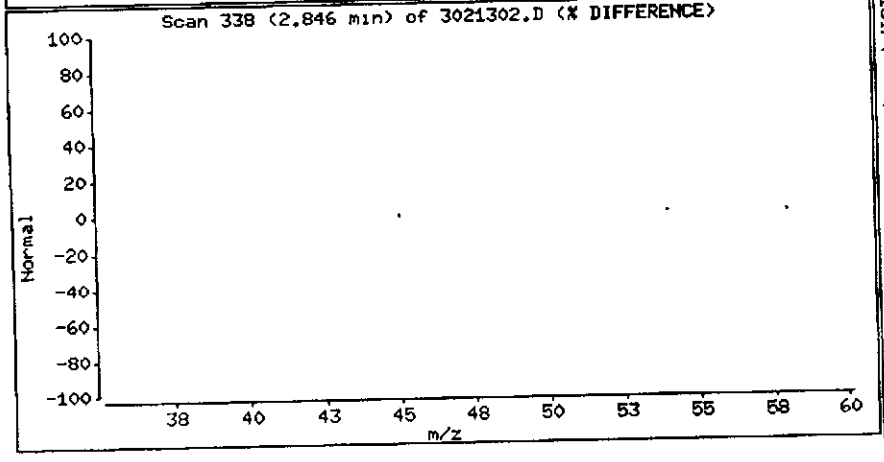

Scan 358 (2.968 min) of 3021302.D (% DIFFERENCE)
Normal
m/z
38
58
64
78

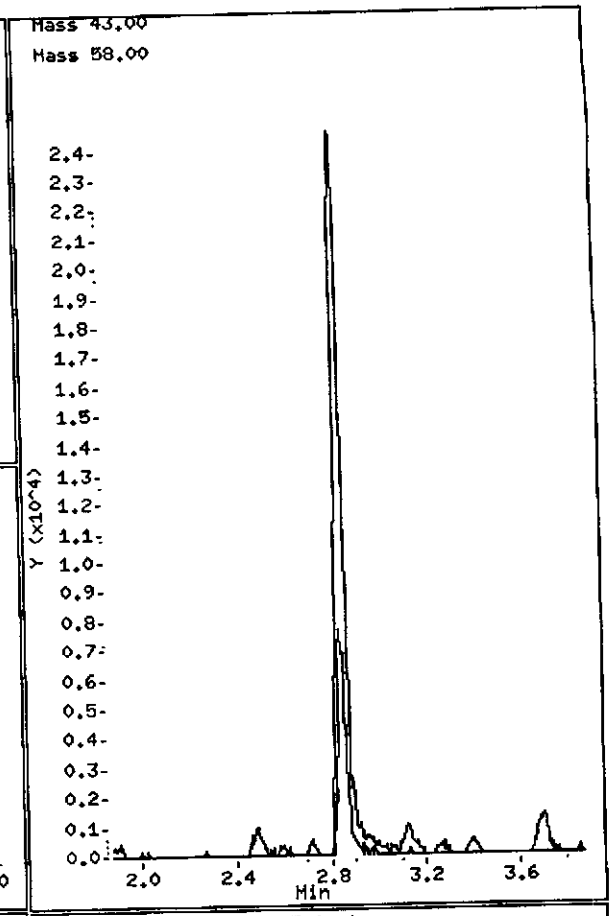
13 Acetone



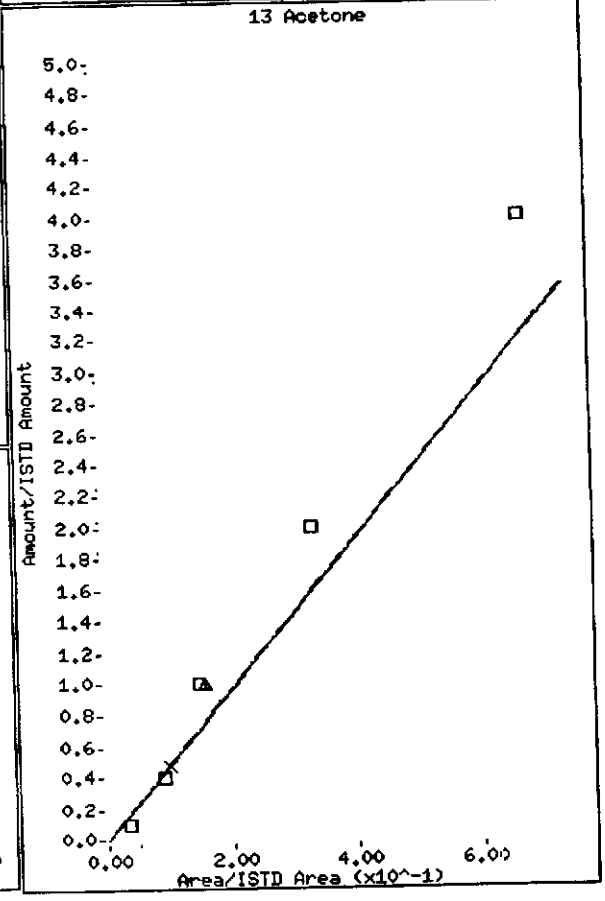


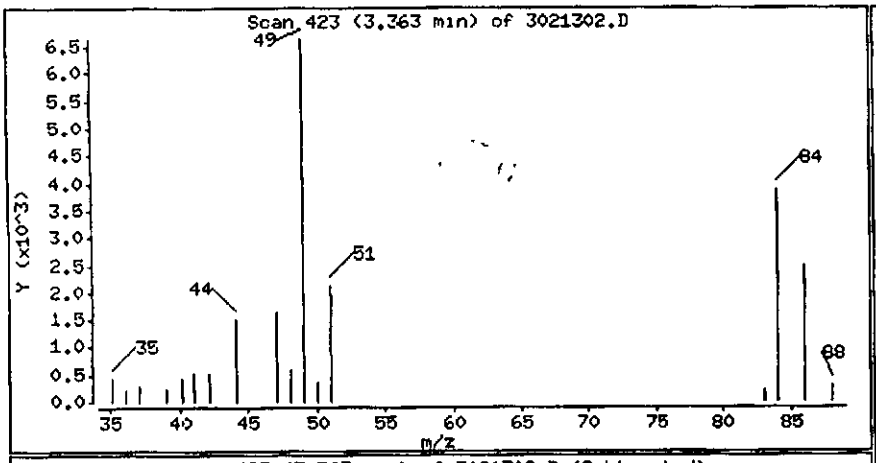


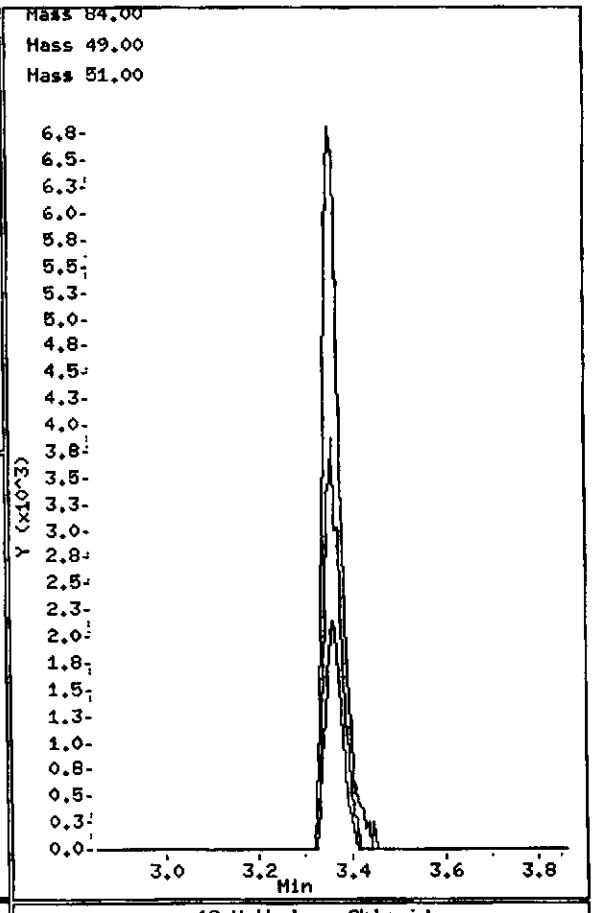


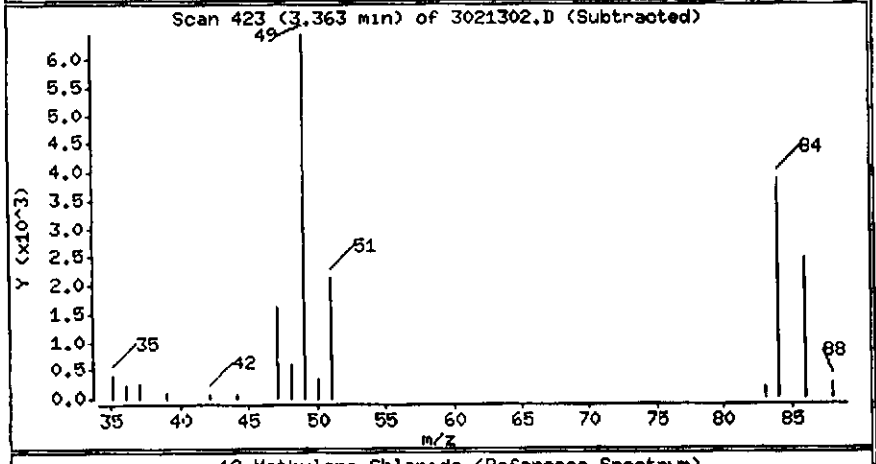


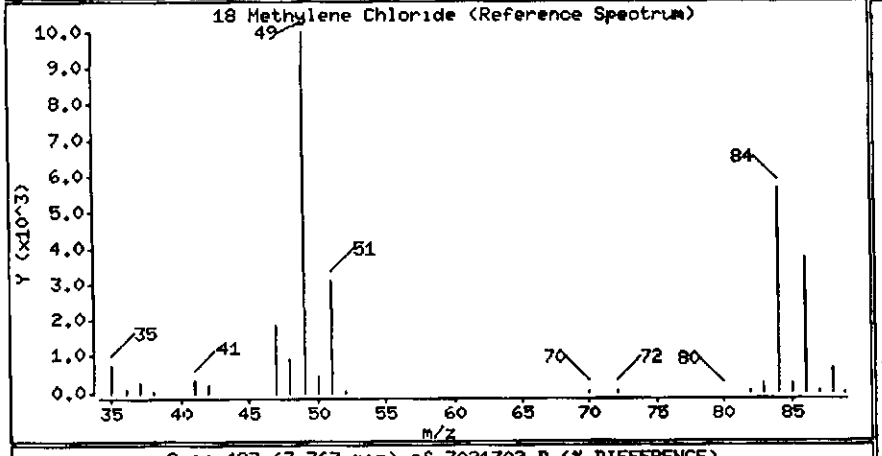
13 Acetone

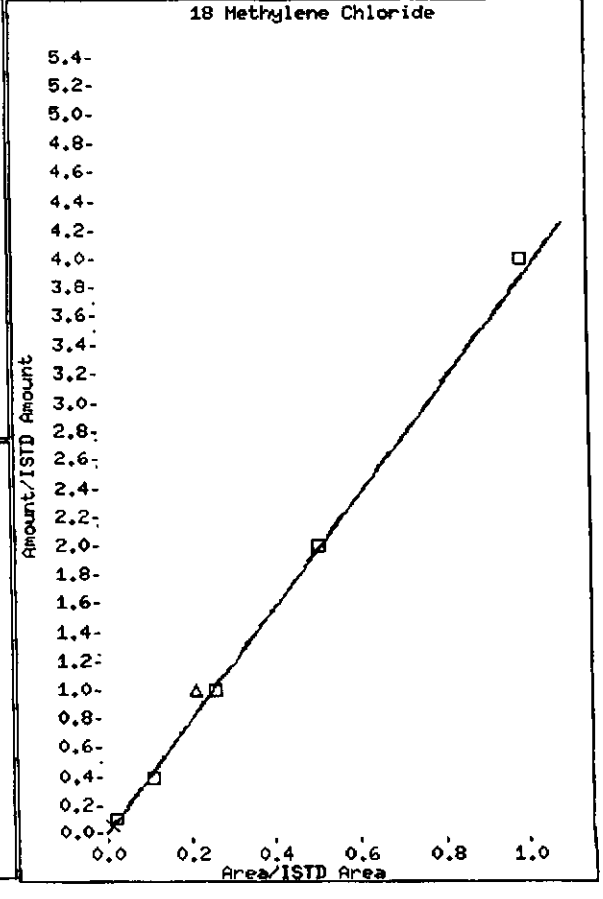


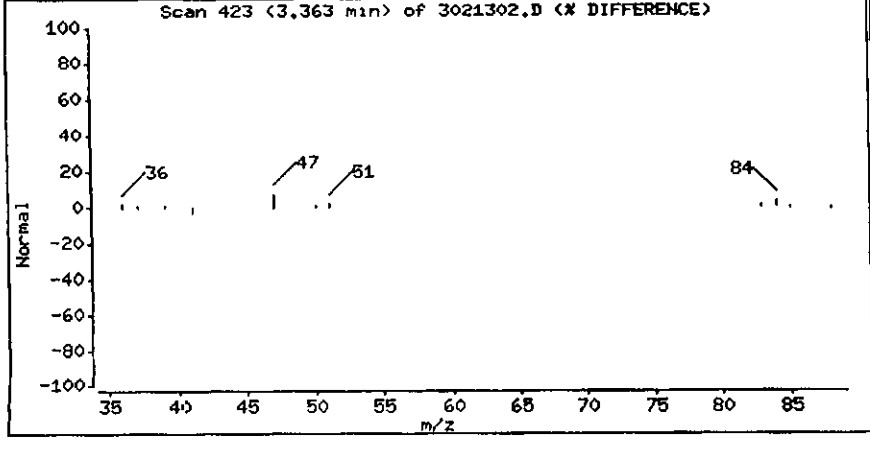

Scan 423 (3.363 min) of 3021302.D
Y (x10^3)
m/z
49
84
51
44
35
88


Mass 84.00
Mass 49.00
Mass 51.00
Y (x10^3)
Min

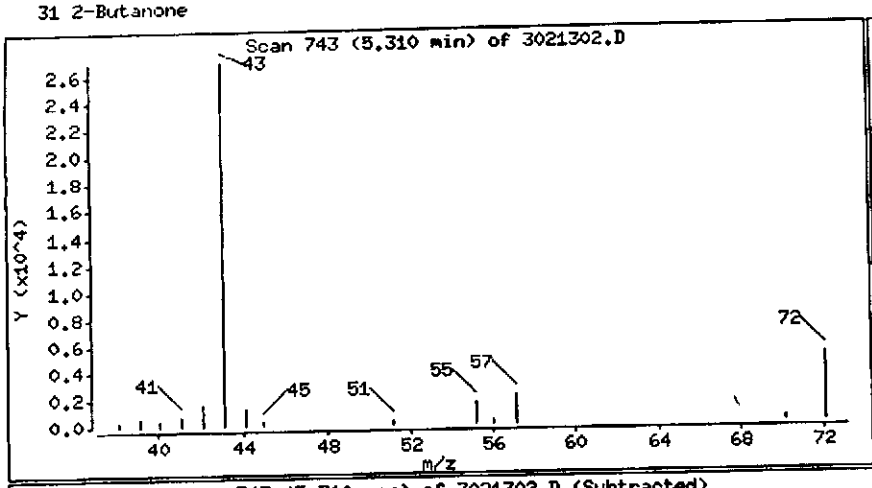

Scan 423 (3.363 min) of 3021302.D (Subtracted)
Y (x10^3)
m/z
49
84
51
35
42
88

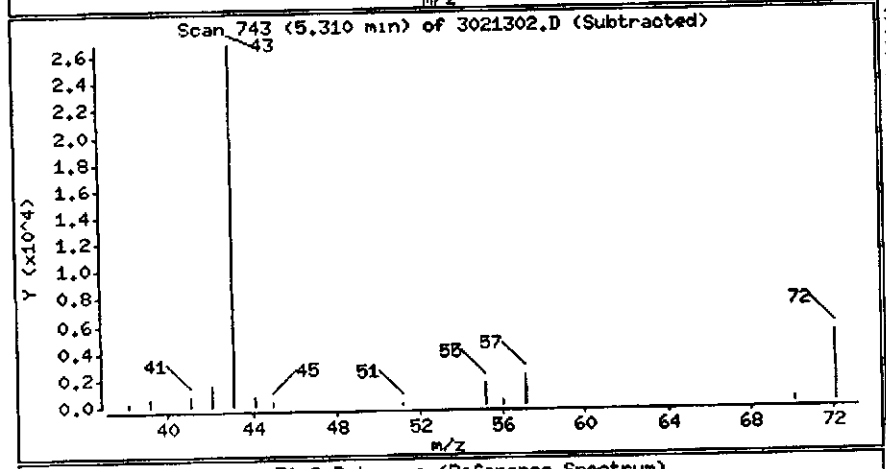

18 Methylene Chloride (Reference Spectrum)
Y (x10^3)
m/z
49
84
51
35
41
70
72
80

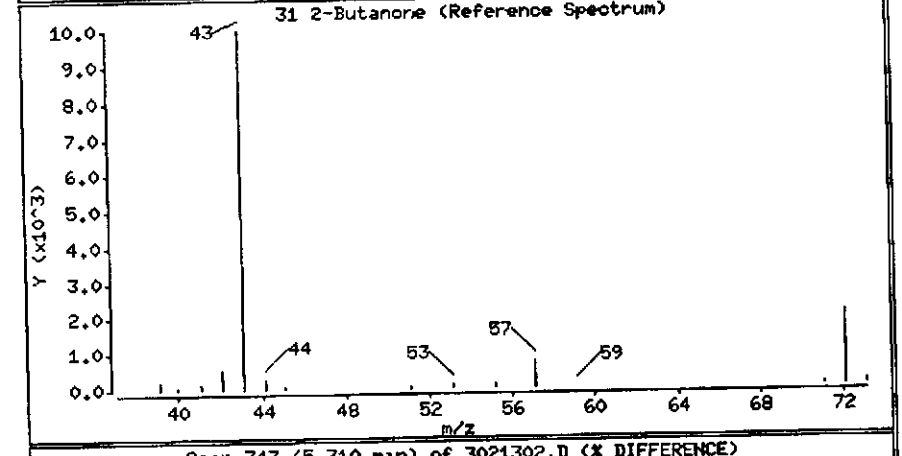

18 Methylene Chloride
Amount/ISTD Amount
Area/ISTD Area

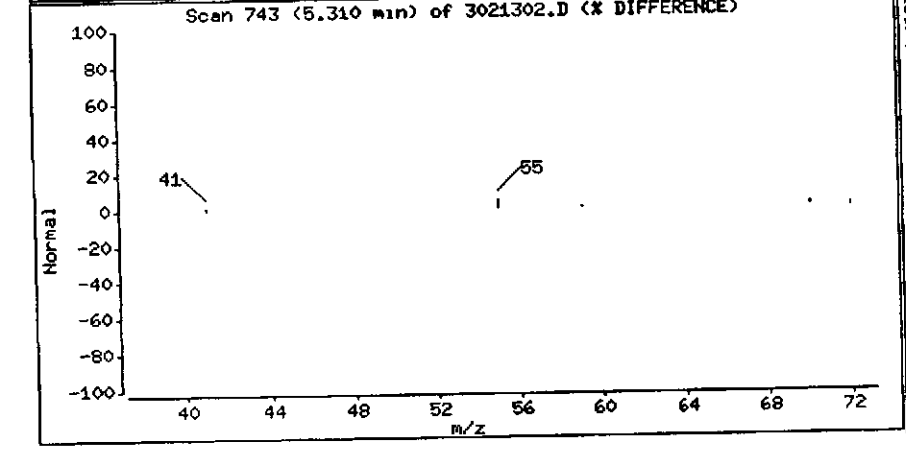

Scan 423 (3.363 min) of 3021302.D (% DIFFERENCE)
Normal
m/z
36
47
51
84

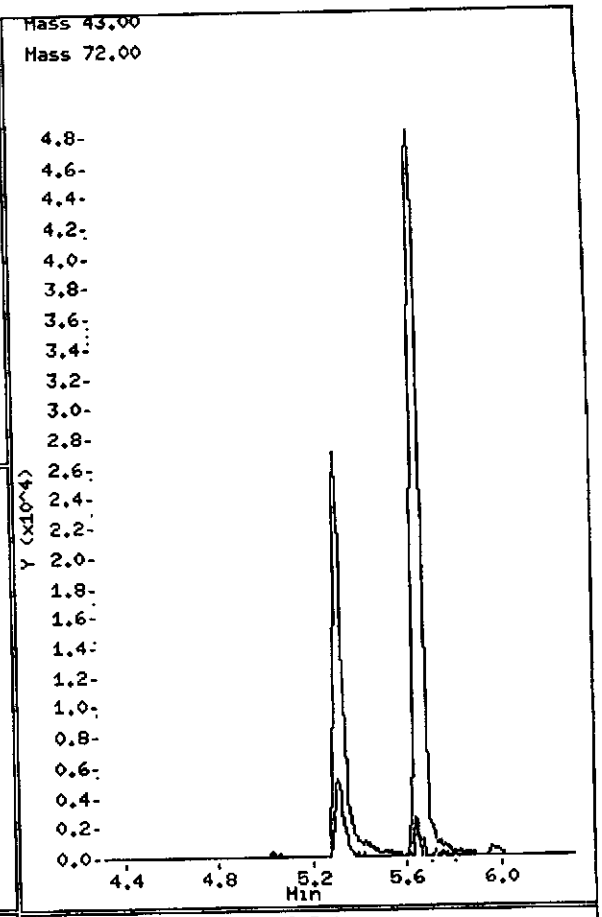
31 2-Butanone

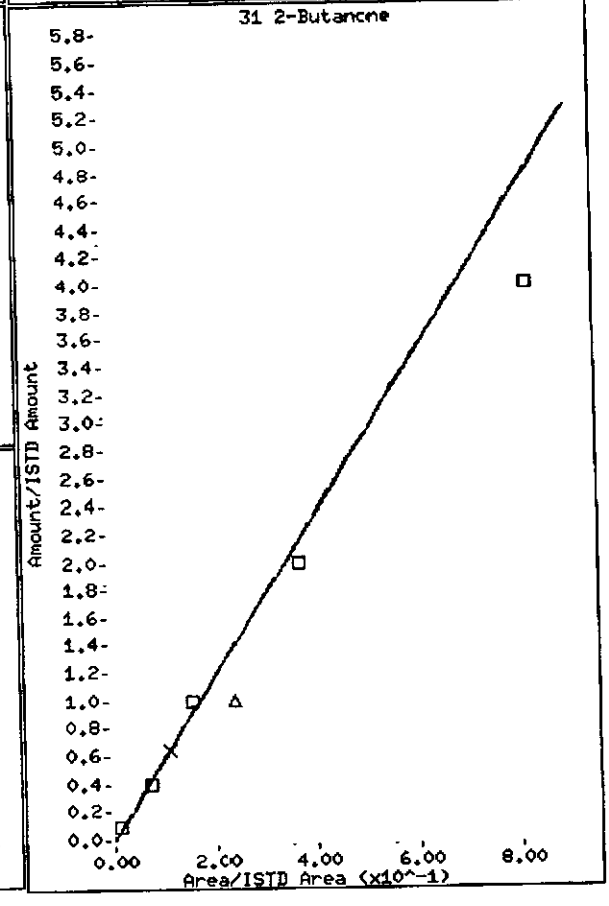




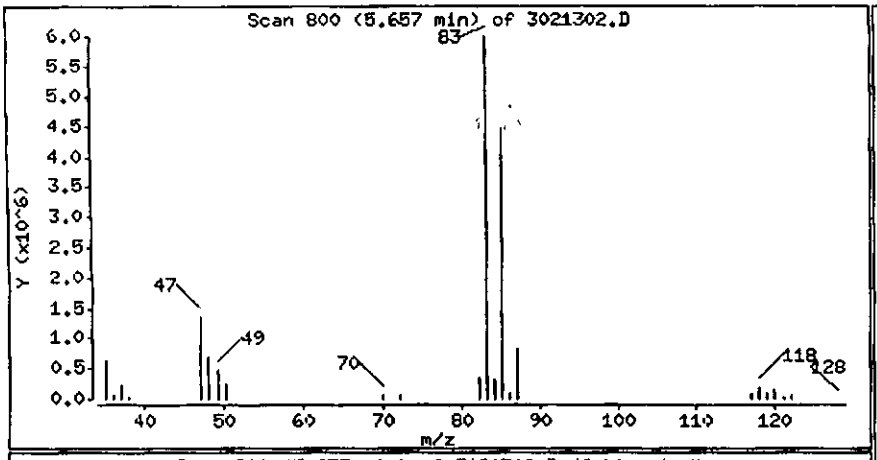


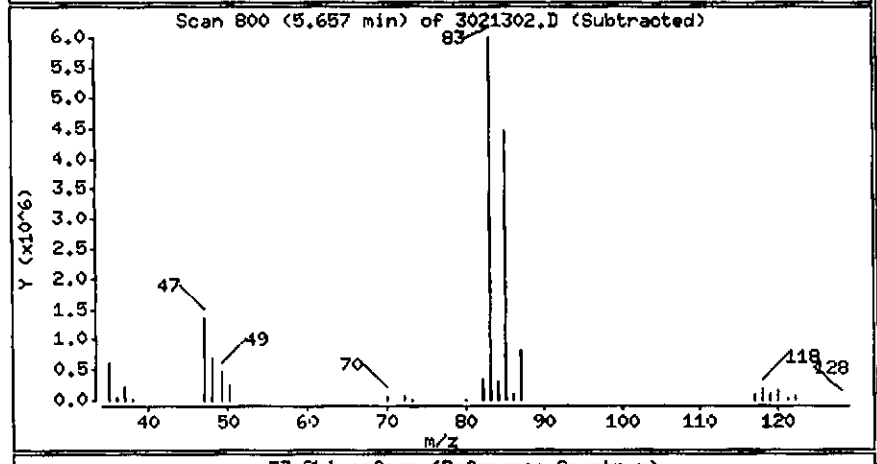


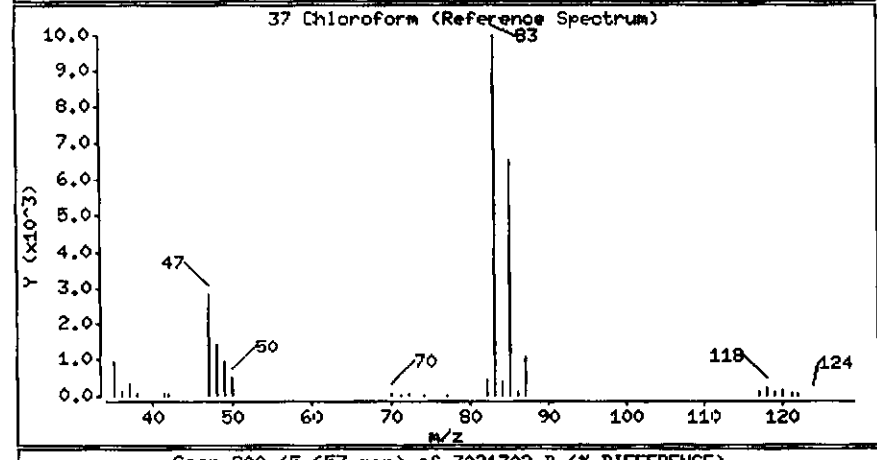


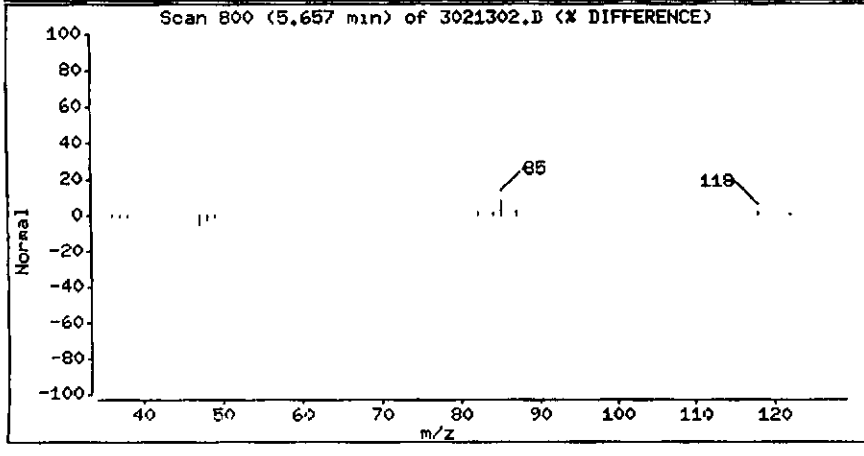


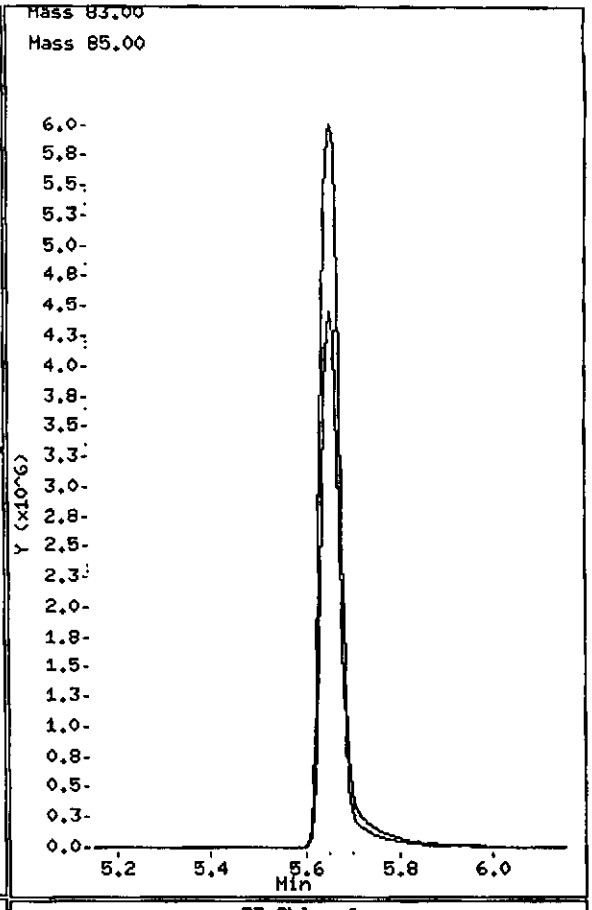
37 Chloroform

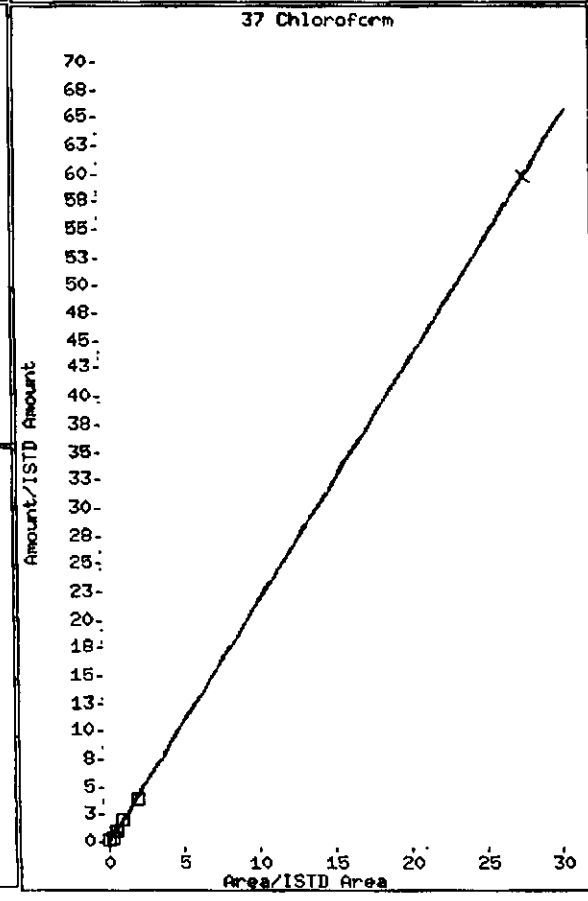




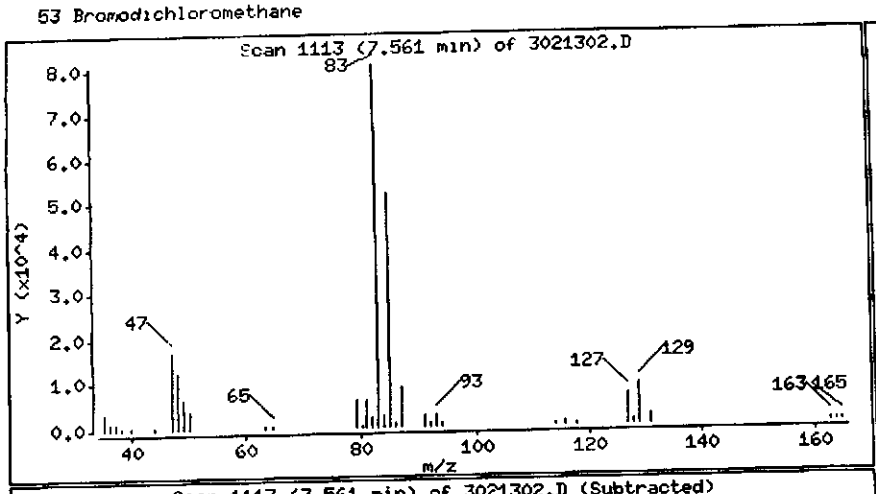


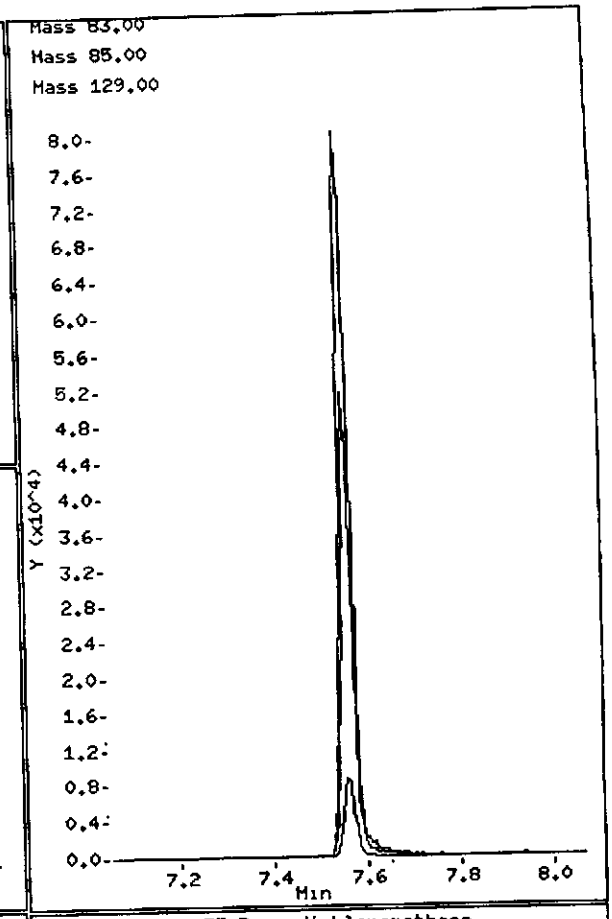


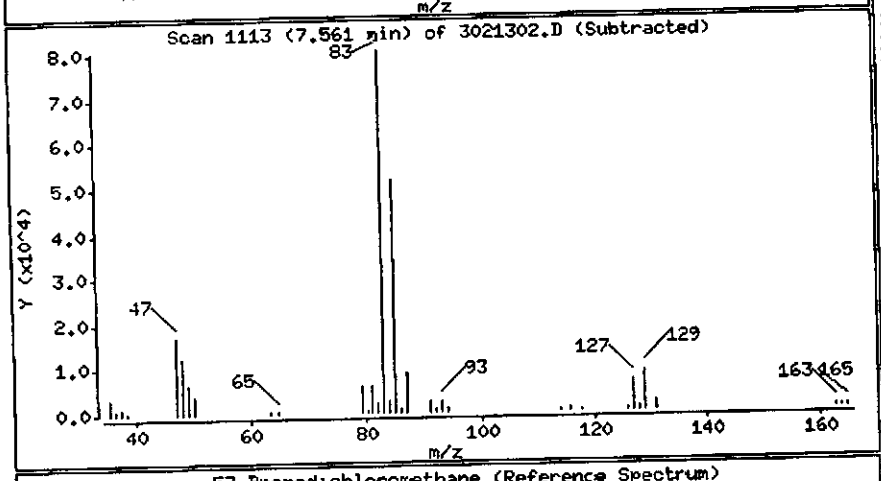


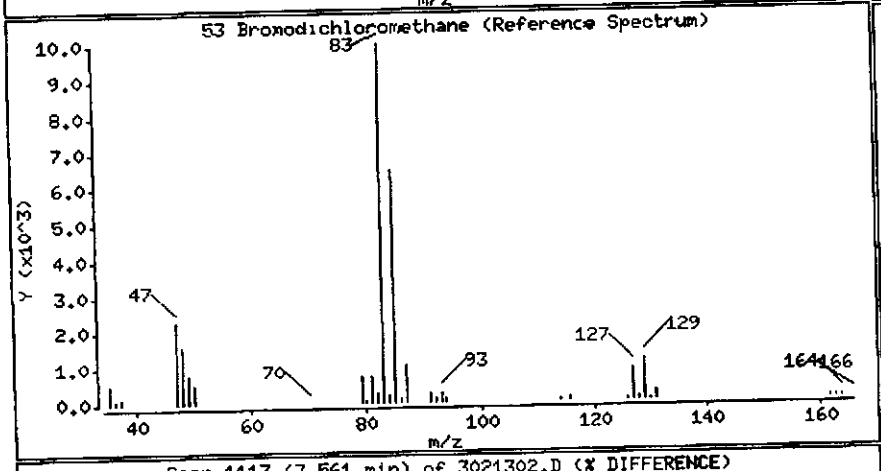


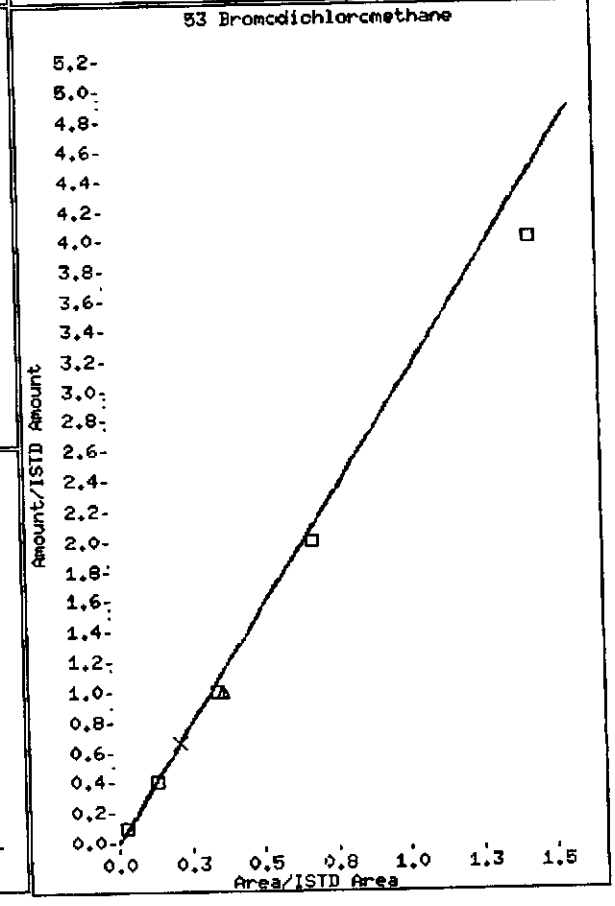
53 Bromodichloromethane

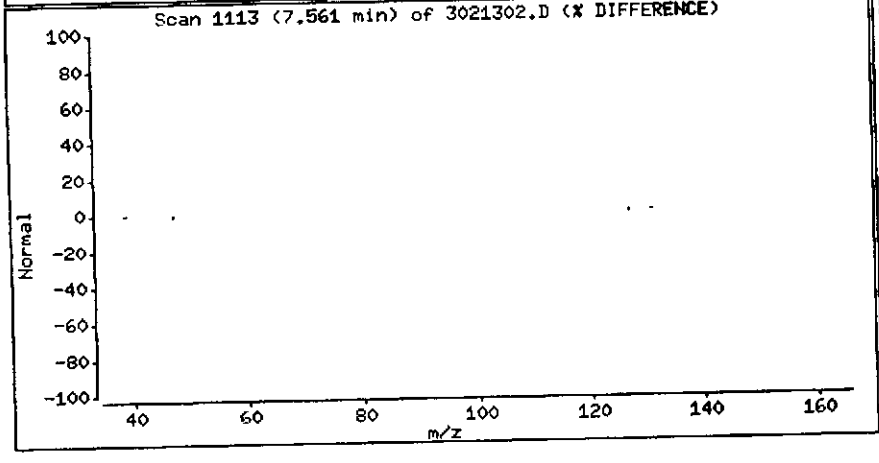


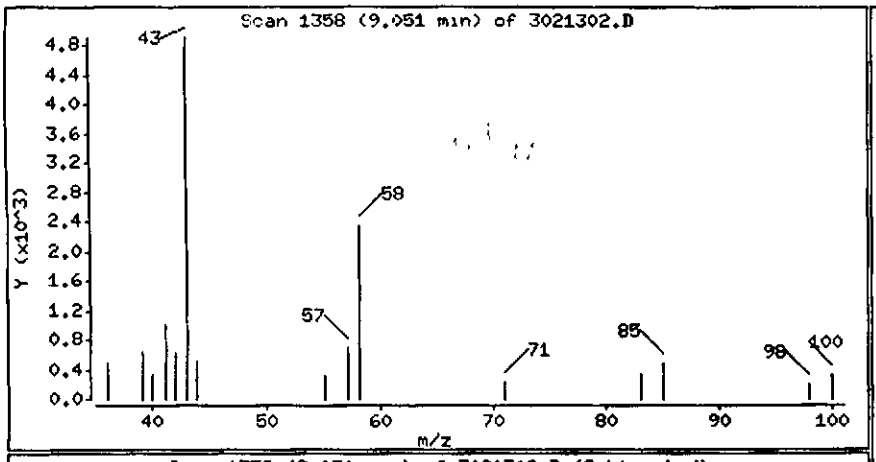


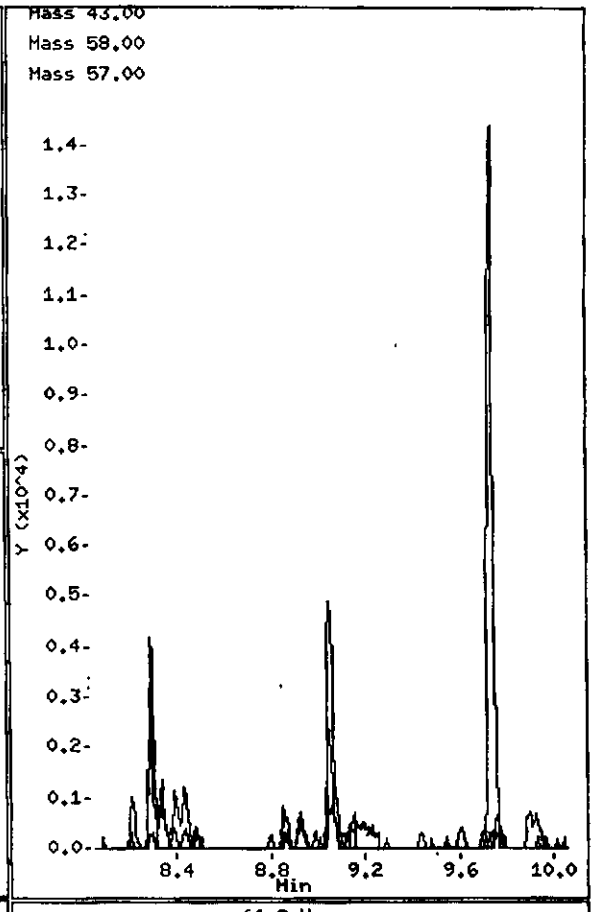


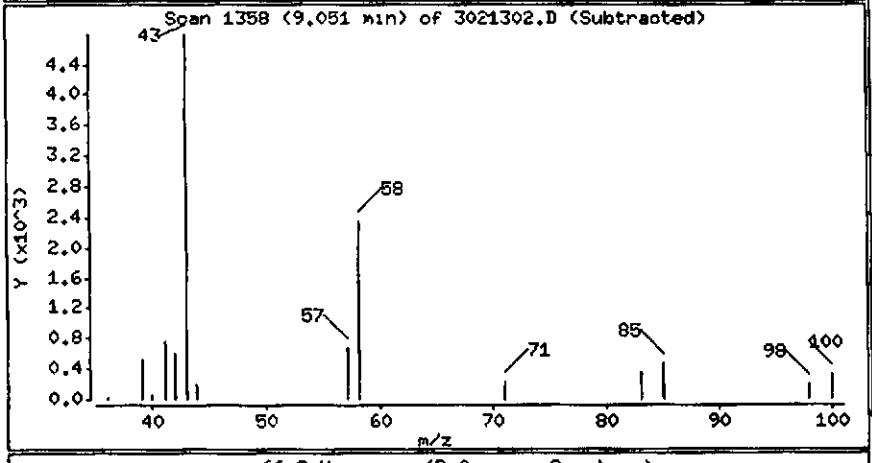


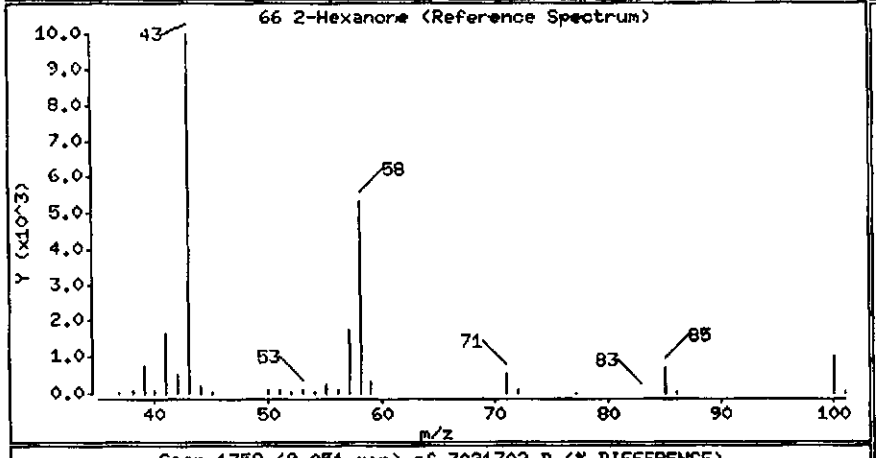


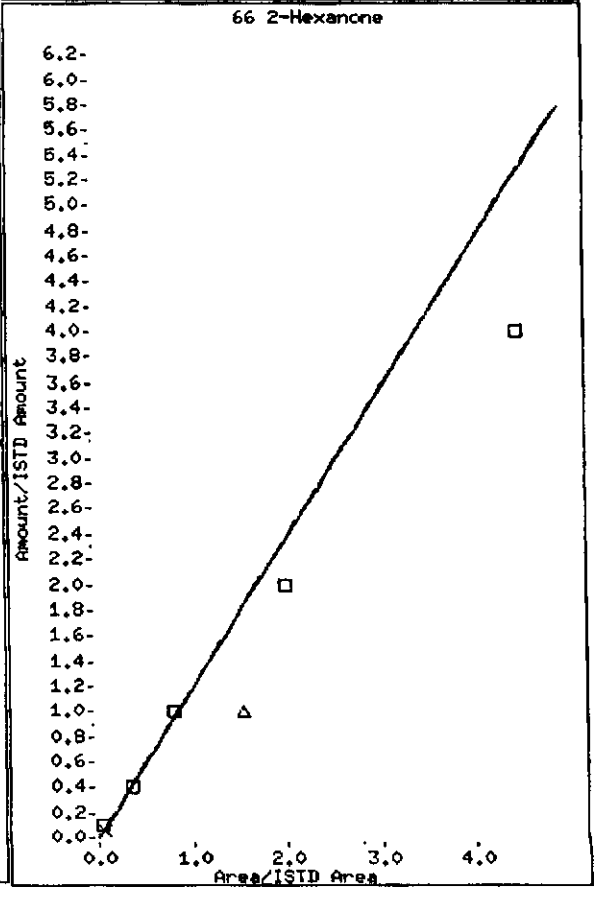


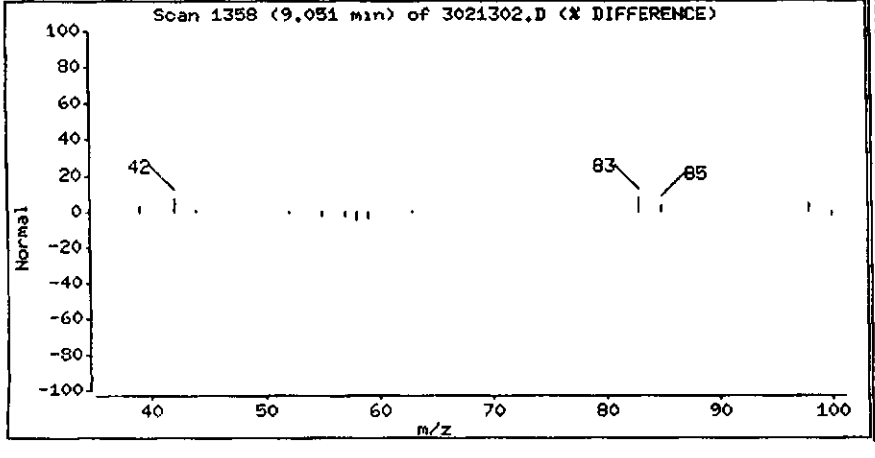

Scan 1358 (9.051 min) of 3021302.D
Y (x10^3)
m/z
43
58
57
71
85
98
100


Mass 43.00
Mass 58.00
Mass 57.00
Y (x10^4)
Min


Scan 1358 (9.051 min) of 3021302.D (Subtracted)
Y (x10^3)
m/z
43
58
57
71
85
98
100


66 2-Hexanone (Reference Spectrum)
Y (x10^3)
m/z
43
58
53
71
83
85


66 2-Hexanone
Amount/ISTD Amount
Area/ISTD Area


Scan 1358 (9.051 min) of 3021302.D (% DIFFERENCE)
Normal
m/z
42
83
85

UXB INTERNATIONAL

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

Matrix: (soil/water) WATER Lab Sample ID:C1B090228 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol 5 / mL Date Received 02/09/01
Work Order DVWJE2AA Date Extracted:02/13/01
Dilution factor 50 Date Analyzed: 02/13/01

QC Batch: 1044112

Client Sample Id: DF/S-1/1039/IDW/004 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	**Acetone**	**79**	J
71-43-2	Benzene	250	U
75-27-4	Bromodichloromethane	250	U
75-25-2	Bromoform	250	U
74-83-9	Bromomethane	500	U
78-93-3	2-Butanone	1000	U
75-15-0	Carbon disulfide	250	U
56-23-5	Carbon tetrachloride	250	U
108-90-7	Chlorobenzene	250	U
124-48-1	Dibromochloromethane	250	U
75-00-3	Chloroethane	500	U
67-66-3	**Chloroform**	**8800**	
74-87-3	Chloromethane	500	U
75-34-3	1,1-Dichloroethane	250	U
107-06-2	1,2-Dichloroethane	250	U
75-35-4	1,1-Dichloroethene	250	U
540-59-0	1,2-Dichloroethene (total)	250	U
78-87-5	1,2-Dichloropropane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
10061-02-6	trans-1,3-Dichloropropene	250	U
100-41-4	Ethylbenzene	250	U
591-78-6	2-Hexanone	1000	U
75-09-2	Methylene chloride	250	U
108-10-1	4-Methyl-2-pentanone	1000	U
100-42-5	Styrene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250	U
127-18-4	Tetrachloroethene	250	U
108-88-3	Toluene	250	U

UXB INTERNATIONAL

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

Matrix: (soil/water) WATER Lab Sample ID:C1B090228 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

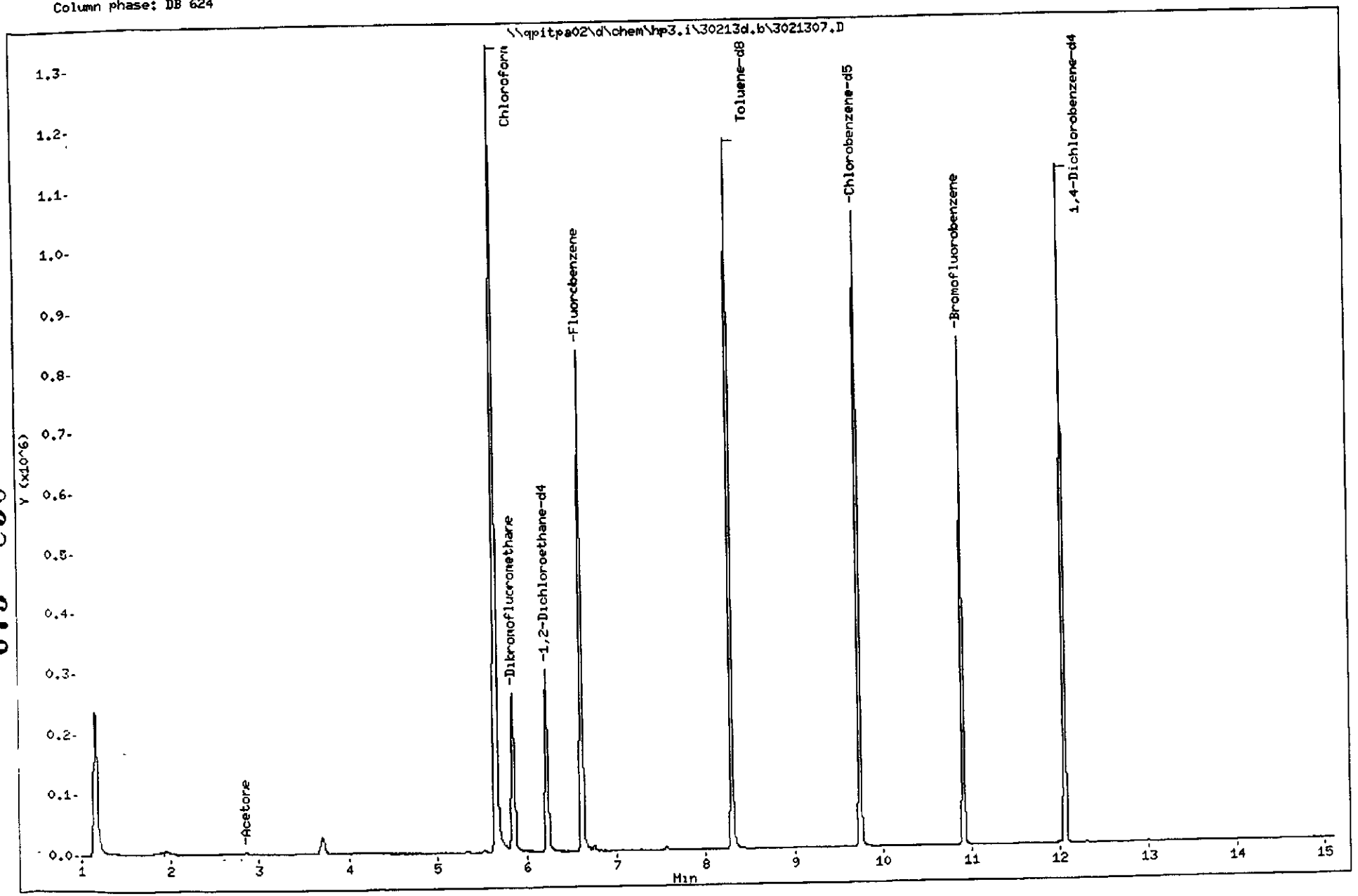
Sample WT/Vol: 5 / mL Date Received: 02/09/01
Work Order: DVWJE2AA Date Extracted:02/13/01
Dilution factor: 50 Date Analyzed: 02/13/01

QC Batch: 1044112
Client Sample Id: DF/S-1/1039/IDW/004 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
71-55-6	1,1,1-Trichloroethane	250	U
79-00-5	1,1,2-Trichloroethane	250	U
79-01-6	Trichloroethene	250	U
75-01-4	Vinyl chloride	500	U
1330-20-7	Xylenes (total)	250	U

Data File: \\qpitpa02\d\chem\hp3.i\30213d.b\3021307.D
Date : 13-FEB-2001 09:40
Client ID: DF/S-1/1039/IDW/004
Sample Info: C1B1090228-001 (1ML/50ML)/5ML
Purge Volume: 5.0
Column phase: DB 624

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



675 656

STL Pittsburgh

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30213d.b\3021307.D
Lab Smp Id: DVWJE2AA Client Smp ID: DF/S-1/1039/IDW/004
Inj Date : 13-FEB-2001 09:40 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : C1B1090228-001 (1ML/50ML)/5ML
Misc Info : dvwje2aa,30213d.b,8260bh2o.m,4-dwh20.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30213d.b\8260bh2o.m
Meth Date : 13-Feb-2001 06:51 gordonk Quant Type: ISTD
Cal Date : 11-JAN-2001 10:49 Cal File: 1E30111.D
Als bottle: 10
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC063

KLG 2/13/01

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

Name	Value	Description
DF	50.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

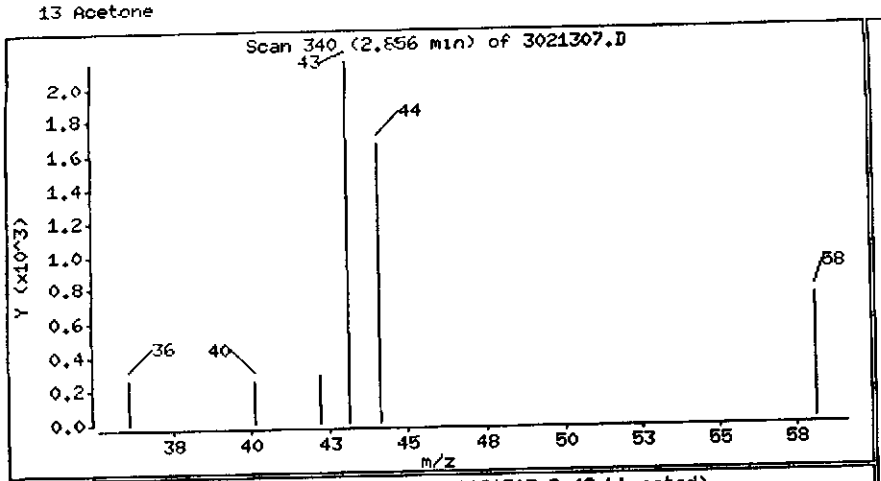
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6 615	6 608	(1.000)	681417	250 000	
* 69 Chlorobenzene-d5	119	9 736	9 735	(1 000)	161377	250 000	
* 92 1,4 Dichlorobenzene-d4	152	12 054	12 053	(1.000)	244808	250.000	
$ 39 Dibromofluoromethane	113	5.849	5.842	(0 884)	168761	243 229	48 64
$ 43 1,2-Dichloroethane-d4	65	6 220	6.219	(0.940)	207036	263 648	52 73
$ 59 Toluene-d8	98	8.294	8 293	(0 852)	644113	250 085	50 02
$ 80 Bromofluorobenzene	95	10 910	10 909	(1.121)	242337	230 832	46 17
1 Dichlorodifluoromethane	85	Compound Not Detected.					
2 Chloromethane	50	Compound Not Detected					
3 Vinyl Chloride	62	Compound Not Detected					
4 Bromomethane	94	Compound Not Detected.					
5 Chloroethane	64	Compound Not Detected.					
6 Trichlorofluoromethane	101	Compound Not Detected					
12 1,1-Dichloroethene	96	Compound Not Detected					
15 Carbon Disulfide	76	Compound Not Detected					
13 Acetone	43	2.856	2.873	(0 432)	4486	7 89132	78 91
18 Methylene Chloride	84	Compound Not Detected.					

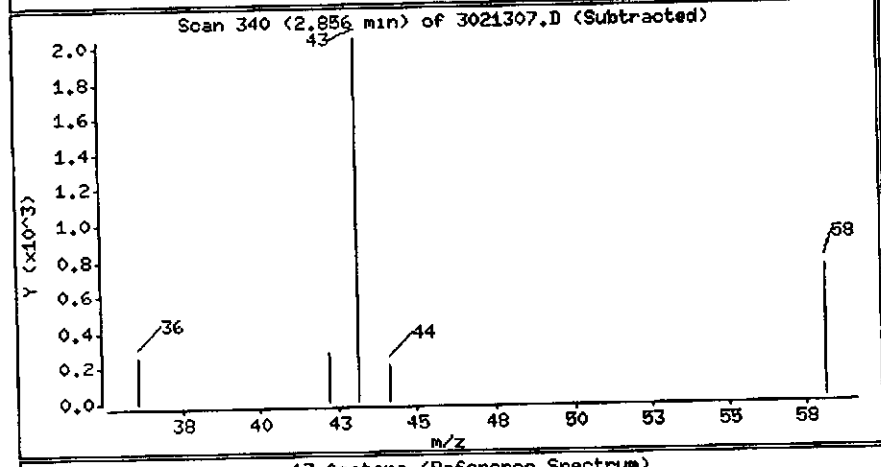
Data File. \\qpitpa02\d\chem\hp3.i\30213d.b\3021307.D
Report Date: 13-Feb-2001 10:12

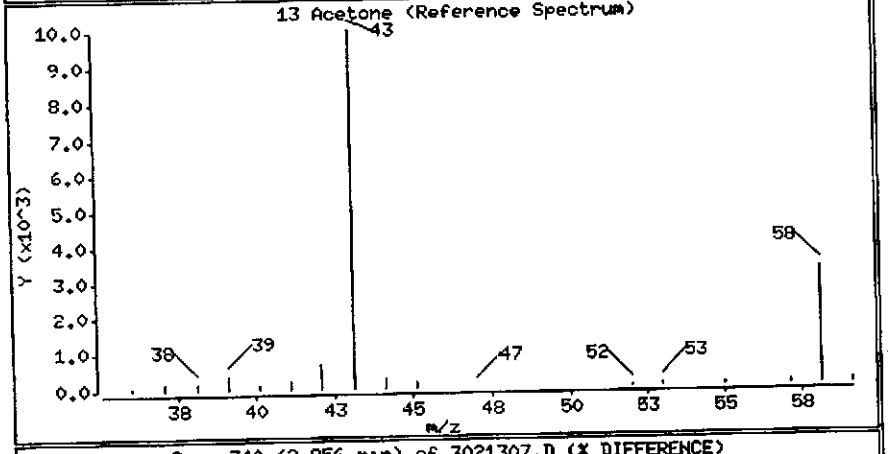
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (UG/L)
	19 trans-1,2-Dichloroethene	96	Compound Not Detected					
	20 Methyl tert-butyl ether	73	Compound Not Detected					
	24 1,1 Dichloroethane	63	Compound Not Detected					
	27 2,2-Dichloropropane	77	Compound Not Detected					
	28 cis-1,2-dichloroethene	96	Compound Not Detected					
M	29 1,2-Dichloroethene (total)	96	Compound Not Detected					
	30 Bromochloromethane	128	Compound Not Detected.					
	31 2-Butanone	43	Compound Not Detected					
	37 Chloroform	83	5 654	5.653	(0 855)	1113716	875 882	8759
	38 1,1,1-Trichloroethane	97	Compound Not Detected					
	40 1,1-Dichloropropene	75	Compound Not Detected.					
	41 Carbon Tetrachloride	117	Compound Not Detected					
	42 Benzene	78	Compound Not Detected					
	45 1,2-Dichloroethane	62	Compound Not Detected					
	47 Trichloroethene	130	Compound Not Detected					
	49 1,2-Dichloropropane	63	Compound Not Detected					
	50 Dibromomethane	93	Compound Not Detected.					
	53 Bromodichloromethane	83	Compound Not Detected					
	57 cis-1,3-Dichloropropene	75	Compound Not Detected					
	58 4-Methyl-2-Pentanone	43	Compound Not Detected					
	60 Toluene	91	Compound Not Detected					
	61 trans 1,3-Dichloropropene	75	Compound Not Detected					
	63 1,3-Dichloropropane	76	Compound Not Detected					
	64 1,1,2-Trichloroethane	97	Compound Not Detected.					
	65 Tetrachloroethene	164	Compound Not Detected					
	66 2-Hexanone	43	Compound Not Detected					
	67 Dibromochloromethane	129	Compound Not Detected.					
	68 1,2-Dibromoethane	107	Compound Not Detected					
	70 Chlorobenzene	112	Compound Not Detected					
	71 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.					
	72 Ethylbenzene	106	Compound Not Detected					
	73 m + p-Xylene	106	Compound Not Detected					
	74 Xylene-o	106	Compound Not Detected					
M	75 Xylenes (total)	106	Compound Not Detected					
	76 Styrene	104	Compound Not Detected					
	77 Bromoform	173	Compound Not Detected					
	78 Isopropylbenzene	105	Compound Not Detected					
	79 Bromobenzene	156	Compound Not Detected.					
	81 n-Propylbenzene	120	Compound Not Detected					
	82 2-Chlorotoluene	126	Compound Not Detected.					
	83 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
	84 1,2,3 Trichloropropane	110	Compound Not Detected					
	85 4-Chlorotoluene	126	Compound Not Detected.					
	86 1,3,5-Trimethylbenzene	105	Compound Not Detected					
	87 tert-Butylbenzene	119	Compound Not Detected.					
	88 1,2,4-Trimethylbenzene	105	Compound Not Detected					
	89 sec-Butylbenzene	105	Compound Not Detected					

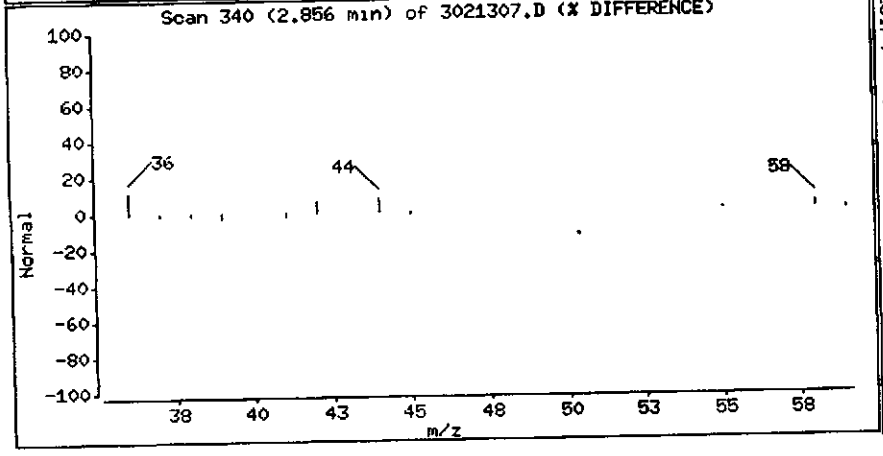
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (UG/L)
90 4 Isopropyltoluene	119	Compound Not Detected					
91 1,3 Dichlorobenzene	146	Compound Not Detected					
93 1,4 Dichlorobenzene	146	Compound Not Detected					
94 n-Butylbenzene	91	Compound Not Detected					
95 1,2 Dichlorobenzene	146	Compound Not Detected					
96 1,2-Dibromo-3-chloropropane	157	Compound Not Detected					
97 1,2,4-Trichlorobenzene	180	Compound Not Detected					
98 Hexachlorobutadiene	225	Compound Not Detected					
99 Naphthalene	128	Compound Not Detected					
100 1,2,3-Trichlorobenzene	180	Compound Not Detected.					

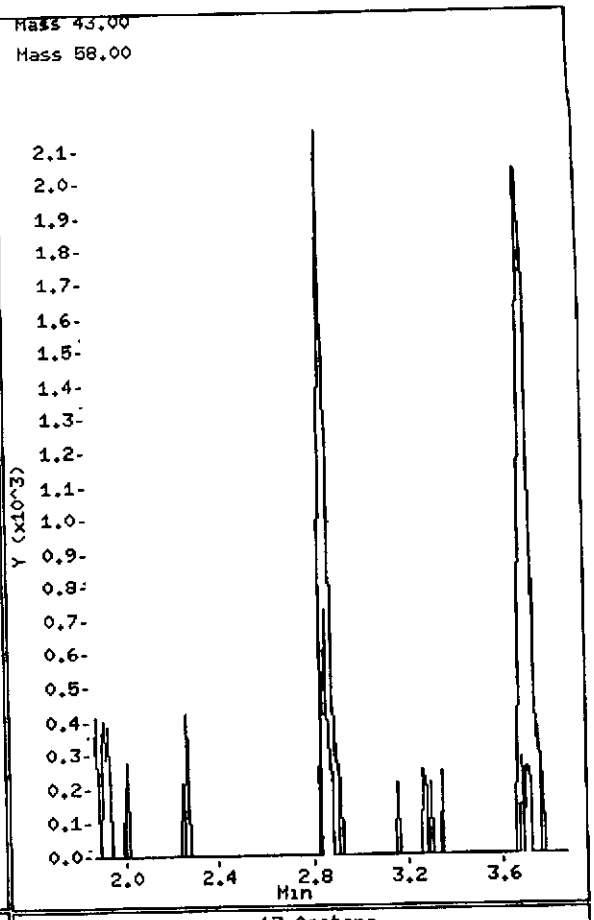
13 Acetone

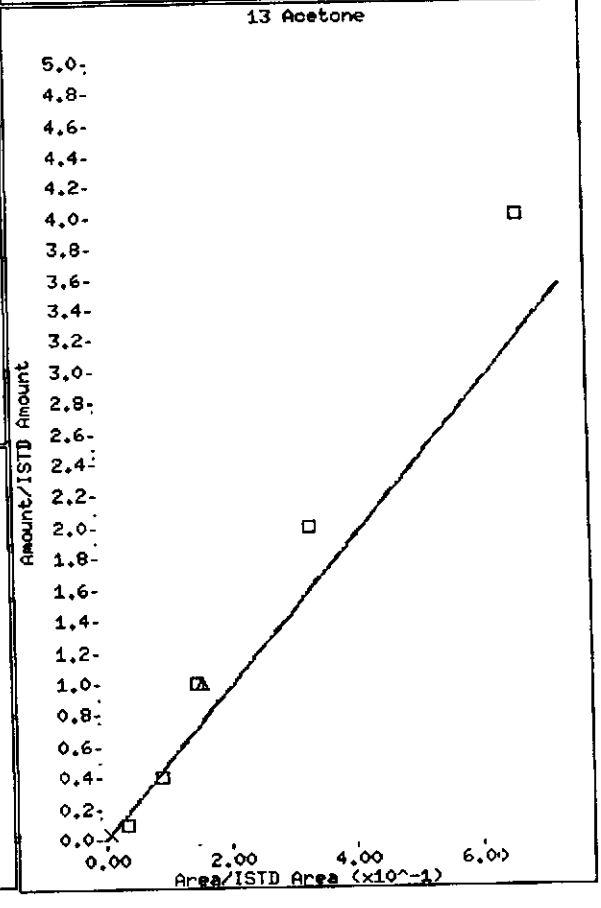

Scan 340 (2.856 min) of 3021307.D
Y (x10^3)
m/z
43
44
58
36
40

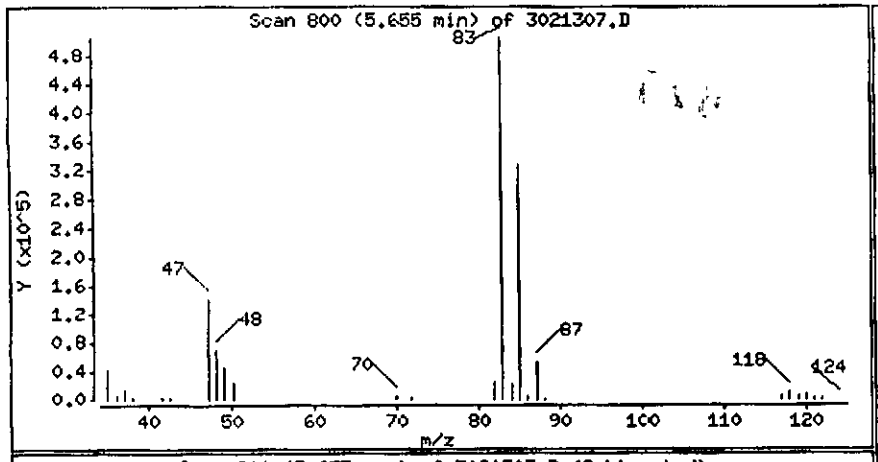

Scan 340 (2.856 min) of 3021307.D (Subtracted)
Y (x10^3)
m/z
43
58
36
44

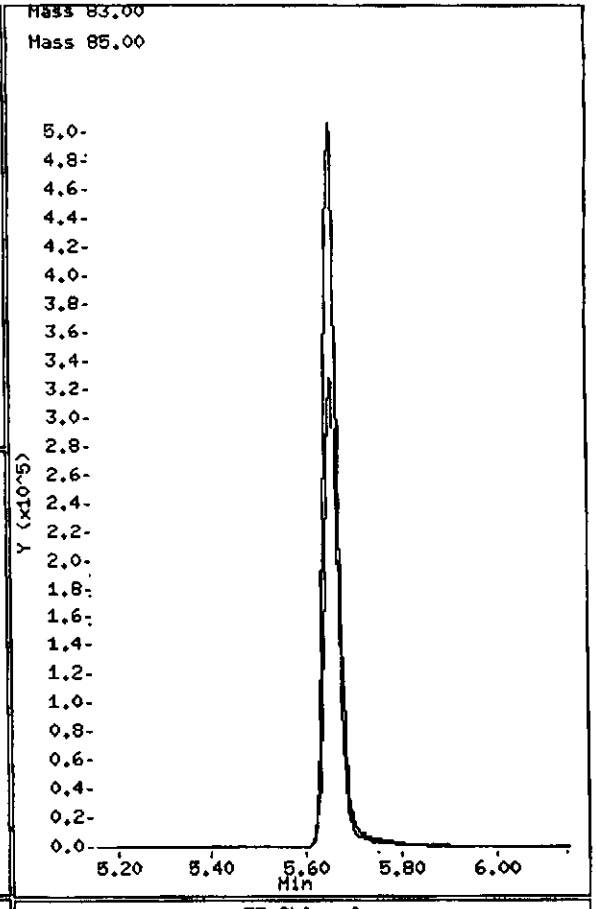

13 Acetone (Reference Spectrum)
Y (x10^3)
m/z
43
58
38
39
47
52
53

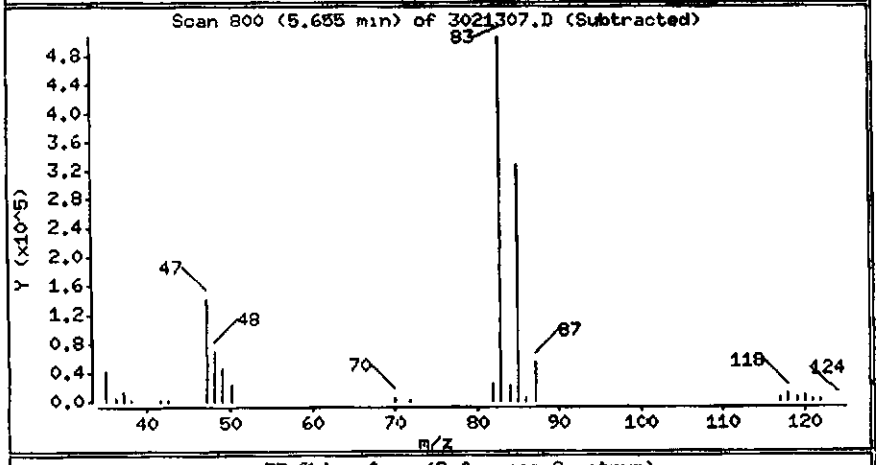

Scan 340 (2.856 min) of 3021307.D (% DIFFERENCE)
Normal
m/z
36
44
58

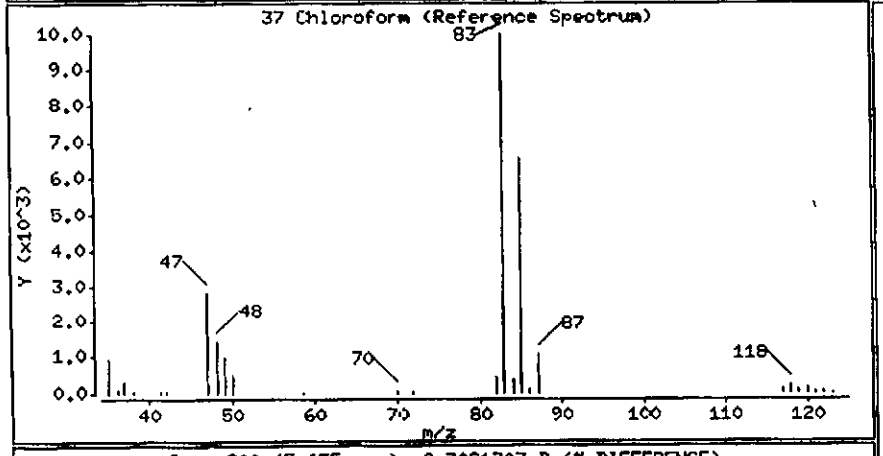

Mass 43.00
Mass 58.00
Y (x10^3)
Min

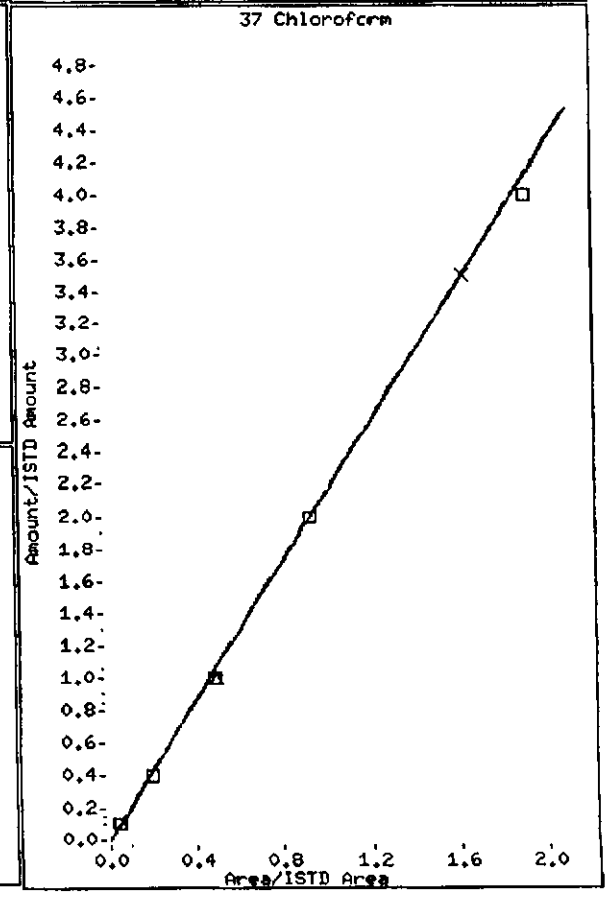

13 Acetone
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

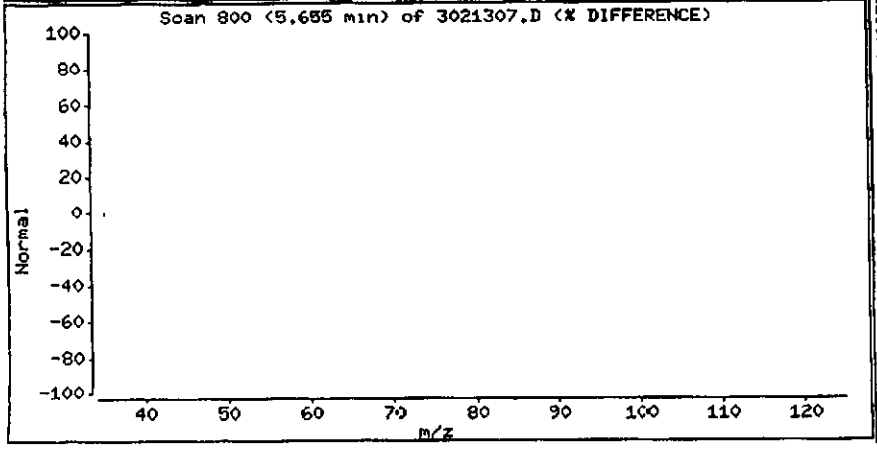

Scan 800 (5.655 min) of 3021307.D
Y (x10^5)
m/z
83
47
48
70
87
118
124


Mass 83.00
Mass 85.00
Y (x10^5)
Min


Scan 800 (5.655 min) of 3021307.D (Subtracted)
Y (x10^5)
m/z
83
47
48
70
87
118
124


37 Chloroform (Reference Spectrum)
Y (x10^3)
m/z
83
47
48
70
87
118


37 Chloroform
Amount/ISTD Amount
Area/ISTD Area


Scan 800 (5.655 min) of 3021307.D (% DIFFERENCE)
Normal
m/z

675 E62

GC/MS VOLATILE
CALIBRATION DATA

INITIAL CALIBRATION REPORT

Instrument ID: hp3.i
Lab File ID: 1E30111.D
Analysis Type: WATER

Injection Date: 11-JAN-2001 10:49
Lab Sample ID: vstd200
Method File: \\QPITPA02\D\chem\hp3.i\30111d.b\8260bh

COMPOUND	%RSD
Xylenes (total)	19.7
1,2-Dichloroethene (total)	9.6
Dichlorodifluoromethane	13 6
Chloromethane	5.7
Vinyl Chloride	10.2
Bromomethane	7.9
Chloroethane	14.5
Trichlorofluoromethane	10.7
1,1-Dichloroethene	7.0
Acetone	36.8
Carbon Disulfide	11 7
Methylene Chloride	4.8
trans-1,2-Dichloroethene	5 1
Methyl tert-butyl ether	8 9
1,1-Dichloroethane	7 0
2,2-Dichloropropane	16 7
cis-1,2-dichloroethene	15.2
2-Butanone	16.7
Bromochloromethane	8 6
Chloroform	7 4
1,1,1-Trichloroethane	11.3
Dibromofluoromethane	6.8
Carbon Tetrachloride	13.5
1,1-Dichloropropene	22.5
1,2-Dichloroethane-d4	5.3
Benzene	12.5
1,2-Dichloroethane	8.5
Trichloroethene	13 5
1,2-Dichloropropane	12.9
Dibromomethane	10.1
Bromodichloromethane	12.1
cis-1,3-Dichloropropene	27.7
4-Methyl-2-Pentanone	30.6
Toluene-d8	17.6
Toluene	15.7
trans-1,3-Dichloropropene	24 8
1,1,2-Trichloroethane	7 6
Tetrachloroethene	12.2
1,3-Dichloropropane	10.9

INITIAL CALIBRATION REPORT

Instrument ID: hp3.i
Lab File ID: 1E30111.D
Analysis Type: WATER

Injection Date: 11-JAN-2001 10:49
Lab Sample ID: vstd200
Method File: \\QPITPA02\D\chem\hp3.i\30111d.b

COMPOUND	%RSD
2-Hexanone	30.0
Dibromochloromethane	17 4
1,2-Dibromoethane	13 5
Chlorobenzene	5.2
1,1,1,2-Tetrachloroethane	9 5
Ethylbenzene	15.4
m + p-Xylene	13 9
Xylene-o	19 7
Styrene	17 4
Bromoform	18 7
Isopropylbenzene	23 1
Bromofluorobenzene	15.1
Bromobenzene	12.0
1,1,2,2-Tetrachloroethane	4 6
1,2,3-Trichloropropane	8 5
2-Chlorotoluene	14 0
1,3,5-Trimethylbenzene	15 3
n-Propylbenzene	15 3
4-Chlorotoluene	10.0
tert-Butylbenzene	24.4
1,2,4-Trimethylbenzene	16 4
sec-Butylbenzene	19 4
1,3-Dichlorobenzene	8.2
4-Isopropyltoluene	16.1
1,4-Dichlorobenzene	3.7
n-Butylbenzene	20 4
1,2-Dichlorobenzene	8.7
1,2-Dibromo-3-chloropropane	25 4
1,2,4-Trichlorobenzene	26.5
Hexachlorobutadiene	10 7
Naphthalene	31.4
1,2,3-Trichlorobenzene	15.5

The average of all %RSD's in the initial calibration is 14 4

VOLATILE ORGANICS INITIAL CALIBRATION DATA

675 865

Lab Name: STL PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: 30111D

Instrument ID: HP3 Calibration Date(s): 01/11/01 01/11/01

Heated Purge: (Y/N) N Calibration Time(s): 0910 1049

GC Column: DB 624 ID: 0.18 (mm)

LAB FILE ID: RRF5 =1A30111 RRF20 =1B30111
RRF50 =CC30111 RRF100=1D30111 RRF200=1E30111

	COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
	Dichlorodifluoromethane	0.302	0.425	0.438	0.389	0.400	0.391	13.6
*	Chloromethane	0.531	0.610	0.598	0.551	0.567	0.571	5.7*
	Vinyl Chloride	0.345	0.450	0.438	0.434	0.438	0.421	10.2
	Bromomethane	0.110	0.112	0.121	0.100	0.102	0.109	7.9
	Chloroethane	0.067	0.080	0.090	0.067	0.066	0.074	14.5
	Trichlorofluoromethane	0.350	0.452	0.460	0.401	0.410	0.415	10.7
	1,1-Dichloroethene	0.200	0.242	0.232	0.229	0.228	0.226	7.0
	Methylene Chloride	0.246	0.276	0.262	0.253	0.249	0.257	4.8
	trans-1,2-Dichloroethene	0.245	0.282	0.264	0.260	0.261	0.262	5.1
*	1,1-Dichloroethane	0.466	0.561	0.536	0.531	0.550	0.529	7.0*
	cis-1,2-dichloroethene	0.214	0.298	0.310	0.313	0.325	0.292	15.2
	Chloroform	0.408	0.495	0.484	0.465	0.480	0.466	7.4
	Bromochloromethane	0.123	0.148	0.146	0.147	0.156	0.144	8.6
	1,1,1-Trichloroethane	0.307	0.398	0.393	0.397	0.416	0.382	11.3
	Carbon Tetrachloride	0.262	0.358	0.369	0.358	0.375	0.344	13.5
	1,2-Dichloroethane	0.328	0.413	0.399	0.385	0.396	0.384	8.5
	Benzene	0.899	1.236	1.238	1.199	1.211	1.157	12.5
	Trichloroethene	0.217	0.290	0.294	0.301	0.315	0.283	13.5
	1,2-Dichloropropane	0.228	0.300	0.312	0.308	0.322	0.294	12.9
	Bromodichloromethane	0.259	0.327	0.343	0.338	0.361	0.326	12.1
	cis-1,3-Dichloropropene	0.205	0.330	0.394	0.423	0.463	0.363	27.7
	Toluene	3.532	5.425	5.275	5.074	5.021	4.865	15.7
	trans-1,3-Dichloropropene	0.759	1.264	1.370	1.467	1.587	1.289	24.8
	1,1,2-Trichloroethane	0.848	1.031	0.974	0.964	1.027	0.969	7.6
	Tetrachloroethene	0.714	0.972	0.950	0.951	0.975	0.912	12.2
	Dibromochloromethane	0.702	0.984	1.030	1.063	1.159	0.988	17.4
*	Chlorobenzene	3.244	3.717	3.557	3.410	3.376	3.461	5.2*
	Ethylbenzene	1.325	1.984	1.981	1.936	1.901	1.825	15.4
	Styrene	2.595	4.182	4.083	3.920	3.665	3.689	17.4
*	Bromoform	0.416	0.543	0.590	0.612	0.710	0.574	18.7*
*	1,1,2,2-Tetrachloroethane	0.615	0.667	0.647	0.630	0.691	0.650	4.6*
	1,3-Dichlorobenzene	1.208	1.469	1.454	1.433	1.491	1.411	8.2
	1,4-Dichlorobenzene	1.429	1.575	1.542	1.484	1.525	1.511	3.7
	1,2-Dichlorobenzene	1.134	1.401	1.360	1.266	1.196	1.271	8.7
	Dibromomethane	0.130	0.162	0.161	0.162	0.172	0.157	10.1
	1,2-Dibromoethane	0.720	0.974	0.946	0.972	1.052	0.933	13.5
	1,1,1,2-Tetrachloroethane	0.881	1.084	1.078	1.094	1.136	1.055	9.5

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

VOLATILE ORGANICS INITIAL CALIBRATION DATA

675 866

Lab Name: STL PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: 30111D

Instrument ID: HP3 Calibration Date(s): 01/11/01 01/11/01

Heated Purge: (Y/N) N Calibration Time(s): 0910 1049

GC Column: DB 624 ID: 0.18 (mm)

LAB FILE ID: RRF5 =1A30111 RRF20 =1B30111
RRF50 =CC30111 RRF100=1D30111 RRF200=1E30111

COMPOUND	RRF5	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
1,2,3-Trichloropropane	0.178	0.207	0.194	0.194	0.224	0.199	8.5
1,2-Dibromo-3-chloropropane	0.065	0.075	0.081	0.093	0.123	0.087	25.4
2,2-Dichloropropane	0.220	0.304	0.296	0.325	0.355	0.300	16.7
1,1-Dichloropropene	0.149	0.226	0.257	0.268	0.283	0.237	22.5
1,3-Dichloropropane	1.334	1.754	1.693	1.701	1.768	1.650	10.9
n-Propylbenzene	0.496	0.867	0.878	0.870	0.900	0.802	21.4
Bromobenzene	0.520	0.683	0.692	0.681	0.720	0.659	12.0
1,3,5-Trimethylbenzene	1.687	2.538	2.516	2.426	2.385	2.310	15.3
2-Chlorotoluene	0.523	0.738	0.730	0.722	0.760	0.695	14.0
4-Chlorotoluene	0.616	0.806	0.755	0.716	0.688	0.716	10.0
tert-Butylbenzene	1.098	2.037	2.132	2.150	2.238	1.931	24.4
1,2,4-Trimethylbenzene	1.704	2.592	2.566	2.550	2.631	2.409	16.4
sec-Butylbenzene	2.004	3.302	3.339	3.292	3.376	3.063	19.4
4-Isopropyltoluene	1.899	2.888	2.883	2.808	2.849	2.665	16.1
n-Butylbenzene	1.529	2.676	2.678	2.571	2.501	2.391	20.4
1,2,4-Trichlorobenzene	0.461	0.688	0.826	0.894	0.984	0.771	26.5
Hexachlorobutadiene	0.380	0.460	0.457	0.472	0.516	0.457	10.7
Naphthalene	0.814	1.616	1.798	1.882	2.216	1.665	31.4
1,2,3-Trichlorobenzene	0.565	0.738	0.765	0.788	0.884	0.748	15.5
Acetone	0.335	0.226	0.147	0.166	0.168	0.208	36.8
Carbon Disulfide	0.575	0.763	0.770	0.764	0.767	0.728	11.7
2-Butanone	0.131	0.181	0.157	0.184	0.206	0.172	16.7
4-Methyl-2-Pentanone	0.478	0.870	0.961	1.056	1.236	0.920	30.6
2-Hexanone	0.446	0.879	0.811	1.000	1.120	0.851	30.0
Methyl tert-butyl ether	0.463	0.555	0.528	0.542	0.594	0.536	8.9
Isopropylbenzene	3.146	5.867	6.070	5.886	5.765	5.347	23.1
1,2-Dichloroethene (total)	0.230	0.290	0.287	0.287	0.293	0.277	9.6
Xylenes (total)	1.348	2.289	2.311	2.236	2.124	2.062	19.7
Dibromofluoromethane	0.224	0.260	0.266	0.264	0.259	0.255	6.8
1,2-Dichloroethane-d4	0.264	0.303	0.299	0.289	0.286	0.288	5.3
Toluene-d8	2.750	4.325	4.405	4.342	4.129	3.990	17.6
Bromofluorobenzene	1.193	1.681	1.768	1.772	1.718	1.626	15.1

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

Data File: \\pittpa02\d\chem\hp3.i\30111d.b\A30111.D
Date : 11-JAN-2001 09:41
Client ID: vstd5
Sample Info: VSTD5 5ML
Purge Volume: 5.0
Column phase: DB 624

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

675 863

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30111d.b\1A30111.D
Lab Smp Id: vstd5 Client Smp ID: vstd5
Inj Date : 11-JAN-2001 09:41 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD5 5ML
Misc Info : ,30111d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30111d.b\8260bh2o.m
Meth Date : 15-Jan-2001 06:24 gordonk Quant Type: ISTD
Cal Date : 11-JAN-2001 09:41 Cal File: 1A30111.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC063

KLG 1/15/01

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

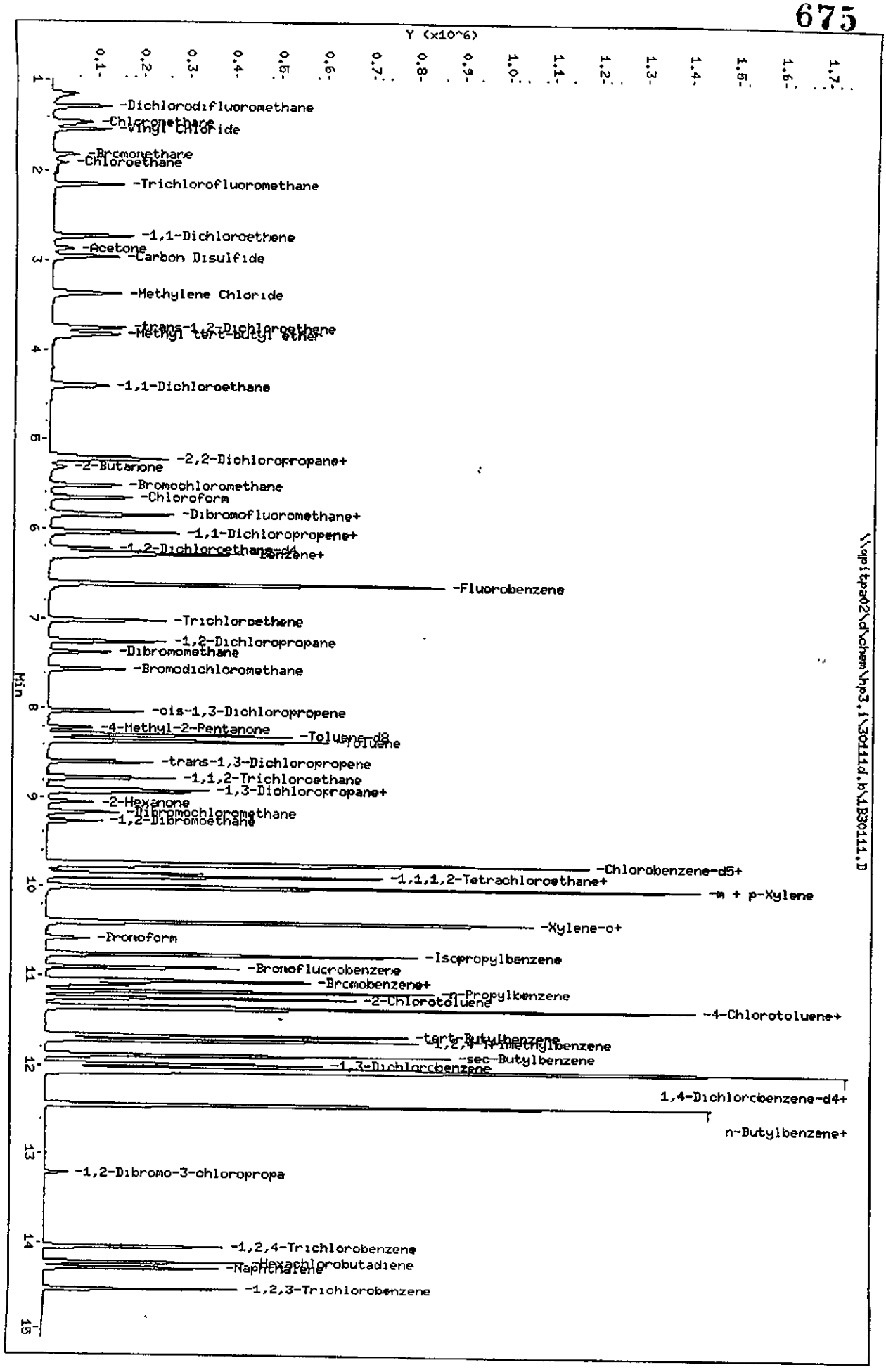
Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
Vt	1.000	mg/L conversion (1.0 if no conversion)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 46 Fluorobenzene	96	6 606	6 606	(1 000)	693656	250 000	
* 69 Chlorobenzene-d5	119	9 739	9.739	(1.000)	177299	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12 050	12.050	(1.000)	379493	250.000	
$ 39 Dibromofluoromethane	113	5.839	5.839	(0.884)	15523	25.0000	25.00
$ 43 1,2-Dichloroethane-d4	65	6 216	6.216	(0 941)	18286	25 0000	25 00
$ 59 Toluene-d8	98	8.291	8 291	(0.851)	48757	25.0000	25 00
$ 80 Bromofluorobenzene	95	10.907	10.907	(1 120)	21151	25.0000	25.00
1 Dichlorodifluoromethane	85	1.283	1.283	(0.194)	20938	25.0000	25.00
2 Chloromethane	50	1.441	1.441	(0.218)	36844	25.0000	25.00
3 Vinyl Chloride	62	1.538	1.538	(0.233)	23924	25 0000	25.00
4 Bromomethane	94	1.824	1.824	(0.276)	7606	25 0000	25.00
5 Chloroethane	64	1.915	1.915	(0 290)	4633	25.0000	25 00
6 Trichlorofluoromethane	101	2.159	2.159	(0.327)	24274	25 0000	25 00
12 1,1-Dichloroethene	96	2 730	2.730	(0.413)	13876	25.0000	25.00
15 Carbon Disulfide	76	2.956	2.956	(0.447)	39882	25.0000	25.00
13 Acetone	43	2 858	2.858	(0.433)	23270	25.0000	25.00

675 869

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	18 Methylene Chloride	84	3.357	3.357	(0.508)	17049	25 0000	25.00
	19 trans-1,2-Dichloroethene	96	3 746	3 746	(0.567)	17016	25 0000	25 00
	20 Methyl tert-butyl ether	73	3 819	3 819	(0.578)	32111	25.0000	25 00
	24 1,1-Dichloroethane	63	4.391	4.391	(0.665)	32307	25.0000	25.00
	27 2,2-Dichloropropane	77	5.194	5.194	(0.786)	15278	25 0000	25.00
	28 cis-1,2-dichloroethene	96	5 219	5.219	(0 790)	14871	25.0000	25 00
M	29 1,2-Dichloroethene (total)	96				31887	50 0000	50.00
	30 Bromochloromethane	128	5.517	5.517	(0.835)	8527	25 0000	25.00
	31 2-Butanone	43	5 316	5 316	(0 805)	9111	25.0000	25 00
	37 Chloroform	83	5.651	5 651	(0 855)	28274	25.0000	25.00
	38 1,1,1-Trichloroethane	97	5.833	5.833	(0.883)	21283	25 0000	25.00
	40 1,1-Dichloropropene	75	6.040	6.040	(0.914)	10320	25 0000	25.00
	41 Carbon Tetrachloride	117	6 028	6.028	(0.913)	18193	25.0000	25 00
	42 Benzene	78	6 271	6 271	(0.949)	62356	25 0000	25.00
	45 1,2-Dichloroethane	62	6.301	6.301	(0.954)	22787	25 0000	25.00
	47 Trichloroethene	130	7.019	7.019	(1.063)	15055	25.0000	25.00
	49 1,2-Dichloropropane	63	7.244	7.244	(1.097)	15792	25 0000	25.00
	50 Dibromomethane	93	7.372	7.372	(1.116)	9056	25 0000	25 00
	53 Bromodichloromethane	83	7 561	7.561	(1.145)	17947	25.0000	25.00
	57 cis-1,3-Dichloropropene	75	8 023	8.023	(1.215)	14218	25 0000	25.00
	58 4-Methyl-2-Pentanone	43	8 212	8.212	(0.843)	8473	25.0000	25.00
	60 Toluene	91	8 358	8.358	(0.858)	62627	25.0000	25.00
	61 trans-1,3-Dichloropropene	75	8.601	8 601	(0.883)	13455	25 0000	25.00
	63 1,3-Dichloropropane	76	8.942	8.942	(0.918)	23652	25 0000	25.00
	64 1,1,2-Trichloroethane	97	8.777	8.777	(0.901)	15027	25.0000	25.00
	65 Tetrachloroethene	164	8.905	8 905	(0.914)	12659	25.0000	25 00
	66 2-Hexanone	43	9.051	9.051	(0.929)	7904	25 0000	25 00
	67 Dibromochloromethane	129	9 161	9.161	(0 941)	12441	25.0000	25 00
	68 1,2-Dibromoethane	107	9 264	9 264	(0.951)	12758	25 0000	25.00
	70 Chlorobenzene	112	9.763	9.763	(1 002)	57509	25.0000	25.00
	71 1,1,1,2-Tetrachloroethane	131	9.848	9 848	(1.011)	15619	25.0000	25.00
	72 Ethylbenzene	106	9.885	9.885	(1.015)	23493	25.0000	25.00
	73 m + p-Xylene	106	10.000	10 000	(1.027)	65144	50.0000	50.00
	74 Xylene-o	106	10.390	10.390	(1.067)	23897	25.0000	25 00
M	75 Xylenes (total)	106				89041	25 0000	93.15
	76 Styrene	104	10 408	10.408	(1.069)	46010	25 0000	25.00
	77 Bromoform	173	10.578	10.578	(1 086)	7373	25.0000	25.00
	78 Isopropylbenzene	105	10.761	10 761	(1.105)	55782	25.0000	25.00
	79 Bromobenzene	156	11.047	11 047	(0 917)	19750	25 0000	25.00
	81 n-Propylbenzene	120	11.174	11 174	(0.927)	18818	25.0000	25.00
	82 2-Chlorotoluene	126	11 247	11 247	(0.933)	19837	25.0000	25 00
	83 1,1,2,2-Tetrachloroethane	83	11 059	11.059	(0.918)	23328	25.0000	25 00
	84 1,2,3-Trichloropropane	110	11 095	11.095	(0 921)	6770	25 0000	25.00
	85 4-Chlorotoluene	126	11 357	11.357	(0 942)	23389	25.0000	25 00
	86 1,3,5-Trimethylbenzene	105	11 351	11.351	(0.942)	64014	25.0000	25.00
	87 tert-Butylbenzene	119	11.667	11 667	(0 968)	41690	25.0000	25.00
	88 1,2,4-Trimethylbenzene	105	11.716	11 716	(0 972)	64675	25 0000	25.00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
89 sec-Butylbenzene	105	11 886	11.886	(0 986)	76040	25.0000	25 00
90 4-Isopropyltoluene	119	12 038	12.038	(0.999)	72074	25.0000	25.00
91 1,3-Dichlorobenzene	146	11.990	11.990	(0.995)	45846	25 0000	25 00
93 1,4-Dichlorobenzene	146	12 075	12.075	(1.002)	54244	25.0000	25 00
94 n-Butylbenzene	91	12 440	12.440	(1.032)	58034	25.0000	25.00
95 1,2-Dichlorobenzene	146	12 446	12.446	(1 033)	43049	25 0000	25 00
96 1,2-Dibromo-3-chloropropane	157	13 218	13.218	(1.097)	2475	25.0000	25 00
97 1,2,4-Trichlorobenzene	180	14.046	14 046	(1 166)	17493	25.0000	25.00
98 Hexachlorobutadiene	225	14.228	14 228	(1.181)	14434	25 0000	25.00
99 Naphthalene	128	14 289	14.289	(1.186)	30895	25 0000	25 00
100 1,2,3-Trichlorobenzene	180	14.532	14 532	(1.206)	21443	25.0000	25.00



Data File: \\pitpa02\dfs\chem\hp3.i\30111d.b\1B30111.D
Date : 11-JAN-2001 10:04
Client ID: vstd20
Sample Info: VSTD20 5ML
Purge Volume: 5.0
Column phase: DB 624

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

675 872

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30111d.b\1B30111.D
Lab Smp Id: vstd20 Client Smp ID: vstd20
Inj Date : 11-JAN-2001 10:04 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD20 5ML
Misc Info : ,30111d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30111d.b\8260bh2o.m
Meth Date : 15-Jan-2001 06:29 gordonk Quant Type: ISTD
Cal Date : 11-JAN-2001 10:04 Cal File: 1B30111.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC063

KLG 1/15/01

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 46 Fluorobenzene	96	6.611	6.611	(1.000)	723262	250.000	
* 69 Chlorobenzene-d5	119	9.738	9.738	(1.000)	187524	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.056	12.056	(1.000)	399468	250 000	
$ 39 Dibromofluoromethane	113	5 845	5 845	(0 884)	75329	100.000	104.2
$ 43 1,2-Dichloroethane-d4	65	6.222	6 222	(0.941)	87582	100.000	105 0
$ 59 Toluene-d8	98	8.297	8.297	(0 852)	324400	100 000	113.0
$ 80 Bromofluorobenzene	95	10.906	10.906	(1 120)	126105	100.000	108 6
1 Dichlorodifluoromethane	85	1.288	1.288	(0 195)	122892	100 000	109.5
2 Chloromethane	50	1.459	1.459	(0.221)	176444	100.000	105.2
3 Vinyl Chloride	62	1.544	1 544	(0.234)	130058	100.000	109 4
4 Bromomethane	94	1.830	1.830	(0.277)	32433	100.000	98.12
5 Chloroethane	64	1 915	1 915	(0.290)	23207	100.000	101 5
6 Trichlorofluoromethane	101	2.164	2.164	(0 327)	130659	100.000	107.4
12 1,1-Dichloroethene	96	2.730	2.730	(0.413)	70157	100.000	107 8
15 Carbon Disulfide	76	2.961	2.961	(0.448)	220638	100.000	108.6
13 Acetone	43	2.870	2 870	(0.434)	65324	100 000	95.61

673 873

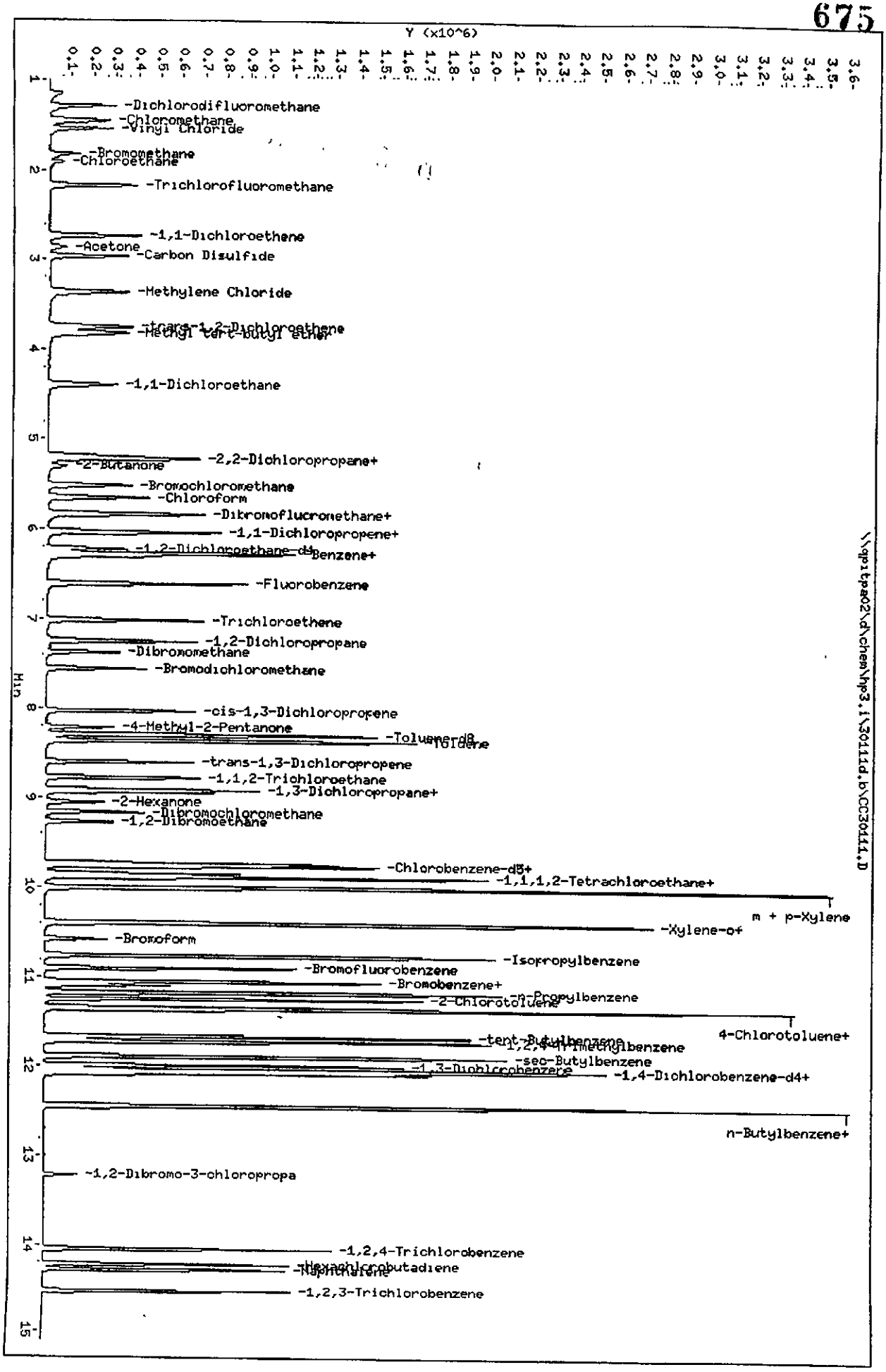
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	18 Methylene Chloride	84	3.369	3 369	(0.510)	79852	100.000	105 6
	19 trans-1,2-Dichloroethene	96	3 752	3.752	(0 568)	81735	100.000	107.1
	20 Methyl tert-butyl ether	73	3.825	3.825	(0.579)	160454	100 000	107 7
	24 1,1-Dichloroethane	63	4 403	4.403	(0.666)	162281	100 000	107 7
	27 2,2-Dichloropropane	77	5.200	5.200	(0 787)	87951	100.000	111.2
	28 cis-1,2-dichloroethene	96	5.224	5.224	(0.790)	86235	100.000	108.7
M	29 1,2-Dichloroethene (total)	96				167971	200 000	215.8
	30 Bromochloromethane	128	5.522	5 522	(0.835)	42684	100.000	106.3
	31 2-Butanone	43	5 310	5.310	(0 803)	52426	100 000	115 8
	37 Chloroform	83	5 650	5.650	(0.855)	143109	100.000	107.0
	38 1,1,1-Trichloroethane	97	5.833	5.833	(0.882)	115189	100.000	108.8
	40 1,1-Dichloropropene	75	6.046	6.046	(0 914)	65456	100.000	107.4
	41 Carbon Tetrachloride	117	6.033	6.033	(0.913)	103489	100 000	108.5
	42 Benzene	78	6 277	6 277	(0.949)	357514	100.000	109.9
	45 1,2-Dichloroethane	62	6.307	6 307	(0 954)	119466	100.000	108.6
	47 Trichloroethene	130	7.019	7.019	(1.062)	83843	100.000	108.5
	49 1,2-Dichloropropane	63	7.250	7.250	(1.097)	86753	100.000	107.1
	50 Dibromomethane	93	7.372	7.372	(1.115)	47024	100 000	107 4
	53 Bromodichloromethane	83	7 560	7 560	(1.144)	94612	100.000	105 6
	57 cis-1,3-Dichloropropene	75	8.029	8 029	(1.214)	95581	100.000	106.6
	58 4-Methyl-2-Pentanone	43	8 217	8 217	(0 844)	65283	100.000	113.1
	60 Toluene	91	8.357	8.357	(0.858)	406931	100.000	114.4
	61 trans-1,3-Dichloropropene	75	8 601	8.601	(0.883)	94794	100.000	111.8
	63 1,3-Dichloropropane	76	8.935	8 935	(0.918)	131564	100 000	110 0
	64 1,1,2-Trichloroethane	97	8.777	8.777	(0 901)	77323	100.000	108.4
	65 Tetrachloroethene	164	8.911	8 911	(0 915)	72903	100.000	110.6
	66 2-Hexanone	43	9.057	9 057	(0 930)	65935	100.000	123.5
	67 Dibromochloromethane	129	9 166	9 166	(0.941)	73847	100.000	108.7
	68 1,2-Dibromoethane	107	9.264	9.264	(0.951)	73087	100.000	110.7
	70 Chlorobenzene	112	9.763	9.763	(1 002)	278806	100.000	106 0
	71 1,1,1,2-Tetrachloroethane	131	9 848	9.848	(1.011)	81327	100 000	106.9
	72 Ethylbenzene	106	9.884	9.884	(1.015)	148787	100 000	112 5
	73 m + p-Xylene	106	10.000	10 000	(1 027)	392510	200.000	225.5
	74 Xylene-o	106	10 389	10 389	(1 067)	171706	100.000	115.4
M	75 Xylenes (total)	106				564217	100.000	379.4
	76 Styrene	104	10 408	10.408	(1.069)	313727	100.000	115.5
	77 Bromoform	173	10.578	10.578	(1.086)	40741	100.000	105 2
	78 Isopropylbenzene	105	10.760	10.760	(1 105)	440077	100.000	116 7
	79 Bromobenzene	156	11 046	11 046	(0 916)	109078	100 000	108.1
	81 n-Propylbenzene	120	11 168	11.168	(0 926)	138481	100.000	116 0
	82 2-Chlorotoluene	126	11 247	11 247	(0.933)	117882	100.000	111.2
	83 1,1,2,2-Tetrachloroethane	83	11.058	11.058	(0.917)	106555	100.000	103.7
	84 1,2,3-Trichloropropane	110	11 095	11.095	(0.920)	33015	100.000	107.1
	85 4-Chlorotoluene	126	11 357	11.357	(0.942)	128800	100.000	111 0
	86 1,3,5-Trimethylbenzene	105	11.344	11.344	(0.941)	405512	100.000	112.9
	87 tert-Butylbenzene	119	11.667	11 667	(0 968)	325436	100.000	116 0
	88 1,2,4-Trimethylbenzene	105	11 715	11.715	(0 972)	414232	100 000	113 3

675 674

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
89 sec-Butylbenzene	105	11 886	11 886	(0 986)	527708	100 000	114 6
90 4-Isopropyltoluene	119	12 032	12 032	(0 998)	461431	100 000	113 0
91 1,3-Dichlorobenzene	146	11.989	11.989	(0.994)	234742	100 000	106.7
93 1,4-Dichlorobenzene	146	12.074	12.074	(1.002)	251690	100.000	103.9
94 n-Butylbenzene	91	12.439	12 439	(1 032)	427617	100 000	116.6
95 1,2-Dichlorobenzene	146	12.445	12 445	(1.032)	223863	100 000	107.9
96 1,2-Dibromo-3-chloropropane	157	13 218	13 218	(1.096)	12058	100 000	102 1
97 1,2,4-Trichlorobenzene	180	14.052	14.052	(1.166)	109863	100 000	104.5
98 Hexachlorobutadiene	225	14.228	14.228	(1.180)	73456	100 000	106.3
99 Naphthalene	128	14.289	14.289	(1.185)	258309	100.000	114.7
100 1,2,3-Trichlorobenzene	180	14.532	14.532	(1 205)	117994	100 000	107.1

Data File: \\qpitpa02\d\chem\hp3.i\30111d.b\CC30111.D
Date : 11-JAN-2001 09:10
Client ID: vstd50
Sample Info: VSTD50 5ML
Purge Volume: 5.0
Column phase: DB 624

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



STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30111d.b\CC30111.D
Lab Smp Id: vstd50 Client Smp ID: vstd50
Inj Date : 11-JAN-2001 09:10 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD50 5ML
Misc Info : ,30111d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30111d.b\8260bh2o.m
Meth Date : 15-Jan-2001 06:28 gordonk Quant Type: ISTD
Cal Date : 11-JAN-2001 09:10 Cal File: CC30111.D
Als bottle: 2 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC063

KLG 1/15/01

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 46 Fluorobenzene	96	6.608	6.608	(1.000)	752352	250 000	
* 69 Chlorobenzene-d5	119	9.735	9.735	(1.000)	201930	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.053	12.053	(1.000)	411404	250.000	
$ 39 Dibromofluoromethane	113	5.842	5 842	(0.884)	199922	250.000	271.4
$ 43 1,2-Dichloroethane-d4	65	6 219	6 219	(0.941)	224797	250.000	265.6
$ 59 Toluene-d8	98	8 293	8.293	(0.852)	889433	250.000	307.8
$ 80 Bromofluorobenzene	95	10.903	10.903	(1 120)	356954	250.000	298.5
1 Dichlorodifluoromethane	85	1.285	1.285	(0.195)	329157	250.000	295.9
2 Chloromethane	50	1.450	1.450	(0.219)	450257	250.000	264.9
3 Vinyl Chloride	62	1.541	1.541	(0.233)	329974	250.000	279.9
4 Bromomethane	94	1.827	1.827	(0.276)	91032	250.000	262.3
5 Chloroethane	64	1 918	1.918	(0.290)	67759	250.000	287.1
6 Trichlorofluoromethane	101	2 167	2 167	(0.328)	346147	250.000	284 0
12 1,1-Dichloroethene	96	2 733	2.733	(0 414)	174797	250.000	268.7
15 Carbon Disulfide	76	2 958	2.958	(0 448)	578952	250.000	286.2
13 Acetone	43	2.855	2.855	(0 432)	110740	250.000	152 5

675 877

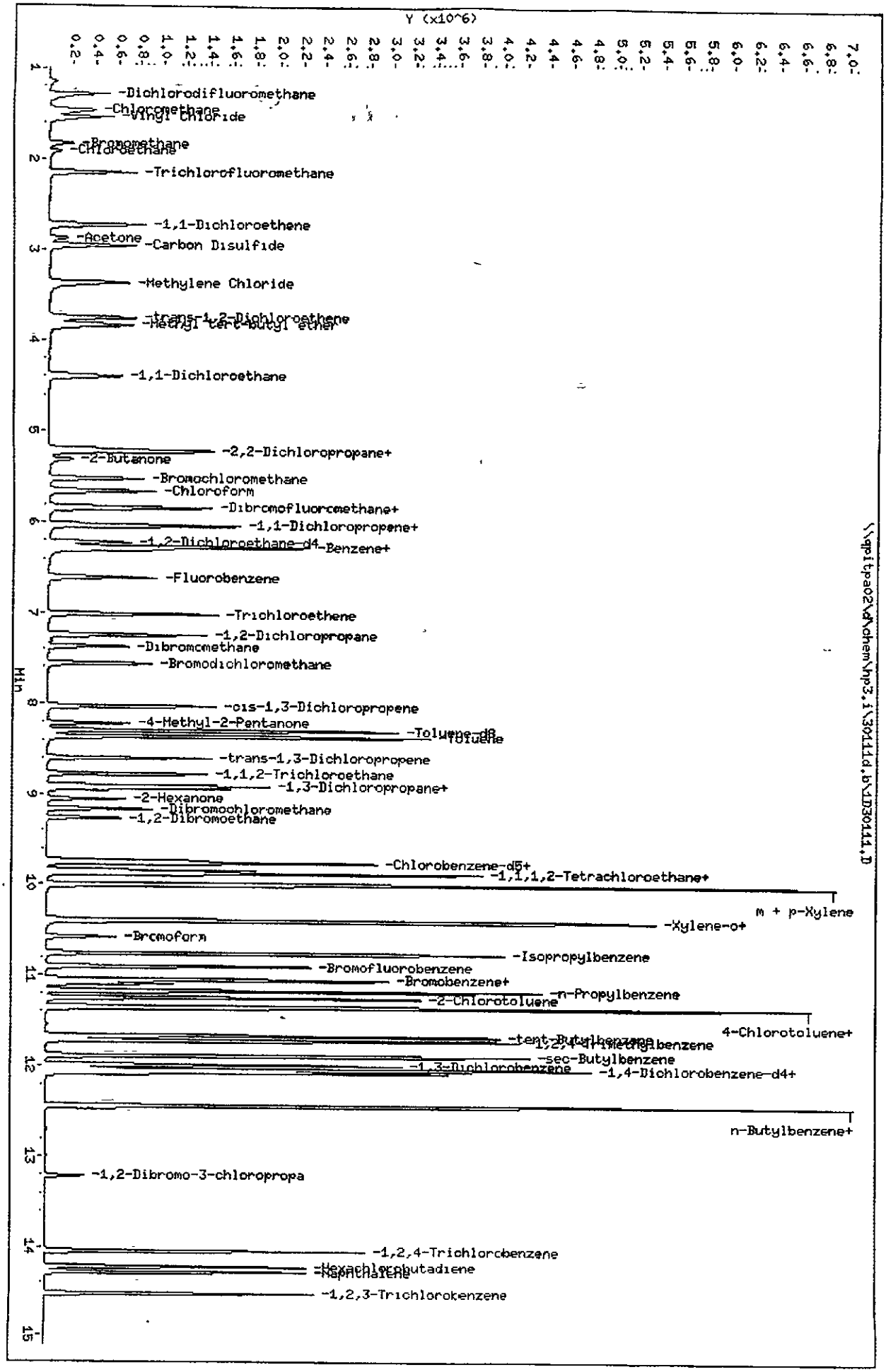
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
18	Methylene Chloride	84	3 360	3.360	(0 508)	197306	250 000	258 1
19	trans-1,2-Dichloroethene	96	3.749	3.749	(0 567)	198449	250.000	259 1
20	Methyl tert-butyl ether	73	3.816	3.816	(0 577)	396917	250.000	266.3
24	1,1-Dichloroethane	63	4 400	4.400	(0 666)	403176	250.000	267.5
27	2,2-Dichloropropane	77	5 203	5 203	(0 787)	222750	250.000	286 7
28	cis-1,2-dichloroethene	96	5.215	5 215	(0 789)	233355	250 000	295.6
M 29	1,2-Dichloroethene (total)	96				431805	500.000	555.3
30	Bromochloromethane	128	5.519	5.519	(0.835)	109640	250 000	271.2
31	2-Butanone	43	5.300	5.300	(0 802)	118121	250.000	272.2
37	Chloroform	83	5 653	5.653	(0 855)	364302	250 000	271.5
38	1,1,1-Trichloroethane	97	5.836	5 836	(0.883)	295939	250.000	280.9
40	1,1-Dichloropropene	75	6 043	6 043	(0 914)	193269	250.000	316.6
41	Carbon Tetrachloride	117	6 030	6 030	(0 913)	277754	250.000	292.3
42	Benzene	78	6.274	6.274	(0 949)	931487	250.000	289.7
45	1,2-Dichloroethane	62	6.304	6.304	(0 954)	300263	250 000	274.2
47	Trichloroethene	130	7.016	7 016	(1 062)	221373	250.000	287.7
49	1,2-Dichloropropane	63	7.247	7 247	(1.097)	235155	250 000	289.3
50	Dibromomethane	93	7.369	7.369	(1.115)	121118	250.000	276 1
53	Bromodichloromethane	83	7.557	7.557	(1.144)	258139	250.000	285 0
57	cis-1,3-Dichloropropene	75	8 026	8.026	(1 214)	296380	250.000	328.9
58	4-Methyl-2-Pentanone	43	8 208	8.208	(0.843)	194033	250.000	333.9
60	Toluene	91	8.360	8.360	(0.859)	1065172	250.000	299.5
61	trans-1,3-Dichloropropene	75	8.598	8.598	(0.883)	276584	250.000	321.7
63	1,3-Dichloropropane	76	8 938	8.938	(0.918)	341961	250.000	279.7
64	1,1,2-Trichloroethane	97	8 774	8.774	(0 901)	196643	250.000	267 3
65	Tetrachloroethene	164	8.914	8 914	(0.916)	191748	250 000	285.4
66	2-Hexanone	43	9.054	9.054	(0.930)	163713	250.000	322.6
67	Dibromochloromethane	129	9 163	9.163	(0.941)	208045	250.000	297.4
68	1,2-Dibromoethane	107	9.261	9.261	(0.951)	191060	250.000	284.0
70	Chlorobenzene	112	9.766	9.766	(1 003)	718322	250.000	261 5
71	1,1,1,2-Tetrachloroethane	131	9 851	9 851	(1.012)	217715	250.000	275 2
72	Ethylbenzene	106	9 881	9 881	(1.015)	400060	250.000	299.6
73	m + p-Xylene	106	10.003	10 003	(1.027)	1012857	500.000	577.2
74	Xylene-o	106	10.392	10.392	(1.067)	466652	250.000	315.8
M 75	Xylenes (total)	106				1479510	250.000	1001
76	Styrene	104	10.404	10 404	(1 069)	824475	250.000	305 7
77	Bromoform	173	10 581	10.581	(1 087)	119044	250.000	293.2
78	Isopropylbenzene	105	10.757	10.757	(1 105)	1225711	250.000	329.3
79	Bromobenzene	156	11 049	11.049	(0 917)	284551	250.000	285.3
81	n-Propylbenzene	120	11.171	11.171	(0 927)	361114	250.000	319.5
82	2-Chlorotoluene	126	11 244	11 244	(0.933)	300232	250.000	291.3
83	1,1,2,2-Tetrachloroethane	83	11 061	11.061	(0.918)	266103	250.000	256.4
84	1,2,3-Trichloropropane	110	11 092	11.092	(0.920)	79758	250.000	260 4
85	4-Chlorotoluene	126	11.353	11.353	(0.942)	310656	250.000	275 3
86	1,3,5-Trimethylbenzene	105	11 347	11.347	(0 941)	1035323	250.000	299.3
87	tert-Butylbenzene	119	11 670	11.670	(0.968)	876980	250.000	330.0
88	1,2,4-Trimethylbenzene	105	11.718	11.718	(0.972)	1055709	250 000	300 4

675 678

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
89 sec-Butylbenzene	105	11.889	11 889	(0.986)	1373870	250.000	312.5
90 4-Isopropyltoluene	119	12.035	12.035	(0 998)	1185977	250.000	301.4
91 1,3-Dichlorobenzene	146	11.986	11.986	(0 994)	598080	250.000	273 1
93 1,4-Dichlorobenzene	146	12.077	12.077	(1 002)	634181	250 000	259.4
94 n-Butylbenzene	91	12.442	12.442	(1 032)	1101643	250 000	318 2
95 1,2-Dichlorobenzene	146	12 442	12.442	(1.032)	559548	250.000	272.6
96 1,2-Dibromo-3-chloropropane	157	13 215	13 215	(1.096)	33343	250 000	277.0
97 1,2,4-Trichlorobenzene	180	14.048	14 048	(1.166)	339817	250.000	320.9
98 Hexachlorobutadiene	225	14.231	14.231	(1 181)	188211	250.000	273.0
99 Naphthalene	128	14.286	14.286	(1.185)	739525	250 000	344 1
100 1,2,3-Trichlorobenzene	180	14.529	14.529	(1.205)	314632	250 000	287.5

Data File: \\apitpa02\d\chem\hp3.i\301111d.b\1D30111.D
Date : 11-JAN-2001 10:27
Client ID: vstd100
Sample Info: VSTD100 5ML
Purge Volume: 5.0
Column phase: DB 624

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



675 880

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30111d.b\1D30111.D
Lab Smp Id: vstd100 Client Smp ID: vstd100
Inj Date : 11-JAN-2001 10:27 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD100 5ML
Misc Info : ,30111d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30111d.b\8260bh2o.m
Meth Date : 15-Jan-2001 06:29 gordonk Quant Type: ISTD
Cal Date : 11-JAN-2001 10:27 Cal File: 1D30111.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC063

KLG 1/15/01

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.609	6.609	(1.000)	796027	250.000	
* 69 Chlorobenzene-d5	119	9 736	9.736	(1.000)	210921	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12 054	12.054	(1.000)	430094	250 000	
$ 39 Dibromofluoromethane	113	5 849	5.849	(0.885)	420447	500 000	520 9
$ 43 1,2-Dichloroethane-d4	65	6 220	6.220	(0.941)	460253	500 000	500.9
$ 59 Toluene-d8	98	8 294	8 294	(0.852)	1831522	500 000	548 8
$ 80 Bromofluorobenzene	95	10 904	10.904	(1.120)	747567	500 000	552 6
1 Dichlorodifluoromethane	85	1.286	1.286	(0 195)	619635	500 000	501.1
2 Chloromethane	50	1 469	1.469	(0.222)	877306	500.000	481.2
3 Vinyl Chloride	62	1 542	1.542	(0.233)	691185	500 000	520.8
4 Bromomethane	94	1.827	1.827	(0.277)	158493	500.000	450.2
5 Chloroethane	64	1 919	1.919	(0.290)	106233	500.000	439.3
6 Trichlorofluoromethane	101	2.156	2.156	(0.326)	639011	500.000	482.7
12 1,1-Dichloroethene	96	2 728	2.728	(0.413)	365223	500.000	507.4
15 Carbon Disulfide	76	2 953	2.953	(0.447)	1216962	500.000	532.4
13 Acetone	43	2.874	2.874	(0 435)	264642	500.000	380.1

675 881

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
18	Methylene Chloride	84	3.367	3.367	(0.509)	403347	500.000	488.4
19	trans-1,2-Dichloroethene	96	3 750	3 750	(0 567)	414313	500.000	494 8
20	Methyl tert-butyl ether	73	3 835	3 835	(0 580)	862387	500 000	519.2
24	1,1-Dichloroethane	63	4.401	4 401	(0.666)	845756	500.000	507 4
27	2,2-Dichloropropane	77	5.204	5 204	(0.787)	517144	500.000	567 3
28	cis-1,2-dichloroethene	96	5.222	5.222	(0.790)	498504	500.000	551 4
M 29	1,2-Dichloroethene (total)	96				912818	1000 00	1048
30	Bromochloromethane	128	5 520	5 520	(0 835)	233970	500.000	521.9
31	2-Butanone	43	5 307	5.307	(0 803)	293712	500.000	564.1
37	Chloroform	83	5 654	5.654	(0 855)	741076	500 000	502.7
38	1,1,1-Trichloroethane	97	5.836	5 836	(0.883)	631504	500.000	530.6
40	1,1-Dichloropropene	75	6 043	6 043	(0.914)	425915	500.000	594.9
41	Carbon Tetrachloride	117	6.031	6 031	(0.913)	569756	500.000	531.3
42	Benzene	78	6 275	6 275	(0 949)	1909390	500.000	524 6
45	1,2-Dichloroethane	62	6 311	6.311	(0 955)	612917	500.000	504 7
47	Trichloroethene	130	7 017	7 017	(1.062)	479137	500.000	546.2
49	1,2-Dichloropropane	63	7.248	7 248	(1.097)	490783	500.000	536.9
50	Dibromomethane	93	7.376	7.376	(1 116)	258601	500 000	526.9
53	Bromodichloromethane	83	7 564	7 564	(1 145)	538248	500 000	533.7
57	cis-1,3-Dichloropropene	75	8 027	8 027	(1.214)	673020	500 000	625 3
58	4-Methyl-2-Pentanone	43	8.215	8 215	(0.844)	445322	500 000	627.5
60	Toluene	91	8.361	8.361	(0 859)	2140546	500 000	525.6
61	trans-1,3-Dichloropropene	75	8.598	8 598	(0.883)	618967	500.000	603.9
63	1,3-Dichloropropane	76	8.939	8 939	(0.918)	717676	500.000	524.9
64	1,1,2-Trichloroethane	97	8.781	8 781	(0.902)	406454	500 000	505.0
65	Tetrachloroethene	164	8.915	8.915	(0.916)	401247	500.000	530 4
66	2-Hexanone	43	9 055	9 055	(0.930)	421838	500.000	637.8
67	Dibromochloromethane	129	9 164	9.164	(0.941)	448475	500.000	562 6
68	1,2-Dibromoethane	107	9.268	9.268	(0.952)	409909	500.000	538.1
70	Chlorobenzene	112	9.766	9 766	(1.003)	1438369	500.000	489 6
71	1,1,1,2-Tetrachloroethane	131	9 852	9.852	(1.012)	461377	500.000	528.7
72	Ethylbenzene	106	9 882	9 882	(1 015)	816897	500.000	536 0
73	m + p-Xylene	106	10 004	10.004	(1 027)	1956366	1000.00	999 5
74	Xylene-o	106	10.393	10.393	(1.067)	943387	500.000	546.5
M 75	Xylenes (total)	106				2899753	500.000	1680
76	Styrene	104	10 405	10.405	(1 069)	1653656	500.000	530 4
77	Bromoform	173	10.582	10.582	(1 087)	258000	500.000	566 3
78	Isopropylbenzene	105	10.758	10.758	(1.105)	2483111	500 000	561.4
79	Bromobenzene	156	11.050	11 050	(0.917)	585659	500 000	528.7
81	n-Propylbenzene	120	11 172	11.172	(0.927)	748628	500 000	559.6
82	2-Chlorotoluene	126	11 251	11.251	(0.933)	621466	500.000	532.6
83	1,1,2,2-Tetrachloroethane	83	11.062	11 062	(0.918)	542296	500.000	492 8
84	1,2,3-Trichloropropane	110	11.093	11.093	(0.920)	166795	500.000	501.8
85	4-Chlorotoluene	126	11.360	11.360	(0.942)	616124	500.000	495.0
86	1,3,5-Trimethylbenzene	105	11 348	11.348	(0.941)	2086800	500 000	529.3
87	tert-Butylbenzene	119	11.671	11.671	(0.968)	1849694	500.000	579.8
88	1,2,4-Trimethylbenzene	105	11 719	11.719	(0.972)	2193685	500.000	541.8

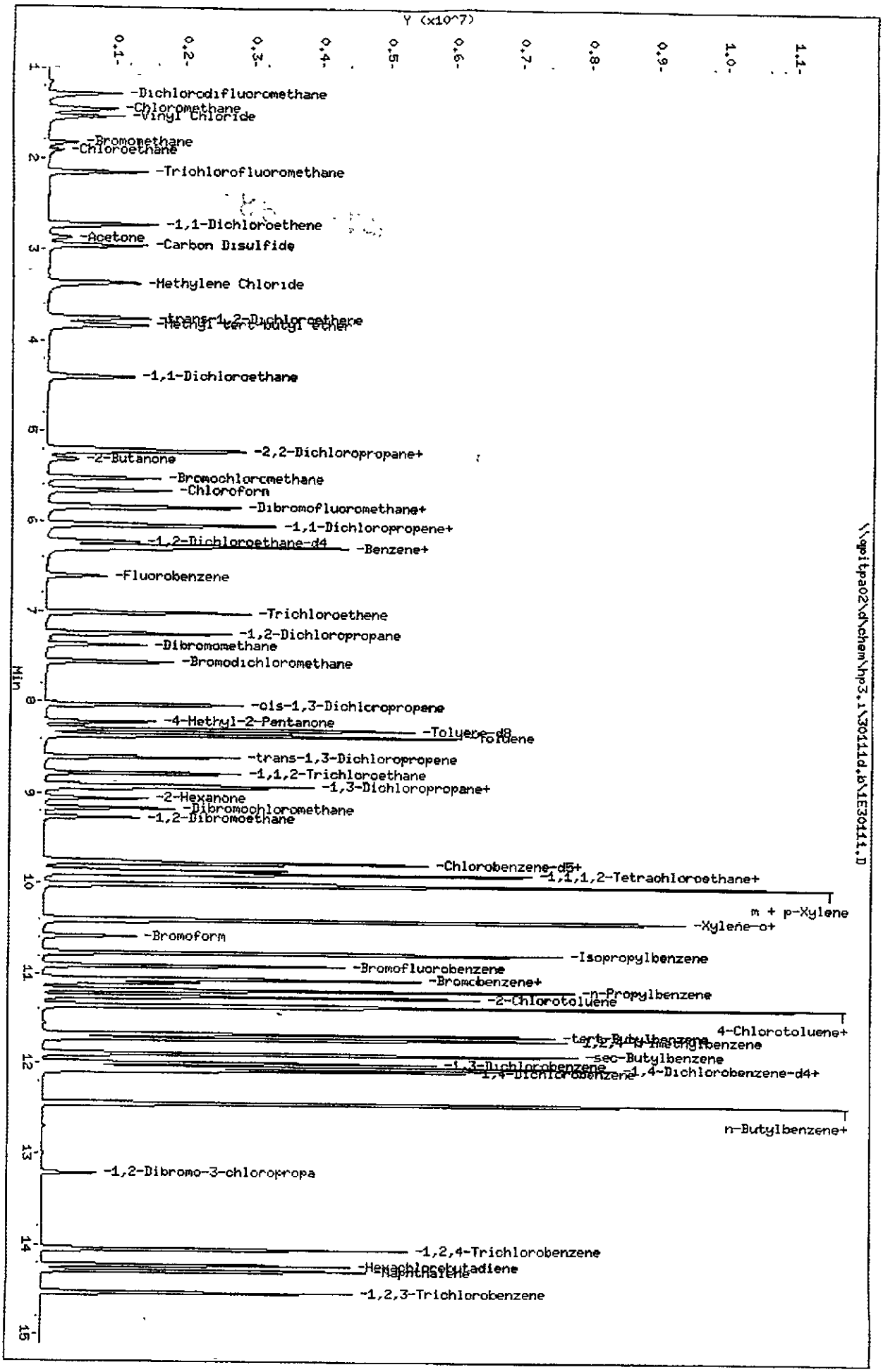
675 682

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
89 sec-Butylbenzene	105	11.890	11.890	(0 986)	2831718	500.000	551.5
90 4-Isopropyltoluene	119	12 036	12 036	(0 998)	2415908	500.000	536 1
91 1,3-Dichlorobenzene	146	11 987	11 987	(0 994)	1232726	500.000	515 1
93 1,4-Dichlorobenzene	146	12 078	12 078	(1 002)	1276643	500 000	492 2
94 n-Butylbenzene	91	12 443	12 443	(1.032)	2211381	500.000	543.8
95 1,2-Dichlorobenzene	146	12.443	12 443	(1.032)	1088869	500 000	490 5
96 1,2-Dibromo-3-chloropropane	157	13.216	13.216	(1.096)	79780	500.000	589.8
97 1,2,4-Trichlorobenzene	180	14 049	14.049	(1.166)	768584	500.000	623.1
98 Hexachlorobutadiene	225	14 232	14.232	(1 181)	406297	500.000	533.7
99 Naphthalene	128	14.286	14.286	(1.185)	1619048	500.000	616 0
100 1,2,3-Trichlorobenzene	180	14.530	14.530	(1 205)	677521	500.000	551.6

675 883

Data File: \\spitpa02\d\chem\hp3.i\30111d.b\1E30111.D
Date : 11-JAN-2001 10:49
Client ID: vstd200
Sample Info: VSTD200 5ML
Purge Volume: 5.0
Column phase: DB 624

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



675 884

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30111d.b\1E30111.D
Lab Smp Id: vstd200 Client Smp ID: vstd200
Inj Date : 11-JAN-2001 10:49 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD200 5ML
Misc Info : ,30111d.b,8260bh2o.m
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30111d.b\8260bh2o.m
Meth Date : 15-Jan-2001 06:29 gordonk Quant Type: ISTD
Cal Date : 11-JAN-2001 10:49 Cal File: 1E30111.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC063

KLG 1/15/01

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 46 Fluorobenzene	96	6.615	6 615	(1.000)	770070	250.000	
* 69 Chlorobenzene-d5	119	9.736	9 736	(1.000)	204820	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.054	12.054	(1.000)	390800	250.000	
$ 39 Dibromofluoromethane	113	5 849	5.849	(0 884)	797163	1000 00	1017
$ 43 1,2-Dichloroethane-d4	65	6 226	6.226	(0 941)	881823	1000 00	993.7
$ 59 Toluene-d8	98	8.294	8.294	(0.852)	3382680	1000.00	1035
$ 80 Bromofluorobenzene	95	10.910	10.910	(1.121)	1407453	1000.00	1056
1 Dichlorodifluoromethane	85	1.286	1.286	(0.194)	1230696	1000.00	1023
2 Chloromethane	50	1 456	1.456	(0.220)	1747207	1000.00	992.4
3 Vinyl Chloride	62	1 541	1.541	(0 233)	1349811	1000 00	1041
4 Bromomethane	94	1 827	1.827	(0 276)	312799	1000.00	933.6
5 Chloroethane	64	1.919	1.919	(0.290)	203972	1000 00	894 8
6 Trichlorofluoromethane	101	2 162	2 162	(0 327)	1262199	1000 00	988 4
12 1,1-Dichloroethene	96	2.734	2 734	(0 413)	701561	1000 00	1006
15 Carbon Disulfide	76	2 959	2 959	(0 447)	2362887	1000 00	1054
13 Acetone	43	2 874	2.874	(0 434)	517887	1000 00	806.1

675 885

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
18	Methylene Chloride	84	3.366	3.366	(0.509)	765781	1000.00	966.6
19	trans-1,2-Dichloroethene	96	3.756	3.756	(0 568)	802929	1000.00	993.0
20	Methyl tert-butyl ether	73	3.835	3 835	(0 580)	1830187	1000.00	1108
24	1,1-Dichloroethane	63	4 401	4.401	(0 665)	1695420	1000.00	1041
27	2,2-Dichloropropane	77	5 204	5 204	(0.787)	1092931	1000 00	1183
28	cis-1,2-dichloroethene	96	5 222	5 222	(0.789)	999917	1000.00	1111
M 29	1,2-Dichloroethene (total)	96				1802846	2000.00	2111
30	Bromochloromethane	128	5.520	5.520	(0 834)	479825	1000.00	1083
31	2-Butanone	43	5.307	5 307	(0 802)	635665	1000.00	1199
37	Chloroform	83	5 654	5 654	(0 855)	1480226	1000.00	1030
38	1,1,1-Trichloroethane	97	5 836	5.836	(0.882)	1281522	1000.00	1088
40	1,1-Dichloropropene	75	6.043	6 043	(0.914)	871669	1000.00	1197
41	Carbon Tetrachloride	117	6.037	6.037	(0 913)	1154815	1000.00	1089
42	Benzene	78	6.280	6 280	(0 949)	3731685	1000.00	1047
45	1,2-Dichloroethane	62	6.311	6.311	(0 954)	1221242	1000.00	1031
47	Trichloroethene	130	7 023	7 023	(1 062)	971374	1000 00	1112
49	1,2-Dichloropropane	63	7.254	7 254	(1.097)	991104	1000.00	1094
50	Dibromomethane	93	7 375	7 375	(1.115)	530739	1000.00	1092
53	Bromodichloromethane	83	7.564	7.564	(1 143)	1112757	1000.00	1109
57	cis-1,3-Dichloropropene	75	8.026	8.026	(1.213)	1425253	1000.00	1275
58	4-Methyl-2-Pentanone	43	8.215	8 215	(0.844)	1012517	1000 00	1343
60	Toluene	91	8.361	8 361	(0.859)	4113657	1000.00	1032
61	trans-1,3-Dichloropropene	75	8.604	8 604	(0.884)	1300214	1000.00	1231
63	1,3-Dichloropropane	76	8.939	8.939	(0.918)	1448481	1000.00	1071
64	1,1,2-Trichloroethane	97	8 781	8.781	(0.902)	841083	1000.00	1060
65	Tetrachloroethene	164	8.915	8.915	(0.916)	799128	1000 00	1069
66	2-Hexanone	43	9.055	9 055	(0.930)	917240	1000 00	1316
67	Dibromochloromethane	129	9 164	9 164	(0.941)	949790	1000.00	1174
68	1,2-Dibromoethane	107	9 267	9.267	(0.952)	861758	1000.00	1128
70	Chlorobenzene	112	9.766	9 766	(1.003)	2766088	1000.00	975 6
71	1,1,1,2-Tetrachloroethane	131	9.851	9.851	(1.012)	931044	1000 00	1077
72	Ethylbenzene	106	9.882	9.882	(1 015)	1557654	1000.00	1041
73	m + p-Xylene	106	10.004	10 004	(1.027)	3419111	2000.00	1836
74	Xylene-o	106	10.393	10.393	(1.067)	1740120	1000.00	1030
M 75	Xylenes (total)	106				5159231	1000.00	3054
76	Styrene	104	10.411	10.411	(1 069)	3002624	1000 00	993 4
77	Bromoform	173	10.581	10 581	(1.087)	581735	1000.00	1237
78	Isopropylbenzene	105	10 764	10.764	(1.106)	4723282	1000 00	1078
79	Bromobenzene	156	11.050	11.050	(0.917)	1125595	1000 00	1092
81	n-Propylbenzene	120	11 172	11.172	(0.927)	1407704	1000 00	1122
82	2-Chlorotoluene	126	11.251	11.251	(0.933)	1187520	1000.00	1094
83	1,1,2,2-Tetrachloroethane	83	11 062	11 062	(0.918)	1080088	1000.00	1063
84	1,2,3-Trichloropropane	110	11 099	11.099	(0 921)	349825	1000.00	1123
85	4-Chlorotoluene	126	11 360	11 360	(0.942)	1075443	1000 00	960 4
86	1,3,5-Trimethylbenzene	105	11.348	11 348	(0 941)	3728966	1000.00	1032
87	tert-Butylbenzene	119	11.670	11.670	(0.968)	3497700	1000.00	1159
88	1,2,4-Trimethylbenzene	105	11 719	11.719	(0.972)	4113333	1000 00	1092

675 886

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
89	sec-Butylbenzene	105	11.889	11.889	(0.986)	5277151	1000 00	1102
90	4-Isopropyltoluene	119	12.035	12.035	(0.998)	4453554	1000.00	1069
91	1,3-Dichlorobenzene	146	11.993	11.993	(0 995)	2330605	1000 00	1057
93	1,4-Dichlorobenzene	146	12 078	12 078	(1 002)	2383927	1000 00	1009
94	n-Butylbenzene	91	12 443	12.443	(1.032)	3909351	1000 00	1046
95	1,2-Dichlorobenzene	146	12.449	12.449	(1.033)	1868962	1000.00	940.4
96	1,2-Dibromo-3-chloropropane	157	13 216	13.216	(1 096)	192481	1000.00	1407
97	1,2,4-Trichlorobenzene	180	14.049	14 049	(1 166)	1538729	1000 00	1278
98	Hexachlorobutadiene	225	14.232	14 232	(1 181)	806003	1000.00	1128
99	Naphthalene	128	14 286	14.286	(1.185)	3463596	1000.00	1330
100	1,2,3-Trichlorobenzene	180	14.536	14.536	(1.206)	1382167	1000.00	1182

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

675 887

Lab Name: STL PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: 30213D

Instrument ID: HP3 Calibration Date: 02/13/01 Time: 0618

Lab File ID: CC30213 Init. Calib. Date(s): 01/11/01 01/11/01

Heated Purge: (Y/N) N Init. Calib. Times: 0910 1049

GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.391	0.458	0.01	17.1	50.0
Chloromethane	0.571	0.662	0.1	15.9	50.0
Vinyl Chloride	0.421	0.472	0.01	12.1	20.0
Bromomethane	0.109	0.085	0.01	22.0	50.0
Chloroethane	0.074	0.072	0.01	2.7	50.0
Trichlorofluoromethane	0.415	0.465	0.01	12.0	50.0
1,1-Dichloroethene	0.226	0.195	0.01	13.7	20.0
Methylene Chloride	0.257	0.215	0.01	16.3	50.0
trans-1,2-Dichloroethene	0.262	0.212	0.01	19.1	50.0
1,1-Dichloroethane	0.529	0.544	0.1	2.8	50.0
cis-1,2-dichloroethene	0.292	0.311	0.01	6.5	50.0
Chloroform	0.466	0.499	0.01	7.1	20.0
Bromochloromethane	0.144	0.153	0.01	6.2	50.0
1,1,1-Trichloroethane	0.382	0.412	0.01	7.8	50.0
Carbon Tetrachloride	0.344	0.380	0.01	10.5	50.0
1,2-Dichloroethane	0.384	0.420	0.01	9.4	50.0
Benzene	1.157	1.217	0.01	5.2	50.0
Trichloroethene	0.283	0.298	0.01	5.3	50.0
1,2-Dichloropropane	0.294	0.312	0.01	6.1	20.0
Bromodichloromethane	0.326	0.363	0.01	11.3	50.0
cis-1,3-Dichloropropene	0.363	0.414	0.01	14.0	50.0
Toluene	4.865	5.594	0.01	15.0	20.0
trans-1,3-Dichloropropene	1.289	1.596	0.01	23.8	50.0
1,1,2-Trichloroethane	0.969	1.102	0.01	13.7	50.0
Tetrachloroethene	0.912	0.974	0.01	6.8	50.0
Dibromochloromethane	0.988	1.168	0.01	18.2	50.0
Chlorobenzene	3.461	3.805	0.3	9.9	50.0
Ethylbenzene	1.825	2.077	0.01	13.8	20.0
Styrene	3.689	4.326	0.01	17.3	50.0
Bromoform	0.574	0.653	0.1	13.8	50.0
1,1,2,2-Tetrachloroethane	0.650	0.854	0.3	31.4	50.0
1,3-Dichlorobenzene	1.411	1.760	0.01	24.7	50.0
1,4-Dichlorobenzene	1.511	1.812	0.01	19.9	50.0
1,2-Dichlorobenzene	1.271	1.569	0.01	23.4	50.0
Dibromomethane	0.157	0.174	0.01	10.8	50.0
1,2-Dibromoethane	0.933	1.121	0.01	20.2	50.0
1,1,1,2-Tetrachloroethane	1.055	1.254	0.01	18.9	50.0

FORM 7
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: 30213D

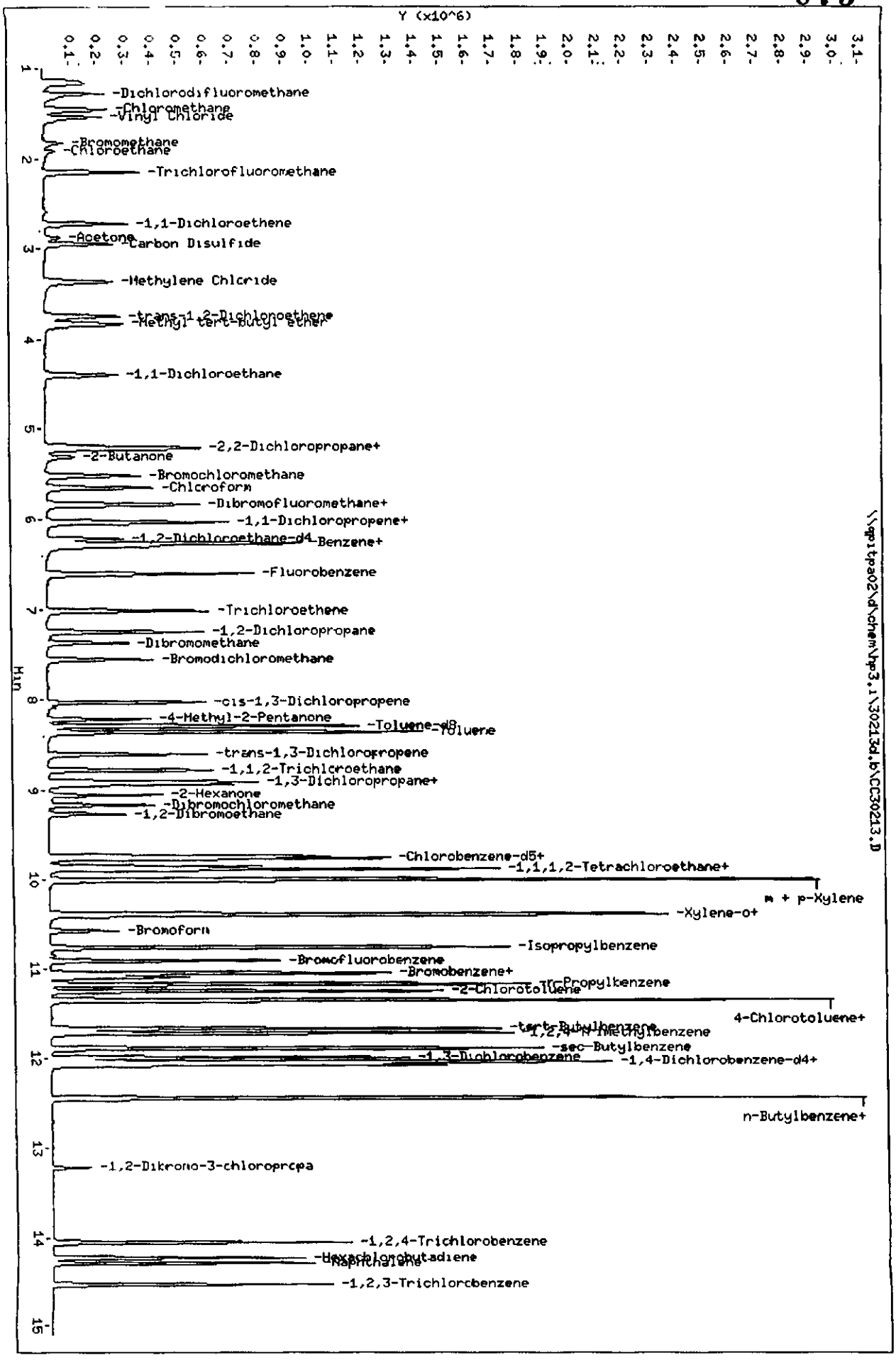
Instrument ID: HP3 Calibration Date: 02/13/01 Time: 0618

Lab File ID: CC30213 Init. Calib. Date(s): 01/11/01 01/11/01

Heated Purge: (Y/N) N Init. Calib. Times: 0910 1049

GC Column: DB 624 ID: 0.18 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
1,2,3-Trichloropropane	0.199	0.273	0.01	37.2	50.0	
1,2-Dibromo-3-chloropropane	0.087	0.117	0.01	34.5	50.0	
2,2-Dichloropropane	0.300	0.351	0.01	17.0	50.0	
1,1-Dichloropropene	0.237	0.261	0.01	10.1	50.0	
1,3-Dichloropropane	1.650	1.997	0.01	21.0	50.0	
n-Propylbenzene	0.802	1.087	0.01	35.5	50.0	
Bromobenzene	0.659	0.831	0.01	26.1	50.0	
1,3,5-Trimethylbenzene	2.310	3.178	0.01	37.6	50.0	
2-Chlorotoluene	0.695	0.944	0.01	35.8	50.0	
4-Chlorotoluene	0.716	0.938	0.01	31.0	50.0	
tert-Butylbenzene	1.931	2.698	0.01	39.7	50.0	
1,2,4-Trimethylbenzene	2.409	3.345	0.01	38.8	50.0	
sec-Butylbenzene	3.063	4.212	0.01	37.5	50.0	
4-Isopropyltoluene	2.665	3.558	0.01	33.5	50.0	
n-Butylbenzene	2.391	3.326	0.01	39.1	50.0	
1,2,4-Trichlorobenzene	0.771	1.051	0.01	36.3	50.0	
Hexachlorobutadiene	0.457	0.559	0.01	22.3	50.0	
Naphthalene	1.665	2.383	0.01	43.1	50.0	
1,2,3-Trichlorobenzene	0.748	0.976	0.01	30.5	50.0	
Acetone	0.208	0.157	0.01	24.5	50.0	
Carbon Disulfide	0.728	0.607	0.01	16.6	50.0	
2-Butanone	0.172	0.238	0.01	38.4	50.0	
4-Methyl-2-Pentanone	0.920	1.455	0.01	58.2	50.0	<-
2-Hexanone	0.851	1.556	0.01	82.8	50.0	<-
Methyl tert-butyl ether	0.536	0.522	0.01	2.6	50.0	
Isopropylbenzene	5.347	6.463	0.01	20.9	50.0	
1,2-Dichloroethene (total)	0.277	0.261	0.01	5.8	50.0	
Xylenes (total)	2.062	2.393	0.01	16.0	50.0	
Dibromofluoromethane	0.255	0.245	0.01	3.9	50.0	
1,2-Dichloroethane-d4	0.288	0.291	0.01	1.0	50.0	
Toluene-d8	3.990	4.258	0.01	6.7	50.0	
Bromofluorobenzene	1.626	1.798	0.01	10.6	50.0	



Data File: \\qpitpa02\d\chem\hp3.i\30213d.b\CC30213.D
Date : 13-FEB-2001 06:18
Client ID: vstd50
Sample Info: VSTD50 5ML
Purge Volume: 5.0
Column phase: DB 624

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

Data File: \\qpitpa02\d\chem\hp3.i\30213d.b\CC30213.D
Report Date: 13-Feb-2001 06:51

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30213d.b\CC30213.D
Lab Smp Id: vstd50 Client Smp ID: vstd50
Inj Date : 13-FEB-2001 06:18 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VSTD50 5ML
Misc Info : ,30213d.b,8260bh2o.m,4-dwh20.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30213d.b\8260bh2o.m
Meth Date : 13-Feb-2001 06:51 gordonk Quant Type: ISTD
Cal Date : 11-JAN-2001 10:49 Cal File: 1E30111.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC063

VG 2/13/01

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 46 Fluorobenzene	96	6.608	6 608	(1.000)	664169	250 000	
* 69 Chlorobenzene-d5	119	9 735	9 735	(1 000)	164557	250 000	
* 92 1,4-Dichlorobenzene-d4	152	12 053	12.053	(1 000)	288411	250 000	
$ 39 Dibromofluoromethane	113	5 842	5 842	(0 884)	163018	250 000	241 0
$ 43 1,2-Dichloroethane-d4	65	6 219	6 219	(0 941)	193115	250 000	252 3
$ 59 Toluene-d8	98	8.293	8.293	(0 852)	700734	250 000	266 8
$ 80 Bromofluorobenzene	95	10 909	10 909	(1 121)	295961	250 000	276 5
1 Dichlorodifluoromethane	85	1.285	1.285	(0 195)	303953	250 000	292 9
2 Chloromethane	50	1 455	1 455	(0 220)	439622	250.000	289 5
3 Vinyl Chloride	62	1.541	1 541	(0 233)	313345	250 000	280.1
4 Bromomethane	94	1.827	1.827	(0 276)	56762	250 000	196.4
5 Chloroethane	64	1 918	1 918	(0 290)	47916	250.000	243.7
6 Trichlorofluoromethane	101	2 149	2 149	(0 325)	308678	250 000	280 3
12 1,1-Dichloroethene	96	2 721	2 721	(0.412)	129687	250.000	215 6
15 Carbon Disulfide	76	2.946	2 946	(0 446)	403180	250.000	208.5
13 Acetone	43	2 873	2 873	(0 435)	104338	250 000	188 3

675 891

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	18 Methylene Chloride	84	3.360	3.360	(0 508)	142883	250 000	209 1
	19 trans-1,2-Dichloroethene	96	3 743	3 743	(0 566)	140640	250 000	201 7
	20 Methyl tert butyl ether	73	3 828	3 828	(0 579)	347025	250.000	243 6
	24 1,1 Dichloroethane	63	4 394	4 394	(0 665)	361579	250 000	257.4
	27 2,2-Dichloropropane	77	5 197	5.197	(0 786)	232963	250 000	292 3
	28 cis-1,2-dichloroethene	96	5 221	5 221	(0 790)	206349	250 000	265 9
M	29 1,2-Dichloroethene (total)	96				346989	500 000	471.0
	30 Bromochloromethane	128	5 519	5.519	(0 835)	101428	250 000	265.5
	31 2-Butanone	43	5 312	5 312	(0 804)	158079	250 000	345 8
	37 Chloroform	83	5 653	5 653	(0 855)	331532	250 000	267 5
	38 1,1,1-Trichloroethane	97	5.829	5 829	(0.882)	273422	250 000	269 3
	40 1,1-Dichloropropene	75	6.036	6 036	(0 913)	173318	250 000	275 9
	41 Carbon Tetrachloride	117	6.030	6.030	(0 913)	252690	250.000	276.2
	42 Benzene	78	6 274	6 274	(0 949)	808095	250 000	263 0
	45 1,2-Dichloroethane	62	6 304	6.304	(0.954)	278780	250 000	273 0
	47 Trichloroethene	130	7.016	7 016	(1.062)	198156	250 000	263 1
	49 1,2-Dichloropropane	63	7 247	7 247	(1 097)	207371	250 000	265 5
	50 Dibromomethane	93	7 369	7.369	(1.115)	115345	250 000	275.2
	53 Bromodichloromethane	83	7 557	7 557	(1 144)	240877	250.000	278 4
	57 cis 1,3-Dichloropropene	75	8 026	8.026	(1 214)	275208	250 000	285.4
	58 4-Methyl-2-Pentanone	43	8 214	8.214	(0 844)	239371	250.000	395 2
	60 Toluene	91	8 360	8.360	(0 859)	920613	250 000	287.4
	61 trans 1,3-Dichloropropene	75	8.597	8 597	(0 883)	262571	250 000	309.4
	63 1,3-Dichloropropane	76	8 938	8 938	(0.918)	328628	250 000	302 6
	64 1,1,2-Trichloroethane	97	8 780	8.780	(0 902)	181382	250.000	284.5
	65 Tetrachloroethene	164	8.914	8 914	(0.916)	160287	250 000	266 9
	66 2-Hexanone	43	9 054	9.054	(0 930)	255977	250 000	457.0
	67 Dibromochloromethane	129	9 163	9 163	(0.941)	192153	250 000	295.5
	68 1,2-Dibromoethane	107	9 267	9 267	(0 952)	184438	250.000	300.4
	70 Chlorobenzene	112	9 765	9 765	(1 003)	626081	250 000	274.8
	71 1,1,1,2-Tetrachloroethane	131	9 851	9 851	(1 012)	206425	250.000	297 3
	72 Ethylbenzene	106	9.881	9 881	(1 015)	341861	250 000	284.5
	73 m + p-Xylene	106	10 003	10 003	(1.027)	834585	500 000	557.7
	74 Xylene-o	106	10 392	10.392	(1 067)	393772	250 000	290 2
M	75 Xylenes (total)	106				1228358	250.000	905 2
	76 Styrene	104	10 404	10 404	(1 069)	711799	250 000	293 1
	77 Bromoform	173	10.581	10.581	(1 087)	107447	250 000	284 4
	78 Isopropylbenzene	105	10 757	10 757	(1 105)	1063597	250.000	302 2
	79 Bromobenzene	156	11.049	11 049	(0 917)	239683	250.000	315.2
	81 n-Propylbenzene	120	11.171	11 171	(0 927)	313477	250 000	338 7
	82 2-Chlorotoluene	126	11 244	11.244	(0 933)	272415	250 000	340 0
	83 1,1,2,2-Tetrachloroethane	83	11 061	11 061	(0 918)	246297	250 000	328 5
	84 1,2,3-Trichloropropane	110	11.092	11.092	(0.920)	78737	250 000	342 4
	85 4-Chlorotoluene	126	11 353	11 353	(0 942)	270581	250 000	327 4
	86 1,3,5-Trimethylbenzene	105	11.347	11.347	(0 941)	916501	250 000	343 8
	87 tert Butylbenzene	119	11 670	11 670	(0 968)	778012	250 000	349 2
	88 1,2,4-Trimethylbenzene	105	11.718	11.718	(0 972)	964767	250 000	347 2

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
89 sec-Butylbenzene	105	11 889	11.889	(0.986)	1214944	250 000	343.8
90 4 Isopropyltoluene	119	12 035	12 035	(0 998)	1026104	250 000	333 7
91 1,3-Dichlorobenzene	146	11.986	11 986	(0.994)	507505	250 000	311.8
93 1,4 Dichlorobenzene	146	12 077	12 077	(1 002)	522539	250 000	299 8
94 n-Butylbenzene	91	12 442	12.442	(1 032)	959131	250 000	347.7
95 1,2-Dichlorobenzene	146	12 442	12 442	(1 032)	452590	250 000	308 6
96 1,2-Dibromo-3-chloropropane	157	13 221	13 221	(1 097)	33744	250 000	334 2
97 1,2,4 Trichlorobenzene	180	14 048	14.048	(1 166)	303096	250.000	341 0
98 Hexachlorobutadiene	225	14 231	14 231	(1 181)	161211	250.000	305 7
99 Naphthalene	128	14 285	14.285	(1 185)	687297	250 000	357.8
100 1,2,3-Trichlorobenzene	180	14 529	14.529	(1 205)	281408	250.000	326 1

GC/MS VOLATILE
QC DATA

Data File: \\QPITPA02\D\chem\hp3.i\30111d.b\BF30111.D

Date : 11-JAN-2001 08:44

Client ID: 31919D

Instrument: hp3.i

Sample Info: BFB 192-199-4 50NG

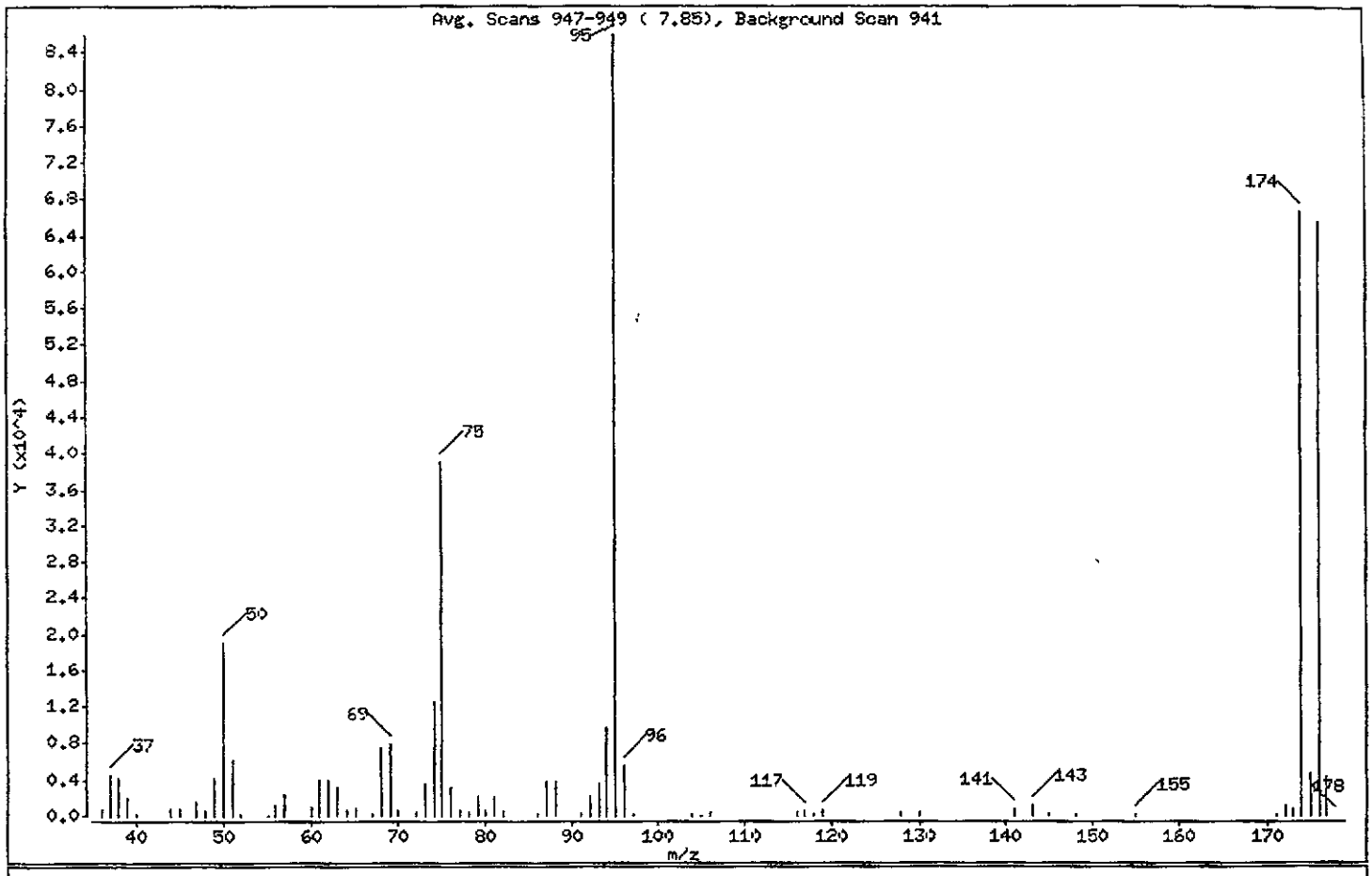
Volume Injected (uL): 1.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.18

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.97
75	30.00 - 60.00% of mass 95	45.59
96	5.00 - 9.00% of mass 95	6.37
173	Less than 2.00% of mass 174	0.91 (1.17)
174	50.00 - 100.00% of mass 95	77.71
175	5.00 - 9.00% of mass 174	5.51 (7.09)
176	95.00 - 101.00% of mass 174	76.42 (98.34)
177	5.00 - 9.00% of mass 176	5.06 (6.63)

Data File: \\QPITPA02\D\chem\hp3.1\30111d.b\BF30111.D

Date : 11-JAN-2001 08:44

Client ID: 31019D

Instrument: hp3.1

Sample Info: BFB 192-199-4 50NG

Volume Injected (uL): 1.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.18

Data File: BF30111.D

Spectrum: Avg. Scans 947-949 (7.85), Background Scan 941

Location of Maximum: 95.00

Number of points: 72

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	788	62.00	3952	86.00	120	135.00	74
37.00	4560	63.00	3244	87.00	3830	137.00	92
38.00	4174	64.00	558	88.00	3795	141.00	799
39.00	1898	66.00	833	91.00	263	143.00	1245
40.00	200	67.00	218	92.00	2190	145.00	235
44.00	723	68.00	7629	93.00	3516	148.00	150
45.00	826	69.00	7795	94.00	9721	155.00	170
46.00	86	70.00	549	95.00	85832	171.00	152
47.00	1581	72.00	448	96.00	5467	172.00	1159
48.00	636	73.00	3574	97.00	112	173.00	781
49.00	4110	74.00	12527	104.00	295	174.00	66704
50.00	18856	75.00	39128	105.00	77	175.00	4726
51.00	6090	76.00	3255	106.00	347	176.00	65592
52.00	205	77.00	510	116.00	313	177.00	4346
55.00	87	78.00	381	117.00	639	178.00	95
56.00	1282	79.00	2164	118.00	242		
57.00	2358	80.00	596	119.00	518		
60.00	936	81.00	2180	128.00	349		
61.00	3968	82.00	548	130.00	297		

Data File: \\QPITPA02\D\chem\hp3.i\30111d.b\BF30111.D

Date : 11-JAN-2001 08:44

Client ID: 31019D

Instrument: hp3.i

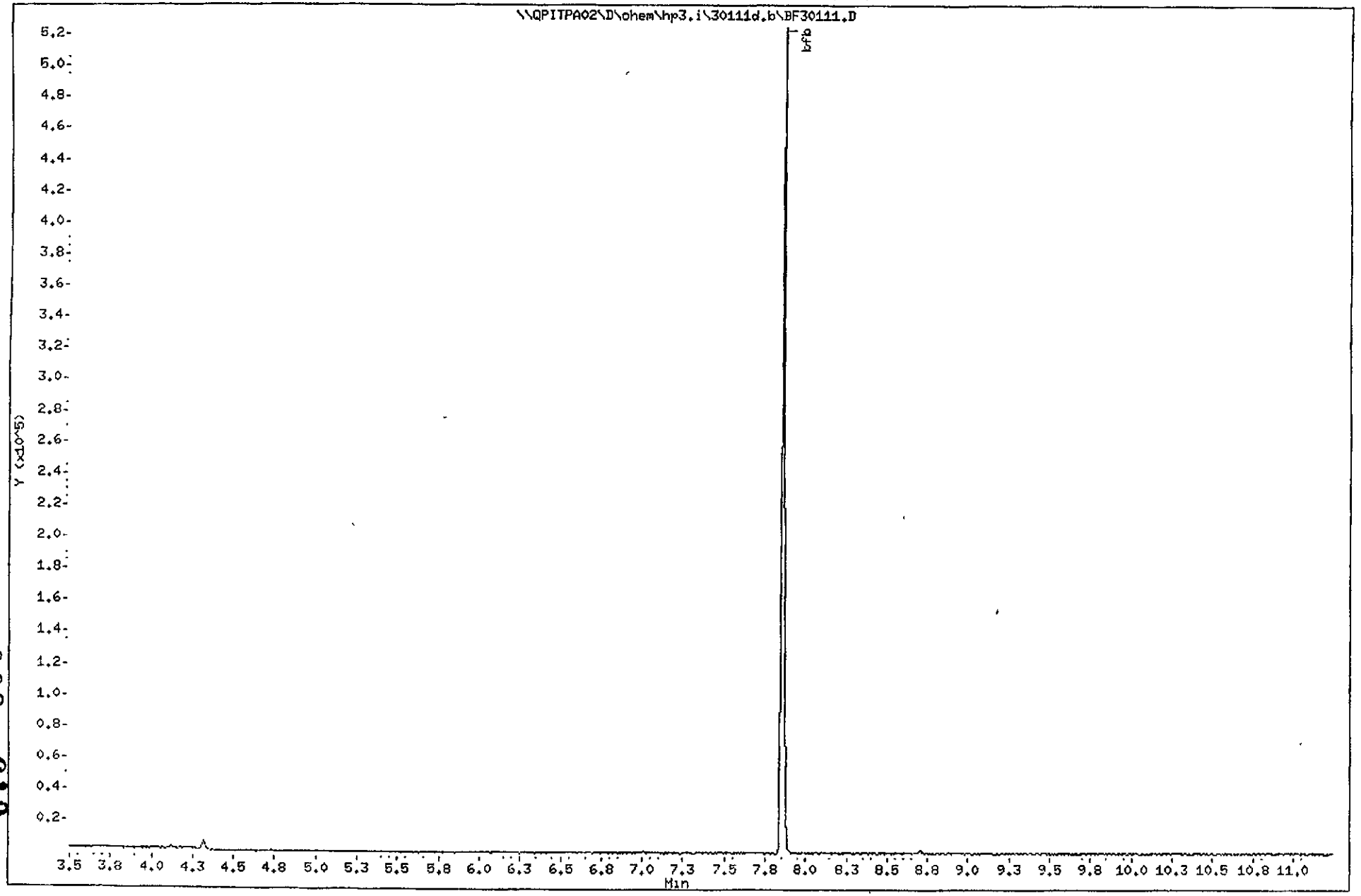
Sample Info: BFB 192-199-4 50NG

Volume Injected (uL): 1.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.18



Data File: \\qpitpa02\d\chem\hp3.1\30213d.b\BF30213.D

Date : 13-FEB-2001 05:50

Client ID: 31019D

Instrument: hp3.1

Sample Info: BFB 85-003-1 1UL

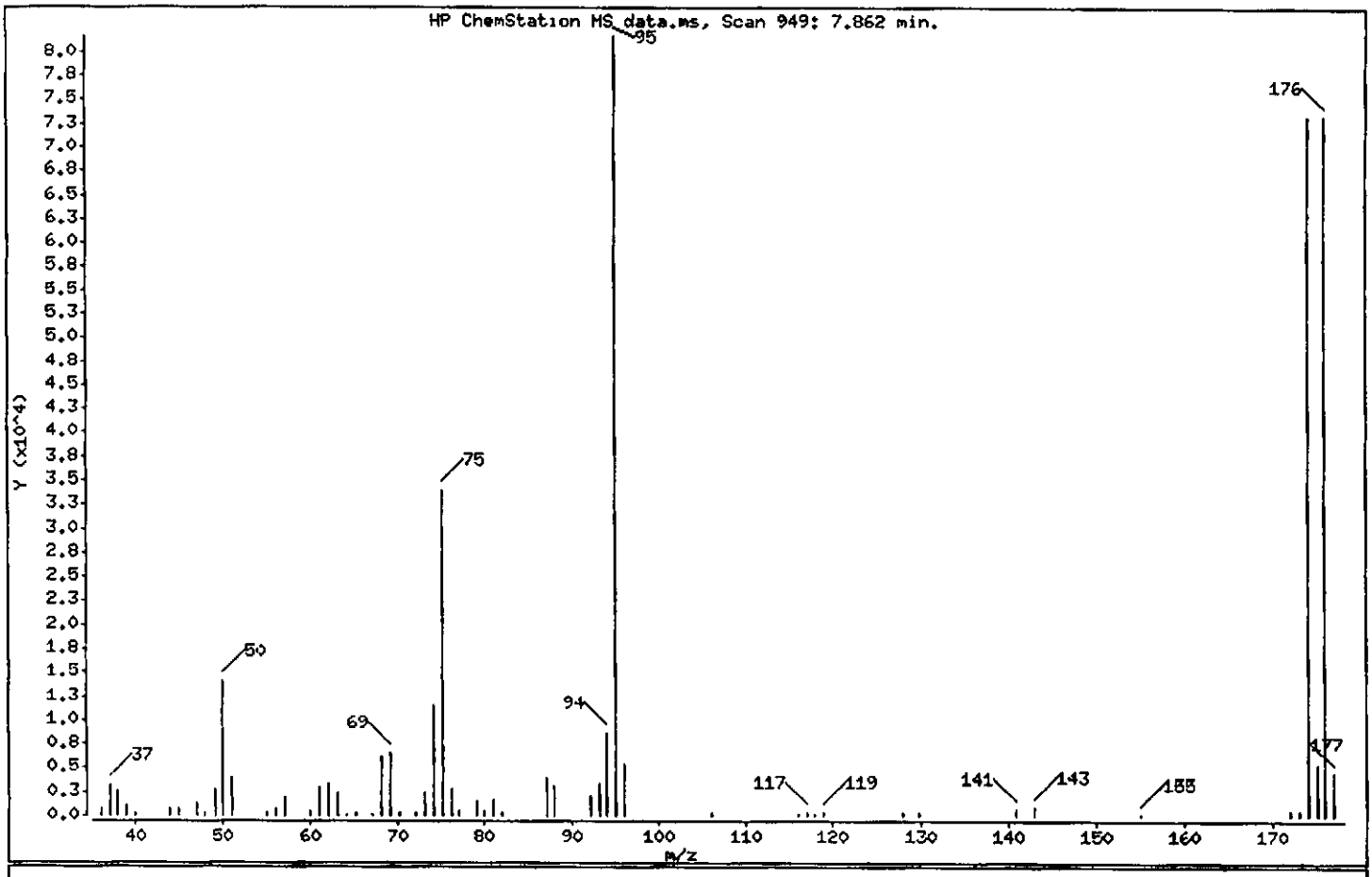
Volume Injected (uL): 1.0

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	17.17
75	30.00 - 60.00% of mass 95	41.80
96	5.00 - 9.00% of mass 95	6.62
173	Less than 2.00% of mass 174	0.74 (0.82)
174	50.00 - 100.00% of mass 95	89.82
175	5.00 - 9.00% of mass 174	6.63 (7.38)
176	95.00 - 101.00% of mass 174	89.86 (100.04)
177	5.00 - 9.00% of mass 176	5.47 (6.08)

Data File: \\qpittpa02\d\chem\hp3.1\30213d.b\BF30213.D

Date : 13-FEB-2001 05:50

Client ID: 31019D

Instrument: hp3.1

Sample Info: BFB 85-003-1 1UL

Volume Injected (uL): 1.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.18

Data File: BF30213.D

Spectrum: HP ChemStation MS data.ms, Scan 949: 7.862 min.

