Return to Navigator

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. CUMMINGS RITER

CummingsRiter-Viacom-Horsehead

Lot #: C0J120207

Bruce Geno/Bill Smith

Cummings-Riter Consultants Inc

SEVERN TRENT LABORATORIES, INC.

Carrie L. Gamber
Project Manager

October 31, 2000

CASE NARRATIVE

CUMMINGS RITER
CummingsRiter-Viacom-Horsehead

STL Lot # C0J120207

Sample Receiving:
STL Pittsburgh received samples, for analysis on October 11, 2000. The cooler was within the proper temperature range.

GC/MS Semivolatiles:
Sample PXS-20 had the surrogate recoveries outside of the control limits. The sample was re-extracted within the holding time. The re-extract had the surrogate recoveries within the control limits. Only the re-extract was reported.

Sample PXS-20 was analyzed at a 2X dilution due to matrix.

The matrix spike duplicate for sample PXS-19 had the recovery of 2,4-dinitrotoluene outside of the advisory limits.

The matrix spike for sample PXS-20 had the recovery of 2,4-dinitrotoluene outside of the advisory limits.

The matrix spike duplicate for sample PXS-20 had the recoveries of 2,4-dinitrotoluene and pentachlorophenol outside of the advisory limits.

Metals:
The relative percent difference between sample PXS-19 and the duplicate of the sample was outside of the control limits for arsenic. All associated results are flagged with an "*" qualifier.

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

METHODS SUMMARY

C0J120207

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
CLP Semi-Volatile Organic Compounds (OLM04.2)	OCLP OLM04.2	
Inductively Coupled Plasma	ICLP ILM04.0	ICLP ILM04.0
Percent Moisture Determination Procedure	ICLP ILM04.0	ICLP ILM04.0

References:

ICLP USEPA Contract Laboratory Program Statement of Work for Inorganics Analysis, Multi-Media, Multi-Concentration.

OCLP USEPA Contract Laboratory Program Statement of Work for Organics Analysis, Multi-Media, Multi-Concentration.

SAMPLE SUMMARY

C0J120207

WO #	SAMPLE#	CLIENT SAMPLE ID	DATE	TIME
DM2GW	001	PXS-19	10/11/00	15:20
DM2G3	002	PXS-20	10/11/00	15:30

NOTE(S):

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

CUMMINGS RITER CONSULTANTS, INC.

Chain of Custody Record

Lab Quote # _____

Project Name:	Horseheads DAF	**Results To:**	Bruce Gano / Bill Smith
Project Location:	Horseheads, NY	**Company:**	Cummings / Riter
Project Number:	245.20	**Address:**	339 Haymaker Rd Monroeville, PA 15146
Sampled By: (print)		**Phone:**	(412) 373-5240

Invoice To:	Lee Brausch
Company:	Viacom Inc.
Address:	11 Stanwix St Pittsburgh, PA 15222
Phone:	(412) 642-3922

Lab ID	Sample Identification	Date	Time	Grab	Composite	Sample Matrix	No. of Bottles	Analyses: 4 oz Glass PAH	Analyses: 4 oz Glass As	Preservatives: HCL	Preservatives: HNO3	Preservatives: H2SO4	Preservatives: NaOH	Remarks
	PXS-19	10/11/00	1526	X		Soil	2	X	X					
	PXS-20	10/11/00	1530	X		Soil	2	X	X					

Turnaround Time Required: 48-HR Normal ___ Rush X	**1. Relinquished By: (signature)** Bruce Gano	**Date** 10/11/00	**Time** 1630
Sample Disposal: Return to Client ___ Disposal by Lab X	**2. Relinquished By: (signature)**	**Date** 10/11/00	**Time** 0930
Known Hazard (flammable/toxic): Yes (comment below) ___ No X	**3. Relinquished By: (signature)**	**Date**	**Time**

1. Received By: (signature)	Fed Ex
2. Received By: (signature)	
3. Received By: (signature)	

Special Instructions/Comments:

Custody Seal No: 173421

See Quality Assurance Project Plan for select list of PAH compounds

Sample Condition Upon Receipt:

Cooler Receipt Form

STL Pittsburgh

Client: Carrie Ritter Project: _____ Quote: _____

Cooler Rec'd & Opened for Temp. Check on: 10/11/00

Coolers Opened and Unpacked on: 10/11/00 By: _____ (Signature)

STL Pittsburgh Lot Number: C0T120207

		Yes	No
1.	Were custody seals on the outside of the cooler?	✓	
	If YES, how many and where? Quantity __ Location Front & Back		
	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 Pack		
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

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			

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

Comments: _____

_____

_____

Cooler Number	Temperature
	3

Bottle Type	Lot Number*

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

FedEx USA Airbill FedEx Tracking Number 822646652248

Form I.D. No. 0200

1 Date 10/11/00

Sender's Name Bruce Geno Phone 412 373-5240

Company Cummings Riter (for Viacom Inc)

Address 339 Haymaker Rd Ste 201

Dept/Floor/Suite/Room

City Monroeville State PA ZIP 15146

2 Your Internal Billing Reference Horseheads Remediation

3 To

Recipient's Name Sample Receiving Phone 412 820-8380

Company Severn Trent

Address 450 William Pitt Way

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept/Floor/Suite/Room

City Pittsburgh State PA ZIP 15238

8226 4665 2248

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 Envelope/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 Envelope/Letter*
- [ ] FedEx Pak*
- [x] Other Pkg. — Includes FedEx Box, FedEx Tube, and customer pkg.

6 Special Handling — Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] SUNDAY Delivery — Available for 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

Dangerous Goods cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

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

- [ ] Obtain Recip. 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	14	$ .00	Credit Card Auth.

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

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

DATA SUMMARY PACKAGE

GC/MS SEMIVOLATILE SUMMARY

CUMMINGS-RITER CONSULTANTS INC

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 001
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2GW1AC Date Extracted:10/12/00
Dilution factor: 1 Date Analyzed: 10/16/00
Moisture %:13

QC Batch: 0287492

Client Sample Id: PXS-19

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	380	U
95-57-8	2-Chlorophenol	380	U
621-64-7	N-Nitrosodi-n-propylamine	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
83-32-9	**Acenaphthene**	**170**	**J**
100-02-7	4-Nitrophenol	950	U
121-14-2	2,4-Dinitrotoluene	380	U
87-86-5	Pentachlorophenol	950	U
129-00-0	**Pyrene**	**850**	
56-55-3	**Benzo(a)anthracene**	**700**	
205-99-2	**Benzo(b)fluoranthene**	**630**	
50-32-8	**Benzo(a)pyrene**	**270**	**J**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**170**	**J**

FORM I

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 001
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2GW1AG Date Extracted:10/12/00
Dilution factor: 1 Date Analyzed: 10/16/00
Moisture %:13

QC Batch: 0287492

Client Sample Id: PXS-19

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	2030	
95-57-8	2-Chlorophenol	2300	
621-64-7	N-Nitrosodi-n-propylamine	1380	
59-50-7	4-Chloro-3-methylphenol	2510	
83-32-9	Acenaphthene	1700	
100-02-7	4-Nitrophenol	2370	
121-14-2	2,4-Dinitrotoluene	1590	
87-86-5	Pentachlorophenol	2220	
129-00-0	Pyrene	1820	

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 001
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2GW1AH Date Extracted:10/12/00
Dilution factor: 1 Date Analyzed: 10/16/00
Moisture %:13

QC Batch: 0287492

Client Sample Id: PXS-19

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	2160	
95-57-8	2-Chlorophenol	2450	
621-64-7	N-Nitrosodi-n-propylamine	1460	
59-50-7	4-Chloro-3-methylphenol	2650	
83-32-9	Acenaphthene	1790	
100-02-7	4-Nitrophenol	2600	
121-14-2	2,4-Dinitrotoluene	1720	a
87-86-5	Pentachlorophenol	2270	
129-00-0	Pyrene	1910	

CUMMINGS-RITER CONSULTANTS INC

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 002
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2G32AC Date Extracted:10/18/00
Dilution factor: 2 Date Analyzed: 10/25/00
Moisture %:14

QC Batch: 0292466

Client Sample Id: PXS-20 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	760	U
95-57-8	2-Chlorophenol	760	U
621-64-7	N-Nitrosodi-n-propylamine	760	U
59-50-7	4-Chloro-3-methylphenol	760	U
83-32-9	Acenaphthene	760	U
100-02-7	4-Nitrophenol	1900	U
121-14-2	2,4-Dinitrotoluene	760	U
87-86-5	Pentachlorophenol	1900	U
129-00-0	**Pyrene**	**230**	**J**
56-55-3	**Benzo(a)anthracene**	**150**	**J**
205-99-2	**Benzo(b)fluoranthene**	**210**	**J**
50-32-8	**Benzo(a)pyrene**	**150**	**J**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**120**	**J**

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 002
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2G31AE Date Extracted:10/18/00
Dilution factor: 2 Date Analyzed: 10/25/00
Moisture %:14

QC Batch: 0292466

Client Sample Id: PXS-20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	2190	
95-57-8	2-Chlorophenol	2150	
621-64-7	N-Nitrosodi-n-propylamine	1570	
59-50-7	4-Chloro-3-methylphenol	2390	
83-32-9	Acenaphthene	1880	
100-02-7	4-Nitrophenol	2910	
121-14-2	2,4-Dinitrotoluene	1760	a
87-86-5	Pentachlorophenol	3000	
129-00-0	Pyrene	2250	

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 002
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2G31AF Date Extracted:10/18/00
Dilution factor: 2 Date Analyzed: 10/25/00
Moisture %:14

QC Batch: 0292466

Client Sample Id: PXS-20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	2250	
95-57-8	2-Chlorophenol	2180	
621-64-7	N-Nitrosodi-n-propylamine	1570	
59-50-7	4-Chloro-3-methylphenol	2500	
83-32-9	Acenaphthene	2010	
100-02-7	4-Nitrophenol	3160	
121-14-2	2,4-Dinitrotoluene	1880	a
87-86-5	Pentachlorophenol	3180	a
129-00-0	Pyrene	2310	

CUMMINGS-RITER CONSULTANTS INC
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J130000 492
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM51V1AC Date Extracted:10/12/00
Dilution factor: 1 Date Analyzed: 10/16/00
Moisture %:NA

QC Batch: 0287492

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	1420	
95-57-8	2-Chlorophenol	1610	
621-64-7	N-Nitrosodi-n-propylamine	1370	
59-50-7	4-Chloro-3-methylphenol	1810	
83-32-9	Acenaphthene	1180	
100-02-7	4-Nitrophenol	1750	
121-14-2	2,4-Dinitrotoluene	1180	
87-86-5	Pentachlorophenol	1850	
129-00-0	Pyrene	1300	

CUMMINGS-RITER CONSULTANTS INC
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J180000 466
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DNDVH1AC Date Extracted:10/18/00
Dilution factor: 1 Date Analyzed: 10/25/00
Moisture %:NA

QC Batch: 0292466

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	1780	
95-57-8	2-Chlorophenol	1890	
621-64-7	N-Nitrosodi-n-propylamine	1310	
59-50-7	4-Chloro-3-methylphenol	1990	
83-32-9	Acenaphthene	1360	
100-02-7	4-Nitrophenol	1940	
121-14-2	2,4-Dinitrotoluene	1340	
87-86-5	Pentachlorophenol	2390	
129-00-0	Pyrene	1280	

OCLP OLM04.2 SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT QESSDG:

Lot #: C0J120207

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	SRG07	SRG08	TOT OUT
01	PXS-19	76	86	91	64	44	100	87	64	00
02	PXS-20 RE-1	74	86	83	73	57	76	74	62	00
03	METHOD BLK. DM51V1AA	70	78	92	72	57	81	88	79	00
04	METHOD BLK. DNDVH1AA	73	74	78	72	67	86	79	70	00
05	LCS DM51V1AC	63	67	81	58	39	74	70	61	00
06	LCS DNDVH1AC	74	74	71	72	69	83	78	72	00
07	PXS-19 D	76	93	94	79	43	92	90	56	00
08	PXS-20 D	85	96	90	78	59	73	79	72	00
09	PXS-19 S	74	89	91	74	42	89	86	53	00
10	PXS-20 S	80	92	88	77	59	73	78	69	00

SURROGATES		QC LIMITS
SRG01	= Nitrobenzene-d5	(23-120)
SRG02	= 2-Fluorobiphenyl	(30-115)
SRG03	= Terphenyl-d14	(18-137)
SRG04	= Phenol-d5	(24-113)
SRG05	= 2-Fluorophenol	(25-121)
SRG06	= 2,4,6-Tribromophenol	(19-122)
SRG07	= 2-Chlorophenol-d4	(20-130)
SRG08	= 1,2-Dichlorobenzene-d4	(20-130)

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

FORM II

OCLP OLM04.2 CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Lot #: C0J130000 WO #: DM51V1AC
BATCH: 0287492

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Pyrene	1670	1300	78	35- 142	
Phenol	2500	1420	57	26- 90	
2-Chlorophenol	2500	1610	64	25- 102	
N-Nitrosodi-n-propylamine	1670	1370	82	41- 126	
4-Chloro-3-methylphenol	2500	1810	73	26- 103	
Acenaphthene	1670	1180	70	31- 137	
4-Nitrophenol	2500	1750	70	11- 114	
2,4-Dinitrotoluene	1670	1180	71	28- 89	
Pentachlorophenol	2500	1850	74	17- 109	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Lot #: C0J180000 WO #: DNDVH1AC
BATCH: 0292466

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	2500	1780	71	26 - 90	
2-Chlorophenol	2500	1890	76	25 - 102	
N-Nitrosodi-n-propylamine	1670	1310	78	41 - 126	
4-Chloro-3-methylphenol	2500	1990	79	26 - 103	
Acenaphthene	1670	1360	82	31 - 137	
4-Nitrophenol	2500	1940	78	11 - 114	
2,4-Dinitrotoluene	1670	1340	80	28 - 89	
Pentachlorophenol	2500	2390	96	17 - 109	
Pyrene	1670	1280	77	35 - 142	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Matrix Spike ID: PXS-19 Level: (low/med) LOW

Lot #: C0J120207 WO #: DM2GW1AG
BATCH: 0287492

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	2860	ND	2030	71	26- 90	
2-Chlorophenol	2860	ND	2300	80	25- 102	
N-Nitrosodi-n-propylamine	1910	ND	1380	72	41- 126	
4-Chloro-3-methylphenol	2860	ND	2510	88	26- 103	
2,4-Dinitrotoluene	1910	ND	1590	83	28- 89	
Pentachlorophenol	2860	ND	2220	78	17- 109	
Pyrene	1910	850	1820	50	35- 142	
Acenaphthene	1910	170	1700	80	31- 137	
4-Nitrophenol	2860	ND	2370	83	11- 114	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

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 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Matrix Spike ID: PXS-19 Level:(low/med) LOW

Lot #: C0J120207 WO #: DM2GW1AH
BATCH: 0287492

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Phenol	2860	2160	75	6.3	35	26- 90	
2-Chlorophenol	2860	2450	86	6.3	50	25- 102	
N-Nitrosodi-n-propylamine	1910	1460	76	5.5	38	41- 126	
4-Chloro-3-methylphenol	2860	2650	92	5.1	33	26- 103	
Acenaphthene	1910	1790	84	5.0	19	31- 137	
4-Nitrophenol	2860	2600	91	9.2	50	11- 114	
2,4-Dinitrotoluene	1910	1720	90*	7.6	47	28- 89	a
Pentachlorophenol	2860	2270	79	2.3	47	17- 109	
Pyrene	1910	1910	55	5.0	36	35- 142	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

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

RPD: 0 out of 9 outside limits
Spike Recovery: 1 out of 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Matrix Spike ID: PXS-20 Level: (low/med) LOW

Lot #: C0J120207 WO #: DM2G31AE
BATCH: 0292466

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	2890	ND	2190	76	26- 90	
2-Chlorophenol	2890	ND	2150	74	25- 102	
N-Nitrosodi-n-propylamine	1930	ND	1570	82	41- 126	
4-Chloro-3-methylphenol	2890	ND	2390	83	26- 103	
Pentachlorophenol	2890	ND	3000	104	17- 109	
Pyrene	1930	230	2250	117	35- 142	
Acenaphthene	1930	ND	1880	98	31- 137	
4-Nitrophenol	2890	ND	2910	100	11- 114	
2,4-Dinitrotoluene	1930	ND	1760	91*	28- 89	a

NOTES (S):

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

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: 1 out of 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Matrix Spike ID: PXS-20 Level:(low/med) LOW

Lot #: C0J120207 WO #: DM2G31AF
BATCH: 0292466

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Phenol	2890	2250	78	2.6	35	26- 90	
2-Chlorophenol	2890	2180	75	1.3	50	25- 102	
N-Nitrosodi-n-propylamine	1930	1570	82	0.010	38	41- 126	
4-Chloro-3-methylphenol	2890	2500	87	4.5	33	26- 103	
Acenaphthene	1930	2010	104	6.7	19	31- 137	
4-Nitrophenol	2890	3160	109	8.4	50	11- 114	
2,4-Dinitrotoluene	1930	1880	98*	6.7	47	28- 89	a
Pentachlorophenol	2890	3180	110*	5.8	47	17- 109	a
Pyrene	1930	2310	120	2.6	36	35- 142	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

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

RPD: 0 out of 9 outside limits
Spike Recovery: 2 out of 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 METHOD BLANK SUMMARY

BLANK WORKORDER NO.: DM51V1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: D1016011.

Lot Number: C0J120207

Date Analyzed: 10/16/00

Time Analyzed: 19:46

Matrix: SOLID

Date Extracted:10/12/00

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 721

Level:(low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	PXS-19	DM2GW1AC	D1016013.	10/16/00	20:47
02	PXS-19	DM2GW1AG S	D1016014.	10/16/00	21:18
03	PXS-19	DM2GW1AH D	D1016015.	10/16/00	21:49
04	CHECK SAMPLE	DM51V1AC C	D1016012.	10/16/00	20:17
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

CUMMINGS-RITER CONSULTANTS INC
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J130000 492
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM51V1AA Date Extracted:10/12/00
Dilution factor: 1 Date Analyzed: 10/16/00
Moisture %:NA

QC Batch: 0287492

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U

OCLP OLM04.2 METHOD BLANK SUMMARY

BLANK WORKORDER NO.: DNDVH1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: D1025006.

Lot Number: C0J120207

Date Analyzed: 10/25/00

Time Analyzed: 16:53

Matrix: SOLID

Date Extracted:10/18/00

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 721

Level:(low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	PXS-20	DM2G31AE S	D1025009.	10/25/00	18:28
02	PXS-20	DM2G31AF D	D1025010.	10/25/00	18:59
03	PXS-20	DM2G32AC	D1025008.	10/25/00	17:56
04	CHECK SAMPLE	DNDVH1AC C	D1025007.	10/25/00	17:25
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

CUMMINGS-RITER CONSULTANTS INC
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J180000 466
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DNDVH1AA Date Extracted:10/18/00
Dilution factor: 1 Date Analyzed: 10/25/00
Moisture %:NA

QC Batch: 0292466

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

EPA Sample No. (SSTD050##): SSTD050 Date Analyzed: 10/16/00

Lab File ID (Standard): D1016CCC Time Analyzed: 1402

Instrument ID: 721 GC Column: ID:0.25(mm)

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	164197		4.35		580634		5.52		355153		7.99	
	UPPER LIMIT	328394		4.85		1161268		6.02		710306		8.49	
	LOWER LIMIT	82099		3.85		290317		5.02		177577		7.49	
	EPA SAMPLE NO.												
01	INTRA-LAB BL	95113		4.35		455426		5.52		291883		7.99	
02	LCS	122463		4.36		553156		5.52		340161		7.99	
03	PXS-19	157711		4.36		609262		5.52		353379		7.99	
04	PXS-19MS	185931		4.37		684576		5.52		387395		7.99	
05	PXS-19MSD	173752		4.37		643453		5.52		363295		7.99	
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 values outside QC limits with an asterisk.
* Values outside of QC limits

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

EPA Sample No. (SSTD050##): SSTD050 Date Analyzed: 10/16/00

Lab File ID (Standard): D1016CCC Time Analyzed: 1402

Instrument ID: 721 GC Column: ID:0.25(mm)

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	636043	10.83	481291	16.66	333444	19.61
	UPPER LIMIT	1272086	11.33	962582	17.16	666888	20.11
	LOWER LIMIT	318022	10.33	240646	16.16	166722	19.11
	EPA SAMPLE NO.						
01	INTRA-LAB BL	504448	10.82	372243	16.65	286104	19.62
02	LCS	599690	10.83	481048	16.65	382541	19.61
03	PXS-19	502586	10.83	358956	16.66	366968	19.63
04	PXS-19MS	576696	10.84	374257	16.66	393729	19.63
05	PXS-19MSD	555623	10.84	353706	16.66	368280	19.63
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 values outside QC limits with an asterisk.
* Values outside of QC limits

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

EPA Sample No. (SSTD050##): SSTD050 Date Analyzed: 10/25/00

Lab File ID (Standard): D1025CCC Time Analyzed: 1314

Instrument ID: 721 GC Column: ID:0.25(mm)

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	128368		4.56		485682		5.78		225161		8.33	
	UPPER LIMIT	256736		5.06		971364		6.28		450322		8.83	
	LOWER LIMIT	64184		4.06		242841		5.28		112581		7.83	
	EPA SAMPLE NO.												
01	INTRA-LAB BL	146217		4.57		526717		5.78		237350		8.33	
02	LCS	146009		4.57		545278		5.78		250867		8.33	
03	PXS-20	150474		4.58		537282		5.78		238693		8.33	
04	PXS-20MS	132386		4.58		478911		5.78		213674		8.33	
05	PXS-20MSD	137074		4.58		494112		5.78		219732		8.33	
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 values outside QC limits with an asterisk.
* Values outside of QC limits

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

EPA Sample No. (SSTD050##): SSTD050 Date Analyzed: 10/25/00

Lab File ID (Standard): D1025CCC Time Analyzed: 1314

Instrument ID: 721 GC Column: ID:0.25(mm)

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	387488		11.20		347939		17.05		295404		20.01	
	UPPER LIMIT	774976		11.70		695878		17.55		590808		20.51	
	LOWER LIMIT	193744		10.70		173970		16.55		147702		19.51	
	EPA SAMPLE NO.												
01	INTRA-LAB BL	384877		11.20		390890		17.04		456735		20.02	
02	LCS	404603		11.21		413756		17.04		474225		20.01	
03	PXS-20	372013		11.20		412945		17.05		459210		20.03	
04	PXS-20MS	345844		11.20		401964		17.05		425236		20.03	
05	PXS-20MSD	368123		11.20		449733		17.05		460886		20.03	
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 values outside QC limits with an asterisk.
* Values outside of QC limits

METALS SUMMARY

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DM2GW **Client ID:** PXS-19

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 12.68

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.48	2.3	7.7	*	1	ICPST	10/16/00	11:17

Comments: Lot #: C0J120207 Sample #: 1 COLOR: PRE-BROWN POST-BROWN TEXTURE: PRE-MEDIUM POST-MEDIUM ARTIFACTS: STONES

Version 4.10.2

U Result is less than the IDL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DM2G3 **Client ID:** PXS-20

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 13.62

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.49	2.3	8.2	*	1	ICPST	10/16/00	11:33

Comments: Lot #: C0J120207 Sample #: 2 COLOR: PRE-BROWN POST-BROWN TEXTURE: PRE-MEDIUM POST-MEDIUM ARTIFACTS: STONES

Version 4.10.2

U Result is less than the IDL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

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

Chart Number: T01016A.ARC

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

Element	WL/ Mass	Report Limit	ICB1 10/16/00 9:24 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	2.1	U								

U Result is less than the IDL

B Result is between IDL and RL

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

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

Chart Number: T01016A.ARC

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

Element	WL/ Mass	Report Limit	CCB1 10/16/00 9:45 AM Found	Q	CCB2 10/16/00 10:35 AM Found	Q	CCB3 10/16/00 11:04 AM Found	Q	CCB4 10/16/00 11:54 AM Found	Q	Found	Q
Arsenic	189.042	10	2.1	U	2.1	U	2.1	U	2.1	U		

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

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DM4CWB

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	0.42	2.0	0.42	U	1	ICPST	10/16/00	11:09

Comments: Lot #: C0J120207

Version 4.10.2

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DM2GWS

Original Sample ID: DM2GW **Client ID:** PXS-19S

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 12.68

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	189.0	7.7		14.8		9.1617	77.4	1	1	ICPST	10/16/00	11:17	10/16/00	11:29

Comments: Lot #: C0J120207 Sample #: 1

Version 4.10.2

U Result is less than the IDL
B Result is between IDL 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

Duplicate Sample Results

Lab Sample ID: DM2GWX **Client ID:** PXS-19X

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 12.68

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	0.48	2.3	14.1	*	1	ICPST	10/16/00	11:25

Comments: Lot #: C0J120207 Sample #: 1

Version 4.10.2

U Result is less than the IDL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Duplicate RPD Report

Duplicate Sample ID: DM2GWX

Original Sample ID: DM2GW **Client ID:** PXS-19X

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 12.68

Element	WL/ Mass	OS Conc	Q	Dupe Conc	Q	RPD	OS DF	Dupe DF	Instr	OS Anal Date	OS Anal Time	Dupe Anal Date	Dupe Anal Time
Arsenic	189.042	7.7		14.1	*	6.4 %	1	1	ICPST	10/16/00	11:17	10/16/00	11:25

Version 4.10.2

U Result is less than the IDL
B Result is between IDL and RL
* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DM4CWC

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	136	137	100.8		75-125	1	ICPST	10/16/00	11:13

Comments: Lot #: C0J120207

Version 4.10.2

U Result is less than the IDL

B Result is between IDL and RL

Form 7 Equivalent

GENERAL CHEMISTRY SUMMARY

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: PXS-19

General Chemistry

Lot-Sample #...: C0J120207-001 Work Order #...: DM2GW Matrix.....: SOLID
Date Sampled...: 10/11/00 Date Received..: 10/12/00
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	12.7		%	ICLP ILM04.0	10/12-10/13/00	0287163

Dilution Factor: 1 MS Run #.....: 0286160

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: PXS-20

General Chemistry

Lot-Sample #...: C0J120207-002 **Work Order #...:** DM2G3 **Matrix.....:** SOLID
Date Sampled...: 10/11/00 **Date Received..:** 10/12/00
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	**13.6**		**%**	**ICLP ILM04.0**	**10/12-10/13/00**	**0287163**

Dilution Factor: 1 MS Run #.....: 0286160

GC/MS SEMIVOLATILE DATA

GC/MS SEMIVOLATILE
QC SUMMARY

OCLP OLM04.2 SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT QESSDG:

Lot #: C0J120207

	CLIENT ID.	SRG01	SRG02	SRG03	SRG04	SRG05	SRG06	SRG07	SRG08	TOT OUT
01	PXS-19	76	86	91	64	44	100	87	64	00
02	PXS-20 RE-1	74	86	83	73	57	76	74	62	00
03	METHOD BLK. DM51V1AA	70	78	92	72	57	81	88	79	00
04	METHOD BLK. DNDVH1AA	73	74	78	72	67	86	79	70	00
05	LCS DM51V1AC	63	67	81	58	39	74	70	61	00
06	LCS DNDVH1AC	74	74	71	72	69	83	78	72	00
07	PXS-19 D	76	93	94	79	43	92	90	56	00
08	PXS-20 D	85	96	90	78	59	73	79	72	00
09	PXS-19 S	74	89	91	74	42	89	86	53	00
10	PXS-20 S	80	92	88	77	59	73	78	69	00

SURROGATES		QC LIMITS
SRG01	= Nitrobenzene-d5	(23-120)
SRG02	= 2-Fluorobiphenyl	(30-115)
SRG03	= Terphenyl-d14	(18-137)
SRG04	= Phenol-d5	(24-113)
SRG05	= 2-Fluorophenol	(25-121)
SRG06	= 2,4,6-Tribromophenol	(19-122)
SRG07	= 2-Chlorophenol-d4	(20-130)
SRG08	= 1,2-Dichlorobenzene-d4	(20-130)

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

FORM II

OCLP OLM04.2 CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Lot #: C0J130000 WO #: DM51V1AC
BATCH: 0287492

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Pyrene	1670	1300	78	35 - 142	
Phenol	2500	1420	57	26 - 90	
2-Chlorophenol	2500	1610	64	25 - 102	
N-Nitrosodi-n-propylamine	1670	1370	82	41 - 126	
4-Chloro-3-methylphenol	2500	1810	73	26 - 103	
Acenaphthene	1670	1180	70	31 - 137	
4-Nitrophenol	2500	1750	70	11 - 114	
2,4-Dinitrotoluene	1670	1180	71	28 - 89	
Pentachlorophenol	2500	1850	74	17 - 109	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 CHECK SAMPLE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Lot #: C0J180000 WO #: DNDVH1AC
BATCH: 0292466

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	% REC	QC LIMITS REC	QUAL
Phenol	2500	1780	71	26 - 90	
2-Chlorophenol	2500	1890	76	25 - 102	
N-Nitrosodi-n-propylamine	1670	1310	78	41 - 126	
4-Chloro-3-methylphenol	2500	1990	79	26 - 103	
Acenaphthene	1670	1360	82	31 - 137	
4-Nitrophenol	2500	1940	78	11 - 114	
2,4-Dinitrotoluene	1670	1340	80	28 - 89	
Pentachlorophenol	2500	2390	96	17 - 109	
Pyrene	1670	1280	77	35 - 142	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Matrix Spike ID: PXS-19 Level:(low/med) LOW

Lot #: C0J120207 WO #: DM2GW1AG
BATCH: 0287492

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	2860	ND	2030	71	26- 90	
2-Chlorophenol	2860	ND	2300	80	25- 102	
N-Nitrosodi-n-propylamine	1910	ND	1380	72	41- 126	
4-Chloro-3-methylphenol	2860	ND	2510	88	26- 103	
2,4-Dinitrotoluene	1910	ND	1590	83	28- 89	
Pentachlorophenol	2860	ND	2220	78	17- 109	
Pyrene	1910	850	1820	50	35- 142	
Acenaphthene	1910	170	1700	80	31- 137	
4-Nitrophenol	2860	ND	2370	83	11- 114	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

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 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Matrix Spike ID: PXS-19 Level:(low/med) LOW

Lot #: C0J120207 WO #: DM2GW1AH
BATCH: 0287492

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Phenol	2860	2160	75	6.3	35	26- 90	
2-Chlorophenol	2860	2450	86	6.3	50	25- 102	
N-Nitrosodi-n-propylamine	1910	1460	76	5.5	38	41- 126	
4-Chloro-3-methylphenol	2860	2650	92	5.1	33	26- 103	
Acenaphthene	1910	1790	84	5.0	19	31- 137	
4-Nitrophenol	2860	2600	91	9.2	50	11- 114	
2,4-Dinitrotoluene	1910	1720	90*	7.6	47	28- 89	a
Pentachlorophenol	2860	2270	79	2.3	47	17- 109	
Pyrene	1910	1910	55	5.0	36	35- 142	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

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

RPD: 0 out of 9 outside limits
Spike Recovery: 1 out of 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Matrix Spike ID: PXS-20 Level:(low/med) LOW

Lot #: C0J120207 WO #: DM2G31AE
BATCH: 0292466

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
Phenol	2890	ND	2190	76	26- 90	
2-Chlorophenol	2890	ND	2150	74	25- 102	
N-Nitrosodi-n-propylamine	1930	ND	1570	82	41- 126	
4-Chloro-3-methylphenol	2890	ND	2390	83	26- 103	
Pentachlorophenol	2890	ND	3000	104	17- 109	
Pyrene	1930	230	2250	117	35- 142	
Acenaphthene	1930	ND	1880	98	31- 137	
4-Nitrophenol	2890	ND	2910	100	11- 114	
2,4-Dinitrotoluene	1930	ND	1760	91*	28- 89	a

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

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: 1 out of 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc. Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT SDG No:

Matrix Spike ID: PXS-20 Level:(low/med) LOW

Lot #: C0J120207 WO #: DM2G31AF
BATCH: 0292466

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	QUAL
Phenol	2890	2250	78	2.6	35	26- 90	
2-Chlorophenol	2890	2180	75	1.3	50	25- 102	
N-Nitrosodi-n-propylamine	1930	1570	82	0.010	38	41- 126	
4-Chloro-3-methylphenol	2890	2500	87	4.5	33	26- 103	
Acenaphthene	1930	2010	104	6.7	19	31- 137	
4-Nitrophenol	2890	3160	109	8.4	50	11- 114	
2,4-Dinitrotoluene	1930	1880	98*	6.7	47	28- 89	a
Pentachlorophenol	2890	3180	110*	5.8	47	17- 109	a
Pyrene	1930	2310	120	2.6	36	35- 142	

NOTES(S):

Results and reporting limits have been adjusted for dry weight.

a Spiked analyte recovery is outside stated control limits.

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

RPD: 0 out of 9 outside limits
Spike Recovery: 2 out of 9 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 METHOD BLANK SUMMARY

BLANK WORKORDER NO.: DM51V1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: D1016011.

Lot Number: C0J120207

Date Analyzed: 10/16/00

Time Analyzed: 19:46

Matrix: SOLID

Date Extracted:10/12/00

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 721

Level:(low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	PXS-19	DM2GW1AC	D1016013.	10/16/00	20:47
02	PXS-19	DM2GW1AG S	D1016014.	10/16/00	21:18
03	PXS-19	DM2GW1AH D	D1016015.	10/16/00	21:49
04	CHECK SAMPLE	DM51V1AC C	D1016012.	10/16/00	20:17
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

OCLP OLM04.2 METHOD BLANK SUMMARY

BLANK WORKORDER NO.: DNDVH1AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: D1025006.

Lot Number: C0J120207

Date Analyzed: 10/25/00

Time Analyzed: 16:53

Matrix: SOLID

Date Extracted:10/18/00

GC Column: HP5MS ID: .25

Extraction Method:

Instrument ID: 721

Level:(low/med) LOW

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

	CLIENT ID.	SAMPLE WORK ORDER #	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	PXS-20	DM2G31AE S	D1025009.	10/25/00	18:28
02	PXS-20	DM2G31AF D	D1025010.	10/25/00	18:59
03	PXS-20	DM2G32AC	D1025008.	10/25/00	17:56
04	CHECK SAMPLE	DNDVH1AC C	D1025007.	10/25/00	17:25
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

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Lab File ID: D1002DF2 DFTPP Injection Date: 10/02/00

Instrument ID: 721 DFTPP Injection Time: 1002

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	41.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	49.4
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	44.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	5.5
275	10.0 - 30.0% of mass 198	26.4
365	Greater than 0.75% of mass 198	3.65
441	Present, but less than mass 443	13.4
442	40.0 - 110.0% of mass 198	84.3
443	15.0 - 24.0% of mass 442	15.5 (18.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD020	SSTD20	D1002CC1	10/02/00	1022
02	SSTD050	SSTD50	D1002CC2	10/02/00	1052
03	SSTD080	SSTD80	D1002CC3	10/02/00	1122
04	SSTD120	SSTD120	D1002CC4	10/02/00	1152
05	SSTD160	SSTD160	D1002CC5	10/02/00	1223
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Lab File ID: D1016DFT DFTPP Injection Date: 10/16/00

Instrument ID: 721 DFTPP Injection Time: 1342

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	47.3
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	50.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	43.8
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	26.2
365	Greater than 0.75% of mass 198	3.85
441	Present, but less than mass 443	13.5
442	40.0 - 110.0% of mass 198	84.0
443	15.0 - 24.0% of mass 442	15.3 (18.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD50	D1016CCC	10/16/00	1402
02	INTRA-LAB BL	DM51V1AA	D1016011	10/16/00	1946
03	LCS	DM51V1AC	D1016012	10/16/00	2017
04	PXS-19	DM2GW1AC	D1016013	10/16/00	2047
05	PXS-19MS	DM2GW1AG	D1016014	10/16/00	2118
06	PXS-19MSD	DM2GW1AH	D1016015	10/16/00	2149
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Lab File ID: D1024DFT DFTPP Injection Date: 10/24/00

Instrument ID: 721 DFTPP Injection Time: 1127

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	34.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	49.6
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	46.6
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	21.6
365	Greater than 0.75% of mass 198	2.19
441	Present, but less than mass 443	14.8
442	40.0 - 110.0% of mass 198	94.1
443	15.0 - 24.0% of mass 442	17.7 (18.8)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	SSTD020	SSTD20	D1024CC1	10/24/00	1329
02	SSTD050	SSTD50	D1024CC2	10/24/00	1358
03	SSTD080	SSTD80	D1024CC3	10/24/00	1428
04	SSTD120	SSTD120	D1024CC4	10/24/00	1527
05	SSTD160	SSTD160	D1024CC5	10/24/00	1557
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Lab File ID: D1025DFT DFTPP Injection Date: 10/25/00

Instrument ID: 721 DFTPP Injection Time: 1253

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	40.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	57.8
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	49.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	19.5
365	Greater than 0.75% of mass 198	1.90
441	Present, but less than mass 443	10.9
442	40.0 - 110.0% of mass 198	68.3
443	15.0 - 24.0% of mass 442	13.2 (19.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	SSTD50	D1025CCC	10/25/00	1314
02	INTRA-LAB BL	DNDVH1AA	D1025006	10/25/00	1653
03	LCS	DNDVH1AC	D1025007	10/25/00	1725
04	PXS-20	DM2G32AC	D1025008	10/25/00	1756
05	PXS-20MS	DM2G31AE	D1025009	10/25/00	1828
06	PXS-20MSD	DM2G31AF	D1025010	10/25/00	1859
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

EPA Sample No. (SSTD050##): SSTD050 Date Analyzed: 10/16/00

Lab File ID (Standard): D1016CCC Time Analyzed: 1402

Instrument ID: 721 GC Column: ID:0.25(mm)

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	164197		4.35		580634		5.52		355153		7.99	
	UPPER LIMIT	328394		4.85		1161268		6.02		710306		8.49	
	LOWER LIMIT	82099		3.85		290317		5.02		177577		7.49	
	EPA SAMPLE NO.												
01	INTRA-LAB BL	95113		4.35		455426		5.52		291883		7.99	
02	LCS	122463		4.36		553156		5.52		340161		7.99	
03	PXS-19	157711		4.36		609262		5.52		353379		7.99	
04	PXS-19MS	185931		4.37		684576		5.52		387395		7.99	
05	PXS-19MSD	173752		4.37		643453		5.52		363295		7.99	
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 values outside QC limits with an asterisk.
* Values outside of QC limits

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

EPA Sample No. (SSTD050##): SSTD050 Date Analyzed: 10/16/00

Lab File ID (Standard): D1016CCC Time Analyzed: 1402

Instrument ID: 721 GC Column: ID:0.25(mm)

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	636043		10.83		481291		16.66		333444		19.61	
	UPPER LIMIT	1272086		11.33		962582		17.16		666888		20.11	
	LOWER LIMIT	318022		10.33		240646		16.16		166722		19.11	
	EPA SAMPLE NO.												
01	INTRA-LAB BL	504448		10.82		372243		16.65		286104		19.62	
02	LCS	599690		10.83		481048		16.65		382541		19.61	
03	PXS-19	502586		10.83		358956		16.66		366968		19.63	
04	PXS-19MS	576696		10.84		374257		16.66		393729		19.63	
05	PXS-19MSD	555623		10.84		353706		16.66		368280		19.63	
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 values outside QC limits with an asterisk.
* Values outside of QC limits

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

EPA Sample No. (SSTD050##): SSTD050 Date Analyzed: 10/25/00

Lab File ID (Standard): D1025CCC Time Analyzed: 1314

Instrument ID: 721 GC Column: ID:0.25(mm)

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	128368		4.56		485682		5.78		225161		8.33	
	UPPER LIMIT	256736		5.06		971364		6.28		450322		8.83	
	LOWER LIMIT	64184		4.06		242841		5.28		112581		7.83	
	EPA SAMPLE NO.												
01	INTRA-LAB BL	146217		4.57		526717		5.78		237350		8.33	
02	LCS	146009		4.57		545278		5.78		250867		8.33	
03	PXS-20	150474		4.58		537282		5.78		238693		8.33	
04	PXS-20MS	132386		4.58		478911		5.78		213674		8.33	
05	PXS-20MSD	137074		4.58		494112		5.78		219732		8.33	
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 values outside QC limits with an asterisk.
* Values outside of QC limits

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

EPA Sample No. (SSTD050##): SSTD050 Date Analyzed: 10/25/00

Lab File ID (Standard): D1025CCC Time Analyzed: 1314

Instrument ID: 721 GC Column: ID:0.25(mm)

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	387488		11.20		347939		17.05		295404		20.01	
	UPPER LIMIT	774976		11.70		695878		17.55		590808		20.51	
	LOWER LIMIT	193744		10.70		173970		16.55		147702		19.51	
	EPA SAMPLE NO.												
01	INTRA-LAB BL	384877		11.20		390890		17.04		456735		20.02	
02	LCS	404603		11.21		413756		17.04		474225		20.01	
03	PXS-20	372013		11.20		412945		17.05		459210		20.03	
04	PXS-20MS	345844		11.20		401964		17.05		425236		20.03	
05	PXS-20MSD	368123		11.20		449733		17.05		460886		20.03	
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 values outside QC limits with an asterisk.
* Values outside of QC limits

GC/MS SEMIVOLATILE
SAMPLE DATA

CUMMINGS-RITER CONSULTANTS INC

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 001
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2GW1AC Date Extracted:10/12/00
Dilution factor: 1 Date Analyzed: 10/16/00
Moisture %:13

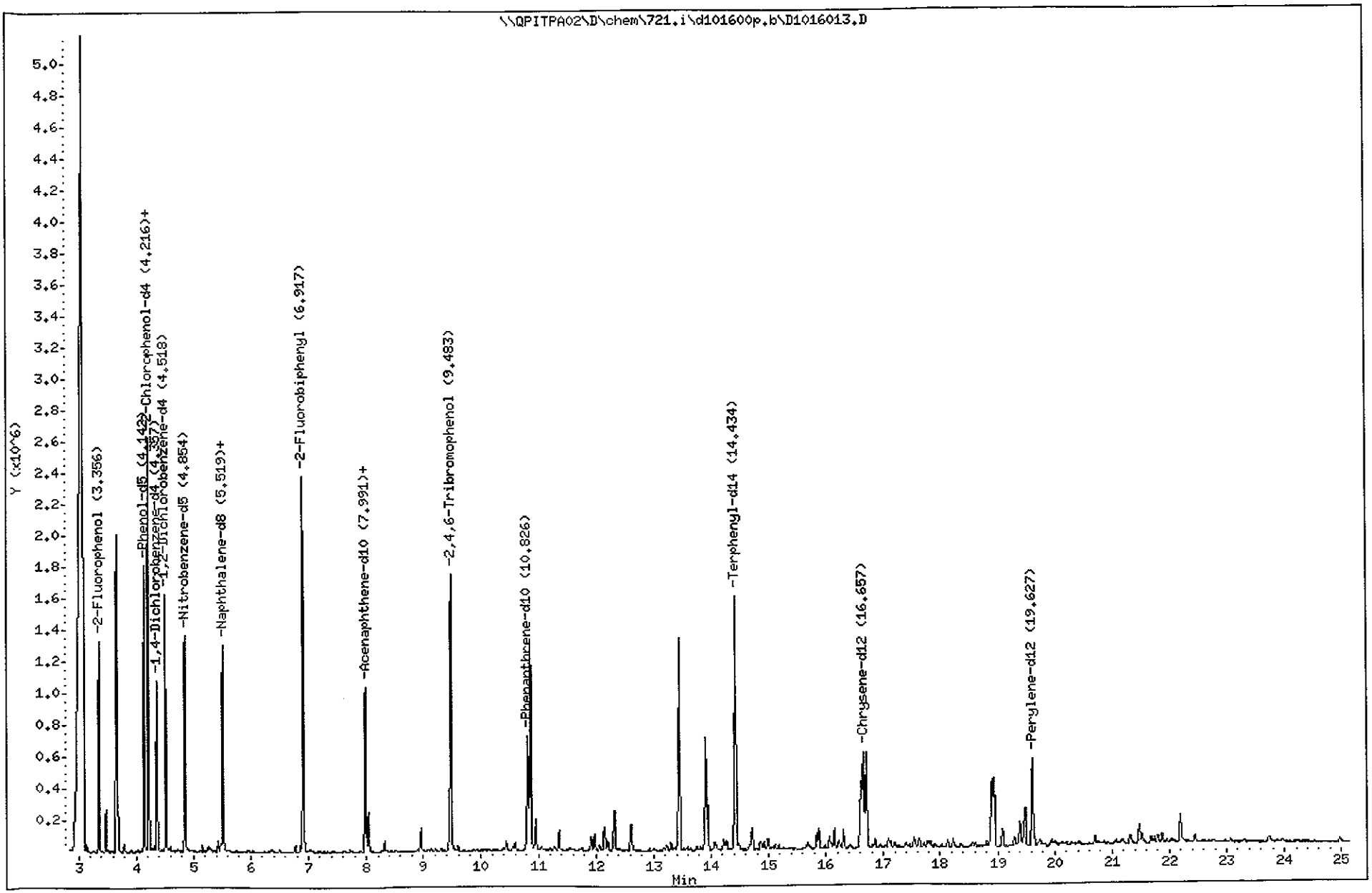
QC Batch: 0287492

Client Sample Id: PXS-19

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	380	U
95-57-8	2-Chlorophenol	380	U
621-64-7	N-Nitrosodi-n-propylamine	380	U
59-50-7	4-Chloro-3-methylphenol	380	U
83-32-9	**Acenaphthene**	**170**	**J**
100-02-7	4-Nitrophenol	950	U
121-14-2	2,4-Dinitrotoluene	380	U
87-86-5	Pentachlorophenol	950	U
129-00-0	**Pyrene**	**850**	
56-55-3	**Benzo(a)anthracene**	**700**	
205-99-2	**Benzo(b)fluoranthene**	**630**	
50-32-8	**Benzo(a)pyrene**	**270**	**J**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**170**	**J**

Data File: \\QPITPA02\D\chem\721.i\d101600p.b\D1016013.D
Date : 16-OCT-2000 20:47
Client ID: PXS-19
Sample Info: c0j120207-001 soil 10/12/00 clp4.2
Volume Injected (uL): 2.0
Column phase:

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



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d101600p.b\D1016013.D
Lab Smp Id: DM2GW1AC Client Smp ID: PXS-19
Inj Date : 16-OCT-2000 20:47
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0j120207-001 soil 10/12/00 clp4.2
Misc Info : dm2gw1ac,d101600p.b,clp.m,1-4.2.sub
Comment :
Method : \\QPITPA02\D\chem\721.i\d101600p.b\clp.m
Meth Date : 17-Oct-2000 10:52 ferguson Quant Type: ISTD
Cal Date : 16-OCT-2000 14:02 Cal File: D1016CCC.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-4.2.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-17-00

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	gpc correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
* 1	1,4-Dichlorobenzene-d4	152	4.363	4.350	(1.000)	157711	40.0000	
* 2	Naphthalene-d8	136	5.519	5.518	(1.000)	609262	40.0000	
* 3	Acenaphthene-d10	164	7.991	7.991	(1.000)	353379	40.0000	
* 4	Phenanthrene-d10	188	10.826	10.832	(1.000)	502586	40.0000	
* 5	Chrysene-d12	240	16.657	16.657	(1.000)	358956	40.0000	
* 6	Perylene-d12	264	19.626	19.612	(1.000)	366968	40.0000	
191	Benzaldehyde	77	Compound Not Detected.					
7	Phenol	94	Compound Not Detected.					
8	Bis(2-chloroethyl)ether	93	Compound Not Detected.					
9	2-Chlorophenol	128	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
192	Acetophenone	105	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
18	Nitrobenzene	77	Compound Not Detected.					
19	Isophorone	82	Compound Not Detected.					
20	2-Nitrophenol	139	Compound Not Detected.					
21	2,4-Dimethylphenol	107	Compound Not Detected.					
22	Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
23	2,4-Dichlorophenol	162	Compound Not Detected.					
25	Naphthalene	128	Compound Not Detected.					
26	4-Chloroaniline	127	Compound Not Detected.					
193	Caprolactam	113	Compound Not Detected.					
27	Hexachlorobutadiene	224	Compound Not Detected.					
28	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
29	2-Methylnaphthalene	142	Compound Not Detected.					
30	Hexachlorocyclopentadiene	236	Compound Not Detected.					
31	2,4,6-Trichlorophenol	196	Compound Not Detected.					
32	2,4,5-Trichlorophenol	196	Compound Not Detected.					
194	1,1'-Biphenyl	154	Compound Not Detected.					
33	2-Chloronaphthalene	162	Compound Not Detected.					
34	2-Nitroaniline	65	Compound Not Detected.					
35	Dimethylphthalate	163	Compound Not Detected.					
36	Acenaphthylene	152	Compound Not Detected.					
37	2,6-Dinitrotoluene	165	Compound Not Detected.					
38	3-Nitroaniline	138	Compound Not Detected.					
39	Acenaphthene	153	8.038	8.051	(1.006)	84784	9.15032	152.50(a)
40	2,4-Dinitrophenol	184	Compound Not Detected.					
41	4-Nitrophenol	109	Compound Not Detected.					
42	Dibenzofuran	168	8.320	8.333	(1.041)	40728	2.92838	48.806(aQ)
43	2,4-Dinitrotoluene	165	Compound Not Detected.					
44	Diethylphthalate	149	Compound Not Detected.					
45	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
46	Fluorene	166	8.958	8.971	(1.121)	56795	4.98928	83.155(a)
47	4-Nitroaniline	138	Compound Not Detected.					
48	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
49	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
50	4-Bromophenyl-phenylether	248	Compound Not Detected.					
51	Hexachlorobenzene	283	Compound Not Detected.					
195	Atrazine	200	Compound Not Detected.					
53	Pentachlorophenol	265	Compound Not Detected.					
54	Phenanthrene	178	10.880	10.879	(1.005)	813974	64.8404	1080.7
55	Anthracene	178	10.960	10.973	(1.012)	123427	9.63291	160.55(aQ)
56	Carbazole	167	11.357	11.370	(1.049)	82314	7.47693	124.62(a)
57	Di-n-Butylphthalate	149	Compound Not Detected.					
58	Fluoranthene	202	13.459	13.445	(1.243)	1000811	78.4488	1307.5
59	Pyrene	202	13.916	13.909	(0.835)	507463	44.7068	745.11
60	Butylbenzylphthalate	149	Compound Not Detected.					
61	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

NA

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
62	Benzo(a)Anthracene	228	16.617	16.616	(0.998)	330581	36.4297	607.16(Q)
63	Chrysene	228	16.711	16.710	(1.003)	339602	39.2284	653.81(Q)
64	bis(2-ethylhexyl)Phthalate	149	17.134	17.134	(1.029)	15505	2.14321	35.720(a)
65	Di-n-octylphthalate	149	Compound Not Detected.					
66	Benzo(b)fluoranthene	252	18.907	18.900	(0.963)	359113	33.2200	553.67
67	Benzo(k)fluoranthene	252	18.941	18.954	(0.965)	301207	24.6946	411.58
68	Benzo(a)pyrene	252	19.499	19.505	(0.993)	136292	14.0723	234.54(a)
69	Indeno(1,2,3-cd)pyrene	276	21.480	21.487	(1.094)	73744	9.03347	150.56(aQ)
70	Dibenz(a,h)anthracene	278	21.521	21.541	(1.097)	31646	3.66999	61.166(aQ)
71	Benzo(g,h,i)perylene	276	21.877	21.897	(1.115)	23509	2.92037	48.673(a)
$ 72	Nitrobenzene-d5	82	4.854	4.847	(0.880)	455819	76.1698	1269.5
$ 73	2-Fluorobiphenyl	172	6.916	6.916	(0.865)	975964	85.6622	1427.7
$ 74	Terphenyl-d14	244	14.433	14.420	(0.867)	859366	90.6712	1511.2
$ 75	Phenol-d5	99	4.148	4.128	(0.951)	577448	95.7063	1595.1
$ 76	2-Fluorophenol	112	3.356	3.302	(0.769)	289227	66.0100	1100.2
$ 77	2,4,6-Tribromophenol	330	9.482	9.482	(0.876)	350970	149.739	2495.6
$ 78	2-Chlorophenol-d4	132	4.216	4.202	(0.966)	601114	129.895	2164.9
$ 79	1,2-Dichlorobenzene-d4	152	4.518	4.504	(1.035)	233726	63.8837	1064.7

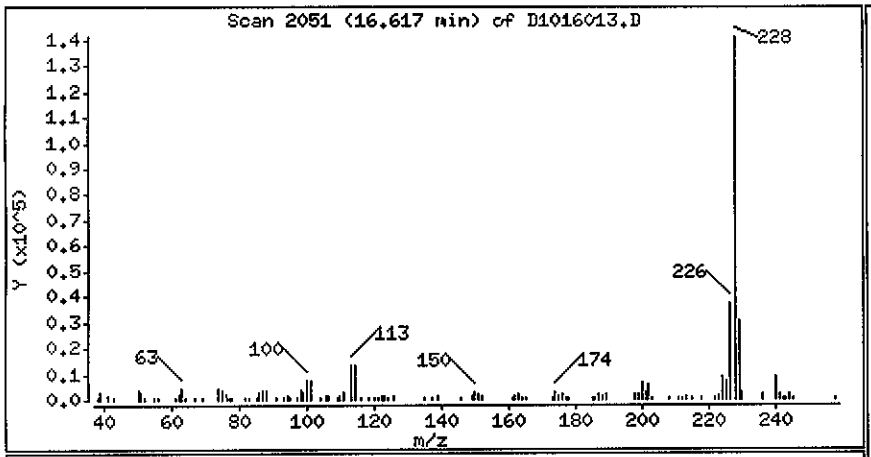
NA

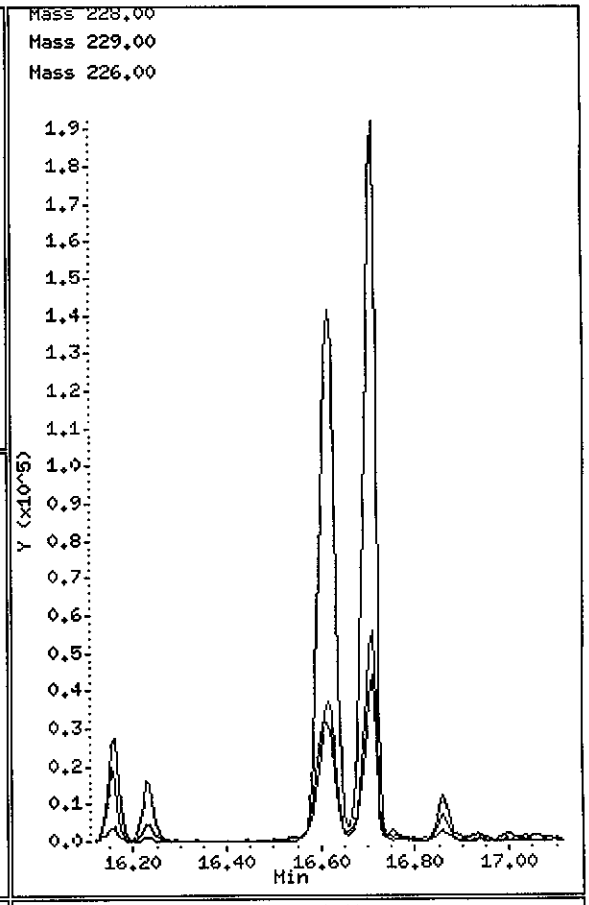
NA

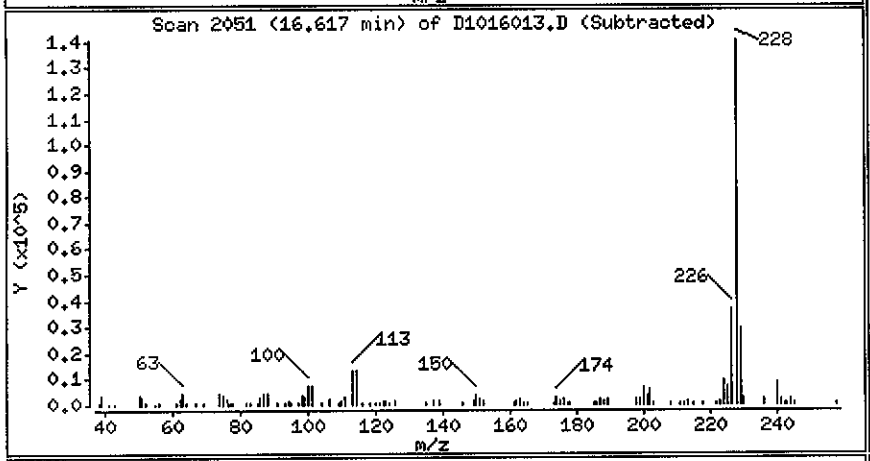
QC Flag Legend

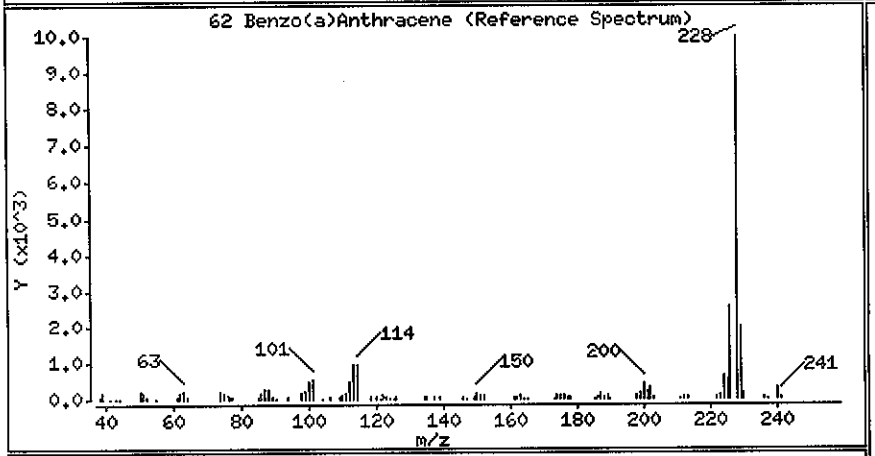
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