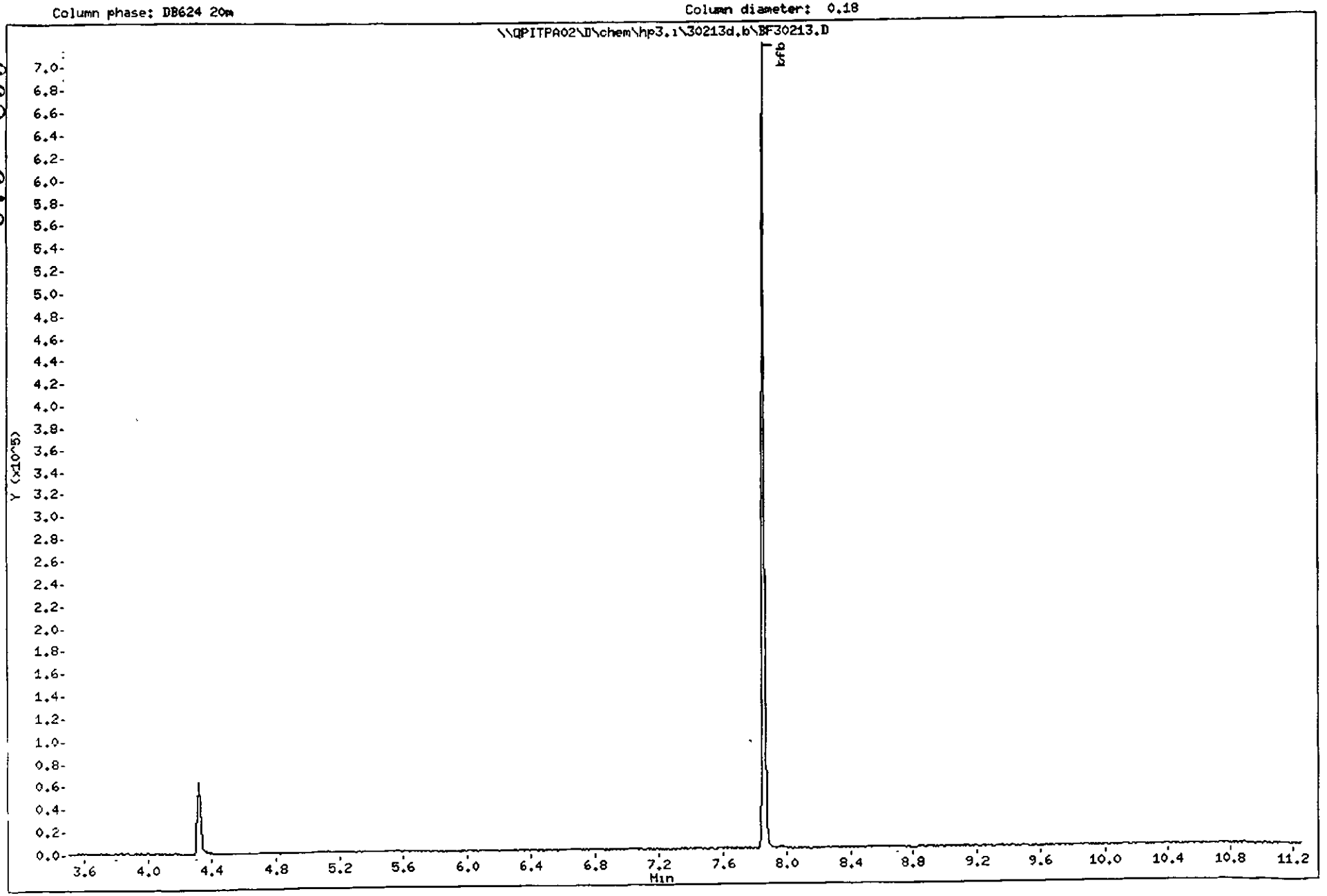
Location of Maximum: 95.10

Number of points: 58

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	680	60.00	511	77.00	644	117.90	218
37.10	3201	61.10	3064	79.00	1520	118.90	427
38.10	2619	62.10	3388	80.00	535	128.00	308
39.10	1047	63.10	2399	81.00	1600	129.90	291
40.00	310	64.10	265	81.90	293	140.90	786
44.10	759	65.10	416	87.10	3869	143.00	934
45.10	681	67.10	219	88.00	3125	155.00	222
47.10	1313	68.10	6213	92.10	2123	172.00	503
48.00	416	69.10	6654	93.10	3371	173.00	602
49.10	2857	70.10	470	94.10	8683	174.00	73360
50.10	14025	72.00	381	95.10	81672	175.00	5414
51.10	3939	73.00	2416	96.10	5406	176.00	73392
55.10	386	74.10	11412	106.00	357	177.00	4465
56.10	836	75.10	34136	115.90	281		
57.10	1850	76.10	2794	117.00	427		

Data File: \\QPITPA02\D\chem\hp3.i\30213d.b\BF30213.D
Date : 13-FEB-2001 05:50
Client ID: 31019D
Sample Info: BFB 85-003-1 1UL
Volume Injected (uL): 1.0
Column phase: DB624 20m

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



675 899

1072

STL Pittsburgh

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER Lab Sample ID: C1B130000 112
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 02/09/01
Work Order: DV1WQ1AA Date Extracted: 02/13/01
Dilution factor: 1 Date Analyzed: 02/13/01

QC Batch: 1044112

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	Acetone	20	U
71-43-2	Benzene	5.0	U
75-27-4	Bromodichloromethane	5.0	U
75-25-2	Bromoform	5.0	U
74-83-9	Bromomethane	10	U
78-93-3	2-Butanone	20	U
75-15-0	Carbon disulfide	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
108-90-7	Chlorobenzene	5.0	U
124-48-1	Dibromochloromethane	5.0	U
75-00-3	Chloroethane	10	U
67-66-3	Chloroform	5.0	U
74-87-3	Chloromethane	10	U
75-34-3	1,1-Dichloroethane	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
540-59-0	1,2-Dichloroethene (total)	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
100-41-4	Ethylbenzene	5.0	U
591-78-6	2-Hexanone	20	U
75-09-2	Methylene chloride	5.0	U
108-10-1	4-Methyl-2-pentanone	20	U
100-42-5	Styrene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
108-88-3	Toluene	5.0	U

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER Lab Sample ID:C1B130000 112
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 02/09/01
Work Order: DV1WQ1AA Date Extracted:02/13/01
Dilution factor: 1 Date Analyzed: 02/13/01

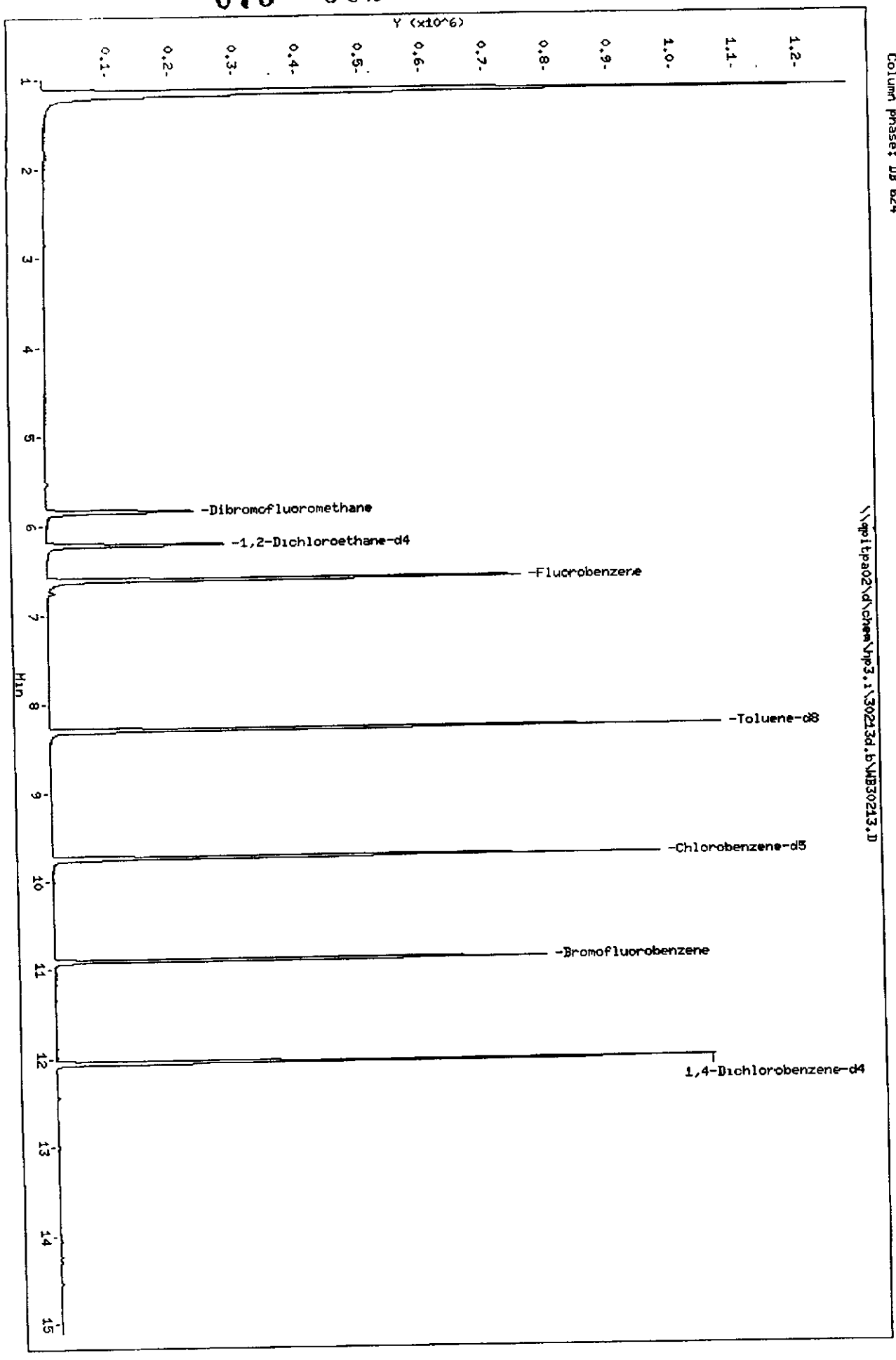
QC Batch: 1044112

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
71-55-6	1,1,1-Trichloroethane	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
75-01-4	Vinyl chloride	10	U
1330-20-7	Xylenes (total)	5.0	U

Data File: \\qpitpa02\d\chem\hp3.i\30213d.b\WB30213.D
Date : 13-FEB-2001 06:49
Client ID:
Sample Info: VBLK BHL
Purge Volume: 5.0
Column phase: DB 624

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



675 903

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30213d.b\WB30213.D
Lab Smp Id:
Inj Date : 13-FEB-2001 06:49 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : VBLK 5ML
Misc Info : ,30213d.b,8260bh2o.m,4-dwh20.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30213d.b\8260bh2o.m
Meth Date : 13-Feb-2001 06:51 gordonk Quant Type: ISTD
Cal Date : 11-JAN-2001 10:49 Cal File: 1E30111.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC076

KL6 2/13/01

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (UG/L)
* 46 Fluorobenzene	96	6.611	6.608	(1.000)	635836	250.000	
* 69 Chlorobenzene-d5	119	9.738	9.735	(1.000)	152545	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.056	12.053	(1.000)	233667	250.000	
$ 39 Dibromofluoromethane	113	5.838	5.842	(0.883)	154506	238.647	47.73
$ 43 1,2-Dichloroethane-d4	65	6.216	6.219	(0.940)	192453	262.646	52.53
$ 59 Toluene-d8	98	8.296	8.293	(0.852)	606830	249.251	49.85
$ 80 Bromofluorobenzene	95	10.906	10.909	(1.120)	234559	236.359	47.27
1 Dichlorodifluoromethane	85	Compound Not Detected					
2 Chloromethane	50	Compound Not Detected					
3 Vinyl Chloride	62	Compound Not Detected.					
4 Bromomethane	94	Compound Not Detected					
5 Chloroethane	64	Compound Not Detected					
6 Trichlorofluoromethane	101	Compound Not Detected					
12 1,1 Dichloroethene	96	Compound Not Detected					
15 Carbon Disulfide	76	Compound Not Detected					
13 Acetone	43	Compound Not Detected					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (UG/L)
	18 Methylene Chloride	84	Compound Not Detected.					
	19 trans 1,2-Dichloroethene	96	Compound Not Detected					
	20 Methyl tert-butyl ether	73	Compound Not Detected					
	24 1,1-Dichloroethane	63	Compound Not Detected					
	27 2,2 Dichloropropane	77	Compound Not Detected					
	28 cis-1,2-dichloroethene	96	Compound Not Detected					
M	29 1,2-Dichloroethene (total)	96	Compound Not Detected.					
	30 Bromochloromethane	128	Compound Not Detected.					
	31 2-Butanone	43	Compound Not Detected					
	37 Chloroform	83	Compound Not Detected					
	38 1,1,1-Trichloroethane	97	Compound Not Detected					
	40 1,1-Dichloropropene	75	Compound Not Detected					
	41 Carbon Tetrachloride	117	Compound Not Detected					
	42 Benzene	78	Compound Not Detected					
	45 1,2-Dichloroethane	62	Compound Not Detected					
	47 Trichloroethene	130	Compound Not Detected					
	49 1,2-Dichloropropane	63	Compound Not Detected					
	50 Dibromomethane	93	Compound Not Detected					
	53 Bromodichloromethane	83	Compound Not Detected					
	57 cis 1,3-Dichloropropene	75	Compound Not Detected					
	58 4-Methyl-2 Pentanone	43	Compound Not Detected.					
	60 Toluene	91	Compound Not Detected					
	61 trans-1,3 Dichloropropene	75	Compound Not Detected					
	63 1,3-Dichloropropane	76	Compound Not Detected					
	64 1,1,2-Trichloroethane	97	Compound Not Detected					
	65 Tetrachloroethene	164	Compound Not Detected					
	66 2-Hexanone	43	Compound Not Detected					
	67 Dibromochloromethane	129	Compound Not Detected					
	68 1,2-Dibromoethane	107	Compound Not Detected					
	70 Chlorobenzene	112	Compound Not Detected.					
	71 1,1,1,2-Tetrachloroethane	131	Compound Not Detected					
	72 Ethylbenzene	106	Compound Not Detected					
	73 m + p-Xylene	106	Compound Not Detected.					
	74 Xylene-o	106	Compound Not Detected.					
M	75 Xylenes (total)	106	Compound Not Detected					
	76 Styrene	104	Compound Not Detected					
	77 Bromoform	173	Compound Not Detected					
	78 Isopropylbenzene	105	Compound Not Detected					
	79 Bromobenzene	156	Compound Not Detected					
	81 n-Propylbenzene	120	Compound Not Detected					
	82 2-Chlorotoluene	126	Compound Not Detected					
	83 1,1,2,2-Tetrachloroethane	83	Compound Not Detected					
	84 1,2,3-Trichloropropane	110	Compound Not Detected					
	85 4-Chlorotoluene	126	Compound Not Detected.					
	86 1,3,5-Trimethylbenzene	105	Compound Not Detected					
	87 tert-Butylbenzene	119	Compound Not Detected					
	88 1,2,4-Trimethylbenzene	105	Compound Not Detected					

675 905

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (UG/L)
89 sec-Butylbenzene	105	Compound Not Detected.					
90 4-Isopropyltoluene	119	Compound Not Detected					
91 1,3-Dichlorobenzene	146	Compound Not Detected					
93 1,4-Dichlorobenzene	146	Compound Not Detected.					
94 n-Butylbenzene	91	Compound Not Detected					
95 1,2-Dichlorobenzene	146	Compound Not Detected					
96 1,2 Dibromo 3-chloropropane	157	Compound Not Detected					
97 1,2,4-Trichlorobenzene	180	Compound Not Detected					
98 Hexachlorobutadiene	225	Compound Not Detected					
99 Naphthalene	128	Compound Not Detected.					
100 1,2,3-Trichlorobenzene	180	Compound Not Detected					

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) WATER Lab Sample ID: C1B130000 112
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL
Work Order. DV1WQ1AC
Dilution factor: 1

Date Received: 02/09/01
Date Extracted: 02/13/01
Date Analyzed: 02/13/01

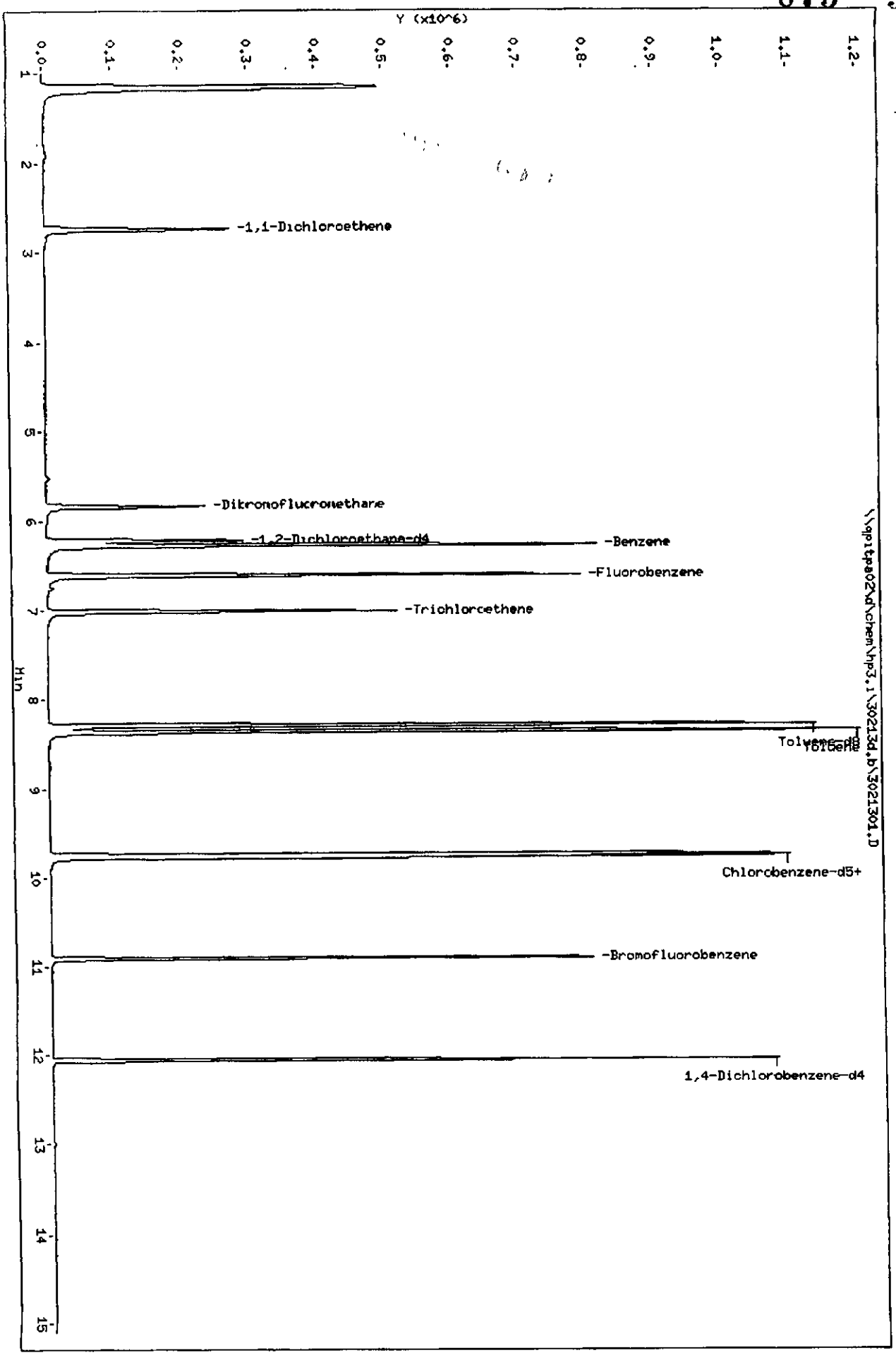
QC Batch: 1044112

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
71-43-2	Benzene	43.9	
108-90-7	Chlorobenzene	47.8	
75-35-4	1,1-Dichloroethene	38.5	
108-88-3	Toluene	50.1	
79-01-6	Trichloroethene	43.6	

Data File: \\apitpa02\d\chem\hp3.i\302134.b\3021304.D
Date : 13-FEB-2001 07:19
Client ID:
Sample Info: BLANK MS 5ML
Purge Volume: 5.0
Column phase: DB 624

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



675 908

STL-Pittsburgh

VOLATILE REPORT SW-846 Method

Data file : \\qpitpa02\d\chem\hp3.i\30213d.b\3021301.D
Lab Smp Id:
Inj Date : 13-FEB-2001 07:19 MS Autotune Date: 08-AUG-2000 16:28
Operator : 10099 Inst ID: hp3.i
Smp Info : BLANK MS 5ML
Misc Info : ,30213d.b,8260bh2o.m,4-dwh20.sub
Comment :
Method : \\QPITPA02\D\chem\hp3.i\30213d.b\8260bh2o.m
Meth Date : 13-Feb-2001 06:51 gordonk Quant Type: ISTD
Cal Date : 11-JAN-2001 10:49 Cal File: 1E30111.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 4-dwh20.sub
Target Version: 4.04
Processing Host: PITPC076

KL6 2/13/01

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (UG/L)
* 46 Fluorobenzene	96	6.609	6.608	(1 000)	661260	250.000	
* 69 Chlorobenzene-d5	119	9.736	9.735	(1 000)	157697	250.000	
* 92 1,4-Dichlorobenzene-d4	152	12.054	12 053	(1 000)	236283	250 000	
$ 39 Dibromofluoromethane	113	5.842	5 842	(0.884)	154869	230.011	46 00
$ 43 1,2 Dichloroethane-d4	65	6.219	6.219	(0.941)	196154	257 405	51.48
$ 59 Toluene-d8	98	8 294	8 293	(0.852)	628013	249.524	49 90
$ 80 Bromofluorobenzene	95	10.910	10.909	(1 121)	242526	236 402	47 28
1 Dichlorodifluoromethane	85	Compound Not Detected					
2 Chloromethane	50	Compound Not Detected					
3 Vinyl Chloride	62	Compound Not Detected					
4 Bromomethane	94	Compound Not Detected					
5 Chloroethane	64	Compound Not Detected					
6 Trichlorofluoromethane	101	Compound Not Detected					
12 1,1-Dichloroethene	96	2.740	2 721	(0.415)	115181	192 334	38 47
15 Carbon Disulfide	76	Compound Not Detected.					
13 Acetone	43	Compound Not Detected					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (UG/L)
	18 Methylene Chloride	84	Compound Not Detected					
	19 trans 1,2-Dichloroethene	96	Compound Not Detected					
	20 Methyl tert-butyl ether	73	Compound Not Detected					
	24 1,1-Dichloroethane	63	Compound Not Detected					
	27 2,2 Dichloropropane	77	Compound Not Detected					
	28 cis-1,2-dichloroethene	96	Compound Not Detected.					
M	29 1,2-Dichloroethene (total)	96	Compound Not Detected					
	30 Bromochloromethane	128	Compound Not Detected.					
	31 2-Butanone	43	Compound Not Detected					
	37 Chloroform	83	Compound Not Detected.					
	38 1,1,1-Trichloroethane	97	Compound Not Detected					
	40 1,1-Dichloropropene	75	Compound Not Detected					
	41 Carbon Tetrachloride	117	Compound Not Detected					
	42 Benzene	78	6 274	6.274	(0 949)	671519	219 481	43 90
	45 1,2-Dichloroethane	62	Compound Not Detected.					
	47 Trichloroethene	130	7 016	7.016	(1 062)	163434	217 966	43.59
	49 1,2-Dichloropropane	63	Compound Not Detected					
	50 Dibromomethane	93	Compound Not Detected.					
	53 Bromodichloromethane	83	Compound Not Detected					
	57 cis-1,3-Dichloropropene	75	Compound Not Detected					
	58 4-Methyl-2 Pentanone	43	Compound Not Detected.					
	60 Toluene	91	8 361	8.360	(0.859)	768756	250 481	50 10
	61 trans-1,3 Dichloropropene	75	Compound Not Detected.					
	63 1,3-Dichloropropane	76	Compound Not Detected					
	64 1,1,2-Trichloroethane	97	Compound Not Detected					
	65 Tetrachloroethene	164	Compound Not Detected					
	66 2-Hexanone	43	Compound Not Detected					
	67 Dibromochloromethane	129	Compound Not Detected					
	68 1,2-Dibromoethane	107	Compound Not Detected					
	70 Chlorobenzene	112	9 766	9.765	(1 003)	521971	239 106	47.82
	71 1,1,1,2-Tetrachloroethane	131	Compound Not Detected					
	72 Ethylbenzene	106	Compound Not Detected					
	73 m + p-Xylene	106	Compound Not Detected					
	74 Xylene-o	106	Compound Not Detected					
M	75 Xylenes (total)	106	Compound Not Detected.					
	76 Styrene	104	Compound Not Detected					
	77 Bromoform	173	Compound Not Detected					
	78 Isopropylbenzene	105	Compound Not Detected.					
	79 Bromobenzene	156	Compound Not Detected					
	81 n-Propylbenzene	120	Compound Not Detected					
	82 2-Chlorotoluene	126	Compound Not Detected					
	83 1,1,2,2 Tetrachloroethane	83	Compound Not Detected					
	84 1,2,3-Trichloropropane	110	Compound Not Detected.					
	85 4-Chlorotoluene	126	Compound Not Detected					
	86 1,3,5-Trimethylbenzene	105	Compound Not Detected					
	87 tert-Butylbenzene	119	Compound Not Detected					
	88 1,2,4-Trimethylbenzene	105	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (UG/L)
89 sec-Butylbenzene	105	Compound Not Detected					
90 4-Isopropyltoluene	119	Compound Not Detected					
91 1,3 Dichlorobenzene	146	Compound Not Detected					
93 1,4-Dichlorobenzene	146	Compound Not Detected					
94 n-Butylbenzene	91	Compound Not Detected					
95 1,2-Dichlorobenzene	146	Compound Not Detected					
96 1,2-Dibromo 3-chloropropane	157	Compound Not Detected					
97 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
98 Hexachlorobutadiene	225	Compound Not Detected					
99 Naphthalene	128	Compound Not Detected					
100 1,2,3-Trichlorobenzene	180	Compound Not Detected					

GC/MS VOLATILE
MISCELLANEOUS

STL Pittsburgh

STL - Pittsburgh

GCMS Volatile Run Log

Logbook ID: MV4

Method	Inst ID	Analyst	Reviewed by	Date
8260B	HP3	KLG		

Standard:	Standard	Standard	Standard	Standard
192-199-4 BFB	192-197-8 Lnt	192-197-9 Surr	192 200-1 VOA	
Standard	Standard	Standard	Standard	Standard

	Date	File ID	Lot No /Sample No	Vol /Wt	pH	Port #	Comments
1	1/11/01	BF30111	BFB	50ng			0844
2.		CC30111	V9d50	5ml			
3		IA30111	V9d5	5ml			
4		IB30111	V9d20	5ml			
5.		ID30111	V9d100	5ml			
6		IE30111	V9d200	5ml			
7		WB30111	VBLK	5ml			
8							
9							
10							
11.							
12							
13							
14							
15							
16.							
17							
18.							
19							
20.							
21.							
22.							

1085

STL Pittsburgh

STL - Pittsburgh

GCMS Volatile Run Log

Logbook ID: MV4

Method:	Inst ID:	Analyst:	Reviewed by:	Date:
8260B	HP3	LG		

Standard:	Standard:	Standard:	Standard:	Standard:
85-003-1BFB	192-200-1VA	85-001-1MS	192-199-2LCS	192-199-3SLCS1
Standard	**Standard**	**Standard**	**tandard:**	**Standard:**

Date	File ID	Lot No./Sample No.	Vol./Wt.	pH	Port #	Comments
2113101	1 BF30213	BFB	1µL			0550
	2. CC30213	VSTD50	5ml			
	3. WB30213	VBLK	5ml			
	4. 3021301	Blank MS	5ml			
	5 3021302	C1B090228-001	5ml	1		need dup
	6. 3021303	C1B050157-001	5ml	7		
	7. 3021304	C1B120128-016	5ml	1		
	8 3021305	C1B090228-001	2.5ml(1ml/100ml)/5ml	1		100 dilut
	9 3021306	C0B120128-015 KLG 2/3/01	5ml	1		
	10. 3021307	C1B090228-001	(1ml/50ml)/5ml	1		
	11. 3021308	C1B120128-001 MS	5ml	1		
	12 3021309	C1B120128-001 MSD	5ml	1		
	13. 3021310	C1B120128-002	5ml	1		
	14.					
	15.					
	16.					
	17.					
	18.					
	19.					
	20					
	21.					
	22					

PSR024 2/13/01 [illegible] SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

REQUESTED BY GORDONK

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

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16D CLP1	1VW0[illegible]1AA	[illegible]	411281	399411	I-15-QK	C1B090228	001		WATER	0	13 1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
CLP1	Kathy Gordon	2/13/01 0630
Kathy Gordon	NFJ01	2/13/01 1000

***** 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: STLPIT SDG No:

Lot #: C1B090228

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	TOT OUT
01	DF/S-1/1039/IDW/004	74	58	69	35	60	91	00
02	METHOD BLK DV03C1AA	89	78	79	103	89	87	00
03	LCS DV03C1AC	85	79	78	97	87	86	00
04	LCSD DV03C1AD	89	80	81	101	90	89	00

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

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

FORM II

675 918

SW846 8270C CHECK SAMPLE RECOVERY

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

Lab Code: STLPTT SDG No.

Lot #: C1B120000 WO #: DV03C1AC

BATCH: 1043285

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Phenol	75.0	60.5	81	10- 131	
2-Chlorophenol	75.0	62.4	83	19- 124	
1,4-Dichlorobenzene	50.0	41.2	82	28- 110	
N-Nitrosodi-n-propylamine	50.0	42.1	84	30- 115	
1,2,4-Trichlorobenzene	50.0	40.6	81	31- 110	
4-Chloro-3-methylphenol	75.0	68.6	91	29- 124	
Acenaphthene	50.0	42.7	85	39- 118	
4-Nitrophenol	75.0	69.6	93	19- 144	
2,4-Dinitrotoluene	50.0	43.6	87	47- 131	
Pentachlorophenol	75.0	76.5	102	10- 140	
Pyrene	50.0	50.4	101	46- 130	

NOTES(S):

* Values outside of QC limits

Spike Recovery 0 out of 11 outside limits

COMMENTS:

FORM III

SW846 8270C CHECK SAMPLE DUPLICATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV03C1AD

BATCH: 1043285

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
2,4-Dinitrotoluene	50.0	44.8	90	47- 131	
Pentachlorophenol	75.0	73.9	99	10- 140	
Pyrene	50.0	51.9	104	46- 130	
2-Chlorophenol	75.0	65.1	87	19- 124	
1,4-Dichlorobenzene	50.0	42.3	85	28- 110	
N-Nitrosodi-n-propylamine	50.0	44.3	89	30- 115	
4-Nitrophenol	75.0	71.3	95	19- 144	
Phenol	75.0	63.3	84	10- 131	
1,2,4-Trichlorobenzene	50.0	41.9	84	31- 110	
4-Chloro-3-methylphenol	75.0	71.8	96	29- 124	
Acenaphthene	50.0	43.3	87	39- 118	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS:

FORM III

675 920

SW846 8270C METHOD BLANK SUMMARY

BLANK WORKORDER NO.: DV03C1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIT

SDG Number:

Lab File ID: S0216S01.

Lot Number: C1B090228

Date Analyzed: 02/16/01

Time Analyzed: 11:05

Matrix: WATER

Date Extracted: 02/12/01

GC Column DB5MS ID: .25

Extraction Method: 3520C

Instrument ID: 71

Level: (low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	DF/S-1/1039/IDW/004	DVWJE1AC	S0216S04.	02/16/01	12:40
02	CHECK SAMPLE	DV03C1AC C	S0216S02.	02/16/01	11:37
03	DUPLICATE CHECK	DV03C1AD L	S0216S03.	02/16/01	12:09
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS

FORM IV

5B

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

Lab Name: STL PITTSBURGH Contract:

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

Lab File ID: S0123DF1 DFTPP Injection Date: 01/23/01

Instrument ID: 71 DFTPP Injection Time: 1809

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	45.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	41.5
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	49.2
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	27.4
365	Greater than 1.0% of mass 198	4.9
441	Present, but less than mass 443	11.4
442	Greater than 40.0% of mass 198	73.5
443	17.0 - 23.0% of mass 442	15.1 (20.6)2

1-Value is % of mass 69 2-Value is % of mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020	SSTD020	S0123CC1	01/23/01	1826
02	SSTD050	SSTD050	S0123CC2	01/23/01	1859
03	SSTD080	SSTD080	S0123CC3	01/23/01	1933
04	SSTD120	SSTD120	S0123CC4	01/23/01	2006
05	SSTD160	SSTD160	S0123CC5	01/23/01	2040
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

675 922

FORM 5

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL-PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Lab File ID: S0216DFT DFTPP Injection Date: 02/16/01

Instrument ID: 71 DFTPP Injection Time: 0944

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	43.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	42.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 60.0% of mass 198	48.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	26.6
365	Greater than 1.0% of mass 198	4.78
441	Present, but less than mass 443	12.3
442	Greater than 40.0% of mass 198	75.9
443	17.0 - 23.0% of mass 442	14.4 (19.0)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	SSTD50	SSTD50	S0216CC1	02/16/01	1034
02	INTRA-LAB BL	DV03C1AA	S0216S01	02/16/01	1105
03	INTRA-LAB CH	DV03C1AC	S0216S02	02/16/01	1137
04	INTRA-LAB CH	DV03C1AD	S0216S03	02/16/01	1209
05	DF/S-1/1039/	DVWJE1AC	S0216S04	02/16/01	1240
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Lab File ID (Standard): S0216CC1 Date Analyzed: 02/16/01

Instrument ID: 71 Time Analyzed: 1034

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	96354	4.91	349739	6.42	192641	9.40
	UPPER LIMIT	192708	5.41	699478	6.92	385282	9.90
	LOWER LIMIT	48177	4.41	174870	5.92	96321	8.90
	CLIENT SAMPLE NO.						
01	INTRA-LAB BL	78101	4.91	289720	6.42	151773	9.41
02	INTRA-LAB CH	73025	4.91	279101	6.42	151292	9.41
03	INTRA-LAB CH	71482	4.91	276512	6.42	153181	9.41
04	DF/S-1/1039/	65389	4.90	239249	6.41	141641	9.42
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

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

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

FORM 8

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL-PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Lab File ID (Standard): S0216CC1 Date Analyzed: 02/16/01

Instrument ID: 71 Time Analyzed: 1034

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	328514	12.68	426597	19.30	460025	22.65
	UPPER LIMIT	657028	13.18	853194	19.80	920050	23.15
	LOWER LIMIT	164257	12.18	213299	18.80	230013	22.15
	CLIENT SAMPLE NO.						
01	INTRA-LAB BL	241464	12.69	244376	19.30	271142	22.65
02	INTRA-LAB CH	257538	12.69	269280	19.30	291183	22.65
03	INTRA-LAB CH	260961	12.69	268074	19.30	282012	22.65
04	DF/S-1/1039/	287178	12.72	508635	19.34	595633	22.69
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

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

GC/MS SEMIVOLATILE
SAMPLE DATA

UXB INTERNATIONAL

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

Matrix (soil/water) WATER Lab Sample ID:C1B090228 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol: 1000 / mL Date Received: 02/09/01
Work Order DVWJE1AC Date Extracted:02/12/01
Dilution factor 1 Date Analyzed: 02/16/01
Moisture %.NA

QC Batch: 1043285

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
110 86-1	Pyridine	20	U
83-32-9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12 7	Anthracene	10	U
56-55-3	Benzo(a)anthracene	10	U
50 32-8	Benzo(a)pyrene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
111-44-4	**bis(2-Chloroethyl) ether**	**6.9**	J
117-81-7	**bis(2-Ethylhexyl) phthalate**	**23**	
101-55-3	4-Bromophenyl phenyl ether	10	U
85 68-7	Butyl benzyl phthalate	10	U
86-74-8	Carbazole	10	U
106-47-8	4-Chloroaniline	10	U
59 50-7	4-Chloro-3-methylphenol	10	U
91 58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218-01-9	Chrysene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
95-50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	50	U
120-83-2	2,4-Dichlorophenol	10	U

UXB INTERNATIONAL

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

Matrix (soil/water) WATER
Method SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID: C1B090228 001

Sample WT/Vol: 1000 / mL
Work Order: DVWJE1AC
Dilution factor 1
Moisture %: NA

Date Received: 02/09/01
Date Extracted: 02/12/01
Date Analyzed: 02/16/01

QC Batch: 1043285

Client Sample Id. DF/S-1/1039/IDW/004

CAS NO	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
84-66-2	Diethyl phthalate	10	U
105 67-9	2,4-Dimethylphenol	10	U
131-11-3	Dimethyl phthalate	10	U
84 74 2	Di-n-butyl phthalate	10	U
117 84-0	Di-n-octyl phthalate	10	U
51 28-5	2,4-Dinitrophenol	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	50	U
67 72 1	Hexachloroethane	10	U
193 39-5	Indeno(1,2,3-cd)pyrene	10	U
78 59-1	Isophorone	10	U
91 57-6	2-Methylnaphthalene	10	U
95 48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	10	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
621-64-7	N-Nitrosodi-n-propylamine	10	U

UXB INTERNATIONAL

Lab Name.Severn Trent Laboratories, Inc SDG Number:

Matrix. (soil/water) WATER Lab Sample ID·C1B090228 001
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Sample WT/Vol· 1000 / mL Date Received: 02/09/01
Work Order. DVWJE1AC Date Extracted:02/12/01
Dilution factor· 1 Date Analyzed: 02/16/01
Moisture % NA

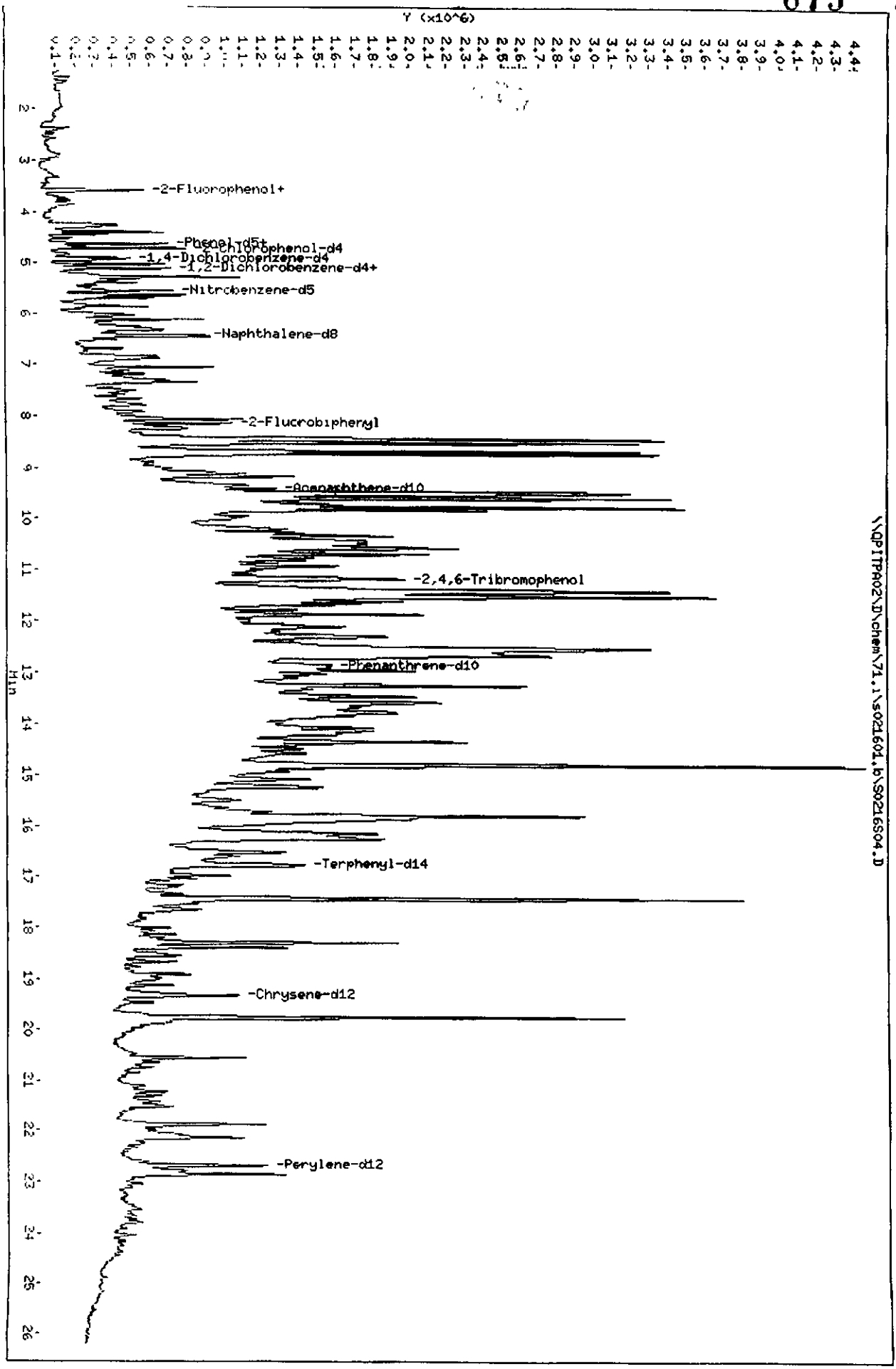
QC Batch: 1043285

Client Sample Id· DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
86 30-6	N-Nitrosodiphenylamine	10	U
108 60-1	2,2'-oxybis(1-Chloropropane)	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	**Phenol**	**3.9**	**J**
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
88-06-2	2,4,6-Trichlorophenol	10	U

Data File: \\QPITPA02\D\chem\71.i\s021601.b\S0216S04.D
Date : 16-FEB-2001 12:40
Client ID: DF/S-1/1039/IDW/004
Sample Info: c1b090228-001 2/12/01 8270 h20
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 71.i
Operator: 045183
Column diameter: 0.25



STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s021601.b\S0216S04.D
Lab Smp Id: DVWJE1AC Client Smp ID: DF/S-1/1039/IDW/004
Inj Date : 16-FEB-2001 12:40
Operator : 045183 Inst ID: 71.i
Smp Info : c1b090228-001 2/12/01 8270 h20
Misc Info : dvwje1ac,s021601.b,8270clp.m,1-8270l.sub
Comment :
Method : \\QPITPA02\D\chem\71.i\s021601.b\8270clp.m
Meth Date : 16-Feb-2001 13:17 bachas Quant Type: ISTD
Cal Date : 23-JAN-2001 20:40 Cal File: S0123CC5.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-8270l.sub
Target Version: 4.04
Processing Host: PITPC050

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

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

Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
* 1,4-Dichlorobenzene-d4	152	4.902	4.905	(1.000)	65389	40.0000	
* Naphthalene-d8	136	6.413	6.416	(1.000)	239249	40.0000	
* Acenaphthene-d10	164	9.416	9.403	(1.000)	141641	40.0000	
* Phenanthrene-d10	188	12.722	12.683	(1.000)	287178	40.0000	
* Chrysene-d12	240	19.341	19.296	(1.000)	508635	40.0000	
* Perylene-d12	264	22.691	22.651	(1.000)	595633	40.0000	
N-Nitrosodimethylamine	74	Compound Not Detected					
Pyridine	79	Compound Not Detected					
2-Picoline	80	Compound Not Detected					
Methyl methanesulfonate	93	Compound Not Detected					
Aniline	93	4.640	4.611	(0.947)	20657	7.82694	3.9135(a)
Phenol	94	4.677	4.680	(0.954)	29695	13.7588	6.8794(a)
bis(2-Chloroethyl)ether	93	Compound Not Detected					
2-Chlorophenol	128	Compound Not Detected					

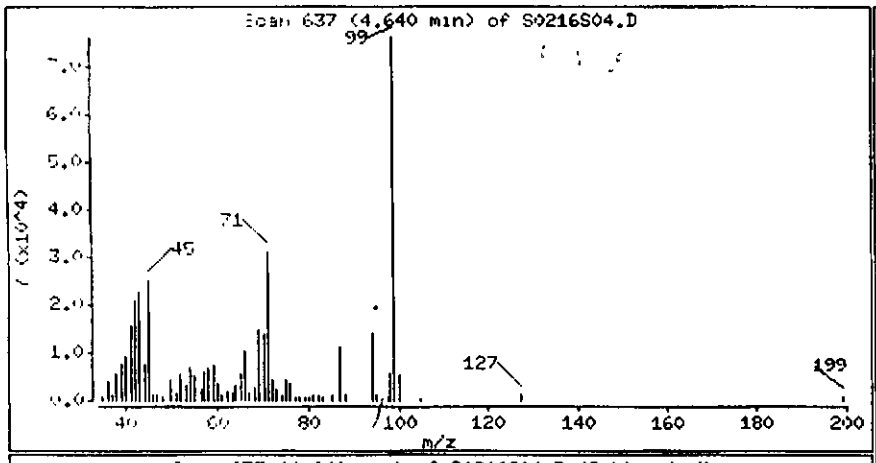
Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
27 1,2-Dichlorobenzene	146	Compound Not Detected						
28 1,4-Dichlorobenzene	146	Compound Not Detected						
29 1,3-Dichlorobenzene	146	Compound Not Detected						
30 Benzyl Alcohol	108	5 099	5 086	(1 040)	47389	33 6081	16 804	
31 2-Methylphenol	108	Compound Not Detected						
32 bis(2-chloroisopropyl) ether	45	Compound Not Detected						
33 N-Nitroso-di-n-propylamine	70	Compound Not Detected						
34 Hexachloroethane	117	Compound Not Detected						
35 Nitrobenzene	77	Compound Not Detected						
36 Isophorone	82	Compound Not Detected						
37 2-Nitrophenol	139	Compound Not Detected						
38 2,4-Dimethylphenol	107	6 034	6 010	(0 941)	7093	3 56982	1 7849(a)	LMDL
39 bis(2-chloroethoxy)methane	93	Compound Not Detected						
40 2,4-Dichlorophenol	162	6 264	6 251	(0 977)	3575	2 16781	1 0839(a)	
41 Benzoic Acid	122	6 312	6 171	(0.984)	40340	70 1127	35 056(aH)	NM
42 1,2,4-Trichlorobenzene	179	Compound Not Detected						
43 Naphthalene	128	Compound Not Detected						
44 4-Chloroaniline	127	Compound Not Detected						
45 Hexachlorobutadiene	224	Compound Not Detected						
46 bis(2-Ethylhexyl) phthalate	107	Compound Not Detected						
47 4-Methylphenol	142	Compound Not Detected						
48 2-Methylnaphthalene	142	Compound Not Detected						
49 Hexachlorocyclopentadiene	236	Compound Not Detected						
50 2,4,6-Trichlorophenol	196	Compound Not Detected						
51 2,4,5-Trichlorophenol	196	Compound Not Detected						
52 2-Chloronaphthalene	162	Compound Not Detected						
53 2-Nitroaniline	65	Compound Not Detected						
54 Dimethylphthalate	163	Compound Not Detected						
55 2,6-Dinitrotoluene	165	Compound Not Detected						
56 Acenaphthylene	152	Compound Not Detected						
57 3-Nitroaniline	138	Compound Not Detected						
58 Acenaphthene	153	Compound Not Detected						
59 2,4-Dinitrophenol	184	Compound Not Detected						
60 4-Nitrophenol	109	Compound Not Detected						
61 Dibenzofuran	168	Compound Not Detected						
62 2,6-Dinitrotoluene	165	Compound Not Detected						
63 1-Chloro-2,4-Dinitrobenzene	231	Compound Not Detected						
64 2,3,5,6-Tetrachlorophenol	231	Compound Not Detected						
65 4-Nitrophenyl ether	143	Compound Not Detected						
66 Diethylphthalate	149	10 543	10 519	(1 120)	12312	3 00341	1 5017(a)	LMDL
67 Fluorene	166	Compound Not Detected						
68 4-Chlorophenyl phenylether	204	Compound Not Detected						
69 4-Nitroaniline	138	Compound Not Detected						
70 4,6-Dinitro-2-methylphenol	198	Compound Not Detected						
71 N-Nitrosodiphenylamine (1)	169	Compound Not Detected						
72 4-Bromophenyl-phenylether	77	Compound Not Detected						

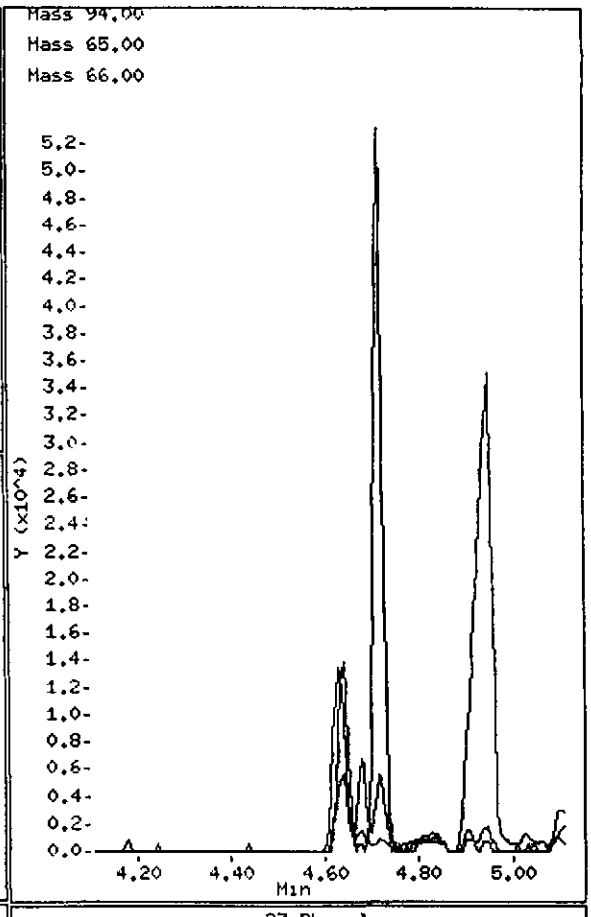
Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
[illegible]	248	Compound Not Detected					
[illegible]	283	Compound Not Detected					
[illegible]	265	Compound Not Detected					
[illegible]	178	Compound Not Detected					
[illegible]	178	Compound Not Detected					
[illegible]	267	Compound Not Detected					
[illegible]	141	Compound Not Detected					
[illegible]	202	Compound Not Detected					
[illegible]	184	Compound Not Detected					
[illegible]	202	Compound Not Detected					
[illegible]	149	Compound Not Detected					
[illegible]	252	Compound Not Detected					
[illegible]	228	Compound Not Detected					
[illegible]	228	Compound Not Detected					
[illegible]	149	19.779	19.745	(1.023)	353001	45.7920	22.896
[illegible]	149	Compound Not Detected					
[illegible]	252	Compound Not Detected					
[illegible]	252	Compound Not Detected					
[illegible]	256	Compound Not Detected					
[illegible]	252	Compound Not Detected					
[illegible]	276	Compound Not Detected					
[illegible]	278	Compound Not Detected					
[illegible]	276	Compound Not Detected					
[illegible]	82	5.553	5.551	(0.866)	176313	68.8615	34.431
[illegible]	172	8.139	8.131	(0.864)	277073	58.4268	29.213
[illegible]	244	16.788	16.743	(0.868)	351275	35.4439	17.722
[illegible]	99	4.629	4.600	(0.944)	267038	111.323	55.662
[illegible]	112	3.577	3.569	(0.740)	156699	89.2992	44.650
[illegible]	330	11.184	11.128	(0.879)	104900	136.199	68.100
[illegible]	132	4.715	4.702	(0.962)	209835	112.939	56.470
[illegible]	152	5.110	5.108	(1.042)	80852	55.4243	27.712

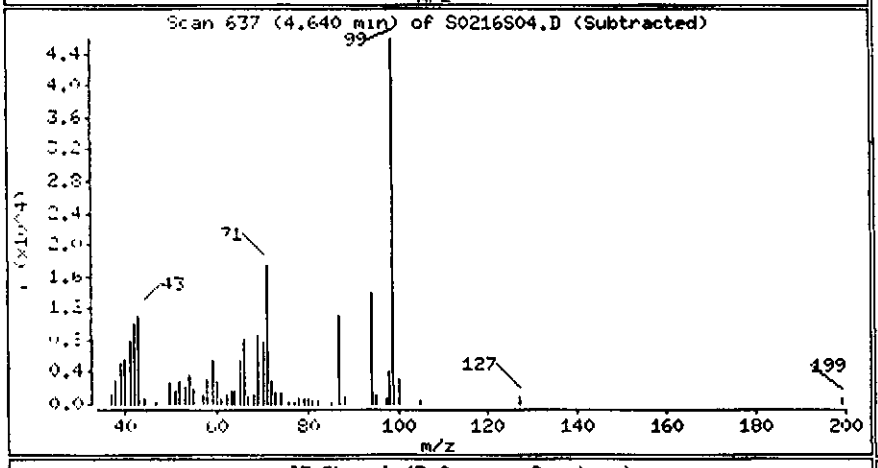
QC Flag Legend

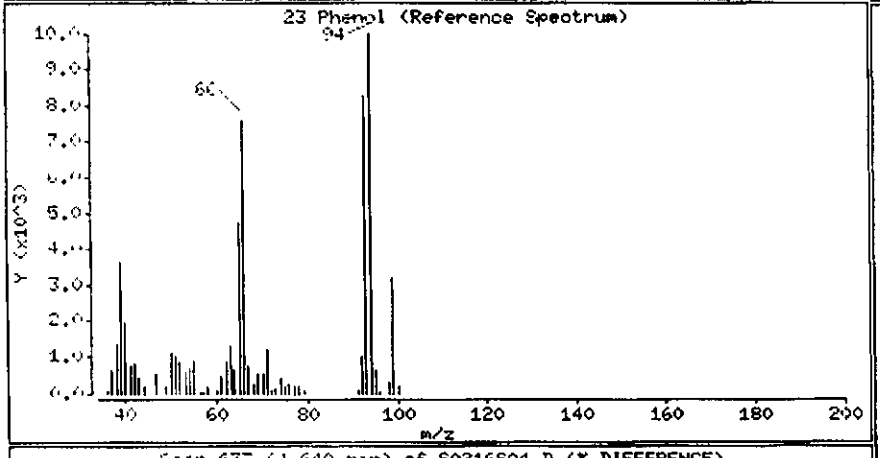
a Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

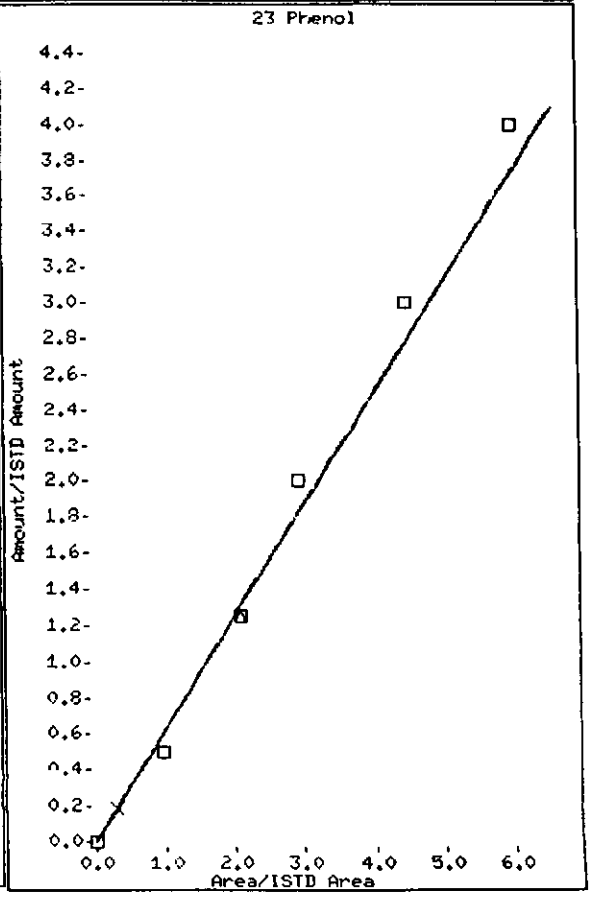
23 Phenol

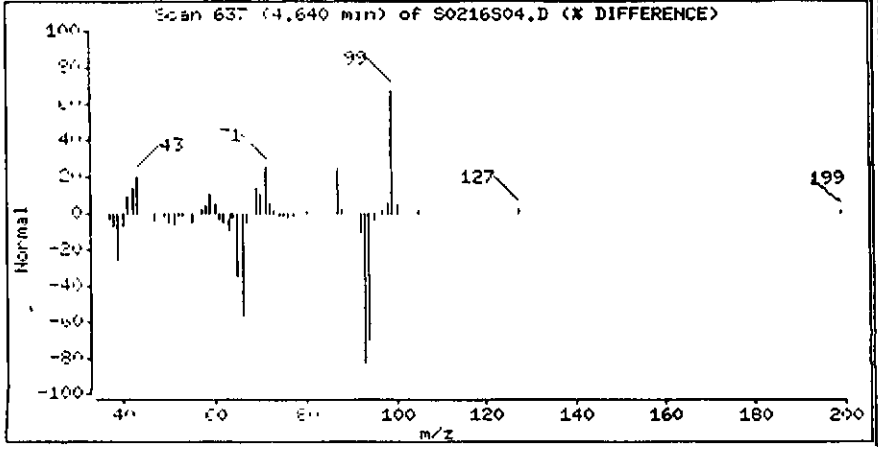

Scan 637 (4.640 min) of S0216S04.D
99
71
45
127
199
m/z


Mass 94.00
Mass 65.00
Mass 66.00
Y (x10^4)
Min

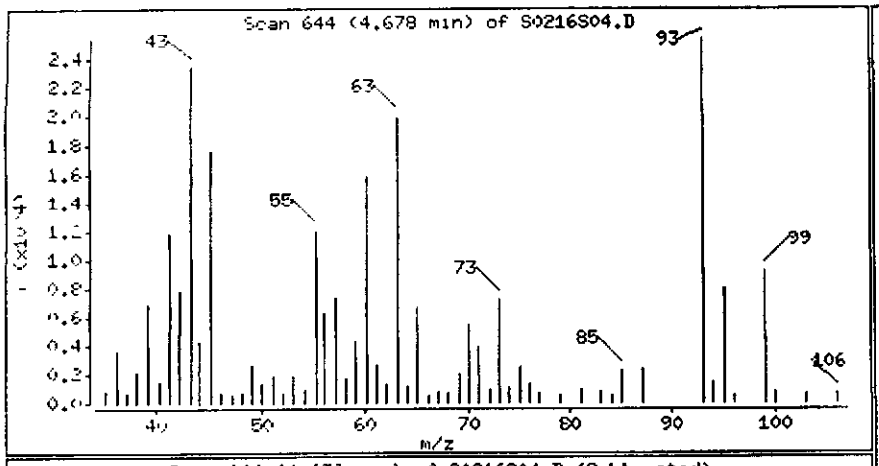

Scan 637 (4.640 min) of S0216S04.D (Subtracted)
99
71
43
127
199
m/z

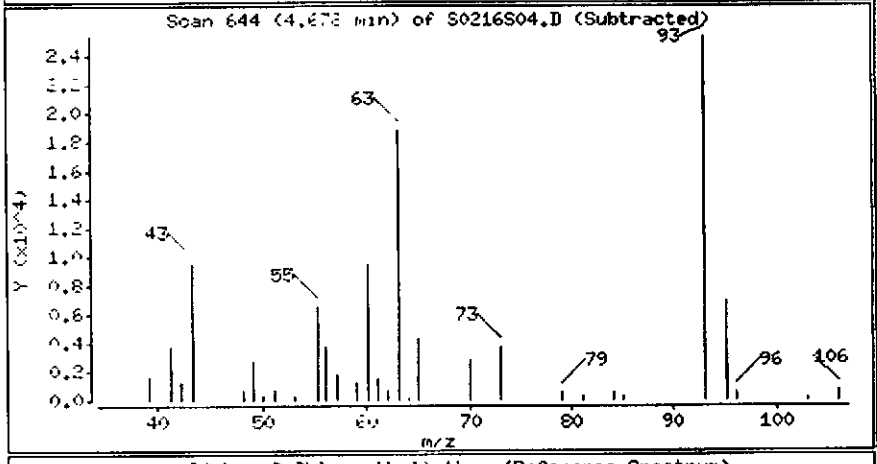

23 Phenol (Reference Spectrum)
94
66
Y (x10^3)
m/z

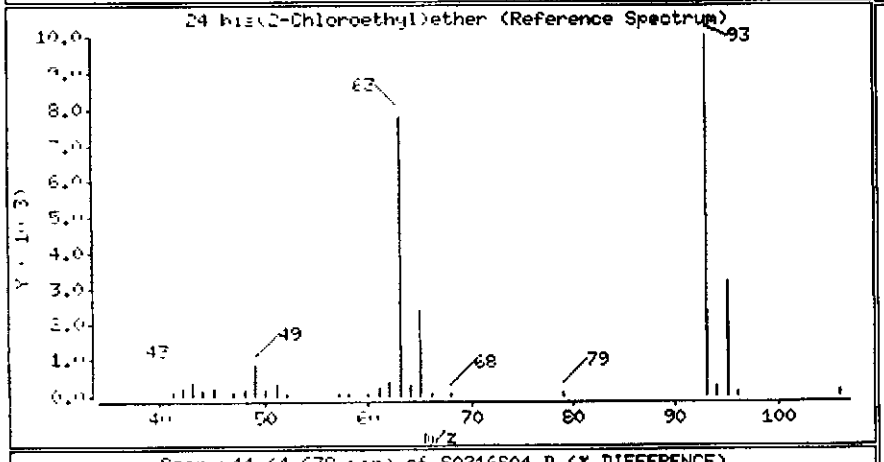

23 Phenol
Amount/ISTD Amount
Area/ISTD Area

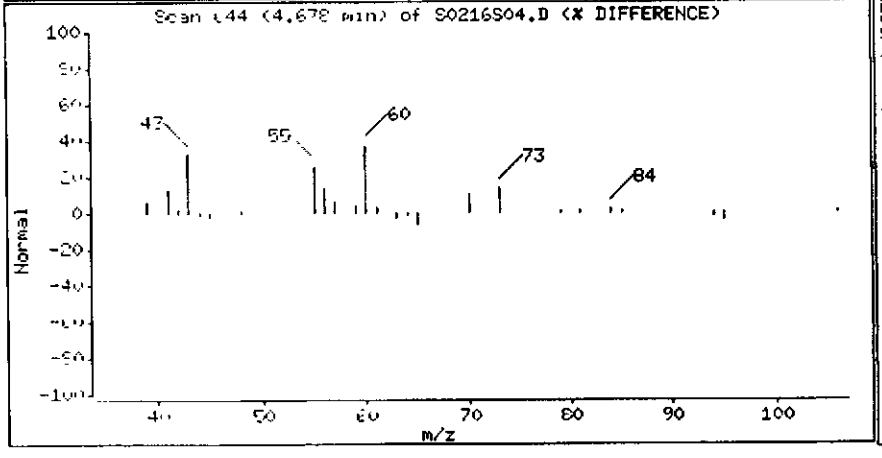

Scan 637 (4.640 min) of S0216S04.D (% DIFFERENCE)
Normal
99
71
43
127
199
m/z

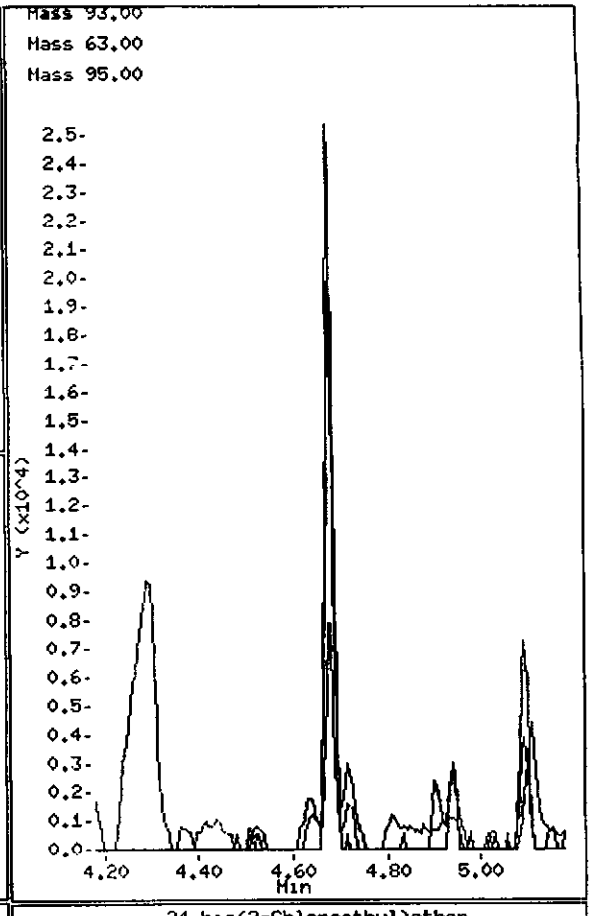
24 bis(2-Chloroethyl)ether

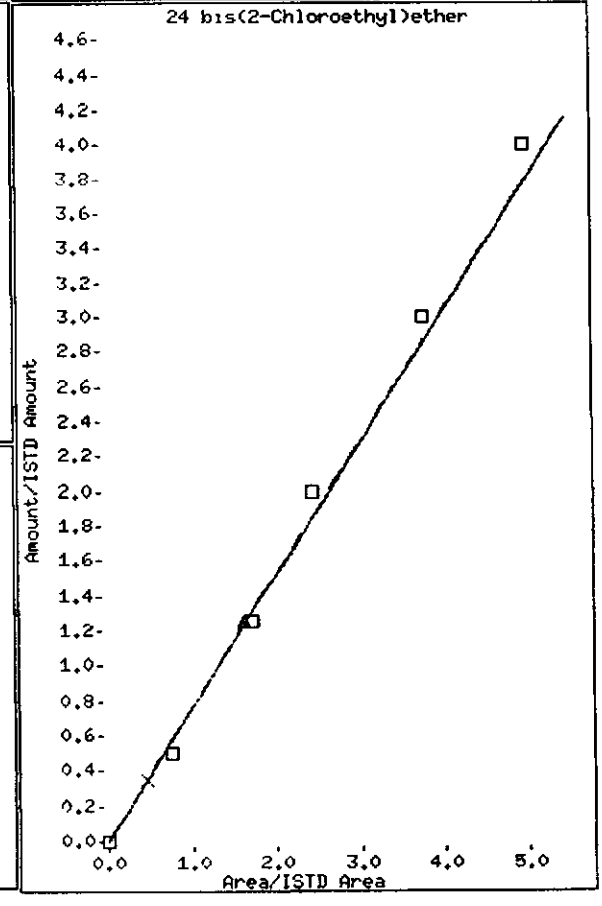




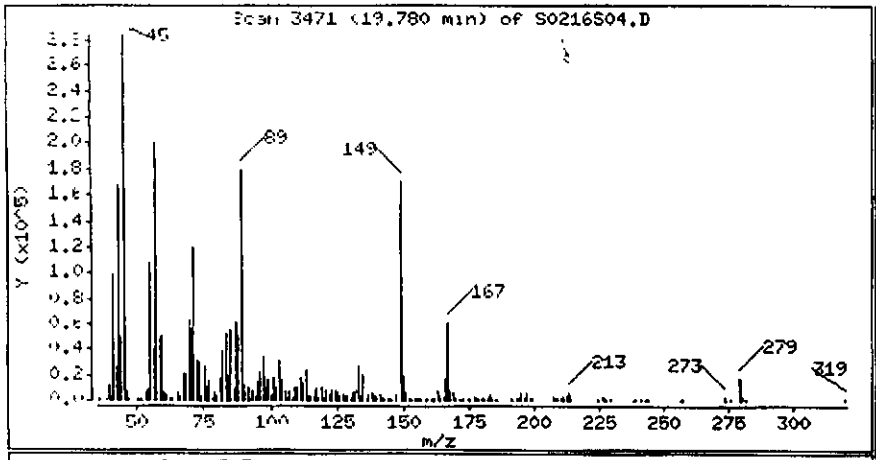


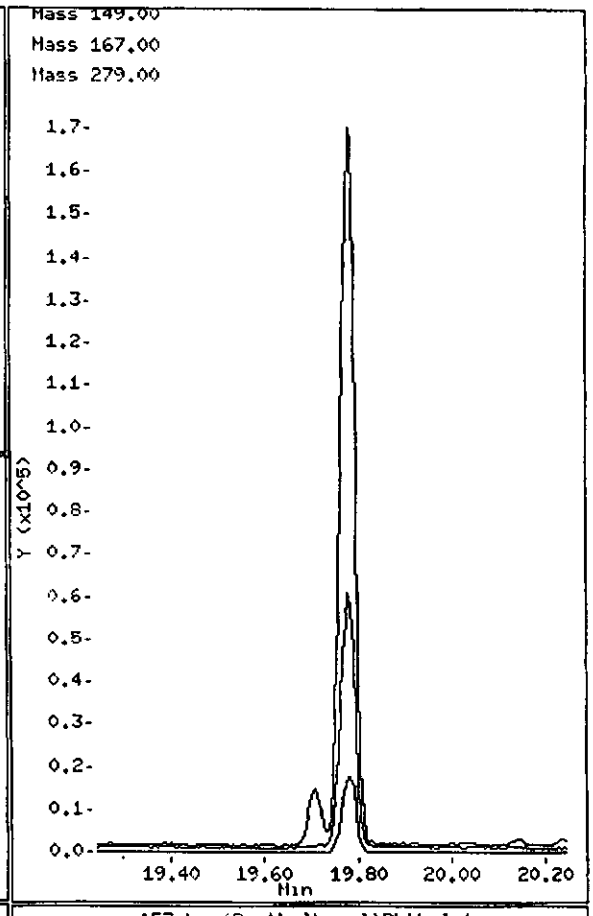


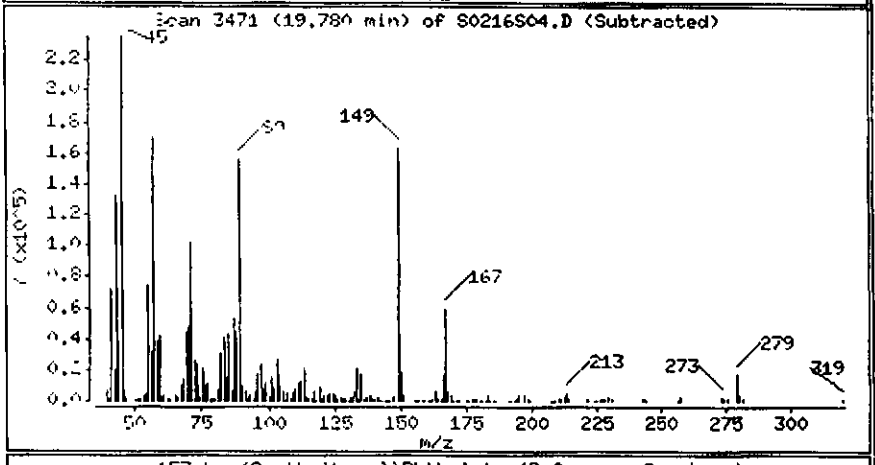


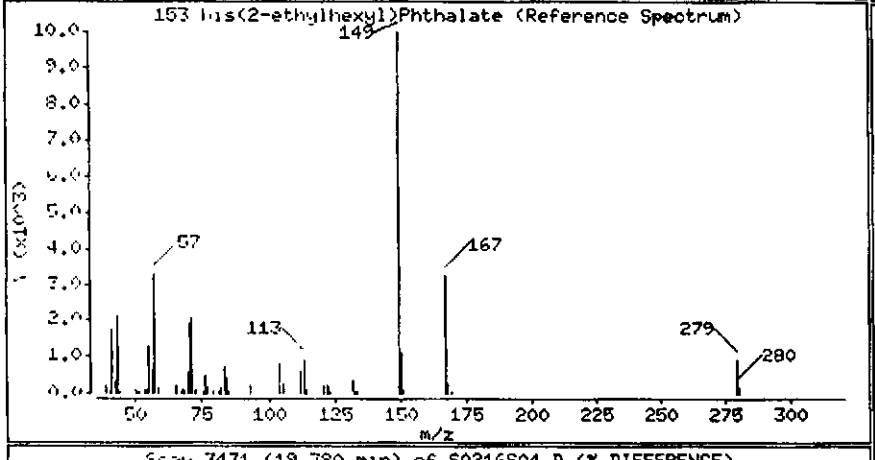


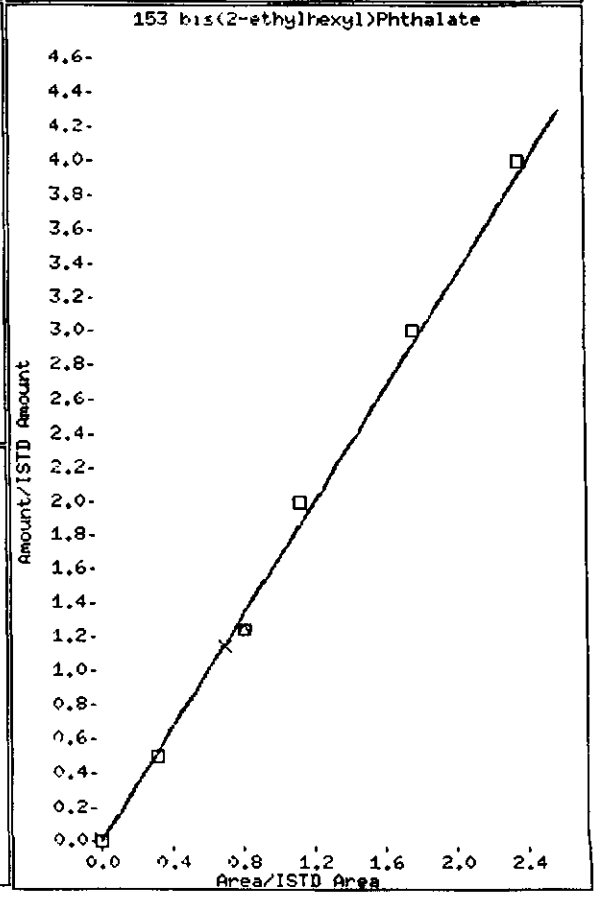
153 bis(2-ethylhexyl)Phthalate

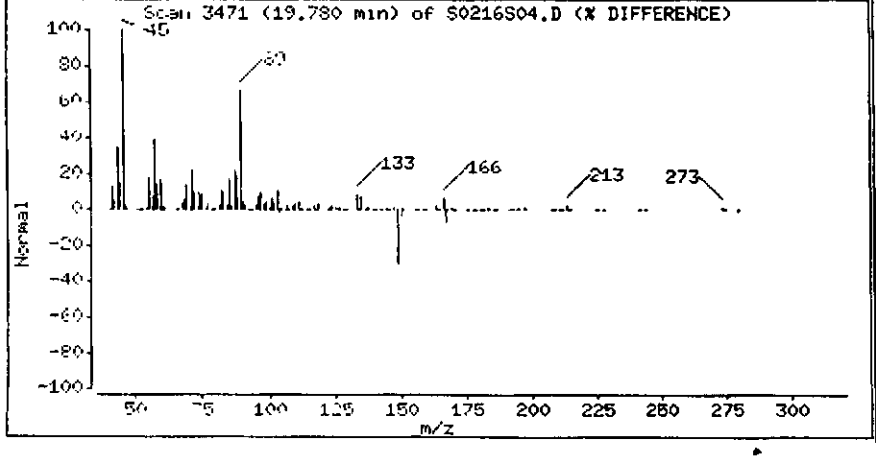












GC/MS SEMIVOLATILE
CALIBRATION DATA

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

675 937

Lab Name: STL PITTSBURGH Contract:

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

Instrument ID: 71 Calibration Date(s): 01/23/01

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF1 =S0123CC1.D RRF2 =S0123CC2.D
RRF3 =S0123CC3.D RRF4 =S0123CC4.D RRF5 =S0123CC5.D

COMPOUND		RRF1	RRF2	RRF3	RRF4	RRF5	$\overline{RRF}$	% RSD
Phenol	*	1.932	1.686	1.461	1.490	1.503	1.614	12.3*
bis(2-Chloroethyl)ether		1.506	1.371	1.219	1.258	1.246	1.320	9.0
2-Chlorophenol		1.365	1.250	1.071	1.100	1.121	1.181	10.4
1,3-Dichlorobenzene		1.659	1.532	1.336	1.385	1.405	1.463	9.0
1,4-Dichlorobenzene	*	1.687	1.548	1.345	1.403	1.419	1.480	9.3*
1,2-Dichlorobenzene		1.552	1.414	1.237	1.282	1.311	1.359	9.2
2-Methylphenol		1.289	1.153	1.029	1.045	1.071	1.117	9.6
2,2'-oxybis(1-Chloropropane		2.744	2.460	2.169	2.195	2.176	2.349	10.7
4-Methylphenol		1.347	1.218	1.074	1.086	1.099	1.165	10.1
Hexachloroethane		0.646	0.592	0.521	0.546	0.569	0.575	8.3
Nitrobenzene		0.470	0.438	0.392	0.413	0.423	0.427	6.8
Isophorone		0.727	0.668	0.598	0.626	0.646	0.653	7.5
2-Nitrophenol	*	0.191	0.183	0.165	0.173	0.179	0.178	5.6*
2,4-Dimethylphenol		0.363	0.344	0.304	0.319	0.330	0.332	6.8
bis(2-Chloroethoxy)methane		0.447	0.414	0.371	0.386	0.398	0.403	7.2
N-Nitroso-di-n-propylamine	#	1.141	1.012	0.924	0.964	0.996	1.007	8.1#
2,4-Dichlorophenol	*	0.304	0.278	0.254	0.266	0.275	0.275	6.6*
1,2,4-Trichlorobenzene		0.339	0.320	0.284	0.298	0.308	0.310	6.9
Naphthalene		1.112	1.030	0.907	0.940	0.952	0.988	8.4
4-Chloroaniline		0.405	0.372	0.329	0.336	0.342	0.357	8.8
Hexachlorobutadiene	*	0.214	0.207	0.188	0.202	0.214	0.205	5.3*
4-Chloro-3-Methylphenol	*	0.288	0.275	0.252	0.266	0.278	0.272	5.1*
2-Methylnaphthalene		0.703	0.675	0.578	0.599	0.618	0.635	8.3
Hexachlorocyclopentadiene	#	0.446	0.440	0.409	0.446	0.463	0.441	4.5#
2,4,6-Trichlorophenol	*	0.370	0.361	0.319	0.342	0.356	0.350	5.7*
2,4,5-Trichlorophenol		0.386	0.364	0.329	0.363	0.372	0.363	5.9
2-Chloronaphthalene		1.247	1.184	1.009	1.068	1.094	1.120	8.5
2-Nitroaniline		0.374	0.372	0.338	0.367	0.382	0.367	4.7
Dimethylphthalate		1.218	1.211	1.066	1.145	1.194	1.167	5.4
Acenaphthylene		1.942	1.774	1.622	1.702	1.753	1.759	6.7
2,6-Dinitrotoluene		0.268	0.270	0.246	0.263	0.276	0.265	4.4
3-Nitroaniline		0.289	0.293	0.268	0.291	0.304	0.289	4.5
Acenaphthene	*	1.193	1.134	1.012	1.070	1.099	1.102	6.2*
2,4-Dinitrophenol	#	0.071	0.118	0.130	0.160	0.178	0.131	31.6#
4-Nitrophenol	#	0.146	0.167	0.160	0.185	0.200	0.172	12.3#
Dibenzofuran		1.633	1.580	1.393	1.463	1.502	1.514	6.3
2,4-Dinitrotoluene		0.337	0.350	0.323	0.353	0.369	0.346	5.1

675 938 6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL PITTSBURGH Contract:

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

Instrument ID: 71 Calibration Date(s): 01/23/01

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF1 =S0123CC1.D RRF2 =S0123CC2.D
RRF3 =S0123CC3.D RRF4 =S0123CC4.D RRF5 =S0123CC5.D

COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	$\overline{RRF}$	% RSD
Diethylphthalate	1.187	1.186	1.065	1.155	1.195	1.158	4.7
4-Chlorophenyl-phenylether	0.627	0.611	0.544	0.578	0.601	0.592	5.4
Fluorene	1.318	1.275	1.142	1.216	1.253	1.241	5.3
4-Nitroaniline	0.259	0.283	0.255	0.285	0.304	0.277	7.2
4,6-Dinitro-2-methylphenol	0.097	0.119	0.114	0.130	0.138	0.120	12.9
N-Nitrosodiphenylamine (1) *	0.443	0.540	0.473	0.495	0.522	0.495	7.8*
4-Bromophenyl-phenylether	0.225	0.217	0.191	0.206	0.216	0.211	6.2
Hexachlorobenzene	0.240	0.231	0.208	0.224	0.238	0.228	5.7
Pentachlorophenol *	0.087	0.110	0.106	0.122	0.131	0.111	15.2*
Phenanthrene	1.140	1.103	0.973	1.026	1.064	1.061	6.1
Anthracene	1.154	1.117	0.994	1.054	1.092	1.082	5.7
Carbazole	0.940	0.949	0.841	0.906	0.958	0.919	5.2
Di-n-Butylphthalate	1.096	1.160	1.039	1.125	1.179	1.120	4.9
Fluoranthene *	1.062	1.103	1.000	1.103	1.177	1.089	6.0*
Pyrene	1.077	0.986	0.829	0.841	0.819	0.910	12.7
Butylbenzylphthalate	0.462	0.464	0.397	0.415	0.416	0.431	7.1
3,3'-Dichlorobenzidine	0.376	0.415	0.383	0.384	0.408	0.393	4.4
Benzo(a)Anthracene	1.062	1.050	0.921	0.989	1.010	1.006	5.6
Chrysene	1.039	0.998	0.867	0.929	0.955	0.958	6.9
bis(2-ethylhexyl)Phthalate	0.640	0.648	0.561	0.588	0.593	0.606	6.1
Di-n-octylphthalate *	1.096	1.116	0.966	1.030	1.066	1.055	5.6*
Benzo(b)fluoranthene	1.116	1.106	1.000	1.233	1.426	1.176	13.8
Benzo(k)fluoranthene	1.336	1.302	1.150	1.028	1.041	1.171	12.2
Benzo(a)pyrene *	1.119	1.116	1.001	1.084	1.143	1.093	5.1*
Indeno(1,2,3-cd)pyrene	1.666	1.668	1.507	1.636	1.786	1.653	6.0
Dibenz(a,h)anthracene	1.454	1.449	1.317	1.430	1.550	1.440	5.8
Benzo(g,h,i)perylene	1.450	1.424	1.276	1.377	1.512	1.408	6.3
Pyridine	1.060	1.039	0.988	0.970	1.007	1.013	3.6
N-Nitrosodimethylamine	0.688	0.646	0.583	0.619	0.651	0.637	6.1
Aniline	2.000	1.806	1.564	1.422	1.413	1.641	15.6
Benzyl Alcohol	0.938	0.922	0.826	0.807	0.819	0.862	7.2
Benzoic Acid	0.042	0.102	0.105	0.107	0.125	0.096	32.7
1-Methylnaphthalene	0.654	0.662	0.592	0.572	0.586	0.613	6.8
2,3,4,6-Tetrachlorophenol	0.264	0.305	0.276	0.288	0.301	0.287	6.0
2,3,5,6-Tetrachlorophenol	0.261	0.310	0.291	0.298	0.315	0.295	7.2

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

675 939

Lab Name: STL PITTSBURGH Contract:

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

Instrument ID: 71 Calibration Date(s): 01/23/01

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF1 =S0123CC1.D RRF2 =S0123CC2.D
RRF3 =S0123CC3.D RRF4 =S0123CC4.D RRF5 =S0123CC5.D

COMPOUND	RRF1	RRF2	RRF3	RRF4	RRF5	$\overline{RRF}$	% RSD
1,2-Diphenylhydrazine	1.008	0.930	0.815	0.854	0.877	0.897	8.3
Benzidine	0.350	0.351	0.352	0.258	0.325	0.327	12.4
Methyl methanesulfonate	0.312	0.177	0.291	0.284	0.289	0.271	19.8
2-Naphthylamine	0.896	0.823	0.698	0.616	0.589	0.724	18.2
7,12-dimethylbenz[a]anthrac	0.533	0.534	0.519	0.530	0.561	0.535	2.9
Nitrobenzene-d5	0.442	0.504	0.381	0.400	0.413	0.428	11.2
2-Fluorobiphenyl	1.374	1.602	1.189	1.251	1.280	1.339	12.1
Terphenyl-d14	0.828	0.965	0.690	0.712	0.701	0.779	15.1
Phenol-d5	1.683	1.595	1.400	1.324	1.334	1.467	11.1
2-Fluorophenol	1.107	1.135	1.049	1.023	1.053	1.073	4.3
2,4,6-Tribromophenol	0.103	0.112	0.104	0.106	0.113	0.108	4.4
2-Chlorophenol-d4	1.244	1.228	1.098	1.049	1.063	1.136	8.2
1,2-Dichlorobenzene-d4	0.967	1.039	0.780	0.808	0.823	0.883	12.8

FORM VI SV-3 1/87 Rev.

Data File: \\QPITPA02\D\chem\71.i\s012301.b/S0123CC5.D
Report Date: 01/23/2001

INITIAL CALIBRATION REPORT

Instrument ID: 71.i
Lab File ID: S0123CC5.D
Analysis Type: NONE

Injection Date: 23-JAN-2001 20:40
Lab Sample ID: sstd160
Method File: \\QPITPA02\D\chem\71.i\s012301.b\

COMPOUND	%RSD
Benzo(b)fluoranthene	13 8
7,12-dimethylbenz[a]anthracen	2 9
Benzo(k)fluoranthene	12 2
Benzo(a)pyrene	5 1
Indeno(1,2,3-cd)pyrene	6 0
Dibenz(a,h)anthracene	5.8
Benzo(g,h,i)perylene	6 3

The average of all %RSD's in the initial calibration is 8 5

INITIAL CALIBRATION REPORT

Instrument ID: 71.i
Lab File ID: S0123CC5.D
Analysis Type: NONE

Injection Date: 23-JAN-2001 20:40
Lab Sample ID: sstd160
Method File: \\QPITPA02\D\chem\71.i\s012301.b\8270clp

COMPOUND	%RSD
Pyridine	3 6
N-Nitrosodimethylamine	6.1
Methyl methanesulfonate	19.8
2-Fluorophenol	4.3
Aniline	15 6
Phenol-d5	11 1
Phenol	12 3
bis(2-Chloroethyl)ether	9 0
2-Chlorophenol-d4	8 2
2-Chlorophenol	10 4
1,3-Dichlorobenzene	9 0
1,4-Dichlorobenzene	9 3
Benzyl Alcohol	7 2
1,2-Dichlorobenzene-d4	12 8
1,2-Dichlorobenzene	9 2
2-Methylphenol	9 6
2,2'-oxybis(1-Chloropropane)	10 7
4-Methylphenol	10 1
N-Nitroso-di-n-propylamine	8 1
Hexachloroethane	8 3
Nitrobenzene-d5	11 2
Nitrobenzene	6 8
Isophorone	7 5
2-Nitrophenol	5 6
2,4-Dimethylphenol	6 8
bis(2-Chloroethoxy)methane	7 2
Benzoic Acid	32 7
2,4-Dichlorophenol	6 6
1,2,4-Trichlorobenzene	6 9
Naphthalene	8 4
4-Chloroaniline	8 8
Hexachlorobutadiene	5 3
4-Cnloro-3-Methylphenol	5 1
2-Methylnaphthalene	8 3
1-Methylnaphthalene	6 8
Hexachlorocyclopentadiene	4 5
2,4,6-Trichlorophenol	5 7
2,4,5-Trichlorophenol	5 9
2-Fluorobiphenyl	12 1

Data File: \\QPITPA02\D\chem\71.i\s012301.b/S0123CC5.D
Report Date: 01/23/2001

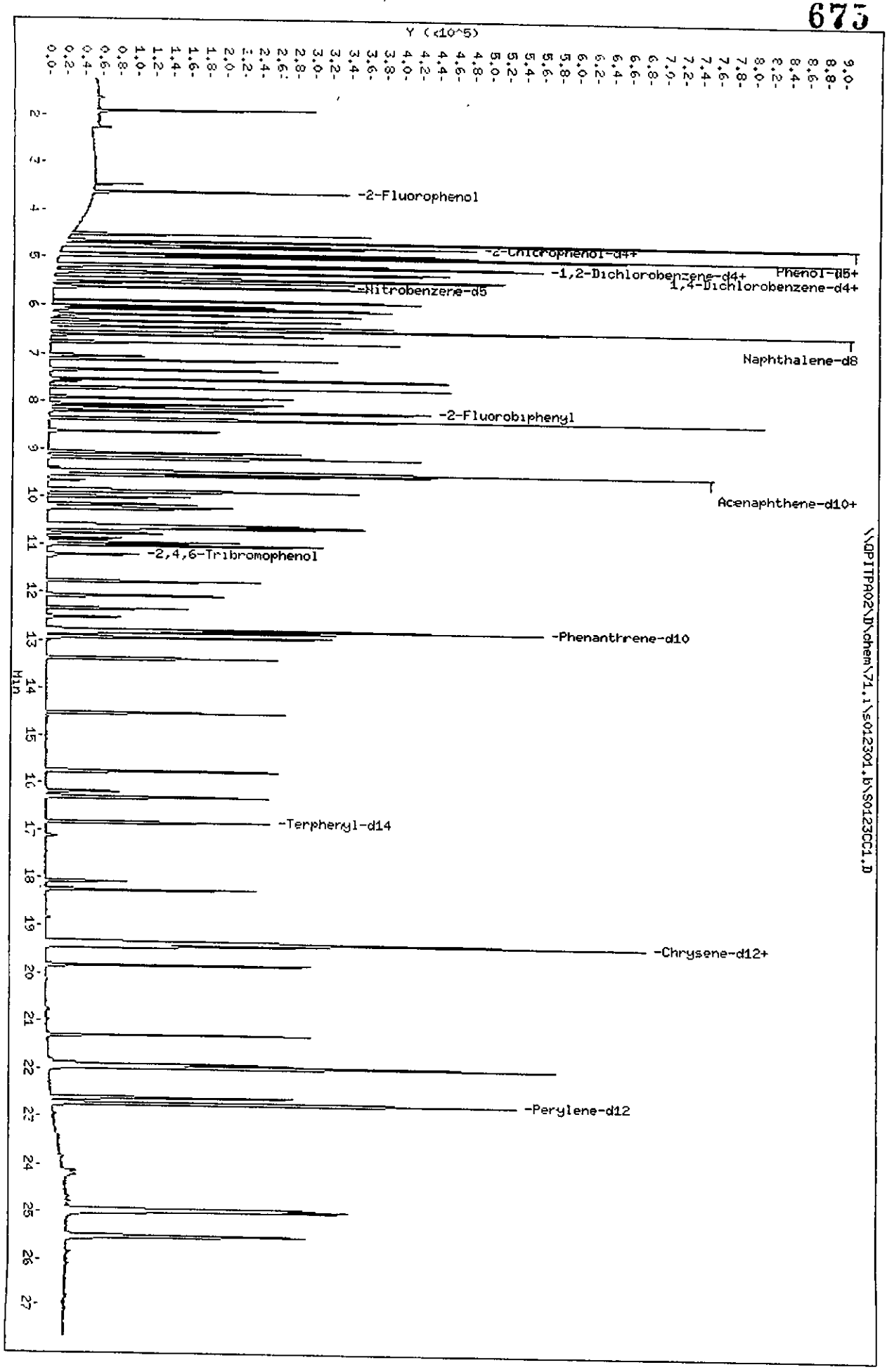
675 942

INITIAL CALIBRATION REPORT

Instrument ID: 71.i
Lab File ID: S0123CC5.D
Analysis Type: NONE

Injection Date: 23-JAN-2001 20:40
Lab Sample ID: sstd160
Method File: \\QPITPA02\D\chem\71.i\s012301.b\

COMPOUND	%RSD
2-Chloronaphthalene	8 5
2-Nitroaniline	4 7
Dimethylphthalate	5 4
Acenaphthylene	6 7
2,6-Dinitrotoluene	4 4
3-Nitroaniline	4 5
Acenaphthene	6.2
2,4-Dinitrophenol	31.6
4-Nitrophenol	12 3
Dibenzofuran	6 3
2,4-Dinitrotoluene	5 1
2,3,5,6-Tetrachlorophenol	7 2
2-Naphthylamine	18 2
2,3,4,6-Tetrachlorophenol	6.0
Diethylphthalate	4 7
Fluorene	5 3
4-Chlorophenyl-phenylether	5 4
4-Nitroaniline	7 2
4,6-Dinitro-2-methylphenol	12 9
N-Nitrosodiphenylamine (1)	7 8
1,2-Diphenylhydrazine	8.3
2,4,6-Tribromophenol	4 4
4-Bromophenyl-phenylether	6 2
Hexachlorobenzene	5 7
Pentachlorophenol	15 2
Phenanthrene	6 1
Anthracene	5 7
Carbazole	5.2
Di-n-Butylphthalate	4 9
Fluoranthene	6 0
Benzidine	12 4
Pyrene	12 7
Terphenyl-d14	15 1
Butylbenzylphthalate	7 1
Benzo(a)Anthracene	5.6
3,3'-Dichlorobenzidine	4 4
Chrysene	6 9
bis(2-ethylhexyl)Phthalate	6 1
Di-n-octylphthalate	5 6



Data File: \\QPITPA02\D\chem\71.1\s012301.b\S0123CC1.D
Date : 23-JAN-2001 18:26
Client ID: SSTD020
Sample Info: std020(10ug/ml) 77-06-3 8270/CLP/625
Column phase: Hp5-MS

Instrument: 71.1
Operator: 045183
Column diameter: 0.25

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s012301.b\S0123CC1.D
Lab Smp Id: sstd020 Client Smp ID: SSTD020
Inj Date : 23-JAN-2001 18:26
Operator : 045183 Inst ID: 71.i
Smp Info : sstd020(10ug/ml) 77-06-3 8270/CLP/625
Misc Info : sstd020,s012301.b,8270clp.m,1-8270l.sub,1,1
Comment :
Method : \\QPITPA02\D\chem\71.i\s012301.b\8270clp.m
Meth Date : 23-Jan-2001 19:02 bachas Quant Type: ISTD
Cal Date : 23-JAN-2001 18:26 Cal File: S0123CC1.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-8270l.sub
Target Version: 4.04
Processing Host: PITPC050

lwf 1/23/01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 1 1,4-Dichlorobenzene-d4	152	4 957	4 957	(1 000)	152363	40.0000	
* 2 Naphthalene-d8	136	6 479	6.479	(1 000)	581803	40 0000	
* 3 Acenaphthene-d10	164	9 487	9 487	(1.000)	313032	40 0000	
* 4 Phenanthrene-d10	188	12.772	12 772	(1 000)	469051	40 0000	
* 5 Chrysene-d12	240	19 391	19.391	(1 000)	470573	40 0000	
* 6 Perylene-d12	264	22 741	22 741	(1 000)	493574	40 0000	
13 N-Nitrosodimethylamine	74	1 896	1 896	(0 382)	52376	20.0000	20.000
10 Pyridine	79	1.890	1 890	(0 381)	80767	20 0000	20 000
19 Methyl methanesulfonate	80	3 466	3 466	(0 699)	23804	20 0000	20 000
22 Aniline	93	4 657	4 657	(0 940)	152359	20 0000	20 000
23 Phenol	94	4 663	4 663	(0 941)	147223	20 0000	20 000
24 bis(2-Chloroethyl)ether	93	4.732	4 732	(0 955)	114712	20 0000	20.000
25 2-Chlorophenol	128	4 775	4 775	(0 963)	103972	20 0000	20 000
27 1,3-Dichlorobenzene	146	4 919	4 919	(0 992)	126409	20 0000	20 000
28 1,4-Dichlorobenzene	146	4 978	4 978	(1 004)	128543	20 0000	20 000
29 1,2-Dichlorobenzene	146	5 181	5 181	(1 045)	118221	20 0000	20 000
30 Benzyl Alcohol	108	5.138	5 138	(1 037)	71456	20 0000	20.000
31 2-Methylphenol	108	5 293	5 293	(1 068)	98187	20 0000	20 000
32 2,2'-oxybis(1-Chloropropane)	45	5 315	5 315	(1 072)	209083	20 0000	20 000
33 N-Nitroso-di-n-propylamine	70	5 469	5 469	(1 103)	86949	20 0000	20 000
35 4-Methylphenol	108	5 453	5.453	(1 100)	102642	20.0000	20 000
38 Hexachloroethane	117	5 523	5 523	(1 114)	49221	20 0000	20.000
39 Nitrobenzene	77	5 630	5 630	(0 869)	136643	20 0000	20 000
44 Isophorone	82	5 902	5 902	(0 911)	211509	20 0000	20.000
45 2-Nitrophenol	139	6.014	6 014	(0 928)	55469	20 0000	20 000
46 2,4-Dimethylphenol	107	6 073	6.073	(0 937)	105585	20 0000	20 000

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
47 bis(2-Chloroethoxy)methane	93	6 191	6 191	(0 955)	130013	20 0000	20 000
51 2,4-Dichlorophenol	162	6.314	6 314	(0 974)	88379	20 0000	20 000
52 Benzoic Acid	122	6 180	6 180	(0 954)	12300	20 0000	20 000(H)
53 1,2,4-Trichlorobenzene	180	6 426	6 426	(0 992)	98755	20 0000	20 000
54 Naphthalene	128	6 506	6 506	(1 004)	323565	20 0000	20 000
55 4-Chloroaniline	127	6 607	6 607	(1 020)	117816	20 0000	20.000
59 Hexachlorobutadiene	225	6 762	6 762	(1 044)	62203	20 0000	20 000
62 4-Chloro-3-Methylphenol	107	7 339	7 339	(1 133)	83925	20 0000	20.000
65 2-Methylnaphthalene	142	7.537	7 537	(1 163)	204543	20.0000	20 000
66 1-Methylnaphthalene	142	7.713	7 713	(1 190)	190204	20 0000	20.000
67 Hexachlorocyclopentadiene	237	7 921	7 921	(0.835)	69864	20 0000	20 000
69 2,4,6-Trichlorophenol	196	8.066	8 066	(0 850)	57974	20 0000	20 000
70 2,4,5-Trichlorophenol	196	8 135	8 135	(0 858)	60447	20 0000	20 000
73 2-Chloronaphthalene	162	8 370	8 370	(0 882)	195180	20 0000	20 000
77 2-Nitroaniline	65	8 627	8 627	(0 909)	58612	20 0000	20 000
80 Dimethylphthalate	163	9 070	9 070	(0 956)	190676	20 0000	20 000
82 2,6-Dinitrotoluene	165	9 193	9.193	(0 969)	42005	20 0000	20 000
83 Acenaphthylene	152	9 172	9 172	(0 967)	303929	20 0000	20 000
85 3-Nitroaniline	138	9 455	9.455	(0 997)	45206	20 0000	20 000
86 Acenaphthene	153	9 551	9.551	(1 007)	186669	20 0000	20 000
87 2,4-Dinitrophenol	184	9 663	9.663	(1 019)	11106	20 0000	20 000
89 4-Nitrophenol	109	9 850	9 850	(1 038)	22824	20 0000	20 000
90 Dibenzofuran	168	9 882	9 882	(1 042)	255606	20 0000	20 000
91 2,4-Dinitrotoluene	165	10 000	10 000	(1 054)	52813	20 0000	20 000
95 2,3,5,6-Tetrachlorophenol	232	10 160	10 160	(1 071)	40833	20 0000	20 000
92 2,3,4,6-Tetrachlorophenol	232	10 256	10 256	(1 081)	41263	20 0000	20 000
96 2-Naphthylamine	143	10 224	10 224	(1 078)	140188	20 0000	20 000
97 Diethylphthalate	149	10 593	10 593	(1 117)	185765	20 0000	20 000
98 Fluorene	166	10 630	10 630	(1 121)	206272	20 0000	20 000
99 4-Chlorophenyl-phenylether	204	10 673	10 673	(1 125)	98163	20 0000	20 000
100 4-Nitroaniline	138	10 774	10 774	(1.136)	40589	20 0000	20 000
102 4,6-Dinitro-2-methylphenol	198	10 881	10 881	(0 852)	22821	20 0000	20 000
103 N-Nitrosodiphenylamine (1)	169	10 956	10 956	(0 858)	103897	20 0000	20 000
104 1,2-Diphenylhydrazine	77	11 015	11 015	(0 862)	236295	20 0000	20 000
112 4-Bromophenyl-phenylether	248	11 773	11 773	(0 922)	52836	20 0000	20 000
113 Hexachlorobenzene	284	12 067	12 067	(0 945)	56297	20 0000	20 000
117 Pentachlorophenol	266	12 510	12 510	(0 980)	20334	20 0000	20 000
122 Phenanthrene	178	12 826	12 826	(1 004)	267453	20 0000	20 000
123 Anthracene	178	12 932	12 932	(1 013)	270714	20 0000	20 000
126 Carbazole	167	13 370	13 370	(1 047)	220584	20 0000	20 000
130 Di-n-Butylphthalate	149	14 524	14 524	(1 137)	257091	20 0000	20 000
135 Fluoranthene	202	15 753	15 753	(1 233)	249198	20 0000	20 000
136 Benzidine	184	16 180	16 180	(0 834)	82296	20 0000	20 000
137 Pyrene	202	16 293	16.293	(0 840)	253508	20 0000	20 000
144 Butylbenzylphthalate	149	18 248	18 248	(0 941)	108804	20 0000	20 000
149 3,3'-Dichlorobenzidine	252	19 402	19 402	(1 001)	88359	20 0000	20 000
150 Benzo(a)Anthracene	228	19 348	19 348	(0 998)	249967	20 0000	20 000

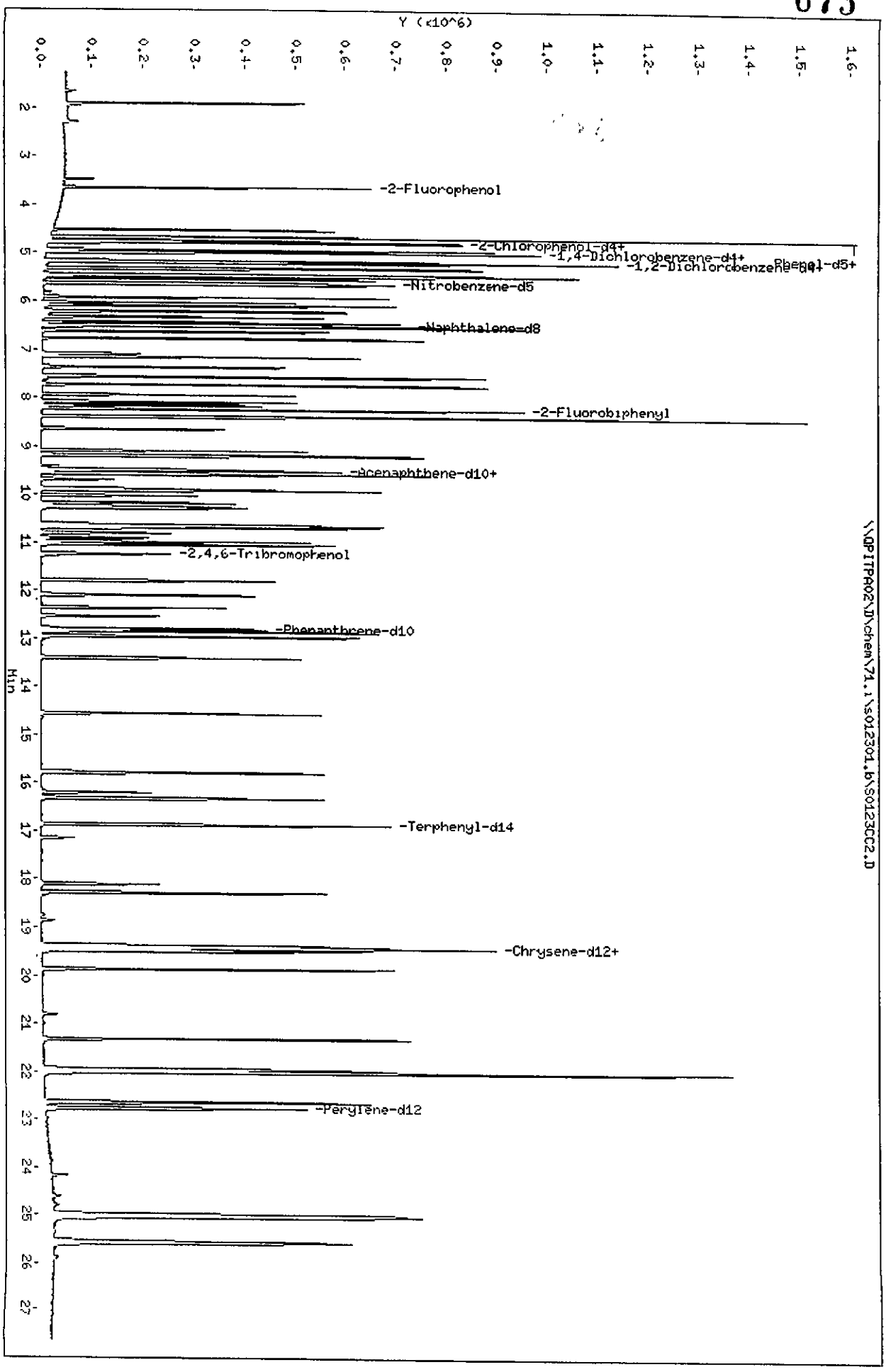
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
151 Chrysene	228	19 444	19 444	(1 003)	244513	20 0000	20 000
153 bis(2-ethylhexyl)Phthalate	149	19 829	19 829	(1 023)	150524	20 0000	20 000
155 Di-n-octylphthalate	149	21 298	21 298	(0 937)	270491	20 0000	20 000
157 Benzo(b)fluoranthene	252	21 918	21 918	(0 964)	275337	20 0000	20 000
158 Benzo(k)fluoranthene	252	21 977	21 977	(0 966)	329663	20 0000	20 000
159 7,12-dimethylbenz(a)anthracen	256	21 982	21 982	(0 967)	131462	20 0000	20 000
167 Benzo(a)pyrene	252	22 612	22 612	(0 994)	276278	20 0000	20 000
169 Indeno(1,2,3-cd)pyrene	276	24.952	24.952	(1 097)	411098	20 0000	20 000
170 Dibenz(a,h)anthracene	278	25 006	25 006	(1 100)	358750	20.0000	20 000
171 Benzo(g,h,i)perylene	276	25 529	25 529	(1 123)	357986	20.0000	20 000
$ 172 Nitrobenzene-d5	82	5 608	5 608	(0 866)	128657	20.0000	20.000
$ 173 2-Fluorobiphenyl	172	8 205	8 205	(0 865)	215045	20 0000	20 000
$ 174 Terphenyl-d14	244	16 838	16 838	(0 868)	194840	20 0000	20.000
$ 175 Phenol-d5	99	4 652	4 652	(0.939)	128251	20 0000	20.000
$ 176 2-Fluorophenol	112	3 632	3 632	(0.733)	84342	20 0000	20 000
$ 177 2,4,6-Tribromophenol	330	11 212	11 212	(0 878)	24076	20 0000	20 000
$ 178 2-Chlorophenol-d4	132	4 759	4 759	(0 960)	94809	20 0000	20 000
$ 179 1,2-Dichlorobenzene-d4	152	5 165	5 165	(1 042)	73701	20 0000	20 000

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\QPITPA02\D\chem\71.1\s012301.b\S0123CC2.D
Date : 23-JAN-2001 18:59
Client ID: SSTD050
Sample Info: sstd050(25ug/ml) 77-09-6 8270/CLP/625
Column phase: Hp5-HS

Instrument: 71.1
Operator: 045183
Column diameter: 0.25



STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s012301.b\S0123CC2.D
Lab Smp Id: sstd050 Client Smp ID: SSTD050
Inj Date : 23-JAN-2001 18:59
Operator : 045183 Inst ID: 71.i
Smp Info : sstd050(25ug/ml) 77-09-6 8270/CLP/625
Misc Info : sstd050,s012301.b,8270clp.m,1-8270l.sub,1,2
Comment :
Method : \\QPITPA02\D\chem\71.i\s012301.b\8270clp.m
Meth Date : 23-Jan-2001 20:05 bachas Quant Type: ISTD
Cal Date : 23-JAN-2001 19:33 Cal File: S0123CC3.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-8270l.sub
Target Version: 4.04
Processing Host: PITPC050

1/23/01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 1 1,4-Dichlorobenzene-d4	152	4 972	4 972	(1.000)	125723	40 0000	
* 2 Naphthalene-d8	136	6 500	6 500	(1 000)	460274	40 0000	
* 3 Acenaphthene-d10	164	9 513	9 513	(1 000)	240979	40 0000	
* 4 Phenanthrene-d10	188	12 804	12.804	(1 000)	384684	40 0000	
* 5 Chrysene-d12	240	19 417	19 417	(1 000)	438383	40 0000	
* 6 Perylene-d12	264	22 767	22.767	(1 000)	476595	40 0000	
13 N-Nitrosodimethylamine	74	1 906	1.906	(0 383)	101485	50 0000	50 547
10 Pyridine	79	1 901	1 901	(0 382)	163335	50 0000	50 498
19 Methyl methanesulfonate	80	3 477	3 477	(0 699)	27780	50 0000	33 979
22 Aniline	93	4 673	4 673	(0 940)	283751	50 0000	50 440
23 Phenol	94	4 679	4 679	(0 941)	264933	50 0000	49 788
24 bis(2-Chloroethyl)ether	93	4 748	4 748	(0 955)	215526	50 0000	50.215
25 2-Chlorophenol	128	4 785	4 785	(0 962)	196490	50 0000	50.874
27 1,3-Dichlorobenzene	146	4 935	4 935	(0 992)	240714	50 0000	50.748
28 1,4-Dichlorobenzene	146	4 988	4 988	(1 003)	243274	50 0000	50.694
29 1,2-Dichlorobenzene	146	5 197	5 197	(1 045)	222154	50 0000	50 453
30 Benzyl Alcohol	108	5 154	5 154	(1 037)	144989	50 0000	51 512
31 2-Methylphenol	108	5.309	5 309	(1 068)	181203	50 0000	49 823
32 2,2'-oxybis(1-Chloropropane)	45	5 330	5 330	(1 072)	386596	50 0000	50 044
33 N-Nitroso-di-n-propylamine	70	5 485	5 485	(1 103)	159037	50 0000	49 325
35 4-Methylphenol	108	5 469	5 469	(1 100)	191494	50 0000	50 218
38 Hexachloroethane	117	5 539	5 539	(1 114)	92995	50 0000	50 470
39 Nitrobenzene	77	5 645	5 645	(0 869)	251776	50 0000	50 517
44 Isophorone	82	5.918	5 918	(0 910)	384222	50 0000	50 260
45 2-Nitrophenol	139	6 030	6 030	(0 928)	105461	50 0000	51 046
46 2,4-Dimethylphenol	107	6 089	6.089	(0 937)	197975	50 0000	51 046

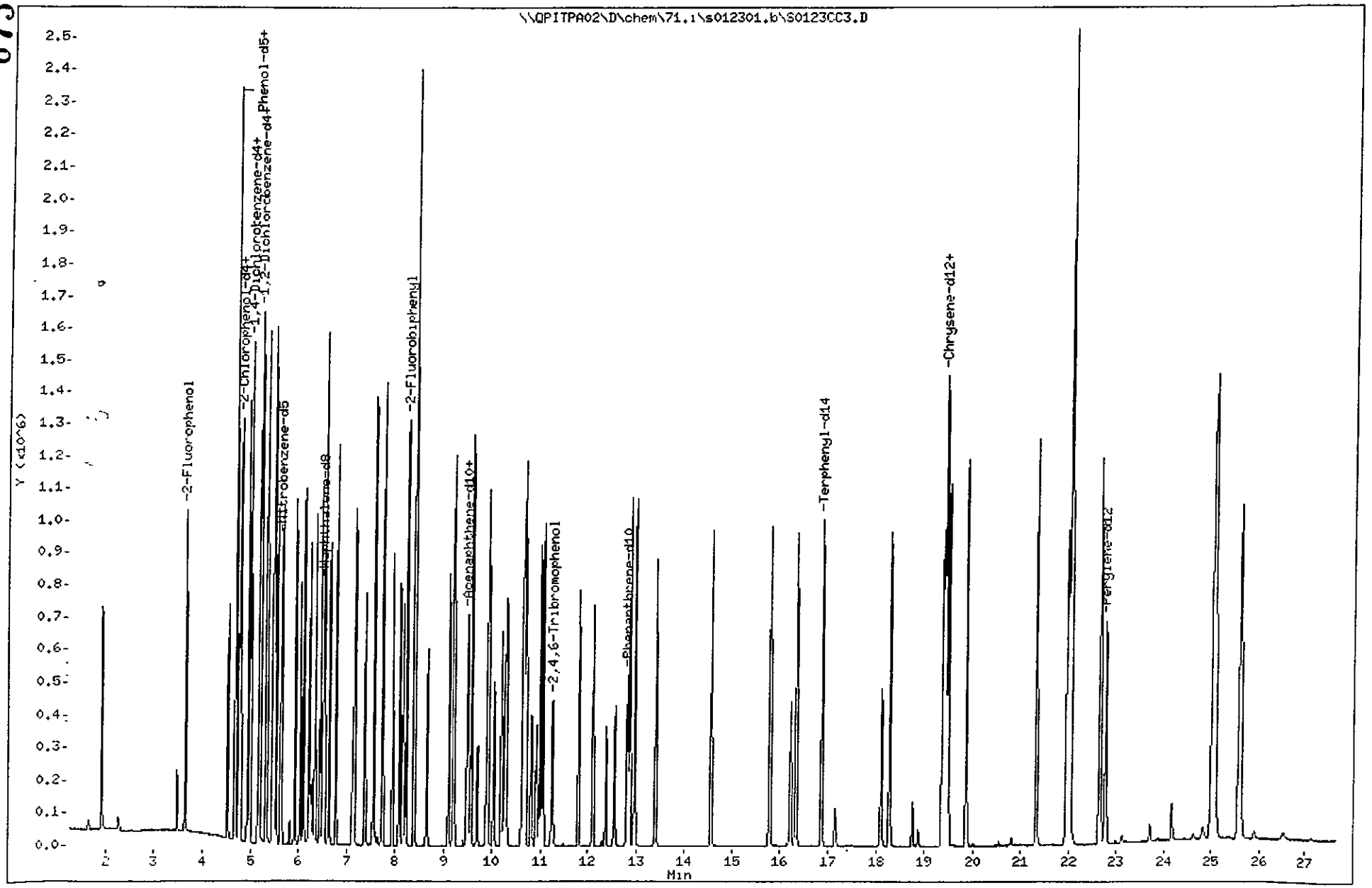
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
47	bis(2-Chloroethoxy)methane	93	6.212	6 212	(0 956)	238493	50 0000	50 449
51	2,4-Dichlorophenol	162	6.335	6 335	(0 975)	160242	50 0000	49 937
52	Benzoic Acid	122	6 244	6 244	(0 961)	58674	50 0000	61.420
53	1,2,4-Trichlorobenzene	180	6 447	6 447	(0.992)	184375	50 0000	50.923
54	Naphthalene	128	6 527	6.527	(1 004)	592741	50 0000	50 678
55	4-Chloroaniline	127	6 628	6 628	(1 020)	214009	50 0000	50 452
59	Hexachlorobutadiene	225	6 778	6 778	(1 043)	119196	50 0000	51 058
62	4-Chloro-3-Methylphenol	107	7 360	7 360	(1 132)	158393	50 0000	50.643
65	2-Methylnaphthalene	142	7 558	7 558	(1 163)	388504	50 0000	51 764
66	1-Methylnaphthalene	142	7.734	7 734	(1 190)	380687	50 0000	52 041
67	Hexachlorocyclopentadiene	237	7 943	7 943	(0 835)	132425	50 0000	50.910
69	2,4,6-Trichlorophenol	196	8 087	8 087	(0 850)	108671	50 0000	51 542
70	2,4,5-Trichlorophenol	196	8 156	8 156	(0 857)	109561	50 0000	50 584
73	2-Chloronaphthalene	162	8.391	8 391	(0 882)	356689	50 0000	51.629
77	2-Nitroaniline	65	8 653	8 653	(0 910)	112153	50 0000	51.492
80	Dimethylphthalate	163	9 096	9 096	(0 956)	364931	50 0000	51.986
82	2,6-Dinitrotoluene	165	9 219	9 219	(0 969)	81349	50 0000	51 674
83	Acenaphthylene	152	9 198	9 198	(0 967)	534365	50 0000	49 847
85	3-Nitroaniline	138	9 481	9 481	(0 997)	88268	50 0000	51 734
86	Acenaphthene	153	9 572	9 572	(1 006)	341519	50 0000	50.946
87	2,4-Dinitrophenol	184	9 689	9 689	(1 019)	35407	50 0000	55 392
89	4-Nitrophenol	109	9 876	9 876	(1 038)	50262	50 0000	52 885
90	Dibenzofuran	168	9 908	9 908	(1 042)	475846	50 0000	51.446
91	2,4-Dinitrotoluene	165	10 026	10 026	(1 054)	105499	50 0000	52 001
95	2,3,5,6-Tetrachlorophenol	232	10 186	10 186	(1 071)	93272	50 0000	53 936
92	2,3,4,6-Tetrachlorophenol	232	10 282	10 282	(1.081)	91807	50 0000	54 114
96	2-Naphthylamine	143	10.250	10 250	(1 077)	247912	50 0000	51.075
97	Diethylphthalate	149	10 624	10 624	(1 117)	357372	50 0000	51 758
98	Fluorene	166	10 651	10 651	(1 120)	384084	50 0000	51 202
99	4-Chlorophenyl-phenylether	204	10.694	10 694	(1 124)	184102	50 0000	51 435
100	4-Nitroaniline	138	10.806	10 806	(1 136)	85131	50 0000	53 169
102	4,6-Dinitro-2-methylphenol	198	10.907	10 907	(0.852)	57342	50 0000	54 106
103	N-Nitrosodiphenylamine (1)	169	10 982	10 982	(0 858)	259596	50 0000	55 618
104	1,2-Diphenylhydrazine	77	11 041	11 041	(0 862)	447344	50 0000	50 687
112	4-Bromophenyl-phenylether	248	11 800	11 800	(0 922)	104280	50 0000	51 367
113	Hexachlorobenzene	284	12 099	12 099	(0 945)	111103	50 0000	51 061
117	Pentachlorophenol	266	12 537	12 537	(0 979)	52806	50 0000	54 396
122	Phenanthrene	178	12.852	12 852	(1 004)	530324	50 0000	51 429
123	Anthracene	178	12 959	12 959	(1 012)	536994	50 0000	51 303
126	Carbazole	167	13 397	13 397	(1 046)	456482	50 0000	52 135
130	Di-n-Butylphthalate	149	14 545	14 545	(1 136)	558019	50.0000	52 814
135	Fluoranthene	202	15 785	15 785	(1 233)	530335	50 0000	52 271
136	Benzidine	184	16 207	16 207	(0 835)	192332	50 0000	49 996
137	Pyrene	202	16 324	16 324	(0 841)	540441	50 0000	51 146
144	Butylbenzylphthalate	149	18 274	18 274	(0 941)	254567	50 0000	52 634
149	3,3'-Dichlorobenzidine	252	19 433	19 433	(1 001)	227306	50 0000	53 017
150	Benzo(a)Anthracene	228	19 380	19 380	(0 998)	575499	50 0000	51 930

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
151 Chrysene	228	19 482	19 482	(1 003)	546662	50 0000	51 523
153 bis(2-ethylhexyl)Phthalate	149	19 856	19 856	(1 023)	355417	50 0000	52 603
155 Di-n-octylphthalate	149	21 325	21 325	(0 937)	664721	50 0000	52 665
157 Benzo(b)fluoranthene	252	21 955	21 955	(0 964)	659000	50 0000	51 496
158 Benzo(k)fluoranthene	252	22 014	22 014	(0 967)	775675	50.0000	51 565
159 7,12-dimethylbenz[a]anthracen	256	22 019	22 019	(0 967)	318224	50 0000	50 536
167 Benzo(a)pyrene	252	22.649	22 649	(0 995)	664782	50 0000	51 719
169 Indeno(1,2,3-cd)pyrene	276	25 005	25 005	(1 098)	993664	50 0000	51 687
170 Dibenz(a,h)anthracene	278	25 053	25 053	(1 100)	863057	50 0000	51.506
171 Benzo(g,h,i)perylene	276	25 582	25 582	(1 124)	848238	50 0000	51 465
$ 172 Nitrobenzene-d5	82	5 624	5.624	(0 865)	289843	50 0000	56 950
$ 173 2-Fluorobiphenyl	172	8.231	8.231	(0 865)	482730	50 0000	57 709
$ 174 Terphenyl-d14	244	16 864	16 864	(0.868)	528918	50 0000	58 295
$ 175 Phenol-d5	99	4 668	4 668	(0 939)	250720	50 0000	51 145
$ 176 2-Fluorophenol	112	3 642	3 642	(0 733)	178413	50 0000	51 739
$ 177 2,4,6-Tribromophenol	330	11 239	11 239	(0 878)	53641	50 0000	52 636
$ 178 2-Chlorophenol-d4	132	4 769	4 769	(0 959)	192968	50 0000	51 582
$ 179 1,2-Dichlorobenzene-d4	152	5 181	5.181	(1 042)	163245	50 0000	55 920

Data File: \\QPITPA02\D\chem\71.1\s012301.b\S0123CC3.D
Date : 23-JAN-2001 19:33
Client ID: SSTD080
Sample Info: sstd080(40ug/ml) 77-06-4 8270/CLP/625

Instrument: 71.1
Operator: 045183
Column diameter: 0.25

Column phase: Hp5-MS



STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s012301.b\S0123CC3.D
Lab Smp Id: sstd080 Client Smp ID: SSTD080
Inj Date : 23-JAN-2001 19:33
Operator : 045183 Inst ID: 71.i
Smp Info : sstd080(40ug/ml) 77-06-4 8270/CLP/625
Misc Info : sstd080,s012301.b,8270clp.m,1-8270l.sub,1,3
Comment :
Method : \\QPITPA02\D\chem\71.i\s012301.b\8270clp.m
Meth Date : 23-Jan-2001 20:06 bachas Quant Type: ISTD
Cal Date : 23-JAN-2001 19:33 Cal File: S0123CC3.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-8270l.sub
Target Version: 4.04
Processing Host: PITPC050

1/23/01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 1 1,4-Dichlorobenzene-d4	152	4 976	4 972	(1 000)	142599	40 0000	
* 2 Naphthalene-d8	136	6 504	6 500	(1 000)	526374	40 0000	
* 3 Acenaphthene-d10	164	9 517	9 513	(1 000)	283829	40 0000	
* 4 Phenanthrene-d10	188	12 803	12 804	(1 000)	460760	40 0000	
* 5 Chrysene-d12	240	19 427	19 417	(1 000)	555905	40 0000	
* 6 Perylene-d12	264	22 782	22 767	(1 000)	618815	40 0000	
13 N-Nitrosodimethylamine	74	1 910	1 906	(0 384)	166287	80 0000	73 021
10 Pyridine	79	1 899	1 901	(0.382)	281690	80 0000	76 784
19 Methyl methanesulfonate	80	3 475	3 477	(0 698)	83024	80 0000	89 533
22 Aniline	93	4 677	4 673	(0 940)	446014	80 0000	69 902
23 Phenol	94	4 688	4 679	(0 942)	416586	80 0000	69 022
24 bis(2-Chloroethyl)ether	93	4 752	4.748	(0 955)	347789	80 0000	71 441
25 2-Chlorophenol	128	4 789	4 785	(0 962)	305561	80 0000	69 751
27 1,3-Dichlorobenzene	146	4 934	4 935	(0 991)	381129	80 0000	70.842
28 1,4-Dichlorobenzene	146	4.992	4 988	(1 003)	383604	80 0000	70.477
29 1,2-Dichlorobenzene	146	5 201	5 197	(1 045)	352867	80 0000	70 656
30 Benzyl Alcohol	108	5 163	5 154	(1 038)	235568	80 0000	73 788
31 2-Methylphenol	108	5 318	5 309	(1 069)	293606	80 0000	71.175
32 2,2'-oxybis(1-Chloropropane)	45	5.329	5 330	(1 071)	618575	80 0000	70.597
33 N-Nitroso-di-n-propylamine	70	5 495	5 485	(1 104)	263567	80 0000	72 071
35 4-Methylphenol	108	5 473	5 469	(1 100)	306242	80 0000	70 806
38 Hexachloroethane	117	5 537	5 539	(1 113)	148550	80.0000	71 079
39 Nitrobenzene	77	5 655	5 645	(0 869)	412733	80 0000	72 413
44 Isophorone	82	5 927	5 918	(0 911)	629754	80 0000	72 033
45 2-Nitrophenol	139	6 034	6 030	(0 928)	173337	80 0000	73 364
46 2,4-Dimethylphenol	107	6 098	6 089	(0.938)	320132	80 0000	72 177

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
47	bis(2-Chloroethoxy)methane	93	6 216	6 212	(0 956)	390612	80 0000	72.252
51	2,4-Dichlorophenol	162	6 339	6 335	(0 975)	267684	80 0000	72 944
52	Benzoic Acid	122	6 275	6 244	(0 965)	110321	80 0000	100 98
53	1,2,4-Trichlorobenzene	180	6.446	6 447	(0.991)	298991	80 0000	72 210
54	Naphthalene	128	6.531	6 527	(1 004)	954665	80 0000	71 372
55	4-Chloroaniline	127	6 632	6 628	(1 020)	346288	80 0000	71 385
59	Hexachlorobutadiene	225	6 782	6.778	(1.043)	197543	80 0000	73 992
62	4-Chloro-3-Methylphenol	107	7 370	7.360	(1 133)	264896	80 0000	74 059
65	2-Methylnaphthalene	142	7.557	7 558	(1 162)	608831	80 0000	70 934
66	1-Methylnaphthalene	142	7 738	7 734	(1 190)	622851	80 0000	74 453
67	Hexachlorocyclopentadiene	237	7 941	7 943	(0 834)	232350	80 0000	75 839
69	2,4,6-Trichlorophenol	196	8 091	8 087	(0 850)	180934	80 0000	72 861
70	2,4,5-Trichlorophenol	196	8 166	8 156	(0 858)	186556	80 0000	73.129
73	2-Chloronaphthalene	162	8 401	8 391	(0 883)	572850	80 0000	70 399
77	2-Nitroaniline	65	8 662	8 653	(0 910)	191758	80 0000	74 749
80	Dimethylphthalate	163	9 106	9 096	(0 957)	605058	80 0000	73 180
82	2,6-Dinitrotoluene	165	9 229	9 219	(0 970)	139364	80 0000	75 160
83	Acenaphthylene	152	9 202	9.198	(0.967)	920988	80 0000	72 942
85	3-Nitroaniline	138	9 491	9 481	(0 997)	152003	80 0000	75 639
86	Acenaphthene	153	9 581	9 572	(1 007)	574299	80 0000	72 738
87	2,4-Dinitrophenol	184	9 699	9 689	(1 019)	73684	80 0000	97.871
89	4-Nitrophenol	109	9 886	9 876	(1 039)	91159	80 0000	81 435
90	Dibenzofuran	168	9 913	9.908	(1 042)	790816	80 0000	72 591
91	2,4-Dinitrotoluene	165	10 035	10.026	(1 054)	183132	80 0000	76 639
95	2,3,5,6-Tetrachlorophenol	232	10 196	10.186	(1 071)	164964	80 0000	80 992
92	2,3,4,6-Tetrachlorophenol	232	10 292	10 282	(1 081)	156906	80 0000	78 523
96	2-Naphthylamine	143	10 260	10 250	(1 078)	396449	80 0000	69 346
97	Diethylphthalate	149	10.634	10 624	(1 117)	604577	80 0000	74 341
98	Fluorene	166	10.660	10 651	(1 120)	648514	80 0000	73 402
99	4-Chlorophenyl-phenylether	204	10.703	10 694	(1 125)	308823	80 0000	73 254
100	4-Nitroaniline	138	10.826	10 806	(1 138)	144963	80 0000	76 869
102	4,6-Dinitro-2-methylphenol	198	10 922	10 907	(0 853)	105092	80 0000	82 789
103	N-Nitrosodiphenylamine (1)	169	10 992	10 982	(0.859)	435984	80 0000	77.986
104	1,2-Diphenylhydrazine	77	11 050	11 041	(0.863)	751258	80 0000	71 068
112	4-Bromophenyl-phenylether	248	11 798	11 800	(0 922)	176127	80 0000	72 433
113	Hexachlorobenzene	284	12 103	12 099	(0 945)	191364	80 0000	73 426
117	Pentachlorophenol	266	12 546	12 537	(0 980)	97962	80 0000	84 251
122	Phenanthrene	178	12 861	12 852	(1 005)	897036	80 0000	72 628
123	Anthracene	178	12 968	12 959	(1 013)	916095	80 0000	73 070
126	Carbazole	167	13 406	13 397	(1 047)	775387	80 0000	73 936
130	Di-n-Butylphthalate	149	14 550	14 545	(1.136)	957682	80 0000	75 674
135	Fluoranthene	202	15 789	15 785	(1 233)	921066	80 0000	75 793
136	Benzidine	184	16 211	16 207	(0 834)	391672	80 0000	80 290
137	Pyrene	202	16 328	16 324	(0 841)	921439	80 0000	68 767
144	Butylbenzylphthalate	149	18 278	18 274	(0 941)	441325	80 0000	71 957
149	3,3'-Dichlorobenzidine	252	19 438	19 433	(1 001)	426105	80 0000	78 375
150	Benzo(a)Anthracene	228	19 384	19 380	(0 998)	1023957	80 0000	72 862

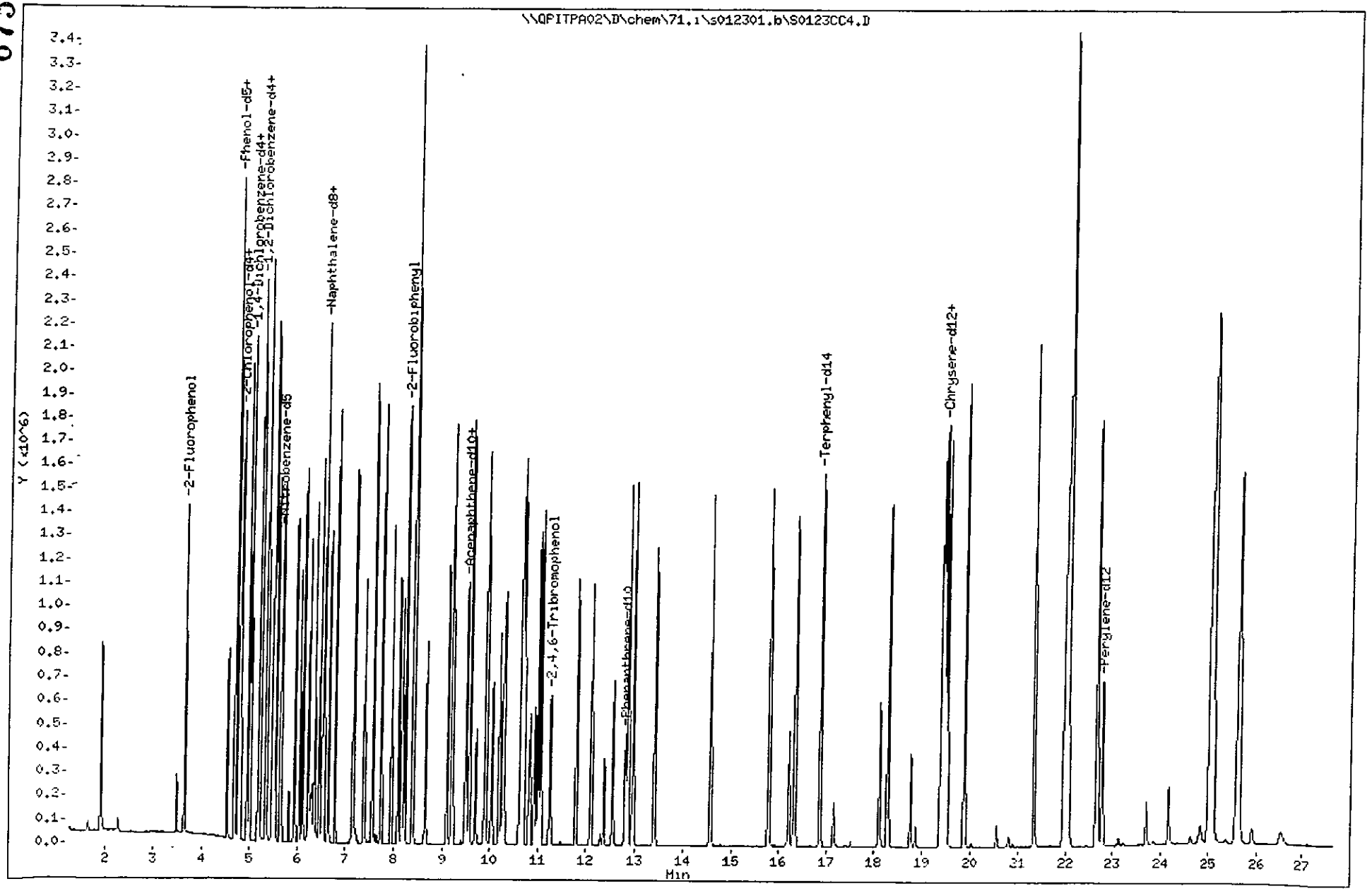
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
151 Chrysene	228	19.491	19 482	(1 003)	964480	80.0000	71 686
153 bis(2-ethylhexyl)Phthalate	149	19.860	19 856	(1 022)	623897	80 0000	72 818
155 Di-n-octylphthalate	149	21 329	21 325	(0 936)	1195703	80 0000	72 962
157 Benzo(b)fluoranthene	252	21 970	21 955	(0 964)	1237954	80 0000	74.504
158 Benzo(k)fluoranthene	252	22 034	22 014	(0 967)	1422885	80 0000	72 851
159 7,12-dimethylbenz[a]anthracen	256	22 034	22 019	(0 967)	641880	80 0000	78 507
167 Benzo(a)pyrene	252	22 664	22 649	(0 995)	1238873	80 0000	74.231
169 Indeno(1,2,3-cd)pyrene	276	25 025	25 005	(1 098)	1864801	80 0000	74 707
170 Dibenz(a,h)anthracene	278	25 074	25.053	(1 101)	1629515	80 0000	74 897
171 Benzo(g,h,i)perylene	276	25.608	25.582	(1 124)	1578605	80 0000	73 766
$ 172 Nitrobenzene-d5	82	5 634	5 624	(0 866)	400925	80 0000	68.884
$ 173 2-Fluorobiphenyl	172	8 235	8 231	(0 865)	674911	80 0000	68 503
$ 174 Terphenyl-d14	244	16 868	16 864	(0 868)	767474	80 0000	66 706
$ 175 Phenol-d5	99	4 672	4 668	(0 939)	399311	80 0000	71 816
$ 176 2-Fluorophenol	112	3 641	3 642	(0 732)	299163	80 0000	76 489
$ 177 2,4,6-Tribromophenol	330	11 248	11 239	(0 879)	95552	80 0000	78 280
$ 178 2-Chlorophenol-d4	132	4 773	4 769	(0.959)	313228	80 0000	73 820
$ 179 1,2-Dichlorobenzene-d4	152	5 185	5 181	(1 042)	222509	80 0000	67 200

Data File: \\QPITPA02\D\chem\71.1\s012301.b\S0123CC4.D
Date : 23-JAN-2001 20:06
Client ID: SSTD120
Sample Info: sstd120(60ug/ml) 77-06-5 8270/CLP/625

Column phase: Hp5-MS

Instrument: 71.1

Operator: 045183
Column diameter: 0.25



Data File: \\QPITPA02\D\chem\71.i\s012301.b\S0123CC4.D
Report Date: 23-Jan-2001 20:37

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s012301.b\S0123CC4.D
Lab Smp Id: sstd120 Client Smp ID: SSTD120
Inj Date : 23-JAN-2001 20:06
Operator : 045183 Inst ID: 71.i
Smp Info : sstd120(60ug/ml) 77-06-5 8270/CLP/625
Misc Info : sstd120,s012301.b,8270clp.m,1-8270l.sub,1,4
Comment :
Method : \\QPITPA02\D\chem\71.i\s012301.b\8270clp.m
Meth Date : 23-Jan-2001 20:37 bachas Quant Type: ISTD
Cal Date : 23-JAN-2001 20:06 Cal File: S0123CC4.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-8270l.sub
Target Version: 4.04
Processing Host: PITPC050

1/23/01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 1 1,4-Dichlorobenzene-d4	152	4 975	4 975	(1 000)	133221	40 0000	
* 2 Naphthalene-d8	136	6 503	6 503	(1 000)	485660	40 0000	
* 3 Acenaphthene-d10	164	9 516	9.516	(1 000)	259715	40 0000	
* 4 Phenanthrene-d10	188	12 807	12.807	(1 000)	432970	40 0000	
* 5 Chrysene-d12	240	19 431	19 431	(1 000)	567113	40 0000	
* 6 Perylene-d12	264	22.791	22 791	(1 000)	634882	40 0000	
13 N-Nitrosodimethylamine	74	1 914	1 914	(0.385)	247475	120 000	117 22
10 Pyridine	79	1.898	1 898	(0 382)	387900	120 000	114.81
19 Methyl methanesulfonate	80	3 479	3.479	(0 699)	113544	120 000	128 11
22 Aniline	93	4 681	4 681	(0 941)	568419	120 000	100 52
23 Phenol	94	4 692	4 692	(0 943)	595563	120 000	108 88
24 bis(2-Chloroethyl)ether	93	4 756	4 756	(0 956)	502786	120 000	112 77
25 2-Chlorophenol	128	4 793	4 793	(0 963)	439822	120 000	110 35
27 1,3-Dichlorobenzene	146	4 938	4.938	(0 992)	553444	120 000	112 43
28 1,4-Dichlorobenzene	146	4 996	4 996	(1 004)	560785	120 000	112 56
29 1,2-Dichlorobenzene	146	5 199	5 199	(1.045)	512369	120 000	112.20
30 Benzyl Alcohol	108	5 167	5.167	(1 039)	322472	120 000	110 86
31 2-Methylphenol	108	5 322	5 322	(1 070)	417826	120 000	111 10
32 2,2'-oxybis(1-Chloropropane)	45	5 333	5 333	(1 072)	877267	120 000	110 11
33 N-Nitroso-di-n-propylamine	70	5.504	5.504	(1 106)	385438	120 000	114 53
35 4-Methylphenol	108	5 482	5 482	(1 102)	433942	120 000	110 29
38 Hexachloroethane	117	5 541	5 541	(1 114)	218409	120 000	113 79
39 Nitrobenzene	77	5 659	5 659	(0.870)	602146	120 000	115 83
44 Isophorone	82	5 937	5 937	(0 913)	912645	120 000	114 78
45 2-Nitrophenol	139	6.038	6 038	(0 929)	251517	120 000	116 50
46 2,4-Dimethylphenol	107	6 102	6 102	(0 938)	465158	120 000	115 19

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
47 bis(2-Chloroethoxy)methane	93	6 220	6 220	(0 956)	563091	120 000	114 58
51 2,4-Dichlorophenol	162	6 343	6 343	(0 975)	388404	120 000	115.99
52 Benzoic Acid	122	6.300	6 300	(0.969)	155754	120 000	144 15
53 1,2,4-Trichlorobenzene	180	6 449	6 449	(0 992)	434109	120 000	115 16
54 Naphthalene	128	6 535	6 535	(1 005)	1369602	120 000	113 10
55 4-Chloroaniline	127	6 636	6 636	(1 021)	489183	120 000	111 79
59 Hexachlorobutadiene	225	6 781	6 781	(1 043)	295137	120 000	119 86
62 4-Chloro-3-Methylphenol	107	7 379	7 379	(1 135)	387380	120 000	118 02
65 2-Methylnaphthalene	142	7 561	7 561	(1 163)	873218	120 000	112 55
66 1-Methylnaphthalene	142	7 742	7 742	(1 191)	833533	120 000	110 76
67 Hexachlorocyclopentadiene	237	7 945	7 945	(0 835)	347674	120 000	122 99
69 2,4,6-Trichlorophenol	196	8 100	8 100	(0 851)	266436	120 000	117 93
70 2,4,5-Trichlorophenol	196	8 170	8 170	(0 859)	282608	120 000	120 80
73 2-Chloronaphthalene	162	8 405	8 405	(0 883)	832267	120 000	113 72
77 2-Nitroaniline	65	8 666	8 666	(0 911)	286058	120 000	121 39
80 Dimethylphthalate	163	9 110	9 110	(0 957)	892033	120 000	118 42
82 2,6-Dinitrotoluene	165	9 233	9 233	(0 970)	205120	120 000	120 67
83 Acenaphthylene	152	9 206	9 206	(0 967)	1326395	120 000	116.06
85 3-Nitroaniline	138	9 500	9 500	(0 998)	226914	120 000	122 53
86 Acenaphthene	153	9 585	9 585	(1 007)	834075	120 000	116.55
87 2,4-Dinitrophenol	184	9 708	9 708	(1 020)	125092	120 000	160.93 (A)
89 4-Nitrophenol	109	9 900	9 900	(1 040)	144039	120 000	134 83
90 Dibenzofuran	168	9 916	9 916	(1 042)	1139818	120 000	115 70
91 2,4-Dinitrotoluene	165	10 045	10 045	(1 056)	275269	120 000	124 37
95 2,3,5,6-Tetrachlorophenol	232	10.200	10.200	(1 072)	232380	120 000	123.48
92 2,3,4,6-Tetrachlorophenol	232	10 301	10 301	(1.083)	224069	120 000	121.90
96 2-Naphthylamine	143	10.269	10 269	(1.079)	480353	120 000	97 549
97 Diethylphthalate	149	10 638	10 638	(1.118)	899709	120 000	120 68
98 Fluorene	166	10 670	10 670	(1 121)	947284	120 000	117 87
99 4-Chlorophenyl-phenylether	204	10 702	10 702	(1 125)	450771	120 000	117 62
100 4-Nitroaniline	138	10 841	10.841	(1 139)	222288	120 000	126 49
102 4,6-Dinitro-2-methylphenol	198	10 937	10 937	(0.854)	168524	120 000	135 28
103 N-Nitrosodiphenylamine (1)	169	11 001	11 001	(0 859)	642534	120 000	121.72
104 1,2-Diphenylhydrazine	77	11 060	11 060	(0 864)	1109651	120 000	113 67
112 4-Bromophenyl-phenylether	248	11 808	11 808	(0 922)	267076	120 000	117 65
113 Hexachlorobenzene	284	12 107	12 107	(0.945)	291730	120 000	119 34
117 Pentachlorophenol	266	12 550	12 550	(0.980)	158325	120 000	137 76
122 Phenanthrene	178	12 865	12.865	(1.005)	1332398	120 000	116 06
123 Anthracene	178	12 972	12 972	(1 013)	1368834	120 000	117 12
126 Carbazole	167	13 416	13 416	(1 048)	1176357	120 000	119 53
130 Di-n-Butylphthalate	149	14 553	14.553	(1 136)	1461463	120 000	122 16
135 Fluoranthene	202	15 798	15 798	(1 234)	1433237	120 000	124 08
136 Benzidine	184	16 215	16.215	(0 834)	438382	120 000	94 362
137 Pyrene	202	16 338	16.338	(0 841)	1430324	120 000	108 10
144 Butylbenzylphthalate	149	18 288	18 288	(0 941)	705642	120 000	114 62
149 3,3'-Dichlorobenzidine	252	19 447	19 447	(1 001)	652606	120 000	118 24
150 Benzo(a)Anthracene	228	19 393	19 393	(0 998)	1682623	120 000	118 01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
151 Chrysene	228	19 500	19 500	(1.004)	1580005	120 000	116 30
153 bis(2-ethylhexyl)Phthalate	149	19 863	19.863	(1.022)	1001043	120 000	115 85
155 Di-n-octylphthalate	149	21 338	21 338	(0 936)	1961458	120 000	117 48
157 Benzo(b)fluoranthene	252	21 990	21 990	(0 965)	2348659	120 000	132 85
158 Benzo(k)fluoranthene	252	22 059	22 059	(0 968)	1957466	120 000	102 45
159 7,12-dimethylbenz[a]anthracen	256	22.054	22 054	(0 968)	1008657	120 000	120 18
167 Benzo(a)pyrene	252	22.679	22 679	(0 995)	2064364	120 000	120 42
169 Indeno(1,2,3-cd)pyrene	276	25 051	25 051	(1 099)	3116860	120 000	121.28
170 Dibenz(a,h)anthracene	278	25 099	25 099	(1 101)	2723536	120.000	121 50
171 Benzo(g,h,i)perylene	276	25 638	25 638	(1 125)	2623148	120 000	119 60
$ 172 Nitrobenzene-d5	82	5 637	5 637	(0 867)	583624	120 000	111 30
$ 173 2-Fluorobiphenyl	172	8 239	8.239	(0 866)	974594	120 000	110 85
$ 174 Terphenyl-d14	244	16 872	16 872	(0 868)	1212269	120 000	107 01
$ 175 Phenol-d5	99	4 681	4 681	(0 941)	529290	120 000	105 89
$ 176 2-Fluorophenol	112	3 645	3 645	(0 733)	408703	120 000	113 78
$ 177 2,4,6-Tribromophenol	330	11.252	11.252	(0 879)	137060	120 000	119.62
$ 178 2-Chlorophenol-d4	132	4 777	4 777	(0 960)	419217	120 000	108.99
$ 179 1,2-Dichlorobenzene-d4	152	5 183	5 183	(1 042)	322906	120 000	107 90

QC Flag Legend

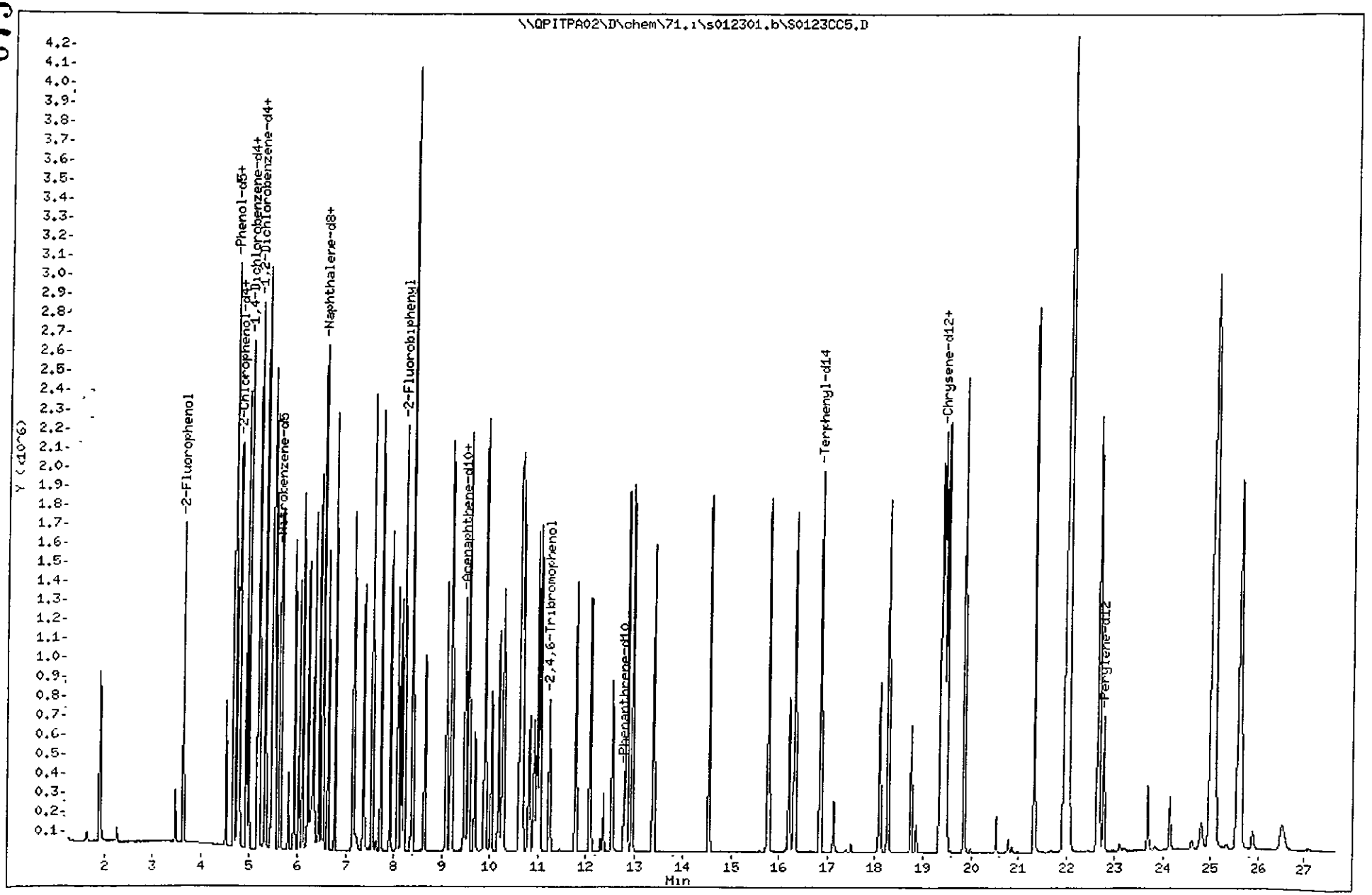
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\QPITPA02\D\chem\71.1\s012301.b\S0123CC5.D
Date : 23-JAN-2001 20:40
Client ID: SSTD160
Sample Info: sstd160(80ug/ml) 77-06-6 8270/CLP/625

Column phase: Hp5-MS

Instrument: 71.1

Operator: 045183
Column diameter: 0.25



STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s012301.b\S0123CC5.D
Lab Smp Id: sstd160 Client Smp ID: SSTD160
Inj Date : 23-JAN-2001 20:40
Operator : 045183 Inst ID: 71.i
Smp Info : sstd160(80ug/ml) 77-06-6 8270/CLP/625
Misc Info : sstd160,s012301.b,8270clp.m,1-8270l.sub,1,5
Comment :
Method : \\QPITPA02\D\chem\71.i\s012301.b\8270clp.m
Meth Date : 23-Jan-2001 21:12 bachas Quant Type: ISTD
Cal Date : 23-JAN-2001 20:40 Cal File: S0123CC5.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-8270l.sub
Target Version: 4.04
Processing Host: PITPC050

wmf 1/23/01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 1 1,4-Dichlorobenzene-d4	152	4 967	4.967	(1 000)	119269	40 0000	
* 2 Naphthalene-d8	136	6 489	6 489	(1 000)	434133	40 0000	
* 3 Acenaphthene-d10	164	9 502	9 502	(1 000)	233236	40 0000	
* 4 Phenanthrene-d10	188	12 788	12 788	(1 000)	389567	40 0000	
* 5 Chrysene-d12	240	19 412	19 412	(1 000)	559093	40 0000	
* 6 Perylene-d12	264	22 767	22 767	(1 000)	611766	40 0000	
13 N-Nitrosodimethylamine	74	1 911	1 911	(0 385)	310516	160 000	163 41(A)
10 Pyridine	79	1 890	1 890	(0 381)	480469	160 000	159 07
19 Methyl methanesulfonate	80	3 471	3.471	(0 699)	137801	160 000	170 75(A)
22 Aniline	93	4 673	4 673	(0 941)	674039	160 000	137 76
23 Phenol	94	4 689	4 689	(0 944)	717118	160.000	148 97
24 bis(2-Chloroethyl)ether	93	4.748	4 748	(0 956)	594708	160 000	151.07
25 2-Chlorophenol	128	4 785	4 785	(0 963)	534708	160 000	151 77
27 1,3-Dichlorobenzene	146	4 929	4 929	(0 992)	670163	160 000	153 59
28 1,4-Dichlorobenzene	146	4 983	4.983	(1 003)	676838	160 000	153 33
29 1,2-Dichlorobenzene	146	5 191	5 191	(1 045)	625619	160 000	154 37
30 Benzyl Alcohol	108	5 159	5 159	(1 039)	390910	160 000	151 99
31 2-Methylphenol	108	5.314	5 314	(1 070)	510957	160 000	153 34
32 2,2'-oxybis(1-Chloropropane)	45	5 325	5 325	(1 072)	1037918	160 000	148 20
33 N-Nitroso-di-n-propylamine	70	5 496	5 496	(1 106)	474936	160 000	158.10
35 4-Methylphenol	108	5 474	5.474	(1 102)	524325	160 000	150 96
38 Hexachloroethane	117	5 528	5 528	(1 113)	271286	160 000	158 30
39 Nitrobenzene	77	5 651	5 651	(0 871)	734615	160 000	158 46
44 Isophorone	82	5.923	5 923	(0 913)	1121461	160 000	158 22
45 2-Nitrophenol	139	6 025	6 025	(0 928)	311346	160 000	161 06(A)
46 2,4-Dimethylphenol	107	6 094	6 094	(0 939)	574039	160 000	159 22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
47	bis(2-Chloroethoxy)methane	93	6 211	6 211	(0.957)	690623	160 000	157 76
51	2,4-Dichlorophenol	162	6 334	6 334	(0 976)	478259	160 000	159 82
52	Benzoic Acid	122	6 308	6 308	(0 972)	217088	160 000	207 93(A)
53	1,2,4-Trichlorobenzene	180	6 436	6 436	(0 992)	534121	160 000	158 80
54	Naphthalene	128	6 521	6 521	(1 005)	1653614	160 000	154 16
55	4-Chloroaniline	127	6 623	6 623	(1 021)	594303	160 000	153 48
59	Hexachlorobutadiene	225	6 767	6 767	(1 043)	371323	160 000	166 88(A)
62	4-Chloro-3-Methylphenol	107	7 365	7 365	(1 135)	483524	160 000	163 82(A)
65	2-Methylnaphthalene	142	7 547	7 547	(1 163)	1072459	160 000	155 68
66	1-Methylnaphthalene	142	7 729	7 729	(1 191)	1017208	160 000	152 89
67	Hexachlorocyclopentadiene	237	7 926	7 926	(0 834)	431993	160 000	168 03(A)
69	2,4,6-Trichlorophenol	196	8 087	8 087	(0 851)	332483	160 000	163 08(A)
70	2,4,5-Trichlorophenol	196	8 161	8 161	(0 859)	347517	160 000	164 30(A)
73	2-Chloronaphthalene	162	8 391	8 391	(0 883)	1020792	160 000	156 23
77	2-Nitroaniline	65	8 653	8 653	(0.911)	356775	160.000	166 80(A)
80	Dimethylphthalate	163	9 096	9 096	(0 957)	1114411	160 000	163 77(A)
82	2,6-Dinitrotoluene	165	9 219	9 219	(0 970)	257298	160 000	166 77(A)
83	Acenaphthylene	152	9 192	9 192	(0 967)	1635708	160 000	159 50
85	3-Nitroaniline	138	9.486	9 486	(0 998)	283393	160 000	168 22(A)
86	Acenaphthene	153	9 572	9.572	(1 007)	1025665	160 000	159 68
87	2,4-Dinitrophenol	184	9 695	9 695	(1 020)	166249	160 000	216 97(A)
89	4-Nitrophenol	109	9 892	9 892	(1 041)	186549	160 000	186 42(A)
90	Dibenzofuran	168	9 903	9 903	(1 042)	1401438	160 000	158 73
91	2,4-Dinitrotoluene	165	10 036	10 036	(1 056)	344373	160 000	170 43(A)
95	2,3,5,6-Tetrachlorophenol	232	10 186	10 186	(1 072)	293782	160 000	170 88(A)
92	2,3,4,6-Tetrachlorophenol	232	10.282	10 282	(1.082)	281232	160 000	168.19(A)
96	2-Naphthylamine	143	10 255	10.255	(1 079)	549871	160 000	130 14
97	Diethylphthalate	149	10 624	10 624	(1 118)	1115151	160 000	165 20(A)
98	Fluorene	166	10 651	10 651	(1 121)	1168639	160 000	161 53(A)
99	4-Chlorophenyl-phenylether	204	10 688	10 688	(1.125)	560560	160 000	162 29(A)
100	4-Nitroaniline	138	10 832	10 832	(1 140)	283299	160.000	175 24(A)
102	4,6-Dinitro-2-methylphenol	198	10 929	10 929	(0 855)	214329	160 000	184 04(A)
103	N-Nitrosodiphenylamine (1)	169	10 987	10 987	(0 859)	813189	160 000	168 85(A)
104	1,2-Diphenylhydrazine	77	11 046	11 046	(0 864)	1366238	160 000	156 42
112	4-Bromophenyl-phenylether	248	11 789	11 789	(0.922)	336090	160 000	163 62(A)
113	Hexachlorobenzene	284	12 093	12 093	(0 946)	370306	160 000	166 62(A)
117	Pentachlorophenol	266	12 531	12 531	(0 980)	204763	160 000	189 03(A)
122	Phenanthrene	178	12 852	12 852	(1 005)	1657365	160 000	160 36(A)
123	Anthracene	178	12 959	12 959	(1 013)	1701321	160 000	161 42(A)
126	Carbazole	167	13 397	13 397	(1 048)	1492659	160 000	166 78(A)
130	Di-n-Butylphthalate	149	14 540	14 540	(1 137)	1836982	160 000	168 41(A)
135	Fluoranthene	202	15 779	15 779	(1 234)	1833697	160 000	172 89(A)
136	Benzidine	184	16 196	16.196	(0.834)	727627	160 000	159 09
137	Pyrene	202	16 319	16 319	(0 841)	1832000	160 000	143 96
144	Butylbenzylphthalate	149	18 269	18 269	(0 941)	931540	160 000	154 57
149	3,3'-Dichlorobenzidine	252	19 433	19 433	(1 001)	913101	160 000	166 19(A)
150	Benzo(a)Anthracene	228	19 375	19 375	(0 998)	2259288	160 000	160 58(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
151 Chrysene	228	19 492	19 492	(1 004)	2135192	160 000	159.53
153 bis(2-ethylhexyl)Phthalate	149	19 845	19 845	(1.022)	1326799	160 000	156 58
155 Di-n-octylphthalate	149	21 324	21 324	(0 937)	2608239	160 000	161 69(A)
157 Benzo(b)fluoranthene	252	21 997	21 997	(0 966)	3490561	160.000	194.02(A)
158 Benzo(k)fluoranthene	252	22 051	22 051	(0 969)	2547620	160 000	142 22
159 7,12-dimethylbenz(a)anthracen	256	22 046	22 046	(0 968)	1373194	160 000	167 75(A)
167 Benzo(a)pyrene	252	22 665	22 665	(0 996)	2797257	160 000	167 38(A)
169 Indeno(1,2,3-cd)pyrene	276	25 037	25 037	(1.100)	4370381	160 000	172 91(A)
170 Dibenz(a,h)anthracene	278	25 085	25 085	(1 102)	3792377	160 000	172 23(A)
171 Benzo(g,h,i)perylene	276	25.630	25 630	(1 126)	3699804	160 000	171 83(A)
$ 172 Nitrobenzene-d5	82	5 624	5 624	(0 867)	717035	160 000	154 33
$ 173 2-Fluorobiphenyl	172	8 225	8 225	(0 866)	1193996	160 000	152 90
$ 174 Terphenyl-d14	244	16.853	16 853	(0 868)	1567262	160 000	143 87
$ 175 Phenol-d5	99	4 673	4 673	(0.941)	636217	160 000	145 41
$ 176 2-Fluorophenol	112	3 637	3.637	(0 732)	502443	160 000	156 98
$ 177 2,4,6-Tribromophenol	330	11.238	11 238	(0 879)	176035	160 000	168 49(A)
$ 178 2-Chlorophenol-d4	132	4 769	4 769	(0 960)	507191	160 000	149 66
$ 179 1,2-Dichlorobenzene-d4	152	5 175	5 175	(1 042)	392811	160 000	149 10

QC Flag Legend

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

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Instrument ID: 71 Calibration Date: 02/16/01 Time: 1034

Lab File ID: S0216CC1 Init. Calib. Date(s): 01/23/01 01/23/01

Init. Calib. Times: 1826 2040

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

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.614	1.688	0.01	4.6	20.0
bis(2 Chloroethyl)ether	1.320	1.302	0.01	1.4	50.0
2-Chlorophenol	1.181	1.201	0.01	1.7	50.0
1,3-Dichlorobenzene	1.463	1.463	0.01	0.0	50.0
1,4-Dichlorobenzene	1.480	1.493	0.01	0.9	20.0
1,2-Dichlorobenzene	1.359	1.365	0.01	0.4	50.0
2-Methylphenol	1.117	1.137	0.01	1.8	50.0
2,2'-oxybis(1-Chloropropane)	2.349	2.259	0.01	3.8	50.0
4-Methylphenol	1.165	1.193	0.01	2.4	50.0
Hexachloroethane	0.575	0.564	0.01	1.9	50.0
Nitrobenzene	0.427	0.422	0.01	1.2	50.0
Isophorone	0.653	0.655	0.01	0.3	50.0
2-Nitrophenol	0.178	0.176	0.01	1.1	20.0
2,4-Dimethylphenol	0.332	0.346	0.01	4.2	50.0
bis(2-Chloroethoxy)methane	0.403	0.400	0.01	0.7	50.0
N-Nitroso-di-n-propylamine	1.007	0.986	0.05	2.1	50.0
2,4-Dichlorophenol	0.275	0.269	0.01	2.2	20.0
1,2,4-Trichlorobenzene	0.310	0.302	0.01	2.6	50.0
Naphthalene	0.988	0.984	0.01	0.4	50.0
4-Chloroaniline	0.357	0.365	0.01	2.2	50.0
Hexachlorobutadiene	0.205	0.197	0.01	3.9	20.0
4-Chloro-3-Methylphenol	0.272	0.286	0.01	5.1	20.0
2-Methylnaphthalene	0.635	0.636	0.01	0.2	50.0
Hexachlorocyclopentadiene	0.441	0.368	0.05	16.6	50.0
2,4,6 Trichlorophenol	0.350	0.341	0.01	2.6	20.0
2,4,5-Trichlorophenol	0.363	0.355	0.01	2.2	50.0
2-Chloronaphthalene	1.120	1.070	0.01	4.5	50.0
2-Nitroaniline	0.367	0.372	0.01	1.4	50.0
Dimethylphthalate	1.167	1.194	0.01	2.3	50.0
Acenaphthylene	1.759	1.630	0.01	7.3	50.0
2,6-Dinitrotoluene	0.265	0.258	0.01	2.6	50.0
3-Nitroaniline	0.289	0.294	0.01	1.7	50.0
Acenaphthene	1.102	1.051	0.01	4.6	20.0
2,4-Dinitrophenol	0.131	0.132	0.05	0.8	50.0
4-Nitrophenol	0.172	0.192	0.05	11.6	50.0
Dibenzofuran	1.514	1.503	0.01	0.7	50.0
2,4 Dinitrotoluene	0.346	0.352	0.01	1.7	50.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Instrument ID: 71 Calibration Date: 02/16/01 Time: 1034

Lab File ID: S0216CC1 Init. Calib. Date(s): 01/23/01 01/23/01

Init. Calib. Times: 1826 2040

GC Column: HP5-MS ID: 0 25 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.158	1.267	0.01	9.4	50.0
4-Chlorophenyl-phenylether	0.592	0.580	0.01	2.0	50.0
Fluorene	1.241	1.224	0.01	1.4	50.0
4-Nitroaniline	0.277	0.293	0.01	5.8	50.0
4,6-Dinitro-2-methylphenol	0.120	0.116	0.01	3.3	50.0
N-Nitrosodiphenylamine (1)	0.495	0.527	0.01	6.5	20.0
4-Bromophenyl-phenylether	0.211	0.200	0.01	5.2	50.0
Hexachlorobenzene	0.228	0.220	0.01	3.5	50.0
Pentachlorophenol	0.111	0.122	0.01	9.9	20.0
Phenanthrene	1.061	1.030	0.01	2.9	50.0
Anthracene	1.082	1.055	0.01	2.5	50.0
Carbazole	0.919	0.945	0.01	2.8	50.0
Di-n-Butylphthalate	1.120	1.178	0.01	5.2	50.0
Fluoranthene	1.089	1.117	0.01	2.6	20.0
Pyrene	0.910	0.878	0.01	3.5	50.0
Butylbenzylphthalate	0.431	0.446	0.01	3.5	50.0
3,3'-Dichlorobenzidine	0.393	0.401	0.01	2.0	50.0
Benzo(a)Anthracene	1.006	0.987	0.01	1.9	50.0
Chrysene	0.958	0.923	0.01	3.6	50.0
bis(2-ethylhexyl)Phthalate	0.606	0.650	0.01	7.3	50.0
Di-n-octylphthalate	1.055	1.155	0.01	9.5	20.0
Benzo(b)fluoranthene	1.176	1.045	0.01	11.1	50.0
Benzo(k)fluoranthene	1.171	1.196	0.01	2.1	50.0
Benzo(a)pyrene	1.093	1.033	0.01	5.5	20.0
Indeno(1,2,3-cd)pyrene	1.653	1.523	0.01	7.9	50.0
Dibenz(a,h)anthracene	1.440	1.322	0.01	8.2	50.0
Benzo(g,h,i)perylene	1.408	1.296	0.01	8.0	50.0
Pyridine	1.013	1.143	0.01	12.8	50.0
N-Nitrosodimethylamine	0.637	0.713	0.01	11.9	50.0
Aniline	1.641	1.792	0.01	9.2	50.0
Benzyl Alcohol	0.862	0.924	0.01	7.2	50.0
Benzoic Acid	0.096	0.140	0.01	45.8	50.0
1-Methylnaphthalene	0.613	0.642	0.01	4.7	50.0
2,3,4,6-Tetrachlorophenol	0.287	0.323	0.01	12.5	50.0
2,3,5,6-Tetrachlorophenol	0.295	0.324	0.01	9.8	50.0
1,2-Diphenylhydrazine	0.897	0.847	0.01	5.6	50.0
Benzidine	0.327	0.286	0.01	12.5	50.0

FORM 7
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL-PITTSBURGH Contract:

Lab Code: STLPIT Case No.: SAS No.: SDG No.: C1B090228

Instrument ID. 71 Calibration Date: 02/16/01 Time: 1034

Lab File ID: S0216CC1 Init. Calib. Date(s): 01/23/01 01/23/01

Init. Calib. Times: 1826 2040

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

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Methyl methanesulfonate	0.271	0.136	0.01	49.8	50.0
2 Naphthylamine	0.724	0.780	0.01	7.7	50.0
7,12-dimethylbenz[a]anthrace	0.535	0.523	0.01	2.2	50.0
Nitrobenzene-d5	0.428	0.394	0.01	7.9	50.0
2-Fluorobiphenyl	1.339	1.204	0.01	10.1	50.0
Terphenyl-d14	0.779	0.708	0.01	9.1	50.0
Phenol-d5	1.467	1.603	0.01	9.3	50.0
2-Fluorophenol	1.073	1.247	0.01	16.2	50.0
2,4,6 Tribromophenol	0.108	0.112	0.01	3.7	50.0
2 Chlorophenol-d4	1.136	1.224	0.01	7.7	50.0
1,2-Dichlorobenzene-d4	0.883	0.832	0.01	5.8	50.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 71.i
Lab File ID: S0216CC1.D
Analysis Type: NONE

Injection Date: 16-FEB-2001 10:34
Lab Sample ID: sstd50
Method File: \\QPITPA02\D\chem\71.i\s021601.b\8270clp

COMPOUND	EXPECTED CONC	MEASURED CONC	%D	MAX %D
66 Pyridine	50.0000	56.4309	12.9	50.0
67 N-Nitrosodimethylamine	50.0000	55.9525	11.9	50.0
87 Methyl methanesulfonate	50.0000	25.1881	49.6	50.0
140 2-Fluorophenol	50.0000	58.0741	16.1	50.0
184 Phenol-d5	50.0000	54.6202	9.2	50.0
68 Aniline	50.0000	54.5957	9.2	50.0
1 Phenol	50.0000	52.2901	4.6	20.0
5 Bis(2-Chloroethyl)ether	50.0000	49.2933	1.4	50.0
187 2-Chlorophenol-d4	50.0000	53.8664	7.7	50.0
4 2-Chlorophenol	50.0000	50.8233	1.6	50.0
41 1,3-Dichlorobenzene	50.0000	49.9881	0.0	50.0
11 1,4-Dichlorobenzene-d4	40.0000	40.0000	0.0	50.0
5 1,4-Dichlorobenzene	50.0000	50.4140	0.8	20.0
69 Benzyl Alcohol	50.0000	53.5467	7.1	50.0
188 1,2-Dichlorobenzene-d4	50.0000	47.0855	5.8	50.0
6 1,2-Dichlorobenzene	50.0000	50.2302	0.5	50.0
7 2-Methylphenol	50.0000	50.8583	1.7	50.0
8 2,2'-oxybis(1-Chloropropane)	50.0000	48.0919	3.8	50.0
9 4-Methylphenol	50.0000	51.2070	2.4	50.0
10 N-Nitroso-di-n-propylamine	50.0000	48.9363	2.1	50.0
12 Hexachloroethane	50.0000	49.0853	1.8	50.0
186 Nitrobenzene-d5	50.0000	46.0228	8.0	50.0
13 Nitrobenzene	50.0000	49.4276	1.1	50.0
14 Isophorone	50.0000	50.1684	0.3	50.0
15 2-Nitrophenol	50.0000	49.4424	1.1	20.0
16 2,4-Dimethylphenol	50.0000	52.0227	4.0	50.0
17 Bis(2-Chloroethoxy)methane	50.0000	49.6275	0.7	50.0
67 Benzoic Acid	50.0000	72.8701	45.7	50.0
18 2,4-Dichlorophenol	50.0000	48.7648	2.5	20.0
19 1,2,4-Trichlorobenzene	50.0000	48.6631	2.7	50.0
42 Naphthalene-d8	40.0000	40.0000	0.0	50.0
20 Naphthalene	50.0000	49.7619	0.5	50.0
21 4-Chloroaniline	50.0000	51.1129	2.2	50.0
22 Hexachlorobutadiene	50.0000	48.0097	4.0	20.0
23 4-Chloro-3-Methylphenol	50.0000	52.4943	5.0	20.0
24 2-Methylnaphthalene	50.0000	50.1093	0.2	50.0
25 1-Methylnaphthalene	50.0000	52.3539	4.7	50.0
26 Hexachlorocyclopentadiene	50.0000	41.7023	16.6	50.0
27 2,4,6-Trichlorophenol	50.0000	48.7232	2.6	20.0

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 71.i
Lab File ID: S0216CC1.D
Analysis Type: NONE

Injection Date: 16-FEB-2001 10:34
Lab Sample ID: sstd50
Method File: \\QPITPA02\D\chem\71.i\s021601.b\

COMPOUND	EXPECTED CONC	MEASURED CONC	%D	MAX %D
77 2,4,5-Trichlorophenol	50.0000	48.9984	2.0	50.0
78 2-Chlorobiphenyl	50.0000	44.9574	10.1	50.0
79 1-Bromonaphthalene	50.0000	47.7370	4.5	50.0
80 3-Nitroaniline	50.0000	50.7612	1.5	50.0
81 Dimethylphthalate	50.0000	51.1362	2.3	50.0
82 Acenaphthylene	50.0000	46.3349	7.3	50.0
83 2,6-Dinitrotoluene	50.0000	48.6927	2.6	50.0
84 3-Nitroaniline	50.0000	50.8699	1.7	50.0
85 Acenaphthene-d10	40.0000	40.0000	0.0	50.0
86 Acenaphthene	50.0000	47.7027	4.6	20.0
87 2,4-Dinitrophenol	50.0000	50.1061	0.2	50.0
88 4-Nitrophenol	50.0000	55.8108	11.6	50.0
89 Dibenzofuran	50.0000	49.6235	0.8	50.0
90 2,4-Dinitrotoluene	50.0000	50.7807	1.6	50.0
91 2,3,4,6-Tetrachlorophenol	50.0000	54.9887	10.0	50.0
92 2-Naphthylamine	50.0000	53.8312	7.7	50.0
93 2,3,4,6-Tetrachlorophenol	50.0000	56.3546	12.7	50.0
94 Diethylphthalate	50.0000	54.7325	9.5	50.0
95 Fluorene	50.0000	49.3427	1.3	50.0
96 4-Chlorophenyl-phenylether	50.0000	48.9638	2.1	50.0
97 3-Nitroaniline	50.0000	52.9033	5.8	50.0
98 4,6-Dinitro-2-methylphenol	50.0000	48.3734	3.3	50.0
99 N-Nitrosodiphenylamine (1)	50.0000	53.7823	6.6	20.0
100 1,2-Diphenylhydrazine	50.0000	47.2255	5.5	50.0
101 2,4,6-Tribromophenol	50.0000	52.2384	4.5	50.0
102 4-Bromophenyl-phenylether	50.0000	47.3486	5.3	50.0
103 Hexachlorobenzene	50.0000	48.1297	3.7	50.0
104 Pentachlorophenol	50.0000	54.6283	9.3	20.0
105 Phenanthrene-d10	40.0000	40.0000	0.0	50.0
106 Phenanthrene	50.0000	48.5233	3.0	50.0
107 Anthracene	50.0000	48.7322	2.5	50.0
108 Carbazole	50.0000	51.4132	2.8	50.0
109 Di-n-butylphthalate	50.0000	52.5988	5.2	50.0
110 Fluoranthene	50.0000	51.3056	2.6	20.0
111 Benzidine	50.0000	43.6962	12.6	50.0
112 Pyrene	50.0000	48.1908	3.6	50.0
113 Terphenyl-d14	50.0000	45.4504	9.1	50.0
114 Butylbenzylphthalate	50.0000	51.7310	3.5	50.0
115 Benzo(a)Anthracene	50.0000	49.0095	2.0	50.0

Data Path: \\QPITPA02\D\chem\71.i\s021601.b/S0216CC1.D
Report Date: 02/16/2001

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: 71.i
Lab File ID: S0216CC1.D
Analysis Type: NONE

Injection Date: 16-FEB-2001 10:34
Lab Sample ID: sstd50
Method File: \\QPITPA02\D\chem\71.i\s021601.b\

ANALYTE	EXPECTED CONC	MEASURED CONC	%D	MAX %D
Acenaphthylene-d2	40.0000	40.0000	0.0	50.0
3,3'-Dichlorobenzidine	50.0000	51.0365	2.1	50.0
Chrysene	50.0000	48.1903	3.6	50.0
bis(2-Ethylhexyl)Phthalate	50.0000	53.6073	7.2	50.0
Butylbenzylphthalate	50.0000	54.7416	9.5	20.0
Benzo(b)fluoranthene	50.0000	44.4289	11.1	50.0
Benzo(k)fluoranthene	50.0000	51.0387	2.1	50.0
Dibenz(a,h)anthracene	50.0000	48.8942	2.2	50.0
Benzo(a)pyrene	50.0000	47.2678	5.5	20.0
Acenaphthylene-d2	40.0000	40.0000	0.0	50.0
Indeno(1,2,3-cd)pyrene	50.0000	46.0711	7.9	50.0
Dibenz(a,h)anthracene	50.0000	45.9040	8.2	50.0
Benzo(g,h,i)perylene	50.0000	46.0407	7.9	50.0

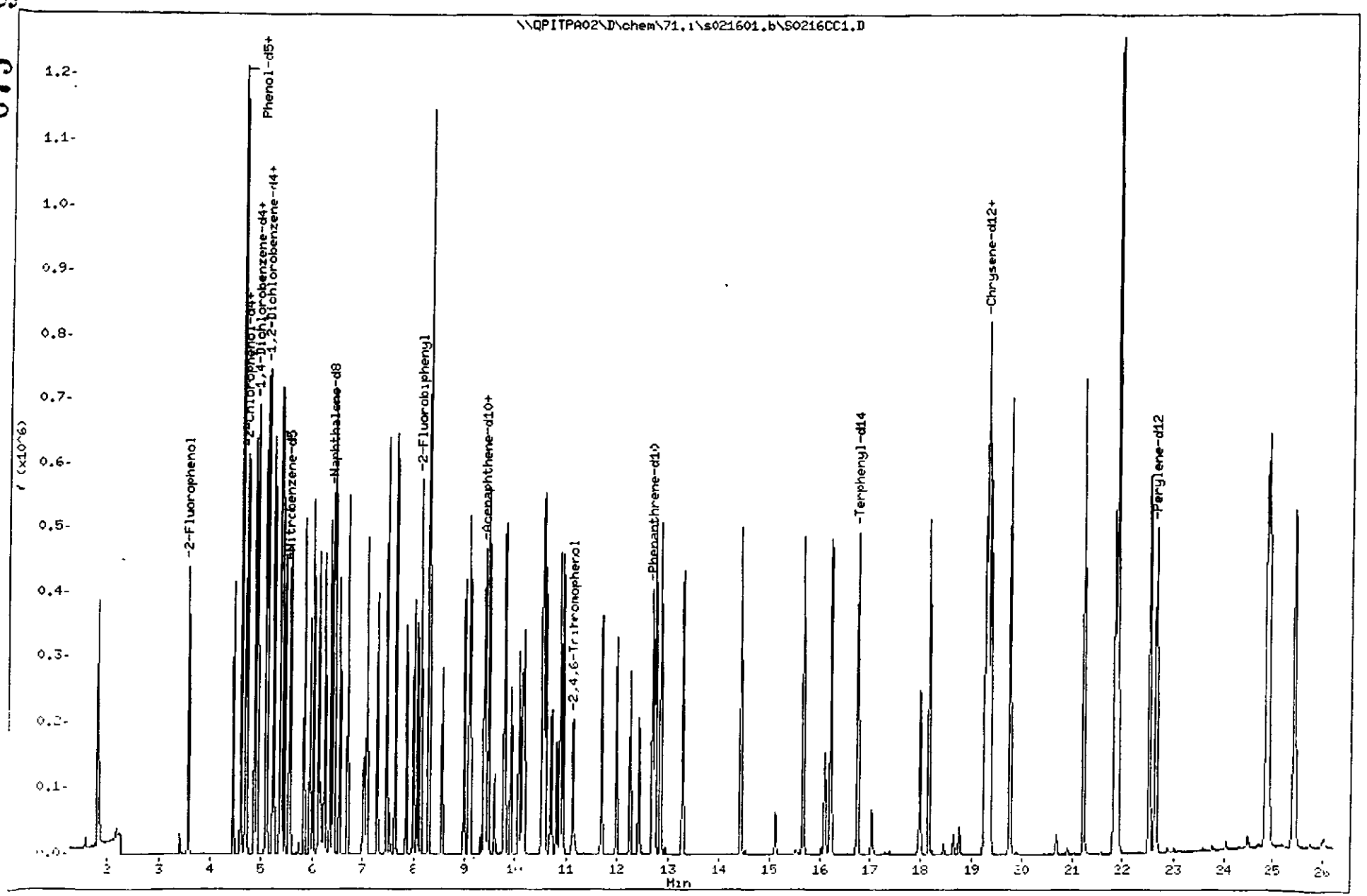
Data File: \\QPITPA02\D\chem\71.1\s021601.b\S0216CC1.D
Date : 16-FEB-2001 10:34
Client ID: sstd50
Sample Info: sstd50(25ug/ml) 77-13-1 8270

Instrument: 71.1

Operator: 045183
Column diameter: 0.25

Column phase: Hp5-MS

675 969



STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s021601.b\S0216CC1.D
Lab Smp Id: sstd50 Client Smp ID: sstd50
Inj Date : 16-FEB-2001 10:34
Operator : 045183 Inst ID: 71.i
Smp Info : sstd50(25ug/ml) 77-13-1 8270
Misc Info : sstd50,s021601.b,8270clp.m,1-8270l.sub,2,2
Comment :
Method : \\QPITPA02\D\chem\71.i\s021601.b\8270clp.m
Meth Date : 16-Feb-2001 11:03 bachas Quant Type: ISTD
Cal Date : 23-JAN-2001 20:40 Cal File: S0123CC5.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-8270l.sub
Target Version: 4.04
Processing Host: PITPC050

2/16/01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
= ==== === === =====	====	**	======	======	========	=======	=======
* 1 1,4 D chlorobenzene-d4	152	4 905	4 905	(1 000)	96354	40.0000	
* 2 Naphthalene-d8	136	6.416	6 416	(1 000)	349739	40 0000	
* 3 Acenaphthene d10	164	9 403	9 403	(1 000)	192641	40 0000	
* 4 Phenanthrene-d10	188	12 683	12 683	(1 000)	328514	40 0000	
* 5 Chrysene d12	240	19 296	19.296	(1 000)	426597	40 0000	
* 6 Perylene d12	264	22 651	22 651	(1.000)	460025	40 0000	
13 N Nitrosodimethylamine	74	1 806	1 806	(0.368)	85894	50 0000	55 952
18 Pyridine	79	1 795	1 795	(0 366)	137698	50 0000	56 431(M)
19 Methyl methanesulfonate	80	3 403	3 403	(0 694)	16422	50 0000	25 188
22 Aniline	93	4 605	4 605	(0 939)	215799	50 0000	54 596
23 Phenol	94	4.611	4 611	(0 940)	203357	50 0000	52 290
24 bis(2 Chloroethyl)ether	93	4 680	4.680	(0 954)	156767	50 0000	49 293
25 2 Chlorophenol	128	4 718	4 718	(0 962)	144653	50 0000	50 823
27 1,3 Dichlorobenzene	146	4 862	4.862	(0 991)	176211	50 0000	49 988
28 1,4-Dichlorobenzene	146	4.921	4 921	(1 003)	179785	50 0000	50 414
29 1,2-Dichlorobenzene	146	5 124	5 124	(1.045)	164461	50.0000	50 230
30 Benzyl Alcohol	108	5 086	5 086	(1 037)	111258	50 0000	53.547
31 2 Methylphenol	108	5.241	5.241	(1 069)	136913	50 0000	50.858
32 2,2' oxybis(1 Chloropropane)	45	5 257	5 257	(1.072)	272101	50 0000	48 092
33 N-Nitroso di-n-propylamine	70	5 412	5.412	(1 103)	118762	50 0000	48 936
35 4 Methylphenol	108	5 396	5 396	(1 100)	143689	50 0000	51.207
38 Hexachloroethane	117	5.460	5.460	(1 113)	67960	50 0000	49.085
39 Nitrobenzene	77	5 572	5 572	(0 868)	184597	50 0000	49.428
44 Isophorone	82	5.845	5 845	(0 911)	286462	50 0000	50 168
45 2 Nitrophenol	139	5 952	5 952	(0 928)	76997	50 0000	49 442
46 2,4 Dimethylphenol	107	6.010	6 010	(0 937)	151102	50 0000	52 023

Compound	QUANT STG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
47 2,4,5-Trichlorophenoxyacetic acid	93	6.133	6.133	(0.956)	175014	50.0000	49.628
48 2,4-Dichlorobenzeneacetic acid	162	6.251	6.251	(0.974)	117559	50.0000	48.765
49 Benzoic Acid	122	6.171	6.171	(0.962)	61289	50.0000	72.870
50 2,4,5-Trichlorobiphenyl	180	6.363	6.363	(0.992)	131856	50.0000	48.663
51 Naphthalene	128	6.438	6.438	(1.003)	430014	50.0000	49.762
52 Benzaldehyde	127	6.545	6.545	(1.020)	159446	50.0000	51.113
53 Benzenemethanol, chloro	225	6.694	6.694	(1.043)	86057	50.0000	48.010
54 2-Chloro-5-Methylphenol	107	7.276	7.276	(1.134)	124820	50.0000	52.494
55 2-Methylnaphthalene	142	7.463	7.463	(1.163)	278093	50.0000	50.109
56 2-Methylbenzeneacetic acid	42	7.640	7.640	(1.191)	280606	50.0000	52.354
57 Benzenemethanol, alpha-methyl-	237	7.848	7.848	(0.835)	88553	50.0000	41.702
58 2,3,5-Trichlorophenol	196	7.992	7.992	(0.850)	82046	50.0000	48.723
59 2,3,6-Trichlorophenol	196	8.062	8.062	(0.857)	85602	50.0000	48.998
60 2-Chloronaphthalene	162	8.297	8.297	(0.882)	257613	50.0000	47.737
61 2-Nitroaniline	65	8.553	8.553	(0.910)	89679	50.0000	50.761
62 Dimethylphthalate	163	8.997	8.997	(0.957)	287402	50.0000	51.136
63 2,6-Dinitrotoluene	165	9.119	9.119	(0.970)	62050	50.0000	48.693
64 Acenaphthylene	151	9.093	9.093	(0.967)	392472	50.0000	46.335
65 3-Nitroaniline	138	9.376	9.376	(0.997)	70784	50.0000	50.870
66 Acenaphthene	153	9.467	9.467	(1.007)	253079	50.0000	47.703
67 2,4-Dinitrophenol	184	9.584	9.584	(1.019)	31711	50.0000	50.106
68 4-Nitrophenol	109	9.777	9.777	(1.040)	46129	50.0000	55.811
69 Dibenzofuran	168	9.803	9.803	(1.043)	361876	50.0000	49.624
70 2,6-Dinitrotoluene	165	9.921	9.921	(1.055)	84750	50.0000	50.781
71 2,3,4,6-Tetrachlorophenol	232	10.081	10.081	(1.072)	78086	50.0000	54.989
72 2,4,6-Tribromophenol	329	10.177	10.177	(1.082)	77831	50.0000	56.354
73 4-Methylphenol	143	10.145	10.145	(1.079)	187854	50.0000	53.831
74 Diethylphthalate	149	10.519	10.519	(1.119)	305154	50.0000	54.732
75 Fluorene	166	10.546	10.546	(1.122)	294851	50.0000	49.343
76 1-Chloro-4-phenoxybenzene	204	10.589	10.589	(1.126)	139684	50.0000	48.964
77 4-Nitroaniline	138	10.701	10.701	(1.138)	70640	50.0000	52.903
78 4,6-Dinitro-2-methylphenol	198	10.802	10.802	(0.852)	47506	50.0000	48.373
79 N-Nitrosodiphenylamine (1)	169	10.877	10.877	(0.858)	216394	50.0000	53.282
80 1,2-Diphenylhydrazine	77	10.936	10.936	(0.862)	347841	50.0000	47.225
81 4-Bromophenyl-phenylether	248	11.684	11.684	(0.921)	82018	50.0000	47.349
82 Hexachlorobenzene	284	11.983	11.983	(0.945)	90203	50.0000	48.130
83 Pentachlorophenol	266	12.426	12.426	(0.980)	49901	50.0000	54.628
84 Phenanthrene	178	12.736	12.736	(1.004)	422910	50.0000	48.523
85 Anthracene	178	12.843	12.843	(1.013)	433113	50.0000	48.732
86 Carbazole	167	13.281	13.281	(1.047)	388033	50.0000	51.413
87 Di-n-butylphthalate	149	14.435	14.435	(1.138)	483819	50.0000	52.599
88 Fluoranthene	202	15.664	15.664	(1.235)	458878	50.0000	51.306
89 Benzidine	184	16.091	16.091	(0.834)	152487	50.0000	43.696
90 Pyrene	202	16.198	16.198	(0.839)	467937	50.0000	48.191
91 Butylbenzylphthalate	149	18.164	18.164	(0.941)	237876	50.0000	51.731
92 3,3'-Dichlorobenzidine	252	19.312	19.312	(1.001)	213962	50.0000	51.036
93 Benzo(a)anthracene	228	19.254	19.254	(0.998)	526116	50.0000	49.009

Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
[illegible]	228	19 360	19 360	(1 003)	492128	50 0000	48 190
[illegible]	149	19 745	19 745	(1 023)	346594	50 0000	53 607
[illegible]	149	21 214	21 214	(0 937)	664017	50 0000	54.741
[illegible]	252	21 834	21 834	(0 964)	601061	50 0000	44 429
[illegible]	252	21 898	21 898	(0 967)	687510	50 0000	51 039
[illegible]	256	21 898	21 898	(0 967)	300976	50 0000	48 894
[illegible]	252	22 523	22 523	(0 994)	593986	50 0000	47.268
[illegible]	276	24 857	24 857	(1 097)	875614	50 0000	46 071
[illegible]	278	24 916	24 916	(1 100)	760079	50 0000	45 904
[illegible]	276	25 429	25 429	(1 123)	745436	50 0000	46.041
[illegible]	82	5 551	5 551	(0 865)	172256	50 0000	46.023
[illegible]	172	8 131	8 131	(0 865)	289963	50 0000	44 957
[illegible]	244	16 743	16 743	(0 868)	377790	50 0000	45 450
[illegible]	99	4 600	4 600	(0 938)	193066	50 0000	54 620
[illegible]	112	3 569	3 569	(0 728)	150164	50 0000	58 074
[illegible]	330	11 128	11 128	(0 877)	46025	50 0000	52 238
[illegible]	132	4 702	4 702	(0 959)	147474	50 0000	53.866
[illegible]	152	5 108	5 108	(1 041)	100213	50 0000	47 086

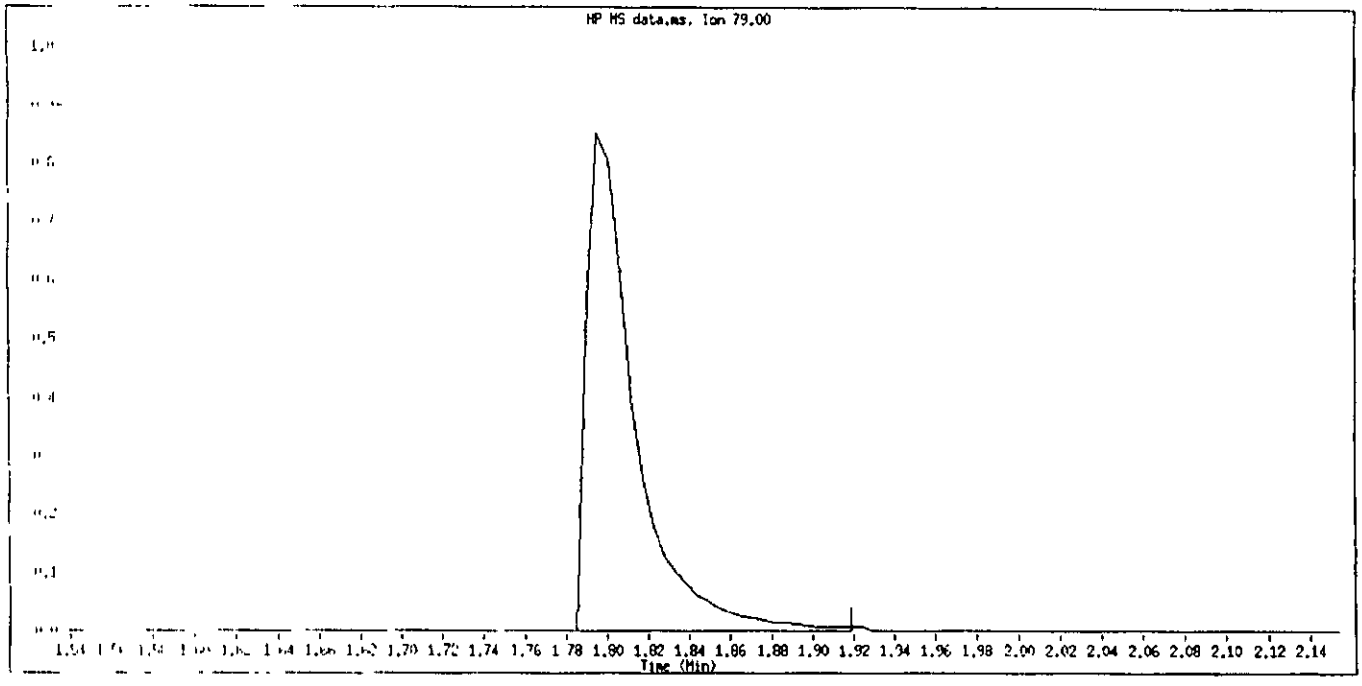
QC Flag Legend

M - Compound response manually integrated.