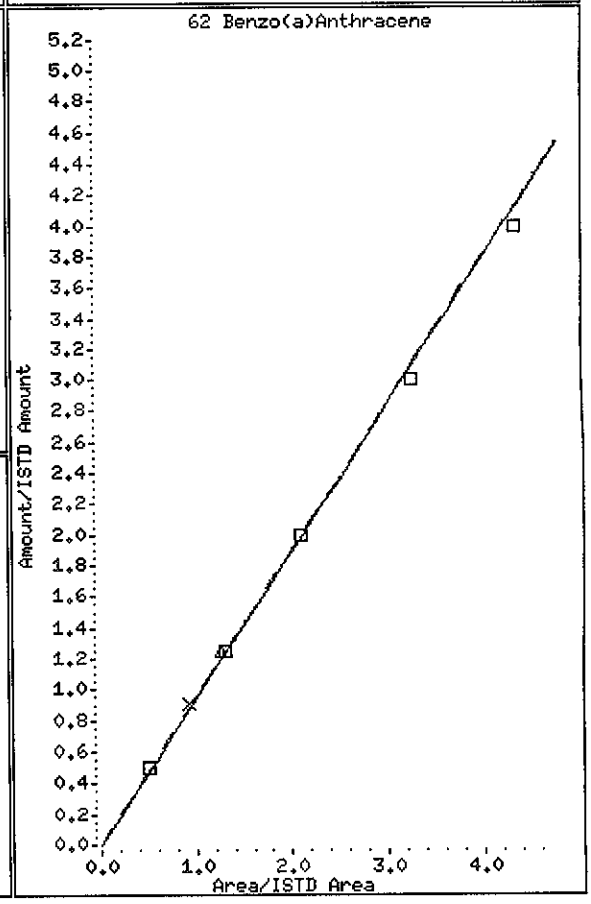
62 Benzo(a)Anthracene

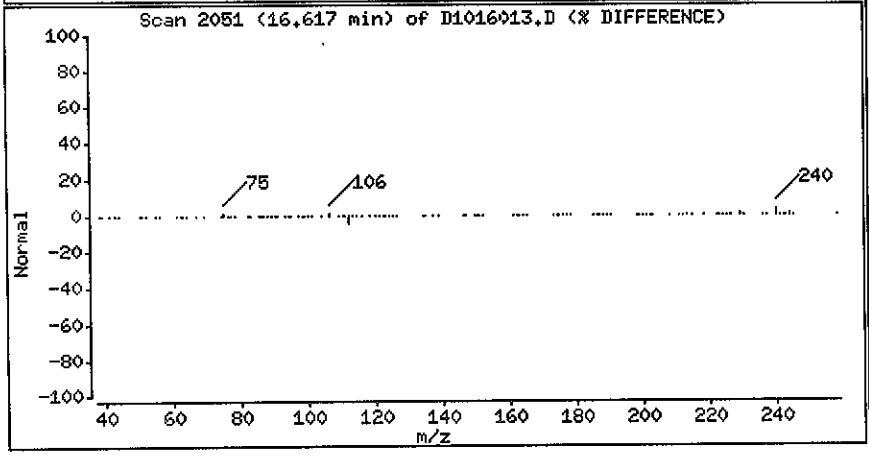




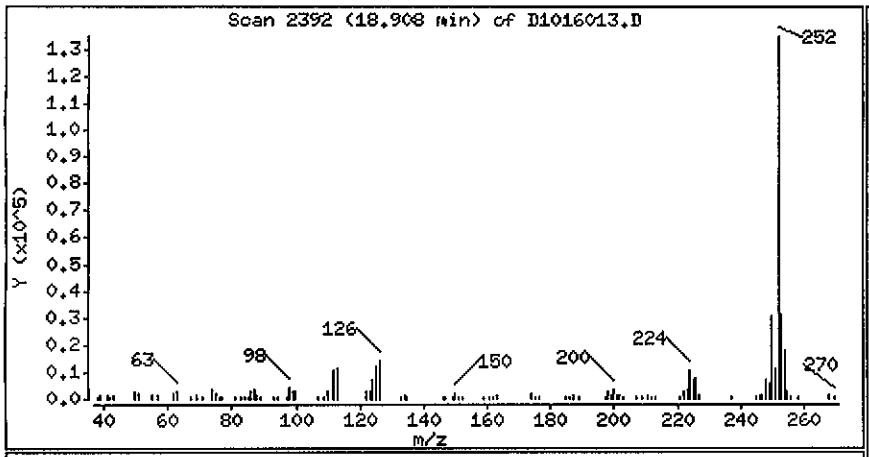


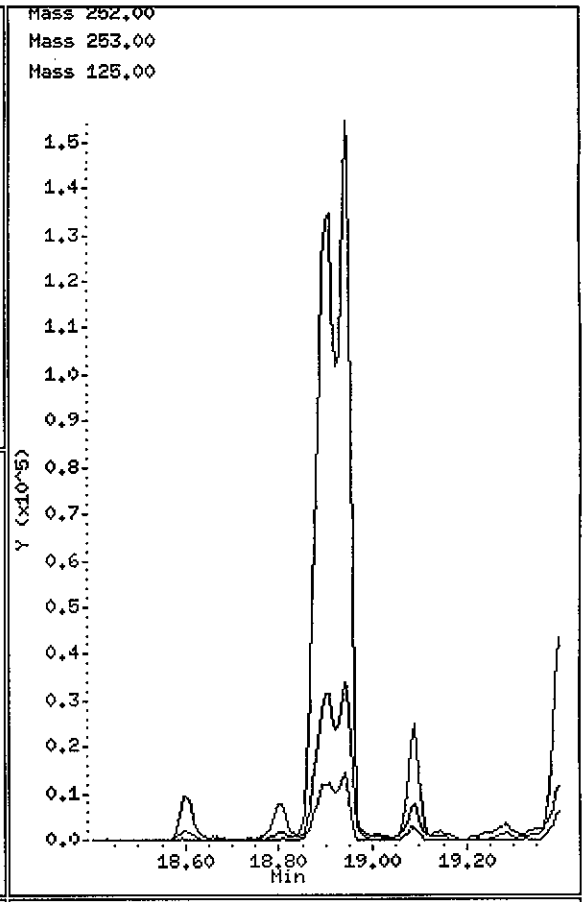


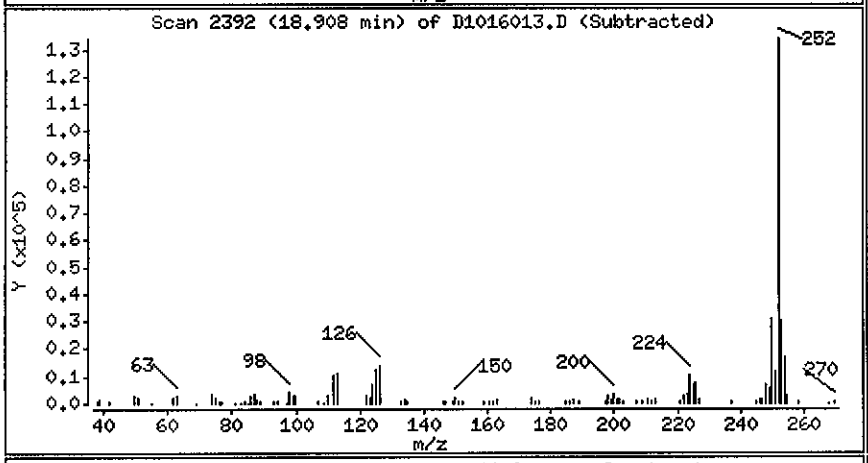


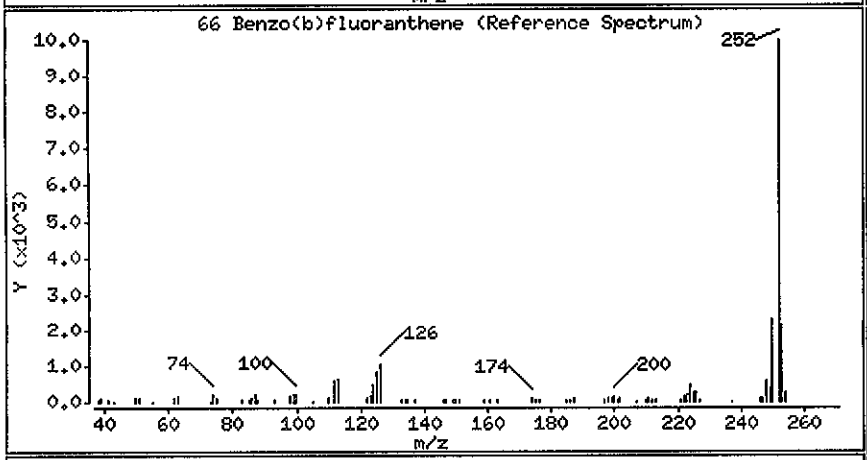


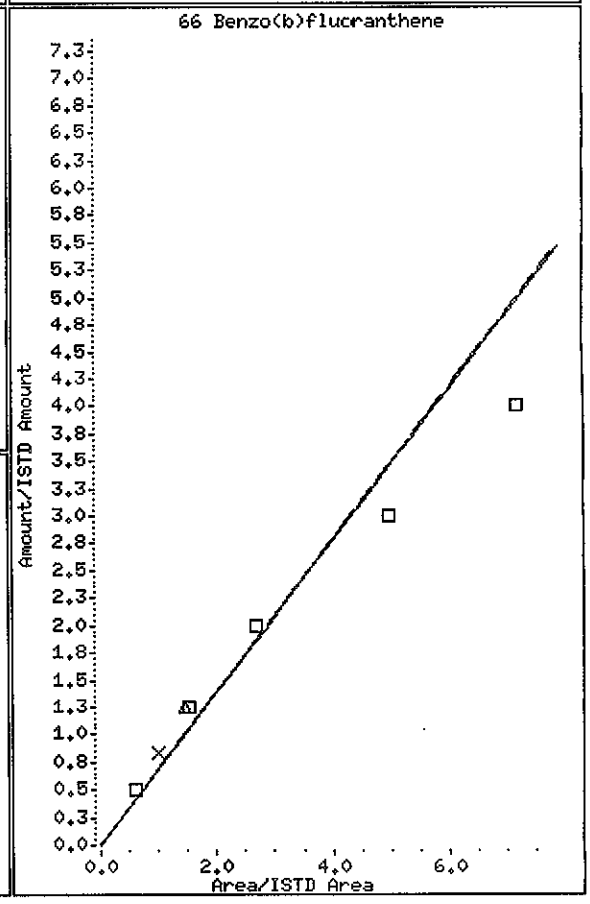
66 Benzo(b)fluoranthene

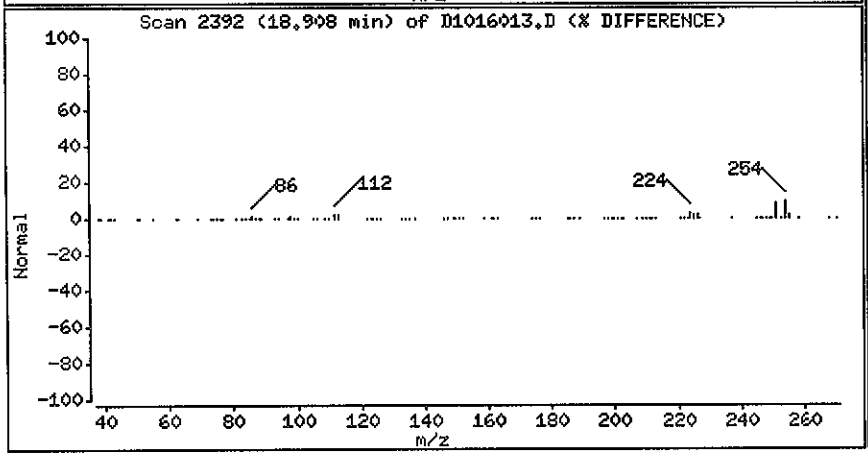




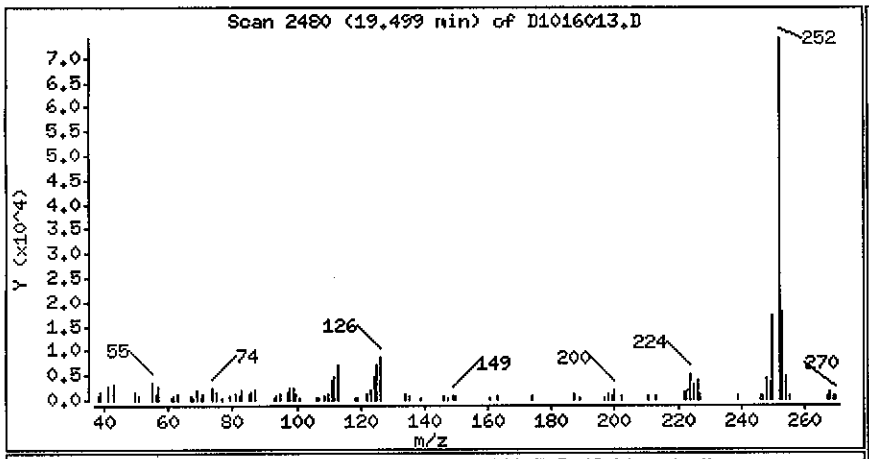


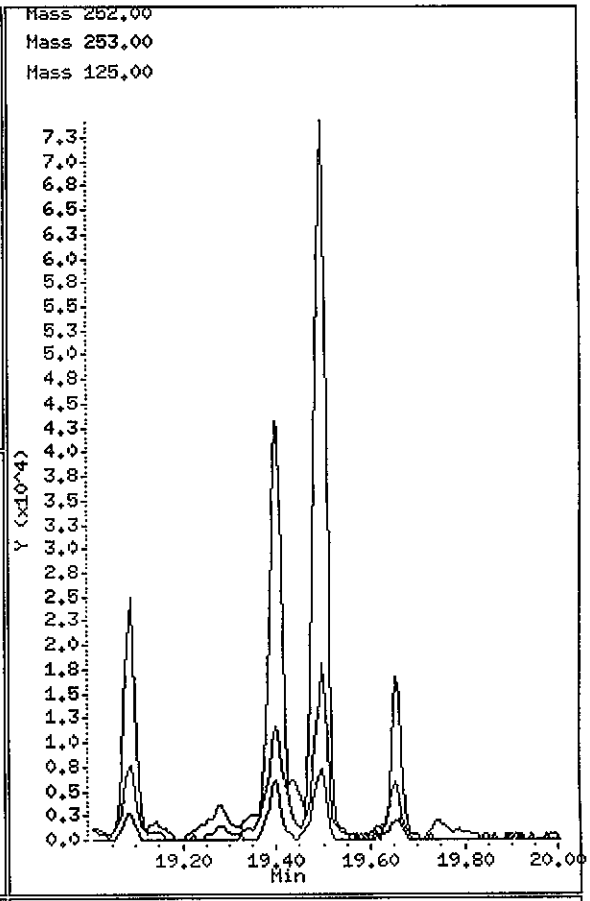


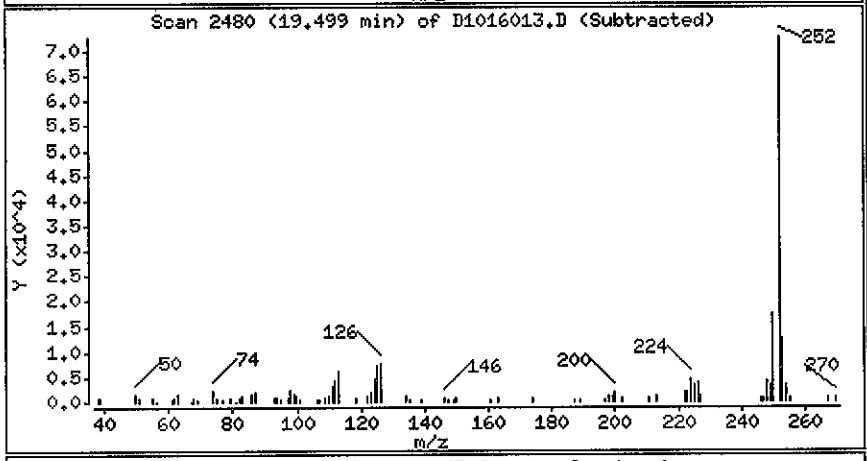


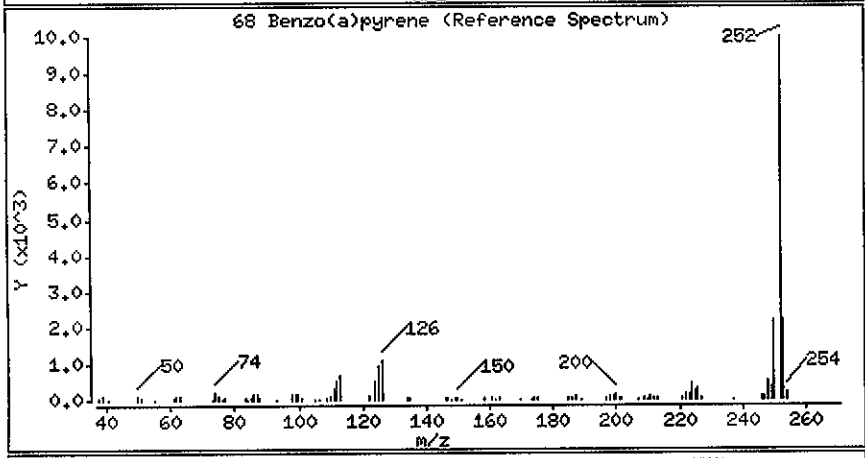


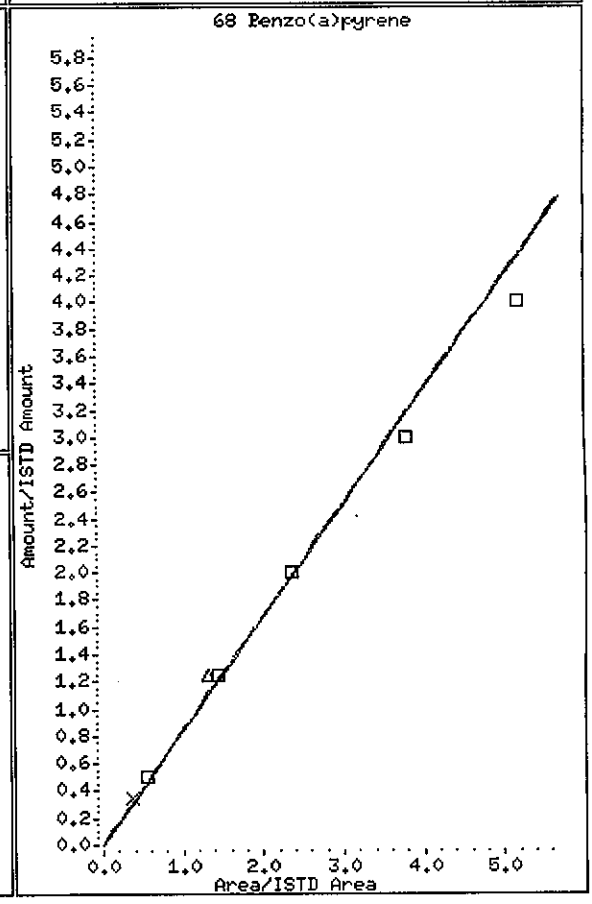
68 Benzo(a)pyrene

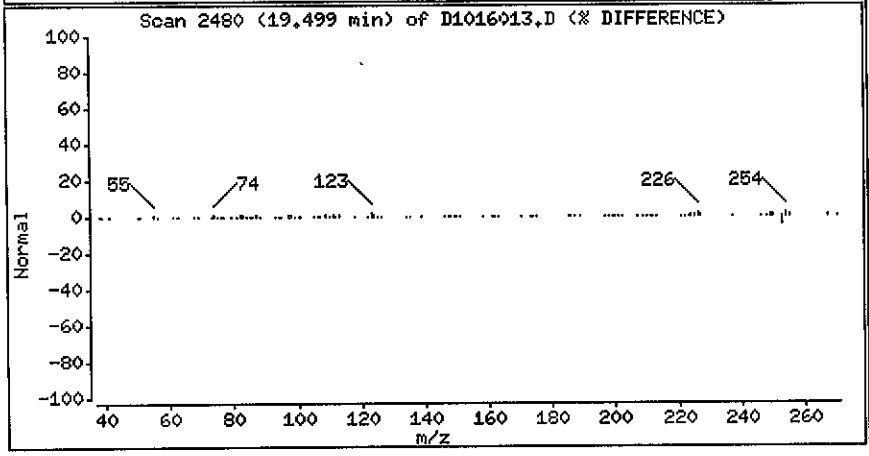




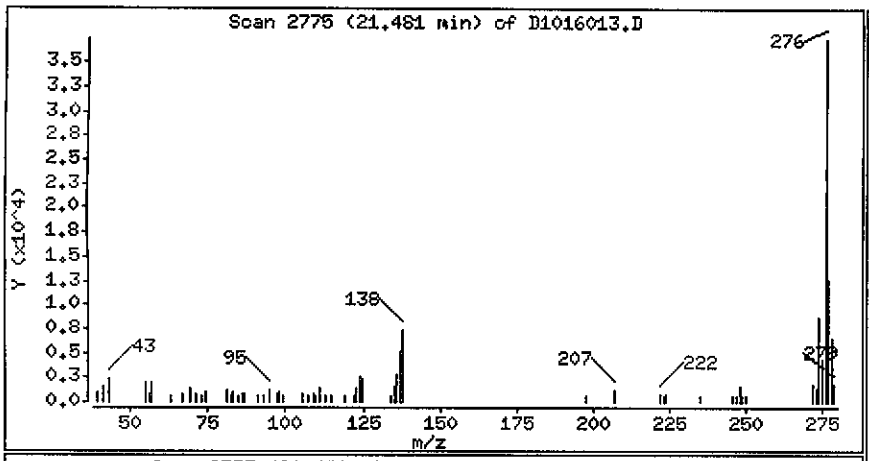


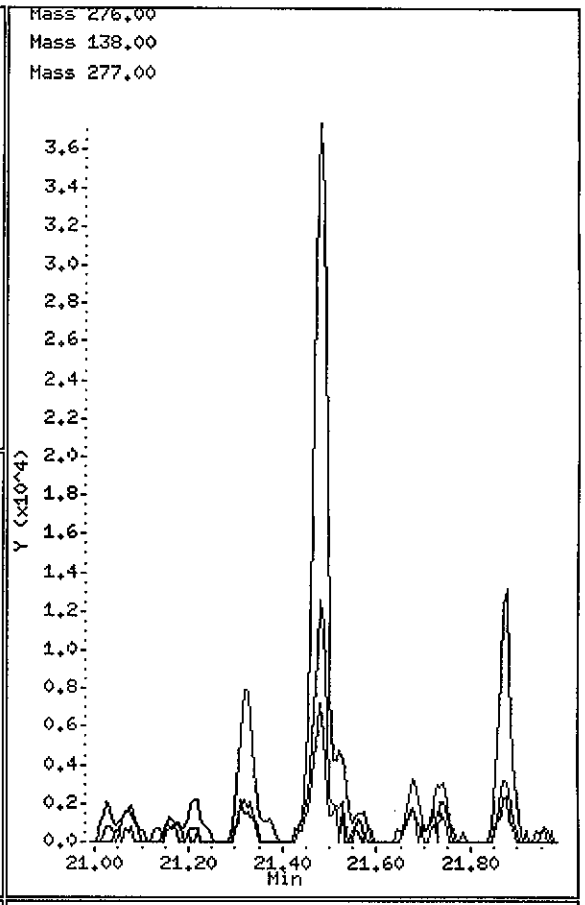


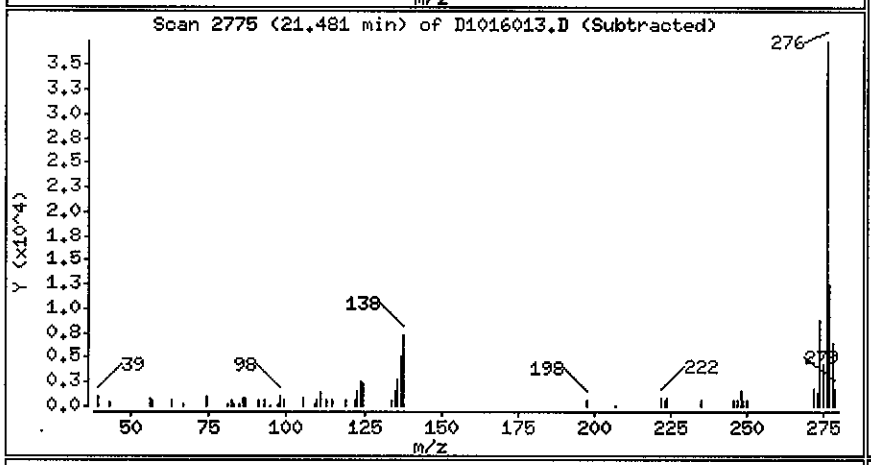


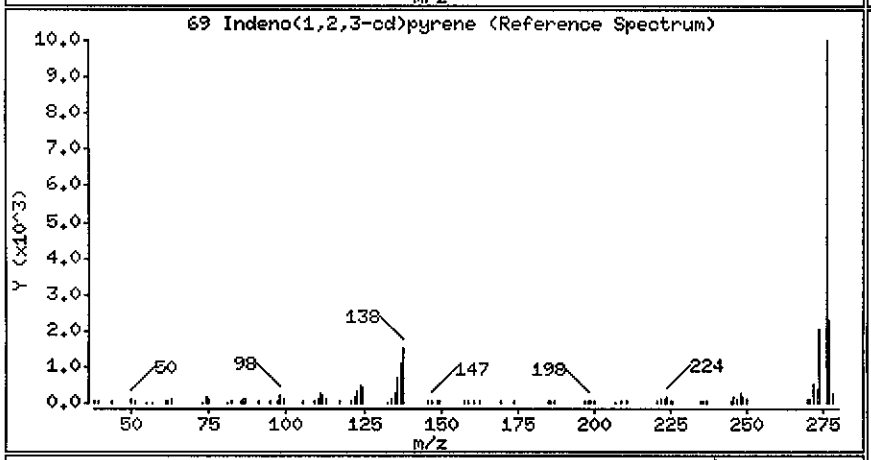


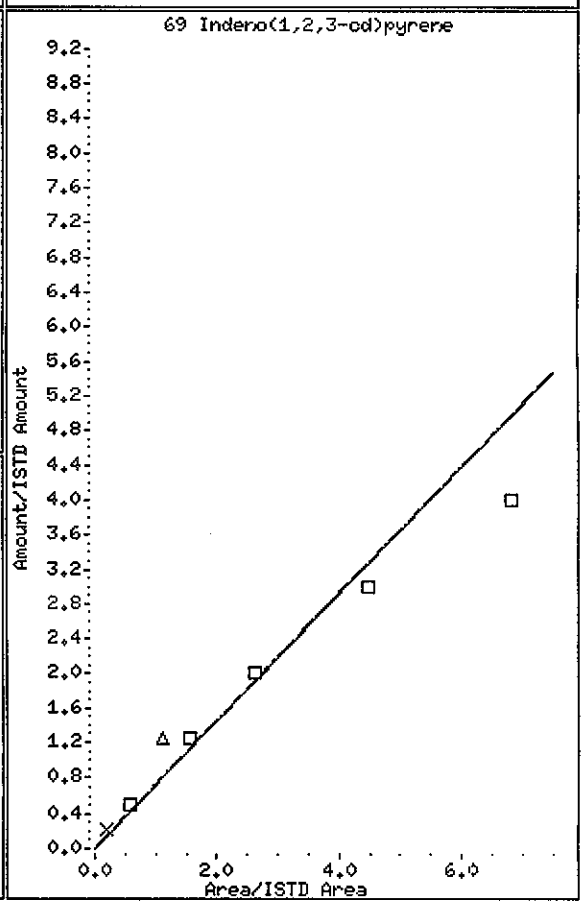
69 Indeno(1,2,3-cd)pyrene

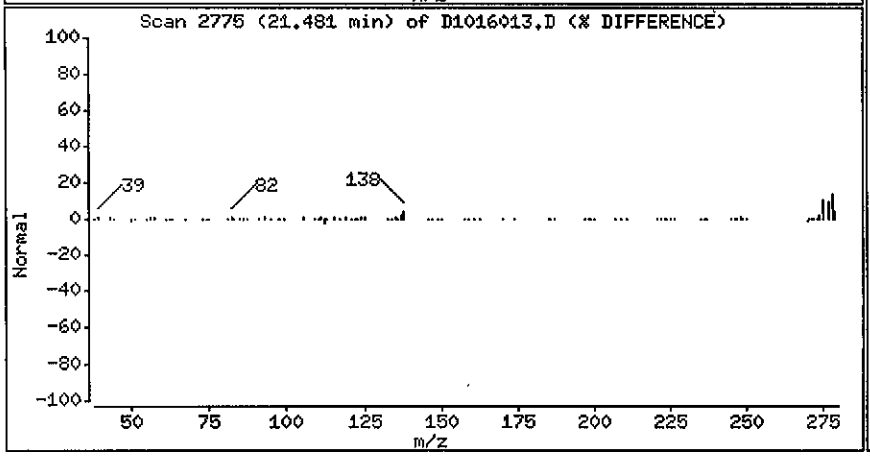












CUMMINGS-RITER CONSULTANTS INC

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 002
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2G32AC Date Extracted:10/18/00
Dilution factor: 2 Date Analyzed: 10/25/00
Moisture %:14

QC Batch: 0292466

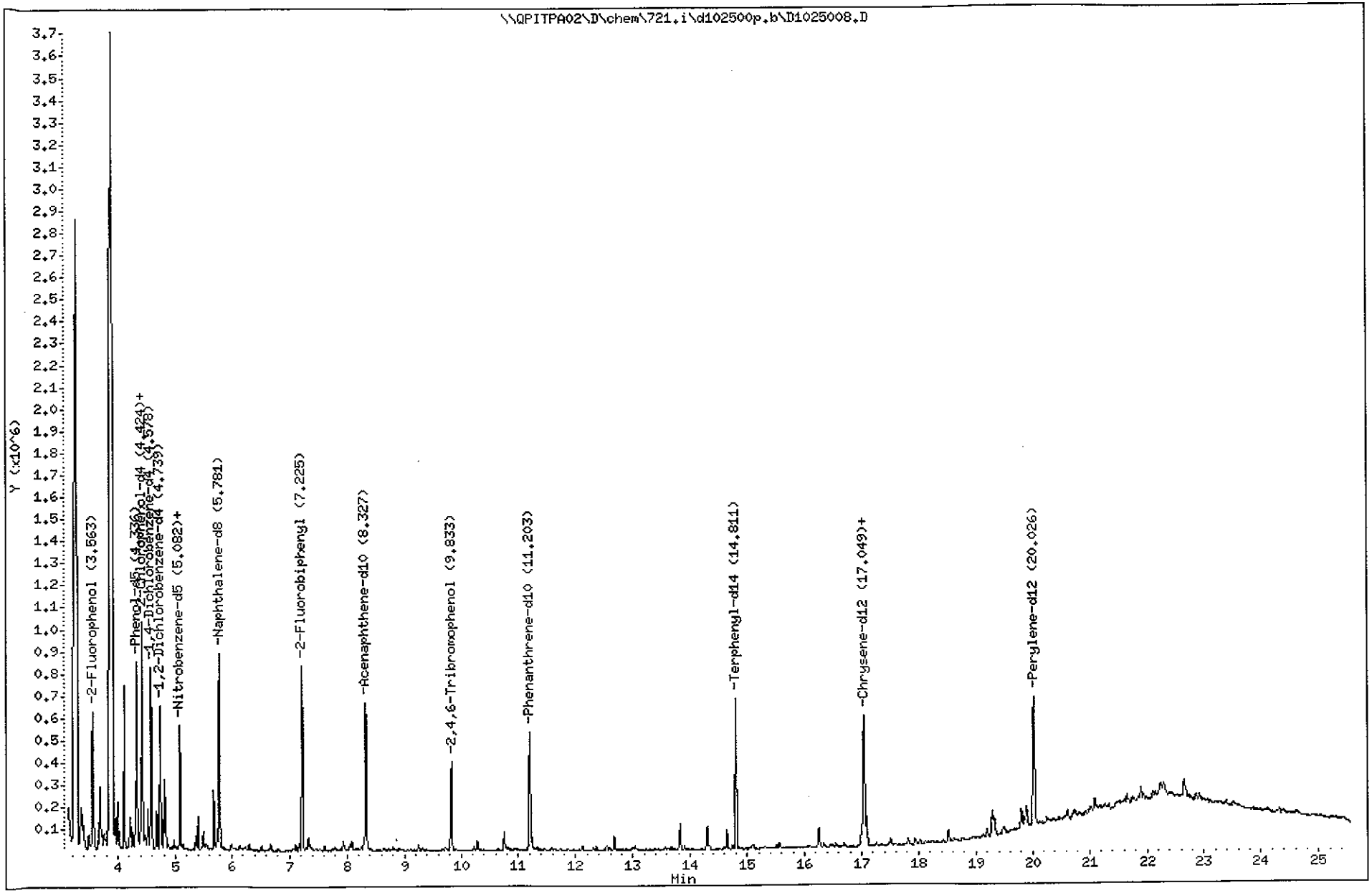
Client Sample Id: PXS-20 -RE 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	760	U
95-57-8	2-Chlorophenol	760	U
621-64-7	N-Nitrosodi-n-propylamine	760	U
59-50-7	4-Chloro-3-methylphenol	760	U
83-32-9	Acenaphthene	760	U
100-02-7	4-Nitrophenol	1900	U
121-14-2	2,4-Dinitrotoluene	760	U
87-86-5	Pentachlorophenol	1900	U
129-00-0	**Pyrene**	**230**	**J**
56-55-3	**Benzo(a)anthracene**	**150**	**J**
205-99-2	**Benzo(b)fluoranthene**	**210**	**J**
50-32-8	**Benzo(a)pyrene**	**150**	**J**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**120**	**J**

Data File: \\QPITPA02\D\chem\721.i\d102500p.b\D1025008.D
Date : 25-OCT-2000 17:56
Client ID: PXS-20
Sample Info: c0j120207-002/re 2x soil 10/18/00 clp4.2
Volume Injected (uL): 2.0
Column phase:

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25



STL-Pittsburgh

Semivolatile REPORT CLP4.2

Data file : \\QPITPA02\D\chem\721.i\d102500p.b\D1025008.D
Lab Smp Id: DM2G32AC Client Smp ID: PXS-20
Inj Date : 25-OCT-2000 17:56
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0j120207-002/re 2x soil 10/18/00 clp4.2
Misc Info : dm2g32ac,d102500p.b,clp.m,1-4.2.sub
Comment :
Method : \\QPITPA02\D\chem\721.i\d102500p.b\clp.m
Meth Date : 26-Oct-2000 07:57 ferguson Quant Type: ISTD
Cal Date : 25-OCT-2000 13:14 Cal File: D1025CCC.D
Als bottle: 11
Dil Factor: 2.00000
Integrator: HP RTE Compound Sublist: 1-4.2.sub
Target Version: 4.04
Processing Host: PITPC013

DRF 10-26-00

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

Name	Value	Description
DF	2.000	Dilution Factor
Uf	2.000	gpc correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
* 1	1,4-Dichlorobenzene-d4	152	4.578	4.563	(1.000)	150474	40.0000	
* 2	Naphthalene-d8	136	5.780	5.779	(1.000)	537282	40.0000	
* 3	Acenaphthene-d10	164	8.327	8.332	(1.000)	238693	40.0000	
* 4	Phenanthrene-d10	188	11.203	11.201	(1.000)	372013	40.0000	
* 5	Chrysene-d12	240	17.048	17.047	(1.000)	412945	40.0000	
* 6	Perylene-d12	264	20.032	20.010	(1.000)	459210	40.0000	
191	Benzaldehyde	77	Compound Not Detected.					
7	Phenol	94	Compound Not Detected.					
8	Bis(2-chloroethyl)ether	93	Compound Not Detected.					
9	2-Chlorophenol	128	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
192	Acetophenone	105	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					

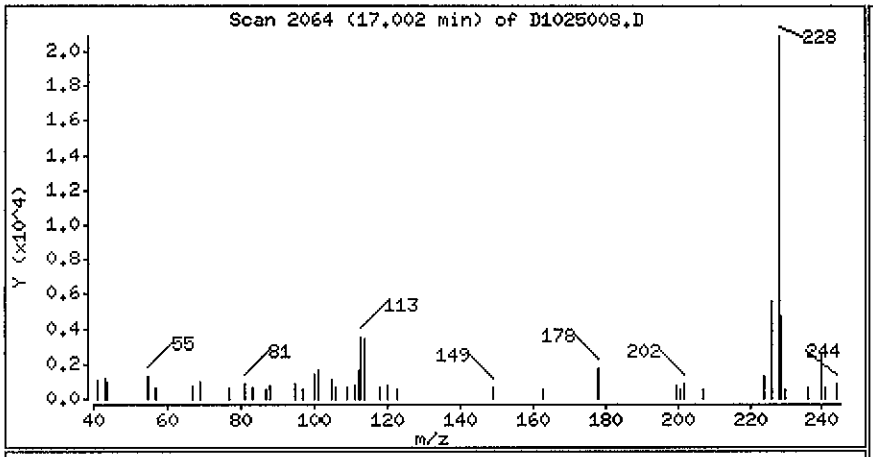
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
18	Nitrobenzene	77	Compound Not Detected.					
19	Isophorone	82	Compound Not Detected.					
20	2-Nitrophenol	139	Compound Not Detected.					
21	2,4-Dimethylphenol	107	Compound Not Detected.					
22	Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
23	2,4-Dichlorophenol	162	Compound Not Detected.					
25	Naphthalene	128	Compound Not Detected.					
26	4-Chloroaniline	127	Compound Not Detected.					
193	Caprolactam	113	Compound Not Detected.					
27	Hexachlorobutadiene	224	Compound Not Detected.					
28	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
29	2-Methylnaphthalene	142	Compound Not Detected.					
30	Hexachlorocyclopentadiene	236	Compound Not Detected.					
31	2,4,6-Trichlorophenol	196	Compound Not Detected.					
32	2,4,5-Trichlorophenol	196	Compound Not Detected.					
194	1,1'-Biphenyl	154	Compound Not Detected.					
33	2-Chloronaphthalene	162	Compound Not Detected.					
34	2-Nitroaniline	65	Compound Not Detected.					
35	Dimethylphthalate	163	Compound Not Detected.					
36	Acenaphthylene	152	Compound Not Detected.					
37	2,6-Dinitrotoluene	165	Compound Not Detected.					
38	3-Nitroaniline	138	Compound Not Detected.					
39	Acenaphthene	153	Compound Not Detected.					
40	2,4-Dinitrophenol	184	Compound Not Detected.					
41	4-Nitrophenol	109	Compound Not Detected.					
42	Dibenzofuran	168	Compound Not Detected.					
43	2,4-Dinitrotoluene	165	Compound Not Detected.					
44	Diethylphthalate	149	Compound Not Detected.					
45	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
46	Fluorene	166	Compound Not Detected.					
47	4-Nitroaniline	138	Compound Not Detected.					
48	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
49	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
50	4-Bromophenyl-phenylether	248	Compound Not Detected.					
51	Hexachlorobenzene	283	Compound Not Detected.					
195	Atrazine	200	Compound Not Detected.					
53	Pentachlorophenol	265	Compound Not Detected.					
54	Phenanthrene	178	11.243	11.255	(1.004)	33889	3.63490	121.16(a)
55	Anthracene	178	Compound Not Detected.					
56	Carbazole	167	Compound Not Detected.					
57	Di-n-Butylphthalate	149	Compound Not Detected.					
58	Fluoranthene	202	13.823	13.829	(1.234)	84494	8.25222	275.07(a)
59	Pyrene	202	14.294	14.306	(0.838)	74414	6.01339	200.45(a)
60	Butylbenzylphthalate	149	Compound Not Detected.					
61	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

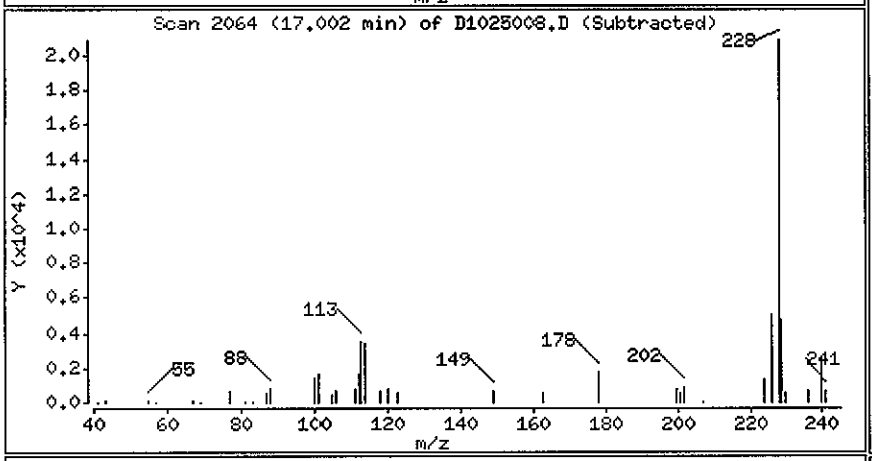
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)
62	Benzo(a)Anthracene	228	17.001	17.014	(0.997)	44444	3.95831	131.94(aQ)
63	Chrysene	228	17.089	17.108	(1.002)	63692	6.23488	207.83(a)
64	bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
65	Di-n-octylphthalate	149	Compound Not Detected.					
66	Benzo(b)fluoranthene	252	19.286	19.298	(0.963)	76457	5.41144	180.38(a)
67	Benzo(k)fluoranthene	252	19.326	19.345	(0.965)	65514	4.57971	152.66(a)
68	Benzo(a)pyrene	252	19.897	19.903	(0.993)	50532	3.91876	130.62(a)
69	Indeno(1,2,3-cd)pyrene	276	21.893	21.892	(1.093)	37926	3.09164	103.05(a)
70	Dibenz(a,h)anthracene	278	Compound Not Detected.					
71	Benzo(g,h,i)perylene	276	22.296	22.302	(1.113)	31323	2.53562	84.520(a)
$ 72	Nitrobenzene-d5	82	5.082	5.080	(0.879)	196182	36.9016	1230.0
$ 73	2-Fluorobiphenyl	172	7.225	7.224	(0.868)	370335	43.1797	1439.3
$ 74	Terphenyl-d14	244	14.811	14.810	(0.869)	422780	41.3092	1377.0
$ 75	Phenol-d5	99	4.336	4.314	(0.947)	349124	54.5169	1817.2
$ 76	2-Fluorophenol	112	3.563	3.508	(0.778)	243681	42.9896	1433.0
$ 77	2,4,6-Tribromophenol	330	9.832	9.837	(0.878)	86613	57.3156	1910.5
$ 78	2-Chlorophenol-d4	132	4.430	4.408	(0.968)	295858	55.4149	1847.2
$ 79	1,2-Dichlorobenzene-d4	152	4.739	4.731	(1.035)	114733	31.0583	1035.3

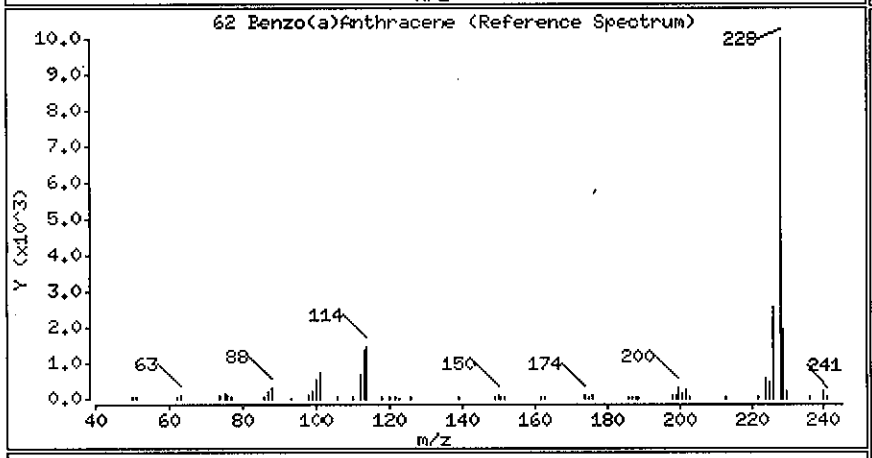
QC Flag Legend

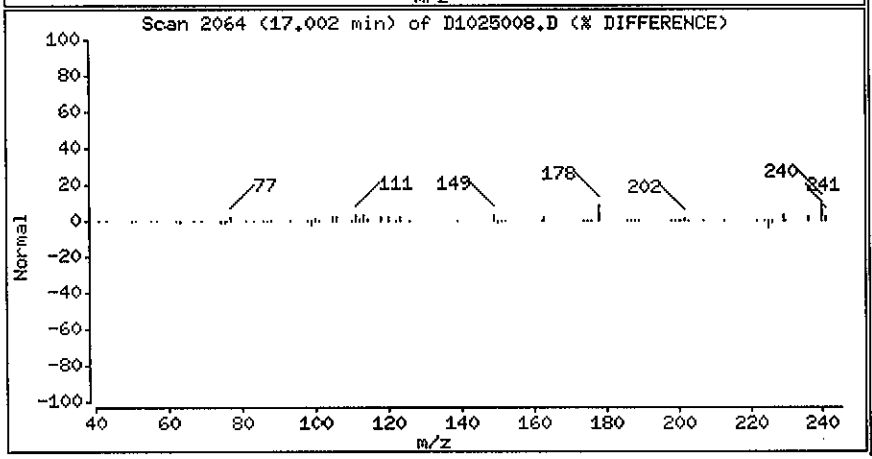
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.

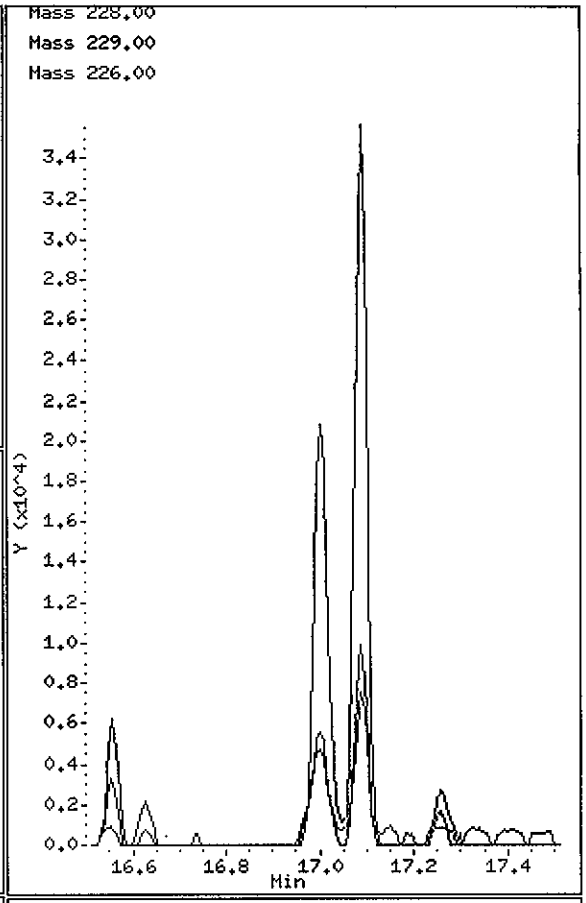
62 Benzo(a)Anthracene

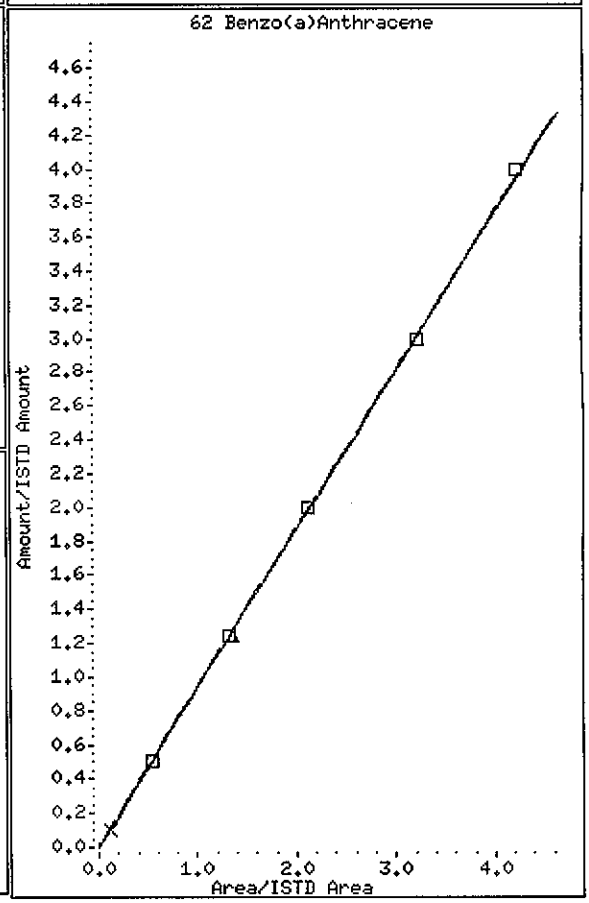




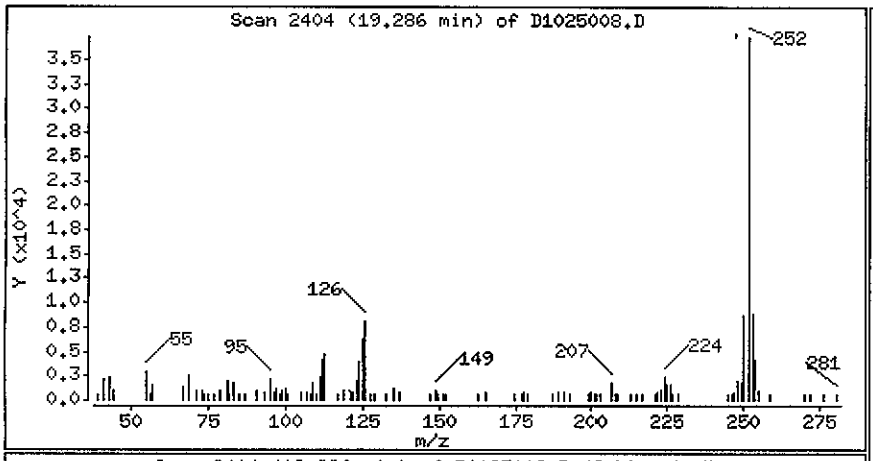


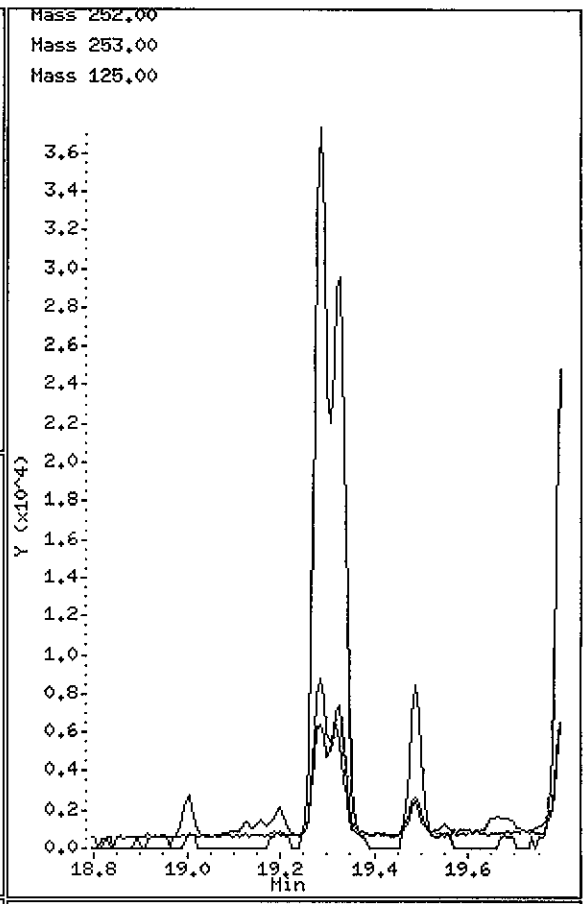


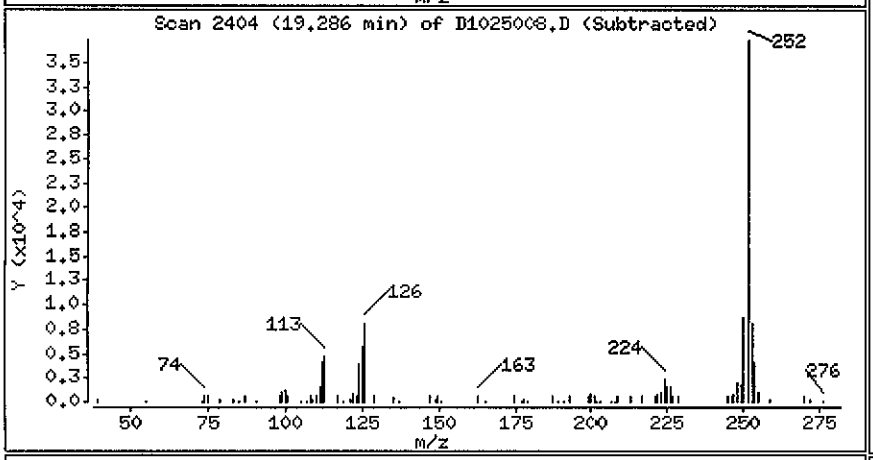


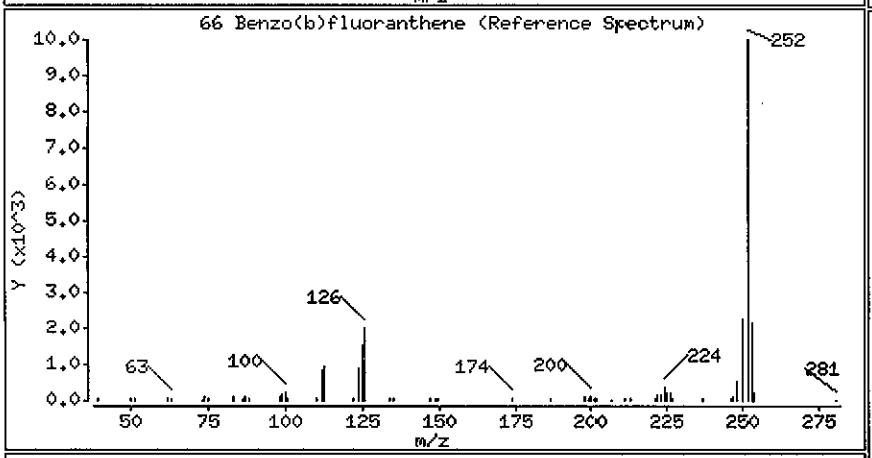


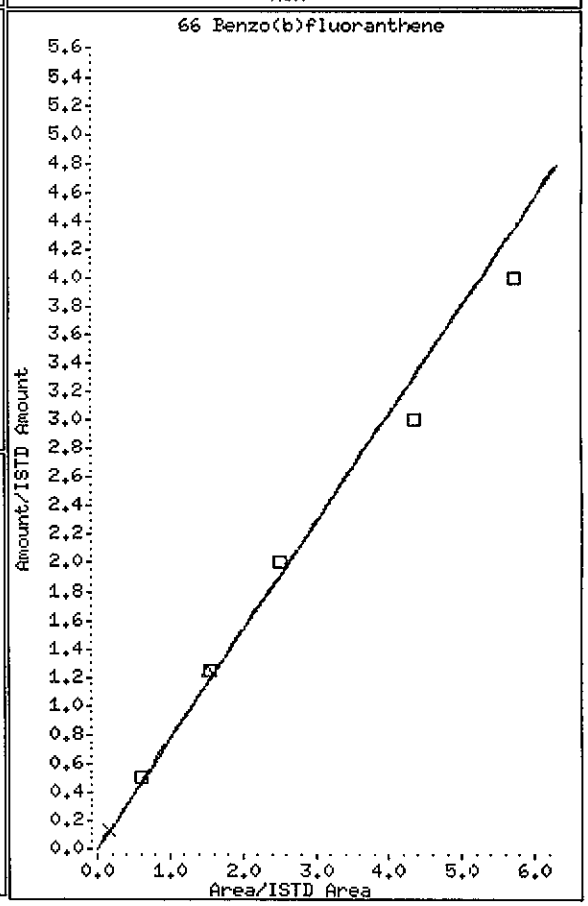
66 Benzo(b)fluoranthene

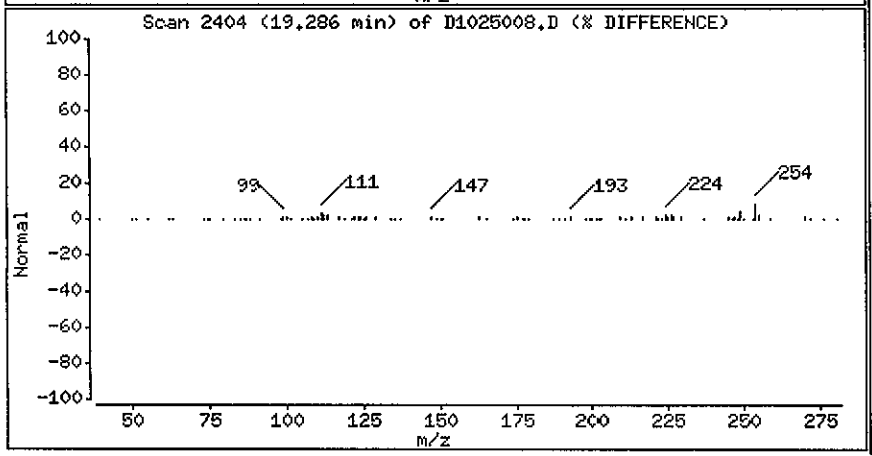




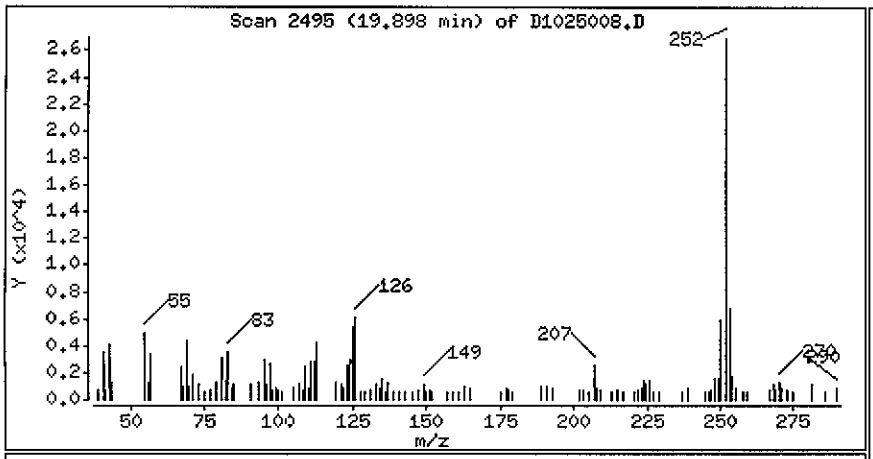


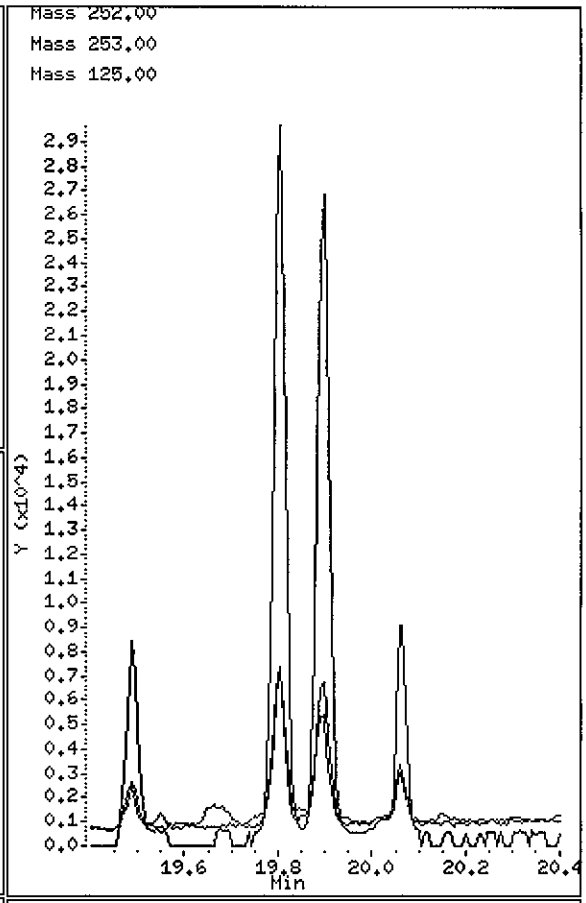


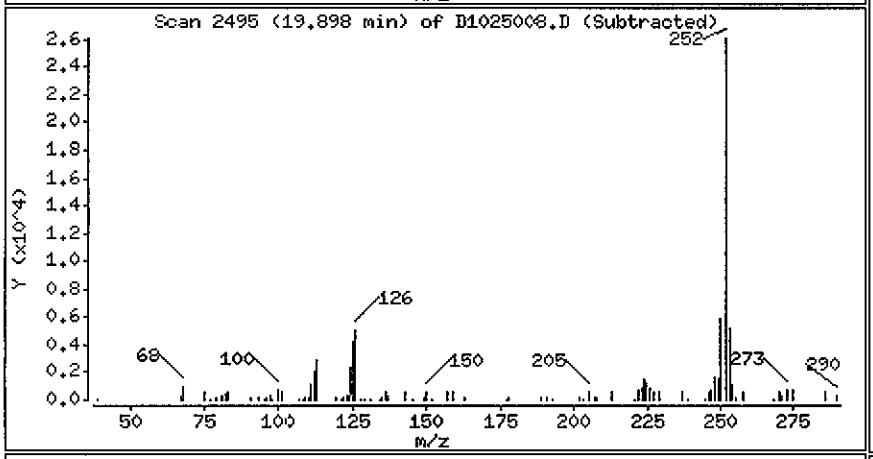


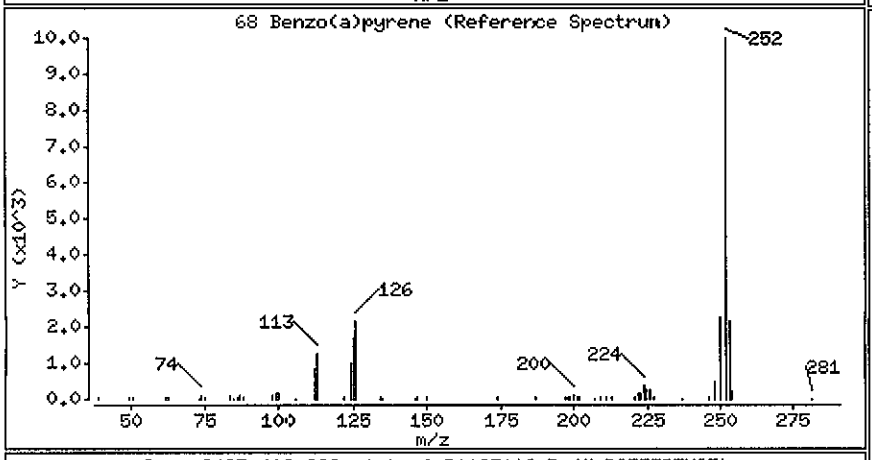


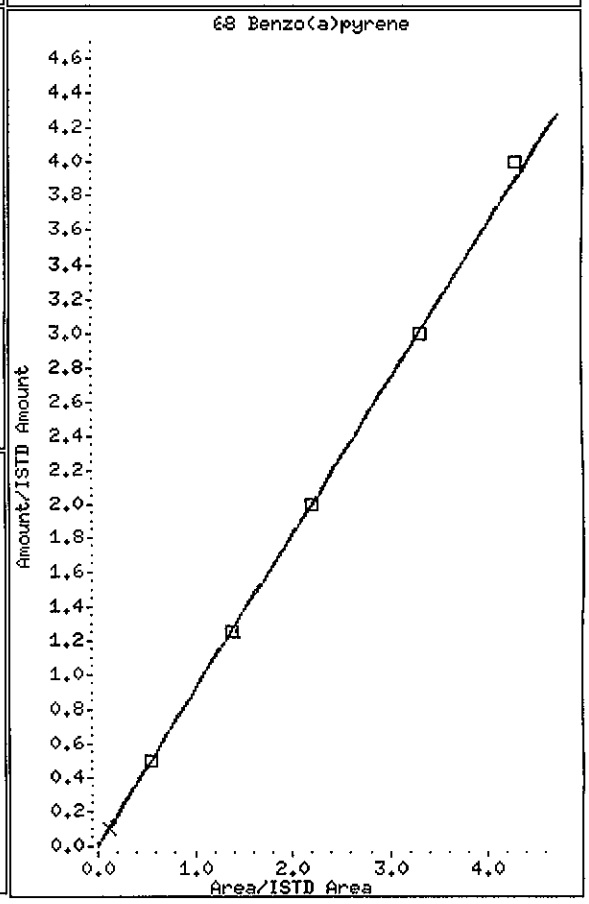
68 Benzo(a)pyrene

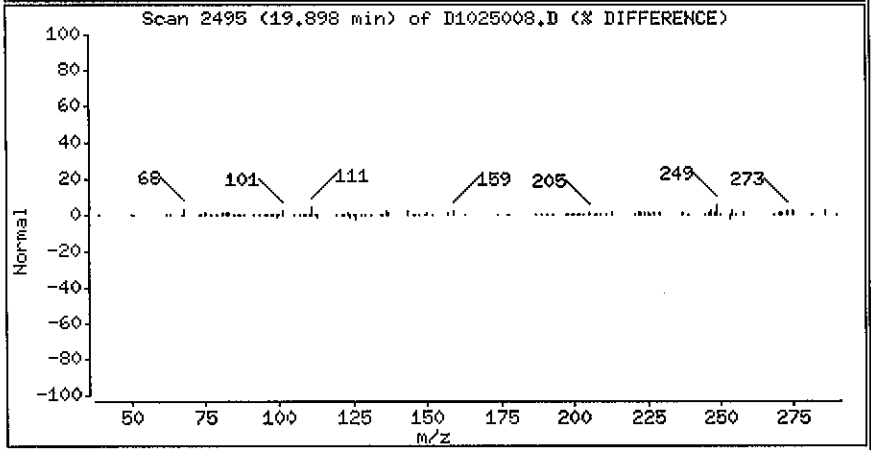




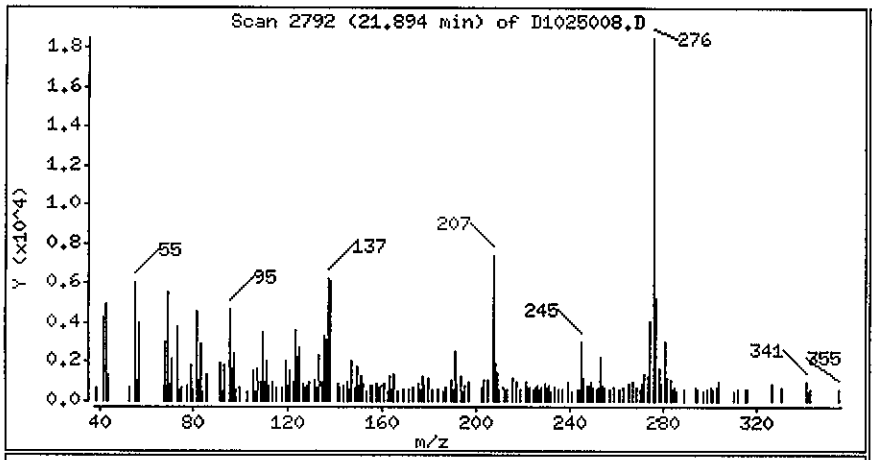


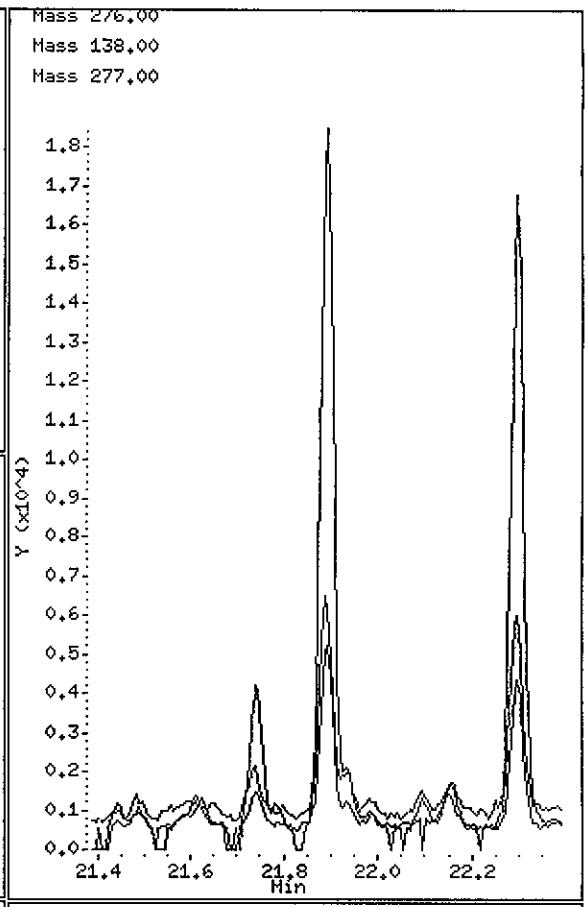


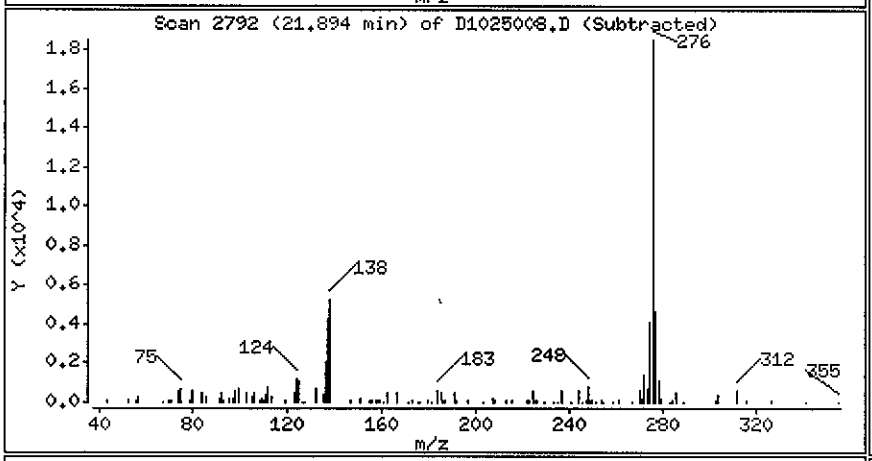


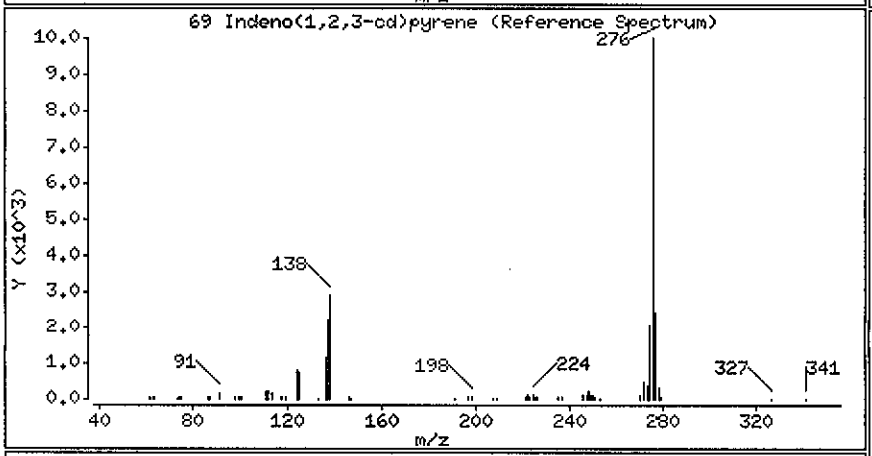


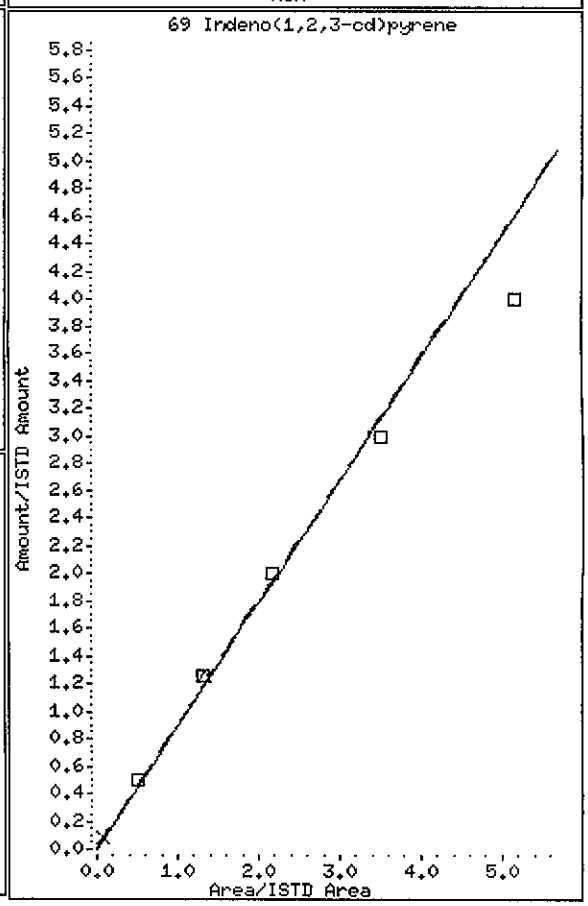
69 Indeno(1,2,3-cd)pyrene

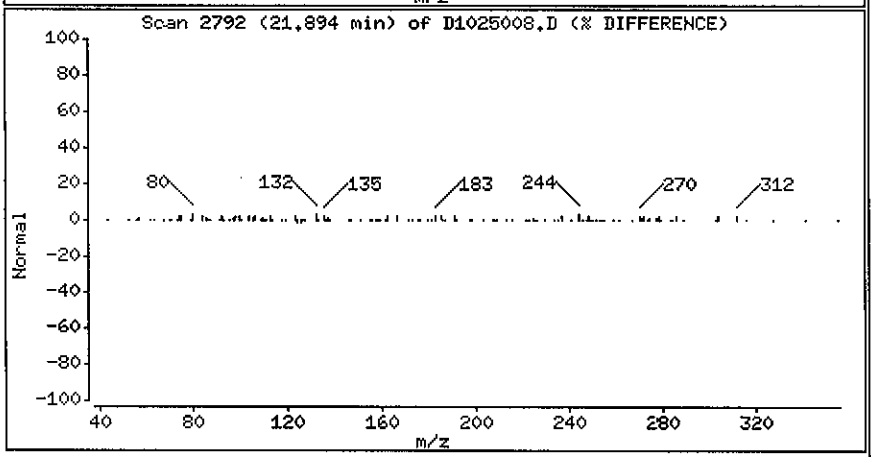












GC/MS SEMIVOLATILE
CALIBRATION DATA

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Instrument ID: 721 Calibration Date(s): 10/02/00 10/02/00

Calibration Time(s): 1022 1223

LAB FILE ID: RRF20 = D1002CC1 RRF50 = D1002CC2
RRF80 = D1002CC3 RRF120= D1002CC4 RRF160= D1002CC5

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol *	1.625	1.623	1.637	1.639	1.609	1.627	0.7*
Bis(2-chloroethyl)ether *	1.210	1.192	1.186	1.190	1.179	1.191	1.0*
2-Chlorophenol *	1.336	1.331	1.335	1.354	1.370	1.345	1.2*
2-Methylphenol *	1.111	1.120	1.092	1.103	1.104	1.106	0.9*
2,2'-oxybis(1-Chloropropane)	1.497	1.474	1.460	1.462	1.414	1.461	2.1
N-Nitroso-di-n-propylamine *	0.831	0.806	0.798	0.817	0.794	0.809	1.8*
4-Methylphenol *	1.196	1.189	1.203	1.216	1.206	1.202	0.8*
Hexachloroethane *	0.665	0.660	0.657	0.670	0.676	0.666	1.2*
Nitrobenzene *	0.383	0.391	0.387	0.408	0.400	0.394	2.5*
Isophorone *	0.645	0.651	0.654	0.669	0.667	0.657	1.6*
2-Nitrophenol *	0.213	0.219	0.223	0.228	0.226	0.222	2.7*
2,4-Dimethylphenol *	0.362	0.370	0.377	0.391	0.392	0.378	3.4*
Bis(2-chloroethoxy)methane *	0.406	0.402	0.406	0.416	0.409	0.408	1.3*
2,4-Dichlorophenol *	0.331	0.334	0.341	0.362	0.357	0.345	4.0*
Naphthalene *	1.032	1.058	1.068	1.105	1.105	1.074	2.9*
4-Chloroaniline	0.418	0.435	0.438	0.455	0.453	0.440	3.4
Hexachlorobutadiene	0.240	0.249	0.255	0.273	0.269	0.257	5.4
4-Chloro-3-Methylphenol *	0.320	0.319	0.321	0.331	0.332	0.325	1.9*
2-Methylnaphthalene *	0.648	0.662	0.670	0.703	0.696	0.676	3.4*
Hexachlorocyclopentadiene	0.486	0.511	0.523	0.548	0.555	0.525	5.3
2,4,6-Trichlorophenol *	0.429	0.425	0.433	0.449	0.443	0.436	2.3*
2,4,5-Trichlorophenol *	0.457	0.473	0.466	0.469	0.469	0.467	1.3*
2-Chloronaphthalene *	1.172	1.211	1.218	1.260	1.260	1.224	3.0*
2-Nitroaniline	0.364	0.379	0.375	0.376	0.372	0.373	1.5
Dimethylphthalate	1.406	1.443	1.412	1.449	1.432	1.428	1.3
Acenaphthylene *	1.801	1.859	1.825	1.854	1.848	1.837	1.3*
2,6-Dinitrotoluene *	0.337	0.352	0.340	0.352	0.348	0.346	2.0*
3-Nitroaniline	0.346	0.357	0.352	0.361	0.357	0.355	1.6
Acenaphthene *	1.085	1.105	1.100	1.148	1.132	1.114	2.3*
2,4-Dinitrophenol	0.195	0.238	0.252	0.268	0.271	0.245	12.6
4-Nitrophenol	0.272	0.293	0.296	0.310	0.328	0.300	6.9
Dibenzofuran *	1.631	1.696	1.678	1.738	1.735	1.696	2.6*
2,4-Dinitrotoluene *	0.450	0.466	0.465	0.473	0.472	0.465	1.9*
Diethylphthalate	1.470	1.544	1.561	1.625	1.631	1.566	4.2
4-Chlorophenyl-phenylether *	0.648	0.685	0.672	0.707	0.722	0.687	4.2*
Fluorene *	1.284	1.345	1.352	1.419	1.412	1.362	4.1*

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

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Instrument ID: 721 Calibration Date(s): 10/02/00 10/02/00

Calibration Time(s): 1022 1223

LAB FILE ID: RRF20 = D1002CC1 RRF50 = D1002CC2
RRF80 = D1002CC3 RRF120= D1002CC4 RRF160= D1002CC5

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
4-Nitroaniline	0.329	0.335	0.331	0.340	0.336	0.334	1.2
4,6-Dinitro-2-methylphenol	0.155	0.173	0.177	0.185	0.194	0.177	8.3
N-Nitrosodiphenylamine (1)	0.532	0.529	0.534	0.564	0.576	0.547	3.9
4-Bromophenyl-phenylether *	0.231	0.237	0.247	0.258	0.268	0.248	6.2*
Hexachlorobenzene *	0.303	0.315	0.324	0.342	0.352	0.327	6.1*
Pentachlorophenol *	0.189	0.199	0.209	0.217	0.223	0.207	6.5*
Phenanthrene *	1.044	1.048	1.072	1.096	1.135	1.079	3.5*
Anthracene *	1.072	1.083	1.070	1.112	1.127	1.093	2.3*
Carbazole	0.895	0.920	0.929	0.956	0.971	0.934	3.2
Di-n-Butylphthalate	1.322	1.340	1.370	1.392	1.413	1.367	2.7
Fluoranthene *	1.066	1.102	1.115	1.137	1.168	1.118	3.4*
Pyrene *	1.143	1.165	1.156	1.198	1.187	1.170	1.9*
Butylbenzylphthalate	0.582	0.605	0.604	0.622	0.612	0.605	2.5
3,3'-Dichlorobenzidine	0.418	0.453	0.472	0.503	0.514	0.472	8.2
Benzo(a)Anthracene *	1.016	1.043	1.046	1.088	1.088	1.056	3.0*
Chrysene *	0.936	0.966	0.976	1.011	1.026	0.983	3.7*
bis(2-ethylhexyl)Phthalate	0.766	0.806	0.810	0.841	0.836	0.812	3.7
Di-n-octylphthalate	1.714	1.736	1.793	1.927	1.916	1.817	5.5
Benzo(b)fluoranthene *	1.226	1.207	1.342	1.659	1.794	1.446	18.4*
Benzo(k)fluoranthene *	1.396	1.406	1.351	1.274	1.269	1.339	4.9*
Benzo(a)pyrene *	1.091	1.153	1.180	1.263	1.298	1.197	7.0*
Indeno(1,2,3-cd)pyrene *	1.155	1.225	1.303	1.496	1.707	1.377	16.3*
Dibenz(a,h)anthracene *	1.159	1.227	1.307	1.502	1.660	1.371	15.1*
Benzo(g,h,i)perylene *	1.139	1.158	1.186	1.314	1.392	1.238	8.9*
Benzaldehyde	1.039	0.997	0.972	0.926	0.869	0.961	6.8
Acetophenone	1.860	1.849	1.854	1.880	1.867	1.862	0.6
Caprolactam	0.112	0.114	0.116	0.112	0.101	0.111	5.1
1,1'-Biphenyl	1.509	1.513	1.539	1.595	1.588	1.549	2.6
Atrazine	0.218	0.206	0.207	0.215	0.215	0.212	2.5
Nitrobenzene-d5 *	0.412	0.408	0.423	0.432	0.425	0.420	2.4*
2-Fluorobiphenyl *	1.387	1.405	1.419	1.430	1.416	1.411	1.1*
Terphenyl-d14 *	0.967	1.005	1.022	1.058	1.061	1.023	3.8*
Phenol-d5 *	1.511	1.543	1.549	1.554	1.527	1.537	1.1*
2-Fluorophenol *	1.198	1.236	1.231	1.241	1.239	1.229	1.4*
2,4,6-Tribromophenol	0.174	0.182	0.193	0.206	0.215	0.194	8.7
2-Chlorophenol-d4 *	1.226	1.219	1.262	1.277	1.305	1.258	2.9*
1,2-Dichlorobenzene-d4 *	0.960	0.942	0.974	0.979	0.979	0.967	1.6*

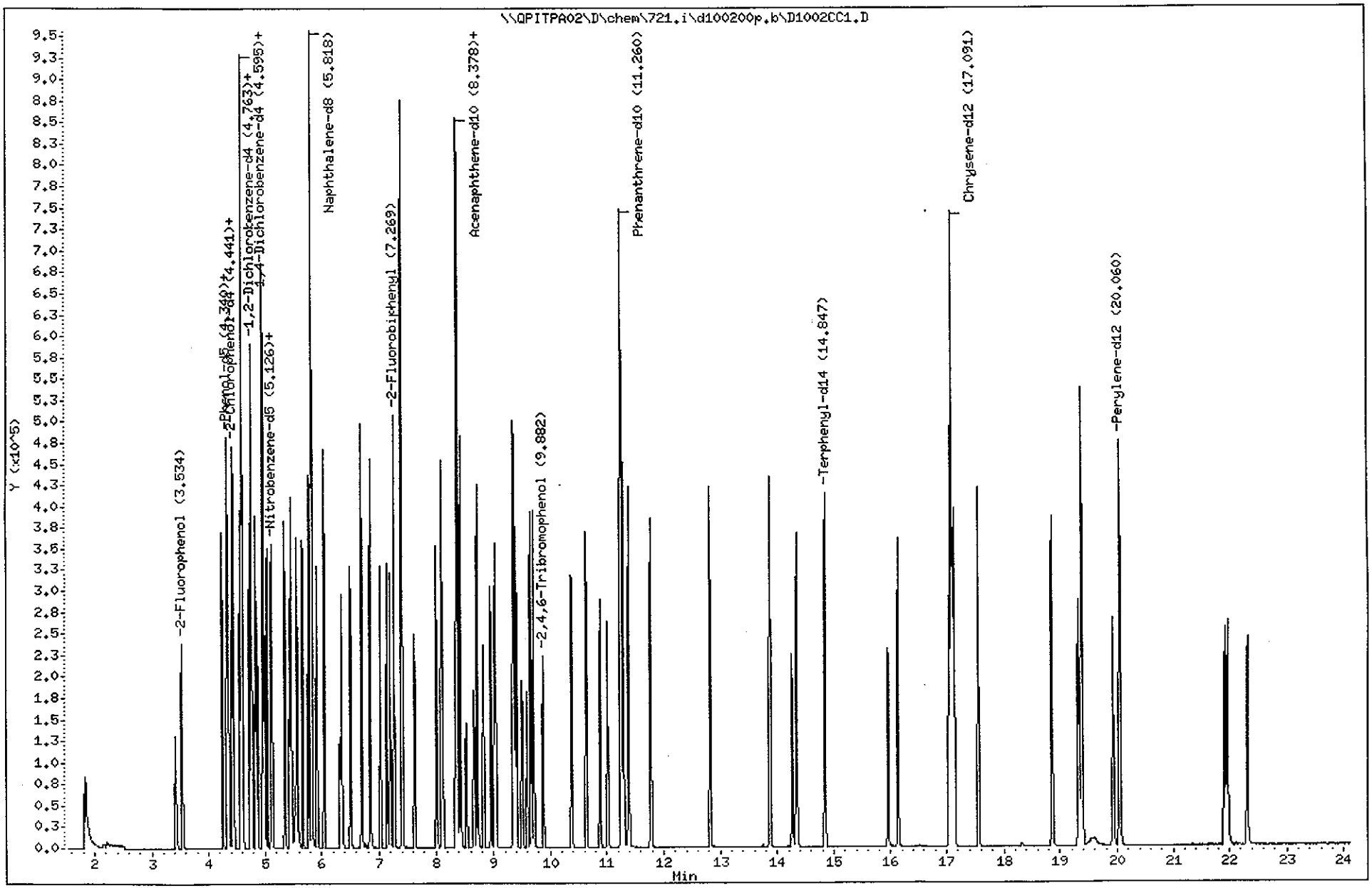
* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Data File: \\QPITPA02\D\chem\721.i\d100200p.b\D1002CC1.D
Date : 02-OCT-2000 10:22
Client ID: SSTD020
Sample Info: sstd020 (10ug/ml) 77-01-5 8270c/clp/625

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25

Column phase:



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d100200p.b\D1002CC1.D
Lab Smp Id: sstd20 Client Smp ID: SSTD020
Inj Date : 02-OCT-2000 10:22
Operator : 001562, DLF Inst ID: 721.i
Smp Info : sstd020 (10ug/ml) 77-01-5 8270c/clp/625
Misc Info : sstd20,d100200p.b,clp.m,1-all.sub,1,1
Comment :
Method : \\QPITPA02\D\chem\721.i\d100200p.b\clp.m
Meth Date : 02-Oct-2000 14:49 ferguson Quant Type: ISTD
Cal Date : 02-OCT-2000 10:22 Cal File: D1002CC1.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-2-00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	4.595	4.595	(1.000)	144932	40.0000	
* 2	Naphthalene-d8	136	5.818	5.818	(1.000)	506410	40.0000	
* 3	Acenaphthene-d10	164	8.377	8.377	(1.000)	294021	40.0000	
* 4	Phenanthrene-d10	188	11.252	11.252	(1.000)	529770	40.0000	
* 5	Chrysene-d12	240	17.090	17.090	(1.000)	482373	40.0000	
* 6	Perylene-d12	264	20.053	20.053	(1.000)	360149	40.0000	
191	Benzaldehyde	77	4.246	4.246	(0.924)	75309	20.0000	21.637
7	Phenol	94	4.340	4.340	(0.944)	117738	20.0000	19.978
8	Bis(2-chloroethyl)ether	93	4.414	4.414	(0.961)	87713	20.0000	20.321
9	2-Chlorophenol	128	4.447	4.447	(0.968)	96842	20.0000	19.866
10	1,3-Dichlorobenzene	146	4.561	4.561	(0.993)	106427	20.0000	20.060
11	1,4-Dichlorobenzene	146	4.608	4.608	(1.003)	111954	20.0000	20.278
12	1,2-Dichlorobenzene	146	4.770	4.770	(1.038)	101204	20.0000	19.697
189	Benzyl Alcohol	108	4.729	4.729	(1.029)	60261	20.0000	19.253
13	2-Methylphenol	108	4.837	4.837	(1.053)	80482	20.0000	20.084
14	2,2'-oxybis(1-Chloropropane)	45	4.870	4.870	(1.060)	108454	20.0000	20.482
192	Acetophenone	105	4.971	4.971	(1.082)	134820	20.0000	19.980
15	4-Methylphenol	108	4.958	4.958	(1.079)	86699	20.0000	19.906
16	N-Nitroso-di-n-propylamine	70	4.991	4.991	(1.086)	60207	20.0000	20.530
17	Hexachloroethane	117	5.045	5.045	(1.098)	48223	20.0000	19.991
18	Nitrobenzene	77	5.126	5.126	(0.881)	97064	20.0000	19.462
19	Isophorone	82	5.347	5.347	(0.919)	163321	20.0000	19.635
20	2-Nitrophenol	139	5.435	5.435	(0.934)	53833	20.0000	19.190
21	2,4-Dimethylphenol	107	5.462	5.462	(0.939)	91691	20.0000	19.136
22	Bis(2-chloroethoxy)methane	93	5.569	5.569	(0.957)	102939	20.0000	19.927
190	Benzoic acid	122	5.562	5.562	(0.956)	52029	20.0000	16.916(MH)

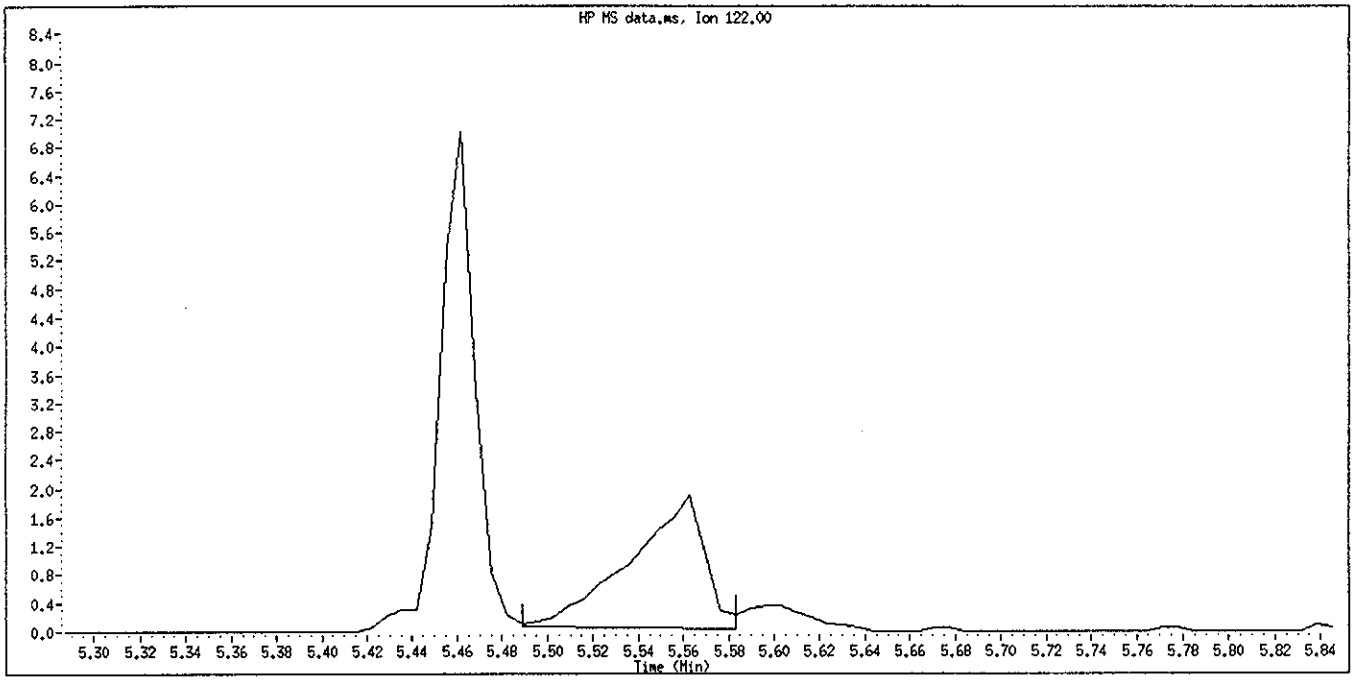
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
23	2,4-Dichlorophenol	162	5.670	5.670	(0.975)	83832	20.0000	19.194
24	1,2,4-Trichlorobenzene	180	5.771	5.771	(0.992)	92405	20.0000	19.140
25	Naphthalene	128	5.838	5.838	(1.003)	261299	20.0000	19.226
26	4-Chloroaniline	127	5.918	5.918	(1.017)	105965	20.0000	19.025
193	Caprolactam	113	6.321	6.321	(1.087)	28312	20.0000	20.118
27	Hexachlorobutadiene	225	6.046	6.046	(1.039)	60699	20.0000	18.649
28	4-Chloro-3-Methylphenol	107	6.503	6.503	(1.118)	80902	20.0000	19.685
29	2-Methylnaphthalene	142	6.698	6.698	(1.151)	164082	20.0000	19.175
30	Hexachlorocyclopentadiene	237	7.027	7.027	(0.839)	71455	20.0000	18.529
31	2,4,6-Trichlorophenol	196	7.141	7.141	(0.852)	63067	20.0000	19.689
32	2,4,5-Trichlorophenol	196	7.195	7.195	(0.859)	67241	20.0000	19.595
194	1,1'-Biphenyl	154	7.403	7.403	(0.884)	221892	20.0000	19.489
33	2-Chloronaphthalene	162	7.410	7.410	(0.885)	172370	20.0000	19.151
34	2-Nitroaniline	65	7.631	7.631	(0.911)	53562	20.0000	19.511
35	Dimethylphthalate	163	8.021	8.021	(0.957)	206742	20.0000	19.689
36	Acenaphthylene	152	8.102	8.102	(0.967)	264722	20.0000	19.600
37	2,6-Dinitrotoluene	165	8.122	8.122	(0.970)	49525	20.0000	19.483
38	3-Nitroaniline	138	8.350	8.350	(0.997)	50901	20.0000	19.512
39	Acenaphthene	153	8.431	8.431	(1.006)	159577	20.0000	19.484
40	2,4-Dinitrophenol	184	8.532	8.532	(1.018)	28653	20.0000	15.917
41	4-Nitrophenol	109	8.666	8.666	(1.034)	39984	20.0000	18.141
42	Dibenzofuran	168	8.720	8.720	(1.041)	239812	20.0000	19.242
43	2,4-Dinitrotoluene	165	8.827	8.827	(1.054)	66233	20.0000	19.366
44	Diethylphthalate	149	9.351	9.351	(1.116)	216112	20.0000	18.772
45	4-Chlorophenyl-phenylether	204	9.412	9.412	(1.123)	95228	20.0000	18.870
46	Fluorene	166	9.371	9.371	(1.119)	188803	20.0000	18.852
47	4-Nitroaniline	138	9.506	9.506	(1.135)	48394	20.0000	19.706
48	4,6-Dinitro-2-methylphenol	198	9.600	9.600	(0.853)	41151	20.0000	17.560
49	N-Nitrosodiphenylamine (1)	169	9.660	9.660	(0.859)	140834	20.0000	19.441
50	4-Bromophenyl-phenylether	248	10.379	10.379	(0.922)	61090	20.0000	18.572
51	Hexachlorobenzene	284	10.634	10.634	(0.945)	80209	20.0000	18.512
195	Atrazine	200	10.890	10.890	(0.968)	57649	20.0000	20.530
53	Pentachlorophenol	266	11.017	11.017	(0.979)	50136	20.0000	18.235
54	Phenanthrene	178	11.299	11.299	(1.004)	276433	20.0000	19.343
55	Anthracene	178	11.393	11.393	(1.013)	283888	20.0000	19.612
56	Carbazole	167	11.776	11.776	(1.047)	237112	20.0000	19.166
57	Di-n-Butylphthalate	149	12.824	12.824	(1.140)	350172	20.0000	19.335
58	Fluoranthene	202	13.872	13.872	(1.233)	282262	20.0000	19.071
59	Pyrene	202	14.349	14.349	(0.840)	275599	20.0000	19.537
60	Butylbenzylphthalate	149	16.123	16.123	(0.943)	140250	20.0000	19.226
61	3,3'-Dichlorobenzidine	252	17.124	17.124	(1.002)	100727	20.0000	17.699
62	Benzo(a)Anthracene	228	17.050	17.050	(0.998)	244945	20.0000	19.232
63	Chrysene	228	17.144	17.144	(1.003)	225744	20.0000	19.048
64	bis(2-ethylhexyl)Phthalate	149	17.554	17.554	(1.027)	184671	20.0000	18.864
65	Di-n-octylphthalate	149	18.864	18.864	(0.941)	308734	20.0000	18.867
66	Benzo(b)fluoranthene	252	19.327	19.327	(0.964)	220805	20.0000	16.963
67	Benzo(k)fluoranthene	252	19.374	19.374	(0.966)	251432	20.0000	20.851