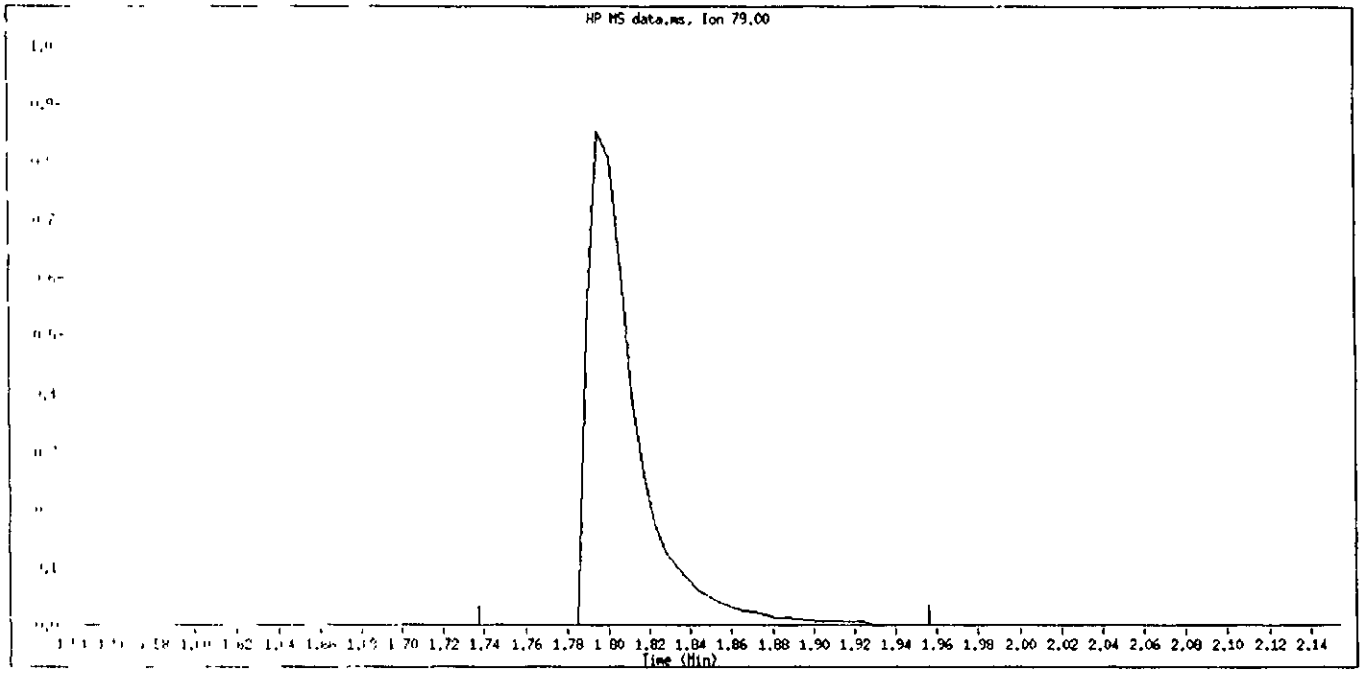
Compound Name:

CAS #:

Report Date:



Original Integration



Manual Integration

Manually Integrated By:

Manual Integration Reason: Poor Chromatography

GC/MS SEMIVOLATILE
QC DATA

Data File: \\QPITPA02\D\chem\71.1\s012301.b\S0123DF1.D

Date : 23-JAN-2001 18:09

Client ID: DFTPP02

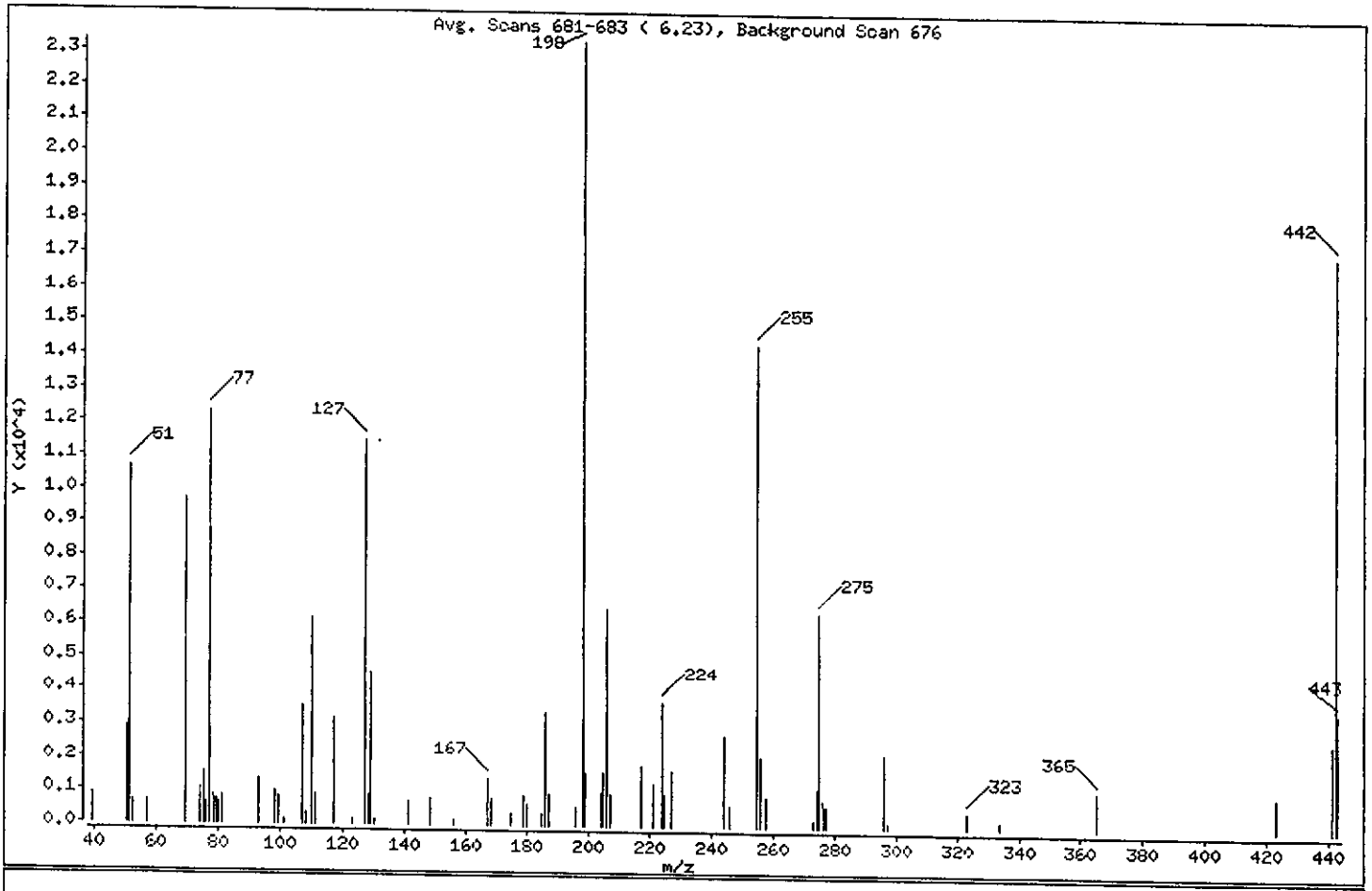
Instrument: 71.1

Sample Info: DFTPP050 (25ppb) 77-06-9

Operator: 045183

Column phase:
1 dftpp

Column diameter: 2.00



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	45.81
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	41.53
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	49.20
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.79
275	10.00 - 30.00% of mass 198	27.36
365	Greater than 1.00% of mass 198	4.90
441	Present, but less than mass 443	11.37
442	Greater than 40.00% of mass 198	73.51
443	17.00 - 23.00% of mass 442	15.14 (20.60)

Data File: \\QPITPA02\D\chem\71.1\s012301.b\S0123DF1.D

Date : 23-JAN-2001 18:09

Client ID: DFTPP02 Instrument: 71.1

Sample Info: DFTPP050 (25ppb) 77-06-9

Operator: 045183

Column phase: Column diameter: 2.00

Data File: S0123DF1.D
Spectrum: Avg. Scans 681-683 (6.23), Background Scan 676
Location of Maximum: 198.00
Number of points: 70

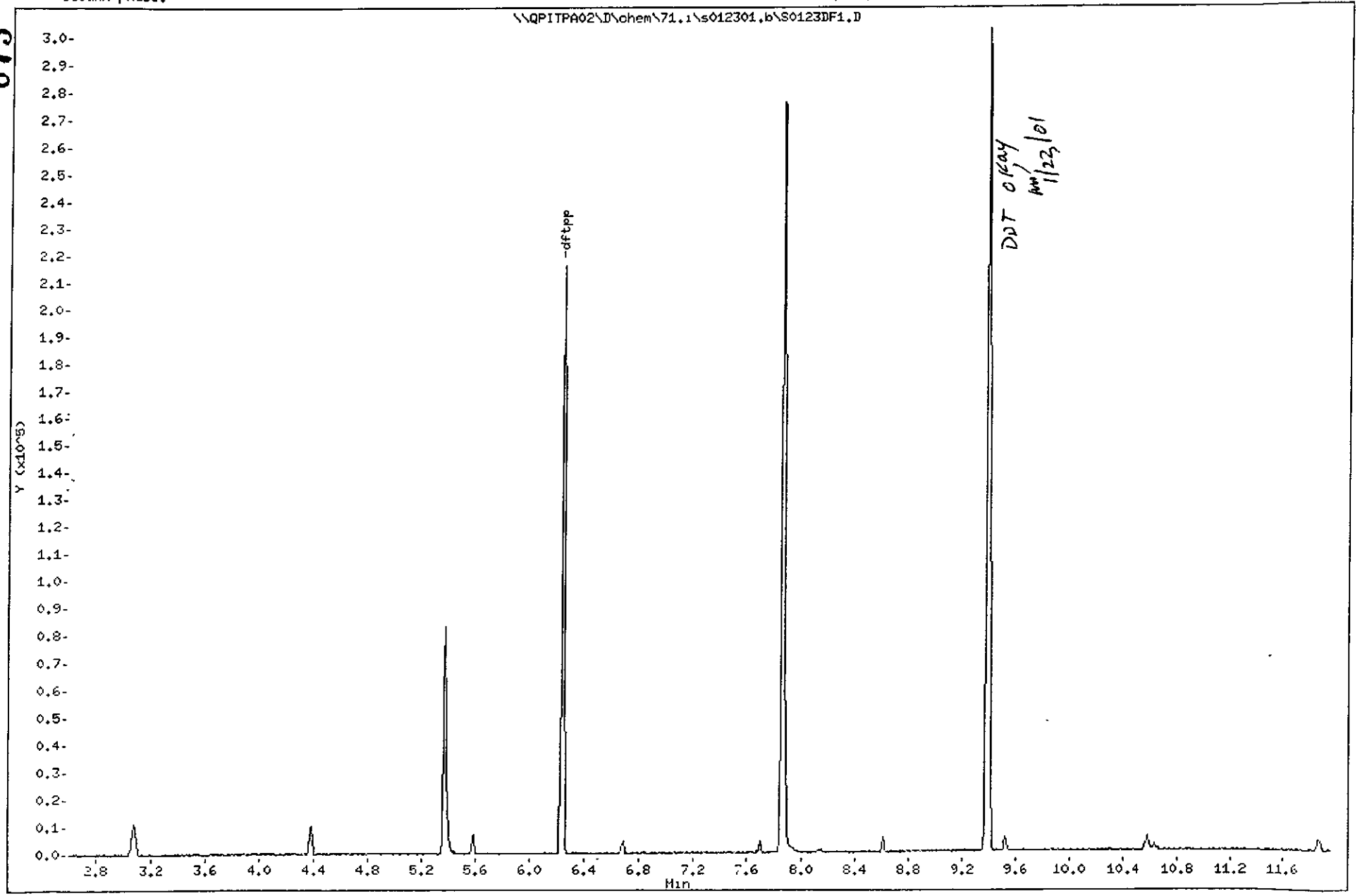
m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	907	107.00	3541	185.00	377	256.00	2096
50.00	2875	108.00	370	186.00	3391	258.00	892
51.00	10688	110.00	6143	187.00	964	273.00	203
52.00	681	111.00	929	196.00	594	274.00	1205
57.00	719	117.00	3160	198.00	23328	275.00	6385
69.00	9691	123.00	168	199.00	1584	276.00	802
74.00	1090	127.00	11480	204.00	1003	277.00	626
75.00	1561	128.00	906	205.00	1593	296.00	2177
76.00	626	129.00	4552	206.00	6473	297.00	183
77.00	12334	130.00	170	207.00	984	323.00	494
79.00	846	141.00	675	217.00	1802	334.00	189
79.00	739	148.00	815	221.00	1268	365.00	1143
80.00	621	156.00	185	224.00	3721	423.00	1029
81.00	856	167.00	1379	225.00	953	441.00	2652
93.00	1331	168.00	779	227.00	1684	442.00	17152
98.00	1008	175.00	386	244.00	2759	443.00	3533
99.00	861	179.00	909	246.00	660		
101.00	178	180.00	638	255.00	14371		

Data File: \\QPITPA02\D\chem\71.1\s012301.b\S0123DF1.D
Date : 23-JAN-2001 18:09
Client ID: DFTPP02
Sample Info: DFTPP050 (25ppb) 77-06-9

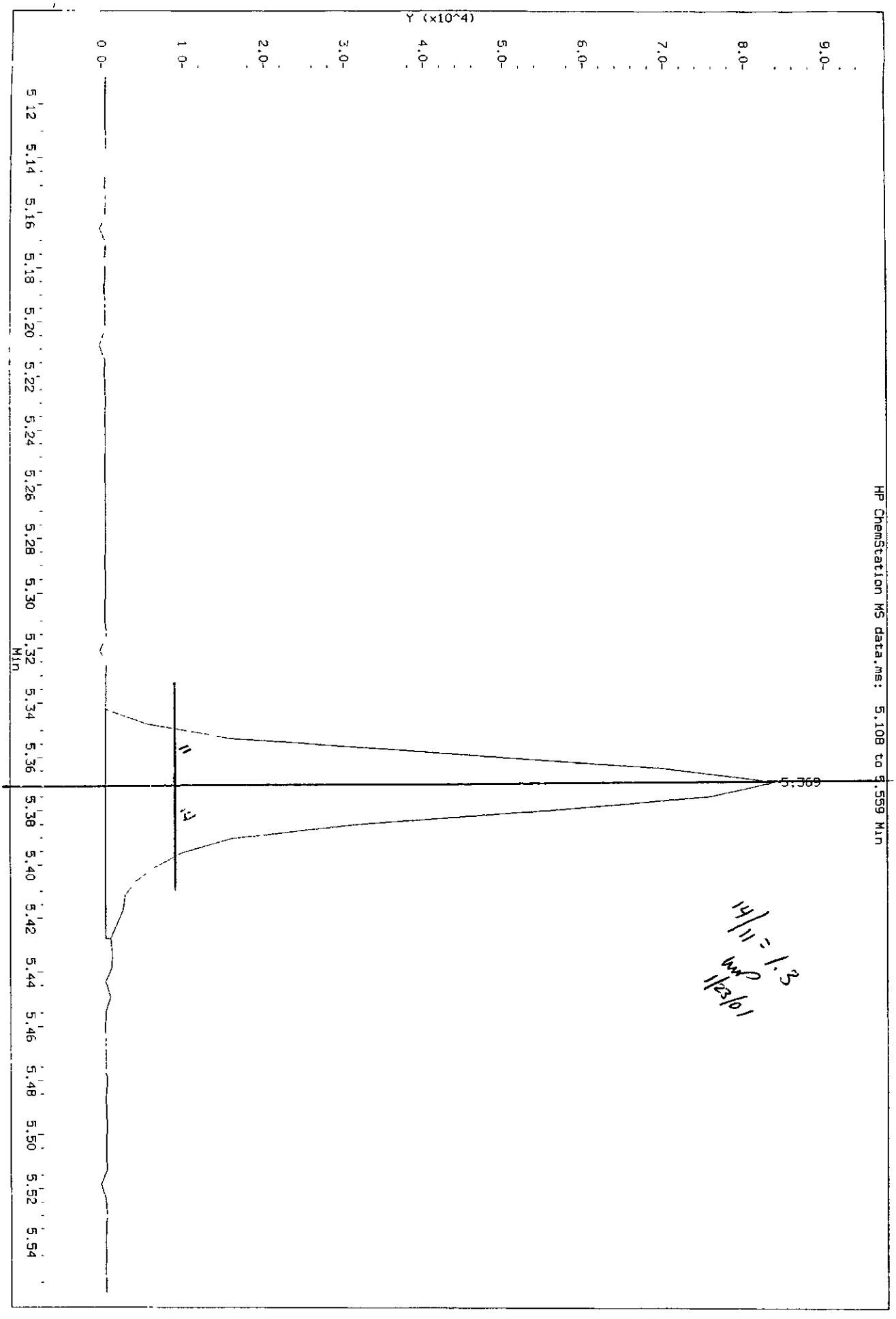
Instrument: 71.1
Operator: 045183
Column diameter: 2.00

Column phase:

677 977

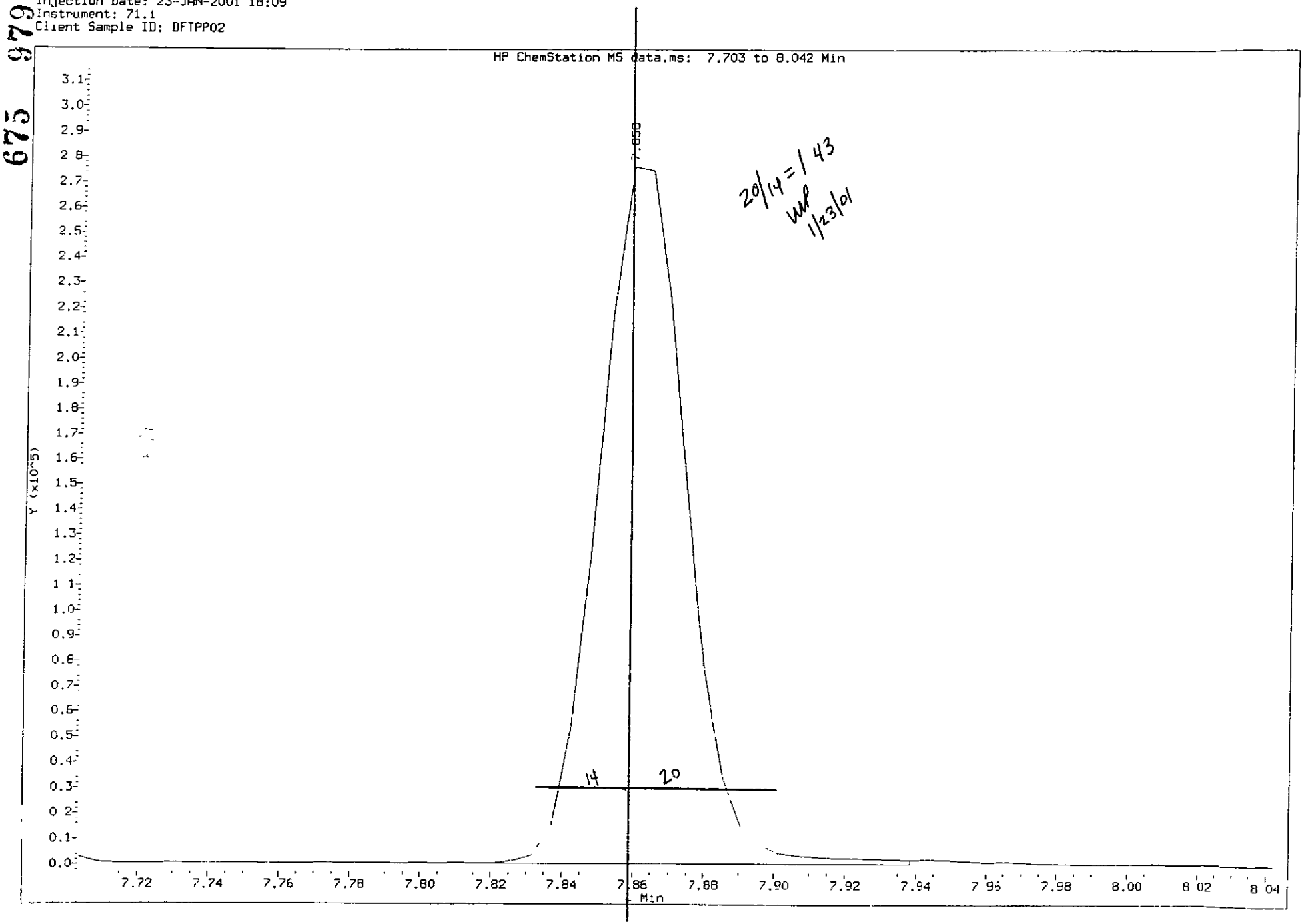


675 978


Data File: \\QPITPA02\D\chem\71.1\s012301.b\S0123F1.D
Injection Date: 23-JAN-2001 18:09
Instrument: 71.1
Client Sample ID: DFTPP02
HP ChemStation MS data.ms: 5.108 to 5.559 Min
Y (x10^4)
Min
5.369
11
12
14/11 = 1.3
WMP
1/23/01

Data File: \\QPITPA02\D\chem\71.1\s012301.b\S0123DF1.D
Injection Date: 23-JAN-2001 18:09
Instrument: 71.1
Client Sample ID: DFTPP02

675 979



STL Pittsburgh

Data File: \ DFITPP~2 D:chem\71.1\s021601.b\S0216DFT.D

Date : 16-FEB-2001 [illegible]:44

Client ID: DFTPP~2

Instrument: 71.1

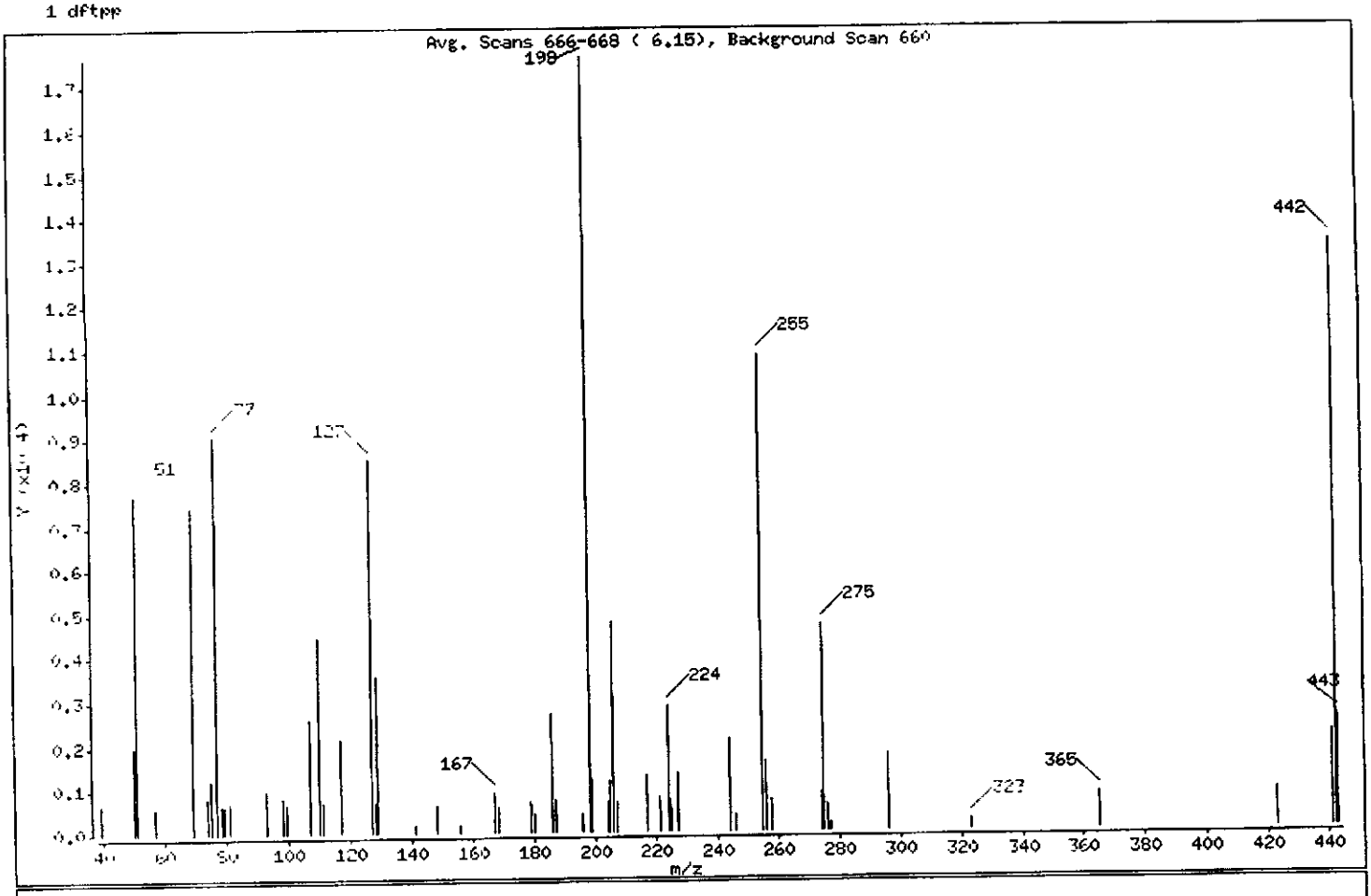
Sample Info: DFTPP050 (25ppb) 77-06-9

Operator: 045183

Column phase:

Column diameter: 2.00

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	43.75
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	41.98
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	48.30
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.88
275	10.00 - 30.00% of mass 198	26.55
365	Greater than 1.00% of mass 198	4.78
441	Present, but less than mass 443	12.33
442	Greater than 40.00% of mass 198	75.95
443	17.00 - 23.00% of mass 442	14.45 (19.03)

Data File: \\OPITFA02\D\chem\71.1\s021601.b\S0216DFT.D

Date : 16-FEB-2001 09:44

Client ID: DFTFP01

Instrument: 71.1

Sample Info: DFTPP050 (25ppb) 77-06-3

Operator: 045183

Column phase:

Column diameter: 2.00

Data File: S0216DFT.D

Spectrum: Avg. Scans 666-668 (6.15), Background Scan 660

Location of Maximum: 198.00

Number of points: 58

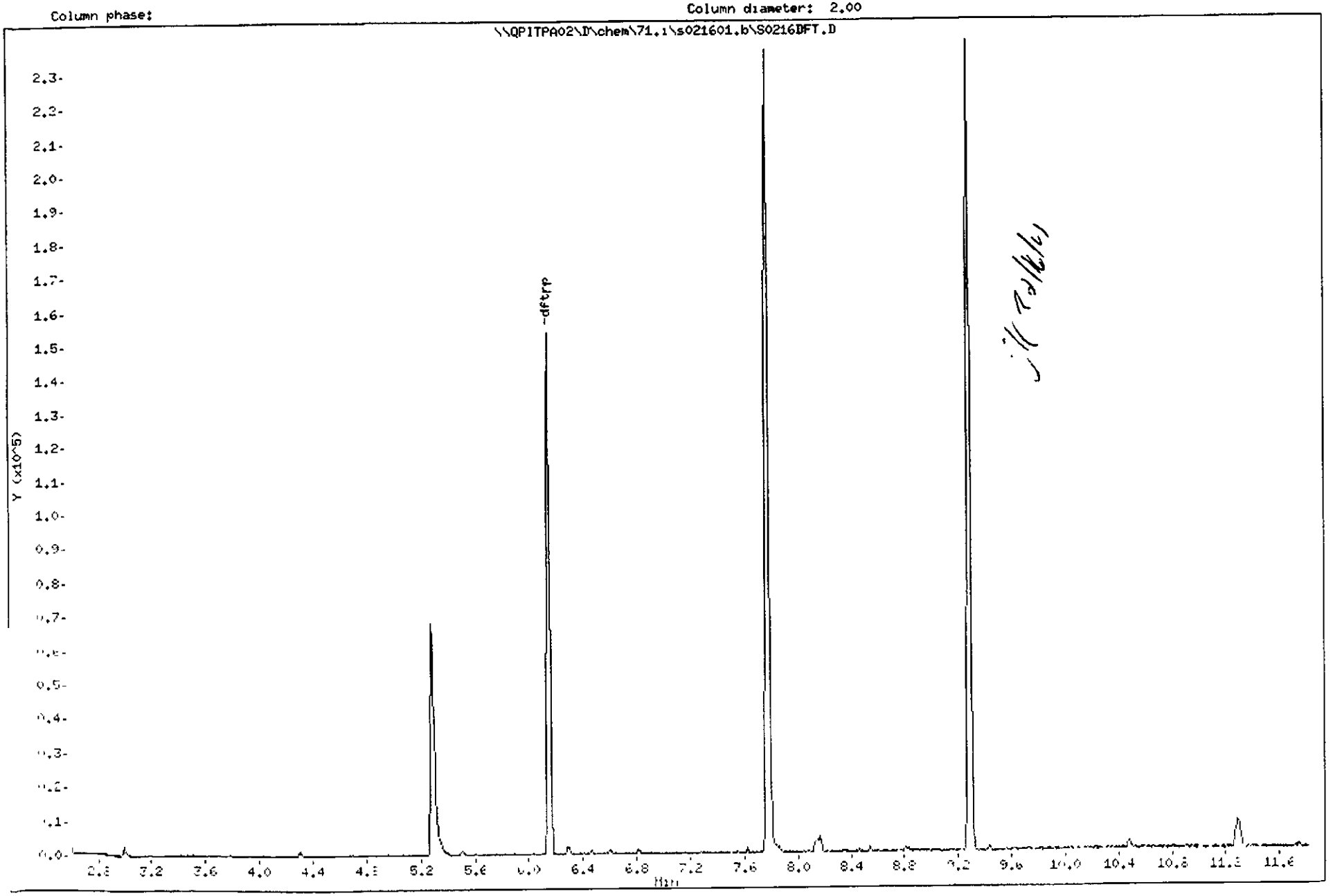
m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	637	110.00	4448	196.00	397	256.00	1627
50.00	1998	111.00	697	198.00	17664	258.00	748
51.00	7729	117.00	2157	199.00	1216	274.00	900
57.00	588	127.00	8534	204.00	689	275.00	4691
69.00	7417	128.00	699	205.00	1184	276.00	589
74.00	823	129.00	3579	206.00	4777	277.00	169
75.00	1231	141.00	171	207.00	676	296.00	1752
77.00	9046	148.00	602	217.00	1315	323.00	235
78.00	604	156.00	170	221.00	812	365.00	845
79.00	629	167.00	935	224.00	2894	423.00	896
81.00	679	168.00	571	225.00	717	441.00	2179
93.00	981	179.00	706	227.00	1326	442.00	13418
98.00	793	180.00	414	244.00	2107	443.00	2553
99.00	645	186.00	2733	246.00	347		
107.00	2610	187.00	750	255.00	10832		

Data File: \\QPITPA02\D\chem\71.1\s021601.b\S0216DFT.D
Date : 16-FEB-2001 09:44
Client ID: DFTPP02
Sample Info: DFTPP050 (25ppb) 77-06-9

Instrument: 71.1

Operator: 045183
Column diameter: 2.00

Column phase:



675 982

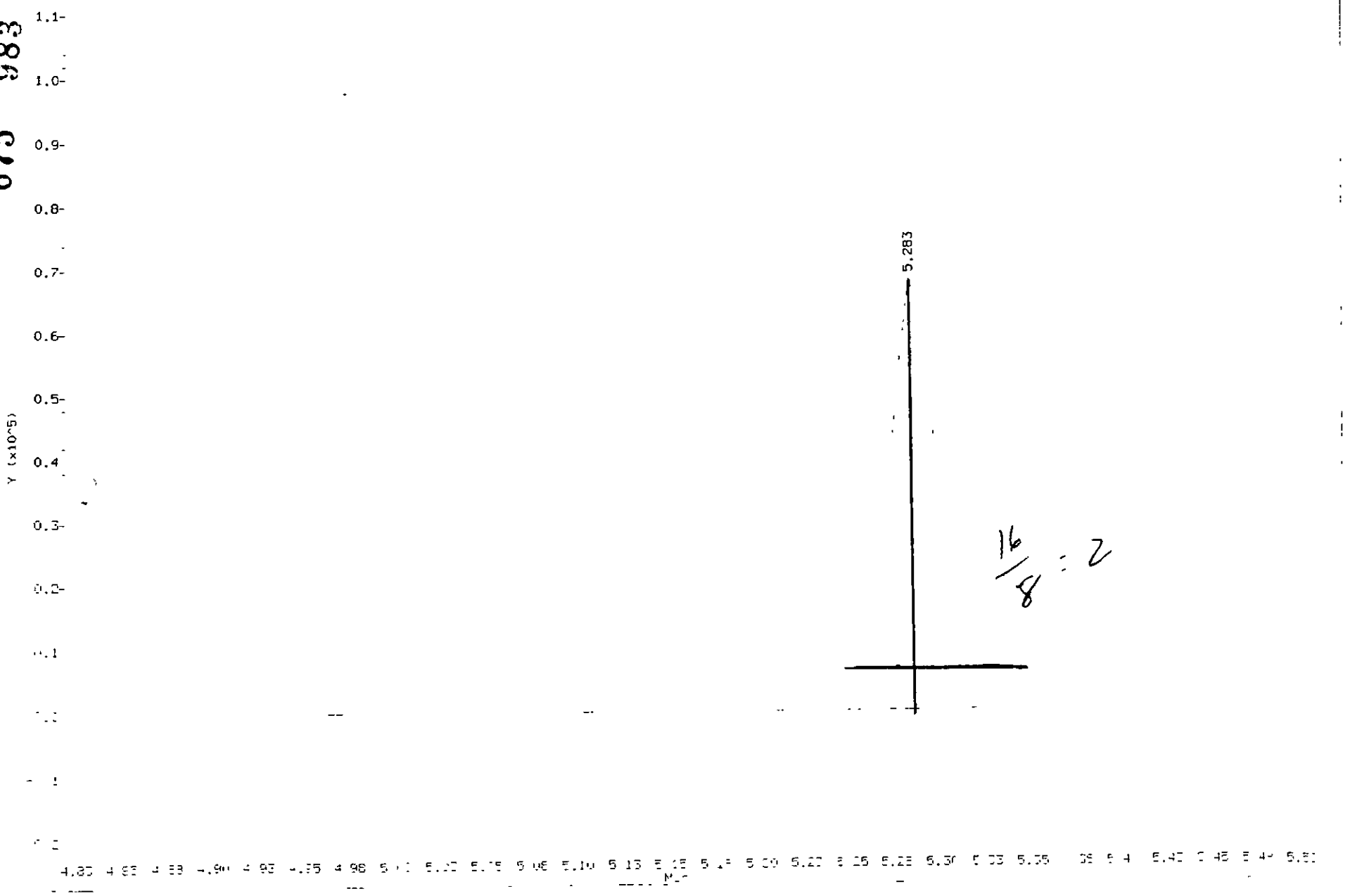
2068

STL Pittsburgh

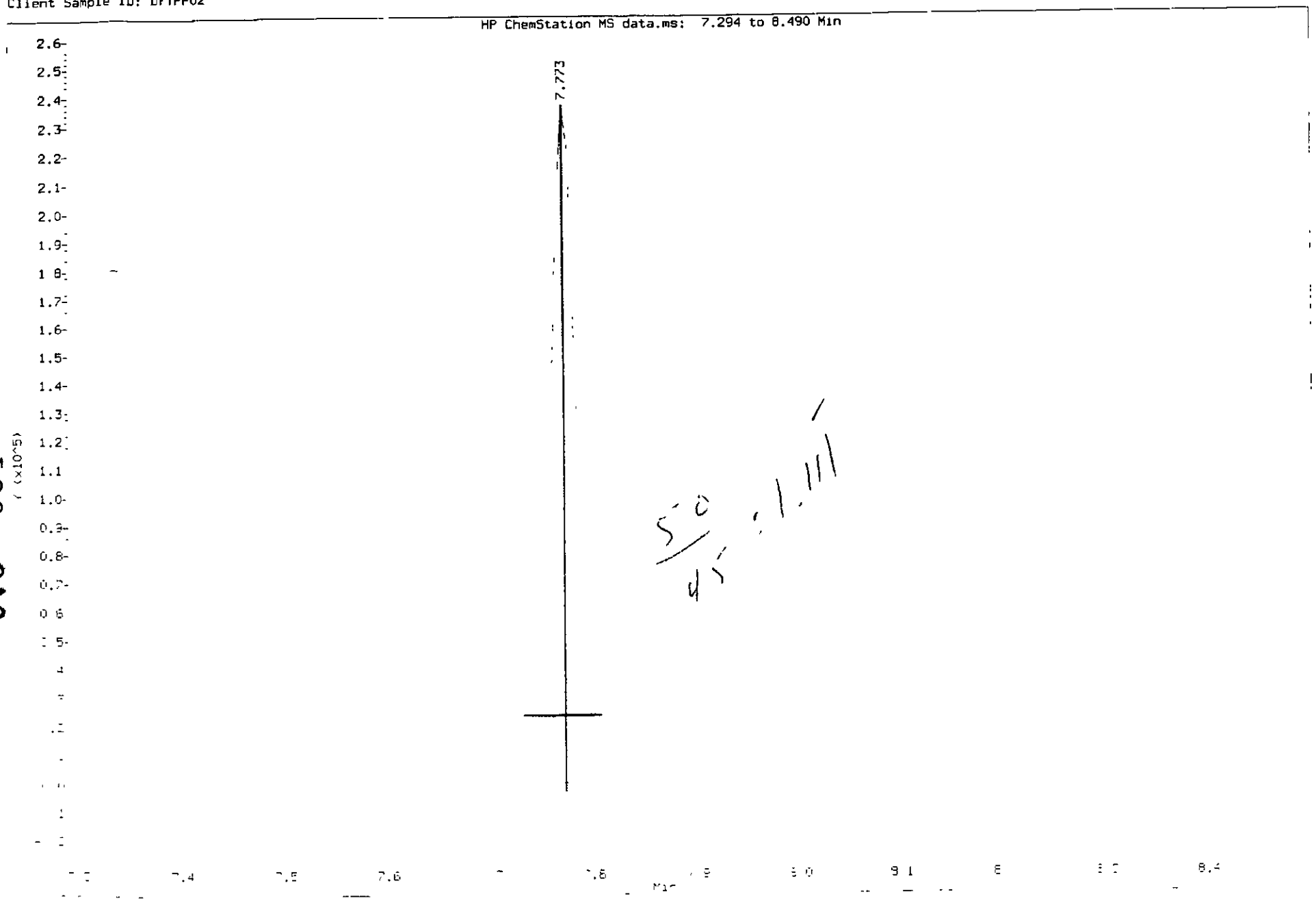
Data File: \\QPITPA02\D\chem\71.1\s021601.b\S0216DFT.D
Injection Date: 16-FEB-2001 09:44
Instrument: 71.1
Client Sample ID: DFTPP02

HP ChemStation MS data.ms: 4.820 to 5.515 Min

675 983



Data File: \\QPITPA02\D\chem\71.1\s021601.b\S0216DFT.D
Injection Date: 16-FEB-2001 09:44
Instrument: 71.1
Client Sample ID: DFTPP02



675 984

2070

STL Pittsburgh

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID: C1B120000 285

Sample WT/Vol: 1000 / mL
Work Order: DV03C1AA
Dilution Factor: 1
Moisture %: NA

Date Received: 02/09/01
Date Extracted: 02/12/01
Date Analyzed: 02/16/01

QC Batch: 1043285

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/kg) ug/L	Q
110 86-1	Pyridine	20	U
83 32 9	Acenaphthene	10	U
208-96-8	Acenaphthylene	10	U
120-12-7	Anthracene	10	U
56 55-3	Benzo(a)anthracene	10	U
50 32 8	Benzo(a)pyrene	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
191-24-2	Benzo(ghi)perylene	10	U
111 91-1	bis(2-Chloroethoxy)methane	10	U
111-44-4	bis(2-Chloroethyl) ether	10	U
117-81-7	bis(2-Ethylhexyl) phthalate	10	U
101 55-3	4-Bromophenyl phenyl ether	10	U
85-68-7	Butyl benzyl phthalate	10	U
86 74-8	Carbazole	10	U
106-47-8	4-Chloroaniline	10	U
59 50-7	4-Chloro-3-methylphenol	10	U
91 58-7	2-Chloronaphthalene	10	U
95-57-8	2-Chlorophenol	10	U
7005-72-3	4-Chlorophenyl phenyl ether	10	U
218 01 9	Chrysene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
132-64-9	Dibenzofuran	10	U
95 50-1	1,2-Dichlorobenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
91-94-1	3,3'-Dichlorobenzidine	50	U
120-83-2	2,4-Dichlorophenol	10	U

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number

Matrix (soil/water) WATER
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID: C1B120000 285

Sample WT/Vol: 1000 / mL
Work Order: DV03C1AA
Dilution factor: 1
Moisture %: NA

Date Received: 02/09/01
Date Extracted: 02/12/01
Date Analyzed: 02/16/01

QC Batch. 1043285

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
84-66-2	Diethyl phthalate	10	U
105-67-9	2,4-Dimethylphenol	10	U
131-11-3	Dimethyl phthalate	10	U
84-74-2	Di-n-butyl phthalate	10	U
117-84-0	Di-n-octyl phthalate	10	U
51-28-5	2,4-Dinitrophenol	50	U
534-52-1	4,6-Dinitro-2-methylphenol	50	U
121-14-2	2,4-Dinitrotoluene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
206-44-0	Fluoranthene	10	U
86-73-7	Fluorene	10	U
118-74-1	Hexachlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
77-47-4	Hexachlorocyclopentadiene	50	U
67-72-1	Hexachloroethane	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
78-59-1	Isophorone	10	U
91-57-6	2-Methylnaphthalene	10	U
95-48-7	2-Methylphenol	10	U
106-44-5	4-Methylphenol	10	U
91-20-3	Naphthalene	10	U
88-74-4	2-Nitroaniline	50	U
99-09-2	3-Nitroaniline	50	U
100-01-6	4-Nitroaniline	50	U
98-95-3	Nitrobenzene	10	U
88-75-5	2-Nitrophenol	10	U
100-02-7	4-Nitrophenol	50	U
621-64-7	N-Nitrosodi-n-propylamine	10	U

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER
Method SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID: C1B120000 285

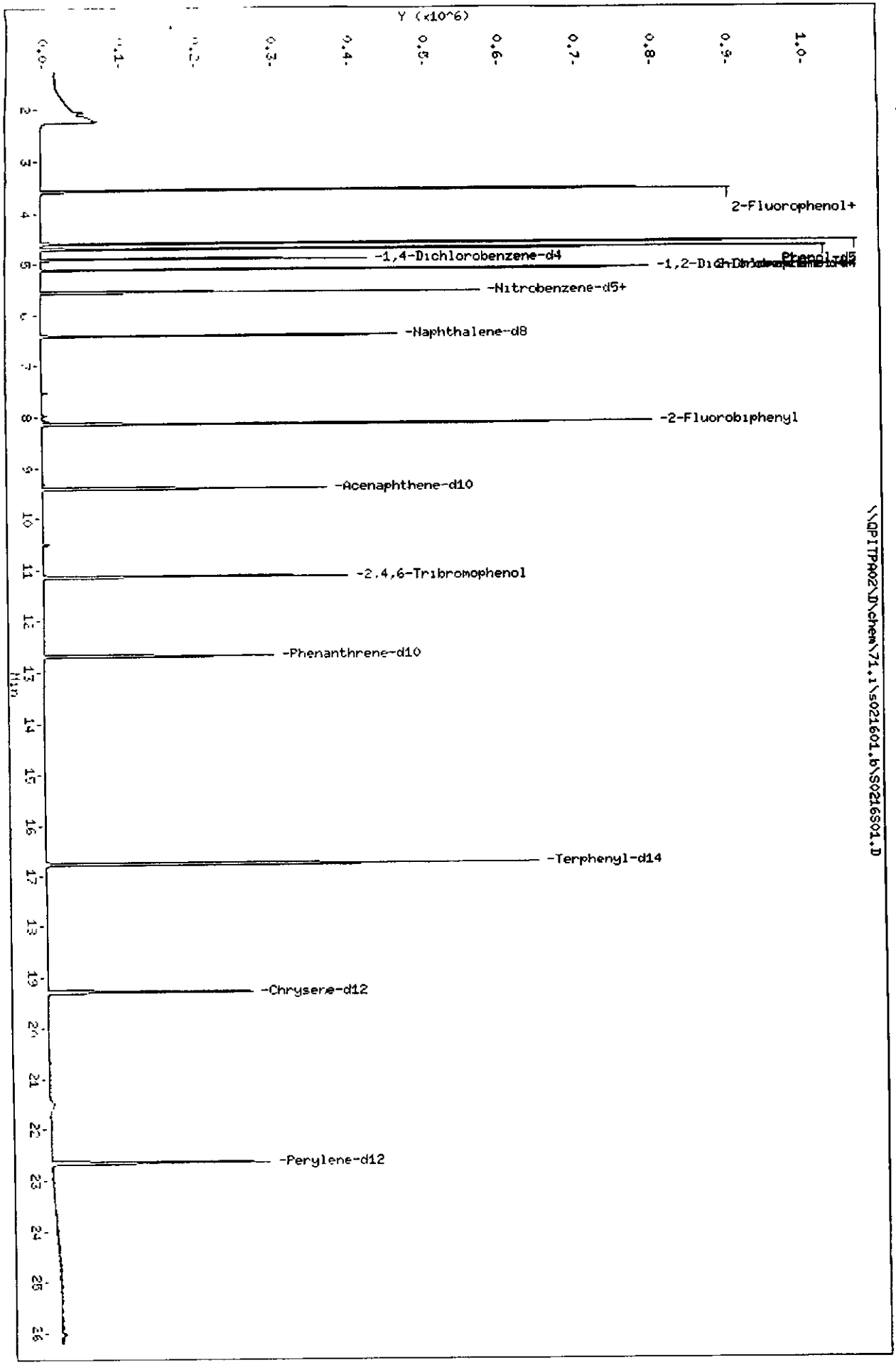
Sample WT/Vol: 1000 / mL
Work Order: DV03C1AA
Dilution factor: 1
Moisture %: NA

Date Received: 02/09/01
Date Extracted: 02/12/01
Date Analyzed: 02/16/01

QC Batch: 1043285

Client Sample Id: INTRA-LAB BLANK

CAS NO	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
86-30-6	N-Nitrosodiphenylamine	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
108-95-2	Phenol	10	U
129-00-0	Pyrene	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
88-06-2	2,4,6-Trichlorophenol	10	U



Data File: \\QPITPA02\D\chem\71.1\s021601.b\S0216S01.D
Date : 16-FEB-2001 11:05
Client ID: INTRA-LAB BLANK
Sample Info: c1b090228-sblk 2/12/01 8270 h20
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 71.1
Operator: 045183
Column diameter: 0.25

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s021601.b\S0216S01.D
Lab Smp Id: DV03C1AA Client Smp ID: INTRA-LAB BLANK
Inj Date : 16-FEB-2001 11:05
Operator : 045183 Inst ID: 71.i
Smp Info : c1b090228-sblk 2/12/01 8270 h20
Misc Info : dv03c1aa,s021601.b,8270clp.m,1-8270l.sub
Comment :
Method : \\QPITPA02\D\chem\71.i\s021601.b\8270clp.m
Meth Date : 16-Feb-2001 11:32 bachas Quant Type: ISTD
Cal Date : 23-JAN-2001 20:40 Cal File: S0123CC5.D
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-8270l.sub
Target Version: 4.04
Processing Host: PITPC050

2/16/01

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

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

Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
* 3 1,4-Dichlorobenzene-d4	152	4.909	4.905	(1.000)	7810)	40.0000	
* 4 Naphthalene-d8	136	6.415	6.416	(1.000)	289720	40.0000	
* 6 Acenaphthene-d10	164	9.407	9.403	(1.000)	151773	40.0000	
* 8 Phenanthrene-d10	188	12.687	12.683	(1.000)	241464	40.0000	
* 9 Chrysene-d12	240	19.295	19.296	(1.000)	244376	40.0000	
* 10 Perylene-d12	264	22.650	22.651	(1.000)	271142	40.0000	
12 N-Nitroso-dimethylamine	74	Compound Not Detected					
13 Pyridine	79	Compound Not Detected					
14 Methyl methanesulfonate	80	Compound Not Detected					
15 Aniline	93	Compound Not Detected.					
16 Phenol	94	Compound Not Detected					
17 bis(2-Chloroethyl) ether	93	Compound Not Detected					
18 2-Chlorophenol	128	Compound Not Detected					

Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON COLUMN (ng)	FINAL (ug/L)
2[illegible]chlorodiethyl ether	146	Compound Not Detected.					
[illegible]chloroisopropyl ether	146	Compound Not Detected					
[illegible]chloroethoxy[illegible]	146	Compound Not Detected					
Benzoic Acid	108	Compound Not Detected					
[illegible]methylphenol	108	Compound Not Detected					
Bis(2-chloroisopropyl) ether	45	Compound Not Detected					
N-Nitroso-di-n-propylamine	70	Compound Not Detected					
[illegible]methylphenol	108	Compound Not Detected					
[illegible]chloroethoxy ether	117	Compound Not Detected					
Nitrobenzene	77	Compound Not Detected					
[illegible]chlorobenzene	82	Compound Not Detected					
Isophorone	139	Compound Not Detected					
[illegible]nitrophenol	107	Compound Not Detected					
Bis(2-chloroethoxy)methane	93	Compound Not Detected					
[illegible]trichlorobenzene	162	Compound Not Detected					
Naphthalene	122	Compound Not Detected					
[illegible]chlorobutadiene	179	Compound Not Detected					
Hexachlorobutadiene	128	Compound Not Detected					
[illegible]chlorocresol	127	Compound Not Detected					
[illegible]methylcyclopentadiene	224	Compound Not Detected					
2,4,6-Trichlorophenol	107	Compound Not Detected					
2-Methylnaphthalene	142	Compound Not Detected					
1-Methylnaphthalene	142	Compound Not Detected					
Hexachlorocyclopentadiene	236	Compound Not Detected					
2,4,5-Trichlorophenol	196	Compound Not Detected					
2,3,6-Trichlorophenol	196	Compound Not Detected					
[illegible]chloronaphthalene	162	Compound Not Detected					
2-Nitroaniline	65	Compound Not Detected					
Dimethylphthalate	163	Compound Not Detected					
[illegible]chloroacenaphthylene	165	Compound Not Detected					
2,6-Dinitrotoluene	152	Compound Not Detected					
3-Nitroaniline	138	Compound Not Detected					
Acenaphthylene	153	Compound Not Detected					
2,4-Dinitrophenol	184	Compound Not Detected					
4-Nitrophenol	109	Compound Not Detected					
Dibenzofuran	168	Compound Not Detected					
2,6-Dinitrotoluene	165	Compound Not Detected					
2,4,6-Tetrachlorophenol	231	Compound Not Detected					
2,3,5-Trichlorophenol	231	Compound Not Detected					
Fluorene	143	Compound Not Detected					
4-Nitroaniline	149	Compound Not Detected					
4,6-Dinitro-2-methylphenol	166	Compound Not Detected					
N-Nitrosodiphenylamine (1)	204	Compound Not Detected					
4-Bromophenyl-phenylether	138	Compound Not Detected					
Hexachlorobenzene	198	Compound Not Detected					
Atrazine	169	Compound Not Detected					
Pentachlorophenol	77	Compound Not Detected					

Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
2,4,6-Tribromophenyl phenyl ether	248	Compound Not Detected					
1,1,1-Trichloroethane	283	Compound Not Detected					
1,1,2-Trichloroethane	265	Compound Not Detected					
1,2,4-Trichlorobenzene	178	Compound Not Detected					
1,2,4-Trimethylbenzene	178	Compound Not Detected					
1,3,5-Trichlorobenzene	167	Compound Not Detected					
1,3,5-Trimethylbenzene	149	Compound Not Detected					
1,3-Dichlorobenzene	202	Compound Not Detected					
1,3-Dichloropropane	184	Compound Not Detected					
1,4-Dichlorobenzene	202	Compound Not Detected					
4,4'-Methylenebis(2-chloroaniline)	149	Compound Not Detected					
4-Bromophenyl phenyl ether	252	Compound Not Detected,					
4-Chloro-2-methylaniline	228	Compound Not Detected					
4-Chloroaniline	228	Compound Not Detected					
4-Chlorophenyl phenyl ether	149	Compound Not Detected					
4-Methylphenol	149	Compound Not Detected					
5-Nitro-o-toluidine	252	Compound Not Detected					
7,12-Dimethylbenz(a)anthracene	256	Compound Not Detected					
Acenaphthene	252	Compound Not Detected					
Acenaphthylene	276	Compound Not Detected					
Acetophenone	278	Compound Not Detected					
Aniline	276	Compound Not Detected					
Anthracene	82	5.555	5.551	(0.866)	243897	78.6630	39.331
Benzidine	372	8.141	8.131	(0.865)	397153	78.1574	39.079
Benzo(a)anthracene	244	16.752	16.743	(0.868)	488527	102.597	51.298
Benzo(a)pyrene	99	4.604	4.600	(0.938)	383419	133.824	66.912
Benzo(b)fluoranthene	112	3.573	3.569	(0.728)	279629	133.417	66.708
Benzo(g,h,i)perylene	330	11.132	11.128	(0.877)	84906	131.110	65.555
Benzo(k)fluoranthene	132	4.706	4.702	(0.959)	304339	137.139	68.569
Benzoic acid	152	5.112	5.108	(1.041)	135589	78.5961	39.298

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) WATER
Method: SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID:C1B120000 285

Sample WT/Vol: 1000 / mL
Work Order: DV03C1AC
Dilution factor 1
Moisture %:NA

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/16/01

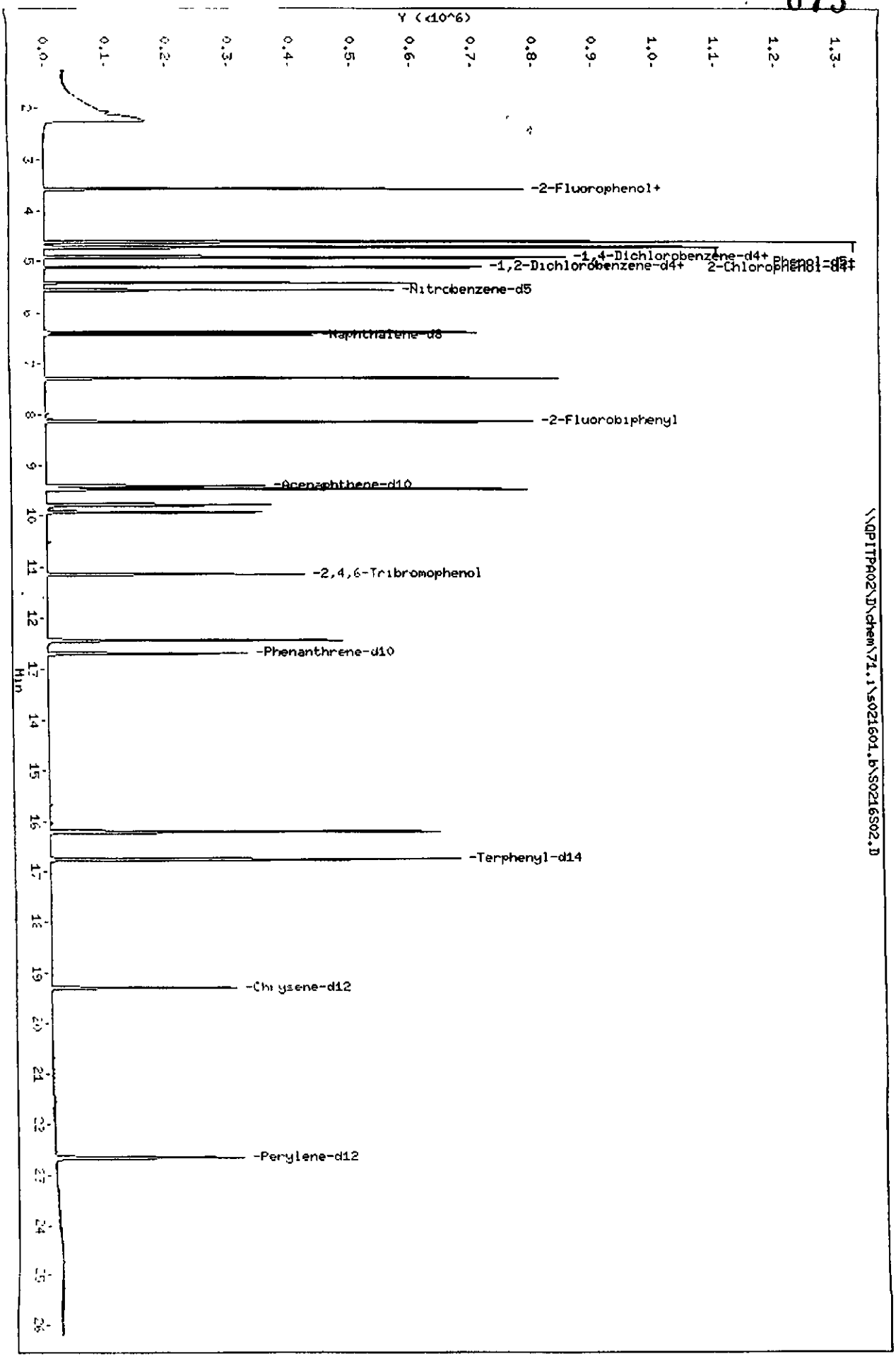
QC Batch: 1043285

Client Sample Id. CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
83-32-9	Acenaphthene	42.7	
59-50-7	4-Chloro-3-methylphenol	68.6	
95-57-8	2-Chlorophenol	62.4	
106-46-7	1,4-Dichlorobenzene	41.2	
121-14-2	2,4-Dinitrotoluene	43.6	
100-02-7	4-Nitrophenol	69.6	
621-64-7	N-Nitrosodi-n-propylamine	42.1	
87-86-5	Pentachlorophenol	76.5	
108 95-2	Phenol	60.5	
129-00-0	Pyrene	50.4	
120-82-1	1,2,4-Trichlorobenzene	40.6	

Data File: \\QPITPA02\D\chem\71.1\s021601.b\S0216S02.D
Date : 16-FEB-2001 11:37
Client ID: INTRA-LAB CHECK
Sample Info: c1b090228-lcs 2/12/01 8270 H20
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 71.1
Operator: 045183
Column diameter: 0.25



STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s021601.b\S0216S02.D
Lab Smp Id: DV03C1AC Client Smp ID: INTRA-LAB CHECK
Inj Date : 16-FEB-2001 11:37
Operator : 045183 Inst ID: 71.i
Smp Info : c1b090228-lcs 2/12/01 8270 h20
Misc Info : dv03c1ac,s021601.b,8270clp.m,1-8270l.sub
Comment :
Method : \\QPITPA02\D\chem\71.i\s021601.b\8270clp.m
Meth Date : 16-Feb-2001 12:11 bachas Quant Type: ISTD
Cal Date : 23-JAN-2001 20:40 Cal File: S0123CC5.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-8270l.sub
Target Version: 4.04
Processing Host: PITPC050

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

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

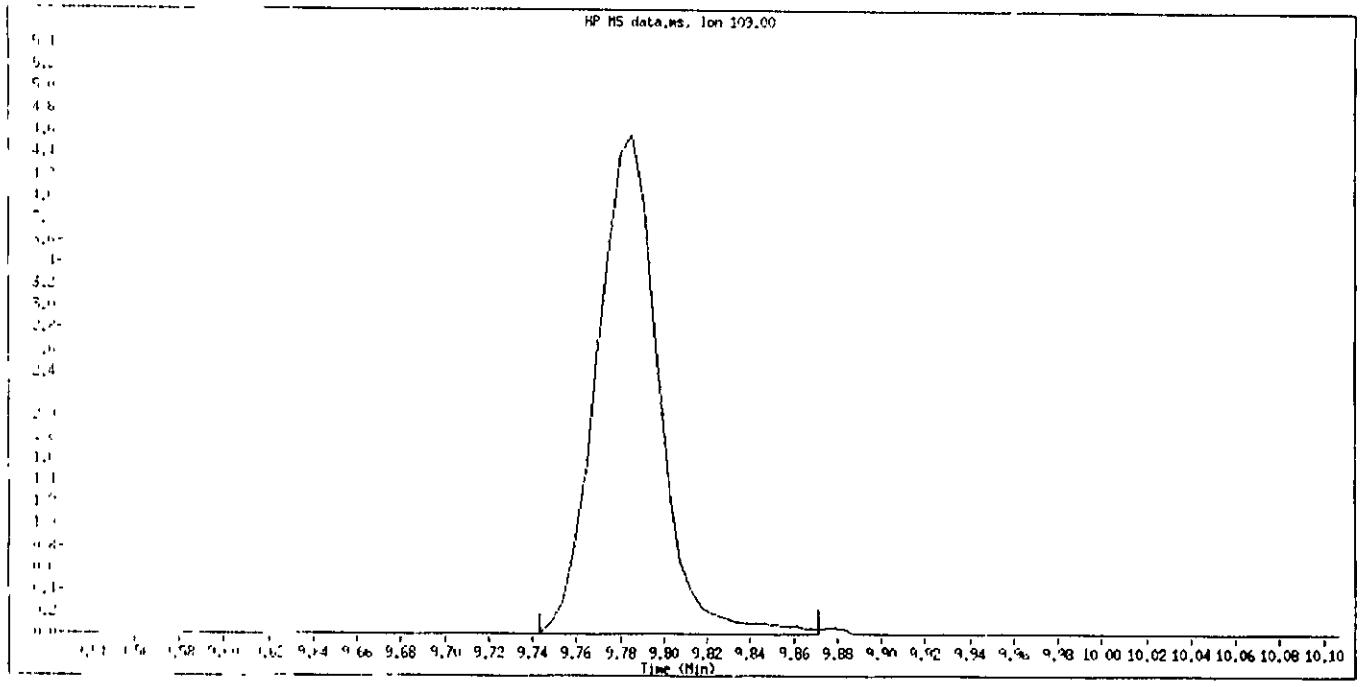
Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
* [illegible]	152	4 908	4 905	(1 000)	73025	40 0000	
* [illegible]	136	6 420	6 416	(1 000)	279101	40 0000	
* [illegible]	164	9 412	9 403	(1 000)	151292	40 0000	
* [illegible]	188	12 686	12 683	(1 000)	257538	40 0000	
* [illegible]	240	19 295	19 296	(1.000)	269280	40 0000	
* [illegible]	264	22 649	22 651	(1 000)	291183	40 0000	
[illegible]	74	Compound Not Detected					
[illegible]	79	Compound Not Detected					
[illegible]	80	Compound Not Detected					
[illegible]	93	Compound Not Detected					
[illegible]	94	4 625	4 611	(0 942)	356776	121 047	60 523
[illegible]	93	Compound Not Detected					
[illegible]	128	4 727	4 718	(0 963)	269164	124 782	62 391
[illegible]	146	Compound Not Detected					

Compound	QUANT STD MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON COLUMN (ng)	FINAL (ug/L)
28 1,4-Dichlorobenzene	146	4.924	4.921	(1.001)	222788	82.4304	41.215
29 1,2-Dichlorobenzene	146	Compound Not Detected					
30 2-Propenal, 2-Methyl-	198	Compound Not Detected					
31 Benzyl Alcohol	108	Compound Not Detected					
32 2,2'-oxybis(1-chloropropane)	45	Compound Not Detected					
33 N-Nitrosodi-n-propylamine	70	5.416	5.412	(1.001)	155024	84.2851	42.142
34 4-Methylphenol	108	Compound Not Detected					
35 Acetophenone	117	Compound Not Detected.					
36 Nitrobenzene	77	Compound Not Detected					
37 Isophorone	82	Compound Not Detected					
38 2-Nitrophenol	139	Compound Not Detected					
39 2,4-Dimethylphenol	107	Compound Not Detected					
40 Bis(2-chloroethyl)methane	93	Compound Not Detected					
41 2,4-Dichlorophenol	162	Compound Not Detected					
42 Benzoic Acid	122	Compound Not Detected					
43 1,2,4-Trichlorobenzene	180	6.367	6.363	(0.992)	175525	80.1748	40.587
44 Naphthalene	128	Compound Not Detected					
45 4-Chloroaniline	127	Compound Not Detected					
46 Hexachlorobutadiene	224	Compound Not Detected					
47 4-Chloro-3-Methylphenol	107	7.275	7.276	(1.133)	260378	137.219	68.610
48 2-Methylnaphthalene	142	Compound Not Detected					
49 1-Methylnaphthalene	142	Compound Not Detected					
50 Hexachlorocyclopentadiene	236	Compound Not Detected					
51 2,4,6-Trichlorophenol	196	Compound Not Detected.					
52 2,4,5-Trichlorophenol	196	Compound Not Detected					
53 2-Chloronaphthalene	162	Compound Not Detected					
54 2-Nitroaniline	65	Compound Not Detected					
55 Dimethylphthalate	163	Compound Not Detected					
56 2,6-Dinitrotoluene	165	Compound Not Detected					
57 Acenaphthylene	152	Compound Not Detected					
58 3-Nitroaniline	138	Compound Not Detected					
59 Acenaphthene	153	9.476	9.467	(1.007)	455525	85.3276	42.664
60 2,4-Dinitrophenol	184	Compound Not Detected					
61 4-Nitrophenol	109	9.786	9.777	(1.040)	90417	139.285	69.642(M)
62 Dibenzofuran	168	Compound Not Detected					
63 2,6-Dinitrotoluene	165	9.925	9.921	(1.054)	114342	87.2364	43.618
64 2,4-Dinitrotoluene	231	Compound Not Detected					
65 2,4,6-Trinitrophenol	231	Compound Not Detected					
66 1-Naphthylamine	143	Compound Not Detected					
67 Diethylphthalate	149	Compound Not Detected					
68 Fluorene	166	Compound Not Detected					
69 4-Bromophenyl-phenylether	204	Compound Not Detected					
70 4-Nitroaniline	138	Compound Not Detected					
71 4,6-Dinitro-2-methylphenol	198	Compound Not Detected					
72 N-Nitrosodiphenylamine (1)	169	Compound Not Detected					
73 Azobenzene	77	Compound Not Detected					
74 4-Chlorophenyl-phenylether	248	Compound Not Detected					

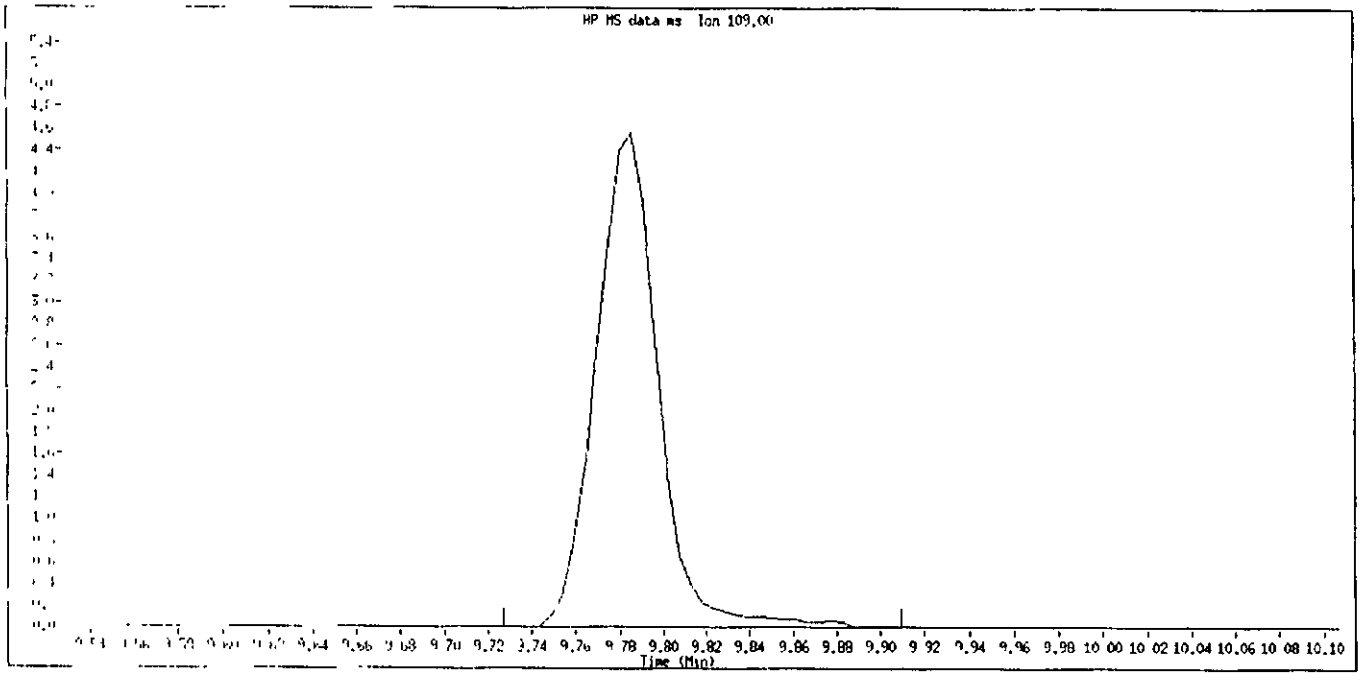
Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
[illegible]	243	Compound Not Detected.					
[illegible]	266	12 430	12 426	(0 980)	109582	153 024	76 512
[illegible]	178	Compound Not Detected					
[illegible]	178	Compound Not Detected					
[illegible]	167	Compound Not Detected					
[illegible]	149	Compound Not Detected					
[illegible]	202	Compound Not Detected					
[illegible]	184	Compound Not Detected					
[illegible]	202	16 207	16 198	(0 840)	618250	100 868	50 434
[illegible]	149	Compound Not Detected					
[illegible]	252	Compound Not Detected					
[illegible]	228	Compound Not Detected					
[illegible]	228	Compound Not Detected.					
[illegible]	149	Compound Not Detected					
[illegible]	149	Compound Not Detected					
[illegible]	252	Compound Not Detected					
[illegible]	252	Compound Not Detected					
[illegible]	256	Compound Not Detected					
[illegible]	252	Compound Not Detected					
[illegible]	276	Compound Not Detected					
[illegible]	278	Compound Not Detected					
[illegible]	276	Compound Not Detected					
[illegible]	82	5 555	5 551	(0 865)	232422	77 8141	38.907
[illegible]	172	8 140	8 131	(0 865)	400734	79 1129	39 556
[illegible]	244	16 757	16 743	(0 868)	511325	97 4537	48 727
[illegible]	99	4 609	4 600	(0 939)	341808	127 593	63 797
[illegible]	112	3 578	3 569	(0 729)	254378	129 806	64 903
[illegible]	336	11.137	11 128	(0 877)	89343	129 351	64 675
[illegible]	132	4 711	4 702	(0 960)	276826	133 416	66 708
[illegible]	152	5 111	5 108	(1 041)	127327	78 9372	39.469

QC Flag Legend

M - Compound response manually integrated.



Original Integration



Manual Integration

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

Lab Name Severn Trent Laboratories, Inc. SDG Number:

Matrix (soil/water) WATER
Method SW846 8270C
Base/Neutrals and Acids (8270C)

Lab Sample ID C1B120000 285

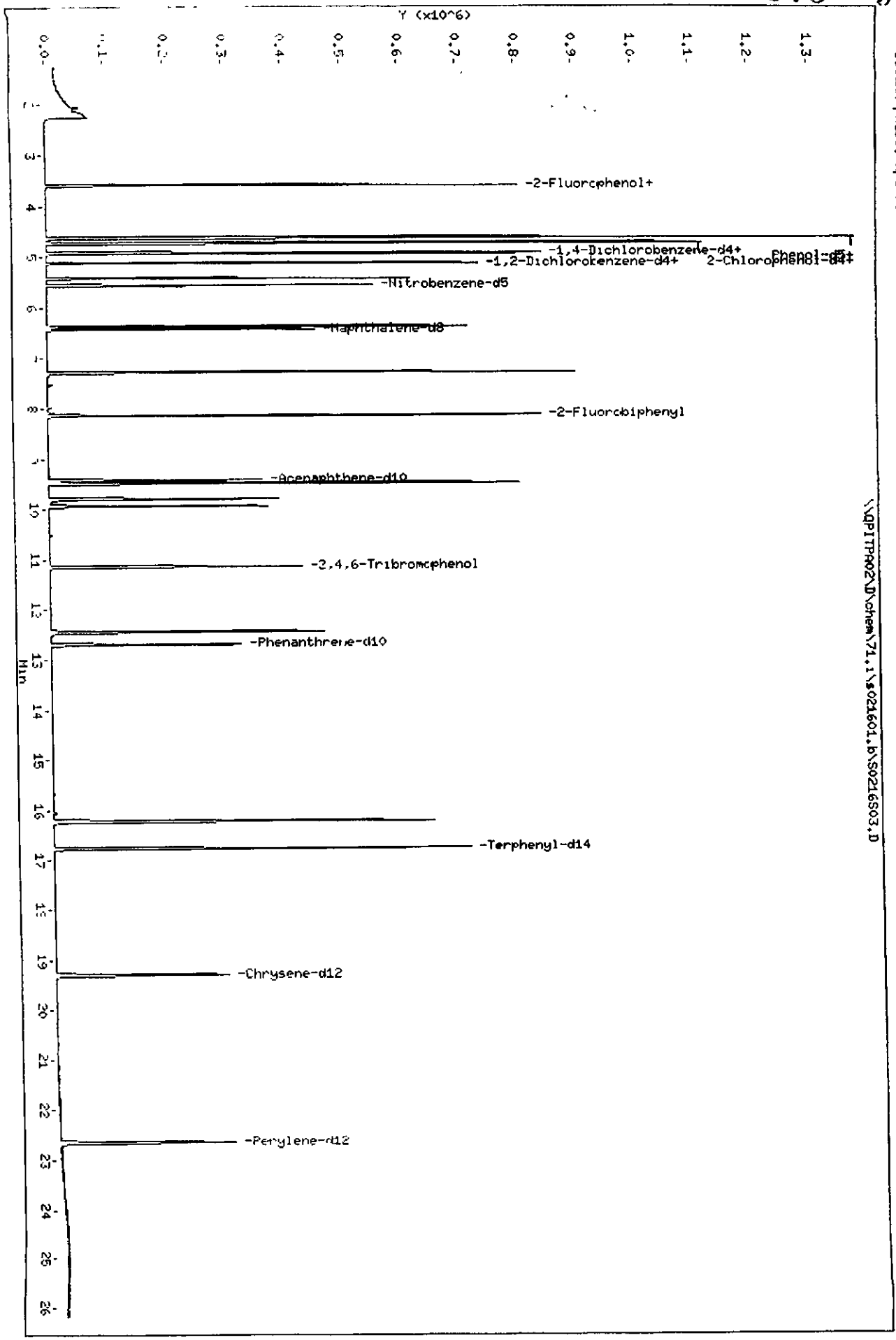
Sample WT/Vol: 1000 / mL
Work Order: DV03C1AD
Dilution factor 1
Moisture %·NA

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed· 02/16/01

QC Batch: 1043285

Client Sample Id· DUPLICATE CHECK

CAS NO	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
83-32-9	Acenaphthene	43.3	
59-50-7	4-Chloro-3-methylphenol	71.8	
95-57-8	2-Chlorophenol	65.1	
106-46-7	1,4-Dichlorobenzene	42.3	
121-14-2	2,4-Dinitrotoluene	44.8	
100-02-7	4-Nitrophenol	71.3	
621-64-7	N-Nitrosodi-n-propylamine	44.3	
87-86-5	Pentachlorophenol	73.9	
108-95-2	Phenol	63.3	
129-00-0	Pyrene	51.9	
120-82-1	1,2,4-Trichlorobenzene	41.9	



Data File: \\QPITPA02\D\chem\71.1\s021601.b\S0216S03.D
Date : 16-FEB-2001 12:09
Client ID: INTRA-LAB CHECK
Sample Info: c1b090228-lcsd 2/12/01 8270 h20
Volume Injected (uL): 2.0
Column phase: Hp5-MS

Instrument: 71.1
Operator: 045183
Column diameter: 0.25

\\QPITPA02\D\chem\71.1\s021601.b\S0216S03.D

STL-Pittsburgh

Semivolatile REPORT SW-846 Method 8270

Data file : \\QPITPA02\D\chem\71.i\s021601.b\S0216S03.D
Lab Smp Id: DV03C1AD Client Smp ID: INTRA-LAB CHECK
Inj Date : 16-FEB-2001 12:09
Operator : 045183 Inst ID: 71.i
Smp Info : c1b090228-lcsd 2/12/01 8270 h20
Misc Info : dv03c1ad,s021601.b,8270clp.m,1-8270l.sub
Comment :
Method : \\QPITPA02\D\chem\71.i\s021601.b\8270clp.m
Meth Date : 16-Feb-2001 12:50 bachas Quant Type: ISTD
Cal Date : 23-JAN-2001 20:40 Cal File: S0123CC5.D
Als bottle: 5 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-8270l.sub
Target Version: 4.04
Processing Host: PITPC050

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

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

Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
* 1,4-Dichlorobenzene-d4	152	4.907	4.905	(1.000)	71482	40.0000	
* Naphthalene-d8	136	6.419	6.416	(1.000)	276512	40.0000	
* Acenaphthene-d10	164	9.411	9.403	(1.000)	153181	40.0000	
* Phenanthrene-d10	188	12.691	12.683	(1.000)	260961	40.0000	
* Chrysene-d12	240	19.299	19.296	(1.000)	268074	40.0000	
* Perylene-d12	264	22.649	22.651	(1.000)	282012	40.0000	
N-Nitrosodimethylamine	74	Compound Not Detected					
Pyridine	79	Compound Not Detected					
2-Picoline	80	Compound Not Detected					
Methyl methanesulfonate	80	Compound Not Detected					
Aniline	93	Compound Not Detected					
2-Picoline	94	4.624	4.611	(0.942)	365106	126.547	63.274
Ethyl methanesulfonate	93	Compound Not Detected.					
Phenol	128	4.726	4.718	(0.963)	274714	130.104	65.052
1,3-Dichlorobenzene	146	Compound Not Detected					

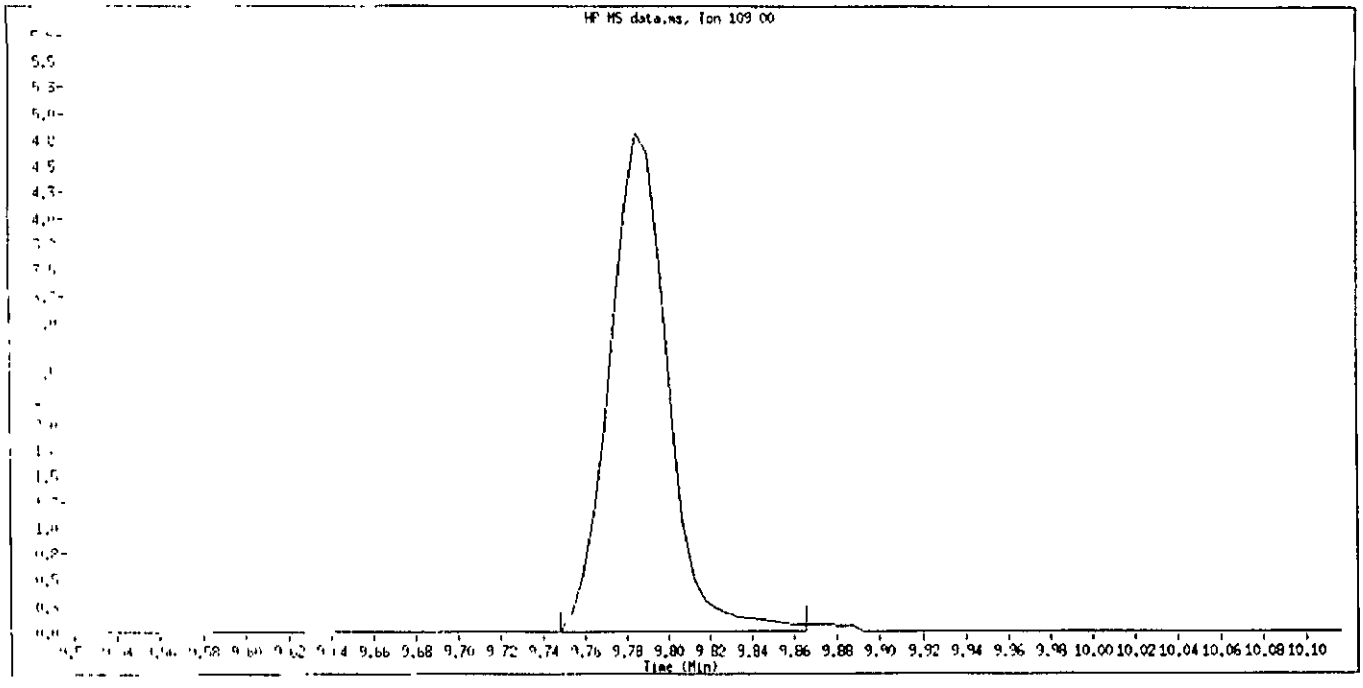
Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
28 2,4-Dichlorophenol	162	4 923	4 921	(1 003)	221814	84 5975	42 299
29 1,2-Dichlorobenzene	146	Compound Not Detected					
30 Benzyl Alcohol	108	Compound Not Detected					
31 3-Methylphenol	108	Compound Not Detected					
32 2,2'-oxybis(1-chloropropane)	45	Compound Not Detected					
33 N-Nitroso-di-n-propylamine	70	5 415	5 412	(1 103)	159632	88 6639	44 332
34 4-Methylphenol	108	Compound Not Detected					
35 Hexachloroethane	117	Compound Not Detected					
36 Nitrobenzene	77	Compound Not Detected					
37 Isophorone	82	Compound Not Detected.					
38 2-Nitrophenol	139	Compound Not Detected					
39 2,4-Dimethylphenol	107	Compound Not Detected					
40 bis(2-chloroethoxy)methane	93	Compound Not Detected					
41 2,4-Dichlorophenol	162	Compound Not Detected					
42 Benzoic Acid	122	Compound Not Detected					
43 1,2,4-Trichlorobenzene	180	6 366	6 363	(0 992)	179438	83 7615	41 881
44 Naphthalene	128	Compound Not Detected					
45 4-Chloroaniline	127	Compound Not Detected					
46 Hexachlorobutadiene	224	Compound Not Detected					
47 4-Chloro-3-Methylphenol	107	7 274	7 276	(1 133)	270035	143 641	71 820
48 2-Methylnaphthalene	142	Compound Not Detected					
49 1-Methylnaphthalene	142	Compound Not Detected					
50 Hexachlorocyclopentadiene	236	Compound Not Detected					
51 2,4,6-Trichlorophenol	196	Compound Not Detected					
52 2,4,5-Trichlorophenol	196	Compound Not Detected					
53 2-Chloronaphthalene	162	Compound Not Detected					
54 2-Nitroaniline	65	Compound Not Detected					
55 Dimethylphthalate	163	Compound Not Detected					
56 2,6-Dinitrotoluene	165	Compound Not Detected					
57 Acenaphthylene	152	Compound Not Detected					
58 3-Nitroaniline	138	Compound Not Detected					
59 Acenaphthene	153	9 480	9 467	(1 007)	365387	86 6131	43 306
60 2,4-Dinitrophenol	184	Compound Not Detected					
61 4-Nitrophenol	109	9 785	9 777	(1 040)	93683	142 544	71 272(M)
62 Dibenzofuran	168	Compound Not Detected					
63 2,6-Dinitrotoluene	165	9 929	9 921	(1 055)	119003	89 6729	44 836
64 2,3,4,6-Tetrachlorophenol	231	Compound Not Detected					
65 2,3,5,6-Tetrachlorophenol	231	Compound Not Detected					
66 4-Nitrobenzamine	143	Compound Not Detected					
67 Diethylphthalate	149	Compound Not Detected					
68 Fluorene	166	Compound Not Detected					
69 4-Chlorophenyl-phenylether	204	Compound Not Detected					
70 4-Nitroaniline	138	Compound Not Detected					
71 4,6-Dinitro-2-methylphenol	198	Compound Not Detected					
72 N-nitrosodiphenylamine(1)	169	Compound Not Detected					
73 1,2-Diphenylhydrazine	77	Compound Not Detected					
74 4-Bromophenyl-phenylether	248	Compound Not Detected					

Compound	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
113 Benzo(a)anthracene	283	Compound Not Detected					
117 Bis(2-ethylhexyl)phthalate	266	12.435	12.426	(0.980)	107411	147.887	73.944(M)
118 Butylbenzylphthalate	178	Compound Not Detected					
119 Carbazole	176	Compound Not Detected					
120 Chrysene	167	Compound Not Detected					
121 Di-n-octylphthalate	149	Compound Not Detected					
122 Dibenz(a,h)anthracene	202	Compound Not Detected					
123 Dibenzofuran	184	Compound Not Detected					
124 Fluoranthene	202	16.211	16.198	(0.840)	633880	103.884	51.942
125 Fluorene	166	Compound Not Detected					
126 Hexachlorobenzene	284	Compound Not Detected					
127 Hexachlorobutadiene	225	Compound Not Detected					
128 Hexachlorocyclopentadiene	237	Compound Not Detected					
129 Hexachloroethane	117	Compound Not Detected					
130 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected					
131 Isophorone	82	Compound Not Detected					
132 2-Methylnaphthalene	142	5.554	5.551	(0.865)	238349	80.5456	40.273
133 2-Methylphenol	108	8.139	8.131	(0.865)	410245	79.9918	39.996
134 4-Methylphenol	108	16.756	16.743	(0.868)	529227	101.320	50.660
135 Naphthalene	128	4.608	4.600	(0.939)	349919	133.441	66.720
136 2-Nitroaniline	65	3.577	3.569	(0.729)	258130	134.564	67.282
137 3-Nitroaniline	138	11.136	11.128	(0.878)	93617	133.752	66.876
138 4-Nitroaniline	138	4.710	4.702	(0.960)	284708	141.276	70.088
139 Nitrobenzene-d5	82	5.116	5.108	(1.042)	129292	81.8857	40.943

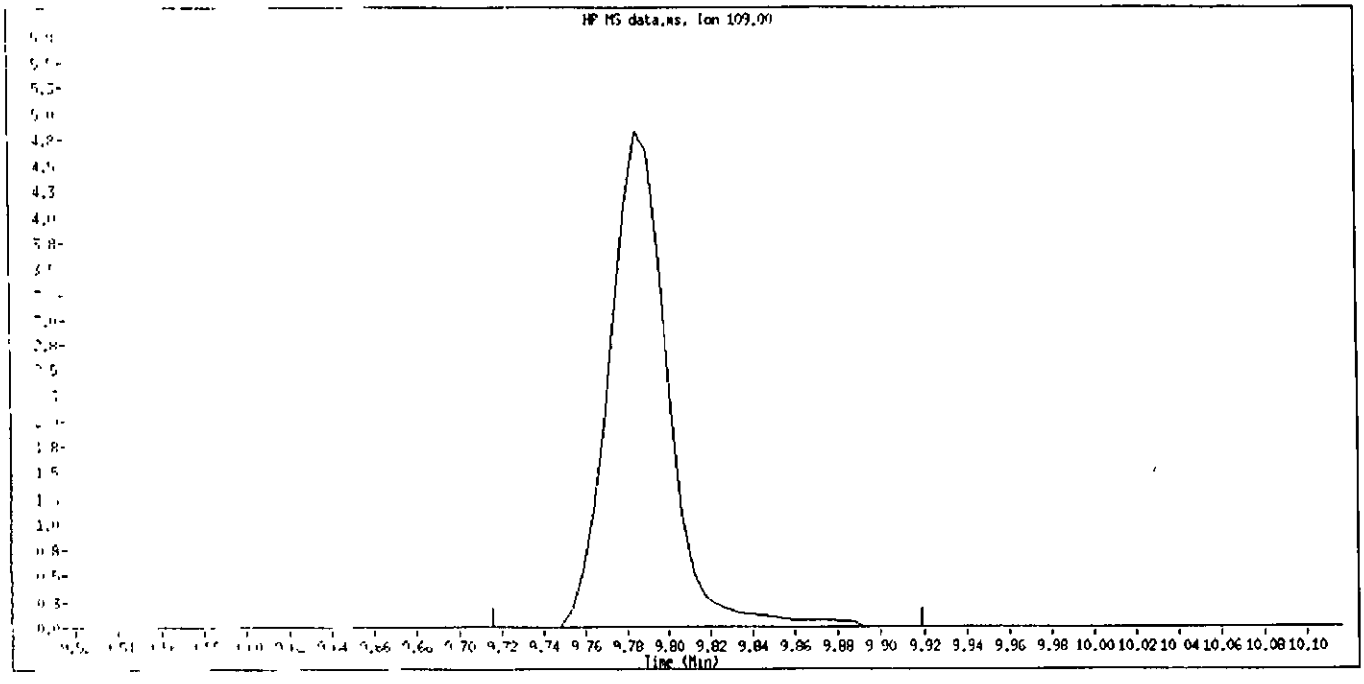
QC Flag Legend

M - Compound response manually integrated.

675 1003



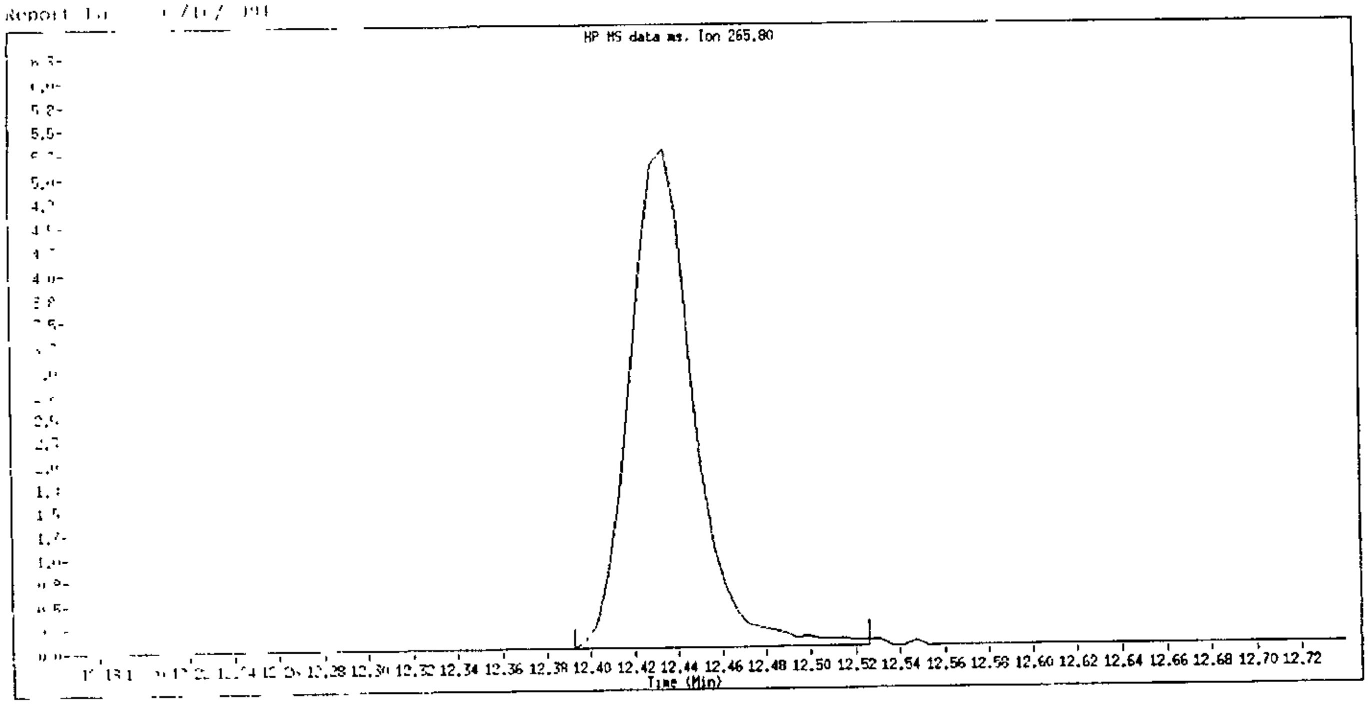
Original Integration



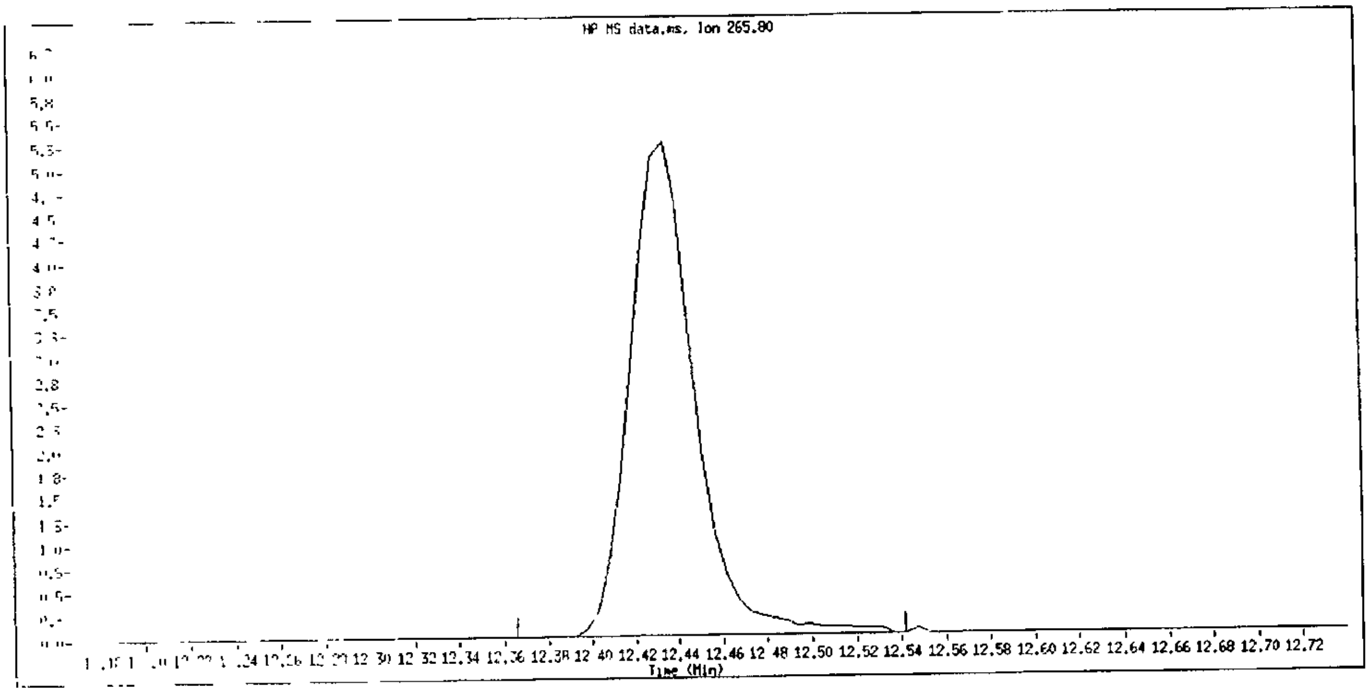
Manual Integration

675 1604

[illegible]
Data File: [illegible]
Instrument: [illegible]
Client ID: [illegible]
Compound Name: [illegible]
CAS #: [illegible]
Report Date: [illegible]



Original Integration



Manual Integration

Manually Integrated by: [illegible]
Manual Integration Reason: [illegible] chromatography

675 1005

GC/MS SEMIVOLATILE
MISCELLANEOUS

STL Pittsburgh

Continuous L-L Extraction Worksheet

STL - Pittsburgh
Logbook ID: OP44

Began 2/13/2001 Time 13.20 | Change Over 2.13.01 Time 0930 | Completed 2-16-01 Time 0845

Prep Meth # 3520C | Analysis 8270 | H2SO4 186-16-10 | NaOH 0258-24 | Solvent MeCl2 | Solvent Mfg Baker | Solvent Lot T50E08 | NaSO4 Lot T43461 | Cleanup Method NA

	Lot Number	Sample ID	Client ID	Extract Volume (mL)	Final Volume (mL)	pH	Surrogate Lot #	Surr Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	Cleanup Init/Date
1	CIB090228	BIK	NA	1000	1.0	5/2/11	77-08-8	0.5	NA	NA	NA
2		LCS				5/2/11			77-12-2	0.5	
3		LCS Dup				5/2/11					
4		001			1.0	7/2/11			NA	NA	
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20.											
21											
22											
23											
24											

WT 2/12/2001

675 1606

Prep Analyst: WT | WT | WT | WT | KW | WT | JM/WT | JM/WT | JM/WT | JM/WT | WT

Extract(s) (record line # from above)	Date	Time	Extract(s) Received	Analyst	Location	Date	Time	Extract(s) Relinquished	Analyst	Location
All Above	2-14-01	1040				2-14-01	1050			Ref 12 Ext.
All Above	2-16-01	0330			Ref 12 Ext	2-16-01	0845			Ref 1 Ext.
All Above	2/16/01	0845				2/16/01	1000			

Batch Number 1043285

Reviewed by [signature] Date 2-16-01

printed on: 31-Jan-01 12:57 53 PM

2092

Sequence Name: D:\HPCHEM\1\SEQUENCE\S012301.S
Comment: STL PITT HP597371A LOG 2ul inj (100ul+1ul IS)
Operator: 045183
Data Path: D:\HPCHEM\1\DATA\s012301.b\
Pre-Seq Cmd:
Post-Seq Cmd:

675 1007

8270 lcp / 625
1/23/01
vvf

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

vvf 1/23/01

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	1809 1	S0119DF1	DFTPP1	DFTPP050 (25ppb) 77-06-9
2	Sample	AQC 2	S0123CC1	EARLY	sstd020(10ug/ml) 77-06-3 8270
3	Sample	AQC 3	S0123CC2	EARLY	sstd050(25ug/ml) 77-09-6 8270
4	Sample	AQC 4	S0123CC3	EARLY	sstd080(40ug/ml) 77-06-4 8270
5	Sample	AQC 5	S0123CC4	EARLY	sstd120(60ug/ml) 77-06-5 8270
6	Sample	AQC 6	S0123CC5	EARLY	sstd160(80ug/ml) 77-06-6 8270
7	Sample	AQC 7	S0123CC6	EARLY	sstdver 50ug/ml 77-05-15 8270

vvf 1/23/01

Last Modified: Tue Jan 23 21:10:00 2001

D:\HPCHEM\1\SEQUENCE\SQ216[illegible].S
Seq. : STL PITT HP597371A LOG 2ul inj (100ul+1ul IS) 675 1608
Operator: 015383
Data Path: D:\HPCHEM\1\DATA\s021601.b\ E270
Pre-Seq Cmd:
Post-Seq Cmd: Is 72c8-5

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	1	S0216DFT	DFTPP1	DFTPP050 (25ppb) 77-06-9
2	Sample	2	S0216CC1	EARLY	sstd50(25ug/ml) 77-13-1 8270
3	Sample	3	S0216S01	EARLY	c1b090228-sblk 2/12/01 8270 h
4	Sample	4	S0216S02	EARLY	c1b090228-lcs 2/12/01 8270 h2
5	Sample	5	S0216S03	EARLY	c1b090228-lcsd 2/12/01 8270 h
6	Sample	6	S0216S04	EARLY	c1b090228-001 2/12/01 8270 h2
7	Sample	7	S0216S05	EARLY	c1b090128-sblk 2/14/01 8270 t
8	Sample	8	S0216S06	EARLY	c1b090128-lcs 2/14/01 8270 tc
9	Sample	9	S0216S07	EARLY	c1b090128-001 2/14/01 8270 tc
10	Sample	10	S0216S08	EARLY	c1b090128-001 ms 2/14/01 8270
11	Sample	11	S0216S09	EARLY	c1b090128-001 msd 2/14/01 827
12	Sample	12	S0216S10	EARLY	c1b090193-001 2/14/01 8270 tc
13	Sample	13	S0216S11	EARLY	c1b090193-002 2/14/01 8270 tc
14					

Last Modified: Fri Feb 16 10:28:37 2001 Page: 1

SAMPLE CUSTODIAN REMOVAL REQUEST 675 1009 PAGE 001

REQUESTED BY TROUTB

METHOD Q. Base/Neutrals and Acids (8270C)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	...	ANALYSIS	LOT #	...	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
60 CLP1	DVWJE 1 AC	___ ___	[illegible]		[illegible]	C1B090		WATER	13	1

Dumped empty jar

RELINQUISHED BY	RECEIVED BY	DATE/TIME
Ken Sudy	B Trout	2/12/2001 07:2[illegible]
B Trout	Ken Sudy	2/12/2001 13:3[illegible]

***** NEO REPORT *****

PESTICIDE DATA

675 1011

PESTICIDE
QC SUMMARY

2E

WATER PESTICIDE SURROGATE RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

GC Column(1): RTX-50 ID: 0.53 (mm) GC Column(2): RTX-1701 ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	DF/S-1/1039/	74	55	89	90			0
02	PBLK3326	73	73	98	95			0
03	LCS3326	78	77	101	100			0
04	LCD3326	76	75	96	94			0
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (39-130)
S2 (DCB) = Decachlorobiphenyl (10-147)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

SW846 8081A CHECK SAMPLE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV05T1AC
BATCH: 1043326

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
gamma-BHC (Lindane)	0.250	0.226	90	49- 137	
Heptachlor	0.250	0.229	92	57- 124	
Aldrin	0.250	0.223	89	62- 120	
Dieldrin	0.500	0.518	104	68- 130	
Endrin	0.500	0.488	98	46- 137	
4,4'-DDT	0.500	0.522	104	60- 140	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits

COMMENTS:

SW846 8081A CHECK SAMPLE DUPLICATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV05T1AD
BATCH: 1043326

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
gamma-BHC (Lindane)	0.250	0.213	85	49- 137	
Heptachlor	0.250	0.217	87	57- 124	
Aldrin	0.250	0.209	83	62- 120	
Dieldrin	0.500	0.483	97	68- 130	
Endrin	0.500	0.436	87	46- 137	
4,4'-DDT	0.500	0.491	98	60- 140	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits

COMMENTS:

675 1615 EPA SAMPLE NO.

4C

PESTICIDE METHOD BLANK SUMMARY

PBLK3326

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

Lab Sample ID: DV05T1AA Lab File ID: D-A1453

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SW3510

Sulfur Cleanup (Y/N) N Date Extracted: 02/12/01

Date Analyzed (1): 02/14/01 Date Analyzed (2): 02/14/01

Time Analyzed (1): 1527 Time Analyzed (2): 1527

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

GC Column (1): RTX-50 ID: 0.53(mm) GC Column (2): RTX-1701 ID: 0.53(mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	DF/S-1/1039/	DVWJE1AD	02/14/01	02/14/01
02	LCS3326	DV05T1AC	02/14/01	02/14/01
03	LCD3326	DV05T1AD	02/14/01	02/14/01
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

PESTICIDE
SAMPLE DATA

UXB INTERNATIONAL

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

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

Lab Sample ID:C1B090228 001

Sample WT/Vol: 1000 / mL
Work Order: DVWJE1AD
Dilution factor: 1

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/14/01

QC Batch: 1043326

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
309-00-2	Aldrin	0.050	U
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.015	J P
58-89-9	gamma-BHC (Lindane)	0.014	J P
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.079	P
72-54-8	4,4'-DDD	0.017	J P
72-55-9	4,4'-DDE	0.0051	J P
50-29-3	4,4'-DDT	0.050	U
60-57-1	Dieldrin	0.014	J P
959-98-8	Endosulfan I	0.050	U
33213-65-9	Endosulfan II	0.050	U
1031-07-8	Endosulfan sulfate	0.050	U
72-20-8	Endrin	0.053	P
7421-93-4	Endrin aldehyde	0.050	U
53494-70-5	Endrin ketone	0.050	U
76-44-8	Heptachlor	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
72-43-5	Methoxychlor	0.10	U
8001-35-2	Toxaphene	2.0	U

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1452.d
Report Date: 15-Feb-2001 11:17

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1452.d
Lab Smp Id: DVWJE1AD Client Smp ID: DF/S-1/1039/IDW/004
Inj Date : 14-FEB-2001 14:59
Operator : 010139 Inst ID: gc4.i
Smp Info : DVWJE1AD,1151-G.b,,PEST.sub,,,
Misc Info : 090228-1
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC044

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 2 Tetrachloro-m-xylene	5.260	5.206	0.054	15923	0.01476	0.1476 (M)
6 alpha-BHC	7.413	7.380	0.033	4370	0.00345	0 03451 (a)
7 gamma-BHC (Lindane)	8.886	8.840	0.046	42805	0.03466	0.3466
10 beta-BHC	Compound Not Detected.					
8 Chlordane	Compound Not Detected.					
9 Heptachlor	Compound Not Detected					
11 delta-BHC	10.760	10.766	-0.006	1661	0.00152	0 01519 (a)
13 Aldrin	Compound Not Detected.					
17 Heptachlor epoxide	Compound Not Detected.					
18 gamma-Chlordane	13.306	13.346	-0 040	11757	0.00787	0.07871
19 alpha-Chlordane	Compound Not Detected					
20 Endosulfan I	Compound Not Detected.					
22 4,4'-DDE	14.060	14.106	-0.046	840	<0.0	0.005148 (a)
23 Dieldrin	14.273	14.266	0.007	2203	0.00140	0.01403 (a)
26 Endrin	14.813	14.800	0.013	7608	0.00535	0.05347

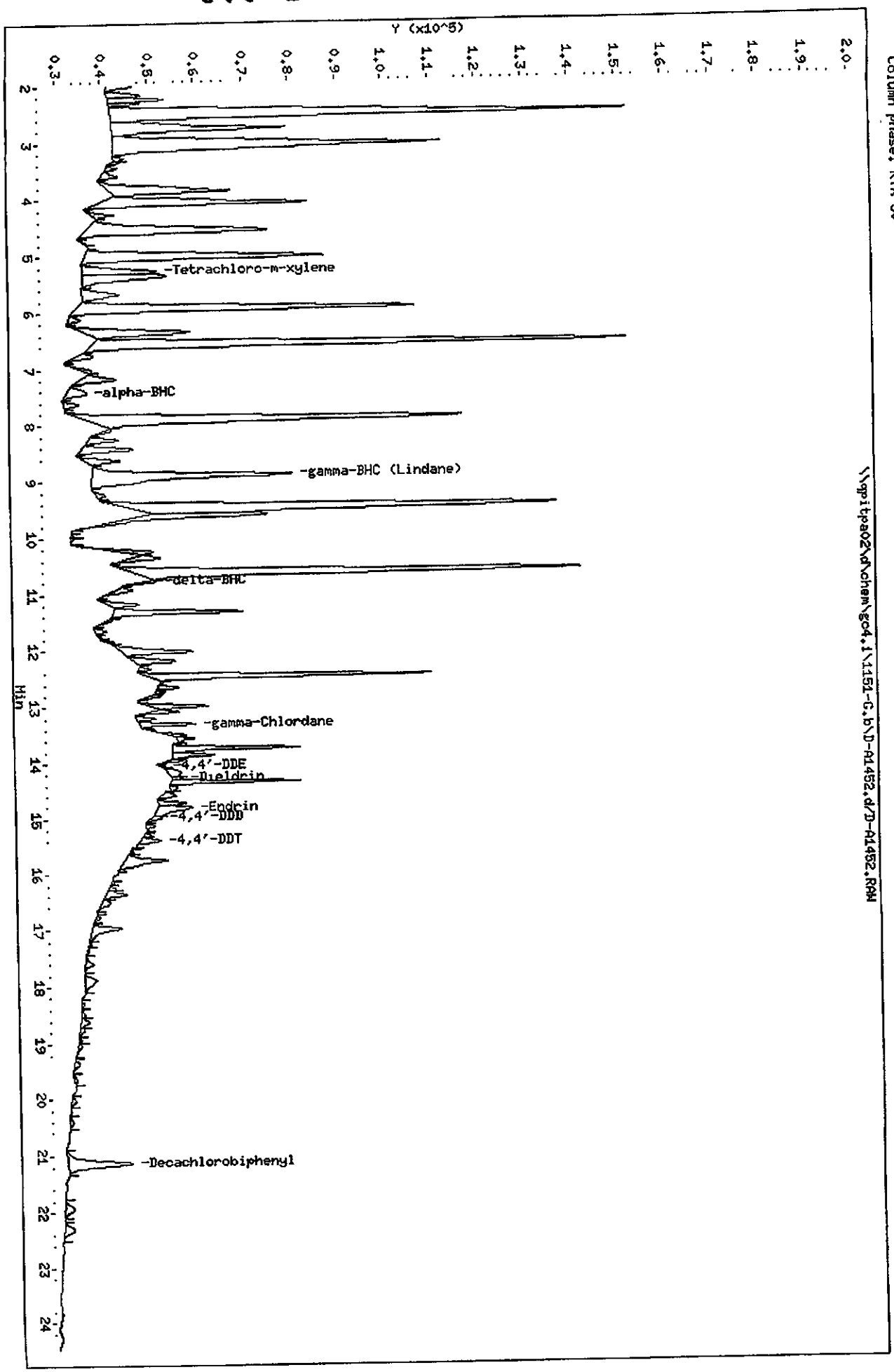
Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1452.d
Report Date: 15-Feb-2001 11:17

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	29 4,4'-DDD	14.993	15.006	-0.013	2161	0 00172	0.01724(a)
	30 Toxaphene	Compound Not Detected					
	31 Endosulfan II	Compound Not Detected					
	32 4,4'-DDT	15.393	15.440	-0.047	4571	0.00369	0.03695(a)
	33 Endrin aldehyde	Compound Not Detected.					
	34 Endosulfan sulfate	Compound Not Detected					
	35 Methoxychlor	Compound Not Detected.					
	37 Endrin ketone	Compound Not Detected.					
$	38 Decachlorobiphenyl	21.140	21.146	-0.006	13733	0.01784	0.1784

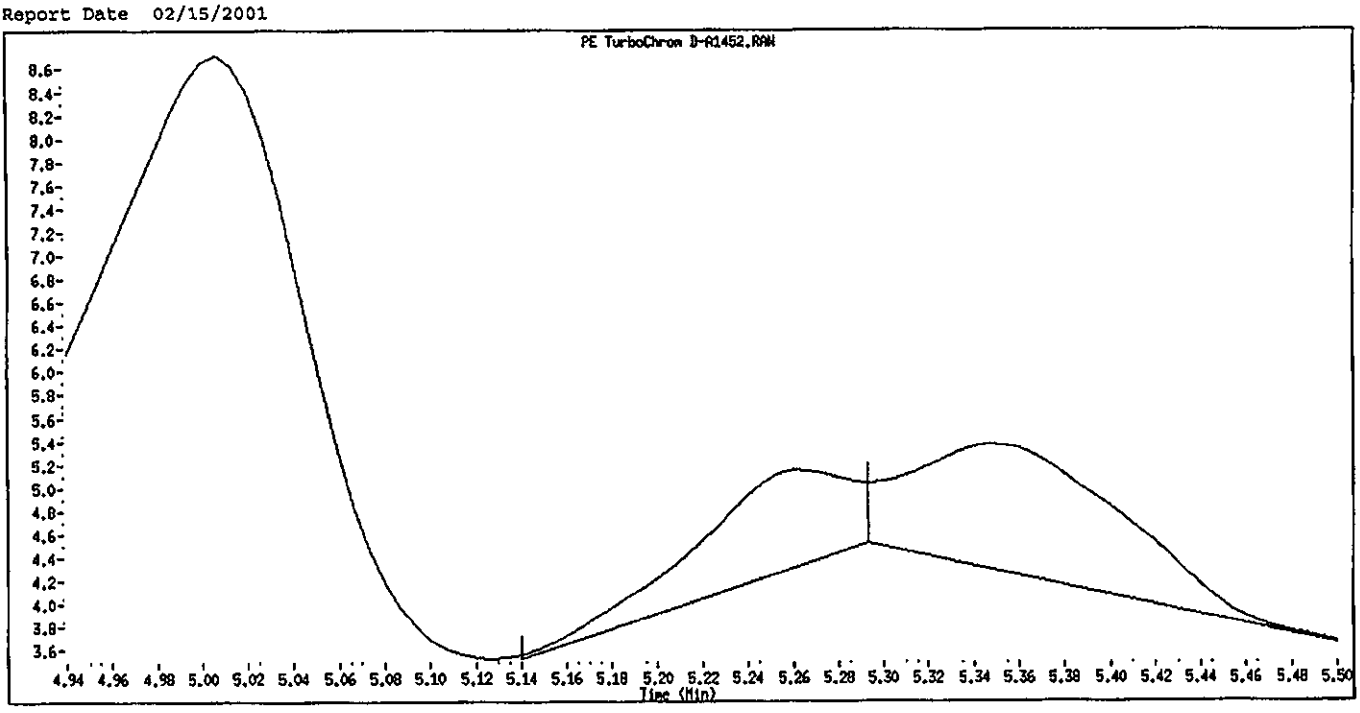
QC Flag Legend

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

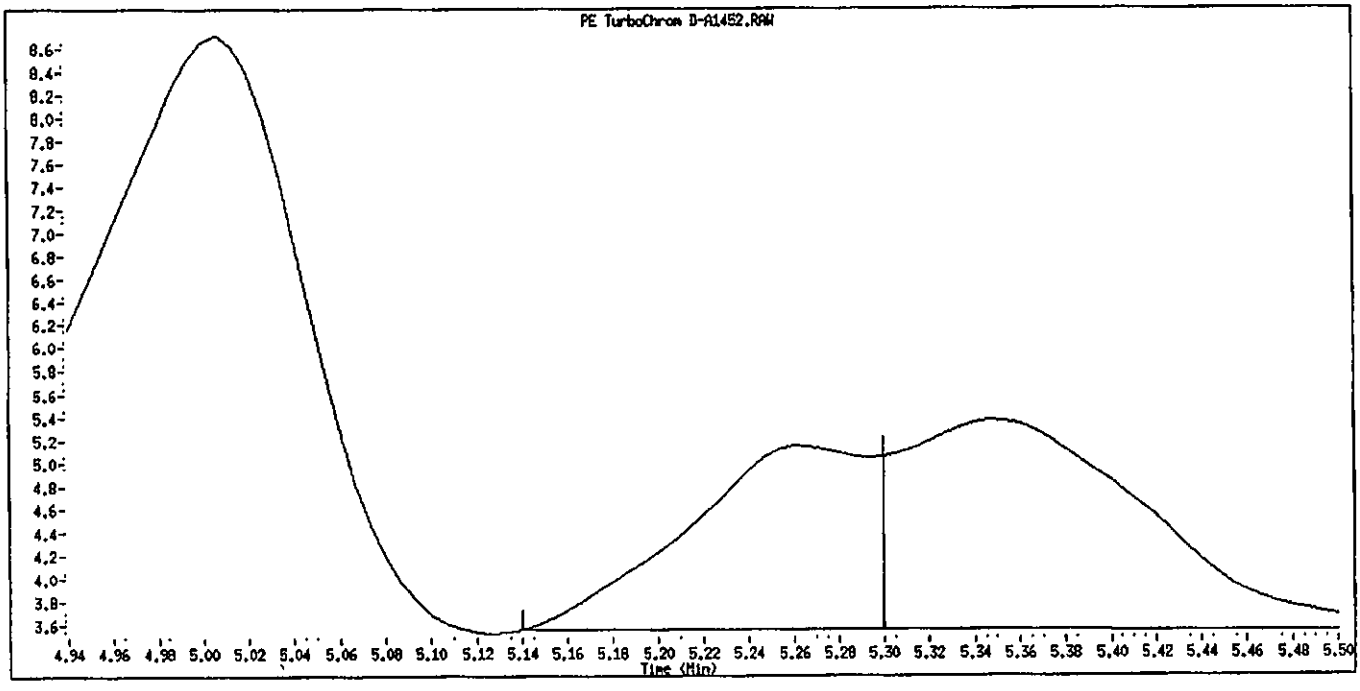
675 1020


Data File: \\pittpa02\d\chem\gc4.i\1151-G.b\D-A1452.d
Date : 14-FEB-2001 14:59
Client ID: DF/S-1/1039/IDW/004
Sample Info: DVAJEAD,1151-G.b,,PEST.sub,,,
Volume Injected (uL): 1.0
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\pittpa02\d\chem\gc4.i\1151-G.b\D-A1452.d/D-A1452.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-alpha-BHC
-gamma-BHC (Lindane)
-delta-BHC
-gamma-Chlordane
4,4'-DDE
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Decachlorobiphenyl

Data File Name: D-A1452.d
Inj Date and Time: 14-FEB-2001 14:59
Instrument ID. gc4.i
Client ID: DF/S-1/1039/IDW/004
Compound Name: Tetrachloro-m-xylene
CAS #. 877-09-8
Report Date 02/15/2001



Original Integration



Manual Integration

Manually Integrated By: MatkoL
Manual Integration Reason: Unknown

675 1622

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1452.d
Report Date: 15-Feb-2001 12:03

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1452.d
Lab Smp Id: DVWJE1AD Client Smp ID: DF/S-1/1039/IDW/004
Inj Date : 14-FEB-2001 14:59
Operator : 010139 Inst ID: gc4.i
Smp Info : DVWJE1AD,1151-G.b,,PEST.sub,,,
Misc Info : 090228-1
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-B1448.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC044

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 2 Tetrachloro-m-xylene	5.480	5.426	0.054	8388	0.01095	0.1095(M)
6 alpha-BHC	Compound Not Detected.					
7 gamma-BHC (Lindane)	9.606	9.600	0.006	1200	0.00138	0 01380(a)
10 beta-BHC	12.306	12 273	0.033	1780	0 00278	0.02784(a)
8 Chlordane	Compound Not Detected					
9 Heptachlor	Compound Not Detected.					
11 delta-BHC	12 860	12 846	0.014	13037	0.01129	0.1128
13 Aldrin	11.346	11.333	0.013	10890	0.01210	0 1210
17 Heptachlor epoxide	13.273	13.240	0.033	80212	0.06729	0.6729
18 gamma-Chlordane	13.900	13.873	0.027	16826	0.01253	0.1253
19 alpha-Chlordane	13.953	13.986	-0.033	17818	0.01316	0.1316
20 Endosulfan I	Compound Not Detected.					
22 4,4'-DDE	14.120	14.126	-0.006	12084	0.00907	0.09071
23 Dieldrin	14.400	14.386	0.014	11326	0.00863	0.08631
26 Endrin	14.713	14.713	0.000	9337	0.00766	0.07656

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1452.d
Report Date: 15-Feb-2001 12:03

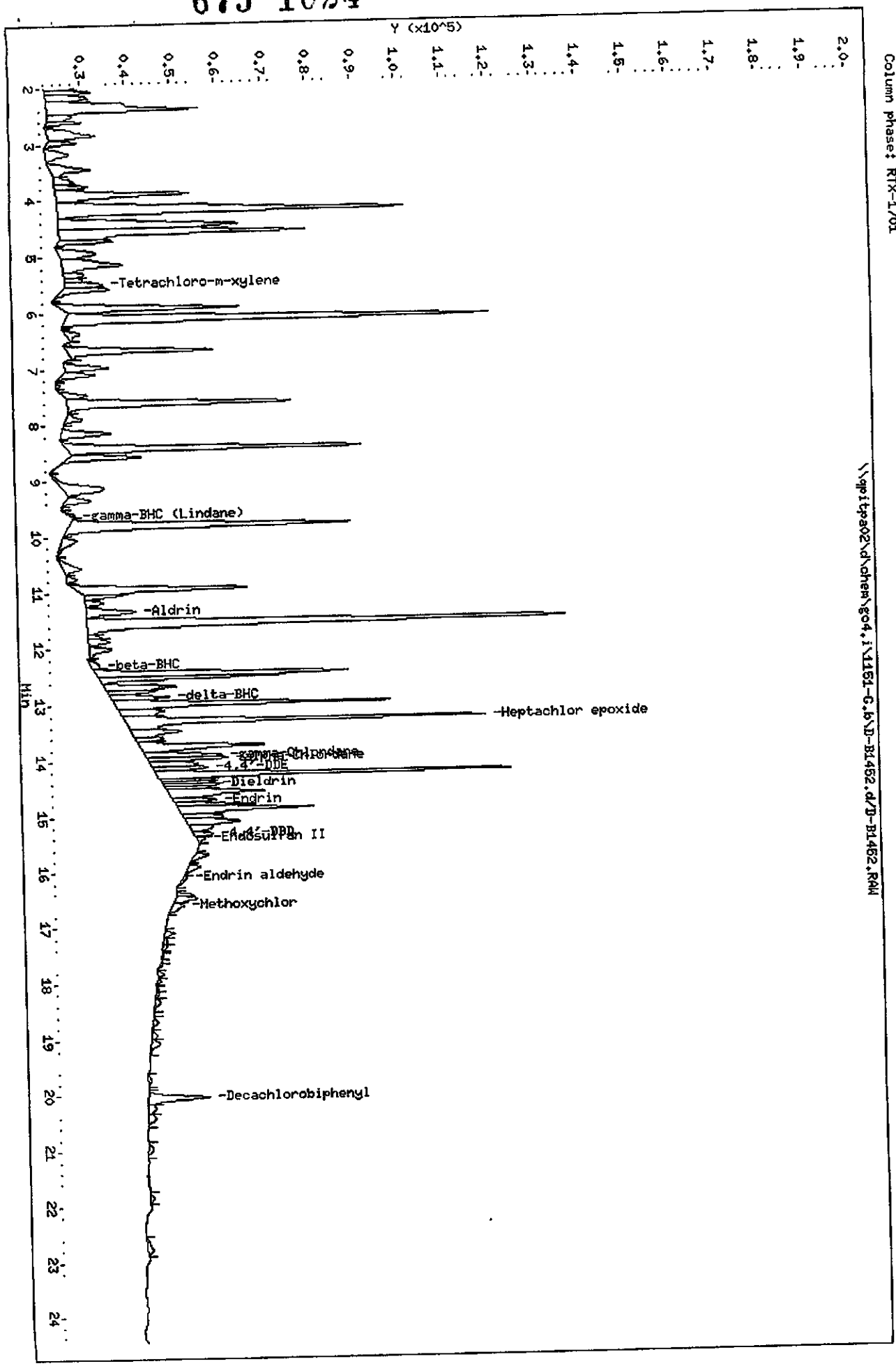
675 1023

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
29	4,4'-DDD	15.320	15.293	0 027	4085	0 00397	0.03966(a)
30	Toxaphene	Compound Not Detected.					
31	Endosulfan II	15.400	15.420	-0.020	1906	0.00159	0.01589(a)
32	4,4'-DDT	Compound Not Detected.					
33	Endrin aldehyde	16.093	16.126	-0.033	1023	0.00155	0 01553(a)
34	Endosulfan sulfate	Compound Not Detected.					
35	Methoxychlor	16 613	16.600	0.013	2395	0.00463	0.04626(a)
37	Endrin ketone	Compound Not Detected.					
$ 38	Decachlorobiphenyl	20.046	20.040	0.006	13555	0.01790	0.1790

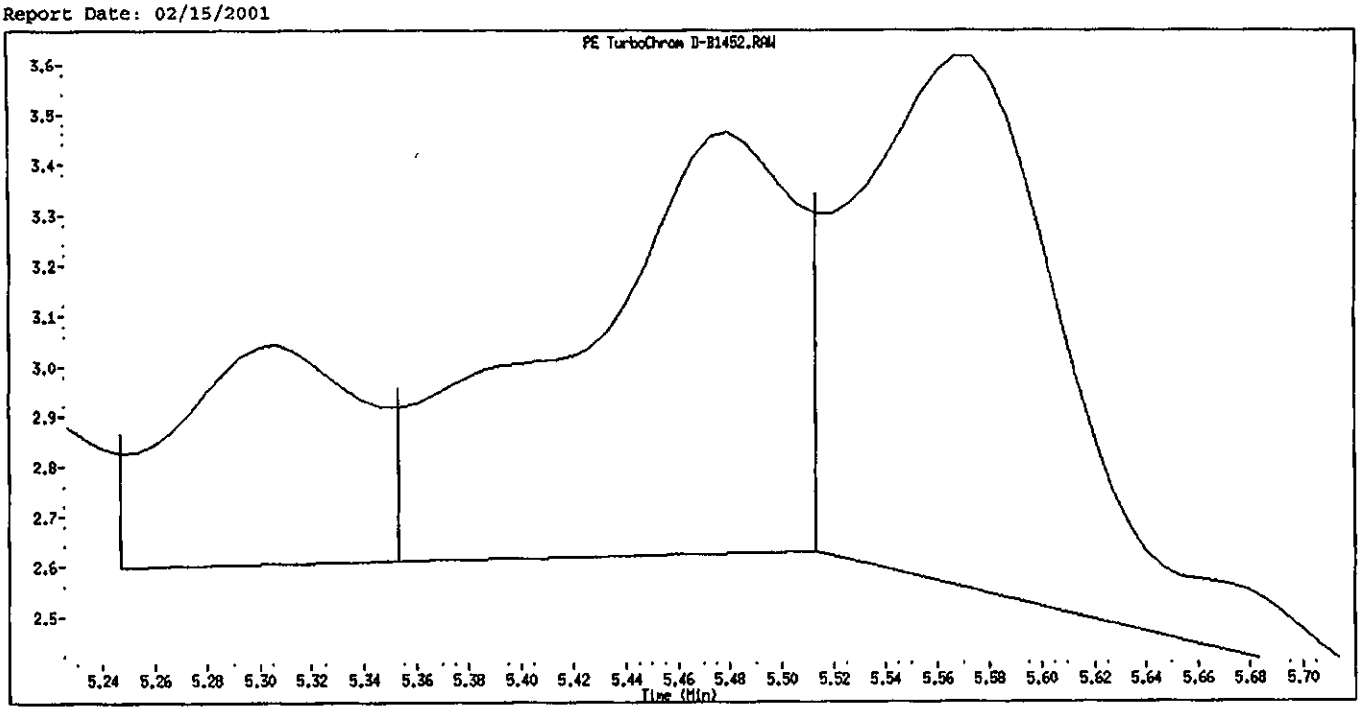
QC Flag Legend

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

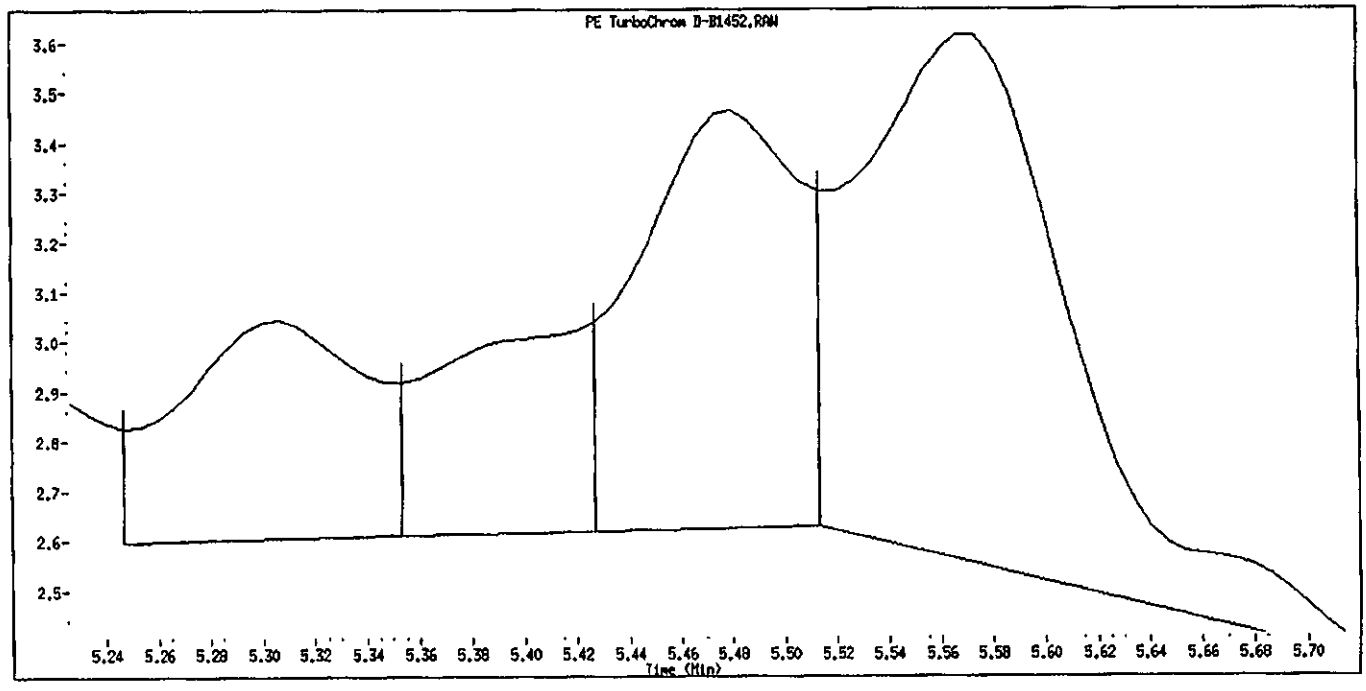
675 1024


Data File: \\qpitpa02\d\chem\go4.i\1151-G.b\D-B1452.d
Date : 14-FEB-2001 14:59
Client ID: DF/S-1/1039/IDW/004
Sample Info: DVWJE16D,1151-G.b,,PEST.sub,,,
Volume Injected (uL): 1.0
Column phase: RTX-1701
Instrument: go4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\go4.i\1151-G.b\D-B1452.d/D-B1452.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-gamma-BHC (Lindane)
-Aldrin
-beta-BHC
-delta-BHC
-Heptachlor epoxide
-4,4'-DDE
-Dieldrin
-Endrin
-Endosulfan II
-Endrin aldehyde
-Methoxychlor
-Decachlorobiphenyl

Data File Name: D-B1452.d
Inj. Date and Time 14-FEB-2001 14.59
Instrument ID. gc4.i
Client ID: DF/S-1/1039/IDW/004
Compound Name- Tetrachloro-m-xylene
CAS #: 877-09-8
Report Date: 02/15/2001



Original Integration



Manual Integration

Manually Integrated By: MatkoL
Manual Integration Reason: Unknown

675 1026 10A

PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

DF/S-1/10
39/IDW/004

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

Lab Sample ID: DVWJE1AD Date(s) Analyzed: 02/14/01 02/14/01

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

GC Column(1): RTX-50 ID: 0.53(mm) GC Column(2): RTX-1701 ID: 0.53(mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
delta-BHC	1	10.76	10.72	10.82	0.01519	
	2	12.86	12.80	12.90	0.1128	642.6
gamma-BHC (Lindane)	1	8.89	8.79	8.89	0.3466	
	2	9.61	9.55	9.65	0.01380	999.9
Dieldrin	1	14.27	14.22	14.32	0.01403	
	2	14.40	14.34	14.44	0.08631	515.2
4,4'-DDE	1	14.06	14.06	14.16	0.005148	
	2	14.12	14.08	14.18	0.09071	999.9
Endrin	1	14.81	14.75	14.85	0.05347	
	2	14.71	14.66	14.76	0.07656	43.2
4,4'-DDD	1	14.99	14.96	15.06	0.01724	
	2	15.32	15.24	15.34	0.03966	130.0
gamma-Chlordane	1	13.31	13.30	13.40	0.07871	
	2	13.90	13.82	13.92	0.1253	59.2
	1					
	2					

PESTICIDE
CALIBRATION DATA

675 1628

Report Date : 15-Feb-2001 10:59

6D
5B9014
RTx-50

STL-Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Quant Method : ESTD
Last Update : 15-Feb-2001 10:59
Data Type : GC MULTI COMP
Target Version : 4.04
Number of Cpnds : 24

Global Integrator : Falcon

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

	Compound	RT	RT Window	RF
$	2 Tetrachloro-m-xylene	5.207	5.157-5.257	1.08e+006
	6 alpha-BHC	7.380	7.330-7.430	1.27e+006
	7 gamma-BHC (Lindane)	8.840	8.790-8.890	1.23e+006
	8 Chlordane	9.207	9.157-9.257	3.12e+004
		9.867	9.817-9.917	4.33e+004
		13.353	13.303-13.403	1.48e+005
		13.640	13.590-13.690	1.67e+005
	9 Heptachlor	9.853	9.803-9.903	1.03e+006
	10 beta-BHC	9.800	9.750-9.850	6.90e+005
	11 delta-BHC	10.767	10.717-10.817	1.09e+006
	13 Aldrin	11.067	11.017-11.117	1.03e+006
	17 Heptachlor epoxide	12.933	12.883-12.983	1.36e+006
	18 gamma-Chlordane	13.347	13.297-13.397	1.49e+006
	19 alpha-Chlordane	13.640	13.590-13.690	1.53e+006
	20 Endosulfan I	13.680	13.630-13.730	1.43e+006
	22 4,4'-DDE	14.107	14.057-14.157	1.63e+006
	23 Dieldrin	14.267	14.217-14.317	1.57e+006
	26 Endrin	14.800	14.750-14.850	1.42e+006
	29 4,4'-DDD	15.007	14.957-15.057	1.25e+006
	30 Toxaphene	15.060	15.010-15.110	2.77e+004
		15.233	15.183-15.283	3.45e+004
		15.600	15.550-15.650	2.35e+004
		16.633	16.583-16.683	1.88e+004
	31 Endosulfan II	15.193	15.143-15.243	1.41e+006

6J
58904A
RTx-50

Report Date : 15-Feb-2001 10:59

STL-Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m

	Compound	RT	RT Window	RF
	32 4,4'-DDT	15.440	15.390-15.490	1.24e+006
	33 Endrin aldehyde	15.693	15.643-15.743	1.12e+006
	34 Endosulfan sulfate	15.980	15.930-16.030	8.19e+005
	35 Methoxychlor	17.093	17.043-17.143	5.59e+005
	37 Endrin ketone	17.433	17.383-17.483	1.09e+006
$	38 Decachlorobiphenyl	21.147	21.097-21.197	7.70e+005

675 1030

Report Date : 15-Feb-2001 10:59

GC 5890A RTX-5D

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 14-FEB-2001 07:59
End Cal Date : 14-FEB-2001 13:07
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Cal Date : 15-Feb-2001 10:59 matkol
Curve Type : Average

Calibration File Names:
Level 1: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1444.d
Level 2: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1445.d
Level 3: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1446.d
Level 4: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1447.d
Level 5: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1448.d

Compound	0.00500 Level 1	0.01000 Level 2	0 02500 Level 3	0.05000 Level 4	0.10000 Level 5	___ RRF	% RSD
6 alpha-BHC	1024600	1001600	1326520	1465900	1512820	1266288	19.048
7 gamma-BHC (Lindane)	1042000	1065100	1262200	1382140	1423150	1234918	14.252
8 Chlordane(1)	+++++	+++++	31212	+++++	+++++	31212	0.000
(2)	+++++	+++++	43276	+++++	+++++	43276	0.000
(3)	+++++	+++++	148292	+++++	+++++	148292	0 000
(4)	+++++	+++++	166700	+++++	+++++	166700	0.000
9 Heptachlor	996000	960000	990680	1060580	1119310	1025314	6.246
10 beta-BHC	663200	718400	702200	691920	672000	689544	3 243
11 delta-BHC	838000	964400	1098120	1277440	1289020	1093396	17.947
13 Aldrin	896200	964800	1024040	1109420	1131400	1025172	9.590
17 Heptachlor epoxide	1240600	1327900	1371960	1461740	1404420	1361324	6.118
18 gamma-Chlordane	1369800	1476700	1511800	1583480	1526320	1493620	5.303
19 alpha-Chlordane	1426400	1527700	1554080	1623900	1539580	1534332	4 624
20 Endosulfan I	1334400	1374700	1374200	1489280	1554940	1425504	6 499
22 4,4'-DDE	1423200	1562100	1657920	1798260	1717040	1631704	8.883
23 Dieldrin	1345200	1471300	1554320	1684860	1795340	1570204	11 235
26 Endrin	1213400	1331600	1408840	1524460	1635500	1422760	11 546
29 4,4'-DDD	1077400	1175400	1241080	1347620	1427180	1253736	11 015
30 Toxaphene(1)	+++++	+++++	27688	+++++	+++++	27688	0.000
(2)	+++++	+++++	34547	+++++	+++++	34547	0.000
(3)	+++++	+++++	23492	+++++	+++++	23492	0 000
(4)	+++++	+++++	18782	+++++	+++++	18782	0.000
31 Endosulfan II	1257400	1394400	1364560	1526380	1484460	1405440	7 511
32 4,4'-DDT	1124200	1191800	1168520	1307320	1393850	1237138	8.947
33 Endrin aldehyde	1063600	1157800	1128280	1165300	1104990	1123994	3.689
34 Endosulfan sulfate	718000	726900	767920	976180	907800	819360	14 165

Report Date : 15-Feb-2001 10:59

6E
5890A
RTX-50

675 1031

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 14-FEB-2001 07:59
End Cal Date : 14-FEB-2001 13:07
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Cal Date : 15-Feb-2001 10:59 matkol
Curve Type : Average

Compound	0.00500 Level 1	0.01000 Level 2	0.02500 Level 3	0.05000 Level 4	0.10000 Level 5	___ RRF	% RSD
35 Methoxychlor	545400	572050	537920	566760	573545	559135	2.927
37 Endrin ketone	963400	1048400	1092200	1206200	1136750	1089390	8.394
$ 2 Tetrachloro-m-xylene	1127800	973000	1179560	1099900	1014010	1078854	7 809
$ 38 Decachlorobiphenyl	799800	811100	740480	750420	746160	769592	4.309

675 1032

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

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

GC Column: RTX-50 ID: 0.53 (mm) Init. Calib. Date(s): 02/14/01 02/14/01

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

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

EPA Sample No.(PEM): Date Analyzed :02/14/01

Lab Sample ID (PEM): EVALB Time Analyzed :0731

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Endrin	14.80	14.75	14.85	0.02361	0.02500	-5.6
4,4'-DDT	15.44	15.39	15.49	0.02386	0.02500	-4.6

4,4'-DDT % breakdown (1): ~~1.38~~ 7.9 Endrin % breakdown (1): ~~4.67~~ 3.7

Combined % breakdown (1): ~~6.05~~ 5.6

LM 2/15/01

FORM VII PEST-1 OLM03.0

PESTICIDE CALIBRATION VERIFICATION SUMMARY

675 1633

Lab Name: Contract:

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

GC Column: RTX-50 ID: 0.53 (mm) Init. Calib. Date(s): 02/14/01 02/14/01

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

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

EPA Sample No.(PEM): Date Analyzed :02/14/01

Lab Sample ID (PEM): EVALB Time Analyzed :1431

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Endrin	14.80	14.75	14.85	0.02411	0.02500	-3.6
4,4'-DDT	15.44	15.39	15.49	0.02393	0.02500	-4.3

4,4'-DDT % breakdown (1): ~~1.92~~ 2.6 Endrin % breakdown (1): ~~5.29~~ 4.1

Combined % breakdown (1): ~~7.22~~ 6.7

MM
2/15/01

675 1034

TE
58904A
RTx50

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1465.d
Report Date: 15-Feb-2001 11:09

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i
Lab File ID: D-A1465.d
Analysis Type:
Lab Sample ID: MEDA
Method: \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m

Injection Date: 14-FEB-2001 21:02
Init. Cal. Date(s): 14-FEB-2001 14-FEB-2001
Init. Cal. Times: 07:59 13:07
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
$	2 Tetrachloro-m-xylene	1078854	1040680	0 000	-3.5	15.0
	6 alpha-BHC	1266288	1269120	0 010	0.2	15.0
	7 gamma-BHC (Lindane)	1234918	1291160	0.010	4 6	15.0
	9 Heptachlor	1025314	1017000	0 010	-0.8	15.0
	20 Endosulfan I	1425504	1484000	0 010	4.1	15 0
	23 Dieldrin	1570204	1656280	0.010	5.5	15.0
	26 Endrin	1422760	1518000	0.010	6 7	15.0
	29 4,4'-DDD	1253736	1359360	0 010	8.4	15 0
	32 4,4'-DDT	1237138	1335360	0.010	7 9	15 0
	35 Methoxychlor	559135	597340	0.010	6.8	15 0
$	38 Decachlorobiphenyl	769592	794480	0.010	3 2	15.0

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1466.d
Report Date: 15-Feb-2001 11:09

FE 5884 04A RTx-5D

675 1635

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i
Lab File ID: D-A1466.d
Analysis Type:
Lab Sample ID: MEDB
Method: \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m

Injection Date: 14-FEB-2001 21:30
Init. Cal. Date(s): 14-FEB-2001 14-FEB-2001
Init. Cal. Times: 07:59 13:07
Quant Type: ESTD

COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
13 Aldrin	1025172	1077000	0.010	5.1	15.0	
10 beta-BHC	689544	723560	0.010	4.9	15.0	
11 delta-BHC	1093396	1243880	0 010	13 8	15 0	
17 Heptachlor epoxide	1361324	1450040	0.010	6.5	15.0	
18 gamma-Chlordane	1493620	1594760	0.010	6.8	15 0	
19 alpha-Chlordane	1534332	1667480	0.010	8 7	15.0	
22 4,4'-DDE	1631704	1801840	0.010	10.4	15 0	
31 Endosulfan II	1405440	1474160	0.010	4.9	15.0	
33 Endrin aldehyde	1123994	1199480	0.010	6.7	15.0	
34 Endosulfan sulfate	819360	1050240	0.010	28.2	15.0	<-
37 Endrin ketone	1089390	1225160	0.010	12.5	15.0	

AVE = 7.28

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

GC Column: RTX-50 ID: 0.53 (mm) Init. Calib. Date(s): 02/14/01 02/14/01

Instrument ID: GC4

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 5.21 DCB: 21.15

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		EVALB	02/14/01	0731	5.24	21.15
02		MEDTOX	02/14/01	0759	5.23	21.15
03		MEDCHLOR	02/14/01	0827	5.23	21.14
04		LOWA	02/14/01	0855	5.23	21.15
05		MLOWA	02/14/01	0923	5.25	21.14
06		MEDA	02/14/01	0951	5.21	21.15
07		MHIGHA	02/14/01	1019	5.23	21.15
08		HIGHA	02/14/01	1047	5.23	21.14
09		LOWB	02/14/01	1115		
10		MLOWB	02/14/01	1143		
11		MEDB	02/14/01	1211		
12		MHIGHB	02/14/01	1239		
13		HIGHB	02/14/01	1307		
14		2ND A	02/14/01	1335	5.23	21.14
15		2ND B	02/14/01	1403		
16		EVALB	02/14/01	1431	5.21	21.14
17	DF/S-1/1039/	DVWJE1AD	02/14/01	1459	5.26*	21.14
18	PBLK3326	DV05T1AA	02/14/01	1527	5.25	21.15
19	LCS3326	DV05T1AC	02/14/01	1555	5.24	21.15
20	LCD3326	DV05T1AD	02/14/01	1623	5.23	21.15
21		MEDA	02/14/01	2102	5.24	21.14
22		MEDB	02/14/01	2130		
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

vm 2/15/01

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\1151-G.b\D-A1436.d
Report Date: 15-Feb-2001 11:14

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1436.d
Lab Smp Id: EVALB
Inj Date : 14-FEB-2001 07:31
Operator : 010139 Inst ID: gc4.i
Smp Info : EVALB,1151-G.b,,EVALBR.sub,,3,1
Misc Info : 190-102-10
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: EVALBR.sub
Target Version: 4.04
Processing Host: PITPC044

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
$	2 Tetrachloro-m-xylene	5.240	5.206	0.034	16944	0.01571	0.01570(R)
	22 4,4'-DDE	14 106	14.106	0 000	563	<0.0	0.0003450
	26 Endrin	14.800	14.800	0.000	33593	0.02361	0.02361
	29 4,4'-DDD	Compound Not Detected.					
	32 4,4'-DDT	15.440	15.440	0.000	29519	0.02386	0.02386
	33 Endrin aldehyde	15 693	15.693	0.000	583	<0 0	0.0005187
	37 Endrin ketone	17.433	17.433	0.000	706	<0.0	0.0006481
$	38 Decachlorobiphenyl	21.146	21 146	0.000	15045	0.01955	0.01955(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

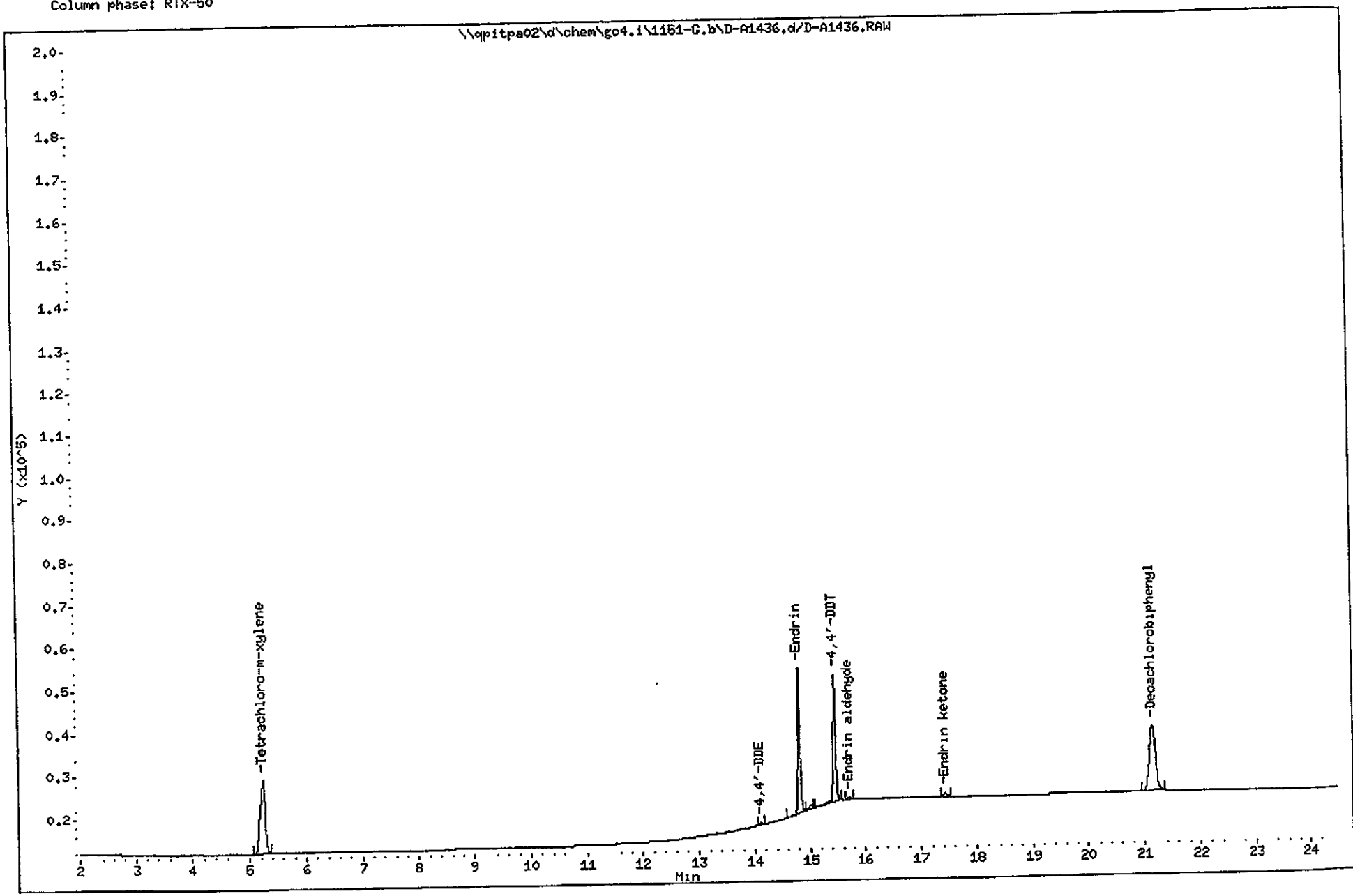
DDT = 1.9
Endrin = 3.7

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1436.d
Date : 14-FEB-2001 07:31
Client ID:
Sample Info: EVALB,1151-G.b,,EVALBR.sub,,3,1

Instrument: gc4.i

Operator: 010139
Column diameter: 0.53

Column phase: RTX-50



675 1038

3029

STL Pittsburgh

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1437.d
Report Date: 15-Feb-2001 11:14

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1437.d
Lab Smp Id: MEDTOX
Inj Date : 14-FEB-2001 07:59
Operator : 010139 Inst ID: gc4.i
Smp Info : MEDTOX,1151-G.b,,1-TOX.sub,,1,3
Misc Info : 190-98-12
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 07:59 Cal File: D-A1437.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-TOX.sub
Target Version: 4.04
Processing Host: PITPC044

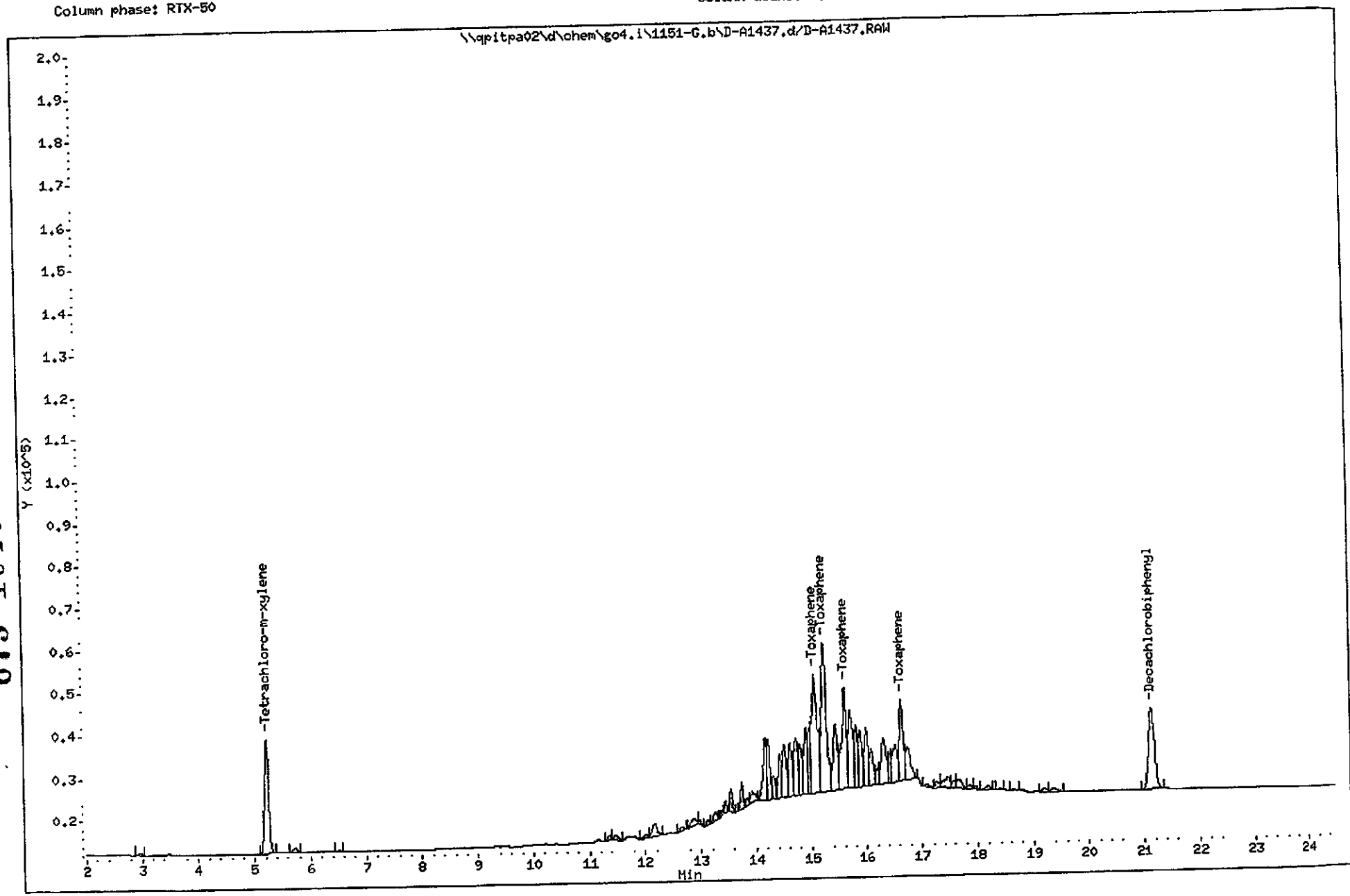
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
30 Toxaphene	15.060	15 060	0 000	27688	1.00000	1.000
$ 2 Tetrachloro-m-xylene	5.226	5.206	0 020	26503	0.02500	0.02500
$ 38 Decachlorobiphenyl	21.146	21.146	0.000	18696	0.02500	0.02500

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1437.d
Date : 14-FEB-2001 07:59
Client ID:
Sample Info: MEDTOX,1151-G.b,,i-TOX,sub,,1,3

Instrument: gc4.i

Operator: 010139
Column diameter: 0.53

Column phase: RTX-50



675 1640

3031

STL Pittsburgh

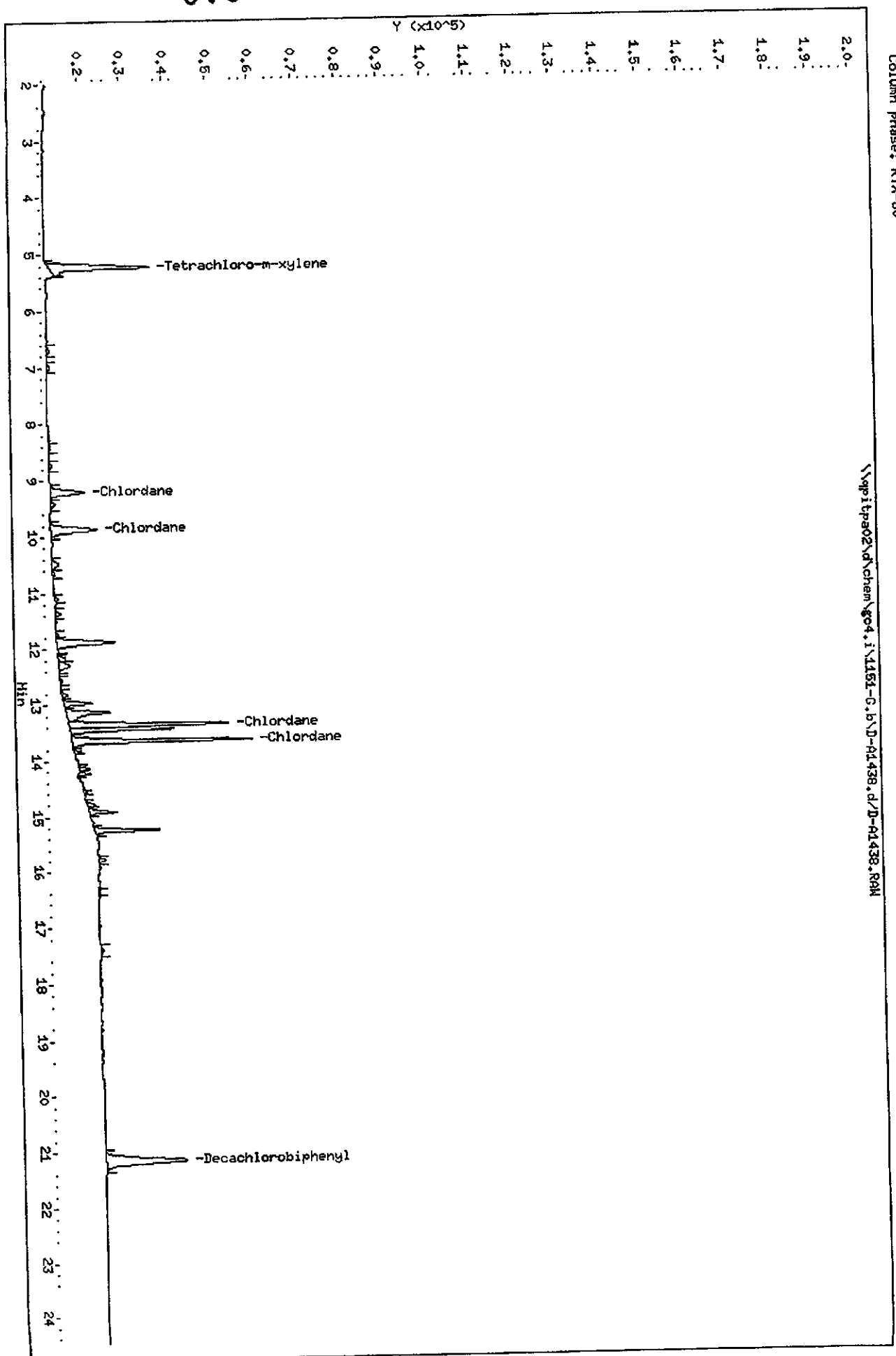
Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1438.d
Report Date: 15-Feb-2001 11:15

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1438.d
Lab Smp Id: MEDCHLOR
Inj Date : 14-FEB-2001 08:27
Operator : 010139 Inst ID: gc4.i
Smp Info : MEDCHLOR,1151-G.b,,2-CHLO.sub,,1,3
Misc Info : 190-102-9
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 08:27 Cal File: D-A1438.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-CHLO.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
8 Chlordane	9.206	9 206	0.000	7803	0.25000	0.2500
$ 2 Tetrachloro-m-xylene	5 226	5.206	0.020	23250	0.02500	0.02500
$ 38 Decachlorobiphenyl	21.140	21.146	-0.006	18755	0.02500	0.02500

675 1042


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1438.d
Date : 14-FEB-2001 08:27
Client ID:
Sample Info: MEDCHLOR,1151-G,b,,2-CHLO,sub,,1,3
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1438.d/D-A1438.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-Chlordane
-Chlordane
-Chlordane
-Chlordane
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1439.d
Report Date: 15-Feb-2001 11:15

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1439.d
Lab Smp Id: LOWA
Inj Date : 14-FEB-2001 08:55
Operator : 010139 Inst ID: gc4.i
Smp Info : LOWA,1151-G.b,,3-INDA.sub,,1,1
Misc Info : 190-100-6
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-A1446.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC044

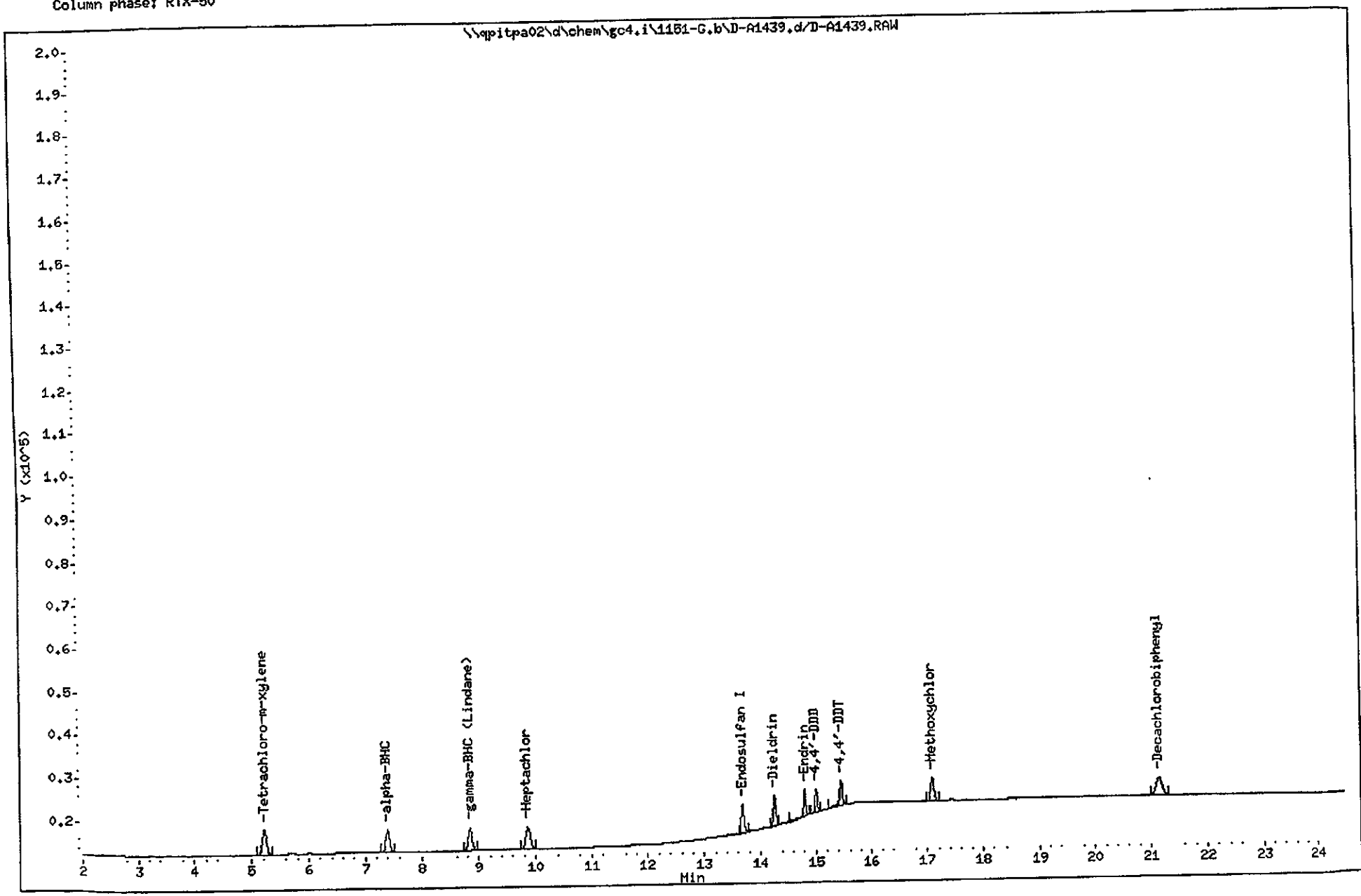
	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 2	Tetrachloro-m-xylene	5.226	5.206	0.020	5639	0.00500	0.004888
6	alpha-BHC	7.393	7.380	0.013	5123	0.00500	0.004358
7	gamma-BHC (Lindane)	8.846	8.840	0.006	5210	0.00500	0.004522
9	Heptachlor	9.866	9.853	0.013	4980	0.00500	0.005013
20	Endosulfan I	13.680	13.680	0.000	6672	0.00500	0.004926
23	Dieldrin	14.266	14 266	0.000	6726	0.00500	0.004639
26	Endrin	14.806	14.800	0.006	6067	0.00500	0.004627
29	4,4'-DDD	15.013	15.006	0.007	5387	0.00500	0.004647
32	4,4'-DDT	15 440	15.440	0.000	5621	0.00500	0.004903
35	Methoxychlor	17.093	17.093	0.000	5454	0 01000	0.01007
$ 38	Decachlorobiphenyl	21.146	21.146	0.000	3999	0 00500	0 005192

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1439.d
Date : 14-FEB-2001 08:55
Client ID:
Sample Info: LOWA,1151-G.b,,3-INDA.sub,,1,1

Column phase: RTX-50

Instrument: gc4.i

Operator: 010139
Column diameter: 0.53



675 1044

3035

STL Pittsburgh

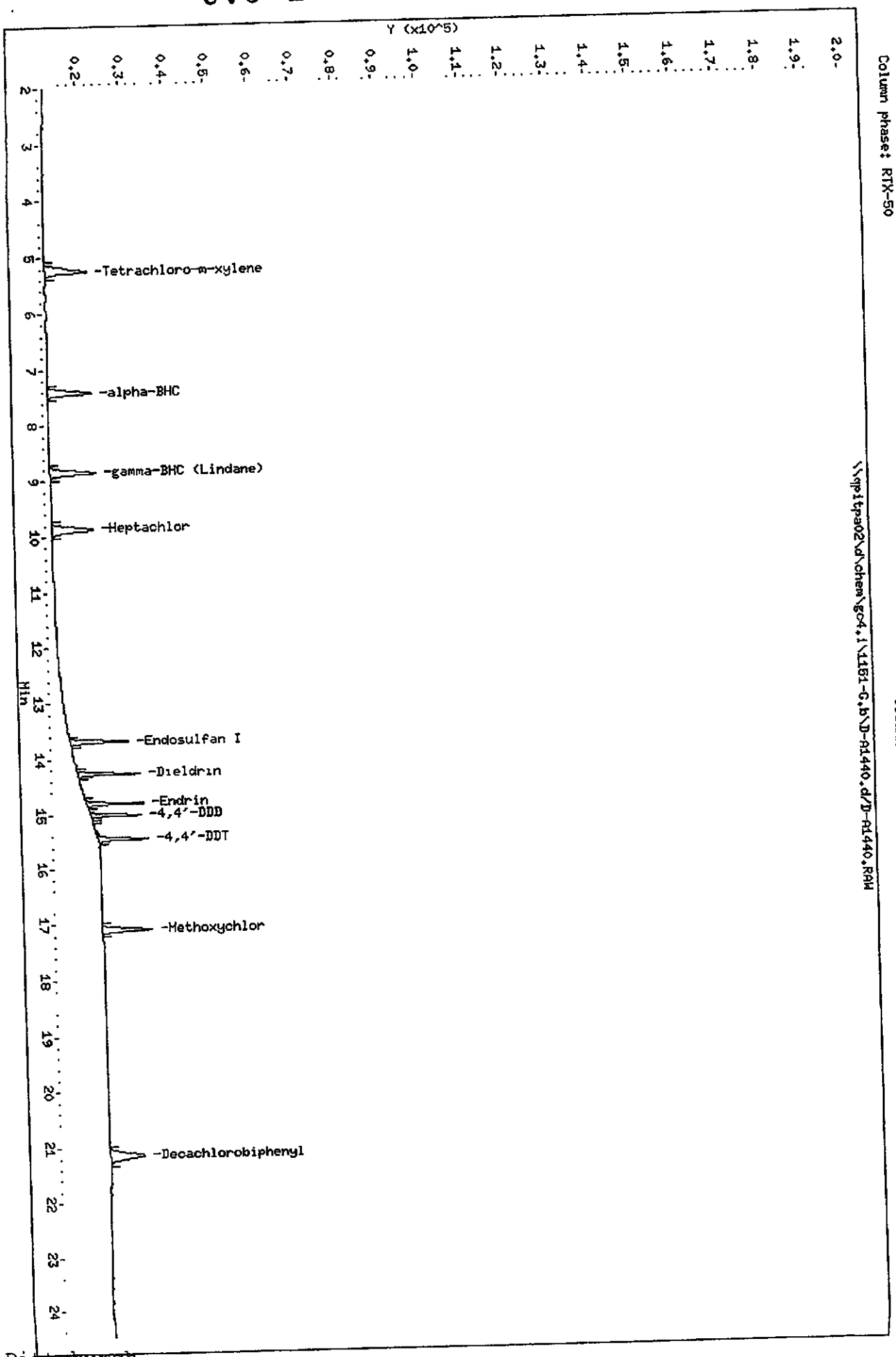
Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1440.d
Report Date: 15-Feb-2001 11:15

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1440.d
Lab Smp Id: MLOWA
Inj Date : 14-FEB-2001 09:23
Operator : 010139 Inst ID: gc4.i
Smp Info : MLOWA,1151-G.b,,3-INDA.sub,,1,2
Misc Info : 190-100-7
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-A1446.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC044

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$	2 Tetrachloro-m-xylene	5 246	5 206	0 040	9730	0.01000	0.008898
	6 alpha-BHC	7.406	7.380	0.026	10016	0 01000	0.008962
	7 gamma-BHC (Lindane)	8.853	8.840	0.013	10651	0.01000	0.009484
	9 Heptachlor	9.866	9.853	0.013	9600	0.01000	0.009774
	20 Endosulfan I	13.680	13.680	0 000	13747	0.01000	0.01010
	23 Dieldrin	14.266	14.266	0.000	14713	0.01000	0.01010
	26 Endrin	14.800	14.800	0 000	13316	0 01000	0.01010
	29 4,4'-DDD	15 013	15.006	0.007	11754	0.01000	0.01009
	32 4,4'-DDT	15.440	15.440	0.000	11918	0.01000	0.01026
	35 Methoxychlor	17.093	17.093	0.000	11441	0.02000	0.02073
$	38 Decachlorobiphenyl	21.140	21 146	-0 006	8111	0.01000	0.01035

675 1646


Data File: \\epitpa02\d\chem\gc4.i\1151-G.b\D-A1440.d
Date : 14-FEB-2001 09:23
Client ID:
Sample Info: MLGMA,1151-G.b,,3-INDA.sub,,1.2
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\epitpa02\d\chem\gc4.i\1151-G.b\D-A1440.d\D-A1440.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-alpha-BHC
-gamma-BHC (Lindane)
-Heptachlor
-Endosulfan I
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Methoxychlor
-Decachlorobiphenyl

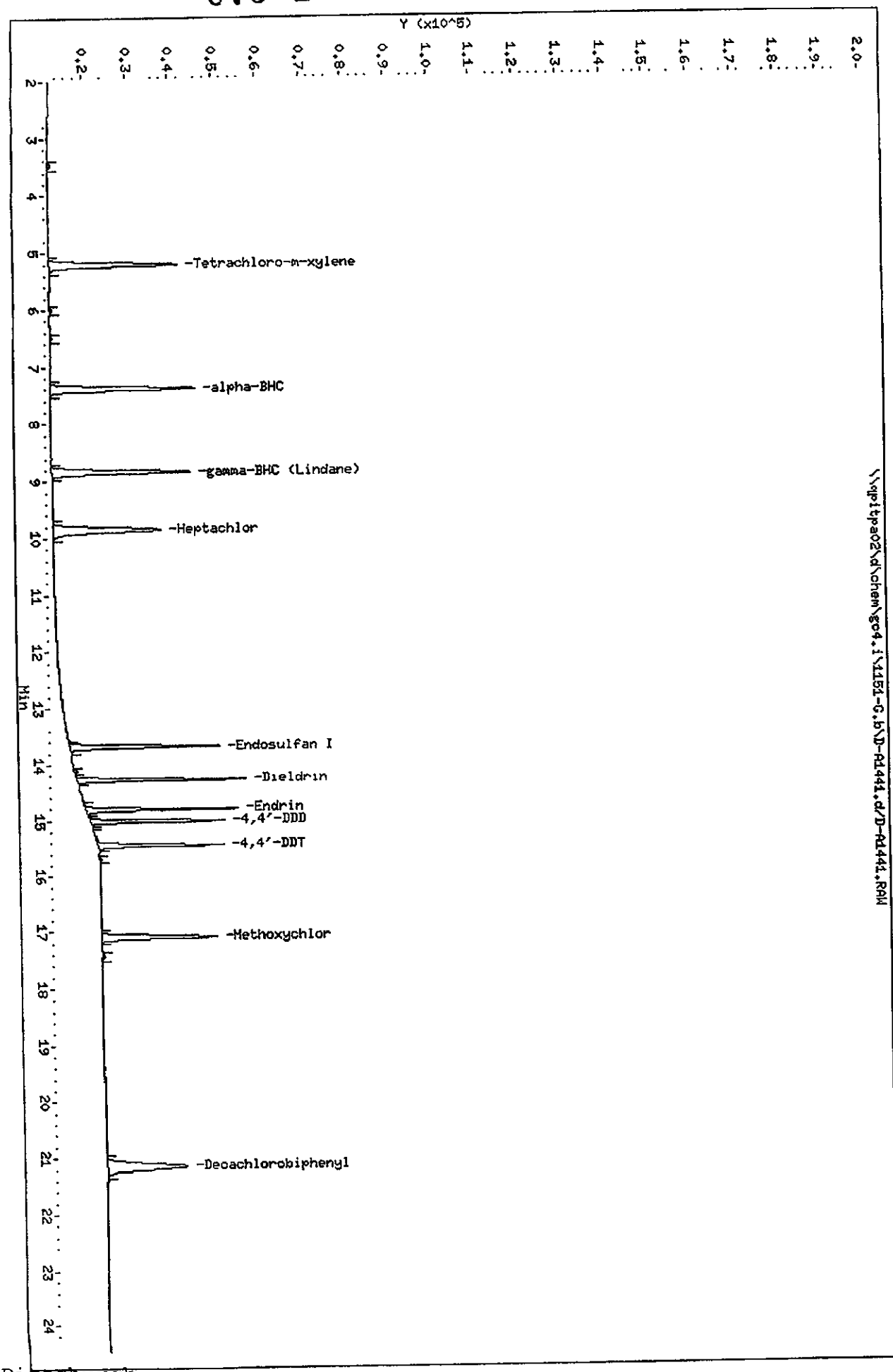
Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1441.d
Report Date: 15-Feb-2001 11:15

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1441.d
Lab Smp Id: MEDA
Inj Date : 14-FEB-2001 09:51
Operator : 010139 Inst ID: gc4.i
Smp Info : MEDA,1151-G.b,,3-INDA.sub,,1,3
Misc Info : 190-100-8
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 09:51 Cal File: D-A1441.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 2 Tetrachloro-m-xylene	5.206	5.206	0.000	29489	0 02500	0.02500
6 alpha-BHC	7.380	7.380	0.000	33163	0.02500	0.02500
7 gamma-BHC (Lindane)	8.840	8.840	0 000	31555	0.02500	0.02500
9 Heptachlor	9.853	9.853	0.000	24767	0 02500	0.02500
20 Endosulfan I	13.680	13.680	0.000	34355	0.02500	0.02500
23 Dieldrin	14.266	14.266	0.000	38858	0.02500	0.02500
26 Endrin	14.800	14.800	0.000	35221	0.02500	0.02500
29 4,4'-DDD	15.006	15.006	0.000	31027	0.02500	0.02500
32 4,4'-DDT	15.440	15.440	0.000	29213	0.02500	0.02500
35 Methoxychlor	17.093	17.093	0.000	26896	0.05000	0.05000
$ 38 Decachlorobiphenyl	21.146	21.146	0.000	18512	0.02500	0.02500

675 1648

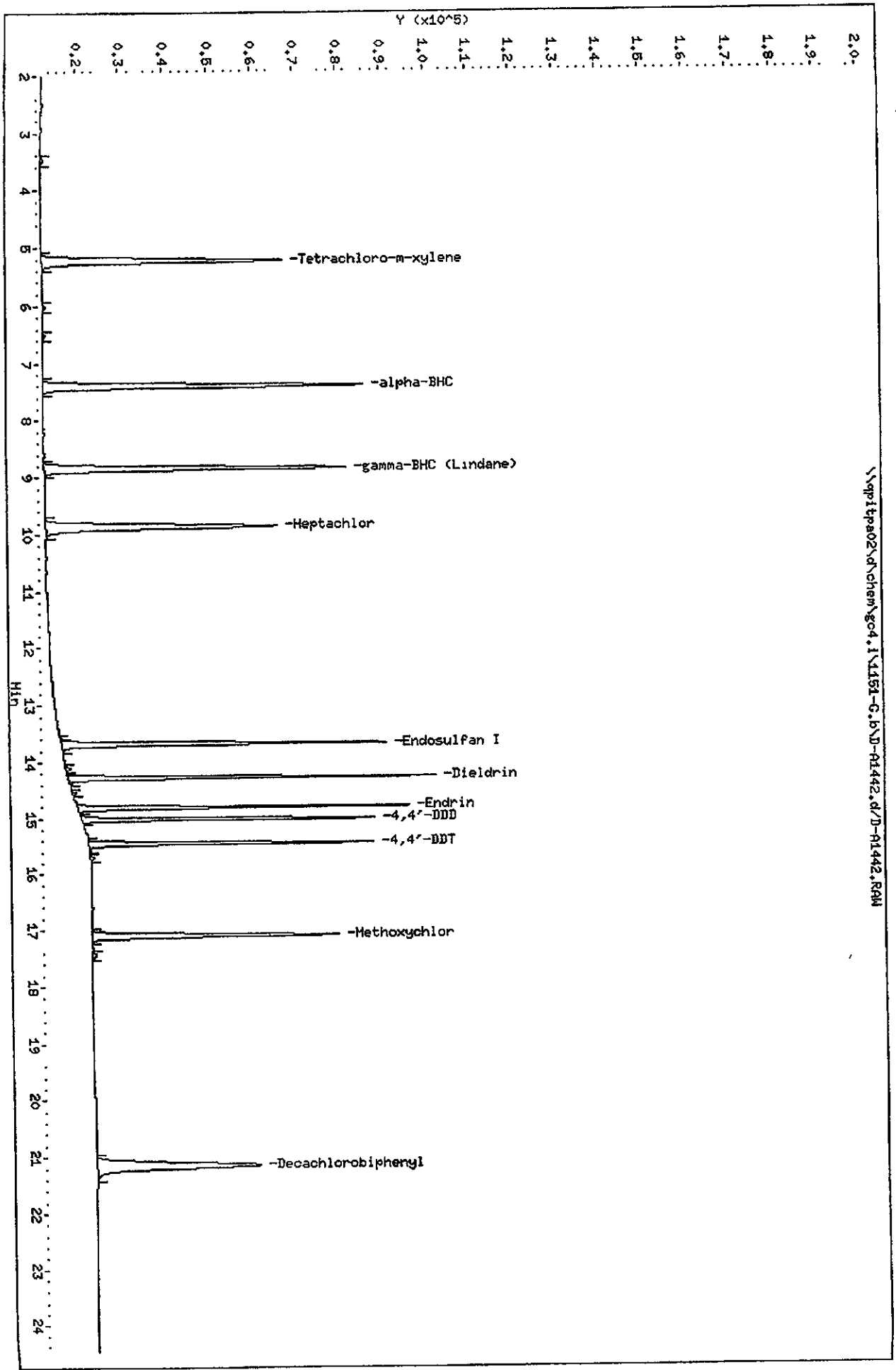

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1441.d
Date : 14-FEB-2001 09:51
Client ID:
Sample Info: MEDA,1151-G,b,,3-INDA.sub,,1,3
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1441.d/D-A1441.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-alpha-BHC
-gamma-BHC (Lindane)
-Heptachlor
-Endosulfan I
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Methoxychlor
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1442.d
Report Date: 15-Feb-2001 11:15

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1442.d
Lab Smp Id: MHIGHA
Inj Date : 14-FEB-2001 10:19
Operator : 010139 Inst ID: gc4.i
Smp Info : MHIGHA,1151-G.b,,3-INDA.sub,,1,4
Misc Info : 190-100-9
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-A1446.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC044

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 2	Tetrachloro-m-xylene	5.226	5.206	0.020	54995	0.05000	0.05022
6	alpha-BHC	7.400	7.380	0.020	73295	0.05000	0.06084
7	gamma-BHC (Lindane)	8.846	8.840	0.006	69107	0 05000	0 05818
9	Heptachlor	9.866	9.853	0.013	53029	0 05000	0.05293
20	Endosulfan I	13.680	13.680	0.000	74464	0.05000	0.05345
23	Dieldrin	14.266	14.266	0.000	84243	0.05000	0.05564
26	Endrin	14.800	14.800	0.000	76223	0.05000	0.05565
29	4,4'-DDD	15.013	15.006	0.007	67381	0.05000	0.05567
32	4,4'-DDT	15.440	15.440	0 000	65366	0.05000	0.05456
35	Methoxychlor	17.093	17.093	0.000	56676	0.10000	0.1020
$ 38	Decachlorobiphenyl	21 146	21.146	0.000	37521	0.05000	0.04839


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1442.d
Date : 14-FEB-2001 10:19
Client ID:
Sample Info: HHIGHA,1151-G.b,,3-INDA.sub,1.4
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1442.d/D-A1442.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-alpha-BHC
-gamma-BHC (Lindane)
-Heptachlor
-Endosulfan I
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Methoxychlor
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1443.d
Report Date: 15-Feb-2001 11:16

STL-Pittsburgh

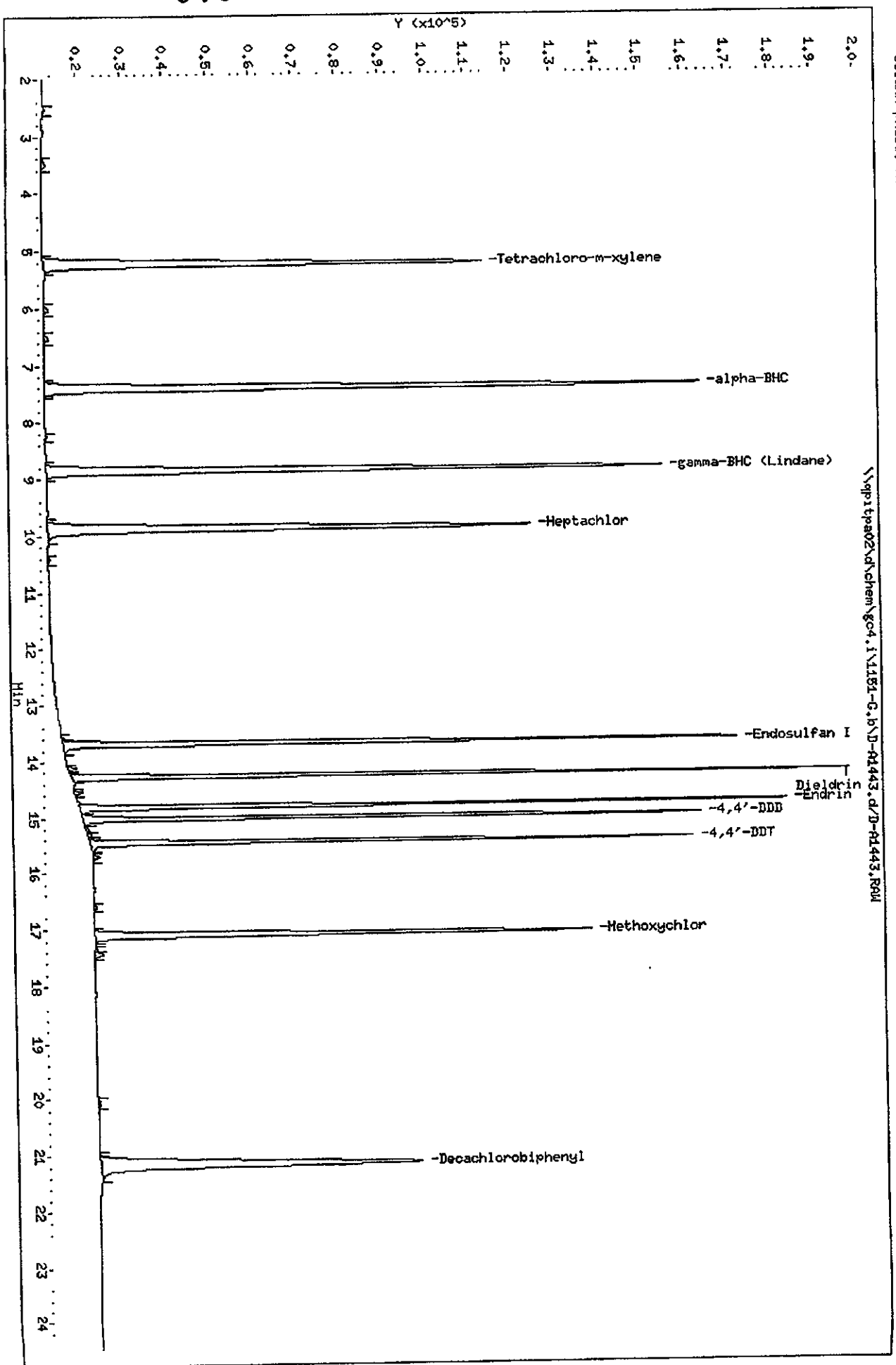
Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1443.d
Lab Smp Id: HIGHA
Inj Date : 14-FEB-2001 10:47
Operator : 010139 Inst ID: gc4.i
Smp Info : HIGHA,1151-G.b,,3-INDA.sub,,1,5
Misc Info : 190-100-10
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-A1446.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 2 Tetrachloro-m-xylene	5.233	5.206	0.027	101401	0.10000	0.09399
6 alpha-BHC	7 400	7.380	0.020	151282	0.10000	0.1195(A)
7 gamma-BHC (Lindane)	8.853	8.840	0 013	142315	0.10000	0.1152(A)
9 Heptachlor	9.866	9.853	0.013	111931	0.10000	0.1092(A)
20 Endosulfan I	13.680	13 680	0.000	155494	0.10000	0 1091(A)
23 Dieldrin	14.266	14.266	0.000	179534	0.10000	0 1143(A)
26 Endrin	14.800	14.800	0.000	163550	0.10000	0.1150(A)
29 4,4'-DDD	15.013	15.006	0.007	142718	0 10000	0.1138(A)
32 4,4'-DDT	15.440	15.440	0.000	139385	0 10000	0.1127(A)
35 Methoxychlor	17.093	17.093	0.000	114709	0 20000	0.2052(A)
$ 38 Decachlorobiphenyl	21.140	21.146	-0.006	74616	0.10000	0.09696

QC Flag Legend

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

675 1652

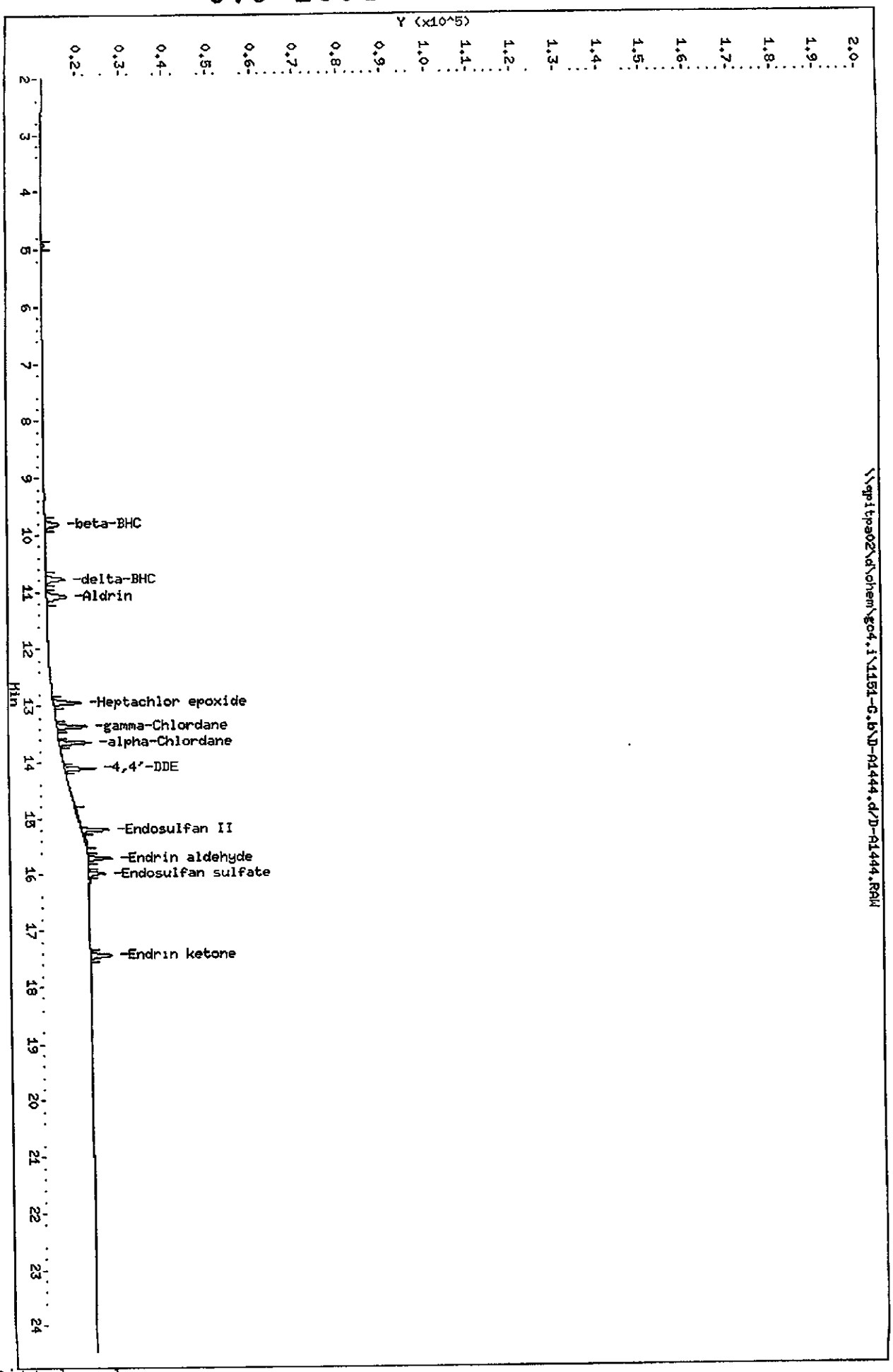

Data File: \\apitpa02\d\chem\gc4.i\1151-G.b\D-A1443.d
Date : 14-FEB-2001 10:47
Client ID:
Sample Info: HIGHA,1151-G,b,,3-INDA,sub,,1,5
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
Y (x10^5)
Min
-Tetrachloro-m-xylene
-alpha-BHC
-gamma-BHC (Lindane)
-Heptachlor
-Endosulfan I
Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Methoxychlor
-Decachlorobiphenyl
\\apitpa02\d\chem\gc4.i\1151-G.b\D-A1443.d\D-A1443.RAW

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1444.d
Report Date: 15-Feb-2001 11:16

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1444.d
Lab Smp Id: LOWB
Inj Date : 14-FEB-2001 11:15
Operator : 010139 Inst ID: gc4.i
Smp Info : LOWB,1151-G.b,,4-INDB.sub,,1,1
Misc Info : 190-100-12
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-A1446.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.080	11.066	0.014	4481	0.00500	0.004667
10 beta-BHC	9.813	9.800	0.013	3316	0.00500	0.004857
11 delta-BHC	10.780	10.766	0.014	4190	0.00500	0.004328
17 Heptachlor epoxide	12.940	12.933	0.007	6203	0.00500	0.004748
18 gamma-Chlordane	13.353	13.346	0.007	6849	0.00500	0.004754
19 alpha-Chlordane	13.646	13.640	0 006	7132	0.00500	0.004786
22 4,4'-DDE	14 106	14.106	0.000	7116	0.00500	0.004619
31 Endosulfan II	15.193	15 193	0.000	6287	0 00500	0.004796
33 Endrin aldehyde	15.693	15.693	0.000	5318	0.00500	0.004852
34 Endosulfan sulfate	15.980	15.980	0.000	3590	0.00500	0 004832
37 Endrin ketone	17.433	17.433	0.000	4817	0 00500	0 004687

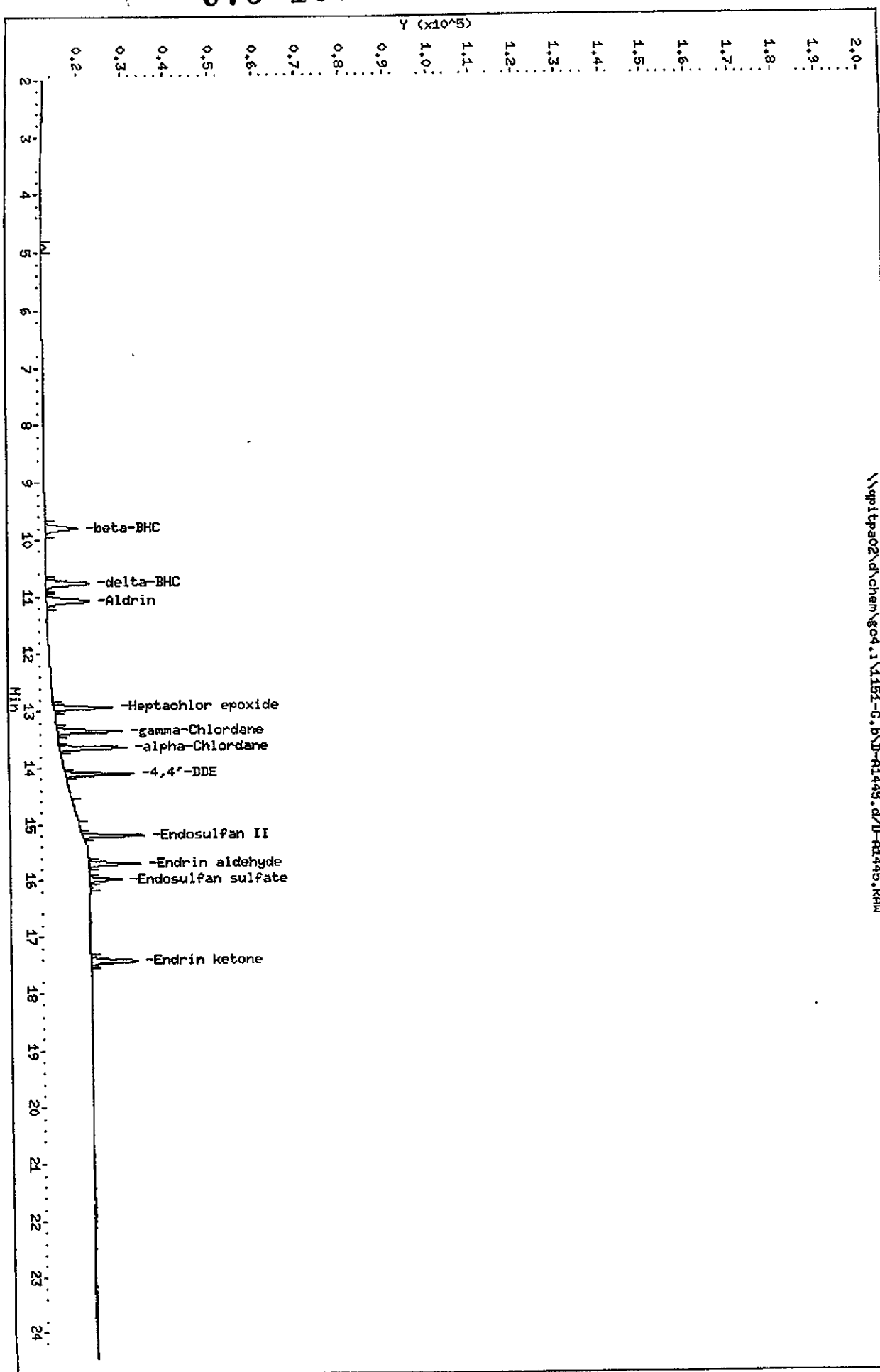

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1444.d
Date : 14-FEB-2001 11:15
Client ID:
Sample Info: LCNB,1151-G,b,,4-INDB.sub,1,1
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1444.d\D-A1444.RAW
Y (x10^5)
Min
-beta-BHC
-delta-BHC
-Aldrin
-Heptachlor epoxide
-gamma-Chlordane
-alpha-Chlordane
-4,4'-DDE
-Endosulfan II
-Endrin aldehyde
-Endosulfan sulfate
-Endrin ketone

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1445.d
Report Date: 15-Feb-2001 11:16

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1445.d
Lab Smp Id: MLOWB
Inj Date : 14-FEB-2001 11:43
Operator : 010139 Inst ID: gc4.i
Smp Info : MLOWB,1151-G.b,,4-INDB.sub,,1,2
Misc Info : 190-100-13
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-A1446.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.073	11.066	0.007	9648	0.01000	0.01003
10 beta-BHC	9 800	9.800	0 000	7184	0.01000	0.01034
11 delta-BHC	10.766	10 766	0.000	9644	0.01000	0.009975
17 Heptachlor epoxide	12.933	12.933	0.000	13279	0.01000	0.01011
18 gamma-Chlordane	13.346	13.346	0.000	14767	0 01000	0.01016
19 alpha-Chlordane	13.640	13.640	0 000	15277	0.01000	0.01017
22 4,4'-DDE	14.106	14.106	0.000	15621	0.01000	0.01009
31 Endosulfan II	15.193	15 193	0.000	13944	0.01000	0.01042
33 Endrin aldehyde	15.693	15.693	0 000	11578	0.01000	0.01037
34 Endosulfan sulfate	15 980	15.980	0.000	7269	0.01000	0.009855
37 Endrin ketone	17 426	17.433	-0.007	10484	0.01000	0.01013

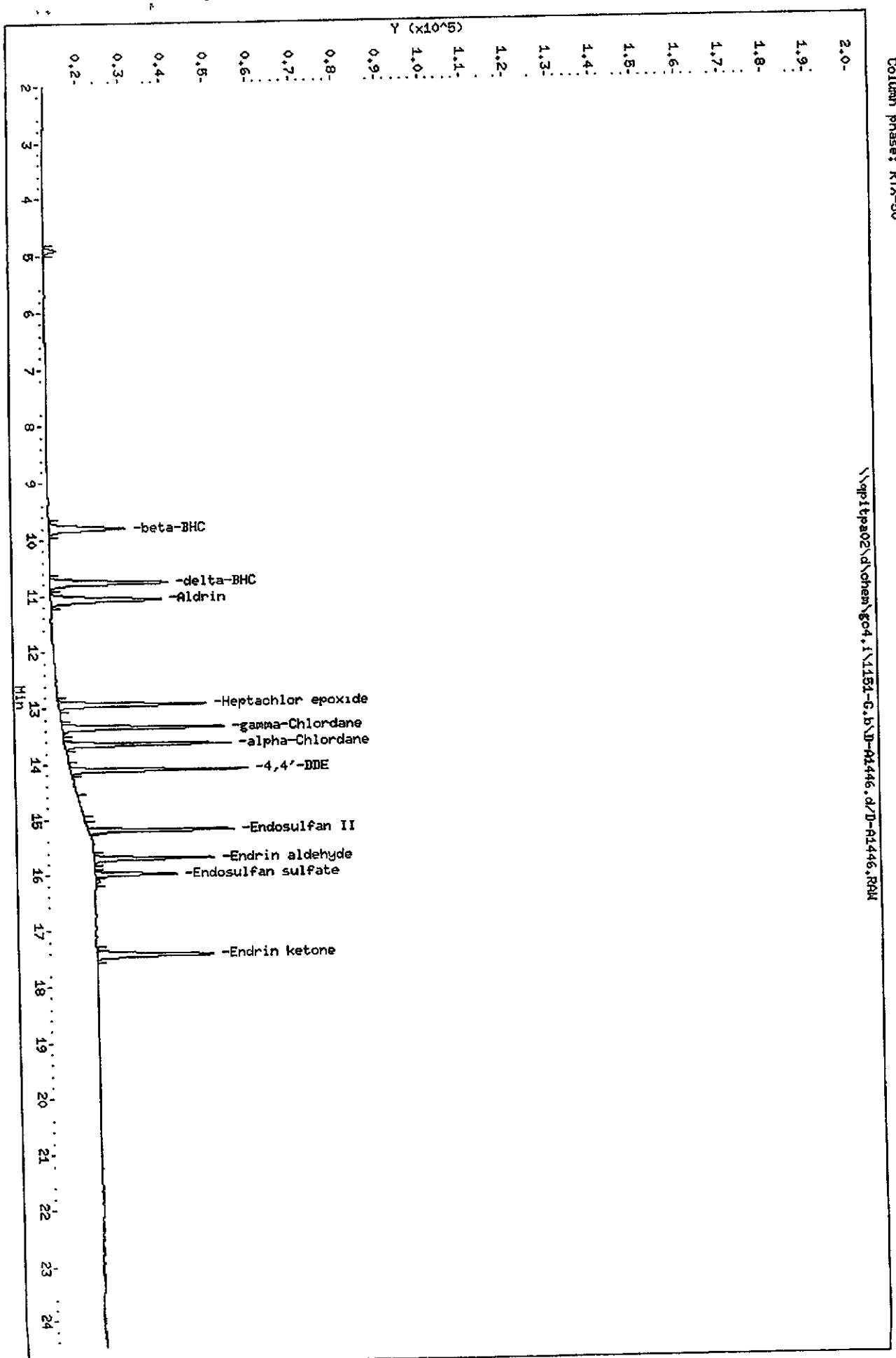

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1445.d
Date : 14-FEB-2001 11:43
Client ID:
Sample Info: MLOWB,1151-G.b,,4-INDB.sub,,1,2
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1445.d\D-A1445.RAW
Y (x10^5)
Min
-beta-BHC
-delta-BHC
-Aldrin
-Heptachlor epoxide
-gamma-Chlordane
-alpha-Chlordane
-4,4'-DDE
-Endosulfan II
-Endrin aldehyde
-Endosulfan sulfate
-Endrin ketone

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1446.d
Report Date: 15-Feb-2001 11:16

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1446.d
Lab Smp Id: MEDB
Inj Date : 14-FEB-2001 12:11
Operator : 010139 Inst ID: gc4.i
Smp Info : MEDB,1151-G.b,,4-INDB.sub,,1,3
Misc Info : 190-100-14
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-A1446.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.066	11.066	0.000	25601	0.02500	0.02500
10 beta-BHC	9.800	9.800	0.000	17555	0.02500	0.02500
11 delta-BHC	10.766	10.766	0.000	27453	0.02500	0.02500
17 Heptachlor epoxide	12.933	12.933	0.000	34299	0.02500	0.02500
18 gamma-Chlordane	13.346	13.346	0.000	37795	0.02500	0.02500
19 alpha-Chlordane	13.640	13.640	0.000	38852	0.02500	0.02500
22 4,4'-DDE	14.106	14.106	0.000	41448	0.02500	0.02500
31 Endosulfan II	15.193	15.193	0.000	34114	0.02500	0.02500
33 Endrin aldehyde	15.693	15.693	0.000	28207	0.02500	0.02500
34 Endosulfan sulfate	15.980	15.980	0.000	19198	0.02500	0.02500
37 Endrin ketone	17.433	17.433	0.000	27305	0.02500	0.02500

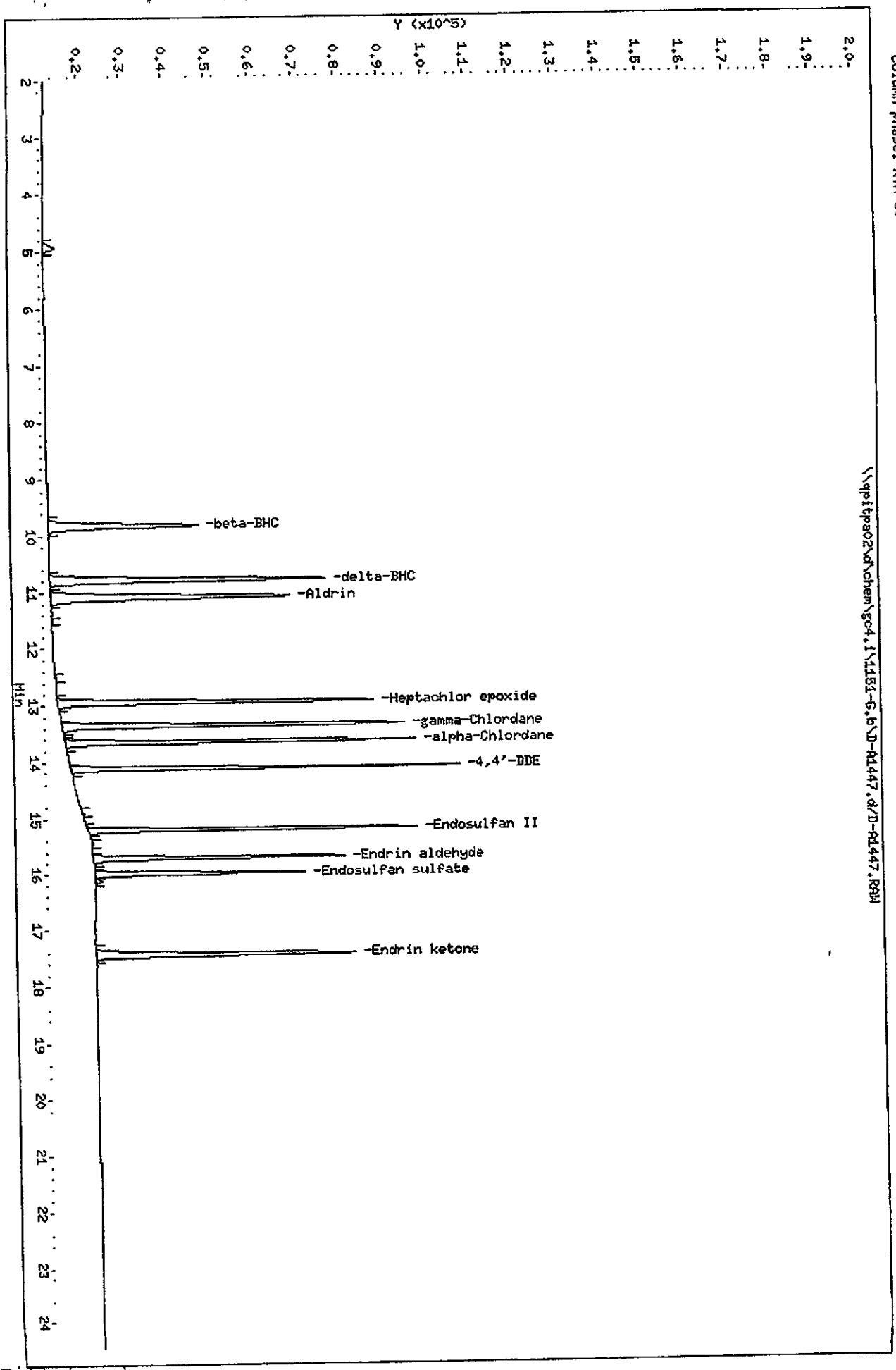

Data File: \\apitpa02\d\chem\gc4.i\1151-G.b\D-A1446.d
Date : 14-FEB-2001 12:11
Client ID:
Sample Info: HEDB,1151-G,b,,4-INDB,sub,,1,3
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\apitpa02\d\chem\gc4.i\1151-G.b\D-A1446.d/D-A1446.RAW
Y (x10^5)
Min
-beta-BHC
-delta-BHC
-Aldrin
-Heptachlor epoxide
-gamma-Chlordane
-alpha-Chlordane
-4,4'-DDE
-Endosulfan II
-Endrin aldehyde
-Endosulfan sulfate
-Endrin ketone

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1447.d
Report Date: 15-Feb-2001 11:16

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1447.d
Lab Smp Id: MHIGHB
Inj Date : 14-FEB-2001 12:39
Operator : 010139 Inst ID: gc4.i
Smp Info : MHIGHB,1151-G.b,,4-INDB.sub,,1,4
Misc Info : 190-101-1
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:39 Cal File: D-A1447.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.080	11.066	0 014	55471	0.05000	0 05555
10 beta-BHC	9.813	9.800	0 013	34596	0.05000	0.04986
11 delta-BHC	10.780	10.766	0.014	63872	0.05000	0.06115
17 Heptachlor epoxide	12.940	12.933	0.007	73087	0.05000	0.05412
18 gamma-Chlordane	13.353	13.346	0.007	79174	0.05000	0.05330
19 alpha-Chlordane	13.646	13.640	0.006	81195	0.05000	0.05296
22 4,4'-DDE	14.106	14 106	0 000	89913	0.05000	0.05583
31 Endosulfan II	15 193	15 193	0 000	76319	0.05000	0.05508
33 Endrin aldehyde	15.693	15.693	0 000	58265	0.05000	0.05162
34 Endosulfan sulfate	15.980	15.980	0 000	48809	0.05000	0.06122
37 Endrin ketone	17.433	17.433	0 000	60310	0.05000	0.05697


Data File: \\qpitpa02\d\chem\gc4,i\1151-G,b\D-A1447,d
Date : 14-FEB-2001 12:39
Client ID:
Sample Info: MHIGHB,1151-G,b,,4-INDB,sub,,1,4
Instrument: gc4,i
Operator: 010139
Column diameter: 0.53
Column phase: RTX-50
\\qpitpa02\d\chem\gc4,i\1151-G,b\D-A1447,d/D-A1447,RAW
Y (x10^5)
Min
-beta-BHC
-delta-BHC
-Aldrin
-Heptachlor epoxide
-gamma-Chlordane
-alpha-Chlordane
-4,4'-DDE
-Endosulfan II
-Endrin aldehyde
-Endosulfan sulfate
-Endrin ketone

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1448.d
Report Date: 15-Feb-2001 11:16

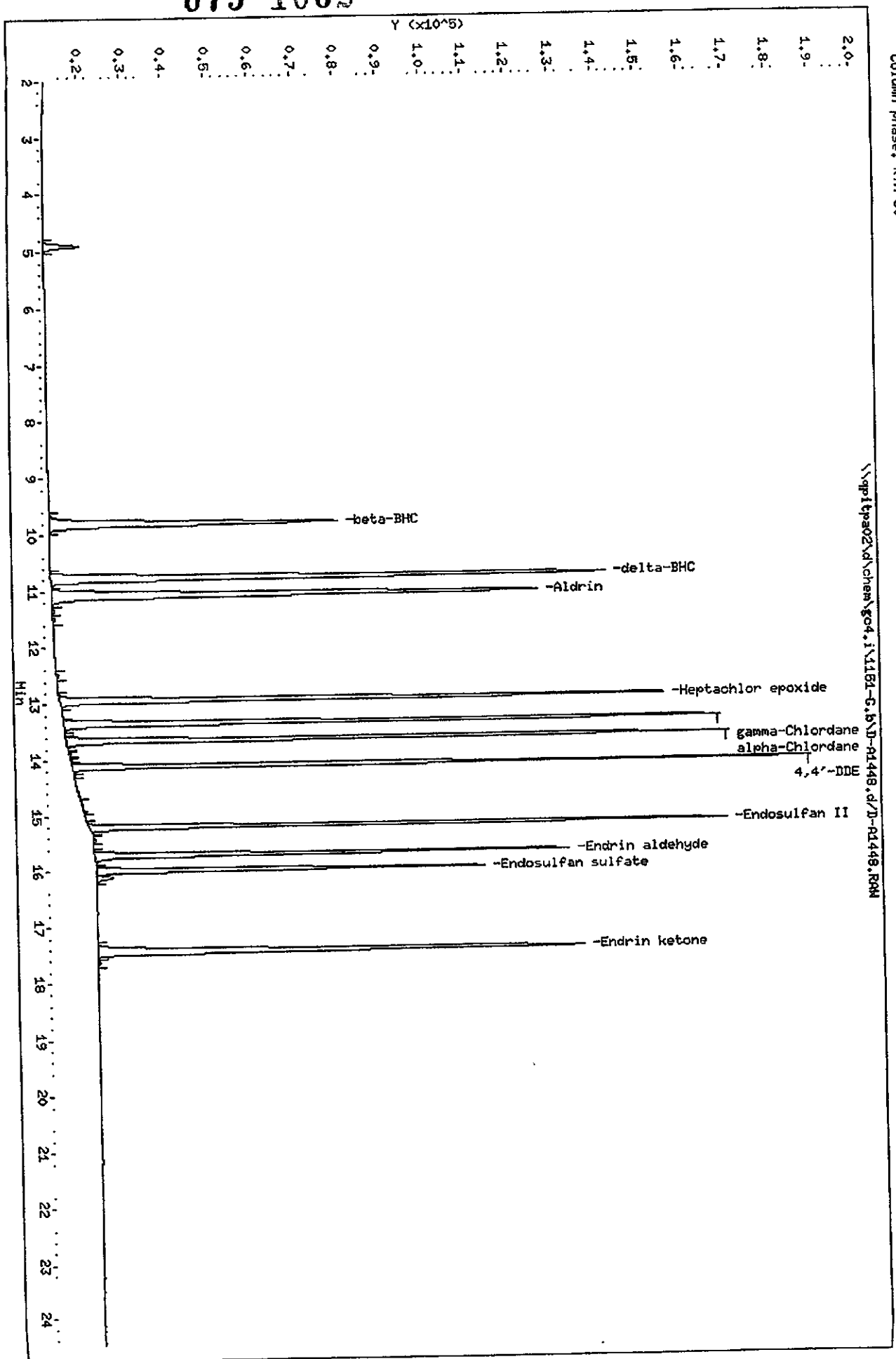
STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1448.d
Lab Smp Id: HIGHB
Inj Date : 14-FEB-2001 13:07
Operator : 010139 Inst ID: gc4.i
Smp Info : HIGHB,1151-G.b,,4-INDB.sub,,1,5
Misc Info : 190-101-2
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.073	11.066	0 007	113140	0.10000	0.1104(A)
10 beta-BHC	9.800	9.800	0.000	67200	0.10000	0.09746
11 delta-BHC	10.773	10.766	0.007	128902	0 10000	0.1179(A)
17 Heptachlor epoxide	12.940	12 933	0 007	140442	0.10000	0.1032(A)
18 gamma-Chlordane	13.346	13.346	0.000	152632	0.10000	0.1022(A)
19 alpha-Chlordane	13 640	13 640	0 000	153958	0.10000	0.1003(A)
22 4,4'-DDE	14.106	14.106	0.000	171704	0.10000	0.1052(A)
31 Endosulfan II	15.193	15.193	0 000	148446	0 10000	0 1056(A)
33 Endrin aldehyde	15.693	15.693	0.000	110499	0.10000	0.09831
34 Endosulfan sulfate	15.980	15.980	0 000	90780	0.10000	0.1108(A)
37 Endrin ketone	17.433	17.433	0 000	113675	0.10000	0.1043(A)

QC Flag Legend

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



Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1448.d
Date : 14-FEB-2001 13:07
Client ID:
Sample Info: HIGHB,1151-G.b,,4-INDB,sub,,1.5

Column phase: RTX-50

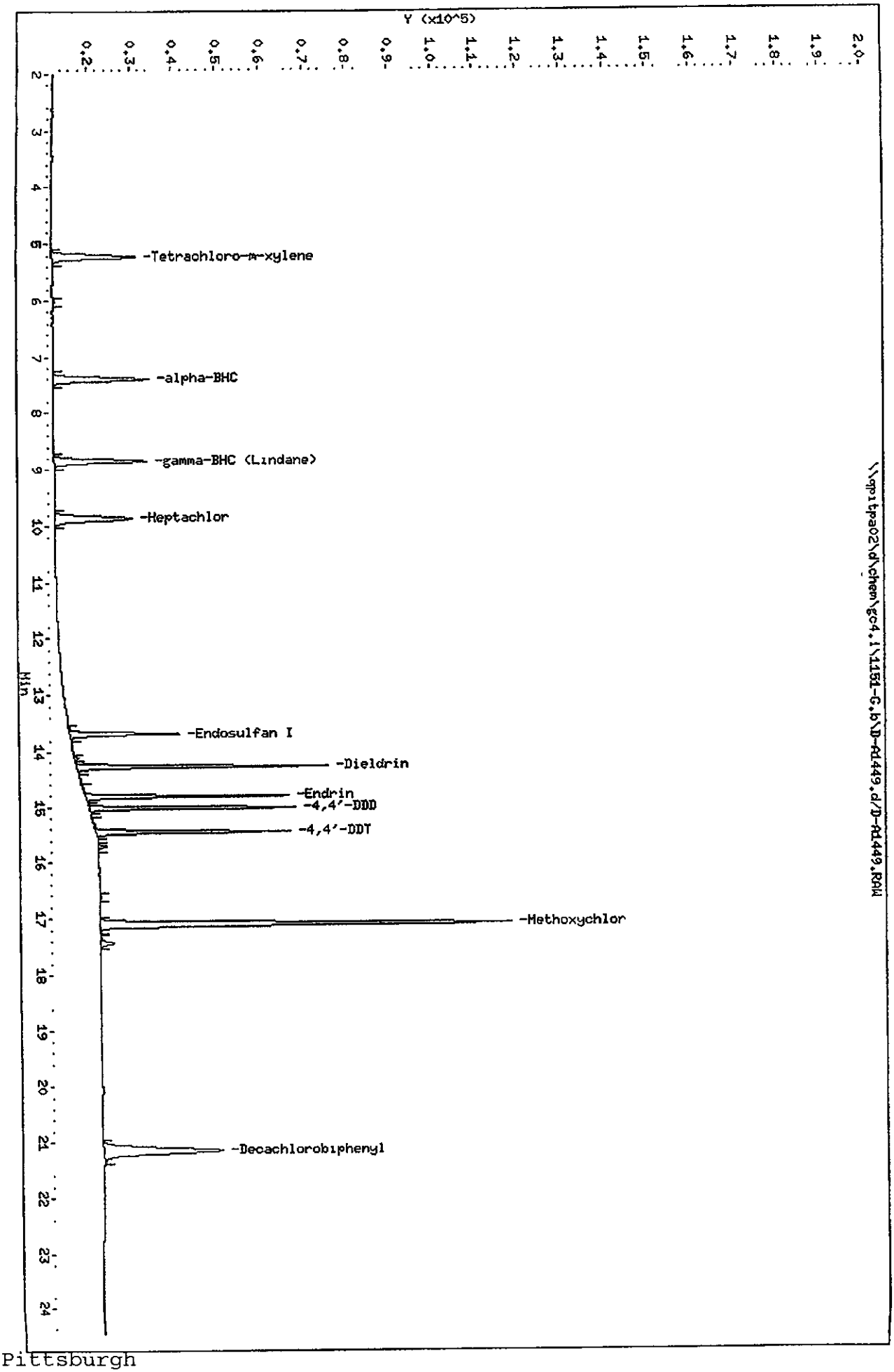
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1449.d
Report Date: 15-Feb-2001 11:17

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1449.d
Lab Smp Id: 2ND A
Inj Date : 14-FEB-2001 13:35
Operator : 010139 Inst ID: gc4.i
Smp Info : 2ND A,1151-G.b,,INDA.sub,,2,3
Misc Info : 190-101-7
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 4.04
Processing Host: PITPC044

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 2	Tetrachloro-m-xylene	5 226	5.206	0 020	19184	0.02500	0.01778
6	alpha-BHC	7.393	7.380	0.013	22005	0.02500	0.01738
7	gamma-BHC (Lindane)	8.846	8.840	0.006	21394	0.02500	0.01732
9	Heptachlor	9.860	9.853	0.007	17627	0.02500	0.01719
20	Endosulfan I	13.680	13.680	0 000	25308	0.02500	0.01775
23	Dieldrin	14.266	14.266	0 000	58240	0 02500	0.03709
26	Endrin	14.800	14.800	0.000	46924	0.02500	0.03298
29	4,4'-DDD	15.006	15.006	0.000	48035	0 02500	0.03831
32	4,4'-DDT	15.440	15.440	0 000	45297	0.02500	0.03661
35	Methoxychlor	17.093	17.093	0 000	95914	0.05000	0.1715
$ 38	Decachlorobiphenyl	21.140	21.146	-0.006	27608	0.02500	0.03587


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1449.d
Date : 14-FEB-2001 13:35
Client ID:
Sample Info: 2ND A,1151-G.b,,INDA,sub,,2,3
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1449.d\D-A1449.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-alpha-BHC
-gamma-BHC (Lindane)
-Heptachlor
-Endosulfan I
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Methoxychlor
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1450.d
Report Date: 15-Feb-2001 11:17

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1450.d
Lab Smp Id: 2ND B
Inj Date : 14-FEB-2001 14:03
Operator : 010139 Inst ID: gc4.i
Smp Info : 2ND B,1151-G.b,,INDB.sub,,2,3
Misc Info : 190-101-10
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDB.sub
Target Version: 4.04
Processing Host: PITPC044

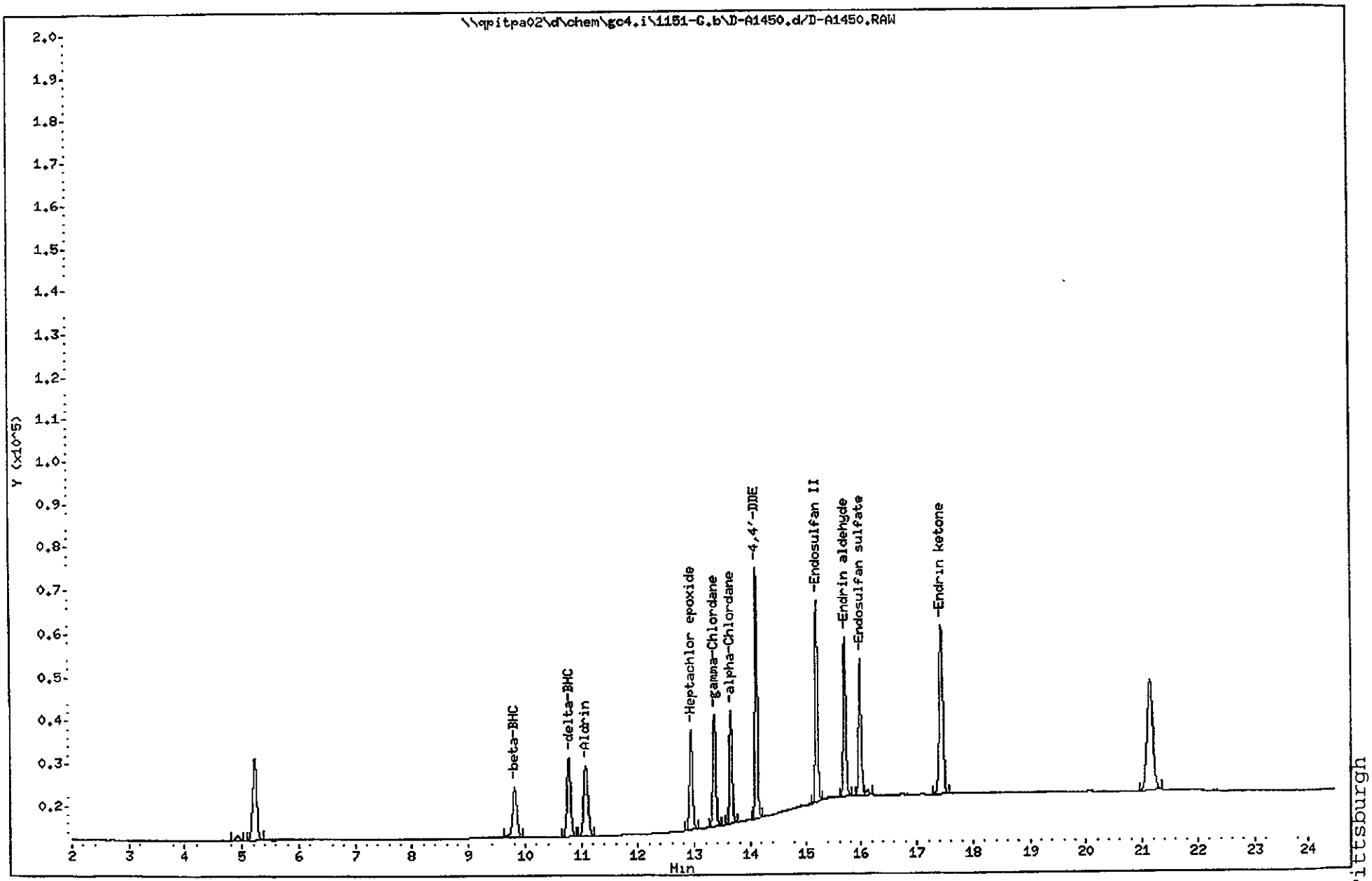
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.080	11.066	0.014	16272	0.02500	0.01587
10 beta-BHC	9.813	9.800	0.013	11689	0.02500	0.01695
11 delta-BHC	10 780	10.766	0.014	18209	0.02500	0.01665
17 Heptachlor epoxide	12.940	12.933	0.007	22927	0 02500	0.01684
18 gamma-Chlordane	13.353	13.346	0.007	25653	0 02500	0.01718
19 alpha-Chlordane	13.646	13.640	0 006	25940	0 02500	0 01691
22 4,4'-DDE	14.106	14.106	0.000	57786	0 02500	0.03541
31 Endosulfan II	15.193	15.193	0.000	46429	0.02500	0.03304
33 Endrin aldehyde	15.693	15.693	0.000	36822	0.02500	0 03276
34 Endosulfan sulfate	15.980	15.980	0.000	31277	0.02500	0.03817
37 Endrin ketone	17.433	17.433	0.000	39027	0.02500	0.03582

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1450.d
Date : 14-FEB-2001 14:03
Client ID:
Sample Info: 2ND B,1151-G.b,,INDB.sub,,2,3

Column phase: RTX-50

Instrument: gc4.i

Operator: 010139
Column diameter: 0.53



675 1066

3057

STL Pittsburgh

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1451.d
Report Date: 15-Feb-2001 11:17

STL-Pittsburgh

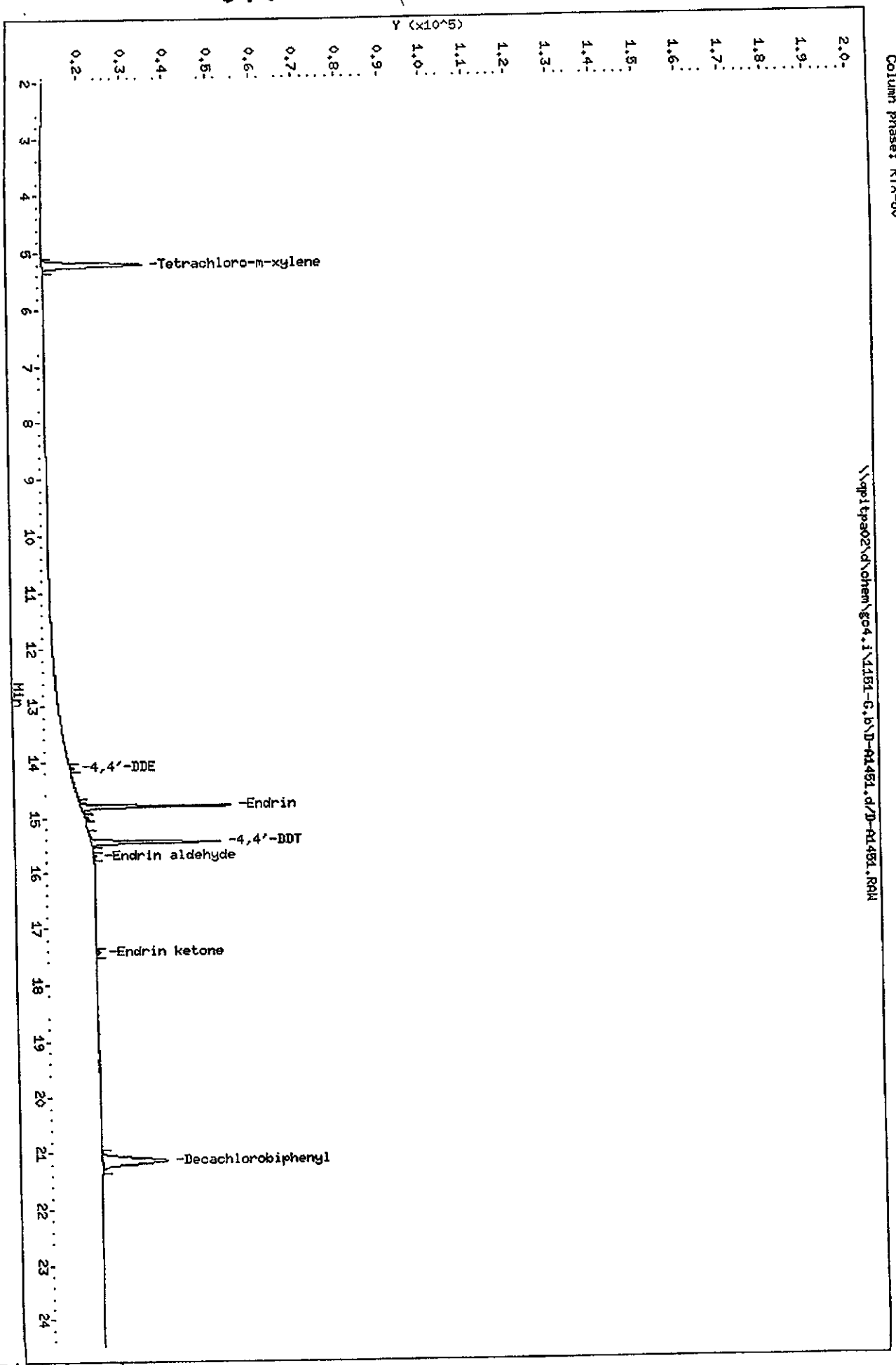
Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1451.d
Lab Smp Id: EVALB
Inj Date : 14-FEB-2001 14:31
Operator : 010139 Inst ID: gc4.i
Smp Info : EVALB,1151-G.b,,EVALBR.sub,,3,1
Misc Info : 190-102-10
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: EVALBR.sub
Target Version: 4.04
Processing Host: PITPC044

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ng)
$	2 Tetrachloro-m-xylene	5 206	5.206	0.000	22881	0.02121	0.02121(R)
	22 4,4'-DDE	14.106	14 106	0.000	785	<0.0	0.0004811
	26 Endrin	14.800	14.800	0.000	34308	0.02411	0.02411
	29 4,4'-DDD	Compound Not Detected.					
	32 4,4'-DDT	15.440	15.440	0.000	29609	0.02393	0.02393
	33 Endrin aldehyde	15.693	15.693	0.000	671	<0.0	0.0005970
	37 Endrin ketone	17.426	17.433	-0.007	791	<0.0	0.0007261
$	38 Decachlorobiphenyl	21 140	21.146	-0.006	15154	0 01969	0.01969(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

DDT= 2.4
Endrin= 4.1

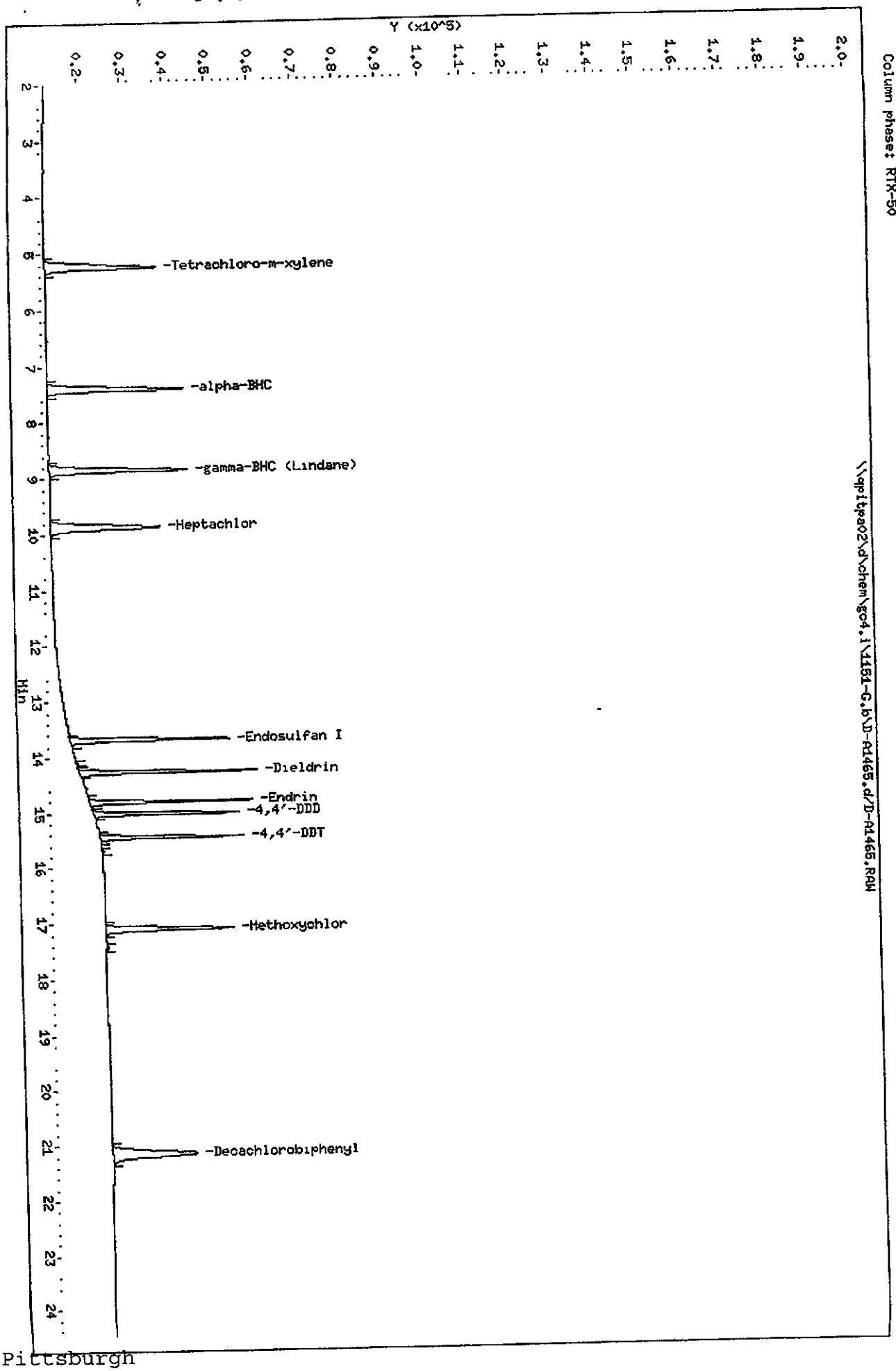

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1451.d
Date : 14-FEB-2001 14:31
Client ID:
Sample Info: EVALB,1151-G.b,,EVALBR.sub,,3,1
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1451.d\D-A1451.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-4,4'-DDE
-Endrin
-4,4'-DDT
-Endrin aldehyde
-Endrin ketone
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1465.d
Report Date: 15-Feb-2001 11:20

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1465.d
Lab Smp Id: MEDA
Inj Date : 14-FEB-2001 21:02
Operator : 010139 Inst ID: gc4.i
Smp Info : MEDA,1151-G.b,,INDA.sub,,2,3
Misc Info : 190-100-8
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 4.04
Processing Host: PITPC044

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 2	Tetrachloro-m-xylene	5.240	5.206	0.034	26017	0.02500	0 02412
6	alpha-BHC	7.400	7.380	0.020	31728	0.02500	0 02506
7	gamma-BHC (Lindane)	8.853	8.840	0 013	32279	0.02500	0.02614
9	Heptachlor	9.866	9.853	0.013	25425	0.02500	0.02480
20	Endosulfan I	13.680	13 680	0.000	37100	0 02500	0.02602
23	Dieldrin	14 266	14 266	0.000	41407	0.02500	0.02637
26	Endrin	14.800	14.800	0.000	37950	0.02500	0.02667
29	4,4'-DDD	15.006	15.006	0 000	33984	0.02500	0.02711
32	4,4'-DDT	15.440	15.440	0.000	33384	0.02500	0.02698
35	Methoxychlor	17.093	17.093	0.000	29867	0.05000	0.05342
$ 38	Decachlorobiphenyl	21.140	21.146	-0.006	19862	0.02500	0 02581

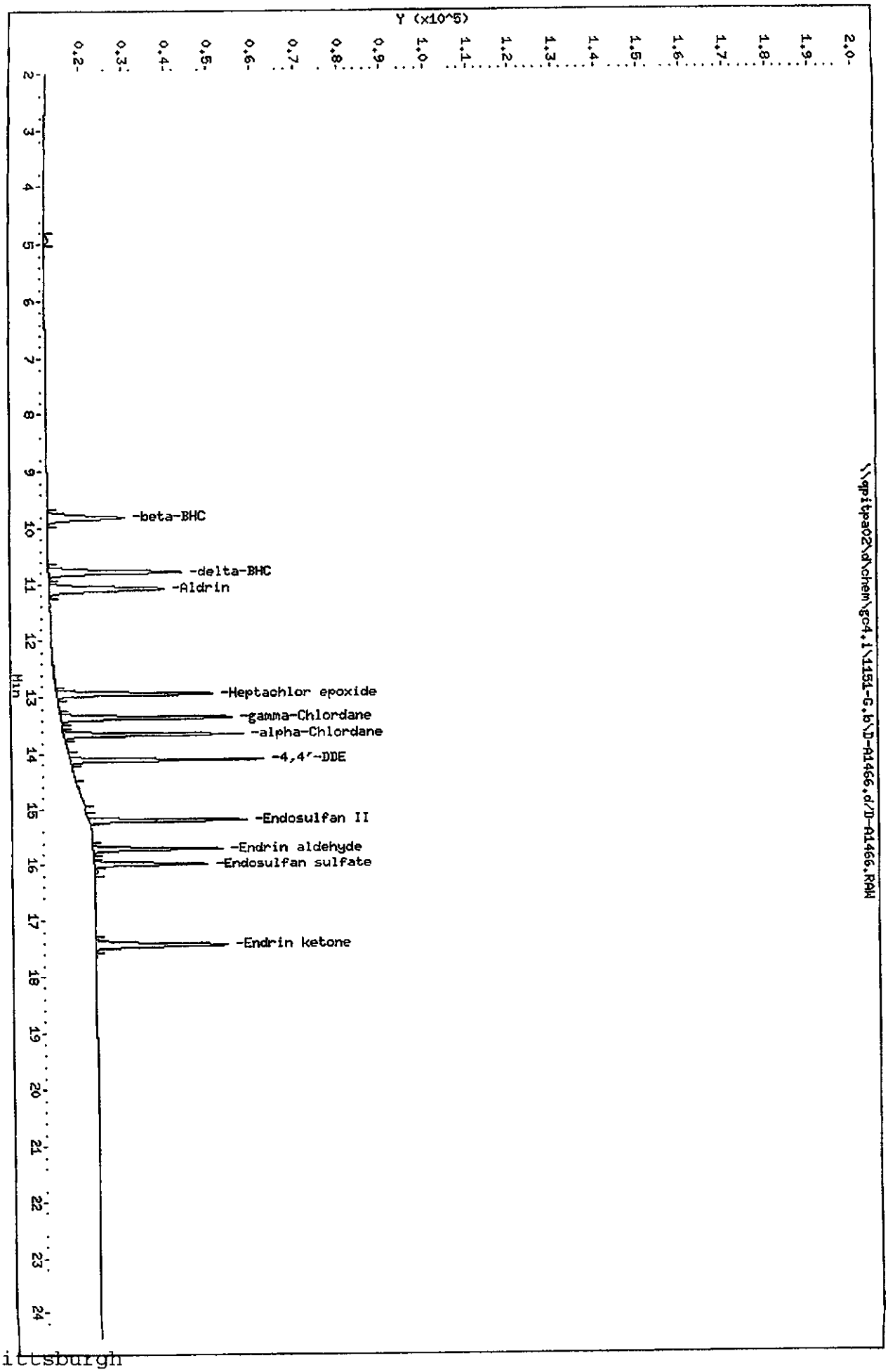

Data File: \\apitpa02\d\chem\gc4.i\1151-G.b\D-A1465.d
Date : 14-FEB-2001 21:02
Client ID:
Sample Info: MEDA,1151-G,b,,INDA,sub,,2,3
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\apitpa02\d\chem\gc4.i\1151-G.b\D-A1465.d/D-A1465.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-alpha-BHC
-gamma-BHC (Lindane)
-Heptachlor
-Endosulfan I
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Methoxychlor
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1466.d
Report Date: 15-Feb-2001 11:20

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1466.d
Lab Smp Id: MEDB
Inj Date : 14-FEB-2001 21:30
Operator : 010139 Inst ID: gc4.i
Smp Info : MEDB,1151-G.b,,INDB.sub,,2,3
Misc Info : 190-100-14
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.080	11.066	0.014	26925	0.02500	0.02626
10 beta-BHC	9 813	9.800	0.013	18089	0.02500	0 02623
11 delta-BHC	10 780	10.766	0.014	31097	0.02500	0.02844
17 Heptachlor epoxide	12 940	12.933	0.007	36251	0.02500	0.02663
18 gamma-Chlordane	13.346	13.346	0.000	39869	0.02500	0.02669
19 alpha-Chlordane	13.640	13.640	0.000	41687	0.02500	0.02717
22 4,4'-DDE	14.106	14.106	0.000	45046	0.02500	0.02761
31 Endosulfan II	15.193	15 193	0.000	36854	0.02500	0.02622
33 Endrin aldehyde	15.693	15.693	0.000	29987	0.02500	0.02668
34 Endosulfan sulfate	15.980	15 980	0.000	26256	0.02500	0.03204
37 Endrin ketone	17.433	17.433	0.000	30629	0.02500	0.02812


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1466.d
Date : 14-FEB-2001 21:30
Client ID:
Sample Info: MEDB,1151-G,b,,INDB,sub,,2,3
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
Column phase: RTX-50
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1466.d/D-A1466.RAW
Y (x10^5)
Min
-beta-BHC
-delta-BHC
-Aldrin
-Heptachlor epoxide
-gamma-Chlordane
-alpha-Chlordane
-4,4'-DDE
-Endosulfan II
-Endrin aldehyde
-Endosulfan sulfate
-Endrin ketone

(6)
5B904A/B mm 2/15/01
RTX-1701

675 1073

Report Date : 15-Feb-2001 11:42

STL-Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Quant Method : ESTD
Last Update : 15-Feb-2001 11:40
Data Type : GC MULTI COMP
Target Version : 4.04
Number of Cpnds : 24

Global Integrator : Falcon

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

	Compound	RT	RT Window	RF
$	2 Tetrachloro-m-xylene	5.427	5.377-5.477	7.66e+005
	6 alpha-BHC	8.220	8.170-8.270	9.25e+005
	7 gamma-BHC (Lindane)	9.600	9.550-9.650	8.69e+005
	8 Chlordane	9.820	9.770-9.870	2.47e+004
		10.407	10.357-10.457	3.62e+004
		13.880	13.830-13.930	1.33e+005
		14.000	13.950-14.050	1.34e+005
	9 Heptachlor	10.393	10.343-10.443	8.85e+005
	10 beta-BHC	12.273	12.223-12.323	6.39e+005
	11 delta-BHC	12.847	12.797-12.897	1.16e+006
	13 Aldrin	11.333	11.283-11.383	9.00e+005
	17 Heptachlor epoxide	13.240	13.190-13.290	1.19e+006
	18 gamma-Chlordane	13.873	13.823-13.923	1.34e+006
	19 alpha-Chlordane	13.987	13.937-14.037	1.35e+006
	20 Endosulfan I	13.780	13.730-13.830	1.21e+006
	22 4,4'-DDE	14.127	14.077-14.177	1.33e+006
	23 Dieldrin	14.387	14.337-14.437	1.31e+006
	26 Endrin	14.713	14.663-14.763	1.22e+006
	29 4,4'-DDD	15.293	15.243-15.343	1.03e+006
	30 Toxaphene	15.400	15.350-15.450	2.84e+004
		15.507	15.457-15.557	2.47e+004
		15.840	15.790-15.890	2.27e+004
		16.667	16.617-16.717	2.04e+004
	31 Endosulfan II	15.420	15.370-15.470	1.20e+006

675 1074

60
5B9048
ATx-1701

Report Date : 15-Feb-2001 11:42

STL-Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m

	Compound	RT	RT Window	RF
	32 4,4'-DDT	15.547	15.497-15.597	9.82e+005
	33 Endrin aldehyde	16.127	16.077-16.177	6.59e+005
	34 Endosulfan sulfate	16.740	16.690-16.790	6.00e+005
	35 Methoxychlor	16.600	16.550-16.650	5.18e+005
	37 Endrin ketone	17.627	17.577-17.677	9.22e+005
$	38 Decachlorobiphenyl	20.040	19.990-20.090	7.57e+005

GE
5890A/B
RTX-1701

675 1075

Report Date : 15-Feb-2001 11:43

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 14-FEB-2001 07:59
End Cal Date : 14-FEB-2001 13:07
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Cal Date : 15-Feb-2001 11:40 matkol
Curve Type : Average

Calibration File Names:
Level 1: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1444.d
Level 2: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1445.d
Level 3: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1446.d
Level 4: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1447.d
Level 5: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1448.d

Compound	0.00500 Level 1	0.01000 Level 2	0.02500 Level 3	0.05000 Level 4	0.10000 Level 5	RRF	% RSD	
6 alpha-BHC	694000	687300	941760	1106880	1196370	925262	25.165	<-
7 gamma-BHC (Lindane)	678200	692800	867400	1011380	1096320	869220	21.477	<-
8 Chlordane(1)	+++++	+++++	24740	+++++	+++++	24740	0.000	
(2)	+++++	+++++	36160	+++++	+++++	36160	0.000	
(3)	+++++	+++++	132848	+++++	+++++	132848	0.000	
(4)	+++++	+++++	134396	+++++	+++++	134396	0.000	
9 Heptachlor	803200	797300	864680	946020	1014910	885222	10.626	
10 beta-BHC	569400	643600	653160	664260	666850	639454	6.294	
11 delta-BHC	830200	988300	1154360	1367600	1435400	1155172	21.947	<-
13 Aldrin	735000	823100	900600	981320	1059110	899826	14.174	
17 Heptachlor epoxide	1023800	1141100	1196520	1286480	1311840	1191948	9.765	
18 gamma-Chlordane	1175200	1321700	1363080	1432160	1422360	1342900	7.744	
19 alpha-Chlordane	1191800	1339400	1392880	1424120	1421070	1353854	7.147	
20 Endosulfan I	1089400	1147500	1186160	1269480	1337030	1205914	8.147	
22 4,4'-DDE	1150600	1294800	1346720	1419180	1449580	1332176	8.876	
23 Dieldrin	1147200	1215200	1272360	1414020	1512440	1312244	11.347	
26 Endrin	1160200	1175400	1174080	1249000	1338890	1219514	6.170	
29 4,4'-DDD	1042000	997200	981280	1037220	1092580	1030056	4.221	
30 Toxaphene(1)	+++++	+++++	28444	+++++	+++++	28444	0.000	
(2)	+++++	+++++	24701	+++++	+++++	24701	0.000	
(3)	+++++	+++++	22713	+++++	+++++	22713	0.000	
(4)	+++++	+++++	20441	+++++	+++++	20441	0.000	
31 Endosulfan II	1143000	1236000	1140520	1232920	1243310	1199150	4.381	
32 4,4'-DDT	927200	940000	933280	1019760	1090990	982246	7.279	
33 Endrin aldehyde	603800	668800	667360	673640	679880	658696	4.718	
34 Endosulfan sulfate	518600	548700	565400	688720	676160	599516	12.954	

6E
589046
RTX-1701

Report Date : 15-Feb-2001 11:43

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 14-FEB-2001 07:59
End Cal Date : 14-FEB-2001 13:07
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Cal Date : 15-Feb-2001 11:40 matkol
Curve Type : Average

Compound	0.00500 Level 1	0.01000 Level 2	0.02500 Level 3	0.05000 Level 4	0.10000 Level 5	RRF	% RSD
35 Methoxychlor	502900	523000	509080	522640	530885	517701	2.202
37 Endrin ketone	836200	919400	926040	967360	958690	921538	5 635
$ 2 Tetrachloro-m-xylene	785800	676600	843720	786620	736270	765802	8.190
$ 38 Decachlorobiphenyl	768400	776900	761800	737880	740750	757146	2 267

AVE=9.58

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

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

GC Column: RTX-1701 ID: 0.53 (mm) Init. Calib. Date(s): 02/14/01 02/14/01

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

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

EPA Sample No.(PEM): Date Analyzed :02/14/01

Lab Sample ID (PEM): EVALB Time Analyzed :0731

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Endrin	14.71	14.66	14.76	0.02289	0.02500	-8.4
4,4'-DDT	15.55	15.50	15.60	0.02336	0.02500	-6.6

4,4'-DDT % breakdown (1): ~~7.05~~ 7.7 Endrin % breakdown (1): ~~2.80~~ 2.3

Combined % breakdown (1): ~~9.85~~ 10 0

mm 2/15/01

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

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

GC Column: RTX-1701 ID: 0.53 (mm) Init. Calib. Date(s): 02/14/01 02/14/01

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

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

EPA Sample No.(PEM): Date Analyzed :02/14/01

Lab Sample ID (PEM): EVALB Time Analyzed :1431

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
Endrin	14.71	14.66	14.76	0.02317	0.02500	-7.3
4,4'-DDT	15.55	15.50	15.60	0.02366	0.02500	-5.4

4,4'-DDT % breakdown (1): ~~7.98~~ 8.6 Endrin % breakdown (1): ~~5.33~~ 3.7

Combined % breakdown (1): ~~13.31~~ 12.3

LM 2/15/01

675 1079
TC 5B904B RTX-1701

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1465.d
Report Date: 15-Feb-2001 11:53

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i
Lab File ID: D-B1465.d
Analysis Type:
Lab Sample ID: MEDA
Method: \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m

Injection Date: 14-FEB-2001 21:02
Init. Cal. Date(s): 14-FEB-2001 14-FEB-2001
Init. Cal. Times: 07:59 13:07
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
$	2 Tetrachloro-m-xylene	765802	726440	0.000	-5.1	15.0
	6 alpha-BHC	925262	889280	0 010	-3 9	15.0
	7 gamma-BHC (Lindane)	869220	867320	0.010	-0.2	15.0
	9 Heptachlor	885222	882080	0.010	-0.4	15.0
	20 Endosulfan I	1205914	1226440	0.010	1.7	15 0
	23 Dieldrin	1312244	1337280	0.010	1.9	15 0
	26 Endrin	1219514	1231600	0.010	1.0	15.0
	29 4,4'-DDD	1030056	1027280	0.010	-0.3	15 0
	32 4,4'-DDT	982246	1023800	0.010	4 2	15 0
	35 Methoxychlor	517701	543660	0 010	5.0	15 0
$	38 Decachlorobiphenyl	757146	779720	0.010	3.0	15.0

675 1080

TE
5B9048
RT+.170

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1466.d
Report Date: 15-Feb-2001 11:53

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc4.i
Lab File ID: D-B1466.d
Analysis Type:
Lab Sample ID: MEDB
Method: \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m

Injection Date: 14-FEB-2001 21:30
Init. Cal. Date(s): 14-FEB-2001 14-FEB-2001
Init. Cal. Times: 07:59 13:07
Quant Type: ESTD

COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
13 Aldrin	899826	917520	0.010	2.0	15.0	
10 beta-BHC	639454	668040	0 010	4.5	15.0	
11 delta-BHC	1155172	1301280	0.010	12 6	15.0	
17 Heptachlor epoxide	1191948	1261400	0 010	5.8	15.0	
18 gamma-Chlordane	1342900	1405920	0.010	4.7	15 0	
19 alpha-Chlordane	1353854	1416360	0.010	4.6	15.0	
22 4,4'-DDE	1332176	1404160	0.010	5.4	15.0	
31 Endosulfan II	1199150	1188160	0.010	-0.9	15.0	
33 Endrin aldehyde	658696	679200	0.010	3.1	15.0	
34 Endosulfan sulfate	599516	731840	0.010	22.1	15.0	<-
37 Endrin ketone	921538	983840	0 010	6.8	15.0	

AVE = 4.51

8D

PESTICIDE ANALYTICAL SEQUENCE

675 1081

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

GC Column: RTX-1701 ID: 0.53 (mm) Init. Calib. Date(s): 02/14/01 02/14/01

Instrument ID: GC4

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 5.43 DCB: 20.04

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		EVALB	02/14/01	0731	5.47	20.05
02		MEDTOX	02/14/01	0759	5.45	20.05
03		MEDCHLOR	02/14/01	0827	5.45	20.04
04		LOWA	02/14/01	0855	5.45	20.04
05		MLOWA	02/14/01	0923	5.47	20.04
06		MEDA	02/14/01	0951	5.43	20.04
07		MHIGHA	02/14/01	1019	5.45	20.04
08		HIGHA	02/14/01	1047	5.46	20.05
09		LOWB	02/14/01	1115		
10		MLOWB	02/14/01	1143		
11		MEDB	02/14/01	1211		
12		MHIGHB	02/14/01	1239		
13		HIGHB	02/14/01	1307		
14		2ND A	02/14/01	1335	5.45	20.04
15		2ND B	02/14/01	1403		
16		EVALB	02/14/01	1431	5.43	20.05
17	DF/S-1/1039/	DVWJE1AD	02/14/01	1459	5.48#	20.05
18	PBLK3326	DV05T1AA	02/14/01	1527	5.47	20.05
19	LCS3326	DV05T1AC	02/14/01	1555	5.47	20.05
20	LCD3326	DV05T1AD	02/14/01	1623	5.45	20.05
21		MEDA	02/14/01	2102	5.47	20.04
22		MEDB	02/14/01	2130		
23						
24						
25						
26						
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.

675 1682

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1436.d
Report Date: 15-Feb-2001 12:00

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1436.d
Lab Smp Id: EVALB
Inj Date : 14-FEB-2001 07:31
Operator : 010139 Inst ID: gc4.i
Smp Info : EVALB,1151-G.b,,EVALBR.sub,,3,1
Misc Info : 190-102-10
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-B1448.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: EVALBR.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
$ 2 Tetrachloro-m-xylene	5.466	5.426	0.040	11960	0 01562	0.01562(R)
22 4,4'-DDE	14.133	14.126	0.007	387	<0.0	0.0002905
26 Endrin	14.713	14.713	0.000	27917	0.02289	0.02289
29 4,4'-DDD	15.293	15.293	0.000	1516	0.00147	0.001472
32 4,4'-DDT	15.546	15 546	0.000	22946	0.02336	0.02336
33 Endrin aldehyde	Compound Not Detected.					
37 Endrin ketone	17.626	17.626	0.000	646	<0.0	0.0007010
$ 38 Decachlorobiphenyl	20.046	20.040	0 006	14726	0.01945	0.01945(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

DDT = 7.7
Endrin = 2.3

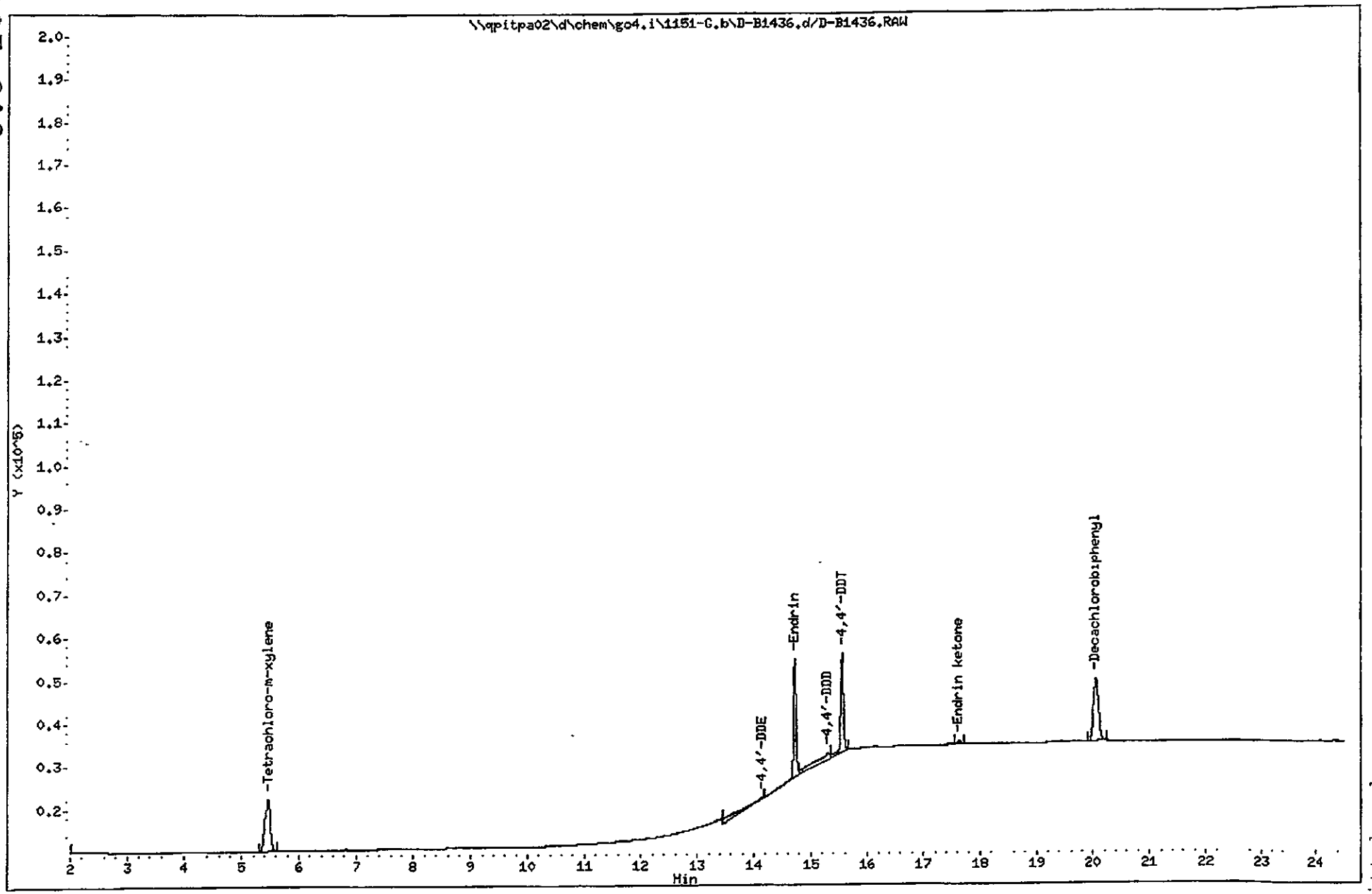
Data File: \\qpitpa02\d\chem\go4.i\1151-C.b\D-B1436.d
Date : 14-FEB-2001 07:31
Client ID:
Sample Info: EVALB,1151-C.b,,EVALBR.sub,,3,1

Instrument: go4.i
Operator: 010139
Column diameter: 0.53

Column phase: RTX-1701

675 1083

3074



STL Pittsburgh

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1437.d
Report Date: 15-Feb-2001 12:00

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1437.d
Lab Smp Id: MEDTOX
Inj Date : 14-FEB-2001 07:59
Operator : 010139 Inst ID: gc4.i
Smp Info : MEDTOX,1151-G.b,,1-TOX.sub,,1,3
Misc Info : 190-98-12
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 07:59 Cal File: D-B1437.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-TOX.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
30 Toxaphene	15.400	15.400	0.000	28444	1.00000	1.000
$ 2 Tetrachloro-m-xylene	5.446	5.426	0.020	18862	0.02500	0.02500
$ 38 Decachlorobiphenyl	20.046	20.040	0.006	18399	0.02500	0.02500

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1437.d
Date : 14-FEB-2001 07:59
Client ID:
Sample Info: MEDTOX,1151-G.b,,1-TOX.sub,,1,3

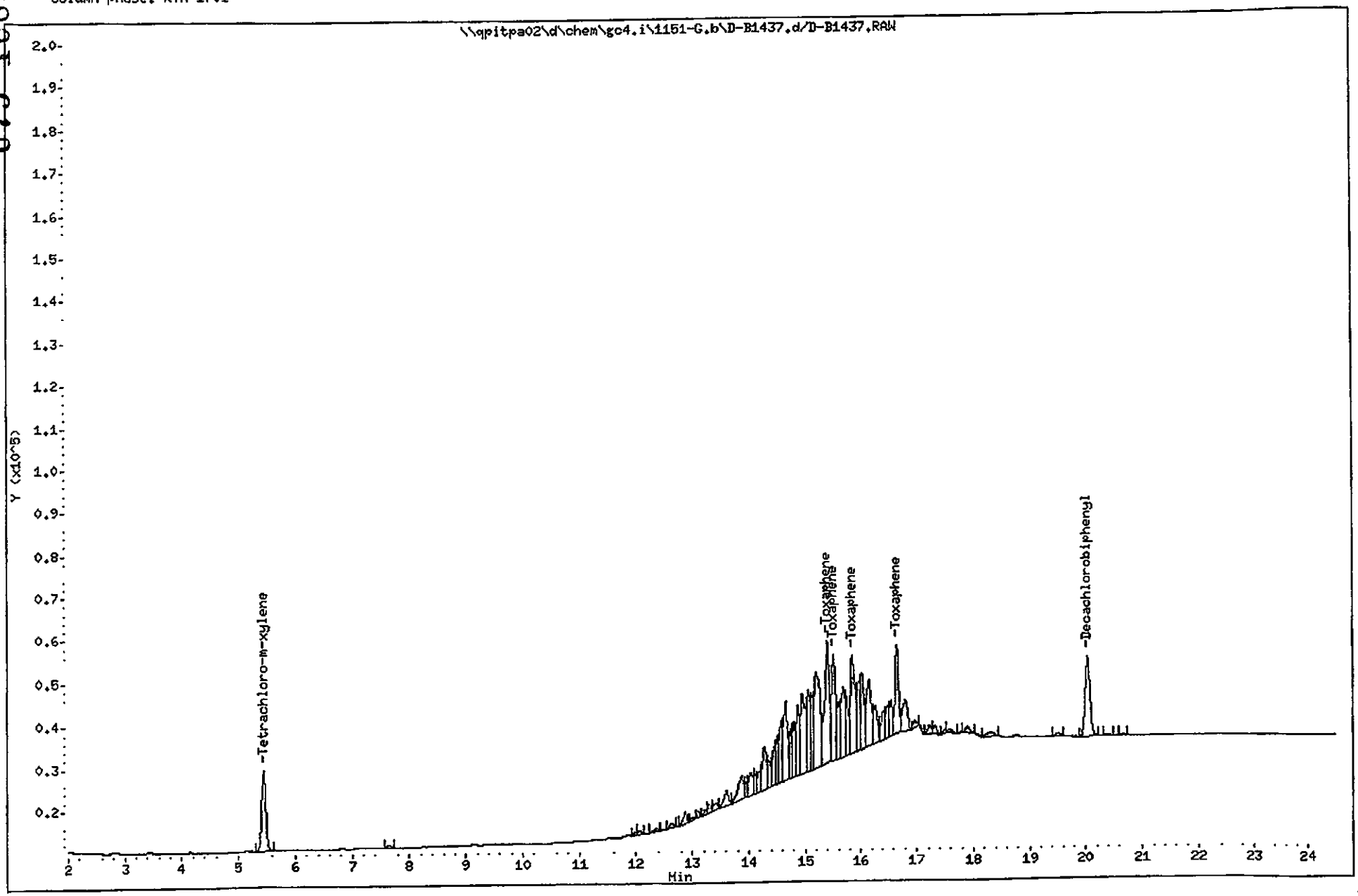
Instrument: gc4.i

Operator: 010139
Column diameter: 0.53

Column phase: RTX-1701

675 1085

3076



STL Pittsburgh

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1438.d
Report Date: 15-Feb-2001 12:00

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1438.d
Lab Smp Id: MEDCHLOR
Inj Date : 14-FEB-2001 08:27 Inst ID: gc4.i
Operator : 010139
Smp Info : MEDCHLOR,1151-G.b,,2-CHLO.sub,,1,3
Misc Info : 190-102-9
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 08:27 Cal File: D-B1438.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-CHLO.sub
Target Version: 4.04
Processing Host: PITPC044

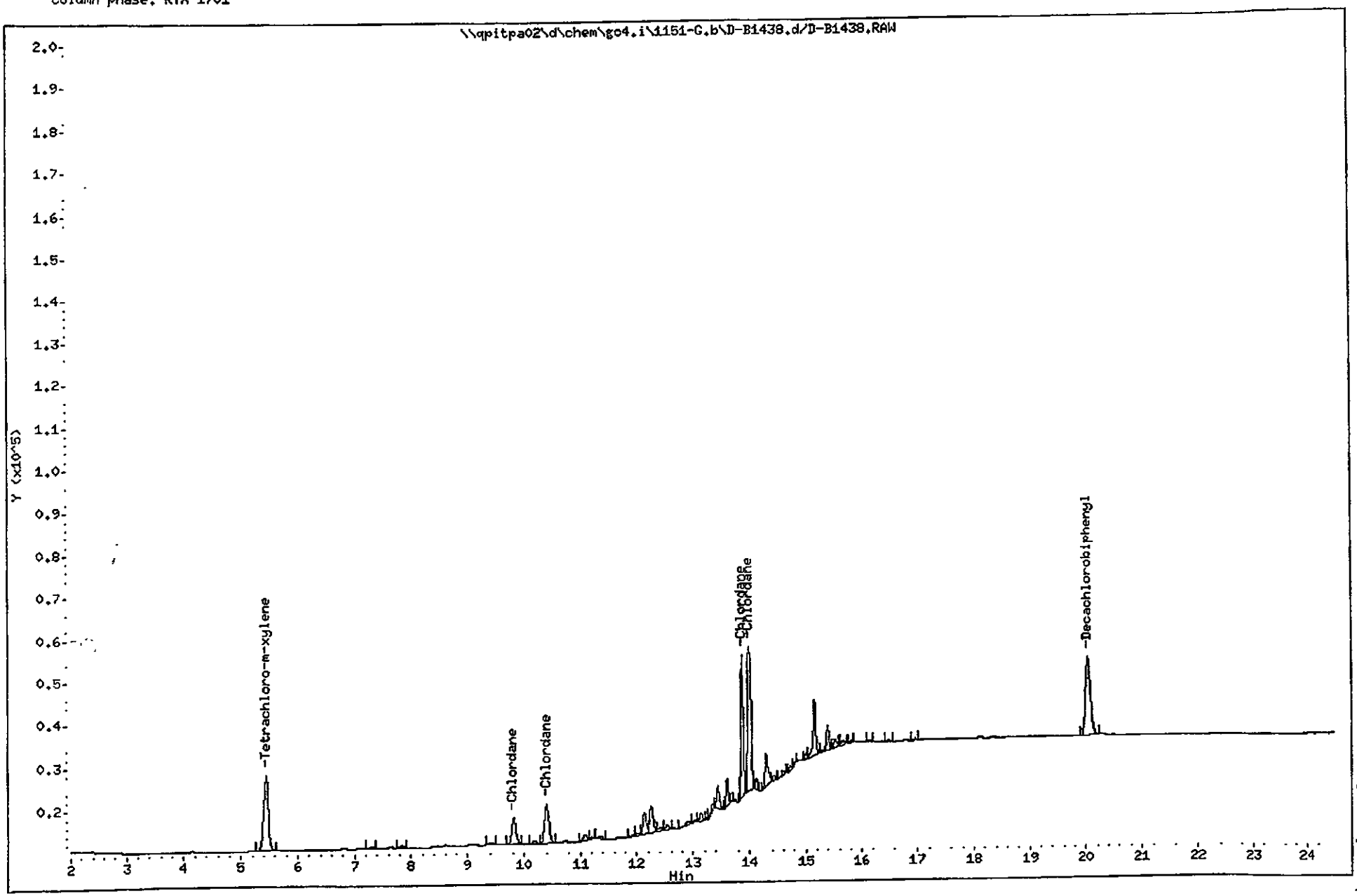
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
8 Chlordane	9.820	9.820	0.000	6185	0.25000	0.2500
$ 2 Tetrachloro-m-xylene	5.453	5.426	0.027	17527	0 02500	0.02500
$ 38 Decachlorobiphenyl	20.040	20.040	0.000	18353	0.02500	0.02500

Data File: \\qpitpa02\d\chem\gc4.i\1151-C.b\D-B1438.d
Date : 14-FEB-2001 08:27
Client ID:
Sample Info: MEDCHLOR,1151-C.b,,2-CHLO.sub,,1,3

Instrument: gc4.i

Operator: 010139
Column diameter: 0.53

Column phase: RTX-1701

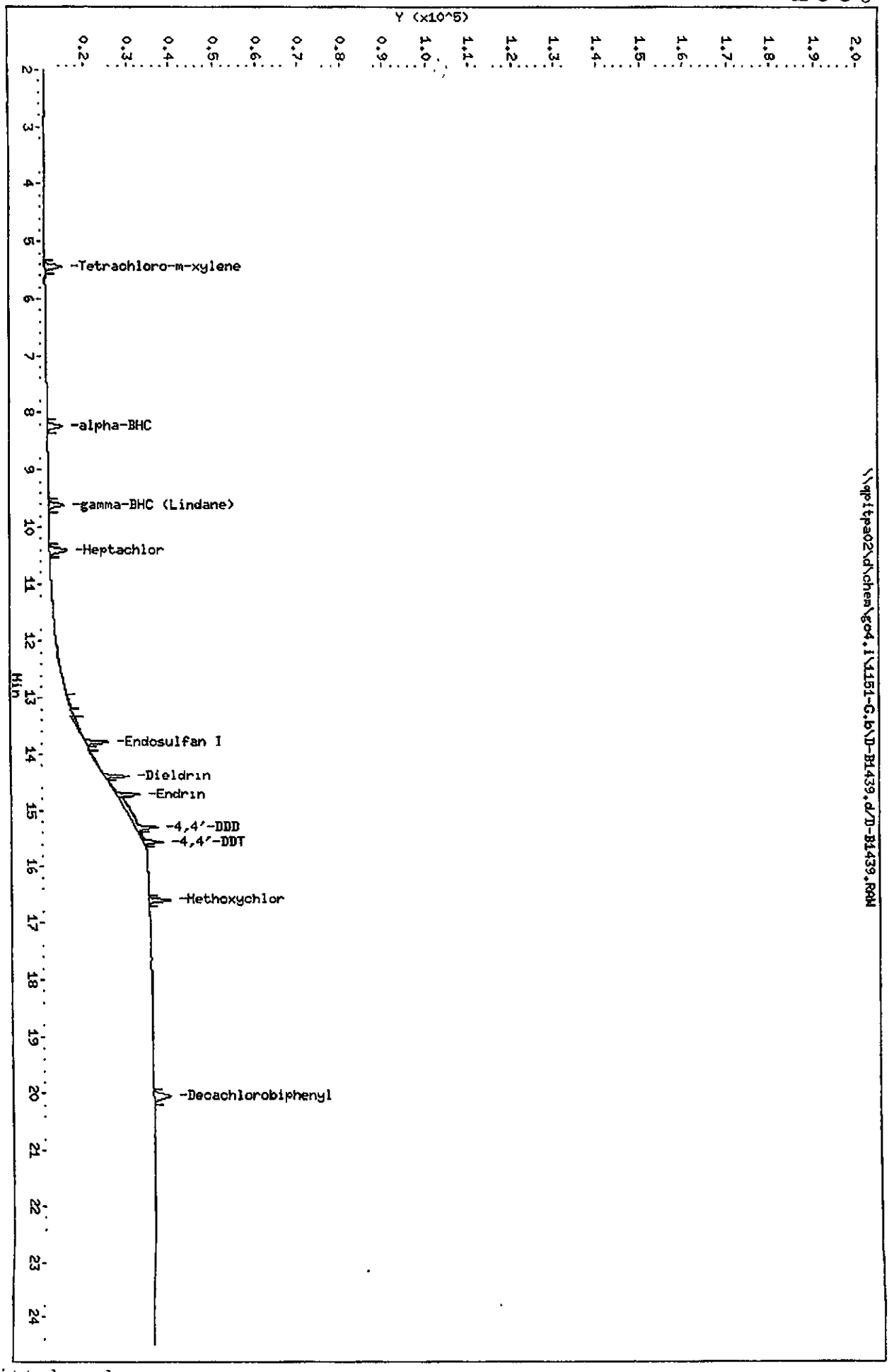


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1439.d
Report Date: 15-Feb-2001 12:01

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1439.d
Lab Smp Id: LOWA
Inj Date : 14-FEB-2001 08:55
Operator : 010139 Inst ID: gc4.i
Smp Info : LOWA,1151-G.b,,3-INDA.sub,,1,1
Misc Info : 190-100-6
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-B1446.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC044

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$	2 Tetrachloro-m-xylene	5.446	5.426	0.020	3929	0.00500	0.004822
	6 alpha-BHC	8.233	8.220	0.013	3470	0.00500	0.004243
	7 gamma-BHC (Lindane)	9.613	9.600	0.013	3391	0.00500	0.004388
	9 Heptachlor	10.406	10.393	0.013	4016	0.00500	0.004816
	20 Endosulfan I	13.780	13.780	0.000	5447	0.00500	0.004787
	23 Dieldrin	14.386	14.386	0.000	5736	0.00500	0.004741
	26 Endrin	14.713	14.713	0.000	5801	0.00500	0.004970
	29 4,4'-DDD	15.293	15.293	0 000	5210	0.00500	0.005150
	32 4,4'-DDT	15.546	15.546	0.000	4636	0.00500	0.004984
	35 Methoxychlor	16.600	16.600	0.000	5029	0.01000	0.009939
$	38 Decachlorobiphenyl	20.040	20.040	0.000	3842	0.00500	0.005022


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1439.d
Date : 14-FEB-2001 08:55
Client ID:
Sample Info: LOWA,1151-G.b,,3-INDA.sub,,1,1
Column phase: RTX-1701
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1439.d\D-B1439.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-alpha-BHC
-gamma-BHC (Lindane)
-Heptachlor
-Endosulfan I
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Methoxychlor
-Decachlorobiphenyl

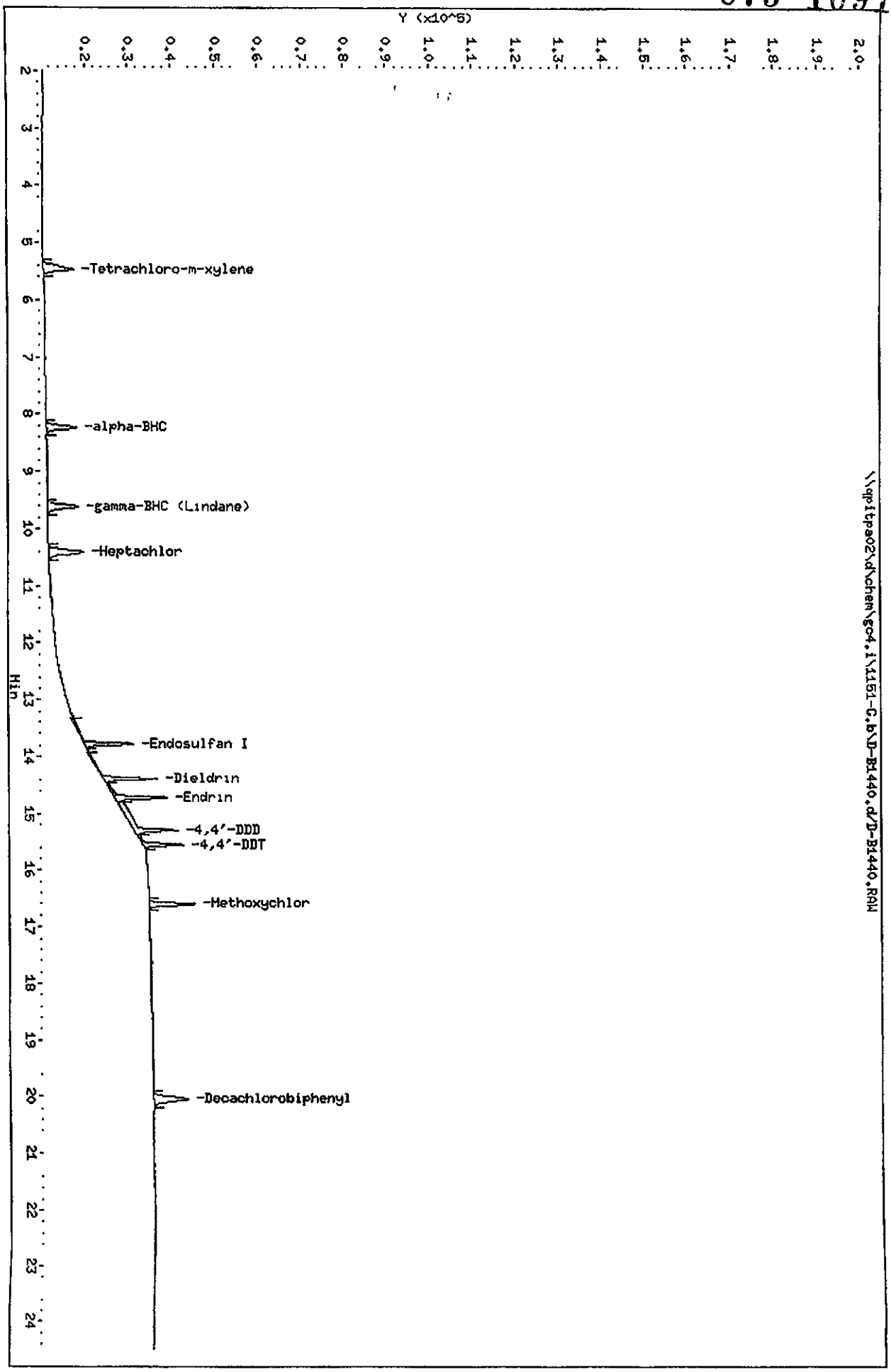
Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1440.d
Report Date: 15-Feb-2001 12:01

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1440.d
Lab Smp Id: MLOWA
Inj Date : 14-FEB-2001 09:23
Operator : 010139 Inst ID: gc4.i
Smp Info : MLOWA,1151-G.b,,3-INDA.sub,,1,2
Misc Info : 190-100-7
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-B1446.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC044

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$	2 Tetrachloro-m-xylene	5.466	5.426	0.040	6766	0.01000	0.008802
	6 alpha-BHC	8.240	8.220	0.020	6873	0.01000	0.008876
	7 gamma-BHC (Lindane)	9.620	9.600	0 020	6928	0.01000	0.009285
	9 Heptachlor	10.406	10.393	0.013	7973	0.01000	0.009703
	20 Endosulfan I	13.780	13.780	0.000	11475	0.01000	0.01006
	23 Dieldrin	14.386	14.386	0.000	12152	0.01000	0.01003
	26 Endrin	14.713	14.713	0.000	11754	0.01000	0.01005
	29 4,4'-DDD	15.293	15.293	0.000	9972	0 01000	0.009904
	32 4,4'-DDT	15.546	15.546	0.000	9400	0.01000	0.01007
	35 Methoxychlor	16.600	16.600	0.000	10460	0.02000	0.02044
$	38 Decachlorobiphenyl	20.040	20.040	0.000	7769	0.01000	0.01010

675 1091


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1440.d
Date : 14-FEB-2001 09:23
Client ID:
Sample Info: MLDWA,1151-G.b,3-INDA.sub,1.2
Column phase: RTX-1701
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1440.d/D-B1440.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-alpha-BHC
-gamma-BHC (Lindane)
-Heptachlor
-Endosulfan I
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Methoxychlor
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1441.d
Report Date: 15-Feb-2001 12:01

STL-Pittsburgh

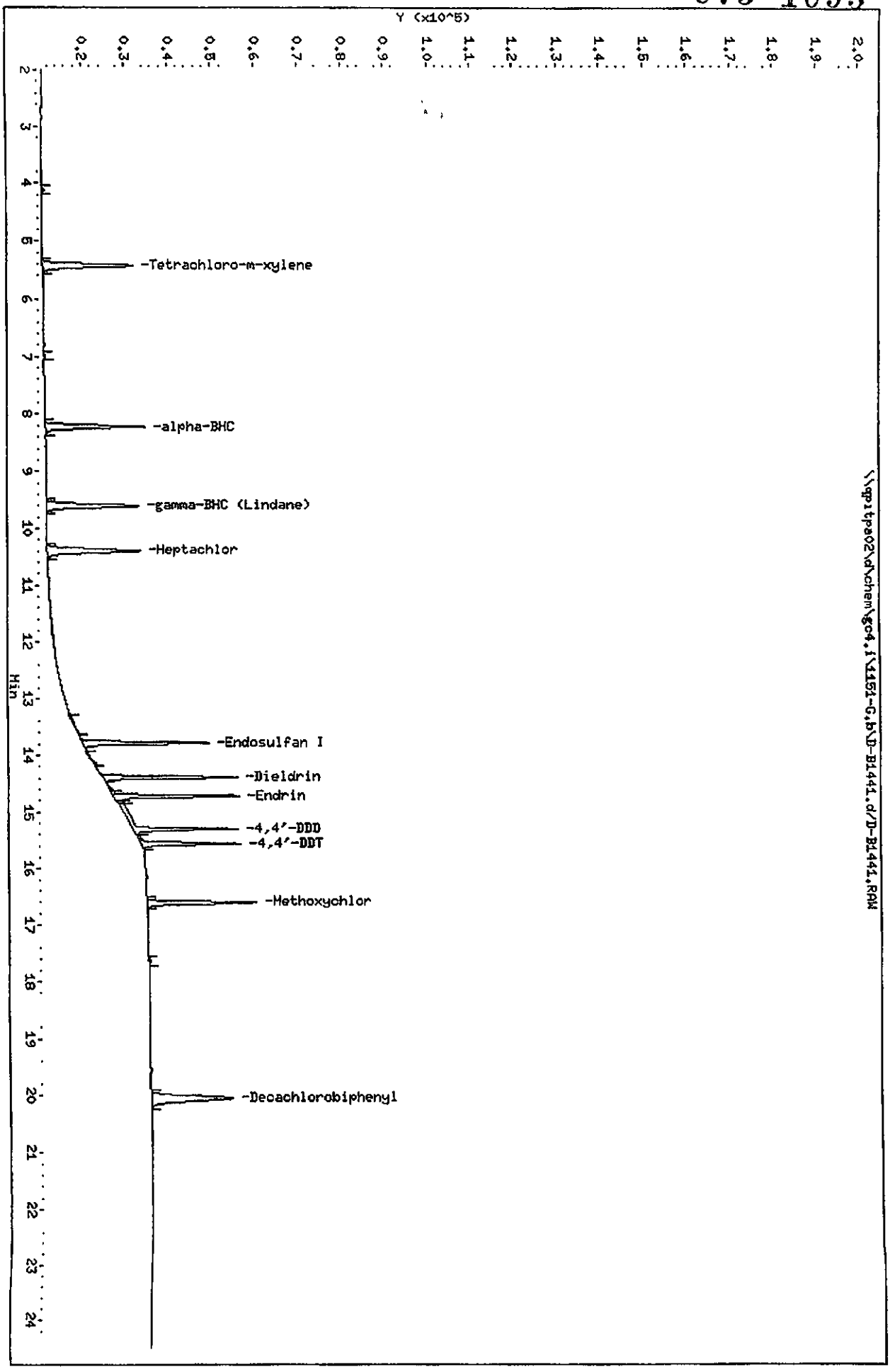
Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1441.d
Lab Smp Id: MEDA
Inj Date : 14-FEB-2001 09:51
Operator : 010139 Inst ID: gc4.i
Smp Info : MEDA,1151-G.b,,3-INDA.sub,,1,3
Misc Info : 190-100-8
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 09:51 Cal File: D-B1441.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC044

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$	2 Tetrachloro-m-xylene	5.426	5.426	0.000	21093	0.02500	0.02500
	6 alpha-BHC	8.220	8.220	0.000	23544	0.02500	0.02500
	7 gamma-BHC (Lindane)	9.600	9 600	0.000	21685	0.02500	0.02500
	9 Heptachlor	10.393	10.393	0.000	21617	0.02500	0.02500
	20 Endosulfan I	13 780	13 780	0.000	29654	0.02500	0.02500
	23 Dieldrin	14.386	14.386	0.000	31809	0.02500	0.02500
	26 Endrin	14.713	14.713	0.000	29352	0.02500	0.02500
	29 4,4'-DDD	15.293	15.293	0 000	24532	0.02500	0.02500
	32 4,4'-DDT	15.546	15.546	0.000	23332	0.02500	0.02500
	35 Methoxychlor	16.600	16.600	0.000	25454	0.05000	0.05000
$	38 Decachlorobiphenyl	20.040	20.040	0.000	19045	0.02500	0.02500

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1441.d
Date : 14-FEB-2001 09:51
Client ID:
Sample Info: MEDA,1151-G.b,3-INDA,sub,1.3

Instrument: gc4.i
Operator: 010139
Column diameter: 0.53

Column phase: RTX-1701



Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1442.d
Report Date: 15-Feb-2001 12:01

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1442.d
Lab Smp Id: MHIGHA
Inj Date : 14-FEB-2001 10:19
Operator : 010139 Inst ID: gc4.i
Smp Info : MHIGHA,1151-G.b,,3-INDA.sub,,1,4
Misc Info : 190-100-9
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-B1446.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC044

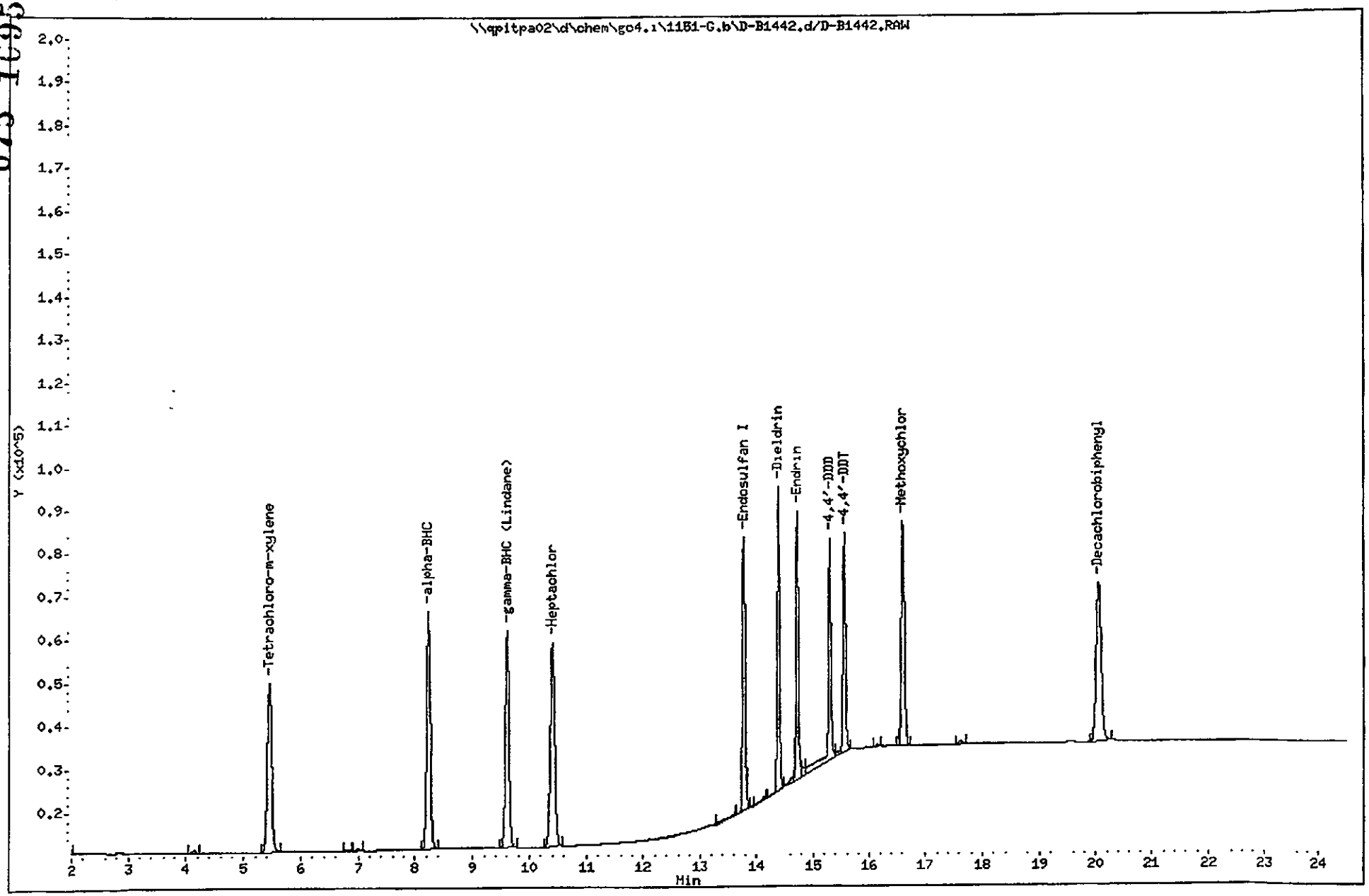
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 2 Tetrachloro-m-xylene	5.446	5.426	0.020	39331	0.05000	0.05087
6 alpha-BHC	8.233	8.220	0.013	55344	0.05000	0.06454
7 gamma-BHC (Lindane)	9.613	9.600	0.013	50569	0.05000	0.06224
9 Heptachlor	10.406	10.393	0.013	47301	0.05000	0.05546
20 Endosulfan I	13.780	13.780	0.000	63474	0.05000	0.05411
23 Dieldrin	14.386	14.386	0.000	70701	0.05000	0.05601
26 Endrin	14.713	14.713	0.000	62450	0.05000	0.05249
29 4,4'-DDD	15.293	15.293	0.000	51861	0.05000	0.05112
32 4,4'-DDT	15.546	15.546	0.000	50988	0.05000	0.05339
35 Methoxychlor	16.600	16.600	0.000	52264	0.10000	0.1016
$ 38 Decachlorobiphenyl	20.040	20.040	0.000	36894	0.05000	0.04846

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1442.d
Date : 14-FEB-2001 10:19
Client ID:
Sample Info: MHIGHA,1151-G.b,,3-INDA.sub,,1,4

Instrument: gc4.i
Operator: 010139
Column diameter: 0.53

Column phase: RTX-1701

675 1695



3086

STL Pittsburgh

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1443.d
Report Date: 15-Feb-2001 12:01

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1443.d
Lab Smp Id: HIGHA
Inj Date : 14-FEB-2001 10:47
Operator : 010139 Inst ID: gc4.i
Smp Info : HIGHA,1151-G.b,,3-INDA.sub,,1,5
Misc Info : 190-100-10
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-B1446.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-INDA.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 2 Tetrachloro-m-xylene	5.460	5.426	0.034	73627	0.10000	0.09614
6 alpha-BHC	8 240	8.220	0.020	119637	0.10000	0.1293 (A)
7 gamma-BHC (Lindane)	9.613	9.600	0.013	109632	0.10000	0.1261 (A)
9 Heptachlor	10.406	10 393	0.013	101491	0.10000	0.1146 (A)
20 Endosulfan I	13.780	13.780	0.000	133703	0.10000	0.1109 (A)
23 Dieldrin	14.386	14.386	0 000	151244	0.10000	0.1152 (A)
26 Endrin	14.713	14 713	0.000	133889	0.10000	0.1098 (A)
29 4,4'-DDD	15.293	15.293	0 000	109258	0.10000	0.1061 (A)
32 4,4'-DDT	15.546	15.546	0.000	109099	0.10000	0.1111 (A)
35 Methoxychlor	16.600	16.600	0.000	106177	0.20000	0.2051 (A)
$ 38 Decachlorobiphenyl	20.046	20.040	0.006	74075	0.10000	0.09783

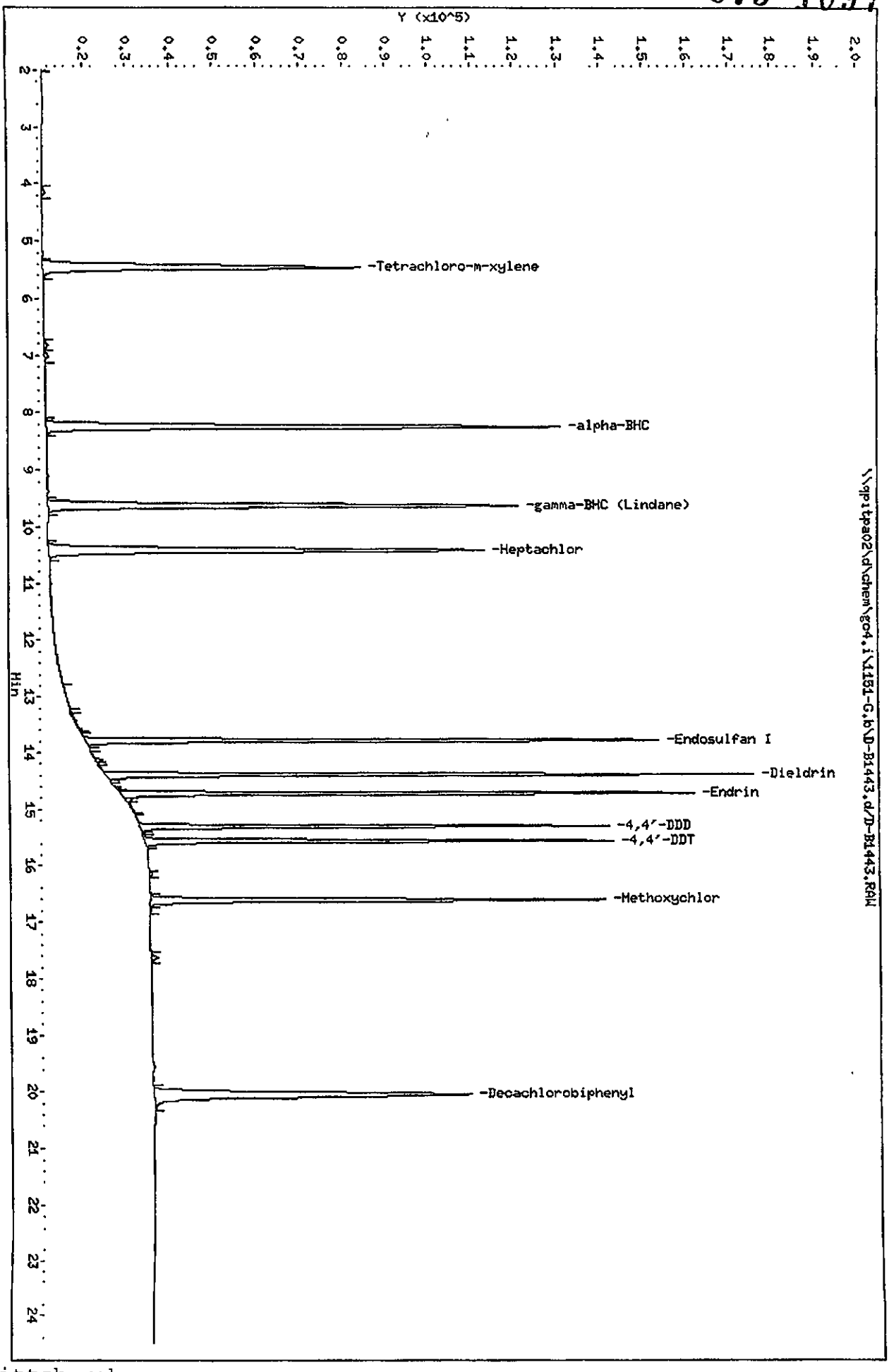
QC Flag Legend

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

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1443.d
Date : 14-FEB-2001 10:47
Client ID:
Sample Info: HIGHA,1151-G.b,3-INDA,sub,1,5

Instrument: gc4.i
Operator: 010139
Column diameter: 0.53

Column phase: RTX-1701



Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1444.d
Report Date: 15-Feb-2001 12:02

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1444.d
Lab Smp Id: LOWB
Inj Date : 14-FEB-2001 11:15
Operator : 010139 Inst ID: gc4.i
Smp Info : LOWB,1151-G.b,,4-INDB.sub,,1,1
Misc Info : 190-100-12
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-B1446.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11 346	11.333	0 013	3675	0.00500	0.004494
10 beta-BHC	12.280	12.273	0.007	2847	0.00500	0.004657
11 delta-BHC	12.846	12.846	0.000	4151	0.00500	0.004183
17 Heptachlor epoxide	13.240	13.240	0.000	5119	0.00500	0.004611
18 gamma-Chlordane	13.880	13.873	0.007	5876	0.00500	0.004630
19 alpha-Chlordane	13 993	13.986	0.007	5959	0.00500	0.004611
22 4,4'-DDE	14.126	14.126	0.000	5753	0.00500	0.004607
31 Endosulfan II	15.420	15.420	0.000	5715	0 00500	0.005005
33 Endrin aldehyde	16.126	16.126	0.000	3019	0.00500	0.004750
34 Endosulfan sulfate	16.740	16.740	0.000	2593	0.00500	0.004784
37 Endrin ketone	17.626	17.626	0.000	4181	0.00500	0.004745

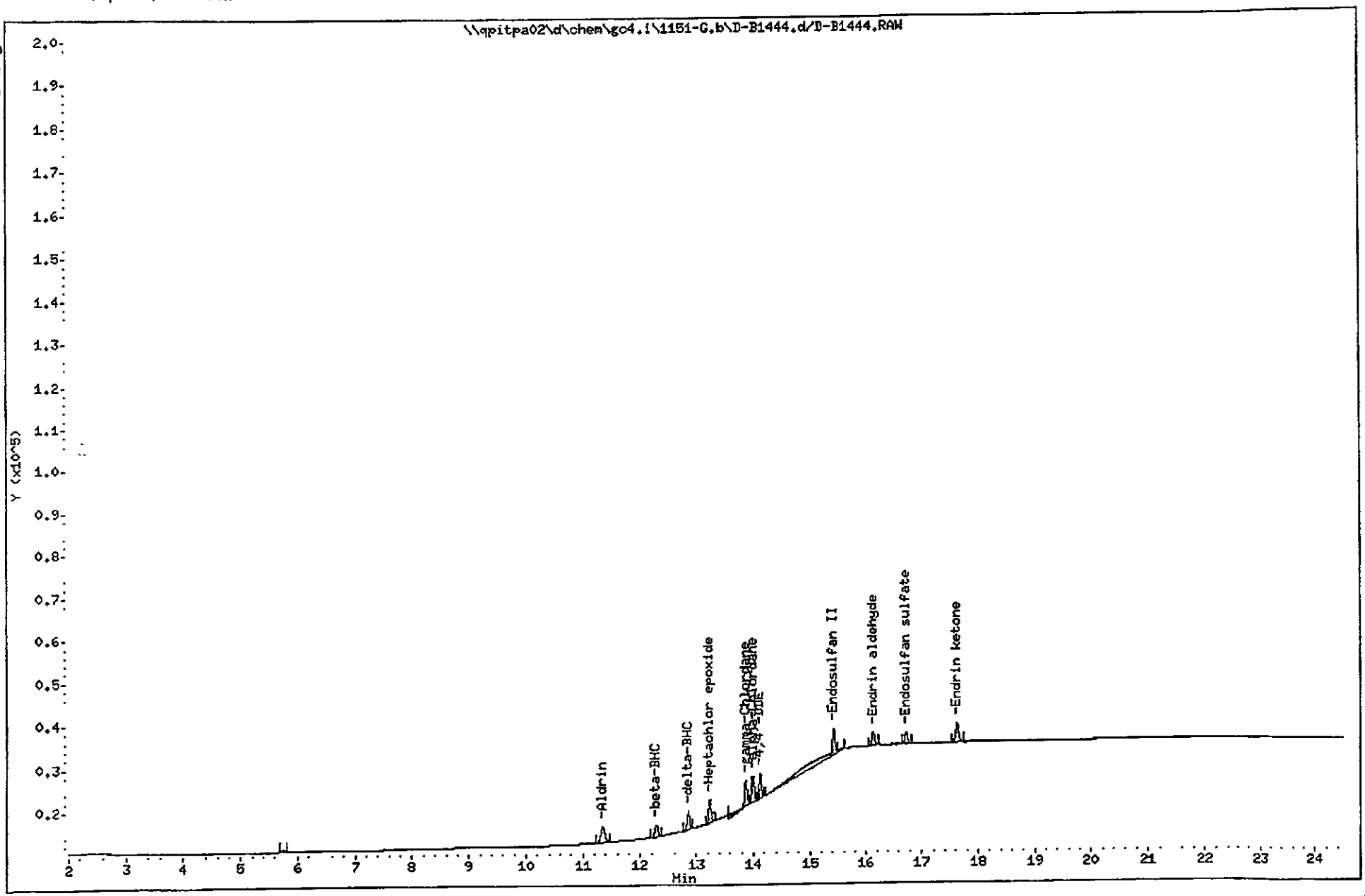
Data File: \\qpitpa02\d\chem\gc4.i\1151-C.b\D-B1444.d
Date : 14-FEB-2001 11:15
Client ID:
Sample Info: LOWB,1151-C.b,,4-INDB.sub,,1,1

Column phase: RTX-1701

Instrument: gc4.i

Operator: 010139
Column diameter: 0.53

675 1099



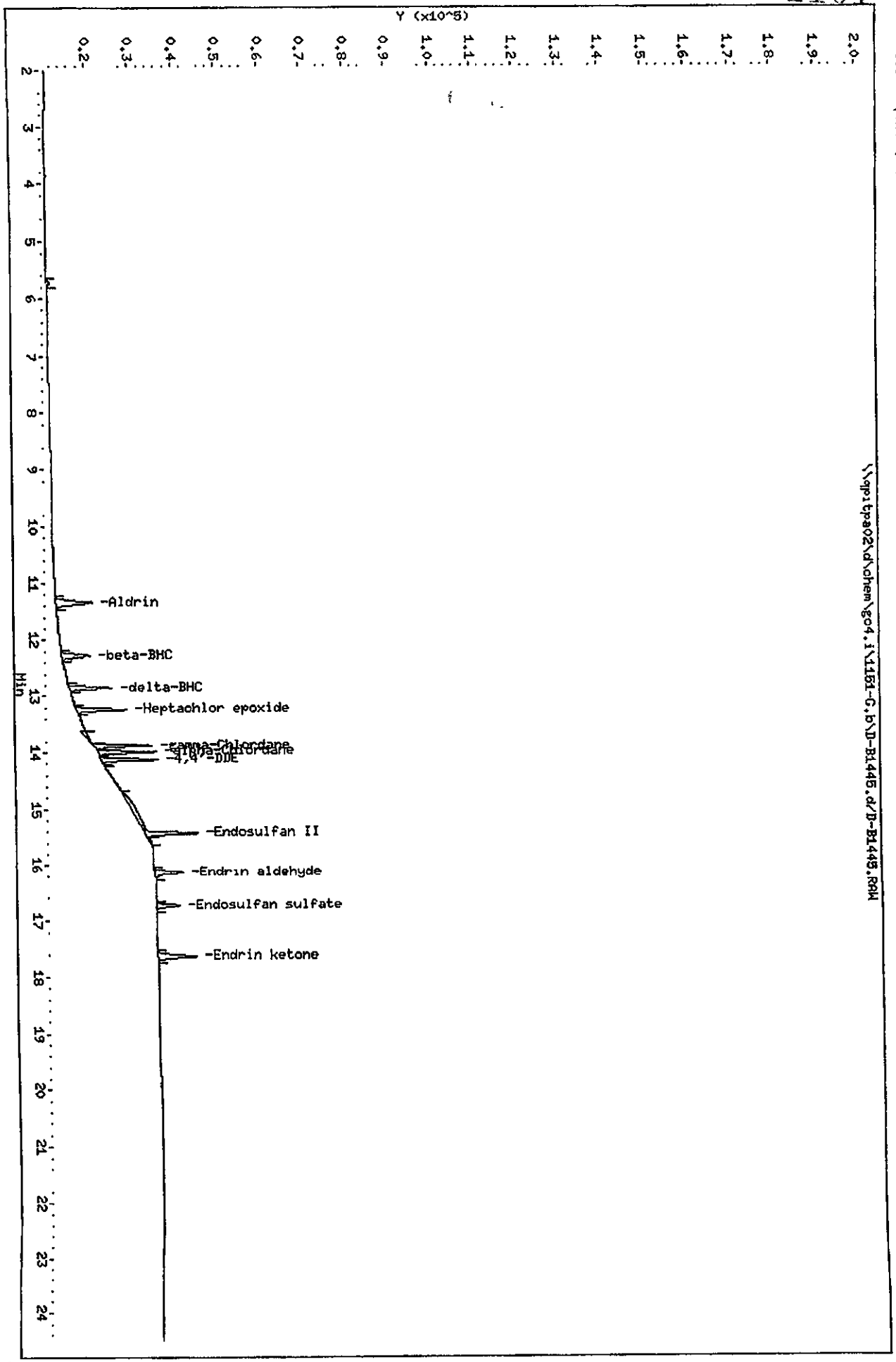
Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1445.d
Report Date: 15-Feb-2001 12:02

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1445.d
Lab Smp Id: MLOWB
Inj Date : 14-FEB-2001 11:43
Operator : 010139 Inst ID: gc4.i
Smp Info : MLOWB,1151-G.b,,4-INDB.sub,,1,2
Misc Info : 190-100-13
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-B1446.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.340	11.333	0.007	8231	0.01000	0.01004
10 beta-BHC	12 273	12.273	0.000	6436	0.01000	0.01035
11 delta-BHC	12.846	12.846	0.000	9883	0.01000	0.009973
17 Heptachlor epoxide	13.240	13.240	0.000	11411	0.01000	0.01018
18 gamma-Chlordane	13.873	13.873	0.000	13217	0.01000	0.01027
19 alpha-Chlordane	13.986	13.986	0.000	13394	0 01000	0.01024
22 4,4'-DDE	14.126	14.126	0.000	12948	0.01000	0.01024
31 Endosulfan II	15.420	15.420	0 000	12360	0.01000	0.01054
33 Endrin aldehyde	16.126	16.126	0.000	6688	0.01000	0.01034
34 Endosulfan sulfate	16.740	16.740	0.000	5487	0.01000	0.01008
37 Endrin ketone	17.626	17.626	0.000	9194	0.01000	0.01028

675 1101


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1445.d
Date : 14-FEB-2001 11:43
Client ID:
Sample Info: MLDMB,1151-G.b,,4-INDB,sub,,1,2
Column phase: RTX-1701
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1445.d/D-B1445.RAW
Y (x10^5)
Min
-Aldrin
-beta-BHC
-delta-BHC
-Heptachlor epoxide
-gamma-Chlordane
-alpha-Chlordane
-4,4'-DDE
-Endosulfan II
-Endrin aldehyde
-Endosulfan sulfate
-Endrin ketone

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1446.d
Report Date: 15-Feb-2001 12:02

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1446.d
Lab Smp Id: MEDB
Inj Date : 14-FEB-2001 12:11
Operator : 010139 Inst ID: gc4.i
Smp Info : MEDB,1151-G.b,,4-INDB.sub,,1,3
Misc Info : 190-100-14
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:11 Cal File: D-B1446.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.333	11 333	0.000	22515	0 02500	0.02500
10 beta-BHC	12.273	12.273	0.000	16329	0.02500	0.02500
11 delta-BHC	12.846	12.846	0.000	28859	0 02500	0.02500
17 Heptachlor epoxide	13.240	13.240	0.000	29913	0.02500	0.02500
18 gamma-Chlordane	13.873	13.873	0.000	34077	0.02500	0 02500
19 alpha-Chlordane	13.986	13.986	0.000	34822	0.02500	0.02500
22 4,4'-DDE	14.126	14.126	0.000	33668	0.02500	0.02500
31 Endosulfan II	15.420	15.420	0.000	28513	0.02500	0.02500
33 Endrin aldehyde	16.126	16.126	0.000	16684	0.02500	0.02500
34 Endosulfan sulfate	16.740	16.740	0 000	14135	0.02500	0.02500
37 Endrin ketone	17.626	17.626	0 000	23151	0.02500	0.02500

Data File: \\qpitpa02\d\chem\gc4.i\1151-C.b\D-B1446.d
Date : 14-FEB-2001 12:11
Client ID:
Sample Info: MEDB,1151-C.b,,4-INDB.sub,,1,3

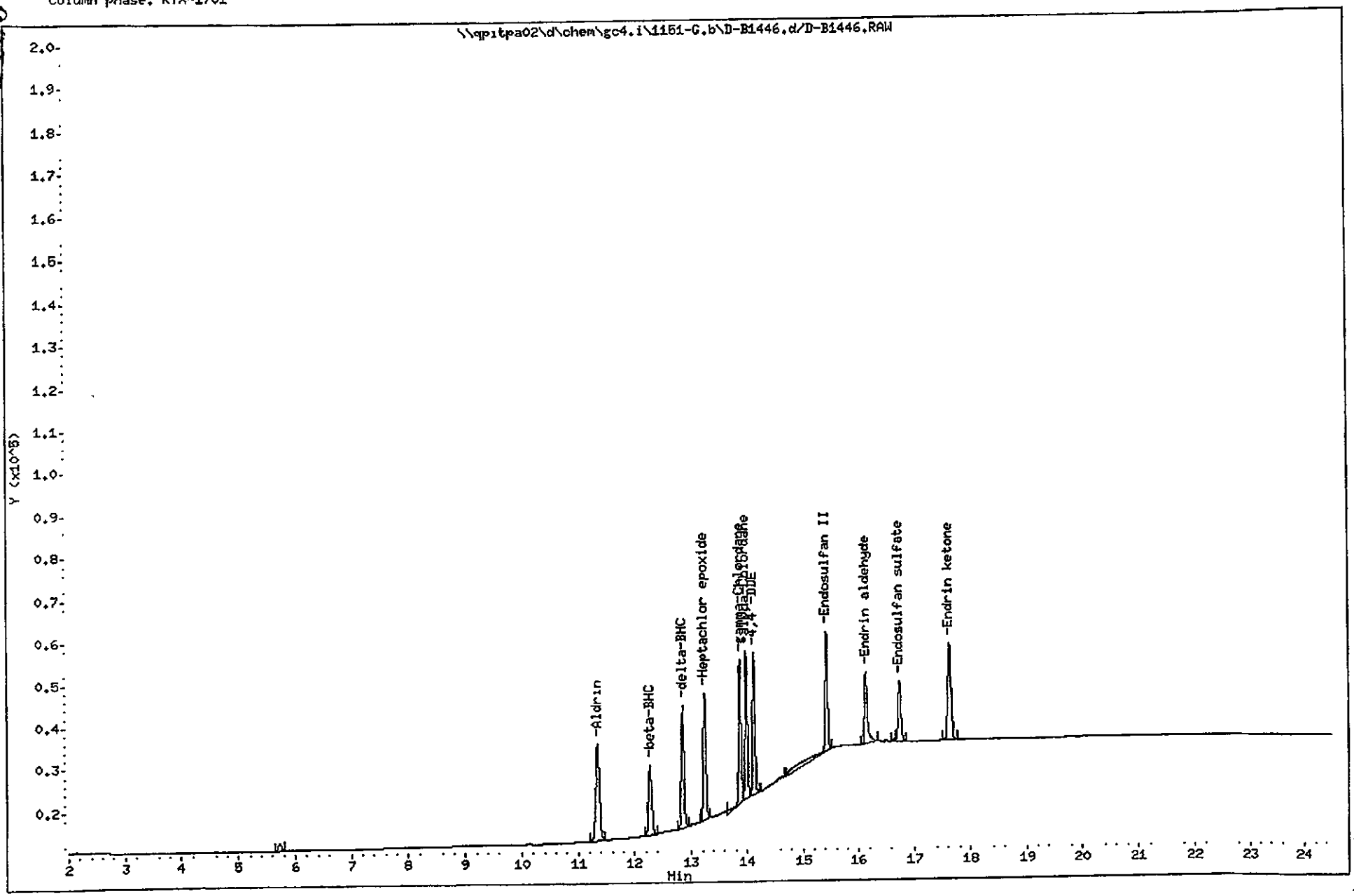
Instrument: gc4.i

Operator: 010139
Column diameter: 0.53

Column phase: RTX-1701

675 1103

3094



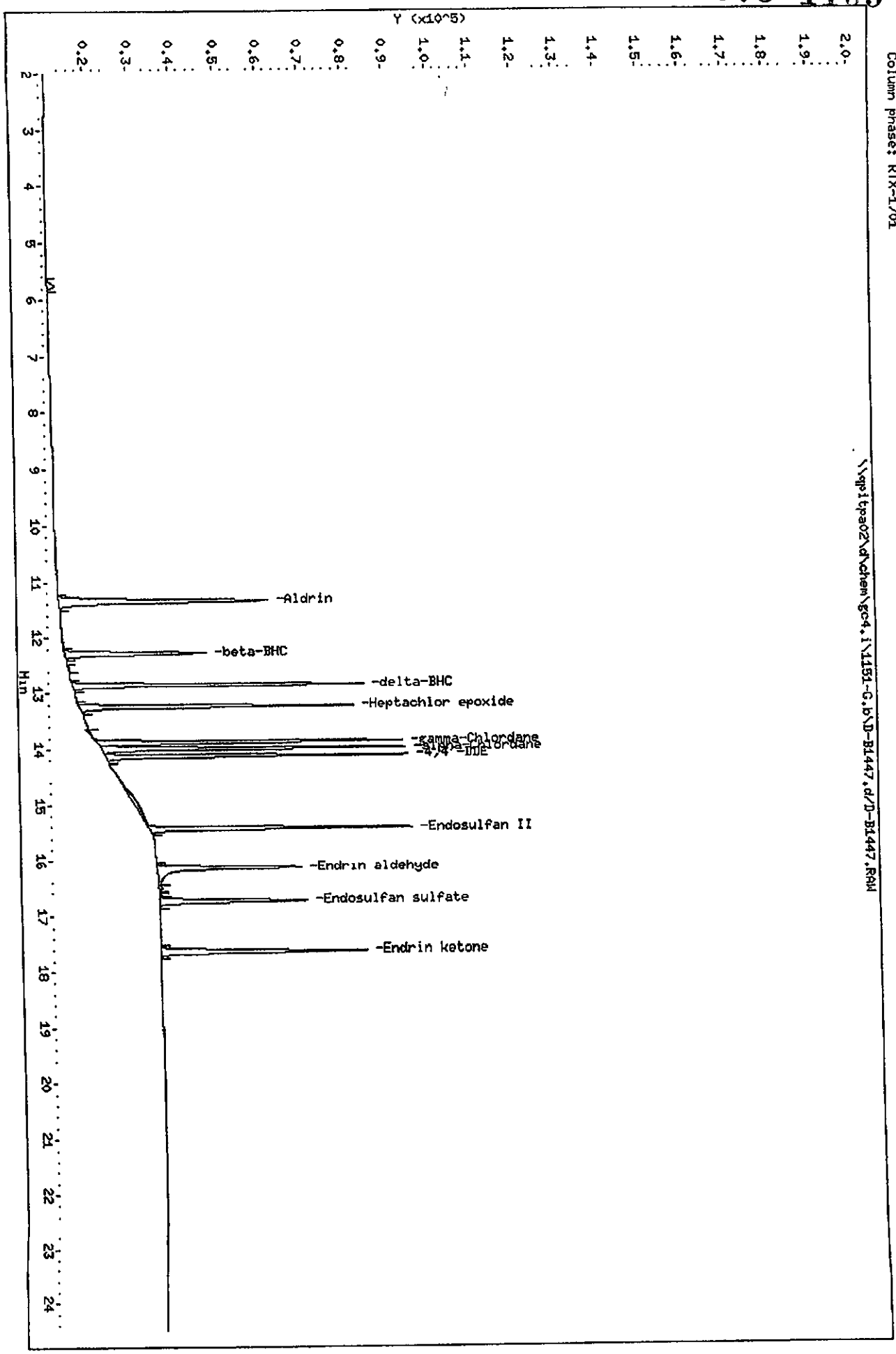
STL Pittsburgh

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1447.d
Report Date: 15-Feb-2001 12:02

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1447.d
Lab Smp Id: MHIGHB
Inj Date : 14-FEB-2001 12:39
Operator : 010139 Inst ID: gc4.i
Smp Info : MHIGHB,1151-G.b,,4-INDB.sub,,1,4
Misc Info : 190-101-1
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 12:39 Cal File: D-B1447.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.346	11.333	0.013	49066	0.05000	0.05705
10 beta-BHC	12.280	12.273	0.007	33213	0.05000	0.05250
11 delta-BHC	12.846	12.846	0 000	68380	0.05000	0.06302
17 Heptachlor epoxide	13.240	13.240	0.000	64324	0.05000	0.05536
18 gamma-Chlordane	13.880	13.873	0.007	71608	0.05000	0.05412
19 alpha-Chlordane	13.993	13.986	0.007	71206	0.05000	0.05326
22 4,4'-DDE	14.126	14.126	0.000	70959	0.05000	0.05446
31 Endosulfan II	15.426	15.420	0.006	61646	0.05000	0.05188
33 Endrin aldehyde	16.126	16.126	0.000	33682	0.05000	0.05155
34 Endosulfan sulfate	16.740	16.740	0.000	34436	0.05000	0.05934
37 Endrin ketone	17 626	17.626	0.000	48368	0.05000	0.05302


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1447.d
Date : 14-FEB-2001 12:39
Client ID:
Sample Info: MHIGHB,1151-G.b,,4-INDB.sub,,1.4
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
Column phase: RTX-1701
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1447.d/D-B1447.RAW
Y (x10^5)
Min
-Aldrin
-beta-BHC
-delta-BHC
-Heptachlor epoxide
-gamma-Chlordane
-alpha-Chlordane
-4,4'-DDE
-Endosulfan II
-Endrin aldehyde
-Endosulfan sulfate
-Endrin ketone

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1448.d
Report Date: 15-Feb-2001 12:02

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1448.d
Lab Smp Id: HIGHB
Inj Date : 14-FEB-2001 13:07
Operator : 010139 Inst ID: gc4.i
Smp Info : HIGHB,1151-G.b,,4-INDB.sub,,1,5
Misc Info : 190-101-2
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-B1448.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.340	11.333	0.007	105911	0.10000	0.1177 (A)
10 beta-BHC	12.273	12 273	0.000	66685	0.10000	0.1043 (A)
11 delta-BHC	12.846	12.846	0.000	143540	0.10000	0.1242 (A)
17 Heptachlor epoxide	13.240	13.240	0.000	131184	0.10000	0.1100 (A)
18 gamma-Chlordane	13.873	13.873	0.000	142236	0.10000	0.1059 (A)
19 alpha-Chlordane	13.986	13 986	0.000	142107	0.10000	0.1050 (A)
22 4,4'-DDE	14.126	14 126	0.000	144958	0.10000	0.1088 (A)
31 Endosulfan II	15.420	15.420	0.000	124331	0.10000	0.1037 (A)
33 Endrin aldehyde	16.126	16.126	0.000	67988	0.10000	0.1032 (A)
34 Endosulfan sulfate	16.740	16 740	0.000	67616	0.10000	0.1128 (A)
37 Endrin ketone	17.626	17.626	0.000	95869	0.10000	0.1040 (A)

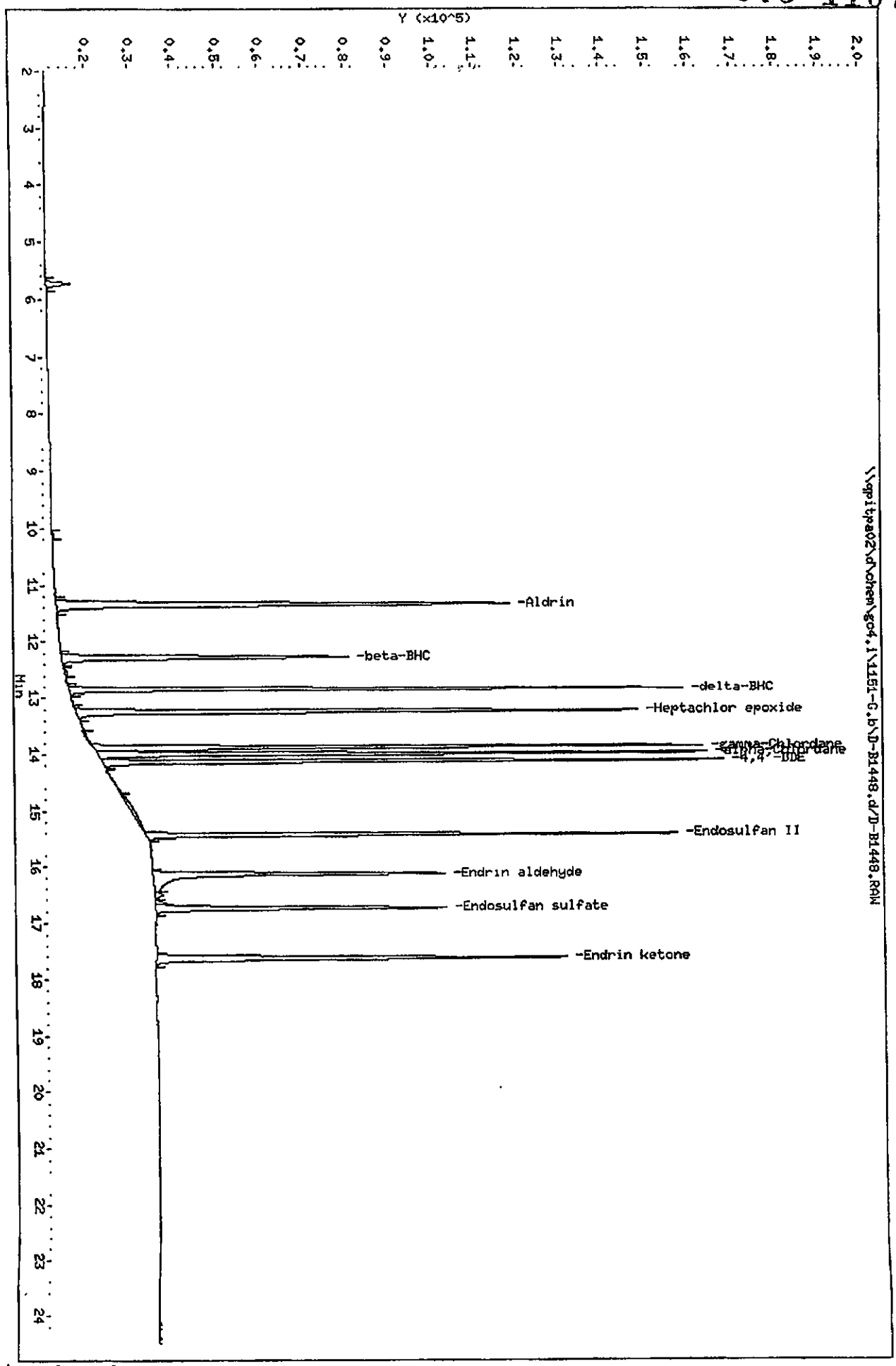
QC Flag Legend

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

Data File: \\qpitpa02\d\chem\gc4.i\1151-C.b\D-B1448.d
Date : 14-FEB-2001 13:07
Client ID:
Sample Info: HIGHB,1151-C,b,,4-INDB,sub,,4,5

Instrument: gc4.i
Operator: 010139
Column diameter: 0.53

Column phase: RTX-1701

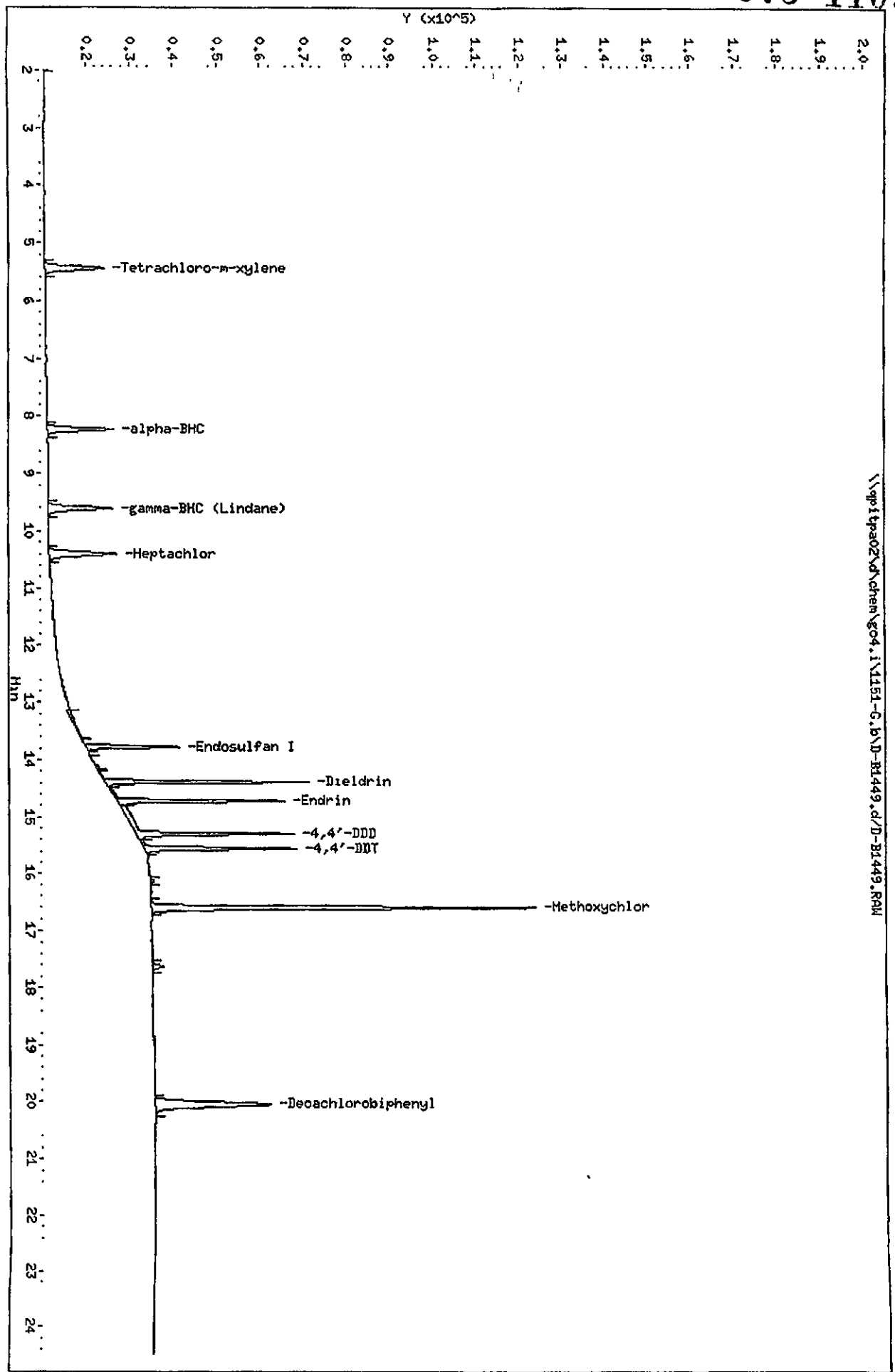


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1449.d
Report Date: 15-Feb-2001 12:03

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1449.d
Lab Smp Id: 2ND A
Inj Date : 14-FEB-2001 13:35 Inst ID: gc4.i
Operator : 010139
Smp Info : 2ND A,1151-G.b,,INDA.sub,,2,3
Misc Info : 190-101-7
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-B1448.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$ 2 Tetrachloro-m-xylene	5.446	5.426	0.020	13544	0.02500	0.01769
6 alpha-BHC	8.226	8.220	0.006	15101	0.02500	0.01632
7 gamma-BHC (Lindane)	9.606	9.600	0.006	14399	0 02500	0.01656
9 Heptachlor	10.400	10.393	0 007	15201	0 02500	0.01717
20 Endosulfan I	13.780	13.780	0.000	21420	0.02500	0.01776
23 Dieldrin	14.386	14.386	0.000	46861	0.02500	0.03571
26 Endrin	14.713	14.713	0.000	38518	0.02500	0.03158
29 4,4'-DDD	15.293	15.293	0.000	36376	0.02500	0.03531
32 4,4'-DDT	15 546	15.546	0.000	35181	0.02500	0.03582
35 Methoxychlor	16.600	16.600	0.000	89271	0.05000	0.1724
$ 38 Decachlorobiphenyl	20.040	20.040	0.000	26704	0.02500	0.03527


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1449.d
Date : 14-FEB-2001 13:35
Client ID:
Sample Info: 2ND A,1151-G,b,,INDA,sub,,2,3
Column phase: RTX-1701
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
Y (x10^5)
Min
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1449.d/D-B1449.RAW
-Tetrachloro-m-xylene
-alpha-BHC
-gamma-BHC (Lindane)
-Heptachlor
-Endosulfan I
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Methoxychlor
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1450.d
Report Date: 15-Feb-2001 12:03

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1450.d
Lab Smp Id: 2ND B
Inj Date : 14-FEB-2001 14:03 Inst ID: gc4.i
Operator : 010139
Smp Info : 2ND B,1151-G.b,,INDB.sub,,2,3
Misc Info : 190-101-10
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m Quant Type: ESTD
Meth Date : 15-Feb-2001 11:53 matkol Cal File: D-B1448.d
Cal Date : 14-FEB-2001 13:07 Continuing Calibration Sample
Als bottle: 1
Dil Factor: 1.00000 Compound Sublist: INDB.sub
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.346	11.333	0.013	13872	0.02500	0.01542
10 beta-BHC	12.280	12.273	0.007	10377	0.02500	0.01623
11 delta-BHC	12.846	12.846	0.000	18526	0 02500	0.01604
17 Heptachlor epoxide	13.240	13.240	0.000	19899	0.02500	0.01669
18 gamma-Chlordane	13.880	13.873	0.007	22683	0.02500	0.01689
19 alpha-Chlordane	13.993	13.986	0.007	21960	0.02500	0.01622
22 4,4'-DDE	14.126	14.126	0.000	45696	0.02500	0.03430
31 Endosulfan II	15.420	15.420	0 000	37118	0.02500	0.03095
33 Endrin aldehyde	16.126	16.126	0.000	21299	0.02500	0.03234
34 Endosulfan sulfate	16.740	16.740	0.000	22034	0.02500	0.03675
37 Endrin ketone	17.626	17.626	0 000	31417	0.02500	0.03409

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1450.d
Date : 14-FEB-2001 14:03
Client ID:
Sample Info: 2ND B,1151-G.b,,INDB.sub,,2,3

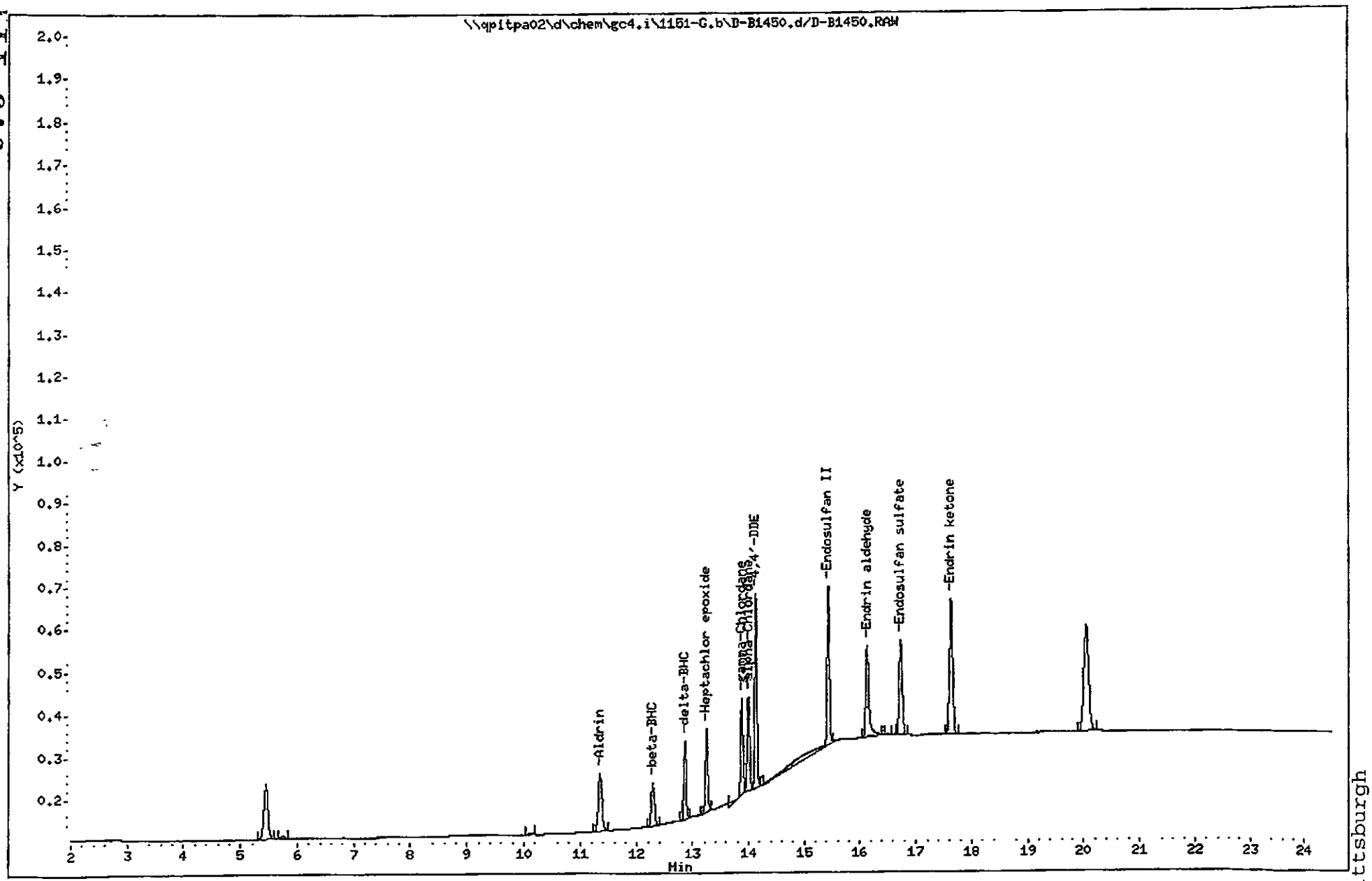
Instrument: gc4.i

Operator: 010139
Column diameter: 0.53

Column phase: RTX-1701

675 11

3102



STL Pittsburgh

675 1112

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1451.d
Report Date: 15-Feb-2001 12:03

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1451.d
Lab Smp Id: EVALB
Inj Date : 14-FEB-2001 14:31
Operator : 010139 Inst ID: gc4.i
Smp Info : EVALB,1151-G.b,,EVALBR.sub,,3,1
Misc Info : 190-102-10
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-B1448.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: EVALBR.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
$ 2 Tetrachloro-m-xylene	5.426	5.426	0.000	16548	0.02161	0.02161(R)
22 4,4'-DDE	14.133	14.126	0.007	538	<0.0	0.0004038
26 Endrin	14.713	14.713	0.000	28261	0.02317	0.02317
29 4,4'-DDD	15.293	15.293	0.000	1640	0.00159	0.001592
32 4,4'-DDT	15.546	15.546	0.000	23240	0.02366	0.02366
33 Endrin aldehyde	16.133	16.126	0.007	345	<0.0	0.0005238
37 Endrin ketone	17.626	17.626	0.000	745	<0.0	0.0008084
$ 38 Decachlorobiphenyl	20.046	20.040	0.006	15213	0.02009	0.02009(R)

QC Flag Legend

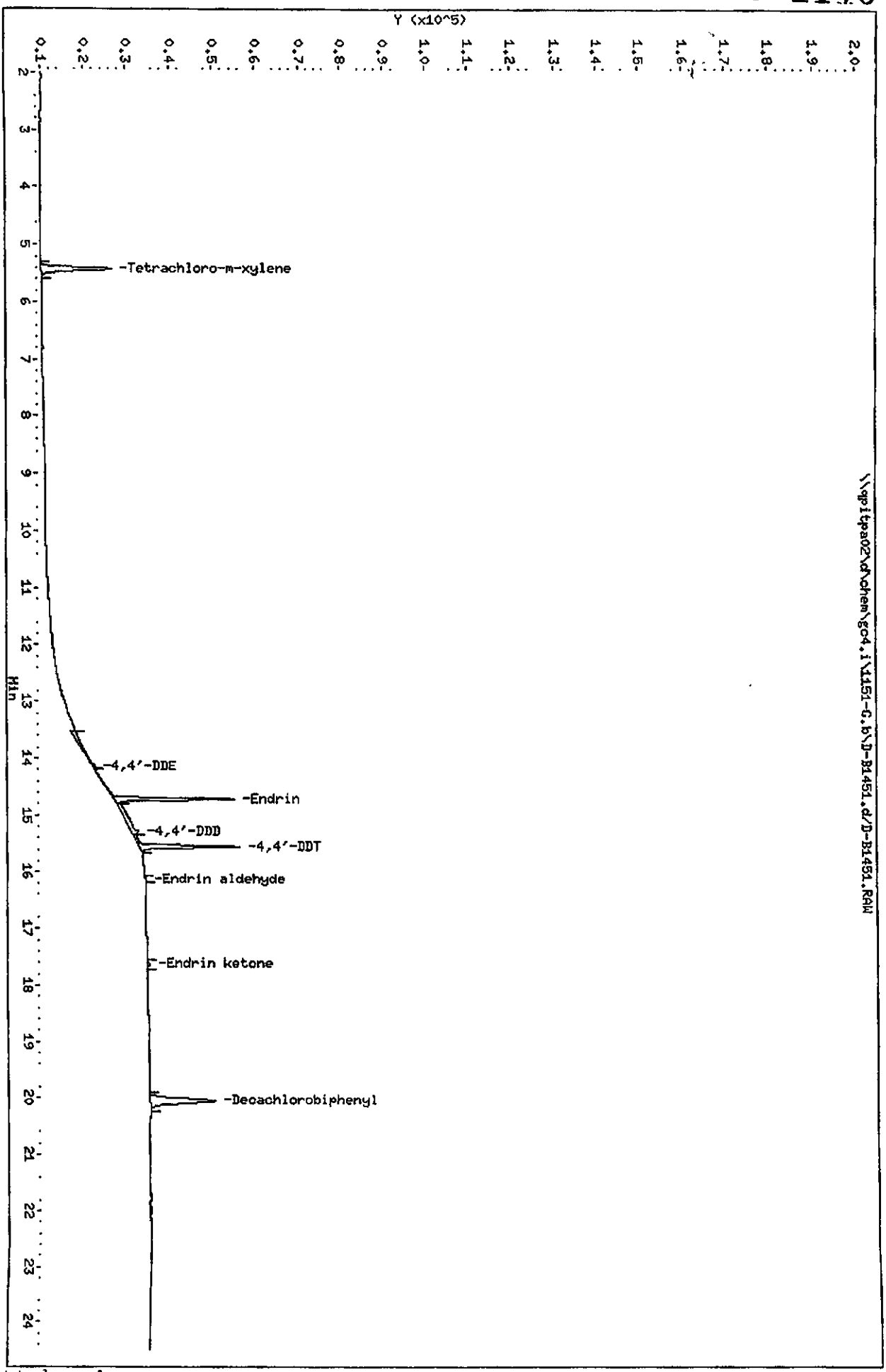
R - Spike/Surrogate failed recovery limits.

DDT= 8.6
Endrin= 3.7

Data File: \\qpitpa02\d\chem\gc4.i\1151-G,b\D-B1451.d
Date : 14-FEB-2001 14:31
Client ID:
Sample Info: EVALB,1151-G,b,,EVALBR.sub,,3,1

Instrument: gc4.i
Operator: 010139
Column diameter: 0.53

Column phase: RTX-1701



Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1465.d
Report Date: 15-Feb-2001 12:06

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1465.d
Lab Smp Id: MEDA
Inj Date : 14-FEB-2001 21:02 Inst ID: gc4.i
Operator : 010139
Smp Info : MEDA,1151-G.b,,INDA.sub,,2,3
Misc Info : 190-100-8
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-B1448.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 4.04
Processing Host: PITPC044

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
$	2 Tetrachloro-m-xylene	5.466	5.426	0.040	18161	0.02500	0.02372
	6 alpha-BHC	8.240	8.220	0.020	22232	0.02500	0.02403
	7 gamma-BHC (Lindane)	9.613	9.600	0.013	21683	0.02500	0.02494
	9 Heptachlor	10.406	10.393	0.013	22052	0.02500	0.02491
	20 Endosulfan I	13.780	13.780	0.000	30661	0.02500	0.02542
	23 Dieldrin	14.386	14.386	0.000	33432	0.02500	0 02548
	26 Endrin	14.713	14.713	0.000	30790	0 02500	0.02525
	29 4,4'-DDD	15.293	15.293	0.000	25682	0.02500	0.02493
	32 4,4'-DDT	15.546	15.546	0.000	25595	0.02500	0.02606
	35 Methoxychlor	16.600	16.600	0.000	27183	0.05000	0.05251
$	38 Decachlorobiphenyl	20.040	20.040	0.000	19493	0.02500	0.02574

Data File: \\qpitpa02\d\chem\go4.i\1151-G.b\D-B1465.d
Date : 14-FEB-2001 21:02
Client ID:
Sample Info: MEDA,1151-G.b,,INDA.sub,,2,3

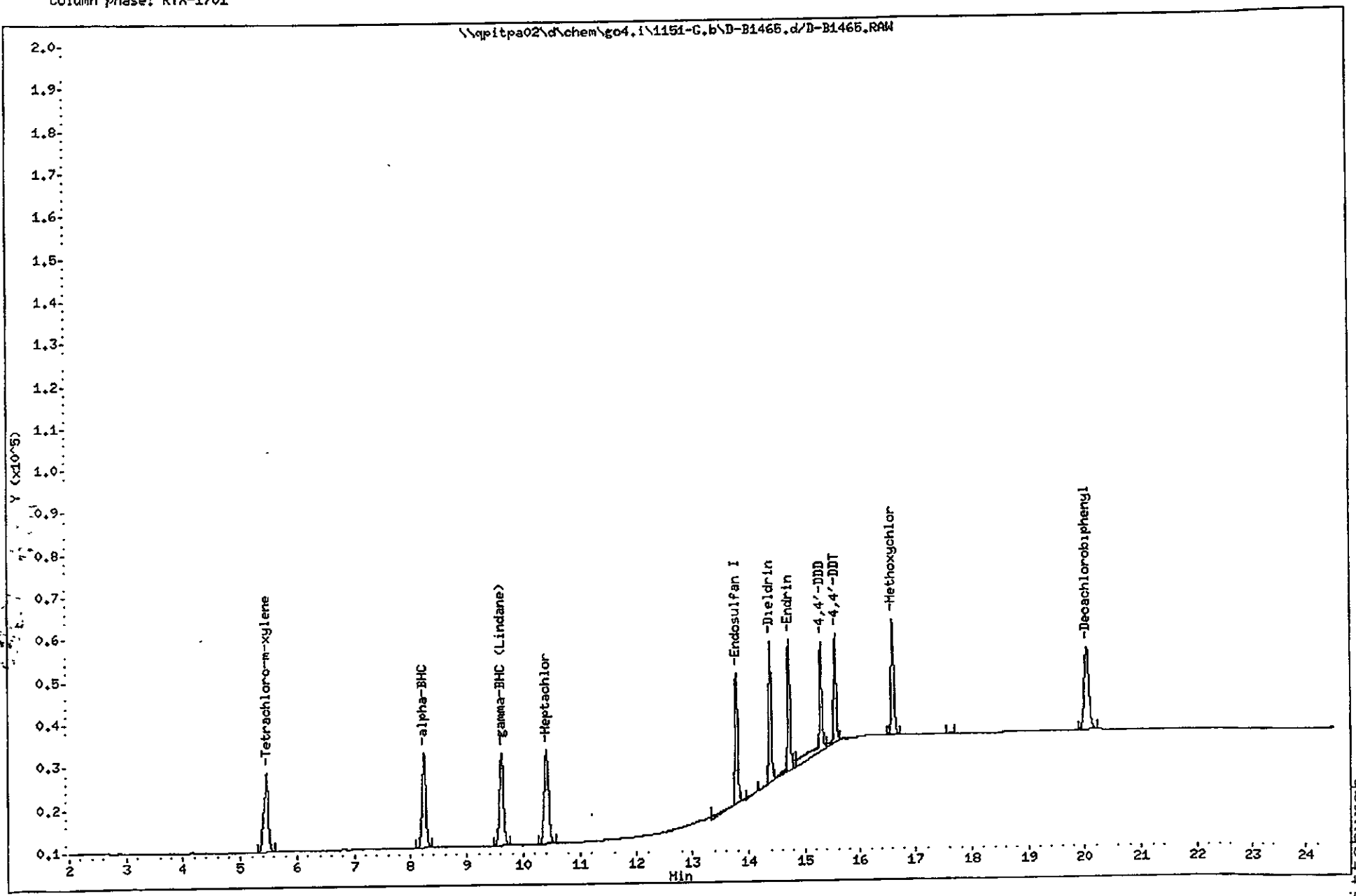
Column phase: RTX-1701

Instrument: go4.i

Operator: 010139
Column diameter: 0.53

3106

675 1115



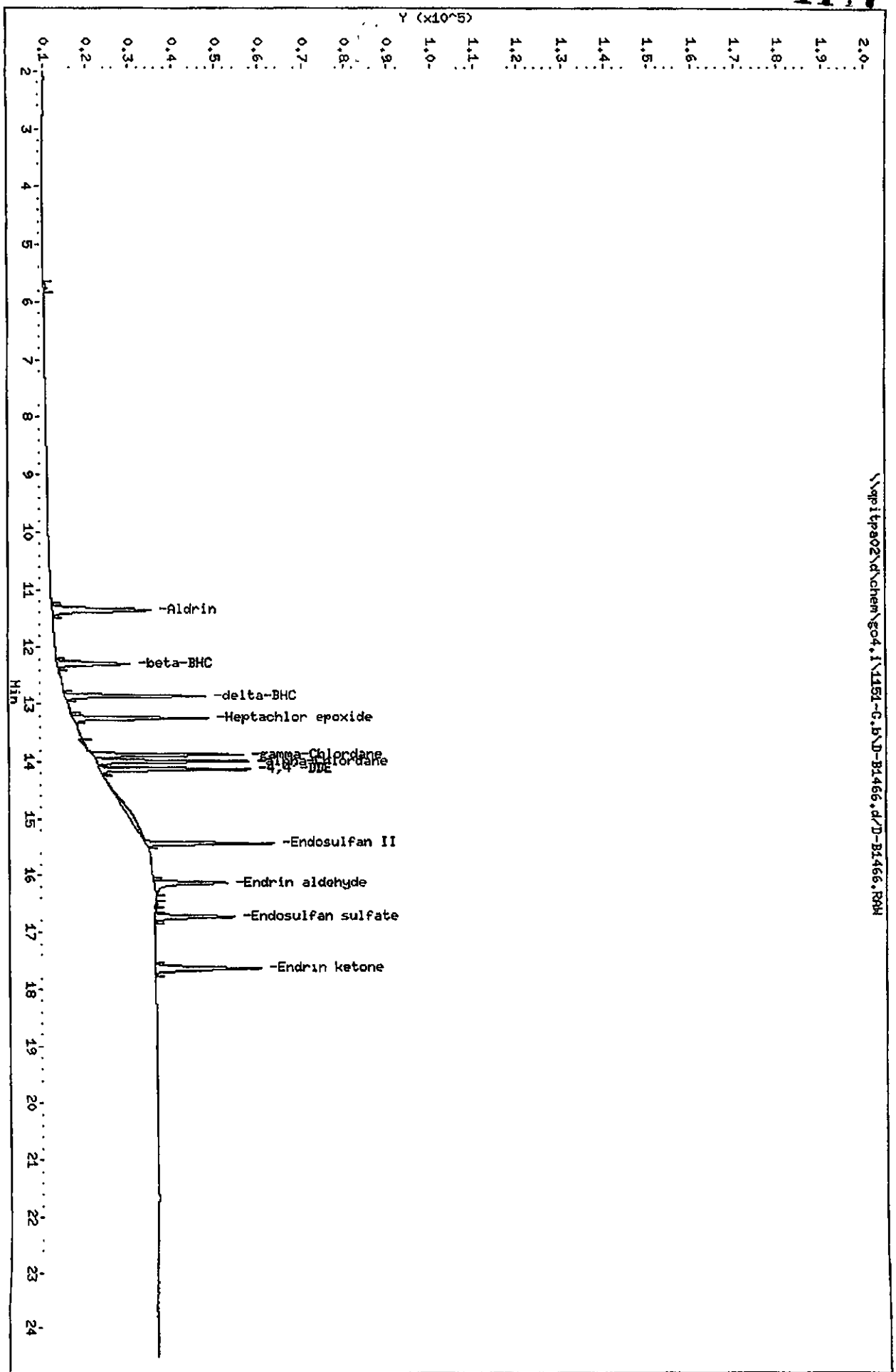
STL Pittsburgh

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1466.d
Report Date: 15-Feb-2001 12:06

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1466.d
Lab Smp Id: MEDB
Inj Date : 14-FEB-2001 21:30
Operator : 010139 Inst ID: gc4.i
Smp Info : MEDB,1151-G.b,,INDB.sub,,2,3
Misc Info : 190-100-14
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-B1448.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDB.sub
Target Version: 4.04
Processing Host: PITPC044

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
13 Aldrin	11.346	11.333	0.013	22938	0.02500	0.02549
10 beta-BHC	12.280	12.273	0.007	16701	0.02500	0.02612
11 delta-BHC	12.846	12.846	0.000	32532	0.02500	0.02816
17 Heptachlor epoxide	13.240	13.240	0.000	31535	0.02500	0.02646
18 gamma-Chlordane	13.880	13.873	0.007	35148	0.02500	0.02617
19 alpha-Chlordane	13.993	13.986	0.007	35409	0.02500	0.02615
22 4,4'-DDE	14.126	14.126	0.000	35104	0.02500	0.02635
31 Endosulfan II	15.420	15.420	0.000	29704	0.02500	0.02477
33 Endrin aldehyde	16.126	16.126	0.000	16980	0.02500	0.02578
34 Endosulfan sulfate	16.740	16.740	0.000	18296	0.02500	0.03052
37 Endrin ketone	17.626	17.626	0.000	24596	0.02500	0.02669


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1466.d
Date : 14-FEB-2001 21:30
Client ID:
Sample Info: MEDB,1151-G.b,,INDB,sub,,2,3
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
Column phase: RTX-1701
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1466.d/D-B1466.RAW
Y (x10^5)
Min
-Aldrin
-beta-BHC
-delta-BHC
-Heptachlor epoxide
-gamma-Chlordane
-alpha-Chlordane
-4,4'-DDE
-Endosulfan II
-Endrin aldehyde
-Endosulfan sulfate
-Endrin ketone

PESTICIDE
QC DATA

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

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

Lab Sample ID:C1B120000 326

Sample WT/Vol: 1000 / mL
Work Order: DV05T1AA
Dilution factor: 1

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/14/01

QC Batch: 1043326

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
309-00-2	Aldrin	0.050	U
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
72-54-8	4,4'-DDD	0.050	U
72-55-9	4,4'-DDE	0.050	U
50-29-3	4,4'-DDT	0.050	U
60-57-1	Dieldrin	0.050	U
959-98-8	Endosulfan I	0.050	U
33213-65-9	Endosulfan II	0.050	U
1031-07-8	Endosulfan sulfate	0.050	U
72-20-8	Endrin	0.050	U
7421-93-4	Endrin aldehyde	0.050	U
53494-70-5	Endrin ketone	0.050	U
76-44-8	Heptachlor	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
72-43-5	Methoxychlor	0.10	U
8001-35-2	Toxaphene	2.0	U

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1453.d
Report Date: 15-Feb-2001 11:18

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1453.d
Lab Smp Id: DV05T1AA Client Smp ID: PBLK3326
Inj Date : 14-FEB-2001 15:27
Operator : 010139 Inst ID: gc4.i
Smp Info : DV05T1AA,1151-G.b,,PEST.sub,,3,
Misc Info : 090228-BLK
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC044

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 2	Tetrachloro-m-xylene	5.246	5.206	0.040	15688	0.01454	0.1454
6	alpha-BHC	Compound Not Detected.					
7	gamma-BHC (Lindane)	Compound Not Detected.					
10	beta-BHC	Compound Not Detected.					
8	Chlordane	Compound Not Detected.					
9	Heptachlor	Compound Not Detected.					
11	delta-BHC	Compound Not Detected.					
13	Aldrin	Compound Not Detected.					
17	Heptachlor epoxide	Compound Not Detected					
18	gamma-Chlordane	Compound Not Detected.					
19	alpha-Chlordane	Compound Not Detected.					
20	Endosulfan I	Compound Not Detected.					
22	4,4'-DDE	Compound Not Detected.					
23	Dieldrin	Compound Not Detected.					
26	Endrin	Compound Not Detected.					

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1453.d
Report Date: 15-Feb-2001 11:18

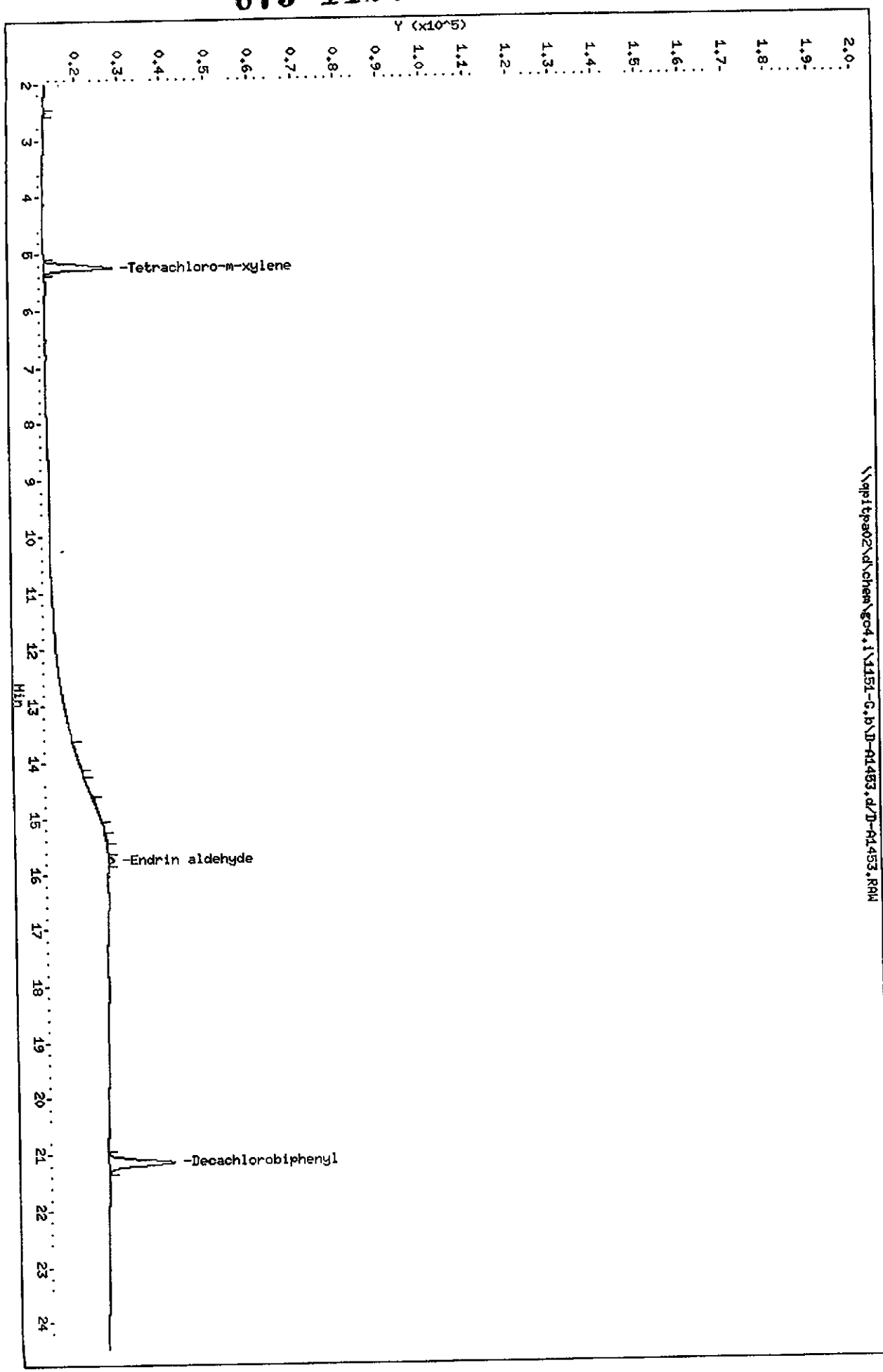
675 1121

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
29	4,4'-DDD	Compound Not Detected.					
30	Toxaphene	Compound Not Detected.					
31	Endosulfan II	Compound Not Detected.					
32	4,4'-DDT	Compound Not Detected.					
33	Endrin aldehyde	15.740	15.693	0.047	1403	0 00125	0.01248(a)
34	Endosulfan sulfate	Compound Not Detected.					
35	Methoxychlor	Compound Not Detected.					
37	Endrin ketone	Compound Not Detected.					
$ 38	Decachlorobiphenyl	21.146	21.146	0 000	15020	0.01952	0.1952

QC Flag Legend

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

675 1122


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1453.d
Date : 14-FEB-2001 16:27
Client ID: PBLK3326
Sample Info: DV05T1AA,1151-G.b,,PEST.sub,,3,
Volume Injected (uL): 1.0
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1453.d/D-A1453.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-Endrin aldehyde
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1453.d
Report Date: 15-Feb-2001 12:03

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1453.d
Lab Smp Id: DV05T1AA Client Smp ID: PBLK3326
Inj Date : 14-FEB-2001 15:27
Operator : 010139 Inst ID: gc4.i
Smp Info : DV05T1AA,1151-G.b,,PEST.sub,,3,
Misc Info : 090228-BLK
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-B1448.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC044

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$	2 Tetrachloro-m-xylene	5.466	5.426	0.040	11169	0.01458	0.1458
	6 alpha-BHC	Compound Not Detected.					
	7 gamma-BHC (Lindane)	Compound Not Detected.					
	10 beta-BHC	Compound Not Detected.					
	8 Chlordane	Compound Not Detected.					
	9 Heptachlor	Compound Not Detected.					
	11 delta-BHC	Compound Not Detected.					
	13 Aldrin	Compound Not Detected.					
	17 Heptachlor epoxide	Compound Not Detected.					
	18 gamma-Chlordane	Compound Not Detected.					
	19 alpha-Chlordane	Compound Not Detected.					
	20 Endosulfan I	Compound Not Detected.					
	22 4,4'-DDE	Compound Not Detected.					
	23 Dieldrin	Compound Not Detected.					
	26 Endrin	Compound Not Detected.					

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1453.d
Report Date: 15-Feb-2001 12:03

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	29 4,4'-DDD	Compound Not Detected.					
	30 Toxaphene	Compound Not Detected.					
	31 Endosulfan II	Compound Not Detected.					
	32 4,4'-DDT	Compound Not Detected.					
	33 Endrin aldehyde	Compound Not Detected.					
	34 Endosulfan sulfate	Compound Not Detected.					
	35 Methoxychlor	Compound Not Detected.					
	37 Endrin ketone	Compound Not Detected.					
$	38 Decachlorobiphenyl	20.046	20.040	0 006	14379	0.01899	0.1899

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1453.d
Date : 14-FEB-2001 15:27
Client ID: PBLK3326
Sample Info: DV05T1AA,1151-G.b,,PEST.sub,,3,
Volume Injected (uL): 1.0
Column phase: RTX-1701

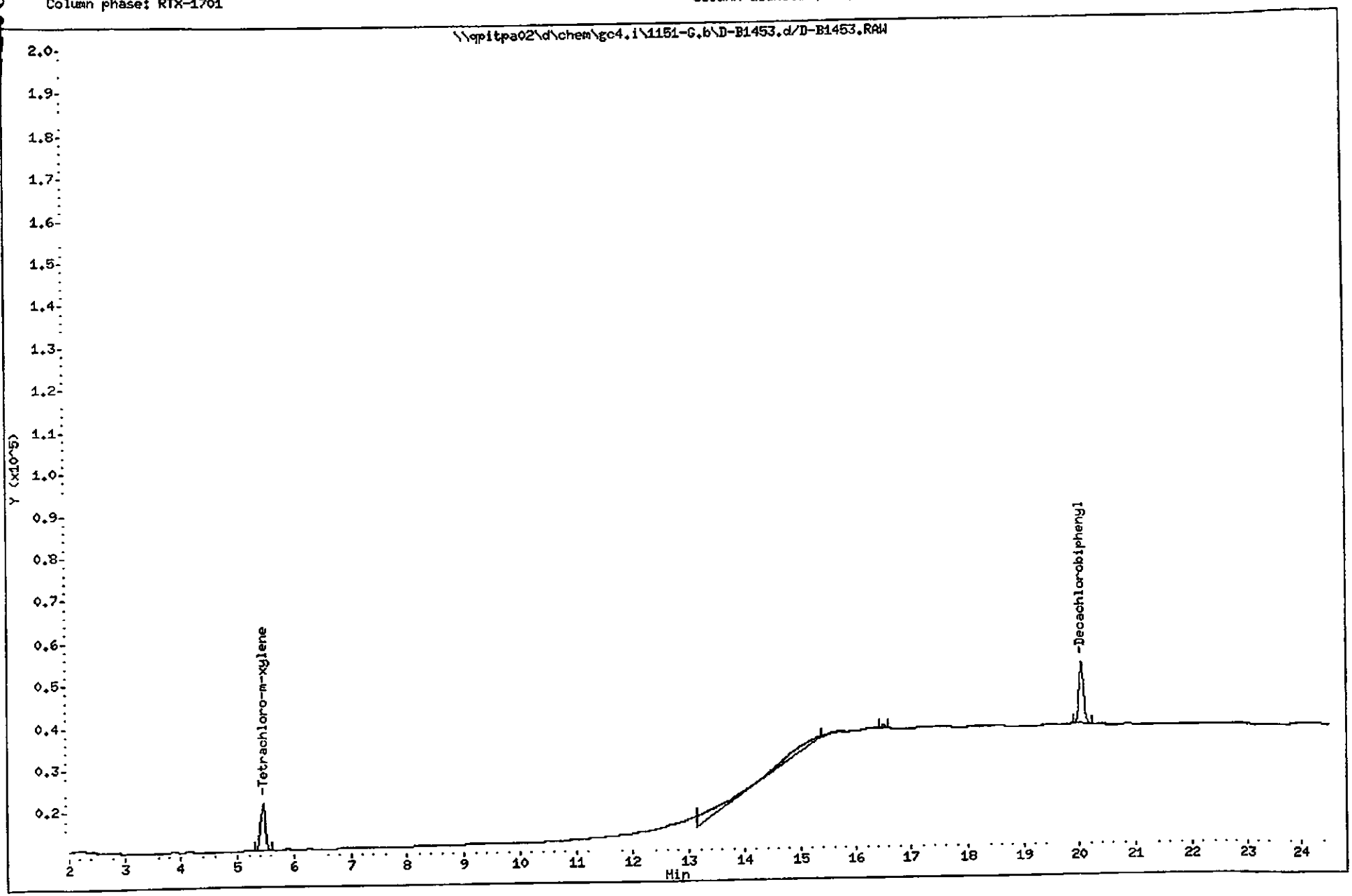
Instrument: gc4.i

Operator: 010139
Column diameter: 0.53

675 1125

3116

\\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1453.d/D-B1453.RAW



STL Pittsburgh

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

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

Lab Sample ID:C1B120000 326

Sample WT/Vol: 1000 / mL
Work Order: DV05T1AC
Dilution factor: 1

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/14/01

QC Batch: 1043326

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
309-00-2	Aldrin	0.223	
58-89-9	gamma-BHC (Lindane)	0.226	
50-29-3	4,4'-DDT	0.522	
60-57-1	Dieldrin	0.518	
72-20-8	Endrin	0.488	
76-44-8	Heptachlor	0.229	

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1454.d
Report Date: 15-Feb-2001 11:18

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1454.d
Lab Smp Id: DV05T1AC Client Smp ID: LCS3326
Inj Date : 14-FEB-2001 15:55
Operator : 010139 Inst ID: gc4.i
Smp Info : DV05T1AC,1151-G.b,,PEST.sub,,3,
Misc Info : 090228-LCS
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC044

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

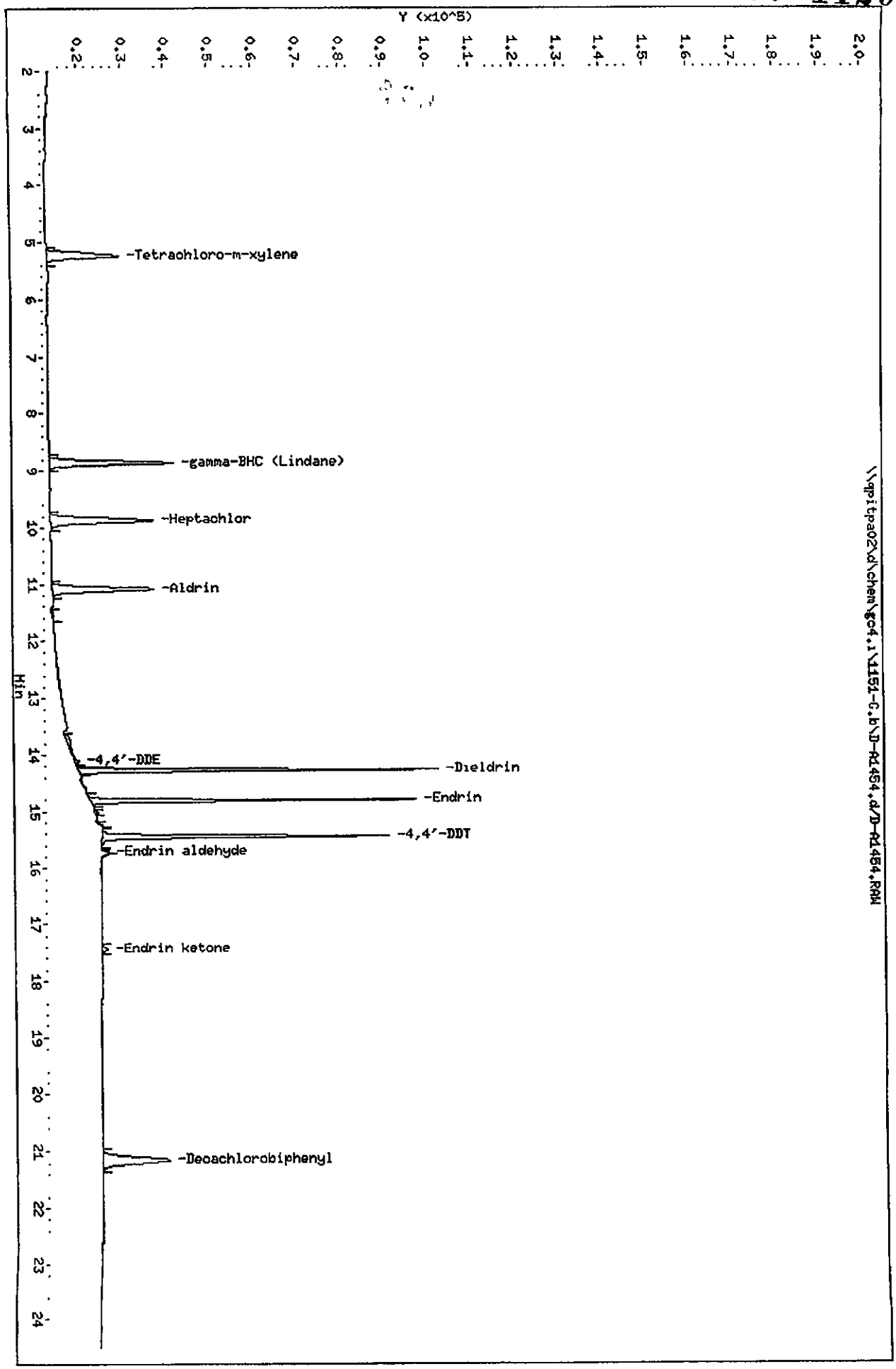
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 2 Tetrachloro-m-xylene	5.240	5.206	0.034	16788	0.01556	0.1556
6 alpha-BHC	Compound Not Detected.					
7 gamma-BHC (Lindane)	8.853	8.840	0.013	28630	0.02318	0.2318
10 beta-BHC	Compound Not Detected.					
8 Chlordane	Compound Not Detected.					
9 Heptachlor	9.866	9 853	0.013	23771	0.02318	0.2318
11 delta-BHC	Compound Not Detected.					
13 Aldrin	11 080	11 066	0.014	23553	0.02297	0 2297
17 Heptachlor epoxide	Compound Not Detected.					
18 gamma-Chlordane	Compound Not Detected.					
19 alpha-Chlordane	Compound Not Detected.					
20 Endosulfan I	Compound Not Detected.					
22 4,4'-DDE	14.106	14 106	0.000	933	<0.0	0.005718(a)
23 Dieldrin	14 266	14 266	0.000	83010	0.05287	0.5286
26 Endrin	14.800	14.800	0.000	75031	0.05274	0.5274
29 4,4'-DDD	Compound Not Detected.					

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1454.d
Report Date: 15-Feb-2001 11:18

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	30 Toxaphene	Compound Not Detected.					
	31 Endosulfan II	Compound Not Detected.					
	32 4,4'-DDT	15.440	15.440	0.000	66183	0.05350	0.5350
	33 Endrin aldehyde	15.700	15.693	0.007	733	<0.0	0.006521(a)
	34 Endosulfan sulfate	Compound Not Detected.					
	35 Methoxychlor	Compound Not Detected.					
	37 Endrin ketone	17.433	17.433	0.000	1174	0.00108	0.01078(a)
$	38 Decachlorobiphenyl	21.146	21.146	0.000	15574	0.02024	0.2024

QC Flag Legend

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


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1454.d
Date : 14-FEB-2001 15:53
Client ID: LCS3326
Sample Info: DV05T1AC,1151-G,b,,PEST,sub,,3,
Volume Injected (uL): 1.0
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1454.d\D-A1454.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-gamma-BHC (Lindane)
-Heptachlor
-Aldrin
-4,4'-DDE
-Dieldrin
-Endrin
-4,4'-DDT
-Endrin aldehyde
-Endrin ketone
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1454.d
Report Date: 15-Feb-2001 12:04

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1454.d
Lab Smp Id: DV05T1AC Client Smp ID: LCS3326
Inj Date : 14-FEB-2001 15:55
Operator : 010139 Inst ID: gc4.i
Smp Info : DV05T1AC,1151-G.b,,PEST.sub,,3,
Misc Info : 090228-LCS
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-B1448.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC044

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 2 Tetrachloro-m-xylene	5.466	5.426	0.040	11747	0.01534	0.1534
6 alpha-BHC	Compound Not Detected.					
7 gamma-BHC (Lindane)	9.613	9.600	0.013	19619	0.02257	0.2257
10 beta-BHC	Compound Not Detected					
8 Chlordane	Compound Not Detected.					
9 Heptachlor	10.406	10.393	0.013	20304	0.02294	0 2294
11 delta-BHC	Compound Not Detected.					
13 Aldrin	11.346	11 333	0.013	20057	0.02229	0.2229
17 Heptachlor epoxide	Compound Not Detected.					
18 gamma-Chlordane	Compound Not Detected.					
19 alpha-Chlordane	Compound Not Detected.					
20 Endosulfan I	Compound Not Detected					
22 4,4'-DDE	14.133	14 126	0 007	562	<0.0	0.004219(a)
23 Dieldrin	14.386	14 386	0.000	68019	0.05183	0.5183
26 Endrin	14.713	14.713	0.000	59452	0.04875	0.4875

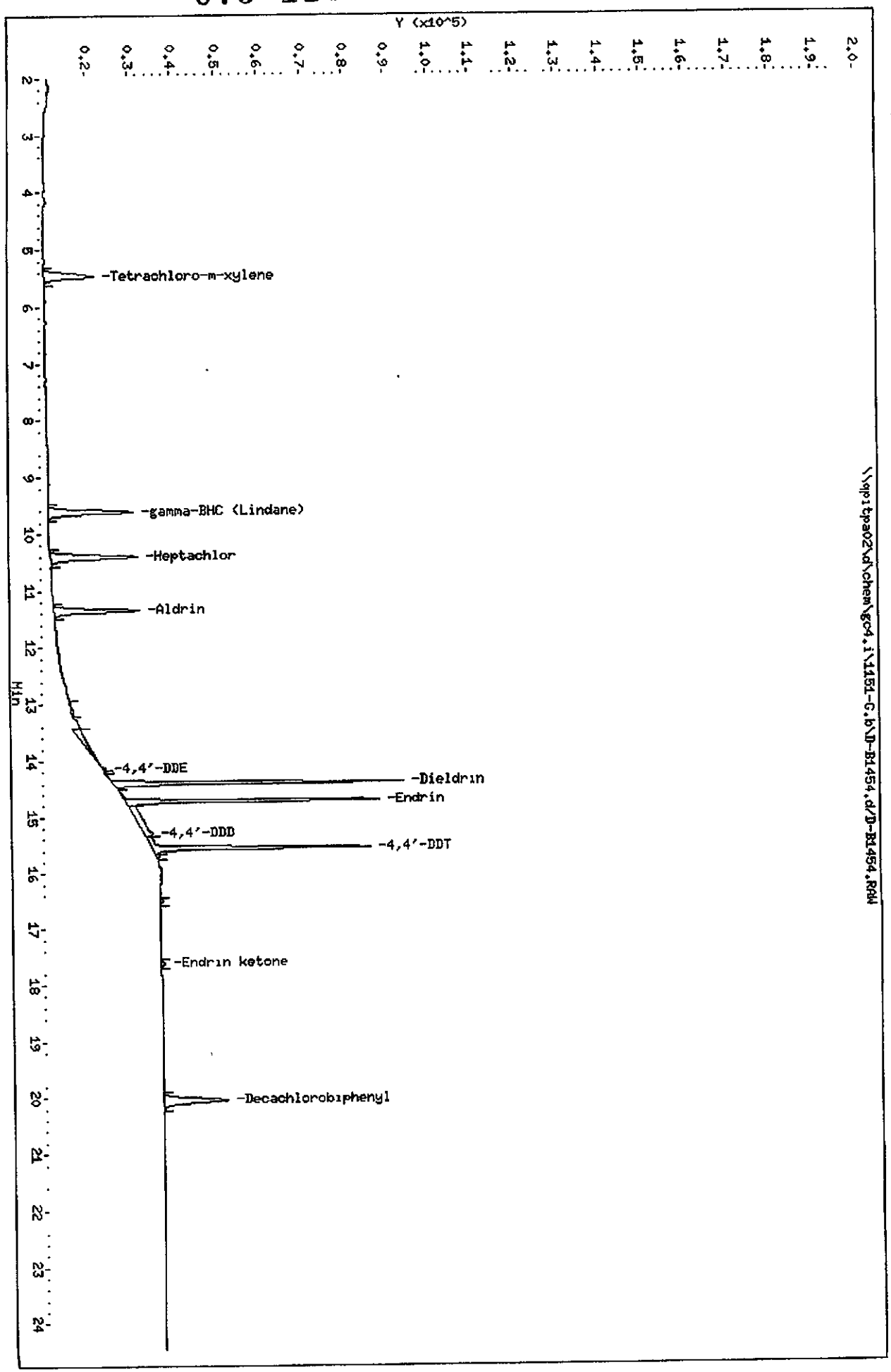
Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1454.d
Report Date: 15-Feb-2001 12:04

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
29	4,4'-DDD	15.293	15.293	0.000	2047	0 00199	0.01987(a)
30	Toxaphene	Compound Not Detected.					
31	Endosulfan II	Compound Not Detected.					
32	4,4'-DDT	15.546	15.546	0.000	51222	0.05215	0.5215
33	Endrin aldehyde	Compound Not Detected.					
34	Endosulfan sulfate	Compound Not Detected.					
35	Methoxychlor	Compound Not Detected.					
37	Endrin ketone	17.626	17 626	0.000	1011	0.00110	0.01097(a)
$ 38	Decachlorobiphenyl	20.046	20.040	0.006	15080	0.01992	0.1992

QC Flag Legend

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

675 1132


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1454.d
Date : 14-FEB-2001 15:55
Client ID: LCS3326
Sample Info: BV05T1AC,1151-G.b,,PEST,sub,,3,
Volume Injected (uL): 1.0
Column phase: RTX-1701
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1454.d/D-B1454.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-gamma-BHC (Lindane)
-Heptachlor
-Aldrin
-4,4'-DDE
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Endrin ketone
-Decachlorobiphenyl

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

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

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

Lab Sample ID: C1B120000 326

Sample WT/Vol: 1000 / mL
Work Order: DV05T1AD
Dilution factor: 1

Date Received: 02/09/01
Date Extracted: 02/12/01
Date Analyzed: 02/14/01

QC Batch: 1043326

Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
309-00-2	Aldrin	0.209	
58-89-9	gamma-BHC (Lindane)	0.213	
50-29-3	4,4'-DDT	0.491	
60-57-1	Dieldrin	0.483	
72-20-8	Endrin	0.436	
76-44-8	Heptachlor	0.217	

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1455.d
Report Date: 15-Feb-2001 11:18

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1455.d
Lab Smp Id: DV05T1AD Client Smp ID: LCD3326
Inj Date : 14-FEB-2001 16:23
Operator : 010139 Inst ID: gc4.i
Smp Info : DV05T1AD,1151-G.b,,PEST.sub,,3,
Misc Info : 090228-LCD
Comment : 8081 analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081A.m
Meth Date : 15-Feb-2001 11:09 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-A1448.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC044

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

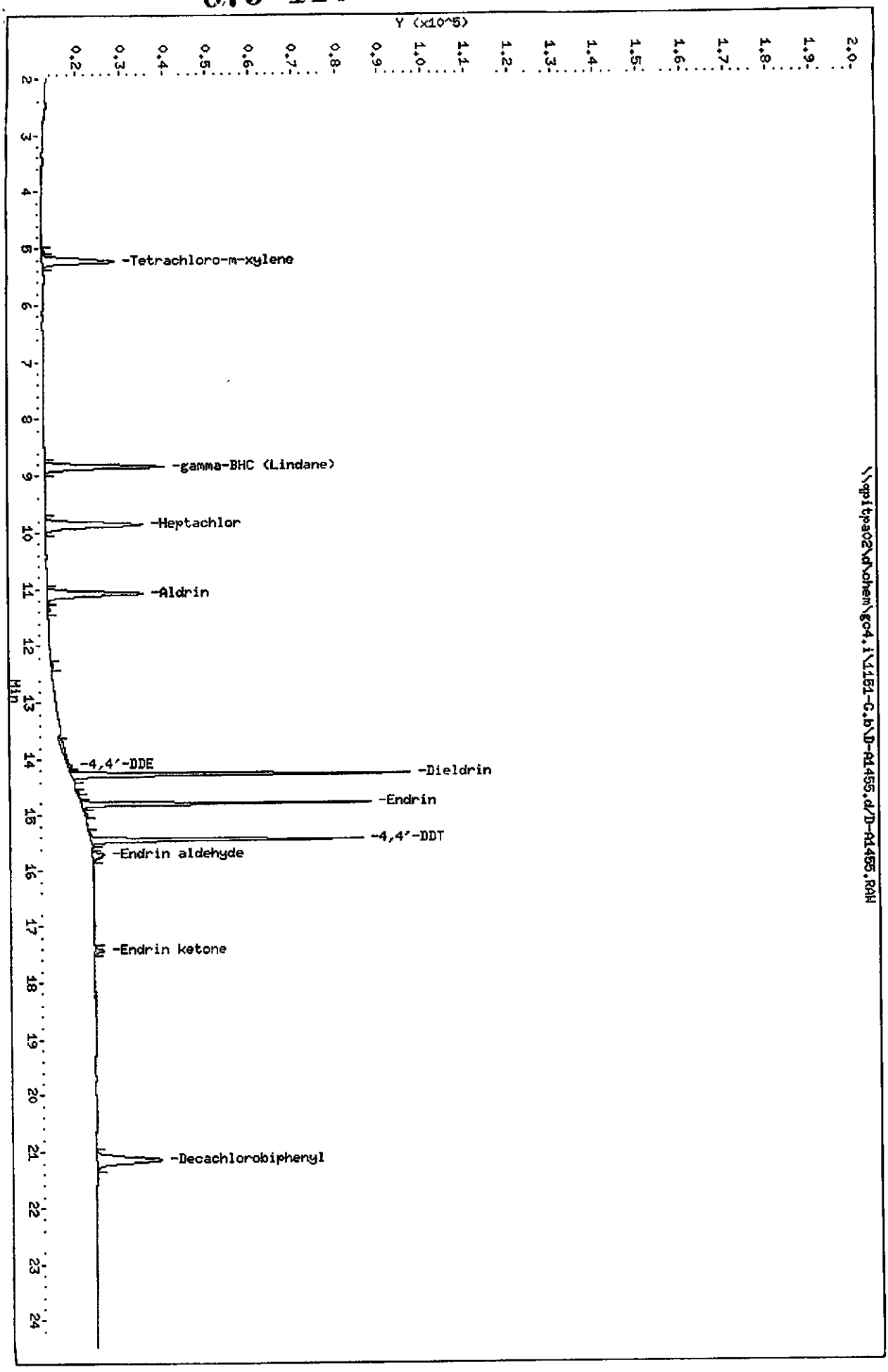
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 2 Tetrachloro-m-xylene	5.233	5.206	0.027	16446	0.01524	0.1524
6 alpha-BHC	Compound Not Detected.					
7 gamma-BHC (Lindane)	8.846	8 840	0.006	27337	0.02214	0.2214
10 beta-BHC	Compound Not Detected.					
8 Chlordane	Compound Not Detected.					
9 Heptachlor	9.866	9.853	0.013	22285	0.02173	0.2173
11 delta-BHC	Compound Not Detected					
13 Aldrin	11.080	11.066	0.014	22070	0.02153	0.2153
17 Heptachlor epoxide	Compound Not Detected.					
18 gamma-Chlordane	Compound Not Detected.					
19 alpha-Chlordane	Compound Not Detected.					
20 Endosulfan I	Compound Not Detected.					
22 4,4'-DDE	14.106	14 106	0.000	813	<0.0	0.004982(a)
23 Dieldrin	14.266	14.266	0 000	78324	0.04988	0.4988
26 Endrin	14.800	14.800	0 000	66967	0.04707	0.4707
29 4,4'-DDD	Compound Not Detected.					

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1455.d
Report Date: 15-Feb-2001 11:18

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
30 Toxaphene	Compound Not Detected.					
31 Endosulfan II	Compound Not Detected.					
32 4,4'-DDT	15 440	15 440	0.000	62752	0.05072	0.5072
33 Endrin aldehyde	15 700	15.693	0.007	2613	0.00232	0.02325(a)
34 Endosulfan sulfate	Compound Not Detected.					
35 Methoxychlor	Compound Not Detected.					
37 Endrin ketone	17.433	17.433	0.000	2022	0.00186	0.01856(a)
$ 38 Decachlorobiphenyl	21.146	21.146	0 000	14802	0.01923	0.1923

QC Flag Legend

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


Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1455.d
Date : 14-FEB-2001 16:23
Client ID: LCD3326
Sample Info: DV05T1AD,1151-G.b,,PEST,sub,,3,
Volume Injected (uL): 1.0
Column phase: RTX-50
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\qpitpa02\d\chem\gc4.i\1151-G.b\D-A1455.d/D-A1455.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-gamma-BHC (Lindane)
-Heptachlor
-Aldrin
-4,4'-DDE
-Dieldrin
-Endrin
-4,4'-DDT
-Endrin aldehyde
-Endrin ketone
-Decachlorobiphenyl

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1455.d
Report Date: 15-Feb-2001 12:04

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1455.d
Lab Smp Id: DV05T1AD Client Smp ID: LCD3326
Inj Date : 14-FEB-2001 16:23
Operator : 010139 Inst ID: gc4.i
Smp Info : DV05T1AD,1151-G.b,,PEST.sub,,3,
Misc Info : 090228-LCD
Comment : 8081 Analysis
Method : \\qpitpa02\d\chem\gc4.i\1151-G.b\8081B.m
Meth Date : 15-Feb-2001 11:53 matkol Quant Type: ESTD
Cal Date : 14-FEB-2001 13:07 Cal File: D-B1448.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEST.sub
Target Version: 4.04
Processing Host: PITPC044

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

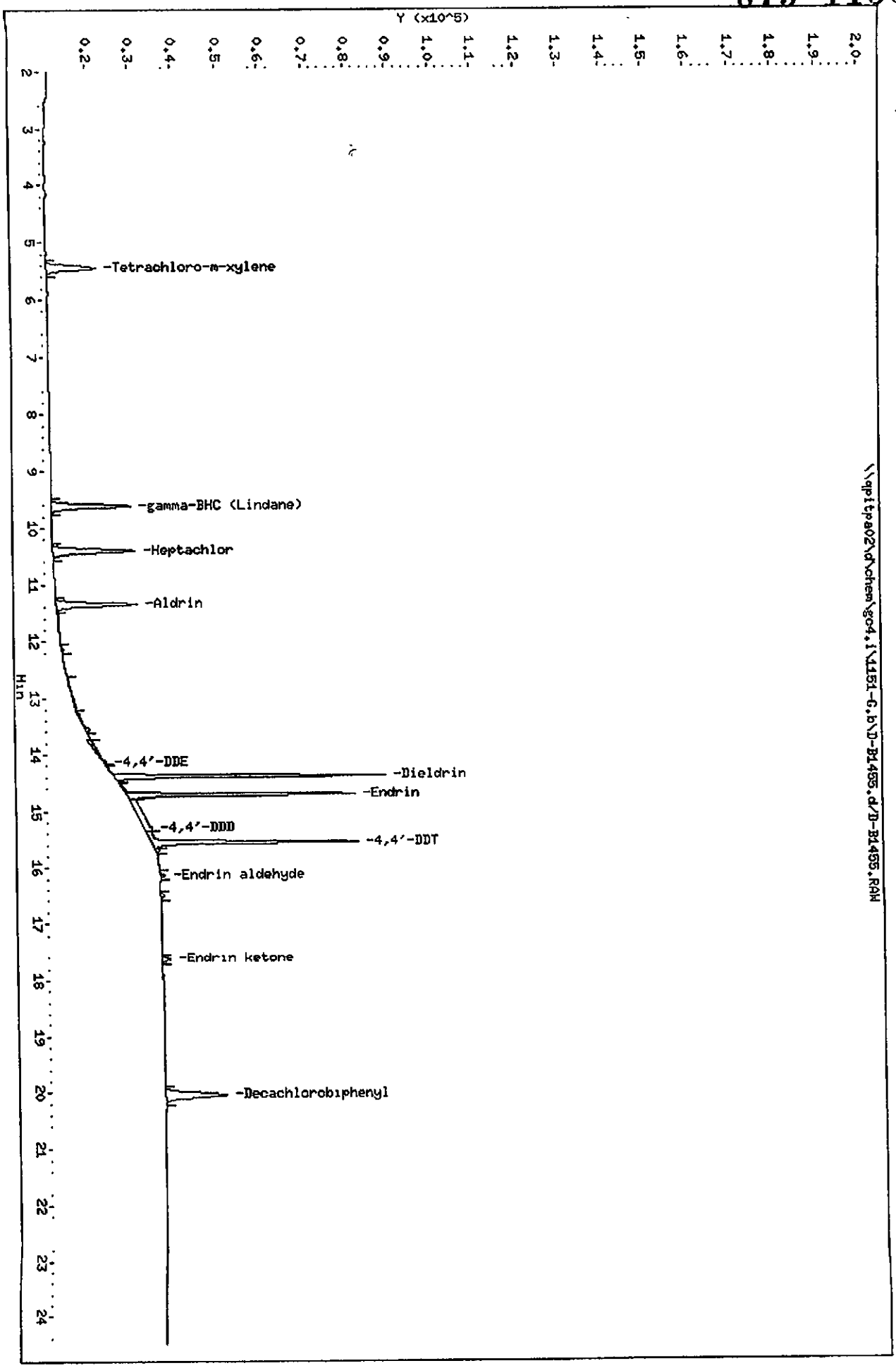
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
$ 2 Tetrachloro-m-xylene	5.453	5.426	0.027	11479	0.01499	0.1499
6 alpha-BHC	Compound Not Detected.					
7 gamma-BHC (Lindane)	9.613	9.600	0.013	18525	0.02131	0 2131
10 beta-BHC	Compound Not Detected.					
8 Chlordane	Compound Not Detected.					
9 Heptachlor	10.406	10.393	0.013	19195	0.02168	0.2168
11 delta-BHC	Compound Not Detected.					
13 Aldrin	11 346	11.333	0.013	18773	0.02086	0.2086
17 Heptachlor epoxide	Compound Not Detected					
18 gamma-Chlordane	Compound Not Detected.					
19 alpha-Chlordane	Compound Not Detected.					
20 Endosulfan I	Compound Not Detected.					
22 4,4'-DDE	14 133	14.126	0.007	487	<0.0	0.003656(a)
23 Dieldrin	14.386	14.386	0.000	63330	0.04826	0 4826
26 Endrin	14.713	14 713	0.000	53133	0.04357	0.4357

Data File: \\qpitpa02\d\chem\gc4.i\1151-G.b\D-B1455.d
Report Date: 15-Feb-2001 12:04

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
29	4,4'-DDD	15.293	15.293	0 000	1829	0 00178	0.01776(a)
30	Toxaphene	Compound Not Detected.					
31	Endosulfan II	Compound Not Detected.					
32	4,4'-DDT	15.546	15.546	0.000	48187	0 04906	0.4906
33	Endrin aldehyde	16.133	16.126	0.007	1060	0.00161	0.01609(a)
34	Endosulfan sulfate	Compound Not Detected.					
35	Methoxychlor	Compound Not Detected.					
37	Endrin ketone	17.626	17.626	0.000	1771	0.00192	0.01922(a)
$ 38	Decachlorobiphenyl	20.046	20.040	0.006	14221	0.01878	0.1878

QC Flag Legend

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


Data File: \\apitpa02\d\chem\gc4.i\1151-G.b\D-B1455.d
Date : 14-FEB-2001 16:23
Client ID: LCM3326
Sample Info: DW05T1AD,1151-G.b,,PEST,sub,,3,
Volume Injected (uL): 1.0
Column phase: RTX-1701
Instrument: gc4.i
Operator: 010139
Column diameter: 0.53
\\apitpa02\d\chem\gc4.i\1151-G.b\D-B1455.d\D-B1455.RAW
Y (x10^5)
Min
-Tetrachloro-m-xylene
-gamma-BHC (Lindane)
-Heptachlor
-Aldrin
-4,4'-DDE
-Dieldrin
-Endrin
-4,4'-DDD
-4,4'-DDT
-Endrin aldehyde
-Endrin ketone
-Decachlorobiphenyl

PESTICIDE
MISCELLANEOUS

STL Pittsburgh

IBA 12/13/00

675 1141

STL - Pittsburgh

Separatory Funnel Extraction Worksheet

Logbook ID: OP43

Start Date	Date Completed	Parameter	Method	Solvent	Solvent Lot	Solvent Mfg	Cleanup Method
2-12-01	2-12-01	8081A/8082 Pest/PCB	3510C	Hexane/MeCl2	T37307	Baker	NA

	Lot Number	Sample ID	Client ID	Sample Volume (mL)	Final Volume (mL)	pH	Surrogate #	Surr Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	Cleanup Date
X	1. D1B090328	BLK	NA	1000	10.0	5	190-110-6	1.0	NA	NA	NA
	2.	LCS	Pest			5			190-103-6	0.5	
	3.	LCS Dup				5			↓	↓	
	4.	LCS	PCB			5			190-110-7	1.0	
	5.	LCSDup				5			↓	↓	
	6.	001				7			NA	NA	
	7. D1B090331	162				5					
CB 2-12	8. ~~D1B090376~~	001				5					
	9. D1B090383	073				5					
	10.										
	11.										
	12.										
	13										
	14.										
	15.										
	16										
	17.										
	18										
	19.										
	20.										
	21.										
	22.										
	23.										
	Analyst.										

F. Yurshinski 2-12-01

Extract(s) (record line # from above)	Extract(s) Received Date	Time	Analyst	Location	Extract(s) Relinquished Date	Time	Analyst	Location
All Above All Above	2-12-01	1800	F. Yurshinski	Org Prep	2-12-01	1810	F. Yurshinski	RFI-GC
	2-13-01	0800		Extract	2-13-01	0830		Rack

Sodium Sulfate Mfg/Lot Number: Baker T43640

Reviewed by: Brian A. Pino

Date: 2-12-01

3132

675 1142

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\1151-G.SEQ
Created by : DE11/02/98 on : 2/15/01 10:22
Edited by : LM02/15/01 on : 2/15/01 10:43
Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
REVIEWED BY:

G

Number of Times Edited : 1

Sequence File Header Information:

Number of Rows : 31
Instrument Type : 760 / 900 Series Intelligent Interface
Injection Type : SINGLE

Sequence Sample Descriptions - Channel A

Row	Type	Sample Name	Sample Number	Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend	Norm factor
1	Std Check	EVALB,1151-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Cal:Replace	MEDTOX,1151-G b	190-98-12		1.000	1.000	1.000	1.000	1.000	1 000	0 000	100.000
3	Cal:Replace	MEDCHLOR,1151-G	190-102-9		1.000	1.000	1.000	1.000	1.000	1 000	0.000	100 000
4	Cal:Replace	LOWA,1151-G.b,,	190-100-6		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Cal:Replace	MLOWA,1151-G.b,	190-100-7		1.000	1.000	1.000	1.000	1.000	1 000	0.000	100.000
6	Cal:Replace	MEDA,1151-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
7	Cal:Replace	MHIGHA,1151-G.b	190-100-9		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
8	Cal:Replace	HIGHA,1151-G.b,	190-100-10		1.000	1.000	1 000	1.000	1.000	1.000	0.000	100.000
9	Cal:Replace	LOWB,1151-G.b,,	190-100-12		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
10	Cal:Replace	MLOWB,1151-G.b,	190-100-13		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Cal:Replace	MEDB,1151-G.b,,	190-100-14		1.000	1 000	1.000	1.000	1.000	1.000	0.000	100.000
12	Cal:Replace	MHIGHB,1151-G.b	190-101-1		1.000	1.000	1.000	1 000	1.000	1.000	0.000	100 000
13	Cal:Replace	HIGHB,1151-G b,	190-101-2		1.000	1.000	1.000	1.000	1.000	1 000	0.000	100.000
14	Std Check	2ND A,1151-G.b,	190-101-7		1.000	1.000	1.000	1.000	1.000	1 000	0.000	100.000
15	Std Check	2ND B,1151-G.b,	190-101-10		1.000	1.000	1.000	1.000	1.000	1 000	0.000	100.000
16	Std Check	EVALB,1151-G.b,	190-102-10		1 000	1.000	1.000	1.000	1.000	1.000	0.000	100 000
17	Sample	DVWJE1AD,1151-G	090228-1		1.000	1.000	1.000	1.000	1.000	1.000	0 000	100.000
18	Sample	DV05T1AA,1151-G	090228-BLK		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
19	Sample	DV05T1AC,1151-G	090228-LCS		1.000	1.000	1.000	1 000	1.000	1.000	0.000	100.000
20	Sample	DV05T1AD,1151-G	090228-LCD		1.000	1.000	1.000	1.000	1.000	1 000	0.000	100.000
21	Sample	DVHM31AA,1151-G	020162-28		1 000	1.000	1.000	1.000	1.000	1 000	0.000	100.000
22	Sample	DVHM31AA,1151-G	020162-28		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100 000
23	Sample	DVHM31AA,1151-G	020162-28		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
24	Sample	DVHM31AA,1151-G	020162-28		1.000	1 000	1.000	1.000	1 000	1.000	0.000	100 000
25	Sample	DVHM31AA,1151-G	020162-28		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100 000
26	Sample	DVHM31AA,1151-G	020162-28		1 000	1.000	1.000	1.000	1.000	1 000	0.000	100.000
27	Sample	DVLC71AA,1151-G	020162-BLK		1.000	1.000	1.000	1 000	1.000	1.000	0.000	100.000
28	Sample	DVLC71AC,1151-G	020162-LCS		1.000	1.000	1.000	1 000	1.000	1.000	0.000	100.000
29	Sample	DVLC71AD,1151-G	020162-LCD		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100 000
30	Std Check	MEDA,1151-G.b,,	190-100-8		1 000	1.000	1.000	1.000	1.000	1.000	0.000	100 000
31	Std Check	MEDB,1151-G.b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

Sequence Process Information - Channel A

Row	Site	Rack	Vial	Inst Method	Process Method	Calib Method	Report Format	Raw File	Result File	Baseline File	Modified Raw File	Cal Rpt	Level Name	Update RT	Out Dev
1	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1436	D-A1436		D-A1436	-	-	-	LPT1:
2	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A1437	D-A1437		D-A1437	N	MED	N	LPT1:,LP
3	-	1	2	GEN4C	GEN4A	122190A	TOX	D-A1438	D-A1438		D-A1438	N	MED	N	LPT1:,LP
4	-	1	4	GEN4C	GEN4A	122190A	INDA	D-A1439	D-A1439		D-A1439	N	LOW	N	LPT1.
5	-	1	5	GEN4C	GEN4A	122190A	INDA	D-A1440	D-A1440		D-A1440	N	MLOW	N	LPT1:
6	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A1441	D-A1441		D-A1441	N	MLOW	N	LPT1·
7	-	1	7	GEN4C	GEN4A	122190A	INDA	D-A1442	D-A1442		D-A1442	N	MLOW	N	LPT1:
8	-	1	8	GEN4C	GEN4A	122190A	INDA	D-A1443	D-A1443		D-A1443	N	MLOW	N	LPT1.
9	-	1	9	GEN4C	GEN4A	122190A	INDA	D-A1444	D-A1444		D-A1444	N	LOW	N	LPT1
10	-	1	10	GEN4C	GEN4A	122190A	INDA	D-A1445	D-A1445		D-A1445	N	MLOW	N	LPT1:
11	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A1446	D-A1446		D-A1446	N	MLOW	N	LPT1:
12	-	1	12	GEN4C	GEN4A	122190A	INDA	D-A1447	D-A1447		D-A1447	N	MLOW	N	LPT1:
13	-	1	13	GEN4C	GEN4A	122190A	INDA	D-A1448	D-A1448		D-A1448	N	MLOW	N	LPT1·
14	-	1	23	GEN4C	GEN4A	122190A	INDA	D-A1449	D-A1449		D-A1449	-	-	-	LPT1:
15	-	1	24	GEN4C	GEN4A	122190A	INDA	D-A1450	D-A1450		D-A1450	-	-	-	LPT1
16	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1451	D-A1451		D-A1451	-	-	-	LPT1
17	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1452	D-A1452		D-A1452	-	-	-	LPT1:
18	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1453	D-A1453		D-A1453	-	-	-	LPT1
19	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1454	D-A1454		D-A1454	-	-	-	LPT1·
20	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1455	D-A1455		D-A1455	-	-	-	LPT1.
21	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1456	D-A1456		D-A1456	-	-	-	LPT1

22	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1457	D-A1457	D-A1457	-	-	-	LPT1:
23	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1458	D-A1458	D-A1458	-	-	-	LPT1:
24	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1459	D-A1459	D-A1459	-	-	-	LPT1.
25	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1460	D-A1460	D-A1460	-	-	-	LPT1
26	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1461	D-A1461	D-A1461	-	-	-	LPT1·
27	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1462	D-A1462	D-A1462	-	-	-	LPT1:
28	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1463	D-A1463	D-A1463	-	-	-	LPT1:
29	-	1	1	GEN4C	GEN4A	122190A	EVAL	D-A1464	D-A1464	D-A1464	-	-	-	LPT1:
30	-	1	6	GEN4C	GEN4A	122190A	INDA	D-A1465	D-A1465	D-A1465	-	-	-	LPT1:
31	-	1	11	GEN4C	GEN4A	122190A	INDA	D-A1466	D-A1466	D-A1466	-	-	-	LPT1:

675 1144

H

Turbochrom Sequence File : H:\ACQUIRE\MET_SEQ\1151-G.SEQ
Created by : DE11/02/98 on : 2/15/01 10:22
Edited by : LM02/15/01 on : 2/15/01 10:43
Description : QUANTERRA PGH 8081 RUN ON GC#4 DB608/DB1701
REVIEWED BY:

Number of Times Edited : 1

Sequence File Header Information:

Number of Rows : 31
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,1151-G.b,	190-102-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Cal:Replace	MEDTOX,1151-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,1151-G	190-102-9		1.000	1.000	1.000	1.000	333.000	1.000	0.000	100.000
4	Cal:Replace	LOWA,1151-G.b,,	190-100-6		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
5	Cal:Replace	MLOWA,1151-G.b,	190-100-7		1 000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
6	Cal.Replace	MEDA,1151-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100 000
7	Cal:Replace	MHIGHA,1151-G b	190-100-9		1.000	1.000	1.000	1.000	1 000	1.000	0.000	100 000
8	Cal.Replace	HIGHA,1151-G.b,	190-100-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
9	Cal:Replace	LOWB,1151-G.b,,	190-100-12		1.000	1.000	1 000	1 000	1.000	1.000	0.000	100.000
10	Cal:Replace	MLOWB,1151-G.b,	190-100-13		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Cal:Replace	MEDB,1151-G b,,	190-100-14		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Cal:Replace	MHIGHB,1151-G.b	190-101-1		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Cal:Replace	HIGHB,1151-G.b,	190-101-2		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Std Check	2ND A,1151-G.b,	190-101-7		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Std Check	2ND B,1151-G.b,	190-101-10		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100 000
16	Std Check	EVALB,1151-G.b,	190-102-10		1.000	1 000	1.000	1.000	1.000	1.000	0.000	100.000
17	Sample	DVWJE1AD,1151-G	090228-1		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
18	Sample	DV05T1AA,1151-G	090228-BLK		1.000	1 000	1.000	1.000	1.000	1.000	0.000	100.000
19	Sample	DV05T1AC,1151-G	090228-LCS		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
20	Sample	DV05T1AD,1151-G	090228-LCD		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Sample	DVHM31AA,1151-G	020162-28		1.000	1.000	1.000	1 000	1.000	1.000	0.000	100.000
22	Sample	DVHM31AA,1151-G	020162-28		1.000	1.000	1.000	1.000	1.000	1.000	0 000	100 000
23	Sample	DVHM31AA,1151-G	020162-28		1.000	1.000	1.000	1 000	1 000	1.000	0 000	100 000
24	Sample	DVHM31AA,1151-G	020162-28		1.000	1.000	1.000	1.000	1 000	1.000	0.000	100.000
25	Sample	DVHM31AA,1151-G	020162-28		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
26	Sample	DVHM31AA,1151-G	020162-28		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100 000
27	Sample	DVLC71AA,1151-G	020162-BLK		1.000	1.000	1.000	1 000	1.000	1.000	0.000	100.000
28	Sample	DVLC71AC,1151-G	020162-LCS		1.000	1 000	1.000	1.000	1.000	1.000	0.000	100.000
29	Sample	DVLC71AD,1151-G	020162-LCD		1 000	1 000	1.000	1.000	1.000	1.000	0.000	100.000
30	Std Check	MEDA,1151-G.b,,	190-100-8		1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
31	Std Check	MEDB,1151-G.b,,	190-100-14		1.000	1.000	1.000	1.000	1 000	1.000	0.000	100.000

Sequence Process Information - Channel B

Row	Site	Rack	Vial	Inst Method	Process Method	Calib Method	Report Format	Raw File	Result File	Baseline File	Modified Raw File	Cal Rpt	Level Name	Update RT	Out Dev
1	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1436	D-B1436		D-B1436	-	-	-	LPT1:
2	-	1	2	GEN4C	GEN4B	122190A	TOX	D-B1437	D-B1437		D-B1437	N	MED	N	LPT1:,LP
3	-	1	2	GEN4C	GEN4B	122190A	TOX	D-B1438	D-B1438		D-B1438	N	MED	N	LPT1:,LP
4	-	1	4	GEN4C	GEN4B	122190A	INDA	D-B1439	D-B1439		D-B1439	N	LOW	N	LPT1:
5	-	1	5	GEN4C	GEN4B	122190A	INDA	D-B1440	D-B1440		D-B1440	N	MLOW	N	LPT1:
6	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B1441	D-B1441		D-B1441	N	MLOW	N	LPT1:
7	-	1	7	GEN4C	GEN4B	122190A	INDA	D-B1442	D-B1442		D-B1442	N	MLOW	N	LPT1:
8	-	1	8	GEN4C	GEN4B	122190A	INDA	D-B1443	D-B1443		D-B1443	N	MLOW	N	LPT1:
9	-	1	9	GEN4C	GEN4B	122190A	INDA	D-B1444	D-B1444		D-B1444	N	LOW	N	LPT1:
10	-	1	10	GEN4C	GEN4B	122190A	INDA	D-B1445	D-B1445		D-B1445	N	MLOW	N	LPT1:
11	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B1446	D-B1446		D-B1446	N	MLOW	N	LPT1:
12	-	1	12	GEN4C	GEN4B	122190A	INDA	D-B1447	D-B1447		D-B1447	N	MLOW	N	LPT1:
13	-	1	13	GEN4C	GEN4B	122190A	INDA	D-B1448	D-B1448		D-B1448	N	MLOW	N	LPT1:
14	-	1	23	GEN4C	GEN4B	122190A	INDA	D-B1449	D-B1449		D-B1449	-	-	-	LPT1:
15	-	1	24	GEN4C	GEN4B	122190A	INDA	D-B1450	D-B1450		D-B1450	-	-	-	LPT1:
16	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1451	D-B1451		D-B1451	-	-	-	LPT1:
17	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1452	D-B1452		D-B1452	-	-	-	LPT1
18	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1453	D-B1453		D-B1453	-	-	-	LPT1:
19	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1454	D-B1454		D-B1454	-	-	-	LPT1
20	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1455	D-B1455		D-B1455	-	-	-	LPT1:
21	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1456	D-B1456		D-B1456	-	-	-	LPT1:

22	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1457	D-B1457	D-B1457	-	-	-	LPT1·
23	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1458	D-B1458	D-B1458	-	-	-	LPT1:
24	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1459	D-B1459	D-B1459	-	-	-	LPT1
25	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1460	D-B1460	D-B1460	-	-	-	LPT1
26	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1461	D-B1461	D-B1461	-	-	-	LPT1·
27	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1462	D-B1462	D-B1462	-	-	-	LPT1·
28	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1463	D-B1463	D-B1463	-	-	-	LPT1
29	-	1	1	GEN4C	GEN4B	122190A	EVAL	D-B1464	D-B1464	D-B1464	-	-	-	LPT1
30	-	1	6	GEN4C	GEN4B	122190A	INDA	D-B1465	D-B1465	D-B1465	-	-	-	LPT1
31	-	1	11	GEN4C	GEN4B	122190A	INDA	D-B1466	D-B1466	D-B1466	-	-	-	LPT1·

675 1146

PSR024 2/12/01 8:42:30 MT SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

REQUESTED BY: **MILLERJ**

METHOD. QJ Pesticides (8081A)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16D CLP1	DVWJE-1-AD	___ ___ ___	311477	399411	I-09-QJ	C1B090228	001		WATER	0	13 1

Used 1 liter per sample, and empty bottles were thrown away.