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
68	Benzo(a)pyrene	252	19.932	19.932	(0.994)	196403	20.0000	18.222
69	Indeno(1,2,3-cd)pyrene	276	21.914	21.914	(1.093)	207958	20.0000	16.770
70	Dibenz(a,h)anthracene	278	21.967	21.967	(1.095)	208794	20.0000	16.913
71	Benzo(g,h,i)perylene	276	22.323	22.323	(1.113)	205154	20.0000	18.407
$ 72	Nitrobenzene-d5	82	5.112	5.112	(0.879)	104198	20.0000	19.595
$ 73	2-Fluorobiphenyl	172	7.269	7.269	(0.868)	203931	20.0000	19.658
$ 74	Terphenyl-d14	244	14.846	14.846	(0.869)	233315	20.0000	18.919
$ 75	Phenol-d5	99	4.333	4.333	(0.943)	109506	20.0000	19.665
$ 76	2-Fluorophenol	112	3.534	3.534	(0.769)	86836	20.0000	19.500
$ 77	2,4,6-Tribromophenol	330	9.882	9.882	(0.878)	46023	20.0000	17.920
$ 78	2-Chlorophenol-d4	132	4.434	4.434	(0.965)	88814	20.0000	19.490
$ 79	1,2-Dichlorobenzene-d4	152	4.756	4.756	(1.035)	69577	20.0000	19.865

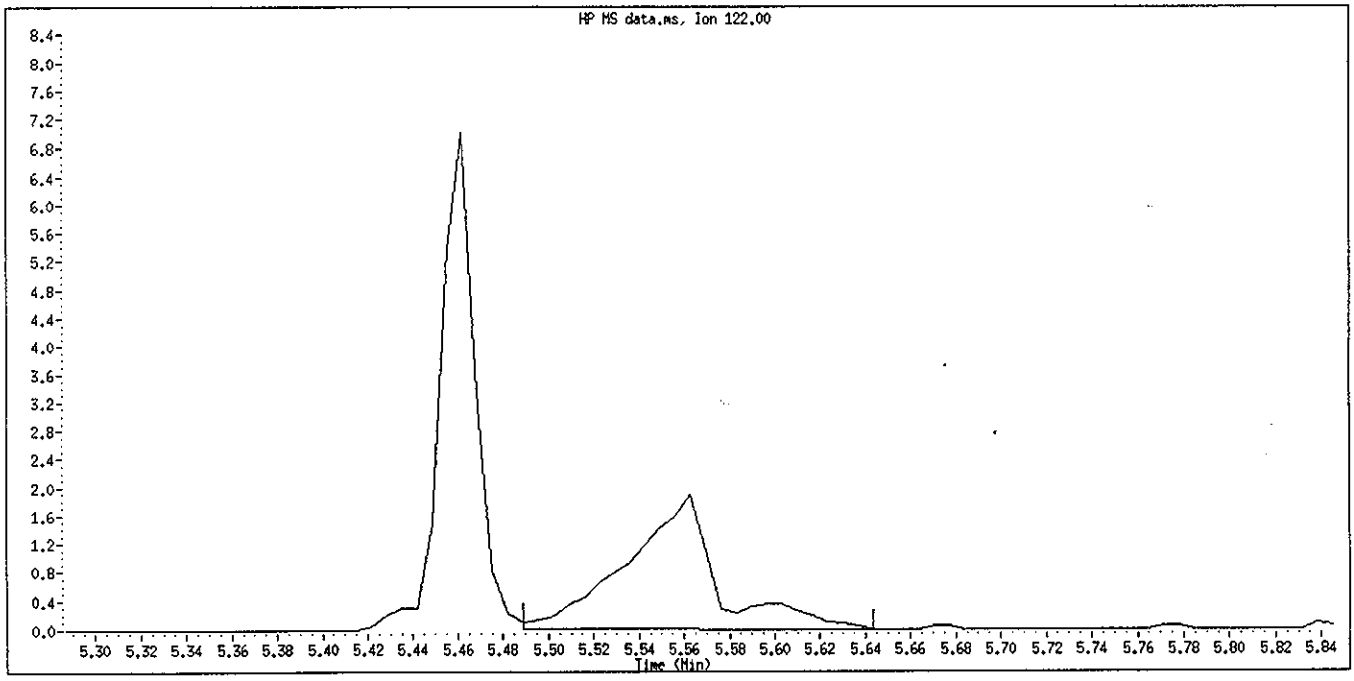
QC Flag Legend

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

Data File Name: D1002CC1.D
Inj. Date and Time: 02-OCT-2000 10:22
Instrument ID: 721.i
Client ID: SSTD020
Compound Name: Benzoic acid
CAS #: 65-85-0
Report Date: 10/02/2000



Original Integration



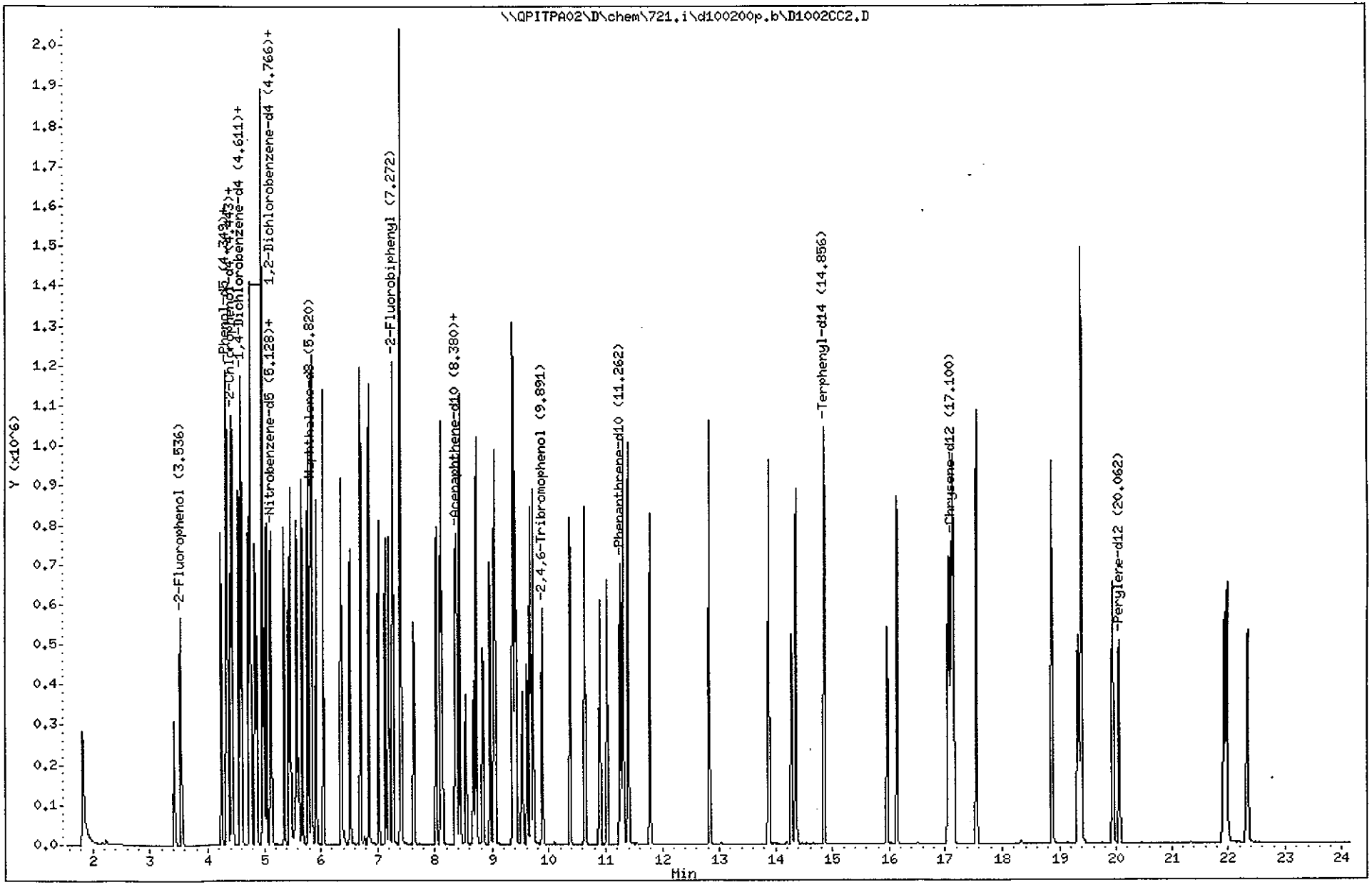
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File: \\QPITPA02\D\chem\721.i\d100200p.b\D1002CC2.D
Date : 02-OCT-2000 10:52
Client ID: SSTD050
Sample Info: sstd050 (25ug/ml) 77-01-6 8270c/clp/625

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

Column phase:



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d100200p.b\D1002CC2.D
Lab Smp Id: sstd50 Client Smp ID: SSTD050
Inj Date : 02-OCT-2000 10:52
Operator : 001562, DLF Inst ID: 721.i
Smp Info : sstd050 (25ug/ml) 77-01-6 8270c/clp/625
Misc Info : sstd50,d100200p.b,clp.m,1-all.sub,2
Comment :
Method : \\QPITPA02\D\chem\721.i\d100200p.b\clp.m
Meth Date : 02-Oct-2000 14:51 ferguson Quant Type: ISTD
Cal Date : 02-OCT-2000 10:22 Cal File: D1002CC1.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-2-00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1 1,4-Dichlorobenzene-d4	152	4.597	4.597	(1.000)	139168	40.0000	
* 2 Naphthalene-d8	136	5.820	5.820	(1.000)	477523	40.0000	
* 3 Acenaphthene-d10	164	8.379	8.379	(1.000)	274400	40.0000	
* 4 Phenanthrene-d10	188	11.261	11.261	(1.000)	502799	40.0000	
* 5 Chrysene-d12	240	17.099	17.099	(1.000)	455433	40.0000	
* 6 Perylene-d12	264	20.062	20.062	(1.000)	358147	40.0000	
191 Benzaldehyde	77	4.248	4.248	(0.924)	173429	50.0000	51.891
7 Phenol	94	4.349	4.349	(0.946)	282346	50.0000	49.893
8 Bis(2-chloroethyl)ether	93	4.416	4.416	(0.961)	207287	50.0000	50.013
9 2-Chlorophenol	128	4.450	4.450	(0.968)	231600	50.0000	49.477
10 1,3-Dichlorobenzene	146	4.570	4.570	(0.994)	252317	50.0000	49.528
11 1,4-Dichlorobenzene	146	4.611	4.611	(1.003)	259918	50.0000	49.028
12 1,2-Dichlorobenzene	146	4.772	4.772	(1.038)	244654	50.0000	49.589
189 Benzyl Alcohol	108	4.738	4.738	(1.031)	143270	50.0000	47.670
13 2-Methylphenol	108	4.839	4.839	(1.053)	194870	50.0000	50.644
14 2,2'-oxybis(1-Chloropropane)	45	4.873	4.873	(1.060)	256426	50.0000	50.433
192 Acetophenone	105	4.973	4.973	(1.082)	321693	50.0000	49.648
15 4-Methylphenol	108	4.967	4.967	(1.080)	206892	50.0000	49.470
16 N-Nitroso-di-n-propylamine	70	5.007	5.007	(1.089)	140315	50.0000	49.827
17 Hexachloroethane	117	5.041	5.041	(1.096)	114848	50.0000	49.583
18 Nitrobenzene	77	5.135	5.135	(0.882)	233275	50.0000	49.604
19 Isophorone	82	5.356	5.356	(0.920)	388360	50.0000	49.513
20 2-Nitrophenol	139	5.437	5.437	(0.934)	130882	50.0000	49.478
21 2,4-Dimethylphenol	107	5.464	5.464	(0.939)	221132	50.0000	48.944
22 Bis(2-chloroethoxy)methane	93	5.571	5.571	(0.957)	239833	50.0000	49.236
190 Benzoic acid	122	5.612	5.612	(0.964)	131484	50.0000	45.336

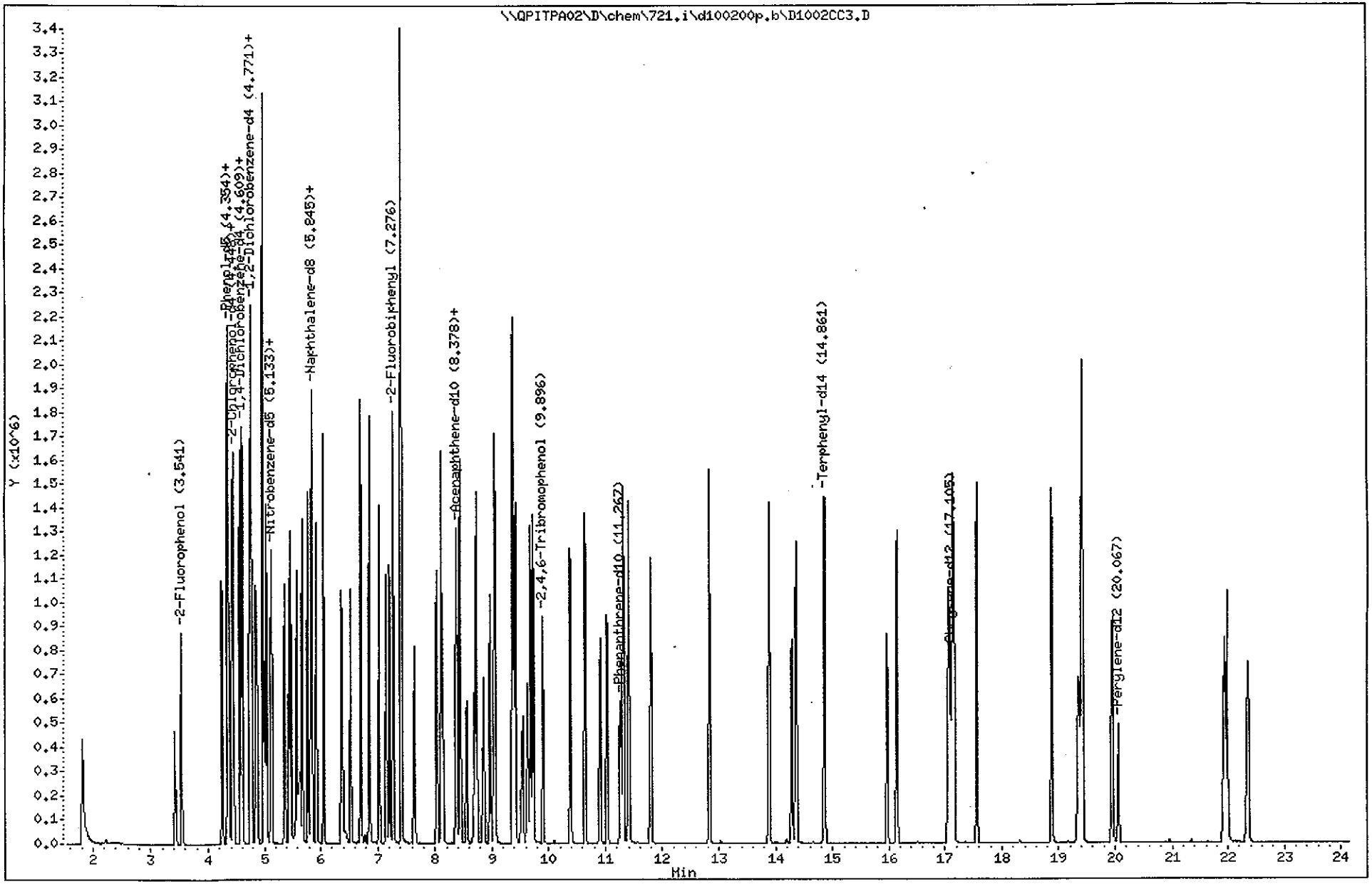
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
23	2,4-Dichlorophenol	162	5.672	5.672	(0.975)	199096	50.0000	48.341
24	1,2,4-Trichlorobenzene	180	5.773	5.773	(0.992)	221404	50.0000	48.634
25	Naphthalene	128	5.847	5.847	(1.005)	631259	50.0000	49.257
26	4-Chloroaniline	127	5.921	5.921	(1.017)	259943	50.0000	49.495
193	Caprolactam	113	6.357	6.357	(1.092)	68181	50.0000	51.379
27	Hexachlorobutadiene	225	6.048	6.048	(1.039)	148395	50.0000	48.351
28	4-Chloro-3-Methylphenol	107	6.519	6.519	(1.120)	190635	50.0000	49.192
29	2-Methylnaphthalene	142	6.700	6.700	(1.151)	394959	50.0000	48.949
30	Hexachlorocyclopentadiene	237	7.029	7.029	(0.839)	175366	50.0000	48.727
31	2,4,6-Trichlorophenol	196	7.143	7.143	(0.852)	145722	50.0000	48.746
32	2,4,5-Trichlorophenol	196	7.204	7.204	(0.860)	162236	50.0000	50.659
194	1,1'-Biphenyl	154	7.405	7.405	(0.884)	519082	50.0000	48.852
33	2-Chloronaphthalene	162	7.419	7.419	(0.885)	415424	50.0000	49.456
34	2-Nitroaniline	65	7.640	7.640	(0.912)	130079	50.0000	50.773
35	Dimethylphthalate	163	8.030	8.030	(0.958)	494978	50.0000	50.509
36	Acenaphthylene	152	8.111	8.111	(0.968)	637756	50.0000	50.596
37	2,6-Dinitrotoluene	165	8.138	8.138	(0.971)	120659	50.0000	50.861
38	3-Nitroaniline	138	8.366	8.366	(0.998)	122414	50.0000	50.282
39	Acenaphthene	153	8.440	8.440	(1.007)	379084	50.0000	49.595
40	2,4-Dinitrophenol	184	8.547	8.547	(1.020)	81564	50.0000	48.549
41	4-Nitrophenol	109	8.682	8.682	(1.036)	100655	50.0000	48.934
42	Dibenzofuran	168	8.729	8.729	(1.042)	581614	50.0000	50.003
43	2,4-Dinitrotoluene	165	8.843	8.843	(1.055)	159874	50.0000	50.090
44	Diethylphthalate	149	9.360	9.360	(1.117)	529536	50.0000	49.287
45	4-Chlorophenyl-phenylether	204	9.414	9.414	(1.123)	234820	50.0000	49.857
46	Fluorene	166	9.380	9.380	(1.119)	461405	50.0000	49.365
47	4-Nitroaniline	138	9.535	9.535	(1.138)	114968	50.0000	50.162
48	4,6-Dinitro-2-methylphenol	198	9.616	9.616	(0.854)	108594	50.0000	48.824
49	N-Nitrosodiphenylamine (1)	169	9.676	9.676	(0.859)	332357	50.0000	48.341
50	4-Bromophenyl-phenylether	248	10.381	10.381	(0.922)	149182	50.0000	47.787
51	Hexachlorobenzene	284	10.643	10.643	(0.945)	198183	50.0000	48.194
195	Atrazine	200	10.905	10.905	(0.968)	129236	50.0000	48.491
53	Pentachlorophenol	266	11.026	11.026	(0.979)	125324	50.0000	48.026
54	Phenanthrene	178	11.308	11.308	(1.004)	658677	50.0000	48.561
55	Anthracene	178	11.402	11.402	(1.013)	680485	50.0000	49.531
56	Carbazole	167	11.792	11.792	(1.047)	578320	50.0000	49.252
57	Di-n-Butylphthalate	149	12.827	12.827	(1.139)	841985	50.0000	48.986
58	Fluoranthene	202	13.888	13.888	(1.233)	692424	50.0000	49.293
59	Pyrene	202	14.358	14.358	(0.840)	663439	50.0000	49.812
60	Butylbenzylphthalate	149	16.132	16.132	(0.943)	344226	50.0000	49.980
61	3,3'-Dichlorobenzidine	252	17.133	17.133	(1.002)	257990	50.0000	48.013
62	Benzo(a)Anthracene	228	17.059	17.059	(0.998)	593949	50.0000	49.392
63	Chrysene	228	17.160	17.160	(1.004)	549864	50.0000	49.140
64	bis(2-ethylhexyl)Phthalate	149	17.556	17.556	(1.027)	458970	50.0000	49.656
65	Di-n-octylphthalate	149	18.873	18.873	(0.941)	776988	50.0000	47.749
66	Benzo(b)fluoranthene	252	19.343	19.343	(0.964)	540570	50.0000	41.760
67	Benzo(k)fluoranthene	252	19.397	19.397	(0.967)	629537	50.0000	52.498

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
	68 Benzo(a)pyrene	252	19.948	19.948	(0.994)	516355	50.0000	48.173
	69 Indeno(1,2,3-cd)pyrene	276	21.936	21.936	(1.093)	548354	50.0000	44.468
	70 Dibenz(a,h)anthracene	278	21.983	21.983	(1.096)	549148	50.0000	44.732
	71 Benzo(g,h,i)perylene	276	22.346	22.346	(1.114)	518482	50.0000	46.780
$	72 Nitrobenzene-d5	82	5.115	5.115	(0.879)	243808	50.0000	48.623
$	73 2-Fluorobiphenyl	172	7.271	7.271	(0.868)	481978	50.0000	49.782
$	74 Terphenyl-d14	244	14.855	14.855	(0.869)	572244	50.0000	49.146
$	75 Phenol-d5	99	4.342	4.342	(0.944)	268479	50.0000	50.211
$	76 2-Fluorophenol	112	3.536	3.536	(0.769)	215006	50.0000	50.282
$	77 2,4,6-Tribromophenol	330	9.891	9.891	(0.878)	114157	50.0000	46.834
$	78 2-Chlorophenol-d4	132	4.436	4.436	(0.965)	212027	50.0000	48.456
$	79 1,2-Dichlorobenzene-d4	152	4.759	4.759	(1.035)	163831	50.0000	48.712

Data File: \\QPITPA02\D\chem\721.i\d100200p.b\D1002CC3.D
Date : 02-OCT-2000 11:22
Client ID: SSTD080
Sample Info: sstd080 (40ug/ml) 77-01-7 8270c/clp/625

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

Column phase:



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d100200p.b\D1002CC3.D
Lab Smp Id: sstd80 Client Smp ID: SSTD080
Inj Date : 02-OCT-2000 11:22
Operator : 001562, DLF Inst ID: 721.i
Smp Info : sstd080 (40ug/ml) 77-01-7 8270c/clp/625
Misc Info : sstd80,d100200p.b,clp.m,1-all.sub,1,3
Comment :
Method : \\QPITPA02\D\chem\721.i\d100200p.b\clp.m
Meth Date : 02-Oct-2000 14:52 ferguson Quant Type: ISTD
Cal Date : 02-OCT-2000 10:22 Cal File: D1002CC1.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-2-00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	4.602	4.602	(1.000)	137332	40.0000	
* 2	Naphthalene-d8	136	5.825	5.825	(1.000)	462383	40.0000	
* 3	Acenaphthene-d10	164	8.384	8.384	(1.000)	271888	40.0000	
* 4	Phenanthrene-d10	188	11.266	11.266	(1.000)	483973	40.0000	
* 5	Chrysene-d12	240	17.104	17.104	(1.000)	443280	40.0000	
* 6	Perylene-d12	264	20.067	20.067	(1.000)	340553	40.0000	
191	Benzaldehyde	77	4.246	4.246	(0.923)	266856	80.0000	80.912
7	Phenol	94	4.354	4.354	(0.946)	449552	80.0000	80.502
8	Bis(2-chloroethyl)ether	93	4.421	4.421	(0.961)	325694	80.0000	79.631 (M)
9	2-Chlorophenol	128	4.454	4.454	(0.968)	366775	80.0000	79.402
10	1,3-Dichlorobenzene	146	4.569	4.569	(0.993)	394968	80.0000	78.566
11	1,4-Dichlorobenzene	146	4.616	4.616	(1.003)	417953	80.0000	79.892
12	1,2-Dichlorobenzene	146	4.777	4.777	(1.038)	385396	80.0000	79.160
189	Benzyl Alcohol	108	4.743	4.743	(1.031)	242826	80.0000	81.876
13	2-Methylphenol	108	4.844	4.844	(1.053)	299876	80.0000	78.976
14	2,2'-oxybis(1-Chloropropane)	45	4.871	4.871	(1.058)	401034	80.0000	79.929
192	Acetophenone	105	4.978	4.978	(1.082)	509390	80.0000	79.668
15	4-Methylphenol	108	4.978	4.978	(1.082)	330339	80.0000	80.044
16	N-Nitroso-di-n-propylamine	70	5.012	5.012	(1.089)	219305	80.0000	78.919
17	Hexachloroethane	117	5.046	5.046	(1.096)	180426	80.0000	78.936
18	Nitrobenzene	77	5.140	5.140	(0.882)	358142	80.0000	78.650
19	Isophorone	82	5.361	5.361	(0.920)	604575	80.0000	79.603
20	2-Nitrophenol	139	5.442	5.442	(0.934)	205978	80.0000	80.416
21	2,4-Dimethylphenol	107	5.476	5.476	(0.940)	348903	80.0000	79.752
22	Bis(2-chloroethoxy)methane	93	5.576	5.576	(0.957)	375560	80.0000	79.625
190	Benzoic acid	122	5.650	5.650	(0.970)	240056	80.0000	85.482

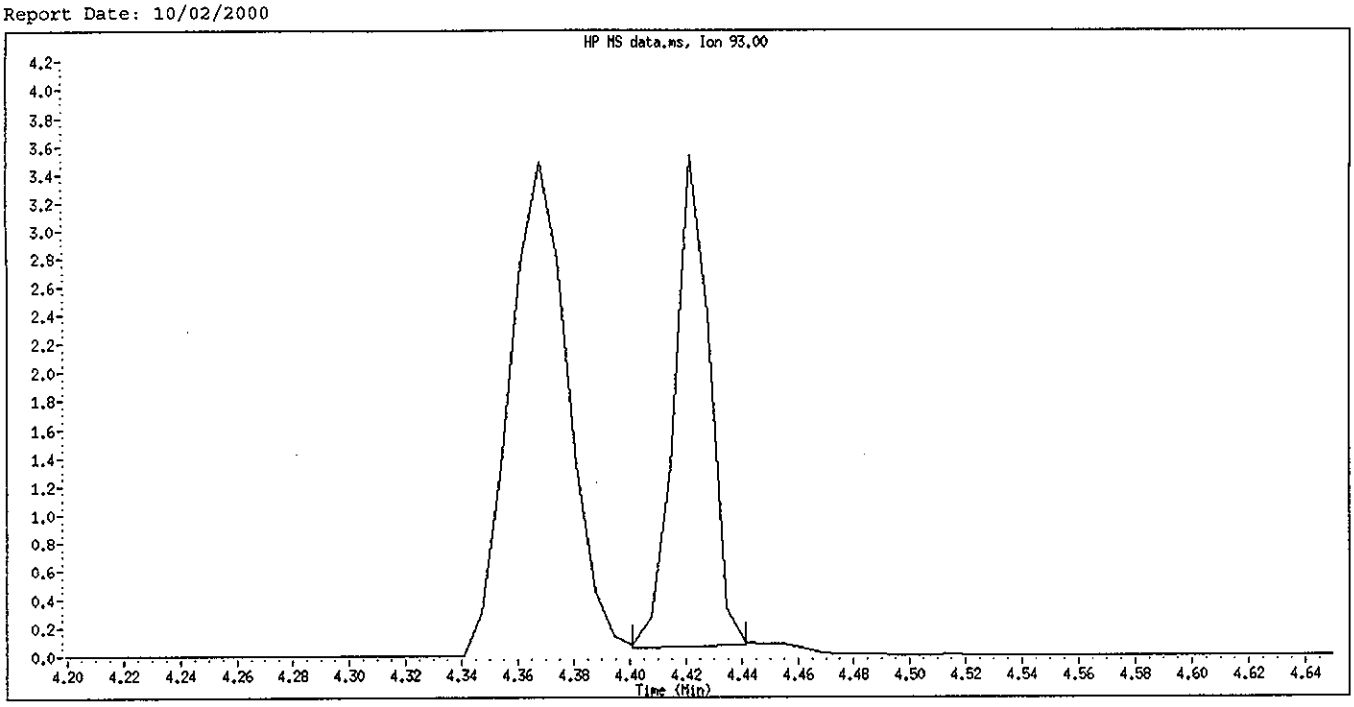
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
23	2,4-Dichlorophenol	162	5.677	5.677	(0.975)	315559	80.0000	79.127
24	1,2,4-Trichlorobenzene	180	5.778	5.778	(0.992)	349485	80.0000	79.282
25	Naphthalene	128	5.845	5.845	(1.003)	987579	80.0000	79.584
26	4-Chloroaniline	127	5.926	5.926	(1.017)	404614	80.0000	79.564
193	Caprolactam	113	6.382	6.382	(1.096)	106995	80.0000	83.269(M)
27	Hexachlorobutadiene	225	6.053	6.053	(1.039)	235884	80.0000	79.374
28	4-Chloro-3-Methylphenol	107	6.530	6.530	(1.121)	297079	80.0000	79.169
29	2-Methylnaphthalene	142	6.705	6.705	(1.151)	619798	80.0000	79.330
30	Hexachlorocyclopentadiene	237	7.027	7.027	(0.838)	284427	80.0000	79.761
31	2,4,6-Trichlorophenol	196	7.155	7.155	(0.853)	235543	80.0000	79.520
32	2,4,5-Trichlorophenol	196	7.215	7.215	(0.861)	253252	80.0000	79.810
194	1,1'-Biphenyl	154	7.417	7.417	(0.885)	836964	80.0000	79.496
33	2-Chloronaphthalene	162	7.424	7.424	(0.885)	662457	80.0000	79.594
34	2-Nitroaniline	65	7.652	7.652	(0.913)	203829	80.0000	80.294
35	Dimethylphthalate	163	8.035	8.035	(0.958)	767939	80.0000	79.087
36	Acenaphthylene	152	8.116	8.116	(0.968)	992602	80.0000	79.476
37	2,6-Dinitrotoluene	165	8.143	8.143	(0.971)	185197	80.0000	78.787
38	3-Nitroaniline	138	8.378	8.378	(0.999)	191726	80.0000	79.480
39	Acenaphthene	153	8.445	8.445	(1.007)	598204	80.0000	78.985
40	2,4-Dinitrophenol	184	8.559	8.559	(1.021)	137267	80.0000	82.460
41	4-Nitrophenol	109	8.700	8.700	(1.038)	160863	80.0000	78.927
42	Dibenzofuran	168	8.734	8.734	(1.042)	912668	80.0000	79.190
43	2,4-Dinitrotoluene	165	8.861	8.861	(1.057)	252781	80.0000	79.930
44	Diethylphthalate	149	9.372	9.372	(1.118)	848826	80.0000	79.735
45	4-Chlorophenyl-phenylether	204	9.426	9.426	(1.124)	365284	80.0000	78.274
46	Fluorene	166	9.392	9.392	(1.120)	735036	80.0000	79.367
47	4-Nitroaniline	138	9.553	9.553	(1.139)	180037	80.0000	79.279
48	4,6-Dinitro-2-methylphenol	198	9.634	9.634	(0.855)	171612	80.0000	80.158
49	N-Nitrosodiphenylamine (1)	169	9.688	9.688	(0.860)	517366	80.0000	78.178
50	4-Bromophenyl-phenylether	248	10.393	10.393	(0.922)	239150	80.0000	79.586
51	Hexachlorobenzene	284	10.648	10.648	(0.945)	313229	80.0000	79.134
195	Atrazine	200	10.924	10.924	(0.970)	200605	80.0000	78.198
53	Pentachlorophenol	266	11.031	11.031	(0.979)	202525	80.0000	80.630
54	Phenanthrene	178	11.320	11.320	(1.005)	1037481	80.0000	79.464
55	Anthracene	178	11.414	11.414	(1.013)	1036135	80.0000	78.352
56	Carbazole	167	11.797	11.797	(1.047)	898910	80.0000	79.533
57	Di-n-Butylphthalate	149	12.832	12.832	(1.139)	1326647	80.0000	80.185
58	Fluoranthene	202	13.893	13.893	(1.233)	1079606	80.0000	79.845
59	Pyrene	202	14.370	14.370	(0.840)	1024832	80.0000	79.056
60	Butylbenzylphthalate	149	16.143	16.143	(0.944)	535408	80.0000	79.870
61	3,3'-Dichlorobenzidine	252	17.138	17.138	(1.002)	418389	80.0000	79.998
62	Benzo(a)Anthracene	228	17.071	17.071	(0.998)	927100	80.0000	79.211
63	Chrysene	228	17.165	17.165	(1.004)	864919	80.0000	79.415
64	bis(2-ethylhexyl)Phthalate	149	17.561	17.561	(1.027)	717683	80.0000	79.775
65	Di-n-octylphthalate	149	18.878	18.878	(0.941)	1221404	80.0000	78.938
66	Benzo(b)fluoranthene	252	19.361	19.361	(0.965)	914013	80.0000	74.257
67	Benzo(k)fluoranthene	252	19.415	19.415	(0.968)	920223	80.0000	80.703(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
68 Benzo(a)pyrene	252	19.966	19.966	(0.995)	803926	80.0000	78.877
69 Indeno(1,2,3-cd)pyrene	276	21.948	21.948	(1.094)	887562	80.0000	75.694
70 Dibenz(a,h)anthracene	278	22.001	22.001	(1.096)	889963	80.0000	76.239
71 Benzo(g,h,i)perylene	276	22.364	22.364	(1.114)	807723	80.0000	76.643
$ 72 Nitrobenzene-d5	82	5.119	5.119	(0.879)	390830	80.0000	80.497
$ 73 2-Fluorobiphenyl	172	7.276	7.276	(0.868)	771603	80.0000	80.433
$ 74 Terphenyl-d14	244	14.867	14.867	(0.869)	905649	80.0000	79.912
$ 75 Phenol-d5	99	4.347	4.347	(0.945)	425548	80.0000	80.650
$ 76 2-Fluorophenol	112	3.541	3.541	(0.769)	338228	80.0000	80.157
$ 77 2,4,6-Tribromophenol	330	9.903	9.903	(0.879)	187278	80.0000	79.821
$ 78 2-Chlorophenol-d4	132	4.441	4.441	(0.965)	346496	80.0000	80.245
$ 79 1,2-Dichlorobenzene-d4	152	4.763	4.763	(1.035)	267543	80.0000	80.613

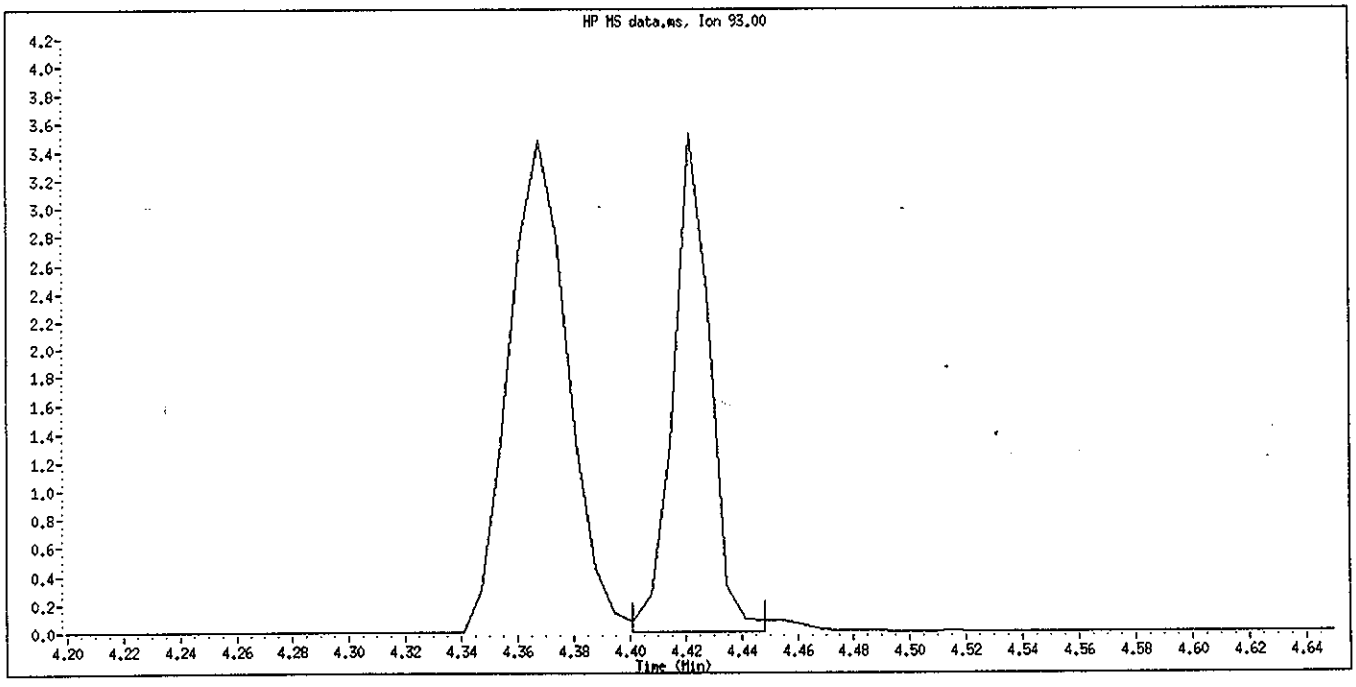
QC Flag Legend

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

Data File Name: D1002CC3.D
Inj. Date and Time: 02-OCT-2000 11:22
Instrument ID: 721.i
Client ID: SSTD080
Compound Name: Bis(2-chloroethyl)ether
CAS #: 111-44-4
Report Date: 10/02/2000