P. Yurkinski
2-12-01

RELINQUISHED BY	RECEIVED BY	DATE/TIME
P. Yurkinski	P. Yurkinski	2-12-01 1300
P. Yurkinski	P. Yurkinski	2-12-01 1600

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

PCB DATA

PCB
QC SUMMARY

SW846 8082 SURROGATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B090228

	CLIENT ID.	SRG01	SRG02	TOT OUT
01	DF/S-1/1039/IDW/004	104	90	00
02	METHOD BLK. DV05X1AA	86	91	00
03	LCS DV05X1AC	85	92	00
04	LCSD DV05X1AD	83	89	00

SURROGATES		QC LIMITS
SRG01	= Tetrachloro-m-xylene	(45-120)
SRG02	= Decachlorobiphenyl	(24-128)

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

FORM II

SW846 8082 CHECK SAMPLE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV05X1AC
BATCH: 1043329

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Aroclor 1016	10.0	8.48	85	61- 118	
Aroclor 1260	10.0	8.94	89	61- 124	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

SW846 8082 CHECK SAMPLE DUPLICATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B120000 WO #: DV05X1AD
BATCH: 1043329

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
Aroclor 1016	10.0	8.34	83	61- 118	
Aroclor 1260	10.0	8.75	88	61- 124	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

SW846 8082 METHOD BLANK SUMMARY

BLANK WORKORDER NO.: DV05X1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: STLPIT

Lab File ID: H-A10328.

Matrix: WATER

SDG Number:

Lot Number: C1B090228

Extraction Method:

Date Extracted: 02/12/01

Date Analyzed(1): 02/13/01

Time Analyzed(1): 13:04

Instrument ID(1): M/N

Date Analyzed(2): N/A

Time Analyzed(2): N/A

Instrument ID(2): N/A

GC Column(1): N/A ID: N/A GC Column(2): N/A ID: N/A

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

	CLIENT ID.	SAMPLE WORK ORDER #	DATE ANALYZED(1)	DATE ANALYZED(2)
01	DF/S-1/1039/IDW/004	DVWJE1AE	02/13/01	N/A
02	CHECK SAMPLE	DV05X1AC C	02/13/01	N/A
03	DUPLICATE CHECK	DV05X1AD L	02/13/01	N/A
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

COMMENTS:

PCB
SAMPLE DATA

UXB INTERNATIONAL

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

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID: C1B090228 001

Sample WT/Vol: 1000 / mL
Work Order: DVWJE1AE
Dilution factor: 1
Moisture %: NA

Date Received: 02/09/01
Date Extracted: 02/12/01
Date Analyzed: 02/13/01

QC Batch: 1043329

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L		Q
12674-11-2	Aroclor 1016		1.0	U
11104-28-2	Aroclor 1221		1.0	U
11141-16-5	Aroclor 1232		1.0	U
53469-21-9	Aroclor 1242		1.0	U
12672-29-6	Aroclor 1248		1.0	U
11097-69-1	Aroclor 1254		1.0	U
11096-82-5	Aroclor 1260		1.0	U

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10324.D
Lab Smp Id: DVWJE1AE Client Smp ID: DF/S-1/1039/IDW/004
Inj Date : 13-FEB-2001 11:45
Operator : 010139 Inst ID: gc8.i
Smp Info : DVWJE1AE,1121.b
Misc Info : 090228001
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 12:24 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 20:16 Cal File: H-A10277.D
Als bottle: 60
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.04 Sample Matrix: WATER
Processing Host: PITPC061

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

				CONCENTRATIONS ON-COL	FINAL			
	RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
$	1 Tetrachloro-m-xylene					CAS # 877-09-8		
	1.679	1.677	(0.002)	194870	0.02079	0.20793		(M)
	8 Aroclor-1221					CAS # 11104-28-2		
	Operator disabled compound identification.							
	14 Aroclor-1232					CAS #: 11141-16-5		
	Peaks not detected for Quant. or Qual signal(s).							

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
15 Aroclor-1242					CAS #: 53469-21-9		

Peaks not detected for Quant. or Qual signal(s)

---

20 Aroclor-1016 CAS #: 12674-11-2

Peaks not detected for Quant. or Qual. signal(s).

---

21 Aroclor-1248 CAS #. 12672-29-6

Peaks not detected for Quant or Qual. signal(s).

---

33 Aroclor-1254 CAS #: 11097-69-1

Operator disabled compound identification

$ 34 Decachlorobiphenyl CAS #: 2051-24-3

10.603 10.602 (0.001) 55123 0 01810 0.18100

---

36 Aroclor-1260 CAS #: 11096-82-5

Peaks not detected for Quant or Qual. signal(s)

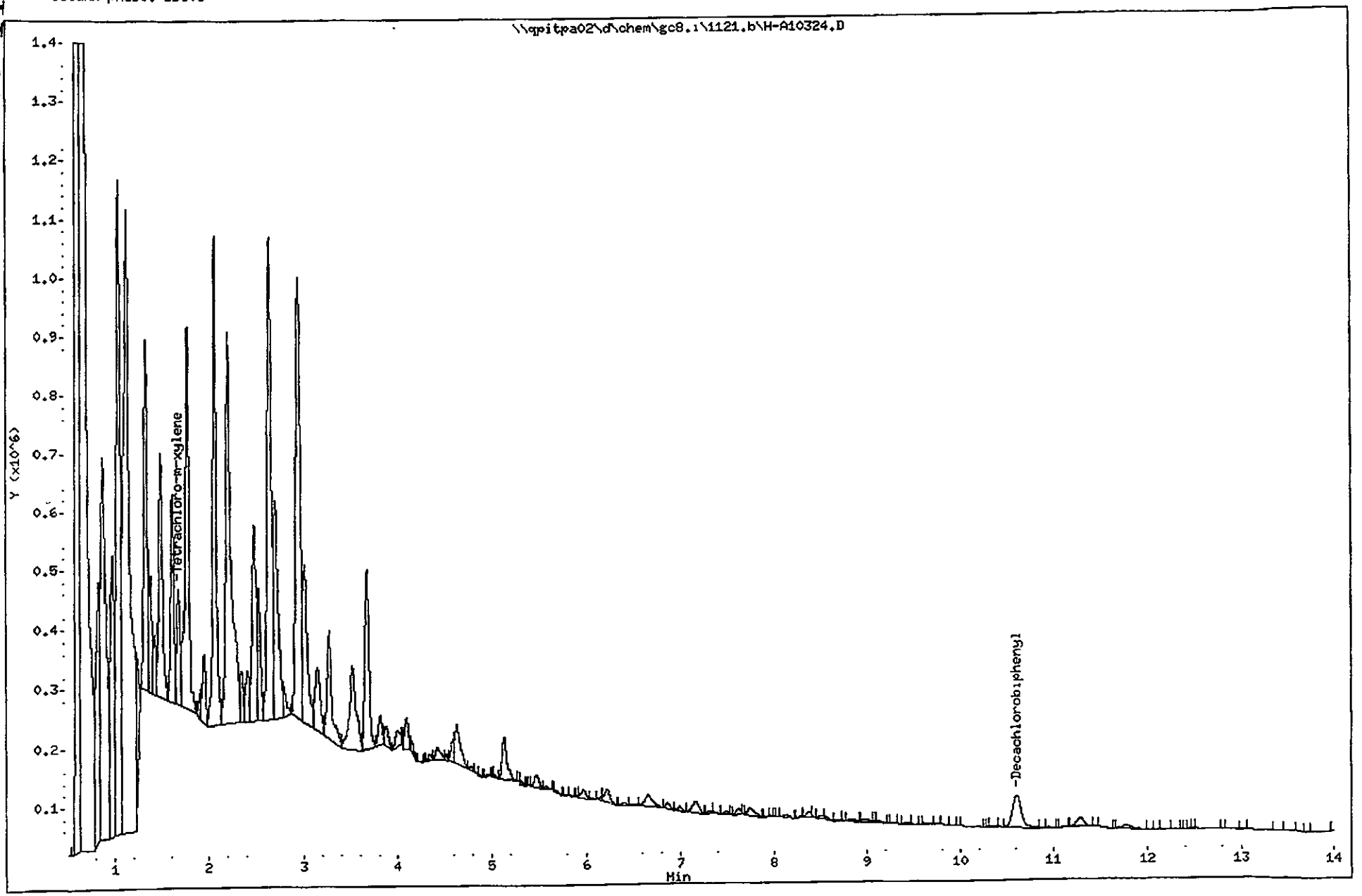
QC Flag Legend

M - Compound response manually integrated.

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10324.D
Date : 13-FEB-2001 11:45
Client ID: DF/S-1/1039/IDW/004
Sample Info: DVWJE1AE,1121.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc8.i
Operator: 010139
Column diameter: 0.53

675 1157

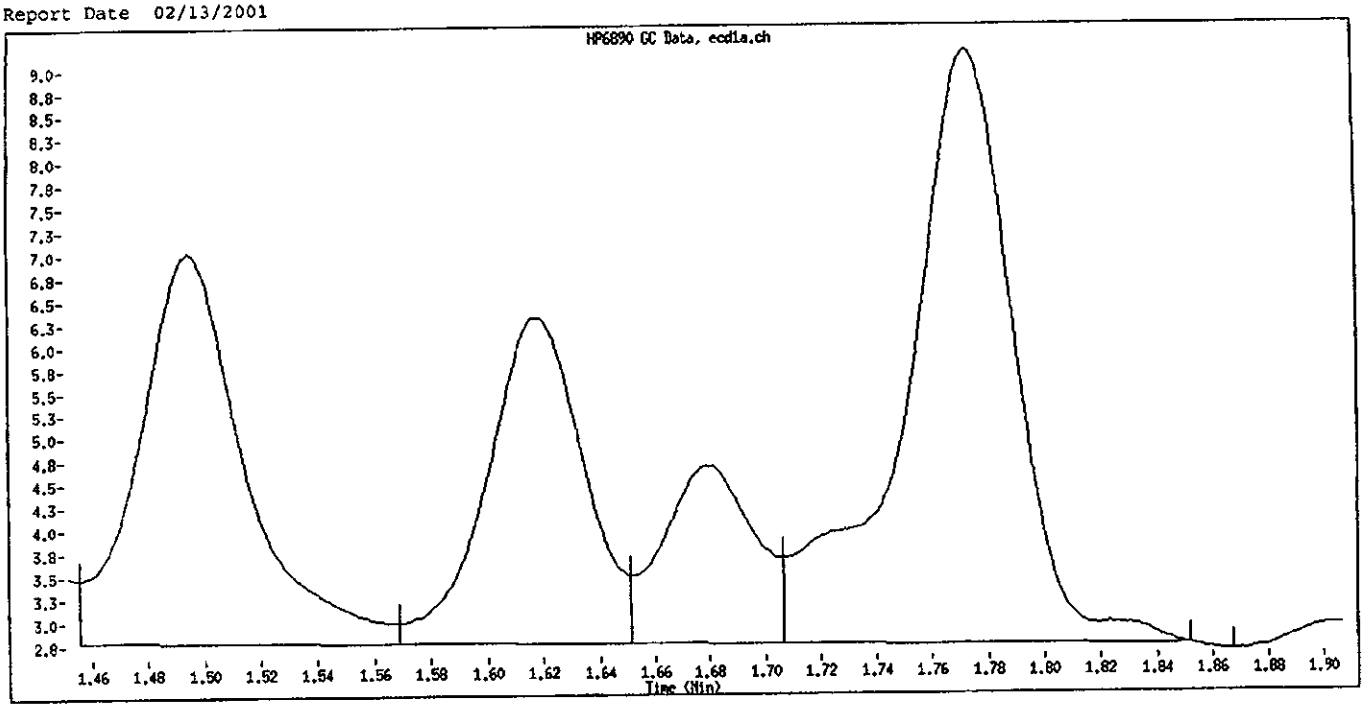


4011

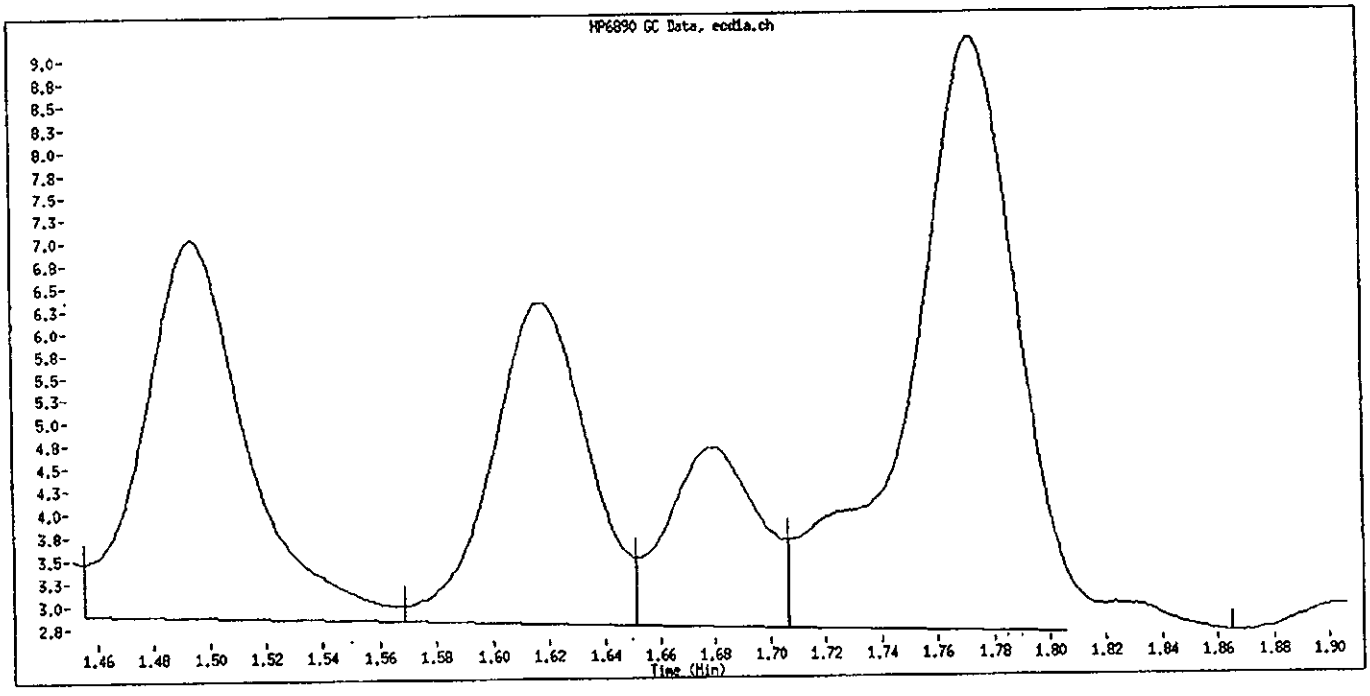
STL Pittsburgh

675 1153

Data File Name H-A10324 D
Inj Date and Time 13-FEB-2001 11:45
Instrument ID: gc8 1
Client ID DF/S-1/1039/IDW/004
Compound Name Tetrachloro-m-xylene
CAS # 877-09-8
Report Date 02/13/2001



Original Integration



Manual Integration

Manually Integrated By: EppingerD
Manual Integration Reason: Poor Chromatography

PCB
CALIBRATION DATA

Report Date : 13-Feb-2001 08:18

ZE
HP6890SM
D3608

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 12-FEB-2001 17:18
End Cal Date : 12-FEB-2001 20:16
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Cal Date : 13-Feb-2001 08:10 eppingerd
Curve Type : Average

Calibration File Names:
Level 1: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10272.D
Level 2: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10273.D
Level 3: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10274.D
Level 4: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10275.D
Level 5: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10276.D
Level 6: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10277.D

Compound	0.00500 Level 1	0.01000 Level 2	0.02500 Level 3	0.05000 Level 4	0.10000 Level 5	0.20000 Level 6	RRF	% RSD	
51 Chlordane(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	<-
8 Aroclor-1221(1)	+++++	+++++	60650	+++++	+++++	+++++	60650	0.000	
(2)	+++++	+++++	87194	+++++	+++++	+++++	87194	0 000	
(3)	+++++	+++++	167300	+++++	+++++	+++++	167300	0.000	
14 Aroclor-1232(1)	+++++	+++++	117466	+++++	+++++	+++++	117466	0 000	
(2)	+++++	+++++	106714	+++++	+++++	+++++	106714	0.000	
(3)	+++++	+++++	153012	+++++	+++++	+++++	153012	0 000	
(4)	+++++	+++++	101624	+++++	+++++	+++++	101624	0 000	
15 Aroclor-1242(1)	+++++	+++++	302740	+++++	+++++	+++++	302740	0 000	
(2)	+++++	+++++	187884	+++++	+++++	+++++	187884	0 000	
(3)	+++++	+++++	133788	+++++	+++++	+++++	133788	0.000	
(4)	+++++	+++++	135390	+++++	+++++	+++++	135390	0 000	
(5)	+++++	+++++	119082	+++++	+++++	+++++	119082	0 000	
20 Aroclor-1016(1)	149600	141435	132394	126263	119201	110549	129907	11.046	
(2)	285120	270655	254360	242042	228463	213198	248973	10 709	
(3)	425090	409385	394604	384678	374026	356021	390634	6 337	
(4)	264090	251715	244106	239018	226458	217042	240405	7 071	
(5)	171470	162520	156230	154120	147429	141129	155483	6 918	
21 Aroclor-1248(1)	+++++	+++++	200896	+++++	+++++	+++++	200896	0 000	
(2)	+++++	+++++	188174	+++++	+++++	+++++	188174	0.000	
(3)	+++++	+++++	219798	+++++	+++++	+++++	219798	0 000	
(4)	+++++	+++++	202068	+++++	+++++	+++++	202068	0 000	
(5)	+++++	+++++	209824	+++++	+++++	+++++	209824	0 000	

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 12-FEB-2001 17:18
End Cal Date : 12-FEB-2001 20:16
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Cal Date : 13-Feb-2001 08:10 eppingerd
Curve Type : Average

Compound	0.00500 Level 1	0.01000 Level 2	0.02500 Level 3	0.05000 Level 4	0.10000 Level 5	0.20000 Level 6	RRF	% RSD
33 Aroclor-1254(1)	+++++	+++++	211366	+++++	+++++	+++++	211366	0.000
(2)	+++++	+++++	258306	+++++	+++++	+++++	258306	0.000
(3)	+++++	+++++	380876	+++++	+++++	+++++	380876	0.000
(4)	+++++	+++++	262868	+++++	+++++	+++++	262868	0.000
(5)	+++++	+++++	229776	+++++	+++++	+++++	229776	0.000
36 Aroclor-1260(1)	330500	317720	306166	300485	287789	274855	302919	6.623
(2)	401420	393900	387356	384446	374450	365999	384595	3.342
(3)	321660	314180	311290	306164	304379	294735	308735	2.986
(4)	680470	678550	705956	713812	706797	696328	696986	2.102
(5)	302620	293390	292592	297638	298430	295941	296768	1.236
$ 1 Tetrachloro-m-xylene	9841400	9702900	9618560	9384820	9065210	8618665	9371926	4.895
$ 34 Decachlorobiphenyl	3131800	3082400	3063320	3003300	3047180	2944590	3045432	2.133

675 1162

7E HP6890SM DB6cf

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10323.D
Report Date: 13-Feb-2001 12:24

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: H-A10323.D
Analysis Type:
Lab Sample ID: M1660
Method: \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m

Injection Date: 13-FEB-2001 11:25
Init. Cal. Date(s): 12-FEB-2001 12-FEB-2001
Init. Cal. Times: 17:18 20:16
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
	20 Aroclor-1016(1)	129907	132504	0 010	2.0	15.0
	(2)	248973	255138	0.010	2 5	15 0
	(3)	390634	399074	0.010	2.2	15 0
	(4)	240405	245312	0.010	2.0	15.0
	(5)	155483	157008	0.010	1.0	15.0
$	1 Tetrachloro-m-xylene	9371926	9541680	0 000	1.8	15.0
$	34 Decachlorobiphenyl	3045432	3061760	0 010	0 5	15 0
	36 Aroclor-1260(1)	302919	305938	0.010	1.0	15.0
	(2)	384595	390038	0 010	1.4	15.0
	(3)	308735	308334	0.010	-0 1	15.0
	(4)	696986	676426	0.010	-2 9	15 0
	(5)	296768	297786	0 010	0.3	15 0

675 1163

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i Injection Date: 13-FEB-2001 18:20
Lab File ID: H-A10344.D Init. Cal. Date(s): 12-FEB-2001 12-FEB-2001
Analysis Type: Init. Cal. Times: 17:18 20:16
Lab Sample ID: M1660 Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
	20 Aroclor-1016(1)	129907	138702	0.010	6.8	15.0
	(2)	248973	264086	0.010	6.1	15.0
	(3)	390634	411972	0.010	5 5	15.0
	(4)	240405	250052	0.010	4.0	15.0
	(5)	155483	159592	0.010	2.6	15.0
$	1 Tetrachloro-m-xylene	9371926	9935440	0.000	6 0	15 0
$	34 Decachlorobiphenyl	3045432	3137360	0.010	3.0	15.0
	36 Aroclor-1260(1)	302919	298958	0.010	-1 3	15 0
	(2)	384595	382294	0 010	-0 6	15.0
	(3)	308735	302848	0.010	-1.9	15.0
	(4)	696986	674890	0.010	-3.2	15.0
	(5)	296768	300678	0.010	1.3	15.0

675 1164

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 02/12/01 02/12/01

Instrument ID: GC8

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 1.68 DCB: 10.60

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01		M2154	02/12/01	1718	1.68	10.60
02		M1232	02/12/01	1738		
03		M1242	02/12/01	1758		
04		M1248	02/12/01	1817		
05		L1660	02/12/01	1837	1.68	10.60
06		ML1660	02/12/01	1857	1.68	10.60
07		M1660	02/12/01	1917	1.68	10.60
08		MH1660	02/12/01	1937	1.68	10.60
09		H1660	02/12/01	1956	1.68	10.60
10		XH1660	02/12/01	2016	1.68	10.60
11		2M2154	02/12/01	2036	1.68	
12		2M1232	02/12/01	2056		
13		2M1242	02/12/01	2115		
14		2M1248	02/12/01	2135		
15		2M1660	02/12/01	2155		10.60
16		M1660	02/13/01	1125	1.68	10.60
17	DF/S-1/1039/	DVWJE1AE	02/13/01	1145	1.68	10.60
18	PBLK3329	DV05X1AA	02/13/01	1304	1.68	10.61
19	LCS3329	DV05X1AC	02/13/01	1324	1.68	10.60
20	LCD3329	DV05X1AD	02/13/01	1343	1.68	10.60
21		M1660	02/13/01	1820	1.68	10.61
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

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

675 1165

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10268.D
Lab Smp Id: M2154
Inj Date : 12-FEB-2001 17:18
Operator : 010139 Inst ID: gc8.i
Smp Info : M2154,1121.b
Misc Info : 190-111-7
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:06 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 17:18 Cal File: H-A10268.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2-2154.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

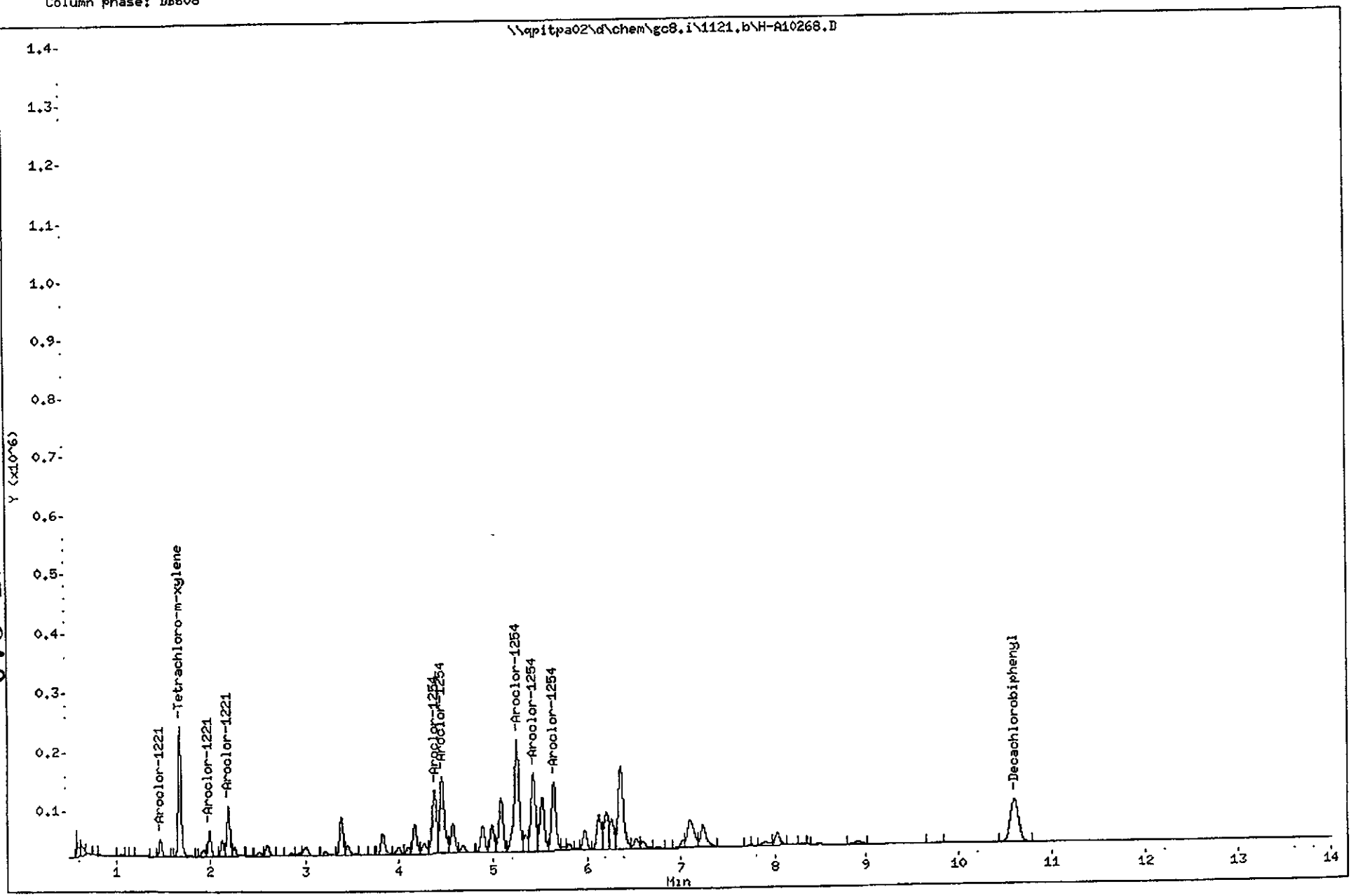
			AMOUNTS CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
8 Aroclor-1221					CAS # 11104-28-2		
1 463	1.463	(0.000)	30325	0.50000	0 50000	0.00- 0 00	0.00
1 988	1 988	(0 000)	43597	0.50000	0 50000	116 57- 156 57	0.00
2 187	2 187	(0 000)	83650	0 50000	0 50000	66 04- 106 04	0 00
Average of Peak Amounts =					0 5		
$ 1 Tetrachloro-m-xylene					CAS # 877-09-8		
1 677	1.677	(0.000)	221909	0 02500	0 025000		
$ 34 Decachlorobiphenyl					CAS #: 2051-24-3		
10 603	10 602	(0.001)	71955	0 02500	0 025000		
33 Aroclor-1254					CAS #: 11097-69-1		
4 376	4 376	(0 000)	105683	0 50000	0 50000	0 00- 0 00	0.00
4 453	4.453	(0.000)	129153	0.50000	0.50000	92 23- 132.23	0 00
5 253	5.253	(0.000)	190438	0 50000	0 50000	77 40- 117 40	0 00
5.430	5 430	(0 000)	131434	0 50000	0 50000	51 09- 91.09	0 00
5.645	5 645	(0.000)	114888	0 50000	0 50000	65 01- 105.01	0.00
Average of Peak Amounts =					0.5		

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10268.D
Date : 12-FEB-2001 17:18
Client ID:
Sample Info: H2154,1121.b

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53

Column phase: DB608



675 1166

4020

STL Pittsburgh

675 1167

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10269.D
Lab Smp Id: M1232
Inj Date : 12-FEB-2001 17:38
Operator : 010139 Inst ID: gc8.i
Smp Info : M1232,1121.b
Misc Info : 190-111-8
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:06 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 17:38 Cal File: H-A10269.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 3-1232.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

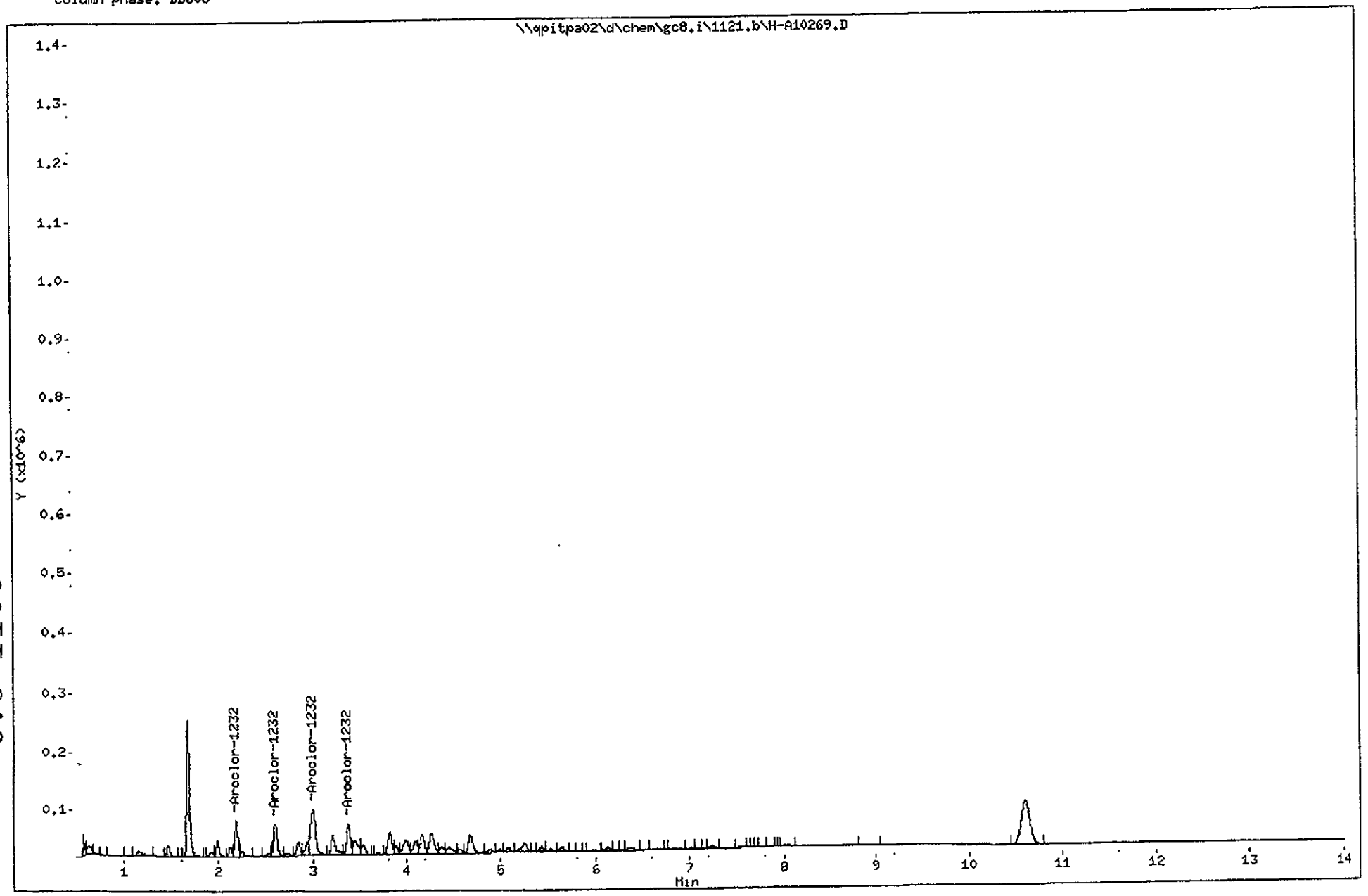
				AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
**	******	********	********	*******	*******	************	*****
14 Aroclor-1232					CAS #: 11141-16-5		
2 186	2 186	(0 000)	58733	0 50000	0 50000	0 00- 0.00	0 00
2 599	2 599	(0 000)	53357	0.50000	0.50000	146 26- 186 26	0.00
3 005	3 005	(0 000)	76506	0 50000	0 50000	65 99- 105 99	0 00
3 377	3 377	(0.000)	50812	0 50000	0.50000	74.18- 114 18	0.00
		Average of Peak Amounts =			0.5		

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10269.D
Date : 12-FEB-2001 17:38
Client ID:
Sample Info: M1232,1121.b

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53

Column phase: DB608



675 1169

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10270.D
Lab Smp Id: M1242
Inj Date : 12-FEB-2001 17:58
Operator : 010139 Inst ID: gc8.i
Smp Info : M1242,1121.b
Misc Info : 190-111-9
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:07 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 17:58 Cal File: H-A10270.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 4-1242.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

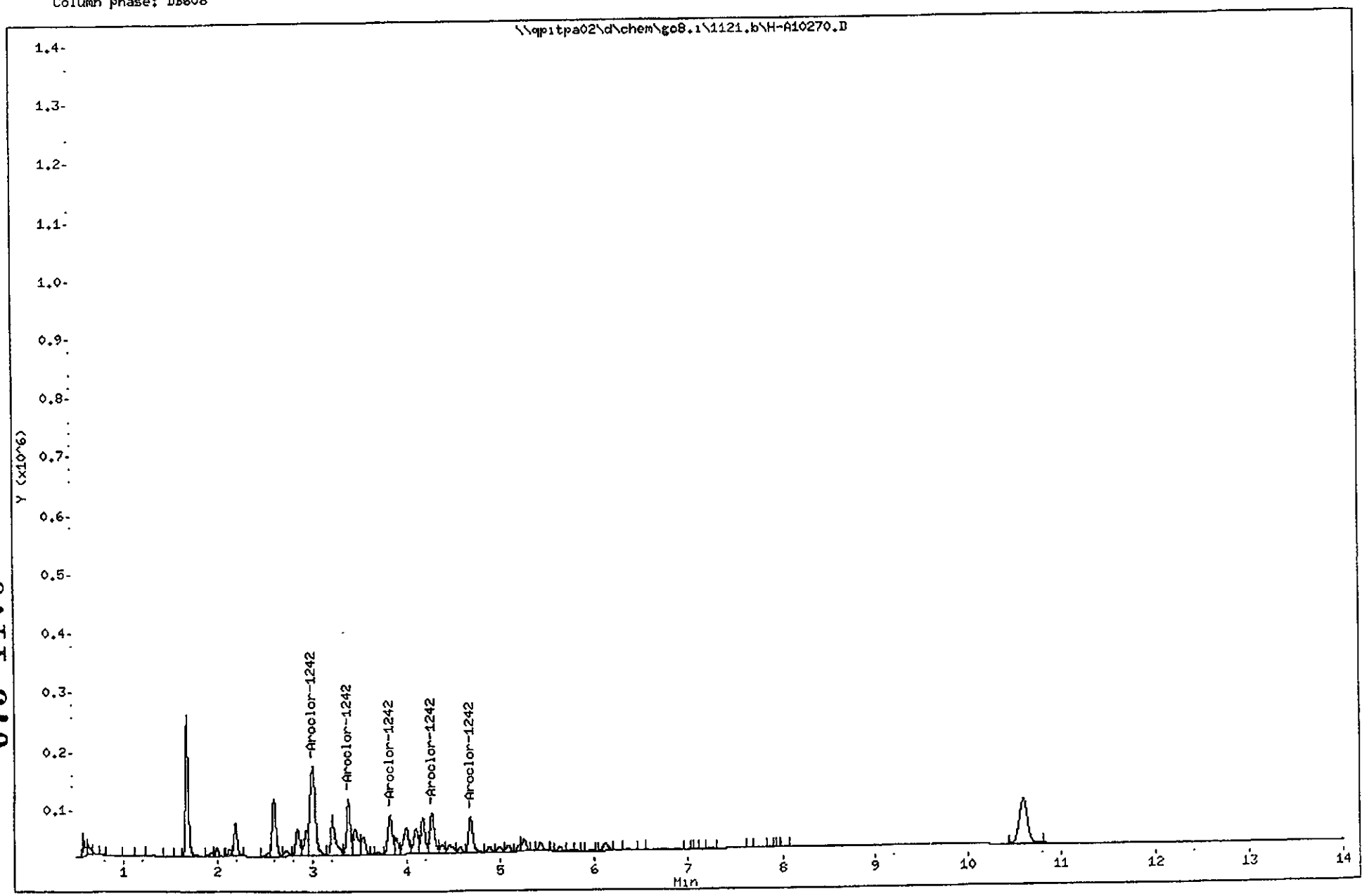
				AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE				
15 Aroclor-1242					CAS #: 53469-21-9		
3 006	3 006	(0 000)	151370	0.50000	0 50000	0.00- 0.00	0 00
3 376	3 376	(0 000)	93942	0.50000	0.50000	310 13- 350.13	0.00
3 817	3 817	(0 000)	66894	0 50000	0 50000	749 70- 789 70	0 00
4 267	4.267	(0 000)	67695	0.50000	0.50000	512.48- 552.48	0.00
4 681	4 681	(0.000)	59541	0.50000	0 50000	314 30- 354 30	0.00
		Average of Peak Amounts =			0 5		

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10270.D
Date : 12-FEB-2001 17:58
Client ID:
Sample Info: H1242,1121.b

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53

Column phase: DB608



675 1171

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10271.D
Lab Smp Id: M1248
Inj Date : 12-FEB-2001 18:17
Operator : 010139 Inst ID: gc8.i
Smp Info : M1248,1121.b
Misc Info : 190-111-10
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:07 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 18:17 Cal File: H-A10271.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 5-1248.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
21 Aroclor-1248					CAS #: 12672-29-6		
3 377	3 377	(0 000)	100448	0.50000	0 50000	0.00- 0.00	0 00(M)
3 818	3.818	(0.000)	94087	0 50000	0.50000	114 57- 154 57	0 00
4 168	4 168	(0 000)	109899	0.50000	0 50000	63 67- 103 67	0.00
4 266	4.266	(0.000)	101034	0 50000	0 50000	43.86- 83 86	0.00
4 683	4 683	(0.000)	104912	0 50000	0 50000	128 08- 168.08	0.00
Average of Peak Amounts =					0.5		

QC Flag Legend

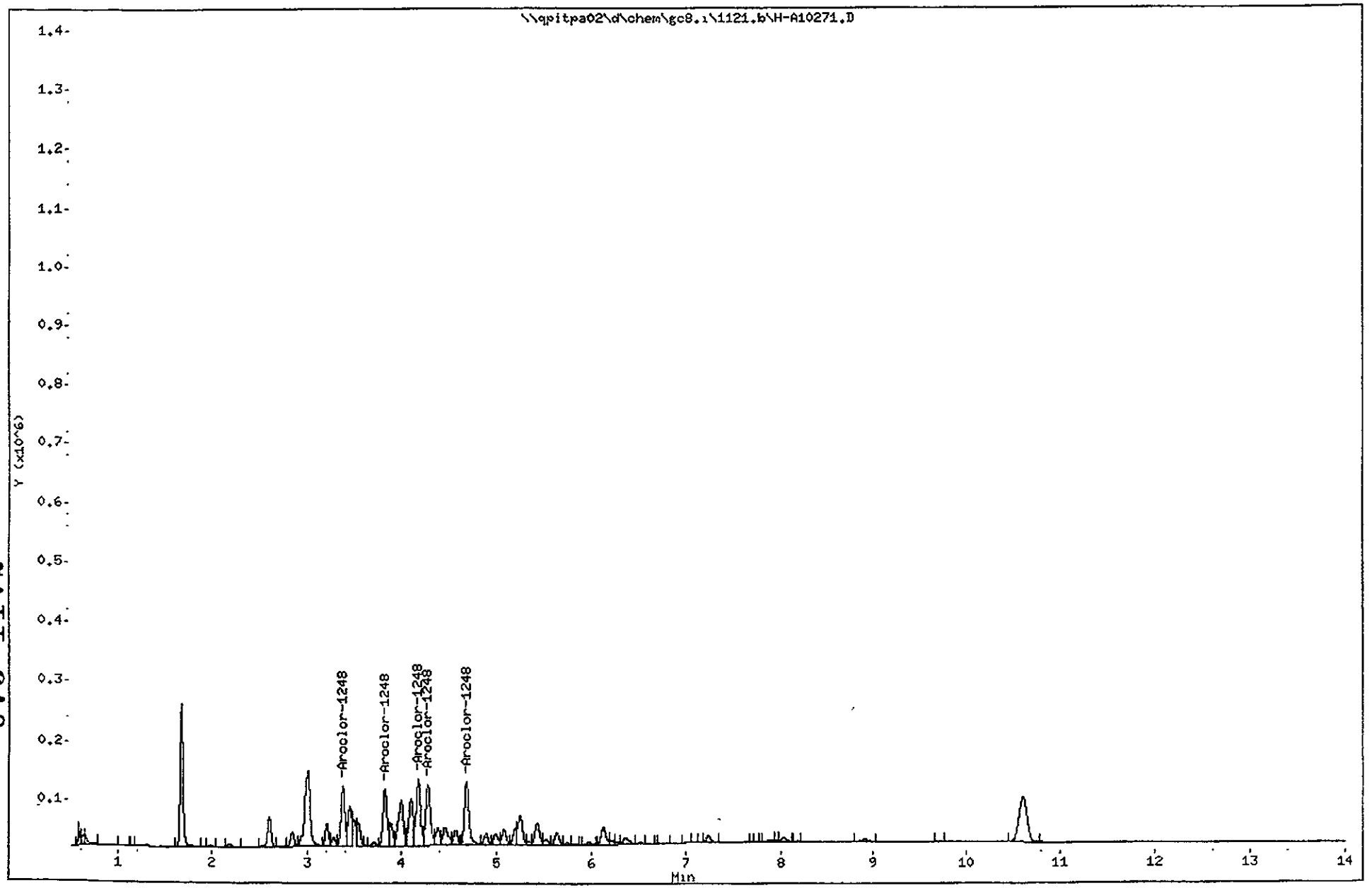
M - Compound response manually integrated.

Data File: \\qpitpa02\d\chem\gc8.1\1121.b\H-A10271.D
Date : 12-FEB-2001 18:17
Client ID:
Sample Info: M1248,1121.b

Instrument: gc8.1

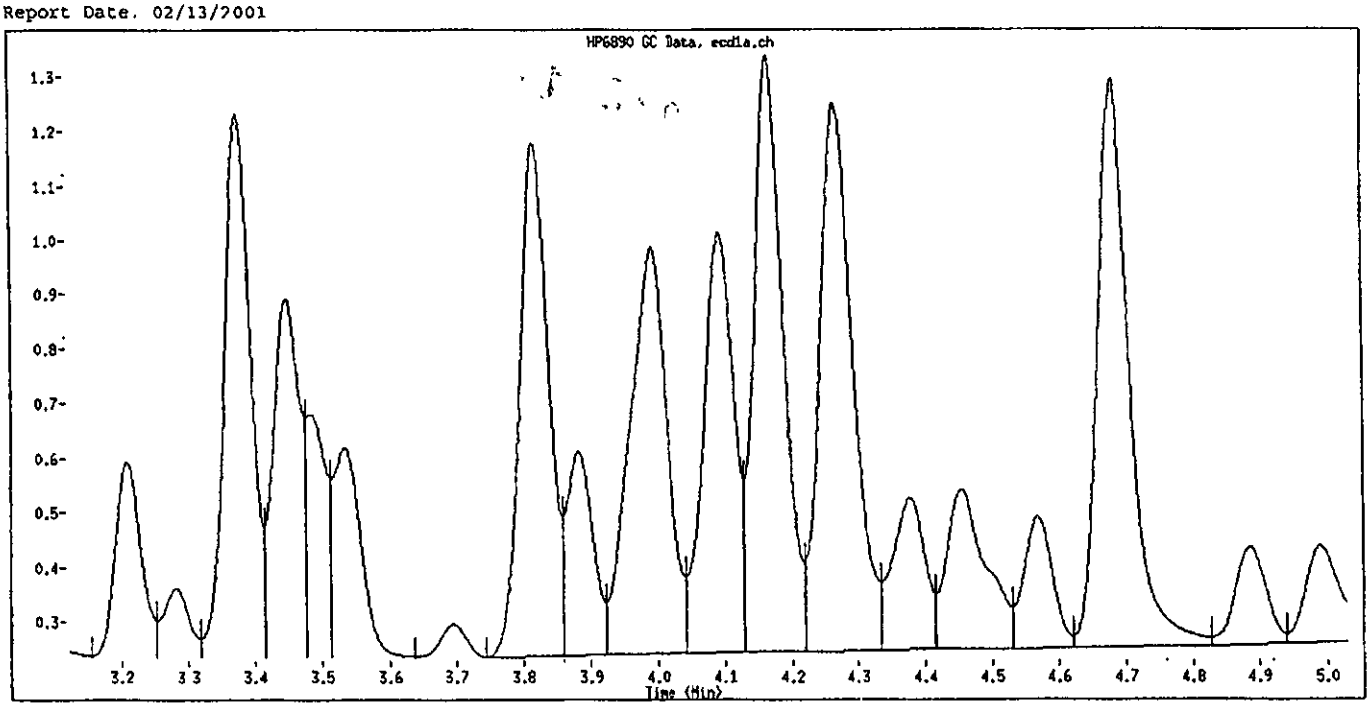
Operator: 010139
Column diameter: 0.53

Column phase: DB608

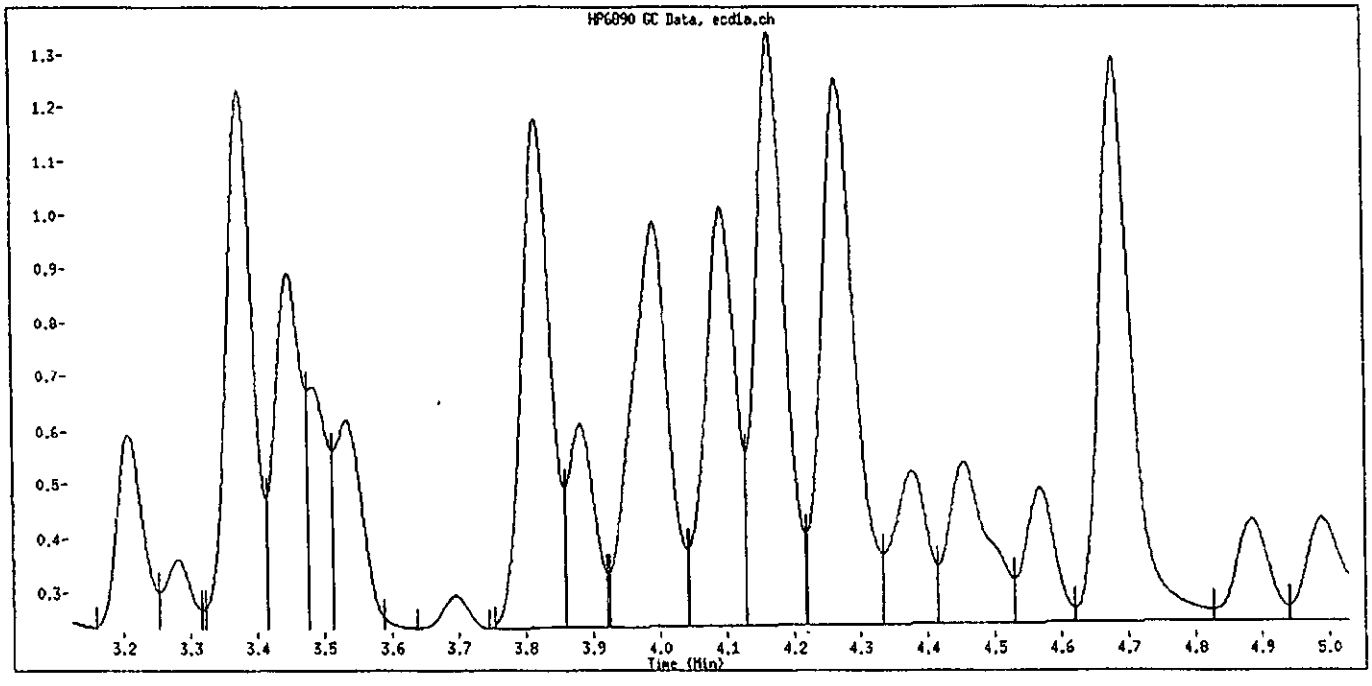


Data File Name H-A10271.D
Inj Date and Time 12-FEB-2001 18 17
Instrument ID gc8 i
Client ID·
Compound Name Aroclor-1248
CAS # 12672-29-6
Report Date. 02/13/2001

675 1173



Original Integration



Manual Integration

Manually Integrated By: EppingerD
Manual Integration Reason: Poor Chromatography

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10272.D
Lab Smp Id: L1660
Inj Date : 12-FEB-2001 18:37
Operator : 010139 Inst ID: gc8.i
Smp Info : L1660,1121.b
Misc Info : 190-111-11
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:08 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 18:37 Cal File: H-A10272.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-1660.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
20 Aroclor-1016					CAS #: 12674-11-2		
2 187	2 187	(0 000)	14960 0 10000	0 10000	0.00- 0.00		0.00
2.600	2 600	(0 000)	28512 0.10000	0.10000	80 00- 120 00		0 00
3 007	3.006	(0.001)	42509 0 10000	0 10000	203 51- 243.51		0.00
3 377	3 378	(-0 001)	26409 0 10000	0 10000	203 51- 243 51		0 00
3 818	3.819	(-0 001)	17147 0.10000	0.10000	297 56- 337 56		0.00
Average of Peak Amounts =				0 1			
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
1 677	1 677	(0 000)	49207 0 00500	0 0052578			
$ 34 Decachlorobiphenyl					CAS # 2051-24-3		
10.602	10 602	(0 000)	15659 0 00500	0.0052110			
36 Aroclor-1260					CAS # 11096-82-5		
5.523	5.524	(-0 001)	33050 0.10000	0.10000	0 00- 0 00		0.00(M)
5 648	5.646	(0 002)	40142 0 10000	0 10000	95.86- 135 86		0.00
6 369	6 365	(0.004)	32166 0 10000	0 10000	116 91- 156 91		0 00
7 238	7 240	(-0 002)	68047 0 10000	0.10000	120 00- 160 00		0 00
8 029	8.030	(-0 001)	30262 0.10000	0 10000	108 33- 148.33		0.00
Average of Peak Amounts =				0.1			

QC Flag Legend

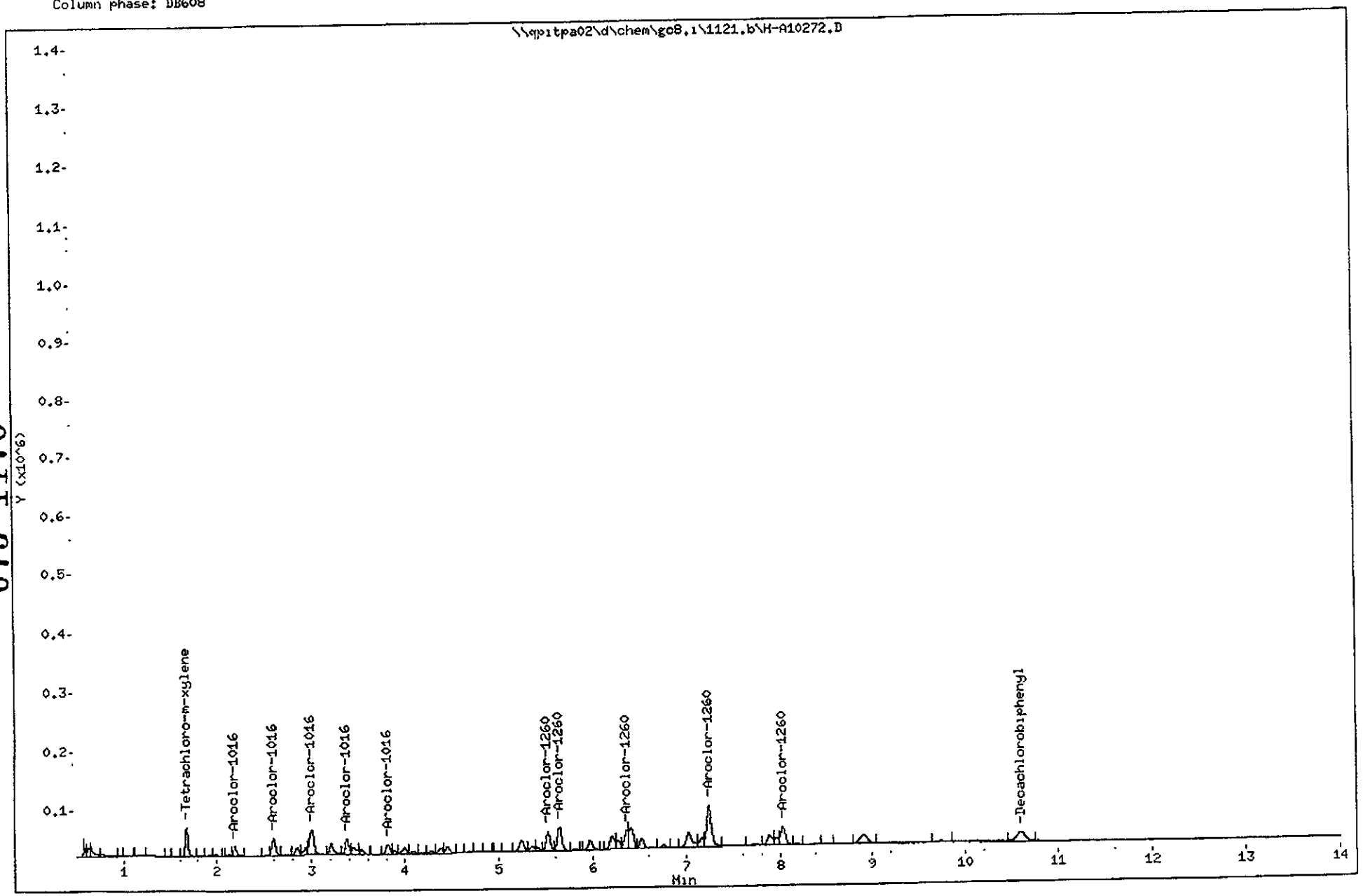
M - Compound response manually integrated.

Data File: \\qpitpa02\d\chem\go8.i\1121.b\H-A10272.D
Date : 12-FEB-2001 18:37
Client ID:
Sample Info: L1660,1121.b

Instrument: go8.i

Operator: 010139
Column diameter: 0.53

Column phase: DB608



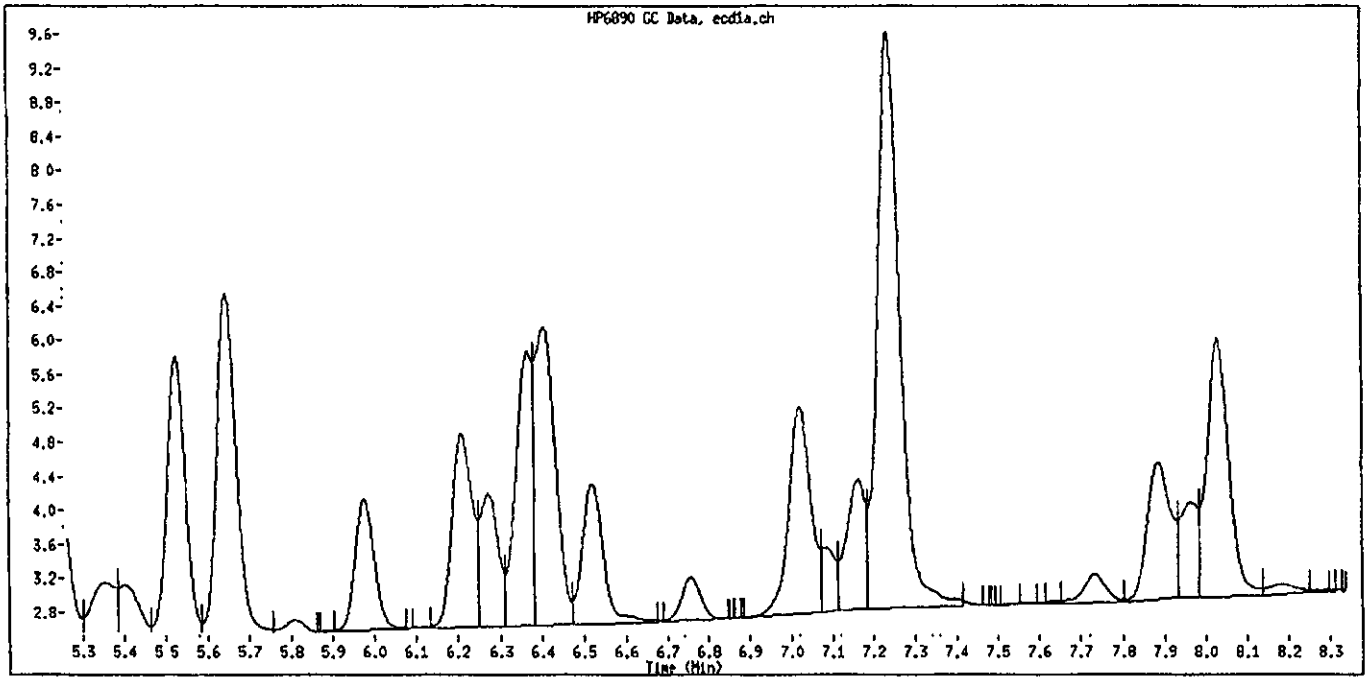
675 1176

4030

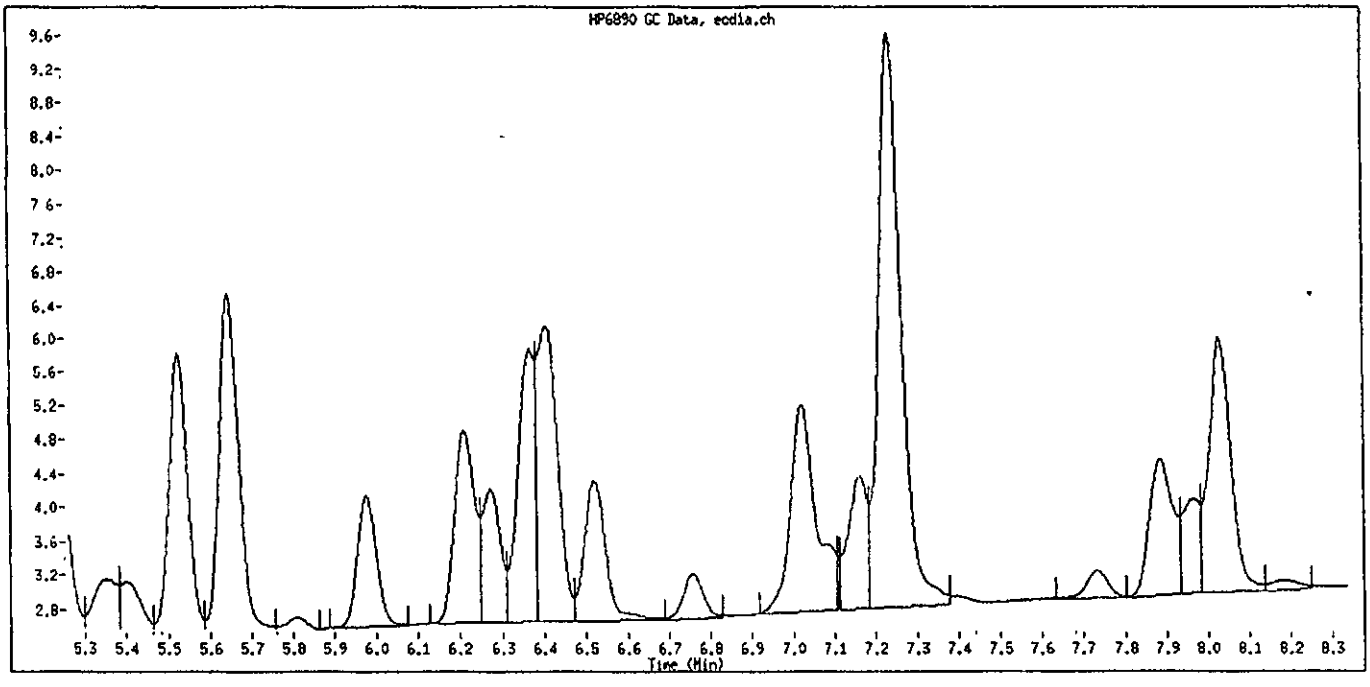
STL Pittsburgh

Data File Name H-A10272 D
Inj Date and Time 12-FEB-2001 18 37
Instrument ID gc8 1
Client ID
Compound Name Aroclor-1260
CAS #. 11096-82-5
Report Date. 02/13/2001

675 1177



Original Integration



Manual Integration

Manually Integrated By EppingerD
Manual Integration Reason Poor Chromatography

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10273.D
Report Date: 13-Feb-2001 08:08

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10273.D
Lab Smp Id: ML1660
Inj Date : 12-FEB-2001 18:57
Operator : 010139 Inst ID: gc8.i
Smp Info : ML1660,1121.b
Misc Info : 190-111-12
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:08 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 18:57 Cal File: H-A10273.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-1660.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

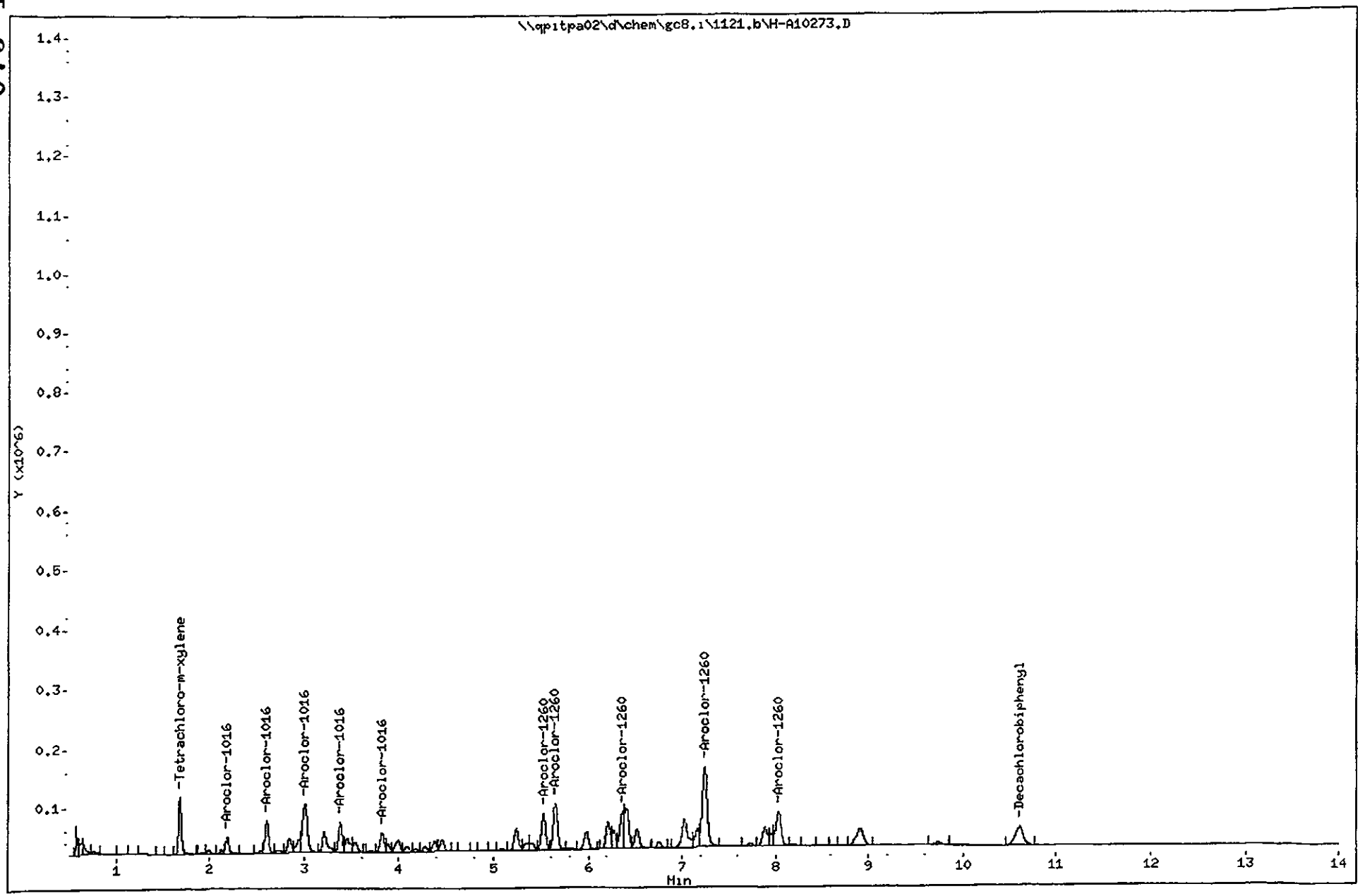
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
20 Aroclor-1016					CAS # 12674-11-2		
2 186	2 187	(-0.001)	28287 0 20000	0.19439	0 00-	0 00	0.00
2.599	2 600	(-0 001)	54131 0.20000	0.19479	80 00-	120 00	0 00
3 005	3 006	(-0.001)	81877 0 20000	0 19624	203.51-	243 51	0.00
3 378	3.378	(0.000)	50343 0.20000	0.19520	203 51-	243 51	0.00
3 819	3 819	(0 000)	32504 0.20000	0.19464	297 56-	337.56	0.00
Average of Peak Amounts =				0 19505			
$ 1 Tetrachloro-m-xylene					CAS #. 877-09-8		
1.676	1.677	(-0.001)	97029 0 01000	0 010242			
$ 34 Decachlorobiphenyl					CAS # 2051-24-3		
10 602	10.602	(0 000)	30824 0 01000	0 010170			
36 Aroclor-1260					CAS # 11096-82-5		
5 526	5 524	(0 002)	63544 0 20000	0 19606	0.00-	0.00	0.00
5 649	5.646	(0 003)	78780 0.20000	0.19811	95 86-	135.86	0 00
6 370	6 365	(0 005)	62836 0 20000	0 19765	116 91-	156 91	0 00
7 241	7 240	(0 001)	135710 0 20000	0.19972	120 00-	160.00	0 00
8.031	8.030	(0 001)	58678 0 20000	0.19690	108.33-	148.33	0 00
Average of Peak Amounts =				0 19769			

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10273.D
Date : 12-FEB-2001 18:57
Client ID:
Sample Info: ML1660,1121.b

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53

Column phase: DB608



Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10274.D
Report Date: 13-Feb-2001 08:09

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10274.D
Lab Smp Id: M1660
Inj Date : 12-FEB-2001 19:17
Operator : 010139 Inst ID: gc8.i
Smp Info : M1660,1121.b
Misc Info : 190-111-13
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:09 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 19:17 Cal File: H-A10274.D
Als bottle: 10 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-1660.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

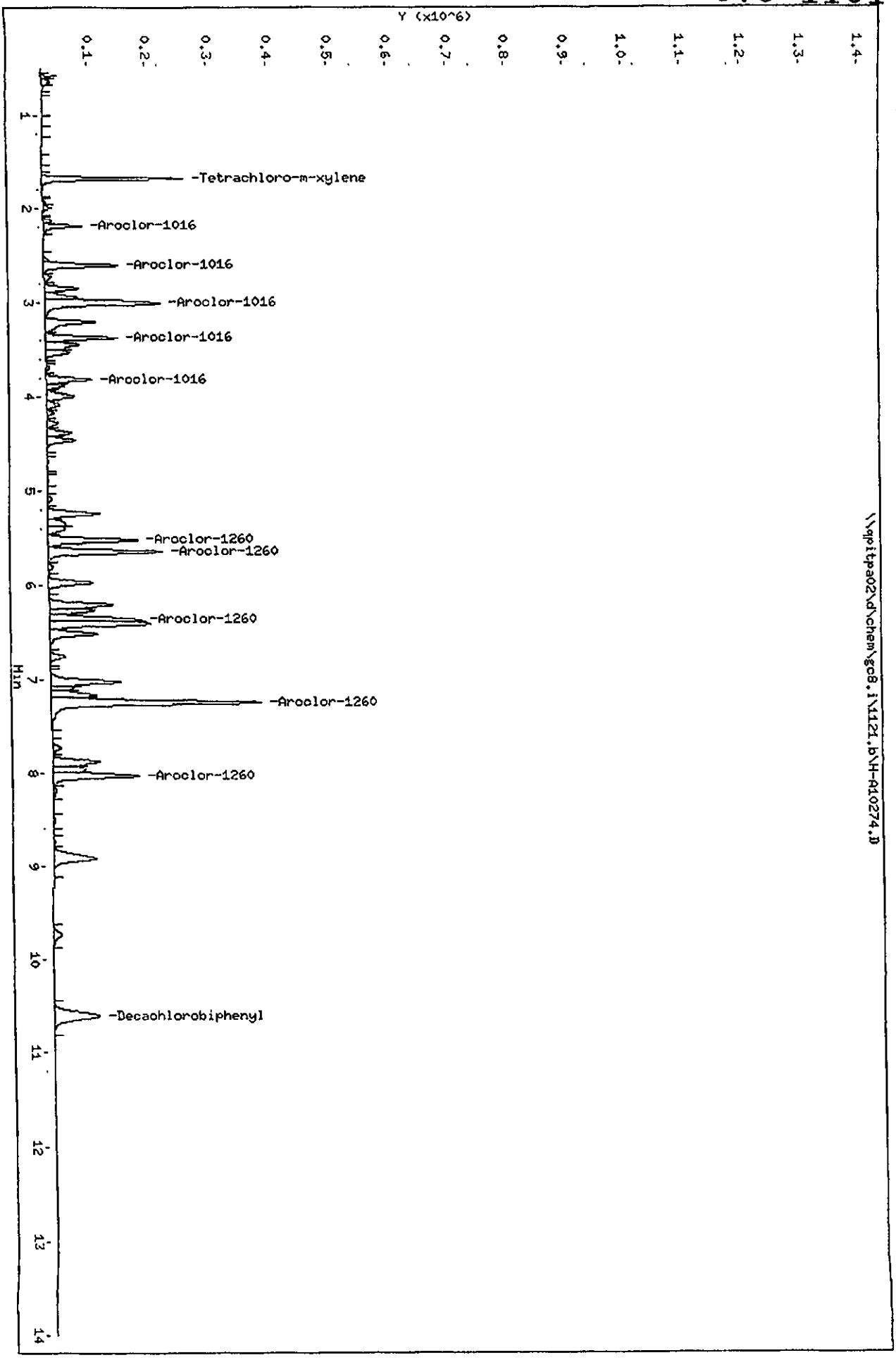
	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
	20 Aroclor-1016					CAS #: 12674-11-2		
2	187	2.187	(0 000)	66197	0 50000	0.46901	0.00- 0 00	0.00
2	600	2.600	(0 000)	127180	0 50000	0 47096	80.00- 120 00	0 00
3	006	3 006	(0 000)	197302	0 50000	0.48158	203 51- 243 51	0 00
3	378	3 378	(0.000)	122053	0 50000	0.48184	203.51- 243.51	0.00
3.819		3 819	(0 000)	78115	0.50000	0.47804	297 56- 337.56	0.00
		Average of Peak Amounts =				0.47629		
$	1 Tetrachloro-m-xylene					CAS #. 877-09-8		
1	677	1 677	(0.000)	240464	0 02500	0 024737		
$	34 Decachlorobiphenyl					CAS #: 2051-24-3		
10	602	10 602	(0 000)	76583	0.02500	0 024764		
	36 Aroclor-1260					CAS #. 11096-82-5		
5	524	5 524	(0.000)	153083	0.50000	0.48120	0.00- 0.00	0 00
5	646	5 646	(0 000)	193678	0 50000	0.49129	95 86- 135 86	0.00
6	365	6 365	(0.000)	155645	0 50000	0.49300	116 91- 156 91	0.00
7.240		7 240	(0.000)	352978	0.50000	0.51281	120 00- 160.00	0 00
8.030		8 030	(0 000)	146296	0 50000	0.49391	108.33- 148 33	0.00
		Average of Peak Amounts =				0 49444		

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10274.D
Date : 12-FEB-2001 19:17
Client ID:
Sample Info: M1660,1121.b

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53

Column phase: DB608



STL-Pittsburgh

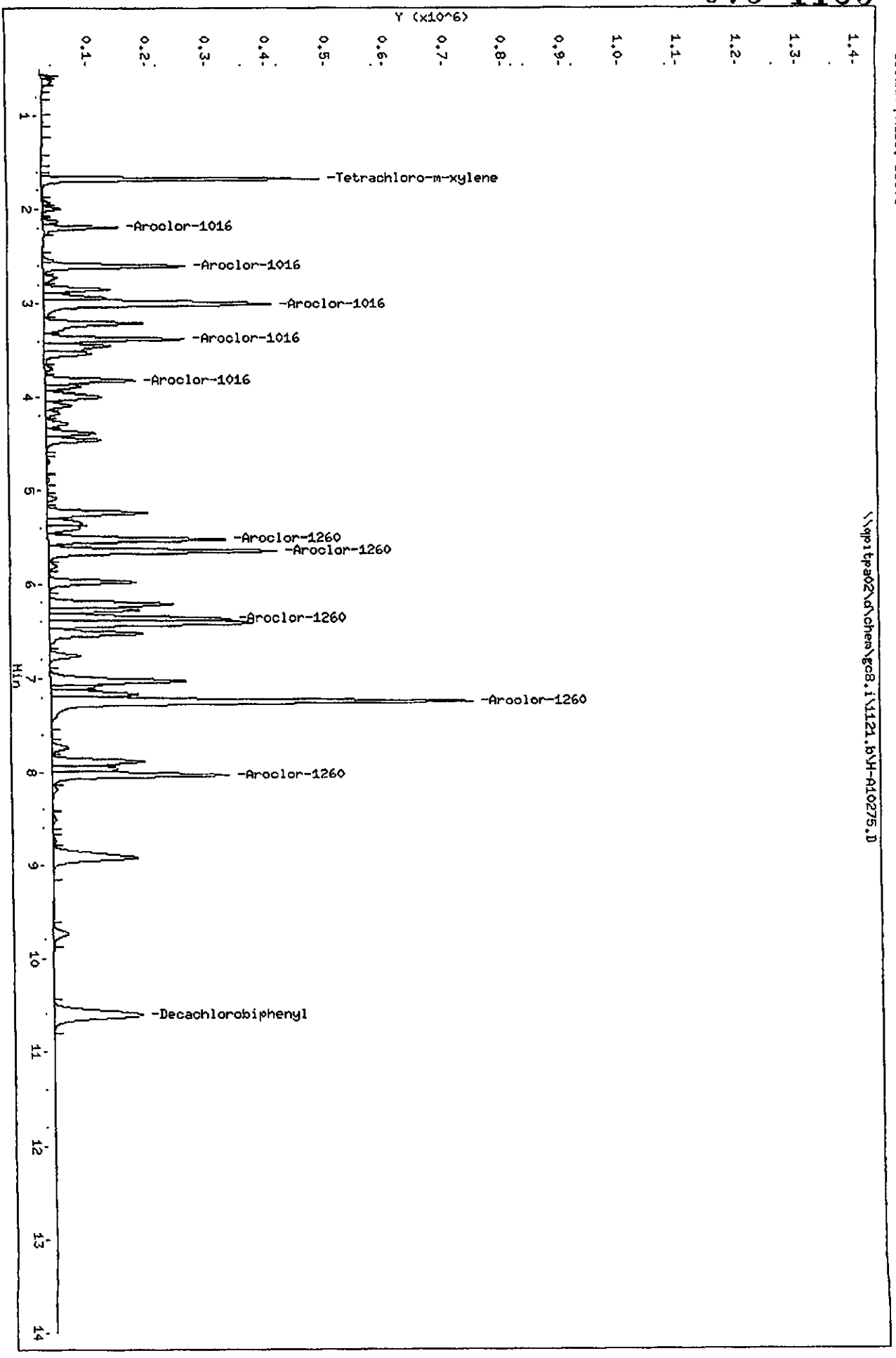
Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10275.D
Lab Smp Id: MH1660
Inj Date : 12-FEB-2001 19:37 Inst ID: gc8.i
Operator : 010139
Smp Info : MH1660,1121.b
Misc Info : 190-111-14
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:09 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 19:37 Cal File: H-A10275.D
Als bottle: 11 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-1660.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
20	Aroclor-1016					CAS # 12674-11-2		
2	188	2.187	(0.001)	126263	1.00000	0 91879	0.00- 0.00	0.00
2	600	2 600	(0.000)	242042	1 00000	0 92016	80.00- 120.00	0 00
3	009	3 006	(0 003)	384678	1.00000	0.95350	203.51- 243.51	0.00
3	379	3 378	(0 001)	239018	1 00000	0 95710	203.51- 243 51	0.00
3.819		3 819	(0 000)	154120	1 00000	0.95676	297 56- 337.56	0 00
			Average of Peak Amounts =			0.94126		
$	1	Tetrachloro-m-xylene				CAS #. 877-09-8		
1	677	1.677	(0.000)	469241	0 05000	0.048692		
$	34	Decachlorobiphenyl				CAS # 2051-24-3		
10	604	10 602	(0 002)	150165	0.05000	0 048910		
36	Aroclor-1260					CAS #: 11096-82-5		
5.524		5.524	(0 000)	300485	1 00000	0.95782	0 00- 0 00	0 00
5	647	5 646	(0.001)	384446	1.00000	0 98128	95 86- 135.86	0 00
6	370	6 365	(0 005)	306164	1 00000	0.97715	116 91- 156 91	0 00
7	240	7 240	(0 000)	713812	1.00000	1 0275	120.00- 160.00	0.00
8.034		8 030	(0.004)	297638	1 00000	1.0036	108.33- 148.33	0 00
			Average of Peak Amounts =			0.98948		

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10275.D
Date : 12-FEB-2001 19:37
Client ID:
Sample Info: MH1660,1121.b

Instrument: gc8.i
Operator: 010139
Column diameter: 0.53

Column phase: DB608

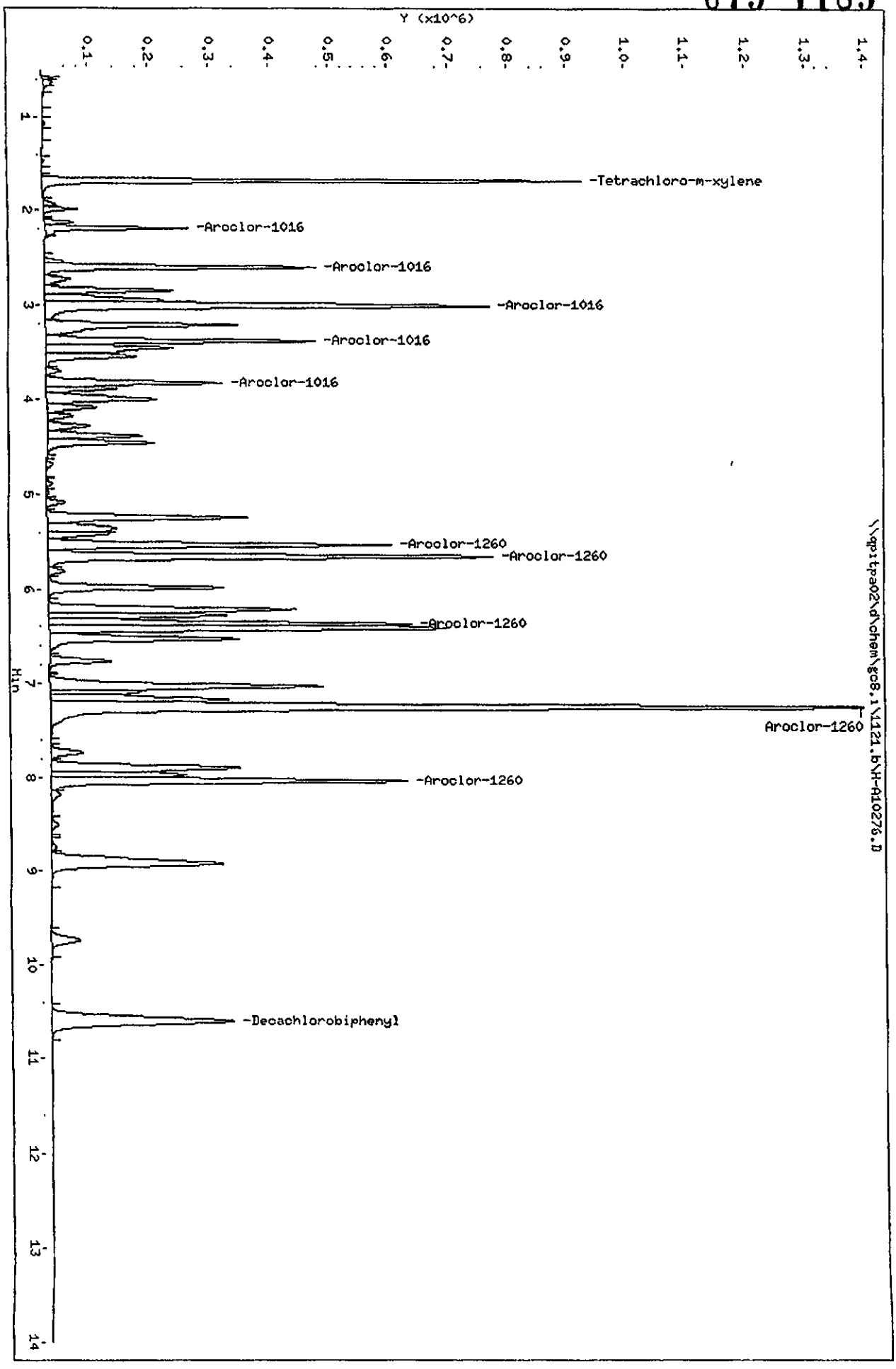


Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10276.D
Report Date: 13-Feb-2001 08:10

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10276.D
Lab Smp Id: H1660
Inj Date : 12-FEB-2001 19:56 Inst ID: gc8.i
Operator : 010139
Smp Info : H1660,1121.b
Misc Info : 190-112-1
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m Quant Type: ESTD
Meth Date : 13-Feb-2001 08:09 eppingerd Cal File: H-A10276.D
Cal Date : 12-FEB-2001 19:56 Calibration Sample, Level: 5
Als bottle: 12
Dil Factor: 1.00000 Compound Sublist: 1-1660.sub
Integrator: Falcon Sample Matrix: None
Target Version: 4.04
Processing Host: PITPC061

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
20 Aroclor-1016					CAS #: 12674-11-2		
2 188	2 187	(0 001)	238401	2.00000	1 7820	0 00- 0.00	0 00
2 601	2 600	(0.001)	456926	2.00000	1.7840	80.00- 120 00	0 00
3 008	3 006	(0 002)	748051	2.00000	1.8816	203.51- 243.51	0 00
3 377	3 378	(-0.001)	452916	2 00000	1 8480	203 51- 243.51	0 00
3 819	3 819	(0 000)	294858	2 00000	1.8620	297 56- 337 56	0.00
		Average of Peak Amounts =			1 8315		
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
1 677	1 677	(0 000)	906521	0 10000	0.095197		
$ 34 Decachlorobiphenyl					CAS # 2051-24-3		
10 601	10 602	(-0 001)	304718	0.10000	0 099399		
36 Aroclor-1260					CAS # 11096-82-5		
5 524	5 524	(0 000)	575578	2 00000	1.8655	0.00- 0.00	0.00
5 648	5.646	(0 002)	748899	2 00000	1.9286	95.86- 135.86	0 00
6 368	6 365	(0 003)	608757	2 00000	1 9540	116.91- 156 91	0.00
7 241	7 240	(0 001)	1413594	2.00000	2.0278	120 00- 160 00	0 00
8 031	8 030	(0 001)	596859	2 00000	2 0101	108.33- 148 33	0.00
		Average of Peak Amounts =			1 9572		



Data File: \\qpitpa02\d\chem\gc8.1\1121.b\H-A10276.D
Date : 12-FEB-2001 19:56
Client ID:
Sample Info: H1660,1121.b

Column phase: DB608

Instrument: gc8.1

Operator: 010139
Column diameter: 0.53

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10277.D
Report Date: 13-Feb-2001 08:10

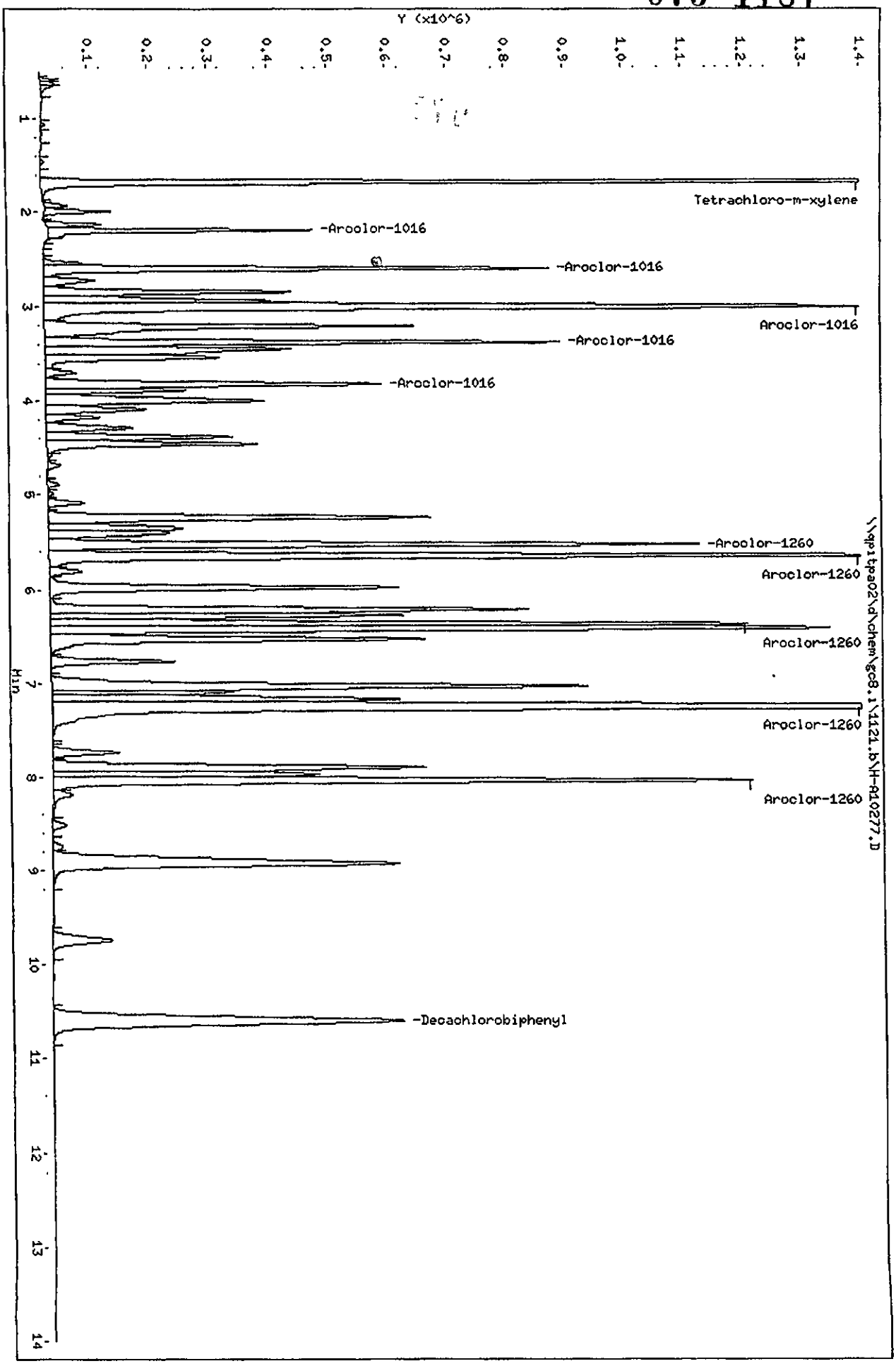
STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10277.D
Lab Smp Id: XH1660
Inj Date : 12-FEB-2001 20:16 Inst ID: gc8.i
Operator : 010139
Smp Info : XH1660,1121.b
Misc Info : 190-112-2
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:10 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 20:16 Cal File: H-A10277.D
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-1660.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
20 Aroclor-1016					CAS # 12674-11-2		
2.188	2 187	(0 001)	442195 4 00000	3.4039	0 00- 0.00	0.00	
2 600	2 600	(0.000)	852793 4.00000	3.4252	80.00- 120 00	0 00	
3 008	3 006	(0.002)	1424085 4 00000	3 6456	203 51- 243.51	0 00	
3 378	3 378	(0 000)	868169 4 00000	3.6113	203 51- 243 51	0.00	
3 818	3.819	(-0 001)	564514 4 00000	3 6307	297 56- 337 56	0 00	
Average of Peak Amounts =				3.5433			
$ 1 Tetrachloro-m-xylene					CAS # 877-09-8		
1 678	1 677	(0 001)	1723733 0 20000	0 18392			
$ 34 Decachlorobiphenyl					CAS # 2051-24-3		
10 601	10.602	(-0 001)	588918 0 20000	0 19338			
36 Aroclor-1260					CAS #: 11096-82-5		
5 525	5 524	(0.001)	1099421 4 00000	3 6294	0 00- 0 00	0 00	
5 648	5.646	(0 002)	1463997 4 00000	3.8066	95.86- 135.86	0 00	
6 368	6 365	(0.003)	1178938 4 00000	3.8186	116.91- 156.91	0.00	
7 239	7 240	(-0 001)	2785312 4 00000	3 9962	120.00- 160.00	0 00	
8 031	8 030	(0 001)	1183762 4 00000	3.9888	108 33- 148.33	0.00	
Average of Peak Amounts =				3 8479			

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10277.D
Date : 12-FEB-2001 20:16
Client ID:
Sample Info: XH1660,1121.b
Column phase: DB608

Instrument: gc8.i
Operator: 010139
Column diameter: 0.53



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10278.D
Lab Smp Id: 2M2154
Inj Date : 12-FEB-2001 20:36
Operator : 010139
Smp Info : 2M2154,1121.b
Misc Info : 190-120-10
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:25 eppingerd
Cal Date : 12-FEB-2001 20:16
Als bottle: 14
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC061

Inst ID: gc8.i

Quant Type: ESTD
Cal File: H-A10277.D
Continuing Calibration Sample

Compound Sublist: 2154.sub
Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
8 Aroclor-1221					CAS # 11104-28-2		
1.465	1 463	(0.002)	31247	0 50000	0 51520	0 00- 0.00	0 00
1 989	1 988	(0 001)	42417	0 50000	0.48647	116.57- 156 57	0.00
2 188	2.187	(0.001)	85617	0.50000	0 51176	66 04- 106.04	0.00
		Average of Peak Amounts =			0.50448	0.97-D	
$ 1 Tetrachloro-m-xylene					CAS # 877-09-8		
1 678	1 677	(0 001)	9196	0.02500	0 00098123		
$ 34 Decachlorobiphenyl					CAS # 2051-24-3		
Compound Not Detected							
33 Aroclor-1254					CAS # 11097-69-1		
4 379	4 376	(0 003)	111892	0.50000	0 52938	0 00- 0.00	0 00
4 455	4 453	(0.002)	136822	0 50000	0.52969	92 23- 132.23	0.00
5.257	5.253	(0.004)	202589	0.50000	0.53190	77.40- 117.40	0.00
5.433	5 430	(0.003)	148139	0 50000	0 56355	51.09- 91 09	0 00
5 646	5.645	(0 001)	113018	0 50000	0.49186	65 01- 105.01	0.00
		Average of Peak Amounts =			0 52928	5.97-D	

2nd SOURCE

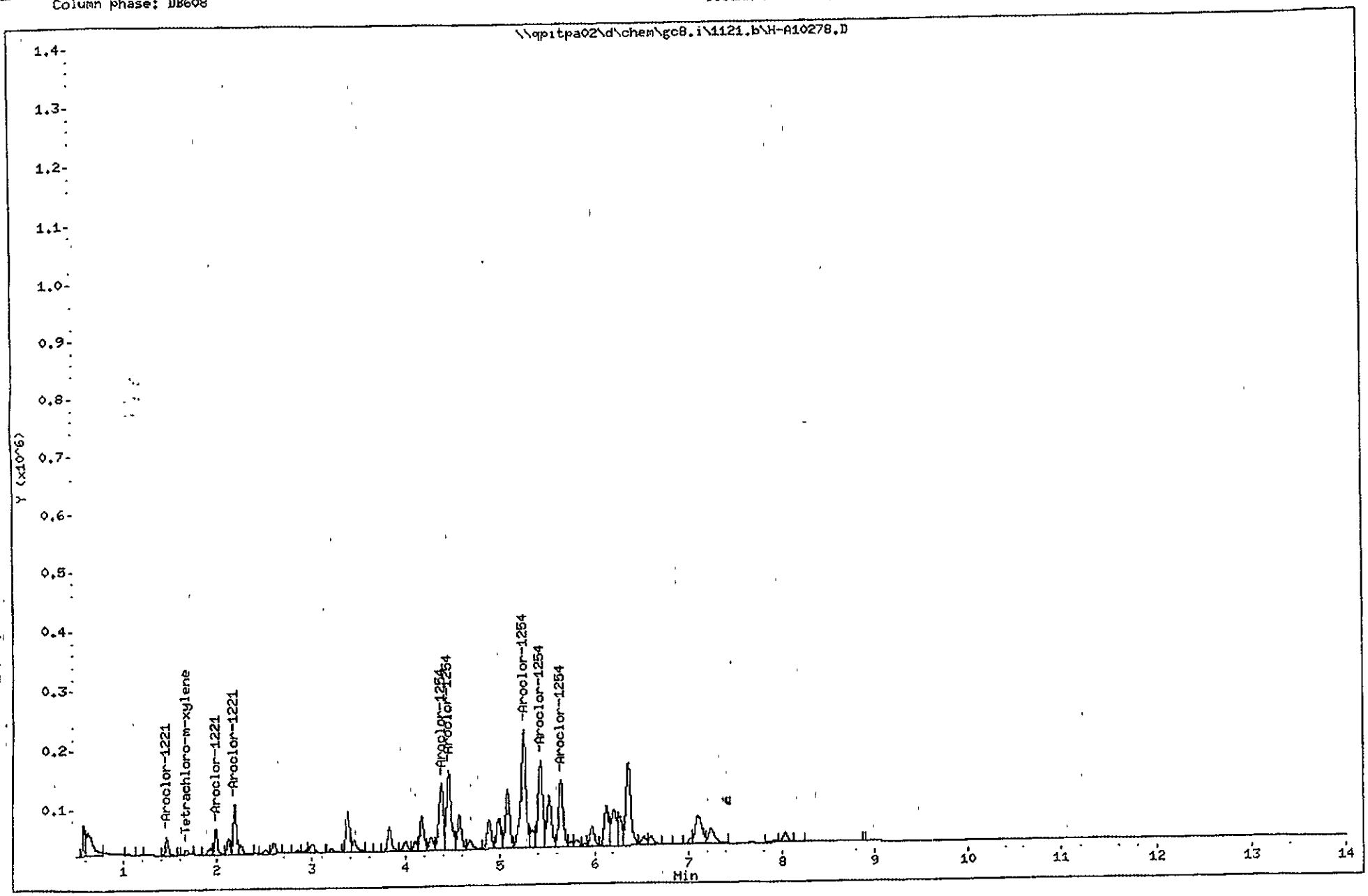
6751189

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10278.D
Date : 12-FEB-2001 20:36
Client ID:
Sample Info: 2M2154,1121.b

Column phase: DB608

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53



4043

STL Pittsburgh

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10279.D
Report Date: 13-Feb-2001 08:31

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10279.D
Lab Smp Id: 2M1232
Inj Date : 12-FEB-2001 20:56 Inst ID: gc8.i
Operator : 010139
Smp Info : 2M1232,1121.b
Misc Info : 190-120-11
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:25 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 20:16 Cal File: H-A10277.D
Als bottle: 15 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1232.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
14 Aroclor-1232					CAS #: 11141-16-5		
2 188	2 186	(0 002)	75668	0 50000	0 64417	0 00- 0 00	0.00
2 600	2 599	(0.001)	59013	0 50000	0.55300	146.26- 186.26	0.00
3 008	3.005	(0.003)	84710	0.50000	0.55362	65 99- 105 99	0 00
3 379	3.377	(0 002)	49788	0 50000	0 48992	74 18- 114 18	0 00
Average of Peak Amounts =					0 56018		

12.09.D

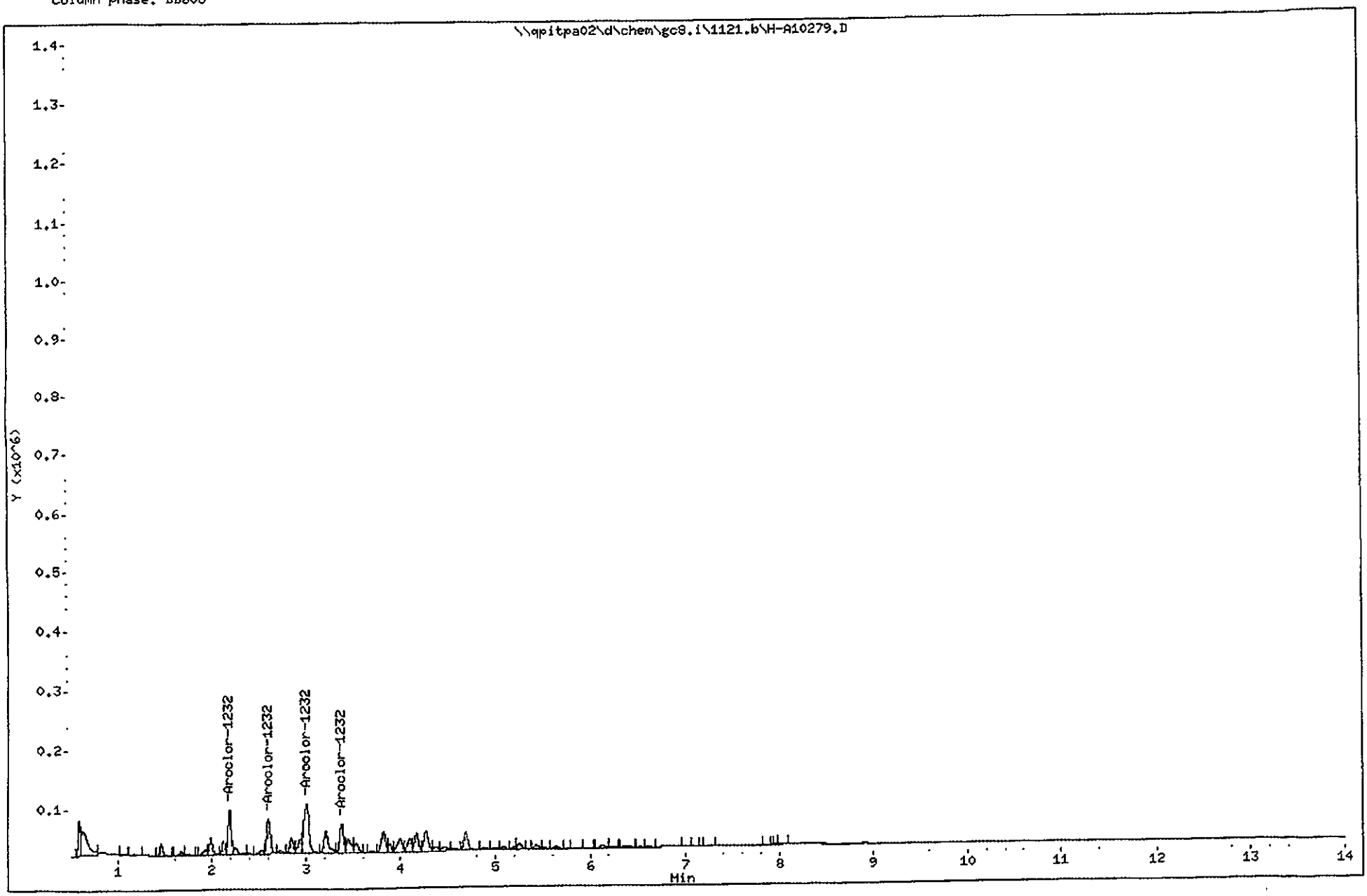
2nd SOURCE

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10279.D
Date : 12-FEB-2001 20:56
Client ID:
Sample Info: 2M1232,1121.b

Column phase: DB608

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53



675 1192

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10280.D
Lab Smp Id: 2M1242
Inj Date : 12-FEB-2001 21:15 Inst ID: gc8.i
Operator : 010139
Smp Info : 2M1242,1121.b
Misc Info : 190-120-12
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m Quant Type: ESTD
Meth Date : 13-Feb-2001 08:25 eppingerd Cal File: H-A10277.D
Cal Date : 12-FEB-2001 20:16 Continuing Calibration Sample
Als bottle: 16
Dil Factor: 1.00000 Compound Sublist: 1242.sub
Integrator: Falcon Sample Matrix: None
Target Version: 4.04
Processing Host: PITPC061

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
15 Aroclor-1242					CAS #. 53469-21-9		
3 007	3 006	(0 001)	154380	0 50000	0 50994	0.00- 0 00	0 00
3 378	3 376	(0.002)	94556	0.50000	0 50327	310 13- 350.13	0.00
3 818	3.817	(0.001)	66866	0.50000	0.49979	749.70- 789 70	0.00
4 267	4 267	(0 000)	69247	0 50000	0.51146	512 48- 552.48	0.00
4 682	4 681	(0.001)	60370	0.50000	0 50696	314 30- 354 30	0.00
Average of Peak Amounts =					0 50629	1.307.D	

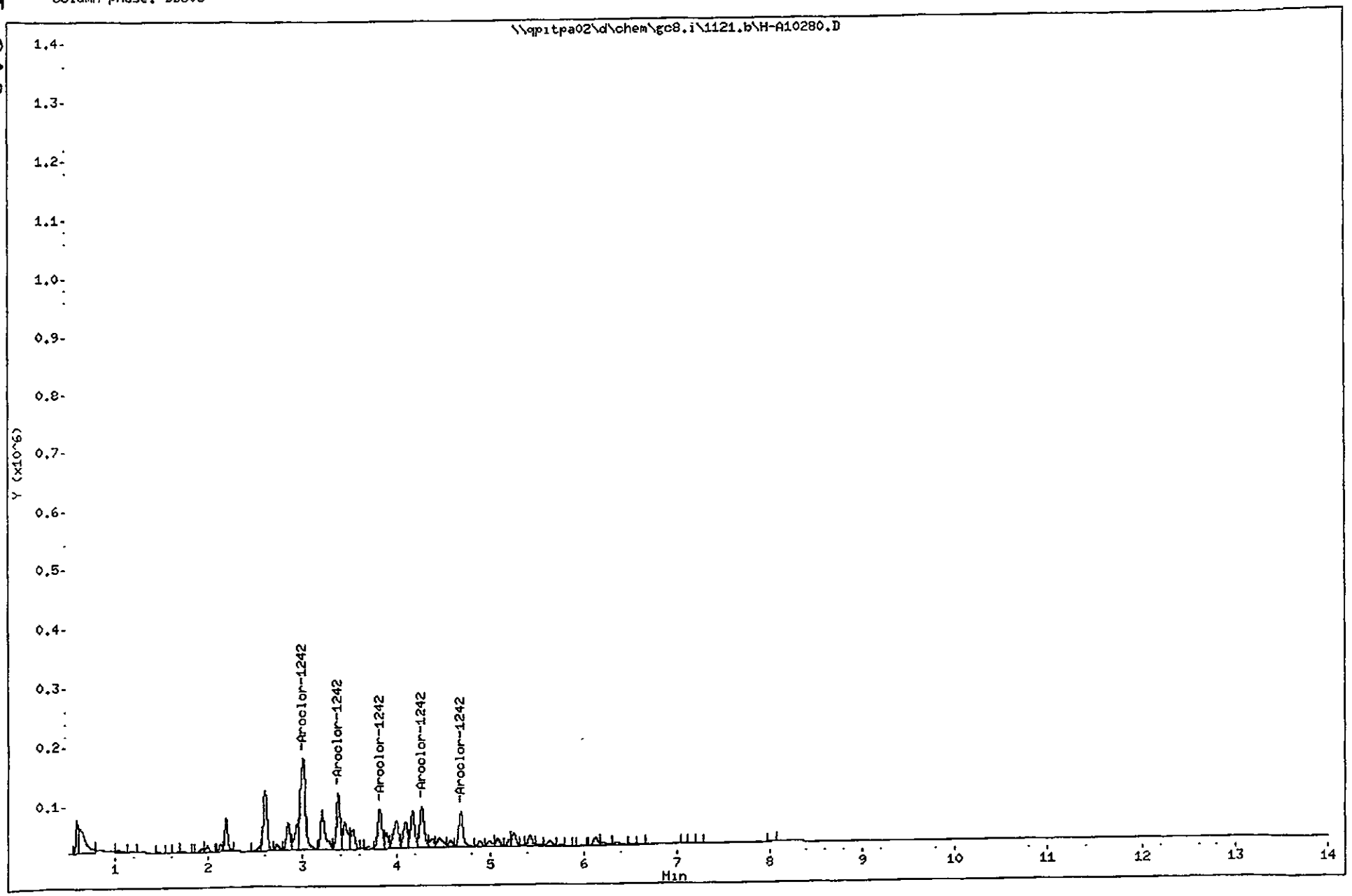
2nd sweep

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10280.D
Date : 12-FEB-2001 21:15
Client ID:
Sample Info: 2M1242,1121.b

Column phase: DB608

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53



Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10281.D
Report Date: 13-Feb-2001 08:31

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10281.D
Lab Smp Id: 2M1248
Inj Date : 12-FEB-2001 21:35 Inst ID: gc8.i
Operator : 010139
Smp Info : 2M1248,1121.b
Misc Info : 190-120-13
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:25 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 20:16 Cal File: H-A10277.D
Als bottle: 17 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1248.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
21 Aroclor-1248					CAS # 12672-29-6		
3 379	3.377	(0 002)	110536	0 50000	0 55022	0.00- 0 00	0 00
3.820	3 818	(0 002)	106726	0.50000	0 56717	114 57- 154.57	0 00
4 169	4.168	(0 001)	119759	0 50000	0 54486	63.67- 103 67	0 00
4 266	4 266	(0 000)	117285	0 50000	0 58042	43 86- 83 86	0 00
4 682	4 683	(-0.001)	100943	0 50000	0 48108	128.08- 168.08	0.00
		Average of Peak Amounts =			0 54475		

9.09-D

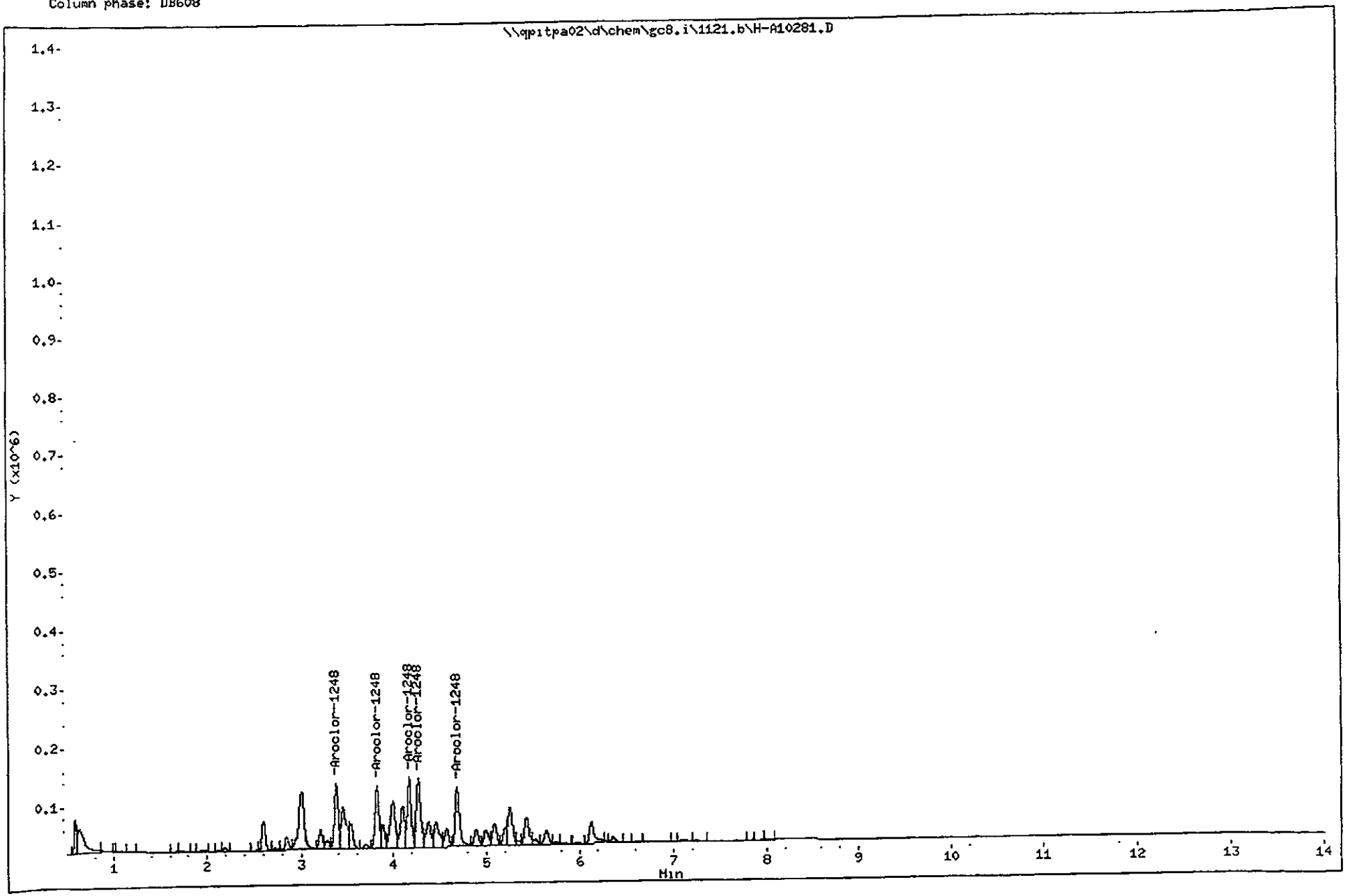
2nd source

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10281.D
Date : 12-FEB-2001 21:35
Client ID:
Sample Info: 2M1248,1121.b

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53

Column phase: DB608



Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10282.D
Report Date: 13-Feb-2001 08:32

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10282.D
Lab Smp Id: 2M1660
Inj Date : 12-FEB-2001 21:55 Inst ID: gc8.i
Operator : 010139
Smp Info : 2M1660,1121.b
Misc Info : 190-120-14
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 08:25 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 20:16 Cal File: H-A10277.D
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
20 Aroclor-1016					CAS #: 12674-11-2		
2 188	2 187	(0 001)	68052	0.50000	0.52385	0 00- 0.00	0.00
2 601	2.600	(0.001)	130359	0.50000	0 52359	80.00- 120.00	0.00
3 008	3 006	(0 002)	201665	0.50000	0.51625	203.51- 243.51	0.00
3 378	3.378	(0 000)	124691	0.50000	0 51867	203 51- 243 51	0.00
3 819	3 819	(0.000)	79762	0 50000	0.51300	297.56- 337.56	0.00
		Average of Peak Amounts =			0 51907	3.89%D	
$ 1 Tetrachloro-m-xylene					CAS #· 877-09-8		
Compound Not Detected							
$ 34 Decachlorobiphenyl					CAS # 2051-24-3		
10.600	10.602	(-0.002)	1357	0 02500	0.00044558		
36 Aroclor-1260					CAS #: 11096-82-5		
5.524	5.524	(0 000)	167418	0 50000	0 55268	0.00- 0 00	0.00
5 648	5 646	(0 002)	207105	0 50000	0 53850	95.86- 135.86	0.00
6 366	6.365	(0 001)	174505	0.50000	0.56523	116 91- 156.91	0.00
7 241	7 240	(0 001)	339281	0 50000	0 48678	120 00- 160.00	0.00
8 033	8 030	(0 003)	150096	0.50000	0 50577	108 33- 148.33	0.00
		Average of Peak Amounts =			0.52979	6.04%D	

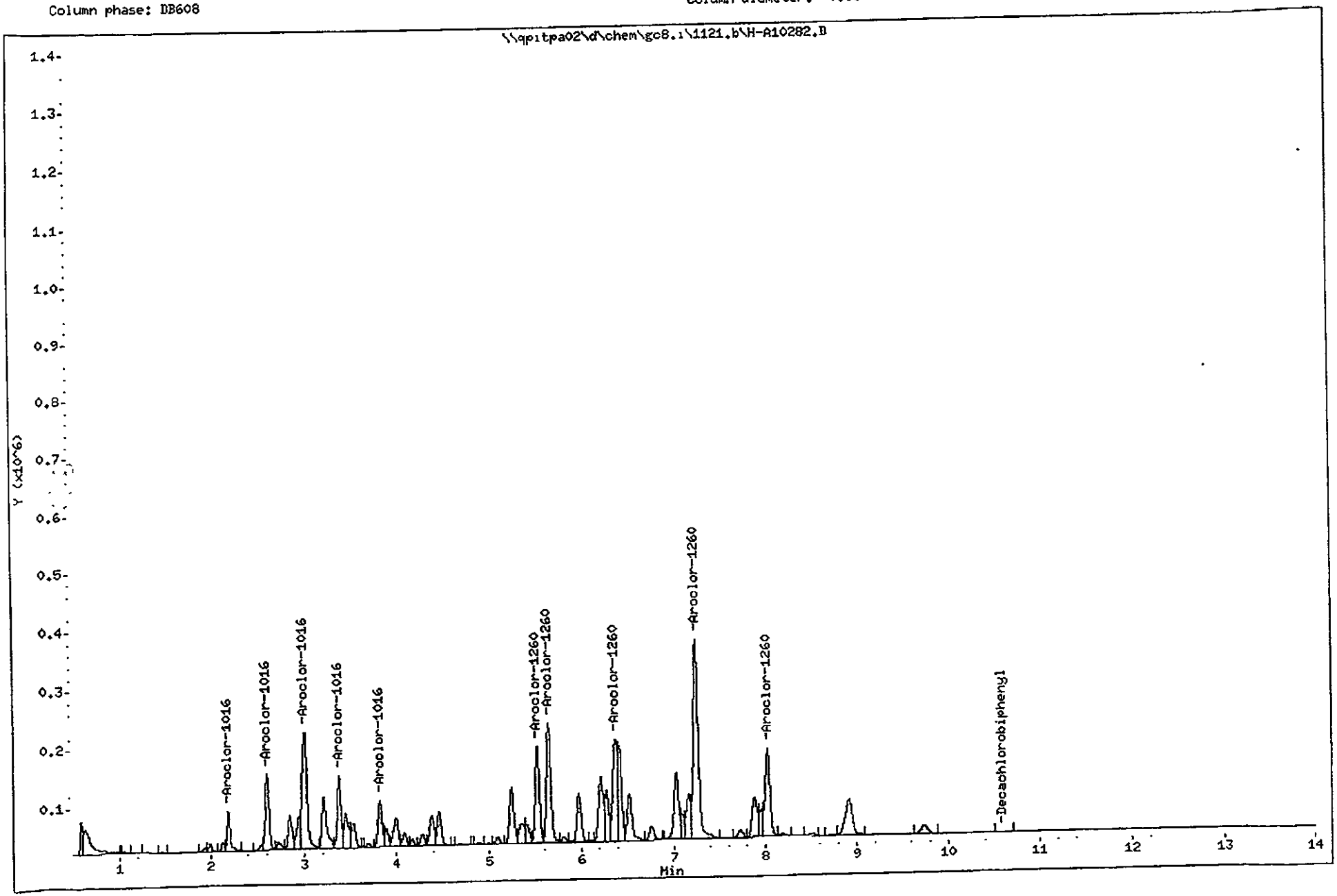
2nd source

Data File: \\qpitpa02\d\chem\gc8.1\1121.b\H-A10282.D
Date : 12-FEB-2001 21:55
Client ID:
Sample Info: 2M1660,1121.b

Instrument: gc8.1

Operator: 010139
Column diameter: 0.53

Column phase: DB608



Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10323.D
Report Date: 13-Feb-2001 12:25

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10323.D
Lab Smp Id: M1660
Inj Date : 13-FEB-2001 11:25 Inst ID: gc8.i
Operator : 010139
Smp Info : M1660,1121.b
Misc Info : 190-111-13
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 12:24 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 20:16 Cal File: H-A10277.D
Als bottle: 59 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

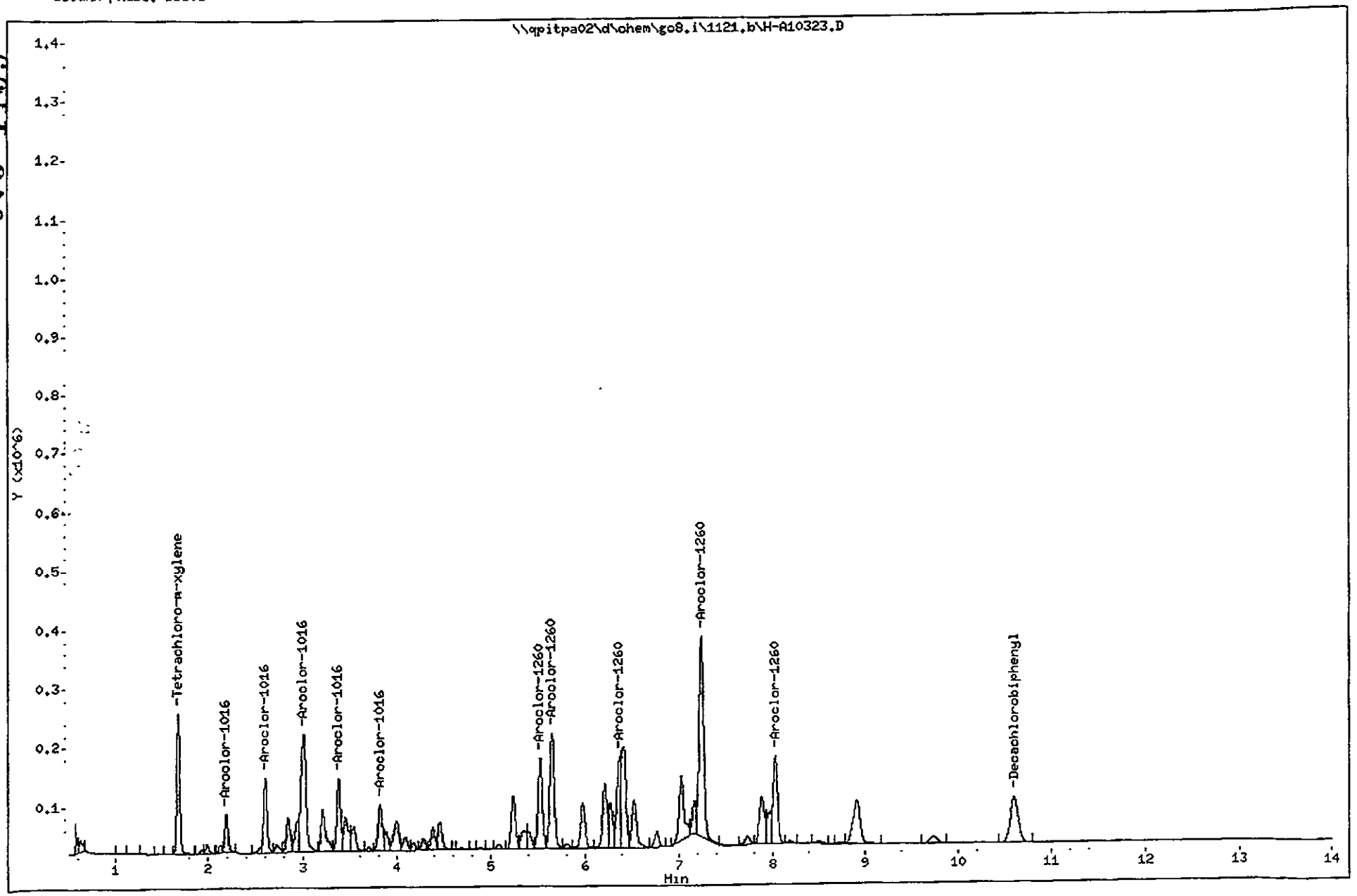
				AMOUNTS CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO
20 Aroclor-1016					CAS #: 12674-11-2		
2 189	2 187	(0 002)	66252	0 50000	0 51000	0.00- 0.00	0.00
2.602	2.600	(0 002)	127569	0 50000	0.51238	80.00- 120.00	0.00
3.008	3 006	(0 002)	199537	0 50000	0 51080	203 51- 243.51	0.00
3.379	3.378	(0.001)	122656	0.50000	0.51020	203.51- 243.51	0 00
3 819	3.819	(0.000)	78504	0.50000	0.50490	297 56- 337.56	0 00
		Average of Peak Amounts =			0.50966		
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
1 679	1.677	(0 002)	238542	0.02500	0 025453		
$ 34 Decachlorobiphenyl					CAS #. 2051-24-3		
10.601	10.602	(-0 001)	76544	0.02500	0 025134		
36 Aroclor-1260					CAS # 11096-82-5		
5.524	5.524	(0.000)	152969	0.50000	0.50498	0.00- 0 00	0.00
5.648	5.646	(0.002)	195019	0 50000	0.50708	95 86- 135 86	0.00
6.371	6.365	(0.006)	154167	0 50000	0.49935	116.91- 156.91	0.00
7 238	7.240	(-0.002)	338213	0 50000	0.48525	120.00- 160.00	0.00
8 031	8.030	(0 001)	148893	0.50000	0 50171	108.33- 148.33	0.00
		Average of Peak Amounts =			0.49968		

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10323.D
Date : 13-FEB-2001 11:25
Client ID:
Sample Info: H1660,1121.b

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53

Column phase: DB608



STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10344.D
Lab Smp Id: M1660
Inj Date : 13-FEB-2001 18:20 Inst ID: gc8.i
Operator : 010139
Smp Info : M1660,1121.b
Misc Info : 190-111-13
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 14-Feb-2001 08:27 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 20:16 Cal File: H-A10277.D
Als bottle: 80 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
20 Aroclor-1016					CAS #: 12674-11-2		
2 190	2.187	(0.003)	69351	0.50000	0.53385	0.00- 0.00	0.00
2 602	2.600	(0.002)	132043	0.50000	0.53035	80.00- 120.00	0.00
3 010	3.006	(0 004)	205986	0.50000	0.52731	203.51- 243.51	0.00
3 380	3 378	(0.002)	125026	0.50000	0.52006	203.51- 243.51	0.00
3.822	3.819	(0 003)	79796	0.50000	0 51321	297 56- 337.56	0.00
Average of Peak Amounts =					0.52496		
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
1 678	1 677	(0.001)	248386	0.02500	0.026503		
$ 34 Decachlorobiphenyl					CAS #: 2051-24-3		
10 608	10.602	(0.006)	78434	0 02500	0.025755		
36 Aroclor-1260					CAS #: 11096-82-5		
5 527	5 524	(0 003)	149479	0.50000	0.49346	0 00- 0.00	0.00
5 649	5.646	(0.003)	191147	0.50000	0.49701	95.86- 135.86	0.00
6.370	6 365	(0.005)	151424	0.50000	0.49047	116.91- 156 91	0.00
7 241	7 240	(0 001)	337445	0.50000	0.48415	120.00- 160.00	0.00
8 034	8 030	(0.004)	150339	0 50000	0.50659	108 33- 148 33	0.00
Average of Peak Amounts =					0.49433		

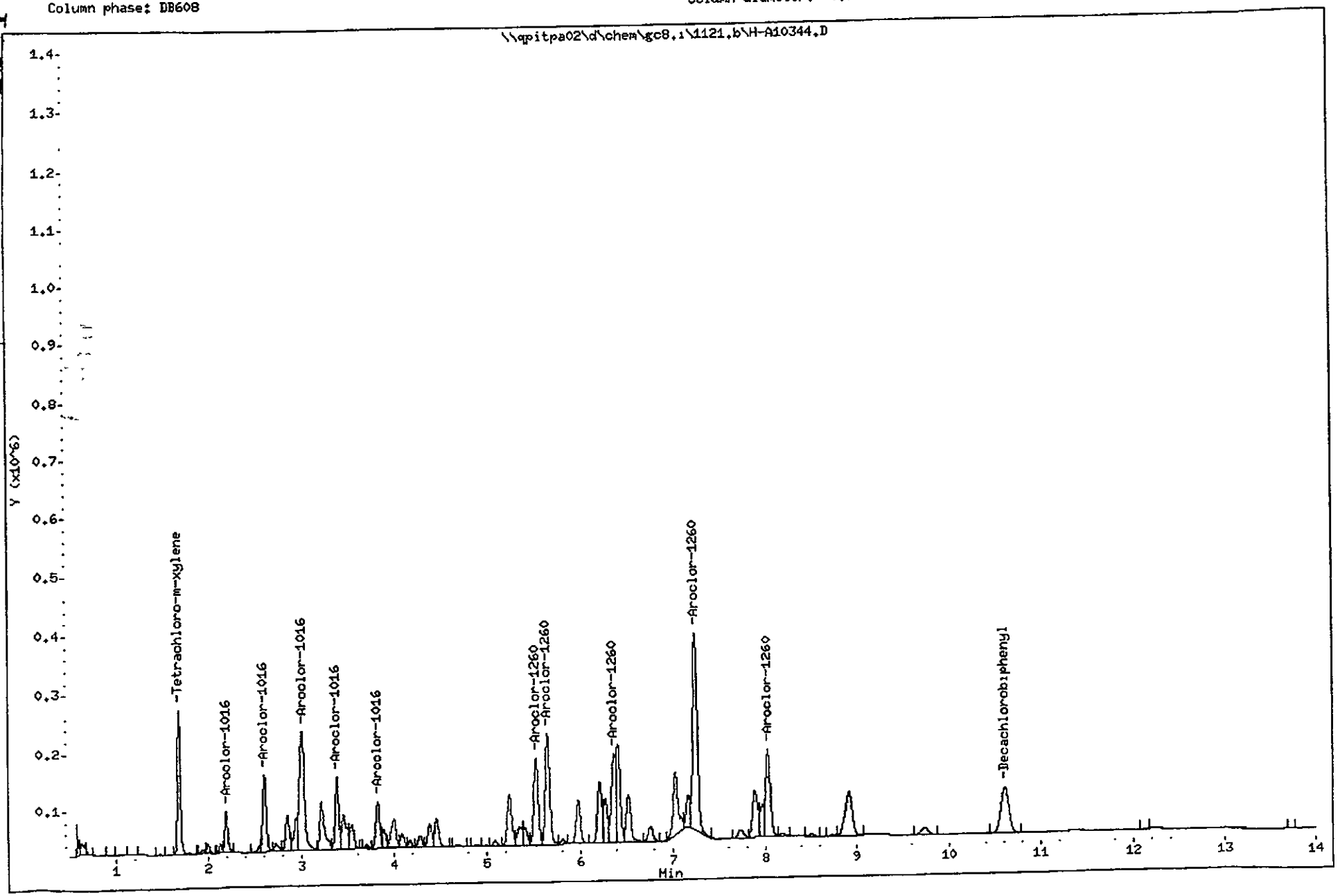
Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10344.D
Date : 13-FEB-2001 18:20
Client ID:
Sample Info: M1660,1121.b

Column phase: DB608

Instrument: gc8.i

Operator: 010139
Column diameter: 0.53

675 1221



STL Pittsburgh

PCB
QC DATA

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:C1B120000 329

Sample WT/Vol: 1000 / mL
Work Order: DV05X1AA
Dilution factor: 1
Moisture %:NA

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/13/01

QC Batch: 1043329

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	1.0	U
11104-28-2	Aroclor 1221	1.0	U
11141-16-5	Aroclor 1232	1.0	U
53469-21-9	Aroclor 1242	1.0	U
12672-29-6	Aroclor 1248	1.0	U
11097-69-1	Aroclor 1254	1.0	U
11096-82-5	Aroclor 1260	1.0	U

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10328.D
Lab Smp Id: DV05X1AA Client Smp ID: PBLK3329
Inj Date : 13-FEB-2001 13:04
Operator : 010139 Inst ID: gc8.i
Smp Info : DV05X1AA,1121.b
Misc Info : 090228BLK
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 12:24 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 20:16 Cal File: H-A10277.D
Als bottle: 64 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.04 Sample Matrix: WATER
Processing Host: PITPC061

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
1	677	1 677 (0 000)	161495	0 01723	0.17232		

$ 1 Tetrachloro-m-xylene CAS #: 877-09-8

---

8 Aroclor-1221 CAS #. 11104-28-2

Peaks not detected for Quant. or Qual signal(s)

---

14 Aroclor-1232 CAS #. 11141-16-5

Peaks not detected for Quant. or Qual signal(s).

---

675 1205

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO

15 Aroclor-1242 CAS #: 53469-21-9

Peaks not detected for Quant or Qual. signal(s).

---

20 Aroclor-1016 CAS #: 12674-11-2

Peaks not detected for Quant. or Qual. signal(s).

---

21 Aroclor-1248 CAS #. 12672-29-6

Peaks not detected for Quant or Qual. signal(s)

---

33 Aroclor-1254 CAS #: 11097-69-1

Peaks not detected for Quant. or Qual. signal(s)

$ 34 Decachlorobiphenyl CAS #: 2051-24-3

10 606 10.602 (0.004) 55674 0.01828 0.18281

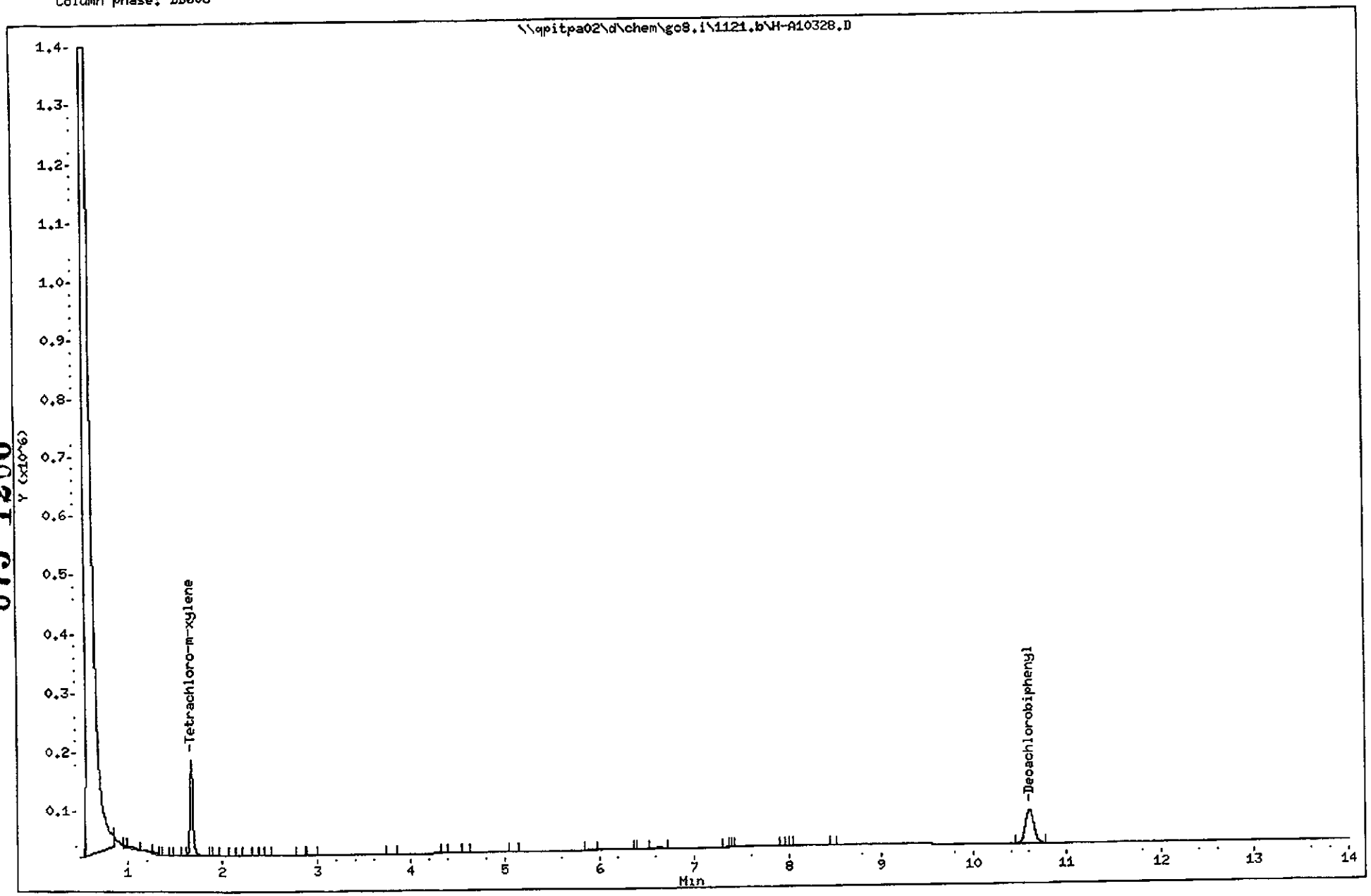
---

36 Aroclor-1260 CAS #: 11096-82-5

Peaks not detected for Quant. or Qual. signal(s)

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10328.D
Date : 13-FEB-2001 13:04
Client ID: PBLK3329
Sample Info: DV05X1AA,1121.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc8.i
Operator: 010139
Column diameter: 0.53



675 1206

4060

STL Pittsburgh

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:C1B120000 329

Sample WT/Vol: 1000 / mL
Work Order: DV05X1AC
Dilution factor: 1
Moisture %:NA

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/13/01

QC Batch: 1043329

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	8.48	
11096-82-5	Aroclor 1260	8.94	

STL-Pittsburgh

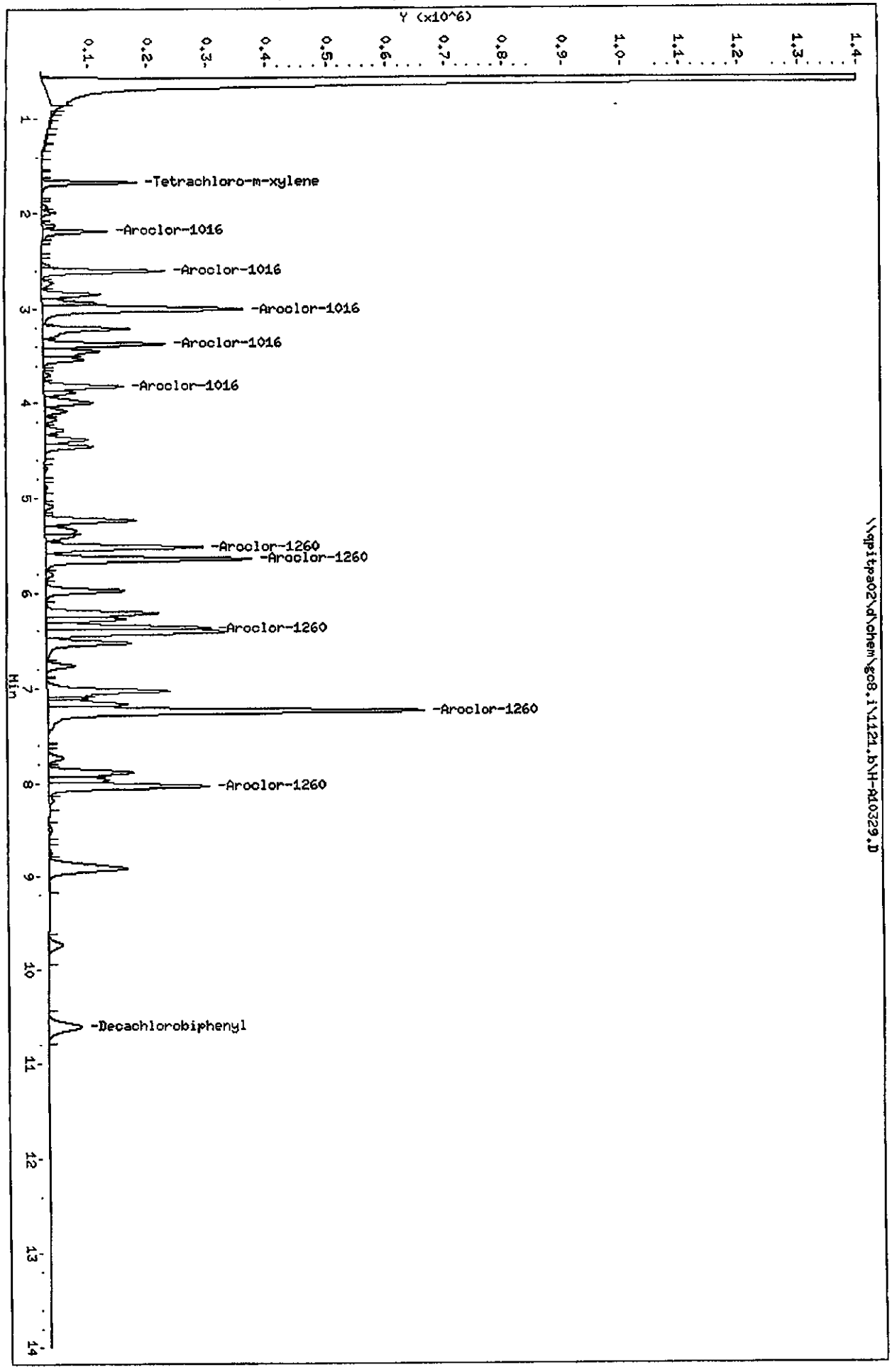
Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10329.D
Lab Smp Id: DV05X1AC Client Smp ID: LCS3329
Inj Date : 13-FEB-2001 13:24
Operator : 010139 Inst ID: gc8.i
Smp Info : DV05X1AC,1121.b
Misc Info : 090228LCS
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 12:24 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 20:16 Cal File: H-A10277.D
Als bottle: 65 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.04 Sample Matrix: WATER
Processing Host: PITPC061

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
20 Aroclor-1016					CAS # 12674-11-2		
2.189	2 187	(0 002)	108610	0.83606	8.3606	0.00- 0.00	0 00
2 601	2.600	(0.001)	208845	0.83883	8.3882	80.00- 120.00	0.00
3 009	3 006	(0.003)	335201	0 85809	8 5809	203.51- 243.51	0.00
3.379	3.378	(0.001)	205500	0 85481	8 5481	203.51- 243.51	0.00
3 820	3.819	(0 001)	132278	0 85076	8.5076	297.56- 337.56	0.00
Average of Peak Concentrations =					8.4771		
$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8		
1 677	1 677	(0.000)	160028	0 01708	0.17075		
$ 34 Decachlorobiphenyl					CAS #: 2051-24-3		
10.600	10.602	(-0.002)	55939	0.01837	0.18368		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
36 Aroclor-1260					CAS #: 11096-82-5		
5.527	5.524	(0 003)	265345	0 87596	8 7596	0.00- 0 00	0.00
5.649	5.646	(0.003)	344603	0 89601	8.9601	95 86- 135 86	0.00
6 374	6.365	(0.009)	273943	0 88731	8.8731	116.91- 156.91	0.00
7.239	7 240	(-0 001)	630988	0 90531	9 0531	120 00- 160.00	0 00
8.034	8.030	(0 004)	269027	0.90652	9.0652	108 33- 148.33	0 00
		Average of Peak Concentrations =			8.9422		



Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10329.D
Date : 13-FEB-2001 13:24
Client ID: LCS3329
Sample Info: DV05X1AC,1121.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc8.i
Operator: 010139
Column diameter: 0.53

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) WATER
Method: SW846 8082
PCBs (8082)

Lab Sample ID:C1B120000 329

Sample WT/Vol: 1000 / mL
Work Order: DV05X1AD
Dilution factor: 1
Moisture %:NA

Date Received: 02/09/01
Date Extracted:02/12/01
Date Analyzed: 02/13/01

QC Batch: 1043329

Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	8.34	
11096-82-5	Aroclor 1260	8.75	

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\1121.b\H-A10330.D
Lab Smp Id: DV05X1AD Client Smp ID: LCD3329
Inj Date : 13-FEB-2001 13:43
Operator : 010139 Inst ID: gc8.i
Smp Info : DV05X1AD,1121.b
Misc Info : 090228LCD
Comment :
Method : \\qpitpa02\d\chem\gc8.i\1121.b\PCBA.m
Meth Date : 13-Feb-2001 12:24 eppingerd Quant Type: ESTD
Cal Date : 12-FEB-2001 20:16 Cal File: H-A10277.D
Als bottle: 66 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.04 Sample Matrix: WATER
Processing Host: PITPC061

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

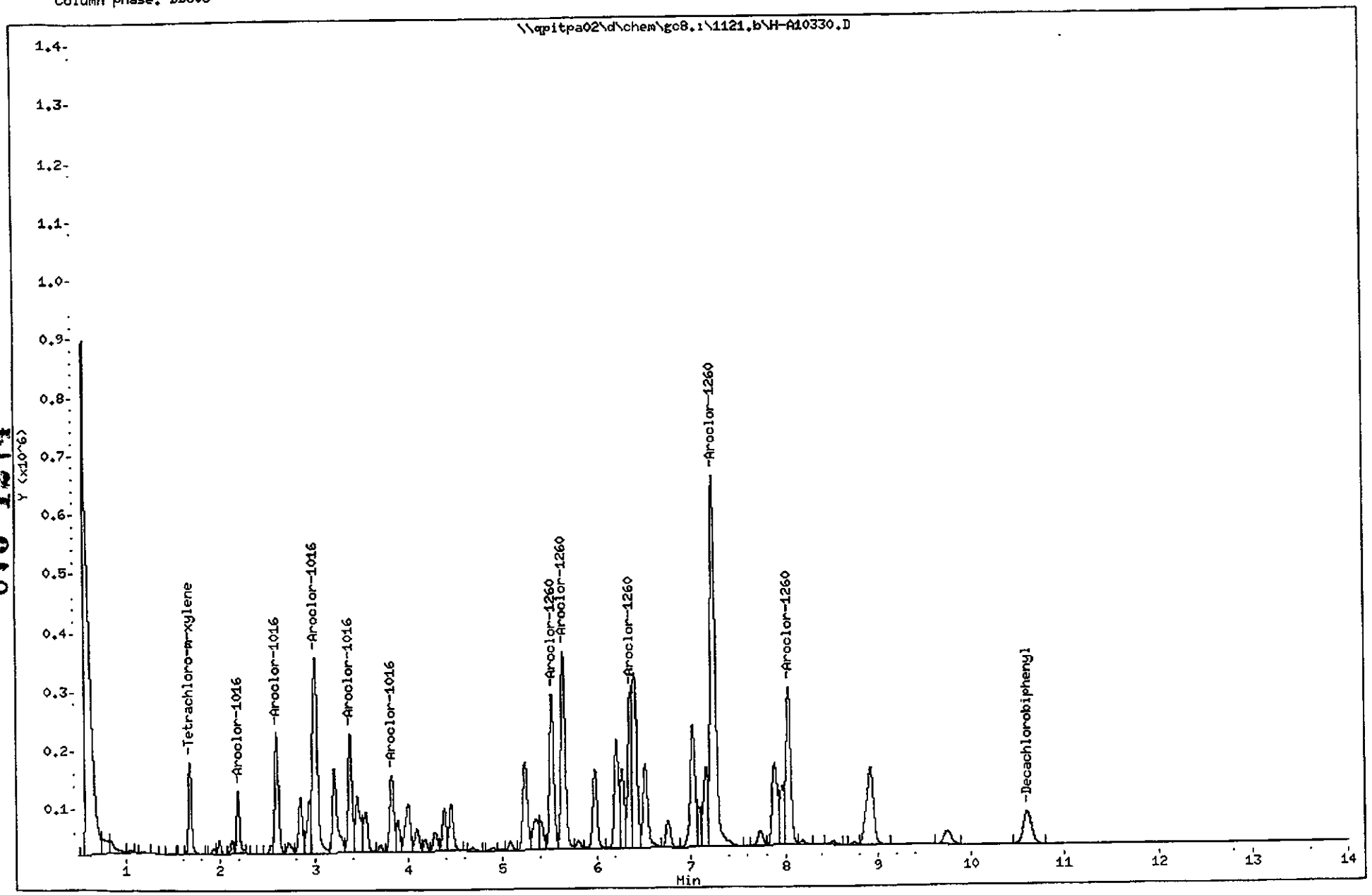
Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ug/L)	TARGET RANGE	RATIO
20 Aroclor-1016						CAS #: 12674-11-2	
2 189	2.187	(0.002)	105980	0.81582	8 1582	0.00- 0.00	0.00
2 601	2 600	(0.001)	206419	0.82908	8.2908	80.00- 120.00	0.00
3.007	3.006	(0 001)	329540	0.84360	8 4360	203.51- 243.51	0.00
3.379	3.378	(0.001)	202250	0.84129	8 4129	203.51- 243.51	0.00
3 819	3.819	(0.000)	130251	0.83772	8.3772	297.56- 337.56	0.00
Average of Peak Concentrations =					8.3350		
$ 1 Tetrachloro-m-xylene						CAS #: 877-09-8	
1 677	1.677	(0 000)	156277	0 01668	0 16675		
$ 34 Decachlorobiphenyl						CAS #: 2051-24-3	
10 604	10 602	(0 002)	54423	0 01787	0.17870		

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
36 Aroclor-1260					CAS #: 11096-82-5		
5.525	5.524	(0.001)	262113	0.86529	8.6529	0.00- 0.00	0.00
5.650	5.646	(0.004)	333588	0.86737	8.6737	95.86- 135.86	0.00
6.370	6.365	(0.005)	263573	0.85372	8.5372	116.91- 156.91	0.00
7.242	7.240	(0.002)	624248	0.89564	8.9564	120.00- 160.00	0.00
8.033	8.030	(0.003)	265692	0.89528	8.9528	108.33- 148.33	0.00
Average of Peak Concentrations =					8.7546		

Data File: \\qpitpa02\d\chem\gc8.i\1121.b\H-A10330.D
Date : 13-FEB-2001 13:43
Client ID: LCD3329
Sample Info: DV05X1AD,1121.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc8.i
Operator: 010139
Column diameter: 0.53



675 1214

4068

STL Pittsburgh

PCB
MISCELLANEOUS

FBA DW 2-13-00

STL Pittsburgh

Separatory Funnel Extraction Worksheet

Logbook ID: OP43

Start Date	Date Completed	Parameter	Method	Solvent	Solvent Lot	Solvent Mfg	Cleanup Method
2-12-01	2-12-01	Pest/PCB 8081A/8082	3510C	MeCl2 Hexane	T19271 T37307	Baker	NA

	Lot Number	Sample ID	Client ID	Sample Volume (mL)	Final Volume (mL)	pH	Surrogate #	Surr Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	Cleanup Date
1.	C1B070328	BPB	NA	1000	10.0	5	190-110-6	1.0	NA	NA	NA
2.		LCS	Pest			5			190-103-6	0.5	
3.		LCS Dup				5			↓	↓	
4.		LCS	PCB			5			190-110-7	1.0	
5		LCSDup				5			↓	↓	
6		001				7			NA	NA	
7.	C1B070321	162				5					
8.	~~C1B070376~~ C1B070376	001				5					
9.	D1B070389	023				5					
10.											
11.											
12											
13											
14.											
15.											
16.											
17											
18.											
19.											
20.											
21.											
22.											
23.											
Analyst											

F. Yurshinski 2-12-01

675 1216

Extract(s) (record line # from above)	Extract(s) Received Date	Time	Analyst	Location	Extract(s) Relinquished Date	Time	Analyst	Location
All Above All Along	2-12-01	1800	F. Yurshinski	Org Prep Refrig	2-12-01	1810	F. Yurshinski	REF-6C
	2-13-01	0800	DC Eff		2-13-01	0830	DC Eff	Prep

Sodium Sulfate Mfg/Lot Number: Baker T43640

Reviewed by: Brian A. Pino

Date: 2-12-01

4070

Sequence: C:\HPCHEM\1\SEQUENCE\1121.S

675 1217

Created : DE 2-12-01

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information
1	1	8082 ANALYSIS
2	2	RINSE
3	3	RINSE
4	4	190-111-7 268
5	5	190-111-8
6	6	190-111-9 270
7	7	190-111-10
8	8	190-111-11
9	9	190-111-12
10	10	190-111-13
11	11	190-111-14 275
12	12	190-112-1
13	13	190-112-2
14	14	190-120-10
15	15	190-120-11
16	16	190-120-12 280
17	17	190-120-13
18	18	190-120-14
19	19	MDLBLKW
20	20	1242#1W
21	21	1242#2W 285
22	22	1242#3W
23	23	1242#4W
24	24	1242#5W
25	25	1242#6W

675 1218

Line	Vial	Vial Information
26	26	1242#7W 290
27	27	1242#8W
28	28	1242#9W
29	29	1248#1W
30	30	1248#2W
31	31	1248#3W 295
32	32	1248#4W
33	33	1248#5W
34	34	1248#6W
35	35	1248#7W
36	36	1248#8W 300
37	37	1248#9W
38	38	190-111-13
39	39	020199001 #2
40	40	080276002
41	41	080276003 305
42	42	080276004
43	43	080276005
44	44	080276006
45	45	080276007
46	46	080276008 310
47	47	080276008S
48	48	080276008D
49	49	080276009
50	50	080276010
51	51	080276012 315
52	52	080276BLK
53	53	080276LCS

675 1219

Line	Vial	Vial Information
54	54	090282001
55	55	090282002
56	56	090282003 320
57	57	090282BLK1
58	58	090282LCS1
59	59	190-111-13
60	60	090228001
61	61	090321162 325
62	62	080276001
63	63	090282023
64	64	090228BLK
65	65	090228LCS
66	66	090228LCD 330
67	67	090282004
68	68	090282005
69	69	090282006
70	70	090282007
71	71	090282009 335
72	72	090282016
73	73	090282017
74	74	090282017S
75	75	090282017D
76	76	090282019 340
77	77	090282024
78	78	090282025
79	79	090282026
80	80	190-111-13
81	81	090282029 345

675 1220

Line	Vial	Vial Information
82	82	090282031
83	83	090282034
84	84	090282008
85	85	090282010
86	86	090282010S 350
87	87	090282010D
88	88	090282011
89	89	090282012
90	90	090282012S
91	91	090282012D 355
92	92	090282013
93	93	090282014
94	94	090282015
95	95	090282018
96	96	090282021 360
97	97	090282022
98	98	090282027
99	99	090282BLK2
100	100	090282LCS2
101	1	190-111-13 365
102	2	090282030
103	3	090282032
104	4	090282033
105	5	090321001
106	6	090321001S 370
107	7	090321001D
108	8	090321002
109	9	090321003

675 1221

Line	Vial	Vial Information
110	10	090321004
111	11	090321005 375
112	12	090321006
113	13	090321007
114	14	090321008
115	15	090321009
116	16	090321010 380
117	17	090321011
118	18	090321012
119	19	090321013
120	20	090321BLK
121	21	090321LCS 385
122	22	190-111-13
123	23	090321014
124	24	090321015
125	25	090321016
126	26	090321017 390
127	27	090321018
128	28	090321019
129	29	090321020
130	30	090321021
131	31	090318001 395
132	32	090318001S
133	33	090318001D
134	34	090318002
135	35	090318003
136	36	090318004 400
137	37	090318005

675 1222

Line	Vial	Vial Information
138	38	090318006
139	39	090318007
140	40	090318008
141	41	090318BLK 405
142	42	090318LCS
143	43	190-111-13
144	44	090318009
145	45	090318010
146	46	190-111-13 410

Sequence Table (Back Injector):

No entries - empty table!

675 1223

PSR024 2/12/01 8:45:30 MT SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

REQUESTED BY: MILLERJ

METHOD: QH PCBs (8082)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16D CLP1	DVWJE-1-AE		311480	399411	I-09-QH	C1B090228	001		WATER	0	13 1
17C	DVXMF-1-AA		311479	382811	I-09-QH	C1B090321	162		WATER	0	1 1
SUB	DVT0J-1-AA		311481	397503	I-09-QH	D1B080276	001		WATER	0	1 1
~~SUB~~	~~DVT0K-1-AA~~		311482	397503	A-13-QH	D1B080276	002		SOLID	0	1 1
~~SUB~~	~~DVT0Q-1-AA~~		311483	397503	A-13-QH	D1B080276	003		SOLID	0	1 1
~~SUB~~	~~DVT04-1-AA~~		311484	397503	A-13-QH	D1B080276	004		SOLID	0	1 1
~~SUB~~	DVT05-1-AA		311485	397503	A-13-QH	D1B080276	005		SOLID	0	1 1
~~SUB~~	~~DVT07-1-AA~~		311486	397503	A-13-QH	D1B080276	006		SOLID	0	1 1
~~SUB~~	~~DVT1C-1-AA~~		311487	397503	A-13-QH	D1B080276	007		SOLID	0	1 1
~~SUB~~	DVT1J-1-AA		311488	397503	A-13-QH	D1B080276	008		SOLID	0	1 1
~~SUB~~	~~DVT1T-1-AA~~		311489	397503	A-13-QH	D1B080276	009		SOLID	0	1 1
~~SUB~~	DVT1X-1-AA		311490	397503	A-13-QH	D1B080276	010		SOLID	0	1 1
~~SUB~~	~~DVT18-1-AA~~		311491	397503	A-13-QH	D1B080276	012		SOLID	0	1 1
SUB	DVW3A-1-AA		311492	397503	I-09-QH	D1B090282	023		WATER	0	1 1

BY 2-12-01

BY 2-12-01

BY 2-12-01

BY 2-12-01

BY 2-12-01

BY 2-12-01

BY 2-12-01

BY 2-12-01

BY 2-12-01

Used 1 liter per sample, and empty bottles were thrown away! P. Yushinski 2-12-01

RELINQUISHED BY	RECEIVED BY	DATE/TIME
P. Yushinski	P. Yushinski	2-12-01 1300
P. Yushinski	P. Yushinski	2-12-01 1500

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

HERBICIDE DATA

HERBICIDE
QC SUMMARY

675 1226 2E

WATER PESTICIDE SURROGATE RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

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

	EPA SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	S3 1 %REC #	S3 2 %REC #	TOT OUT
01	LCS5443	72						0
02	LCD5443	75						0
03	BLK5443		73					0
04	PBLK5443	72						0
05	DF/S-1/1039/	398*D	75D					1
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

Q 2/19/01

ADVISORY QC LIMITS (~~0-119~~ 42-125) JD 2/19/01

S1 = DCAA

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

SW846 8151A CHECK SAMPLE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B140000 WO #: DV5LH1AC
BATCH: 1045443

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
2,4-D	16.0	9.63	60	46 - 124	
2,4,5-TP (Silvex)	4.00	2.61	65	53 - 127	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

SW846 8151A CHECK SAMPLE DUPLICATE RECOVERY

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

Lab Code: STLPIT SDG No:

Lot #: C1B140000 WO #: DV5LH1AD
BATCH: 1045443

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
2,4-D	16.0	10.4	65	46 - 124	
2,4,5-TP (Silvex)	4.00	2.74	69	53 - 127	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

BLK5443

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

Lab Sample ID: DV5LH1AA Lab File ID: A-A01050

Matrix (soil/water) WATER Extraction: (SepF/Cont/Sonc) SW846 8151A

Sulfur Cleanup (Y/N) N Date Extracted: 02/14/01

Date Analyzed (1): 02/15/01 Date Analyzed (2):

Time Analyzed (1): 1323 Time Analyzed (2):

Instrument ID (1): GC1 Instrument ID (2):

GC Column (1): RTX-50 ID: 0.53(mm) GC Column (2): ID:

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	LCS5443	DV5LH1AC		02/15/01
02	LCD5443	DV5LH1AD		02/15/01
03	DF/S-1/1039/	DVWJE1CC	02/16/01	02/16/01
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

675 1230

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK5443

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

Lab Sample ID: DV5LH1AA

Lab File ID: A-B00525

Matrix (soil/water) WATER

Extraction: (SepF/Cont/Sonc) SW846 8151A

Sulfur Cleanup (Y/N) N

Date Extracted: 02/14/01

Date Analyzed (1): 02/15/01

Date Analyzed (2):

Time Analyzed (1): 1352

Time Analyzed (2):

Instrument ID (1): GC1

Instrument ID (2):

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

GC Column (2): ID:

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	LCS5443	DV5LH1AC	02/15/01	
02	LCD5443	DV5LH1AD	02/15/01	
03	DF/S-1/1039/	DVWJE1CC	02/16/01	02/16/01
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

675 1231

HERBICIDE
SAMPLE DATA

UXB INTERNATIONAL

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

Lab Sample ID: C1B090228 001

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

Sample WT/Vol: 1000 / mL
Work Order: DVWJE1CC
Dilution factor: 5
Moisture %: NA

Date Received: 02/09/01
Date Extracted: 02/14/01
Date Analyzed: 02/16/01

QC Batch: 1045443

Client Sample Id: DF/S-1/1039/IDW/004

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q	
94-75-7	2,4-D	2.7	J	P
93-72-1	2,4,5-TP (Silvex)	1.4	J	P

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01061.D
Report Date: 16-Feb-2001 16:45

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A01061.D
Lab Smp Id: DVWJE1CC Client Smp ID: DF/S-1/1039/IDW/004
Inj Date : 16-FEB-2001 12:05
Operator : 01797 Inst ID: gc1.i
Smp Info : DVWJE1CC,0301.b
Misc Info : 090228001
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 16-Feb-2001 16:32 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 17:51 Cal File: A-A00881.D
Als bottle: 5
Dil Factor: 5.00000
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	5.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

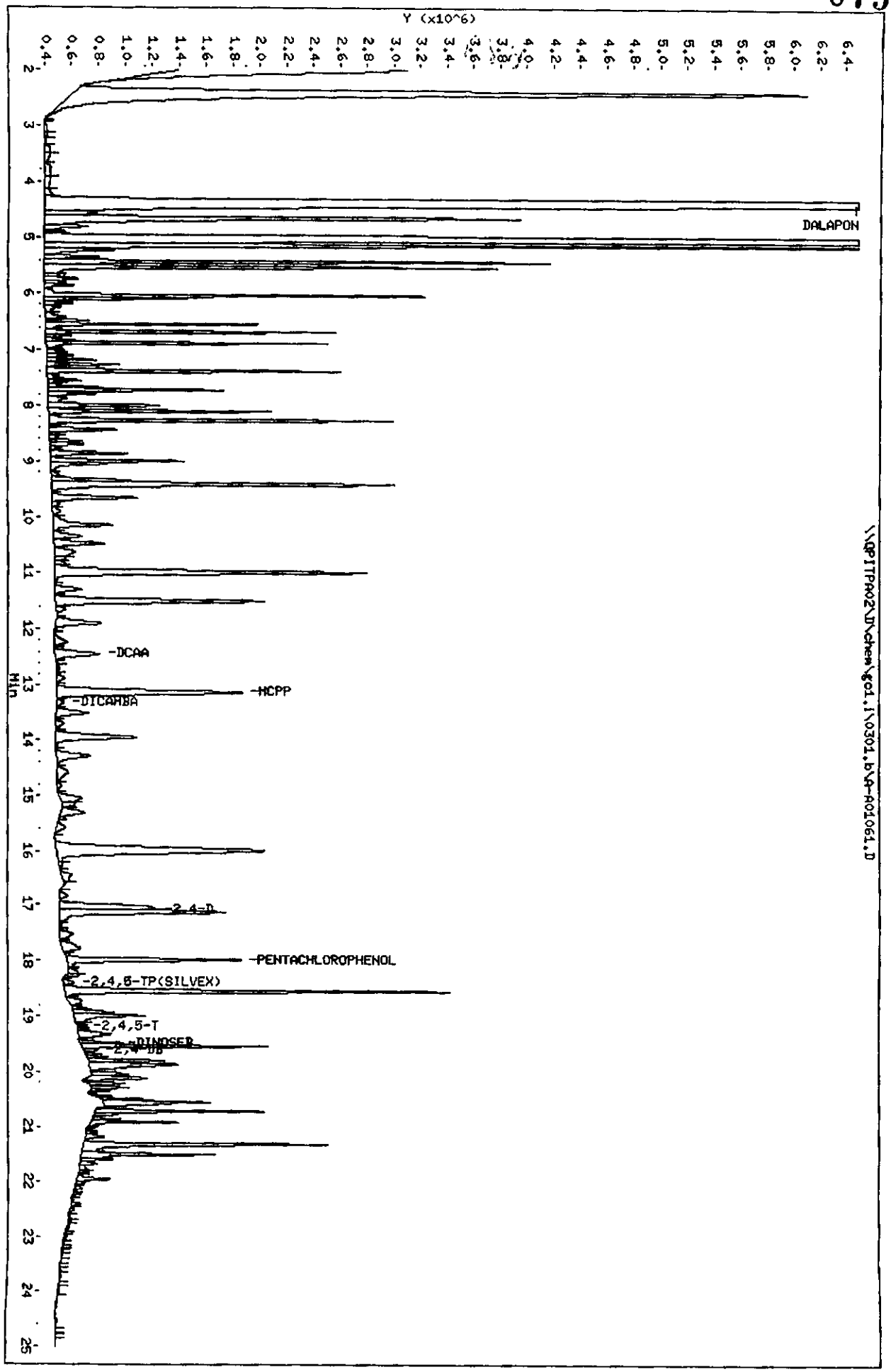
	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
1	DALAPON	4 350	4 400	-0 050	67053021	3 41569	3416
$ 2	DCAA	12.439	12.487	-0 048	1963984	0 03774	7.548
3	MCPP	13.130	13.116	0 014	1384689	19.3150	19310
4	DICAMBA	13 319	13 303	0 016	51546	0.00142	1 422
5	MCPA	Compound Not Detected					
6	DICHLOROPROP	Compound Not Detected					
7	2,4-D	17 083	17.086	-0.003	716410	0.05257	52 57(M)
8	PENTACHLOROPHENOL	17 985	17 994	-0.009	1291674	0.00664	6.639
9	2,4,5-TP(SILVEX)	18 396	18 397	-0 001	335216	0 00139	1 386
10	2,4,5-T	19 188	19.171	0 017	103189	<0.0	0 5066
11	DINOSEB	19.479	19 489	-0 010	747513	0 00445	4 451
12	2,4-DB	19 610	19.641	-0.031	289714	0.01203	12.03

675 1234

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01061.D
Report Date: 16-Feb-2001 16:45

QC Flag Legend

M - Compound response manually integrated.

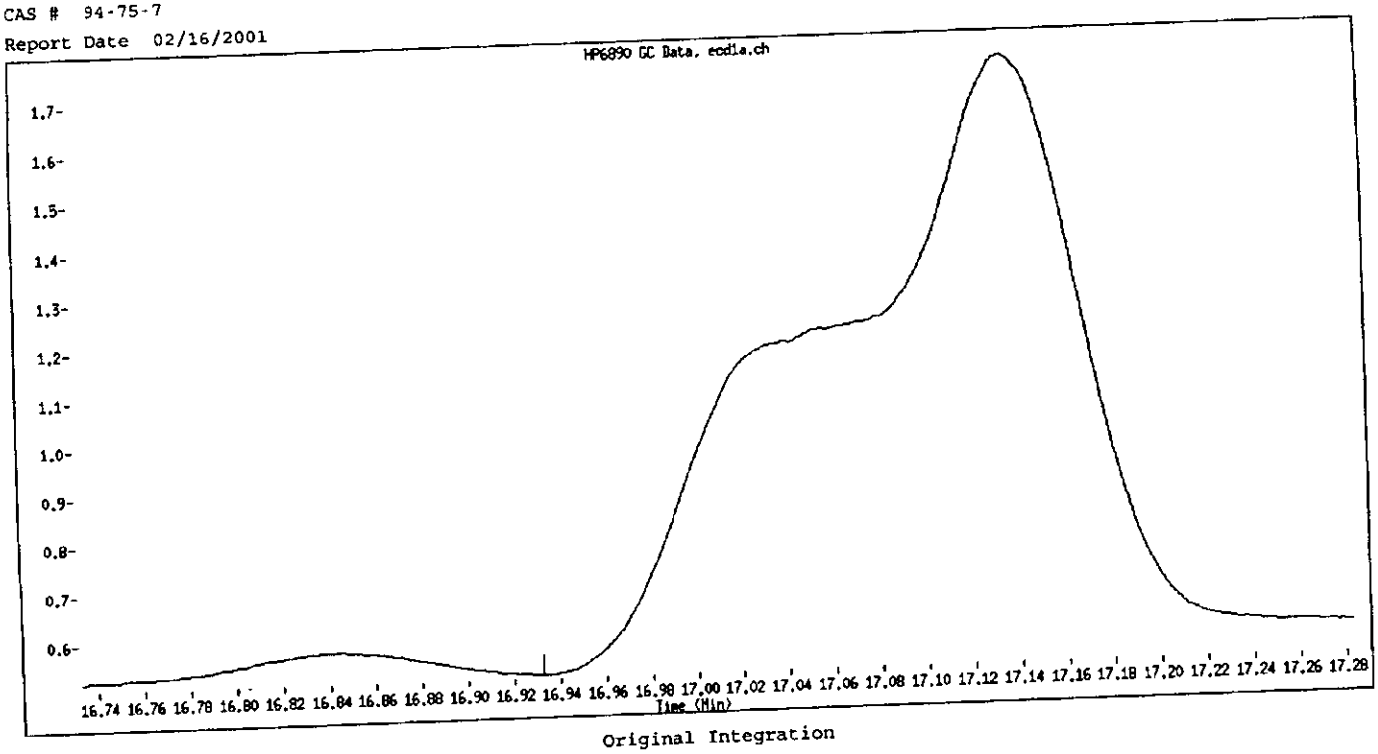


Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01061.D
Date : 16-FEB-2001 12:05
Client ID: DF/S-1/1039/IDW/004
Sample Info: DWJE1CC,0301.b
Volume Injected (uL): 1.0
Column phase: RTX-50

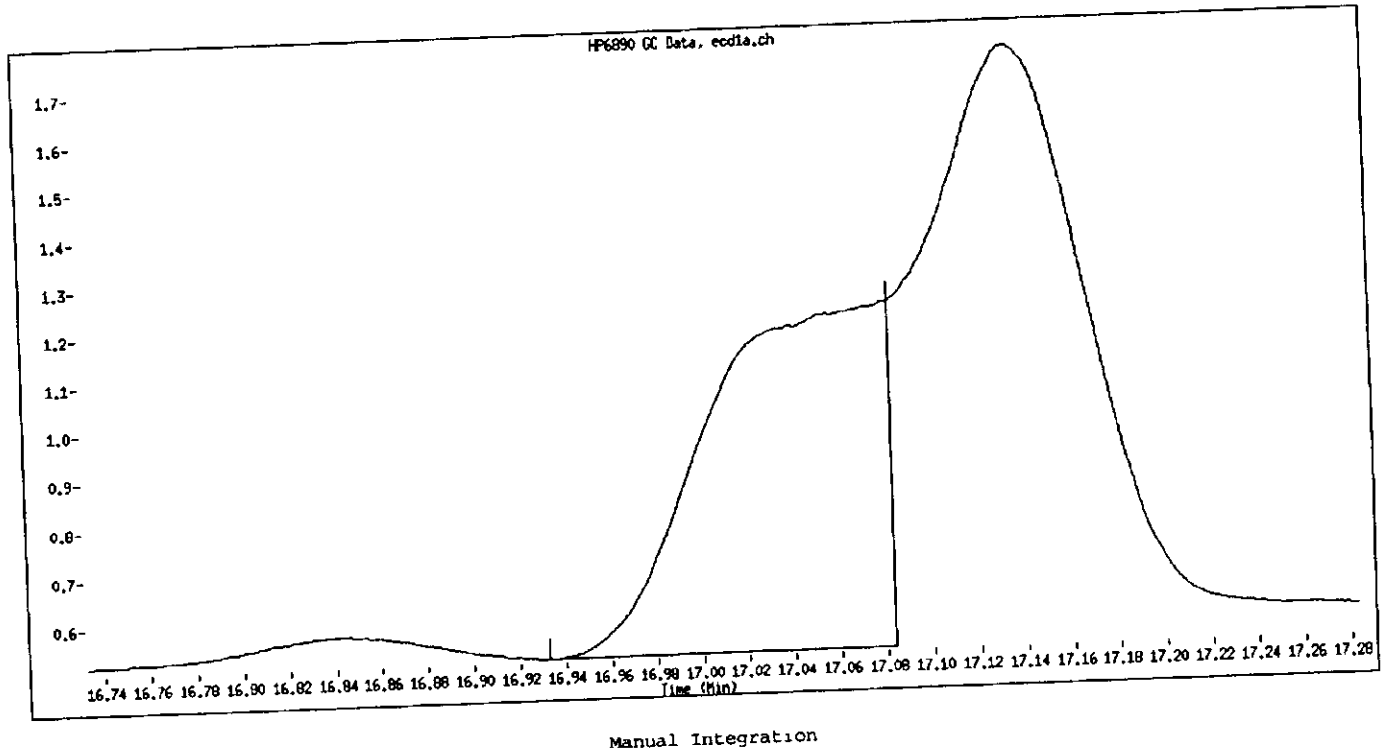
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53

675 1236

Data File Name A-A01061 D
Inj Date and Time 16-FEB-2001 12 05
Instrument ID gc1.i
Client ID DF/S-1/1039/IDW/004
Compound Name: 2,4-D
CAS # 94-75-7
Report Date 02/16/2001



Original Integration



Manual Integration

Manually Integrated By:
Manual Integration Reason: Poor Chromatography

STL Pittsburgh

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00537.D
Report Date: 16-Feb-2001 13:39

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00537.D
Lab Smp Id: DVWJE1CC Client Smp ID: DF/S-1/1039/IDW/004
Inj Date : 16-FEB-2001 12:35
Operator : 01797 Inst ID: gc1.i
Smp Info : DVWJE1CC,0301A.b
Misc Info : 090228001
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 16-Feb-2001 13:37 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 18:20 Cal File: A-B00341.D
Als bottle: 5
Dil Factor: 5.00000
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	5.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	
1	DALAPON	4 265	4.267	-0 002	62585860	3 05994	3060	
$ 2	DCAA	11 166	11 123	0 043	8698980	0.19887	39.77(R)	
3	DICAMBA	11 765	11 718	0 047	78040	0.00206	2 059	
4	MCPP	12 099	12.157	-0.058	69506	2.19223	2192	
5	MCPA	Compound Not Detected.						
6	DICHLOROPROP	Compound Not Detected						
7	2,4-D	15.664	15 660	0.004	20534	0 00266	2.656	✓
8	PENTACHLOROPHENOL	Compound Not Detected						
9	2,4,5-TP(SILVEX)	17.764	17 778	-0 014	346622	0.00417	4 165	✓
10	2,4,5-T	18.557	18.548	0 009	117486	0.00137	1.374	
11	2,4-DB	19 142	19 126	0.016	109587	0 00862	8 620	
12	DINOSEB	19 817	19 832	-0 015	387466	0 00484	4.836	

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00537.D
Report Date: 16-Feb-2001 13:39

QC Flag Legend

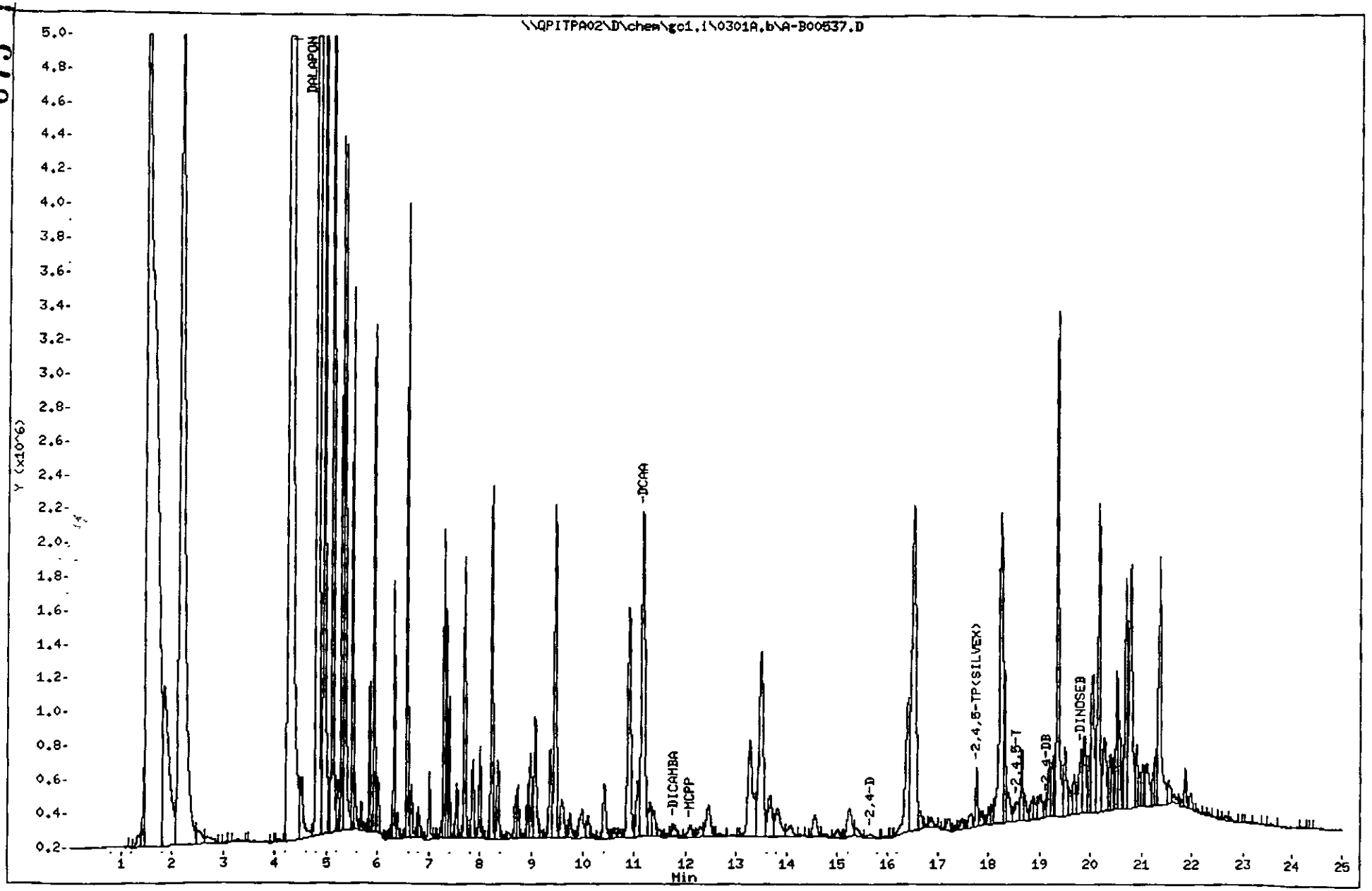
R - Spike/Surrogate failed recovery limits.

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00537.D
Date : 16-FEB-2001 12:38
Client ID: DF/S-1/1039/IDW/004
Sample Info: DVWJE1CC,0301A.b
Volume Injected (uL): 1.0
Column phase: DB1701

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

675 1239

5016



STL Pittsburgh

675 1240

10A

PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO.