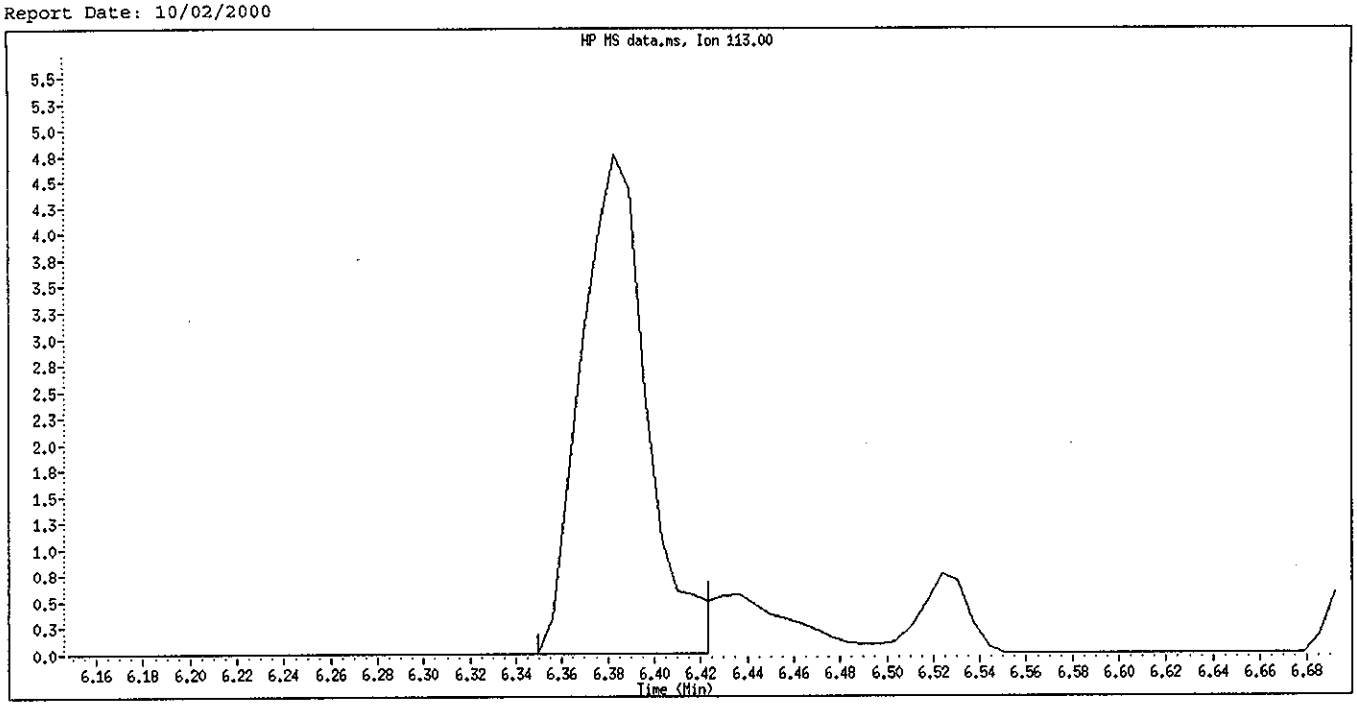
Original Integration



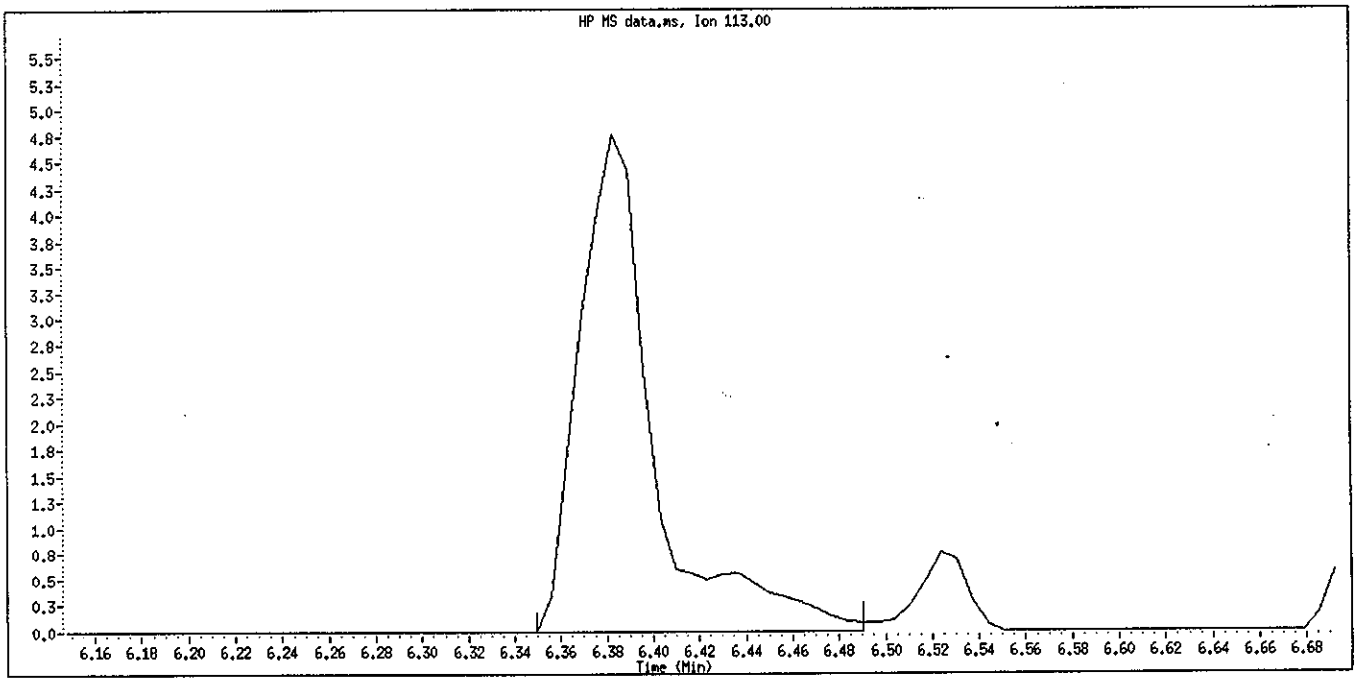
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1002CC3.D
Inj. Date and Time: 02-OCT-2000 11:22
Instrument ID: 721.i
Client ID: SSTD080
Compound Name: Caprolactam
CAS #: 105-60-2
Report Date: 10/02/2000



Original Integration



Manual Integration

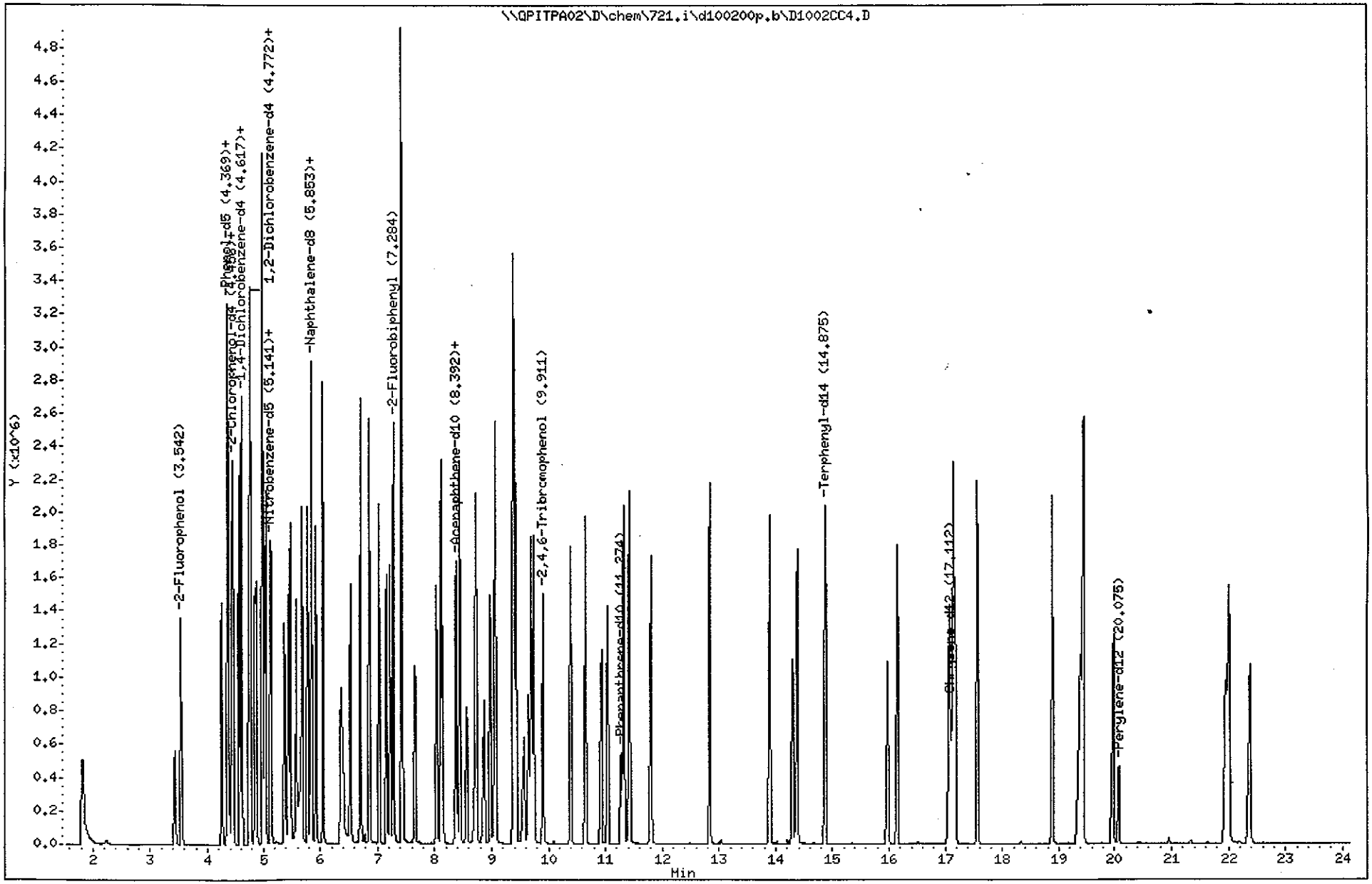
Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File: \\QPITPA02\D\chem\721.i\d100200p.b\D1002CC4.D
Date : 02-OCT-2000 11:52
Client ID: SSTD120
Sample Info: sstd120 (60ug/ml) 77-01-8 8270c/clp/625

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25

Column phase:



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d100200p.b\D1002CC4.D
Lab Smp Id: sstd120 Client Smp ID: SSTD120
Inj Date : 02-OCT-2000 11:52
Operator : 001562, DLF Inst ID: 721.i
Smp Info : sstd120 (60ug/ml) 77-01-8 8270c/clp/625
Misc Info : sstd120,d100200p.b,clp.m,1-all.sub,1,4
Comment :
Method : \\QPITPA02\D\chem\721.i\d100200p.b\clp.m
Meth Date : 02-Oct-2000 14:54 ferguson Quant Type: ISTD
Cal Date : 02-OCT-2000 10:22 Cal File: D1002CC1.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-2-00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	4.603	4.603	(1.000)	138047	40.0000	
* 2	Naphthalene-d8	136	5.826	5.826	(1.000)	450274	40.0000	
* 3	Acenaphthene-d10	164	8.392	8.392	(1.000)	267307	40.0000	
* 4	Phenanthrene-d10	188	11.274	11.274	(1.000)	473954	40.0000	
* 5	Chrysene-d12	240	17.112	17.112	(1.000)	425703	40.0000	
* 6	Perylene-d12	264	20.074	20.074	(1.000)	315676	40.0000	
191	Benzaldehyde	77	4.254	4.254	(0.924)	383536	120.000	115.69
7	Phenol	94	4.368	4.368	(0.949)	678871	120.000	120.94
8	Bis(2-chloroethyl)ether	93	4.428	4.428	(0.962)	492744	120.000	119.85(M)
9	2-Chlorophenol	128	4.462	4.462	(0.969)	560729	120.000	120.76
10	1,3-Dichlorobenzene	146	4.576	4.576	(0.994)	610909	120.000	120.89
11	1,4-Dichlorobenzene	146	4.617	4.617	(1.003)	635912	120.000	120.92
12	1,2-Dichlorobenzene	146	4.778	4.778	(1.038)	598871	120.000	122.37
189	Benzyl Alcohol	108	4.751	4.751	(1.032)	370358	120.000	124.23
13	2-Methylphenol	108	4.858	4.858	(1.055)	456750	120.000	119.67
14	2,2'-oxybis(1-Chloropropane)	45	4.879	4.879	(1.060)	605504	120.000	120.06
192	Acetophenone	105	4.993	4.993	(1.085)	778703	120.000	121.16
15	4-Methylphenol	108	4.986	4.986	(1.083)	503646	120.000	121.41
16	N-Nitroso-di-n-propylamine	70	5.026	5.026	(1.092)	338197	120.000	121.07
17	Hexachloroethane	117	5.047	5.047	(1.096)	277322	120.000	120.70
18	Nitrobenzene	77	5.147	5.147	(0.884)	550988	120.000	124.25
19	Isophorone	82	5.376	5.376	(0.923)	903780	120.000	122.20
20	2-Nitrophenol	139	5.450	5.450	(0.935)	307388	120.000	123.24
21	2,4-Dimethylphenol	107	5.483	5.483	(0.941)	527643	120.000	123.85
22	Bis(2-chloroethoxy)methane	93	5.591	5.591	(0.960)	562438	120.000	122.45
190	Benzoic acid	122	5.678	5.678	(0.975)	350477	120.000	128.16(M)

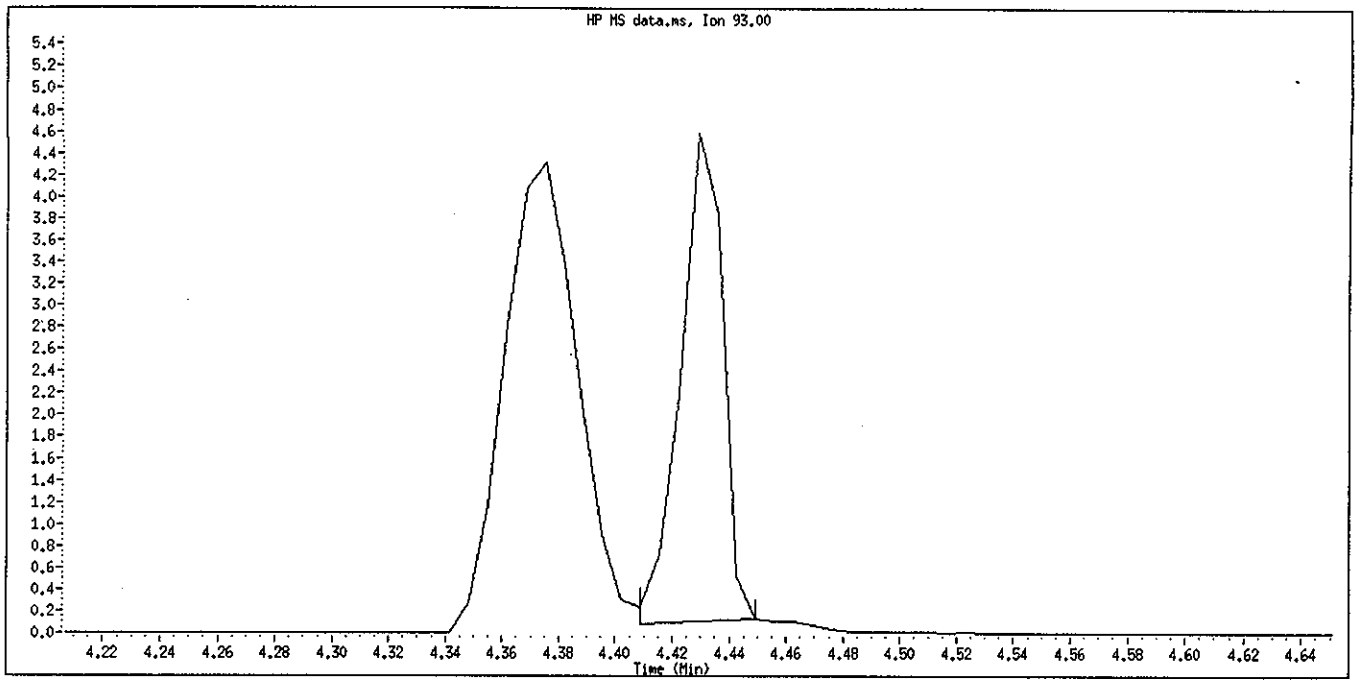
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
23	2,4-Dichlorophenol	162	5.691	5.691	(0.977)	488645	120.000	125.82
24	1,2,4-Trichlorobenzene	180	5.785	5.785	(0.993)	533671	120.000	124.32
25	Naphthalene	128	5.853	5.853	(1.005)	1492422	120.000	123.50
26	4-Chloroaniline	127	5.933	5.933	(1.018)	614207	120.000	124.03
193	Caprolactam	113	6.410	6.410	(1.100)	152101	120.000	121.56 (M)
27	Hexachlorobutadiene	225	6.054	6.054	(1.039)	369205	120.000	127.58
28	4-Chloro-3-Methylphenol	107	6.545	6.545	(1.123)	447280	120.000	122.40
29	2-Methylnaphthalene	142	6.713	6.713	(1.152)	949813	120.000	124.84
30	Hexachlorocyclopentadiene	237	7.035	7.035	(0.838)	439389	120.000	125.33
31	2,4,6-Trichlorophenol	196	7.163	7.163	(0.854)	360074	120.000	123.64
32	2,4,5-Trichlorophenol	196	7.223	7.223	(0.861)	376185	120.000	120.58
194	1,1'-Biphenyl	154	7.425	7.425	(0.885)	1279156	120.000	123.58
33	2-Chloronaphthalene	162	7.431	7.431	(0.886)	1010386	120.000	123.48
34	2-Nitroaniline	65	7.660	7.660	(0.913)	301909	120.000	120.97
35	Dimethylphthalate	163	8.049	8.049	(0.959)	1162324	120.000	121.76
36	Acenaphthylene	152	8.123	8.123	(0.968)	1486897	120.000	121.09
37	2,6-Dinitrotoluene	165	8.157	8.157	(0.972)	281920	120.000	121.99
38	3-Nitroaniline	138	8.392	8.392	(1.000)	289774	120.000	122.18
39	Acenaphthene	153	8.459	8.459	(1.008)	920754	120.000	123.66
40	2,4-Dinitrophenol	184	8.573	8.573	(1.022)	215375	120.000	131.60
41	4-Nitrophenol	109	8.728	8.728	(1.040)	248676	120.000	124.10
42	Dibenzofuran	168	8.748	8.748	(1.042)	1393476	120.000	122.98
43	2,4-Dinitrotoluene	165	8.882	8.882	(1.058)	379185	120.000	121.95
44	Diethylphthalate	149	9.386	9.386	(1.118)	1303441	120.000	124.54
45	4-Chlorophenyl-phenylether	204	9.433	9.433	(1.124)	567030	120.000	123.59
46	Fluorene	166	9.400	9.400	(1.120)	1138120	120.000	125.00
47	4-Nitroaniline	138	9.581	9.581	(1.142)	272262	120.000	121.94
48	4,6-Dinitro-2-methylphenol	198	9.662	9.662	(0.857)	262641	120.000	125.27
49	N-Nitrosodiphenylamine (1)	169	9.702	9.702	(0.861)	801587	120.000	123.69
50	4-Bromophenyl-phenylether	248	10.401	10.401	(0.923)	367117	120.000	124.75
51	Hexachlorobenzene	284	10.663	10.663	(0.946)	486462	120.000	125.50
195	Atrazine	200	10.938	10.938	(0.970)	305574	120.000	121.63
53	Pentachlorophenol	266	11.046	11.046	(0.980)	308827	120.000	125.55
54	Phenanthrene	178	11.328	11.328	(1.005)	1559105	120.000	121.94
55	Anthracene	178	11.428	11.428	(1.014)	1581836	120.000	122.15
56	Carbazole	167	11.811	11.811	(1.048)	1358594	120.000	122.75
57	Di-n-Butylphthalate	149	12.846	12.846	(1.139)	1979345	120.000	122.16
58	Fluoranthene	202	13.907	13.907	(1.234)	1616927	120.000	122.11
59	Pyrene	202	14.378	14.378	(0.840)	1530229	120.000	122.92
60	Butylbenzylphthalate	149	16.151	16.151	(0.944)	794962	120.000	123.49
61	3,3'-Dichlorobenzidine	252	17.152	17.152	(1.002)	641902	120.000	127.80
62	Benzo(a)Anthracene	228	17.078	17.078	(0.998)	1389682	120.000	123.64
63	Chrysene	228	17.186	17.186	(1.004)	1290717	120.000	123.40
64	bis(2-ethylhexyl)Phthalate	149	17.569	17.569	(1.027)	1074605	120.000	124.38
65	Di-n-octylphthalate	149	18.885	18.885	(0.941)	1825391	120.000	127.27
66	Benzo(b)fluoranthene	252	19.389	19.389	(0.966)	1570943	120.000	137.68
67	Benzo(k)fluoranthene	252	19.443	19.443	(0.969)	1206385	120.000	114.14 (MH)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
	68 Benzo(a)pyrene	252	19.980	19.980	(0.995)	1195876	120.000	126.58
	69 Indeno(1,2,3-cd)pyrene	276	21.962	21.962	(1.094)	1417303	120.000	130.40
	70 Dibenz(a,h)anthracene	278	22.016	22.016	(1.097)	1422850	120.000	131.49
	71 Benzo(g,h,i)perylene	276	22.385	22.385	(1.115)	1243974	120.000	127.34
$	72 Nitrobenzene-d5	82	5.127	5.127	(0.880)	584208	120.000	123.56
$	73 2-Fluorobiphenyl	172	7.284	7.284	(0.868)	1146596	120.000	121.57
$	74 Terphenyl-d14	244	14.875	14.875	(0.869)	1351737	120.000	124.20
$	75 Phenol-d5	99	4.355	4.355	(0.946)	643479	120.000	121.32
$	76 2-Fluorophenol	112	3.542	3.542	(0.769)	513823	120.000	121.14
$	77 2,4,6-Tribromophenol	330	9.910	9.910	(0.879)	292741	120.000	127.41
$	78 2-Chlorophenol-d4	132	4.449	4.449	(0.966)	528928	120.000	121.86
$	79 1,2-Dichlorobenzene-d4	152	4.764	4.764	(1.035)	405319	120.000	121.49

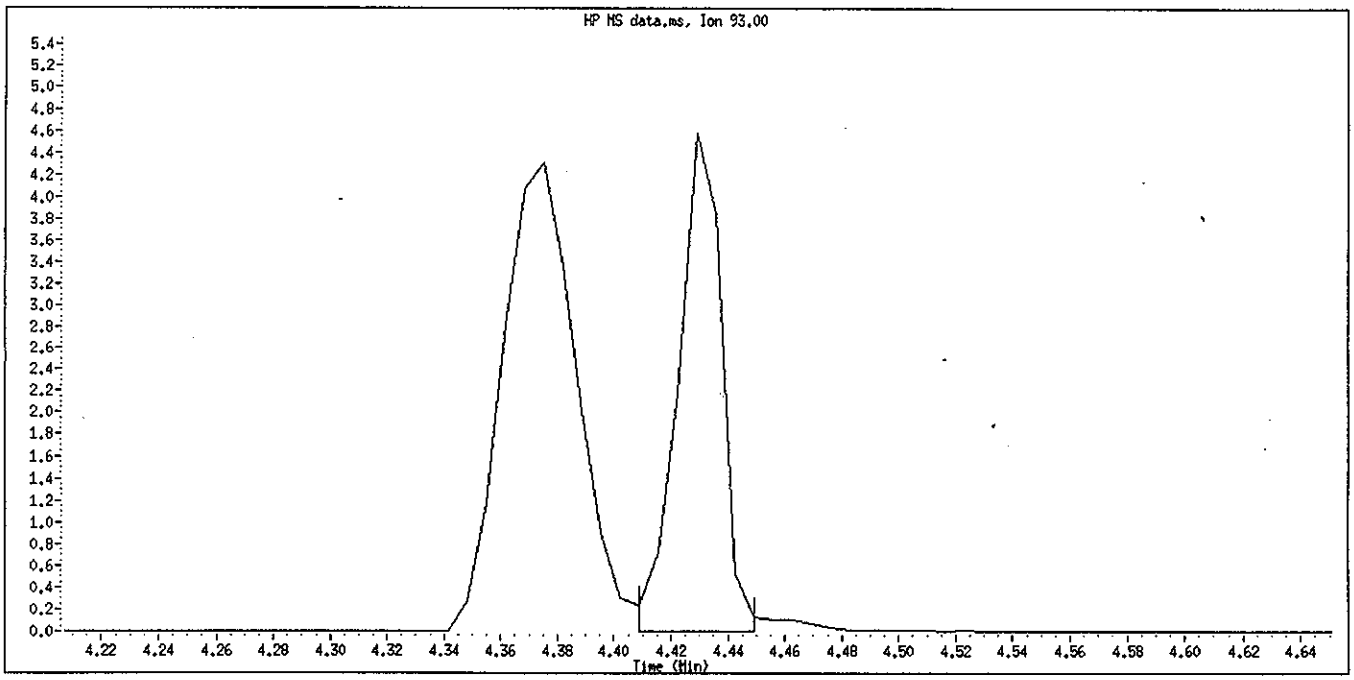
QC Flag Legend

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

Data File Name: D1002CC4.D
Inj. Date and Time: 02-OCT-2000 11:52
Instrument ID: 721.i
Client ID: SSTD120
Compound Name: Bis(2-chloroethyl)ether
CAS #: 111-44-4
Report Date: 10/02/2000



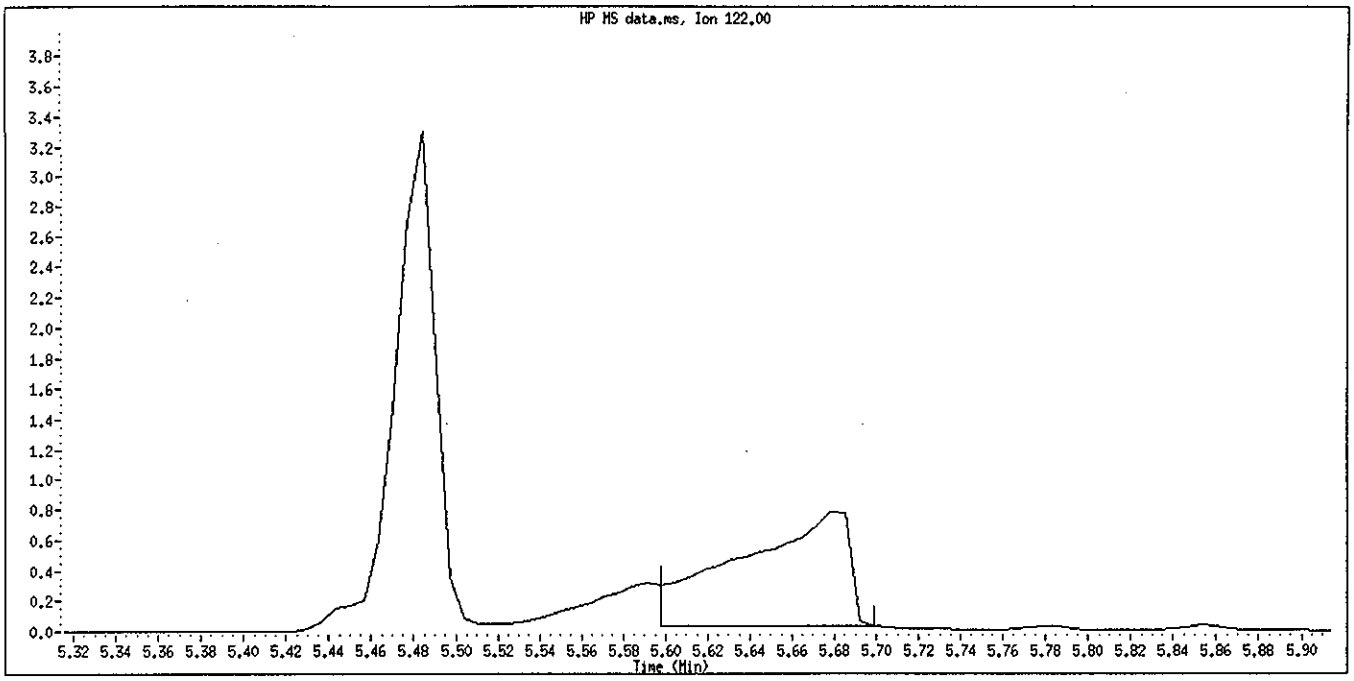
Original Integration



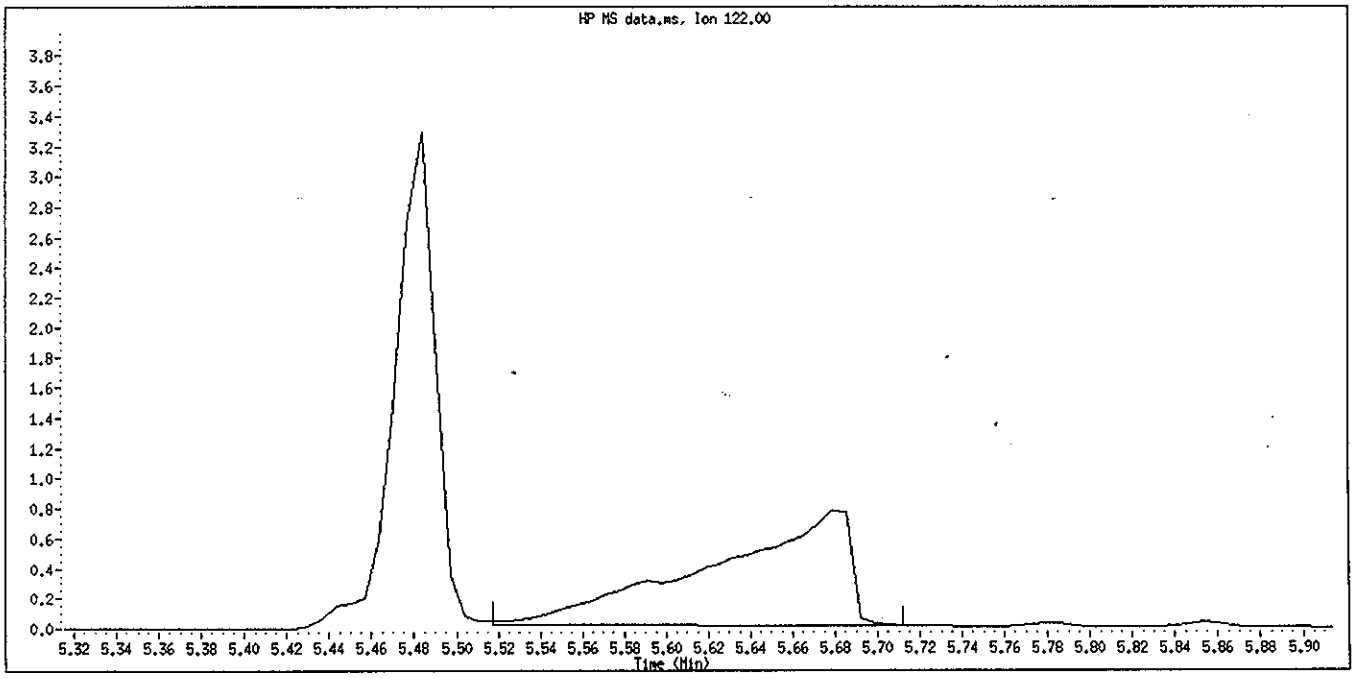
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1002CC4.D
Inj. Date and Time: 02-OCT-2000 11:52
Instrument ID: 721.i
Client ID: SSTD120
Compound Name: Benzoic acid
CAS #: 65-85-0
Report Date: 10/02/2000



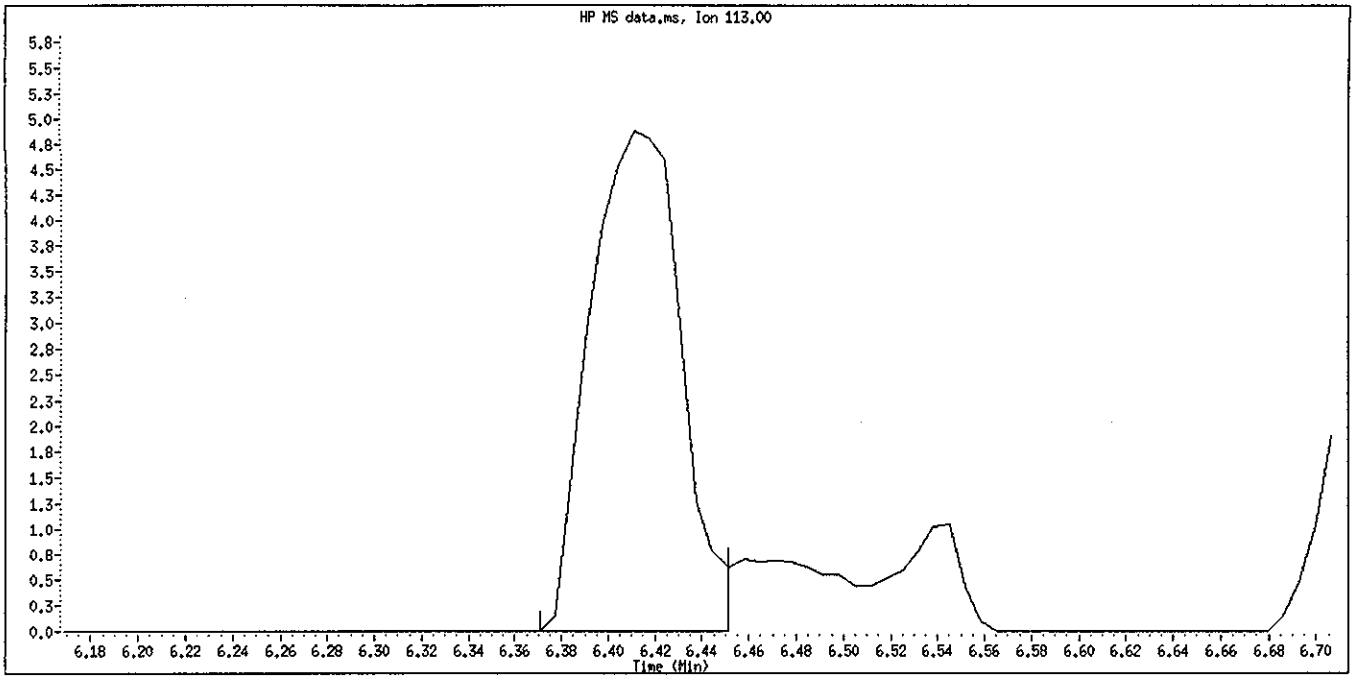
Original Integration



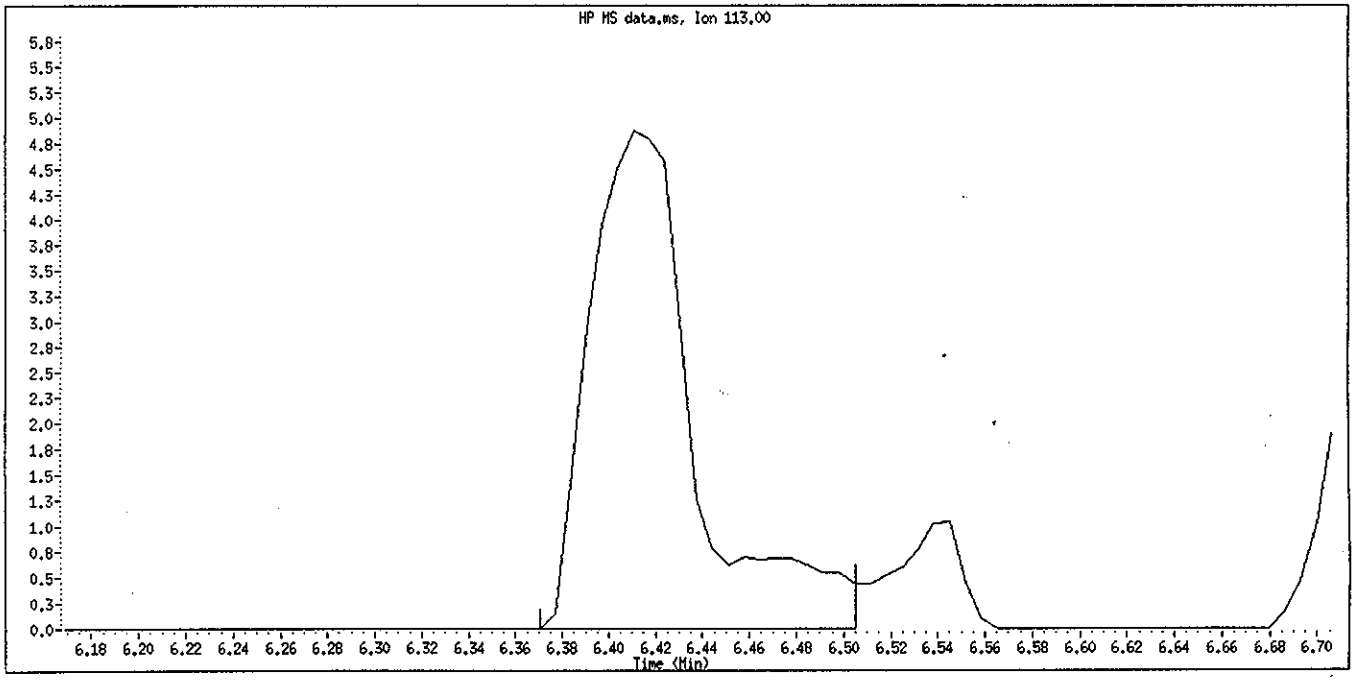
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1002CC4.D
Inj. Date and Time: 02-OCT-2000 11:52
Instrument ID: 721.i
Client ID: SSTD120
Compound Name: Caprolactam
CAS #: 105-60-2
Report Date: 10/02/2000



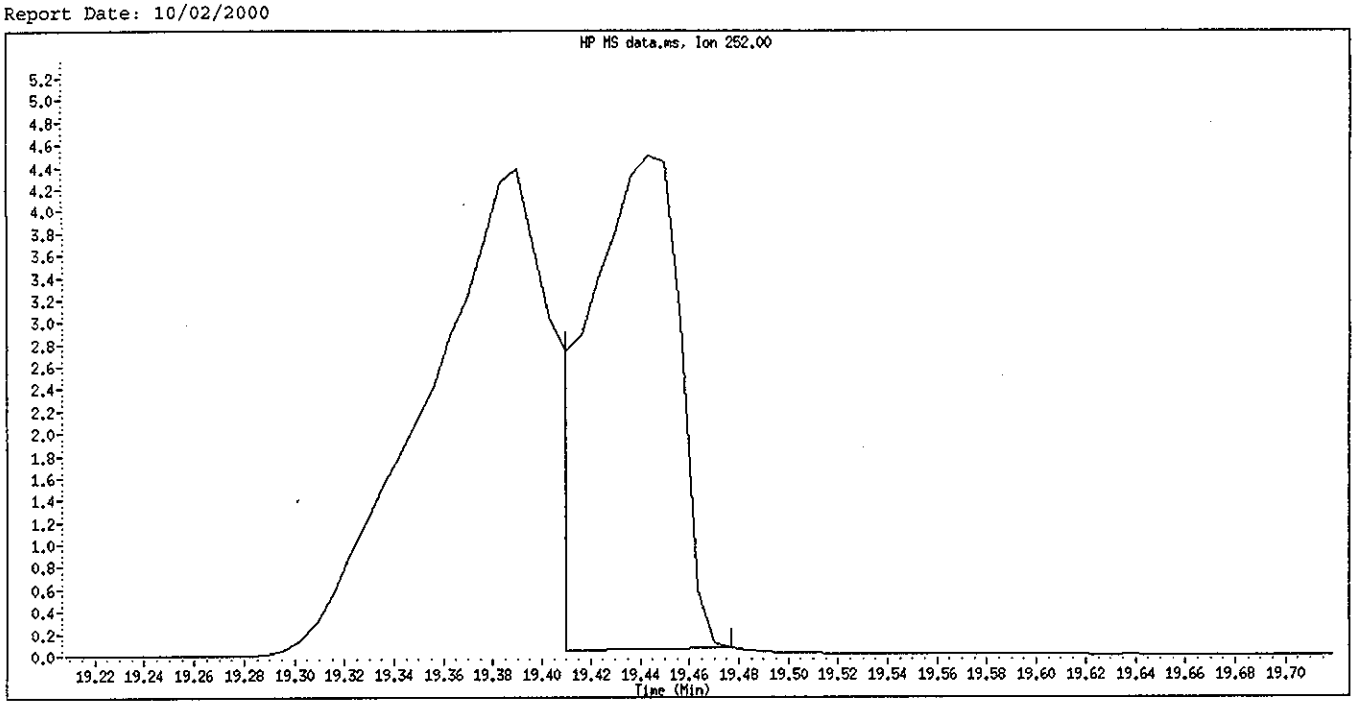
Original Integration



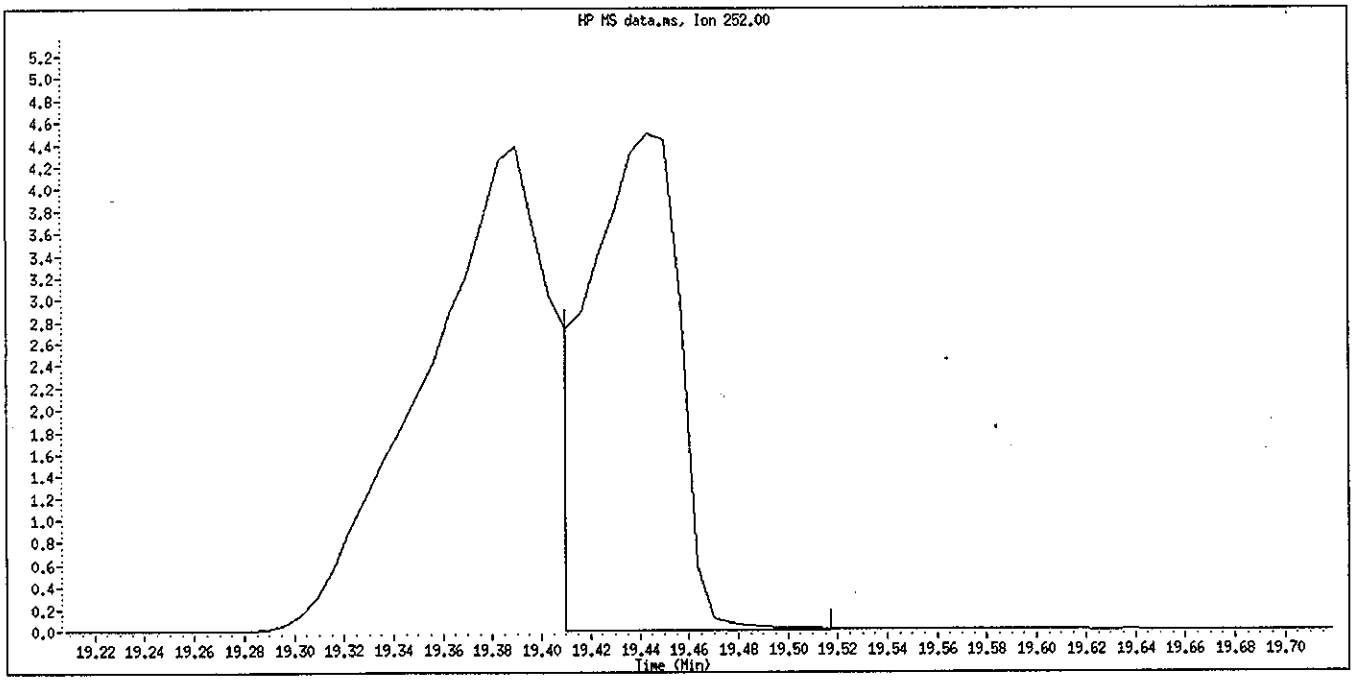
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1002CC4.D
Inj. Date and Time: 02-OCT-2000 11:52
Instrument ID: 721.i
Client ID: SSTD120
Compound Name: Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 10/02/2000



Original Integration



Manual Integration

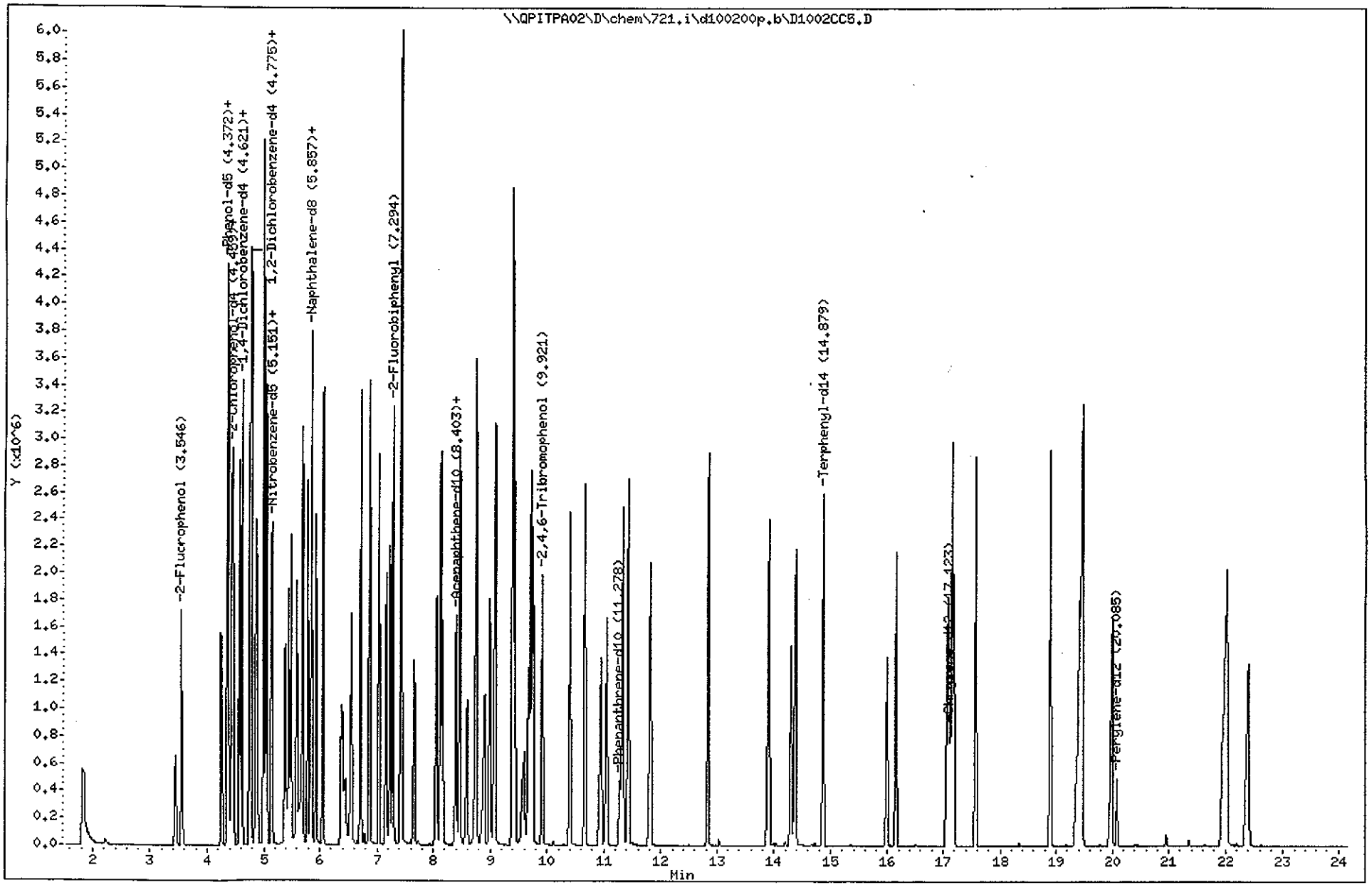
Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File: \\QPITPA02\D\chem\721.i\d100200p.b\D1002CC5.D
Date : 02-OCT-2000 12:23
Client ID: SSTD160
Sample Info: sstd160 (80ug/ml) 77-01-9 8270c/clp/625

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25

Column phase:



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d100200p.b\D1002CC5.D
Lab Smp Id: sstd160 Client Smp ID: SSTD160
Inj Date : 02-OCT-2000 12:23
Operator : 001562, DLF Inst ID: 721.i
Smp Info : sstd160 (80ug/ml) 77-01-9 8270c/clp/625
Misc Info : sstd160,d100200p.b,clp.m,1-all.sub,1,5
Comment :
Method : \\QPITPA02\D\chem\721.i\d100200p.b\clp.m
Meth Date : 02-Oct-2000 14:56 ferguson Quant Type: ISTD
Cal Date : 02-OCT-2000 12:23 Cal File: D1002CC5.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLH 10-2-00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	4.607	4.607	(1.000)	139461	40.0000	
* 2	Naphthalene-d8	136	5.829	5.829	(1.000)	455535	40.0000	
* 3	Acenaphthene-d10	164	8.396	8.396	(1.000)	270594	40.0000	
* 4	Phenanthrene-d10	188	11.277	11.277	(1.000)	466452	40.0000	
* 5	Chrysene-d12	240	17.122	17.122	(1.000)	429408	40.0000	
* 6	Perylene-d12	264	20.085	20.085	(1.000)	317088	40.0000	
191	Benzaldehyde	77	4.251	4.251	(0.923)	484906	160.000	144.78
7	Phenol	94	4.378	4.378	(0.950)	897526	160.000	158.27
8	Bis(2-chloroethyl)ether	93	4.439	4.439	(0.964)	657599	160.000	158.33(M)
9	2-Chlorophenol	128	4.466	4.466	(0.969)	764290	160.000	162.93(A)
10	1,3-Dichlorobenzene	146	4.573	4.573	(0.993)	830677	160.000	162.71(A)
11	1,4-Dichlorobenzene	146	4.620	4.620	(1.003)	849327	160.000	159.87
12	1,2-Dichlorobenzene	146	4.781	4.781	(1.038)	802193	160.000	162.26(A)
189	Benzyl Alcohol	108	4.754	4.754	(1.032)	494030	160.000	164.03(A)
13	2-Methylphenol	108	4.862	4.862	(1.055)	616002	160.000	159.75
14	2,2'-oxybis(1-Chloropropane)	45	4.882	4.882	(1.060)	788859	160.000	154.82
192	Acetophenone	105	4.996	4.996	(1.085)	1041542	160.000	160.41(A)
15	4-Methylphenol	108	4.996	4.996	(1.085)	672557	160.000	160.48(A)
16	N-Nitroso-di-n-propylamine	70	5.037	5.037	(1.093)	443173	160.000	157.04
17	Hexachloroethane	117	5.050	5.050	(1.096)	377426	160.000	162.60(A)
18	Nitrobenzene	77	5.151	5.151	(0.884)	729443	160.000	162.60(A)
19	Isophorone	82	5.386	5.386	(0.924)	1214700	160.000	162.34(A)
20	2-Nitrophenol	139	5.453	5.453	(0.935)	411343	160.000	163.01(A)
21	2,4-Dimethylphenol	107	5.487	5.487	(0.941)	713954	160.000	165.65(A)
22	Bis(2-chloroethoxy)methane	93	5.594	5.594	(0.960)	745822	160.000	160.50(A)
190	Benzoic acid	122	5.702	5.702	(0.978)	491795	160.000	177.76(AM)

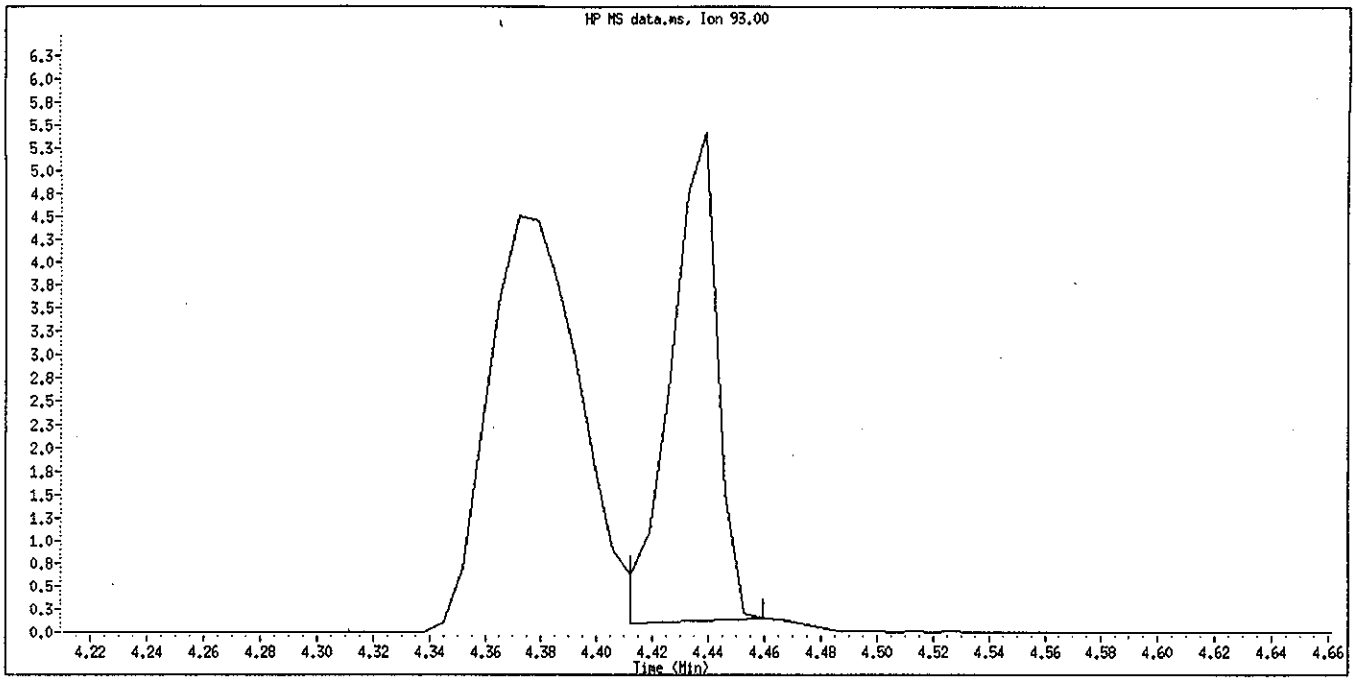
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
23	2,4-Dichlorophenol	162	5.695	5.695	(0.977)	651179	160.000	165.74(A)
24	1,2,4-Trichlorobenzene	180	5.782	5.782	(0.992)	724944	160.000	166.93(A)
25	Naphthalene	128	5.856	5.856	(1.005)	2013969	160.000	164.73(A)
26	4-Chloroaniline	127	5.937	5.937	(1.018)	826252	160.000	164.92(A)
193	Caprolactam	113	6.447	6.447	(1.106)	184858	160.000	146.03(M)
27	Hexachlorobutadiene	225	6.058	6.058	(1.039)	489607	160.000	167.23(A)
28	4-Chloro-3-Methylphenol	107	6.555	6.555	(1.124)	604658	160.000	163.56(A)
29	2-Methylnaphthalene	142	6.716	6.716	(1.152)	1268869	160.000	164.85(A)
30	Hexachlorocyclopentadiene	237	7.032	7.032	(0.838)	600538	160.000	169.21(A)
31	2,4,6-Trichlorophenol	196	7.166	7.166	(0.854)	479353	160.000	162.60(A)
32	2,4,5-Trichlorophenol	196	7.233	7.233	(0.862)	507610	160.000	160.73(A)
194	1,1'-Biphenyl	154	7.435	7.435	(0.886)	1718469	160.000	164.00(A)
33	2-Chloronaphthalene	162	7.442	7.442	(0.886)	1364304	160.000	164.70(A)
34	2-Nitroaniline	65	7.670	7.670	(0.914)	403112	160.000	159.56
35	Dimethylphthalate	163	8.060	8.060	(0.960)	1549522	160.000	160.34(A)
36	Acenaphthylene	152	8.134	8.134	(0.969)	1999738	160.000	160.88(A)
37	2,6-Dinitrotoluene	165	8.167	8.167	(0.973)	377006	160.000	161.15(A)
38	3-Nitroaniline	138	8.402	8.402	(1.001)	386833	160.000	161.13(A)
39	Acenaphthene	153	8.463	8.463	(1.008)	1225479	160.000	162.58(A)
40	2,4-Dinitrophenol	184	8.590	8.590	(1.023)	293112	160.000	176.92(A)
41	4-Nitrophenol	109	8.745	8.745	(1.042)	354879	160.000	174.95(A)
42	Dibenzofuran	168	8.752	8.752	(1.042)	1877701	160.000	163.70(A)
43	2,4-Dinitrotoluene	165	8.899	8.899	(1.060)	510881	160.000	162.31(A)
44	Diethylphthalate	149	9.403	9.403	(1.120)	1764960	160.000	166.58(A)
45	4-Chlorophenyl-phenylether	204	9.444	9.444	(1.125)	781088	160.000	168.17(A)
46	Fluorene	166	9.410	9.410	(1.121)	1528413	160.000	165.82(A)
47	4-Nitroaniline	138	9.605	9.605	(1.144)	363166	160.000	160.68(A)
48	4,6-Dinitro-2-methylphenol	198	9.679	9.679	(0.858)	363041	160.000	175.94(A)
49	N-Nitrosodiphenylamine (1)	169	9.719	9.719	(0.862)	1074747	160.000	168.50(A)
50	4-Bromophenyl-phenylether	248	10.404	10.404	(0.923)	501006	160.000	172.99(A)
51	Hexachlorobenzene	284	10.666	10.666	(0.946)	656461	160.000	172.08(A)
195	Atrazine	200	10.955	10.955	(0.971)	400583	160.000	162.02(A)
53	Pentachlorophenol	266	11.056	11.056	(0.980)	415848	160.000	171.78(A)
54	Phenanthrene	178	11.338	11.338	(1.005)	2118310	160.000	168.34(A)
55	Anthracene	178	11.439	11.439	(1.014)	2103479	160.000	165.04(A)
56	Carbazole	167	11.822	11.822	(1.048)	1811964	160.000	166.34(A)
57	Di-n-Butylphthalate	149	12.849	12.849	(1.139)	2635971	160.000	165.31(A)
58	Fluoranthene	202	13.918	13.918	(1.234)	2178743	160.000	167.19(A)
59	Pyrene	202	14.395	14.395	(0.841)	2038188	160.000	162.30(A)
60	Butylbenzylphthalate	149	16.155	16.155	(0.944)	1051073	160.000	161.86(A)
61	3,3'-Dichlorobenzidine	252	17.162	17.162	(1.002)	883421	160.000	174.37(A)
62	Benzo(a)Anthracene	228	17.095	17.095	(0.998)	1868694	160.000	164.82(A)
63	Chrysene	228	17.196	17.196	(1.004)	1761937	160.000	167.00(A)
64	bis(2-ethylhexyl)Phthalate	149	17.579	17.579	(1.027)	1436180	160.000	164.80(A)
65	Di-n-octylphthalate	149	18.902	18.902	(0.941)	2430369	160.000	168.70(A)
66	Benzo(b)fluoranthene	252	19.413	19.413	(0.967)	2275773	160.000	198.57(A)
67	Benzo(k)fluoranthene	252	19.473	19.473	(0.970)	1609643	160.000	151.61(MH)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
68 Benzo(a)pyrene	252	19.997	19.997	(0.996)	1646928	160.000	173.54(A)
69 Indeno(1,2,3-cd)pyrene	276	21.992	21.992	(1.095)	2164893	160.000	198.29(A)
70 Dibenz(a,h)anthracene	278	22.039	22.039	(1.097)	2105872	160.000	193.75(A)
71 Benzo(g,h,i)perylene	276	22.409	22.409	(1.116)	1766012	160.000	179.97(A)
$ 72 Nitrobenzene-d5	82	5.131	5.131	(0.880)	774426	160.000	161.90(A)
$ 73 2-Fluorobiphenyl	172	7.294	7.294	(0.869)	1532105	160.000	160.47(A)
$ 74 Terphenyl-d14	244	14.885	14.885	(0.869)	1821948	160.000	165.96(A)
$ 75 Phenol-d5	99	4.365	4.365	(0.948)	851677	160.000	158.94
$ 76 2-Fluorophenol	112	3.545	3.545	(0.770)	691012	160.000	161.26(A)
$ 77 2,4,6-Tribromophenol	330	9.920	9.920	(0.880)	400809	160.000	177.25(A)
$ 78 2-Chlorophenol-d4	132	4.452	4.452	(0.966)	728128	160.000	166.05(A)
$ 79 1,2-Dichlorobenzene-d4	152	4.768	4.768	(1.035)	545935	160.000	161.98(A)

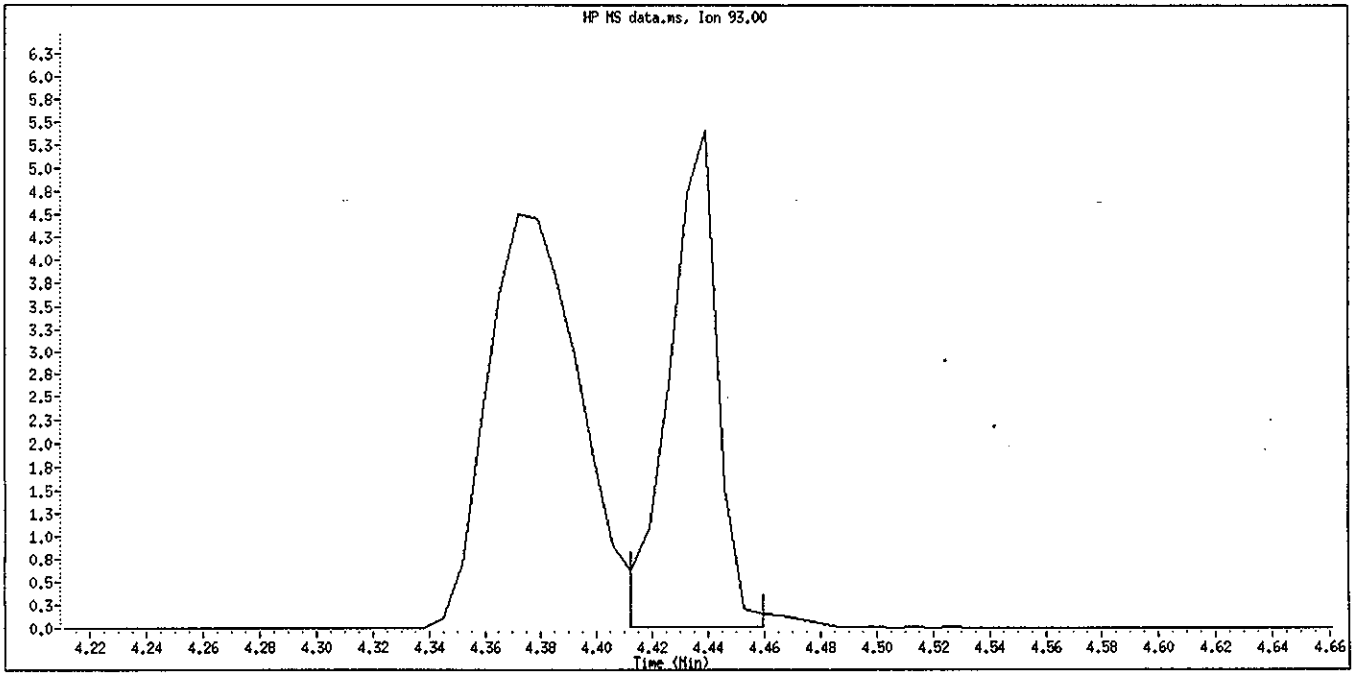
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File Name: D1002CC5.D
Inj. Date and Time: 02-OCT-2000 12:23
Instrument ID: 721.i
Client ID: SSTD160
Compound Name: Bis(2-chloroethyl)ether
CAS #: 111-44-4
Report Date: 10/02/2000



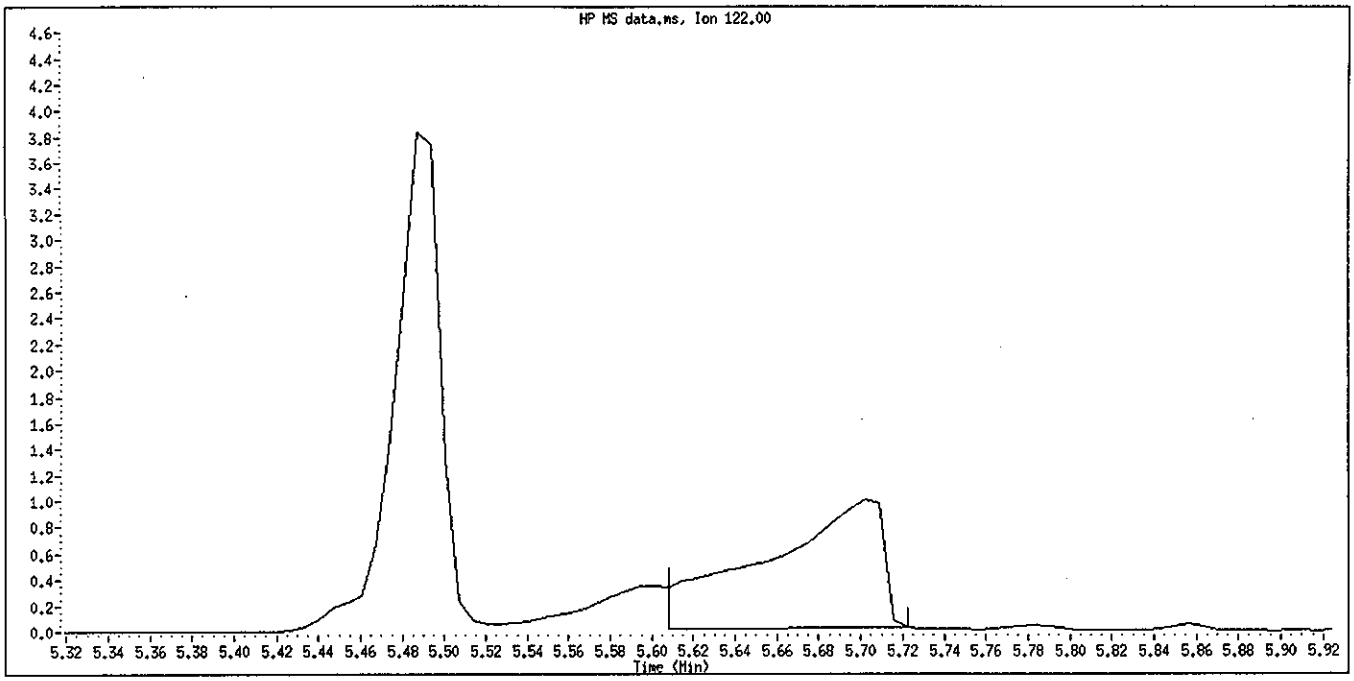
Original Integration



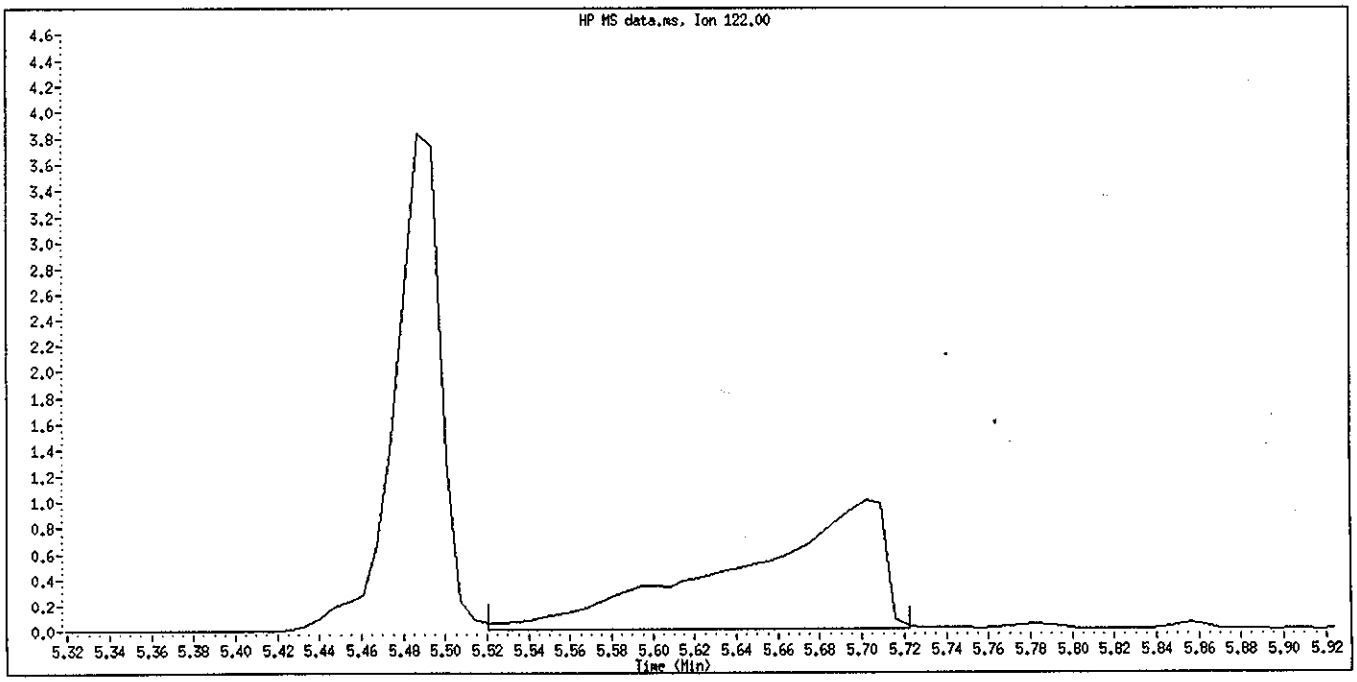
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1002CC5.D
Inj. Date and Time: 02-OCT-2000 12:23
Instrument ID: 721.i
Client ID: SSTD160
Compound Name: Benzoic acid
CAS #: 65-85-0
Report Date: 10/02/2000



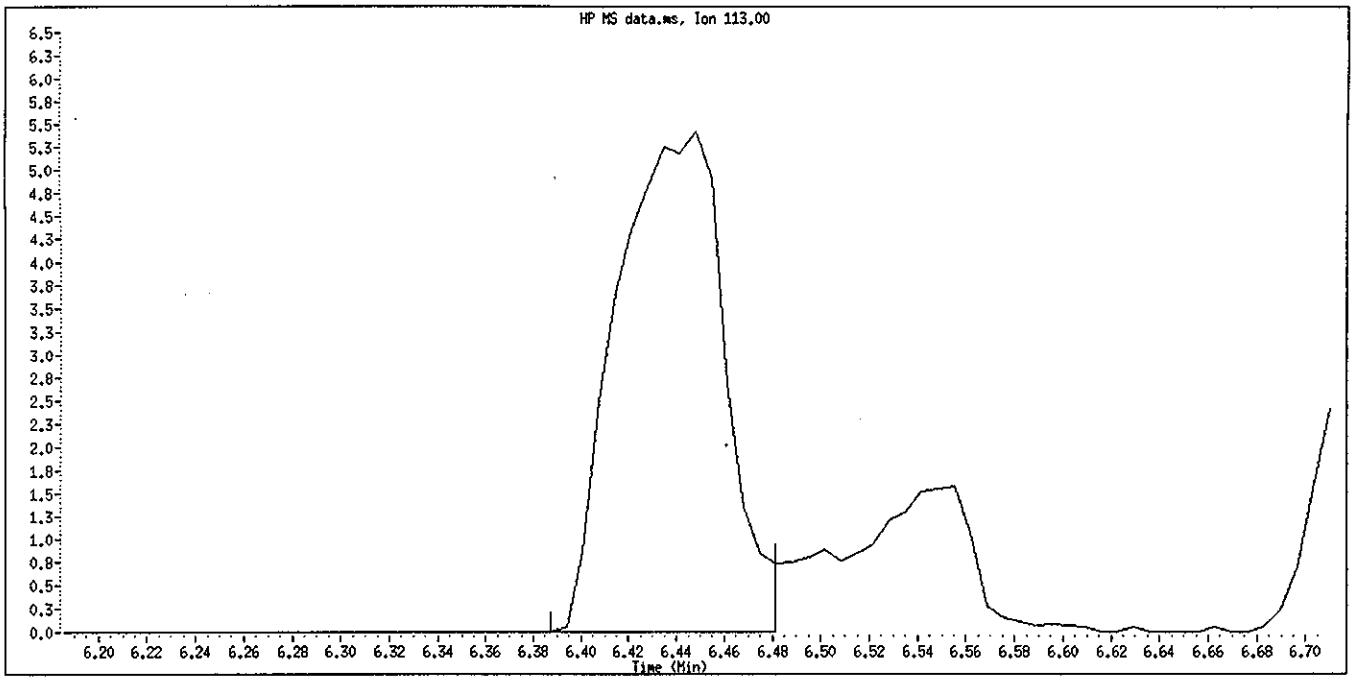
Original Integration



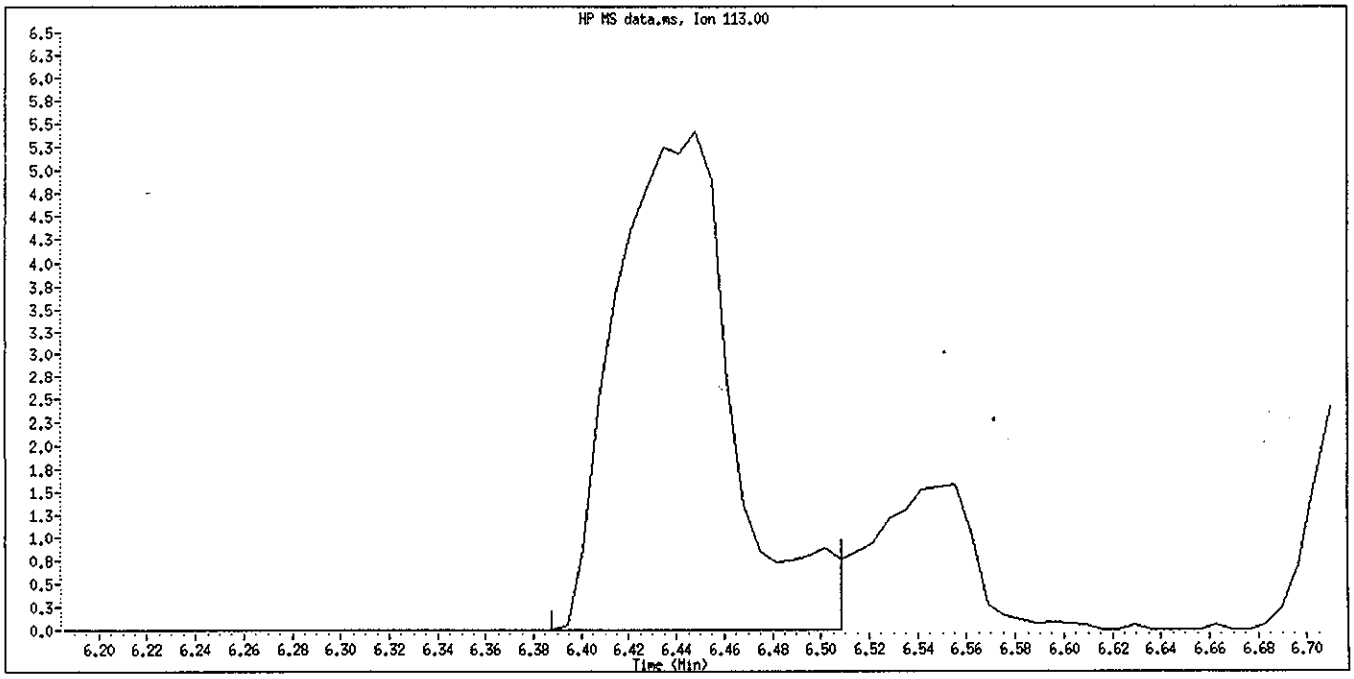
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1002CC5.D
Inj. Date and Time: 02-OCT-2000 12:23
Instrument ID: 721.i
Client ID: SSTD160
Compound Name: Caprolactam
CAS #: 105-60-2
Report Date: 10/02/2000



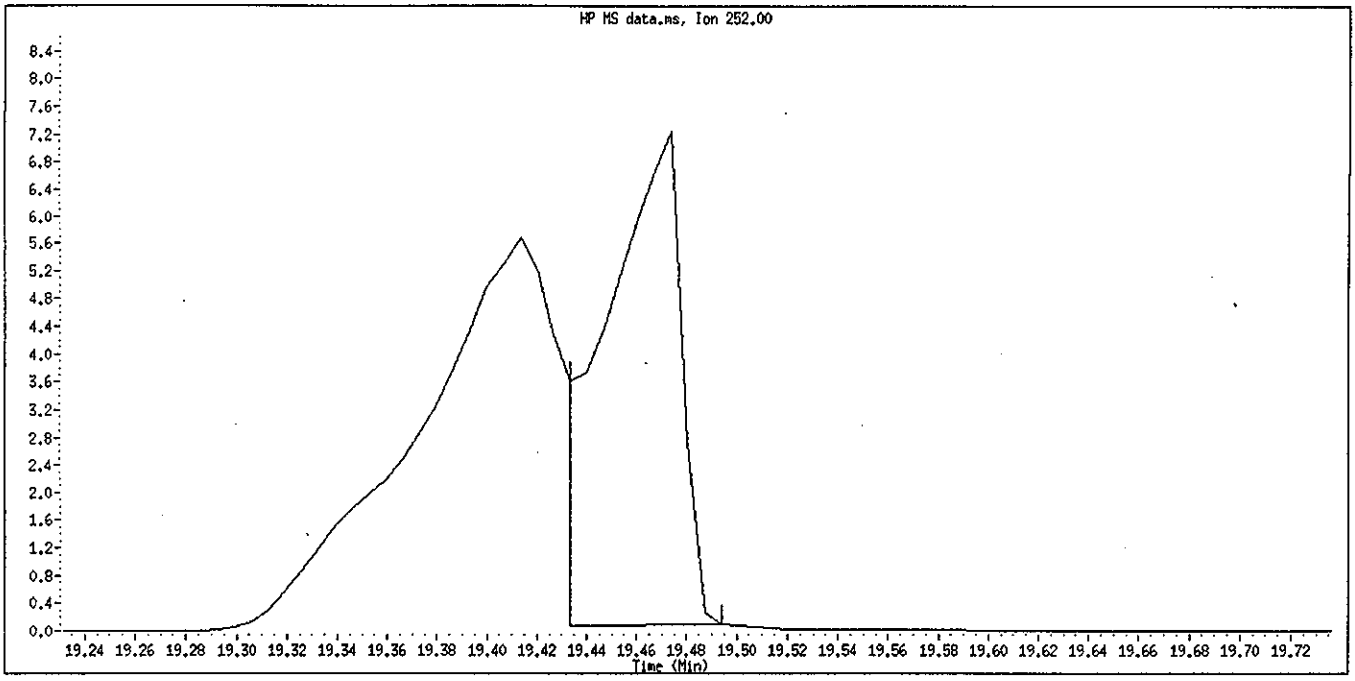
Original Integration



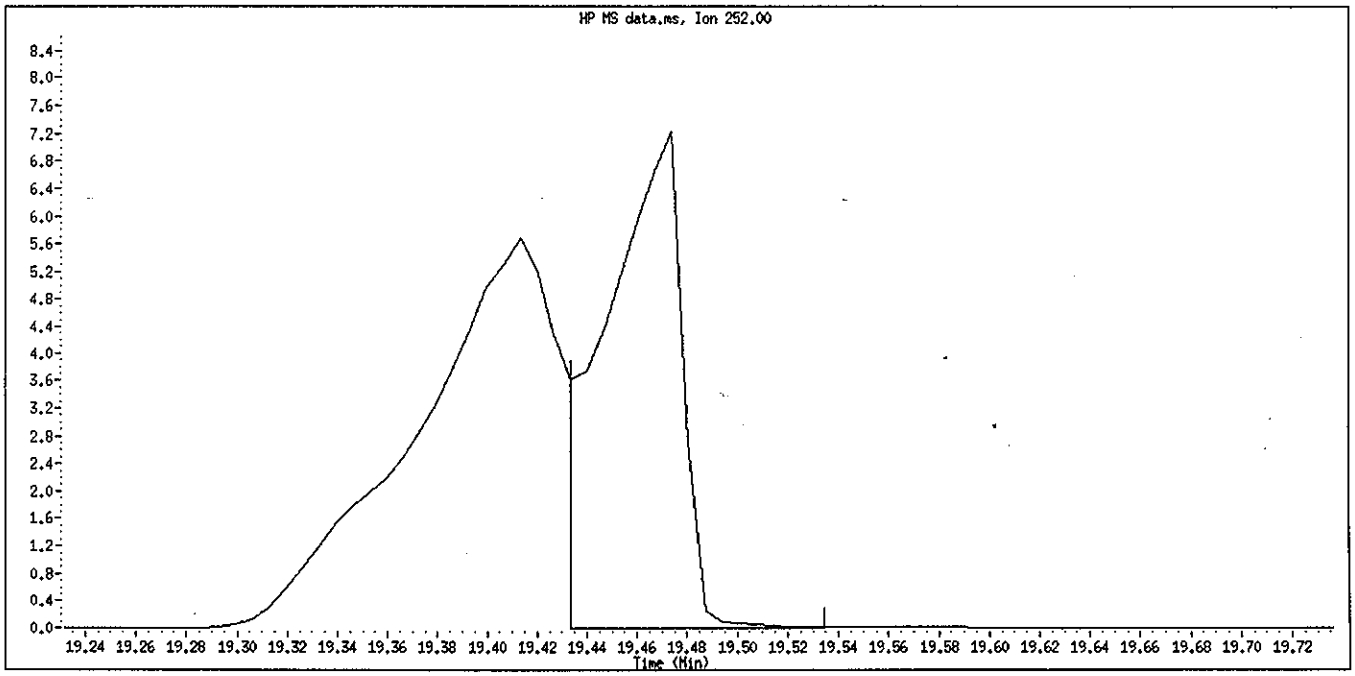
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1002CC5.D
Inj. Date and Time: 02-OCT-2000 12:23
Instrument ID: 721.i
Client ID: SSTD160
Compound Name: Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 10/02/2000