DF/S-1/10
39/IDW/004

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

Lab Sample ID: DVWJE1CC Date(s) Analyzed: 02/16/01 02/16/01

Instrument ID (1): GC1 Instrument ID (2): GC1

GC Column(1): RTX-50 ID: 0.53(mm) GC Column(2): DB1701 ID: 0.53(mm)

JV 2/19/01

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
2,4-D	1	17.08	17.04	17.14	52.57	
	2	15.66	15.59	15.73	2.656	999.9
2,4,5-TP(SILVEX)	1	18.40	18.35	18.45	1.386	
	2	17.76	17.71	17.85	4.165	200.5
2,4,5-T	1	19.19	19.12	19.22	0.5066	
	2	18.56	18.48	18.62	1.374	171.2
2,4-DB	1	19.61	19.59	19.69	12.03	
	2	19.14	19.06	19.20	8.620	39.6
DALAPON	1	4.35	4.35	4.45	3416	
	2	4.27	4.20	4.34	3060	11.6
DICAMBA	1	13.32	13.25	13.35	1.422	
	2	11.77	11.65	11.79	2.059	44.8
DINOSEB	1	19.48	19.44	19.54	4.451	
	2	19.82	19.76	19.90	4.836	8.6
MCPP	1	13.13	13.07	13.17	19310	
	2	12.10	12.09	12.23	2192	780.9

HERBICIDE
CALIBRATION DATA

675 1242

6D
Hp 6401A
RTX-50

Report Date : 16-Feb-2001 09:46

STL-Pittsburgh

COMPOUND LISTING

Method file : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Quant Method : ESTD
Last Update : 16-Feb-2001 09:45
Data Type : GC MULTI COMP
Target Version : 4.04
Number of Cpnds : 12

Global Integrator : Falcon Chromat Events	Values
Initial:Start Threshold	376.000000
Initial:End Threshold	188.000000
Initial:Area Threshold	3760.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	9.000000
Initial:Negative Peaks	ON
Initial:Tension	0.200000

	Compound	RT	RT Window	RF
	1 DALAPON	4.398	4.348-4.448	1.96e+007
$	2 DCAA	12.484	12.434-12.534	5.19e+007
	3 MCPP	13.117	13.067-13.167	7.19e+004
	4 DICAMBA	13.300	13.250-13.350	3.62e+007
	5 MCPA	14.460	14.410-14.510	8.58e+004
	6 DICHLOROPROP	15.459	15.409-15.509	8.11e+006
	7 2,4-D	17.085	17.035-17.135	1.37e+007
	8 PENTACHLOROPHENOL	17.995	17.945-18.045	1.95e+008
	9 2,4,5-TP(SILVEX)	18.396	18.346-18.446	2.42e+008
	10 2,4,5-T	19.171	19.121-19.221	2.05e+008
	11 DINOSEB	19.488	19.438-19.538	1.69e+008
	12 2,4-DB	19.640	19.590-19.690	2.42e+007

6D
HP 6890 IM
RTx-50

675 1243

Report Date : 16-Feb-2001 11:27

STL-Pittsburgh

COMPOUND LISTING

Method file : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Quant Method : ESTD
Target Version : 4.04
Last Update : 16-Feb-2001 11:26
Number of Cpnds : 12
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	376.000000
Initial:End Threshold	188.000000
Initial:Area Threshold	3760.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	9.000000
Initial:Negative Peaks	ON
Initial:Tension	0.200000

	Compound	RT	RT Window	RF
	1 DALAPON	4.400	4.350-4.450	1.96e+007
$	2 DCAA	12.488	12.438-12.538	5.19e+007
	3 MCPP	13.117	13.067-13.167	7.19e+004
	4 DICAMBA	13.304	13.254-13.354	3.62e+007
	5 MCPA	14.463	14.413-14.513	8.58e+004
	6 DICHLOROPROP	15.459	15.409-15.509	8.11e+006
	7 2,4-D	17.087	17.037-17.137	1.37e+007
	8 PENTACHLOROPHENOL	17.994	17.944-18.044	1.95e+008
	9 2,4,5-TP(SILVEX)	18.398	18.348-18.448	2.42e+008
	10 2,4,5-T	19.171	19.121-19.221	2.05e+008
	11 DINOSEB	19.489	19.439-19.539	1.69e+008
	12 2,4-DB	19.642	19.592-19.692	2.42e+007

675 1244

6E
Hp6890 A
RTX-50

Report Date : 16-Feb-2001 16:31

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 30-JAN-2001 15:54
End Cal Date : 30-JAN-2001 17:51
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Cal Date : 16-Feb-2001 16:31 morganw
Curve Type : Average

Calibration File Names:
Level 1: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00877.D
Level 2: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00878.D
Level 3: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00879.D
Level 4: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00880.D
Level 5: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00881.D

Compound	0.00500 Level 1	0.01000 Level 2	0.02500 Level 3	0.05000 Level 4	0.10000 Level 5	RRF	% RSD	
1 DALAPON	21894455	19452227	19620478	18473200	18713955	19630863	6.899	
3 MCPP	106250	88680	70906	52923	39690	71690	37.298	<-
4 DICAMBA	39245377	36183521	36218094	34815018	34735141	36239430	5.038	
5 MCPA	129989	103698	81878	61455	48224	85049	38.507	<-
6 DICHLOROPROP	9137972	8448420	8209151	7556282	7310283	8132422	8.962	
7 2,4-D	14887156	13872800	13494254	12972441	12916909	13628712	5.914	
8 PENTACHLOROPHENOL	198472556	188453571	193220301	192062312	200581528	194558054	2.530	
9 2,4,5-TP(SILVEX)	249664000	237867048	240540284	236353777	244866762	241858374	2.245	
10 2,4,5-T	211045161	205072571	199393460	197805024	205013495	203665942	2.585	
11 DINOSEB	181416404	169401732	165555591	160641417	162716122	167946253	4.892	
12 2,4-DB	25245972	24027441	23473408	23135243	24519825	24080378	3.484	
$ 2 DCAA	57958685	54291012	52421563	48809841	46699862	52036193	8.551	

AVG. RSD 10.6%

675 1245

GC
HP 1640 IA
RTX-50

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01046.D
Report Date: 16-Feb-2001 09:45

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i
Lab File ID: A-A01046.D
Analysis Type:
Lab Sample ID: MHERB
Method: \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m

Injection Date: 15-FEB-2001 11:26
Init. Cal. Date(s): 30-JAN-2001 30-JAN-2001
Init. Cal. Times: 15:54 17:51
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
1	DALAPON	19633459	19916333	0 010	1 4	15 0
$ 2	DCAA	51939850	53291633	0 010	2 6	15 0
3	MCPP	71886	72036	0 010	0 2	15.0
4	DICAMBA	36244764	36950800	0 010	1 9	15 0
5	MCPA	85842	83429	0.010	-2.8	15.0
6	DICHLOROPROP	8113239	8122665	0 010	0.1	15 0
7	2,4-D	13662327	13486510	0 010	-1 3	15.0
8	PENTACHLOROPHENOL	194892492	209121147	0 010	7 3	15 0
9	2,4,5-TP(SILVEX)	242187897	256395213	0 010	5 9	15.0
10	2,4,5-T	204734063	215532085	0 010	5.3	15.0
11	DINOSEB	168543919	172013937	0.010	2.1	15.0
12	2,4-DB	24232120	24836462	0 010	2 5	15 0

76
Hp 6890 1A
RTX-5

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01056.D
Report Date: 16-Feb-2001 12:17

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i
Lab File ID: A-A01056.D
Analysis Type:
Lab Sample ID: MHERB
Method: \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m

Injection Date: 15-FEB-2001 16:18
Init. Cal. Date(s): 30-JAN-2001 30-JAN-2001
Init. Cal. Times: 15:54 17:51
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
	1 DALAPON	19633459	20041959	0.010	2 1	15 0
$	2 DCAA	51939850	54514606	0 010	5 0	15.0
	3 MCPP	71886	72600	0 010	1 0	15.0
	4 DICAMBA	36244764	37705224	0 010	4 0	15 0
	5 MCPA	85842	84039	0 010	-2 1	15 0
	6 DICHLOROPROP	8113239	8413950	0.010	3.7	15 0
	7 2,4-D	13662327	14275605	0.010	4 5	15.0
	8 PENTACHLOROPHENOL	194892492	217859398	0 010	11 8	15 0
	9 2,4,5-TP(SILVEX)	242187897	268199573	0 010	10 7	15.0
	10 2,4,5-T	204734063	224968483	0 010	9 9	15 0
	11 DINOSEB	168543919	181960551	0 010	8 0	15 0
	12 2,4-DB	24232120	26452982	0 010	9.2	15 0

7E
Hp6890A
ETX-50

675 1247

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01060.D
Report Date: 16-Feb-2001 12:43

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i
Lab File ID: A-A01060.D
Analysis Type:
Lab Sample ID: MHERB
Method: \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m

Injection Date: 16-FEB-2001 11:36
Init. Cal. Date(s): 30-JAN-2001 30-JAN-2001
Init. Cal. Times: 15:54 17:51
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
1	DALAPON	19633459	20301093	0 010	3.4	15.0
$ 2	DCAA	51939850	54035546	0 010	4 0	15 0
3	MCPP	71886	70860	0.010	-1 4	15 0
4	DICAMBA	36244764	37636824	0.010	3 8	15.0
5	MCPA	85842	82835	0.010	-3 5	15 0
6	DICHLOROPROP	8113239	8381887	0 010	3 3	15.0
7	2,4-D	13662327	14162115	0 010	3 7	15 0
8	PENTACHLOROPHENOL	194892492	220070301	0 010	12 9	15 0
9	2,4,5-TP(SILVEX)	242187897	270651991	0 010	11.8	15 0
10	2,4,5-T	204734063	227516351	0 010	11.1	15.0
11	DINOSEB	168543919	183937953	0 010	9 1	15.0
12	2,4-DB	24232120	26485941	0 010	9 3	15 0

675 1243

TE
Hp6890 1A
RTX-50

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01062.D
Report Date: 16-Feb-2001 13:43

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i
Lab File ID: A-A01062.D
Analysis Type:
Lab Sample ID: MHERB
Method: \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m

Injection Date: 16-FEB-2001 12:35
Init. Cal. Date(s): 30-JAN-2001 30-JAN-2001
Init. Cal. Times: 15:54 17:51
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D	
	1 DALAPON	19633459	20367289	0.010	3.7	15.0	
$	2 DCAA	51939850	55483255	0.010	6.8	15.0	
	3 MCPP	71886	73782	0.010	2.6	15.0	
	4 DICAMBA	36244764	38304259	0.010	5.7	15.0	
	5 MCPA	85842	85417	0.010	-0.5	15.0	
	6 DICHLOROPROP	8113239	8565802	0.010	5.6	15.0	
	7 2,4-D	13662327	14452068	0.010	5.8	15.0	
	8 PENTACHLOROPHENOL	194892492	225043703	0.010	15.5	15.0	<-
	9 2,4,5-TP(SILVEX)	242187897	278591469	0.010	15.0	15.0	<-
	10 2,4,5-T	204734063	234932370	0.010	14.8	15.0	
	11 DINOSEB	168543919	189200315	0.010	12.3	15.0	
	12 2,4-DB	24232120	27692639	0.010	14.3	15.0	

8D

PESTICIDE ANALYTICAL SEQUENCE

675 1249

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

GC Column: RTX-50 ID: 0.53 (mm) Init. Calib. Date(s): 01/30/01 01/30/01

Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 12.49

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01		LHERB	01/30/01	1554	12.50	
02		MLHERB	01/30/01	1623	12.51	
03		MHERB	01/30/01	1652	12.51	
04		MHHERB	01/30/01	1722	12.50	
05		HHERB	01/30/01	1751	12.50	
06	~~DF/S 1/1039/~~	~~DVWJE1CC~~	~~02/16/01~~	~~1205~~	~~12.44~~	
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

JD 2/19/01

QC LIMITS
(+/- 0.05 MINUTES)

S1 = DCAA

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

675 1250 8D

PESTICIDE ANALYTICAL SEQUENCE

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

GC Column: RTX-50 ID: 0.53 (mm) Init. Calib. Date(s): 01/30/01 01/30/01

Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 12.49

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	RT	#
01		MHERB	02/15/01	1126	12.48			
02	BLK5443	DV5LH1AA	02/15/01	1323	12.49			
03		MHERB	02/15/01	1618	12.48			
04		MHERB	02/16/01	1136	12.48			
05		~~MHERB~~	~~02/16/01~~	~~1235~~	~~12.49~~			
06	DF/5-1/1039/ JP 2/19/01	DVWJE1CC	02/16/01	1205	12.44			
07		MHERB	02/16/01	1235	12.49			
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

QC LIMITS
(+/- 0.05 MINUTES)

S1 = DCAA

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

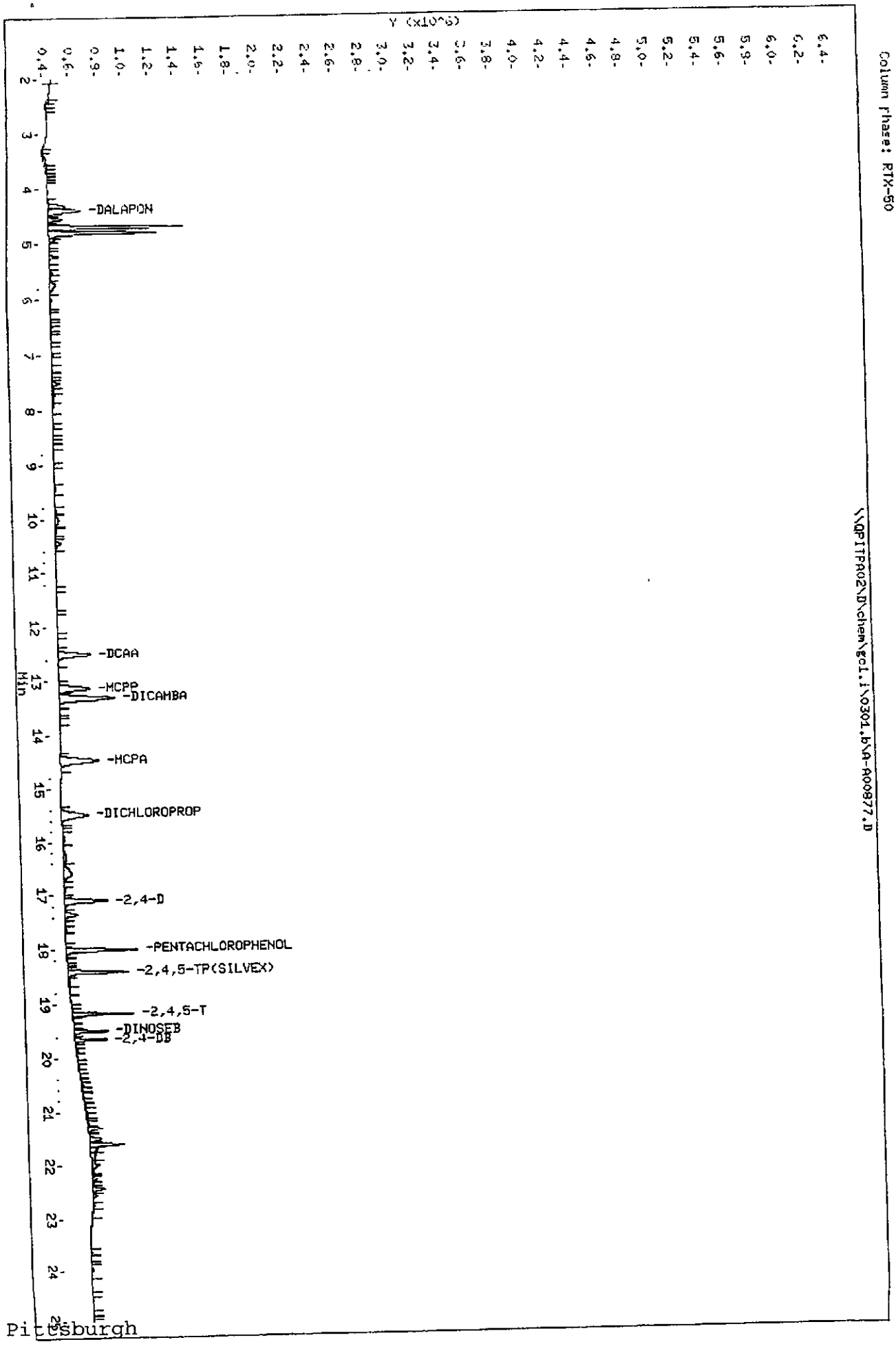
Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00877.D
Report Date: 31-Jan-2001 11:56

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A00877.D
Lab Smp Id: LHERB
Inj Date : 30-JAN-2001 15:54
Operator : 01797 Inst ID: gc1.i
Smp Info : LHERB,0301.b
Misc Info : 190-107-1
Comment :
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 31-Jan-2001 09:39 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 15:54 Cal File: A-A00877.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4.402	4 397	0 005	240839	0.01100	0 01100
S	2 DCAA	12 504	12 498	0.006	1234520	0.02130	0.02130
	3 MCPP	13.136	13.131	0 005	225249	2.12000	2 120
	4 DICAMBA	13 322	13 316	0.006	416001	0.01060	0 01060
	5 MCPA	14 482	14 476	0 006	278177	2 14000	2 140
	6 DICHLOROPROP	15 482	15.476	0.006	193725	0.02120	0.02120
	7 2,4-D	17.101	17 097	0 004	314119	0 02110	0 02110
	8 PENTACHLOROPHENOL	18 006	17 998	0 008	527937	0.00266	0.002660
	9 2,4,5-TP(SILVEX)	18 406	18.402	0.004	1310736	0 00525	0.005250
	10 2,4,5-T	19 179	19 174	0 005	1112208	0 00527	0 005270
	11 DINOSEB	19.497	19 491	0 006	575090	0.00317	0.003170
	12 2,4-DB	19 651	19.645	0 006	532690	0.02110	0 02110

675 1252


Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00877.D
Date : 30-JAN-2001 15:54
Client ID:
Sample Info: LHEPB,0301,b
Column phase: RTX-50
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301.b\A-A00877.D
Y (x10^6)
Min
-DALAPON
-DCAA
-MCPP
-DICAMBA
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-DINOSEB
-2,4-DB

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00878.D
Report Date: 31-Jan-2001 11:56

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A00878.D
Lab Smp Id: MLHERB
Inj Date : 30-JAN-2001 16:23
Operator : 01797 Inst ID: gc1.i
Smp Info : MLHERB,0301.b
Misc Info : 190-107-2
Comment :
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 31-Jan-2001 09:39 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 16:23 Cal File: A-A00878.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4.401	4.397	0.004	427949	0.02200	0.02070
$	2 DCAA	12.505	12.498	0.007	2307368	0.04250	0.04111
	3 MCPP	13.136	13.131	0.005	377778	4.26000	3.876
	4 DICAMBA	13.320	13.316	0.004	770709	0.02130	0.02044
	5 MCPA	14.483	14.476	0.007	443829	4.28000	3.798
	6 DICHLOROPROP	15.484	15.476	0.008	358213	0.04240	0.04074
	7 2,4-D	17.101	17.097	0.004	589594	0.04250	0.04100
	8 PENTACHLOROPHENOL	18.005	17.998	0.007	1002573	0.00532	0.005182
	9 2,4,5-TP(SILVEX)	18.407	18.402	0.005	2497604	0.01050	0.01024
	10 2,4,5-T	19.179	19.174	0.005	2153262	0.01050	0.01035
	11 DINOSEB	19.496	19.491	0.005	1075701	0.00635	0.006132
	12 2,4-DB	19.649	19.645	0.004	1013958	0.04220	0.04116

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00878.D
Date : 30-JAN-2001 16:23
Client ID:
Sample Info: HLHERB,0301.b

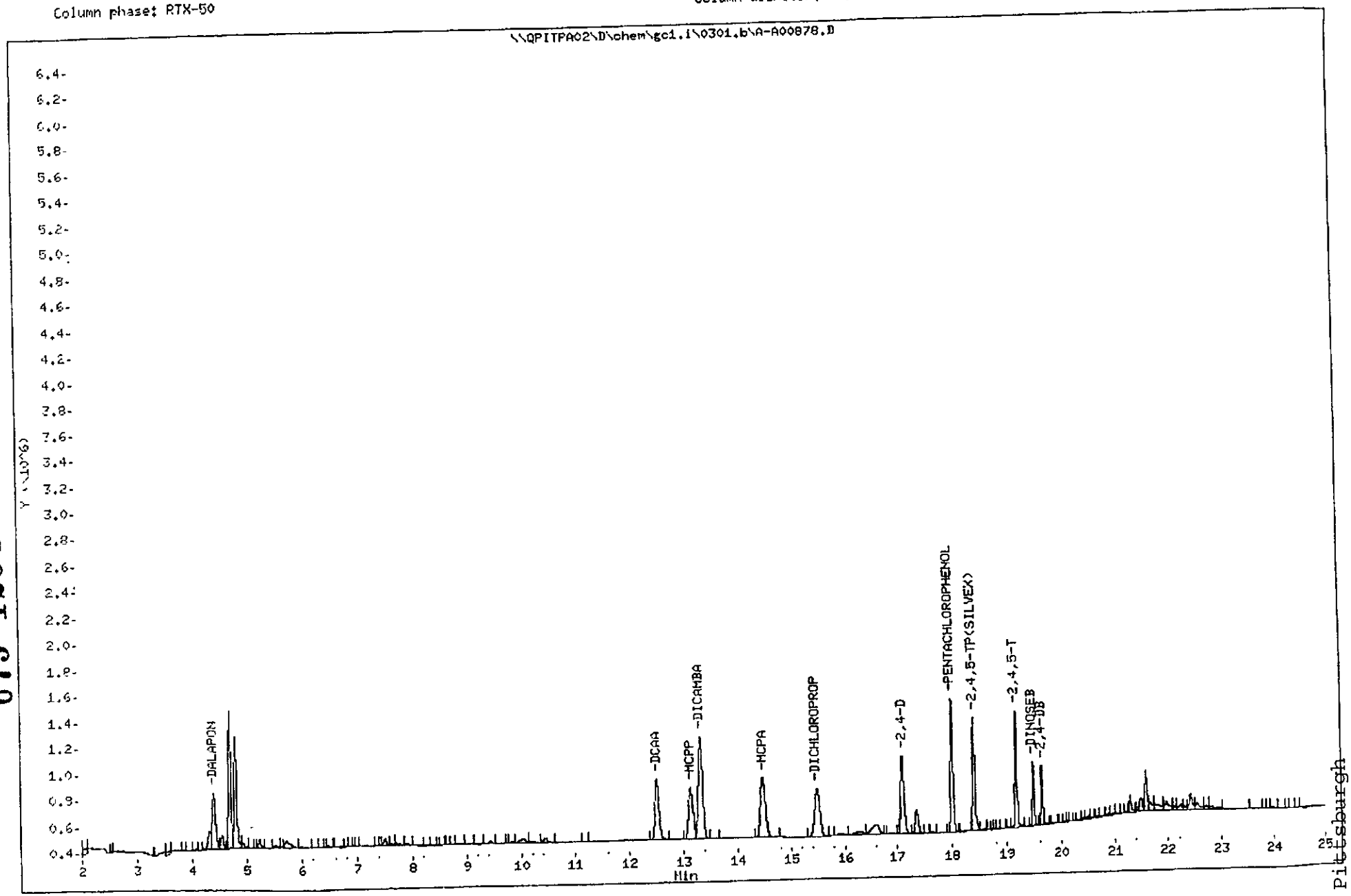
Column phase: RTX-50

Instrument: gc1.i

Operator: 01797
Column diameter: 0.53

5031

675 1254



STL Pittsburgh

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00879.D
Report Date: 31-Jan-2001 11:56

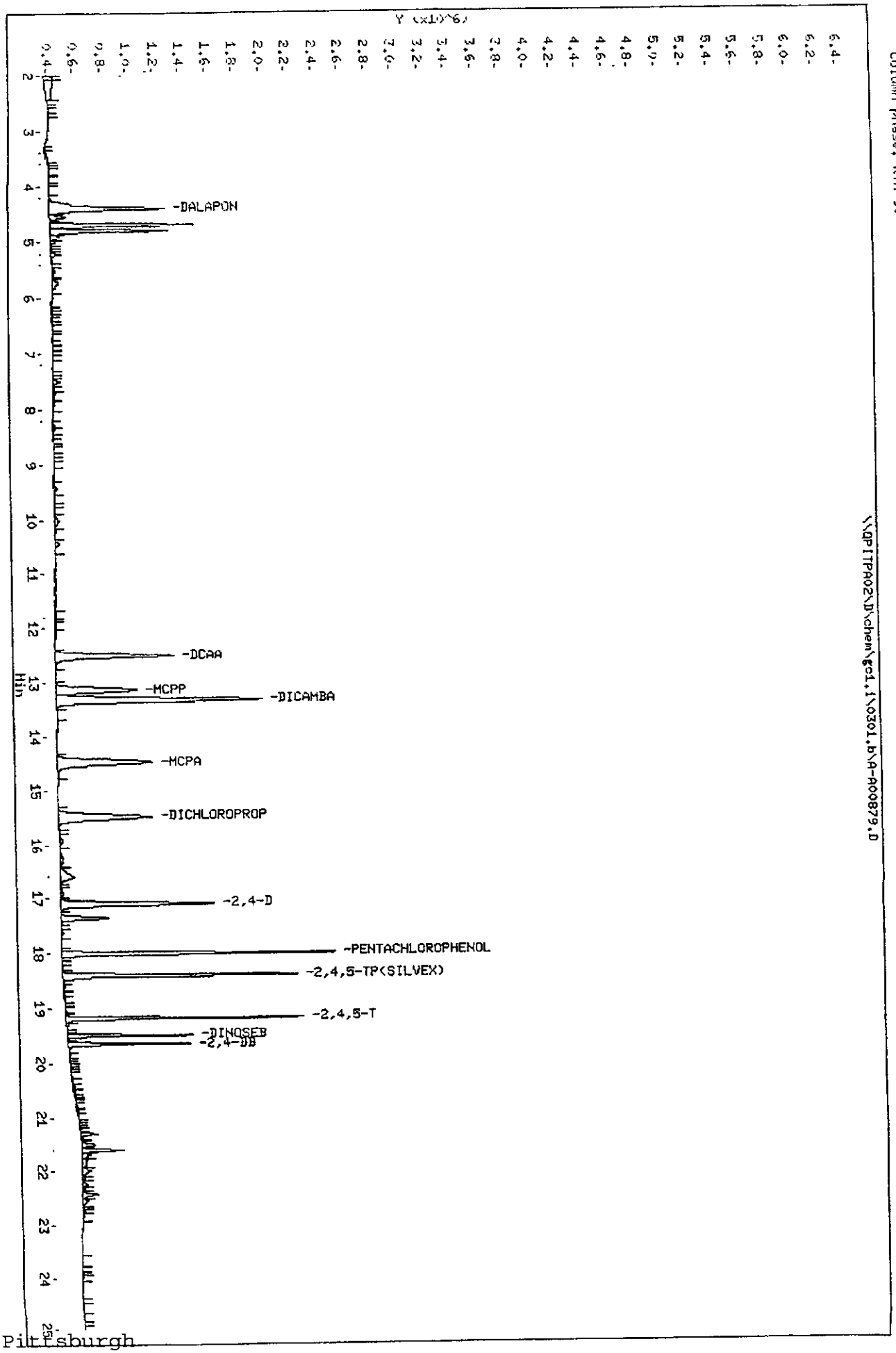
STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A00879.D
Lab Smp Id: MHERB
Inj Date : 30-JAN-2001 16:52
Operator : 01797 Inst ID: gc1.i
Smp Info : MHERB,0301.b
Misc Info : 190-107-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 31-Jan-2001 09:39 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 16:23 Cal File: A-A00878.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ng)
	1 DALAPON	4.404	4.397	0.007	861339	0.04166	0.04166
$	2 DCAA	12.505	12.498	0.007	4461075	0.07948	0.07948(R)
	3 MCPP	13.137	13.131	0.006	604122	6.19835	6.198
	4 DICAMBA	13.323	13.316	0.007	1539269	0.04081	0.04081
	5 MCPA	14.484	14.476	0.008	700877	5.99841	5.998
	6 DICHLOROPROP	15.482	15.476	0.006	696136	0.07917	0.07917
	7 2,4-D	17.098	17.097	0.001	1148361	0.07986	0.07986
	8 PENTACHLOROPHENOL	18.006	17.998	0.008	2055864	0.01063	0.01063
	9 2,4,5-TP(SILVEX)	18.407	18.402	0.005	5075400	0.02082	0.02082
	10 2,4,5-T	19.179	19.174	0.005	4207202	0.02022	0.02022
	11 DINOSEB	19.497	19.491	0.006	2102556	0.01199	0.01199
	12 2,4-DB	19.649	19.645	0.004	1983503	0.08051	0.08051

QC Flag Legend

R - Spike/Surrogate failed recovery limits.


Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00879.D
Date : 30-JAN-2001 16:52
Client ID:
Sample Info: MHERB,0301.b
Column phase: RTX-50
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301.b\A-A00879.D
Y (x10^6)
Min
-DALAPON
-DCAA
-MCPP
-DICAMBA
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-DINOSEB
-2,4-DB

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00880.D
Report Date: 31-Jan-2001 11:56

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A00880.D
Lab Smp Id: MHHERB
Inj Date : 30-JAN-2001 17:22
Operator : 01797 Inst ID: gc1.i
Smp Info : MHHERB,0301.b
Misc Info : 190-107-4
Comment :
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 31-Jan-2001 09:39 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 17:22 Cal File: A-A00880.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4.404	4.397	0.007	1621947	0.08780	0.08134
$	2 DCAA	12.504	12.498	0.006	8297673	0.17000	0.1546
	3 MCPP	13.138	13.131	0.007	899695	17.0000	10.89
	4 DICAMBA	13.323	13.316	0.007	2962758	0.08510	0.08062
	5 MCPA	14.482	14.476	0.006	1050873	17.1000	10.68
	6 DICHLOROPROP	15.484	15.476	0.008	1284568	0.17000	0.1533
	7 2,4-D	17.098	17.097	0.001	2205315	0.17000	0.1585
	8 PENTACHLOROPHENOL	18.005	17.998	0.007	4087086	0.02128	0.02118
	9 2,4,5-TP(SILVEX)	18.406	18.402	0.004	9950494	0.04210	0.04124
	10 2,4,5-T	19.179	19.174	0.005	8347372	0.04220	0.04079
	11 DINOSEB	19.497	19.491	0.006	4080292	0.02540	0.02393
	12 2,4-DB	19.649	19.645	0.004	3909856	0.16900	0.1620

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00880.D
Date : 30-JAN-2001 17:22
Client ID:
Sample Info: MHHERB,0301.b

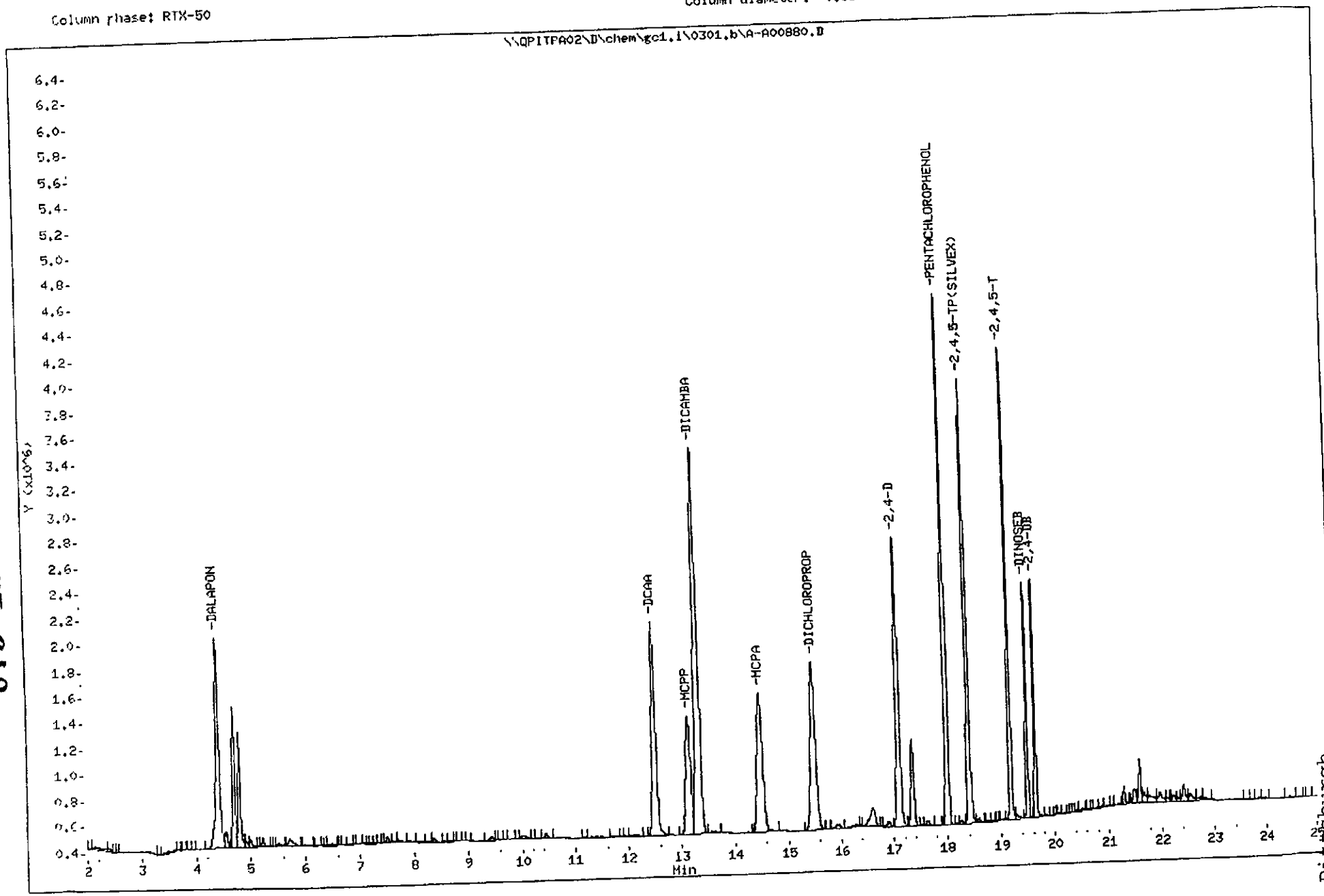
Column phase: RTX-50

Instrument: gc1.i

Operator: 01797
Column diameter: 0.53

5035

675 1253



STL Pittsburgh

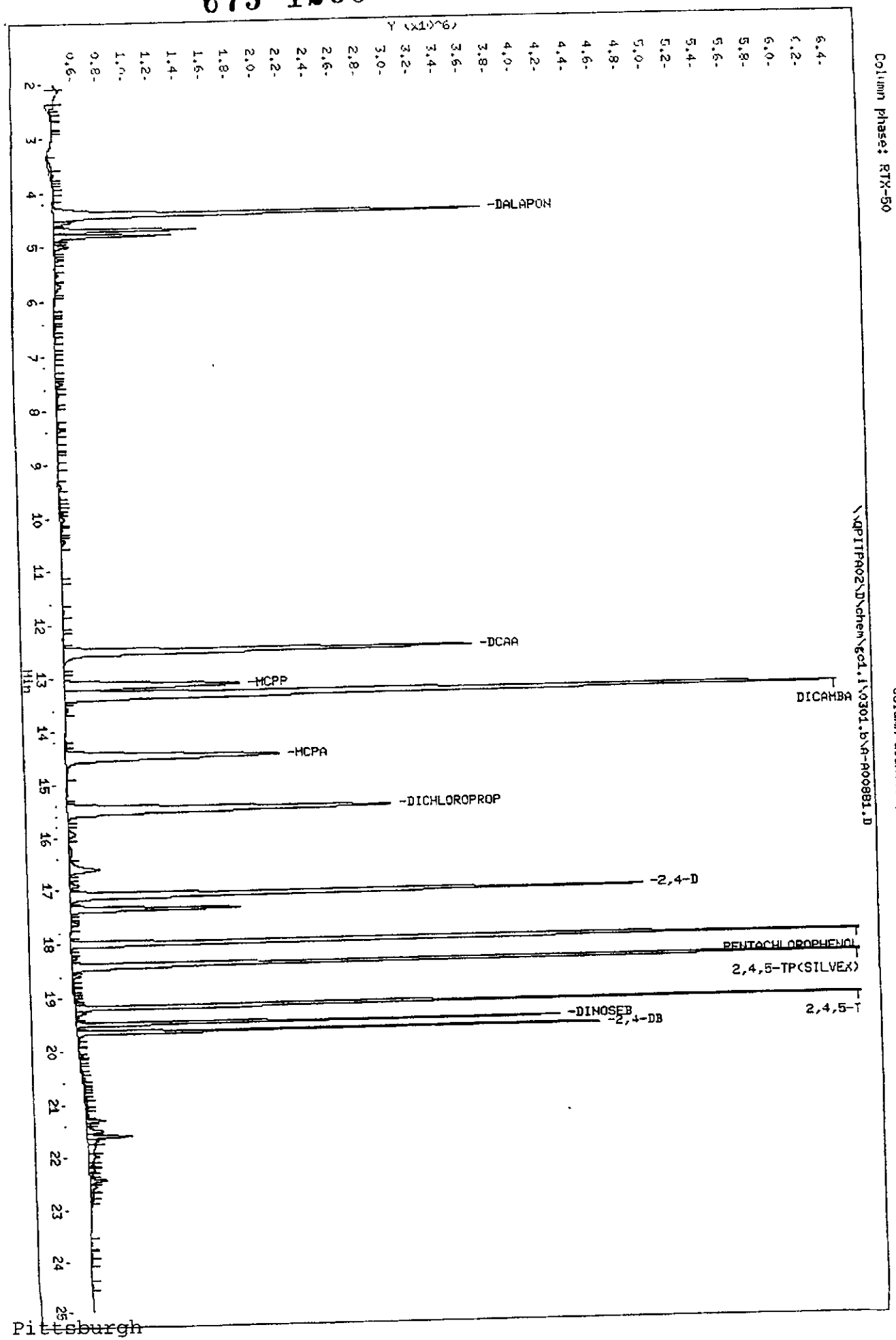
Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00881.D
Report Date: 31-Jan-2001 11:57

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A00881.D
Lab Smp Id: HHERB
Inj Date : 30-JAN-2001 17:51
Operator : 01797 Inst ID: gc1.i
Smp Info : HHERB,0301.b
Misc Info : 190-107-5
Comment :
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 31-Jan-2001 09:39 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 17:51 Cal File: A-A00881.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4 406	4 397	0 009	3293656	0.17600	0 1678
$	2 DCAA	12 501	12.498	0 003	15877953	0 34000	0 3057
	3 MCPP	13.137	13 131	0 006	1353439	34 1000	18.83
	4 DICAMBA	13 321	13 316	0 005	5904974	0.17000	0 1629
	5 MCPA	14 485	14 476	0 009	1639619	34 0000	19.10
	6 DICHLOROPROP	15 480	15 476	0.004	2478186	0.33900	0.3054
	7 2,4-D	17 097	17 097	0 000	4391749	0.34000	0 3214
	8 PENTACHLOROPHENOL	18 006	17 998	0 008	8534744	0 04255	0.04379
	9 2,4,5-TP(SILVEX)	18 407	18 402	0 005	20568808	0.08400	0 08493
	10 2,4,5-T	19 180	19 174	0 006	17303139	0.08440	0 08452
	11 DINOSEB	19 497	19 491	0 006	8265979	0.05080	0.04904
	12 2,4-DB	19 650	19 645	0.005	8287701	0.33800	0 3420

675 1260


Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A00881.D
Date : 30-JAN-2001 17:51
Client ID:
Sample Info: HHERB,0301.b
Column Phase: RTX-50
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
Y (X1)^6)
-DALAPON
-DCAA
-MCPP
DICAMBA
-MCPA
-DICHLOROPROP
-2,4-D
PENTACHLOROPHENOL
2,4,5-TP(SILVEX)
2,4,5-T
-DINOSEB
-2,4-DB
\\QPITPA02\D\chem\gc1.i\0301.b\A-A00881.D
Min

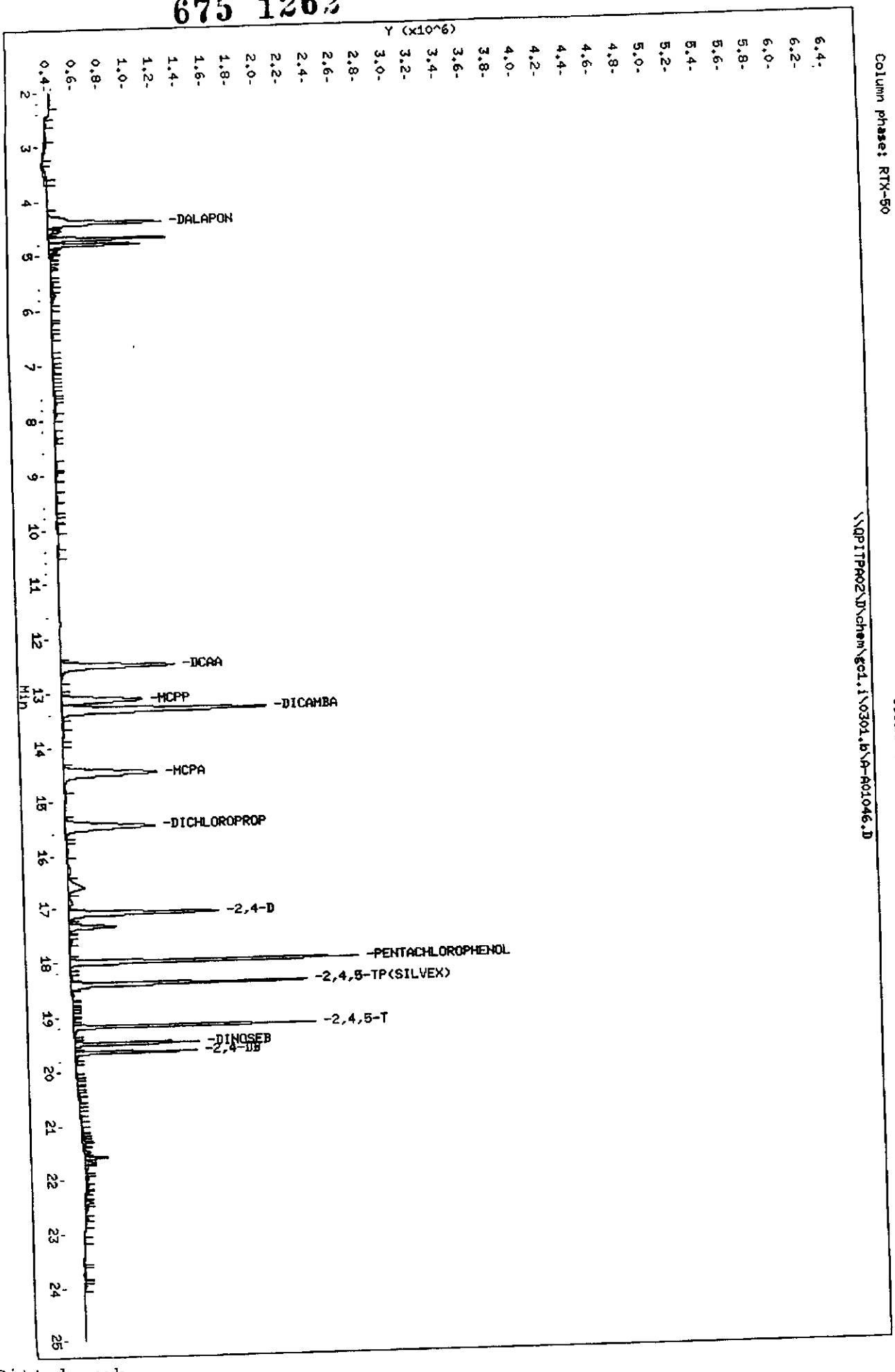
Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01046.D
Report Date: 16-Feb-2001 12:14

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A01046.D
Lab Smp Id: MHERB
Inj Date : 15-FEB-2001 11:26
Operator : 01797 Inst ID: gc1.i
Smp Info : MHERB,0301.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 16-Feb-2001 11:52 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 17:51 Cal File: A-A00881.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4 397	4 400	-0.003	874327	0 04390	0.04453
$	2 DCAA	12 483	12.487	-0.004	4535118	0 08510	0.08731
	3 MCPP	13.117	13 116	0 001	613747	8 52000	8 538
	4 DICAMBA	13.300	13.303	-0.003	1570409	0 04250	0.04333
	5 MCPA	14.460	14.462	-0.002	714149	8 56000	8 319
	6 DICHLOROPROP	15 458	15 459	-0 001	688802	0 08480	0 08490
	7 2,4-D	17 085	17.086	-0 001	1147702	0 08510	0 08400
	8 PENTACHLOROPHENOL	17 994	17 994	0 000	2225049	0 01064	0 01142
	9 2,4,5-TP(SILVEX)	18.396	18.397	-0.001	5409939	0 02110	0.02234
	10 2,4,5-T	19.171	19 171	0 000	4547727	0 02110	0 02221
	11 DINOSEB	19 487	19 489	-0 002	2184577	0 01270	0 01296
	12 2,4-DB	19.640	19 641	-0 001	2098681	0 08450	0 08661

675 1262


Data File: \QPITPA02\D\chem\gc1.i\0301.b\A-A01046.D
Date : 15-FEB-2001 11:26
Client ID:
Sample Info: MHERB,0301.b
Column phase: RTX-50
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\QPITPA02\D\chem\gc1.i\0301.b\A-A01046.D
Y (x10^6)
Min
-DALAPON
-DCAA
-MCPP
-DICAMBA
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-DINOSEB
-2,4-DB

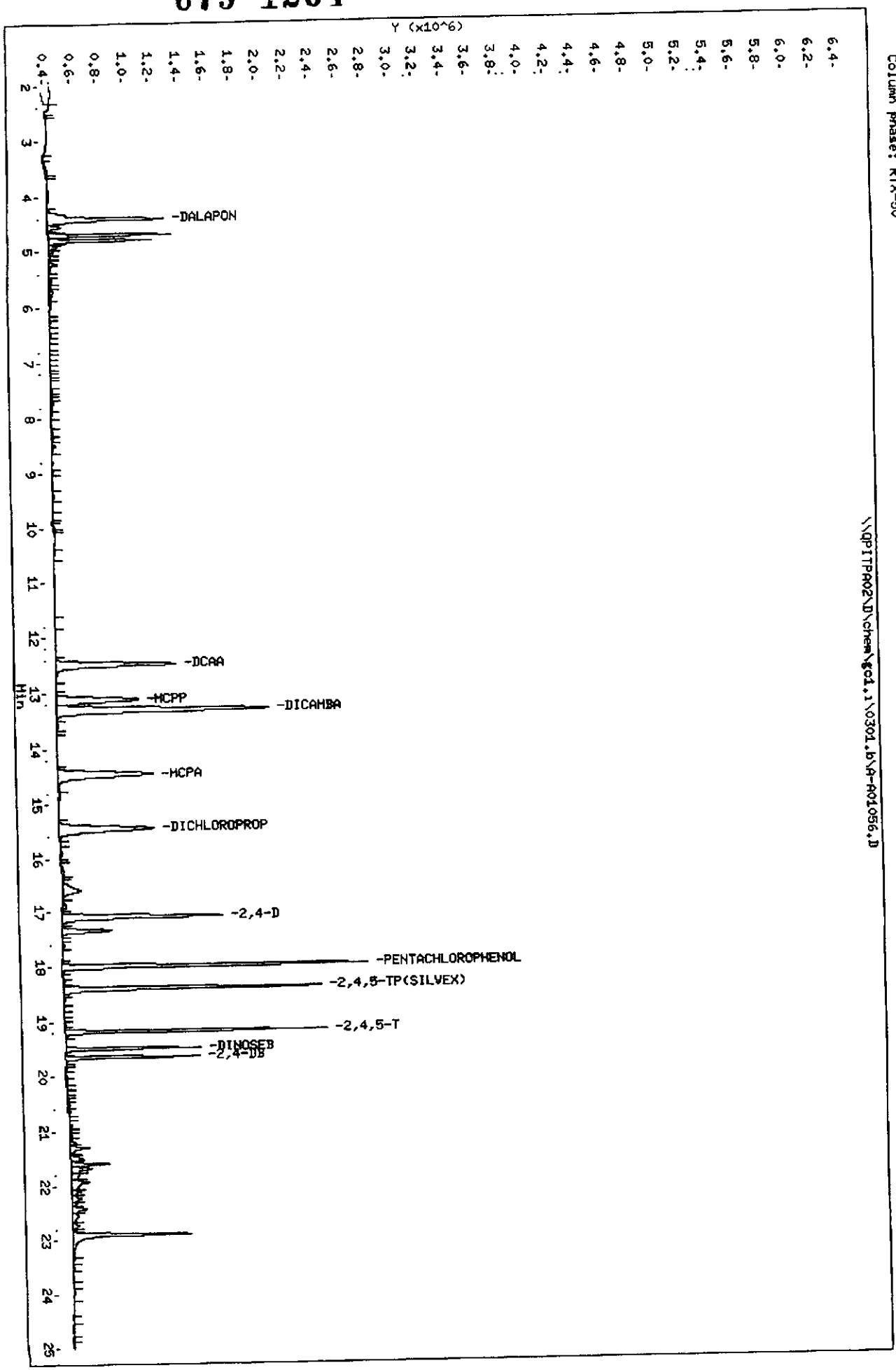
Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01056.D
Report Date: 16-Feb-2001 12:18

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A01056.D
Lab Smp Id: MHERB
Inj Date : 15-FEB-2001 16:18
Operator : 01797 Inst ID: gc1.i
Smp Info : MHERB,0301.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 16-Feb-2001 12:17 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 17:51 Cal File: A-A00881.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 DALAPON	4.402	4.400	0.002	879842	0.04390	0.04481
$	2 DCAA	12.481	12.487	-0.006	4639193	0.08510	0.08932
	3 MCPP	13.113	13.116	-0.003	618548	8.52000	8.604
	4 DICAMBA	13.298	13.303	-0.005	1602472	0.04250	0.04421
	5 MCPA	14.457	14.462	-0.005	719377	8.56000	8.380
	6 DICHLOROPROP	15.452	15.459	-0.007	713503	0.08480	0.08794
	7 2,4-D	17.082	17.086	-0.004	1214854	0.08510	0.08892
	8 PENTACHLOROPHENOL	17.990	17.994	-0.004	2318024	0.01064	0.01189
	9 2,4,5-TP(SILVEX)	18.393	18.397	-0.004	5659011	0.02110	0.02337
	10 2,4,5-T	19.169	19.171	-0.002	4746835	0.02110	0.02318
	11 DINOSEB	19.486	19.489	-0.003	2310899	0.01270	0.01371
	12 2,4-DB	19.638	19.641	-0.003	2235277	0.08450	0.09224

675 1264


Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01056.D
Date : 15-FEB-2001 16:18
Client ID:
Sample Info: MHERB,0301.b
Column phase: RTX-50
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301.b\A-A01056.D
Y (x10^6)
Min
-DALAPON
-DCAA
-MCPP
-DICAMBA
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-DINOSEB
-2,4-DB

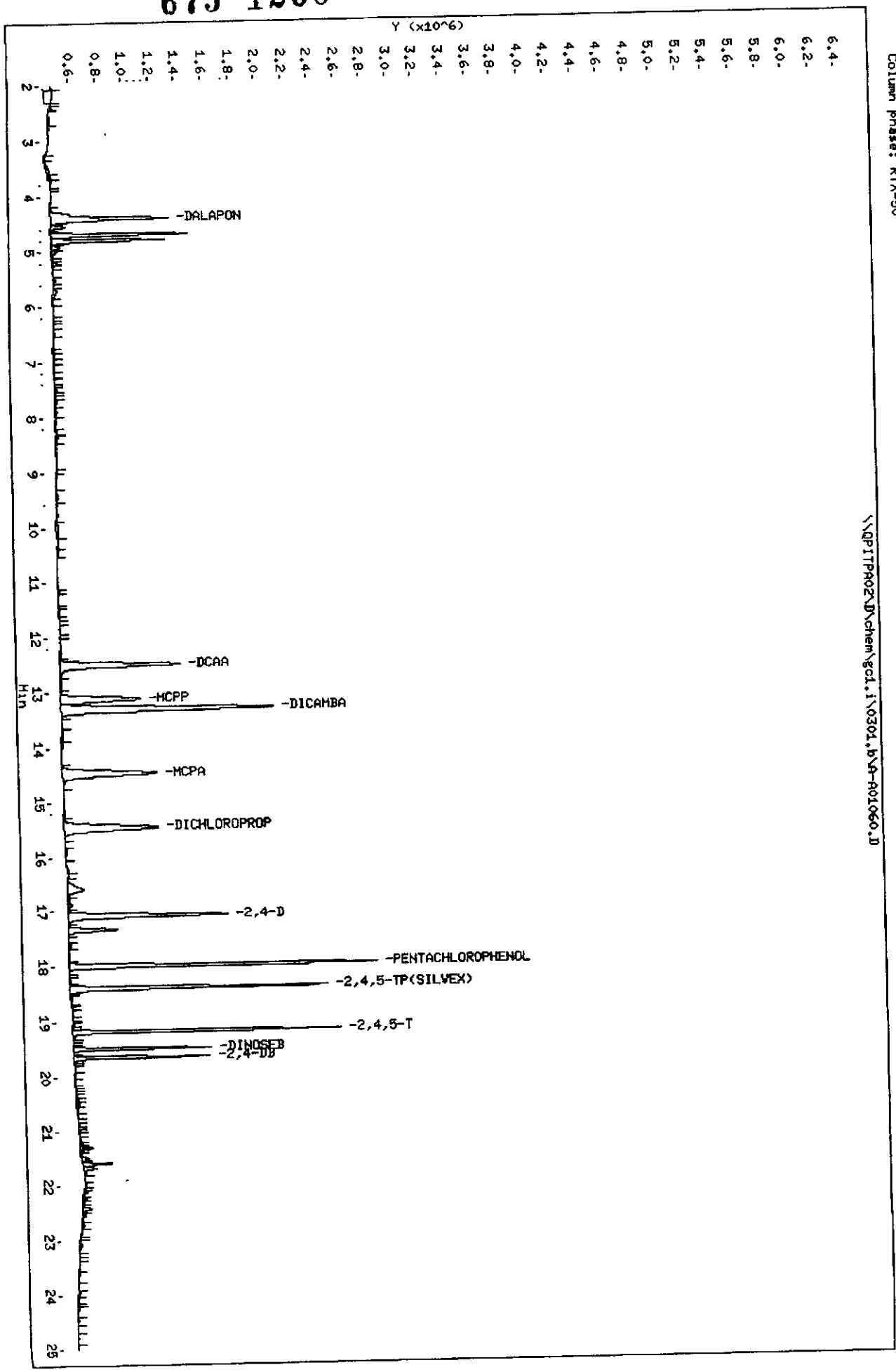
Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01060.D 675 1265
Report Date: 16-Feb-2001 12:45

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A01060.D
Lab Smp Id: MHERB
Inj Date : 16-FEB-2001 11:36
Operator : 01797 Inst ID: gc1.i
Smp Info : MHERB,0301.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 16-Feb-2001 12:43 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 17:51 Cal File: A-A00881.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 DALAPON	4 401	4 400	0 001	891218	0 04390	0.04539
$	2 DCAA	12.484	12 487	-0 003	4598425	0 08510	0.08853
	3 MCPP	13 114	13 116	-0 002	603730	8.52000	8 398
	4 DICAMBA	13.302	13 303	-0 001	1599565	0.04250	0 04413
	5 MCPA	14 460	14 462	-0.002	709070	8.56000	8 260
	6 DICHLOROPROP	15.457	15.459	-0 002	710784	0 08480	0 08761
	7 2,4-D	17 083	17 086	-0 003	1205196	0.08510	0 08821
	8 PENTACHLOROPHENOL	17.992	17 994	-0 002	2341548	0 01064	0 01201
	9 2,4,5-TP(SILVEX)	18 395	18 397	-0 002	5710757	0 02110	0 02358
	10 2,4,5-T	19 169	19 171	-0 002	4800595	0 02110	0 02345
	11 DINOSEB	19 486	19 489	-0 003	2336012	0.01270	0 01386
	12 2,4-DB	19 639	19 641	-0 002	2238062	0.08450	0.09236

675 1266

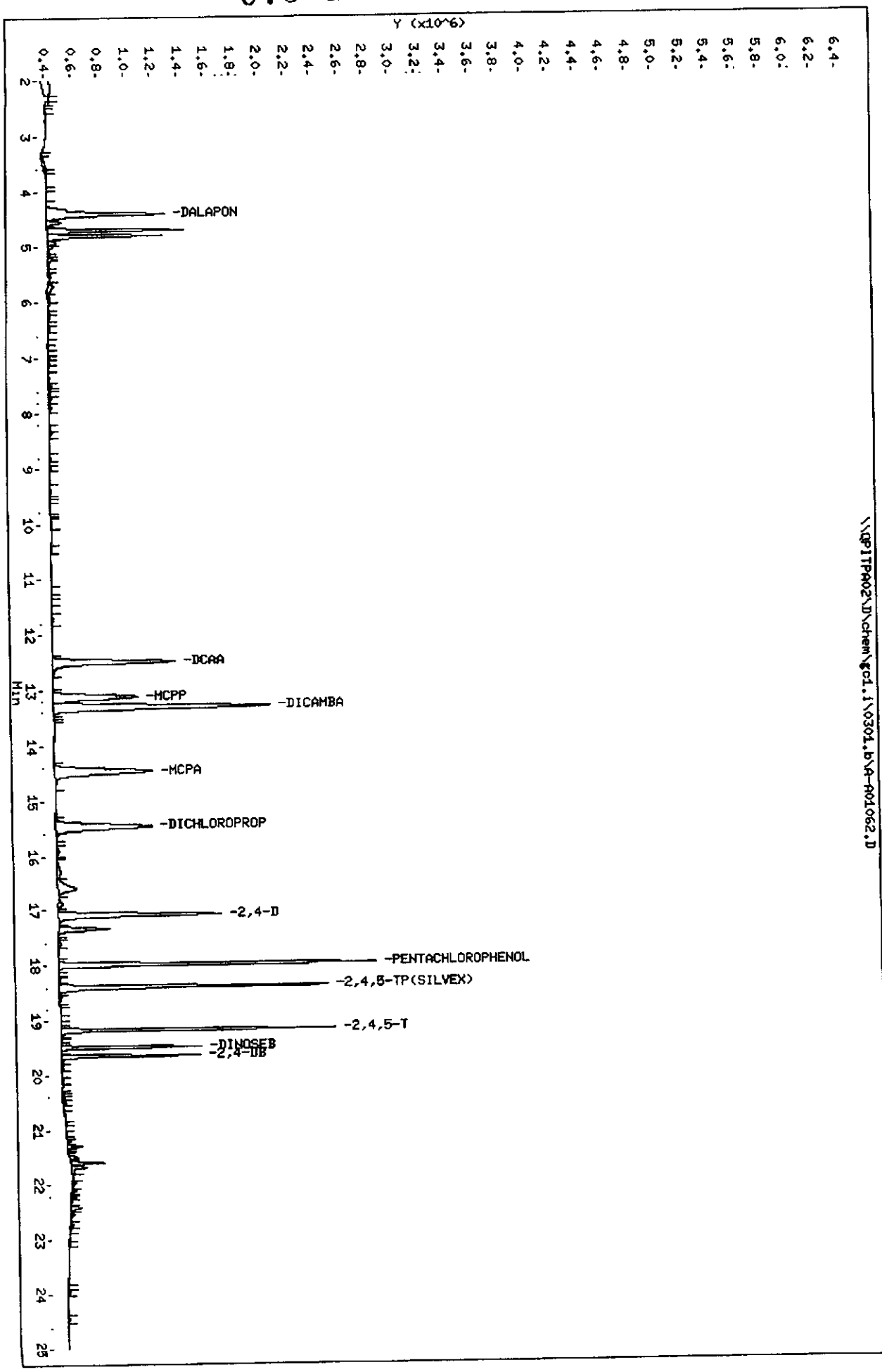

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01060.D
Date : 16-FEB-2001 11:36
Client ID:
Sample Info: MHERB,0301.b
Column phase: RTX-50
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301.b\A-A01060.D
Y (x10^6)
Min
-DALAPON
-DCAA
-MCPP
-DICAMBA
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-DINOSEB
-2,4-DB

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01062.D
Report Date: 16-Feb-2001 13:44

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A01062.D
Lab Smp Id: MHERB
Inj Date : 16-FEB-2001 12:35
Operator : 01797 Inst ID: gc1.i
Smp Info : MHERB,0301.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 16-Feb-2001 13:43 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 17:51 Cal File: A-A00881.D
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4.401	4.400	0.001	894124	0.04390	0.04554
$	2 DCAA	12.486	12.487	-0.001	4721625	0.08510	0.09090
	3 MCPP	13.118	13.116	0.002	628619	8.52000	8.745
	4 DICAMBA	13.302	13.303	-0.001	1627931	0.04250	0.04491
	5 MCPA	14.460	14.462	-0.002	731170	8.56000	8.518
	6 DICHLOROPROP	15.459	15.459	0.000	726380	0.08480	0.08953
	7 2,4-D	17.086	17.086	0.000	1229871	0.08510	0.09002
	8 PENTACHLOROPHENOL	17.994	17.994	0.000	2394465	0.01064	0.01229
	9 2,4,5-TP(SILVEX)	18.396	18.397	-0.001	5878280	0.02110	0.02427
	10 2,4,5-T	19.169	19.171	-0.002	4957073	0.02110	0.02421
	11 DINOSEB	19.487	19.489	-0.002	2402844	0.01270	0.01426
	12 2,4-DB	19.640	19.641	-0.001	2340028	0.08450	0.09657


Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01062.D
Date : 16-FEB-2001 12:35
Client ID:
Sample Info: MHERB,0301.b
Column phase: RTX-50
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301.b\A-A01062.D
Y (x10^6)
Min
-DALAPON
-DCAA
-MCPP
-DICAMBA
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-DINOSEB
-2,4-DB

6D
Hp 68901B
DB1701

675 1269

Report Date : 16-Feb-2001 09:24

STL-Pittsburgh

COMPOUND LISTING

Method file : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Quant Method : ESTD
Last Update : 16-Feb-2001 09:23
Data Type : GC MULTI COMP
Target Version : 4.04
Number of Cpnds : 12

Global Integrator : Falcon

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

	Compound	RT	RT Window	RF
	1 DALAPON	4.265	4.195-4.335	2.05e+007
$	2 DCAA	11.125	11.055-11.195	4.37e+007
	3 DICAMBA	11.720	11.650-11.790	3.79e+007
	4 MCPP	12.156	12.086-12.226	3.17e+004
	5 MCPA	13.031	12.961-13.101	4.42e+004
	6 DICHLOROPROP	14.175	14.105-14.245	7.83e+006
	7 2,4-D	15.666	15.596-15.736	7.73e+006
	8 PENTACHLOROPHENOL	16.096	16.026-16.166	1.09e+008
	9 2,4,5-TP(SILVEX)	17.780	17.710-17.850	8.32e+007
	10 2,4,5-T	18.550	18.480-18.620	8.55e+007
	11 2,4-DB	19.127	19.057-19.197	1.27e+007
	12 DINOSEB	19.833	19.763-19.903	8.01e+007

675 1270

6D
Itp 689018
DB1701

Report Date : 16-Feb-2001 12:32

STL-Pittsburgh

COMPOUND LISTING

Method file : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Quant Method : ESTD
Last Update : 16-Feb-2001 12:31
Data Type : GC MULTI COMP

Target Version : 4.04
Number of Cpnds : 12

Global Integrator : Falcon

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

	Compound	RT	RT Window	RF
	1 DALAPON	4.267	4.197-4.337	2.05e+007
$	2 DCAA	11.124	11.054-11.194	4.37e+007
	3 DICAMBA	11.719	11.649-11.789	3.79e+007
	4 MCPP	12.157	12.087-12.227	3.17e+004
	5 MCPA	13.031	12.961-13.101	4.42e+004
	6 DICHLOROPROP	14.173	14.103-14.243	7.83e+006
	7 2,4-D	15.661	15.591-15.731	7.73e+006
	8 PENTACHLOROPHENOL	16.101	16.031-16.171	1.09e+008
	9 2,4,5-TP(SILVEX)	17.779	17.709-17.849	8.32e+007
	10 2,4,5-T	18.549	18.479-18.619	8.55e+007
	11 2,4-DB	19.126	19.056-19.196	1.27e+007
	12 DINOSEB	19.832	19.762-19.902	8.01e+007

6E
HP689013
DB1701

675 1271

Report Date : 31-Jan-2001 10:31

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 30-JAN-2001 16:23
End Cal Date : 30-JAN-2001 18:20
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Cal Date : 31-Jan-2001 10:30 morganw
Curve Type : Average

Calibration File Names:
Level 1: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00337.D
Level 2: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00338.D
Level 3: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00339.D
Level 4: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00340.D
Level 5: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00341.D

	Compound	0.00500 Level 1	0.01000 Level 2	0.02500 Level 3	0.05000 Level 4	0.10000 Level 5	RRF	% RSD	
1	DALAPON	23217000	20846273	20012278	19172050	19018841	20453288	8.357	
3	DICAMBA	42458868	38681878	37859624	35734219	34745200	37895958	7 921	
4	MCPP	42662	35122	30692	25987	24065	31706	23 593	<-
5	MCPA	59179	48622	42555	36579	34246	44236	22.713	<-
6	DICHLOROPROP	9099670	8240991	7858632	7173812	6793304	7833282	11 573	
7	2,4-D	8073081	7829929	7870752	7531924	7357000	7732537	3 691	
8	PENTACHLOROPHENOL	113929699	107113910	108280263	106457566	108010223	108758332	2 740	
9	2,4,5-TP(SILVEX)	88997905	83325905	83293128	80724323	79765190	83221290	4.314	
10	2,4,5-T	83854649	82963238	86081943	86398033	88079419	85475457	2 407	
11	2,4-DB	12724739	12286422	12549396	12614225	13387269	12712410	3 227	
12	DINOSEB	79640379	77982205	80774567	79815669	82366516	80115867	2 010	
$ 2	DCAA	52646197	46537153	43503243	39083047	36936074	43741143	14.240	

AVG RSD 8.9%

675 1272

7L
HP5890B
DB 1701

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00521.D
Report Date: 16-Feb-2001 09:23

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i
Lab File ID: A-B00521.D
Analysis Type:
Lab Sample ID: MHERB
Method: \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m

Injection Date: 15-FEB-2001 11:55
Init. Cal. Date(s): 30-JAN-2001 30-JAN-2001
Init. Cal. Times: 16:23 18:20
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
	1 DALAPON	20453288	19473736	0.010	-4 8	15 0
	2 DCAA	43741143	41412315	0 010	-5.3	15.0
	3 DICAMBA	37895958	36544024	0 010	-3 6	15 0
	4 MCPP	31706	30678	0.010	-3 2	15 0
	5 MCPA	44236	42271	0 010	-4 4	15 0
	6 DICHLOROPROP	7833282	7568290	0.010	-3 4	15 0
	7 2,4-D	7732537	7707673	0.010	-0.3	15 0
	8 PENTACHLOROPHENOL	108758332	104808177	0 010	-3 6	15 0
	9 2,4,5-TP(SILVEX)	83221290	81405877	0.010	-2.2	15 0
	10 2,4,5-T	85475457	84307441	0 010	-1 4	15.0
	11 2,4-DB	12712410	12481988	0.010	-1 8	15 0
	12 DINOSEB	80115867	82435906	0 010	2 9	15.0

7G
Hp 6890 1B
DB 1701

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00531.D
Report Date: 16-Feb-2001 09:25

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i
Lab File ID: A-B00531.D
Analysis Type:
Lab Sample ID: MHERB
Method: \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m

Injection Date: 15-FEB-2001 16:47
Init. Cal. Date(s): 30-JAN-2001 30-JAN-2001
Init. Cal. Times: 16:23 18:20
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
	1 DALAPON	20453288	20059613	0 010	-1.9	15 0
$	2 DCAA	43741143	42321210	0.010	-3.2	15 0
	3 DICAMBA	37895958	37617529	0.010	-0.7	15 0
	4 MCPP	31706	30419	0 010	-4 1	15.0
	5 MCPA	44236	42110	0 010	-4.8	15.0
	6 DICHLOROPROP	7833282	7820849	0.010	-0.2	15.0
	7 2,4-D	7732537	8035441	0 010	3 9	15.0
	8 PENTACHLOROPHENOL	108758332	106958929	0 010	-1.7	15 0
	9 2,4,5-TP(SILVEX)	83221290	83922227	0 010	0 8	15 0
	10 2,4,5-T	85475457	88453649	0 010	3 5	15.0
	11 2,4-DB	12712410	12727467	0.010	0 1	15.0
	12 DINOSEB	80115867	83456299	0 010	4.2	15 0

675 1274

7E
Hp6890B
DB1701

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00536.D
Report Date: 16-Feb-2001 12:39

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i
Lab File ID: A-B00536.D
Analysis Type:
Lab Sample ID: MHERB
Method: \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m

Injection Date: 16-FEB-2001 12:05
Init. Cal. Date(s): 30-JAN-2001 30-JAN-2001
Init. Cal. Times: 16:23 18:20
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
	1 DALAPON	20453288	20136948	0.010	-1.5	15.0
$	2 DCAA	43741143	42233995	0.010	-3.4	15.0
	3 DICAMBA	37895958	37552706	0.010	-0.9	15.0
	4 MCPP	31706	30323	0.010	-4.4	15.0
	5 MCPA	44236	42037	0.010	-5.0	15.0
	6 DICHLOROPROP	7833282	7837134	0.010	0.0	15.0
	7 2,4-D	7732537	8019965	0.010	3.7	15.0
	8 PENTACHLOROPHENOL	108758332	105978665	0.010	-2.6	15.0
	9 2,4,5-TP(SILVEX)	83221290	83551090	0.010	0.4	15.0
	10 2,4,5-T	85475457	89230569	0.010	4.4	15.0
	11 2,4-DB	12712410	12868639	0.010	1.2	15.0
	12 DINOSEB	80115867	83643780	0.010	4.4	15.0

675 1275

TE
Hp6890/B
DB1701

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00538.D
Report Date: 16-Feb-2001 13:37

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i
Lab File ID: A-B00538.D
Analysis Type:
Lab Sample ID: MHERB
Method: \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m

Injection Date: 16-FEB-2001 13:04
Init. Cal. Date(s): 30-JAN-2001 30-JAN-2001
Init. Cal. Times: 16:23 18:20
Quant Type: ESTD

	COMPOUND	RRF	RF0	MIN RRF	%D	MAX %D
	1 DALAPON	20453288	20195923	0.010	-1 3	15 0
S	2 DCAA	43741143	42900811	0 010	-1 9	15.0
	3 DICAMBA	37895958	37712988	0 010	-0 5	15.0
	4 MCPP	31706	30920	0 010	-2.5	15.0
	5 MCPA	44236	42626	0 010	-3 6	15 0
	6 DICHLOROPROP	7833282	7982972	0 010	1 9	15 0
	7 2,4-D	7732537	8161892	0 010	5 6	15 0
	8 PENTACHLOROPHENOL	108758332	108031861	0 010	-0 7	15 0
	9 2,4,5-TP(SILVEX)	83221290	84243839	0 010	1 2	15 0
	10 2,4,5-T	85475457	89962891	0 010	5.2	15 0
	11 2,4-DB	12712410	12908414	0 010	1 5	15 0
	12 DINOSEB	80115867	86247953	0 010	7.7	15.0

675 1276

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: C1B090228

GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 01/30/01 01/30/01

Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 11.12

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01		LHERB	01/30/01	1623	11.14	
02		MLHERB	01/30/01	1652	11.14	
03		MHERB	01/30/01	1722	11.14	
04		MHHERB	01/30/01	1751	11.14	
05		HHERB	01/30/01	1820	11.13	
06		MHERB	02/15/01	1155	11.12	
07	LCS5443	DV5LH1AC	02/15/01	1254	11.13	
08	LCD5443	DV5LH1AD	02/15/01	1323	11.13	
09	PBLK5443	DV5LH1AA	02/15/01	1352	11.13	
10		MHERB	02/15/01	1647	11.13	
11		MHERB	02/16/01	1205	11.13	
12	DF/S-1/1039/	DVWJE1CC	02/16/01	1235	11.17	
13		MHERB	02/16/01	1304	11.13	
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
(+/- 0.07 MINUTES)

S1 = DCAA

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

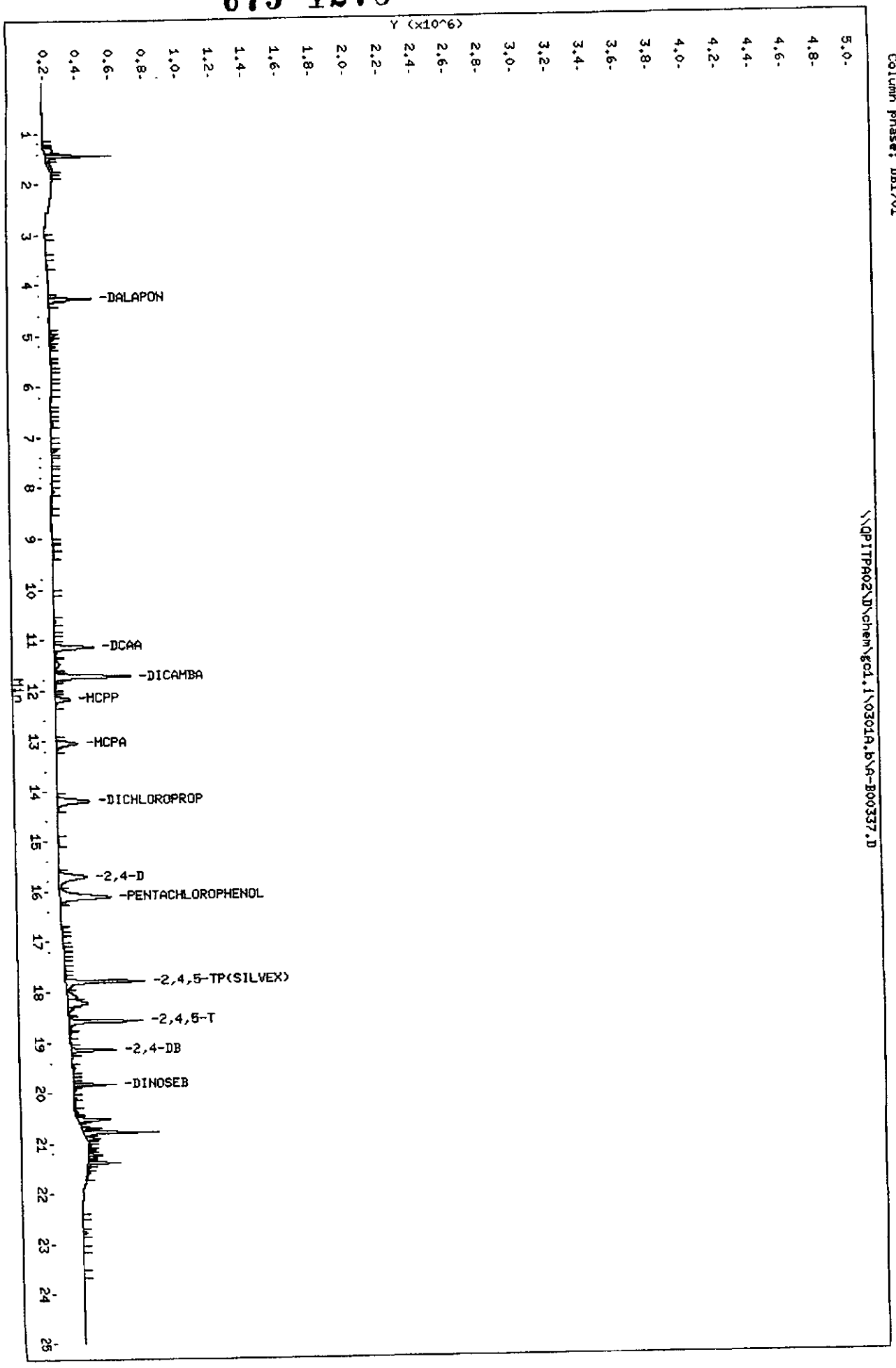
Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00337.D
Report Date: 31-Jan-2001 12:09

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00337.D
Lab Smp Id: LHERB
Inj Date : 30-JAN-2001 16:23
Operator : 01797 Inst ID: gc1.i
Smp Info : LHERB,0301A.b
Misc Info : 190-107-1
Comment :
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 31-Jan-2001 10:33 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 16:23 Cal File: A-B00337.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4.268	4 268	0.000	255387	0 01100	0 01100
$	2 DCAA	11.136	11 136	0.000	1121364	0 02130	0 02130
	3 DICAMBA	11 729	11.732	-0 003	450064	0.01060	0 01060
	4 MCPP	12 173	12 172	0.001	90443	2.12000	2 120
	5 MCPA	13 044	13 045	-0.001	126644	2 14000	2.140
	6 DICHLOROPROP	14 191	14 191	0.000	192913	0 02120	0 02120
	7 2,4-D	15.696	15 685	0 011	170342	0 02110	0.02110
	8 PENTACHLOROPHENOL	16 115	16 115	0 000	303053	0 00266	0 002660
	9 2,4,5-TP(SILVEX)	17.785	17 788	-0 003	467239	0 00525	0 005250
	10 2,4,5-T	18 559	18 557	0.002	441914	0 00527	0 005270
	11 2,4-DB	19 136	19 133	0 003	268492	0 02110	0 02110
	12 DINOSEB	19 838	19 838	0.000	252460	0 00317	0 003170

675 1278


Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00337.D
Date : 30-JAN-2001 16:23
Client ID:
Sample Info: LHERB,0301A.b
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00337.D
Y (x10^6)
Min
-DALAPON
-DCAA
-DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-2,4-DB
-DINOSEB

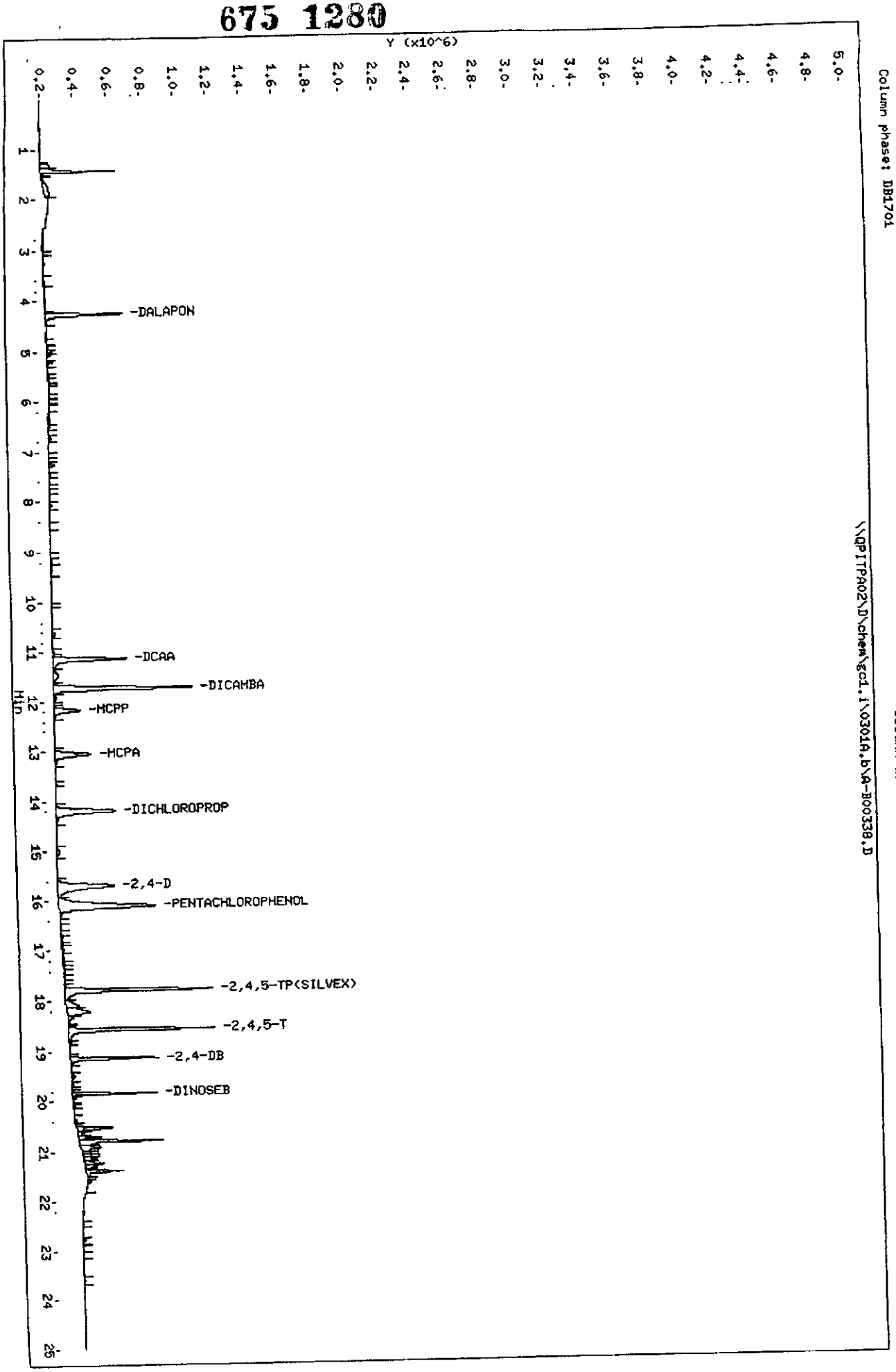
Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00338.D
Report Date: 31-Jan-2001 12:10

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00338.D
Lab Smp Id: MLHERB
Inj Date : 30-JAN-2001 16:52
Operator : 01797 Inst ID: gc1.i
Smp Info : MLHERB,0301A.b
Misc Info : 190-107-2
Comment :
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 31-Jan-2001 10:33 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 16:52 Cal File: A-B00338.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4.269	4 268	0 001	458618	0 02200	0 02082
$	2 DCAA	11 137	11 136	0 001	1977829	0 04250	0 03988
	3 DICAMBA	11 732	11 732	0 000	823924	0.02130	0.02031
	4 MCPP	12 173	12.172	0.001	149620	4.26000	3.847
	5 MCPA	13 047	13 045	0.002	208102	4 28000	3 861
	6 DICHLOROPROP	14 189	14.191	-0 002	349418	0.04240	0.04030
	7 2,4-D	15.690	15.685	0.005	332772	0 04250	0.04185
	8 PENTACHLOROPHENOL	16 115	16 115	0.000	569846	0.00532	0.005156
	9 2,4,5-TP(SILVEX)	17 786	17.788	-0.002	874922	0 01050	0 01015
	10 2,4,5-T	18 558	18.557	0.001	871114	0.01050	0.01044
	11 2,4-DB	19 135	19.133	0.002	518487	0 04220	0 04146
	12 DINOSEB	19 838	19 838	0.000	495187	0 00635	0 006283

675 1280

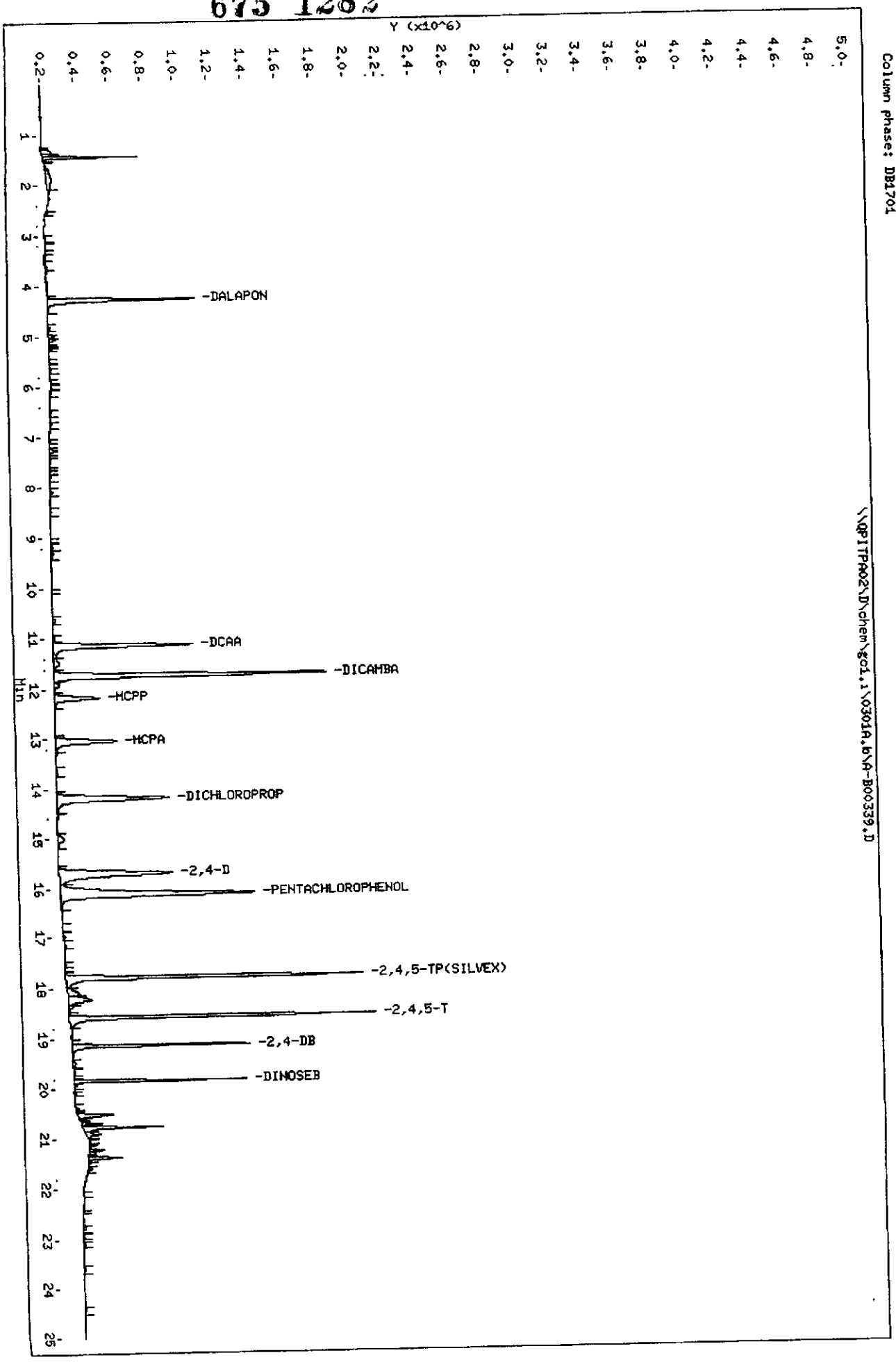

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00338.D
Date : 30-JAN-2001 16:52
Client ID:
Sample Info: MLHERB,0301A.b
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00338.D
Y (x10^6)
-DALAPON
-DCAA
-DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-2,4-DB
-DINOSEB
Min

675 1281

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00339.D
Lab Smp Id: MHERB
Inj Date : 30-JAN-2001 17:22
Operator : 01797 Inst ID: gc1.i
Smp Info : MHERB,0301A.b
Misc Info : 190-107-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 31-Jan-2001 10:33 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 17:22 Cal File: A-B00339.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4.268	4 268	0 000	878539	0.04390	0 04113
$	2 DCAA	11 136	11.136	0.000	3702126	0 08510	0 07784
	3 DICAMBA	11 732	11 732	0 000	1609034	0.04250	0 04056
	4 MCPP	12.172	12.172	0.000	261499	8 52000	7 232
	5 MCPA	13.045	13 045	0 000	364267	8 56000	7 268
	6 DICHLOROPROP	14 191	14 191	0 000	666412	0 08480	0.07934
	7 2,4-D	15 685	15 685	0.000	669801	0.08510	0 08452
	8 PENTACHLOROPHENOL	16.115	16 115	0 000	1152102	0 01064	0 01050
	9 2,4,5-TP(SILVEX)	17 788	17 788	0 000	1757485	0 02110	0 02063
	10 2,4,5-T	18 557	18 557	0 000	1816329	0 02110	0 02155
	11 2,4-DB	19 133	19 133	0 000	1060424	0 08450	0 08470
	12 DINOSEB	19 838	19 838	0.000	1025837	0 01270	0 01291


Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00339.D
Date : 30-JAN-2001 17:22
Client ID:
Sample Info: MHERB,0301A.b
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00339.D
Y (x10^6)
Min
-DALAPON
-DCAA
-DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-2,4-DB
-DINOSEB

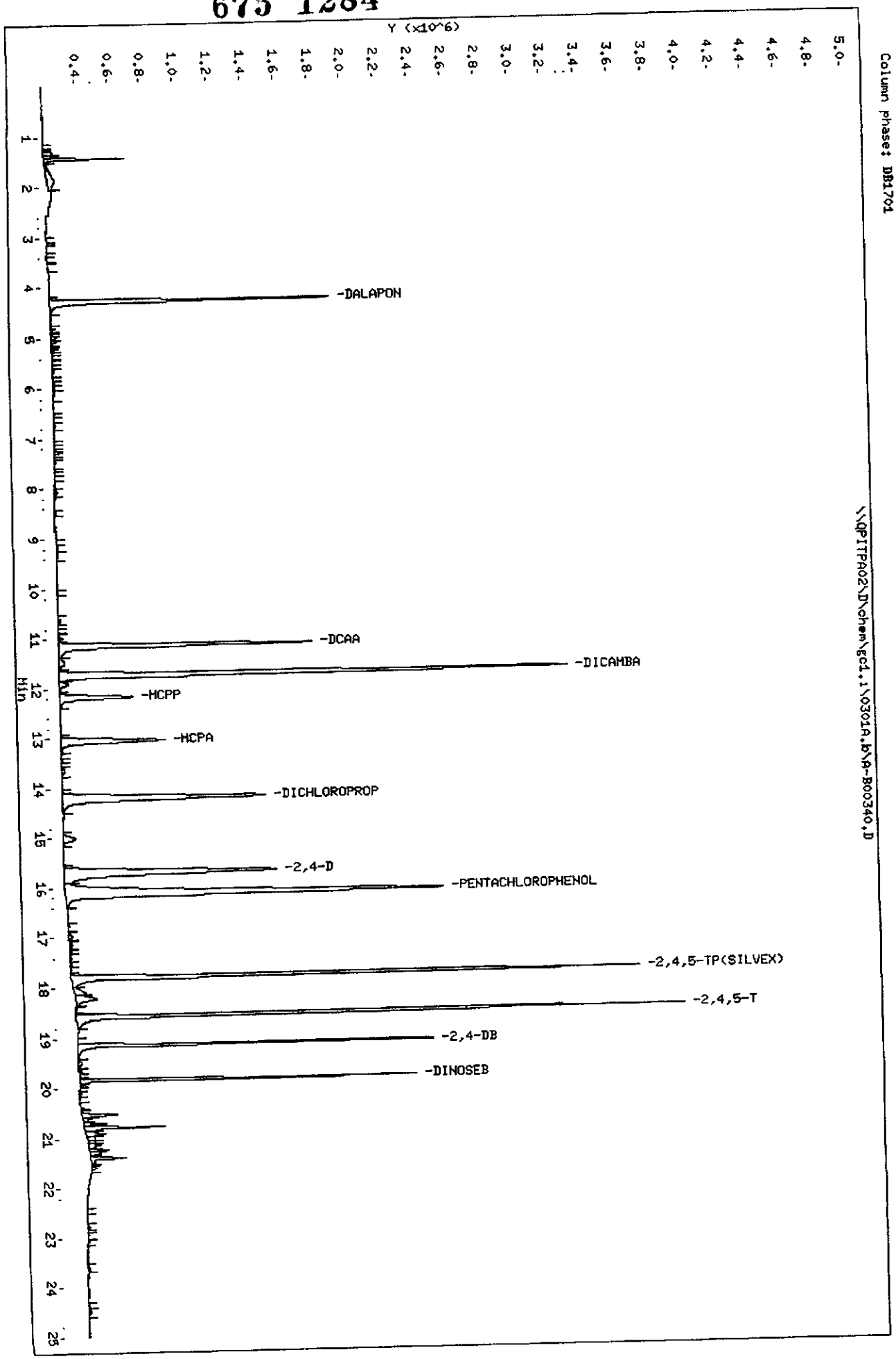
Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00340.D
Report Date: 31-Jan-2001 12:10

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00340.D
Lab Smp Id: MHHERB
Inj Date : 30-JAN-2001 17:51
Operator : 01797 Inst ID: gc1.i
Smp Info : MHHERB,0301A.b
Misc Info : 190-107-4
Comment :
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 31-Jan-2001 10:33 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 17:51 Cal File: A-B00340.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4 270	4 268	0.002	1683306	0 08780	0 08088
$	2 DCAA	11 136	11.136	0.000	6644118	0 17000	0 1462
	3 DICAMBA	11 733	11 732	0 001	3040982	0 08510	0 07861
	4 MCPP	12.173	12 172	0 001	441771	17 0000	13.14
	5 MCPA	13.048	13 045	0.003	625502	17 1000	13 38
	6 DICHLOROPROP	14 191	14 191	0.000	1219548	0.17000	0 1507
	7 2,4-D	15.681	15 685	-0 004	1280427	0 17000	0.1636
	8 PENTACHLOROPHENOL	16.118	16 115	0 003	2265417	0.02128	0.02079
	9 2,4,5-TP(SILVEX)	17 787	17 788	-0 001	3398494	0 04210	0.04042
	10 2,4,5-T	18 556	18 557	-0.001	3645997	0 04220	0.04298
	11 2,4-DB	19 131	19 133	-0 002	2131804	0 16900	0 1700
	12 DINOSEB	19 839	19.838	0.001	2027318	0.02540	0 02548

675 1284


Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00340.D
Date : 30-JAN-2001 17:51
Client ID:
Sample Info: MHHERB,0301A.b
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00340.D
Y (x10^6)
Min
-DALAPON
-DCAA
-DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-2,4-DB
-DINOSEB

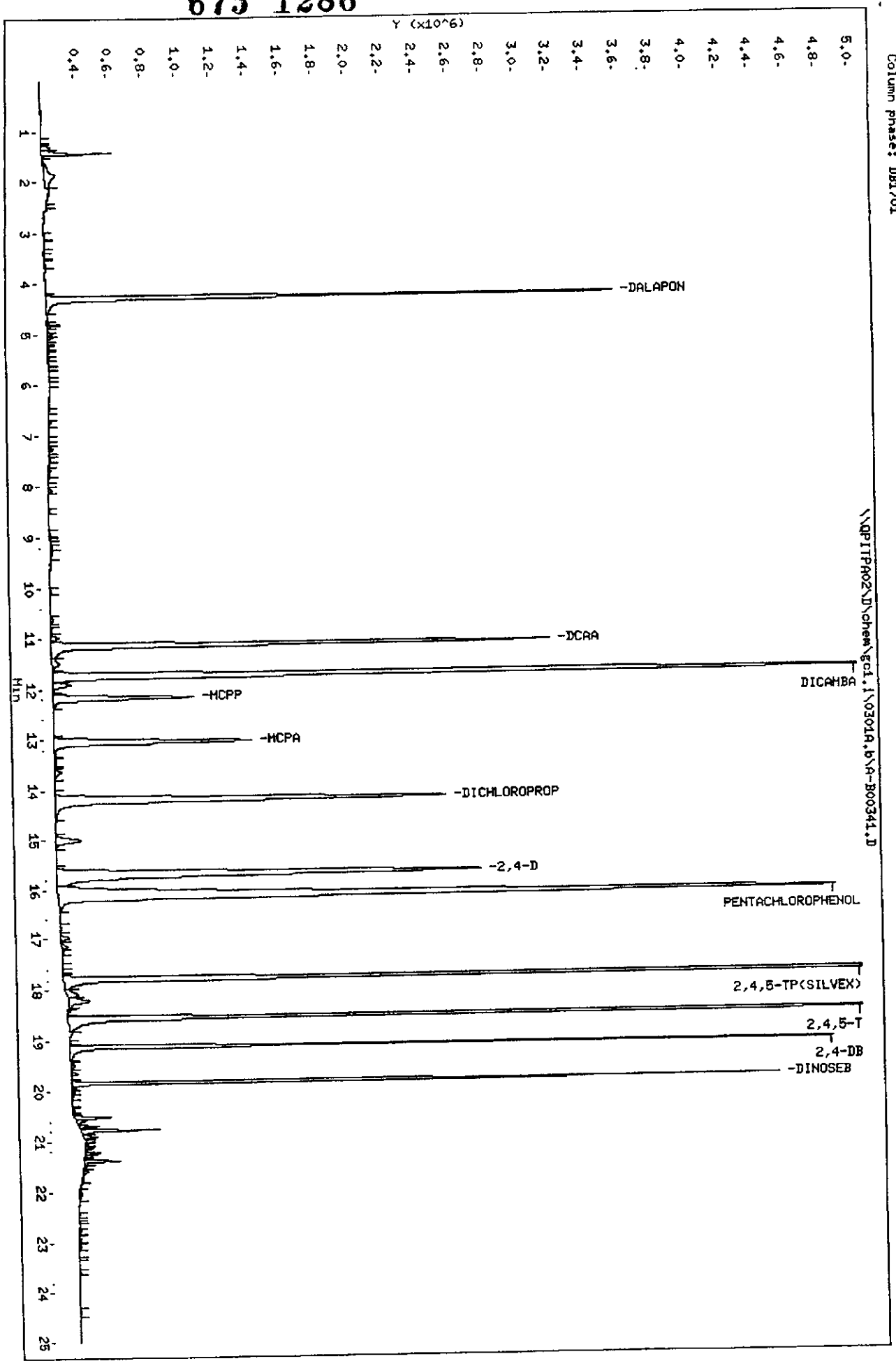
675 1285

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00341.D
Lab Smp Id: HHERB
Inj Date : 30-JAN-2001 18:20
Operator : 01797 Inst ID: gc1.i
Smp Info : HHERB,0301A.b
Misc Info : 190-107-5
Comment :
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 31-Jan-2001 10:33 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 18:20 Cal File: A-B00341.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4.269	4.268	0 001	3347316	0.17600	0 1636
$	2 DCAA	11.133	11.136	-0 003	12558265	0 34000	0.2871
	3 DICAMBA	11 730	11 732	-0 002	5906684	0 17000	0 1559
	4 MCPP	12.172	12 172	0.000	820633	34 1000	25 88
	5 MCPA	13 045	13.045	0 000	1164358	34 0000	26.32
	6 DICHLOROPROP	14 184	14 191	-0.007	2302930	0 33900	0.2940
	7 2,4-D	15 673	15 685	-0.012	2501380	0.34000	0.3235
	8 PENTACHLOROPHENOL	16 113	16 115	-0.002	4595835	0.04255	0 04226
	9 2,4,5-TP(SILVEX)	17 785	17 788	-0 003	6700276	0.08400	0 08051
	10 2,4,5-T	18 552	18 557	-0.005	7433903	0.08440	0 08697
	11 2,4-DB	19 129	19.133	-0 004	4524897	0.33800	0 3559
	12 DINOSEB	19 837	19 838	-0 001	4184219	0 05080	0.05223

675 1286

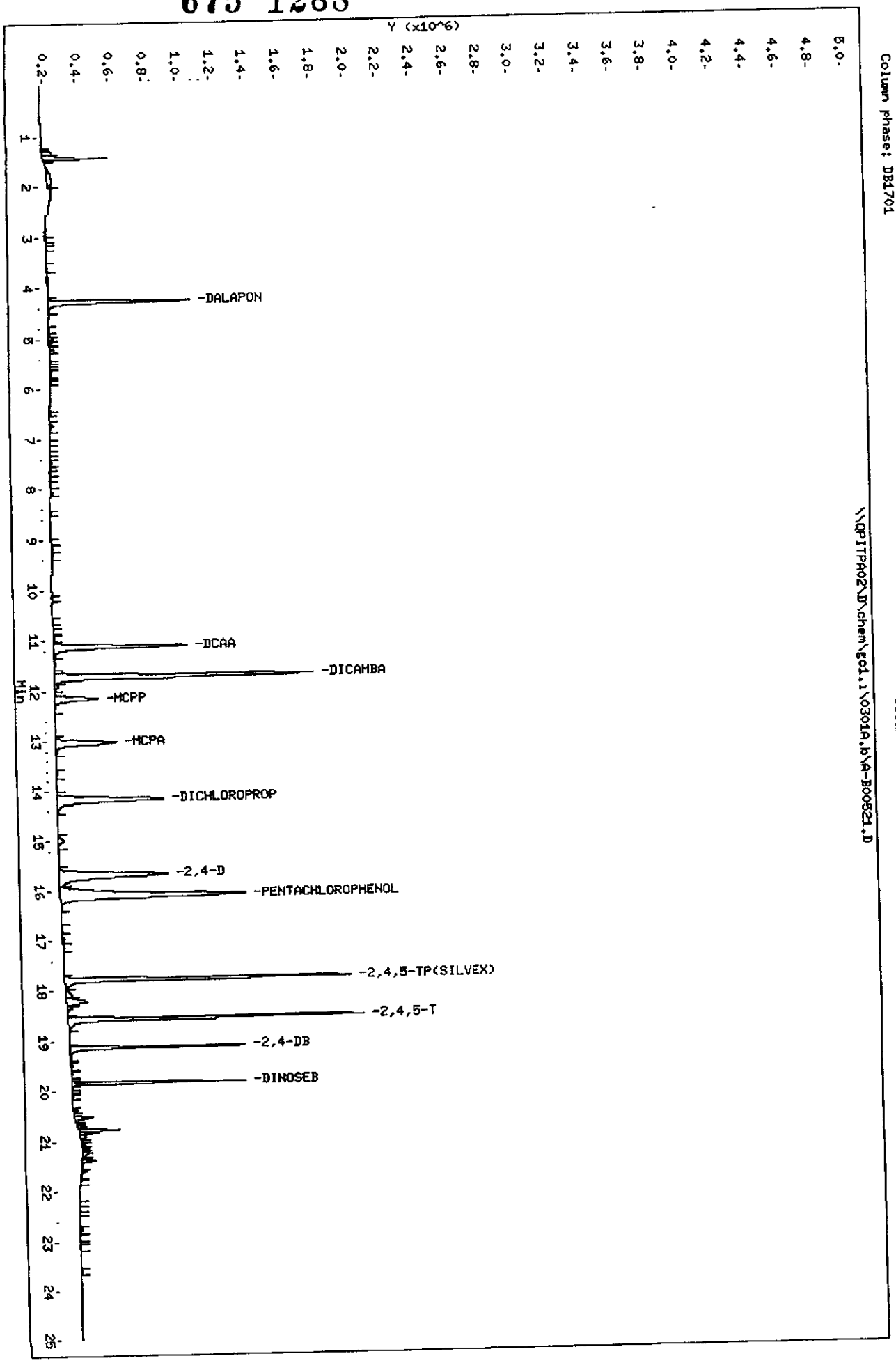

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00341.D
Date : 30-JAN-2001 18:20
Client ID:
Sample Info: HHERB,0301A.b
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
Y (x10^6)
Min
-DALAPON
-DCAA
DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
PENTACHLOROPHENOL
2,4,5-TP(SILVEX)
2,4,5-T
2,4-DB
-DINOSEB
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00341.D

675 1287

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00521.D
Lab Smp Id: MHERB
Inj Date : 15-FEB-2001 11:55
Operator : 01797 Inst ID: gc1.i
Smp Info : MHERB,0301A.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 16-Feb-2001 09:25 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 18:20 Cal File: A-B00341.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4 265	4.265	0.000	854897	0.04390	0 04180
$	2 DCAA	11 124	11 124	0 000	3524188	0.08510	0.08057
	3 DICAMBA	11 719	11.719	0 000	1553121	0 04250	0 04098
	4 MCPP	12 156	12 156	0.000	261373	8 52000	8.244
	5 MCPA	13.031	13 031	0.000	361844	8 56000	8 180
	6 DICHLOROPROP	14 174	14.174	0 000	641791	0 08480	0.08193
	7 2,4-D	15 666	15 666	0 000	655923	0 08510	0 08483
	8 PENTACHLOROPHENOL	16 096	16 096	0.000	1115159	0.01064	0.01025
	9 2,4,5-TP(SILVEX)	17 779	17 779	0.000	1717664	0 02110	0 02064
	10 2,4,5-T	18 550	18 550	0.000	1778887	0.02110	0 02081
	11 2,4-DB	19.127	19 127	0 000	1054728	0 08450	0.08297
	12 DINOSEB	19.832	19 832	0.000	1046936	0 01270	0 01307

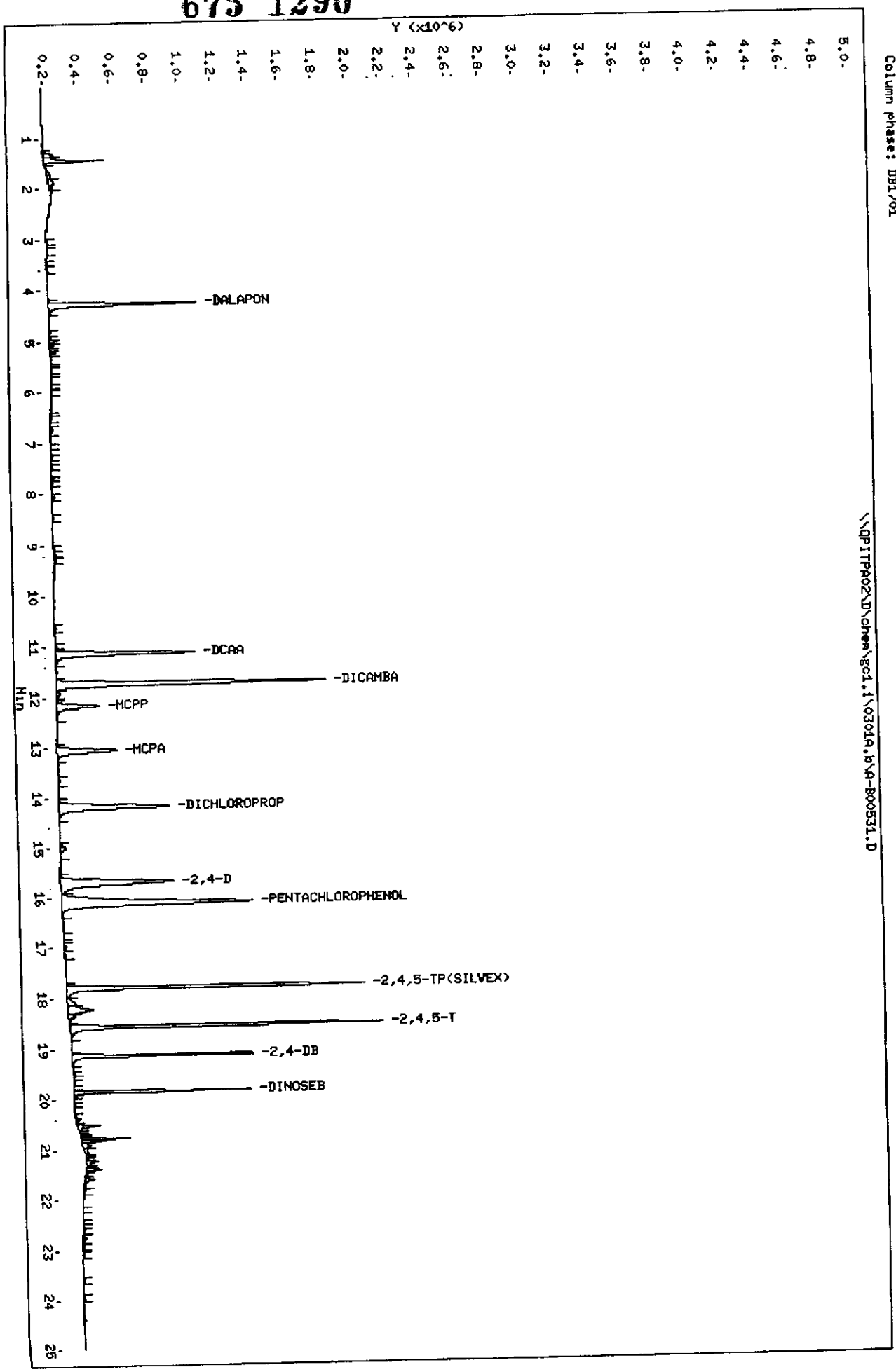

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00521.D
Date : 15-FEB-2001 11:55
Client ID:
Sample Info: MHERB,0301A.b
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00521.D
Y (x10^6)
Min
-DALAPON
-DCAA
-DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-2,4-DB
-DINOSEB

675 1289

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00531.D
Lab Smp Id: MHERB
Inj Date : 15-FEB-2001 16:47
Operator : 01797 Inst ID: gc1.i
Smp Info : MHERB,0301A.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 16-Feb-2001 09:25 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 18:20 Cal File: A-B00341.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 DALAPON	4 270	4.265	0.005	880617	0.04390	0 04306
$	2 DCAA	11 131	11 124	0 007	3601535	0 08510	0.08234
	3 DICAMBA	11 728	11.719	0 009	1598745	0 04250	0 04219
	4 MCPP	12.167	12 156	0.011	259168	8 52000	8 174
	5 MCPA	13 040	13.031	0.009	360465	8 56000	8.149
	6 DICHLOROPROP	14 183	14.174	0.009	663208	0 08480	0 08466
	7 2,4-D	15 675	15 666	0 009	683816	0.08510	0 08843
	8 PENTACHLOROPHENOL	16.113	16 096	0.017	1138043	0 01064	0 01046
	9 2,4,5-TP(SILVEX)	17.786	17 779	0 007	1770759	0 02110	0 02128
	10 2,4,5-T	18 554	18.550	0.004	1866372	0 02110	0 02184
	11 2,4-DB	19.130	19 127	0.003	1075471	0 08450	0.08460
	12 DINOSEB	19.837	19 832	0.005	1059895	0.01270	0 01323

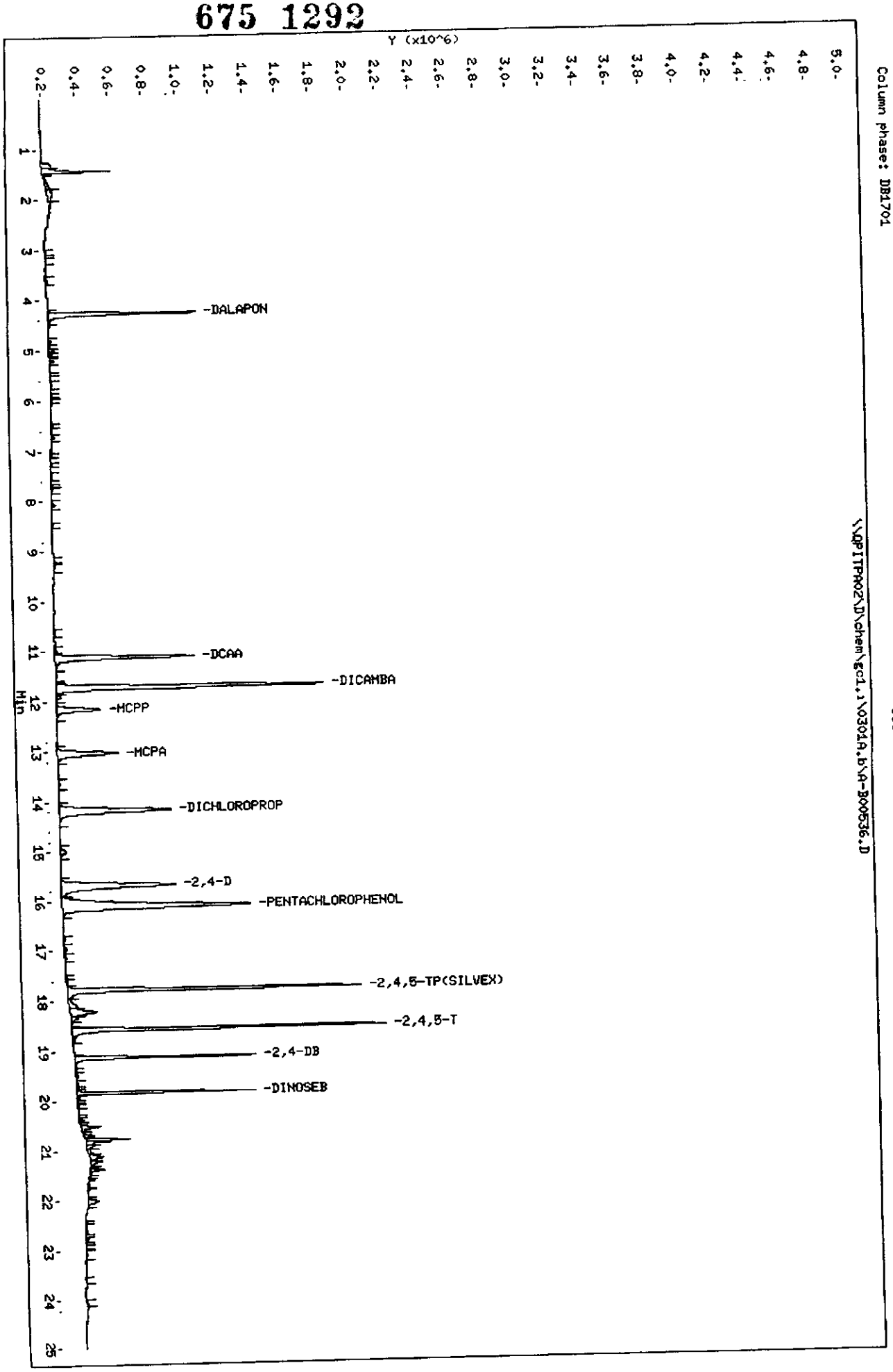

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00531.D
Date : 15-FEB-2001 16:47
Client ID:
Sample Info: MHERB,0301A,b
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
Y (x10^6)
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00531.D
-DALAPON
-DCAA
-DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-2,4-DB
-DINOSEB
Min

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00536.D
Report Date: 16-Feb-2001 12:39

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00536.D
Lab Smp Id: MHERB
Inj Date : 16-FEB-2001 12:05
Operator : 01797 Inst ID: gc1.i
Smp Info : MHERB,0301A.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 16-Feb-2001 12:39 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 18:20 Cal File: A-B00341.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
	1 DALAPON	4 267	4 267	0.000	884012	0 04390	0 04322
$	2 DCAA	11 125	11 123	0.002	3594113	0 08510	0.08217
	3 DICAMBA	11 720	11.718	0.002	1595990	0 04250	0.04212
	4 MCPP	12 161	12.157	0.004	258348	8 52000	8.148
	5 MCPA	13 035	13.030	0.005	359838	8 56000	8.134
	6 DICHLOROPROP	14.174	14 173	0 001	664589	0.08480	0 08484
	7 2,4-D	15 666	15.660	0.006	682499	0.08510	0 08826
	8 PENTACHLOROPHENOL	16 102	16.101	0 001	1127613	0.01064	0.01037
	9 2,4,5-TP(SILVEX)	17 780	17 778	0.002	1762928	0.02110	0 02118
	10 2,4,5-T	18 549	18.548	0.001	1882765	0 02110	0.02203
	11 2,4-DB	19 126	19 126	0.000	1087400	0.08450	0 08554
	12 DINOSEB	19 832	19 832	0.000	1062276	0 01270	0 01326


Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00536.D
Date : 16-FEB-2001 12:05
Client ID:
Sample Info: MHERB,0301A.b
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00536.D
Y (x10^6)
Min
-DALAPON
-DCAA
-DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-2,4-DB
-DINOSEB

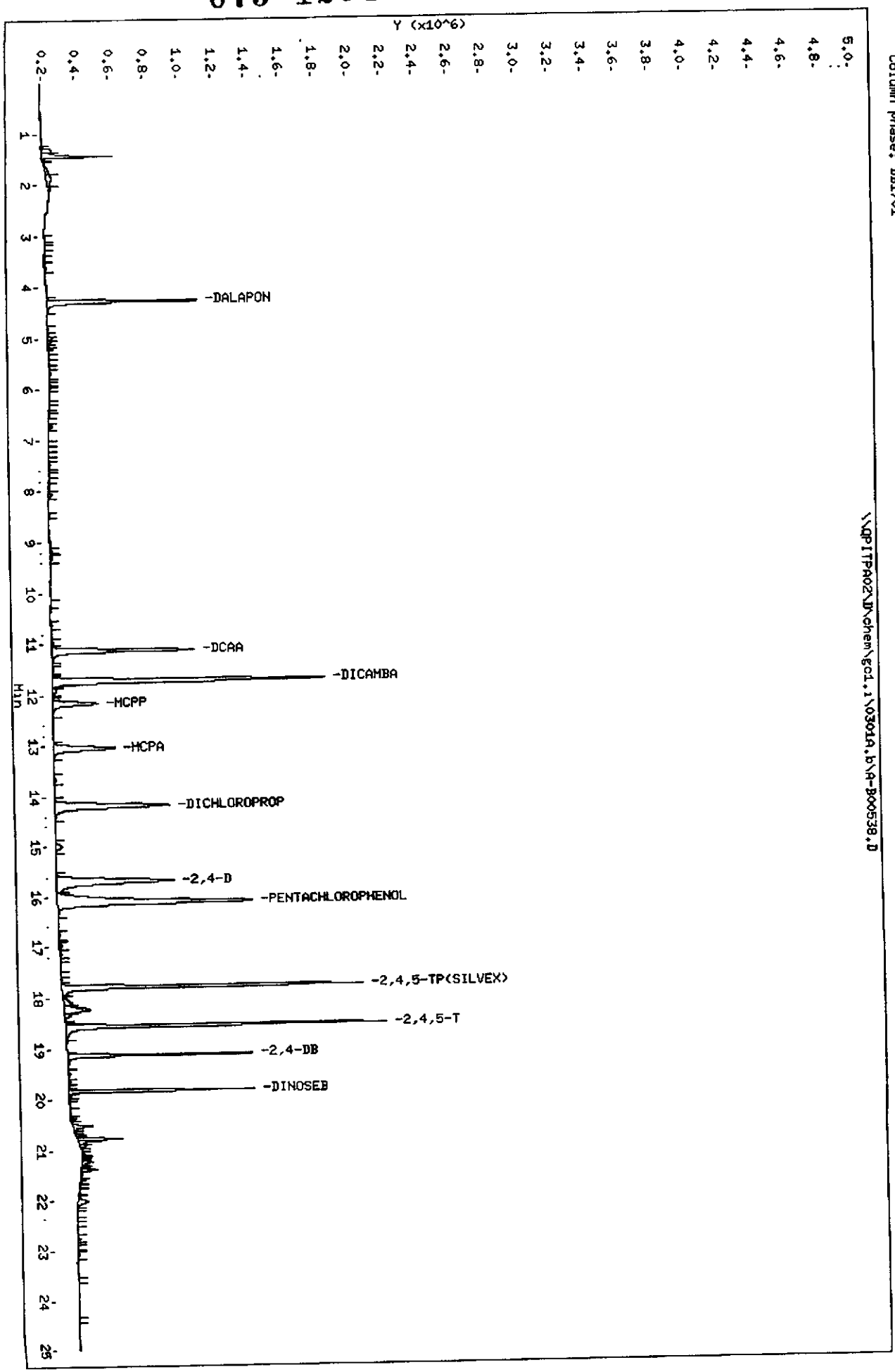
Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00538.D
Report Date: 16-Feb-2001 13:39

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00538.D
Lab Smp Id: MHERB
Inj Date : 16-FEB-2001 13:04
Operator : 01797 Inst ID: gc1.i
Smp Info : MHERB,0301A.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 16-Feb-2001 13:37 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 18:20 Cal File: A-B00341.D
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085

	Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
	1 DALAPON	4 270	4.267	0 003	886601	0 04390	0.04335
$	2 DCAA	11 130	11.123	0.007	3650859	0.08510	0 08346
	3 DICAMBA	11 726	11.718	0 008	1602802	0 04250	0.04229
	4 MCPP	12 164	12 157	0 007	263441	8.52000	8 309
	5 MCPA	13.039	13.030	0 009	364878	8 56000	8 248
	6 DICHLOROPROP	14.180	14 173	0 007	676956	0 08480	0.08642
	7 2,4-D	15.670	15.660	0 010	694577	0.08510	0.08982
	8 PENTACHLOROPHENOL	16 108	16 101	0 007	1149459	0 01064	0 01057
	9 2,4,5-TP(SILVEX)	17 782	17 778	0 004	1777545	0 02110	0 02136
	10 2,4,5-T	18 551	18 548	0.003	1898217	0.02110	0 02221
	11 2,4-DB	19 128	19 126	0 002	1090761	0.08450	0 08580
	12 DINOSEB	19.835	19.832	0.003	1095349	0.01270	0 01367

675 1294


Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00538.D
Date : 16-FEB-2001 13:04
Client ID:
Sample Info: MHERB,0301A.b
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
Y (x10^6)
Min
-DALAPON
-DCAA
-DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-2,4-DB
-DINOSEB
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00538.D

HERBICIDE
QC DATA

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Lab Sample ID:C1B140000 443

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

Date Received: 02/09/01
Date Extracted:02/14/01
Date Analyzed: 02/15/01

Sample WT/Vol: 1000 / mL
Work Order: DV5LH1AA
Dilution factor: 1
Moisture %:NA

QC Batch: 1045443

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
94-75-7	2,4-D	4.0	U
93-72-1	2,4,5-TP (Silvex)	1.0	U

Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01050.D
Report Date: 16-Feb-2001 12:22

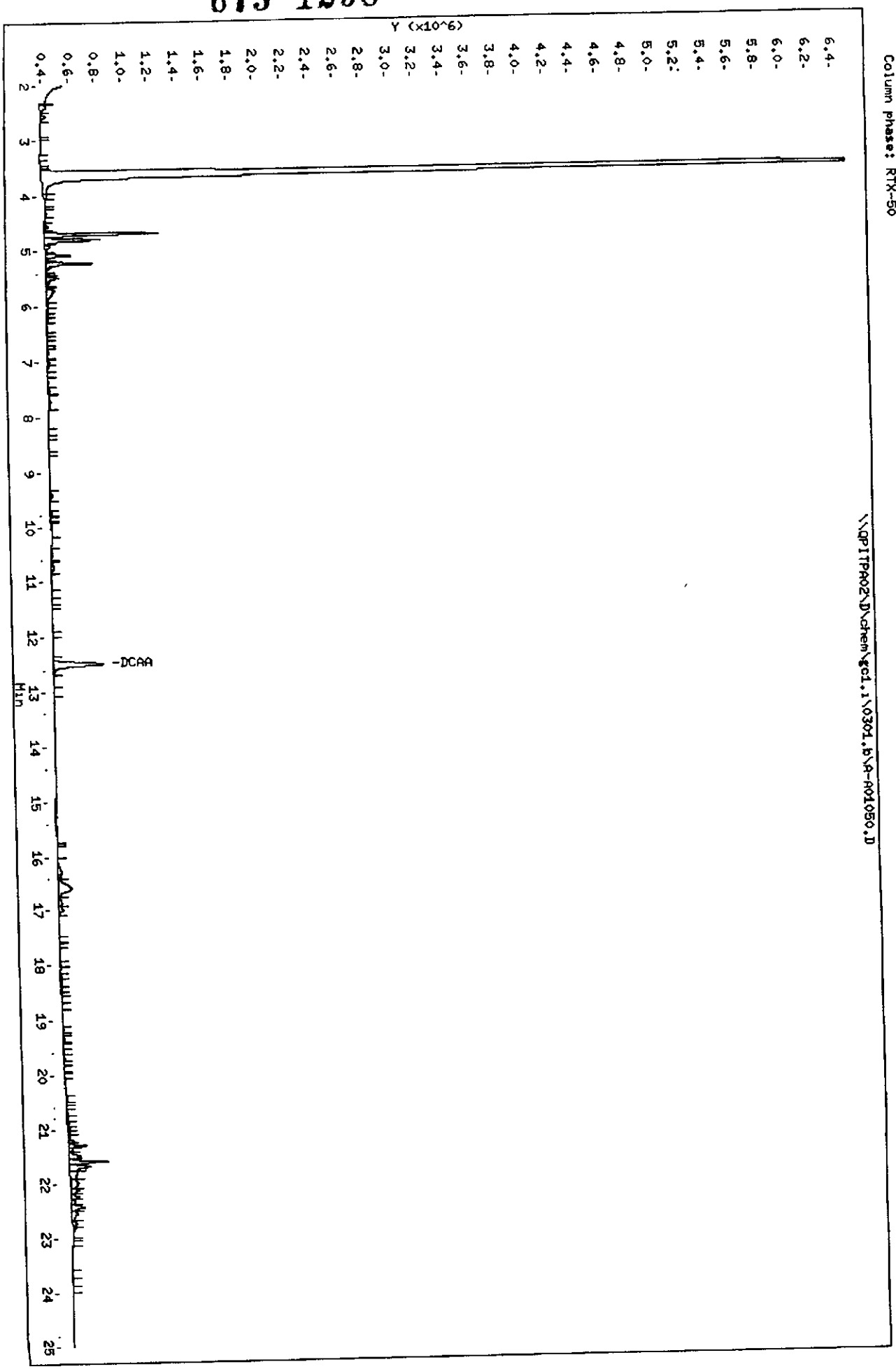
STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301.b\A-A01050.D
Lab Smp Id: DV5LH1AA Client Smp ID: BLK5443
Inj Date : 15-FEB-2001 13:23
Operator : 01797 Inst ID: gc1.i
Smp Info : DV5LH1AA,0301.b
Misc Info : 090228BLK
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301.b\LONGH.m
Meth Date : 16-Feb-2001 12:17 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 17:51 Cal File: A-A00881.D
Als bottle: 6 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	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
1	DALAPON	Compound Not Detected.					
$ 2	DCAA	12 490	12.487	0 003	1891992	0 03643	7 285
3	MCPP	Compound Not Detected					
4	DICAMBA	Compound Not Detected.					
5	MCPA	Compound Not Detected.					
6	DICHLOROPROP	Compound Not Detected.					
7	2,4-D	Compound Not Detected					
8	PENTACHLOROPHENOL	Compound Not Detected					
9	2,4,5-TP(SILVEX)	Compound Not Detected					
10	2,4,5-T	Compound Not Detected.					
11	DINOSEB	Compound Not Detected.					
12	2,4-DB	Compound Not Detected					


Data File: \\QPITPA02\D\chem\gc1.i\0301.b\A-A01050.D
Date : 15-FEB-2001 13:23
Client ID: BLK5443
Sample Info: DVBLH1AA,0301.b
Volume Injected (uL): 1.0
Column phase: RTX-50
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301.b\A-A01050.D
Y (x10^6)
-DCAA
Min

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00525.D
Report Date: 16-Feb-2001 12:05

STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00525.D
Lab Smp Id: DV5LH1AA Client Smp ID: PBLK5443
Inj Date : 15-FEB-2001 13:52
Operator : 01797 Inst ID: gc1.i
Smp Info : DV5LH1AA,0301A.b
Misc Info : 090228BLK
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 16-Feb-2001 09:25 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 18:20 Cal File: A-B00341.D
Als bottle: 6 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	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	1 DALAPON	Compound Not Detected.					
$	2 DCAA	11 131	11.124	0 007	1577628	0 03607	7.213
	3 DICAMBA	Compound Not Detected.					
	4 MCPP	Compound Not Detected					
	5 MCPA	Compound Not Detected					
	6 DICHLOROPROP	Compound Not Detected.					
	7 2,4-D	Compound Not Detected					
	8 PENTACHLOROPHENOL	Compound Not Detected					
	9 2,4,5-TP(SILVEX)	Compound Not Detected					
	10 2,4,5-T	Compound Not Detected.					
	11 2,4-DB	Compound Not Detected					
	12 DINOSEB	Compound Not Detected					

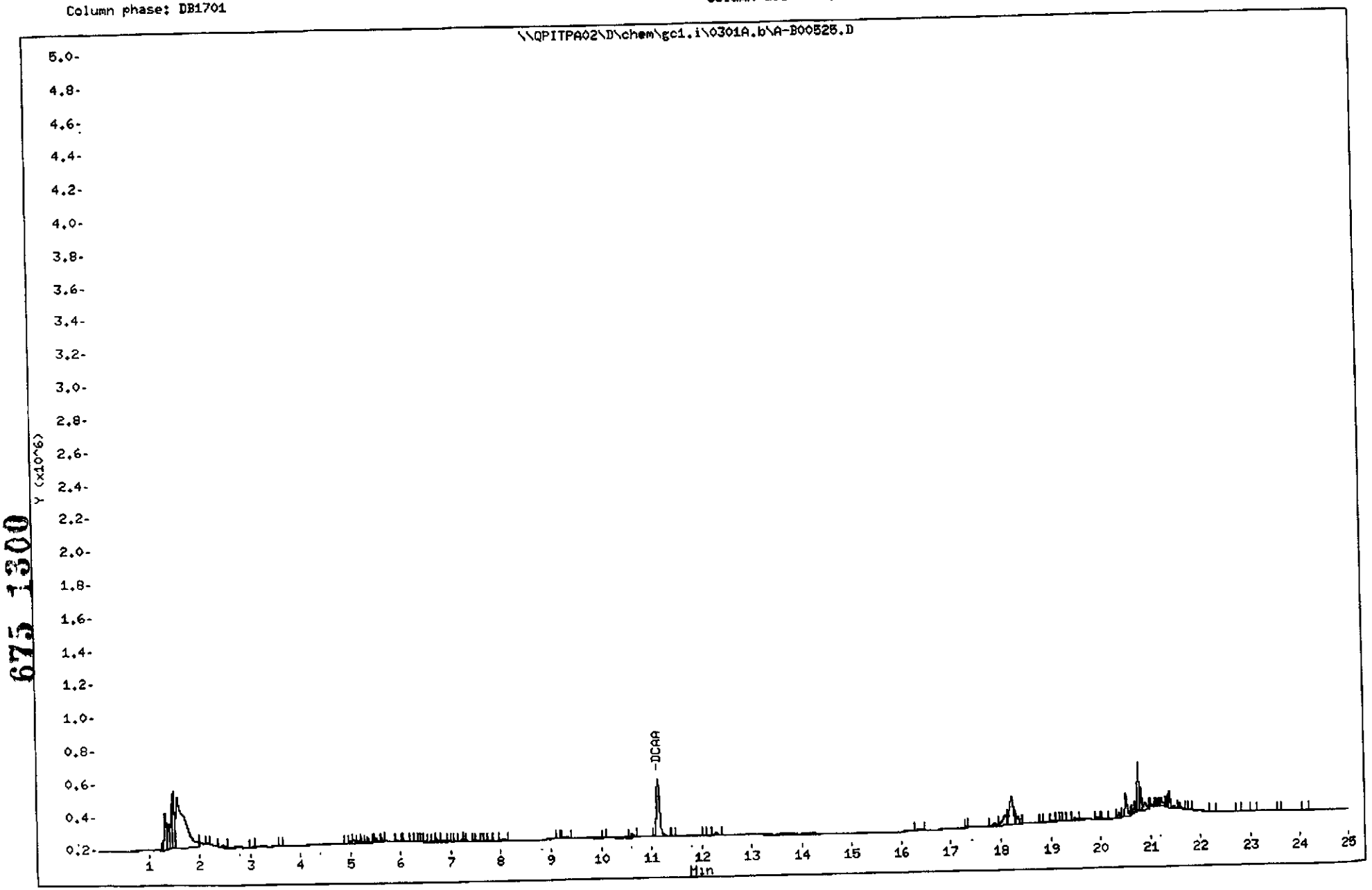
Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00525.D
Date : 15-FEB-2001 13:52
Client ID: PBLK5443
Sample Info: DV5LH1AA,0301A.b
Volume Injected (uL): 1.0
Column phase: DB1701

Instrument: gc1.i

Operator: 01797
Column diameter: 0.53

5077

675 1300



STL Pittsburgh

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

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

Lab Sample ID:C1B140000 443

Sample WT/Vol: 1000 / mL
Work Order: DV5LH1AC
Dilution factor: 1
Moisture %:NA

Date Received: 02/09/01
Date Extracted:02/14/01
Date Analyzed: 02/15/01

QC Batch: 1045443

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
94-75-7	2,4-D	9.63	
93-72-1	2,4,5-TP (Silvex)	2.61	

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00523.D
Report Date: 16-Feb-2001 12:04

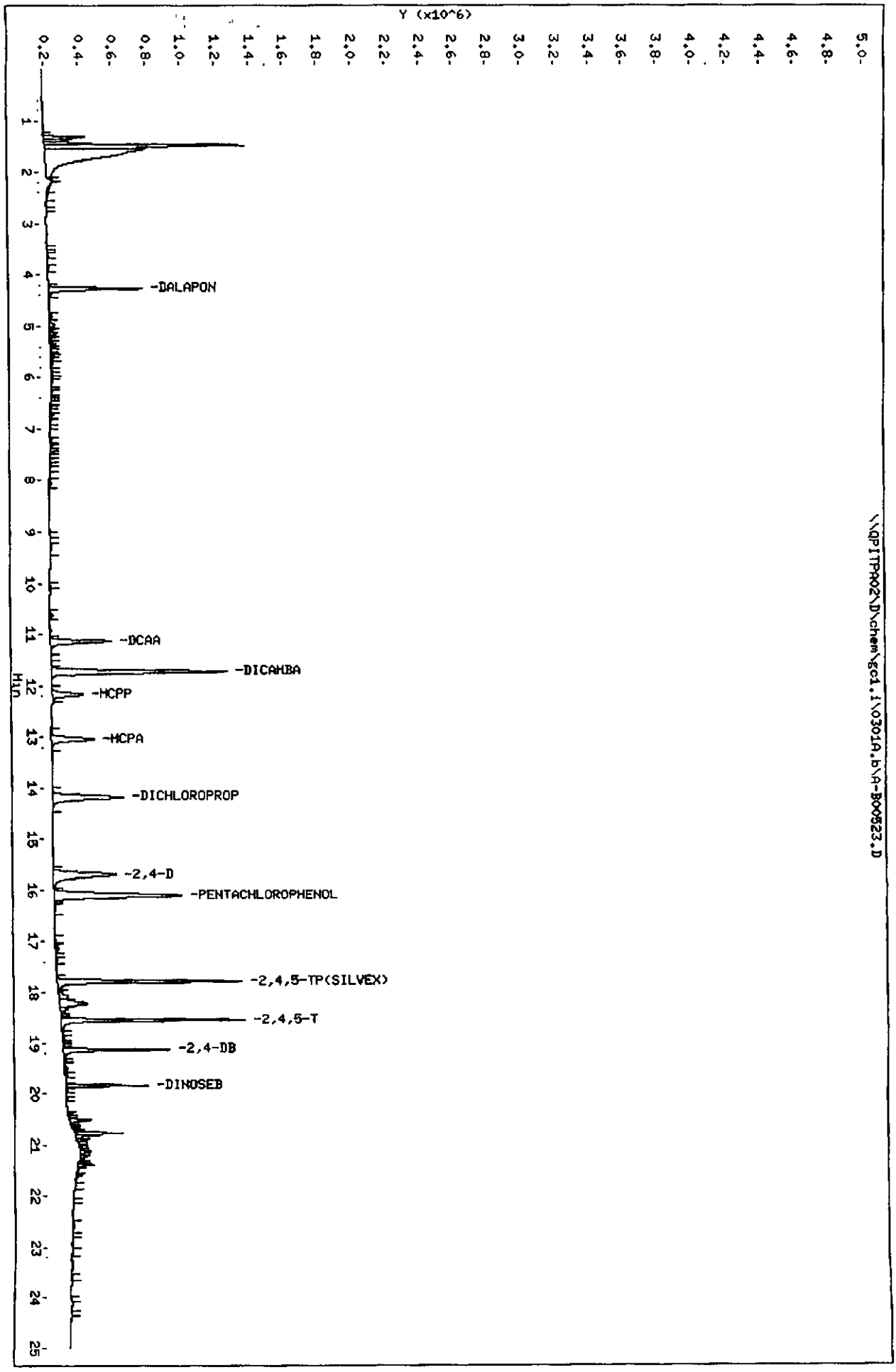
STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00523.D
Lab Smp Id: DV5LH1AC Client Smp ID: LCS5443
Inj Date : 15-FEB-2001 12:54
Operator : 01797 Inst ID: gc1.i
Smp Info : DV5LH1AC,0301A.b
Misc Info : 090228LCS
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 16-Feb-2001 09:25 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 18:20 Cal File: A-B00341.D
Als bottle: 4 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	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	1 DALAPON	4 266	4 265	0 001	549681	0 02687	5 375
$	2 DCAA	11 127	11 124	0.003	1578242	0 03608	7 216
	3 DICAMBA	11.722	11.719	0 003	1031264	0.02721	5.443
	4 MCPP	12.159	12 156	0.003	187116	5 90166	1180
	5 MCPA	13 035	13 031	0 004	252642	5 71121	1142
	6 DICHLOROPROP	14 176	14.174	0 002	424114	0 05414	10.83
	7 2,4-D	15.674	15 666	0.008	372216	0 04814	9 627
	8 PENTACHLOROPHENOL	16 104	16.096	0.008	754542	0.00694	1.388
	9 2,4,5-TP(SILVEX)	17.782	17.779	0 003	1085278	0 01304	2 608
	10 2,4,5-T	18.552	18 550	0 002	1080609	0 01264	2 528
	11 2,4-DB	19 128	19 127	0 001	623333	0.04903	9 807
	12 DINOSEB	19.833	19 832	0 001	485095	0 00605	1.211


Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00523.D
Date : 15-FEB-2001 12:54
Client ID: LCS5443
Sample Info: DVBLH1AC,0301A.b
Volume Injected (uL): 1.0
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
Y (x10^6)
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00523.D
Min
-DALAPON
-DCAA
-DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-2,4-DB
-DINOSEB

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

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

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

Lab Sample ID: C1B140000 443

Sample WT/Vol: 1000 / mL
Work Order: DV5LH1AD
Dilution factor: 1
Moisture %: NA

Date Received: 02/09/01
Date Extracted: 02/14/01
Date Analyzed: 02/15/01

QC Batch: 1045443

Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
94-75-7	2,4-D	10.4	
93-72-1	2,4,5-TP (Silvex)	2 74	

Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00524.D
Report Date: 16-Feb-2001 12:04

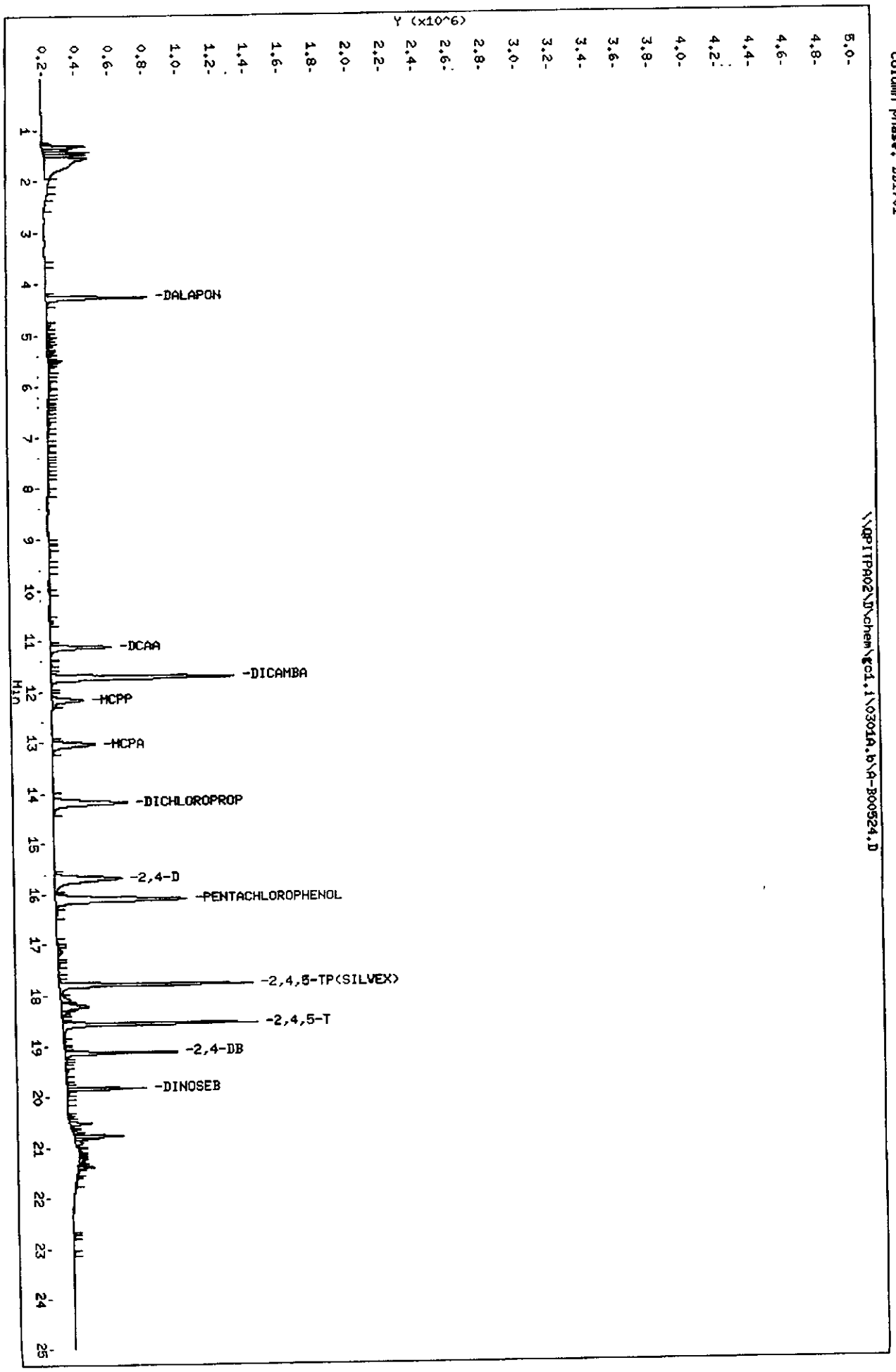
STL-Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00524.D
Lab Smp Id: DV5LH1AD Client Smp ID: LCD5443
Inj Date : 15-FEB-2001 13:23
Operator : 01797 Inst ID: gc1.i
Smp Info : DV5LH1AD,0301A.b
Misc Info : 090228LCD
Comment : 8151/515 ANALYSIS
Method : \\QPITPA02\D\chem\gc1.i\0301A.b\LONGHB.m
Meth Date : 16-Feb-2001 09:25 morganw Quant Type: ESTD
Cal Date : 30-JAN-2001 18:20 Cal File: A-B00341.D
Als bottle: 5 QC Sample: LCSD
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	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

	Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)
	1 DALAPON	4.269	4 265	0 004	598988	0 02929	5.857
$	2 DCAA	11.131	11 124	0 007	1633159	0 03734	7 467
	3 DICAMBA	11.723	11.719	0 004	1077086	0 02842	5 684
	4 MCPP	12 162	12 156	0.006	191538	6.04113	1208
	5 MCPA	13 036	13 031	0 005	260948	5 89897	1180
	6 DICHLOROPROP	14 181	14.174	0.007	441467	0.05636	11.27
	7 2,4-D	15 674	15.666	0.008	402401	0.05204	10.41
	8 PENTACHLOROPHENOL	16.109	16.096	0 013	778031	0.00715	1 431
	9 2,4,5-TP(SILVEX)	17 783	17 779	0.004	1140558	0 01371	2 741
	10 2,4,5-T	18 553	18 550	0.003	1144941	0.01339	2 679
	11 2,4-DB	19 129	19 127	0.002	664147	0.05224	10 45
	12 DINOSEB	19 834	19 832	0 002	471609	0 00589	1 177


Data File: \\QPITPA02\D\chem\gc1.i\0301A.b\A-B00524.D
Date : 15-FEB-2001 13:23
Client ID: LCD5443
Sample Info: DV5LH1AD,0301A.b
Volume Injected (uL): 1.0
Column phase: DB1701
Instrument: gc1.i
Operator: 01797
Column diameter: 0.53
\\QPITPA02\D\chem\gc1.i\0301A.b\A-B00524.D
Y (x10^6)
Min
-DALAPON
-DCAA
-DICAMBA
-MCPP
-MCPA
-DICHLOROPROP
-2,4-D
-PENTACHLOROPHENOL
-2,4,5-TP(SILVEX)
-2,4,5-T
-2,4-DB
-DINOSEB

HERBICIDE
MISCELLANEOUS

STL Pittsburgh

B# 1045443

STL - Pittsburgh

Separatory Funnel Extraction Worksheet

Logbook ID: OP43

HEXANE T37307 BAKER

Start Date	Date Completed	Parameter	Method	Solvent	Solvent Lot	Solvent Mfg	Cleanup Method
2-14-01	2-15-01	Herb (8151A)	3510	MeCl2/Ether	T19271/SA320	Baker/B+J	NA

	Lot Number	Sample ID	Client ID	Sample Volume (mL)	Final Volume (mL)	pH	Surrogate #	Surr Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	Cleanup Date
1	P1B090728	BPK	NA	1000	10.0	5	190-131-1	1.0	NA	NA	NA
2		LCS				5			190-120-4	1.0	
3		LCSDup				5			NA	NA	
4		001				7					
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16.											
17.											
18											
19.											
20											
21											
22											
23											

675 1308

F. Yuskinski 2-14-01

Analyst															
	Y	Y	Y	Y	JM	Y	Y	Y	Y	Y	Y	Y	Y	Y	

Extract(s) (record line # from above)	Extract(s) Received Date	Time	Analyst	Location	Extract(s) Relinquished Date	Time	Analyst	Location
All Above	2-14-01	2230	F. Yuskinski	Org Prep	2-14-01	2340	F. Yuskinski	Refrig
ALL ABOVE	2-15-01	0545	James Miller	REFRIG-EXT	2-15-01	0830	James Miller	REFRIG-C
ALL ABOVE	2-15-01	0900	D. Myers	LP1-GC	2-15-01	0930	D. Myers	LP1-GC

Sodium Sulfate Mfg/Lot Number: Baker T43641

Reviewed by: James Miller Date: 2-15-01

0085

675 1309

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information
1	1	8151/515 HERB ANALYSIS
2	1	8151/515 HERB ANALYSIS
3	2	190-107-1 877
4	3	190-107-2 878
5	4	190-107-3 879
6	5	190-107-4 880
7	6	190-107-5 881
8	7	MDL #1-S 882
9	8	MDL #2-S 883
10	9	MDL #3-S 884
11	10	MDL #4-S 885
12	11	MDL #5-S 886
13	12	MDL #6-S 887
14	13	MDL #7-S 888
15	14	MDL #8-S 889
16	15	MDL #9-S 890
17	16	LCS #1-S 891
18	17	LCS #2-S 892
19	18	LCS #3-S 893
20	19	LCS #4-S 894
21	20	~~LPC/190-115-14~~ MDL BLK 895
22	21	~~MDL BLK-S~~ LPC/190-115-14 896
23	22	190-107-3 897

created: 1-30-01 mmm

1-31-01 mmm

Sequence Table (Back Injector):

Vial Information Part:

675 1310

Sequence Table (Front Injector):

Vial Information Part:

created: 2-15-01 wwm A

Line	Vial		Vial Information
1	1		8151/515 HERB ANALYSIS
2	2	1046	190-107-3
3	3	1047	~~09022800~~1
4	4	1048	~~090228LCS~~
5	5	1049	~~090228LCD~~
6	6	1050	090228BLK
7	7	1051	~~070113001~~
8	8	1052	~~070113001MS~~
9	9	1053	~~070113001MSD~~
10	10	1054	~~0701130LCS~~
11	11	1055	~~0701130BLK~~
12	12	1056	190-107-3

✓ JD 2-16-01

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
1	100	8151 HERB ANALYSIS
2	1	8151/515 HERB ANALYSIS
3	2	190-107-3
4	3	090228001
5	4	090228LCS
6	5	090228LCD
7	6	090228BLK
8	7	070113001
9	8	070113001MS
10	9	070113001MSD

675 1311

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial		Vial Information
1	1		8151/515 HERB ANALYSIS
2	2	1058	190-107-3
3	3	1059	~~090228001~~
4	4	1060	190-107-3
5	5	1061	090228001 5X
6	6	1062	190-107-3

Created: 2-16-01 mwm A

JD 2-16-01

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
1	100	8151 HERB ANALYSIS
2	1	8151/515 HERB ANALYSIS
3	2	190-107-3
4	3	090228001
5	4	190-107-3
6	5	090228001 5X
7	6	190-107-3

675 1312

B

created: 1-30-01 wwm

Line	Vial	Vial Information
1	100	8151 HERB ANALYSIS
2	100	8151/515 HERB ANALYSIS
3	100	8151/515 HERB ANALYSIS
4	2	190-107-1 337
5	3	190-107-2 338
6	4	190-107-3 339
7	5	190-107-4 340
8	6	190-107-5 341
9	7	MDL #1-S 342
10	8	MDL #2-S 343
11	9	MDL #3-S 344
12	10	MDL #4-S 345
13	11	MDL #5-S 346
14	12	MDL #6-S 347
15	13	MDL #7-S 348
16	14	MDL #8-S 349
17	15	MDL #9-S 350
18	16	LCS #1-S 351
19	17	LCS #2-S 352
20	18	LCS #3-S 353
21	19	LCS #4-S 354
22	20	MDL BLK ~~LPC/190-115-14~~ 355
23	21	wwm 1-31-01 ~~MDL BLK-S~~ 356 LPC/190-115-14
24	22	190-107-3 357

675 1313

Sequence Table (Front Injector):

Vial Information Part:

created: 2-15-01 mmm B

Line	Vial	Vial Information
1	1	8151/515 HERB ANALYSIS
2	2	190-107-3
3	3	090228001
4	4	090228LCS
5	5	090228LCD
6	6	090228BLK
7	7	070113001
8	8	070113001MS
9	9	070113001MSD
10	10	0701130LCS
11	11	0701130BLK
12	12	190-107-3

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial		Vial Information
1	100		8151 HERB ANALYSIS
2	1		8151/515 HERB ANALYSIS
3	2	521	190-107-3
4	3	522	~~090228001~~
5	4	523	090228LCS
6	5	524	090228LCD
7	6	525	090228BLK
8	7	526	070113001
9	8	527	070113001MS
10	9	528	070113001MSD

✓JD 2-16-01

Sequence: C:\HPCHEM\2\SEQUENCE\1151.S

11	10	529	0701130LCS
12	11	530	0701130BLK
13	12	531	190-107-3

675 1315

Sequence Table (Front Injector):

Vial Information Part:

Created: 2-16-01 mm B

Line	Vial		Vial Information
1	1		8151/515 HERB ANALYSIS
2	2	1058	190-107-3
3	3	1059	090228001
4	4	1060	190-107-3
5	5	1061	090228001 5X
6	6	1062	190-107-3

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial		Vial Information
1	100		8151 HERB ANALYSIS
2	1		8151/515 HERB ANALYSIS
3	2	534	190-107-3
4	3	535	~~090228~~001
5	4	536	190-107-3
6	5	537	090228001 5X
7	6	538	190-107-3

JD 2-16-01

675 1316

PSR024 2/14/01 11 42 35 MT SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

REQUESTED BY **PINOB**

METHOD. QS Herbicides (8151A)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16D CLP1	DVWJE-1-CC	___ ___ ___	312306	4994	1 OA QS	C1B090229	001		WATER	0	13 1

V. seal 1 liter per sample, and empty bottle was thrown away!

P. Yuskinski
2-14-01

RELINQUISHED BY	RECEIVED BY	DATE/TIME
P. Yuskinski	P. Yuskinski	2-14-01 154
P. Yuskinski	P. Yuskinski	2-14-01 21(

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

METALS DATA

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
DF/S-1/1039/IDW/004	DVWJE
DF/S-1/1039/IDW/004S	DVWJES
DF/S-1/1039/IDW/004SD	DVWJED

Comments: UXB DUNN FIELD
C1B090228
METALS ANALYSIS
6010B,7470A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

Version 4 10 2

REVIEWED BY: RG
DATE: 21601

Cover Page Equivalent

METALS
RESULTS

675 1320

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DVWJE **Client ID:** DF/S-1/1039/IDW/004

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

Weight: NA **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	**308.22**	**12.7**	**200**	**1580**	**N**	**1**	**ICP**	**2/14/01**	**10:44**
Antimony	**220.35**	**1.5**	**60.0**	**30.0**	**B**	**1**	**ICPST**	**2/13/01**	**13:52**
Arsenic	**189.04**	**2.6**	**10.0**	**8.0**	**B**	**1**	**ICPST**	**2/13/01**	**13:52**
Barium	**493.41**	**0.41**	**200**	**218**		**1**	**ICP**	**2/14/01**	**10:44**
Beryllium	313.04	0.071	5.0	0.071	U	1	ICP	2/14/01	10:44
Cadmium	**226.50**	**0.49**	**5.0**	**0.56**	**B**	**1**	**ICPST**	**2/13/01**	**13:52**
Calcium	**317.93**	**37.9**	**5000**	**71900**		**1**	**ICP**	**2/14/01**	**10:44**
Chromium	**267.72**	**1.0**	**10.0**	**23.5**		**1**	**ICPST**	**2/13/01**	**13:52**
Cobalt	228.62	3.2	50.0	3.2	U	1	ICP	2/14/01	10:44
Copper	**324.75**	**2.2**	**25.0**	**51.8**		**1**	**ICP**	**2/14/01**	**10:44**
Iron	**259.94**	**8.8**	**100**	**2970**		**1**	**ICP**	**2/14/01**	**10:44**
Lead	**220.35**	**1.9**	**3.0**	**13.3**		**1**	**ICPST**	**2/13/01**	**13:52**
Magnesium	**279.08**	**19.9**	**5000**	**16700**		**1**	**ICP**	**2/14/01**	**10:44**
Manganese	**257.61**	**0.87**	**15.0**	**898**		**1**	**ICP**	**2/14/01**	**10:44**
Nickel	**231.60**	**6.1**	**40.0**	**20.0**	**B**	**1**	**ICP**	**2/14/01**	**10:44**
Potassium	**766.49**	**496**	**5000**	**4600**	**B**	**1**	**ICP**	**2/14/01**	**10:44**
Selenium	220.35	2.1	5.0	2.1	U	1	ICPST	2/13/01	13:52
Silver	328.07	0 94	10.0	0.94	U	1	ICPST	2/13/01	13:52
Sodium	**589**	**29.0**	**10000**	**489000**		**2**	**ICP**	**2/14/01**	**12:54**
Thallium	190 86	3 9	10.0	3 9	U	1	ICPST	2/13/01	13:52
Vanadium	**292.40**	**1.8**	**50.0**	**3.9**	**B**	**1**	**ICP**	**2/14/01**	**10:44**
Zinc	**213.86**	**3.1**	**20.0**	**203**		**1**	**ICP**	**2/14/01**	**10:44**

Comments. Lot # C1B090228 Sample #: 1

U Result is less than the MDL

B Result is between MDL and RL

Form I Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DVWJE **Client ID:** DF/S-1/1039/IDW/004

Matrix: Water **Units:** ug/L **Prep Date:** 2/13/01 **Prep Batch:** 1043191

Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.054	0.20	0.16	B	1	CVAA	2/13/01	9:07

Comments: Lot #. C1B090228 Sample #. 1

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

675 1322 **STL-Pittsburgh**

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAA

Units: ug/L

Chart Number: 0213HGA.PRN

Acceptable Range: 80% - 120%

Standard Source: Ultra

Standard ID: 0087-074-11

Element	WL/ Mass	True Conc	ICV5-1 2/13/01 8:57 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253 7	2.5	2 49	**99.6**								

Form 2A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICP **Units:** ug/L

Chart Number: J10214B.ARC **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** 0087-036-1

Element	WL/ Mass	True Conc	ICV2-1 2/14/01 10:23 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	25000.0	25195.80	**100.8**								
Barium	493.409	1000.0	1000.25	**100.0**								
Beryllium	313.042	1000.0	988 51	**98.9**								
Calcium	317.933	25000.0	25234.19	**100.9**								
Cobalt	228.616	1000.0	1002.93	**100.3**								
Copper	324.754	1000 0	999.35	**99.9**								
Iron	259 94	25000.0	26187 35	**104.7**								
Magnesium	279.079	25000.0	25337 28	**101.3**								
Manganese	257 61	1000.0	1007.83	**100.8**								
Nickel	231 604	1000.0	1011.61	**101.2**								
Potassium	766.491	25000.0	24191 98	**96.8**								
Sodium	588.995	25000.0	25033 92	**100.1**								
Vanadium	292.402	1000 0	1008 38	**100.8**								
Zinc	213 856	1000 0	1011.49	**101.1**								

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPST

Units: ug/L

Chart Number: T10213B.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0087-035-16

Element	WL/ Mass	True Conc	ICV3-1 2/13/01 1:25 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220 353	250 0	262.98	**105.2**								
Arsenic	189.042	250.0	260.55	**104.2**								
Cadmium	226.502	250 0	255 20	**102.1**								
Chromium	267.716	1000.0	1018.90	**101.9**								
Lead	220 353	250.0	260.44	**104.2**								
Selenium	220.353	250.0	260.34	**104.1**								
Silver	328.068	500 0	522.02	**104.4**								
Thallium	190.864	500.0	527.94	**105.6**								

Form 2A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA **Units:** ug/L

Chart Number: 0213HGA.PRN **Acceptable Range:** 80% - 120%

Standard Source: Inorganic Ventures **Standard ID:** 0087-074-12

Element	WL/ Mass	True Conc	CCV5-1 2/13/01 9:00 AM Found	% Rec	CCV5-2 2/13/01 9:18 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.07	101.4	5.11	102.2						

675 1326

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICP

Units: ug/L

Chart Number: J10214B.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0087-072-1

MW 2-15 01

Element	WL/ Mass	True Conc	CCV2-1 2/14/01 11:03 AM Found	% Rec	CCV2-2 2/14/01 11:41 AM Found	% Rec	CCV2-3 2/14/01 12:18 PM Found	% Rec	CCV2-4 2/14/01 1:07 PM Found	% Rec	Found	% Rec
Aluminum	308.215	50000.0	49864.30	99.7								
Barium	493.409	5000.0	4873.28	97.5								
Beryllium	313.042	5000.0	4874.73	97.5								
Calcium	317.933	50000.0	51045 98	102.1								
Cobalt	228.616	5000.0	4938 40	98.8								
Copper	324 754	5000.0	4887.60	97.8								
Iron	259.94	50000.0	51558.03	103.1								
Magnesium	279.079	50000.0	50093.55	100.2								
Manganese	257.61	5000.0	4935.08	98.7								
Nickel	231.604	5000.0	4914 70	98.3								
Potassium	766.491	50000.0	49160.01	98.3								
Sodium	588.995	50000 0	49017.09	98.0	48432.94	96.9	48060.81	96.1	49559.08	99.1		
Vanadium	292.402	5000 0	4929.68	98.6								
Zinc	213.856	5000.0	5006.67	100.1								

Form 2A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPST **Units:** ug/L

Chart Number: T10213B.ARC **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** 0087-052-5

Element	WL/ Mass	True Conc	CCV3-1 2/13/01 2:09 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	500.0	528.20	**105.6**								
Arsenic	189.042	500.0	520 12	**104.0**								
Cadmium	226 502	500.0	501 64	**100.3**								
Chromium	267.716	2000.0	2015 12	**100.8**								
Lead	220.353	500.0	516.44	**103.3**								
Selenium	220.353	500.0	531 16	**106.2**								
Silver	328 068	1000.0	1047.70	**104.8**								
Thallium	190.864	1000.0	1056.59	**105.7**								

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: 0213HGA.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB1 2/13/01 8:59 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	U								

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: J10214B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB1 2/14/01 10.26 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308 215	200	12.7	U								
Barium	493.409	200	0.4	U								
Beryllium	313 042	5	0 1	U								
Calcium	317.933	5000	37 9	U								
Cobalt	228.616	50	3.2	U								
Copper	324.754	25	**2.2**	**U**								
Iron	259.94	100	**11.5**	**B**								
Magnesium	279.079	5000	19.9	U								
Manganese	257.61	15	0.9	U								
Nickel	231.604	40	6.1	U								
Potassium	766.491	5000	496 0	U								
Sodium	588 995	5000	14.5	U								
Vanadium	292.402	50	**1.8**	**U**								
Zinc	213.856	20	**3.1**	**U**								

Version 4 10.2

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

Form 3 Equivalent

675 1330

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: T10213B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	ICB1 2/13/01 1:29 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Antimony	220.353	60	1.5	U								
Arsenic	189.042	10	2.6	U								
Cadmium	226.502	5	0.5	U								
Chromium	267 716	10	1.0	U								
Lead	220.353	3	1.9	U								
Selenium	220.353	5	2.1	U								
Silver	328.068	10	0.9	U								
Thallium	190 864	10	3.9	U								

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

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA **Units:** ug/L

Chart Number: 0213HGA.PRN

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB1 2/13/01 9:01 AM Found	Q	CCB2 2/13/01 9.20 AM Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	U	0.1	U						

U Result is less than the MDL

B Result is between MDL and RL

675 1332

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP **Units:** ug/L

Chart Number: J10214B.ARC

Standard Source: _____ **Standard ID:** _____ mtw 2-13-01

Element	WL/ Mass	Report Limit	CCB1 2/14/01 11 06 AM Found	Q	CCB2 2/14/01 11:44 AM Found	Q	CCB3 2/14/01 12.22 PM Found	Q	CCB4 2/14/01 1.10 PM Found	Q	Found	Q
Aluminum	308.215	200	12 7	U								
Barium	493.409	200	0 4	U								
Beryllium	313.042	5	**0.3**	**B**								
Calcium	317.933	5000	37.9	U								
Cobalt	228.616	50	3 2	U								
Copper	324 754	25	**2.2**	**U**								
Iron	259.94	100	8 8	U								
Magnesium	279.079	5000	19.9	U								
Manganese	257.61	15	0.9	U								
Nickel	231.604	40	6.1	U								
Potassium	766.491	5000	-520.0	B								
Sodium	588.995	5000	14 5	U	14.5	U	14.5	U	14.5	U		
Vanadium	292.402	50	**1.8**	**U**								
Zinc	213.856	20	**3.1**	**U**								

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPST **Units:** ug/L

Chart Number: T10213B.ARC

Standard Source: _____ **Standard ID:** _____

Element	WL/ Mass	Report Limit	CCB1 2/13/01 2:13 PM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Antimony	220.353	60	1.5	U								
Arsenic	189 042	10	2.6	U								
Cadmium	226.502	5	0 5	U								
Chromium	267.716	10	1.0	U								
Lead	220.353	3	1.9	U								
Selenium	220.353	5	2.1	U								
Silver	328.068	10	0.9	U								
Thallium	190.864	10	3.9	U								

675 1334

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DV0HRB

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

Weight: NA **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.215	12.7	200	12 7	U	1	ICP	2/14/01	10:38
Antimony	220.353	1.5	60.0	-1 6	B	1	ICPST	2/13/01	13:44
Arsenic	189.042	2 6	10 0	2.6	U	1	ICPST	2/13/01	13:44
Barium	493.409	0.41	200	0.41	U	1	ICP	2/14/01	10:38
Beryllium	313.042	0.071	5 0	0.071	U	1	ICP	2/14/01	10:38
Cadmium	226 502	0 49	5.0	0.49	U	1	ICPST	2/13/01	13:44
Calcium	**317.933**	**37.9**	**5000**	**49.2**	**B**	**1**	**ICP**	**2/14/01**	**10:38**
Chromium	267 716	1.0	10.0	1.0	U	1	ICPST	2/13/01	13:44
Cobalt	228 616	3 2	50 0	3.2	U	1	ICP	2/14/01	10:38
Copper	324.754	2.2	25.0	2.2	U	1	ICP	2/14/01	10:38
Iron	**259.94**	**8.8**	**100**	**10.0**	**B**	**1**	**ICP**	**2/14/01**	**10:38**
Lead	220.353	1.9	3.0	1.9	U	1	ICPST	2/13/01	13:44
Magnesium	279.079	19.9	5000	19 9	U	1	ICP	2/14/01	10:38
Manganese	257 61	0.87	15.0	0.87	U	1	ICP	2/14/01	10:38
Nickel	231.604	6 1	40.0	6.1	U	1	ICP	2/14/01	10:38
Potassium	766.491	496	5000	496	U	1	ICP	2/14/01	10:38
Selenium	220 353	2.1	5 0	2.1	U	1	ICPST	2/13/01	13:44
Silver	328 068	0.94	10.0	0.94	U	1	ICPST	2/13/01	13:44
Sodium	588.995	14.5	5000	14.5	U	1	ICP	2/14/01	10:38
Thallium	190.864	3 9	10 0	-8.2	B	1	ICPST	2/13/01	13 44
Vanadium	292.402	1 8	50.0	1.8	U	1	ICP	2/14/01	10:38
Zinc	**213.856**	**3.1**	**20.0**	**6.7**	**B**	**1**	**ICP**	**2/14/01**	**10:38**

Comments: Lot #: C1B090228

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: DV0L9B

Matrix: Water **Units:** ug/L **Prep Date:** 2/13/01 **Prep Batch:** 1043191

Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.054	0.20	0.054	U	1	CVAA	2/13/01	9:03

Comments Lot #: C1B090228

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

675 1336

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICP

Units: ug/L

Chart Number: J10214B.ARC

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0087-129-11

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 2/14/01 10.29 AM Found	Found	Found	Found	Found
Aluminum	308.215		500000	491000				
Barium	493.409	200		2				
Beryllium	313.042	5		0				
Calcium	317.933		500000	485000				
Cobalt	228.616	50		11				
Copper	324.754	25		-1				
Iron	259.94		200000	184000				
Magnesium	279.079		500000	476000				
Manganese	257.61	15		7				
Nickel	231 604	40		1				
Potassium	766.491	5000		-180				
Sodium	588 995	5000		10				
Vanadium	292.402	50		4				
Zinc	213.856	20		0				

U Result is less than the MDL

B Result is between MDL and RL

Form 4 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST **Units:** ug/L

Chart Number: T10213B.ARC **Acceptable Range:** 0% - 0%

Standard Source: Inorganic Ventures **Standard ID:** 0087-029-11

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 2/13/01 1:33 PM Found	Found	Found	Found	Found
Antimony	220.353	60		2				
Arsenic	189.042	10		-1				
Cadmium	226.502	5		-1				
Chromium	267.716	10		0				
Lead	220.353	3		3				
Selenium	220.353	5		2				
Silver	328 068	10		-1				
Thallium	190.864	10		9				

675 1338

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICP

Units: ug/L

Chart Number: J10214B.ARC

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0087-012-2

Element	WL/ Mass	True Conc	ICSAB 2/14/01 10:33 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	500000	486424 9	97.3								
Barium	493.409	500	458 7	91.7								
Beryllium	313 042	500	450.9	90.2								
Calcium	317.933	500000	476834 0	95.4								
Cobalt	228.616	500	456 0	91.2								
Copper	324.754	500	487.2	97.4								
Iron	259.94	200000	181669.1	90.8								
Magnesium	279.079	500000	469814 5	94.0								
Manganese	257.61	500	457.6	91.5								
Nickel	231.604	1000	855.5	85.5								
Potassium	766 491	10000	9332 4	93.3								
Sodium	588 995	10000	9791.3	97.9								
Vanadium	292.402	500	454.7	90.9								
Zinc	213.856	1000	939.4	93.9								

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST **Units:** ug/L

Chart Number: T10213B.ARC **Acceptable Range:** 80% - 120%

Standard Source: Inorganic Ventures **Standard ID:** 0087-024-1

Element	WL/ Mass	True Conc	ICSAB 2/13/01 1.38 PM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	1000	1073.6	**107.4**								
Arsenic	189.042	1000	1040.0	**104.0**								
Cadmium	226.502	1000	946.1	**94.6**								
Chromium	267 716	500	505.2	**101.0**								
Lead	220.353	1000	1012.3	**101.2**								
Selenium	220 353	1000	1053.2	**105.3**								
Silver	328 068	1000	1122.5	**112.2**								
Thallium	190.864	1000	1095.7	**109.6**								

675 1340

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DVWJES

Original Sample ID: DVWJE **Client ID:** DF/S-1/1039/IDW/004S

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

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
Aluminum	308 2	1580		4150	N	2000	128.8	1	1	ICP	2/14/01	10 44	2/14/01	10:51
Antimony	220 4	30.0	B	556		500	105.2	1	1	ICPST	2/13/01	13:52	2/13/01	14:01
Arsenic	189.0	8.0	B	2080		2000	103.8	1	1	ICPST	2/13/01	13:52	2/13/01	14:01
Barium	493 4	218		2100		2000	94.2	1	1	ICP	2/14/01	10:44	2/14/01	10:51
Beryllium	313.0	0.071	U	47.5		50	95.0	1	1	ICP	2/14/01	10:44	2/14/01	10:51
Cadmium	226.5	0.56	B	47 6		50	94.1	1	1	ICPST	2/13/01	13:52	2/13/01	14:01
Calcium	317 9	71900		121000		50000	97.6	1	1	ICP	2/14/01	10.44	2/14/01	10:51
Chromium	267 7	23.5		225		200	100.8	1	1	ICPST	2/13/01	13:52	2/13/01	14:01
Cobalt	228.6	3 2	U	468		500	93.6	1	1	ICP	2/14/01	10·44	2/14/01	10:51
Copper	324.8	51.8		293		250	96.5	1	1	ICP	2/14/01	10:44	2/14/01	10:51
Iron	259.9	2970		4020		1000	104.5	1	1	ICP	2/14/01	10·44	2/14/01	10:51
Lead	220.4	13 3		525		500	102.4	1	1	ICPST	2/13/01	13:52	2/13/01	14·01
Magnesium	279.1	16700		64900		50000	96.4	1	1	ICP	2/14/01	10:44	2/14/01	10·51
Manganese	257.6	898		1360		500	92.9	1	1	ICP	2/14/01	10:44	2/14/01	10:51
Nickel	231.6	20.0	B	476		500	91.1	1	1	ICP	2/14/01	10:44	2/14/01	10:51
Potassium	766 5	4600	B	55200		50000	101.1	1	1	ICP	2/14/01	10·44	2/14/01	10:51
Selenium	220 4	2.1	U	2090		2000	104.2	1	1	ICPST	2/13/01	13:52	2/13/01	14:01
Silver	328.1	0.94	U	54.2		50	108.3	1	1	ICPST	2/13/01	13:52	2/13/01	14:01
Sodium	589	489000		545000	NC	50000		2	2	ICP	2/14/01	12:54	2/14/01	13:01
Thallium	190.9	3.9	U	2220		2000	110 8	1	1	ICPST	2/13/01	13:52	2/13/01	14:01
Vanadium	292 4	3.9	B	475		500	94.2	1	1	ICP	2/14/01	10·44	2/14/01	10:51
Zinc	213.9	203		680		500	95.5	1	1	ICP	2/14/01	10:44	2/14/01	10:51

Comments: Lot # C1B090228 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

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DVWJED

Original Sample ID: DVWJE **Client ID:** DF/S-1/1039/IDW/004SD

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

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
Aluminum	308.2	1580	N	4180	N	2000	130.4	1	1	ICP	2/14/01	10:44	2/14/01	10 54
Antimony	220.4	30 0	B	556		500	105.2	1	1	ICPST	2/13/01	13:52	2/13/01	14:05
Arsenic	189 0	8.0	B	2090		2000	104.1	1	1	ICPST	2/13/01	13:52	2/13/01	14:05
Barium	493.4	218		2110		2000	94.8	1	1	ICP	2/14/01	10:44	2/14/01	10:54
Beryllium	313.0	0.071	U	48.2		50	96.4	1	1	ICP	2/14/01	10:44	2/14/01	10:54
Cadmium	226.5	0 56	B	48.1		50	95.0	1	1	ICPST	2/13/01	13:52	2/13/01	14 05
Calcium	317 9	71900		122000		50000	99.7	1	1	ICP	2/14/01	10:44	2/14/01	10:54
Chromium	267.7	23.5		224		200	100.1	1	1	ICPST	2/13/01	13:52	2/13/01	14:05
Cobalt	228.6	3.2	U	480		500	96.0	1	1	ICP	2/14/01	10.44	2/14/01	10·54
Copper	324 8	51.8		327		250	110.1	1	1	ICP	2/14/01	10:44	2/14/01	10:54
Iron	259.9	2970		4020		1000	104.5	1	1	ICP	2/14/01	10:44	2/14/01	10:54
Lead	220.4	13 3		525		500	102.3	1	1	ICPST	2/13/01	13:52	2/13/01	14 05
Magnesium	279.1	16700		65000		50000	96.7	1	1	ICP	2/14/01	10·44	2/14/01	10:54
Manganese	257 6	898		1370		500	95.1	1	1	ICP	2/14/01	10:44	2/14/01	10:54
Nickel	231.6	20.0	B	496		500	95.2	1	1	ICP	2/14/01	10:44	2/14/01	10:54
Potassium	766 5	4600	B	55300		50000	101.5	1	1	ICP	2/14/01	10:44	2/14/01	10:54
Selenium	220 4	2 1	U	2100		2000	105.1	1	1	ICPST	2/13/01	13:52	2/13/01	14·05
Silver	328.1	0.94	U	53 5		50	107.0	1	1	ICPST	2/13/01	13:52	2/13/01	14:05
Sodium	589	489000		543000	NC	50000		2	2	ICP	2/14/01	12:54	2/14/01	13:04
Thallium	190 9	3 9	U	2230		2000	111.6	1	1	ICPST	2/13/01	13:52	2/13/01	14:05
Vanadium	292.4	3.9	B	483		500	95.8	1	1	ICP	2/14/01	10·44	2/14/01	10:54
Zinc	213.9	203		707		500	100.9	1	1	ICP	2/14/01	10:44	2/14/01	10:54

Comments: Lot #: C1B090228 Sample # 1

Version 4.10 2

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

Form 5A Equivalent

675 1342

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DVWJED

Matrix Spike Sample ID: DVWJES **Client ID:** DF/S-1/1039/IDW/004SD

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

Weight: 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
Aluminum	308.215	4150	N	4180	N	1.2 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Antimony	220.353	556		556		0.1 %	1	1	ICPST	2/13/01	14:01	2/13/01	14:05
Arsenic	189 042	2080		2090		0.3 %	1	1	ICPST	2/13/01	14:01	2/13/01	14:05
Barium	493.409	2100		2110		0.6 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Beryllium	313.042	47.5		48.2		1.5 %	1	1	ICP	2/14/01	10.51	2/14/01	10 54
Cadmium	226.502	47 6		48.1		1.0 %	1	1	ICPST	2/13/01	14·01	2/13/01	14:05
Calcium	317.933	121000		122000		2.1 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Chromium	267.716	225		224		0.8 %	1	1	ICPST	2/13/01	14:01	2/13/01	14:05
Cobalt	228.616	468		480		2.5 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Copper	324.754	293		327		13.1 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Iron	259.94	4020		4020		0.0 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Lead	220.353	525		525		0.1 %	1	1	ICPST	2/13/01	14:01	2/13/01	14.05
Magnesium	279.079	64900		65000		0.2 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Manganese	257.61	1360		1370		2.3 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Nickel	231.604	476		496		4.4 %	1	1	ICP	2/14/01	10·51	2/14/01	10:54
Potassium	766.491	55200		55300		0.4 %	1	1	ICP	2/14/01	10·51	2/14/01	10:54
Selenium	220.353	2090		2100		0.9 %	1	1	ICPST	2/13/01	14:01	2/13/01	14:05
Silver	328.068	54.2		53.5		1.3 %	1	1	ICPST	2/13/01	14:01	2/13/01	14:05
Sodium	588.995	545000	NC	543000	NC		2	2	ICP	2/14/01	13.01	2/14/01	13:04
Thallium	190.864	2220		2230		0.7 %	1	1	ICPST	2/13/01	14:01	2/13/01	14:05
Vanadium	292.402	475		483		1.7 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54
Zinc	213 856	680		707		5.5 %	1	1	ICP	2/14/01	10:51	2/14/01	10:54

Comments: Lot #. C1B090228 Sample #: 1

Version 4 10 2

Form 6 Equivalent

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

STL-Pittsburgh

Metals Data Reporting Form

Duplicate LCS RPD Report

Duplicate LCS ID: DV0L9L

Original LCS ID: DV0L9C

Matrix: Water **Units:** ug/L **Prep Date:** 2/13/01 **Prep Batch:** 1043191

Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	LCS Conc	Q	LCS Dupe Conc	Q	RPD	LCS DF	LCS Dupe DF	Instr	LCS Anal Date	LCS Anal Time	LCS Dupe Anal Date	LCS Dupe Anal Time
Mercury	253.7	2.5		2.5		12%	1	1	CVAA	2/13/01	9:05	2/13/01	9.06

675 1344

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DV0HRC

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

Weight: NA **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Aluminum	308 215	2000	2000	99.8		80-120	1	ICP	2/14/01	10:41
Antimony	220 353	500	529	105.7		80-120	1	ICPST	2/13/01	13:48
Arsenic	189.042	2000	2110	105.4		80-120	1	ICPST	2/13/01	13:48
Barium	493.409	2000	2000	99 9		80-120	1	ICP	2/14/01	10 41
Beryllium	313.042	50 0	49.8	99.5		80-120	1	ICP	2/14/01	10.41
Cadmium	226.502	50.0	50.0	99 9		80-120	1	ICPST	2/13/01	13.48
Calcium	317 933	50000	50200	100.3		80-120	1	ICP	2/14/01	10:41
Chromium	267 716	200	210	104.8		80-120	1	ICPST	2/13/01	13:48
Cobalt	228.616	500	491	98.2		80-120	1	ICP	2/14/01	10:41
Copper	324.754	250	248	99.2		80-120	1	ICP	2/14/01	10:41
Iron	259.94	1000	1050	105.0		80-120	1	ICP	2/14/01	10:41
Lead	220.353	500	530	106.0		80-120	1	ICPST	2/13/01	13:48
Magnesium	279.079	50000	50400	100.8		80-120	1	ICP	2/14/01	10:41
Manganese	257 61	500	495	99 0		80-120	1	ICP	2/14/01	10:41
Nickel	231.604	500	485	97.0		80-120	1	ICP	2/14/01	10:41
Potassium	766 491	50000	49700	99.5		80-120	1	ICP	2/14/01	10:41
Selenium	220.353	2000	2090	104.5		80-120	1	ICPST	2/13/01	13:48
Silver	328.068	50.0	54.1	108.2		80-120	1	ICPST	2/13/01	13:48
Sodium	588.995	50000	50800	101 5		80-120	1	ICP	2/14/01	10:41
Thallium	190 864	2000	2210	110.3		80-120	1	ICPST	2/13/01	13:48
Vanadium	292.402	500	496	99.1		80-120	1	ICP	2/14/01	10:41
Zinc	213.856	500	501	100.2		80-120	1	ICP	2/14/01	10:41

Comments: Lot #: C1B090228

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DV0L9C

Matrix: Water **Units:** ug/L **Prep Date:** 2/13/01 **Prep Batch:** 1043191

Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	2.5	2 5	100.0		80-120	1	CVAA	2/13/01	9:05

Comments: Lot #: C1B090228

Version 4 10 2

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

675 1346

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Duplicate Results

Lab Sample ID: DV0L9L

Matrix: Water **Units:** ug/L **Prep Date:** 2/13/01 **Prep Batch:** 1043191

Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253 7	2.5	2.5	98.8		80-120	1	CVAA	2/13/01	9:06

Comments. Lot #: C1B090228

Version 4 10 2

U Result is less than the MDL

B Result is between MDL and RL

Form 7 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DVWJEP

Original Sample ID: DVWJE **Client ID:** DF/S-1/1039/IDW/004

Matrix: Water **Units:** ug/L **Prep Date:** 2/12/01 **Prep Batch:** 1043138

Weight: 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
Aluminum	308 215	1580	N	1620		3 0 %	1	5	ICP	2/14/01	10.44	2/14/01	10·47
Antimony	220 353	30.0	B	27.1	B		1	5	ICPST	2/13/01	13:52	2/13/01	13:57
Arsenic	189.042	8.0	B	12 8	U		1	5	ICPST	2/13/01	13:52	2/13/01	13:57
Barium	493 409	218		232	B	6.5 %	1	5	ICP	2/14/01	10:44	2/14/01	10:47
Beryllium	313 042	0.071	U	0.36	U		1	5	ICP	2/14/01	10:44	2/14/01	10:47
Cadmium	226.502	0.56	B	2.5	U		1	5	ICPST	2/13/01	13:52	2/13/01	13:57
Calcium	317.933	71900		75200		4 7 %	1	5	ICP	2/14/01	10·44	2/14/01	10:47
Chromium	267.716	23.5		21.7	B		1	5	ICPST	2/13/01	13.52	2/13/01	13:57
Cobalt	228.616	3.2	U	16 1	U		1	5	ICP	2/14/01	10:44	2/14/01	10:47
Copper	324 754	51.8		53.8	B		1	5	ICP	2/14/01	10:44	2/14/01	10:47
Iron	259.94	2970		3160		6.3 %	1	5	ICP	2/14/01	10:44	2/14/01	10:47
Lead	220.353	13 3		19.4			1	5	ICPST	2/13/01	13:52	2/13/01	13:57
Magnesium	279 079	16700		17700	B	6.3 %	1	5	ICP	2/14/01	10:44	2/14/01	10·47
Manganese	257.61	898		958		6 7 %	1	5	ICP	2/14/01	10:44	2/14/01	10:47
Nickel	231 604	20 0	B	30.7	U		1	5	ICP	2/14/01	10:44	2/14/01	10·47
Potassium	766.491	4600	B	3670	B		1	5	ICP	2/14/01	10:44	2/14/01	10:47
Selenium	220.353	2.1	U	10.5	U		1	5	ICPST	2/13/01	13:52	2/13/01	13:57
Silver	328.068	0 94	U	4.7	U		1	5	ICPST	2/13/01	13 52	2/13/01	13:57
Sodium	588.995	489000		488000		0.2 %	2	10	ICP	2/14/01	12 54	2/14/01	12:58
Thallium	190.864	3 9	U	19.4	U		1	5	ICPST	2/13/01	13.52	2/13/01	13:57
Vanadium	292.402	3.9	B	8 9	U		1	5	ICP	2/14/01	10:44	2/14/01	10:47
Zinc	213 856	203		222		9.5 %	1	5	ICP	2/14/01	10:44	2/14/01	10:47

Comments:

Version 4 10.2

U Result is less than the MDL

B Result is between MDL and RL

E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-Pittsburgh

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	0.054	1/24/01

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICP **Units:** ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Aluminum	308.21	200	12.7	4/1/00
Barium	493.41	200	0.41	4/1/00
Beryllium	313.04	5	0 071	4/1/00
Calcium	317 93	5000	37.9	4/1/00
Cobalt	228.62	50	3.2	4/1/00
Copper	324 75	25	2.2	4/1/00
Iron	259 94	100	8.8	4/1/00
Magnesium	279.08	5000	19.9	4/1/00
Manganese	257 61	15	0.87	4/1/00
Nickel	231.60	40	6.1	4/1/00
Potassium	766 49	5000	496	4/1/00
Sodium	589 00	5000	14.5	4/1/00
Vanadium	292 40	50	1 8	4/1/00
Zinc	213 86	20	3.1	4/1/00

675 1350

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST **Units:** ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Antimony	220.35	60	1.5	4/1/00
Arsenic	189.04	10	2 6	4/1/00
Cadmium	226.50	5	0.49	4/1/00
Chromium	267.72	10	1.0	4/1/00
Lead	220 35	3	1.9	4/1/00
Selenium	220.35	5	2.1	4/1/00
Silver	328.07	10	0.94	4/1/00
Thallium	190 86	10	3 9	4/1/00

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP **Date of IEC's:** 9/20/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(0.007861), Mn(0 000018), Pb(0 000719)
Antimony	206.838	Ni(-0.000528), Pb(-0.001408), Sn(-0.004161)
Arsenic	193.696	Cd(0.011217)
Barium	493.409	Co(0.000449)
Beryllium	313.042	Cd(0.008648)
Cadmium	228.802	Co(0.002996)
Chromium	267.716	Pb(-0.000767), Sb(0.009005), V(-0.002296)
Cobalt	228 616	Al(-0.013948), B(0.00168), Cd(-0.004424), Cu(-0.000974), Pb(-0.026155), Sb(-0.004281), Tl(0.008568)
Copper	324.754	Zn(0.00414)
Iron	259.94	Ag(-0.000242), As(0.001058), B(-0.001884), Cd(-0.000046), Cu(-0.000114), Mn(-0.00029), Mo(-0.000129), Pb(0 00019), Se(-0.003038), Sn(-0.000176), Tl(0.011416), Zn(0.000091)
Manganese	257.61	Ag(0.000185), Tl(-0.007608)
Molybdenum	202.03	Al(0.009881), Cr(-0.000204), Mn(-0.000334), Sb(0.005016), V(-0.013194)
Nickel	231.604	Cd(-0.000482), Sb(-0.01006), Zn(0 00326)
Tin	189.989	Sb(0.002501)
Titanium	334.941	Co(0.001561), Fe(-0 003248), Sb(0.001256), Sn(0.003314)
Vanadium	292.402	Ag(-0.004417), Al(0 014581), As(0.015197), Be(0.002162), Cd(0 000076), Cr(0.000544), Sb(-0.002921), Si(-0.011682), Tl(0.006485), Zn(-0.0046)

STL-Pittsburgh

675 1352

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST **Date of IEC's:** 1/9/01

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308 215	Pb(-0.000163)
Aluminum	308 215	Pb(0.000539)
Chromium	267.716	Sb(0 007445)
Chromium	267.716	As(-0 003079), Sb(0.013117)
Cobalt	228.616	Pb(0 000043), Se(-0.000467)
Cobalt	228.616	Cd(-0 000073), Fe(0.086957), Ni(-0 000735), Pb(0.000049), Se(0.000496), Tl(0.002407)
Iron	271.441	Cd(0 000118), Pb(0.000082), Sb(0.000025), Se(-0.00001), Tl(0.000006), V(-0.000341), Zn(0.000124)
Iron	271.441	Pb(0.000048), Se(-0.000347)
Magnesium	279 078	Fe(-0 00058)
Manganese	257 61	Se(-0 000214), Tl(-0.005174)
Manganese	257 61	Se(0.000533)
Molybdenum	202.03	As(-0 000927), Pb(-0.000446), Sb(-0.002435), Tl(-0.000488)
Molybdenum	202.03	Pb(-0.000742), Sb(-0.011507), Se(0.000246)
Nickel	231.604	Pb(0.000124)
Nickel	231 604	Pb(0 000274), Sb(-0.00125), Zn(0.005251)
Vanadium	292.402	Al(0 020017), Be(-0 008152), Cr(-0.00015), Fe(0.009334), Sb(-0 008099), Se(0 000269), Tl(0.001468)
Vanadium	292 402	Pb(-0 000307), Se(0 000106)

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	1/24/01

675 1354

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICP **Units:** ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Aluminum	308.21	600000	1/15/01
Barium	493.41	100000	1/15/01
Beryllium	313.04	15000	1/15/01
Calcium	317 93	600000	1/15/01
Cobalt	228.62	100000	1/15/01
Copper	324.75	100000	1/15/01
Iron	259.94	400000	1/15/01
Magnesium	279.08	600000	1/15/01
Manganese	257 61	100000	1/15/01
Nickel	231.60	100000	1/15/01
Potassium	766 49	1000000	1/15/01
Sodium	589 00	400000	1/15/01
Vanadium	292 40	100000	1/15/01
Zinc	213.86	100000	1/15/01

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST **Units:** ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Antimony	220.35	10000	1/11/01
Arsenic	189.04	10000	1/11/01
Cadmium	226.50	5000	1/11/01
Chromium	267.72	20000	1/11/01
Lead	220.35	5000	1/11/01
Selenium	220.35	10000	1/11/01
Silver	328.07	2000	1/11/01
Thallium	190.86	10000	1/11/01

675 1356

STL-Pittsburgh

Metals Data Reporting Form

Preparation Log

Preparation Batch: 1043138 **Instrument:** ICP **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DV0HRB	2/12/01	NA	50	NA
DV0HRC	2/12/01	NA	50	NA
DVWJE	2/12/01	NA	50	NA
DVWJED	2/12/01	NA	50	NA
DVWJES	2/12/01	NA	50	NA

STL-Pittsburgh

Metals Data Reporting Form

Preparation Log

Preparation Batch: 1043191 **Instrument:** CVAA **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DV0L9B	2/13/01	NA	100	NA
DV0L9C	2/13/01	NA	100	NA
DV0L9L	2/13/01	NA	100	NA
DVWJE	2/13/01	NA	100	NA

675 1353

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** 0213HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		2/13/01	8:44
Std2Rep1		2/13/01	8:45
Std3Rep1		2/13/01	8:47
Std4Rep1		2/13/01	8:49
Std5Rep1		2/13/01	8:50
Std6Rep1		2/13/01	8:52
ICV5-1		2/13/01	8:57
ICB1		2/13/01	8:59
CCV5-1		2/13/01	9:00
CCB1		2/13/01	9:01
DV0L9B		2/13/01	9.03
DV0L9C		2/13/01	9:05
DV0L9L		2/13/01	9:06
DVWJE	DF/S-1/1039/IDW/004	2/13/01	9:07
ZZZZZZ		2/13/01	9:09
ZZZZZZ		2/13/01	9.10
ZZZZZZ		2/13/01	9:12
ZZZZZZ		2/13/01	9:13
ZZZZZZ		2/13/01	9:15
ZZZZZZ		2/13/01	9:16
CCV5-2		2/13/01	9:18
CCB2		2/13/01	9:20
ZZZZZZ		2/13/01	9:21
ZZZZZZ		2/13/01	9:23
ZZZZZZ		2/13/01	9.24
ZZZZZZ		2/13/01	9:26
ZZZZZZ		2/13/01	9:27
ZZZZZZ		2/13/01	9:29
ZZZZZZ		2/13/01	9:30
ZZZZZZ		2/13/01	9:32
ZZZZZZ		2/13/01	9:33
ZZZZZZ		2/13/01	9:34
ZZZZZZ		2/13/01	9:36
ZZZZZZ		2/13/01	9.38
ZZZZZZ		2/13/01	9:40
ZZZZZZ		2/13/01	9 41
ZZZZZZ		2/13/01	9.43
ZZZZZZ		2/13/01	9:44
ZZZZZZ		2/13/01	9.46

Form 14 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA **Chart Number:** 0213HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		2/13/01	9:48
ZZZZZZ		2/13/01	9:49
ZZZZZZ		2/13/01	9:51
ZZZZZZ		2/13/01	9:52
ZZZZZZ		2/13/01	9:54
ZZZZZZ		2/13/01	9:55
ZZZZZZ		2/13/01	9:57
ZZZZZZ		2/13/01	9:58
ZZZZZZ		2/13/01	10:00
ZZZZZZ		2/13/01	10:02
ZZZZZZ		2/13/01	10:03
ZZZZZZ		2/13/01	10.05
ZZZZZZ		2/13/01	10:06
ZZZZZZ		2/13/01	10:07
ZZZZZZ		2/13/01	10.09
ZZZZZZ		2/13/01	10:11
ZZZZZZ		2/13/01	10:13
ZZZZZZ		2/13/01	10:14
ZZZZZZ		2/13/01	10:16
ZZZZZZ		2/13/01	10:17
ZZZZZZ		2/13/01	10:19
ZZZZZZ		2/13/01	10:21

675 1360

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP **Chart Number:** J10214B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		2/14/01	10:14
STD5A		2/14/01	10:17
STD5B		2/14/01	10:20
ICV2-1		2/14/01	10:23
ICB1		2/14/01	10:26
ICSA		2/14/01	10:29
ICSAB		2/14/01	10:33
DV0HRB		2/14/01	10:38
DV0HRC		2/14/01	10:41
DVWJE	DF/S-1/1039/IDW/004	2/14/01	10:44
DVWJEP	DF/S-1/1039/IDW/004	2/14/01	10.47
DVWJES	DF/S-1/1039/IDW/004S	2/14/01	10:51
DVWJED	DF/S-1/1039/IDW/004SD	2/14/01	10:54
ZZZZZZ		2/14/01	10:57
ZZZZZZ		2/14/01	11:00
CCV2-1		2/14/01	11:03
CCB1		2/14/01	11:06
ZZZZZZ		2/14/01	11:09
ZZZZZZ		2/14/01	11:13
ZZZZZZ		2/14/01	11:16
ZZZZZZ		2/14/01	11:19
ZZZZZZ		2/14/01	11:22
ZZZZZZ		2/14/01	11:25
ZZZZZZ		2/14/01	11:28
ZZZZZZ		2/14/01	11:31
ZZZZZZ		2/14/01	11:34
ZZZZZZ		2/14/01	11:38
CCV2-2		2/14/01	11:41
CCB2		2/14/01	11:44
ZZZZZZ		2/14/01	11 47
ZZZZZZ		2/14/01	11:50
ZZZZZZ		2/14/01	11.53
ZZZZZZ		2/14/01	11:56
ZZZZZZ		2/14/01	12:00
ZZZZZZ		2/14/01	12:03
ZZZZZZ		2/14/01	12:06
ZZZZZZ		2/14/01	12:09
ZZZZZZ		2/14/01	12:12
ZZZZZZ		2/14/01	12.15

Form 14 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP **Chart Number:** J10214B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CCV2-3		2/14/01	12:18
CCB3		2/14/01	12.22
ZZZZZZ		2/14/01	12:31
ZZZZZZ		2/14/01	12:34
ZZZZZZ		2/14/01	12:37
ZZZZZZ		2/14/01	12.42
ZZZZZZ		2/14/01	12:47
ZZZZZZ		2/14/01	12:50
DVWJE	DF/S-1/1039/IDW/004	2/14/01	12:54
DVWJEP	DF/S-1/1039/IDW/004	2/14/01	12:58
DVWJES	DF/S-1/1039/IDW/004S	2/14/01	13:01
DVWJED	DF/S-1/1039/IDW/004SD	2/14/01	13:04
CCV2-4		2/14/01	13:07
CCB4		2/14/01	13.10
ZZZZZZ		2/14/01	13:15
ZZZZZZ		2/14/01	13:18
ZZZZZZ		2/14/01	13:21
ZZZZZZ		2/14/01	13:24
ZZZZZZ		2/14/01	13:27
ZZZZZZ		2/14/01	13:30
ZZZZZZ		2/14/01	13:33
ZZZZZZ		2/14/01	13:37
ZZZZZZ		2/14/01	13:40
ZZZZZZ		2/14/01	13:43
ZZZZZZ		2/14/01	13:46

675 1362

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** T10213B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		2/13/01	13:13
STD6		2/13/01	13:17
STD7		2/13/01	13:21
ICV3-1		2/13/01	13:25
ICB1		2/13/01	13:29
ICSA		2/13/01	13:33
ICSAB		2/13/01	13:38
DV0HRB		2/13/01	13:44
DV0HRC		2/13/01	13:48
DVWJE	DF/S-1/1039/IDW/004	2/13/01	13:52
DVWJEP	DF/S-1/1039/IDW/004	2/13/01	13:57
DVWJES	DF/S-1/1039/IDW/004S	2/13/01	14:01
DVWJED	DF/S-1/1039/IDW/004SD	2/13/01	14:05
CCV3-1		2/13/01	14:09
CCB1		2/13/01	14:13
ZZZZZZ		2/13/01	14:17
ZZZZZZ		2/13/01	14:21
ZZZZZZ		2/13/01	14:26
ZZZZZZ		2/13/01	14:30
ZZZZZZ		2/13/01	14:34
ZZZZZZ		2/13/01	14:38
ZZZZZZ		2/13/01	14:43
ZZZZZZ		2/13/01	14:48
ZZZZZZ		2/13/01	14:52
ZZZZZZ		2/13/01	14:56
ZZZZZZ		2/13/01	15:00
ZZZZZZ		2/13/01	15:04
ZZZZZZ		2/13/01	15:11
ZZZZZZ		2/13/01	15:16
ZZZZZZ		2/13/01	15:20
ZZZZZZ		2/13/01	15:24
ZZZZZZ		2/13/01	15:28
ZZZZZZ		2/13/01	15:34
ZZZZZZ		2/13/01	15:38
ZZZZZZ		2/13/01	15:42
ZZZZZZ		2/13/01	15:46
ZZZZZZ		2/13/01	15:50
ZZZZZZ		2/13/01	15:55
ZZZZZZ		2/13/01	16:01

Form 14 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** T10213B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		2/13/01	16:05
ZZZZZZ		2/13/01	16:10
ZZZZZZ		2/13/01	16:14
ZZZZZZ		2/13/01	16:18
ZZZZZZ		2/13/01	16:22
ZZZZZZ		2/13/01	16:26
ZZZZZZ		2/13/01	16:30
ZZZZZZ		2/13/01	16:35
ZZZZZZ		2/13/01	16:39
ZZZZZZ		2/13/01	16:43
ZZZZZZ		2/13/01	16:47
ZZZZZZ		2/13/01	16:51
ZZZZZZ		2/13/01	16:55
ZZZZZZ		2/13/01	17:00
ZZZZZZ		2/13/01	17:04
ZZZZZZ		2/13/01	17:08
ZZZZZZ		2/13/01	17:12
ZZZZZZ		2/13/01	17:16

675 1364

METALS
RAW DATA

CIB0902ZE

Ramirez 2-14-01

675 1365

#	Sample Name	AL	BA	BE	CA	CO	CU
1	STD1	.00999	.00004	.00274	-.00005	.00009	.00054
2	STD5A		4.57834	15.8268		1.2889	2.38619
3	STD5B	11.5131			24.2829		
4	ICV2-1 0087-036-1	25.196	1.0003	.98851	25.234	1.0029	.99935
5	ICB1	.00125	.00004	.00000	-.00079	-.00077	-.00083
6	ICSA 0087-129-11	490.51	.00179	-.00004	484.96	.01134	-.00068
7	ICSAB 0087-012-2	486.42	.45869	.45088	476.83	.45604	.48716
8	DV0HRB	.00127	-.00010	-.00006	.04916	-.00078	-.00083
9	DV0HRC	1.9968	1.9984	.04975	50.165	.49105	.24808
10	DVWJE	1.5768	.21747	.00000	71.851	.00219	.05184
11	DVWJEP5	.32470	.04633	.00000	15.046	.00035	.01075
12	DVWJES	4.1526	2.1009	.04748	120.64	.46800	.29320
13	DVWJED	4.1843	2.1127	.04819	121.70	.48005	.32714
14	DVMK2B	.01251	.00050	-.00006	.22295	.00194	.00042
15	DVMK2C	1.9267	1.8971	.04767	49.190	.47672	.23592
16	CCV2-1 0087-072-1	49.864	4.8733	4.8747	51.046	4.9384	4.8876
17	CCB1	-.00228	.00039	.00035	-.00304	.00000	-.00125
18	DVDMD	21.456	.16445	.00067	71.352	.01288	.03727
19	DVDMDP5	4.4191	.03420	.00016	14.793	.00109	.00731
20	DVDMDS	37.572	2.0892	.04800	119.04	.48292	.27729
21	DVDMDD	31.981	1.8538	.04197	104.10	.42285	.24306
22	DVDM8	25.495	.17417	.00125	25.416	.02258	.16277
23	DVDN5	105.75	.75189	.00726	74.772	.10982	.12524
24	DVDT5	105.78	.74450	.00733	40.139	.11648	.12351
25	DVDN8F	.96668	.02959	.00000	40.639	.00114	.00077
26	DVDN8P5F	.19206	.00600	.00000	8.4428	.00000	-.00017
27	DVDN8SF	4.3588	1.9114	.04698	92.555	.46388	.23629
28	CCV2-2	49.548	4.8260	4.8420	50.879	4.9214	4.8431
29	CCB2	-.00626	.00000	.00015	-.00141	-.00233	-.00188
30	DVDN8DF	3.7893	1.7416	.04233	82.993	.42239	.21402
31	DVDMTF	2.5683	.06854	.00000	59.298	.00188	.00454
32	DVDNPF	37.417	.22916	.00165	32.631	.02476	.22833
33	DVDVCF	5.4963	.06313	.00029	22.749	.00532	.00724
34	DV0HFB	-.00085	.00006	-.00003	.11273	.00117	.00586
35	DV0HFC	1.9378	1.9778	.04872	L.04091	.49263	.24536
36	DVLXL	2.2568	2.3019	.05655	.03831	.57196	.28503
37	DVLXLP5	.46159	.46292	.01140	.00690	.11946	.05646
38	DVLXLS	-.00075	.00015	-.00008	.02537	.00006	.00021
39	DVLXLD	1.9035	1.9554	.04794	.07502	.48459	.24368
40	CCV2-3	49.101	4.7925	4.7981	50.000	4.8500	4.8118
41	CCB3	-.01454	-.00010	-.00006	.03472	-.00038	-.00146
42	DVWJE/2 Na	.71329	.09855	-.00009	31.938	.00150	.02234
43	DVWJEP10 Na	.14726	.02040	-.00003	6.5821	-.00040	.00338
44	DVWJES/2 Na	1.8621	.95136	.02160	54.489	.21678	.13044
45	DVWJED/2 Na	1.8820	.96525	.02200	54.411	.21793	.14636
46	DVDM8/5 Na	5.9342	.04049	.00020	5.7243	.00341	.03536
47	DVDNPF/10 Na	3.8567	.02505	.00014	3.3680	.00266	.02332
48	DVWJE/2 Na Rerun	.80015	.11129	-.00006	35.623	-.00163	.02529
49	DVWJEP10 Na Rerun	.16857	.02308	.00002	7.5133	.00037	.00610
50	DVWJES/2 Na Rerun	2.1197	1.0809	.02474	61.744	.24236	.14745
51	DVWJED/2 Na Rerun	2.1318	1.0900	.02505	61.415	.24351	.16588
52	CCV2-4	50.187	4.9148	4.9268	50.479	4.9178	4.9420
53	CCB4	.00025	.00004	.00012	-.00611	-.00039	-.00041

#	Sample Name	AL	BA	BE	CA	CO	CU
54	DVDM8/5 Na Rerun	6.4063	.04288	.00028	6.0962	.00613	.03961
55	DVDNPF/10 Na Rerun	3.8327	.02459	.00014	3.3372	.00189	.02290
56	DV1V9B	.00993	.00015	-.00009	.03082	-.00038	-.00041
57	DV1V9C	L-.05345	L.00004	L-.00047	L-.00519	L.00000	L-.00251
58	DVVK3	-.05213	.00006	-.00057	-.00540	.00000	-.00376
59	DVVK3P5	-.05697	-.00010	-.00051	-.00489	-.00039	-.00376
60	DVVK3S	-.05570	.00000	-.00054	-.00348	-.00077	-.00460
61	DVVK3D	-.05262	-.00006	-.00054	-.00501	-.00039	-.00544
62	DVVLF	-.05429	.00000	-.00060	-.00421	.00077	-.00565
63	DVVLH	-.04869	.00012	-.00060	-.00488	-.00039	-.00439
64	CCV2-5	L-.05868	L-.00004	L-.00060	L-.00449	L.00000	L-.00502

VOID: CCV2-5 not analyzed (autosampler malfunction) RB 2/14/01

#	Sample Name	FE	K	MG	MN	NA	NI
1	STD1	.00095	-.01414	.00069	.00014	.05835	.00016
2	STD5A				1.86734		1.56944
3	STD5B	28.3702	2.25375	7.34975		53.3063	
4	ICV2-1 0087-036-1	26.187	24.192	25.337	1.0078	25.034	1.0116
5	ICB1	.01145	-.24692	-.01020	.00027	.00394	-.00380
6	ICSA 0087-129-11	183.71	-.18298	476.40	.00708	.01042	.00093
7	ICSAB 0087-012-2	181.67	9.3324	469.81	.45764	9.7913	.85546
8	DV0HRB	.01004	-.22487	-.01292	.00080	.00967	-.00094
9	DV0HRC	1.0501	49.733	50.411	.49475	50.762	.48479
10	DVWJE	2.9723	4.5990	16.677	.89760	H484.83	.02003
11	DVWJEP5	.63168	.73415	3.5460	.19157	99.869	.00205
12	DVWJES	4.0172	55.159	64.893	1.3621	H543.03	.47573
13	DVWJED	4.0171	55.340	65.010	1.3731	H536.28	.49612
14	DVMK2B	.02590	.08377	.00204	.00027	.04976	-.00666
15	DVMK2C	1.0392	47.731	48.572	.47895	47.851	.47983
16	CCV2-1 0087-072-1	51.558	49.160	50.094	4.9351	49.017	4.9147
17	CCB1	.00282	-.51810	-.01428	.00054	.00319	-.00149
18	DVDMD	25.709	11.090	15.686	.73841	165.05	.02202
19	DVDMDP5	5.4226	2.0702	3.2671	.15568	33.432	.00596
20	DVDMDS	27.865	62.827	64.033	1.1971	212.80	.49145
21	DVDMDD	23.743	58.852	55.600	1.0447	194.96	.43310
22	DVDM8	30.058	7.8553	13.151	1.4589	S1490.6	.04543
23	DVDN5	183.68	22.430	44.230	3.4278	22.124	.19336
24	DVDT5	196.03	18.954	37.005	3.8565	8.4778	.19237
25	DVDN8F	1.3148	3.4900	13.188	.39735	10.896	-.00344
26	DVDN8P5F	.27318	.55998	2.7194	.08252	2.2025	.00057
27	DVDN8SF	2.5135	51.376	62.263	.90281	58.968	.45213
28	CCV2-2	51.215	48.759	49.737	4.9071	48.433	4.9092
29	CCB2	.00176	-.43873	-.01156	-.00053	.00234	-.00473
30	DVDN8DF	2.2243	48.302	55.700	.80795	54.984	.42423
31	DVDMTF	3.1558	6.8169	11.493	.39223	153.43	.00038
32	DVDNPF	41.245	9.3567	17.580	1.9050	S-.10958	.06115
33	DVDVCF	8.3954	3.3577	10.609	.36961	5.4017	.00959
34	DV0HFB	.01921	-.27338	-.01224	.00027	.00413	-.00231
35	DV0HFC	1.0434	L.02204	L-.03061	.49234	L.01568	.50718
36	DVLXL	1.2099	-.34172	-.02041	.57290	.00845	.56504
37	DVLXLP5	.24692	-.24912	-.01020	.11784	.00244	.12117
38	DVLXLS	.01529	-.15212	-.03129	-.00020	.00544	-.00299
39	DVLXLD	1.0386	-.06834	-.03469	.48597	.01427	.48278

VOID elevated Na all runs RB 2/14/01

#	Sample Name	FE	K_	MG	MN	NA	NI
40	CCV2-3	50.617	48.283	49.348	4.8411	48.061	4.8395
41	CCB3	-.00017	-.26676	-.01224	.00000	-.00300	-.00083
42	DVWJE/2 Na	1.3430	1.8608	7.5649	.40459	214.09	.00871
43	DVWJEP10 Na	.27953	.16755	1.5186	.08306	42.655	-.00541
44	DVWJES/2 Na	1.8254	24.362	29.555	.62275	238.51	.21808
45	DVWJED/2 Na	1.8330	24.121	29.632	.62489	239.40	.22681
46	DVDM8/5 Na	7.1362	1.2765	3.1160	.33738	248.02	.00871
47	DVDNPF/10 Na	4.4394	.75400	1.8887	.20038	139.35	.00371
48	DVWJE/2 Na Rerun	1.5082	2.0834	8.5501	.45282	244.64	.00866
49	DVWJEP10 Na Rerun	.31743	.67022	1.7635	.09485	48.835	.00116
50	DVWJES/2 Na Rerun	2.0725	27.550	33.578	.70582	272.59	.25043
51	DVWJED/2 Na Rerun	2.0690	27.519	33.488	.70448	271.52	.24773
52	CCV2-4	51.471	50.205	50.468	4.9115	49.559	4.9400
53	CCB4	.00088	-.23810	-.00884	-.00052	.00394	-.00346
54	DVDM8/5 Na Rerun	7.6467	1.5521	3.3181	.35867	257.76	.00468
55	DVDNPF/10 Na Rerun	4.4137	.66581	1.8798	.19903	138.46	.00766
56	DV1V9B	.00722	-.25353	-.00952	.00000	.00516	.00102
57	DV1V9C	L-.00351	L-1.0693	L-.00612	L-.00026	L.13540	L-.00771
58	DVVK3	-.00457	-1.0737	-.01905	-.00053	.12986	-.00079
59	DVVK3P5	-.00404	-1.1420	-.00136	-.00053	.13408	-.00059
60	DVVK3S	-.00457	-1.1200	-.00136	-.00053	.13606	-.00962
61	DVVK3D	-.00404	-.90391	-.00340	-.00080	.13474	-.00545
62	DVVLF	-.00439	-1.1971	-.00204	-.00080	.12920	.00032
63	DVVLH	-.00457	-1.4132	-.00816	-.00080	.12845	.00199
64	CCV2-5	L-.00527	L-1.0847	L-.00612	L-.00080	L.12808	L.00262

#	Sample Name	V_	ZN
1	STD1	.00009	.0001
2	STD5A	1.58654	1.24762
3	STD5B		
4	ICV2-1 0087-036-1	1.0084	1.0115
5	ICB1	.00034	.00105
6	ICSA 0087-129-11	.00431	.00044
7	ICSAB 0087-012-2	.45466	.93943
8	DV0HRB	-.00058	.00667
9	DV0HRC	.49549	.50110
10	DVWJE	.00389	.20274
11	DVWJEP5	.00061	.04441
12	DVWJES	.47499	.68016
13	DVWJED	.48287	.70716
14	DVMK2B	.00289	.01837
15	DVMK2C	.47662	.49200
16	CCV2-1 0087-072-1	4.9297	5.0067
17	CCB1	-.00137	.00007
18	DVDMD	.03927	.07552
19	DVDMDP5	.00934	.01695
20	DVDMDS	.52606	.55141
21	DVDMDD	.46252	.49764
22	DVDM8	.05146	.08937
23	DVDN5	.18613	.67167
24	DVDT5	.19417	.58010
25	DVDN8F	.00064	.03060

#	Sample Name	V_	ZN
26	DVDN8P5F	-.00054	.00888
27	DVDN8SF	.47185	.49475
28	CCV2-2	4.8999	4.9780
29	CCB2	.00048	.00035
30	DVDN8DF	.42649	.44933
31	DVDMTF	.00323	.02077
32	DVDNPF	.06903	.11771
33	DVDVCF	.01088	.04632
34	DV0HFB	-.00059	.01002
35	DV0HFC	.48811	.48299
36	DVLXL	.57211	.56429
37	DVLXLP5	.11493	.11787
38	DVLXLS	-.00405	.00124
39	DVLXLD	.48229	.47822
40	CCV2-3	4.8404	4.8948
41	CCB3	.00085	.00185
42	DVWJE/2 Na	-.00058	.09259
43	DVWJEP10 Na	.00163	.02001
44	DVWJES/2 Na	.21716	.30407
45	DVWJED/2 Na	.21874	.31975
46	DVDM8/5 Na	.00951	.01972
47	DVDNPF/10 Na	.00808	.01423
48	DVWJE/2 Na Rerun	.00068	.10219
49	DVWJEP10 Na Rerun	.00345	.02494
50	DVWJES/2 Na Rerun	.24429	.34837
51	DVWJED/2 Na Rerun	.24679	.36014
52	CCV2-4	4.9217	4.9744
53	CCB4	.00083	.00145
54	DVDM8/5 Na Rerun	.01444	.02144
55	DVDNPF/10 Na Rerun	.00690	.01301
56	DV1V9B	-.00053	.00304
57	DV1V9C	L.00059	L.00053
58	DVVK3	.00026	.00025
59	DVVK3P5	.00276	-.00022
60	DVVK3S	.00190	.00069
61	DVVK3D	.00155	.00035
62	DVVLF	-.00064	.00122
63	DVVLH	-.00060	-.00001
64	CCV2-5	L.00061	L.00193

VCID

CCV2-5 not analyzed (autosampler malfunction)

RR 2/14/01

Analysis Report Summary 02/14/01 01:54:31 PM page 1

02/14/01

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J10214B	QUANMET	02/14/01	10:14		X	IR
2	STD5A	J10214B	QUANMET	02/14/01	10:17		X	IR
3	STD5B	J10214B	QUANMET	02/14/01	10:20		X	IR
4	ICV2-1 0087-036-1	J10214B	QUANMET	02/14/01	10:23	RJG	S	CONC
5	ICB1	J10214B	QUANMET	02/14/01	10:26	RJG	S	CONC
6	ICSA 0087-129-11	J10214B	QUANMET	02/14/01	10:29	RJG	Q	CONC
7	ICSAB 0087-012-2	J10214B	QUANMET	02/14/01	10:33	RJG	Q	CONC
8	DV0HRB	J10214B	QUANMET	02/14/01	10:38	RJG	S	CONC
9	DV0HRC	J10214B	QUANMET	02/14/01	10:41	RJG	S	CONC
10	DVWJE	J10214B	QUANMET	02/14/01	10:44	RJG	S	CONC
11	DVWJEP5	J10214B	QUANMET	02/14/01	10:47	RJG	S	CONC
12	DVWJES	J10214B	QUANMET	02/14/01	10:51	RJG	S	CONC
13	DVWJED	J10214B	QUANMET	02/14/01	10:54	RJG	S	CONC
14	DVMK2B	J10214B	QUANMET	02/14/01	10:57	RJG	S	CONC
15	DVMK2C	J10214B	QUANMET	02/14/01	11:00	RJG	S	CONC
16	CCV2-1 0087-072-1	J10214B	QUANMET	02/14/01	11:03	RJG	S	CONC
17	CCB1	J10214B	QUANMET	02/14/01	11:06	RJG	S	CONC
18	DVDMD	J10214B	QUANMET	02/14/01	11:09	RJG	S	CONC
19	DVDMDP5	J10214B	QUANMET	02/14/01	11:13	RJG	S	CONC
20	DVDMDS	J10214B	QUANMET	02/14/01	11:16	RJG	S	CONC
21	DVDMDD	J10214B	QUANMET	02/14/01	11:19	RJG	S	CONC
22	DVDM8	J10214B	QUANMET	02/14/01	11:22	RJG	S	CONC
23	DVDN5	J10214B	QUANMET	02/14/01	11:25	RJG	S	CONC
24	DVDT5	J10214B	QUANMET	02/14/01	11:28	RJG	S	CONC
25	DVDN8F	J10214B	QUANMET	02/14/01	11:31	RJG	S	CONC
26	DVDN8P5F	J10214B	QUANMET	02/14/01	11:34	RJG	S	CONC
27	DVDN8SF	J10214B	QUANMET	02/14/01	11:38	RJG	S	CONC
28	CCV2-2	J10214B	QUANMET	02/14/01	11:41	RJG	S	CONC
29	CCB2	J10214B	QUANMET	02/14/01	11:44	RJG	S	CONC
30	DVDN8DF	J10214B	QUANMET	02/14/01	11:47	RJG	S	CONC
31	DVDMTF	J10214B	QUANMET	02/14/01	11:50	RJG	S	CONC
32	DVDNPF	J10214B	QUANMET	02/14/01	11:53	RJG	S	CONC
33	DVDVCF	J10214B	QUANMET	02/14/01	11:56	RJG	S	CONC
34	DV0HFB	J10214B	QUANMET	02/14/01	12:00	RJG	S	CONC
35	DV0HFC	J10214B	QUANMET	02/14/01	12:03	RJG	S	CONC
36	DVLXL	J10214B	QUANMET	02/14/01	12:06	RJG	S	CONC
37	DVLXLP5	J10214B	QUANMET	02/14/01	12:09	RJG	S	CONC
38	DVLXLS	J10214B	QUANMET	02/14/01	12:12	RJG	S	CONC
39	DVLXLD	J10214B	QUANMET	02/14/01	12:15	RJG	S	CONC
40	CCV2-3	J10214B	QUANMET	02/14/01	12:18	RJG	S	CONC
41	CCB3	J10214B	QUANMET	02/14/01	12:22	RJG	S	CONC
42	DVWJE/2 Na	J10214B	QUANMET	02/14/01	12:31	RJG	S	CONC
43	DVWJEP10 Na	J10214B	QUANMET	02/14/01	12:34	RJG	S	CONC
44	DVWJES/2 Na	J10214B	QUANMET	02/14/01	12:37	RJG	S	CONC
45	DVWJED/2 Na	J10214B	QUANMET	02/14/01	12:42	RJG	S	CONC
46	DVDM8/5 Na	J10214B	QUANMET	02/14/01	12:47	RJG	S	CONC
47	DVDNPF/10 Na	J10214B	QUANMET	02/14/01	12:50	RJG	S	CONC
48	DVWJE/2 Na Rerun	J10214B	QUANMET	02/14/01	12:54	RJG	S	CONC
49	DVWJEP10 Na Rerun	J10214B	QUANMET	02/14/01	12:58	RJG	S	CONC
50	DVWJES/2 Na Rerun	J10214B	QUANMET	02/14/01	13:01	RJG	S	CONC
51	DVWJED/2 Na Rerun	J10214B	QUANMET	02/14/01	13:04	RJG	S	CONC
52	CCV2-4	J10214B	QUANMET	02/14/01	13:07	RJG	S	CONC
53	CCB4	J10214B	QUANMET	02/14/01	13:10	RJG	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DVDM8/5 Na Rerun	J10214B	QUANMET	02/14/01	13:15	RJG	S	CONC
55	DVDNPF/10 Na Rerun	J10214B	QUANMET	02/14/01	13:18	RJG	S	CONC
56	DV1V9B	J10214B	QUANMET	02/14/01	13:21	RJG	S	CONC
57	DV1V9C	J10214B	QUANMET	02/14/01	13:24	RJG	S	CONC
58	DVVK3	J10214B	QUANMET	02/14/01	13:27	RJG	S	CONC
59	DVVK3P5	J10214B	QUANMET	02/14/01	13:30	RJG	S	CONC
60	DVVK3S	J10214B	QUANMET	02/14/01	13:33	RJG	S	CONC
61	DVVK3D	J10214B	QUANMET	02/14/01	13:37	RJG	S	CONC
62	DVVLF	J10214B	QUANMET	02/14/01	13:40	RJG	S	CONC
63	DVVLH	J10214B	QUANMET	02/14/01	13:43	RJG	S	CONC
64	CCV2-5	J10214B	QUANMET	02/14/01	13:46	RJG	S	CONC

VOID CCV2-5 not analyzed autosampler malfunction RG 2-14-01

Method: QUANMET Standard: STD1
Run Time: 02/14/01 10:14:13

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00040	.01000	-.00065	.00000	.00005	.00275	-.00005
SDev	.00028	.00147	.00057	.00000	.00012	.00010	.00076
%RSD	70.711	14.697	88.378	.00000	241.01	3.6364	1523.1
#1	-.00060	.00800	-.00140	.00000	-.00008	.00280	.00042
#2	-.00040	.01100	-.00020	.00000	.00020	.00280	-.00027
#3	.00000	.01120	-.00020	.00000	.00008	.00280	.00067
#4	-.00060	.00980	-.00080	.00000	.00000	.00260	-.00102

Elem	CD	CO	CR	CU	FE	K	LI
Avge	.00008	.00010	.00075	.00055	.00095	-.01415	-.00042
SDev	.00031	.00026	.00076	.00030	.00076	.01070	.00026
%RSD	391.85	258.20	100.66	54.545	79.472	75.654	62.730
#1	-.00012	.00040	.00160	.00040	.00040	.00000	-.00025
#2	-.00016	-.00020	.00100	.00080	.00100	-.01760	-.00040
#3	.00008	.00000	.00060	.00080	.00200	-.01340	-.00024
#4	.00052	.00020	-.00020	.00020	.00040	-.02560	-.00080

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	.00070	.00015	.00005	.05835	.00017	.00075	.00040
SDev	.00081	.00019	.00010	.00422	.00051	.00055	.00043
%RSD	115.47	127.66	200.00	7.2353	304.51	73.434	108.01
#1	.00180	.00000	.00000	.05320	-.00025	.00100	.00040
#2	.00020	.00020	.00000	.06200	.00073	.00140	.00100
#3	.00080	.00040	.00020	.06160	-.00028	.00020	.00000
#4	.00000	.00000	.00000	.05660	.00047	.00040	.00020

Elem	SE	SI	SN	SR	TI	TL	V
Avge	-.00160	.00095	-.00045	.00000	.00195	.00030	.00010
SDev	.00049	.00019	.00096	.00000	.00041	.00026	.00012
%RSD	30.619	20.156	212.76	.00000	21.144	86.066	115.47
#1	-.00160	.00100	-.00160	.00000	.00160	.00040	.00000
#2	-.00160	.00120	.00000	.00000	.00220	.00000	.00020
#3	-.00100	.00080	.00060	.00000	.00240	.00020	.00020
#4	-.00220	.00080	-.00080	.00000	.00160	.00060	.00000

Elem	ZN
Avge	.00011
SDev	.00015
%RSD	137.71
#1	.00012
#2	.00000
#3	.00000
#4	.00032

V

Method: QUANMET Standard: STD5A 0801 0314
Run Time: 02/14/01 10:17:24

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.26670	.43630	.55811	4.5783	15.827	.76293	1.2889
SDev	.00077	.00373	.00067	.0135	.019	.00385	.0038
%RSD	.29044	.85391	.11982	.29407	.11889	.50495	.29591
#1	.26700	.43620	.55900	4.5622	15.819	.76569	1.2930
#2	.26580	.43720	.55768	4.5829	15.828	.75726	1.2838
#3	.26760	.43140	.55752	4.5940	15.852	.76489	1.2890
#4	.26640	.44040	.55824	4.5742	15.808	.76386	1.2898

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.4976	2.3862	4.3688	1.8673	.32840	1.5694	.21530
SDev	.0104	.0065	.0262	.0046	.00209	.0031	.00066
%RSD	.29629	.27288	.59962	.24413	.63680	.19565	.30810
#1	3.5038	2.3784	4.3347	1.8704	.32800	1.5731	.21600
#2	3.4878	2.3888	4.3856	1.8620	.32560	1.5658	.21440
#3	3.5090	2.3936	4.3927	1.8718	.33000	1.5687	.21540
#4	3.4900	2.3840	4.3624	1.8652	.33000	1.5702	.21540

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.15900	.41660	.35115	.74915	8.8214	6.3254	.27590
SDev	.00120	.00583	.00809	.00414	.0216	.0117	.00194
%RSD	.75472	1.3991	2.3044	.55204	.24452	.18507	.70157
#1	.15840	.41320	.34020	.74440	8.7980	6.3230	.27380
#2	.15760	.41280	.35000	.74700	8.8242	6.3180	.27700
#3	.16000	.42520	.35620	.75300	8.8494	6.3426	.27480
#4	.16000	.41520	.35820	.75220	8.8141	6.3180	.27800

Elem	V	ZN
Avge	1.5865	1.2476
SDev	.0026	.0031
%RSD	.16609	.25182
#1	1.5886	1.2511
#2	1.5838	1.2448
#3	1.5890	1.2495
#4	1.5848	1.2451

Standardization Rpt. 02/14/01 10:23:39 AM page 1

Method: QUANMET Standard: STD5B 0087032 1
Run Time: 02/14/01 10:20:33

Elem	AL	CA	FE	K_	MG	NA
Avge	11.513	24.283	28.370	2.2538	7.3498	53.306
SDev	.059	.087	.083	.0167	.0309	.418
%RSD	.51314	.35770	.29346	.74237	.42043	.78387
#1	11.447	24.232	28.252	2.2356	7.3102	52.863
#2	11.586	24.246	28.443	2.2746	7.3854	53.804
#3	11.528	24.240	28.377	2.2584	7.3550	53.476
#4	11.491	24.413	28.409	2.2464	7.3484	53.081

Standardization Report 02/14/01 10:23:40 AM page 1

Method: QUANMET Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.32938	.002932	02/14/01 10:20:33
AL	308.215	STD5B	STD1	8.69327	-.086933	02/14/01 10:20:33
AS	193.696	STD5A	STD1	23.2337	.015102	02/14/01 10:20:33
B_	249.600	STD5A	STD1	17.9478	.000000	02/14/01 10:20:33
BA	493.409	STD5A	STD1	2.18422	-.000109	02/14/01 10:20:33
BE	313.042	STD5A	STD1	.633316	-.001742	02/14/01 10:20:33
CA	317.933	STD5B	STD1	4.11812	.000206	02/14/01 10:20:33
CD	228.802	STD5A	STD1	13.3059	-.001057	02/14/01 10:20:33
CO	228.616	STD5A	STD1	7.79799	-.000780	02/14/01 10:20:33
CR	267.716	STD5A	STD1	2.86065	-.002145	02/14/01 10:20:33
CU	324.754	STD5A	STD1	4.18765	-.002303	02/14/01 10:20:33
FE	259.940	STD5B	STD1	3.52494	-.003349	02/14/01 10:20:33
K_	766.491	STD5B	STD1	44.0937	.623925	02/14/01 10:20:33
LI	670.789	STD5A	STD1	2.28872	.000963	02/14/01 10:20:33
MG	279.079	STD5B	STD1	13.6072	-.009525	02/14/01 10:20:33
MN	257.610	STD5A	STD1	5.35383	-.000803	02/14/01 10:20:33
MO	202.030	STD5A	STD1	30.4553	-.001523	02/14/01 10:20:33
NA	588.995	STD5B	STD1	1.87801	-.109582	02/14/01 10:20:33
NI	231.604	STD5A	STD1	6.36899	-.001068	02/14/01 10:20:33
PB	220.353	STD5A	STD1	45.2888	-.033967	02/14/01 10:20:33
SB	206.838	STD5A	STD1	63.0842	-.025234	02/14/01 10:20:33
SE	196.026	STD5A	STD1	23.9120	.038259	02/14/01 10:20:33
SI	288.158	STD5A	STD1	28.2215	-.026810	02/14/01 10:20:33
SN	189.989	STD5A	STD1	13.3292	.005998	02/14/01 10:20:33
SR	409.552	STD5A	STD1	1.13360	.000000	02/14/01 10:20:33
TI	334.941	STD5A	STD1	1.58142	-.003084	02/14/01 10:20:33
TL	190.864	STD5A	STD1	72.8391	-.021852	02/14/01 10:20:33
V_	292.402	STD5A	STD1	6.20574	-.000621	02/14/01 10:20:33
ZN	213.856	STD5A	STD1	8.03841	-.000875	02/14/01 10:20:33

Analysis Report 02/14/01 10:26:48 AM page 1

Method: QUANMET Sample Name: ICV2-1 0087-036-1 Operator: RJG
Run Time: 02/14/01 10:23:42
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP Reanalyzed 2/14/01
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50754	25.196	1.0449	1.0180	1.0003	.98852	25.234
SDev	.00293	.109	.0794	.0190	.0071	.00514	.110
%RSD	.57648	.43437	7.6010	1.8618	.71220	.51981	.43599
#1	.50610	25.297	1.0277	1.0091	1.0075	.99418	25.188
#2	.50607	25.277	1.0327	1.0464	1.0042	.99115	25.142
#3	.51193	25.070	.96460	1.0075	.99132	.98266	25.393
#4	.50607	25.139	H1.1546	1.0090	.99805	.98608	25.214
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	.99383	1.0029	1.0075	.99936	26.187	24.192	1.0085
SDev	.01295	.0034	.0045	.00689	.038	.295	.0108
%RSD	1.3033	.34300	.45050	.68909	.14513	1.2209	1.0680
#1	.98611	1.0018	1.0050	1.0067	26.240	24.064	1.0206
#2	.98404	.99868	1.0027	1.0033	26.188	23.835	1.0140
#3	1.0124	1.0048	1.0130	.99161	26.168	24.443	.99680
#4	.99275	1.0065	1.0090	.99580	26.154	24.426	1.0026
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	25.337	1.0078	.97339	25.034	1.0116	.96994	.98389
SDev	.141	.0012	.00351	.196	.0170	.06728	.01017
%RSD	.55461	.12326	.36113	.78232	1.6817	6.9367	1.0337
#1	25.460	1.0089	.97035	25.217	1.0072	.91321	.98393
#2	25.452	1.0068	.97643	25.176	1.0290	.92219	.97140
#3	25.183	1.0089	.97643	24.806	1.0203	.98594	.98394
#4	25.254	1.0068	.97034	24.936	.98995	1.0584	.99631
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	1.0276	.97555	.97846	.99152	.98277	5.0035	1.0084
SDev	.0263	.01629	.01810	.00640	.00362	.2202	.0018
%RSD	2.5597	1.6700	1.8504	.64580	.36788	4.4014	.18165
#1	1.0660	.97276	.96046	.99844	.98720	5.3234	1.0111
#2	1.0132	.95578	1.0031	.99458	.98404	4.8579	1.0075

#3	1.0227	.99529	.97114	.98370	.97898	4.9746	1.0075
#4	1.0083	.97836	.97918	.98937	.98087	4.8582	1.0074
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	1.0115
SDev	.0047
%RSD	.46921
#1	1.0152
#2	1.0048
#3	1.0146
#4	1.0114
Errors	LC Pass
High	1.1000
Low	.90000

Analysis Report 02/14/01 10:29:56 AM

Method: QUANMET Sample Name: ICB1 Operator: RJG
Run Time: 02/14/01 10:26:51
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00110	.00126	-.00700	.00002	.00004	-.00000	-.00080
SDev	.00140	.00612	.02018	.00001	.00011	.00006	.00186
%RSD	127.57	486.37	288.35	44.174	242.44	8245.5	232.07
#1	-.00147	-.00532	-.02203	.00001	-.00011	.00003	-.00289
#2	-.00292	-.00176	.01041	.00002	.00015	.00002	-.00076
#3	.00000	.00343	-.02675	.00003	.00007	.00003	-.00115
#4	.00000	.00869	.01038	.00003	.00007	-.00009	.00161
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00098	-.00078	-.00114	-.00084	.01146	-.24692	-.00055
SDev	.00271	.00128	.00205	.00080	.00471	.19097	.00031
%RSD	275.82	164.11	179.64	95.885	41.137	77.337	56.880
#1	-.00458	-.00077	-.00157	-.00063	.00582	-.15212	-.00014
#2	-.00117	.00078	.00186	.00021	.00934	-.06394	-.00068
#3	.00190	-.00079	-.00272	-.00146	.01569	-.50487	-.00087
#4	-.00009	-.00234	-.00215	-.00147	.01498	-.26677	-.00049
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	-.01021	.00027	.00305	.00394	-.00380	-.02952	-.03793
SDev	.00408	.00087	.00583	.00353	.00586	.04823	.02298
%RSD	40.000	321.17	191.38	89.468	154.14	163.40	60.585
#1	-.01497	-.00080	.01066	-.00028	-.01126	.02940	-.01280
#2	-.00680	.00027	-.00152	.00385	.00025	-.02498	L-.06315
#3	-.00680	.00027	.00457	.00836	-.00565	-.08838	-.02530
#4	-.01225	.00134	-.00152	.00385	.00145	-.03411	-.05046
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	.04666	-.00423	.01184	.00000	.00008	-.05475	.00035
SDev	.03711	.00002	.01112	.00000	.00036	.11367	.00183
%RSD	79.534	.50478	93.888	.00000	461.88	207.60	525.30
#1	.04784	-.00424	.01128	.00000	-.00024	-.15302	-.00048
#2	.09089	-.00420	.02706	.00000	-.00024	-.15309	.00309

#3	.00005	-.00424	.00056	.00000	.00040	.05082	-.00057
#4	.04787	-.00424	.00846	.00000	.00040	.03628	-.00065
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	.00106
SDev	.00260
%RSD	246.26
#1	-.00084
#2	.00491
#3	.00009
#4	.00007
Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: ICSA 0087-129-11 Operator: RJG
Run Time: 02/14/01 10:29:59
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00275	490.51	.26074	-.03330	.00179	-.00004	484.96
SDev	.00133	1.06	.07960	.01145	.00034	.00007	2.02
%RSD	48.591	.21710	30.529	34.395	19.128	178.66	.41693
#1	-.00103	488.93	.29458	-.01627	.00164	-.00010	483.55
#2	-.00390	490.92	.18568	-.03688	.00138	-.00010	483.30
#3	-.00235	491.26	.20591	-.04044	.00208	.00002	485.33
#4	-.00371	490.92	.35678	-.03962	.00208	.00002	487.68
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value		500.00					500.00
Range		20.000					20.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00326	.01135	-.00158	-.00068	183.71	-.18299	.00130
SDev	.00280	.00150	.00204	.00005	.46	.23821	.00026
%RSD	85.742	13.230	129.29	7.6175	.24888	130.18	20.342
#1	-.00206	.01017	-.00272	-.00074	183.23	-.05512	.00131
#2	-.00739	.01331	.00014	-.00071	183.50	-.54015	.00096
#3	-.00121	.01017	-.00387	-.00067	183.85	-.07275	.00161
#4	-.00239	.01173	.00014	-.00062	184.28	-.06394	.00131
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK
Value					200.00		
Range					20.000		

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	476.40	.00709	-.00214	.01042	.00093	.02250	-.00604
SDev	.81	.00059	.00862	.00451	.01381	.03125	.01628
%RSD	.16904	8.3466	402.36	43.293	1479.9	138.91	269.34
#1	475.28	.00724	-.00220	.00385	.01421	.01463	-.01224
#2	476.43	.00621	.00392	.01136	.00762	.01325	.00035
#3	476.75	.00737	-.01431	.01249	-.01777	-.00525	.01277
#4	477.15	.00751	.00402	.01399	-.00033	.06737	-.02505
Errors	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	500.00						
Range	20.000						

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.04631	.08753	-.05834	.01323	-.01914	.87081	.00431
SDev	.13254	.01068	.01512	.00000	.00040	.13238	.00012
%RSD	286.19	12.205	25.912	.00000	2.0798	15.202	2.7377
#1	.14348	.08048	-.04712	.01323	-.01953	.75621	.00431
#2	-.05654	.08612	-.07901	.01323	-.01921	.79677	.00440

#3	-.15111	.10305	-.06024	.01323	-.01858	1.0550	.00415
#4	-.12107	.08048	-.04699	.01323	-.01921	.87524	.00440
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	.00045
SDev	.00183
%RSD	406.99
#1	.00189
#2	.00123
#3	-.00222
#4	.00090
Errors	NOCHECK
Value	
Range	

Analysis Report QC Standard 02/14/01 10:36:13 AM

Method: QUANMET Sample Name: ICSAB 0087-012-2 Operator: RJG
Run Time: 02/14/01 10:33:07
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96248	486.42	1.1455	.89844	.45869	.45089	476.83
SDev	.00404	2.76	.1073	.00802	.00308	.00172	1.43
%RSD	.41992	.56717	9.3657	.89303	.67037	.38118	.30020
#1	.95769	488.02	Q1.2910	.89617	.46122	.45213	474.71
#2	.96063	486.04	1.1299	.89911	.45791	.45061	477.48
#3	.96641	482.70	1.1287	.88959	.45467	.44857	477.82
#4	.96517	488.93	1.0322	.90889	.46097	.45225	477.33
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	.95258	.45605	.43775	.48717	181.67	9.3324	.97996
SDev	.00800	.00348	.00347	.00327	.43	.3522	.01161
%RSD	.83964	.76294	.79181	.67211	.23761	3.7739	1.1848
#1	.95863	.45330	.43317	.48947	181.64	9.0546	.99106
#2	.94328	.46115	.43718	.48529	181.64	9.1164	.97566
#3	.94857	.45490	.44119	.48355	181.18	9.8307	.96562
#4	.95985	.45485	.43947	.49037	182.23	9.3280	.98751
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	469.81	.45765	.87166	9.7913	.85547	.91544	.92136
SDev	1.49	.00100	.01613	.1082	.01549	.05328	.04819
%RSD	.31810	.21760	1.8503	1.1054	1.8102	5.8207	5.2306
#1	469.89	.45894	.85034	9.8585	.84473	.94375	.98430
#2	469.85	.45791	.86861	9.7744	.87839	.97241	.88389
#3	467.93	.45677	.88073	9.6455	.85082	.89322	.88335
#4	471.59	.45697	.88696	9.8867	.84792	.85238	.93392
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	.92300	.98883	.85658	.91562	.87318	9.8938	.45467
SDev	.09240	.01454	.05489	.00572	.00348	.3970	.00288
%RSD	10.011	1.4707	6.4085	.62511	.39844	4.0130	.63312
#1	.87508	1.0057	.92414	.91924	.87555	9.8468	.45220
#2	.85595	.99446	.81443	.91471	.87239	10.109	.45369

#3	.90235	.97195	.87834	.90791	.86859	9.3567	.45883
#4	1.0586	.98318	.80940	.92060	.87618	10.263	.45394
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	.93943
SDev	.00247
%RSD	.26261
#1	.93758
#2	.93910
#3	.93804
#4	.94301
Errors	QC Pass
Value	1.0000
Range	20.000

Method: QUANMET Sample Name: DV0HRB Operator: RJG
Run Time: 02/14/01 10:38:31
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00073	.00127	-.04067	.00002	-.00011	-.00006	.04916
SDev	.00085	.00800	.03713	.00000	.00015	.00006	.00432
%RSD	115.45	629.14	91.294	5.1466	134.48	102.15	8.7961
#1	-.00000	.00523	-.02211	.00002	.00007	.00003	.04890
#2	-.00147	-.00349	-.02204	.00002	-.00011	-.00009	.04458
#3	-.00147	-.00709	-.09637	.00002	-.00029	-.00009	.04817
#4	.00000	.01043	-.02216	.00002	-.00011	-.00009	.05500
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	.00057	-.00078	.00014	-.00084	.01005	-.22488	-.00015
SDev	.00371	.00219	.00114	.00106	.00173	.21534	.00045
%RSD	649.95	280.79	794.41	126.10	17.203	95.758	293.25
#1	-.00081	-.00078	.00186	-.00063	.01075	-.18740	-.00022
#2	-.00192	-.00233	-.00043	-.00230	.00864	-.53133	-.00049
#3	-.00108	-.00234	-.00043	-.00063	.00863	-.15212	-.00041
#4	H.00609	.00232	-.00043	.00021	.01216	-.02866	.00050
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	-.01293	.00081	.00305	.00967	-.00095	-.03402	-.02216
SDev	.00261	.00062	.00583	.00348	.00345	.05178	.03155
%RSD	20.156	76.577	191.40	35.944	364.07	152.19	142.40
#1	-.01497	.00134	-.00152	.01249	-.00357	-.09748	L-.06318
#2	-.01497	.00027	-.00152	.00685	-.00176	.02934	-.02535
#3	-.00953	.00027	.01066	.00648	.00411	-.03401	.01252
#4	-.01225	.00134	.00457	.01286	-.00257	-.03393	-.01261
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	.02155	.00564	.01857	.00000	.00000	-.02559	-.00058
SDev	.02747	.00282	.02598	.00000	.00047	.05501	.00008
%RSD	127.46	50.046	139.87	.00000	435e6	214.96	13.035
#1	.01438	.00705	.01906	.00000	.00040	.03632	-.00064
#2	.06220	.00705	.04055	.00000	-.00024	-.03649	-.00064

#3	.00481	.00141	.03271	.00000	-.00055	-.00736	-.00048
#4	.00482	.00705	-.01805	.00000	.00040	-.09484	-.00056
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	.00667
SDev	.00106
%RSD	15.970
#1	.00651
#2	.00651
#3	.00554
#4	.00811
Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DV0HRC Operator: RJG
Run Time: 02/14/01 10:41:39
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04816	1.9968	2.0446	.99604	1.9984	.04975	50.165
SDev	.00302	.0110	.0529	.00286	.0201	.00032	.148
%RSD	6.2659	.55211	2.5866	.28754	1.0054	.64880	.29548
#1	.05072	1.9931	2.0307	.99694	1.9685	.04938	50.284
#2	.04486	1.9859	1.9797	.99693	2.0063	.04963	49.963
#3	.05072	2.0120	2.1049	.99842	2.0072	.04988	50.145
#4	.04634	1.9964	2.0632	.99187	2.0118	.05012	50.267
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04359	.49105	.19703	.24809	1.0501	49.733	1.0231
SDev	.00420	.00125	.00143	.00173	.0032	.168	.0149
%RSD	9.6440	.25497	.72482	.69620	.30740	.33749	1.4588
#1	.04046	.48953	.19860	.24620	1.0510	49.780	1.0013
#2	.04902	.49259	.19517	.24788	1.0453	49.541	1.0351
#3	.04008	.49106	.19689	.24788	1.0517	49.674	1.0276
#4	.04478	.49104	.19745	.25039	1.0524	49.938	1.0283
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.411	.49475	.97471	50.762	.48479	.48981	.46246
SDev	.263	.00161	.01040	.633	.01286	.01170	.02303
%RSD	.52131	.32481	1.0672	1.2461	2.6530	2.3896	4.9801
#1	50.024	.49341	.96100	49.819	.50017	.49433	.48782
#2	50.495	.49342	.98536	51.165	.48943	.50341	.43728
#3	50.517	.49556	.97927	50.988	.47041	.48528	.47490
#4	50.609	.49663	.97318	51.075	.47917	.47620	.44984
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9724	9.4967	1.9569	.98808	.98166	1.9073	.49550
SDev	.0143	.0925	.0228	.00855	.00504	.1415	.00247
%RSD	.72402	.97362	1.1632	.86559	.51315	7.4198	.49912
#1	1.9927	9.3711	1.9884	.97531	.97486	1.9874	.49408
#2	1.9688	9.4840	1.9401	.99277	.98119	2.0457	.49439

#3	1.9688	9.5573	1.9590	.99122	.98404	1.8709	.49432
#4	1.9592	9.5743	1.9402	.99304	.98657	1.7252	.49920
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	.50110
SDev	.00092
%RSD	.18272
#1	.50186
#2	.50028
#3	.50034
#4	.50193
Errors	LC Pass
High	.60000
Low	.40000

Analysis Report 02/14/01 10:47:53 AM page 1

Method: QUANMET Sample Name: DVWJE Operator: RJG
Run Time: 02/14/01 10:44:48
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00236	1.5768	.00415	.07908	.21747	-.00001	71.851
SDev	.00121	.0084	.02009	.00169	.00097	.00006	.331
%RSD	51.132	.53482	484.06	2.1324	.44541	678.90	.46122
#1	-.00235	1.5646	.01352	.07885	.21605	.00002	71.624
#2	-.00235	1.5838	.02265	.08034	.21780	.00002	71.793
#3	-.00385	1.5786	.00420	.08034	.21824	-.00009	71.651
#4	-.00089	1.5804	-.02378	.07678	.21780	.00002	72.335
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	-.00040	.00219	.01859	.05185	2.9723	4.5990	.00595
SDev	.00261	.00127	.00029	.00042	.0106	.0886	.00059
%RSD	656.89	57.928	1.5360	.81172	.35520	1.9263	9.8816
#1	-.00106	.00064	.01902	.05164	2.9612	4.6188	.00535
#2	.00261	.00218	.01845	.05164	2.9718	4.5218	.00646
#3	-.00361	.00220	.01845	.05164	2.9697	4.5394	.00646
#4	.00047	.00375	.01845	.05248	2.9866	4.7158	.00554
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.677	.89760	.00952	H484.83	.02003	-.00613	.01886
SDev	.039	.00404	.00304	2.43	.00531	.02380	.03009
%RSD	.23288	.45054	31.975	.50045	26.505	388.24	159.55
#1	16.621	.89305	.01104	H481.41	.02029	-.01751	-.00008
#2	16.697	.89841	.01104	H486.35	.02684	-.02645	.06309
#3	16.681	.89626	.01104	H486.74	.01909	.02781	-.00014
#4	16.708	.90269	.00495	H484.83	.01392	-.00837	.01256
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	.03068	12.746	.01516	.28673	.03131	-.00165	.00389
SDev	.03794	.027	.01310	.00136	.00030	.09765	.00295
%RSD	123.67	.21055	86.423	.47516	.96710	5903.4	75.787
#1	.07607	12.729	.01708	.28469	.03107	-.04891	.00577
#2	.04741	12.729	.01467	.28751	.03171	.14038	.00577

#3	-.00520	12.786	.03041	.28741	.03107	-.01982	-.00043
#4	.00442	12.741	-.00153	.28732	.03139	-.07828	.00445
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	.20275
SDev	.00193
%RSD	.95011
#1	.20372
#2	.20370
#3	.20370
#4	.19986
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVWJEP5 Operator: RJG
Run Time: 02/14/01 10:47:56
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00171	.32470	.00606	.03978	.04633	-.00000	15.046
SDev	.00455	.02242	.03803	.00179	.00037	.00006	.110
%RSD	265.68	6.9049	627.17	4.4951	.79395	4664.3	.72958
#1	-.00428	.31980	-.04848	.03710	.04681	.00003	14.918
#2	-.00575	.29737	.03999	.04067	.04620	-.00009	15.017
#3	.00454	.35124	.01625	.04067	.04594	.00002	15.183
#4	-.00135	.33042	.01650	.04067	.04638	.00003	15.065

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00063	.00036	.00472	.01075	.63169	.73416	.00108
SDev	.00076	.00466	.00192	.00109	.00317	.52150	.00121
%RSD	121.26	1301.6	40.776	10.094	.50266	71.034	111.94
#1	.00106	-.00549	.00243	.00949	.63186	.05071	-.00003
#2	.00009	.00231	.00415	.01033	.62904	.61511	.00013
#3	.00148	.00542	.00701	.01201	.63610	1.0560	.00234
#4	-.00012	-.00081	.00529	.01117	.62975	1.2148	.00188

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.5460	.19158	-.00144	99.869	.00205	-.04112	-.01265
SDev	.0207	.00107	.00497	1.439	.01035	.03948	.02065
%RSD	.58280	.55817	345.11	1.4412	503.73	96.020	163.27
#1	3.5664	.18997	.00465	101.49	-.00033	-.09788	-.01271
#2	3.5583	.19211	-.00144	100.47	-.01158	-.00712	-.03797
#3	3.5392	.19211	-.00144	98.139	.00920	-.03418	.01262
#4	3.5202	.19211	-.00753	99.379	.01091	-.02530	-.01254

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04020	2.6740	.00537	.06110	.00609	.00516	.00061
SDev	.04829	.0073	.01442	.00043	.00106	.05988	.00249
%RSD	120.12	.27335	268.49	.71052	17.488	1159.3	406.04
#1	.00195	2.6655	.00337	.06167	.00577	-.01300	-.00055
#2	.10237	2.6768	-.01006	.06121	.00482	-.07129	-.00063
#3	.00196	2.6825	.02480	.06076	.00735	.05968	.00434
#4	.05455	2.6712	.00337	.06076	.00640	.04527	-.00071

Elem	ZN
Units	ppm
Avge	.04441
SDev	.00215
%RSD	4.8460
#1	.04272
#2	.04275
#3	.04724

#4 .04494

Method: QUANMET Sample Name: DVWJES Operator: RJG
Run Time: 02/14/01 10:51:04
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04423	4.1526	2.0330	1.0336	2.1009	.04749	120.64
SDev	.00140	.0129	.0498	.0045	.0099	.00006	.61
%RSD	3.1683	.31124	2.4482	.43453	.46946	.13135	.50196
#1	.04532	4.1333	1.9925	1.0277	2.0947	.04739	120.17
#2	.04239	4.1579	2.0713	1.0385	2.1150	.04752	120.26
#3	.04532	4.1613	2.0806	1.0349	2.1002	.04752	120.63
#4	.04388	4.1578	1.9876	1.0334	2.0936	.04751	121.50
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	.04698	.46801	.20504	.29321	4.0172	55.159	1.0003
SDev	.00381	.00346	.00118	.00185	.0097	.248	.0080
%RSD	8.1140	.73970	.57432	.63215	.24266	.45013	.80435
#1	.04893	.46918	.20376	.29258	4.0062	54.956	.99731
#2	.05116	.46604	.20604	.29509	4.0190	55.503	1.0107
#3	.04259	.46451	.20433	.29425	4.0140	55.177	1.0018
#4	.04523	.47231	.20604	.29091	4.0295	55.000	.99160
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	64.893	1.3621	.94768	H543.03	.47573	.48263	.50678
SDev	.192	.0050	.01040	3.47	.00753	.00739	.01627
%RSD	.29611	.36605	1.0976	.63961	1.5824	1.5318	3.2100
#1	64.725	1.3573	.96138	H542.04	.47966	.49176	.52568
#2	65.120	1.3605	.93702	H547.58	.48429	.48256	.50055
#3	64.984	1.3615	.94311	H543.26	.47081	.48254	.51303
#4	64.742	1.3690	.94920	H539.23	.46817	.47365	.48784
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	2.0270	H22.909	1.8250	1.2200	.97075	1.8148	.47499
SDev	.0910	.044	.0160	.0048	.00252	.0617	.00188
%RSD	4.4877	.19035	.87433	.39083	.25929	3.4022	.39611
#1	1.9492	H22.844	1.8291	1.2162	.96727	1.8440	.47424
#2	1.9684	H22.934	1.8397	1.2266	.97328	1.7711	.47392

#3	2.0401	H22.923	1.8290	1.2202	.97138	1.7566	.47400
#4	2.1501	H22.934	1.8023	1.2168	.97107	1.8875	.47781
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	.68017
SDev	.00222
%RSD	.32635
#1	.68049
#2	.67791
#3	.67918
#4	.68310
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVWJED Operator: RJG
Run Time: 02/14/01 10:54:11
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04646	4.1843	2.0117	1.0406	2.1127	.04820	121.70
SDev	.00250	.0158	.0714	.0000	.0206	.00026	.86
%RSD	5.3858	.37822	3.5489	.00320	.97459	.53778	.70487
#1	.04681	4.1631	1.9690	1.0405	2.0932	.04789	121.17
#2	.04977	4.1839	2.0105	1.0406	2.0967	.04813	122.96
#3	.04537	4.2011	1.9546	1.0406	2.1298	.04851	121.50
#4	.04390	4.1890	2.1127	1.0406	2.1312	.04826	121.16
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	.05099	.48006	.20919	.32714	4.0171	55.340	.99948
SDev	.00397	.00383	.00266	.00230	.0167	.182	.01353
%RSD	7.7780	.79801	1.2727	.70405	.41579	.32826	1.3534
#1	.05567	.48162	.20890	.32609	3.9943	55.071	.99281
#2	.04927	.48475	.21291	.32443	4.0260	55.397	.98368
#3	.05252	.47692	.20662	.32944	4.0324	55.424	1.0119
#4	.04652	.47694	.20833	.32860	4.0155	55.468	1.0095
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	65.010	1.3731	.95682	H536.28	.49613	.50560	.53192
SDev	.300	.0066	.00767	6.81	.00145	.03959	.03010
%RSD	.46109	.48275	.80123	1.2695	.29299	7.8310	5.6597
#1	64.646	1.3637	.94920	H531.92	.49601	.49212	.56358
#2	64.902	1.3787	.95529	H529.03	.49585	.56463	.55085
#3	65.332	1.3765	.96748	H541.82	.49808	.48282	.50033
#4	65.158	1.3733	.95529	H542.34	.49456	.48285	.51293
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	2.0126	H23.185	1.9311	1.2255	.98546	1.8912	.48288
SDev	.0618	.127	.0206	.0102	.00519	.1482	.00255
%RSD	3.0685	.54828	1.0648	.83027	.52705	7.8336	.52823
#1	2.0305	H23.002	1.9039	1.2150	.97834	1.7858	.47905
#2	2.0019	H23.205	1.9278	1.2186	.98562	1.8729	.48411

#3	1.9349	H23.290	1.9409	1.2345	.99068	2.1060	.48426
#4	2.0831	H23.245	1.9516	1.2340	.98720	1.8002	.48410

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	.70716
SDev	.00790
%RSD	1.1175

#1	.69895
#2	.71572
#3	.70216
#4	.71183

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVMK2B Operator: RJG
Run Time: 02/14/01 10:57:19
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00108	.01251	.02539	.00005	.00050	-.00007	.22296
SDev	.00302	.01517	.02924	.00000	.00031	.00006	.00673
%RSD	279.83	121.20	115.17	9.7817	62.440	87.944	3.0201
#1	.00296	.03290	.01939	.00005	.00076	.00002	.23121
#2	-.00437	-.00359	-.00355	.00004	.00015	-.00010	.22108
#3	-.00146	.01214	.06610	.00004	.00033	-.00009	.21507
#4	-.00145	.00861	.01960	.00005	.00076	-.00010	.22447
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00054	.00195	.00057	.00042	.02591	.08378	.00044
SDev	.00184	.00149	.00293	.00105	.00168	.54096	.00075
%RSD	338.81	76.632	512.28	248.93	6.4837	645.71	171.02
#1	.00249	.00233	.00472	.00189	.02697	.78266	.00142
#2	.00009	.00390	-.00043	.00022	.02485	-.01984	-.00006
#3	-.00180	.00079	-.00214	-.00062	.02415	-.53133	-.00022
#4	.00139	.00078	.00014	.00021	.02767	.10362	.00061
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	.00204	.00028	.00762	.04977	-.00667	-.01812	-.02852
SDev	.01513	.00088	.00352	.00712	.00345	.04876	.02602
%RSD	741.37	315.23	46.168	14.298	51.742	269.13	91.236
#1	.02041	.00135	.01066	.05944	-.00198	.01132	-.02536
#2	-.00408	.00028	.01066	.04441	-.00811	.02954	-.00014
#3	-.01497	.00028	.00457	.04441	-.01007	-.07929	-.02534
#4	.00680	-.00079	.00457	.05080	-.00650	-.03405	L-.06324
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	.02519	.04660	.01455	.00011	.00016	-.06588	.00289
SDev	.00906	.02690	.01193	.00023	.00083	.06182	.00239
%RSD	35.960	57.722	81.989	200.00	525.99	93.836	82.560
#1	.02400	.06355	.01389	.00045	.00134	-.00763	.00450
#2	.01921	.05226	.01400	.00000	-.00055	-.09503	.00448

#3	.01920	.00705	.00057	.00000	-.00024	-.02213	-.00057
#4	.03834	.06354	.02973	.00000	.00008	-.13874	.00316
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	.01838
SDev	.00066
%RSD	3.5684
#1	.01843
#2	.01752
#3	.01845
#4	.01911
Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DVMK2C Operator: RJG
Run Time: 02/14/01 11:00:27
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04734	1.9267	1.8968	.94674	1.8971	.04767	49.190
SDev	.00368	.0078	.0563	.00660	.0205	.00028	.586
%RSD	7.7646	.40332	2.9697	.69747	1.0814	.59465	1.1905
#1	.04623	1.9306	1.8596	.94162	1.9000	.04752	48.878
#2	.04330	1.9203	1.9805	.95639	1.9225	.04803	48.524
#3	.04772	1.9201	1.8689	.94373	1.8934	.04776	49.604
#4	.05212	1.9357	1.8781	.94522	1.8727	.04738	49.753
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04719	.47672	.19217	.23593	1.0392	47.731	.95877
SDev	.00180	.00296	.00249	.00259	.0055	.299	.01866
%RSD	3.8246	.62014	1.2950	1.0984	.53265	.62570	1.9461
#1	.04810	.47243	.19003	.23613	1.0332	47.328	.96524
#2	.04895	.47709	.19003	.23949	1.0361	47.998	.98156
#3	.04693	.47867	.19403	.23446	1.0424	47.910	.94941
#4	.04479	.47869	.19460	.23363	1.0452	47.689	.93888
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.572	.47895	.95643	47.851	.47984	.47587	.44691
SDev	.294	.00255	.00914	.732	.00348	.00743	.01884
%RSD	.60453	.53311	.95536	1.5307	.72467	1.5622	4.2146
#1	48.446	.47734	.94882	47.914	.48284	.46672	.46274
#2	48.952	.47627	.94882	48.817	.48223	.48493	.43753
#3	48.628	.48056	.96100	47.605	.47900	.47590	.42492
#4	48.263	.48163	.96709	47.069	.47528	.47594	.46247
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9221	9.3511	1.8743	.93940	.94213	1.8639	.47663
SDev	.0375	.0885	.0372	.00801	.00260	.1174	.00299
%RSD	1.9534	.94629	1.9861	.85230	.27615	6.2981	.62694
#1	1.8922	9.2185	1.8791	.93976	.93976	1.8130	.47404
#2	1.8875	9.3934	1.8709	.94969	.94545	1.7255	.47404

#3	1.9496	9.3935	1.8283	.93790	.94292	1.9876	.47918
#4	1.9592	9.3991	1.9191	.93023	.94039	1.9293	.47926
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	.49200
SDev	.00280
%RSD	.56995
#1	.48900
#2	.49287
#3	.49548
#4	.49067
Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: CCV2-1 0087-072-1 Operator: RJG
Run Time: 02/14/01 11:03:35
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0023	49.864	5.0628	4.9561	4.8733	4.8747	51.046
SDev	.0021	.163	.0547	.0213	.0301	.0126	.303
%RSD	.20808	.32596	1.0814	.43000	.61780	.25892	.59366
#1	1.0008	50.090	5.0447	4.9373	4.9178	4.8908	50.681
#2	1.0023	49.826	5.0327	4.9805	4.8540	4.8770	51.420
#3	1.0052	49.837	5.1443	4.9674	4.8654	4.8702	51.075
#4	1.0008	49.703	5.0294	4.9393	4.8559	4.8609	51.008
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	5.0656	4.9384	4.9420	4.8876	51.558	49.160	4.9345
SDev	.0157	.0204	.0141	.0287	.077	.420	.0510
%RSD	.30939	.41373	.28560	.58647	.15017	.85373	1.0342
#1	5.0533	4.9119	4.9262	4.9297	51.537	49.718	5.0051
#2	5.0884	4.9617	4.9606	4.8703	51.669	49.065	4.8864
#3	5.0578	4.9400	4.9405	4.8819	51.536	49.153	4.9347
#4	5.0630	4.9400	4.9405	4.8685	51.489	48.704	4.9118
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	50.094	4.9351	4.9602	49.017	4.9147	4.9629	5.0406
SDev	.182	.0082	.0208	.405	.0225	.0659	.0261
%RSD	.36332	.16579	.41958	.82678	.45783	1.3278	.51820
#1	50.321	4.9308	4.9511	49.617	4.9396	4.9235	5.0188
#2	50.046	4.9469	4.9876	48.741	4.8855	5.0609	5.0179
#3	50.125	4.9340	4.9389	48.901	4.9212	4.9426	5.0566
#4	49.883	4.9286	4.9633	48.809	4.9125	4.9246	5.0689
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	4.9663	4.8722	4.9775	4.8687	4.9138	9.8416	4.9297
SDev	.1519	.0367	.0228	.0243	.0095	.0947	.0071
%RSD	3.0580	.75234	.45824	.49988	.19306	.96236	.14491
#1	4.9890	4.8172	4.9701	4.9047	4.9256	9.7255	4.9339
#2	4.7981	4.8906	5.0101	4.8555	4.9167	9.8111	4.9344

#3	5.1611	4.8905	4.9569	4.8621	4.9091	9.8856	4.9313
#4	4.9171	4.8904	4.9730	4.8525	4.9037	9.9444	4.9192
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0067
SDev	.0185
%RSD	.36929
#1	4.9801
#2	5.0137
#3	5.0229
#4	5.0100
Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB1 Operator: RJG
Run Time: 02/14/01 11:06:43
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00184	-.00229	.02559	.00808	.00039	.00035	-.00304
SDev	.00251	.01287	.03196	.01615	.00026	.00022	.00507
%RSD	136.55	562.17	124.89	199.83	66.980	62.265	166.76
#1	-.00147	-.00187	.03836	.00000	.00015	.00016	-.00682
#2	.00147	.01201	.04752	.03231	.00076	.00028	.00442
#3	-.00295	-.00006	.03841	.00001	.00033	.00030	-.00445
#4	-.00440	-.01923	-.02192	.00001	.00033	.00067	-.00532
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	.00249	-.00001	-.00186	-.00126	.00282	-.51810	-.00036
SDev	.00097	.00371	.00190	.00106	.00301	.53013	.00113
%RSD	39.006	43677.	102.28	84.186	106.79	102.32	317.70
#1	.00163	-.00234	-.00157	-.00147	-.00123	-.34614	-.00060
#2	.00376	.00544	.00015	.00022	.00512	.15653	.00107
#3	.00273	-.00235	-.00157	-.00230	.00511	-.94581	-.00168
#4	.00184	-.00079	-.00443	-.00147	.00229	-.93699	-.00022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01429	.00054	.01371	.00319	-.00149	-.01815	-.02532
SDev	.01513	.00054	.00609	.00591	.00686	.05313	.03990
%RSD	105.91	99.422	44.445	185.12	459.71	292.68	157.60
#1	-.01497	.00027	.01066	-.00404	-.00407	.01124	-.01270
#2	.00680	.00135	.02284	.00723	.00209	.03866	.02516
#3	-.02041	.00027	.01066	.00873	.00579	-.07941	L-.06311
#4	-.02858	.00027	.01066	.00085	-.00979	-.04311	-.05062
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	.01794	-.00566	.00389	.00051	.00055	.00362	-.00137
SDev	.05229	.00282	.00786	.00039	.00061	.08009	.00280
%RSD	291.45	49.739	201.86	75.903	109.42	2210.6	203.33
#1	.05260	-.00988	-.00472	.00000	.00008	-.06552	-.00048
#2	.06219	-.00422	.00077	.00045	.00134	.06545	.00092

#3	-.05259	-.00430	.00573	.00068	.00071	.08012	-.00545
#4	.00957	-.00424	.01379	.00091	.00008	-.06557	-.00049
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00007
SDev	.00003
%RSD	40.615
#1	.00009
#2	.00007
#3	.00004
#4	.00011
Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DVDMD Operator: RJG
Run Time: 02/14/01 11:09:51
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00143	21.456	.03820	.24437	.16446	.00068	71.352
SDev	.00140	.073	.03030	.00009	.00146	.00006	.672
%RSD	98.100	.34137	79.322	.03504	.88658	9.3768	.94190
#1	-.00254	21.529	.03652	.24427	.16581	.00058	70.492
#2	.00040	21.404	.00495	.24432	.16407	.00071	71.456
#3	-.00252	21.508	.07842	.24442	.16538	.00071	71.329
#4	-.00105	21.383	.03291	.24446	.16258	.00071	72.129
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	.00004	.01288	.02558	.03727	25.709	11.090	.02077
SDev	.00249	.00127	.00136	.00143	.046	.255	.00067
%RSD	5902.5	9.8462	5.3258	3.8476	.17775	2.2951	3.2125
#1	-.00021	.01288	.02472	.03748	25.660	11.092	.02129
#2	.00233	.01288	.02472	.03580	25.684	10.730	.02075
#3	-.00335	.01133	.02759	.03665	25.734	11.242	.02121
#4	.00140	.01444	.02530	.03916	25.760	11.295	.01984
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	15.686	.73841	.00941	165.05	.02202	-.00866	-.00962
SDev	.068	.00321	.00305	1.86	.00302	.03232	.01594
%RSD	.43094	.43446	32.373	1.1278	13.714	373.36	165.68
#1	15.767	.73438	.00788	167.28	.02298	-.00870	-.01279
#2	15.636	.73974	.00789	164.18	.02434	.01859	.01255
#3	15.718	.73762	.01399	165.75	.02320	-.05405	-.02546
#4	15.625	.74191	.00790	163.00	.01758	.00954	-.01279
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	.04929	H34.343	.01250	.31922	.19301	.07595	.03928
SDev	.00704	.073	.01666	.00221	.00026	.05426	.00004
%RSD	14.274	.21318	133.29	.69107	.13380	71.444	.11019
#1	.05512	H34.274	.02581	.32152	.19301	.11290	.03926
#2	.05519	H34.308	-.00874	.31789	.19270	.09810	.03926

#3	.04578	H34.443	.02576	.32061	.19333	.09753	.03934
#4	.04108	H34.347	.00716	.31685	.19301	-.00474	.03926

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	.07553
SDev	.00131
%RSD	1.7361

#1	.07392
#2	.07553
#3	.07713
#4	.07553

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDMDP5 Operator: RJG
Run Time: 02/14/01 11:13:00
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00161	4.4191	.03257	.04601	.03421	.00017	14.793
SDev	.00000	.0111	.03092	.00105	.00013	.00012	.081
%RSD	.10308	.25071	94.922	2.2908	.37559	71.406	.54438
#1	-.00160	4.4300	.04874	.04655	.03414	.00014	14.770
#2	-.00161	4.4229	.05010	.04442	.03414	.00001	14.769
#3	-.00160	4.4038	.03501	.04654	.03440	.00026	14.910
#4	-.00161	4.4196	-.01157	.04651	.03414	.00026	14.724

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00140	.00109	.00329	.00732	5.4226	2.0702	.00426
SDev	.00124	.00234	.00212	.00080	.0062	.4497	.00029
%RSD	88.674	213.65	64.429	10.964	.11451	21.724	6.7962
#1	-.00183	-.00085	.00071	.00669	5.4280	1.5940	.00454
#2	-.00193	-.00085	.00472	.00752	5.4224	1.9820	.00390
#3	-.00228	.00227	.00529	.00837	5.4259	2.6787	.00444
#4	.00044	.00382	.00243	.00669	5.4139	2.0261	.00417

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.2671	.15569	.00222	33.432	.00596	-.03819	-.02841
SDev	.0086	.00053	.00786	.203	.00303	.00007	.00632
%RSD	.26341	.34205	353.63	.60723	50.867	.18927	22.251
#1	3.2780	.15595	-.00691	33.513	.00169	-.03824	-.02520
#2	3.2616	.15595	.00527	33.496	.00753	-.03825	-.03789
#3	3.2589	.15489	.01136	33.133	.00604	-.03814	-.02532
#4	3.2698	.15595	-.00082	33.586	.00858	-.03811	-.02522

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00953	7.1373	.00736	.06636	.04159	-.02437	.00935
SDev	.03696	.0096	.01030	.00051	.00030	.01192	.00011
%RSD	387.90	.13506	139.88	.77383	.72808	48.902	1.1611
#1	.02150	7.1246	-.00662	.06594	.04183	-.02441	.00922
#2	.03105	7.1472	.00666	.06620	.04120	-.03892	.00939
#3	.03106	7.1359	.01204	.06620	.04151	-.02443	.00947
#4	-.04550	7.1416	.01737	.06711	.04183	-.00973	.00930

Elem	ZN
Units	ppm
Avge	.01695
SDev	.00174
%RSD	10.284
#1	.01633
#2	.01952
#3	.01565

#4 .01631

Method: QUANMET Sample Name: DVDMDS Operator: RJG
Run Time: 02/14/01 11:16:08
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04660	37.572	1.9627	1.1981	2.0892	.04801	119.04
SDev	.00253	.204	.0348	.0024	.0152	.00026	.94
%RSD	5.4248	.54201	1.7724	.20359	.72909	.54215	.79282
#1	.04548	37.362	1.9284	1.2005	2.0766	.04778	118.67
#2	.04694	37.437	1.9371	1.1986	2.0792	.04779	118.97
#3	.04403	37.783	1.9901	1.1987	2.1101	.04817	118.16
#4	.04995	37.705	1.9951	1.1947	2.0908	.04829	120.36
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	.04366	.48293	.22089	.27730	27.865	62.827	1.0182
SDev	.00486	.00421	.00295	.00109	.124	.121	.0134
%RSD	11.122	.87077	1.3371	.39462	.44345	.19229	1.3165
#1	.03857	.47672	.22432	.27602	27.737	62.893	1.0079
#2	.04697	.48448	.22203	.27688	27.809	62.893	1.0104
#3	.04856	.48446	.21746	.27856	27.889	62.646	1.0375
#4	.04053	.48604	.21974	.27774	28.026	62.875	1.0171
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	64.033	1.1971	.93553	212.80	.49145	.48382	.44679
SDev	.276	.0069	.00306	2.00	.01043	.03578	.03324
%RSD	.43104	.57997	.32702	.94162	2.1224	7.3963	7.4408
#1	63.689	1.1922	.93399	211.41	.48574	.45434	.41199
#2	63.931	1.1955	.93400	211.45	.50541	.49986	.47520
#3	64.255	1.1933	.93401	215.68	.49304	.45430	.47525
#4	64.257	1.2073	.94012	212.67	.48163	.52676	.42472
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9773	H56.585	1.8643	1.2605	1.1666	1.9597	.52607
SDev	.0920	.179	.0378	.0084	.0054	.0593	.00289
%RSD	4.6513	.31659	2.0257	.66672	.46716	3.0252	.54988
#1	1.9267	H56.767	1.8695	1.2517	1.1612	1.9939	.52854
#2	1.9508	H56.394	1.9124	1.2557	1.1631	2.0076	.52357

#3	2.1136	H56.473	1.8538	1.2704	1.1694	1.8756	.52356
#4	1.9180	H56.705	1.8216	1.2641	1.1729	1.9615	.52861
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	.55142
SDev	.00754
%RSD	1.3673
#1	.54747
#2	.55636
#3	.54286
#4	.55899
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDMDD Operator: RJG
Run Time: 02/14/01 11:19:17
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04352	31.981	1.8110	1.1454	1.8538	.04197	104.10
SDev	.00307	.120	.0565	.0068	.0104	.00001	.42
%RSD	7.0550	.37493	3.1223	.59575	.56159	.02123	.40166
#1	.04720	31.815	1.8471	1.1409	1.8395	.04196	104.56
#2	.03982	32.073	1.8499	1.1445	1.8642	.04198	103.55
#3	.04426	32.066	1.7290	1.1554	1.8572	.04197	104.15
#4	.04279	31.972	1.8180	1.1410	1.8543	.04197	104.14
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	.03851	.42286	.19029	.24306	23.743	58.852	.92797
SDev	.00510	.00150	.00266	.00080	.031	.433	.00943
%RSD	13.235	.35524	1.4003	.32997	.13096	.73505	1.0160
#1	.03158	.42406	.19000	.24201	23.721	59.101	.91559
#2	.04061	.42089	.18944	.24368	23.712	59.180	.93847
#3	.04355	.42401	.19401	.24369	23.774	58.898	.92970
#4	.03831	.42246	.18772	.24285	23.767	58.228	.92813
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	55.600	1.0447	.82841	194.96	.43311	.45751	.39055
SDev	.146	.0018	.01040	1.52	.00711	.00012	.01211
%RSD	.26307	.17569	1.2560	.78093	1.6412	.02554	3.1019
#1	55.383	1.0466	.82993	192.93	.43410	.45766	.38731
#2	55.698	1.0423	.81774	196.57	.43027	.45737	.37477
#3	55.663	1.0455	.84212	195.45	.44242	.45749	.40006
#4	55.658	1.0444	.82384	194.90	.42564	.45751	.40006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8283	H43.736	1.6419	1.1096	1.0108	1.8608	.46252
SDev	.1449	.082	.0344	.0050	.0023	.1020	.00412
%RSD	7.9242	.18692	2.0960	.45302	.22347	5.4833	.89113
#1	1.9765	H43.846	1.6879	1.1024	1.0074	1.7627	.46751
#2	1.8999	H43.750	1.6479	1.1140	1.0116	1.9959	.45742

#3	1.7949	H43.671	1.6213	1.1117	1.0125	1.8058	.46271
#4	1.6418	H43.677	1.6106	1.1104	1.0116	1.8788	.46246

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	.49764
SDev	.00286
%RSD	.57550

#1	.50124
#2	.49666
#3	.49825
#4	.49443

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDM8 Operator: RJG
Run Time: 02/14/01 11:22:26
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00009	25.495	.07602	.07022	.17418	.00125	25.416
SDev	.00272	.047	.06160	.01142	.00047	.00007	.280
%RSD	3043.5	.18516	81.036	16.268	.26786	5.5841	1.1021
#1	-.00159	25.536	-.00897	.07999	.17437	.00131	25.127
#2	.00140	25.439	.07056	.05920	.17393	.00118	25.531
#3	-.00306	25.531	.12583	.08016	.17473	.00120	25.253
#4	.00289	25.472	.11664	.06152	.17368	.00131	25.751
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	-.00052	.02258	.03317	.16278	30.058	7.8553	.02820
SDev	.00214	.00196	.00318	.00097	.121	.4328	.00066
%RSD	408.82	8.6622	9.5834	.59497	.40344	5.5098	2.3565
#1	-.00213	.02064	.03217	.16360	29.922	7.6965	.02789
#2	.00075	.02219	.03445	.16194	30.093	8.0052	.02800
#3	-.00253	.02220	.02931	.16193	30.011	7.3526	.02773
#4	.00182	.02530	.03674	.16363	30.207	8.3668	.02918
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.151	1.4589	.06175	S1490.6	.04543	.02182	-.02230
SDev	.032	.0081	.00304	1721.3	.00887	.05143	.01214
%RSD	.24274	.55656	4.9272	115.48	19.515	235.69	54.441
#1	13.146	1.4498	.06326	S-.10958	.03721	.06026	-.02549
#2	13.143	1.4605	.05719	S2980.8	.04080	.06032	-.03815
#3	13.119	1.4562	.06327	S2981.7	.05752	-.04839	-.01274
#4	13.195	1.4691	.06329	S-.10958	.04621	.01510	-.01284
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	.02323	H37.676	.01645	.15772	.22132	.07532	.05147
SDev	.04467	.065	.01773	.00052	.00105	.03594	.00467
%RSD	192.27	.17278	107.78	.33198	.47398	47.715	9.0792
#1	.05390	H37.644	-.00558	.15817	.22053	.08411	.05117
#2	-.01731	H37.638	.03438	.15726	.22148	.08220	.05482

#3	-.01278	H37.649	.02648	.15817	.22053	.02490	.04496
#4	.06913	H37.774	.01051	.15726	.22274	.11008	.05491

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	.08937
SDev	.00198
%RSD	2.2139

#1	.08749
#2	.08815
#3	.08995
#4	.09190

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDN5 Operator: RJG
Run Time: 02/14/01 11:25:34
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	105.75	.19365	.04417	.75190	.00726	74.772
SDev	.00205	.82	.06446	.00330	.00917	.00006	.591
%RSD	590.41	.77679	33.288	7.4735	1.2190	.84422	.78985
#1	.00196	105.50	.25349	.04017	.75201	.00723	74.147
#2	.00213	104.70	.14758	.04640	.73890	.00722	75.534
#3	-.00209	106.36	.12902	.04280	.75856	.00735	74.523
#4	-.00061	106.44	.24450	.04730	.75812	.00723	74.885
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	-.00214	.10983	.27224	.12525	183.68	22.430	.13176
SDev	.00289	.00267	.00338	.00228	.72	.126	.00194
%RSD	135.11	2.4287	1.2417	1.8185	.39138	.56280	1.4764
#1	.00102	.10865	.26952	.12326	182.79	22.247	.13306
#2	-.00040	.11334	.27696	.12334	183.41	22.450	.12886
#3	-.00440	.11021	.27009	.12677	184.19	22.494	.13250
#4	-.00476	.10710	.27238	.12762	184.33	22.530	.13260
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	44.230	3.4278	.02070	22.124	.19337	.14568	-.00992
SDev	.317	.0107	.00761	.342	.00515	.00489	.02384
%RSD	.71577	.31230	36.776	1.5451	2.6639	3.3597	240.34
#1	44.059	3.4126	.02210	22.176	.18924	.14824	-.02568
#2	43.876	3.4310	.02827	21.626	.19764	.14884	-.01316
#3	44.429	3.4301	.02228	22.366	.18859	.13840	.02474
#4	44.557	3.4376	.01012	22.327	.19801	.14723	-.02557
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	-.00457	H62.463	.03350	.29344	.61778	.65483	.18614
SDev	.05480	.231	.02337	.00326	.00359	.14295	.00264
%RSD	1199.7	.36925	69.765	1.1107	.58073	21.830	1.4177
#1	.03214	H62.305	.01728	.29276	.61588	.62486	.18398
#2	-.01376	H62.260	.06544	.28914	.61367	.51582	.18904

#3	-.07833	H62.526	.03638	.29639	.62094	.62354	.18771
#4	.04168	H62.763	.01487	.29548	.62063	.85510	.18383

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	.67168
SDev	.00664
%RSD	.98906

#1	.67331
#2	.67580
#3	.67574
#4	.66187

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDT5 Operator: RJG
Run Time: 02/14/01 11:28:42
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00000	105.78	.25109	.05423	.74451	.00734	40.139
SDev	.00196	.26	.08487	.01343	.00424	.00000	.287
%RSD	69616.	.24937	33.800	24.767	.56964	.01847	.71416
#1	-.00236	105.84	.24669	.03851	.74790	.00734	39.748
#2	-.00066	106.08	.36918	.04759	.74746	.00734	40.118
#3	.00078	105.76	.21849	.06547	.74396	.00734	40.278
#4	.00223	105.44	.16997	.06536	.73872	.00734	40.411
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	-.00057	.11648	.28410	.12352	196.03	18.954	.14413
SDev	.00301	.00235	.00338	.00046	.45	.207	.00124
%RSD	523.85	2.0155	1.1914	.37419	.23126	1.0942	.85977
#1	.00014	.11452	.27924	.12386	195.36	19.108	.14451
#2	.00039	.11451	.28439	.12397	196.37	18.896	.14515
#3	.00208	.11919	.28611	.12312	196.22	18.685	.14453
#4	-.00490	.11769	.28668	.12311	196.16	19.126	.14232
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	37.005	3.8565	.01620	8.4778	.19237	.13216	-.01336
SDev	.091	.0139	.00303	.0527	.01252	.02141	.01779
%RSD	.24722	.36106	18.731	.62106	6.5109	16.201	133.19
#1	36.942	3.8359	.01764	8.5184	.19254	.14578	-.01335
#2	37.130	3.8651	.01777	8.5244	.20835	.13634	-.02576
#3	37.016	3.8598	.01775	8.4530	.17778	.14578	-.02612
#4	36.931	3.8651	.01165	8.4154	.19083	.10074	.01180
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	.00597	H71.980	.01154	.22064	.85507	.64447	.19417
SDev	.07789	.099	.02391	.00094	.00181	.11641	.00063
%RSD	1304.6	.13806	207.29	.42535	.21222	18.063	.32282
#1	.10434	H71.884	.02142	.22139	.85341	.57182	.19511
#2	-.08385	H72.115	-.01845	.22139	.85752	.74994	.19389

#3	.01613	H71.985	.00552	.22035	.85531	.73694	.19389
#4	-.01275	H71.935	.03766	.21944	.85404	.51917	.19381

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	.58010
SDev	.00329
%RSD	.56773

#1	.57830
#2	.58269
#3	.57637
#4	.58305

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDN8F Operator: RJG
Run Time: 02/14/01 11:31:50
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00342	.96668	-.02062	.02882	.02960	-.00000	40.639
SDev	.00147	.00616	.05421	.00729	.00031	.00006	.110
%RSD	42.901	.63700	262.95	25.307	1.0491	4403.8	.27044
#1	-.00562	.96145	.00614	.02760	.02985	.00003	40.493
#2	-.00269	.97366	.03395	.02761	.02978	.00003	40.735
#3	-.00269	.96155	-.09142	.02126	.02960	-.00009	40.616
#4	-.00267	.97006	-.03114	.03879	.02916	.00002	40.711
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	-.00064	.00115	.00172	.00078	1.3148	3.4900	.00390
SDev	.00107	.00234	.00108	.00108	.0009	.1502	.00061
%RSD	166.28	204.24	63.129	138.63	.06750	4.3031	15.713
#1	-.00215	.00232	.00243	-.00048	1.3150	3.5253	.00352
#2	.00018	-.00081	.00186	.00120	1.3157	3.6840	.00481
#3	.00005	.00387	.00243	.00036	1.3150	3.3401	.00363
#4	-.00065	-.00080	.00014	.00203	1.3136	3.4106	.00363
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.188	.39735	.00169	10.896	-.00344	-.03265	-.02532
SDev	.046	.00062	.00352	.063	.00485	.04809	.00008
%RSD	.35242	.15562	207.75	.58229	141.03	147.28	.32100
#1	13.247	.39789	.00474	10.964	-.00408	-.03488	-.02528
#2	13.160	.39681	-.00135	10.858	-.00962	.02843	-.02543
#3	13.203	.39789	-.00135	10.935	.00207	-.08919	-.02524
#4	13.143	.39682	.00474	10.829	-.00213	-.03497	-.02531
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	.03992	7.4759	.00876	.12870	.00791	-.12126	.00065
SDev	.03796	.0310	.01860	.00052	.00054	.05579	.00179
%RSD	95.093	.41515	212.20	.40683	6.8313	46.007	276.91
#1	.09492	7.4463	-.01523	.12915	.00735	-.07756	.00069
#2	.02318	7.4688	.03009	.12824	.00862	-.07755	-.00063

#3	.00883	7.5196	.00876	.12915	.00767	-.13584	-.00063
#4	.03274	7.4689	.01143	.12824	.00799	-.19409	.00317
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	.03060
SDev	.00109
%RSD	3.5541
#1	.02957
#2	.03213
#3	.03049
#4	.03023
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDN8P5F Operator: RJG
Run Time: 02/14/01 11:34:58
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00325	.19207	.02260	.00859	.00601	.00000	8.4428
SDev	.00140	.00994	.03501	.01615	.00000	.00006	.0368
%RSD	43.195	5.1762	154.87	187.97	.00000	5405.6	.43594
#1	-.00142	.19294	-.01458	.00052	.00601	.00003	8.4976
#2	-.00435	.19290	.06442	.00051	.00601	.00003	8.4303
#3	-.00435	.20333	.00393	.00052	.00601	-.00009	8.4193
#4	-.00288	.17910	.03665	.03282	.00601	.00003	8.4241

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00423	.00001	-.00086	-.00018	.27319	.55999	.00057
SDev	.00208	.00324	.00118	.00049	.00176	.16769	.00052
%RSD	49.093	39825.	137.72	272.21	.64563	29.945	91.215
#1	-.00245	-.00078	.00014	.00024	.27513	.75621	.00040
#2	-.00662	.00080	.00015	-.00060	.27301	.43873	.00013
#3	-.00533	-.00389	-.00214	-.00060	.27089	.40346	.00042
#4	-.00253	.00390	-.00157	.00024	.27372	.64156	.00131

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.7194	.08253	.00613	2.2025	.00058	-.00930	-.03790
SDev	.0141	.00053	.00305	.0081	.00166	.03263	.01028
%RSD	.51920	.64756	49.712	.36770	285.89	350.82	27.126
#1	2.7364	.08279	.00460	2.2011	.00221	-.01612	-.03789
#2	2.7255	.08173	.01069	2.2120	.00055	-.02515	-.05052
#3	2.7092	.08279	.00460	2.2045	.00124	-.03430	-.02533
#4	2.7065	.08279	.00460	2.1925	-.00169	.03836	-.03788

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02356	1.5846	.01322	.02656	.00119	.00844	-.00054
SDev	.03950	.0149	.01533	.00011	.00041	.01398	.00004
%RSD	167.69	.94239	116.04	.42676	34.427	165.65	7.7121
#1	-.00394	1.5649	.01121	.02662	.00166	.00478	-.00056
#2	.00562	1.5931	.00050	.02662	.00103	.01935	-.00048
#3	.08214	1.5987	.03526	.02662	.00071	.01943	-.00056
#4	.01041	1.5818	.00588	.02639	.00134	-.00981	-.00056

Elem	ZN
Units	ppm
Avge	.00888
SDev	.00157
%RSD	17.679
#1	.00968
#2	.01064
#3	.00713

#4 .00809

Method: QUANMET Sample Name: DVDN8SF Operator: RJG
Run Time: 02/14/01 11:38:06
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04504	4.3588	1.8982	.97947	1.9114	.04699	92.555
SDev	.00120	.0199	.0469	.00576	.0111	.00012	.250
%RSD	2.6758	.45747	2.4685	.58821	.57906	.25718	.27025
#1	.04504	4.3613	1.8343	.98115	1.9100	.04689	92.592
#2	.04504	4.3337	1.9135	.97101	1.9002	.04689	92.814
#3	.04356	4.3824	1.8993	.98392	1.9267	.04702	92.213
#4	.04651	4.3579	1.9459	.98179	1.9087	.04714	92.603
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	.04256	.46388	.18788	.23629	2.5135	51.376	.97134
SDev	.00400	.00270	.00338	.00097	.0061	.127	.00930
%RSD	9.4076	.58190	1.7992	.40913	.24299	.24637	.95759
#1	.04103	.46155	.18773	.23545	2.5080	51.393	.96467
#2	.04598	.46778	.19002	.23546	2.5108	51.367	.96276
#3	.04564	.46308	.18316	.23713	2.5221	51.217	.98253
#4	.03760	.46312	.19059	.23713	2.5130	51.526	.97539
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	62.263	.90281	.92464	58.968	.45214	.44634	.45315
SDev	.190	.00175	.00703	.418	.01499	.03705	.02144
%RSD	.30474	.19357	.76060	.70926	3.3156	8.3015	4.7309
#1	62.159	.90281	.93073	58.781	.43954	.43725	.47504
#2	62.096	.90495	.91855	58.586	.47385	.50080	.45028
#3	62.526	.90067	.91855	59.554	.44641	.42814	.42479
#4	62.271	.90281	.93073	58.952	.44875	.41916	.46250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9099	18.344	1.8487	1.0709	.92963	1.9123	.47186
SDev	.0678	.071	.0139	.0059	.00211	.0435	.00222
%RSD	3.5489	.38704	.75340	.54793	.22738	2.2769	.47049
#1	1.9637	18.238	1.8608	1.0695	.92963	1.9743	.47256
#2	1.9542	18.368	1.8367	1.0654	.92742	1.8722	.47240

#3	1.9064	18.385	1.8365	1.0792	.93248	1.9013	.46866
#4	1.8155	18.385	1.8607	1.0696	.92900	1.9014	.47380
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	.49475
SDev	.00293
%RSD	.59158
#1	.49222
#2	.49277
#3	.49539
#4	.49862
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-2 Operator: RJG
Run Time: 02/14/01 11:41:15
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99696	49.548	5.0359	4.9067	4.8260	4.8420	50.879
SDev	.00524	.162	.0475	.0183	.0234	.0141	.297
%RSD	.52582	.32779	.94348	.37221	.48591	.29065	.58348
#1	1.0022	49.660	5.0671	4.8795	4.8312	4.8566	51.171
#2	.99327	49.702	5.0813	4.9186	4.8570	4.8484	50.593
#3	1.0007	49.474	5.0178	4.9159	4.8076	4.8394	51.096
#4	.99171	49.354	4.9775	4.9127	4.8080	4.8237	50.655
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	5.0492	4.9214	4.9166	4.8432	51.215	48.759	4.8873
SDev	.0273	.0138	.0209	.0209	.151	.246	.0357
%RSD	.54095	.28091	.42583	.43226	.29391	.50499	.72961
#1	5.0561	4.9369	4.9388	4.8476	51.386	48.889	4.8806
#2	5.0149	4.9090	4.8993	4.8710	51.156	48.518	4.9380
#3	5.0808	4.9291	4.9302	4.8266	51.279	48.589	4.8544
#4	5.0451	4.9105	4.8982	4.8274	51.039	49.039	4.8764
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	49.737	4.9071	4.9160	48.433	4.9092	4.9513	4.9715
SDev	.145	.0175	.0135	.280	.0401	.0437	.0744
%RSD	.29134	.35759	.27461	.57735	.81631	.88315	1.4956
#1	49.861	4.9275	4.9206	48.420	4.9022	4.9427	5.0816
#2	49.836	4.8953	4.9267	48.832	4.9194	4.9146	4.9433
#3	49.706	4.9157	4.8962	48.217	4.9558	4.9334	4.9435
#4	49.545	4.8900	4.9206	48.263	4.8593	5.0145	4.9177
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	4.8875	4.9297	4.9386	4.8308	4.8777	9.9367	4.8999
SDev	.0835	.0490	.0757	.0181	.0129	.0950	.0155
%RSD	1.7075	.99414	1.5318	.37412	.26517	.95562	.31662
#1	4.8020	4.9017	5.0051	4.8372	4.8898	9.8145	4.9186
#2	4.9113	4.9071	4.9351	4.8535	4.8854	9.9775	4.8963

#3	4.9929	5.0031	4.9805	4.8179	4.8749	9.9178	4.9034
#4	4.8440	4.9069	4.8338	4.8147	4.8607	10.037	4.8813
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	4.9780
SDev	.0351
%RSD	.70447
#1	5.0272
#2	4.9478
#3	4.9779
#4	4.9591
Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB2 Operator: RJG
Run Time: 02/14/01 11:44:23
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00256	-.00626	-.00228	.00808	.00000	.00016	-.00142
SDev	.00219	.00494	.05045	.01615	.00013	.00017	.00223
%RSD	85.449	78.959	2209.3	199.79	.00000	109.98	157.18
#1	-.00144	-.00030	-.01749	.03231	.00015	.00015	-.00028
#2	-.00002	-.00703	.00594	.00001	.00007	.00004	.00021
#3	-.00440	-.01230	.06167	.00001	-.00011	.00003	-.00469
#4	-.00438	-.00540	-.05926	.00001	-.00011	.00040	-.00091
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	-.00077	-.00234	-.00057	-.00189	.00176	-.43873	-.00015
SDev	.00200	.00127	.00177	.00108	.00106	.26245	.00058
%RSD	259.65	54.344	310.77	57.373	60.043	59.819	373.95
#1	.00179	-.00078	.00186	-.00063	.00088	-.05512	.00032
#2	-.00114	-.00390	-.00214	-.00314	.00300	-.62833	-.00038
#3	-.00067	-.00234	-.00157	-.00231	.00088	-.58424	.00032
#4	-.00307	-.00233	-.00043	-.00147	.00229	-.48723	-.00087
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	-.01157	-.00053	.01371	.00235	-.00474	-.00464	-.03482
SDev	.02345	.00053	.00609	.00081	.00560	.02992	.02160
%RSD	202.75	100.87	44.443	34.564	118.17	645.53	62.036
#1	.01769	-.00080	.02284	.00310	-.00259	-.02498	-.03796
#2	-.01497	-.00080	.01066	.00122	.00200	-.03408	-.01270
#3	-.03946	-.00080	.01066	.00272	-.00767	.02935	-.02533
#4	-.00953	.00027	.01066	.00235	-.01069	.01118	L-.06329
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	.05142	.02823	.00119	.00017	.00008	.03641	.00049
SDev	.04820	.02279	.01784	.00034	.00045	.07036	.00451
%RSD	93.747	80.747	1501.7	200.00	565.68	193.25	921.40
#1	.05261	.04098	-.01549	.00000	-.00024	-.02189	.00465
#2	.10044	-.00430	.01394	.00000	.00071	.02188	-.00545

#3	.06696	.04656	-.01277	.00000	.00008	.00729	-.00048
#4	-.01434	.02967	.01907	.00068	-.00024	.13837	.00324
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	.00036
SDev	.00075
%RSD	209.44
#1	.00010
#2	-.00023
#3	.00010
#4	.00145
Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DVDN8DF Operator: RJG
Run Time: 02/14/01 11:47:31
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04442	3.7893	1.7922	.92732	1.7416	.04233	82.993
SDev	.00251	.0275	.0571	.00741	.0077	.00023	.539
%RSD	5.6600	.72634	3.1868	.79924	.44148	.55578	.64996
#1	.04477	3.7590	1.8587	.92598	1.7310	.04218	82.621
#2	.04330	3.7747	1.7285	.93465	1.7413	.04218	82.516
#3	.04186	3.8040	1.7653	.93107	1.7489	.04268	83.147
#4	.04774	3.8197	1.8163	.91756	1.7450	.04229	83.688
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	.03940	.42239	.16657	.21402	2.2243	48.302	.90208
SDev	.00190	.00545	.00334	.00109	.0114	.596	.00453
%RSD	4.8217	1.2899	2.0027	.50758	.51362	1.2342	.50252
#1	.03839	.41656	.16944	.21276	2.2102	48.166	.89561
#2	.04143	.41966	.16314	.21360	2.2222	47.592	.90374
#3	.03728	.42434	.16429	.21528	2.2271	49.030	.90614
#4	.04049	.42901	.16943	.21445	2.2377	48.421	.90282
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	55.700	.80795	.85304	54.984	.42424	.42299	.40634
SDev	.226	.00377	.01256	.211	.00368	.02170	.04183
%RSD	.40553	.46623	1.4722	.38407	.86639	5.1301	10.293
#1	55.519	.80420	.84542	54.701	.42241	.41829	.37476
#2	55.497	.80527	.83933	54.996	.42008	.40930	.37488
#3	55.845	.81063	.86370	55.210	.42625	.40945	.41263
#4	55.941	.81171	.86370	55.030	.42822	.45492	.46310
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8050	16.769	1.6781	.96729	.83673	1.7771	.42649
SDev	.0408	.125	.0121	.00388	.00423	.0852	.00438
%RSD	2.2594	.74759	.72241	.40101	.50561	4.7946	1.0267
#1	1.7906	16.629	1.6793	.96243	.83222	1.8028	.42298
#2	1.7572	16.697	1.6607	.96606	.83443	1.7590	.42289

#3	1.8529	16.877	1.6875	.97118	.83855	1.6715	.42818
#4	1.8194	16.872	1.6850	.96950	.84171	1.8753	.43191
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	.44933
SDev	.00410
%RSD	.91168
#1	.45198
#2	.44328
#3	.45037
#4	.45171
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDMTF Operator: RJG
Run Time: 02/14/01 11:50:39
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00296	2.5683	.02405	.22823	.06855	-.00001	59.298
SDev	.00147	.0138	.01310	.00073	.00020	.00006	.323
%RSD	49.662	.53548	54.445	.32016	.28612	827.78	.54398
#1	-.00369	2.5696	.01473	.22786	.06848	.00002	59.136
#2	-.00369	2.5556	.02414	.22933	.06848	.00002	59.135
#3	-.00075	2.5610	.01480	.22786	.06840	.00002	59.781
#4	-.00371	2.5870	.04254	.22788	.06883	-.00009	59.138
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00023	.00188	.00229	.00455	3.1558	6.8169	.00244
SDev	.00248	.00295	.00164	.00042	.0052	.4403	.00083
%RSD	1069.4	156.79	71.791	9.2584	.16515	6.4591	34.086
#1	.00160	.00383	.00243	.00476	3.1565	7.0528	.00252
#2	.00149	.00227	.00415	.00476	3.1494	6.8235	.00252
#3	-.00372	.00384	.00243	.00476	3.1551	7.1939	.00336
#4	-.00031	-.00241	.00014	.00392	3.1621	6.1974	.00134
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.493	.39224	.00954	153.43	.00038	-.03866	-.02534
SDev	.037	.00053	.00583	1.43	.00614	.03082	.00006
%RSD	.32488	.13622	61.095	.93300	1615.6	79.705	.25642
#1	11.499	.39197	.01107	153.64	.00169	-.00918	-.02537
#2	11.483	.39197	.01716	153.62	.00409	-.02732	-.02530
#3	11.450	.39304	.00498	151.50	.00439	-.08163	-.02528
#4	11.540	.39197	.00498	154.96	-.00865	-.03653	-.02542
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	.01689	7.8414	.01370	.26011	.02317	-.04765	.00323
SDev	.06019	.0264	.01545	.00148	.00045	.09626	.00253
%RSD	356.28	.33726	112.76	.56934	1.9307	202.02	78.126
#1	.06233	7.8245	.03036	.26011	.02285	-.14237	.00450
#2	-.01421	7.8301	-.00696	.26011	.02317	-.11314	.00458

#3	-.05245	7.8301	.01703	.25830	.02380	.00333	.00442
#4	.07191	7.8809	.01437	.26193	.02285	.06160	-.00055
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	.02077
SDev	.00190
%RSD	9.1454
#1	.01813
#2	.02067
#3	.02228
#4	.02202
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDNPF Operator: RJG
Run Time: 02/14/01 11:53:47
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00068	37.417	.03641	.06754	.22916	.00166	32.631
SDev	.00252	.195	.06357	.00028	.00146	.00010	.250
%RSD	368.72	.52050	174.61	.41538	.63737	5.7271	.76641
#1	-.00184	37.413	.05297	.06718	.22934	.00154	32.288
#2	.00264	37.164	-.05228	.06749	.22715	.00177	32.888
#3	-.00030	37.454	.09877	.06762	.22952	.00165	32.688
#4	-.00323	37.637	.04618	.06785	.23065	.00166	32.662
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	.00139	.02476	.04804	.22833	41.245	9.3567	.03576
SDev	.00171	.00234	.00366	.00125	.147	.5312	.00071
%RSD	123.17	9.4394	7.6131	.54920	.35652	5.6772	1.9848
#1	.00148	.02672	.04418	.22936	41.057	8.7019	.03521
#2	.00376	.02671	.05275	.22770	41.223	9.9541	.03513
#3	-.00013	.02360	.04875	.22687	41.290	9.5573	.03613
#4	.00045	.02204	.04647	.22939	41.409	9.2134	.03659
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.580	1.9050	.07386	S-.10958	.06115	.02478	-.01605
SDev	.067	.0085	.00353	.00000	.00481	.03588	.02152
%RSD	.38096	.44554	4.7827	.00000	7.8683	144.79	134.03
#1	17.514	1.8929	.07079	S-.10958	.05766	-.00460	-.03810
#2	17.536	1.9090	.07081	S-.10958	.06343	.07709	-.02548
#3	17.612	1.9058	.07691	S-.10958	.06682	.01343	.01231
#4	17.658	1.9122	.07692	S-.10958	.05670	.01320	-.01294
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	.03617	H56.249	.00951	.20584	.30221	.16211	.06904
SDev	.04217	.187	.01622	.00151	.00111	.05512	.00490
%RSD	116.60	.33187	170.63	.73295	.36630	34.002	7.0941
#1	.00690	H56.163	.00139	.20610	.30086	.22244	.06495
#2	.05045	H56.067	.00413	.20370	.30181	.08949	.07490

#3	-.00195	H56.265	.03362	.20633	.30276	.17617	.07125
#4	.08928	H56.502	-.00112	.20724	.30339	.16033	.06504

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	.11772
SDev	.00123
%RSD	1.0458

#1	.11675
#2	.11809
#3	.11929
#4	.11672

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDVCF Operator: RJG
Run Time: 02/14/01 11:56:55
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00055	5.4963	.01280	.02499	.06313	.00029	22.749
SDev	.00073	.0235	.02316	.00149	.00034	.00012	.138
%RSD	132.21	.42698	180.88	5.9477	.54103	40.153	.60833
#1	.00054	5.5045	.03716	.02465	.06298	.00039	22.616
#2	-.00090	5.4645	.01415	.02321	.06280	.00038	22.943
#3	-.00093	5.4958	-.01853	.02679	.06359	.00026	22.707
#4	-.00092	5.5202	.01844	.02533	.06316	.00014	22.730
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	.00148	.00533	.01187	.00724	8.3954	3.3577	.00887
SDev	.00143	.00312	.00136	.00126	.0133	.3808	.00038
%RSD	96.209	58.503	11.474	17.392	.15801	11.341	4.3160
#1	.00003	.00377	.01158	.00619	8.3778	3.2519	.00893
#2	.00345	.01000	.01387	.00871	8.4053	3.9221	.00939
#3	.00113	.00377	.01101	.00787	8.3926	3.1373	.00858
#4	.00133	.00377	.01101	.00619	8.4060	3.1196	.00858
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	10.609	.36961	-.00044	5.4017	.00960	.02174	-.01898
SDev	.019	.00135	.00497	.0253	.00479	.00444	.02183
%RSD	.17819	.36469	1136.4	.46853	49.874	20.411	115.01
#1	10.596	.36987	-.00044	5.4211	.01090	.02394	-.03789
#2	10.637	.36988	.00565	5.3652	.01143	.01509	-.02531
#3	10.604	.36774	-.00044	5.4159	.01346	.02396	-.02526
#4	10.599	.37095	-.00653	5.4046	.00261	.02399	.01253
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	.03662	13.472	.00851	.09537	.06468	-.03852	.01088
SDev	.04807	.026	.00508	.00045	.00030	.13977	.00241
%RSD	131.28	.19495	59.665	.47546	.46819	362.87	22.142
#1	.01146	13.446	.00443	.09560	.06428	-.15848	.01057
#2	.04980	13.463	.01515	.09469	.06492	.16162	.01438

#3	-.01241	13.469	.00982	.09560	.06460	-.10039	.00933
#4	.09763	13.508	.00465	.09560	.06492	-.05681	.00925
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	.04632
SDev	.00154
%RSD	3.3181
#1	.04592
#2	.04432
#3	.04751
#4	.04755
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DV0HFB Operator: RJG
Run Time: 02/14/01 12:00:04
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00183	-.00086	.03485	.00003	.00006	-.00003	.11274
SDev	.00250	.00866	.08188	.00000	.00021	.00007	.00641
%RSD	136.81	1007.5	234.96	9.2568	332.06	240.40	5.6874
#1	-.00293	-.00518	.02443	.00003	-.00011	-.00009	.10578
#2	-.00146	-.00516	.04301	.00004	.00015	.00003	.11861
#3	-.00440	-.00522	-.06386	.00004	-.00011	-.00009	.10883
#4	.00147	.01213	.13581	.00003	.00033	.00003	.11774
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	-.00105	.00117	.00129	.00587	.01921	-.27338	-.00032
SDev	.00361	.00267	.00268	.00173	.00288	.76689	.00058
%RSD	343.84	227.55	208.33	29.474	14.991	280.52	180.45
#1	-.00289	.00079	-.00043	.00440	.01639	-1.2016	-.00095
#2	.00160	.00233	.00529	.00775	.02133	.62393	.00040
#3	.00231	-.00234	.00014	.00440	.01709	-.47842	-.00060
#4	L-.00522	.00391	.00015	.00692	.02203	-.03748	-.00014
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	-.01225	.00027	.00153	.00413	-.00231	-.02721	-.04737
SDev	.02676	.00088	.00609	.00419	.00430	.04145	.02986
%RSD	218.49	320.10	399.36	101.33	185.96	152.34	63.029
#1	-.05035	.00027	-.00152	-.00141	-.00588	-.07927	-.02527
#2	.01225	.00027	-.00152	.00498	.00394	.02041	-.02523
#3	-.00680	-.00080	-.00152	.00423	-.00366	-.03415	L-.08843
#4	-.00408	.00135	.01066	.00873	-.00364	-.01583	-.05055
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	.02517	.05644	.00780	.00000	-.00024	.00706	-.00060
SDev	.03650	.03429	.01471	.00000	.00068	.04609	.00008
%RSD	145.05	60.767	188.51	.00000	288.03	652.72	13.196
#1	.03831	.00705	-.00210	.00000	-.00024	-.02204	-.00064
#2	.01441	.06914	.00323	.00000	.00008	-.03668	-.00063

#3	-.01908	.06349	.02963	.00000	-.00119	.06538	-.00064
#4	.06702	.08607	.00046	.00000	.00040	.02158	-.00048
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	.01003
SDev	.00136
%RSD	13.563
#1	.00811
#2	.01033
#3	.01131
#4	.01036
Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DV0HFC Operator: RJG
Run Time: 02/14/01 12:03:12
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04813	1.9378	1.9650	.95833	1.9778	.04872	L.04091
SDev	.00185	.0085	.0349	.02390	.0125	.00021	.00356
%RSD	3.8354	.43676	1.7766	2.4939	.63121	.44097	8.7066
#1	.04774	1.9428	1.9616	.93737	1.9747	.04864	L.04521
#2	.04777	1.9459	1.9197	.98108	1.9830	.04875	L.03649
#3	.04630	1.9357	1.9755	.97687	1.9913	.04901	L.04110
#4	.05070	1.9269	2.0035	.93801	1.9620	.04850	L.04085
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	.04349	.49263	.19718	.24537	1.0434	L.02205	.98661
SDev	.00464	.00129	.00165	.00137	.0023	.12645	.01173
%RSD	10.673	.26146	.83825	.55719	.22419	573.53	1.1889
#1	.04548	.49263	.19689	.24537	1.0404	L.18299	.98530
#2	L.03908	.49420	.19746	.24537	1.0439	L-.09921	.98683
#3	.04908	.49104	.19517	.24704	1.0460	L-.05512	1.0015
#4	.04032	.49265	.19918	.24369	1.0432	L.05953	.97283
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-.03062	.49234	.97927	L.01568	.50718	.47858	.46902
SDev	.01119	.00263	.01573	.00937	.01220	.00866	.00733
%RSD	36.560	.53380	1.6060	59.720	2.4052	1.8091	1.5638
#1	L-.01769	.48912	.96100	L.02864	.49019	.47630	.46266
#2	L-.02858	.49449	.99755	L.01624	.51581	.46728	.46268
#3	L-.03130	.49127	.97318	L.00761	.50645	.48534	.47536
#4	L-.04490	.49449	.98536	L.01024	.51627	.48539	.47538
Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9030	9.4740	1.9330	.97653	.97629	1.9183	.48811
SDev	.0395	.1197	.0098	.00506	.00352	.0677	.00265
%RSD	2.0758	1.2635	.50779	.51807	.36027	3.5272	.54226
#1	1.9305	9.3032	1.9216	.97458	.97297	1.8273	.48415
#2	1.9210	9.4839	1.9456	.97898	.97866	1.9147	.48960

#3	1.8444	9.5742	1.9323	.98206	.97992	1.9438	.48927
#4	1.9162	9.5347	1.9323	.97050	.97360	1.9875	.48944
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	.48299
SDev	.00140
%RSD	.29053
#1	.48189
#2	.48505
#3	.48252
#4	.48250
Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DVLXL Operator: RJG
Run Time: 02/14/01 12:06:20
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05475	2.2568	2.2480	1.1295	2.3019	.05655	.03831
SDev	.00254	.0091	.0769	.0243	.0072	.00018	.00441
%RSD	4.6434	.40104	3.4218	2.1520	.31361	.31217	11.525
#1	.05548	2.2634	2.2828	1.1099	2.2956	.05630	.04473
#2	.05108	2.2459	2.3155	1.1572	2.3118	.05656	.03533
#3	.05695	2.2650	2.1388	1.1084	2.3024	.05668	.03548
#4	.05550	2.2529	2.2550	1.1428	2.2976	.05667	.03771
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	.05104	.57197	.22811	.28504	1.2099	-.34173	1.1430
SDev	.00552	.00526	.00219	.00042	.0052	.51645	.0076
%RSD	10.815	.91876	.96034	.14730	.43357	151.13	.66431
#1	.04862	.57354	.22868	.28567	1.2106	.37700	1.1366
#2	.04775	.56573	.22640	.28482	1.2029	-.61952	1.1535
#3	.05930	.57038	.22640	.28483	1.2156	-.79589	1.1438
#4	.04848	.57821	.23097	.28483	1.2106	-.32850	1.1383
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	-.02041	.57290	.00320	.00845	.56505	.54314	-.01438
SDev	.00667	.00186	.00583	.00442	.00577	.00456	.00631
%RSD	32.660	.32412	182.14	52.258	1.0213	.84032	43.883
#1	-.01225	.57237	-.00137	.01211	.56262	.54998	-.00491
#2	-.02041	.57129	-.00137	.00723	.56501	.54071	-.01747
#3	-.02858	.57237	.00473	.01174	.55954	.54082	-.01761
#4	-.02041	.57558	.01082	.00272	.57303	.54104	-.01753
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	2.2921	.04902	.01415	1.1363	-.00008	2.2254	.57211
SDev	.0627	.02819	.01821	.0031	.00055	.0699	.00255
%RSD	2.7342	57.511	128.69	.27231	692.82	3.1424	.44640
#1	2.2610	.00808	.01152	1.1328	.00008	2.2763	.57081
#2	2.2706	.05323	-.00986	1.1403	-.00087	2.2911	.57081

#3	2.3854	.06452	.02213	1.1364	.00040	2.1452	.57089
#4	2.2515	.07023	.03280	1.1355	.00008	2.1889	.57595
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	.56429
SDev	.00256
%RSD	.45344
#1	.56160
#2	.56358
#3	.56426
#4	.56774
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVLXLP5 Operator: RJG
Run Time: 02/14/01 12:09:28
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01044	.46159	.48460	.23000	.46293	.01140	.00690
SDev	.00185	.00917	.04887	.00000	.00395	.00012	.00381
%RSD	17.686	1.9873	10.085	.00032	.85269	1.0230	55.195
#1	.01080	.46253	.53456	.23000	.45817	.01131	.01062
#2	.00787	.44849	.41850	.23000	.46778	.01144	.00306
#3	.01082	.46938	.50190	.23000	.46341	.01155	.00970
#4	.01227	.46597	.48341	.23000	.46235	.01131	.00423

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00957	.11946	.04585	.05647	.24692	-.24913	.22936
SDev	.00519	.00267	.00168	.00000	.00208	.24995	.00163
%RSD	54.151	2.2319	3.6725	.00501	.84089	100.33	.71192
#1	.00361	.12065	.04757	.05647	.24763	.03307	.22722
#2	.00850	.11596	.04356	.05646	.24410	-.57542	.23118
#3	.01619	.11905	.04585	.05647	.24692	-.21385	.22935
#4	.01000	.12219	.04642	.05647	.24904	-.24031	.22970

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01021	.11785	.00155	.00244	.12117	.09787	-.01418
SDev	.00465	.00053	.00352	.00675	.01000	.03168	.01203
%RSD	45.542	.45342	226.20	276.46	8.2507	32.369	84.873
#1	-.00408	.11811	-.00149	.00460	.10757	.05035	-.01121
#2	-.01497	.11812	.00460	-.00516	.11987	.11366	.00162
#3	-.01225	.11811	-.00149	.01061	.12967	.11369	-.02351
#4	-.00953	.11705	.00460	-.00028	.12757	.11377	-.02360

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50650	.00275	.02064	.22877	-.00008	.38964	.11493
SDev	.06946	.00461	.01719	.00180	.00032	.03469	.00246
%RSD	13.713	167.34	83.249	.78609	400.00	8.9022	2.1367
#1	.57465	.00838	.04065	.22656	.00008	.33864	.11365
#2	.43117	.00274	.00072	.23087	-.00055	.41156	.11373
#3	.55552	.00280	.01394	.22928	.00008	.39691	.11862
#4	.46466	-.00290	.02727	.22837	.00008	.41145	.11373

Elem	ZN
Units	ppm
Avge	.11788
SDev	.00125
%RSD	1.0582
#1	.11640
#2	.11892
#3	.11891

#4 .11728

Method: QUANMET Sample Name: DVLXLS Operator: RJG
Run Time: 02/14/01 12:12:36
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00148	-.00076	.01748	.00003	.00015	-.00009	.02537
SDev	.00318	.01669	.03872	.00001	.00047	.00010	.00761
%RSD	215.15	2206.6	221.58	16.349	301.96	110.12	29.973
#1	-.00294	-.01813	-.01726	.00003	.00015	-.00009	.02225
#2	-.00443	-.00583	.06172	.00002	-.00037	-.00008	.02235
#3	-.00150	-.00084	-.01267	.00003	.00007	-.00021	.02022
#4	.00295	.02178	.03811	.00003	.00076	.00003	.03669
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	-.00207	.00006	.00063	.00021	.01529	-.15212	-.00039
SDev	.00186	.00156	.00211	.00097	.00207	.50772	.00061
%RSD	89.775	2575.7	336.89	458.44	13.519	333.76	157.20
#1	-.00462	.00085	.00091	.00105	.01459	.02425	-.00052
#2	-.00018	.00083	-.00195	-.00063	.01319	-.62833	-.00087
#3	-.00202	-.00228	.00035	-.00063	.01530	-.48723	-.00068
#4	-.00148	.00084	.00320	.00105	.01810	.48283	.00050
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	-.03130	-.00021	.96239	.00545	-.00299	.00061	.43078
SDev	.01602	.00054	.00766	.00626	.00445	.02990	.03562
%RSD	51.199	254.86	.79640	114.90	148.73	4933.3	8.2693
#1	-.03130	.00059	.96087	-.00178	-.00235	.03004	.40558
#2	-.05307	-.00048	.95478	.00310	-.00737	-.03337	.40568
#3	-.02585	-.00047	.97305	.00761	-.00519	.02092	.43069
#4	-.01497	-.00048	.96087	.01286	.00293	-.01517	.48120
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	.03831	9.2311	1.8867	.00000	.96419	.05812	-.00406
SDev	.03049	.0865	.0405	.00000	.00277	.06778	.00474
%RSD	79.603	.93726	2.1441	.00000	.28769	116.62	116.81
#1	.06222	9.1168	1.8839	.00000	.96348	.13824	-.00283
#2	.03830	9.2127	1.8386	.00000	.96696	-.02196	-.00789

#3	.05744	9.2861	1.8867	.00000	.96569	.03631	-.00764
#4	-.00473	9.3087	1.9375	.00000	.96063	.07989	.00214
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	.00124
SDev	.00096
%RSD	77.515
#1	.00101
#2	.00034
#3	.00261
#4	.00101
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVLXLD Operator: RJG
Run Time: 02/14/01 12:15:45
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04627	1.9035	1.9921	.93928	1.9554	.04794	.07502
SDev	.00208	.0051	.0533	.00090	.0158	.00017	.00394
%RSD	4.5002	.26748	2.6743	.09542	.80674	.34719	5.2491
#1	.04332	1.9045	1.9295	.93949	1.9769	.04814	.07012
#2	.04774	1.9097	2.0595	.93949	1.9389	.04775	.07830
#3	.04629	1.9025	1.9851	.94013	1.9530	.04800	.07811
#4	.04773	1.8973	1.9945	.93802	1.9529	.04788	.07356
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	.04209	.48459	.19579	.24368	1.0386	-.06835	.97377
SDev	.00267	.00181	.00420	.00137	.0030	.57795	.01226
%RSD	6.3375	.37374	2.1443	.56074	.29057	845.63	1.2587
#1	.04156	.48302	.19236	.24536	1.0367	-.67243	.99168
#2	.03857	.48618	.19750	.24201	1.0367	.28881	.96411
#3	.04362	.48615	.20093	.24368	1.0430	.54456	.97081
#4	.04460	.48303	.19236	.24368	1.0381	-.43432	.96850
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	-.03470	.48598	1.1498	.01427	.48279	.45810	.53003
SDev	.01204	.00152	.0070	.00532	.00936	.02567	.02202
%RSD	34.708	.31188	.61172	37.301	1.9388	5.6031	4.1554
#1	-.04218	.48383	1.1437	.00685	.47261	.42182	.52380
#2	-.02313	.48704	1.1437	.01399	.48994	.47630	.56176
#3	-.02585	.48705	1.1559	.01850	.47710	.47623	.51077
#4	-.04763	.48598	1.1559	.01775	.49149	.45805	.52379
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9532	10.840	2.2246	.96525	1.1380	1.9257	.48229
SDev	.0239	.090	.0622	.00558	.0032	.0861	.00365
%RSD	1.2226	.83060	2.7947	.57758	.28468	4.4692	.75636
#1	1.9209	10.742	2.1692	.97286	1.1396	1.9585	.47786
#2	1.9544	10.793	2.1907	.95944	1.1333	1.7983	.48284

#3	1.9783	10.946	2.3105	.96424	1.1406	1.9876	.48673
#4	1.9592	10.878	2.2279	.96447	1.1384	1.9585	.48174
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	.47823
SDev	.00515
%RSD	1.0778
#1	.47067
#2	.48096
#3	.48196
#4	.47933
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-3 Operator: RJG
Run Time: 02/14/01 12:18:53
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98154	49.101	4.9689	4.8604	4.7925	4.7981	50.000
SDev	.00136	.315	.0415	.0191	.0475	.0316	.239
%RSD	.13893	.64104	.83422	.39396	.99072	.65917	.47847
#1	.97977	49.308	4.9554	4.8790	4.8272	4.8220	49.743
#2	.98271	49.262	5.0301	4.8748	4.8123	4.8089	50.017
#3	.98115	49.202	4.9519	4.8441	4.8082	4.8100	49.923
#4	.98251	48.634	4.9382	4.8436	4.7224	4.7515	50.315
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	4.9655	4.8500	4.8447	4.8118	50.617	48.283	4.8855
SDev	.0251	.0074	.0037	.0555	.135	.497	.0805
%RSD	.50558	.15280	.07627	1.1541	.26605	1.0299	1.6480
#1	4.9492	4.8453	4.8404	4.8499	50.676	48.280	4.9394
#2	4.9682	4.8468	4.8490	4.8323	50.712	48.254	4.9214
#3	4.9999	4.8467	4.8433	4.8357	50.662	48.906	4.9156
#4	4.9447	4.8611	4.8462	4.7293	50.417	47.689	4.7657
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	49.348	4.8411	4.8413	48.061	4.8395	4.9181	4.9306
SDev	.347	.0070	.0086	.648	.0376	.0443	.0962
%RSD	.70311	.14558	.17814	1.3490	.77669	.90078	1.9509
#1	49.635	4.8384	4.8352	48.505	4.7978	4.9131	4.8292
#2	49.466	4.8513	4.8535	48.326	4.8422	4.9135	5.0190
#3	49.447	4.8395	4.8413	48.315	4.8884	4.9767	4.8680
#4	48.843	4.8352	4.8352	47.097	4.8295	4.8690	5.0063
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	4.9275	4.7935	4.8699	4.7918	4.8233	9.6928	4.8404
SDev	.0593	.0315	.0464	.0421	.0245	.1023	.0153
%RSD	1.2034	.65688	.95177	.87809	.50848	1.0557	.31516
#1	4.9911	4.7485	4.9294	4.8217	4.8402	9.8231	4.8527
#2	4.8477	4.7993	4.8236	4.8101	4.8357	9.7208	4.8530

#3	4.9337	4.8217	4.8816	4.8060	4.8304	9.5903	4.8342
#4	4.9377	4.8046	4.8450	4.7295	4.7870	9.6368	4.8217
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	4.8948
SDev	.0137
%RSD	.27911
#1	4.8832
#2	4.8883
#3	4.8935
#4	4.9143
Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB3 Operator: RJG
Run Time: 02/14/01 12:22:02
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00256	-.01454	-.01849	.00000	-.00011	-.00007	.03473
SDev	.00074	.00864	.02287	.00001	.00000	.00007	.00234
%RSD	29.049	59.417	123.74	1612.9	.00000	100.23	6.7418
#1	-.00293	-.01582	-.02194	.00000	-.00011	.00003	.03659
#2	-.00293	-.02110	-.04513	-.00000	-.00011	-.00009	.03305
#3	-.00145	-.00200	-.01748	.00001	-.00011	-.00010	.03688
#4	-.00293	-.01925	.01061	-.00000	-.00011	-.00009	.03238
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	-.00019	-.00039	-.00143	-.00147	-.00018	-.26677	-.00066
SDev	.00249	.00197	.00195	.00153	.00147	.44439	.00031
%RSD	1341.1	506.01	136.36	104.21	830.76	166.58	47.292
#1	-.00191	-.00077	.00015	.00021	.00018	.33291	-.00079
#2	.00211	-.00079	-.00386	-.00230	-.00194	-.25795	-.00022
#3	.00179	-.00235	.00014	-.00063	.00159	-.41669	-.00068
#4	-.00273	.00235	-.00214	-.00314	-.00053	-.72534	-.00095
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	-.01225	.00001	.01827	-.00300	-.00083	-.00456	-.01902
SDev	.01315	.00053	.00304	.00321	.00619	.03571	.00734
%RSD	107.34	8483.1	16.666	106.74	742.17	783.75	38.572
#1	-.00136	.00027	.01675	.00047	.00822	-.03399	-.01262
#2	-.00953	-.00080	.02284	-.00592	-.00227	.01130	-.01271
#3	-.00680	.00027	.01675	-.00103	-.00565	.03840	-.02537
#4	-.03130	.00027	.01675	-.00554	-.00363	-.03393	-.02537
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	.03228	.00142	.00259	.00000	-.00016	.01093	.00086
SDev	.03793	.00463	.01116	.00000	.00040	.07744	.00247
%RSD	117.51	325.96	431.37	.00000	251.66	708.75	287.93
#1	.07174	-.00424	-.00205	.00000	-.00024	.12384	-.00040
#2	.04304	.00141	-.00472	.00000	-.00024	-.00726	-.00033

#3	-.01912	.00711	-.00211	.00000	.00040	-.02188	.00457
#4	.03348	.00141	.01922	.00000	-.00055	-.05100	-.00040
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	.00186
SDev	.00138
%RSD	74.454
#1	.00004
#2	.00236
#3	.00333
#4	.00170
Errors	LC Pass
High	.02000
Low	-.02000

VOID: Dilution prepared incorrectly RC 2140

Analysis Report 02/14/01 12:34:09 PM

Method: QUANMET Sample Name: DVWJE/2 Na Operator: RJG
Run Time: 02/14/01 12:31:03
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP 675 1451
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00122	.71330	-.01515	.05996	.09856	-.00009	31.938
SDev	.00207	.01077	.00664	.00001	.00058	.00000	.178
%RSD	170.27	1.5106	43.827	.01946	.59086	.11660	.55747
#1	-.00268	.70417	-.01508	.05995	.09810	-.00009	31.785
#2	.00172	.71984	-.01986	.05998	.09941	-.00009	32.184
#3	-.00122	.72505	-.01989	.05995	.09836	-.00009	31.952
#4	-.00268	.70413	-.00579	.05996	.09836	-.00009	31.832
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	-.00226	.00150	.00715	.02235	1.3430	1.8608	.00269
SDev	.00399	.00155	.00211	.00105	.0055	.2605	.00061
%RSD	176.38	103.55	29.489	4.7210	.40975	13.997	22.787
#1	.00076	.00383	.00987	.02382	1.3397	2.1760	.00279
#2	-.00452	.00073	.00701	.02214	1.3510	1.8938	.00317
#3	.00143	.00071	.00472	.02214	1.3390	1.5411	.00298
#4	L-.00671	.00073	.00701	.02130	1.3425	1.8321	.00180
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	7.5649	.40459	.00170	214.09	.00872	-.01208	-.02207
SDev	.0449	.00203	.00352	.88	.00518	.02723	.01204
%RSD	.59358	.50108	207.29	.41058	59.429	225.46	54.531
#1	7.5261	.40325	.00474	213.11	.00380	.02877	-.01275
#2	7.6296	.40754	-.00135	214.77	.00702	-.02568	-.01251
#3	7.5561	.40432	-.00135	213.59	.01600	-.02572	-.03776
#4	7.5479	.40325	.00474	214.90	.00806	-.02568	-.02528
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	-.00543	5.6782	-.00124	.12950	.01392	-.00134	-.00058
SDev	.02029	.0621	.02962	.00064	.00030	.07655	.00005
%RSD	373.71	1.0931	2398.2	.49039	2.1760	5722.6	8.5822
#1	-.02935	5.6062	.02213	.12870	.01400	-.04868	-.00054
#2	-.01497	5.7529	-.04451	.13024	.01431	-.04874	-.00062

#3	.01369	5.6965	.00603	.12947	.01368	.11161	-.00063
#4	.00892	5.6570	.01141	.12960	.01368	-.01955	-.00054
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	.09260
SDev	.00143
%RSD	1.5486
#1	.09337
#2	.09052
#3	.09371
#4	.09279
Errors	LC Pass
High	100.00
Low	-.02000

VCII) Diluted prepared incorrectly RJG 2/14/01

Analysis Report 02/14/01 12:37:17 PM

Method: QUANMET Sample Name: DVWJEP10 Na Operator: RJG
Run Time: 02/14/01 12:34:12
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP 675 1453
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00079	.14726	.00085	.00053	.02040	-.00004	6.5821
SDev	.00306	.01082	.02959	.00000	.00018	.00007	.0404
%RSD	385.98	7.3481	3501.5	.71850	.88086	211.21	.61407
#1	.00007	.14429	-.00961	.00053	.02042	.00002	6.5651
#2	.00152	.14782	.00901	.00053	.02042	.00003	6.5960
#3	-.00288	.13544	.03698	.00053	.02060	-.00009	6.5366
#4	.00447	.16149	-.03300	.00053	.02017	-.00010	6.6306

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00000	-.00040	.00129	.00338	.27954	.16756	.00097
SDev	.00036	.00149	.00229	.00209	.00121	.33753	.00096
%RSD	50792.	369.65	177.56	61.931	.43125	201.44	98.507
#1	.00016	.00077	.00243	.00443	.28007	.01543	.00096
#2	.00042	.00076	.00243	.00443	.27936	.26236	.00069
#3	-.00037	-.00079	-.00214	.00024	.27795	-.19622	-.00003
#4	-.00022	-.00235	.00243	.00443	.28077	.58865	.00226

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.5186	.08306	.00613	42.655	-.00541	-.01833	-.03480
SDev	.0121	.00054	.00914	.442	.00765	.03167	.02162
%RSD	.79475	.64585	149.11	1.0364	141.28	172.75	62.136
#1	1.5335	.08279	-.00149	42.678	-.01631	-.03419	-.06328
#2	1.5226	.08279	-.00149	42.849	.00155	-.03412	-.01257
#3	1.5118	.08280	.01679	43.059	-.00394	-.03419	-.03792
#4	1.5063	.08387	.01070	42.035	-.00295	.02917	-.02542

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04390	1.1670	.00189	.02655	.00308	.00108	.00164
SDev	.01610	.0057	.02368	.00040	.00055	.06664	.00255
%RSD	36.676	.48513	1250.4	1.5107	17.765	6196.4	156.22
#1	.06303	1.1698	.00844	.02649	.00293	-.09728	.00309
#2	.02477	1.1698	-.01801	.02698	.00293	.01929	-.00063
#3	.03912	1.1585	-.01545	.02671	.00261	.03389	-.00040
#4	.04869	1.1698	.03259	.02603	.00387	.04841	.00449

Elem	ZN
Units	ppm
Avge	.02001
SDev	.00130
%RSD	6.4853
#1	.01844
#2	.01997
#3	.02001

#4	.02162

VCID Dilution prepared incorrectly RK 2/4/01

Method: QUANMET Sample Name: DVWJES/2 Na Operator: RJG
Run Time: 02/14/01 12:37:20
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP 675 1455
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01888	1.8621	.90019	.46164	.95137	.02160	54.489
SDev	.00001	.0087	.05891	.00179	.00587	.00011	.319
%RSD	.05687	.46911	6.5439	.38889	.61721	.49952	.58543
#1	.01888	1.8647	.93849	.46254	.95200	.02160	54.482
#2	.01886	1.8717	.88739	.45895	.95681	.02174	54.047
#3	.01888	1.8507	.82242	.46254	.94309	.02147	54.782
#4	.01888	1.8612	.95244	.46254	.95357	.02160	54.644
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	.01957	.21678	.09351	.13044	1.8254	24.362	.43982
SDev	.00376	.00266	.00029	.00097	.0024	.190	.00588
%RSD	19.188	1.2262	.30537	.74096	.13001	.77996	1.3361
#1	.01974	.21795	.09394	.12961	1.8268	24.135	.43646
#2	.01497	.21329	.09337	.13128	1.8219	24.276	.44662
#3	.02416	.21639	.09337	.12961	1.8261	24.505	.43361
#4	.01943	.21951	.09337	.13129	1.8268	24.532	.44258
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.555	.62275	.42813	238.51	.21809	.19680	.18731
SDev	.087	.00203	.00352	2.09	.00351	.01284	.00012
%RSD	.29471	.32568	.82144	.87631	1.6092	6.5231	.06189
#1	29.540	.62409	.42509	238.50	.22112	.18777	.18732
#2	29.602	.61981	.42509	240.74	.22105	.19670	.18744
#3	29.439	.62302	.43118	235.72	.21438	.18774	.18732
#4	29.638	.62409	.43118	239.08	.21580	.21498	.18716
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	.91189	10.404	.86338	.55233	.43774	.88384	.21717
SDev	.03416	.047	.04262	.00273	.00145	.09555	.00238
%RSD	3.7461	.45511	4.9360	.49414	.33046	10.811	1.0983
#1	.93341	10.373	.88004	.55238	.43845	.74543	.21744
#2	.86166	10.384	.81872	.55488	.43813	.96403	.21372

#3	.93341	10.384	.84006	.54853	.43560	.90568	.21876
#4	.91907	10.474	.91469	.55352	.43876	.92022	.21876
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	.30407
SDev	.00260
%RSD	.85336
#1	.30416
#2	.30187
#3	.30769
#4	.30257
Errors	LC Pass
High	100.00
Low	-.02000

VCID · Dilution prepared incorrectly RJG 2/14/01

Analysis Report 02/14/01 12:45:50 PM

Method: QUANMET Sample Name: DVWJED/2 Na Operator: RJG
Run Time: 02/14/01 12:42:44
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP 675 1457
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01889	1.8820	.88489	.46292	.96526	.02201	54.411
SDev	.00239	.0109	.04241	.00074	.00920	.00012	.249
%RSD	12.670	.57872	4.7931	.16067	.95317	.55206	.45687
#1	.01889	1.8979	.82204	.46256	.96668	.02211	54.457
#2	.01888	1.8801	.91047	.46254	.96187	.02185	54.468
#3	.01596	1.8768	.91049	.46404	.97716	.02210	54.064
#4	.02182	1.8734	.89658	.46254	.95532	.02198	54.655
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	.01975	.21794	.09365	.14636	1.8330	24.121	.44905
SDev	.00175	.00254	.00212	.00205	.0053	.286	.00700
%RSD	8.8451	1.1672	2.2591	1.4007	.29041	1.1875	1.5580
#1	.01885	.21794	.09165	.14385	1.8381	24.399	.44764
#2	.01785	.21483	.09452	.14803	1.8268	23.720	.44570
#3	.02052	.21793	.09223	.14804	1.8367	24.170	.45924
#4	.02179	.22106	.09623	.14553	1.8304	24.196	.44360
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	29.632	.62490	.42966	239.40	.22682	.20814	.19367
SDev	.157	.00053	.01351	3.18	.00315	.03496	.02410
%RSD	.53006	.08528	3.1434	1.3288	1.3878	16.796	12.445
#1	29.594	.62516	.41291	239.04	.23018	.18772	.17487
#2	29.564	.62517	.44336	238.16	.22877	.19675	.19990
#3	29.861	.62410	.43727	243.90	.22366	.26020	.17474
#4	29.507	.62516	.42509	236.49	.22466	.18790	.22517
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	.92745	10.497	.87538	.55911	.44477	.83276	.21874
SDev	.07161	.030	.01583	.00445	.00181	.12245	.00018
%RSD	7.7214	.28791	1.8084	.79585	.40643	14.704	.08208
#1	.88084	10.480	.87996	.55941	.44541	.99295	.21852
#2	.99558	10.485	.87741	.55696	.44382	.84743	.21892

#3	.98127	10.542	.85330	.56517	.44699	.78901	.21884
#4	.85212	10.480	.89084	.55488	.44288	.70166	.21869
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	.31975
SDev	.00354
%RSD	1.1077
#1	.31694
#2	.32431
#3	.32082
#4	.31695
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDM8/5 Na Operator: RJG
Run Time: 02/14/01 12:47:26
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00086	5.9342	.03395	.02812	.04050	.00020	5.7243
SDev	.00141	.0274	.03060	.00216	.00051	.00007	.0248
%RSD	164.08	.46233	90.130	7.6799	1.2694	36.368	.43261
#1	-.00269	5.9460	.04432	.02608	.04008	.00014	5.6953
#2	.00024	5.9286	.00727	.02758	.04070	.00026	5.7282
#3	.00025	5.9634	.01163	.02762	.04113	.00026	5.7186
#4	-.00122	5.8990	.07256	.03117	.04008	.00014	5.7551
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00187	.00342	.00672	.03536	7.1362	1.2765	.00615
SDev	.00103	.00197	.00099	.00000	.0116	.1973	.00083
%RSD	55.119	57.535	14.752	.00366	.16294	15.458	13.530
#1	-.00120	.00381	.00701	.03536	7.1235	1.0649	.00500
#2	-.00235	.00381	.00758	.03536	7.1348	1.2677	.00656
#3	-.00085	.00068	.00529	.03536	7.1517	1.2324	.00611
#4	-.00308	.00537	.00701	.03536	7.1348	1.5411	.00691
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.1160	.33739	.01463	248.02	.00871	-.03501	-.02846
SDev	.0112	.00175	.00352	1.53	.00660	.00519	.00630
%RSD	.36010	.51900	24.040	.61739	75.732	14.820	22.122
#1	3.1147	.33524	.01158	248.49	.01068	-.03955	-.03791
#2	3.1038	.33739	.01767	248.28	.01233	-.03046	-.02528
#3	3.1310	.33739	.01158	249.46	.01293	-.03057	-.02525
#4	3.1147	.33953	.01767	245.86	-.00108	-.03946	-.02541
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	-.01269	8.2789	.00296	.03682	.05132	.01206	.00952
SDev	.03367	.0056	.00553	.00007	.00058	.05881	.00005
%RSD	265.24	.06818	186.56	.18113	1.1253	487.82	.50378
#1	-.02588	8.2817	.00959	.03678	.05068	.04496	.00948
#2	.03632	8.2817	-.00369	.03678	.05195	-.01343	.00956

#3	-.04014	8.2817	.00431	.03692	.05163	-.05729	.00947
#4	-.02107	8.2704	.00164	.03678	.05100	.07398	.00956
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	.01972
SDev	.00102
%RSD	5.1659
#1	.01858
#2	.02018
#3	.01923
#4	.02089
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVDNPF/10 Na Operator: RJG
Run Time: 02/14/01 12:50:34
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00034	3.8567	.03108	-.01064	.02505	.00014	3.3680
SDev	.00348	.0166	.05186	.00004	.00047	.00010	.0315
%RSD	1019.3	.42941	166.87	.34725	1.8582	70.396	.93558
#1	.00398	3.8458	.03590	-.01070	.02453	.00002	3.3670
#2	-.00332	3.8788	-.02023	-.01063	.02566	.00014	3.3246
#3	.00255	3.8424	.10087	-.01063	.02497	.00026	3.3977
#4	-.00185	3.8597	.00778	-.01061	.02505	.00014	3.3826
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	.00093	.00266	.00357	.02333	4.4394	.75400	.00359
SDev	.00148	.00149	.00168	.00153	.0200	.49711	.00095
%RSD	160.35	55.969	47.134	6.5676	.45126	65.930	26.366
#1	-.00078	.00228	.00243	.02165	4.4107	.43873	.00382
#2	.00094	.00072	.00185	.02249	4.4438	.23590	.00234
#3	.00070	.00383	.00471	.02417	4.4459	1.2853	.00462
#4	.00284	.00383	.00529	.02501	4.4572	1.0560	.00360
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8887	.20038	.00057	139.35	.00372	-.03301	-.01583
SDev	.0225	.00053	.00304	2.22	.00589	.05562	.00622
%RSD	1.1911	.26706	530.33	1.5909	158.33	168.53	39.264
#1	1.8628	.20064	.00514	138.17	-.00130	-.03753	-.01279
#2	1.8792	.19958	-.00095	142.40	-.00025	L-.10100	-.01274
#3	1.8982	.20065	-.00095	137.34	.00485	-.02843	-.01265
#4	1.9145	.20065	-.00095	139.51	.01158	.03494	-.02516
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	.03639	5.6402	.02393	.02245	.03250	-.01645	.00808
SDev	.04447	.0452	.01816	.00026	.00055	.06214	.00244
%RSD	122.20	.80110	75.900	1.1664	1.6857	377.68	30.234
#1	-.02467	5.5724	.03860	.02222	.03297	-.04159	.00442
#2	.03760	5.6628	.03861	.02267	.03202	-.08570	.00930

#3	.08065	5.6628	.01728	.02222	.03297	.05994	.00931
#4	.05199	5.6628	.00124	.02267	.03202	.00154	.00931
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	.01423
SDev	.00100
%RSD	7.0511
#1	.01379
#2	.01409
#3	.01567
#4	.01338
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVWJE/2 Na Rerun Operator: RJG
Run Time: 02/14/01 12:54:57
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00228	.80015	.01882	.06028	.11129	-.00006	35.623
SDev	.00221	.00382	.02229	.00001	.00047	.00006	.401
%RSD	96.791	.47743	118.42	.01215	.42632	89.548	1.1260
#1	-.00412	.79797	.03977	.06027	.11147	-.00009	35.244
#2	-.00119	.80136	-.01137	.06028	.11165	-.00009	35.516
#3	.00030	.79633	.03041	.06027	.11059	.00002	36.190
#4	-.00412	.80494	.01648	.06028	.11147	-.00009	35.540
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	.00037	-.00163	.00915	.02530	1.5082	2.0834	.00275
SDev	.00078	.00485	.00338	.00081	.0017	.4619	.00029
%RSD	214.81	296.53	36.914	3.1839	.11453	22.169	10.571
#1	.00060	-.00241	.00701	.02467	1.5061	1.8321	.00242
#2	-.00040	-.00397	.00930	.02467	1.5096	1.8762	.00290
#3	.00136	.00538	.01387	.02635	1.5096	2.7757	.00306
#4	-.00010	-.00553	.00644	.02550	1.5075	1.8497	.00261
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.5501	.45282	.00324	244.64	.00867	.00135	-.00955
SDev	.0171	.00281	.00583	2.49	.00526	.03063	.01210
%RSD	.20025	.62169	179.97	1.0188	60.695	2264.0	126.79
#1	8.5304	.45041	.00476	245.97	.00559	.01039	-.01273
#2	8.5412	.45149	.01085	245.38	.01444	-.00775	-.00012
#3	8.5657	.45684	-.00133	240.94	.01160	.03779	-.00000
#4	8.5630	.45255	-.00133	246.25	.00304	-.03501	-.02534
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	.05845	6.3823	.01950	.14705	.01534	-.01741	.00068
SDev	.00986	.0434	.01213	.00045	.00030	.03003	.00245
%RSD	16.869	.67947	62.186	.30409	1.9741	172.51	358.05
#1	.05246	6.3174	.01949	.14729	.01494	-.05016	-.00054
#2	.06682	6.4020	.03554	.14725	.01526	.02266	-.00046

#3	.04769	6.4077	.00621	.14638	.01558	-.02112	.00436
#4	.06681	6.4020	.01677	.14729	.01558	-.02100	-.00062
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	.10220
SDev	.00105
%RSD	1.0242
#1	.10110
#2	.10362
#3	.10204
#4	.10205
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVWJEP10 Na Rerun Operator: RJG
Run Time: 02/14/01 12:58:05
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00029	.16857	.02501	.00060	.02309	.00002	7.5133
SDev	.00140	.00378	.02092	.00001	.00029	.00000	.0830
%RSD	480.54	2.2403	83.674	.91369	1.2472	16.515	1.1042
#1	-.00139	.17207	.05052	.00060	.02348	.00002	7.4650
#2	.00155	.16855	.02731	.00060	.02304	.00002	7.6373
#3	-.00139	.16333	-.00052	.00059	.02304	.00002	7.4814
#4	.00006	.17034	.02271	.00059	.02279	.00003	7.4695

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00081	.00038	.00243	.00611	.31743	.67022	.00087
SDev	.00249	.00077	.00114	.00068	.00258	.26273	.00062
%RSD	306.57	205.31	47.122	11.206	.81120	39.200	71.722
#1	-.00428	-.00078	.00071	.00527	.31884	.65920	.00059
#2	-.00087	.00077	.00300	.00695	.32025	1.0296	.00169
#3	.00053	.00076	.00300	.00611	.31602	.58865	.00024
#4	.00137	.00076	.00300	.00611	.31461	.40346	.00096

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.7635	.09485	.00309	48.835	.00117	-.00021	-.02528
SDev	.0138	.00103	.00304	.360	.00652	.02705	.01027
%RSD	.78183	1.0808	98.667	.73692	558.46	13162.	40.612
#1	1.7757	.09565	-.00148	49.257	-.00767	.01110	-.01273
#2	1.7594	.09566	.00461	48.378	.00528	-.03418	-.03788
#3	1.7730	.09351	.00461	48.835	.00027	.02925	-.02530
#4	1.7458	.09458	.00461	48.871	.00679	-.00699	-.02521

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03685	1.3279	.01127	.03047	.00348	-.02114	.00346
SDev	.05758	.0080	.00898	.00007	.00040	.06109	.00185
%RSD	156.29	.60037	79.643	.21887	11.439	289.01	53.416
#1	-.00380	1.3166	.01665	.03057	.00356	-.11219	.00433
#2	.05359	1.3279	.01655	.03043	.00387	.00432	.00441
#3	-.01337	1.3335	.01394	.03043	.00293	.01892	.00441
#4	.11096	1.3335	-.00206	.03043	.00356	.00440	.00069

Elem	ZN
Units	ppm
Avge	.02495
SDev	.00160
%RSD	6.4110
#1	.02418
#2	.02735
#3	.02415

#4 .02411

Method: QUANMET Sample Name: DVWJES/2 Na Rerun Operator: RJG
Run Time: 02/14/01 13:01:13
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02124	2.1197	.97067	.51950	1.0809	.02474	61.744
SDev	.00146	.0057	.05933	.00180	.0071	.00012	.209
%RSD	6.8981	.26911	6.1125	.34749	.65303	.49103	.33829
#1	.02344	2.1126	.97306	.51679	1.0704	.02458	61.684
#2	.02051	2.1198	1.0473	.52040	1.0844	.02484	61.634
#3	.02051	2.1197	.90329	.52040	1.0838	.02471	62.053
#4	.02051	2.1266	.95900	.52040	1.0852	.02484	61.604
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	.01932	.24237	.10467	.14746	2.0725	27.550	.50334
SDev	.00253	.00149	.00109	.00042	.0063	.140	.00422
%RSD	13.119	.61312	1.0367	.28365	.30379	.50907	.83933
#1	.01679	.24121	.10538	.14725	2.0632	27.380	.49718
#2	.01752	.24276	.10309	.14725	2.0745	27.706	.50542
#3	.02181	.24430	.10538	.14725	2.0766	27.503	.50413
#4	.02117	.24119	.10481	.14809	2.0759	27.609	.50661
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	33.578	.70582	.48298	272.59	.25044	.25622	.26282
SDev	.125	.00237	.01055	2.10	.00349	.00521	.01038
%RSD	.37305	.33639	2.1843	.77068	1.3946	2.0339	3.9479
#1	33.402	.70234	.49212	269.62	.24843	.26071	.25010
#2	33.690	.70662	.46776	273.72	.24671	.26076	.26286
#3	33.636	.70770	.48603	272.69	.25226	.25176	.27552
#4	33.587	.70663	.48603	274.35	.25435	.25166	.26280
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0525	11.822	.96484	.62966	.49878	.96866	.24429
SDev	.0257	.045	.02111	.00369	.00226	.08617	.00014
%RSD	2.4419	.37870	2.1884	.58539	.45248	8.8961	.05797
#1	1.0824	11.756	.97612	.62417	.49569	.91776	.24442
#2	1.0585	11.846	.97083	.63156	.49886	1.0342	.24409

#3	1.0490	11.835	.93356	.63088	.50107	.87392	.24433
#4	1.0203	11.852	.97883	.63202	.49949	1.0488	.24433
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	.34838
SDev	.00497
%RSD	1.4254
#1	.34202
#2	.35234
#3	.35232
#4	.34682
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVWJED/2 Na Rerun Operator: RJG
Run Time: 02/14/01 13:04:22
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02198	2.1318	1.0379	.52038	1.0900	.02505	61.415
SDev	.00318	.0081	.1268	.00001	.0090	.00019	.262
%RSD	14.450	.37968	12.218	.00212	.82974	.76376	.42726
#1	.02493	2.1370	1.0750	.52038	1.0844	.02483	61.595
#2	.02197	2.1249	.95438	.52037	1.0822	.02496	61.324
#3	.02346	2.1404	1.2004	.52038	1.0914	.02521	61.655
#4	.01758	2.1250	.92184	.52040	1.1023	.02522	61.086
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	.02245	.24351	.10509	.16588	2.0690	27.519	.50919
SDev	.00465	.00298	.00212	.00277	.0045	.454	.00630
%RSD	20.711	1.2220	2.0121	1.6677	.21827	1.6483	1.2382
#1	.02631	.24584	.10767	.16400	2.0681	27.548	.50421
#2	.01966	.24275	.10366	.16316	2.0632	26.868	.50760
#3	.02646	.24584	.10595	.16735	2.0710	27.821	.50653
#4	.01735	.23962	.10309	.16902	2.0738	27.839	.51840
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	33.488	.70448	.48451	271.52	.24774	.25624	.25641
SDev	.217	.00175	.00766	2.93	.00533	.00915	.02186
%RSD	.64933	.24844	1.5819	1.0784	2.1522	3.5723	8.5251
#1	33.423	.70448	.48603	269.58	.25174	.26085	.27533
#2	33.217	.70234	.48603	269.06	.24544	.26076	.26273
#3	33.595	.70663	.49212	271.96	.25248	.26083	.26273
#4	33.717	.70448	.47385	275.48	.24130	.24251	.22485
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0788	11.842	.99211	.63371	.50495	.98323	.24680
SDev	.0482	.080	.01113	.00442	.00207	.05387	.00294
%RSD	4.4685	.67450	1.1219	.69779	.41034	5.4794	1.1918
#1	1.0776	11.773	1.0055	.63098	.50423	.97592	.24930
#2	1.0633	11.773	.97882	.62930	.50234	.99059	.24433

#3	1.0298	11.914	.99480	.63551	.50676	.91763	.24938
#4	1.1446	11.908	.98931	.63904	.50645	1.0488	.24417
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	.36014
SDev	.00318
%RSD	.88307
#1	.36192
#2	.35644
#3	.36351
#4	.35869
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-4 Operator: RJG
Run Time: 02/14/01 13:07:30
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99382	50.187	5.0767	4.9577	4.9148	4.9268	50.479
SDev	.00141	.167	.0971	.0196	.0295	.0181	.248
%RSD	.14175	.33187	1.9133	.39532	.59963	.36724	.49075
#1	.99346	50.269	5.0482	4.9604	4.9304	4.9408	50.400
#2	.99490	50.040	5.0640	4.9313	4.8932	4.9095	50.639
#3	.99494	50.058	5.2124	4.9604	4.8870	4.9129	50.712
#4	.99197	50.383	4.9823	4.9787	4.9484	4.9440	50.166
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	5.0318	4.9178	4.9000	4.9420	51.471	50.205	5.0406
SDev	.0138	.0140	.0094	.0348	.039	.165	.0482
%RSD	.27493	.28479	.19125	.70434	.07514	.32936	.95595
#1	5.0343	4.9322	4.8988	4.9632	51.512	50.115	5.0657
#2	5.0477	4.9260	4.9062	4.9104	51.424	50.018	4.9979
#3	5.0311	4.9120	4.9079	4.9146	51.490	50.335	5.0026
#4	5.0141	4.9011	4.8873	4.9799	51.456	50.353	5.0960
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	50.468	4.9115	4.9237	49.559	4.9400	4.9735	5.0381
SDev	.173	.0059	.0176	.429	.0289	.0280	.0217
%RSD	.34227	.11951	.35703	.86575	.58547	.56388	.43085
#1	50.598	4.9126	4.9023	49.838	4.9199	4.9964	5.0193
#2	50.269	4.9158	4.9450	49.171	4.9504	4.9330	5.0316
#3	50.378	4.9147	4.9267	49.215	4.9761	4.9870	5.0321
#4	50.626	4.9029	4.9206	50.012	4.9136	4.9774	5.0695
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	5.0127	4.8594	4.9615	4.9239	4.9224	9.9920	4.9217
SDev	.0151	.0398	.0569	.0236	.0132	.1452	.0030
%RSD	.30036	.81881	1.1468	.47965	.26787	1.4530	.06025
#1	5.0032	4.8227	4.9034	4.9366	4.9316	9.9004	4.9208
#2	5.0317	4.8283	5.0395	4.9058	4.9078	10.003	4.9201

#3	5.0175	4.8848	4.9461	4.9023	4.9148	9.8717	4.9261
#4	4.9983	4.9017	4.9569	4.9507	4.9354	10.193	4.9197
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	4.9744
SDev	.0112
%RSD	.22583
#1	4.9881
#2	4.9788
#3	4.9675
#4	4.9632
Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB4 Operator: RJG
Run Time: 02/14/01 13:10:38
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00256	.00025	.03019	.00000	.00004	.00012	-.00612
SDev	.00074	.00672	.02116	.00000	.00021	.00015	.00377
%RSD	29.055	2673.7	70.084	163.72	459.52	120.27	61.563
#1	-.00145	-.00202	.01969	-.00000	.00033	.00027	-.00115
#2	-.00296	-.00362	.01521	.00001	-.00011	-.00008	-.01026
#3	-.00291	.01027	.06142	.00000	.00007	.00015	-.00609
#4	-.00293	-.00363	.02443	.00000	-.00011	.00016	-.00696
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	.00032	-.00039	-.00071	-.00042	.00088	-.23811	-.00044
SDev	.00321	.00235	.00266	.00080	.00129	.43031	.00082
%RSD	996.96	599.91	373.55	191.84	146.08	180.72	186.86
#1	.00138	.00078	.00015	.00021	-.00053	.30645	.00059
#2	.00408	-.00391	-.00443	-.00147	.00018	-.69007	-.00079
#3	-.00065	.00078	.00186	.00021	.00229	-.12567	-.00022
#4	-.00352	.00079	-.00043	-.00063	.00159	-.44314	-.00133
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	-.00884	-.00053	.01675	.00394	-.00346	-.02722	-.02537
SDev	.01797	.00053	.00497	.00585	.00225	.03873	.01027
%RSD	203.13	100.88	29.690	148.44	65.097	142.29	40.471
#1	.01225	-.00080	.02284	.00423	-.00377	.02944	-.01280
#2	-.01769	-.00080	.01675	-.00291	-.00108	-.05222	-.02535
#3	-.00136	.00027	.01066	.01136	-.00641	-.03401	-.03795
#4	-.02858	-.00080	.01675	.00310	-.00258	-.05210	-.02537
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	.02033	-.00422	.00922	.00000	.00016	-.02551	.00084
SDev	.03345	.01036	.01164	.00000	.00040	.09903	.00476
%RSD	164.54	245.25	126.14	.00000	251.66	388.21	566.63
#1	.03826	.00147	.01927	.00000	.00008	.08009	.00465
#2	.01435	-.01558	.01123	.00000	-.00024	-.12377	-.00537

#3	.05261	.00711	-.00749	.00000	.00071	.03636	.00449
#4	-.02391	-.00988	.01389	.00000	.00008	-.09472	-.00040
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	.00146
SDev	.00246
%RSD	168.82
#1	.00493
#2	-.00089
#3	.00077
#4	.00103
Errors	LC Pass
High	.02000
Low	-.02000

VOID Rerun for verification

Analysis Report RB 2/14/01 02/14/01 01:18:10 PM page 1

Method: QUANMET Sample Name: DVDM8/5 Na Rerun Operator: RJG
Run Time: 02/14/01 13:15:04
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP 675 1475
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00035	6.4063	.00522	.03018	.04288	.00029	6.0962
SDev	.00189	.0121	.00798	.00227	.00000	.00012	.0368
%RSD	541.24	.18930	152.68	7.5302	.00000	42.508	.60316
#1	.00038	6.3910	-.00160	.02787	.04288	.00013	6.0650
#2	-.00254	6.4067	-.00177	.03217	.04288	.00038	6.0916
#3	-.00108	6.4207	.01205	.02859	.04288	.00038	6.1489
#4	.00185	6.4067	.01221	.03210	.04288	.00025	6.0793
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	-.00167	.00614	.00886	.03961	7.6467	1.5521	.00637
SDev	.00401	.00200	.00098	.00119	.0269	.4249	.00064
%RSD	239.41	32.605	11.014	3.0005	.35220	27.373	10.062
#1	L-.00599	.00381	.00872	.03793	7.6206	1.0560	.00619
#2	-.00332	.00536	.00929	.04045	7.6643	1.8409	.00554
#3	.00343	.00846	.00986	.04045	7.6749	1.9644	.00691
#4	-.00081	.00691	.00758	.03961	7.6269	1.3471	.00683
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.3181	.35867	.01165	257.76	.00468	.00764	-.03799
SDev	.0139	.00103	.00497	1.01	.00587	.03168	.02524
%RSD	.42021	.28661	42.676	.39125	125.36	414.68	66.450
#1	3.3025	.35786	.01164	257.26	-.00146	.02346	-.02543
#2	3.3324	.35788	.01165	258.77	.00174	.02341	L-.07585
#3	3.3106	.36002	.00556	256.60	.00641	.02355	-.02535
#4	3.3270	.35894	.01774	258.41	.01203	-.03987	-.02531
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	.07138	8.8942	.01833	.03912	.05527	.01362	.01445
SDev	.05831	.0286	.00914	.00011	.00018	.09482	.00006
%RSD	81.695	.32151	49.875	.27699	.33038	696.19	.43916
#1	.13825	8.8744	.01505	.03914	.05511	.02486	.01445
#2	.05708	8.8857	.00951	.03918	.05511	-.12133	.01445

#3	.09059	8.9365	.03105	.03918	.05543	.05335	.01437
#4	-.00042	8.8801	.01771	.03896	.05543	.09760	.01452
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	.02144
SDev	.00145
%RSD	6.7841
#1	.01953
#2	.02272
#3	.02110
#4	.02241
Errors	LC Pass
High	100.00
Low	-.02000

XID Rerun for verification 675 1477

Analysis Report RE 2/14 CJ 02/14/01 01:21:19 PM page 1

Method: QUANMET Sample Name: DVDNPF/10 Na Rerun Operator: RJG
Run Time: 02/14/01 13:18:13
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00077	3.8327	.04874	.01391	.02460	.00014	3.3372
SDev	.00251	.0231	.00686	.01659	.00013	.00010	.0174
%RSD	326.08	.60284	14.071	119.26	.52233	69.114	.52123
#1	-.00041	3.8110	.04082	.01950	.02453	.00015	3.3298
#2	.00254	3.8597	.05428	.02164	.02479	.00026	3.3633
#3	-.00188	3.8441	.04520	.02522	.02453	.00002	3.3275
#4	-.00333	3.8162	.05466	-.01072	.02453	.00014	3.3283
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	-.00217	.00189	.00357	.02291	4.4137	.66581	.00394
SDev	.00267	.00267	.00284	.00108	.0142	.46119	.00117
%RSD	123.14	140.94	79.504	4.7271	.32118	69.267	29.551
#1	-.00083	.00228	.00415	.02249	4.4121	.35936	.00390
#2	L-.00613	.00541	.00700	.02417	4.4290	1.1971	.00538
#3	-.00135	.00072	.00014	.02165	4.4184	.20944	.00252
#4	-.00037	-.00084	.00300	.02332	4.3952	.89731	.00398
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8798	.19904	.00514	138.46	.00767	-.03755	-.02841
SDev	.0134	.00062	.00497	.62	.00599	.00006	.00634
%RSD	.71291	.31233	96.798	.45003	78.140	.15529	22.297
#1	1.8683	.19958	.01123	138.61	.01158	-.03754	-.03791
#2	1.8928	.19958	.00514	138.24	.00162	-.03747	-.02530
#3	1.8683	.19850	.00514	139.23	.00356	-.03759	-.02527
#4	1.8900	.19850	-.00095	137.75	.01390	-.03760	-.02516
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	.00881	5.6627	.01255	.02242	.03242	-.03072	.00690
SDev	.02436	.0000	.01115	.00020	.00060	.08090	.00282
%RSD	276.46	.00059	88.915	.90019	1.8468	263.32	40.916
#1	.00881	5.6627	.02784	.02241	.03202	.03122	.00450
#2	-.02462	5.6628	.00123	.02267	.03329	.04554	.00939

#3	.03274	5.6627	.00923	.02241	.03234	-.11452	.00441
#4	.01832	5.6628	.01189	.02218	.03202	-.08514	.00930
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	.01301
SDev	.00107
%RSD	8.2494
#1	.01403
#2	.01313
#3	.01151
#4	.01338
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DV1V9B Operator: RJG
Run Time: 02/14/01 13:21:21
Comment: STL PITTSBURGH 'ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00147	.00994	.01619	.00001	.00015	-.00009	.03083
SDev	.00120	.00994	.03380	.00001	.00021	.00000	.00230
%RSD	81.628	99.979	208.80	37.345	138.36	.09582	7.4663
#1	-.00000	.01906	.03819	.00002	.00007	-.00009	.03208
#2	-.00293	-.00348	.00584	.00001	.00033	-.00009	.02739
#3	-.00147	.01554	-.02684	.00001	.00033	-.00009	.03170
#4	-.00147	.00865	.04756	.00002	-.00011	-.00009	.03213
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	-.00124	-.00039	.00100	-.00042	.00723	-.25354	.00007
SDev	.00217	.00196	.00136	.00042	.00129	.22547	.00052
%RSD	174.91	508.06	135.84	100.03	17.832	88.928	764.82
#1	-.00415	-.00233	-.00043	-.00063	.00793	.00661	-.00049
#2	-.00111	.00234	.00243	-.00063	.00581	-.34614	-.00025
#3	-.00076	-.00078	.00186	.00021	.00652	-.16094	.00050
#4	.00107	-.00078	.00014	-.00063	.00864	-.51369	.00050
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	-.00953	.00000	.00609	.00516	.00102	-.00230	-.01581
SDev	.00770	.00053	.00304	.00502	.00345	.03666	.01888
%RSD	80.812	13529.	49.991	97.303	337.77	1590.8	119.42
#1	-.00408	.00027	.00457	.01024	.00446	-.03408	-.02519
#2	-.00953	.00027	.00457	-.00066	-.00114	.02952	.01251
#3	-.00408	-.00080	.01066	.00272	-.00265	.02937	-.02529
#4	-.02041	.00027	.00457	.00836	.00341	-.03403	-.02526
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	.04067	.00705	.00127	.00000	-.00024	-.00008	-.00054
SDev	.03415	.00798	.02017	.00000	.00045	.04369	.00004
%RSD	83.965	113.24	1589.5	.00000	188.56	57752.	7.7329
#1	-.00476	.01269	-.01277	.00000	.00008	-.05105	-.00056
#2	.05262	-.00424	.02471	.00000	-.00087	.03634	-.00055

#3	.07654	.00705	-.01810	.00000	-.00024	-.02192	-.00048
#4	.03829	.01269	.01123	.00000	.00008	.03633	-.00056
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	.00305
SDev	.00072
%RSD	23.755
#1	.00233
#2	.00263
#3	.00395
#4	.00327
Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DV1V9C Operator: RJG
Run Time: 02/14/01 13:24:30
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01209	L-.05346	L-.01004	-.00001	L.00004	L-.00048	L-.00520
SDev	.00074	.00811	.04500	.00001	.00021	.00014	.00165
%RSD	6.0896	15.170	448.17	107.41	459.52	30.050	31.706
#1	L-.01171	L-.05915	L-.04955	-.00002	L.00007	L-.00036	L-.00348
#2	L-.01173	L-.06088	L.04348	-.00000	L-.00011	L-.00060	L-.00420
#3	L-.01173	L-.05035	L-.04489	-.00001	L-.00011	L-.00060	L-.00604
#4	L-.01320	L-.04345	L.01081	-.00000	L.00033	L-.00035	L-.00706
Errors	LC Low	LC Low	LC Low	NOCHECK	LC Low	LC Low	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00063	L-.00000	L-.00157	L-.00251	L-.00352	L-1.0693	-.00151
SDev	.00369	.00392	.00204	.00042	.00106	.2629	.00062
%RSD	585.23	462920.	129.35	16.680	30.043	24.586	40.979
#1	L.00438	L.00544	L.00014	L-.00230	L-.00405	L-.70770	-.00133
#2	L-.00046	L-.00390	L-.00386	L-.00231	L-.00405	L-1.3250	-.00125
#3	L-.00212	L-.00078	L-.00272	L-.00230	L-.00405	L-1.0693	-.00243
#4	L-.00431	L-.00077	L.00014	L-.00314	L-.00193	L-1.1751	-.00106
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	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-.00612	L-.00027	-.00152	L.13540	L-.00771	L-.02948	L-.05685
SDev	.00408	.00062	.00497	.00545	.00292	.00536	.04664
%RSD	66.667	229.96	326.50	4.0286	37.910	18.194	82.044
#1	L-.00953	L-.00080	.00457	L.13005	L-.00602	L-.02474	L-.01270
#2	L-.00408	L.00027	-.00152	L.13569	L-.00785	L-.03413	L-.07575
#3	L-.00136	L.00026	-.00761	L.13306	L-.00520	L-.02493	L-.02531
#4	L-.00953	L-.00080	-.00152	L.14282	L-.01177	L-.03411	L-.11364
Errors	LC Low	LC Low	NOCHECK	LC Low	LC Low	LC Low	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	L.05260	-.01410	.00709	.00000	.00174	L-.01453	L.00060
SDev	.04670	.00710	.01969	.00000	.00016	.08942	.00254
%RSD	88.780	50.330	277.81	.00000	9.0909	615.24	425.36
#1	L.07172	-.01547	.01127	.00000	.00166	L-.08016	L.00440
#2	L-.00958	-.00424	-.00232	.00000	.00166	L-.00720	L-.00065

#3	L.10042	-.01553	.03254	.00000	.00198	L-.08006	L-.00073
#4	L.04782	-.02117	-.01314	.00000	.00166	L.10929	L-.00064
Errors	LC Low	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low	LC Low
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000

Elem	ZN
Units	ppm
Avge	L.00054
SDev	.00030
%RSD	56.600
#1	L.00012
#2	L.00077
#3	L.00076
#4	L.00050
Errors	LC Low
High	.60000
Low	.40000

Method: QUANMET Sample Name: DVVK3 Operator: RJG
Run Time: 02/14/01 13:27:38
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01246	-.05213	.02829	-.00001	.00006	-.00057	-.00540
SDev	.00147	.00546	.01912	.00001	.00021	.00006	.00047
%RSD	11.785	10.469	67.574	66.398	332.06	10.079	8.7378
#1	L-.01171	-.04526	.02469	-.00001	.00015	-.00048	-.00541
#2	L-.01173	-.05558	.05273	-.00002	.00033	-.00060	-.00604
#3	L-.01174	-.05035	.02947	-.00000	-.00011	-.00060	-.00493
#4	L-.01466	-.05734	.00627	-.00001	-.00011	-.00060	-.00522
Errors	LC Low	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	-.00004	-.00000	-.00115	-.00377	-.00458	-1.0737	-.00156
SDev	.00332	.00201	.00127	.00105	.00156	.1050	.00040
%RSD	8496.5	61812.	110.80	27.957	34.173	9.7761	25.393
#1	.00133	-.00079	-.00158	-.00398	-.00405	-1.0252	-.00143
#2	.00369	.00233	-.00272	-.00481	-.00687	-.95463	-.00189
#3	-.00406	-.00233	.00014	-.00398	-.00405	-1.1927	-.00106
#4	-.00112	.00078	-.00043	-.00230	-.00334	-1.1222	-.00186
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01905	-.00054	-.00305	.12986	-.00079	.00229	-.00631
SDev	.00648	.00053	.00305	.00436	.00528	.03463	.04883
%RSD	34.007	99.563	99.979	3.3605	667.93	1510.2	774.01
#1	-.02313	-.00080	-.00152	.12592	.00692	.02936	L-.06297
#2	-.02313	-.00080	-.00152	.12630	-.00166	-.04291	.01260
#3	-.02041	.00026	-.00761	.13306	-.00434	.02948	.05047
#4	-.00953	-.00080	-.00152	.13418	-.00408	-.00677	-.02533
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	.03107	-.01270	.00663	.00000	.00213	-.00360	.00027
SDev	.05954	.00324	.01847	.00000	.00018	.09543	.00277
%RSD	191.63	25.500	278.55	.00000	8.5533	2654.0	1036.5
#1	.05259	-.01547	-.00493	.00000	.00198	-.00727	.00432
#2	-.00959	-.01553	.01671	.00000	.00198	-.12377	-.00065

#3	.10520	-.00990	-.01246	.00000	.00229	.00736	-.00196
#4	-.02392	-.00989	.02721	.00000	.00229	.10929	-.00064
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	.00026
SDev	.00136
%RSD	529.68
#1	-.00152
#2	.00170
#3	.00009
#4	.00075
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVVK3P5 Operator: RJG
Run Time: 02/14/01 13:30:47
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01282	-.05697	.00854	-.00001	-.00011	-.00051	-.00489
SDev	.00073	.00087	.03183	.00000	.00000	.00007	.00229
%RSD	5.7262	1.5228	372.64	32.881	.00000	12.821	46.891
#1	-.01320	-.05736	-.01696	-.00001	-.00011	-.00047	-.00299
#2	-.01317	-.05567	.05265	-.00001	-.00011	-.00061	-.00769
#3	-.01171	-.05735	.01086	-.00000	-.00011	-.00048	-.00585
#4	-.01317	-.05750	-.01239	-.00001	-.00011	-.00048	-.00304

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00006	-.00039	-.00172	-.00377	-.00405	-1.1420	-.00145
SDev	.00139	.00078	.00189	.00105	.00100	.2070	.00094
%RSD	2209.4	198.93	110.06	27.951	24.633	18.125	64.707
#1	.00022	-.00078	.00072	-.00230	-.00475	-.83998	-.00060
#2	-.00164	.00078	-.00215	-.00398	-.00405	-1.2809	-.00068
#3	-.00008	-.00078	-.00158	-.00482	-.00264	-1.2721	-.00235
#4	.00174	-.00079	-.00386	-.00398	-.00475	-1.1751	-.00216

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00136	-.00054	-.00152	.13409	-.00060	-.04299	.00631
SDev	.00385	.00053	.00497	.00423	.00668	.05682	.03342
%RSD	282.84	99.675	326.48	3.1557	1120.9	132.19	530.00
#1	.00136	-.00080	-.00152	.13306	-.01036	.02946	-.00011
#2	.00136	-.00080	-.00152	.13043	.00307	-.02480	.03785
#3	-.00136	.00027	-.00761	.13268	.00427	-.08826	.02535
#4	-.00680	-.00080	.00457	.14019	.00064	-.08835	-.03787

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01792	-.00561	.00935	.00000	.00221	.04737	.00277
SDev	.06608	.00845	.01662	.00000	.00030	.12441	.00236
%RSD	368.73	150.62	177.78	.00000	13.678	262.63	85.260
#1	-.01914	.00140	-.00201	.00000	.00198	.16759	-.00064
#2	.00477	.00146	.02747	.00000	.00261	-.10925	.00432
#3	.11477	-.00984	-.00723	.00000	.00198	.12385	.00300
#4	-.02871	-.01547	.01916	.00000	.00229	.00731	.00440

Elem	ZN
Units	ppm
Avge	-.00023
SDev	.00131
%RSD	572.49
#1	-.00216
#2	.00076
#3	.00037

#4 .00011

Method: QUANMET Sample Name: DVVK3S Operator: RJG
Run Time: 02/14/01 13:33:55
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01392	-.05571	.00855	-.00001	.00000	-.00054	-.00349
SDev	.00086	.00372	.02413	.00000	.00013	.00007	.00193
%RSD	6.1694	6.6821	282.36	42.605	.00000	13.538	55.375
#1	L-.01466	-.05736	.00627	-.00000	.00015	-.00047	-.00096
#2	L-.01317	-.05056	-.00780	-.00001	.00007	-.00048	-.00566
#3	L-.01317	-.05567	.04336	-.00001	-.00011	-.00061	-.00357
#4	L-.01466	-.05922	-.00765	-.00001	-.00011	-.00060	-.00377
Errors	LC Low	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	-.00143	-.00078	.00057	-.00461	-.00457	-1.1200	-.00151
SDev	.00115	.00127	.00189	.00080	.00089	.1942	.00022
%RSD	80.219	163.61	330.43	17.390	19.378	17.339	14.515
#1	-.00066	-.00078	.00243	-.00565	-.00334	-.84880	-.00125
#2	-.00051	-.00234	-.00043	-.00398	-.00475	-1.3074	-.00151
#3	-.00154	.00078	.00186	-.00482	-.00546	-1.1398	-.00178
#4	-.00301	-.00077	-.00157	-.00398	-.00475	-1.1839	-.00151
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	-.00136	-.00053	.00304	.13606	-.00963	-.03847	.00304
SDev	.00497	.00054	.00583	.00332	.00391	.04090	.02796
%RSD	365.15	100.17	191.52	2.4380	40.602	106.31	919.92
#1	-.00680	-.00080	-.00152	.13794	-.00818	-.03393	.01252
#2	.00408	.00027	.00457	.13832	-.00969	-.04307	-.01270
#3	.00136	-.00080	-.00152	.13681	-.00569	.01144	.03770
#4	-.00408	-.00080	.01066	.13118	-.01494	-.08833	-.02536
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	.03705	-.00844	-.00133	.00000	.00229	-.10193	.00190
SDev	.03753	.00713	.02852	.00000	.00026	.05641	.00284
%RSD	101.30	84.379	2146.8	.00000	11.262	55.337	149.45
#1	.03825	-.01553	-.00195	.00000	.00198	-.08008	-.00064
#2	.08607	-.00983	-.01272	.00000	.00229	-.12378	.00440

675 1488

#3	-.00480	.00146	.03814	.00000	.00229	-.03640	.00433
#4	.02868	-.00988	-.02877	.00000	.00261	-.16747	-.00048
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	.00070
SDev	.00138
%RSD	197.66
#1	-.00083
#2	.00109
#3	.00013
#4	.00240
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVVK3D Operator: RJG
Run Time: 02/14/01 13:37:13
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01319	-.05262	.00853	-.00001	-.00006	-.00054	-.00501
SDev	.00119	.00419	.02999	.00001	.00009	.00007	.00438
%RSD	9.0048	7.9663	351.69	90.577	140.00	13.369	87.415
#1	L-.01320	-.04687	.05266	-.00002	.00007	-.00060	.00147
#2	L-.01173	-.05562	-.00768	-.00001	-.00011	-.00047	-.00619
#3	L-.01318	-.05216	.00153	-.00000	-.00011	-.00061	-.00735
#4	L-.01464	-.05584	-.01240	-.00000	-.00011	-.00048	-.00798
Errors	LC Low	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	.00057	-.00040	-.00057	-.00544	-.00405	-.90392	-.00119
SDev	.00303	.00295	.00286	.00210	.00100	.16923	.00081
%RSD	531.78	746.79	498.67	38.506	24.646	18.722	67.922
#1	.00103	.00389	.00243	-.00230	-.00475	-.66361	-.00033
#2	.00169	-.00079	-.00043	-.00649	-.00475	-1.0605	-.00178
#3	-.00374	-.00233	-.00444	-.00649	-.00405	-.93699	-.00197
#4	.00330	-.00235	.00014	-.00649	-.00264	-.95463	-.00068
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	-.00340	-.00080	-.00000	.13475	-.00546	-.03401	-.04742
SDev	.00515	.00000	.00766	.00117	.00826	.00011	.02789
%RSD	151.44	.35033	1464100.	.86665	151.39	.32345	58.830
#1	.00408	-.00080	-.00152	.13418	-.00902	-.03385	-.01277
#2	-.00680	-.00080	-.00152	.13381	.00684	-.03404	L-.06308
#3	-.00680	-.00081	-.00761	.13456	-.00868	-.03410	L-.07573
#4	-.00408	-.00080	.01066	.13644	-.01098	-.03404	-.03808
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	.04064	-.01268	.02112	.00000	.00229	-.00725	.00155
SDev	.04947	.00981	.01037	.00000	.00026	.03569	.00260
%RSD	121.73	77.323	49.079	.00000	11.262	492.26	167.70
#1	-.02393	-.02117	.02460	.00000	.00198	-.00726	-.00064
#2	.05259	-.02117	.02705	.00000	.00229	.03648	-.00064

#3	.09564	-.00420	.00567	.00000	.00261	-.05095	.00299
#4	.03825	-.00418	.02716	.00000	.00229	-.00727	.00448
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	.00036
SDev	.00157
%RSD	441.39
#1	-.00055
#2	.00263
#3	-.00081
#4	.00015
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVVLF Operator: RJG
Run Time: 02/14/01 13:40:21
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01503	-.05430	-.00304	-.00001	.00000	-.00060	-.00422
SDev	.00140	.01024	.01561	.00000	.00013	.00000	.00115
%RSD	9.3411	18.863	512.97	39.518	.00000	.00140	27.352
#1	L-.01320	-.06082	.00165	-.00001	.00015	-.00060	-.00382
#2	L-.01466	-.06425	-.00761	-.00001	-.00011	-.00060	-.00590
#3	L-.01613	-.04174	.01545	-.00001	-.00011	-.00060	-.00386
#4	L-.01613	-.05039	-.02166	-.00001	.00007	-.00060	-.00328
Errors	LC Low	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	.00004	.00078	-.00215	-.00565	-.00440	-1.1971	-.00173
SDev	.00230	.00254	.00168	.00097	.00168	.2656	.00011
%RSD	5383.9	327.80	78.506	17.077	38.136	22.185	6.6032
#1	.00269	.00077	-.00043	-.00482	-.00264	-.83117	-.00189
#2	-.00048	.00390	-.00157	-.00649	-.00334	-1.2280	-.00170
#3	-.00280	-.00234	-.00443	-.00482	-.00546	-1.4661	-.00162
#4	.00076	.00077	-.00215	-.00649	-.00616	-1.2633	-.00170
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	-.00204	-.00080	-.00152	.12921.	.00033	.01357	-.05045
SDev	.02004	.00000	.00000	.00699	.00543	.00450	.02911
%RSD	982.06	.08022	.01423	5.4092	1648.9	33.182	57.701
#1	.01769	-.00080	-.00152	.12667	.00496	.01128	L-.07565
#2	-.02313	-.00080	-.00152	.12705	.00484	.01143	-.02521
#3	.01225	-.00080	-.00152	.13944	-.00580	.01125	-.02527
#4	-.01497	-.00080	-.00152	.12367	-.00268	.02033	L-.07567
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	.02868	.00705	.00511	.00000	.00229	.02189	-.00065
SDev	.02439	.02304	.01537	.00000	.00045	.08739	.00000
%RSD	85.037	326.95	300.66	.00000	19.506	399.16	.59929
#1	.05260	.00140	.00568	.00000	.00166	-.02183	-.00064
#2	.02868	-.00989	.02454	.00000	.00261	.09469	-.00064

#3	.03824	-.00424	.00322	.00000	.00261	-.08004	-.00065
#4	-.00480	.04091	-.01299	.00000	.00229	.09475	-.00065
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	.00123
SDev	.00236
%RSD	192.83
#1	.00168
#2	.00396
#3	-.00178
#4	.00105
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DVVLH Operator: RJG
Run Time: 02/14/01 13:43:29
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01576	-.04869	-.02051	-.00001	.00013	-.00060	-.00488
SDev	.00140	.00321	.02558	.00000	.00018	.00000	.00108
%RSD	8.9038	6.5987	124.69	24.755	139.88	.02925	22.091
#1	L-.01759	-.04523	-.04494	-.00001	.00015	-.00060	-.00348
#2	L-.01466	-.05221	.01553	-.00001	.00015	-.00060	-.00537
#3	L-.01613	-.04685	-.02634	-.00001	-.00011	-.00060	-.00600
#4	L-.01466	-.05049	-.02631	-.00001	.00033	-.00060	-.00469
Errors	LC Low	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	-.00110	-.00039	-.00214	-.00440	-.00457	-1.4132	-.00088
SDev	.00456	.00149	.00047	.00145	.00067	.2579	.00096
%RSD	415.98	382.13	21.825	33.009	14.742	18.250	109.32
#1	.00212	.00077	-.00214	-.00230	-.00405	-1.0516	-.00143
#2	L-.00765	-.00076	-.00157	-.00482	-.00545	-1.4044	-.00160
#3	-.00075	.00078	-.00272	-.00482	-.00405	-1.6072	-.00098
#4	.00189	-.00235	-.00214	-.00566	-.00475	-1.5896	.00050
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	-.00816	-.00080	.00152	.12846	.00199	-.02492	-.02522
SDev	.01728	.00000	.00609	.00517	.00793	.01279	.00009
%RSD	211.70	.24339	400.15	4.0260	398.31	51.336	.35599
#1	.01769	-.00080	.00457	.13456	.01256	-.03395	-.02513
#2	-.01497	-.00080	.00457	.12329	-.00655	-.00681	-.02532
#3	-.01769	-.00081	-.00761	.12517	.00199	-.03395	-.02516
#4	-.01769	-.00080	.00457	.13080	-.00003	-.02497	-.02528
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	.00596	.01128	.00588	.00000	.00253	.02191	-.00061
SDev	.03108	.03429	.00487	.00000	.00030	.02379	.00008
%RSD	521.19	303.99	82.736	.00000	11.968	108.60	13.420
#1	-.00958	.04091	.00855	.00000	.00229	-.00725	-.00057
#2	.04781	-.01553	.00055	.00000	.00293	.02192	-.00056

#3	-.02392	-.02117	.00322	.00000	.00261	.05103	-.00073
#4	.00955	.04091	.01122	.00000	.00229	.02192	-.00057
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	-.00001
SDev	.00077
%RSD	5385.8
#1	-.00062
#2	-.00055
#3	.00008
#4	.00104
Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-5 Operator: RJG
Run Time: 02/14/01 13:46:37
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01686	L-.05869	L.01904	L-.00001	L-.00004	L-.00060	L-.00449
SDev	.00084	.00715	.02527	.00000	.00013	.00001	.00184
%RSD	4.9864	12.176	132.69	43.551	285.71	.86752	40.923
#1	L-.01757	L-.06776	L-.01695	L-.00001	L.00015	L-.00061	L-.00420
#2	L-.01613	L-.06094	L.03883	L-.00001	L-.00011	L-.00060	L-.00716
#3	L-.01613	L-.05392	L.02018	L-.00001	L-.00011	L-.00060	L-.00304
#4	L-.01759	L-.05212	L.03412	L-.00001	L-.00011	L-.00060	L-.00357
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L-.00177	L.00000	L-.00029	L-.00503	L-.00528	L-1.0847	L-.00143
SDev	.00153	.00270	.00297	.00198	.00156	.3134	.00054
%RSD	86.300	208310.	1036.0	39.415	29.587	28.892	37.527
#1	L-.00132	L.00234	L.00243	L-.00230	L-.00475	L-.62833	L-.00081
#2	L-.00150	L-.00390	L-.00157	L-.00650	L-.00616	L-1.1751	L-.00178
#3	L-.00394	L.00079	L.00186	L-.00482	L-.00334	L-1.3427	L-.00197
#4	L-.00034	L.00078	L-.00386	L-.00649	L-.00686	L-1.1927	L-.00116
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L-.00612	L-.00080	L-.00000	L.12808	L.00263	L-.02490	L-.02526
SDev	.01358	.00000	.00583	.00552	.00715	.01286	.00010
%RSD	221.85	.24720	854020.	4.3124	272.16	51.652	.39626
#1	L.01225	L-.00081	L-.00761	L.12517	L-.00056	L-.00672	L-.02530
#2	L-.01769	L-.00080	L.00457	L.13193	L.01331	L-.03406	L-.02512
#3	L-.01497	L-.00080	L.00457	L.12179	L-.00033	L-.03394	L-.02535
#4	L-.00408	L-.00080	L-.00152	L.13343	L-.00191	L-.02489	L-.02529
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L.03466	L.00283	L.02321	L.00000	L.00237	L.02190	L.00062
SDev	.05082	.02227	.01916	.00000	.00040	.07798	.00242
%RSD	146.65	786.95	82.549	.00000	16.777	356.07	390.36
#1	L.00955	L-.01547	L.03787	L.00000	L.00229	L.00728	L.00425
#2	L-.00002	L-.00424	L-.00478	L.00000	L.00229	L.02195	L-.00056

#3	L.10998	L.03527	L.02721	L.00000	L.00198	L.12386	L-.00056
#4	L.01911	L-.00424	L.03254	L.00000	L.00293	L-.06549	L-.00065

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low	LC Low
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	L.00193
SDev	.00125
%RSD	64.882

#1	L.00266
#2	L.00100
#3	L.00075
#4	L.00332

Errors	LC Low
High	5.5000
Low	4.5000

C18090228 675 1497

Michael Wenrich 2-14-01

#	Sample Name	AG	AS	CD	CR	PB	SB
1	STD1	.00145	-.00698	.00233	.00399		
2	STD6	9.51873	5.91579	12.55			
3	STD7				9.71098		
4	ICV3-1 0087-035-16	.52202	.26055	.25520	1.0189	.26044	.26298
5	ICB1	-.00035	-.00114	-.00019	.00064	-.00053	-.00039
6	ICSA 0087-029-11	-.00063	-.00089	-.00089	-.00016	.00323	.00168
7	ICSAB 0087-024-1	1.1225	1.0400	.94611	.50524	1.0123	1.0736
8	DV0HRB	-.00056	-.00002	.00001	.00058	.00121	-.00160
9	DV0HRC	.05411	2.1090	.04995	.20968	.52991	.52865
10	DVWJE	.00014	.00799	.00056	.02348	.01328	.03002
11	DVWJEP5	-.00055	-.00024	-.00004	.00433	.00388	.00542
12	DVWJES	.05417	2.0843	.04760	.22510	.52516	.55613
13	DVWJED	.05348	2.0903	.04808	.22358	.52465	.55579
14	CCV3-1 0087-052-5	1.0477	.52012	.50164	2.0151	.51644	.52820
15	CCB1	-.00017	-.00025	.00003	.00065	-.00070	-.00013
16	DVKJHB	-.00065	-.00095	-.00013	.00160	.00023	-.00097
17	DVKJHC	.05257	2.0897	.04989	.20705	.52415	.52084
18	DVH1X	.00461	.04925	.00119	2.9260	.47594	.01416
19	DVH1XP5	.00087	.00954	-.00023	.62355	.10232	.00172
20	DVH1XS	.04944	1.8749	.04395	1.5150	.90469	.32365
21	DVH1XD	.04987	1.9243	.04405	2.0116	.95148	.35393
22	DVH12	-.00276	.01451	-.00118	.11850	.05170	.00496
23	DVH13	.00304	.05050	.00325	2.4936	.72928	.00927
24	DVH14	~~-.00190~~	~~.03282~~	~~.00058~~	~~.19303~~	~~.11448~~	~~.00175~~
25	DVH18	-.00068	.14232	.00011	.09706	.23745	.00886
26	CCV3-2	1.0129	.50688	.48698	1.9556	.50356	.51180
27	CCB2	-.00057	.00006	.00009	.00037	.00026	-.00137
28	DVH20	~~-.00295~~	~~.05771~~	~~.00001~~	~~.04675~~	~~.08469~~	~~.00020~~
29	DVH23	~~-.00204~~	~~.01771~~	~~.00049~~	~~.06410~~	~~.05265~~	~~-.00130~~
30	DVH25	-.00179	.01531	-.00026	.05246	.03308	.00202
31	CCV3-3	1.0197	.51214	.49338	1.9783	.50762	.51357
32	CCB3	-.00015	-.00172	.00004	.00085	.00002	.00077
33	DVH1X/2 FE	.00199	.02516	.00024	1.5268	.24830	.00685
34	DVH1XP10 FE	-.00002	.00410	-.00011	.31234	.04977	-.00093
35	DVH1XS/2 MN	.02455	.97547	.02371	.78635	.47372	.16567
36	DVH1XD/2 FE,MN	.02426	.98158	.02368	1.0208	.48618	.18080
37	DVH13/2 FE	.00077	.02377	.00178	1.2676	.37366	.00317
38	DVH1X/10 MN	-.00063	.00551	.00009	.30819	.04953	-.00036
39	DVH1XP50 MN	-.00077	-.00118	-.00009	.06189	.00973	-.00144
40	DVH13/5 MN	-.00061	.00824	.00054	.51920	.15190	.00180
41	DVH14/2(INTSTD)	-.00119	.01877	.00022	.11335	.06748	.00160
42	DVH18/2 MN	-.00157	.07474	.00032	.05082	.12653	.00493
43	CCV3-4	1.0063	.51086	.48970	1.9588	.50357	.51376
44	CCB4	-.00031	-.00223	.00001	.00041	.00099	.00049
45	DVH20/2(INTSTD)	~~-.00211~~	~~.03614~~	~~.00026~~	~~.02843~~	~~.05053~~	~~.00053~~
46	DVH20/5(INTSTD)	-.00158	.01510	.00005	.01262	.02373	-.00281
47	DVH23/2(INTSTD)	-.00165	.00993	-.00010	.03631	.02987	.00153
48	CCV3-5	1.0125	.51511	.49470	1.9781	.51261	.51879
49	CCB5	-.00097	-.00069	.00012	-.00038	-.00045	-.00013
50	DV0HXB	-.00010	-.00214	-.00003	.00042	.00151	.00448
51	DV0HXC	.04844	1.9988	.04878	.19650	.49957	L.00263
52	DVNQR	-.00027	.01021	-.00003	.00191	.00243	.00070
53	DVNQRP5	-.00060	.00094	-.00004	.00070	.00026	-.00122

#	Sample Name	AG	AS	CD	CR	PB	SB
54	DVNQRS	.04929	2.0065	.04749	.19498	.49725	.00000
55	DVNQRD	.04902	2.0207	.04754	.19633	.50359	-.00008
56	CCV3-6	.98816	.50268	.48273	1.9314	.49735	.50707
57	CCB6	.00018	-.00046	.00030	.00076	-.00111	-.00039

#	Sample Name	SE	TL
1	STD1		-.02609
2	STD6		3.33836
3	STD7		
4	ICV3-1 0087-035-16	.26034	.52794
5	ICB1	.00060	-.00135
6	ICSA 0087-029-11	.00190	.00870
7	ICSAB 0087-024-1	1.0532	1.0957
8	DV0HRB	-.00125	-.00817
9	DV0HRC	2.0909	2.2061
10	DVWJE	.00170	.00123
11	DVWJEP5	-.00017	.00152
12	DVWJES	2.0845	2.2151
13	DVWJED	2.1026	2.2311
14	CCV3-1 0087-052-5	.53116	1.0566
15	CCB1	.00096	-.00255
16	DVKJHB	.00016	-.00872
17	DVKJHC	2.0543	2.1888
18	DVH1X	.00176	.06981
19	DVH1XP5	.00336	.00958
20	DVH1XS	1.8040	1.9215
21	DVH1XD	1.8277	1.9599
22	DVH12	.00023	.02125
23	DVH13	.00163	.05061
24	DVH14	~~.00265~~	~~.01090~~
25	DVH18	.00515	.03145
26	CCV3-2	.51360	1.0263
27	CCB2	-.00093	.00032
28	DVH20	~~.00026~~	~~.01042~~
29	DVH23	~~.00258~~	~~.01196~~
30	DVH25	-.00104	.01926
31	CCV3-3	.51569	1.0407
32	CCB3	-.00115	.00044
33	DVH1X/2 FE	.00147	.03298
34	DVH1XP10 FE	-.00137	.00595
35	DVH1XS/2 MN	.94723	.99503
36	DVH1XD/2 FE,MN	.93753	.99078
37	DVH13/2 FE	.00239	.02494
38	DVH1X/10 MN	.00000	.00514
39	DVH1XP50 MN	-.00097	-.00029
40	DVH13/5 MN	.00143	.00732
41	DVH14/2(INTSTD)	-.00029	.00165
42	DVH18/2 MN	.00147	.01612
43	CCV3-4	.51439	1.0354
44	CCB4	-.00396	-.00403
45	DVH20/2(INTSTD)	~~-.00229~~	~~.00617~~
46	DVH20/5(INTSTD)	-.00144	-.00344

UCID Fe and/or MN are out-of-range and Fe and MN IEC's exist on Se & TL. Repeat Se & Th From dilutions Below. MTW 2-14-01

UCID Internal Standard Counts of Samples were >30% of that Found in the ICB Samples require dilutions see Dilutions Further on Run MTW 2-14-01

UCID. NOT Repeated, Sample Counts still >30% of that Found in the ICB Sample Requires A Further dilution. See (X5) dilution Below MTW 2-14-01

mtw 2-14-01

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T10213B	METTRA	02/13/01	13:13		X	IR
2	STD6	T10213B	METTRA	02/13/01	13:17		X	IR
3	STD7	T10213B	METTRA	02/13/01	13:21		X	IR
4	ICV3-1 0087-035-16	T10213B	METTRA	02/13/01	13:25	MTW	S	CONC
5	ICB1	T10213B	METTRA	02/13/01	13:29	MTW	S	CONC
6	ICSA 0087-029-11	T10213B	METTRA	02/13/01	13:33	MTW	Q	CONC
7	ICSAB 0087-024-1	T10213B	METTRA	02/13/01	13:38	MTW	Q	CONC
8	DV0HRB	T10213B	METTRA	02/13/01	13:44	MTW	S	CONC
9	DV0HRC	T10213B	METTRA	02/13/01	13:48	MTW	S	CONC
10	DVWJE	T10213B	METTRA	02/13/01	13:52	MTW	S	CONC
11	DVWJEP5	T10213B	METTRA	02/13/01	13:57	MTW	S	CONC
12	DVWJES	T10213B	METTRA	02/13/01	14:01	MTW	S	CONC
13	DVWJED	T10213B	METTRA	02/13/01	14:05	MTW	S	CONC
14	CCV3-1 0087-052-5	T10213B	METTRA	02/13/01	14:09	MTW	S	CONC
15	CCB1	T10213B	METTRA	02/13/01	14:13	MTW	S	CONC
16	DVKJHB	T10213B	METTRA	02/13/01	14:17	MTW	S	CONC
17	DVKJHC	T10213B	METTRA	02/13/01	14:21	MTW	S	CONC
18	DVH1X	T10213B	METTRA	02/13/01	14:26	MTW	S	CONC
19	DVH1XP5	T10213B	METTRA	02/13/01	14:30	MTW	S	CONC
20	DVH1XS	T10213B	METTRA	02/13/01	14:34	MTW	S	CONC
21	DVH1XD	T10213B	METTRA	02/13/01	14:38	MTW	S	CONC
22	DVH12	T10213B	METTRA	02/13/01	14:43	MTW	S	CONC
23	DVH13	T10213B	METTRA	02/13/01	14:48	MTW	S	CONC
24	DVH14	T10213B	METTRA	02/13/01	14:52	MTW	S	CONC
25	DVH18	T10213B	METTRA	02/13/01	14:56	MTW	S	CONC
26	CCV3-2	T10213B	METTRA	02/13/01	15:00	MTW	S	CONC
27	CCB2	T10213B	METTRA	02/13/01	15:04	MTW	S	CONC
28	DVH20	T10213B	METTRA	02/13/01	15:11	MTW	S	CONC
29	DVH23	T10213B	METTRA	02/13/01	15:16	MTW	S	CONC
30	DVH25	T10213B	METTRA	02/13/01	15:20	MTW	S	CONC
31	CCV3-3	T10213B	METTRA	02/13/01	15:24	MTW	S	CONC
32	CCB3	T10213B	METTRA	02/13/01	15:28	MTW	S	CONC
33	DVH1X/2 FE	T10213B	METTRA	02/13/01	15:34	MTW	S	CONC
34	DVH1XP10 FE	T10213B	METTRA	02/13/01	15:38	MTW	S	CONC
35	DVH1XS/2 MN	T10213B	METTRA	02/13/01	15:42	MTW	S	CONC
36	DVH1XD/2 FE,MN	T10213B	METTRA	02/13/01	15:46	MTW	S	CONC
37	DVH13/2 FE	T10213B	METTRA	02/13/01	15:50	MTW	S	CONC
38	DVH1X/10 MN	T10213B	METTRA	02/13/01	15:55	MTW	S	CONC
39	DVH1XP50 MN	T10213B	METTRA	02/13/01	16:01	MTW	S	CONC
40	DVH13/5 MN	T10213B	METTRA	02/13/01	16:05	MTW	S	CONC
41	DVH14/2(INTSTD)	T10213B	METTRA	02/13/01	16:10	MTW	S	CONC
42	DVH18/2 MN	T10213B	METTRA	02/13/01	16:14	MTW	S	CONC
43	CCV3-4	T10213B	METTRA	02/13/01	16:18	MTW	S	CONC
44	CCB4	T10213B	METTRA	02/13/01	16:22	MTW	S	CONC
45	DVH20/2(INTSTD)	T10213B	METTRA	02/13/01	16:26	MTW	S	CONC
46	DVH20/5(INTSTD)	T10213B	METTRA	02/13/01	16:30	MTW	S	CONC
47	DVH23/2(INTSTD)	T10213B	METTRA	02/13/01	16:35	MTW	S	CONC
48	CCV3-5	T10213B	METTRA	02/13/01	16:39	MTW	S	CONC
49	CCB5	T10213B	METTRA	02/13/01	16:43	MTW	S	CONC
50	DV0HXB	T10213B	METTRA	02/13/01	16:47	MTW	S	CONC
51	DV0HXC	T10213B	METTRA	02/13/01	16:51	MTW	S	CONC
52	DVNQR	T10213B	METTRA	02/13/01	16:55	MTW	S	CONC
53	DVNQRP5	T10213B	METTRA	02/13/01	17:00	MTW	S	CONC

675 1499

#	Sample Name	SE	TL
47	DVH23/2(INTSTD)	-.00020	.00370
48	CCV3-5	.51955	1.0465
49	CCB5	-.00193	-.00016
50	DV0HXB	-.00189	-.00801
51	DV0HXC	1.9600	2.0060
52	DVNQR	.00116	-.00601
53	DVNQRP5	-.00130	-.00446
54	DVNQRS	1.9588	2.0536
55	DVNQRD	1.9776	2.0717
56	CCV3-6	.51046	1.0260
57	CCB6	.00346	-.00242

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DVNQRS	T10213B	METTRA	02/13/01	17:04	MTW	S	CONC
55	DVNQRD	T10213B	METTRA	02/13/01	17:08	MTW	S	CONC
56	CCV3-6	T10213B	METTRA	02/13/01	17:12	MTW	S	CONC
57	CCB6	T10213B	METTRA	02/13/01	17:16	MTW	S	CONC

Method: METTRA Standard: STD1
Run Time: 02/13/01 13:13:35

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	.00146	.15840	-.00698	.00030	-.02332	.00272	.00234
SDev	.00193	.00272	.00796	.00023	.00273	.00001	.00105
%RSD	132.63	1.7151	113.93	76.447	11.691	.41848	44.934
#1	.00282	.16032	-.01261	.00046	-.02139	.00273	.00159
#2	.00009	.15648	-.00136	.00014	-.02525	.00272	.00308

Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00073	.00399	-.00095	.00018	.00036	.00195	.00145
SDev	.00045	.00002	.00032	.00000	.00052	.00007	.00026
%RSD	61.533	.41848	34.066	.41848	141.42	3.7071	18.089
#1	-.00041	.00401	-.00118	.00018	.00073	.00200	.00164
#2	-.00104	.00398	-.00072	.00018	.00000	.00190	.00127

Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00050	.04919	.00529	.00248	.01982	-.11692	.06921
SDev	.00058	.00249	.01082	.01195	.00499	.02263	.00183
%RSD	115.57	5.0615	204.73	482.62	25.161	19.359	2.6420
#1	.00009	.04743	-.00237	.01092	.01630	-.13292	.06792
#2	.00091	.05095	.01294	-.00597	.02335	-.10091	.07050

Elem	TL	V	ZN
Avge	-.02609	.00018	.00039
SDev	.00098	.00013	.00010
%RSD	3.7630	71.024	25.362
#1	-.02540	.00027	.00046
#2	-.02679	.00009	.00032

675 1503

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11017	--	--	--	--	--	--
SDev	46.10281	--	--	--	--	--	--
%RSD	.4184811	--	--	--	--	--	--
#1	10984	--	--	--	--	--	--
#2	11049	--	--	--	--	--	--