Original Integration



Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Instrument ID: 721 Calibration Date(s): 10/24/00 10/24/00

Calibration Time(s): 1329 1557

LAB FILE ID: RRF20 = D1024CC1 RRF50 = D1024CC2
RRF80 = D1024CC3 RRF120= D1024CC4 RRF160= D1024CC5

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol *	1.846	1.589	1.471	1.426	1.360	1.538	12.4*
Bis(2-chloroethyl)ether *	1.442	1.291	1.255	1.209	1.162	1.272	8.4*
2-Chlorophenol *	1.570	1.440	1.393	1.371	1.320	1.419	6.7*
2-Methylphenol *	1.272	1.210	1.137	1.120	1.072	1.162	6.8*
2,2'-oxybis(1-Chloropropane)	1.926	1.735	1.619	1.526	1.428	1.647	11.7
N-Nitroso-di-n-propylamine *	1.002	0.941	0.922	0.910	0.839	0.923	6.4*
4-Methylphenol *	1.302	1.128	1.042	1.002	0.963	1.087	12.4*
Hexachloroethane *	0.664	0.622	0.607	0.583	0.537	0.603	7.8*
Nitrobenzene *	0.384	0.360	0.342	0.335	0.322	0.349	6.9*
Isophorone *	0.690	0.656	0.638	0.641	0.640	0.653	3.4*
2-Nitrophenol *	0.229	0.230	0.224	0.225	0.213	0.224	3.0*
2,4-Dimethylphenol *	0.342	0.332	0.316	0.317	0.309	0.323	4.1*
Bis(2-chloroethoxy)methane *	0.420	0.399	0.379	0.374	0.361	0.387	6.1*
2,4-Dichlorophenol *	0.308	0.299	0.287	0.284	0.272	0.290	4.9*
Naphthalene *	1.121	1.024	0.970	0.934	0.895	0.989	8.9*
4-Chloroaniline	0.469	0.451	0.426	0.418	0.389	0.431	7.2
Hexachlorobutadiene	0.187	0.185	0.182	0.179	0.171	0.181	3.5
4-Chloro-3-Methylphenol *	0.307	0.295	0.286	0.276	0.272	0.287	4.9*
2-Methylnaphthalene *	0.674	0.617	0.588	0.568	0.544	0.598	8.4*
Hexachlorocyclopentadiene	0.456	0.458	0.470	0.467	0.459	0.462	1.3
2,4,6-Trichlorophenol *	0.436	0.431	0.437	0.435	0.438	0.435	0.6*
2,4,5-Trichlorophenol *	0.468	0.461	0.466	0.465	0.445	0.461	2.0*
2-Chloronaphthalene *	1.208	1.115	1.096	1.096	1.067	1.116	4.8*
2-Nitroaniline	0.391	0.386	0.398	0.395	0.388	0.392	1.3
Dimethylphthalate	1.417	1.384	1.399	1.387	1.365	1.390	1.4
Acenaphthylene *	1.996	1.896	1.884	1.828	1.781	1.877	4.3*
2,6-Dinitrotoluene *	0.342	0.336	0.342	0.344	0.339	0.341	0.9*
3-Nitroaniline	0.408	0.403	0.406	0.410	0.406	0.407	0.7
Acenaphthene *	1.222	1.151	1.134	1.122	1.095	1.145	4.2*
2,4-Dinitrophenol	0.105	0.182	0.214	0.237	0.248	0.197	29.1
4-Nitrophenol	0.165	0.180	0.187	0.183	0.178	0.179	4.6
Dibenzofuran *	1.677	1.611	1.577	1.513	1.486	1.573	4.9*
2,4-Dinitrotoluene *	0.445	0.447	0.458	0.471	0.462	0.457	2.4*
Diethylphthalate	1.435	1.371	1.352	1.316	1.275	1.350	4.5
4-Chlorophenyl-phenylether *	0.680	0.655	0.654	0.653	0.620	0.652	3.2*
Fluorene *	1.304	1.224	1.196	1.144	1.102	1.194	6.5*

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

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Instrument ID: 721 Calibration Date(s): 10/24/00 10/24/00

Calibration Time(s): 1329 1557

LAB FILE ID: RRF20 = D1024CC1 RRF50 = D1024CC2
RRF80 = D1024CC3 RRF120= D1024CC4 RRF160= D1024CC5

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD	
4-Nitroaniline	0.395	0.390	0.404	0.418	0.413	0.404	2.8	
4,6-Dinitro-2-methylphenol	0.102	0.151	0.165	0.172	0.177	0.153	19.7	
N-Nitrosodiphenylamine (1)	0.586	0.564	0.526	0.530	0.507	0.543	5.9	
4-Bromophenyl-phenylether *	0.235	0.230	0.227	0.226	0.223	0.228	2.0*	
Hexachlorobenzene *	0.272	0.270	0.268	0.262	0.262	0.267	1.8*	
Pentachlorophenol *	0.075	0.125	0.145	0.155	0.162	0.132	26.5*	<-
Phenanthrene *	1.049	1.005	0.970	0.950	0.934	0.982	4.7*	
Anthracene *	1.088	1.031	0.973	0.947	0.931	0.994	6.5*	
Carbazole	0.989	0.942	0.917	0.902	0.894	0.929	4.1	
Di-n-Butylphthalate	1.405	1.355	1.309	1.268	1.231	1.314	5.2	
Fluoranthene *	1.115	1.079	1.034	1.013	0.992	1.047	4.8*	
Pyrene *	1.267	1.200	1.186	1.190	1.164	1.201	3.2*	
Butylbenzylphthalate	0.648	0.636	0.634	0.645	0.628	0.638	1.2	
3,3'-Dichlorobenzidine	0.423	0.440	0.431	0.420	0.403	0.423	3.3	
Benzo(a)Anthracene *	1.106	1.060	1.058	1.076	1.056	1.071	2.0*	
Chrysene *	1.033	0.977	0.964	0.963	0.941	0.976	3.5*	
bis(2-ethylhexyl)Phthalate	0.901	0.888	0.870	0.880	0.866	0.881	1.6	
Di-n-octylphthalate	1.782	1.782	1.754	1.699	1.603	1.724	4.4	
Benzo(b)fluoranthene *	1.214	1.245	1.252	1.456	1.436	1.321	8.8*	
Benzo(k)fluoranthene *	1.270	1.240	1.194	0.966	0.891	1.112	15.4*	
Benzo(a)pyrene *	1.122	1.115	1.100	1.106	1.075	1.104	1.6*	
Indeno(1,2,3-cd)pyrene *	1.024	1.050	1.082	1.165	1.294	1.123	9.8*	
Dibenz(a,h)anthracene *	1.069	1.118	1.120	1.165	1.171	1.129	3.7*	
Benzo(g,h,i)perylene *	1.085	1.104	1.134	1.205	1.246	1.155	5.9*	
Benzaldehyde	1.251	0.761	0.770	0.374	0.204	0.672	60.4	
Acetophenone	1.908	1.671	1.586	1.556	1.492	1.643	9.8	
Caprolactam	0.120	0.108	0.111	0.115	0.108	0.112	4.3	
1,1'-Biphenyl	1.611	1.439	1.389	1.353	1.328	1.424	7.9	
Atrazine	0.220	0.201	0.204	0.203	0.200	0.206	4.0	
Nitrobenzene-d5 *	0.394	0.392	0.366	0.355	0.344	0.370	6.1*	
2-Fluorobiphenyl *	1.415	1.398	1.330	1.314	1.270	1.345	4.5*	
Terphenyl-d14 *	0.987	1.001	0.957	0.950	0.926	0.964	3.1*	
Phenol-d5 *	1.726	1.628	1.474	1.434	1.347	1.522	10.1*	
2-Fluorophenol *	1.464	1.483	1.388	1.385	1.342	1.412	4.2*	
2,4,6-Tribromophenol	0.149	0.167	0.161	0.158	0.154	0.158	4.3	
2-Chlorophenol-d4 *	1.421	1.399	1.281	1.249	1.201	1.310	7.3*	
1,2-Dichlorobenzene-d4 *	0.998	0.954	0.872	0.822	0.789	0.887	9.9*	

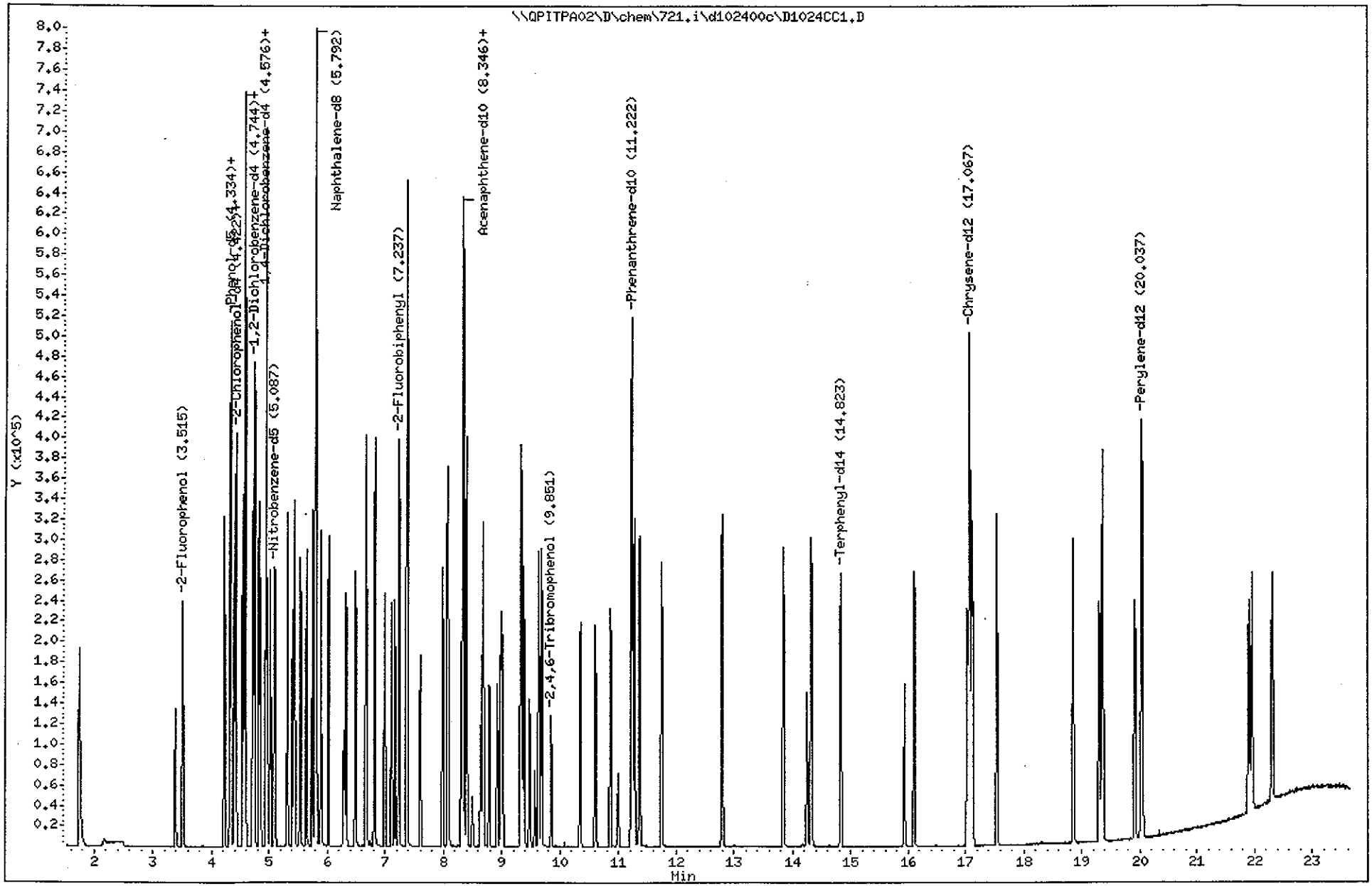
* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

Data File: \\QPITPA02\D\chem\721.i\d102400c\D1024CC1.D
Date : 24-OCT-2000 13:29
Client ID: SSTD020
Sample Info: SSTD020 (10ug/ml) 77-01-5 8270/clp/625

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25

Column phase:



STL-Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d102400c\D1024CC1.D
Lab Smp Id: sstd20 Client Smp ID: SSTD020
Inj Date : 24-OCT-2000 13:29
Operator : 001562, DLF Inst ID: 721.i
Smp Info : SSTD020 (10ug/ml) 77-01-5 8270/clp/625
Misc Info : sstd20,d102400c.b,clp.m,1-all.sub,1,1
Comment :
Method : \\QPITPA02\D\chem\721.i\d102400c\clp.m
Meth Date : 24-Oct-2000 17:45 ferguson Quant Type: ISTD
Cal Date : 24-OCT-2000 13:29 Cal File: D1024CC1.D
Als bottle: 6 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-24-00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	4.576	4.576	(1.000)	125309	40.0000	
* 2	Naphthalene-d8	136	5.792	5.792	(1.000)	475044	40.0000	
* 3	Acenaphthene-d10	164	8.345	8.345	(1.000)	231688	40.0000	
* 4	Phenanthrene-d10	188	11.221	11.221	(1.000)	385232	40.0000	
* 5	Chrysene-d12	240	17.067	17.067	(1.000)	337051	40.0000	
* 6	Perylene-d12	264	20.037	20.037	(1.000)	285124	40.0000	
191	Benzaldehyde	77	4.226	4.226	(0.924)	78364	20.0000	37.223
7	Phenol	94	4.334	4.334	(0.947)	115682	20.0000	23.997
8	Bis(2-chloroethyl)ether	93	4.394	4.394	(0.960)	90350	20.0000	22.675
9	2-Chlorophenol	128	4.428	4.428	(0.968)	98383	20.0000	22.136
10	1,3-Dichlorobenzene	146	4.542	4.542	(0.993)	102224	20.0000	21.713
11	1,4-Dichlorobenzene	146	4.589	4.589	(1.003)	102153	20.0000	21.892
12	1,2-Dichlorobenzene	146	4.751	4.751	(1.038)	94827	20.0000	22.598
189	Benzyl Alcohol	108	4.710	4.710	(1.029)	60121	20.0000	21.596
13	2-Methylphenol	108	4.824	4.824	(1.054)	79726	20.0000	21.897
14	2,2'-oxybis(1-Chloropropane)	45	4.845	4.845	(1.059)	120671	20.0000	23.390
192	Acetophenone	105	4.952	4.952	(1.082)	119524	20.0000	23.231
15	4-Methylphenol	108	4.945	4.945	(1.081)	81610	20.0000	23.952
16	N-Nitroso-di-n-propylamine	70	4.972	4.972	(1.087)	62798	20.0000	21.720
17	Hexachloroethane	117	5.019	5.019	(1.097)	41606	20.0000	22.039
18	Nitrobenzene	77	5.107	5.107	(0.882)	91117	20.0000	22.006
19	Isophorone	82	5.322	5.322	(0.919)	163890	20.0000	21.135
20	2-Nitrophenol	139	5.409	5.409	(0.934)	54416	20.0000	20.420
21	2,4-Dimethylphenol	107	5.443	5.443	(0.940)	81207	20.0000	21.149
22	Bis(2-chloroethoxy)methane	93	5.543	5.543	(0.957)	99885	20.0000	21.756
190	Benzoic acid	122	5.543	5.543	(0.957)	5759	20.0000	6.9322(H)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
23	2,4-Dichlorophenol	162	5.644	5.644	(0.974)	73167	20.0000	21.259
24	1,2,4-Trichlorobenzene	180	5.745	5.745	(0.992)	76507	20.0000	21.056
25	Naphthalene	128	5.812	5.812	(1.003)	266241	20.0000	22.670
26	4-Chloroaniline	127	5.893	5.893	(1.017)	111403	20.0000	21.777
193	Caprolactam	113	6.289	6.289	(1.086)	28470	20.0000	21.306
27	Hexachlorobutadiene	225	6.020	6.020	(1.039)	44364	20.0000	20.668
28	4-Chloro-3-Methylphenol	107	6.484	6.484	(1.119)	72857	20.0000	21.368
29	2-Methylnaphthalene	142	6.665	6.665	(1.151)	160008	20.0000	22.534
30	Hexachlorocyclopentadiene	237	6.995	6.995	(0.838)	52817	20.0000	19.736
31	2,4,6-Trichlorophenol	196	7.116	7.116	(0.853)	50505	20.0000	20.019
32	2,4,5-Trichlorophenol	196	7.169	7.169	(0.859)	54225	20.0000	20.304
194	1,1'-Biphenyl	154	7.371	7.371	(0.883)	186674	20.0000	22.635
33	2-Chloronaphthalene	162	7.378	7.378	(0.884)	139924	20.0000	21.640
34	2-Nitroaniline	65	7.599	7.599	(0.911)	45323	20.0000	19.987
35	Dimethylphthalate	163	7.989	7.989	(0.957)	164107	20.0000	20.376
36	Acenaphthylene	152	8.070	8.070	(0.967)	231240	20.0000	21.270
37	2,6-Dinitrotoluene	165	8.090	8.090	(0.969)	39585	20.0000	20.061
38	3-Nitroaniline	138	8.318	8.318	(0.997)	47302	20.0000	20.084
39	Acenaphthene	153	8.399	8.399	(1.006)	141571	20.0000	21.352
40	2,4-Dinitrophenol	184	8.500	8.500	(1.019)	12174	20.0000	10.648
41	4-Nitrophenol	109	8.648	8.648	(1.036)	19141	20.0000	18.480
42	Dibenzofuran	168	8.688	8.688	(1.041)	194284	20.0000	21.329
43	2,4-Dinitrotoluene	165	8.795	8.795	(1.054)	51537	20.0000	19.477
44	Diethylphthalate	149	9.320	9.320	(1.117)	166277	20.0000	21.266
45	4-Chlorophenyl-phenylether	204	9.380	9.380	(1.124)	78755	20.0000	20.838
46	Fluorene	166	9.340	9.340	(1.119)	151039	20.0000	21.838
47	4-Nitroaniline	138	9.474	9.474	(1.135)	45770	20.0000	19.560
48	4,6-Dinitro-2-methylphenol	198	9.561	9.561	(0.852)	19746	20.0000	13.348
49	N-Nitrosodiphenylamine (1)	169	9.629	9.629	(0.858)	112828	20.0000	21.592
50	4-Bromophenyl-phenylether	248	10.348	10.348	(0.922)	45235	20.0000	20.581
51	Hexachlorobenzene	284	10.603	10.603	(0.945)	52465	20.0000	20.422
195	Atrazine	200	10.858	10.858	(0.968)	42402	20.0000	21.420
53	Pentachlorophenol	266	10.993	10.993	(0.980)	14419	20.0000	11.288
54	Phenanthrene	178	11.268	11.268	(1.004)	202013	20.0000	21.371
55	Anthracene	178	11.362	11.362	(1.013)	209564	20.0000	21.889
56	Carbazole	167	11.752	11.752	(1.047)	190554	20.0000	21.299
57	Di-n-Butylphthalate	149	12.800	12.800	(1.141)	270557	20.0000	21.386
58	Fluoranthene	202	13.848	13.848	(1.234)	214768	20.0000	21.307
59	Pyrene	202	14.319	14.319	(0.839)	213506	20.0000	21.090
60	Butylbenzylphthalate	149	16.106	16.106	(0.944)	109124	20.0000	20.297
61	3,3'-Dichlorobenzidine	252	17.100	17.100	(1.002)	71334	20.0000	19.986
62	Benzo(a)Anthracene	228	17.027	17.027	(0.998)	186430	20.0000	20.651
63	Chrysene	228	17.121	17.121	(1.003)	174023	20.0000	21.172
64	bis(2-ethylhexyl)Phthalate	149	17.537	17.537	(1.028)	151868	20.0000	20.455
65	Di-n-octylphthalate	149	18.854	18.854	(0.941)	254012	20.0000	20.672
66	Benzo(b)fluoranthene	252	19.304	19.304	(0.963)	173011	20.0000	18.381
67	Benzo(k)fluoranthene	252	19.358	19.358	(0.966)	181077	20.0000	22.840

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
68 Benzo(a)pyrene	252	19.916	19.916	(0.994)	159920	20.0000	20.333
69 Indeno(1,2,3-cd)pyrene	276	21.898	21.898	(1.093)	145968	20.0000	18.233
70 Dibenz(a,h)anthracene	278	21.952	21.952	(1.096)	152415	20.0000	18.946
71 Benzo(g,h,i)perylene	276	22.308	22.308	(1.113)	154636	20.0000	18.786
$ 72 Nitrobenzene-d5	82	5.086	5.086	(0.878)	93701	20.0000	21.312
$ 73 2-Fluorobiphenyl	172	7.237	7.237	(0.867)	163899	20.0000	21.032
$ 74 Terphenyl-d14	244	14.823	14.823	(0.869)	166345	20.0000	20.469
$ 75 Phenol-d5	99	4.320	4.320	(0.944)	108160	20.0000	22.688
$ 76 2-Fluorophenol	112	3.514	3.514	(0.768)	91722	20.0000	20.730
$ 77 2,4,6-Tribromophenol	330	9.850	9.850	(0.878)	28768	20.0000	18.914
$ 78 2-Chlorophenol-d4	132	4.415	4.415	(0.965)	89063	20.0000	21.699
$ 79 1,2-Dichlorobenzene-d4	152	4.737	4.737	(1.035)	62540	20.0000	22.505

QC Flag Legend

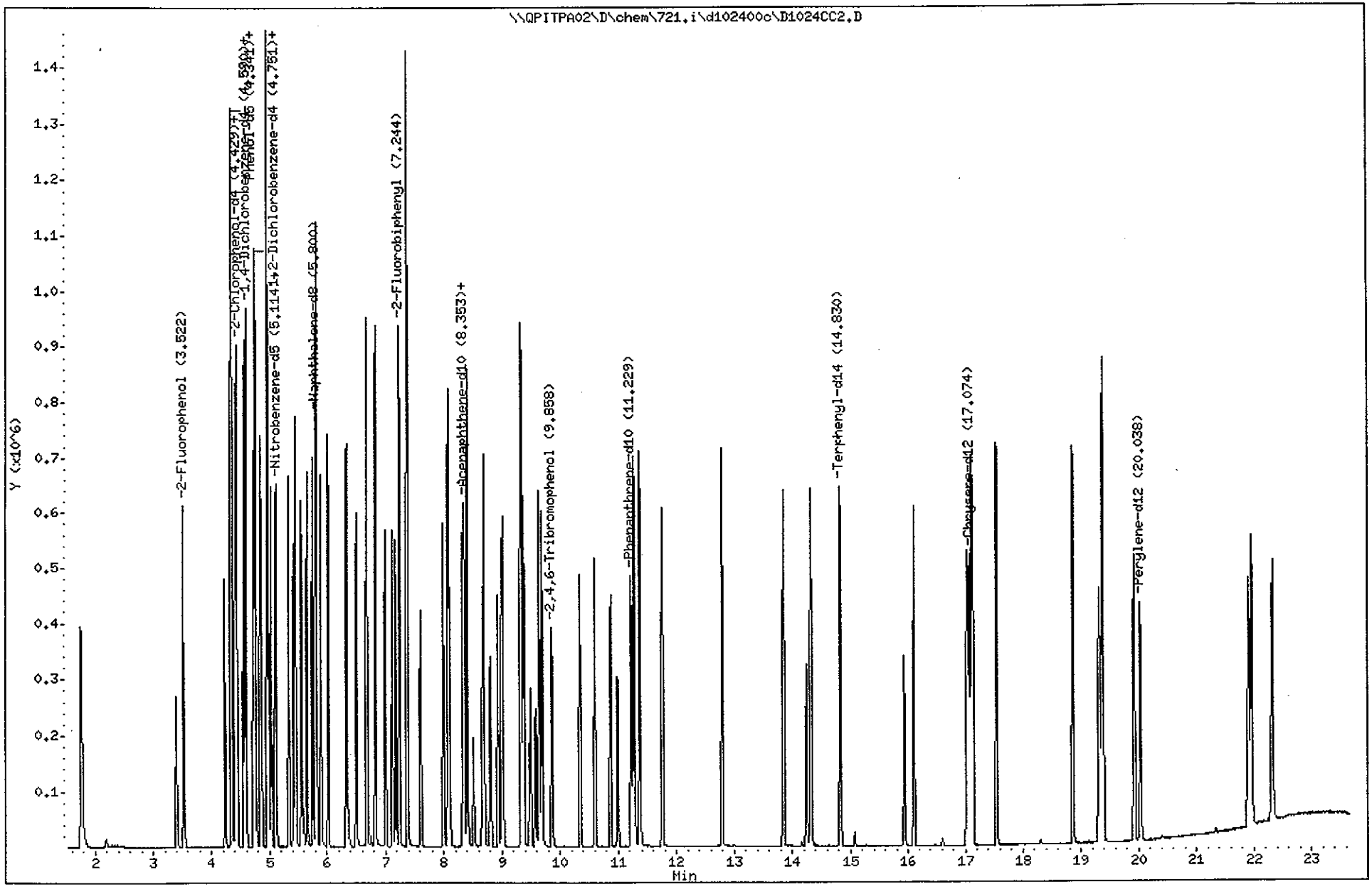
H - Operator selected an alternate compound hit.

Data File: \\QPITPA02\D\chem\721.i\d102400c\D1024CC2.D
Date : 24-OCT-2000 13:58
Client ID: SSTD050
Sample Info: SSTD050 (25ug/ml) 77-03-1 8270/clp/625

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25

Column phase:



STL-Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d102400c\D1024CC2.D
Lab Smp Id: sstd50 Client Smp ID: SSTD050
Inj Date : 24-OCT-2000 13:58
Operator : 001562, DLF Inst ID: 721.i
Smp Info : SSTD050 (25ug/ml) 77-03-1 8270/clp/625
Misc Info : sstd50,d102400c.b,clp.m,1-all.sub,1,2
Comment :
Method : \\QPITPA02\D\chem\721.i\d102400c\clp.m
Meth Date : 24-Oct-2000 17:46 ferguson Quant Type: ISTD
Cal Date : 24-OCT-2000 13:29 Cal File: D1024CC1.D
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-24-00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1 1,4-Dichlorobenzene-d4	152	4.583	4.583	(1.000)	127589	40.0000	
* 2 Naphthalene-d8	136	5.799	5.799	(1.000)	471696	40.0000	
* 3 Acenaphthene-d10	164	8.352	8.352	(1.000)	228312	40.0000	
* 4 Phenanthrene-d10	188	11.228	11.228	(1.000)	382438	40.0000	
* 5 Chrysene-d12	240	17.074	17.074	(1.000)	337287	40.0000	
* 6 Perylene-d12	264	20.037	20.037	(1.000)	282797	40.0000	
191 Benzaldehyde	77	4.227	4.227	(0.922)	121369	50.0000	56.621
7 Phenol	94	4.341	4.341	(0.947)	253498	50.0000	51.647
8 Bis(2-chloroethyl)ether	93	4.401	4.401	(0.960)	205837	50.0000	50.736
9 2-Chlorophenol	128	4.435	4.435	(0.968)	229623	50.0000	50.743
10 1,3-Dichlorobenzene	146	4.549	4.549	(0.993)	242993	50.0000	50.690
11 1,4-Dichlorobenzene	146	4.596	4.596	(1.003)	244398	50.0000	51.439
12 1,2-Dichlorobenzene	146	4.758	4.758	(1.038)	221167	50.0000	51.764
189 Benzyl Alcohol	108	4.724	4.724	(1.031)	148395	50.0000	52.353
13 2-Methylphenol	108	4.831	4.831	(1.054)	192981	50.0000	52.057
14 2,2'-oxybis(1-Chloropropane)	45	4.852	4.852	(1.059)	276781	50.0000	52.691
192 Acetophenone	105	4.959	4.959	(1.082)	266448	50.0000	50.862
15 4-Methylphenol	108	4.952	4.952	(1.081)	179852	50.0000	51.842
16 N-Nitroso-di-n-propylamine	70	4.986	4.986	(1.088)	150099	50.0000	50.987
17 Hexachloroethane	117	5.026	5.026	(1.097)	99161	50.0000	51.587
18 Nitrobenzene	77	5.114	5.114	(0.882)	212566	50.0000	51.703
19 Isophorone	82	5.335	5.335	(0.920)	386856	50.0000	50.242
20 2-Nitrophenol	139	5.416	5.416	(0.934)	135815	50.0000	51.328
21 2,4-Dimethylphenol	107	5.450	5.450	(0.940)	195767	50.0000	51.347
22 Bis(2-chloroethoxy)methane	93	5.550	5.550	(0.957)	235374	50.0000	51.631
190 Benzoic acid	122	5.591	5.591	(0.964)	40219	50.0000	48.756

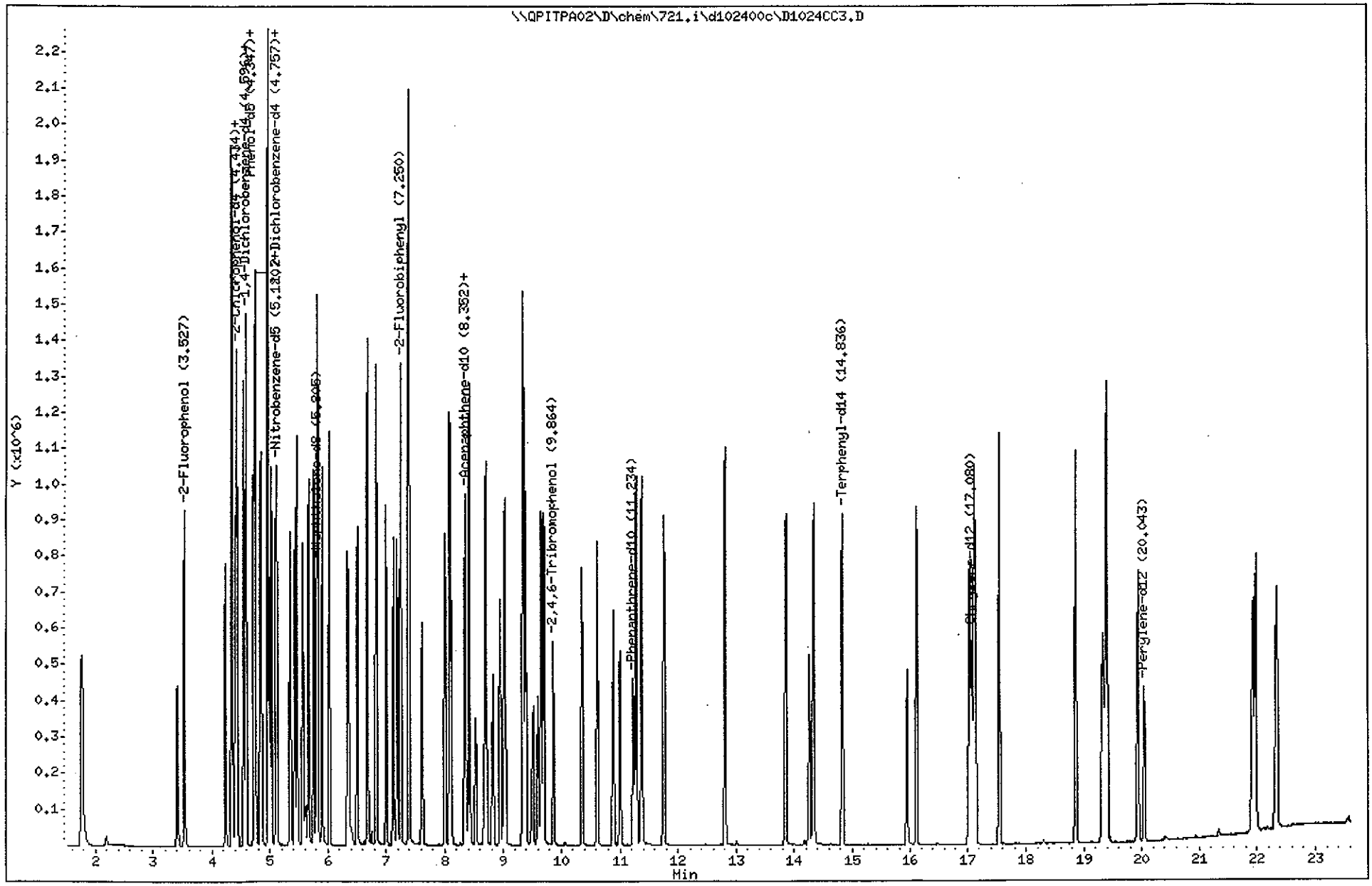
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
23	2,4-Dichlorophenol	162	5.651	5.651	(0.975)	176199	50.0000	51.559
24	1,2,4-Trichlorobenzene	180	5.752	5.752	(0.992)	185412	50.0000	51.391
25	Naphthalene	128	5.819	5.819	(1.003)	604042	50.0000	51.800
26	4-Chloroaniline	127	5.900	5.900	(1.017)	266105	50.0000	52.388
193	Caprolactam	113	6.330	6.330	(1.092)	63947	50.0000	48.196
27	Hexachlorobutadiene	225	6.021	6.021	(1.038)	108923	50.0000	51.105
28	4-Chloro-3-Methylphenol	107	6.498	6.498	(1.120)	173749	50.0000	51.319
29	2-Methylnaphthalene	142	6.673	6.673	(1.151)	363971	50.0000	51.622
30	Hexachlorocyclopentadiene	237	6.995	6.995	(0.838)	130777	50.0000	49.590
31	2,4,6-Trichlorophenol	196	7.116	7.116	(0.852)	122996	50.0000	49.473
32	2,4,5-Trichlorophenol	196	7.176	7.176	(0.859)	131635	50.0000	50.020
194	1,1'-Biphenyl	154	7.378	7.378	(0.883)	410579	50.0000	50.520
33	2-Chloronaphthalene	162	7.392	7.392	(0.885)	318132	50.0000	49.927
34	2-Nitroaniline	65	7.613	7.613	(0.912)	110041	50.0000	49.244
35	Dimethylphthalate	163	7.996	7.996	(0.957)	394882	50.0000	49.756
36	Acenaphthylene	152	8.077	8.077	(0.967)	541033	50.0000	50.502
37	2,6-Dinitrotoluene	165	8.104	8.104	(0.970)	95921	50.0000	49.329
38	3-Nitroaniline	138	8.332	8.332	(0.998)	114929	50.0000	49.521
39	Acenaphthene	153	8.406	8.406	(1.006)	328403	50.0000	50.263
40	2,4-Dinitrophenol	184	8.514	8.514	(1.019)	51943	50.0000	46.104
41	4-Nitrophenol	109	8.668	8.668	(1.038)	51427	50.0000	50.386
42	Dibenzofuran	168	8.695	8.695	(1.041)	459673	50.0000	51.211
43	2,4-Dinitrotoluene	165	8.809	8.809	(1.055)	127660	50.0000	48.960
44	Diethylphthalate	149	9.333	9.333	(1.117)	391312	50.0000	50.786
45	4-Chlorophenyl-phenylether	204	9.387	9.387	(1.124)	186980	50.0000	50.204
46	Fluorene	166	9.347	9.347	(1.119)	349416	50.0000	51.267
47	4-Nitroaniline	138	9.501	9.501	(1.138)	111459	50.0000	48.337
48	4,6-Dinitro-2-methylphenol	198	9.582	9.582	(0.853)	72224	50.0000	49.178
49	N-Nitrosodiphenylamine (1)	169	9.642	9.642	(0.859)	269752	50.0000	52.001
50	4-Bromophenyl-phenylether	248	10.355	10.355	(0.922)	110083	50.0000	50.452
51	Hexachlorobenzene	284	10.610	10.610	(0.945)	128864	50.0000	50.528
195	Atrazine	200	10.879	10.879	(0.969)	96231	50.0000	48.967
53	Pentachlorophenol	266	11.000	11.000	(0.980)	59984	50.0000	47.304
54	Phenanthrene	178	11.275	11.275	(1.004)	480538	50.0000	51.207
55	Anthracene	178	11.369	11.369	(1.013)	492779	50.0000	51.846
56	Carbazole	167	11.759	11.759	(1.047)	450307	50.0000	50.701
57	Di-n-Butylphthalate	149	12.800	12.800	(1.140)	647903	50.0000	51.587
58	Fluoranthene	202	13.855	13.855	(1.234)	515942	50.0000	51.560
59	Pyrene	202	14.326	14.326	(0.839)	505949	50.0000	49.943
60	Butylbenzylphthalate	149	16.113	16.113	(0.944)	268005	50.0000	49.814
61	3,3'-Dichlorobenzidine	252	17.107	17.107	(1.002)	185700	50.0000	51.993
62	Benzo(a)Anthracene	228	17.040	17.040	(0.998)	446999	50.0000	49.480
63	Chrysene	228	17.128	17.128	(1.003)	411835	50.0000	50.070
64	bis(2-ethylhexyl)Phthalate	149	17.544	17.544	(1.028)	374372	50.0000	50.390
65	Di-n-octylphthalate	149	18.854	18.854	(0.941)	629842	50.0000	51.679
66	Benzo(b)fluoranthene	252	19.318	19.318	(0.964)	439972	50.0000	47.129
67	Benzo(k)fluoranthene	252	19.372	19.372	(0.967)	438253	50.0000	55.732

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
	68 Benzo(a)pyrene	252	19.930	19.930	(0.995)	394153	50.0000	50.527
	69 Indeno(1,2,3-cd)pyrene	276	21.918	21.918	(1.094)	371028	50.0000	46.727
	70 Dibenz(a,h)anthracene	278	21.965	21.965	(1.096)	395067	50.0000	49.513
	71 Benzo(g,h,i)perylene	276	22.328	22.328	(1.114)	390319	50.0000	47.808
$	72 Nitrobenzene-d5	82	5.094	5.094	(0.878)	230979	50.0000	52.908