Method: METTRA Standard: STD6 0057-190-2
Run Time: 02/13/01 13:17:48

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	9.5187	5.9158	12.550	4.6482	6.6053	7.8852	4.1936
SDev	.0230	.0445	.071	.0008	.0250	.1002	.0320
%RSD	.24183	.75149	.56539	.01706	.37791	1.2704	.76370
#1	9.5350	5.9472	12.600	4.6477	6.5876	7.8144	4.1709
#2	9.5025	5.8844	12.500	4.6488	6.6229	7.9561	4.2162

Elem	SE/1	SE/2	TL
Avge	4.8625	3.4613	3.3384
SDev	.0401	.0171	.0264
%RSD	.82373	.49262	.79108
#1	4.8342	3.4493	3.3570
#2	4.8909	3.4734	3.3197

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11050	--	--	--	--	--	--
SDev	4.808188	--	--	--	--	--	--
%RSD	.0435128	--	--	--	--	--	--
#1	11047	--	--	--	--	--	--
#2	11053	--	--	--	--	--	--

Method: METTRA Standard: STD7 0057-190-3 675 1505
Run Time: 02/13/01 13:21:59

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	5.0432	13.079	10.867	4.5181	2.5575	9.7110	2.8585
SDev	.0031	.009	.002	.0087	.0007	.0099	.0066
%RSD	.06182	.06814	.01772	.19240	.02565	.10209	.22980
#1	5.0454	13.086	10.865	4.5120	2.5580	9.7040	2.8631
#2	5.0409	13.073	10.868	4.5243	2.5570	9.7180	2.8538

Elem	FE	MG	MN	MO	NI	V	ZN
Avge	2.7980	12.072	7.7082	2.5060	2.0687	.75432	2.4183
SDev	.0024	.006	.0020	.0123	.0059	.00011	.0009
%RSD	.08750	.04774	.02599	.49179	.28621	.01396	.03711
#1	2.7963	12.068	7.7068	2.4973	2.0645	.75439	2.4177
#2	2.7998	12.076	7.7096	2.5147	2.0729	.75424	2.4190

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10830	--	--	--	--	--	--
SDev	16.29936	--	--	--	--	--	--
%RSD	.1504975	--	--	--	--	--	--
#1	10842	--	--	--	--	--	--
#2	10819	--	--	--	--	--	--

Method: METTRA Slope = Conc(SIR)/IR 675 1506

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.210144	-.000306	02/13/01 01:21:59
AL	308.215	STD7	STD1	10.2523	-1.62399	02/13/01 01:21:59
AS	189.042	STD6	STD1	.168840	.001179	02/13/01 01:21:59
BA	493.409	STD7	STD1	.305832	-.000090	02/13/01 01:21:59
BE	313.042	STD7	STD1	.364309	.008497	02/13/01 01:21:59
CA	317.933	STD7	STD1	22.1465	-.060309	02/13/01 01:21:59
CD	226.502	STD6	STD1	.079696	-.000186	02/13/01 01:21:59
CO	228.616	STD7	STD1	1.56359	.001134	02/13/01 01:21:59
CR	267.716	STD7	STD1	.412012	-.001646	02/13/01 01:21:59
CU	324.753	STD7	STD1	1.39888	.001334	02/13/01 01:21:59
FE	271.441	STD7	STD1	17.9878	-.003266	02/13/01 01:21:59
MG	279.078	STD7	STD1	8.28392	-.003017	02/13/01 01:21:59
MN	257.610	STD7	STD1	.519058	-.001013	02/13/01 01:21:59
MO	202.030	STD7	STD1	1.59711	-.002320	02/13/01 01:21:59
NI	231.604	STD7	STD1	1.93264	-.000963	02/13/01 01:21:59
PB/1	220.351	STD6	STD1	.217438	-.010696	02/13/01 01:21:59
PB/2	220.352	STD6	STD1	.151516	-.000801	02/13/01 01:21:59
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.126859	-.000314	02/13/01 01:21:59
SB/2	206.832	STD6	STD1	.239591	-.004749	02/13/01 01:21:59
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.200825	.023480	02/13/01 01:21:59
SE/2	196.022	STD6	STD1	.294800	-.020403	02/13/01 01:21:59
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.594450	.015512	02/13/01 01:21:59
V	292.402	STD7	STD1	5.28146	-.000960	02/13/01 01:21:59
ZN	213.856	STD7	STD1	1.66553	-.000643	02/13/01 01:21:59

Michael Wiesboth 2-13-01

Analysis Report 673 1507 02/13/01 01:29:45 PM

Method: METTRA Sample Name: ICV3-1 0087-035-16 Operator: MTW
Run Time: 02/13/01 13:25:39
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52202	12.018	.26055	1.0070	1.0084	25.163	.25521
SDev	.00291	.056	.00080	.0050	.0068	.140	.00166
%RSD	.55724	.46581	.30538	.49457	.67699	.55692	.64837
#1	.52408	11.978	.26111	1.0105	1.0132	25.262	.25638
#2	.51996	12.057	.25999	1.0035	1.0036	25.063	.25404
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	1.0319	1.0189	.98022	12.695	24.519	1.0131	1.0287
SDev	.0042	.0042	.00047	.013	.029	.0024	.0019
%RSD	.40786	.40864	.04838	.09871	.11968	.23867	.18759
#1	1.0348	1.0219	.97988	12.686	24.539	1.0148	1.0301
#2	1.0289	1.0160	.98055	12.704	24.498	1.0114	1.0274
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	1.0090	.26133	.26001	.26045	.26447	.26225	.26299
SDev	.0209	.00486	.00319	.00375	.00025	.00308	.00214
%RSD	2.0754	1.8607	1.2269	1.4387	.09343	1.1736	.81187
#1	1.0238	.26477	.26227	.26310	.26464	.26443	.26450
#2	.99420	.25789	.25776	.25780	.26429	.26007	.26148
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	.25852	.26126	.26035	.52794	1.0139	1.0451
SDev	.00325	.00954	.00744	.00381	.0063	.0122
%RSD	1.2564	3.6506	2.8589	.72245	.62538	1.1633
#1	.26081	.26801	.26561	.53064	1.0184	1.0537
#2	.25622	.25452	.25508	.52525	1.0094	1.0365
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.27500	.55000	1.1000	1.1000
Low			.22500	.45000	.90000	.90000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10877	--	--	--	--	--	--
SDev	120.0314	--	--	--	--	--	--
%RSD	1.103582	--	--	--	--	--	--
#1	10792	--	--	--	--	--	--
#2	10961	--	--	--	--	--	--

Method: METTRA Sample Name: ICB1 Operator: MTW
Run Time: 02/13/01 13:29:49
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00035	.05650	-.00115	.00044	.00133	.04402	-.00020
SDev	.00071	.02458	.00003	.00009	.00072	.00069	.00014
%RSD	200.49	43.505	2.6597	19.325	53.878	1.5676	70.666
#1	.00015	.07388	-.00113	.00050	.00184	.04353	-.00029
#2	-.00085	.03912	-.00117	.00038	.00083	.04451	-.00010
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	.00019	.00065	-.00088	-.02086	.01013	.00063	.00289
SDev	.00020	.00102	.00020	.01053	.00338	.00008	.00004
%RSD	106.80	158.48	22.706	50.473	33.315	12.729	1.3311
#1	.00033	.00137	-.00103	-.01342	.01252	.00069	.00292
#2	.00005	-.00008	-.00074	-.02831	.00775	.00058	.00287
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	-.00042	.00064	-.00112	-.00054	.00188	-.00153	-.00040
SDev	.00077	.00155	.00160	.00055	.00071	.00051	.00010
%RSD	183.69	242.42	142.65	102.92	37.987	33.005	25.179
#1	.00013	-.00046	.00001	-.00015	.00137	-.00118	-.00033
#2	-.00096	.00174	-.00225	-.00092	.00238	-.00189	-.00047
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	-.00183	.00183	.00061	-.00135	.00076	.00313
SDev	.00181	.00085	.00117	.00318	.00036	.00008
%RSD	98.887	46.458	192.50	235.02	48.092	2.4739
#1	-.00055	.00243	.00143	-.00361	.00102	.00318
#2	-.00312	.00123	-.00022	.00090	.00050	.00308
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10720	--	--	--	--	--	--
SDev	79.19596	--	--	--	--	--	--
%RSD	.7387958	--	--	--	--	--	--
#1	10664	--	--	--	--	--	--
#2	10776	--	--	--	--	--	--

Analysis Report QC Standard 02/13/01 01:38:05 PM page 1

Method: METTRA Sample Name: ICSA 0087-029-11 Operator: MTW
Run Time: 02/13/01 13:33:59
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	-.00063	528.74	-.00090	.00189	.00045	484.90	-.00089
SDev	.00020	4.75	.00344	.00009	.00152	2.57	.00010
%RSD	32.095	.89889	384.22	4.7926	339.33	.52988	11.559
#1	-.00078	525.37	.00154	.00195	.00152	486.71	-.00082
#2	-.00049	532.10	-.00333	.00182	-.00063	483.08	-.00096
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	-.00020	-.00016	-.00499	206.27	536.47	.00610	-.00084
SDev	.00006	.00090	.00079	.28	.79	.00055	.00165
%RSD	29.650	554.69	15.823	.13393	.14663	8.9844	195.72
#1	-.00024	-.00080	-.00555	206.07	537.02	.00571	.00032
#2	-.00015	.00047	-.00443	206.46	535.91	.00649	-.00201
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	.00157	.01355	-.00191	.00324	.00364	.00070	.00168
SDev	.00120	.00940	.00691	.00148	.00456	.00151	.00051
%RSD	76.419	69.347	361.23	45.814	125.31	214.29	30.438
#1	.00243	.02019	-.00680	.00219	.00041	.00177	.00132
#2	.00072	.00691	.00297	.00428	.00686	-.00036	.00204
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	-.00342	.00457	.00191	.00871	.02198	.00025
SDev	.00690	.00148	.00328	.00288	.00229	.00012
%RSD	201.51	32.336	172.28	33.076	10.435	46.071
#1	.00145	.00561	.00423	.00667	.02360	.00017
#2	-.00830	.00352	-.00042	.01075	.02036	.00034
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value						
Range						

675 1512

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10291	--	--	--	--	--	--
SDev	32.98612	--	--	--	--	--	--
%RSD	.3205266	--	--	--	--	--	--
#1	10268	--	--	--	--	--	--
#2	10315	--	--	--	--	--	--

Analysis Report QC Standard 02/13/01 01:42:15 PM

Method: METTRA Sample Name: ICSAB 0087-024-1 Operator: MTW
Run Time: 02/13/01 13:38:09
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1225	529.24	1.0400	.53122	.50295	487.97	.94612
SDev	.0025	3.80	.0003	.00221	.00355	2.54	.00685
%RSD	.22510	.71814	.02572	.41649	.70544	.52076	.72450
#1	1.1243	526.55	1.0398	.53278	.50546	489.77	.95096
#2	1.1207	531.93	1.0402	.52965	.50044	486.17	.94127
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	.50000	.50000	500.00	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49950	.50524	.54770	207.68	537.63	.51703	.98838
SDev	.00171	.00004	.00137	.43	.38	.00066	.00048
%RSD	.34294	.00840	.25052	.20549	.07068	.12827	.04859
#1	.50071	.50527	.54673	207.37	537.36	.51656	.98804
#2	.49829	.50521	.54867	207.98	537.90	.51750	.98872
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	.50000	.50000	200.00	500.00	.50000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97901	1.0426	.99721	1.0123	1.0675	1.0767	1.0736
SDev	.01890	.0105	.00486	.0068	.0019	.0012	.0015
%RSD	1.9302	1.0111	.48774	.66722	.18121	.11579	.13745
#1	.99237	1.0500	1.0007	1.0171	1.0662	1.0758	1.0726
#2	.96565	1.0351	.99377	1.0075	1.0689	1.0775	1.0747
Errors	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass
Value	1.0000			1.0000			1.0000
Range	20.000			20.000			20.000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0421	1.0588	1.0532	1.0957	.53932	1.0487
SDev	.0030	.0049	.0043	.0072	.00549	.0083
%RSD	.28853	.46511	.40693	.65732	1.0185	.78896
#1	1.0443	1.0623	1.0563	1.1008	.54320	1.0546
#2	1.0400	1.0553	1.0502	1.0906	.53544	1.0429
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

675 1514

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10290	--	--	--	--	--	--
SDev	52.00756	--	--	--	--	--	--
%RSD	.5054173	--	--	--	--	--	--
#1	10253	--	--	--	--	--	--
#2	10327	--	--	--	--	--	--

Method: METTRA Sample Name: DV0HRB 675 1515 Operator: MTW
Run Time: 02/13/01 13:44:35
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	-.00057	.12640	-.00003	.00014	.00047	.08610	.00001
SDev	.00009	.02719	.00197	.00003	.00128	.00607	.00014
%RSD	15.024	21.514	7244.9	22.657	272.56	7.0482	1055.8
#1	-.00051	.14563	.00137	.00011	.00137	.09039	.00011
#2	-.00063	.10717	-.00142	.00016	-.00044	.08181	-.00008
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	-.00029	.00058	-.00037	.02953	.04222	.00033	.00066
SDev	.00053	.00014	.00033	.00250	.00788	.00007	.00054
%RSD	183.31	24.041	88.740	8.4762	18.657	21.149	81.740
#1	-.00066	.00068	-.00061	.03130	.04779	.00028	.00105
#2	.00009	.00049	-.00014	.02776	.03665	.00038	.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00013	.00260	.00053	.00122	.00317	-.00399	-.00160
SDev	.00065	.00245	.00167	.00193	.00051	.00279	.00203
%RSD	504.91	94.372	317.46	158.70	15.971	69.844	126.38
#1	-.00059	.00433	.00171	.00258	.00282	-.00596	-.00304
#2	.00033	.00086	-.00065	-.00015	.00353	-.00202	-.00017
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	-.00922	.00273	-.00125	-.00818	.00006	.00446
SDev	.00332	.00111	.00185	.00154	.00000	.00012
%RSD	35.998	40.717	147.35	18.830	2.1293	2.6521
#1	-.00687	.00351	.00005	-.00927	.00006	.00454
#2	-.01157	.00194	-.00256	-.00709	.00006	.00438
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10438	--	--	--	--	--	--
SDev	4.772971	--	--	--	--	--	--
%RSD	.0457289	--	--	--	--	--	--
#1	10434	--	--	--	--	--	--
#2	10441	--	--	--	--	--	--

Method: METTRA Sample Name: DV0HRC Operator: MTW
Run Time: 02/13/01 13:48:44
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05411	2.1470	2.1090	2.0672	.05396	51.957	.04995
SDev	.00016	.0238	.0043	.0068	.00135	.047	.00040
%RSD	.29752	1.1108	.20533	.32685	2.4997	.09041	.79898
#1	.05400	2.1301	2.1059	2.0720	.05492	51.991	.05023
#2	.05423	2.1638	2.1121	2.0624	.05301	51.924	.04967
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52302	.20969	.25872	.88009	51.181	.52133	1.0472
SDev	.00264	.00033	.00172	.00141	.147	.00148	.0026
%RSD	.50415	.15830	.66452	.16067	.28776	.28422	.25255
#1	.52116	.20945	.25750	.87909	51.077	.52029	1.0453
#2	.52489	.20992	.25993	.88109	51.285	.52238	1.0490
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51033	.53897	.52539	.52991	.51968	.53313	.52865
SDev	.00793	.00260	.00370	.00333	.00404	.00034	.00157
%RSD	1.5545	.48289	.70376	.62895	.77637	.06405	.29723
#1	.51594	.54081	.52800	.53227	.51683	.53289	.52754
#2	.50472	.53713	.52277	.52755	.52253	.53337	.52976
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	2.0894	2.0916	2.0909	2.2061	.51738	.53348
SDev	.0134	.0029	.0064	.0145	.00021	.00275
%RSD	.64146	.14097	.30753	.65799	.04164	.51597
#1	2.0989	2.0937	2.0954	2.2164	.51722	.53542
#2	2.0799	2.0895	2.0863	2.1959	.51753	.53153
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	10736	--	--	--	--	--	--
SDev	4.454635	--	--	--	--	--	--
%RSD	.0414944	--	--	--	--	--	--
#1	10739	--	--	--	--	--	--
#2	10732	--	--	--	--	--	--

Method: METTRA Sample Name: DVWJE Operator: MTW
Run Time: 02/13/01 13:52:53
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00014	1.9021	.00799	.23416	.00105	74.049	.00057
SDev	.00023	.0036	.00083	.00131	.00128	.313	.00001
%RSD	159.67	.18678	10.377	.56088	121.99	.42293	1.3590
#1	-.00002	1.9046	.00740	.23509	.00196	74.270	.00057
#2	.00030	1.8996	.00858	.23323	.00014	73.827	.00056
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	.00206	.02348	.05649	3.0451	17.403	.95547	.00559
SDev	.00010	.00017	.00008	.0319	.011	.00047	.00006
%RSD	4.6214	.72667	.14427	1.0473	.06279	.04876	1.0070
#1	.00199	.02336	.05643	3.0226	17.411	.95580	.00555
#2	.00212	.02360	.05654	3.0677	17.395	.95514	.00563
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	.01863	.01556	.01215	.01329	.03105	.02952	.03003
SDev	.00049	.00111	.00031	.00058	.00018	.00214	.00149
%RSD	2.6162	7.1307	2.5751	4.3522	.59018	7.2445	4.9534
#1	.01897	.01478	.01193	.01288	.03092	.02801	.02898
#2	.01828	.01635	.01237	.01370	.03118	.03103	.03108
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	.00141	.00185	.00171	.00123	.01064	.21643
SDev	.00214	.00209	.00211	.00202	.00063	.00138
%RSD	151.65	112.58	123.35	163.92	5.9023	.63896
#1	.00293	.00333	.00319	-.00020	.01019	.21741
#2	-.00010	.00038	.00022	.00266	.01108	.21545
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	11002	--	--	--	--	--	--
SDev	64.45237	--	--	--	--	--	--
%RSD	.5858414	--	--	--	--	--	--
#1	10956	--	--	--	--	--	--
#2	11047	--	--	--	--	--	--

Method: METTRA Sample Name: DVWJEP5 Operator: MTW
Run Time: 02/13/01 13:57:01
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00056	.36968	-.00024	.04645	.00101	14.877	-.00005
SDev	.00055	.01245	.00012	.00018	.00063	.068	.00007
%RSD	98.367	3.3679	50.225	.38568	62.560	.45566	142.83
#1	-.00017	.37849	-.00016	.04657	.00146	14.925	.00000
#2	-.00094	.36088	-.00033	.04632	.00056	14.829	-.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	-.00020	.00433	.00983	.59205	3.4219	.19097	.00033
SDev	.00024	.00037	.00002	.01177	.0028	.00011	.00060
%RSD	121.52	8.5505	.22052	1.9884	.08180	.05533	181.43
#1	-.00003	.00459	.00985	.58372	3.4239	.19090	-.00009
#2	-.00037	.00407	.00982	.60037	3.4199	.19105	.00076
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	.00350	.00453	.00356	.00388	.00545	.00541	.00543
SDev	.00029	.00246	.00088	.00023	.00321	.00063	.00149
%RSD	8.2255	54.377	24.831	5.9170	58.840	11.698	27.462
#1	.00371	.00627	.00294	.00404	.00318	.00497	.00437
#2	.00330	.00279	.00419	.00372	.00772	.00586	.00648
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	-.00105	.00025	-.00018	.00153	.00046	.04432
SDev	.00126	.00382	.00297	.00024	.00035	.00002
%RSD	120.57	1502.5	1659.2	15.516	75.708	.05354
#1	-.00015	.00295	.00192	.00136	.00071	.04430
#2	-.00194	-.00245	-.00228	.00170	.00022	.04433
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	10823	--	--	--	--	--	--
SDev	85.80713	--	--	--	--	--	--
%RSD	.7928568	--	--	--	--	--	--
#1	10762	--	--	--	--	--	--
#2	10883	--	--	--	--	--	--

Method: METTRA Sample Name: DVWJES Operator: MTW
Run Time: 02/13/01 14:01:10
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05417	4.8138	2.0843	2.2649	.05246	124.86	.04760
SDev	.00028	.0101	.0180	.0212	.00178	.59	.00017
%RSD	.51970	.20987	.86306	.93596	3.3849	.47117	.36295
#1	.05437	4.8067	2.0970	2.2799	.05371	125.28	.04772
#2	.05397	4.8210	2.0716	2.2499	.05120	124.45	.04748
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	.50439	.22511	.32230	4.0116	68.853	1.4776	1.0093
SDev	.00037	.00020	.00083	.0073	.057	.0013	.0027
%RSD	.07367	.08837	.25651	.18200	.08340	.08746	.26991
#1	.50466	.22525	.32171	4.0167	68.894	1.4786	1.0112
#2	.50413	.22497	.32288	4.0064	68.812	1.4767	1.0073
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	.51299	.53980	.51786	.52517	.54524	.56158	.55613
SDev	.01017	.00133	.00074	.00094	.00483	.00174	.00045
%RSD	1.9824	.24672	.14271	.17831	.88643	.30983	.08072
#1	.52018	.54075	.51839	.52583	.54182	.56281	.55582
#2	.50580	.53886	.51734	.52451	.54865	.56035	.55645
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	2.0760	2.0888	2.0845	2.2151	.51535	.73001
SDev	.0076	.0016	.0036	.0092	.00557	.00910
%RSD	.36423	.07643	.17189	.41432	1.0808	1.2472
#1	2.0814	2.0899	2.0871	2.2216	.51929	.73644
#2	2.0707	2.0876	2.0820	2.2086	.51141	.72357
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	10929	--	--	--	--	--	--
SDev	67.38714	--	--	--	--	--	--
%RSD	.6166127	--	--	--	--	--	--
#1	10881	--	--	--	--	--	--
#2	10976	--	--	--	--	--	--

Method: METTRA Sample Name: DVWJED Operator: MTW
Run Time: 02/13/01 14:05:19
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05349	4.7447	2.0903	2.2575	.05292	123.09	.04809
SDev	.00047	.0178	.0132	.0017	.00136	.55	.00061
%RSD	.88603	.37458	.63118	.07578	2.5784	.44498	1.2740
#1	.05382	4.7321	2.0996	2.2587	.05389	123.47	.04852
#2	.05315	4.7573	2.0809	2.2563	.05196	122.70	.04766
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	.50541	.22358	.35512	3.9575	67.920	1.4622	1.0121
SDev	.00151	.00023	.00145	.0070	.009	.0001	.0005
%RSD	.29805	.10328	.40849	.17781	.01303	.00466	.04459
#1	.50647	.22375	.35409	3.9525	67.913	1.4621	1.0124
#2	.50434	.22342	.35614	3.9624	67.926	1.4622	1.0118
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	.51523	.53519	.51940	.52466	.53793	.56471	.55579
SDev	.01163	.00651	.00571	.00598	.00034	.00988	.00647
%RSD	2.2580	1.2170	1.0992	1.1392	.06404	1.7493	1.1649
#1	.52345	.53980	.52343	.52888	.53769	.57169	.56037
#2	.50700	.53059	.51536	.52043	.53818	.55772	.55122
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	2.1126	2.0976	2.1026	2.2311	.51207	.74399
SDev	.0247	.0221	.0230	.0094	.00882	.00696
%RSD	1.1670	1.0549	1.0924	.42280	1.7220	.93520
#1	2.1300	2.1133	2.1189	2.2378	.51831	.74891
#2	2.0952	2.0820	2.0864	2.2244	.50584	.73907
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	11071	--	--	--	--	--	--
SDev	125.1579	--	--	--	--	--	--
%RSD	1.130487	--	--	--	--	--	--
#1	10983	--	--	--	--	--	--
#2	11160	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-1 0087-052-5 Operator: MTW
Run Time: 02/13/01 14:09:27
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	1.0477	23.953	.52012	1.9949	2.0141	49.974	.50165
SDev	.0176	.550	.01082	.0239	.0318	.787	.00680
%RSD	1.6787	2.2965	2.0806	1.1990	1.5768	1.5753	1.3556
#1	1.0353	23.564	.51247	1.9780	1.9917	49.417	.49684
#2	1.0601	24.342	.52778	2.0118	2.0366	50.531	.50646
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	2.0276	2.0151	1.9650	24.870	49.073	2.0067	2.0293
SDev	.0383	.0398	.0349	.572	.968	.0414	.0463
%RSD	1.8910	1.9749	1.7781	2.3014	1.9733	2.0623	2.2808
#1	2.0005	1.9870	1.9403	24.465	48.388	1.9774	1.9966
#2	2.0547	2.0433	1.9897	25.274	49.758	2.0359	2.0621
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	1.9941	.52229	.51353	.51645	.52361	.53049	.52820
SDev	.0011	.01399	.00734	.00956	.01473	.01635	.01581
%RSD	.05660	2.6787	1.4298	1.8504	2.8136	3.0815	2.9931
#1	1.9933	.51239	.50834	.50969	.51319	.51893	.51702
#2	1.9949	.53218	.51872	.52320	.53403	.54205	.53938
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	.53199	.53076	.53117	1.0566	2.0027	2.0347
SDev	.01896	.00935	.01255	.0197	.0357	.0292
%RSD	3.5643	1.7611	2.3625	1.8666	1.7845	1.4366
#1	.51858	.52415	.52230	1.0426	1.9774	2.0140
#2	.54539	.53737	.54004	1.0705	2.0279	2.0553
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	10871	--	--	--	--	--	--
SDev	219.8750	--	--	--	--	--	--
%RSD	2.022532	--	--	--	--	--	--
#1	11027	--	--	--	--	--	--
#2	10716	--	--	--	--	--	--

Method: METTRA Sample Name: CCB1 Operator: MTW
Run Time: 02/13/01 14:13:36
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00018	.06530	-.00025	.00081	.00167	.03466	.00003
SDev	.00057	.00825	.00140	.00008	.00145	.00018	.00002
%RSD	318.91	12.633	552.50	9.7710	87.055	.52649	62.970
#1	-.00058	.07114	.00074	.00086	.00269	.03453	.00005
#2	.00022	.05947	-.00124	.00075	.00064	.03479	.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	.00037	.00066	-.00052	-.01001	.01938	.00083	.00363
SDev	.00026	.00076	.00087	.02375	.00113	.00000	.00146
%RSD	69.438	115.96	166.74	237.18	5.8575	.42789	40.248
#1	.00019	.00012	-.00114	.00678	.01858	.00082	.00467
#2	.00055	.00120	.00009	-.02681	.02018	.00083	.00260
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00015	.00010	-.00110	-.00070	.00193	-.00116	-.00013
SDev	.00115	.00037	.00044	.00017	.00118	.00100	.00027
%RSD	763.49	387.54	40.182	24.417	60.886	85.766	207.73
#1	-.00096	-.00017	-.00079	-.00058	.00276	-.00186	-.00032
#2	.00066	.00036	-.00141	-.00082	.00110	-.00046	.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	-.00117	.00203	.00096	-.00255	-.00022	.00118
SDev	.00400	.00041	.00106	.00247	.00034	.00027
%RSD	341.30	20.265	109.77	96.679	151.90	23.162
#1	-.00400	.00232	.00022	-.00081	-.00047	.00138
#2	.00166	.00174	.00171	-.00429	.00002	.00099
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10727	--	--	--	--	--	--
SDev	20.61175	--	--	--	--	--	--
%RSD	.1921488	--	--	--	--	--	--
#1	10742	--	--	--	--	--	--
#2	10712	--	--	--	--	--	--

Method: METTRA Sample Name: DVKJHB Operator: MTW
Run Time: 02/13/01 14:17:45
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	-.00066	.08772	-.00096	.00030	.00116	.03444	-.00014
SDev	.00018	.00817	.00080	.00004	.00138	.00253	.00010
%RSD	27.774	9.3140	83.292	12.993	118.75	7.3335	74.484
#1	-.00078	.08194	-.00152	.00033	.00214	.03622	-.00021
#2	-.00053	.09350	-.00039	.00027	.00019	.03265	-.00007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00050	.00161	-.00029	.00877	.00171	.00158	.00148
SDev	.00136	.00018	.00060	.00720	.00002	.00002	.00020
%RSD	272.81	11.314	205.56	82.021	1.3199	1.4279	13.328
#1	-.00146	.00148	-.00072	.00368	.00169	.00159	.00161
#2	.00046	.00173	.00013	.01386	.00172	.00156	.00134
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	.00032	.00234	-.00082	.00023	.00121	-.00207	-.00098
SDev	.00053	.00257	.00035	.00109	.00169	.00136	.00035
%RSD	162.31	110.18	42.375	465.34	139.64	65.667	35.319
#1	-.00005	.00416	-.00057	.00100	.00002	-.00111	-.00073
#2	.00070	.00052	-.00106	-.00054	.00240	-.00303	-.00122
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	-.00526	.00287	.00016	-.00872	-.00046	.00371
SDev	.00303	.00245	.00063	.00012	.00000	.00013
%RSD	57.516	85.516	391.09	1.3671	1.0664	3.4803
#1	-.00312	.00113	-.00028	-.00864	-.00046	.00362
#2	-.00740	.00460	.00060	-.00881	-.00045	.00380
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10518	--	--	--	--	--	--
SDev	50.20458	--	--	--	--	--	--
%RSD	.4773297	--	--	--	--	--	--
#1	10553	--	--	--	--	--	--
#2	10482	--	--	--	--	--	--

Method: METTRA Sample Name: DVKJHC Operator: MTW
Run Time: 02/13/01 14:21:54
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	.05257	2.1456	2.0897	2.0404	.05436	50.890	.04990
SDev	.00034	.0120	.0161	.0160	.00128	.275	.00096
%RSD	.64804	.55858	.77229	.78354	2.3511	.53952	1.9166
#1	.05281	2.1541	2.1012	2.0517	.05526	51.084	.05057
#2	.05233	2.1372	2.0783	2.0291	.05346	50.696	.04922
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51738	.20706	.25273	.87548	50.199	.51647	1.0423
SDev	.00107	.00101	.00024	.01639	.103	.00115	.0011
%RSD	.20609	.48955	.09637	1.8727	.20517	.22289	.10091
#1	.51813	.20777	.25255	.86389	50.272	.51729	1.0431
#2	.51662	.20634	.25290	.88707	50.126	.51566	1.0416
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51021	.53235	.52007	.52416	.50867	.52692	.52085
SDev	.01155	.00584	.00268	.00373	.00402	.00694	.00329
%RSD	2.2629	1.0967	.51546	.71204	.78999	1.3181	.63249
#1	.51838	.53648	.52196	.52680	.50583	.53184	.52318
#2	.50205	.52822	.51817	.52152	.51151	.52201	.51852
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	2.0569	2.0530	2.0543	2.1888	.51229	.52523
SDev	.0103	.0119	.0114	.0136	.00409	.00563
%RSD	.50155	.58043	.55413	.62106	.79755	1.0713
#1	2.0642	2.0614	2.0623	2.1984	.51518	.52921
#2	2.0496	2.0446	2.0462	2.1792	.50940	.52125
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	10580	--	--	--	--	--	--
SDev	62.54304	--	--	--	--	--	--
%RSD	.5911678	--	--	--	--	--	--
#1	10535	--	--	--	--	--	--
#2	10624	--	--	--	--	--	--

Method: METTRA Sample Name: DVH1X Operator: MTW
Run Time: 02/13/01 14:26:03
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	.00462	80.490	.04926	.49571	.01990	454.76	.00119
SDev	.00013	1.012	.00194	.00230	.00253	3.01	.00131
%RSD	2.7796	1.2575	3.9395	.46375	12.728	.66213	110.08
#1	.00471	79.774	.04788	.49734	.02169	456.89	.00026
#2	.00452	81.206	.05063	.49409	.01811	452.63	.00212
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	.08661	2.9260	.67261	H560.63	103.76	H62.097	.26963
SDev	.00036	.0070	.00302	.69	.12	.105	.00139
%RSD	.41245	.23894	.44850	.12353	.11419	.16953	.51750
#1	.08686	2.9309	.67047	H560.14	103.84	H62.172	.27061
#2	.08636	2.9211	.67474	H561.12	103.68	H62.023	.26864
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95778	.49809	.46490	.47595	.01234	.01508	.01417
SDev	.02194	.00936	.00552	.00680	.00163	.00027	.00072
%RSD	2.2904	1.8794	1.1871	1.4284	13.195	1.8016	5.1058
#1	.97329	.50471	.46880	.48076	.01119	.01489	.01366
#2	.94226	.49147	.46099	.47114	.01349	.01527	.01468
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	.03030	-.01248	.00177	.06981	4.2085	1.8497
SDev	.00100	.00119	.00046	.00330	.0264	.0242
%RSD	3.2922	9.5228	26.036	4.7331	.62714	1.3073
#1	.03100	-.01332	.00144	.07215	4.2271	1.8668
#2	.02959	-.01164	.00209	.06748	4.1898	1.8326
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	11232	--	--	--	--	--	--
SDev	111.6165	--	--	--	--	--	--
%RSD	.9937258	--	--	--	--	--	--
#1	11153	--	--	--	--	--	--
#2	11311	--	--	--	--	--	--

Method: METTRA Sample Name: DVH1XP5 Operator: MTW
Run Time: 02/13/01 14:30:17
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00088	15.415	.00954	.10191	.00609	99.788	-.00024
SDev	.00015	.141	.00028	.00027	.00138	.597	.00025
%RSD	16.955	.91701	2.9816	.26105	22.710	.59834	105.24
#1	.00077	15.315	.00975	.10210	.00706	100.21	-.00042
#2	.00099	15.515	.00934	.10172	.00511	99.366	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01865	.62355	.13078	118.00	20.940	H12.807	.05887
SDev	.00004	.00242	.00019	.01	.045	.016	.00045
%RSD	.21978	.38879	.14258	.00494	.21308	.12512	.76082
#1	.01862	.62527	.13092	118.00	20.972	H12.819	.05919
#2	.01868	.62184	.13065	118.00	20.909	H12.796	.05856
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.21143	.10435	.10131	.10232	.00400	.00059	.00173
SDev	.00411	.00028	.00229	.00162	.00138	.00013	.00055
%RSD	1.9441	.26592	2.2633	1.5850	34.549	21.343	31.521
#1	.21433	.10454	.10293	.10347	.00302	.00050	.00134
#2	.20852	.10415	.09969	.10118	.00498	.00068	.00211
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	.00569	.00220	.00336	.00958	.88119	.41520
SDev	.00176	.00224	.00208	.00596	.00454	.00443
%RSD	30.847	102.03	61.893	62.228	.51526	1.0675
#1	.00445	.00061	.00189	.01380	.88440	.41834
#2	.00694	.00378	.00483	.00537	.87798	.41207
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	11158	--	--	--	--	--	--
SDev	100.1261	--	--	--	--	--	--
%RSD	.8973757	--	--	--	--	--	--
#1	11087	--	--	--	--	--	--
#2	11228	--	--	--	--	--	--

Method: METTRA Sample Name: DVH1XS Operator: MTW
Run Time: 02/13/01 14:34:32
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04945	99.328	1.8749	2.5516	.05509	302.43	.04396
SDev	.00052	1.706	.0109	.0074	.00181	.30	.00063
%RSD	1.0581	1.7179	.58338	.28930	3.2844	.09824	1.4384
#1	.04982	98.121	1.8826	2.5568	.05637	302.22	.04351
#2	.04908	100.53	1.8671	2.5464	.05381	302.64	.04440
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	.51944	1.5150	.74400	424.62	135.99	H14.317	1.1274
SDev	.00249	.0069	.00724	3.33	.75	.081	.0032
%RSD	.48007	.45512	.97241	.78399	.54833	.56293	.28832
#1	.51768	1.5101	.73889	422.27	135.46	H14.260	1.1251
#2	.52120	1.5199	.74912	426.97	136.52	H14.374	1.1297
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2953	.93641	.88886	.90469	.30611	.33242	.32366
SDev	.0312	.00073	.00367	.00269	.00494	.00052	.00199
%RSD	2.4078	.07850	.41282	.29759	1.6142	.15673	.61575
#1	1.3173	.93693	.89145	.90659	.30261	.33205	.32225
#2	1.2732	.93589	.88626	.90279	.30960	.33279	.32507
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	1.8124	1.7999	1.8040	1.9215	1.1236	2.4783
SDev	.0061	.0139	.0073	.0054	.0015	.0286
%RSD	.33507	.77477	.40347	.28172	.13139	1.1533
#1	1.8081	1.8097	1.8092	1.9253	1.1247	2.4985
#2	1.8167	1.7900	1.7989	1.9177	1.1226	2.4581
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	11246	--	--	--	--	--	--
SDev	37.61822	--	--	--	--	--	--
%RSD	.3344957	--	--	--	--	--	--
#1	11220	--	--	--	--	--	--
#2	11273	--	--	--	--	--	--

Method: METTRA Sample Name: DVH1XD Operator: MTW
Run Time: 02/13/01 14:38:47
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	.04988	87.606	1.9243	2.3026	.05513	204.14	.04406
SDev	.00101	.240	.0111	.0222	.00178	.83	.00014
%RSD	2.0157	.27408	.57581	.96250	3.2264	.40670	.32217
#1	.05059	87.437	1.9321	2.3183	.05638	204.73	.04396
#2	.04917	87.776	1.9164	2.2869	.05387	203.55	.04416
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	.53726	2.0116	.77568	H511.54	93.114	H13.738	1.3824
SDev	.00070	.0023	.00002	.84	.042	.000	.0016
%RSD	.12992	.11372	.00229	.16349	.04529	.00199	.11318
#1	.53775	2.0132	.77569	H510.95	93.144	H13.738	1.3835
#2	.53676	2.0100	.77566	H512.13	93.084	H13.738	1.3813
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.6689	.98420	.93515	.95149	.33452	.36362	.35393
SDev	.0344	.00478	.00522	.00507	.00458	.00132	.00241
%RSD	2.0638	.48523	.55865	.53336	1.3692	.36402	.68038
#1	1.6933	.98758	.93885	.95507	.33129	.36269	.35223
#2	1.6446	.98082	.93146	.94790	.33776	.36456	.35564
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	1.8365	1.8233	1.8277	1.9599	1.1433	2.2674
SDev	.0063	.0150	.0079	.0060	.0103	.0202
%RSD	.34358	.82510	.43406	.30456	.90203	.88872
#1	1.8320	1.8340	1.8333	1.9641	1.1506	2.2817
#2	1.8410	1.8127	1.8221	1.9556	1.1360	2.2532
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	11188	--	--	--	--	--	--
SDev	114.5865	--	--	--	--	--	--
%RSD	1.024157	--	--	--	--	--	--
#1	11107	--	--	--	--	--	--
#2	11269	--	--	--	--	--	--

Method: METTRA Sample Name: DVH12 Operator: MTW
Run Time: 02/13/01 14:43:01
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00277	77.462	.01451	.53343	.00878	8.0200	-.00119
SDev	.00008	.534	.00114	.00900	.00106	.1276	.00026
%RSD	2.9654	.68958	7.8664	1.6869	12.085	1.5906	21.816
#1	-.00282	77.840	.01370	.53979	.00953	8.1102	-.00137
#2	-.00271	77.084	.01532	.52707	.00803	7.9298	-.00101
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	.11159	.11850	.13112	173.68	27.165	.90238	.01549
SDev	.00149	.00138	.00060	1.43	.262	.00846	.00044
%RSD	1.3380	1.1644	.45435	.82433	.96462	.93785	2.8323
#1	.11264	.11948	.13154	174.70	27.351	.90836	.01580
#2	.11053	.11752	.13070	172.67	26.980	.89639	.01518
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	.08105	.06048	.04732	.05171	.01111	.00190	.00497
SDev	.00331	.00099	.00096	.00031	.00092	.00198	.00102
%RSD	4.0859	1.6366	2.0312	.60246	8.3016	104.35	20.471
#1	.08339	.06118	.04664	.05149	.01176	.00050	.00425
#2	.07870	.05978	.04800	.05193	.01045	.00331	.00569
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	-.00583	.00327	.00024	.02125	.27775	.40425
SDev	.00072	.00225	.00174	.00196	.00442	.00622
%RSD	12.384	68.890	727.95	9.2178	1.5928	1.5375
#1	-.00634	.00168	-.00099	.02264	.28088	.40865
#2	-.00532	.00487	.00147	.01987	.27463	.39986
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	12468	--	--	--	--	--	--
SDev	53.42247	--	--	--	--	--	--
%RSD	.4284655	--	--	--	--	--	--
#1	12431	--	--	--	--	--	--
#2	12506	--	--	--	--	--	--

Method: METTRA Sample Name: DVH13 Operator: MTW
Run Time: 02/13/01 14:48:06
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00304	84.904	.05051	.54710	.01061	341.17	.00325
SDev	.00056	1.797	.00073	.00277	.00231	.80	.00173
%RSD	18.544	2.1159	1.4506	.50672	21.760	.23486	53.102
#1	.00264	83.634	.04999	.54906	.01225	341.74	.00203
#2	.00344	86.175	.05103	.54514	.00898	340.60	.00447
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	.07386	2.4936	.48782	H583.95	143.50	H32.558	.35282
SDev	.00042	.0073	.00586	4.30	.45	.115	.00032
%RSD	.56696	.29197	1.2019	.73717	.31330	.35440	.08937
#1	.07357	2.4885	.48367	H580.91	143.18	H32.477	.35304
#2	.07416	2.4987	.49196	H587.00	143.82	H32.640	.35260
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.6066	.75370	.71709	.72928	.00348	.01216	.00927
SDev	.0556	.00767	.00517	.00600	.00106	.00153	.00137
%RSD	3.4576	1.0181	.72078	.82312	30.541	12.552	14.798
#1	1.6459	.75913	.72075	.73353	.00273	.01108	.00830
#2	1.5673	.74828	.71344	.72504	.00423	.01324	.01024
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01676	-.00592	.00163	.05061	1.0940	2.5810
SDev	.00103	.00115	.00042	.00365	.0131	.0320
%RSD	6.1343	19.392	25.909	7.2171	1.1957	1.2379
#1	.01748	-.00673	.00133	.05320	1.1033	2.6036
#2	.01603	-.00511	.00193	.04803	1.0848	2.5584
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	11169	--	--	--	--	--	--
SDev	18.70311	--	--	--	--	--	--
%RSD	.1674627	--	--	--	--	--	--
#1	11182	--	--	--	--	--	--
#2	11155	--	--	--	--	--	--

Method: METTRA Sample Name: DVH14 Operator: MTW
Run Time: 02/13/01 14:52:21
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00191	45.091	.03283	.13272	.00936	3.8892	.00059
SDev	.00030	.177	.00010	.00092	.00069	.0371	.00017
%RSD	15.630	.39228	.30123	.69267	7.3640	.95296	28.085
#1	-.00170	44.966	.03290	.13337	.00985	3.9154	.00047
#2	-.00212	45.216	.03276	.13207	.00888	3.8630	.00071
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06697	.19304	.22797	83.422	43.867	.87987	.00519
SDev	.00070	.00111	.00016	.245	.143	.00394	.00040
%RSD	1.0507	.57229	.06930	.29318	.32679	.44745	7.6157
#1	.06747	.19382	.22808	83.595	43.969	.88265	.00547
#2	.06647	.19225	.22786	83.249	43.766	.87708	.00491
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	.10912	.11917	.11215	.11449	.00501	.00013	.00176
SDev	.00350	.00325	.00211	.00249	.00128	.00056	.00005
%RSD	3.2051	2.7243	1.8821	2.1740	25.436	421.36	2.9010
#1	.11159	.12147	.11364	.11625	.00411	.00053	.00172
#2	.10665	.11687	.11066	.11273	.00591	-.00026	.00179
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	.00713	.00043	.00266	.01090	.44930	.49551
SDev	.00016	.00240	.00155	.00256	.00522	.00681
%RSD	2.2016	561.05	58.146	23.478	1.1612	1.3753
#1	.00702	.00212	.00375	.00909	.45299	.50032
#2	.00724	-.00127	.00157	.01271	.44561	.49069
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	15741	--	--	--	--	--	--
SDev	227.0165	--	--	--	--	--	--
%RSD	1.442187	--	--	--	--	--	--
#1	15581	--	--	--	--	--	--
#2	15902	--	--	--	--	--	--

Method: METTRA Sample Name: DVH18 Operator: MTW
Run Time: 02/13/01 14:56:30
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	-.00068	82.933	.14232	.40120	.01445	3.9759	.00011
SDev	.00053	.692	.00025	.00319	.00109	.0034	.00061
%RSD	78.046	.83490	.17616	.79399	7.5487	.08509	532.52
#1	-.00106	82.444	.14215	.40346	.01522	3.9735	-.00032
#2	-.00031	83.423	.14250	.39895	.01368	3.9783	.00054
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	.26926	.09706	.32920	338.57	5.1120	H11.623	.01211
SDev	.00216	.00153	.00124	1.56	.0171	.030	.00097
%RSD	.80285	1.5724	.37596	.46037	.33391	.26215	7.9815
#1	.26773	.09598	.32833	337.47	5.1000	H11.602	.01143
#2	.27079	.09814	.33008	339.68	5.1241	H11.645	.01280
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22551	.25883	.22679	.23746	.00420	.01119	.00886
SDev	.00461	.00613	.00536	.00153	.00799	.00149	.00167
%RSD	2.0460	2.3670	2.3626	.64587	190.08	13.301	18.800
#1	.22877	.25450	.23058	.23854	.00985	.01014	.01004
#2	.22225	.26316	.22300	.23637	-.00145	.01224	.00768
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	.00937	.00305	.00516	.03146	.34684	1.2202
SDev	.00801	.00216	.00123	.00022	.00564	.0094
%RSD	85.509	70.644	23.822	.71366	1.6273	.77200
#1	.00370	.00458	.00429	.03130	.35083	1.2269
#2	.01503	.00153	.00602	.03162	.34285	1.2135
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	12612	--	--	--	--	--	--
SDev	94.18676	--	--	--	--	--	--
%RSD	.7468116	--	--	--	--	--	--
#1	12545	--	--	--	--	--	--
#2	12678	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-2 Operator: MTW
Run Time: 02/13/01 15:00:44
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0129	L22.484	.50689	1.9273	1.9444	48.185	.48698
SDev	.0025	.076	.00342	.0135	.0101	.254	.00254
%RSD	.25047	.34021	.67400	.70141	.51969	.52680	.52172
#1	1.0147	L22.430	.50931	1.9369	1.9515	48.365	.48878
#2	1.0111	22.538	.50447	1.9177	1.9372	48.006	.48518
Errors	LC Pass	LC Low	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	1.9691	1.9556	1.8848	24.014	47.526	1.9302	1.9764
SDev	.0017	.0023	.0023	.039	.017	.0011	.0036
%RSD	.08607	.11811	.11950	.16283	.03473	.05546	.18383
#1	1.9703	1.9572	1.8864	23.986	47.538	1.9310	1.9739
#2	1.9679	1.9539	1.8832	24.041	47.514	1.9295	1.9790
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	1.9903	.50569	.50250	.50356	.51220	.51161	.51181
SDev	.0345	.00156	.00115	.00025	.01139	.00181	.00500
%RSD	1.7330	.30945	.22981	.04947	2.2241	.35486	.97782
#1	2.0147	.50679	.50168	.50338	.50414	.51032	.50827
#2	1.9659	.50458	.50332	.50374	.52026	.51289	.51534
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	.51108	.51486	.51360	1.0263	1.9374	1.9728
SDev	.00360	.00152	.00221	.0073	.0031	.0153
%RSD	.70448	.29591	.43130	.71419	.15941	.77453
#1	.50853	.51378	.51203	1.0315	1.9396	1.9836
#2	.51362	.51594	.51517	1.0212	1.9352	1.9620
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

675 1552

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11121	--	--	--	--	--	--
SDev	42.10807	--	--	--	--	--	--
%RSD	.3786195	--	--	--	--	--	--
#1	11151	--	--	--	--	--	--
#2	11092	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2 Operator: MTW
Run Time: 02/13/01 15:04:57
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00057	.03292	.00006	.00046	.00284	1.5472	.00009
SDev	.00057	.00190	.00059	.00001	.00123	.0020	.00011
%RSD	98.894	5.7830	976.08	2.2896	43.405	.12714	116.83
#1	-.00097	.03426	-.00036	.00045	.00371	1.5458	.00002
#2	-.00017	.03157	.00048	.00047	.00197	1.5486	.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	.00021	.00038	-.00124	.04494	.02106	.00250	.00334
SDev	.00010	.00047	.00094	.01277	.00003	.00016	.00122
%RSD	47.123	126.30	75.923	28.416	.13989	6.4971	36.682
#1	.00014	.00071	-.00190	.03591	.02104	.00261	.00420
#2	.00028	.00004	-.00057	.05397	.02109	.00238	.00247
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	.00079	.00115	-.00018	.00026	-.00069	-.00171	-.00137
SDev	.00124	.00465	.00063	.00113	.00005	.00401	.00269
%RSD	156.62	403.70	345.72	430.64	7.7004	234.05	196.18
#1	-.00009	.00444	-.00063	.00106	-.00065	.00112	.00053
#2	.00167	-.00214	.00026	-.00054	-.00073	-.00455	-.00327
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	-.00138	-.00071	-.00093	.00032	.00025	.00109
SDev	.00474	.00050	.00125	.00334	.00101	.00022
%RSD	342.90	71.028	133.71	1038.9	398.47	20.230
#1	-.00474	-.00035	-.00181	.00268	.00097	.00124
#2	.00197	-.00106	-.00005	-.00204	-.00046	.00093
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11008	--	--	--	--	--	--
SDev	13.47025	--	--	--	--	--	--
%RSD	.1223703	--	--	--	--	--	--
#1	11017	--	--	--	--	--	--
#2	10998	--	--	--	--	--	--

Method: METTRA Sample Name: DVH20 Operator: MTW
Run Time: 02/13/01 15:11:53
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00296	28.460	.05771	.04039	.00724	.71664	.00001
SDev	.00017	.131	.00021	.00041	.00085	.00697	.00001
%RSD	5.7869	.46154	.36760	1.0109	11.740	.97237	94.759
#1	-.00283	28.367	.05756	.04067	.00784	.72156	.00000
#2	-.00308	28.553	.05786	.04010	.00664	.71171	.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09303	.04676	.17768	112.34	.62456	.38927	.01116
SDev	.00063	.00033	.00043	.03	.00114	.00112	.00052
%RSD	.68166	.71532	.24145	.02398	.18307	.28697	4.6946
#1	.09348	.04700	.17738	112.36	.62537	.39006	.01153
#2	.09258	.04652	.17799	112.32	.62375	.38848	.01078
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	.14235	.08787	.08310	.08469	.00302	-.00182	-.00021
SDev	.00522	.00036	.00165	.00098	.00135	.00154	.00148
%RSD	3.6660	.40479	1.9828	1.1578	44.693	84.676	710.04
#1	.14604	.08812	.08194	.08400	.00398	-.00073	.00084
#2	.13866	.08762	.08427	.08539	.00207	-.00291	-.00125
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	.00240	-.00160	-.00027	.01043	.14631	.41566
SDev	.00027	.00063	.00051	.00113	.00358	.00550
%RSD	11.190	39.737	193.50	10.858	2.4483	1.3228
#1	.00221	-.00205	-.00063	.00963	.14885	.41954
#2	.00259	-.00115	.00010	.01123	.14378	.41177
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	17602	--	--	--	--	--	--
SDev	97.40396	--	--	--	--	--	--
%RSD	.5533679	--	--	--	--	--	--
#1	17533	--	--	--	--	--	--
#2	17671	--	--	--	--	--	--

Method: METTRA Sample Name: DVH23 Operator: MTW
Run Time: 02/13/01 15:16:02
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00205	78.058	.01771	.90331	.01253	6.1279	-.00049
SDev	.00024	.624	.00034	.00634	.00090	.0293	.00006
%RSD	11.570	.80000	1.8938	.70129	7.2117	.47891	11.881
#1	-.00221	77.617	.01748	.90779	.01317	6.1487	-.00053
#2	-.00188	78.500	.01795	.89883	.01189	6.1072	-.00045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06568	.06410	.04762	118.20	10.874	5.9181	.00125
SDev	.00034	.00019	.00056	.13	.014	.0048	.00008
%RSD	.51204	.29370	1.1786	.11276	.13132	.08182	6.5388
#1	.06592	.06397	.04722	118.11	10.884	5.9216	.00130
#2	.06544	.06424	.04801	118.30	10.863	5.9147	.00119
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	.06947	.06030	.04884	.05266	.00033	-.00212	-.00130
SDev	.00158	.00045	.00081	.00069	.00019	.00090	.00054
%RSD	2.2736	.74491	1.6633	1.3131	55.809	42.607	41.476
#1	.07059	.06062	.04942	.05315	.00047	-.00276	-.00168
#2	.06835	.05999	.04827	.05217	.00020	-.00148	-.00092
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	.00928	-.00075	.00259	.01196	.16876	.38704
SDev	.00407	.00157	.00031	.00244	.00189	.00397
%RSD	43.870	209.20	11.830	20.395	1.1210	1.0251
#1	.01215	-.00186	.00280	.01024	.17010	.38984
#2	.00640	.00036	.00237	.01369	.16743	.38423
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

675 1558

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14553	--	--	--	--	--	--
SDev	15.87468	--	--	--	--	--	--
%RSD	.1090798	--	--	--	--	--	--
#1	14542	--	--	--	--	--	--
#2	14564	--	--	--	--	--	--

Method: METTRA Sample Name: DVH25 Operator: MTW
Run Time: 02/13/01 15:20:11
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00180	68.707	.01531	.33729	.01287	2.2032	-.00026
SDev	.00070	1.052	.00167	.00268	.00146	.0033	.00051
%RSD	39.078	1.5318	10.927	.79403	11.346	.14785	196.73
#1	-.00229	67.963	.01413	.33918	.01391	2.2055	-.00062
#2	-.00130	69.452	.01649	.33539	.01184	2.2009	.00010
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	.07642	.05246	.09224	238.53	55.432	5.5650	-.00007
SDev	.00020	.00072	.00171	1.02	.045	.0049	.00068
%RSD	.25591	1.3766	1.8527	.42897	.08180	.08747	1039.8
#1	.07628	.05195	.09103	237.81	55.400	5.5616	.00042
#2	.07656	.05297	.09345	239.25	55.464	5.5685	-.00055
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	.09776	.04266	.02831	.03308	.00130	.00239	.00203
SDev	.00344	.00087	.00045	.00001	.00356	.00252	.00049
%RSD	3.5181	2.0458	1.5982	.03358	273.38	105.28	24.331
#1	.10019	.04328	.02799	.03308	-.00121	.00417	.00238
#2	.09532	.04204	.02863	.03309	.00382	.00061	.00168
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	.00557	-.00435	-.00105	.01927	.15831	.44591
SDev	.00080	.00010	.00020	.00020	.00365	.00701
%RSD	14.299	2.3226	18.863	1.0516	2.3040	1.5723
#1	.00613	-.00443	-.00091	.01912	.16089	.45087
#2	.00501	-.00428	-.00119	.01941	.15573	.44095
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13468	--	--	--	--	--	--
SDev	67.81181	--	--	--	--	--	--
%RSD	.5034976	--	--	--	--	--	--
#1	13420	--	--	--	--	--	--
#2	13516	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3 Operator: MTW
Run Time: 02/13/01 15:24:19
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0197	22.510	.51214	1.9390	1.9616	48.597	.49338
SDev	.0026	.193	.00447	.0153	.0057	.127	.00486
%RSD	.25321	.85543	.87214	.78832	.29143	.26182	.98509
#1	1.0216	L22.374	.51530	1.9498	1.9657	48.687	.49682
#2	1.0179	22.647	.50899	1.9282	1.9576	48.507	.48995
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	1.9936	1.9783	1.8939	24.193	48.012	1.9524	2.0002
SDev	.0032	.0001	.0011	.084	.015	.0002	.0050
%RSD	.16235	.00711	.05848	.34638	.03111	.00991	.25056
#1	1.9959	1.9784	1.8931	24.133	48.023	1.9522	1.9966
#2	1.9913	1.9782	1.8947	24.252	48.002	1.9525	2.0037
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	1.9601	.51120	.50584	.50763	.51368	.51352	.51357
SDev	.0406	.00161	.00085	.00110	.00466	.00371	.00093
%RSD	2.0710	.31570	.16713	.21696	.90691	.72333	.18034
#1	1.9888	.51234	.50644	.50840	.51039	.51614	.51423
#2	1.9314	.51006	.50524	.50685	.51698	.51089	.51292
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	.51611	.51549	.51570	1.0407	1.9568	1.9964
SDev	.00157	.00166	.00059	.0040	.0050	.0207
%RSD	.30336	.32289	.11419	.38076	.25335	1.0344
#1	.51722	.51431	.51528	1.0435	1.9603	2.0110
#2	.51500	.51667	.51611	1.0379	1.9533	1.9818
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	11026	--	--	--	--	--	--
SDev	10.11149	--	--	--	--	--	--
%RSD	.0917067	--	--	--	--	--	--
#1	11033	--	--	--	--	--	--
#2	11019	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3 Operator: MTW
Run Time: 02/13/01 15:28:28
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00015	.02727	-.00172	.00064	.00331	.01291	.00004
SDev	.00051	.00681	.00012	.00007	.00129	.00468	.00016
%RSD	336.32	24.970	6.9874	11.427	38.875	36.257	358.80
#1	-.00051	.03208	-.00164	.00059	.00422	.00960	-.00007
#2	.00021	.02245	-.00181	.00069	.00240	.01622	.00016
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	.00064	.00085	-.00104	.04070	.01500	.00162	.00390
SDev	.00010	.00009	.00048	.00946	.00435	.00002	.00058
%RSD	15.226	10.647	46.058	23.248	28.990	.94623	14.817
#1	.00057	.00092	-.00138	.03401	.01193	.00161	.00431
#2	.00071	.00079	-.00070	.04739	.01808	.00163	.00349
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	-.00017	.00090	-.00041	.00003	.00339	-.00053	.00077
SDev	.00013	.00014	.00100	.00062	.00041	.00358	.00252
%RSD	73.766	15.605	245.07	2347.4	12.203	669.27	326.41
#1	-.00026	.00080	.00030	.00046	.00310	-.00306	-.00101
#2	-.00008	.00099	-.00111	-.00041	.00369	.00200	.00256
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	-.00274	-.00036	-.00115	.00045	-.00023	.00097
SDev	.00227	.00359	.00164	.00044	.00035	.00017
%RSD	82.925	1007.1	142.39	99.012	151.65	17.188
#1	-.00113	-.00290	-.00231	.00013	-.00047	.00086
#2	-.00435	.00218	.00001	.00076	.00002	.00109
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11042	--	--	--	--	--	--
SDev	64.27559	--	--	--	--	--	--
%RSD	.5820852	--	--	--	--	--	--
#1	11088	--	--	--	--	--	--
#2	10997	--	--	--	--	--	--

Method: METTRA Sample Name: DVH1X/2 FE Operator: MTW
Run Time: 02/13/01 15:34:11
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00199	38.328	.02516	.25144	.01342	241.11	.00024
SDev	.00046	.205	.00295	.00278	.00227	1.28	.00070
%RSD	23.056	.53553	11.725	1.1035	16.906	.53187	290.90
#1	.00167	38.183	.02725	.25340	.01502	242.02	-.00025
#2	.00232	38.473	.02308	.24948	.01182	240.20	.00074
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	.04546	1.5268	.32930	287.50	52.688	H31.760	.14232
SDev	.00025	.0021	.00118	.20	.047	.030	.00019
%RSD	.54008	.13975	.35841	.06907	.08943	.09350	.13139
#1	.04563	1.5283	.32847	287.36	52.721	H31.781	.14219
#2	.04529	1.5253	.33014	287.64	52.654	H31.739	.14245
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50466	.26054	.24221	.24831	.00515	.00771	.00686
SDev	.01686	.00230	.00163	.00185	.00395	.00262	.00306
%RSD	3.3415	.88229	.67177	.74532	76.780	33.966	44.666
#1	.51658	.26216	.24336	.24962	.00235	.00586	.00469
#2	.49273	.25891	.24106	.24700	.00794	.00956	.00902
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01321	-.00438	.00148	.03299	2.1749	.97056
SDev	.00602	.00092	.00139	.00426	.0135	.01257
%RSD	45.568	21.082	93.926	12.900	.62092	1.2952
#1	.00895	-.00373	.00050	.03599	2.1844	.97945
#2	.01746	-.00503	.00246	.02998	2.1653	.96167
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	11191	--	--	--	--	--	--
SDev	24.57196	--	--	--	--	--	--
%RSD	.2195684	--	--	--	--	--	--
#1	11174	--	--	--	--	--	--
#2	11208	--	--	--	--	--	--

Method: METTRA Sample Name: DVH1XP10 FE Operator: MTW
Run Time: 02/13/01 15:38:25
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00002	7.2086	.00411	.05018	.00472	49.590	-.00012
SDev	.00013	.0683	.00111	.00030	.00156	.225	.00037
%RSD	584.21	.94802	26.932	.59176	32.945	.45338	315.46
#1	.00007	7.1603	.00489	.05039	.00582	49.749	-.00038
#2	-.00012	7.2570	.00333	.04997	.00362	49.431	.00015
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	.00990	.31235	.06206	58.129	10.316	6.3903	.02933
SDev	.00046	.00152	.00114	.102	.015	.0070	.00046
%RSD	4.6059	.48723	1.8415	.17619	.14516	.11008	1.5800
#1	.00958	.31127	.06125	58.057	10.327	6.3952	.02901
#2	.01022	.31342	.06286	58.202	10.306	6.3853	.02966
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	.10253	.05206	.04863	.04977	-.00052	-.00114	-.00094
SDev	.00145	.00023	.00018	.00004	.00277	.00105	.00022
%RSD	1.4159	.44592	.36574	.08304	531.34	91.715	23.848
#1	.10356	.05222	.04851	.04974	.00144	-.00188	-.00078
#2	.10150	.05190	.04876	.04980	-.00248	-.00040	-.00109
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	-.00067	-.00172	-.00137	.00596	.43833	.19943
SDev	.00219	.00152	.00174	.00041	.00221	.00317
%RSD	328.36	88.229	127.05	6.8908	.50448	1.5895
#1	.00088	-.00065	-.00014	.00625	.43990	.20167
#2	-.00221	-.00280	-.00260	.00567	.43677	.19719
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	11150	--	--	--	--	--	--
SDev	50.80535	--	--	--	--	--	--
%RSD	.4556625	--	--	--	--	--	--
#1	11114	--	--	--	--	--	--
#2	11186	--	--	--	--	--	--

Method: METTRA Sample Name: DVH1XS/2 MN Operator: MTW
Run Time: 02/13/01 15:42:35
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	.02455	47.237	.97548	1.2938	.03037	157.88	.02371
SDev	.00018	.622	.01196	.0112	.00191	.75	.00007
%RSD	.72686	1.3159	1.2264	.86707	6.2978	.47306	.29114
#1	.02468	46.797	.98394	1.3018	.03173	158.41	.02367
#2	.02443	47.676	.96702	1.2859	.02902	157.36	.02376
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	.27371	.78635	.36481	216.26	68.712	7.3765	.59132
SDev	.00062	.00045	.00191	.56	.004	.0013	.00190
%RSD	.22778	.05710	.52230	.25968	.00597	.01818	.32192
#1	.27415	.78667	.36346	215.87	68.715	7.3775	.59267
#2	.27327	.78604	.36616	216.66	68.709	7.3756	.58998
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	.67598	.48808	.46656	.47373	.15722	.16989	.16567
SDev	.02350	.00113	.00254	.00132	.00369	.00131	.00210
%RSD	3.4761	.23109	.54475	.27857	2.3491	.76883	1.2682
#1	.69259	.48728	.46836	.47466	.15460	.16897	.16418
#2	.65936	.48888	.46476	.47279	.15983	.17081	.16716
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	.95066	.94553	.94723	.99504	.57259	1.3007
SDev	.00408	.00187	.00012	.01240	.00353	.0214
%RSD	.42953	.19744	.01210	1.2465	.61650	1.6443
#1	.94777	.94685	.94715	1.0038	.57508	1.3158
#2	.95354	.94421	.94731	.98627	.57009	1.2855
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	11150	--	--	--	--	--	--
SDev	68.09425	--	--	--	--	--	--
%RSD	.6106970	--	--	--	--	--	--
#1	11102	--	--	--	--	--	--
#2	11198	--	--	--	--	--	--

Method: METTRA Sample Name: DVH1XD/2 FE,MN Operator: MTW
Run Time: 02/13/01 15:46:45
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	.02426	41.195	.98159	1.1479	.02943	103.49	.02369
SDev	.00010	.495	.00440	.0001	.00091	.19	.00014
%RSD	.38974	1.2006	.44834	.00947	3.1042	.18463	.59758
#1	.02420	40.845	.98470	1.1478	.03007	103.62	.02359
#2	.02433	41.544	.97847	1.1480	.02878	103.35	.02379
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	.27484	1.0208	.37520	255.49	46.251	6.9330	.70779
SDev	.00013	.0016	.00251	.56	.062	.0056	.00086
%RSD	.04598	.15443	.66953	.21919	.13439	.08032	.12158
#1	.27475	1.0219	.37343	255.09	46.207	6.9290	.70718
#2	.27493	1.0197	.37698	255.89	46.295	6.9369	.70840
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	.85070	.49991	.47933	.48619	.17481	.18380	.18080
SDev	.01298	.00586	.00300	.00395	.00103	.00173	.00081
%RSD	1.5258	1.1714	.62609	.81281	.58801	.94291	.45001
#1	.85987	.50406	.48145	.48898	.17408	.18502	.18138
#2	.84152	.49577	.47721	.48339	.17554	.18257	.18023
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	.94528	.93366	.93753	.99078	.57402	1.1590
SDev	.00768	.00248	.00421	.00270	.00071	.0092
%RSD	.81214	.26553	.44905	.27292	.12392	.79094
#1	.95071	.93541	.94051	.99269	.57453	1.1654
#2	.93985	.93191	.93455	.98887	.57352	1.1525
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

675 1572

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11256	--	--	--	--	--	--
SDev	89.73212	--	--	--	--	--	--
%RSD	.7972292	--	--	--	--	--	--
#1	11192	--	--	--	--	--	--
#2	11319	--	--	--	--	--	--

Method: METTRA Sample Name: DVH13/2 FE Operator: MTW
Run Time: 02/13/01 15:50:54
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	.00078	39.894	.02378	.27145	.00709	174.72	.00179
SDev	.00104	.963	.00076	.00332	.00059	1.11	.00061
%RSD	132.89	2.4135	3.1795	1.2248	8.3621	.63639	34.244
#1	.00151	39.213	.02431	.26910	.00751	173.93	.00136
#2	.00005	40.575	.02324	.27380	.00667	175.50	.00222
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	.03769	1.2676	.23406	292.16	70.975	H16.388	.18227
SDev	.00047	.0108	.00405	3.17	.647	.139	.00040
%RSD	1.2335	.85420	1.7299	1.0847	.91090	.84737	.21738
#1	.03802	1.2600	.23119	289.92	70.518	H16.289	.18199
#2	.03736	1.2753	.23692	294.40	71.433	H16.486	.18255
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.81668	.38307	.36898	.37367	.00345	.00304	.00318
SDev	.00140	.00156	.00361	.00292	.00179	.00025	.00043
%RSD	.17167	.40695	.97725	.78256	51.940	8.3756	13.462
#1	.81569	.38417	.37153	.37574	.00472	.00286	.00348
#2	.81767	.38196	.36643	.37160	.00218	.00322	.00287
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	.00831	-.00056	.00239	.02495	.54713	1.3227
SDev	.00152	.00246	.00114	.00147	.00436	.0001
%RSD	18.222	438.96	47.568	5.8796	.79684	.00863
#1	.00724	.00118	.00320	.02391	.54405	1.3228
#2	.00939	-.00230	.00159	.02599	.55021	1.3227
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	11261	--	--	--	--	--	--
SDev	67.59982	--	--	--	--	--	--
%RSD	.6003084	--	--	--	--	--	--
#1	11213	--	--	--	--	--	--
#2	11309	--	--	--	--	--	--

Method: METTRA Sample Name: DVH1X/10 MN Operator: MTW
Run Time: 02/13/01 15:55:09
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00063	7.0532	.00552	.04928	.00447	48.836	.00010
SDev	.00025	.2657	.00003	.00093	.00131	.970	.00007
%RSD	39.080	3.7664	.47651	1.8785	29.298	1.9861	72.434
#1	-.00081	6.8653	.00550	.04863	.00539	48.150	.00015
#2	-.00046	7.2410	.00554	.04994	.00354	49.522	.00005
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	.00974	.30820	.06050	57.247	10.179	6.3044	.02945
SDev	.00040	.00673	.00210	1.328	.216	.1347	.00060
%RSD	4.1294	2.1830	3.4753	2.3201	2.1218	2.1359	2.0326
#1	.00946	.30344	.05901	56.308	10.027	6.2092	.02902
#2	.01003	.31296	.06199	58.186	10.332	6.3996	.02987
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	.09997	.05019	.04920	.04953	.00339	-.00224	-.00036
SDev	.00369	.00153	.00143	.00044	.00137	.00150	.00146
%RSD	3.6926	3.0511	2.8997	.89183	40.452	67.087	401.20
#1	.09736	.04910	.05021	.04984	.00242	-.00330	-.00140
#2	.10258	.05127	.04820	.04922	.00436	-.00118	.00067
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	.00138	-.00068	.00000	.00514	.42943	.19629
SDev	.00225	.00375	.00325	.00191	.01091	.00175
%RSD	163.43	548.22	148510.	37.092	2.5396	.89233
#1	.00297	.00197	.00230	.00649	.42172	.19505
#2	-.00021	-.00334	-.00230	.00379	.43714	.19753
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

675 1576

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11263	--	--	--	--	--	--
SDev	141.1037	--	--	--	--	--	--
%RSD	1.252827	--	--	--	--	--	--
#1	11363	--	--	--	--	--	--
#2	11163	--	--	--	--	--	--

Method: METTRA Sample Name: DVH1XP50 MN Operator: MTW
Run Time: 02/13/01 16:01:42
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00077	1.3573	-.00118	.00991	.00400	9.8103	-.00010
SDev	.00053	.0033	.00067	.00019	.00112	.0751	.00001
%RSD	68.282	.24505	56.961	1.8872	27.901	.76596	10.563
#1	-.00040	1.3549	-.00071	.01005	.00479	9.8634	-.00009
#2	-.00115	1.3596	-.00166	.00978	.00321	9.7572	-.00010
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	.00152	.06190	.00996	11.413	2.0044	1.2679	.00613
SDev	.00035	.00137	.00060	.009	.0062	.0033	.00047
%RSD	23.018	2.2179	5.9857	.07548	.30729	.25691	7.7152
#1	.00177	.06287	.00953	11.407	2.0087	1.2702	.00647
#2	.00127	.06093	.01038	11.419	2.0000	1.2656	.00580
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02001	.01151	.00884	.00973	.00081	-.00257	-.00145
SDev	.00066	.00163	.00162	.00162	.00229	.00205	.00060
%RSD	3.2934	14.151	18.284	16.657	284.31	79.668	41.724
#1	.02048	.01266	.00999	.01088	-.00082	-.00112	-.00102
#2	.01954	.01035	.00770	.00858	.00243	-.00403	-.00188
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	.00219	-.00256	-.00098	-.00030	.08889	.04003
SDev	.00414	.00501	.00196	.00089	.00035	.00055
%RSD	189.16	195.70	200.57	299.16	.39737	1.3688
#1	.00512	-.00610	-.00236	.00033	.08914	.04042
#2	-.00074	.00098	.00041	-.00093	.08864	.03965
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	11153	--	--	--	--	--	--
SDev	89.66100	--	--	--	--	--	--
%RSD	.8039507	--	--	--	--	--	--
#1	11089	--	--	--	--	--	--
#2	11216	--	--	--	--	--	--

Method: METTRA Sample Name: DVH13/5 MN Operator: MTW
Run Time: 02/13/01 16:05:52
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	-.00062	15.390	.00825	.10922	.00471	71.791	.00054
SDev	.00004	.139	.00049	.00018	.00068	.025	.00021
%RSD	6.4720	.90199	5.8797	.16250	14.352	.03450	38.069
#1	-.00065	15.292	.00790	.10910	.00518	71.809	.00040
#2	-.00059	15.488	.00859	.10935	.00423	71.774	.00069
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	.01433	.51920	.09230	118.50	28.258	6.6794	.07423
SDev	.00010	.00204	.00055	.52	.050	.0141	.00062
%RSD	.71141	.39306	.59715	.44231	.17847	.21119	.84028
#1	.01425	.51776	.09192	118.13	28.222	6.6695	.07379
#2	.01440	.52064	.09269	118.87	28.294	6.6894	.07467
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	.33619	.15895	.14839	.15191	.00325	.00108	.00180
SDev	.00349	.00183	.00002	.00060	.00150	.00195	.00080
%RSD	1.0377	1.1519	.01335	.39269	46.172	181.14	44.514
#1	.33866	.16025	.14838	.15233	.00219	.00246	.00237
#2	.33373	.15766	.14840	.15149	.00432	-.00030	.00123
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	.00528	-.00048	.00144	.00733	.22295	.54563
SDev	.00113	.00434	.00327	.00360	.00045	.00220
%RSD	21.408	896.70	227.87	49.105	.20374	.40411
#1	.00608	.00258	.00375	.00987	.22327	.54718
#2	.00448	-.00355	-.00088	.00478	.22263	.54407
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	11141	--	--	--	--	--	--
SDev	2.262880	--	--	--	--	--	--
%RSD	.0203116	--	--	--	--	--	--
#1	11142	--	--	--	--	--	--
#2	11139	--	--	--	--	--	--

Method: METTRA Sample Name: DVH14/2(INTSTD) Operator: MTW
Run Time: 02/13/01 16:10:01
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00120	24.633	.01878	.07656	.00672	2.2507	.00022
SDev	.00015	.411	.00033	.00022	.00089	.0025	.00027
%RSD	12.776	1.6699	1.7567	.28522	13.270	.11003	120.58
#1	-.00130	24.342	.01901	.07671	.00735	2.2489	.00041
#2	-.00109	24.923	.01854	.07640	.00609	2.2524	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03926	.11336	.12869	48.063	25.351	.51706	.00253
SDev	.00055	.00096	.00151	.153	.008	.00033	.00013
%RSD	1.4103	.84495	1.1750	.31746	.02988	.06452	5.0901
#1	.03965	.11403	.12762	47.955	25.346	.51730	.00262
#2	.03887	.11268	.12976	48.171	25.357	.51683	.00244
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06072	.07355	.06445	.06748	.00293	.00094	.00160
SDev	.00210	.00301	.00289	.00293	.00186	.00145	.00035
%RSD	3.4541	4.0945	4.4784	4.3390	63.392	153.64	21.796
#1	.06220	.07568	.06649	.06955	.00161	.00197	.00185
#2	.05924	.07142	.06241	.06541	.00424	-.00008	.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	.00127	-.00108	-.00030	.00166	.26271	.29099
SDev	.00233	.00217	.00067	.00087	.00248	.00373
%RSD	184.03	200.81	224.67	52.431	.94211	1.2819
#1	.00292	-.00261	-.00077	.00104	.26446	.29363
#2	-.00038	.00045	.00017	.00227	.26096	.28835
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	13340	--	--	--	--	--	--
SDev	121.2329	--	--	--	--	--	--
%RSD	.9088043	--	--	--	--	--	--
#1	13254	--	--	--	--	--	--
#2	13426	--	--	--	--	--	--

Method: METTRA Sample Name: DVH18/2 MN Operator: MTW
Run Time: 02/13/01 16:14:10
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00157	40.647	.07474	.20834	.00953	2.0639	.00033
SDev	.00047	.271	.00117	.00015	.00047	.0055	.00016
%RSD	29.731	.66631	1.5699	.06945	4.9386	.26567	48.145
#1	-.00191	40.456	.07391	.20823	.00986	2.0600	.00022
#2	-.00124	40.839	.07557	.20844	.00920	2.0677	.00044
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	.14285	.05083	.16581	175.25	2.6780	6.1134	.00598
SDev	.00220	.00060	.00052	.84	.0045	.0222	.00034
%RSD	1.5438	1.1792	.31498	.48192	.16895	.36314	5.7158
#1	.14129	.05040	.16544	174.66	2.6748	6.0977	.00623
#2	.14441	.05125	.16618	175.85	2.6812	6.1291	.00574
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	.11926	.13338	.12311	.12653	.00478	.00502	.00494
SDev	.00107	.00054	.00250	.00149	.00020	.00382	.00248
%RSD	.89741	.40249	2.0325	1.1778	4.1316	76.053	50.225
#1	.12002	.13376	.12134	.12548	.00492	.00232	.00318
#2	.11850	.13300	.12488	.12759	.00464	.00772	.00669
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	-.00112	.00277	.00148	.01612	.18290	.65152
SDev	.00093	.00142	.00064	.00042	.00084	.00057
%RSD	83.487	51.353	43.264	2.5737	.45849	.08780
#1	-.00046	.00177	.00103	.01642	.18231	.65112
#2	-.00178	.00378	.00193	.01583	.18350	.65193
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	11922	--	--	--	--	--	--
SDev	52.89145	--	--	--	--	--	--
%RSD	.4436402	--	--	--	--	--	--
#1	11960	--	--	--	--	--	--
#2	11885	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-4 Operator: MTW
Run Time: 02/13/01 16:18:18
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0063	L21.429	.51087	1.9070	1.9346	47.811	.48971
SDev	.0027	.149	.00317	.0024	.0044	.137	.00224
%RSD	.27127	.69600	.62153	.12790	.22514	.28737	.45672
#1	1.0083	L21.323	.51311	1.9087	1.9377	47.908	.49129
#2	1.0044	L21.534	.50862	1.9052	1.9315	47.714	.48813
Errors	LC Pass	LC Low	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	1.9796	1.9588	1.8558	23.631	47.582	1.9349	1.9964
SDev	.0021	.0013	.0065	.057	.003	.0001	.0017
%RSD	.10591	.06653	.34928	.24045	.00566	.00454	.08282
#1	1.9811	1.9597	1.8512	23.590	47.584	1.9348	1.9952
#2	1.9781	1.9579	1.8604	23.671	47.580	1.9349	1.9975
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	1.9380	.50894	.50090	.50358	.50899	.51615	.51377
SDev	.0259	.00707	.00494	.00565	.00208	.00443	.00227
%RSD	1.3388	1.3898	.98536	1.1215	.40759	.85852	.44083
#1	1.9563	.51395	.50439	.50757	.50753	.51928	.51537
#2	1.9196	.50394	.49741	.49959	.51046	.51302	.51217
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	.51993	.51163	.51440	1.0354	1.9333	1.9763
SDev	.00181	.00238	.00219	.0022	.0052	.0102
%RSD	.34856	.46435	.42537	.20969	.27050	.51649
#1	.52121	.51331	.51594	1.0339	1.9370	1.9836
#2	.51865	.50995	.51285	1.0370	1.9296	1.9691
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

675 1586

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11060	--	--	--	--	--	--
SDev	59.22019	--	--	--	--	--	--
%RSD	.5354654	--	--	--	--	--	--
#1	11018	--	--	--	--	--	--
#2	11101	--	--	--	--	--	--

Method: METTRA Sample Name: CCB4 Operator: MTW
Run Time: 02/13/01 16:22:32
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00032	.03917	-.00224	.00047	.00407	.01741	.00001
SDev	.00026	.00774	.00053	.00009	.00032	.00743	.00022
%RSD	81.406	19.753	23.560	19.161	7.9861	42.703	1877.6
#1	-.00013	.03370	-.00261	.00041	.00430	.01215	-.00014
#2	-.00050	.04464	-.00187	.00054	.00384	.02267	.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	.00042	.00042	-.00157	.01966	.01133	.00157	.00401
SDev	.00051	.00047	.00015	.00477	.00112	.00004	.00214
%RSD	120.47	112.22	9.3461	24.281	9.9116	2.7720	53.330
#1	.00078	.00075	-.00146	.01628	.01054	.00153	.00552
#2	.00006	.00009	-.00167	.02303	.01212	.00160	.00250
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	.00010	.00261	.00018	.00099	.00240	-.00046	.00050
SDev	.00125	.00148	.00109	.00023	.00447	.00162	.00257
%RSD	1287.9	56.855	593.57	23.377	185.76	354.26	517.02
#1	-.00079	.00365	-.00059	.00083	-.00075	-.00160	-.00132
#2	.00098	.00156	.00095	.00115	.00556	.00069	.00231
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	-.00307	-.00441	-.00396	-.00404	.00073	.00102
SDev	.00322	.00143	.00012	.00023	.00033	.00043
%RSD	104.77	32.464	2.9714	5.6399	45.481	41.827
#1	-.00080	-.00542	-.00388	-.00388	.00097	.00072
#2	-.00535	-.00340	-.00405	-.00420	.00050	.00133
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

675 1588

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10973	--	--	--	--	--	--
SDev	42.28485	--	--	--	--	--	--
%RSD	.3853676	--	--	--	--	--	--
#1	11002	--	--	--	--	--	--
#2	10943	--	--	--	--	--	--

Method: METTRA Sample Name: DVH20/2(INTSTD) Operator: MTW
Run Time: 02/13/01 16:26:41
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00212	16.083	.03615	.02414	.00646	.43351	.00027
SDev	.00013	.130	.00066	.00030	.00093	.00442	.00015
%RSD	6.0652	.80569	1.8263	1.2404	14.381	1.0194	57.086
#1	-.00202	15.991	.03661	.02436	.00712	.43664	.00016
#2	-.00221	16.174	.03568	.02393	.00580	.43039	.00038
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	.05582	.02843	.10307	66.906	.37792	.23596	.00645
SDev	.00011	.00020	.00060	.096	.00260	.00128	.00039
%RSD	.18880	.69047	.58329	.14363	.68672	.54219	6.0854
#1	.05589	.02829	.10264	66.974	.37975	.23686	.00672
#2	.05574	.02857	.10349	66.838	.37608	.23505	.00617
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	.08467	.05331	.04914	.05053	.00262	-.00051	.00053
SDev	.00333	.00175	.00107	.00129	.00206	.00024	.00084
%RSD	3.9316	3.2901	2.1693	2.5631	78.433	46.426	158.27
#1	.08703	.05455	.04990	.05145	.00117	-.00068	-.00006
#2	.08232	.05207	.04839	.04962	.00408	-.00034	.00113
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	.00070	-.00379	-.00230	.00618	.08938	.25574
SDev	.00052	.00033	.00005	.00100	.00064	.00435
%RSD	74.741	8.6887	2.0174	16.133	.71256	1.6998
#1	.00107	-.00403	-.00233	.00688	.08983	.25881
#2	.00033	-.00356	-.00226	.00547	.08893	.25267
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	14397	--	--	--	--	--	--
SDev	128.8350	--	--	--	--	--	--
%RSD	.8948988	--	--	--	--	--	--
#1	14306	--	--	--	--	--	--
#2	14488	--	--	--	--	--	--

Method: METTRA Sample Name: DVH20/5(INTSTD) Operator: MTW
Run Time: 02/13/01 16:30:50
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	-.00158	7.3181	.01511	.01111	.00454	.19940	.00005
SDev	.00008	.0610	.00058	.00004	.00076	.00337	.00008
%RSD	4.8204	.83324	3.8461	.38453	16.799	1.6889	149.16
#1	-.00163	7.2749	.01552	.01108	.00508	.20178	-.00000
#2	-.00153	7.3612	.01469	.01114	.00400	.19702	.00010
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	.02630	.01262	.04596	30.939	.16916	.10928	.00369
SDev	.00169	.00023	.00026	.044	.00229	.00003	.00026
%RSD	6.4270	1.8573	.55815	.14121	1.3532	.02874	6.9112
#1	.02750	.01279	.04578	30.908	.16754	.10926	.00351
#2	.02511	.01246	.04615	30.970	.17078	.10931	.00387
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	.03813	.02375	.02372	.02373	.00149	-.00497	-.00282
SDev	.00057	.00145	.00007	.00044	.00020	.00023	.00009
%RSD	1.4919	6.0988	.28233	1.8442	13.371	4.5862	3.0385
#1	.03853	.02477	.02367	.02404	.00135	-.00480	-.00276
#2	.03773	.02272	.02377	.02342	.00163	-.00513	-.00288
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00150	-.00141	-.00144	-.00345	.04036	.11848
SDev	.00359	.00279	.00067	.00744	.00069	.00045
%RSD	238.68	198.03	46.458	215.80	1.7048	.37626
#1	-.00404	.00056	-.00097	-.00871	.04084	.11880
#2	.00103	-.00339	-.00191	.00181	.03987	.11817
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	12365	--	--	--	--	--	--
SDev	39.73885	--	--	--	--	--	--
%RSD	.3213830	--	--	--	--	--	--
#1	12337	--	--	--	--	--	--
#2	12393	--	--	--	--	--	--

Method: METTRA Sample Name: DVH23/2(INTSTD) Operator: MTW
Run Time: 02/13/01 16:35:00
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00166	41.300	.00994	.49939	.00874	3.4146	-.00011
SDev	.00009	1.378	.00000	.00171	.00178	.0009	.00049
%RSD	5.5551	3.3370	.00741	.34335	20.391	.02537	459.69
#1	-.00159	40.326	.00994	.50060	.01000	3.4152	-.00045
#2	-.00172	42.275	.00994	.49818	.00748	3.4140	.00024
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03686	.03631	.02559	65.141	6.0420	3.3191	.00073
SDev	.00015	.00048	.00105	.421	.0208	.0025	.00029
%RSD	.41125	1.3203	4.1199	.64701	.34377	.07675	39.752
#1	.03675	.03665	.02485	64.843	6.0273	3.3173	.00094
#2	.03696	.03597	.02634	65.439	6.0567	3.3209	.00053
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	.03859	.03534	.02714	.02987	.00305	.00078	.00153
SDev	.00164	.00006	.00039	.00028	.00088	.00038	.00055
%RSD	4.2424	.17755	1.4388	.94197	28.833	49.219	35.727
#1	.03975	.03538	.02742	.03007	.00367	.00105	.00192
#2	.03743	.03529	.02687	.02967	.00243	.00051	.00115
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	.00178	-.00120	-.00021	.00370	.09650	.21610
SDev	.00126	.00034	.00064	.00269	.00034	.00534
%RSD	70.622	28.302	312.21	72.769	.35035	2.4714
#1	.00089	-.00144	-.00066	.00180	.09626	.21988
#2	.00266	-.00096	.00025	.00561	.09674	.21232
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	12814	--	--	--	--	--	--
SDev	115.8592	--	--	--	--	--	--
%RSD	.9041944	--	--	--	--	--	--
#1	12732	--	--	--	--	--	--
#2	12895	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-5 Operator: MTW
Run Time: 02/13/01 16:39:09
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0125	L21.387	.51512	1.9177	1.9456	48.111	.49470
SDev	.0027	.212	.00244	.0204	.0056	.182	.00517
%RSD	.26798	.99102	.47285	1.0634	.28771	.37732	1.0458
#1	1.0144	L21.237	.51684	1.9321	1.9496	48.239	.49836
#2	1.0105	L21.537	.51339	1.9033	1.9417	47.982	.49105
Errors	LC Pass	LC Low	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	2.0010	1.9781	1.8621	23.698	47.976	1.9545	2.0151
SDev	.0012	.0001	.0007	.037	.005	.0010	.0010
%RSD	.05755	.00651	.04016	.15726	.01069	.05194	.04964
#1	2.0018	1.9782	1.8616	23.672	47.972	1.9552	2.0144
#2	2.0001	1.9780	1.8626	23.725	47.980	1.9538	2.0158
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	1.9553	.51712	.51037	.51261	.51719	.51959	.51879
SDev	.0591	.00205	.00272	.00113	.00918	.00325	.00522
%RSD	3.0225	.39641	.53386	.22136	1.7754	.62491	1.0068
#1	1.9971	.51567	.51229	.51342	.51070	.51729	.51510
#2	1.9135	.51857	.50844	.51181	.52369	.52188	.52248
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	.52580	.51643	.51955	1.0465	1.9473	1.9952
SDev	.00160	.00328	.00165	.0087	.0098	.0260
%RSD	.30392	.63433	.31814	.82824	.50190	1.3049
#1	.52693	.51412	.51838	1.0526	1.9543	2.0136
#2	.52467	.51875	.52072	1.0404	1.9404	1.9768
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

675 1596

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10884	--	--	--	--	--	--
SDev	.9191007	--	--	--	--	--	--
%RSD	.0084443	--	--	--	--	--	--
#1	10885	--	--	--	--	--	--
#2	10884	--	--	--	--	--	--

Method: METTRA Sample Name: CCB5 Operator: MTW
Run Time: 02/13/01 16:43:23
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00098	.04151	-.00070	.00050	.00427	.00942	.00012
SDev	.00052	.01022	.00124	.00006	.00022	.00084	.00001
%RSD	53.196	24.629	177.96	12.944	5.2528	8.8678	8.1575
#1	-.00061	.03428	-.00158	.00045	.00442	.01001	.00012
#2	-.00135	.04873	.00018	.00054	.00411	.00883	.00013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00017	-.00039	-.00109	.01316	.00833	.00100	.00329
SDev	.00016	.00007	.00007	.00248	.00117	.00008	.00109
%RSD	93.802	17.866	6.3795	18.816	13.998	8.3352	33.042
#1	.00028	-.00034	-.00114	.01141	.00750	.00106	.00405
#2	.00006	-.00044	-.00104	.01491	.00915	.00094	.00252
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	.00018	-.00053	-.00041	-.00045	.00221	-.00131	-.00014
SDev	.00012	.00343	.00112	.00040	.00085	.00127	.00056
%RSD	62.694	642.50	269.70	86.984	38.249	96.369	403.16
#1	.00026	.00189	-.00121	-.00017	.00161	-.00042	.00026
#2	.00010	-.00296	.00038	-.00073	.00281	-.00221	-.00054
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	-.00304	-.00138	-.00193	-.00017	-.00096	.00167
SDev	.00283	.00070	.00048	.00267	.00000	.00018
%RSD	93.037	50.584	24.783	1569.2	.08843	10.834
#1	-.00104	-.00187	-.00159	.00172	-.00096	.00155
#2	-.00504	-.00088	-.00227	-.00206	-.00096	.00180
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10958	--	--	--	--	--	--
SDev	93.37331	--	--	--	--	--	--
%RSD	.8521309	--	--	--	--	--	--
#1	11024	--	--	--	--	--	--
#2	10892	--	--	--	--	--	--

Method: METTRA Sample Name: DV0HXB Operator: MTW
Run Time: 02/13/01 16:47:33
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	.05436	-.00215	.00021	.00416	.05497	-.00003
SDev	.00015	.02451	.00077	.00000	.00107	.00197	.00006
%RSD	153.14	45.088	35.806	1.1731	25.613	3.5811	183.44
#1	.00001	.07169	-.00269	.00021	.00492	.05357	.00001
#2	-.00021	.03703	-.00160	.00021	.00341	.05636	-.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00050	.00042	-.00198	.00019	.00393	.00072	.00109
SDev	.00004	.00061	.00021	.01421	.00332	.00005	.00060
%RSD	7.5876	144.17	10.645	7605.8	84.635	7.4657	55.140
#1	-.00047	.00086	-.00213	.01024	.00628	.00069	.00067
#2	-.00053	-.00001	-.00183	-.00986	.00158	.00076	.00152
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	.00002	.00608	-.00076	.00152	.00828	.00259	.00449
SDev	.00063	.00115	.00068	.00007	.00147	.00140	.00143
%RSD	2774.2	18.910	89.454	4.6976	17.750	54.102	31.767
#1	-.00042	.00526	-.00028	.00157	.00931	.00358	.00549
#2	.00047	.00689	-.00124	.00147	.00724	.00160	.00348
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	-.00782	.00107	-.00189	-.00802	-.00047	.00810
SDev	.00180	.00369	.00186	.00043	.00001	.00018
%RSD	23.065	346.85	98.460	5.3851	1.8899	2.2525
#1	-.00654	-.00155	-.00321	-.00771	-.00046	.00823
#2	-.00909	.00368	-.00058	-.00832	-.00048	.00798
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

675 1600

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10758	--	--	--	--	--	--
SDev	87.99958	--	--	--	--	--	--
%RSD	.8179976	--	--	--	--	--	--
#1	10696	--	--	--	--	--	--
#2	10820	--	--	--	--	--	--

Method: METTRA Sample Name: DV0HXC Operator: MTW
Run Time: 02/13/01 16:51:42
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04844	1.6173	1.9988	1.8747	.05314	L.21840	.04879
SDev	.00024	.0018	.0136	.0071	.00105	.00246	.00008
%RSD	.50639	.11169	.68072	.37939	1.9760	1.1259	.16915
#1	.04862	1.6185	2.0084	1.8798	.05388	L.21666	.04873
#2	.04827	1.6160	1.9892	1.8697	.05240	L.22014	.04885
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	.50574	.19651	.22591	.94089	L.01531	.48708	L.00092
SDev	.00003	.00079	.00073	.00857	.00204	.00038	.00081
%RSD	.00491	.40272	.32119	.91054	13.309	.07710	88.523
#1	.50572	.19595	.22540	.93484	L.01387	.48681	L.00034
#2	.50576	.19707	.22643	.94695	L.01675	.48734	L.00149
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	.48937	.50181	.49847	.49958	.00369	.00210	L.00263
SDev	.01073	.00508	.00452	.00470	.00094	.00123	.00113
%RSD	2.1917	1.0118	.90606	.94142	25.415	58.503	43.031
#1	.49696	.50540	.50166	.50291	.00303	.00123	L.00183
#2	.48179	.49822	.49527	.49625	.00436	.00297	L.00343
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	1.9716	1.9542	1.9600	2.0060	.47559	.53438
SDev	.0134	.0121	.0125	.0235	.00093	.00367
%RSD	.67720	.61864	.63825	1.1726	.19667	.68600
#1	1.9811	1.9627	1.9688	2.0226	.47493	.53697
#2	1.9622	1.9456	1.9511	1.9894	.47625	.53179
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

675 1602

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10846	--	--	--	--	--	--
SDev	72.86722	--	--	--	--	--	--
%RSD	.6718334	--	--	--	--	--	--
#1	10794	--	--	--	--	--	--
#2	10898	--	--	--	--	--	--

Method: METTRA Sample Name: DVNQR Operator: MTW
Run Time: 02/13/01 16:55:52
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	-.00027	.06695	.01022	.05979	.00405	73.593	-.00004
SDev	.00046	.02740	.00128	.00006	.00087	.200	.00024
%RSD	165.99	40.925	12.560	.10908	21.397	.27109	654.73
#1	.00005	.08632	.00931	.05984	.00466	73.734	.00013
#2	-.00060	.04758	.01113	.05975	.00344	73.452	-.00020
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	.00103	.00191	.00387	.46549	22.596	.16494	.00212
SDev	.00036	.00020	.00006	.00227	.004	.00001	.00058
%RSD	34.858	10.472	1.6781	.48832	.01598	.00323	27.391
#1	.00128	.00205	.00382	.46388	22.593	.16494	.00171
#2	.00077	.00177	.00391	.46709	22.599	.16495	.00253
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	.00478	.00614	.00059	.00244	.00071	.00070	.00070
SDev	.00019	.00487	.00340	.00064	.00169	.00393	.00206
%RSD	4.0263	79.291	580.94	26.491	236.43	562.10	292.60
#1	.00464	.00270	.00299	.00289	.00191	-.00208	-.00075
#2	.00491	.00959	-.00182	.00198	-.00048	.00348	.00216
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	-.00655	.00501	.00116	-.00602	.00165	.01783
SDev	.00122	.00153	.00061	.00468	.00072	.00053
%RSD	18.658	30.533	52.813	77.718	43.461	2.9541
#1	-.00568	.00393	.00073	-.00271	.00216	.01820
#2	-.00741	.00609	.00160	-.00932	.00115	.01745
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

675 1604

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10775	--	--	--	--	--	--
SDev	114.6576	--	--	--	--	--	--
%RSD	1.064120	--	--	--	--	--	--
#1	10694	--	--	--	--	--	--
#2	10856	--	--	--	--	--	--

675 1605

Method: METTRA Sample Name: DVNQRP5 Operator: MTW
Run Time: 02/13/01 17:00:01
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00060	.03805	.00094	.01193	.00411	14.776	-.00005
SDev	.00050	.01721	.00124	.00011	.00073	.085	.00032
%RSD	83.238	45.221	131.42	.95542	17.801	.57817	681.66
#1	-.00025	.05022	.00182	.01201	.00462	14.836	.00018
#2	-.00096	.02588	.00007	.01185	.00359	14.716	-.00027
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	.00024	.00070	-.00059	.09097	4.4244	.03322	.00017
SDev	.00045	.00024	.00025	.00923	.0051	.00011	.00024
%RSD	186.13	34.544	42.240	10.146	.11514	.31966	136.92
#1	.00055	.00087	-.00041	.09750	4.4280	.03330	.00034
#2	-.00008	.00053	-.00077	.08445	4.4208	.03315	.00001
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	-.00043	.00106	-.00014	.00026	.00170	-.00269	-.00123
SDev	.00076	.00139	.00024	.00031	.00096	.00264	.00144
%RSD	178.42	131.05	172.78	116.53	56.053	98.014	117.39
#1	.00011	.00008	.00003	.00005	.00103	-.00083	-.00021
#2	-.00096	.00205	-.00030	.00048	.00238	-.00456	-.00225
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00390	-.00001	-.00131	-.00446	.00028	.00455
SDev	.00339	.00025	.00130	.00163	.00036	.00005
%RSD	86.987	1754.1	99.135	36.551	126.51	1.1235
#1	-.00630	-.00019	-.00222	-.00562	.00054	.00451
#2	-.00150	.00016	-.00039	-.00331	.00003	.00458
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

675 1606

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10894	--	--	--	--	--	--
SDev	130.2844	--	--	--	--	--	--
%RSD	1.195898	--	--	--	--	--	--
#1	10802	--	--	--	--	--	--
#2	10986	--	--	--	--	--	--

Method: METTRA Sample Name: DVNQRS Operator: MTW
Run Time: 02/13/01 17:04:10
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04929	1.7406	2.0065	1.9484	.05302	70.181	.04750
SDev	.00053	.0045	.0095	.0111	.00106	.044	.00034
%RSD	1.0676	.25911	.47505	.56922	1.9992	.06256	.72048
#1	.04892	1.7374	2.0132	1.9563	.05377	70.150	.04774
#2	.04966	1.7438	1.9997	1.9406	.05227	70.212	.04726
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	.49339	.19498	.23522	1.3454	21.562	.64114	.00281
SDev	.00017	.00148	.00109	.0075	.054	.00157	.00040
%RSD	.03394	.75991	.46347	.56095	.24921	.24475	14.232
#1	.49327	.19394	.23445	1.3400	21.524	.64003	.00309
#2	.49351	.19603	.23599	1.3507	21.600	.64225	.00252
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	.48112	.50208	.49485	.49726	.00165	-.00083	-.00001
SDev	.01075	.00428	.00062	.00184	.00040	.00353	.00249
%RSD	2.2353	.85174	.12533	.36957	24.618	422.79	29937.
#1	.48872	.49906	.49441	.49596	.00136	-.00333	-.00177
#2	.47351	.50511	.49528	.49856	.00193	.00166	.00175
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	1.9770	1.9496	1.9588	2.0536	.47740	.50966
SDev	.0054	.0112	.0093	.0206	.00037	.00407
%RSD	.27363	.57416	.47314	1.0022	.07713	.79781
#1	1.9732	1.9417	1.9522	2.0681	.47714	.51254
#2	1.9809	1.9575	1.9653	2.0390	.47766	.50679
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

675 1608

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10902	--	--	--	--	--	--
SDev	31.78459	--	--	--	--	--	--
%RSD	.2915435	--	--	--	--	--	--
#1	10925	--	--	--	--	--	--
#2	10880	--	--	--	--	--	--

Method: METTRA Sample Name: DVNQRD Operator: MTW
Run Time: 02/13/01 17:08:19
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04902	1.7589	2.0207	1.9448	.05370	70.995	.04754
SDev	.00007	.0012	.0159	.0035	.00117	.011	.00061
%RSD	.13769	.06631	.78498	.18039	2.1796	.01559	1.2902
#1	.04907	1.7597	2.0319	1.9473	.05452	71.003	.04798
#2	.04898	1.7581	2.0094	1.9423	.05287	70.987	.04711
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	.49644	.19633	.23631	1.3575	21.787	.64423	.00109
SDev	.00131	.00014	.00086	.0085	.047	.00090	.00040
%RSD	.26336	.07035	.36502	.62642	.21756	.13981	36.497
#1	.49736	.19623	.23570	1.3515	21.753	.64359	.00081
#2	.49551	.19643	.23692	1.3636	21.820	.64486	.00137
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	.48653	.50850	.50115	.50360	.00099	-.00062	-.00008
SDev	.00731	.00451	.00353	.00386	.00147	.00066	.00005
%RSD	1.5026	.88773	.70390	.76571	147.34	105.73	59.018
#1	.49170	.51169	.50365	.50632	.00203	-.00109	-.00005
#2	.48137	.50530	.49866	.50087	-.00004	-.00016	-.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	1.9931	1.9698	1.9776	2.0717	.47816	.51211
SDev	.0005	.0152	.0103	.0280	.00166	.00444
%RSD	.02478	.77070	.52035	1.3528	.34647	.86753
#1	1.9935	1.9805	1.9848	2.0915	.47699	.51525
#2	1.9928	1.9591	1.9703	2.0519	.47934	.50897
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

675 1610

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10780	--	--	--	--	--	--
SDev	71.98333	--	--	--	--	--	--
%RSD	.6677551	--	--	--	--	--	--
#1	10729	--	--	--	--	--	--
#2	10831	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-6 Operator: MTW
Run Time: 02/13/01 17:12:29
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98816	L20.594	.50269	1.8700	1.8949	46.800	.48273
SDev	.00180	.424	.00561	.0051	.0025	.037	.00556
%RSD	.18205	2.0606	1.1152	.27488	.13236	.07836	1.1525
#1	.98689	L20.294	.50665	1.8737	1.8931	46.774	.48667
#2	.98943	L20.894	.49872	1.8664	1.8967	46.826	.47880
Errors	LC Pass	LC Low	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	1.9566	1.9314	1.8145	22.975	46.901	1.9157	1.9746
SDev	.0023	.0052	.0137	.148	.158	.0058	.0041
%RSD	.11650	.26715	.75624	.64204	.33619	.30045	.20713
#1	1.9550	1.9278	1.8048	22.871	46.789	1.9116	1.9717
#2	1.9582	1.9351	1.8242	23.080	47.012	1.9197	1.9775
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	1.9003	.50428	.49390	.49736	.50521	.50801	.50708
SDev	.0470	.00265	.00329	.00131	.00873	.00091	.00352
%RSD	2.4710	.52510	.66631	.26404	1.7290	.17963	.69367
#1	1.9335	.50241	.49623	.49829	.49903	.50737	.50459
#2	1.8671	.50616	.49157	.49643	.51138	.50866	.50957
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	.51466	.50837	.51046	1.0260	1.8980	1.9457
SDev	.00274	.00064	.00048	.0047	.0055	.0267
%RSD	.53226	.12615	.09490	.45675	.28887	1.3746
#1	.51272	.50882	.51012	1.0293	1.9019	1.9646
#2	.51659	.50791	.51080	1.0227	1.8941	1.9268
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

675 1612

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11117	--	--	--	--	--	--
SDev	18.70311	--	--	--	--	--	--
%RSD	.1682430	--	--	--	--	--	--
#1	11104	--	--	--	--	--	--
#2	11130	--	--	--	--	--	--

Method: METTRA Sample Name: CCB6 Operator: MTW
Run Time: 02/13/01 17:16:43
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00018	.04415	-.00047	.00068	H.00505	.02069	.00030
SDev	.00048	.00433	.00050	.00006	.00121	.00034	.00008
%RSD	258.27	9.8013	107.15	9.2123	23.914	1.6338	26.693
#1	-.00015	.04721	-.00083	.00063	H.00590	.02045	.00036'
#2	.00052	.04109	-.00011	.00072	.00419	.02093	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	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	.00067	.00077	-.00106	-.00167	.01555	.00072	.00374
SDev	.00015	.00108	.00004	.00231	.00490	.00003	.00070
%RSD	22.356	140.12	3.3096	138.71	31.496	3.6611	18.658
#1	.00056	.00001	-.00109	-.00330	.01209	.00074	.00423
#2	.00078	.00153	-.00104	-.00003	.01901	.00070	.00325
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	.00116	.00175	-.00254	-.00111	.00116	-.00118	-.00040
SDev	.00074	.00485	.00093	.00099	.00642	.00384	.00042
%RSD	64.027	277.47	36.596	89.490	553.22	326.28	106.53
#1	.00168	-.00168	-.00188	-.00181	.00570	-.00389	-.00070
#2	.00063	.00518	-.00320	-.00041	-.00338	.00154	-.00010
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	.00046	.00497	.00347	-.00243	.00025	.00179
SDev	.00045	.00117	.00093	.00277	.00103	.00009
%RSD	96.976	23.538	26.787	114.04	414.37	5.2533
#1	.00078	.00580	.00413	-.00047	-.00048	.00185
#2	.00014	.00414	.00281	-.00438	.00098	.00172
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

675 1614

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10937	--	--	--	--	--	--
SDev	45.64360	--	--	--	--	--	--
%RSD	.4173444	--	--	--	--	--	--
#1	10969	--	--	--	--	--	--
#2	10904	--	--	--	--	--	--

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A Hoyle

Date of Analysis: 2-13-01

File ID: 0213HGA

Matrix: WATER

Lot Number/SDG	Method
C1B090228	7470A
A1B070257	
A1B080180	
C1B090189	
C1B080114	

William C Hoyle 2-13-01

Folder: 0213HGA
Protocol: HGMET

08:44:14 13 Feb 2001

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0	08:44:14 13 Feb 2001 HG			
Hg	.000	ppb	7709					
*** Standard: 2 Rep: 1				Seq: 1	08:45:54 13 Feb 2001 HG			
Hg	.200	ppb	17248	0087-014-6				
*** Standard: 3 Rep: 1				Seq: 2	08:47:19 13 Feb 2001 HG			
Hg	.500	ppb	45753	0087-014-7				
*** Standard: 4 Rep: 1				Seq: 3	08:49:05 13 Feb 2001 HG			
Hg	1.00	ppb	92004	0087-014-8				
*** Standard: 5 Rep: 1				Seq: 4	08:50:42 13 Feb 2001 HG			
Hg	5.00	ppb	510167	0087-014-9				
*** Standard: 6 Rep: 1				Seq: 5	08:52:10 13 Feb 2001 HG			
Hg	10.0	ppb	971478	0087-014-10				

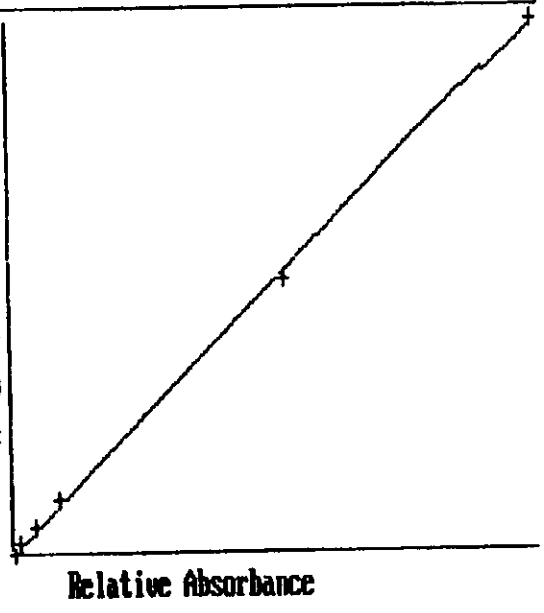
William a Hoyle 2-13-01

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0213HGA Seq: 6 Batch:
Prnt: R/T On Pump: On
Rev: 4.2 08:54:37 13 Feb 2001 Xmit: Off Gas: 0.30 LPM
State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGMET

	ng Conc.	Calc.	Dev.	accepted ->linear
S1	.000	.063	.063	Quadratic
S2	.200	.160	-.040	Wtdlinear
S3	.500	.451	-.049	C
S4	1.00	.924	-.076	Accept o
S5	5.00	5.20	.195	n
S6	10.0	9.91	-.093	c

A .0000000 r .999622
B 1.02147e-5 C -1.61160e-2



	Mean		
S1	7709	0 SD	7709
S2	17248	0 %RSD	17248
S3	45753	0 %RSD	45753
S4	92004	0 %RSD	92004
S5	518167	0 %RSD	518167
S6	971478	0 %RSD	971478

New cal coefficients stored

William A. Hoyle 2.13.01

675 1618

Folder: 0213HGA
Protocol: HGMET

08:57:40 13 Feb 2001

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6	08:57:40 13 Feb 2001 HG			
Hg	2.49	ppb	245280	0087-074-11				
*** Sample ID: ICB1				Seq: 7	08:59:05 13 Feb 2001 HG			
Hg	.022	ppb	3719					
*** Sample ID: CCV5-1				Seq: 8	09:00:32 13 Feb 2001 HG			
Hg	5.07	ppb	498036	0087-074-12				
*** Sample ID: CCB1				Seq: 9	09:01:56 13 Feb 2001 HG			
Hg	.023	ppb	3796					
*** Sample ID: DV0L9B				Seq: 10	09:03:23 13 Feb 2001 HG			
Hg	.042	ppb	5671					
*** Sample ID: DV0L9C				Seq: 11	09:05:01 13 Feb 2001 HG			
Hg	2.50	ppb	246491	0087-074-13				
*** Sample ID: DV0L9L				Seq: 12	09:06:26 13 Feb 2001 HG			
Hg	2.47	ppb	243413	0087-074-14				
*** Sample ID: DVWJE				Seq: 13	09:07:52 13 Feb 2001 HG			
Hg	.163	ppb	17551					
*** Sample ID: DV0X4B				Seq: 14	09:09:20 13 Feb 2001 HG			
Hg	.047	ppb	6163					
*** Sample ID: DV0X4C				Seq: 15	09:10:50 13 Feb 2001 HG			
Hg	2.45	ppb	241169	0087-074-15				
*** Sample ID: DVQQA				Seq: 16	09:12:19 13 Feb 2001 HG			
Hg	.032	ppb	4686					
*** Sample ID: DVR49				Seq: 17	09:13:47 13 Feb 2001 HG			
Hg	.022	ppb	3735					

Folder: 0213HGA
Protocol: HGMET

09:15:27 13 Feb 2001

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DVR49S				Seq: 18		09:15:27 13 Feb 2001 HG		
Hg	1.10	ppb	109039					
*** Sample ID: DVR49D				Seq: 19		09:16:54 13 Feb 2001 HG		
Hg	1.06	ppb	105020					
*** Sample ID: CCV5-2				Seq: 20		09:18:19 13 Feb 2001 HG		
Hg	5.11	ppb	502230					
*** Sample ID: CCB2				Seq: 21		09:20:00 13 Feb 2001 HG		
Hg	.008	ppb	2353					
*** Sample ID: DVR5L				Seq: 22		09:21:51 13 Feb 2001 HG		
Hg	.329	ppb	33784					
*** Sample ID: DVR5CF				Seq: 23		09:23:15 13 Feb 2001 HG		
Hg	.035	ppb	5023					
*** Sample ID: DVR5CSF				Seq: 24		09:24:41 13 Feb 2001 HG		
Hg	1.19	ppb	117631					
*** Sample ID: DVR5CDF				Seq: 25		09:26:08 13 Feb 2001 HG		
Hg	1.13	ppb	112498					
*** Sample ID: DV0X8B				Seq: 26		09:27:43 13 Feb 2001 HG		
Hg	.070	ppb	8460					
*** Sample ID: DV0X8C				Seq: 27		09:29:09 13 Feb 2001 HG		
Hg	2.45	ppb	241584	e087-074-16				
*** Sample ID: DVV6V				Seq: 28		09:30:36 13 Feb 2001 HG		
Hg	.028	ppb	4330					
*** Sample ID: DVV84				Seq: 29		09:32:02 13 Feb 2001 HG		
Hg	.035	ppb	4985					

SP REC. 110%

SP REC 106%

SP. REC 119%

SP REC 113%

Folder: 0213HGA
Protocol: HGMET

09:33:27 13 Feb 2001

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DVV86				Seq: 30	09:33:27 13 Feb 2001 HG			
Hg	.015	ppb	3008					
*** Sample ID: DVV86S				Seq: 31	09:34:52 13 Feb 2001 HG			
Hg	.941	ppb	93665					
*** Sample ID: CCV5-3				Seq: 32	09:36:51 13 Feb 2001 HG			
Hg	5.14	ppb	504551					
*** Sample ID: CCB3				Seq: 33	09:38:16 13 Feb 2001 HG			
Hg	-.008	ppb	748					
*** Sample ID: DVV86D				Seq: 34	09:40:03 13 Feb 2001 HG			
Hg	.929	ppb	92525					
*** Sample ID: DVV97				Seq: 35	09:41:49 13 Feb 2001 HG			
Hg	.269	ppb	27942					
*** Sample ID: DVWAW				Seq: 36	09:43:15 13 Feb 2001 HG			
Hg	.072	ppb	8628					
*** Sample ID: DVWA8				Seq: 37	09:44:41 13 Feb 2001 HG			
Hg	.037	ppb	5169					
*** Sample ID: DVWCD				Seq: 38	09:46:28 13 Feb 2001 HG			
Hg	-.012	ppb	372					
*** Sample ID: DVV6VF				Seq: 39	09:48:05 13 Feb 2001 HG			
Hg	-.013	ppb	285					
*** Sample ID: DVV84F				Seq: 40	09:49:43 13 Feb 2001 HG			
Hg	.035	ppb	4994					
*** Sample ID: DVV86F				Seq: 41	09:51:12 13 Feb 2001 HG			
Hg	.054	ppb	6873					

SP. Rec. 94%

SP Rec. 93%

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DVV86SF				Seq: 42		09:52:48 13 Feb 2001 HG		
Hg	.949	ppb	94519					
*** Sample ID: DVV86DF				Seq: 43		09:54:18 13 Feb 2001 HG		
Hg	.882	ppb	87952					
*** Sample ID: CCV5-4				Seq: 44		09:55:48 13 Feb 2001 HG		
Hg	5.15	ppb	506221					
*** Sample ID: CCB4				Seq: 45		09:57:16 13 Feb 2001 HG		
Hg	.046	ppb	6071					
*** Sample ID: DVV97F				Seq: 46		09:58:52 13 Feb 2001 HG		
Hg	-.072	ppb	-5474					
*** Sample ID: DVWAWF				Seq: 47		10:00:31 13 Feb 2001 HG		
Hg	.068	ppb	8241					
*** Sample ID: DVWA8F				Seq: 48		10:02:02 13 Feb 2001 HG		
Hg	-.029	ppb	-1289					
*** Sample ID: DVWCDF				Seq: 49		10:03:29 13 Feb 2001 HG		
Hg	-.007	ppb	921					
*** Sample ID: DV1VTBF				Seq: 50		10:05:06 13 Feb 2001 HG		
Hg	.038	ppb	5344					
*** Sample ID: DV1VTCF				Seq: 51		10:06:31 13 Feb 2001 HG		
Hg	2.45	ppb	241611	0087-075-1				
*** Sample ID: DVRN9F				Seq: 52		10:07:59 13 Feb 2001 HG		
Hg	.022	ppb	3759					
*** Sample ID: DVRN9SF				Seq: 53		10:09:36 13 Feb 2001 HG		
Hg	1.08	ppb	107556					

SP Rec 90%

SP Rec 83%

SP Rec. 108%

Folder: 0213HGA
Protocol: HGMET

10:11:45 13 Feb 2001

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DVRN9DF				Seq: 54	10:11:45 13 Feb 2001 HG			
Hg	1.05	ppb	104464					
*** Sample ID: DVRPPF				Seq: 55	10:13:20 13 Feb 2001 HG			
Hg	-.001	ppb	1469					
*** Sample ID: CCV5-5				Seq: 56	10:14:48 13 Feb 2001 HG			
Hg	5.00	ppb	490918					
*** Sample ID: CCB5				Seq: 57	10:16:19 13 Feb 2001 HG			
Hg	-.036	ppb	-1989					
*** Sample ID: DVRPWF				Seq: 58	10:17:51 13 Feb 2001 HG			
Hg	.012	ppb	2724					
*** Sample ID: CCV5-6				Seq: 59	10:19:50 13 Feb 2001 HG			
Hg	5.05	ppb	496210					
*** Sample ID: CCB6				Seq: 60	10:21:40 13 Feb 2001 HG			
Hg	-.006	ppb	1038					

SP REC 105%

END OF ANALYSIS

WAH
2.13.01

William A Hoyle 2-13-01

675 1623

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0213HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 07:38:26 13 Feb 2001 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1

cup	ID	Extended id	Weight	Volume	Macro	checK macros
1	ICV5-1		1.0000	1.0000		
2	ICB1		1.0000	1.0000		
3	CCV5-1		1.0000	1.0000		
4	CCB1		1.0000	1.0000		
5	DVOL9B		1.0000	1.0000		
6	DVOL9C		1.0000	1.0000		
7	DVOL9L		1.0000	1.0000		
8	DVWJE		1.0000	1.0000		
9	DVOX4B		1.0000	1.0000		
10	DVOX4C		1.0000	1.0000		
11	DVQQA		1.0000	1.0000		
12	DVR49		1.0000	1.0000		
13	DVR49S		1.0000	1.0000		
14	DVR49D		1.0000	1.0000		
15	CCV5-2		1.0000	1.0000		

PgDn

Cup 1 ID: ICV5-1 Cell down mode Ins to switch

675 1624

```
RunProt: HGMET      STL-PITTSBURGH METALS ANALYSIS
RunFold: 0213HGA  Seq: 0    Batch:
                  Prnt: R/T On                    Pump: Off
                  Rev: 4.2    07:38:28 13 Feb 2001 Xmit: Off Gas:          LPM
                                                  User: WAH          A/S: On
State: Idle
                                                                        PgUp
 AUTOSAMPLER:  Rack Edit    rack: RACK1
cup ID         Extended id          Weight Volume Macro      checK macros
16 CCB2                             1.0000 1.0000
17 DVR5L                            1.0000 1.0000
18 DVR5CF                           1.0000 1.0000
19 DVR5CSF                          1.0000 1.0000
20 DVR5CDF                          1.0000 1.0000
21 DV0X8B                           1.0000 1.0000
22 DV0X8C                           1.0000 1.0000
23 DVV6V                            1.0000 1.0000
24 DVV84                            1.0000 1.0000
25 DVV86                            1.0000 1.0000
26 DVV86S                           1.0000 1.0000
27 CCV5-3                           1.0000 1.0000
28 CCB3                             1.0000 1.0000
29 DVV86D                           1.0000 1.0000
30 DVV97                                                            PgDn
Cup 16 ID: CCB2                                  Cell down mode Ins to switch
```

```
RunProt: HGMET      STL-PITTSBURGH METALS ANALYSIS
RunFold: 0213HGA ; Seq: 0    Batch:
                   Prnt: R/T On                          Pump: Off
                   Rev: 4.2    07:38:29 13 Feb 2001 Xmit: Off Gas:          LPM
State: Idle                                             User: WAH          A/S: On
```

PgUp

AUTOSAMPLER: Rack Edit rack: RACK1

cup	ID	Extended id	Weight	Volume	Macro	checK macros
31	DVWAW		1.0000	1.0000		
32	DVWA8		1.0000	1.0000		
33	DVWCD		1.0000	1.0000		
34	DVV6VF		1.0000	1.0000		
35	DVV84F		1.0000	1.0000		
36	DVV86F		1.0000	1.0000		
37	DVV86SF		1.0000	1.0000		
38	DVV86DF		1.0000	1.0000		
39	CCV5-4		1.0000	1.0000		
40	CCB4		1.0000	1.0000		
41	DVV97F		1.0000	1.0000		
42	DVWAWF		1.0000	1.0000		
43	DVWA8F		1.0000	1.0000		
44	DVWCDF		1.0000	1.0000		

PgDn

```
Cup 31 ID: DVWAW                          Cell down mode Ins to switch
```

```
RunProt: HGMET      STL-PITTSBURGH METALS ANALYSIS
RunFold: 0213HGA  Seq: 0    Batch:
                  Prnt: R/T On                    Pump: Off
                  Rev: 4.2    07:42:58 13 Feb 2001 Xmit: Off Gas:          LPM
                                                   User: WAH          A/S: On
State: Idle
```

AUTOSAMPLER: Rack Edit rack: RACK2 Range 1-44 Clear seQ Undo eXit Extended id checK macros

cup	ID	Weight	Volume	Macro
1	DV1VTBF	1.0000	1.0000	
2	DV1VTCF	1.0000	1.0000	
3	DVRN9F	1.0000	1.0000	
4	DVRN9SF	1.0000	1.0000	
5	DVRN9DF	1.0000	1.0000	
6	DVRPPF	1.0000	1.0000	
7	CCV5-5	1.0000	1.0000	
8	CCB5	1.0000	1.0000	
9	DVRPWF	1.0000	1.0000	
10	CCV5-6	1.0000	1.0000	
11	CCB6	1.0000	1.0000	
12		1.0000	1.0000	
13		1.0000	1.0000	
14		1.0000	1.0000	
15		1.0000	1.0000	

PgDn

```
Cup 12 ID:                                   Cell down mode Ins to switch
```

6751627

STL - Pittsburgh

Metals Preparation Log

Logbook ID: OP46

6311

Method: 3010A | Matrix: WATER | Start Time: 1030 | Reagents: 3mL Conc HNO_3 - 6623-T09A05

Analyst: R-MJ Williams | Date: 2-12-01 | Lot Number: CIB090228 | 5mL 1:1 HCL - 0087-058-10

Reviewed by: Michael Wardlow | Date: 2-12-01

SDG: ——— | MS: MSBIREV, MSA, MSCREV | Lab Lot # (book,page,line): 0087-020-4 0057-124-1, 0057-123-16 | Balance #: ———

	Sample ID	Initial Wt/Vol g/mL	Final Vol mL	Comments	Color Pre	Color Post	Clarity Pre	Clarity Post	Texture Pre	Texture Post	Artifacts
1	DVWJE	50mL MTW 2-15-01	50mL	RW 2-12-1							
2	DVWJE-S			+0.5 ml MSBIREV, MSA, MSCREV							
3	DVWJE-D										
4	DVOHR-B			RW 2-15-01 +0.5 MSBIREV RW 2-12-1 MSA, MSCREV							
5	DVOHR-C										
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

RW 2-12-1 RW 2-12-1

Artifact Codes
S=Stones
O=Organic (plant matl)
W=free H2O
G=Glass
M=Metal Frgmnts
R=Rubber/Plastic
C=Cloth
P=Paper
I=Insects

Texture
F=Fine
M=Medium
C=Coarse

Clarity
C=Clear
CL=Cloudy
O=Opaque

Digestate(s)	Date	Time	(Received)	Analyst	Location	Date	Time	(Relinquished)	Analyst	Location	Hot Plate/Block Temp	Correction Factor
All ABOVE	2-12-01	1710	RW	MET-PREP	2-12-01	1720	RW	MET-1	CL #11	95°C	+0.5°C	
ALL ABOVE	2-13-01	1300	MTW	MET-1 C2	2-14-01	1645	MTW	MET-1	C2			
ALL ABOVE	2-14-01	0840	RG	MET-1 C2	2-14-01	1330	RG	MET-1	C2			

Color

R=Red	Y=Yellow	W=White
BL=Blue	O=Orange	GY=Gray
BR=Brown	V=Violet	GN=Green
BLK=Black	P=Pink	C=Colorless

printed on: 02-Feb-01 2:21:27 PM

STL Pittsburgh

6751628

Hg Digestion Log

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

Quanterra Environmental Services

6312

Serial Number	Log Book Number	Start Time
040	96-MT-583	07 15 → 07 30

QUA-4169

PIPET # M31607

	Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1	STD0	N/A	2-13-01	WAH	100ml	WATER	2-13-01	N/A
2	STD1	↓	↓	↓	↓	↓	↓	0087-074-6
3	STD2							0087-074-7
4	STD3							0087-074-8
5	STD4							0087-074-9
6	STD5							0087 074-10
7	ICV							0087-074-11
8	ICB							N/A
9	CCV							0087-074-12
10	CCB							N/A
11	DV0L9B							↓
12	DV0L9C							0087-074-13
13	DV0L9L	↓						0087-074-14
14	DVWJE	2-9-01						N/A
15	DV0X4B	N/A						↓
16	DV0X4C	↓						0087-074-15
17	DVQQA	2-7-01						N/A
18	DVR49	2-8-01						↓
19	DVR49S	↓						+1ml 0087-074-4
20	DVR49D							+1ml 0087-074-4
21	DVR5L							N/A
22	DVR5LF							↓
23	DVR5CSF							+1ml 0087-074-4
24	DVR5CDF	↓						+1ml 0087 074-4
25	DV0X8B	N/A						N/A

Reagents	Vol (mL)	Ref. Number			Method
HNO_3	2.5ml	MALLINCKRODT	6623	TOSA05	7470A AUTOCLAVE 15 PSI 130°C
H_2SO_4	5.0ml	↓	5557	TIEAV6	$SnCl_2$ = 0087-051-6
$KMNO_4$	15.0ml	0087-057-10			NaCl-NH_2OH: 0087-056-10
$K_2S_2O_4$	8ml	0087-057-11			WAH 2-13-01

Extract(s) (Record line number from above)	Extract(s) Received: Date	Time	Analyst	Location	Extract(s) Relinquished: Date	Time	Analyst	Location
			WAH 2-13-01					

STL Pittsburgh

6751629

Hg Digestion Log

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

Quanterra Environmental Services

6313

Serial Number	Log Book Number	Start Time
041	96-MT-583	01:15-307.2C

QUA 4169

PIPET# H31609

	Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1	DV0X8C	N/A	2-13-01	WAH	100 ml	WATER	2-13-01	0087 074-16
2	DVV6V	2-8-01						N/A
3	DVV84							↓
4	DVV86							+1ml 0087-074-4
5	DVV865							+1ml 0087-074-4
6	DVV86D							N/A
7	DVV97							↓
8	DVWAW							
9	DVWA8							
10	DVWCD							
11	DVV6VF							
12	DVV84F							
13	DVV86F							+1ml 0087-074-4
14	DVV865F							+1ml 0087 074-4
15	DVV86DF							N/A
16	DVV91F							↓
17	DVWAWF							
18	DVWA8F							
19	DVWCDF	↓						
20	DV1VT8F	N/A						0087-075-1
21	DV1VJCF	↓						N/A
22	DVRN9F	2-8-01						+1ml 0087-074-4
23	DVRN95F							+1ml 0087-074-4
24	DVRN9DF							N/A
25	DVRPPF	↓	↓	↓	↓	↓	↓	↓

Reagents	Vol (mL)	Ref Number			Method
HNO_3	25ml	MALLINCKRODT	6623	T09A05	7470A AUTOCLAVE 15PSI 121°C
H_2SO_4	5 ml	↓	5557	T16A16	$SnCl_2$ = 0087-051-6
$KMNO_4$	15 ml	0087-057-10			NaCl-NH_2OH = 0087-056-10
$K_2S_2O_4$	8 ml	0087-057-11			WAH 2-13-01

Extract(s) (Record line number from above)	Extract(s) Received				Extract(s) Relinquished			
	Date	Time	Analyst	Location	Date	Time	Analyst	Location
			WAH 2-13-01					

STL Pittsburgh

6751630

Hg Digestion Log

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

Quanterra Environmental Services

6314

Serial Number	Log Book Number	Start Time
042	96-MT-583	07.15 → 07.30

QUA-4169

PIPET # H31609

	Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1	DVRPWF	2-8-01	2-13-01	WAH	100ml	WATER	2-13-01	N/A
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13				WAH 2-13-01				
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

Reagents	Vol (mL)	Ref. Number			Method
HNO_3	2.5ml	MALLINCKRODT	6623	TOGH05	7470A AUTOCLAVE 15PSI 120°C
H_2SO_4	5.0ml	↓	5557	T16A16	SaCl2 = 0087-051-6
$KMNO_4$	15.0ml		0087-057-10		NaCl-NH2OH = 0087-056-10
$K_2S_2O_4$	8.0ml		0087-057-11		WAH 2-13-01

Extract(s) (Record line number from above)	Extract(s) Received				Extract(s) Relinquished			
	Date	Time	Analyst	Location	Date	Time	Analyst	Location
			WAH 2-13-01					

STL Pittsburgh

675 1631

REQUESTED BY WILLIAMR

METHOD QO Inductively Coupled Plasma (6010B)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SPX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16D CLP1	DVWJE	___ ___ ___	311318	399411	I-05-QO	C1B090228	001		WATER	0	13 1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
Thomas H. Williams	Thomas H. Williams	2-12-1 0855
		2-12-1 1300

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

675 1632

PSR024 2/12/01 7 32 06 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 RBQD
16D CLP1	DVWJE		311446	399411	I-19-08	C1B090228	001		WATER	0 13	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
William a Hoyle	William a Hoyle	2-13-01 05:30
William a Hoyle	William a Hoyle	2-13 01 06 15

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

GENERAL CHEMISTRY DATA

UXB INTERNATIONAL

Client Sample ID: DF/S-1/1039/IDW/004

General Chemistry

Lot-Sample #...: C1B090228-001 Work Order #...: DVWJE Matrix.....: WATER
Date Sampled...: 02/08/01 Date Received..: 02/09/01

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH	6.8		No Units	SW846 9040	02/09/01	1040278
	Dilution Factor: 1			MS Run # 1040127		
Cyanide, Total	ND	10.0	ug/L	SW846 9012A	02/12-02/15/01	1043164
	Dilution Factor: 1			MS Run # 1043057		
Flashpoint	>201		deg F	SW846 1010	02/16/01	1047359
	Dilution Factor: 1			MS Run # 1047165		
Total Sulfide	5.0	1.0	mg/L	MCAWW 376.1	02/13/01	1044274
	Dilution Factor: 1			MS Run # 1044147		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C1B090228 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		Work Order #: DV0KJ1AA		MB Lot-Sample #.	C1B120000-164	
	ND	10.0	ug/L	SW846 9012A	02/12-02/15/01	1043164
		Dilution Factor: 1				
Total Sulfide		Work Order #. DV22P1AA		MB Lot-Sample #:	C1B130000-274	
	ND	1.0	mg/L	MCAWW 376.1	02/13/01	1044274
		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 #...: C1B090228 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH		Work Order #: DVWCW1AA	LCS Lot-Sample#: C1B090000-278		
	101	(85 - 115)	SW846 9040	02/09/01	1040278
		Dilution Factor: 1			
Cyanide, Total		Work Order #: DV0KJ1AC	LCS Lot-Sample#: C1B120000-164		
	100	(85 - 115)	SW846 9012A	02/12-02/15/01	1043164
		Dilution Factor: 1			
Flashpoint		Work Order #: DV8191AA	LCS Lot-Sample#: C1B160000-359		
	101	(85 - 115)	SW846 1010	02/16/01	1047359
		Dilution Factor: 1			
Total Sulfide		Work Order #: DV22P1AC	LCS Lot-Sample#: C1B130000-274		
	95	(75 - 125)	MCAWW 376.1	02/13/01	1044274
		Dilution Factor: 1			

NOTE(S):

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

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C1B090228 **Matrix.....:** WATER
Date Sampled...: 02/07/01 **Date Received..:** 02/09/01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Cyanide, Total		WO#: DVV861D8-MS/DVV861D9-MSD				MS Lot-Sample #: C1B090189-003	
	104	(75 - 125)			SW846 9012A	02/12-02/15/01	1043164
	102	(75 - 125)	1.7	(0-20)	SW846 9012A	02/12-02/15/01	1043164
		Dilution Factor: 1					
		MS Run # . . 1043057					
Total Sulfide		WO#: DVWJE1DU-MS/DVWJE1DV-MSD				MS Lot-Sample #: C1B090228-001	
	83	(75 - 125)			MCAWW 376 1	02/13/01	1044274
	79	(75 - 125)	3.9	(0-20)	MCAWW 376 1	02/13/01	1044274
		Dilution Factor: 1					
		MS Run # 1044147					

NOTE(S):

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

675 1638

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C1B090228 **Work Order #...:** DVV2K-SMP DVV2K-DUP **Matrix.....:** WATER

Date Sampled...: 02/08/01 **Date Received..:** 02/09/01

% Moisture.....: 100 **Dilution Factor:** **Initial Wgt/Vol:**

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH						SD Lot-Sample #: C1B090178-002		
	8.3	8.2	No Units	0.97	(0-20)	SW846 9040	02/09/01	1040278

Dilution Factor: 1 MS Run Number 1040127

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C1B090228 **Work Order #...:** DVWJE-SMP DVWJE-DUP **Matrix.....:** WATER

Date Sampled...: 02/08/01 **Date Received..:** 02/09/01

% Moisture.....: **Dilution Factor:** **Initial Wgt/Vol:**

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Flashpoint						SD Lot-Sample #: C1B090228-001		
	>201	>201	deg F	0.0	(0-20)	SW846 1010	02/16/01	1047359

Dilution Factor: 1 MS Run Number 1047165

675 1640

STL Pittsburgh
pH LOG SHEET

	Lot No.	Batch No.	SDG No.
H2O	C1B080262, C1B090123	1040277	EW 2-9-01
H2O	C1B090228, C1B090178	1040278	
Soils	C1B080204, C1B080219, C1B090193, C1B090306, C1B090250	1040280	

Analyst: Eric L. Wesolowski / Pittsburgh

Date: 2-9-01

Start Time: 08:00 / 12:30 / 13:25 / 14:45

pH Meter Calibration

Reading	Buffer	Manf. Lot No.	Rec'd	Expire
4.00	4.0	LABCHEM 0271-08	12/19/00	12/19/01
7.01	7.0	LABCHEM 0062-04	5/19/00	3/1/02
10.01	10.0	LABCHEM 0146-04	10/26/00	5/25/01

LCS ID No.: 0299-26 Rec'd = 12/19/00 Exp = 12/19/01

Range = ± .05 pH units

Relative Percent Difference =

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X_1 = Original Result

X_2 = Duplicate

C1B080262-001 = 0.5%

C1B090178-002 = .97%

C1B080204-001 = 3.9%

pH Liquid

Sample ID	pH Reading
LCS	7.05
C1B080262-001	6.65
-001 Dup	6.68 RPD 0.5%
-002	3.94
-003	7.37
-004	7.40
-005	4.52
-006	6.76
-007	6.57
-008	6.78
-009	7.30
LCS	7.05
C1B080262-010	7.39
-011	7.40
-012	7.15
-013	7.00
-014	7.26
-015	7.65
-016	7.42
LCS	7.04
C1B090123-001	7.08
-002	7.32
-003	7.39
LCS	7.05
C1B090178-002	8.31
-002 Dup	8.23 RPD 0.97%
LCS	7.05
C1B090228-001 CW 2-9-01	6.78
LCS	7.05

pH Solid

Sample ID	pH Reading
LCS	7.05
C1B080204-001	7.55
-001 Dup	7.85 RPD 3.9%
-002	7.58
C1B080219-001	6.90
-002	6.66
-003	6.34
-004	6.92
-005	6.58
-006	7.06
LCS	7.04
C1B090193-001	7.14
-002	6.95
LCS	7.05
C1B090306-001	4.02
C1B090250-001	7.52
LCS	7.03

CW 2-9-01

Eric L. Wesolowski 2/9/01

REQUESTED BY **WESOLOSE**

OD: OZ pH (9045C) - Non-Aqueous

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
15D	DVTG0-1-A8	___ ___ ___	310822	058624	A-88-OZ	C1B080219	001		SOLID	2	1
15D	DVTG6-1-AK	___ ___ ___	310823	058624	A-88-OZ	C1B080219	002		SOLID	2	1
15D	DVTG8-1-AK	___ ___ ___	310824	058624	A-88-OZ	C1B080219	003		SOLID	2	1
15D	DVTG9-1-AK	___ ___ ___	310825	058624	A-88-OZ	C1B080219	004		SOLID	2	1
15D	DVTHC-1-AK	___ ___ ___	310826	058624	A-88-OZ	C1B080219	005		SOLID	2	1
15D	DVTHD-1-AK	___ ___ ___	310827	058624	A-88-OZ	C1B080219	006		SOLID	2	1
15D CLP1	DVTDM-1-A8	___ ___ ___	310820	375241	A-88-OZ	C1B080204	001		SOLID	5	1
15D CLP1	DVTDX-1-AK	___ ___ ___	310821	375241	A-88-OZ	C1B080204	002		SOLID	5	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
Eric L. Wesolowski	Eric L. Wesolowski	2/9/01 (07:10)
Eric L. Wesolowski	Eric L. Wesolowski	2/9/01 (08:30)

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

REQUESTED BY **WESOLOSE**

675 1642

OD AJ pH - Aqueous (150 1)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16A	DVTVG-1-CP		310828	071212	I-88-AJ	C1B080262	001		WATER	5	1
16A	DVTVM-1-CP		310829	071212	I-88-AJ	C1B080262	002		WATER	5	1
16A	DVTVQ-1-CP		310830	071212	I-88-AJ	C1B080262	003		WATER	5	1
16A	DVTVR-1-CP		310831	071212	I-88-AJ	C1B080262	004		WATER	5	1
16A	DVTVT-1-CP		310832	071212	I-88-AJ	C1B080262	005		WATER	5	1
16A	DVTVX-1-CP		310833	071212	I-88-AJ	C1B080262	006		WATER	5	1
16A	DVTV1-1-CP		310834	071212	I-88-AJ	C1B080262	007		WATER	5	1
16A	DVTV3-1-CP		310835	071212	I-88-AJ	C1B080262	008		WATER	5	1
16A	DVTV4-1-CP		310836	071212	I-88-AJ	C1B080262	009		WATER	5	1
16A	DVTV5-1-CP		310837	071212	I-88-AJ	C1B080262	010		WATER	5	1
-	DVTV8-1-CP		310838	071212	I-88-AJ	C1B080262	011		WATER	5	1
16A	DVTWA-1-CP		310839	071212	I-88-AJ	C1B080262	012		WATER	5	1
16A	DVTWE-1-CP		310840	071212	I-88-AJ	C1B080262	013		WATER	5	1
16A	DVTWG-1-CP		310841	071212	I-88-AJ	C1B080262	014		WATER	5	1
16A	DVTWH-1-CP		310842	071212	I-88-AJ	C1B080262	015		WATER	5	1
16A	DVTWL-1-CP		310843	071212	I-88-AJ	C1B080262	016		WATER	5	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
Eric L. Wesolowski	Eric L. Wesolowski	2/9/01 (07:10)
Eric L. Wesolowski	Eric L. Wesolowski	2/9/01 (08:30)

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

PSR024 2/09/01 10.29 20 MT SAMPLE CUSTODIAN REMOVAL REQUEST 675 1643 PAGE 001

REQUESTED BY **HLECHICB**

IOD AJ pH - Aqueous (150.1)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
15E	DVVK3-1-AA	___ ___ ___	310941	059184	I-88-AJ	C1B090123	001		WATER	12	1
15E	DVVLP-1-AA	___ ___ ___	310942	059184	I-88-AJ	C1B090123	002		WATER	12	1
15E	DVVLH-1-AA	___ ___ ___	310943	059184	I-88-AJ	C1B090123	003		WATER	12	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
E. L. Mlechicb	E. L. Mlechicb	2/9/01 (12:30)
E. L. Mlechicb	E. L. Mlechicb	2/9/01 (13:05)

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

PSR024 2/09/01 11:22 16 MT SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

REQUESTED BY **GROVEP**

IOD AJ pH - Aqueous (150 1)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
15E CLP1	DVV2K-1-AC	___ ___ ___	310964	422422	I-88-AJ	C1B090178	002		WATER	4	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
Ei. L. Wendt	Ei. L. Wendt	2/9/01 (13:25)
Ei. L. Wendt	Ei. L. Wendt	2/9/01 (13:45)

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

675 1645

PSR024 2/09/01 12 04.02 MT SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

REQUESTED BY **MLECHICB**

IOD. OZ pH (9045C) - Non-Aqueous

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16C	DVV7H-1-AN	___ ___ ___	310985	002532	A-88-OZ	C1B090193	001		SOLID	3	1
16C	DVV8L-1-AN	___ ___ ___	310986	002532	A-88-OZ	C1B090193	002		SOLID	3	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
Eric L. Mlechi	Eric L. Mlechi	2/9/01 (14:05)
Eric L. Mlechi	Eric L. Mlechi	2/9/01 (14:30)

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

PSR024 2/09/01 13 17 11 MT SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

675 1646

REQUESTED BY BLECHICB

)D FJ pH (9040) - Aqueous

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16D CLP1	DVWJB-1-CA	___ ___ ___	310988	399411	I-88-FJ	C1B090228	001		WATER	13	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
		02/09/01 15:20
		02/09/01 15:45

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

675 1647

C C/Sample Request

STL Pittsburgh
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/820/8380 FAX.412/820-2080

Project Name

Site

Lot Number/Sample Number	Analysis	Matrix
C1B090306-001	PH	S.1
C1B090250-001	PH	S

Raw Sample	Raw Relinquished by				Raw Received by			
	Date	Time	Analyst	Location	Date	Time	Analyst	Location
Bill Above	2-9-01	16:20	P.Phu	S.R	2-9-01	16:20		
Bill Above	2-9-01	17:00		WTCH	2-9-01	17:10	P.Phu	WTCH S.R

675 1648

STL Pittsburgh-Cyanide Analysis

Analyst Eric L. Wesoloski Date 2/15/01

Data File 021501

Lot Number(s)	Batch Number(s)	Method
CIB090249, CIB090250	1043163	Total Solids
CIB090228, CIB090189	1043164	Total H_2O
CIB080219, CIB100118, CIB100119, CIB100121	1043286	Total H_2O (CLP)
CIB100118	1044162	Total Solid (CLP)

Run Results Report
Results: C:\FLOW_4\021501.RST
Results completed: 11:36 February 15, 2001.
Operator: ERIC WESOLOSKI

675 1649

E. I. Wesoloski 2/15/01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
----------	User request:	Start Data Collect	----------		
07:14	0	CARRYOVER	781	0.001805	
07:16	0	CARRYOVER	133	0.000199	
		Mean & RSD:	457	0.001002	NoRSD
07:17	0	READ BASELIN	0	-0.000129	BL
07:18	301	0.500 PPM ST	201937	0.499761	
07:19	301	0.500 PPM ST	201174	0.497871	
07:20	301	0.500 PPM ST	199197	0.492977	
		Mean & RSD:	200769	0.496870	.704%
07:21	302	0.400 PPM ST	161890	0.400624	
07:23	302	0.400 PPM ST	162628	0.402453	
07:24	302	0.400 PPM ST	162036	0.400987	
		Mean & RSD:	162185	0.401355	.241%
07:25	303	0.300 ppm ST	120896	0.299145	
07:26	303	0.300 ppm ST	122342	0.302726	
07:27	303	0.300 ppm ST	121291	0.300123	
		Mean & RSD:	121510	0.300665	.615%
07:28	304	0.200 PPM ST	80700	0.199643	
07:30	304	0.200 PPM ST	80304	0.198661	
07:31	304	0.200 PPM ST	80921	0.200188	
		Mean & RSD:	80642	0.199497	.388%
07:32	305	0.100 PPM ST	40754	0.100757	
07:33	305	0.100 PPM ST	40056	0.099030	
07:34	305	0.100 PPM ST	39982	0.098845	
		Mean & RSD:	40264	0.099544	1.06%
07:35	306	0.050 PPM ST	20103	0.049636	
07:37	306	0.050 PPM ST	20063	0.049537	
07:38	306	0.050 PPM ST	20215	0.049913	
		Mean & RSD:	20127	0.049695	.39%
07:39	307	0.010 PPM ST	4303	0.010523	OL
07:40	307	0.010 PPM ST	4211	0.010296	
07:41	307	0.010 PPM ST	4160	0.010170	
		Mean & RSD:	4186	0.010233	1.73%
07:42	0	0.000 PPM ST	98	0.000112	OL
07:44	0	0.000 PPM ST	2	-0.000124	LO
07:45	0	0.000 PPM ST	6	-0.000113	LO
		Mean & RSD:	4	-0.000119	>999%
07:46	0	BLANK	-86	-0.000342	LO
07:47	2	CCV	41359	0.102254	102.3%
07:48	0	CCB	-66	-0.000291	LO
07:49	0	BASELINE	0	-0.000129	BL
07:51	101	.05 7215209	21424	0.052906	105.8%
07:52	102	.40 7215210	169579	0.419660	104.9%
07:53	0	BLANK	-24	-0.000187	LO

Run Results Report
Results: C:\FLOW_4\021501.RST 675 1650
Results completed: 11:36 February 15, 2001.
Operator: ERIC WESOLOSKI

Eric L. Wesoloski 2/15/01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
07:54	2	CCV 7215212	41547	0.102720	102.7%
07:55	0	CCB	63	0.000027	
07:56	0	BASELINE	0	-0.000129	BL
07:58	103	DV0KH1AAB	1018	0.119490	mg/kg
07:59	104	DV0KH1ACC	90360	111.777008	108.5% TV=103 mg/kg (RANGE = 53.0 - 152)
08:00	105	DVWMQ1A5	2003	0.241504	
08:01	106	DVWNC1AG	1316	0.156378	
08:02	107	DVWMW1DX	1599	0.191426	
08:03	108	DVWMW1D0S	10615	1.307370	26.1% RPD pw 2-15-01 1.07%
08:05	109	DVWMW1D1D	10495	1.292605	25.9%
08:06	0	BLANK	51	-0.000002	LO
08:07	2	CCV 7215212	42442	0.104935	104.9%
08:08	0	CCB	5	-0.000117	LO
08:09	0	BASELINE	0	-0.000129	BL
08:10	110	DV0KJ1AAB	1613	0.003863	
08:12	111	DV0KJ1ACC	64959	0.160676	100.4%
08:13	112	DVWJE1A7	1504	0.003594	
08:14	113	DVV6V1A9	15160	0.037400	
08:15	114	DVV841AL	5384	0.013198	pw 2-15-01
08:16	115	DVV861D7	4801	0.011755	103.1% RPD
08:17	116	DVV861D8S	46717	0.115519	101.8% 1.74%
08:19	117	DVV861D9D	45954	0.113629	pw 2-15-01
08:20	0	BLANK	62	0.000024	
08:21	2	CCV 7215212	42444	0.104940	104.9%
08:22	0	CCB	-33	-0.000211	LO
08:23	0	BASELINE	0	-0.000129	BL
08:24	118	DVV971AL	2304	0.005575	
08:26	119	DVWAW1AL	1348	0.003208	
08:27	120	DVWA81AL	5043	0.012354	
08:28	121	DVWCD1AL	1078	0.002539	
08:29	0	BLANK	-6	-0.000144	LO
08:30	2	CCV 7215212	42650	0.105451	105.4%
08:31	0	CCB	-70	-0.000302	LO
08:33	0	BASELINE	0	-0.000129	BL
08:34	122	DV03H1ACC	63739	0.157654	98.6%
08:35	0	ICB	-10	-0.000153	LO
08:36	0	BLANK	-4	-0.000138	LO
08:37	2	CCV 7215212	42493	0.105060	105.1%
08:38	0	CCB	-37	-0.000220	LO
08:40	0	BASELINE	0	-0.000129	BL
08:41	123	DV03H1AAB	1343	0.003196	
08:42	124	DVTHJ1A5	1193	0.002824	
08:43	125	DVX051A5	1353	0.003219	
08:44	126	DVXXW1A7	1461	0.003487	

Run Results Report
Results: C:\FLOW_4\021501.RST
Results completed: 11:36 February 15, 2001.
Operator: ERIC WESOLOSKI

675 1651

E. J. Wesoloski 2/15/01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
08:45	127	DVXXQ1A6	1473	0.003516	
08:47	128	DVXX91AH	1716	0.004119	
08:48	129	DVXOE1AH	1757	0.004221	
08:49	130	DVX0G1AH	1643	0.003938	
08:50	0	BLANK	-58	-0.000272	LO
08:51	2	CCV 7215212	42902	0.106073	106.1%
08:52	0	CCB	-7	-0.000146	LO
08:54	0	BASELINE	0	-0.000129	BL
08:55	131	DVX0K1AW	967	0.002265	>RPD
08:56	132	DVX0K1EPX	1008	0.002366	0%
08:57	133	DVX0K1AXS	35008	0.086533	86.5%
08:58	134	DVXOR1AH	1066	0.002511	
08:59	0	BLANK	-40	-0.000227	LO
09:01	2	CCV 7215212	41822	0.103401	103.4%
09:02	0	CCB	-20	-0.000178	LO
09:03	0	BASELINE	0	-0.000129	BL
09:04	135	ICV	56565	0.139896	87.4%
09:05	0	ICB	-39	-0.000226	LO
09:06	0	BLANK	-18	-0.000175	LO
09:08	2	CCV 7215212	42253	0.104466	104.5%
09:09	0	CCB	-26	-0.000193	LO
09:10	0	BASELINE	0	-0.000129	BL
~~09:11~~	~~136~~	~~DV1341AAB~~	~~10789~~	~~1.328982~~	~~UM~~
09:12	137	DV1341ACC	94396	116.772453	113.4%
09:13	138	DVXXF1A6	336	0.035090	
09:15	139	DVXXL1A6	1310	0.155683	
09:16	140	DVXX81AH	1564	0.187174	
09:17	141	DVX0A1AH	1673	0.200669	
09:18	142	DVX0C1AH	1684	0.201993	
09:19	143	DVX0F1AH	1572	0.188126	
09:20	0	BLANK	-57	-0.000269	LO
09:22	2	CCV 7215212	42292	0.104563	104.6%
09:23	0	CCB	-38	-0.000224	LO
09:24	0	BASELINE	0	-0.000129	BL
09:25	144	DVX0H1AH	1765	0.212029	
09:26	145	DVX0L1AH	1682	0.201771	
09:27	146	DVX0M1AH	946	0.110657	
09:29	147	DVX0N1AH	928	0.108381	
09:30	148	DVX0P1AW	962	0.112669	>RPD
09:31	149	DVX0P1D6X	1033	0.121443	0%
09:32	150	DVX0P1AXS	41786	5.165574	103.3%
09:33	151	DVX0W1AH	1129	0.133301	
09:34	0	BLANK	29	-0.000057	LO
09:36	2	CCV 7215212	42301	0.104586	104.6%

~~Air-Spike Recov 02MW5.15.01~~ mg/kg

TV = 103 mg/kg (RANGE 53 → 152)

mg/kg

Run Results Report
Results: C:\FLOW_4\021501.RST
Results completed: 11:36 February 15, 2001.
Operator: ERIC WESOLOSKI

675 1652

Eric I. Wesoloski 2/15/01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
09:37	0	CCB	-22	-0.000183	LO
09:38	0	BASELINE	0	-0.000129	BL
09:39	152	DVX001AH	1444	0.172296	mg/kg
09:40	153	DVX021AH	1178	0.139322	↓
09:41	0	BLANK	-8	-0.000148	LO
09:43	2	CCV 7215212	42213	0.104368	104.4%
09:44	0	CCB	3	-0.000122	LO
09:45	0	BASELINE	0	-0.000129	BL
~~09:46~~	~~154~~	~~ICV~~	~~68876~~	~~0.170372~~	
09:47	0	ICB	-33	-0.000210	LO
09:48	0	BLANK	7	-0.000111	LO
09:50	2	CCV	42385	0.104793	
09:51	0	CCB	0	-0.000129	LO
09:52	0	BASELINE	0	-0.000129	BL
09:53	155	DV2R61AAB	1318	0.156731	
09:54	156	DV2R61ACC	126494	156.501862	
09:55	157	DVTDM1CA	402	0.043293	
09:57	158	DVTDX1CA	1519	0.181509	
09:58	159	DVTG01A6	1757	0.211065	
09:59	160	DVTG61AH	1730	0.207692	
10:00	161	DVTG81AH	1078	0.126920	
10:01	162	DVTG91AH	990	0.116108	
10:02	0	BLANK	-23	-0.000185	LO
10:04	2	CCV	42170	0.104262	
10:05	0	CCB	48	-0.000010	LO
10:06	0	BASELINE	0	-0.000129	BL
10:07	163	DVTHC1AH	1029	0.120871	
10:08	164	DVTHD1AH	1108	0.130712	
10:09	165	DVXXG1A7	1109	0.130775	
10:11	166	DVXXH1AJ	1069	0.125834	
10:12	167	DVXXJ1A8	1319	0.156798	
10:13	168	DVXXK1AJ	1308	0.155471	
10:14	169	DVXXN1A1	1364	0.162327	
10:15	170	DVXXN1EFX	1237	0.146702	
10:16	0	BLANK	-54	-0.000263	LO
10:18	2	CCV	42049	0.103961	
10:19	0	CCB	-9	-0.000151	LO
10:20	0	BASELINE	0	-0.000129	BL
10:21	171	DVXXN1A2S	31598	3.904529	
10:22	172	DVX071A6	1356	0.161375	
10:23	173	DVX1D1AH	1852	0.222747	
10:25	174	DVX1G1AH	1459	0.174149	
10:26	175	DVX1J1AT	1489	0.177879	
~~10:27~~	~~176~~	~~DVX1K1AH~~	~~895~~	~~0.104324~~	

CCW 2-15-01

Run Results Report
Results: C:\FLOW_4\021501.RST
Results completed: 11:36 February 15, 2001.
Operator: ERIC WESOLOSKI

675 1653

Eric L Wesoloski 2/15/01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
~~10:28~~	~~177~~	~~DEVX1M1AT~~	~~854~~	~~0.099261~~	
10:29	0	BLANK	12	-0.000100	LO
10:30	2	CCV	42789	0.105795	
10:32	0	CCB	54	0.000004	
10:33	0	BASELINE	0	-0.000129	BL
10:34	178	ICV	70580	0.174589	
10:35	0	ICB	21	-0.000078	LO
10:36	0	BLANK	14	-0.000096	LO
10:37	2	CCV	42556	0.105217	
10:39	0	CCB	0	-0.000129	LO
10:40	0	BASELINE	0	-0.000129	BL
10:41	179	DV4H01AAB	731	0.084065	
10:42	180	DV4H01ACC	167254	206.951370	
10:43	181	DV2HW1DU	672	0.076775	
10:44	182	DV2HW1D5X	1494	0.178480	
10:46	183	DV2HW1DVS	44984	5.561327	
10:47	184	DV2JH1A6	1229	0.145723	
10:48	185	DV2JM1A7	1282	0.152212	
10:49	186	DV2JR1AH	1337	0.159067	
10:50	0	BLANK	-41	-0.000231	LO
10:51	2	CCV	42193	0.104317	
10:53	0	CCB	4	-0.000119	LO
10:54	0	BASELINE	0	-0.000129	BL
10:55	187	DV2J71A7	19162	2.365274	
10:56	188	DV2KD1AH	1732	0.207924	
10:57	189	DV2KK1A7	1726	0.207189	
10:58	190	DV2KM1AH	1814	0.218064	
11:00	201	DV2KQ1A7	1287	0.152787	
11:01	202	DV2KW1AH	1128	0.133212	
11:02	203	DV2K31A7	1309	0.155603	
11:03	204	DV2K71AH	1104	0.130136	
11:04	0	BLANK	-46	-0.000242	LO
11:05	2	CCV	42562	0.105232	
11:07	0	CCB	-65	-0.000290	LO
11:08	0	BASELINE	0	-0.000129	BL
11:09	205	DV2K91A7	1247	0.147856	
11:10	206	DV2LE1AH	1248	0.147993	
11:11	207	DV21V1A6	1580	0.189116	
11:12	208	DV2181A6	1377	0.163925	
11:14	209	DV22C1AH	1822	0.219056	
~~11:15~~	~~210~~	~~DV22G1AH~~	~~1602~~	~~0.191883~~	
11:16	0	BLANK	-30	-0.000204	LO
11.17	2	CCV 7215212	42674	0.105510	105.5%
11:18	0	CCB	9	-0.000106	LO

2-15-01

Run Results Report
Results: C:\FLOW_4\021501.RST
Results completed: 11:36 February 15, 2001.
Operator: ERIC WESOLOSKI

675 1654

E. L. Wesoloski 2/15/01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
11:19	0	BASELINE	0	-0.000129	BL
11:26	136	DV1341AAB	1297	0.154048	mg/Kg
11:27	0	BLANK	2	-0.000124	LO
11:28	2	CCV 7215212	42542	0.105182	105.2%
11:29	0	CCB	-15	-0.000165	LO
11:30	0	BASELINE	0	-0.000129	BL

CYANIDE: Calibration, Peak 5-217

675 1655

File name: C:\FLOW_4\021501.RST
Date: February 15, 2001
Operator: ERIC WESOLOSKI E. I. Wesoloski 2/15/01

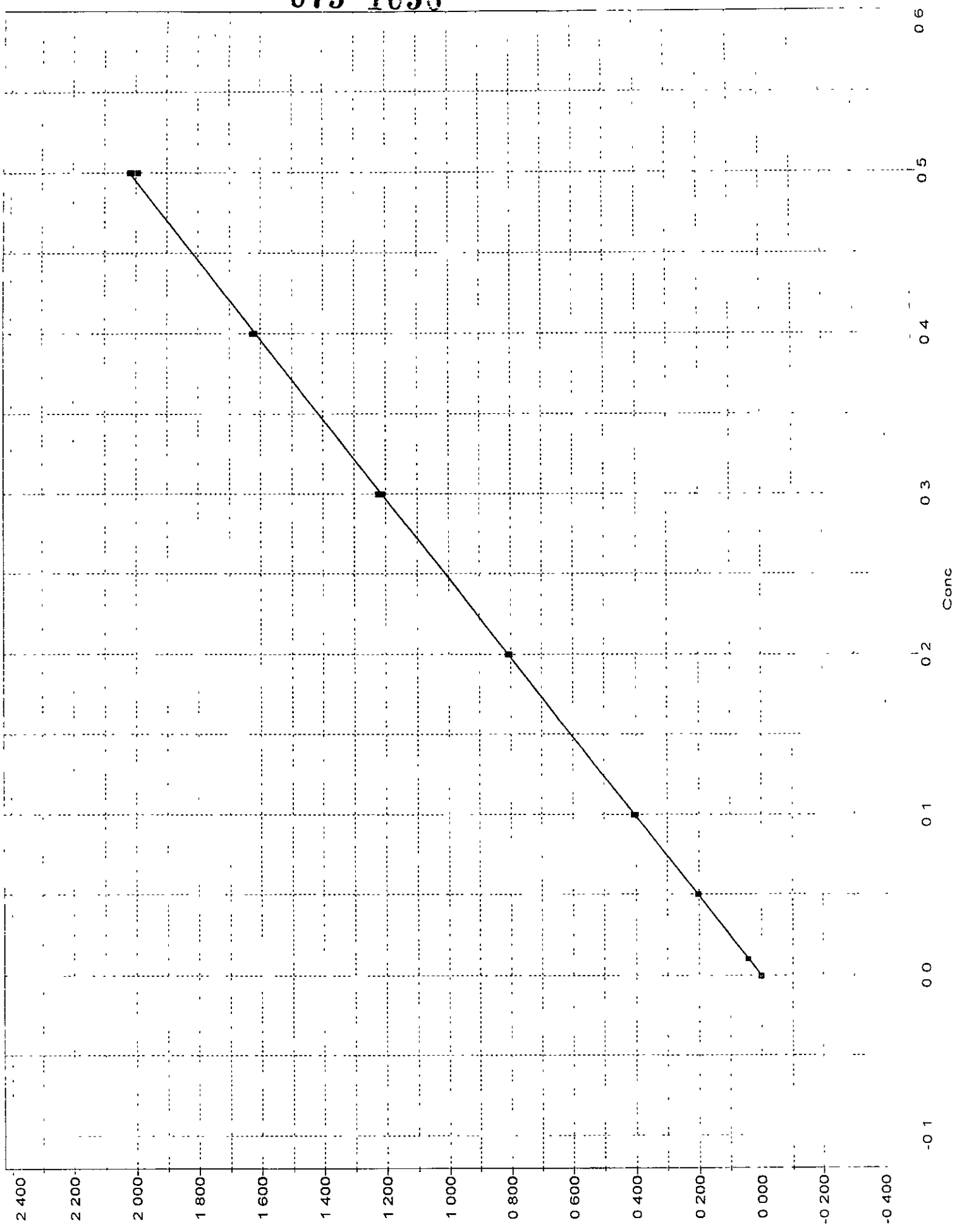
*	Name	Conc	Height
*	0.500 PPM STD	0.500000	201937.156250
*	0.500 PPM STD	0.500000	201173.828125
*	0.500 PPM STD	0.500000	199196.796875
*	0.400 PPM STD	0.400000	161889.656250
*	0.400 PPM STD	0.400000	162628.250000
*	0.400 PPM STD	0.400000	162036.406250
*	0.300 ppm STD	0.300000	120895.820312
*	0.300 ppm STD	0.300000	122342.273438
*	0.300 ppm STD	0.300000	121290.898438
*	0.200 PPM STD	0.200000	80700.429688
*	0.200 PPM STD	0.200000	80303.773438
*	0.200 PPM STD	0.200000	80920.664062
*	0.100 PPM STD	0.100000	40754.421875
*	0.100 PPM STD	0.100000	40056.496094
*	0.100 PPM STD	0.100000	39981.796875
*	0.050 PPM STD	0.050000	20103.357422
*	0.050 PPM STD	0.050000	20063.402344
*	0.050 PPM STD	0.050000	20215.019531
*	0.010 PPM STD	0.010000	4303.187012
*	0.010 PPM STD	0.010000	4211.237305
*	0.010 PPM STD	0.010000	4160.266113
*	0.000 PPM STD	0.000000	97.536011
*	0.000 PPM STD	0.000000	1.866671
*	0.000 PPM STD	0.000000	6.413570

Calib Coef:
y=bx+a
a: (intercept) 5.2125e+01
b: 4.0396e+05

Corr Coef: 0.999953

Carryover: 0.186%

No Drift Peaks


CYANIDE Calibration, Peak 5-217
Height (E+05)
2 400
2 200
2 000
1 800
1 600
1 400
1 200
1 000
0 800
0 600
0 400
0 200
0 000
-0 200
-0 400
Conc
0 6
0 5
0 4
0 3
0 2
0 1
0 0
-0 1

C1309249 Total 1043163
C1309250 Solids

STL - Pittsburgh

CYANIDE DISTILLATION WORKSHEET

Logbook ID: WC37

Distilled by: L. Johnson start 0930

Date: 2-12-01

Reagent/Std Book ID: balance 676358
342.189.9 / 342.197.1 / 342.154.9

Sample ID	Distillation Initial	Distillation Final	Sample Description (CLP Samples Only) Before Distillation	After Distillation	Expiration Date	Color
1. VOKHIAAR	1.000g	50ml			NA	
2. VOKHIAC	1.00g				NA	
3. WMOIAX	1.00g				2-22-01	
4. WHEIAC	1.00g					
5. WPAWJX	1.00g					
6. WMWJOC	1.00g				2-22-01	
7. WMWJJ5	1.00g	50ml				
8.						
9.						
10.						
11						
12						
13.						
14						
15						
16						
17						
18						
19			L. Johnson 2-12-01			
20						
21						
22.						
23						
24						
25						
26						

Color: R=Red, BL=Blue, BR=Brown, BLK=Black, Y=Yellow, O=Orange, V=Violet, P=Pink, W=White, GY=Gray, GN=Green, C=Colorless

Texture: F=Fine, M=Medium, C=Coarse

Clarity: C=Clear, CL=Cloudy, O=Opaque

Distillate(s) (record line # from above)	Distillate(s) Received Date	Time	Analyst	Location	Distillate(s) Relinquished Date	Time	Analyst	Location
1-7	2-12-01	1045	L. Johnson	WC	2-12-01	1115	L. Johnson	Bench
1-7	2-15-01	06:00	[illegible]	WC	2-15-01	12:00	[illegible]	Disposal

Comments: LCS 103mg/kg 72-151-0/mg/kg 50mg/kg to 50ml of 72-151-0 To 1.00g of Sample

Reviewed by: [illegible]

Date: 2-12-01

675 1657

STL Pittsburgh

7025

CJ090228 Total 1043164
CJ090189 Water

STL - Pittsburgh CYANIDE DISTILLATION WORKSHEET

Logbook ID: WC37

675 1658

Distilled by	Date	Reagent/Std Book ID
J. Johnson Start 0930	2-12-01	342-189.9 / 342-197.1 / 342-154.9

#	Sample ID	Distillation: Initial	Distillation: Final	Sample Description (CLP Samples Only): Before Distillation	After Distillation	Expiration Date	Color
1	JJOKJ1AA	50ml	50ml			NA	R=Red
2	JJOLJ1AC					NA	BL=Blue
3	JJWTE1A7					2-22-01	BR=Brown
4	JJW6V1A9					2-21-01	BLK=Black
5	JJW8H1AL						Y=Yellow
6	JJW8L1A7						O=Orange
7	JJW8L1A5						V=Violet
8	JJW8K1A9					2-21-01	P=Pink
9	JJWG21AL					2-22-01	W=White
10	JJWFW1AL					2-22-01	GY=Gray
11	JJWA81AL					2-22-01	GN=Green
12	JJWGJ1AL	50ml	50ml			2-22-01	C=Colorless
13							
14							Texture
15							F=Fine
16							M=Medium
17							C=Coarse
18							
19							
20.							Clarity
21							C=Clear
22				J. Johnson 2-12-01			CL=Cloudy
23							O=Opaque
24.							
25							
26							

Distillate(s) (record line # from above)	Distillate(s) Received: Date	Time	Analyst	Location	Distillate(s) Relinquished: Date	Time	Analyst	Location
1-12	2-12-01	1045	J. Johnson	WC	2-12-01	1115	J. Johnson	Ref 3
1-12	2-15-01	06:00	E. F. Ulrich	WC	2-15-01	17:00	E. F. Ulrich	Dispersal

Comments
LCS .1ppm 72-151-1 / MS/MSD 0.1ppm 0.5ml of 72-151-06 to 50ml of sample

Reviewed by E. F. Ulrich Date. 2-16-01

7026

STL Pittsburgh

CLP0802L9 Total 1043296
CLP1001L8 Water
CLP1001L9
CLP1001L1

STL - Pittsburgh CYANIDE DISTILLATION WORKSHEET

Logbook ID: WC37

Distilled by: J. Johnson Start 1420 | Date: 2.12.01 | Reagent/Std Book ID: 342189 / 342197.1 / 342154.9

	Sample ID	Distillation: Initial	Distillation: Final	Sample Description (CLP Samples Only): Before Distillation	After Distillation	Expiration Date	Color
1	VOHIALL	Some	Some	NA	NA	NA	
2	VOHIAAD			NA	NA	NA	
3	VTHJIA3			" "	" "	2.20.01	
4	VXOJIA3			" "	" "	2.22.01	
5	VXXWIA3			" "	" "		
6	VXXOIA6			" "	" "		
7	VXXGIAH			" "	" "		
8	VXOEIAH			" "	" "		
9	VXOGIAH			" "	" "		
10	VXOKIAW			" "	" "		
11	VXOKIEX			" "	" "		
12	VXOHIAX			" "	" "		
13	VXORIAH	Some	Some	" "	" "	2.22.01	
14							
15							
16							
17							
18							
19							
20							
21				J. Johnson 2.12.01			
22							
23							
24							
25							
26							

Color: R=Red, BL=Blue, BR=Brown, BLK=Black, Y=Yellow, O=Orange, V=Violet, P=Pink, W=White, GY=Gray, GN=Green, C=Colorless

Texture: F=Fine, M=Medium, C=Coarse

Clarity: C=Clear, CL=Cloudy, O=Opaque

Distillate(s) (record line # from above)	Distillate(s) Received: Date	Time	Analyst	Location	Distillate(s) Relinquished: Date	Time	Analyst	Location
1-13	2-12-01	1525	J. Johnson	WC				
	2-15-01	0400	E. L. Mitchell	WC	2-15-01	1500	E. L. Mitchell	Disposal

Comments: ICV: Iron 73151.12 / Spike 5.1ppm 0.5ml of 73151 06 To Some of Samples

Reviewed by: E. L. Mitchell | Date: 2-12-01 SDW 2-12-01

7027

675 1659

C1B100119 Total Solid 1044162

STL - Pittsburgh

CYANIDE DISTILLATION WORKSHEET

Logbook ID: WC37

Distilled by	Date	Reagent/Std Book ID
D. Johnson Start 1020	2.13.01	Balance (67639) 342189.9 / 342.197.1 / 342.154.9

	Sample ID	Distillation Initial	Distillation Final	Before Distillation	After Distillation	Expiration Date	Color
1	TCW	50ml	50ml	NA	NA	NA	R=Red
2	JV12H1AAB	1.00g					BL=Blue
3	JV12H1ACC	0.10g		NA	NA	NA	BR=Brown
4	JXXF1AL	1.00g		Br, M	Br, M	2.22.01	BLK=Black
5	JXXL1AL	1.00g		Br, M	Br, M		Y=Yellow
6	JXX81AH	1.00g		Br, M	Br, M		O=Orange
7	JXOA1AH	1.00g		Br, M	Br, M		V=Violet
8	JXOCJAH	1.00g		Br, M	Br, M		P=Pink
9	JXOF1AH	1.00g		Br, M	Br, M		W=White
10	JXOH1AH	1.00g		Br, M	Br, M		GY=Gray
11	JXOL1AH	1.00g		Br, M	Br, M		GN=Green
12	JXOM1AH	1.00g		Br, M	Br, M		C=Colorless
13	JXON1AH	1.00g		Br, M	Br, M		
14	JXOP1AW	1.00g		Br, M	Br, M		
15	JXOP1D6X	1.00g		Br, M	Br, M		Texture
16	JXOP1AXS	1.00g		Br, M	Br, M		F=Fine
17	JXOW1AH	1.00g		Br, M	Br, M		M=Medium
18	JXOO1AH	1.00g		Br, M	Br, M		C=Coarse
19	JXO21AH	1.00g	50ml	Br, M	Br, M	2.22.01	
20.							
21							Clarity
22							C=Clear
23							CL=Cloudy
24.				D. Johnson 2.13.01			O=Opaque
25							
26.							

Distillate(s) (record line # from above)	Received Date	Received Time	Received Analyst	Received Location	Relinquished Date	Relinquished Time	Relinquished Analyst	Relinquished Location
1-19	2.14.01	1135	D Johnson	WC	2.14.01	1205	D Johnson	Lab
1-19	2-15-01	06:00	E. K. White	WC	2-15-01	17:00	E. K. White	Disposal

Comments: TCW: Hoppar 72.15.15/4 103mg/kg 72.154.4 / Spike 5.0mg/kg 0.5ml of 72.151.1 / To 1.00g of Sample

Reviewed by: E. K. White — Date 2-13-01

675 1660

STL Pittsburgh

7028

REQUESTED BY: **JOHNSONP**

METHOD QP Cyanide, Total

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16B CLP1	DVV6V-1-A9		311348	017267	I-06-QP	C1B090189	001		WATER	12	1
16B CLP1	DVV84-1-AL		311349	017267	I-06-QP	C1B090189	002		WATER	12	1
16B CLP1	DVV86-1-D7		311350	017267	I-06-QP	C1B090189	003		WATER	36	1
16B CLP1	DVV97-1-AL		311351	017267	I-06-QP	C1B090189	004		WATER	12	1
16B CLP1	DVWAW-1-AL		311352	017267	I-06-QP	C1B090189	005		WATER	12	1
16B CLP1	DVWA8-1-AL		311353	017267	I-06-QP	C1B090189	006		WATER	12	1
16B CLP1	DVWCD-1-AL		311354	017267	I-06-QP	C1B090189	007		WATER	12	1
16C	DVWMW-1-DX		311357	104643	A-06-QP	C1B090250	001		SOLID	6	1
16C CLP1	DVWMQ-1-A5		311356	414852	A-06-QP	C1B090249	001		SOLID	3	1
16C CLP1	DVWNC-1-AG		311358	414852	A-06-QP	C1B090249	002		SOLID	3	1
16D CLP1	DVWJ8-1-A7		311355	399411	I-06-QP	C1B090228	001		WATER	13	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
P. J. Johnson	P. J. Johnson	2-12-01 | 0815
P. J. Johnson	P. J. Johnson	2-12-01 | 1500

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

675 1662

PSR024 2/12/01 @ 12:02 MT SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

REQUESTED BY: JOHNSONP

METHOD OU Cyanide, Total (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
15D	DVTHJ-1-A5	___ ___ ___	311359	058624	I-06-OU	C1B080219	007		WATER	6	1
17D CLP1	DVXXW-1-A7	___ ___ ___	311361	058624	I-06-OU	C1B100119	006		WATER	14	1
17E CLP1	DVX05-1-A5	___ ___ ___	311367	058624	I-06-OU	C1B100118	015		WATER	9	1
18A, CLP1	DVXXQ-1-A6	___ ___ ___	311360	058624	I-06-OU	C1B100121	001		WATER	14	1
18A, CLP1	DVXX9-1-AH	___ ___ ___	311362	058624	I-06-OU	C1B100121	002		WATER	14	1
18A, CLP1	DVX0E-1-AH	___ ___ ___	311363	058624	I-06-OU	C1B100121	003		WATER	14	1
18A, CLP1	DVX0G-1-AH	___ ___ ___	311364	058624	I-06-OU	C1B100121	004		WATER	14	1
18A, CLP1	DVX0K-1-AW	___ ___ ___	311365	058624	I-06-OU	C1B100121	005		WATER	42	1
18A, CLP1	DVX0R-1-AH	___ ___ ___	311366	058624	I-06-OU	C1B100121	006		WATER	13	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
P. C. Johnson	P. C. Johnson	2-12-01 0815
P. C. Johnson	P. C. Johnson	2-12-01 1500

REQUESTED BY: JOHNSONP

METHOD: OU Cyanide, Total (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
17E	DVXXF-1-A6		311666	058624	A-06-OU	C1B100118	001		SOLID	2	1
17E	DVXXL-1-A6		311667	058624	A-06-OU	C1B100118	002		SOLID	2	1
17E	DVXX8-1-AH		311668	058624	A-06-OU	C1B100118	003		SOLID	2	1
17E	DVX0A-1-AH		311669	058624	A-06-OU	C1B100118	004		SOLID	2	1
17E	DVX0C-1-AH		311670	058624	A-06-OU	C1B100118	005		SOLID	2	1
17E	DVX0F-1-AH		311671	058624	A-06-OU	C1B100118	006		SOLID	2	1
17E	DVX0H-1-AH		311672	058624	A-06-OU	C1B100118	007		SOLID	2	1
17E	DVX0L-1-AH		311673	058624	A-06-OU	C1B100118	008		SOLID	2	1
17E	DVX0M-1-AH		311674	058624	A-06-OU	C1B100118	009		SOLID	2	1
17E	DVX0N-1-AH		311675	058624	A-06-OU	C1B100118	010		SOLID	2	1
17E	DVX0P-1-AW		311676	058624	A-06-OU	C1B100118	011		SOLID	4	1
17E	DVX0W-1-AH		311677	058624	A-06-OU	C1B100118	012		SOLID	2	1
17E	DVX00-1-AH		311678	058624	A-06-OU	C1B100118	013		SOLID	2	1
17E	DVX02-1-AH		311679	058624	A-06-OU	C1B100118	014		SOLID	2	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
P. J. Johnson	P. J. Johnson	2-13-01 0835
P. J. Johnson	P. J. Johnson	2-13-01 1430

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

675 1664

STL Pittsburgh
SULFIDE LOG SHEET

Page ____ of ____

Lot No	Batch No.	SDG No.
C1B090228 >	1044274	
TOTAL - C1B080110 >		
DISSO. - C1B080110 >	1044275	
TOTAL - C1B090250 >	1044272	
LEACH - CB090250 >	1044273	

CHW 2-13-01

Analyst: Eric L. Wesoloski

Date: 2-13-01

Start Time: 12:15

Stock Std. ID No.: 647 - 022 - 04 True Value ~1000ppm Days Actual Value 948.32

Prep 2-13-01 Exp. 2-20-01

ICV/LCS 2.5 mL of 948.32ppm (ID No.: 647 - 022 - 04) = 47.42ppm Range +/- 15% CHW 2-13-01

CCV 2.5 mL of 948.32ppm Range +/- 10% 237.10 - FOR SOILS.

Calculations:

$$\text{Sulfide mg/L} = \frac{[(20\text{ mL of Iodine} \times \text{N Iodine}) - (\_\_X\_\_\text{mL } Na_2S_2O_3 \times \text{N } Na_2S_2O_3)]}{\text{mL Sample}} \times 16{,}000$$

Iodine Standardization ID No.: 647 - 021 - 06

.0244 N Iodine = $\frac{(19.9)\text{ mL } Na_2S_2O_3 (.0245\text{N of } Na_2S_2O_3)}{20\ 0\text{ mL of Iodine Solution}}$

C1B090228-001 = 3.9%

Relative Percent Difference =

@SOIL = C1B090250-001 = .81%.

*LEACH = C1B090250-001 = 7.9%

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X_1 = Original Result

X_2 = Duplicate

Sodium Thiosulfate Standardization = ID No. 647 - 018 - 06

Titration	mLs	Normality
1	10.1	.02475
2	10.2	.0245

Avg. = .0246 N

$$\frac{(10\text{ mL of } KH(IO_3)^2)\ (0\ 025\text{N } KH(IO_3)^2)}{\text{mL of } Na_2S_2O_3}$$

Concentration of Sample in Spike:

Sample ID: C1B090228-001

Orig. Smp. Conc. 5.02 $\times \left(\frac{\text{Vol of Smp. in Spike } 50}{\text{Orig. Smp. Vol } 50}\right)$ = 5.02

MS Percent Recovery:

$$100 \times \left(\frac{\text{Observed Conc of MS } 20.76 - \text{Conc of Smp in Spike } 5.02}{\text{True Spike Conc. } 18.97}\right) = 83\%$$

Sample ID C1B090228-001 CHW 2-13-01

MSD Percent Recovery:

$$100 \times \left(\frac{\text{Observed Conc of MS } 19.97 - \text{Conc of Smp in Spike } 5.02}{\text{True Spike Conc } 18.97}\right) = 78.8\%$$

Sample ID C1B090228-001 CHW 2-13-01

Eric L. Wesoloski 2/13/01

STL Pittsburgh
SULFIDE LOG SHEET

Page ____ of ____

Lot No.	Batch No	SDG No

Analyst _____

Date _____

Start Time: _____

Stock Std. ID No.: _____-_____-_____ True Value _____ Days Actual Value _____

Prep _____ Exp _____

ICV/LCS _____ mL of _____ ppm (ID No.: _____-_____-_____) = _____ ppm Range _____

CCV _____ mL of _____ ppm Range _____

Calculations:

$$\text{Sulfide mg/L} = \frac{[(20\text{ mL of Iodine} \times \text{N Iodine}) - (\_\_\text{X}\_\_\text{ mL } Na_2S_2O_3 \times \text{N } Na_2S_2O_3)]}{\text{mL Sample}} \times 16{,}000$$

Iodine Standardization ID No.: _____-_____-_____

$$\_\_\_\_\text{N Iodine} = \frac{(\_\_\_)\text{ mL } Na_2S_2O_3)(\_\_\_)\text{N of } Na_2S_2O_3)}{20.0\text{ mL of Iodine Solution}}$$

Relative Percent Difference =

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X_1 = Original Result

X_2 = Duplicate

Sodium Thiosulfate Standardization = ID No _____-_____-_____

Titration	mLs	Normality
1	_____	_____
2	_____	_____

Avg. = _____N

$$\frac{(10\text{ mL of } KH(IO_3)^2)\ (0.025\text{N } KH(IO_3)^2)}{\text{mL of } Na_2S_2O_3}$$

Concentration of Sample in Spike:

Sample ID: CIB090250-001

(*) Soil (*)

Orig. Smp. Conc. 465.92 $\left(\frac{\text{Vol of Smp. in Spike } 50}{\text{Orig. Smp. Vol. } 50}\right)$ = 465.92

MS Percent Recovery:

$$100 \times \left(\frac{\text{Observed Conc. of MS } 485.6 - \text{Conc. of Smp in Spike } 465.92}{\text{True Spike Conc } 94.85}\right) = 20.7\%$$

Sample ID: CIB090250-001

MSD Percent Recovery:

$$100 \times \left(\frac{\text{Observed Conc. of MS } 489.54 - \text{Conc of Smp in Spike } 465.92}{\text{True Spike Conc } 94.85}\right) = 24.9\%$$

Sample ID CIB090250-001

675 1666

STL Pittsburgh
SULFIDE LOG SHEET

Page ____ of ____

Lot No.	Batch No.	SDG No.

Analyst. _____

Date. _____

Start Time _____

Stock Std. ID No ____-____-____ True Value _____ Days Actual Value _____

Prep _____ Exp. _____

ICV/LCS _____ mL of _____ ppm (ID No.: ____-____-____) = _____ ppm Range _____

CCV _____ mL of _____ ppm Range _____

Calculations:

$$\text{Sulfide mg/L} = \frac{[(20\text{ mL of Iodine} \times \text{N Iodine}) - (\_\_\text{X}\_\_\text{ mL } Na_2S_2O_3 \times \text{N } Na_2S_2O_3)]}{\text{mL Sample}} \times 16{,}000$$

Iodine Standardization ID No.: ____-____-____

$$\_\_\_\_\text{N Iodine} = \frac{(\_\_\_)\text{ mL } Na_2S_2O_3)(\_\_\_)\text{N of } Na_2S_2O_3)}{20\ 0\text{ mL of Iodine Solution}}$$

Relative Percent Difference =

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X_1 = Original Result

X_2 = Duplicate

Sodium Thiosulfate Standardization = ID No. ____-____-____

Titration	mLs	Normality
1		
2		

Avg. = _____N

$$\frac{(10\text{ mL of } KH(IO_3)^2)\ (0\ 025\text{N } KH(IO_3)^2)}{\text{mL of } Na_2S_2O_3}$$

Concentration of Sample in Spike:

Sample ID: CIB090250-001

(*) LEACH (*)

Orig. Smp. Conc 5.41 × (Vol of Smp. in Spike 50 / Orig. Smp. Vol 50) = 5.41

MS Percent Recovery:

$$100 \times \left(\frac{\text{Observed Conc of MS } 95.94 - \text{Conc of Smp in Spike } 5.41}{\text{True Spike Conc. } 94.85}\right) = 95.8\%$$

4/ CW 2-13-01

Sample ID CIB090250-001

MSD Percent Recovery:

$$100 \times \left(\frac{\text{Observed Conc of MS } 103.81 - \text{Conc of Smp in Spike } 5.41}{\text{True Spike Conc } 94.85}\right) = 103.8\%$$

Sample ID CIB090250-001

STL Pittsburgh
SULFIDE LOG SHEET

Page ____ of ____

True Value LCS/ICV = 47.42 (H2O) / 237.10 (Soils + Leach) ppm

True Value MS/MSD = 18.97 (H2O) / 94.85 ppm

Sample ID	Sample mL	N = .0244 mL of Iodine	mL of N = .0246 $Na_2S_2O_3$	Conc.	LDL	
ICV	50 ml	20 ml	13.8	47.53	100.2%	
ICB			20.4	ND	1.0	
PB-1			20.5	ND	5	
LCS-1			14.0	229.76	96.9%	
C1B090250-001			8.0	465.92	5	
-001 MS			7.5	485.60	20.7%	RPD .81%
-001 MSD			7.4	489.54	24.9%	
CCV			13.9	46[illegible].74	98.6%	
CCB			20.4	ND	1.0	
~~ICB~~ ICV			14.0	45.95	96.9%	
ICB			20.6	ND	1.0	
PB DI LEACH			20.4	ND	5	
PB-2			20.5	ND	5	
LCS-2			14.2	221.9	93.6%	
C1B090250-001			19.7	5.41	5	
-001 MS			17.4	95.94	95.8%	RPD 7.9%
-001 MSD			17.2	103.81	103.8%	
CCV			13.8	47.53	100.2%	
CCB			20.5	ND	1.0	
ICV			13.7	48.31	101.9%	
ICB			20.4	ND	1.0	
PB-3			20.4	ND	1.0	
LCS-3			14.1	45.16	95.2%	
C1B090228-001			19.2	5.02	1.0	
-001 MS			17.2	20.76	83%	RPD 3.9%
-001 MSD			17.3	19.97	78.8%	
TOTAL C1B080110-001			20.0	ND	1.0	
DISSOLVED C1B080110-001			20.1	ND	1.0	
CCV			13.9	46.74	98.6%	
CCB			20.5	ND	1.0	

SOILS 2

LEACH 5

H_2O's 5

EHW 2-13-01

STL Pittsburgh

STL - Pittsburgh START: 07:30 SULFIDE DISTILLATION WORKSHEET

Logbook ID: WC1

Distilled by	Date	Reagent/Std Book ID	Actual Stock Value (ppm)	True Value
Eric L. Wesoloski	2-13-01	342-173-8 / 342-170-0 / 647-016-4	948.32	1000 ppm

	Sample ID	Distillation Initial	Distillation Final	Distillation Expiration Date
1	ICV	50ml	50ml	
2.	ICB	↓	↓	
3	PB-1	10.00g		
4	LCS-1	10.00g		
5	C1B090250-001	10.00g		2-15-01
6	↓ -001 MS	10.00g	↓	↓
7.	-001 MSD	10.00g		
8				
9				
10.				
11				
12				
13.				
14				
15				
16				
17.				
18				
19				
20				
21				
22				
23				
24				
25				
26				

EW 2-13-01

675 16668

Distillate(s) (record line # from above)	Distillate(s) Received Date	Time	Analyst	Location	Distillate(s) Relinquished Date	Time	Analyst	Location
1-7	2-13-01	07:30	E. L. Wesoloski	WET CHEM	2-13-01	14:05	E. L. Wesoloski	DISPOSAL

Comments: ICV/LCS = 2.5ml of 647-022-04 (use 237.10 ppm / ICV = 47.42 ppm) MS/MSD = 1.0ml of 647-022-04 to 10.00g SAMPLE + 40ml DI H2O = 94.85g

Reviewed by: BJ Mel Date: 02/13/01

STL Pittsburgh

LEACH

STL - Pittsburgh

START: 09:15

SULFIDE DISTILLATION WORKSHEET

Logbook ID: WC1

Distilled by	Date	Reagent/Std Book ID	Actual Stock Value (ppm)	True Value
Eric L. Wesoloski	2-13-01	342-173-8 / 342-170-0 / 647-016-4	948.32	1000 ppm

	Sample ID	Distillation: Initial	Distillation: Final	Expiration Date
1	ICV	50 ml	50 ml	
2	ICB			
3	PB-2			
4	LCS-2			
5	PB DI LEACH			2-15-01
6	C1B090250-001			2-15-01
7	-001 MS			
8	-001 MSD			
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

EW 2-13-01

675 1669

Distillate(s) (record line # from above)	Distillate(s) Received: Date	Time	Analyst	Location
1-8	2-13-01	09:15	L. Z Nemeth	WET CHEM

Distillate(s) Relinquished: Date	Time	Analyst	Location
2-13-01	14:05	L. Z Nemeth	DISPOSAL

Comments: ICV = 2.5ml of 647-022-04 = 47.42ppm; LCS = 2.5ml of 647-022-04 = 237.10ppm; MS/MSD = 1.0ml of 647-022-04 to 50ml Smpl = 94.85

Reviewed by: [signature]

Date: 02/13/01

7037

STL Pittsburgh

STL - Pittsburgh

START: 10:25

SULFIDE DISTILLATION WORKSHEET

Logbook ID: WC1

675 1670

Distilled by	Date	Reagent/Std Book ID	Actual Stock Value (ppm)	True Value
Eric L. Wesolosky	2-13-01	342-173-8 / 342-170-0 / 647-016-4	948.32	1000 ppm

	Sample ID	Distillation: Initial	Distillation: Final	Distillation: Expiration Date
1	ICV	50ml	50ml	
2	ICB			
3	PB-3			
4	LCS-3			
5	C1B090228-001			2-15-01
6	-001 MS			
7	-001 MSD			
8	TOTAL-C1B080110-001			2-14-01
9	DISSOLVED-C1B080110-001			2-14-01
10				
11.				
12				
13				
14				
15				
16.				
17				
18				
19				
20.				
21				
22				
23				
24.				
25.				
26				

EHW 2-13-01

Distillate(s) (record line # from above)	Distillate(s) Received: Date	Time	Analyst	Location	Distillate(s) Relinquished: Date	Time	Analyst	Location
1-9	2-13-01	10:25	E. L. Wesolosky	WET CHEM	2-13-01	14:05	E. L. Wesolosky	DISPOSAL

Comments: ICV/LCS = 2.5ml of 647-022-04 = 47.42ppm ; MS/MSD = 1.0ml of 647-022-04 to 50ml SAMPLE = 18.97ppm

Reviewed by: BJ Mel

Date: 02/13/01

7038

printed on: 18-Sep-00 2:25:27 PM

STL Pittsburgh

Digestate Log

C1B090250

1:5

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

Committed To Your Success

Parameter	Analyst	Date	Reagent Std Log Book	Reagent IDs
DI LEACH SULFIDE	Eric L. Wesoloski	2-13-01		Super Q H2O

	Sample ID	Weight/Volume (g/mL)	Final Volume (mL)
1	PB DI LEACH	40.00g	200 ml
2.	C1B090250-001		
3.	-001 MS		
4	-001 MSD		
5			
6			
7			
8			
9			
10			
11.			
12			
13			
14.			
15			
16.			
17.			
18.			
19			
20.			
21			
22			
23.			

Digestate(s) (Record line number from above)	Digestate(s) Received				Digestate(s) Relinquished			
	Date	Time	Analyst	Location	Date	Time	Analyst	Location
1-4	2-13-01	07:15	E. L. Wesoloski	WET CHEM	2-13-01	08:35	E. L. Wesoloski	WET CHEM SULFIDE

Comments: ADEQUATE SAMPLE WAS LEACHED FOR REQUIRED QC. - SAMPLES SPIKED WHEN DISTILLED.

Batch Number | Reviewed By | Date 2.13.01

675 1671

7039

675 1672

PSR024 2/13/01 4 53 42 MT SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

REQUESTED BY **WESOLOSE**

)D. TV Sulfides, Total (9030B-dist/9034-titrat)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16C	DVWMW-1-D8	___ ___ ___	311585	104643	A-06-TV	C1B090250	001		SOLID	6	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
E. L. Wesolose	E. L. Wesolose	2/13/01 (06:55)
E. L. Wesolose	E. L. Wesolose	2/13/01 (12:00)

REQUESTED BY **WESOLOSB**

METHOD TV Sulfides, Total (9030B-dist/9034-titrat)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
	DVWMW-1-B8	___ ___ ___	311586	104643	A-82-TV	C1B090250	001		SOLID	6	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
E. L. Wesolosky	E. L. Wesolosky	2/13/01 (06:55)
E. L. Wesolosky	E. L. Wesolosky	2/13/01 (12:00)

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

675 1674

PSR024 2/13/01 4:53 55 MT SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

REQUESTED BY MESOLOSE

)D: CT Dissolved Sulfide

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
15C	DVRM3-1-AT	___ ___ ___	311588	059184	I-87-CT	C1B080110	001		WATER	11	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
Ei. L. Wenrich	Ei. L. Wenrich	2/13/01 (06:55)
Ei. L. Wenrich	Ei. L. Wenrich	2/13/01 (12:00)

REQUESTED BY **WESOLOSE**

DD CT Sulfide (376 1)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
	DVRM3-1-AR	___ ___ ___	311587	059184	I-88-CT	C1B080110	001		WATER	11	1
16D CLP1	DVWJE-1-A9	___ ___ ___	311589	399411	I-88-CT	C1B090228	001		WATER	13	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
Eric L. Wesolowski	Eric L. Wesolowski	2/13/01 (06:55)
Eric L. Wesolowski	Eric L. Wesolowski	2/13/01 (12:00)

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

675 1676

Ignitability
Method: Flash Point (Closed Cup)

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238

ANALYST:	DATE: 2-16-01
BATCH: 1047359	TIME: 14:30

SAMPLE ID	RESULT	Correction Results
R Xylene	81°F	82.2
C1B090228-001	>200°F	>201.2°F
b -001 DUP	>200°F	>201.2°F
P-Xylene	81°F	82.2

Reviewed by [signature] Date 2/16/01

REQUESTED BY **GROVER**

METHOD. AE Flash Point (1010, Closed Cup)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
16D CLP1	DVWJE-1-A8	___ ___ ___	313068	399411	I-88-AE	C1B090228	001		WATER	13	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

2-16-01 14:15

2-16-01 15:15

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

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE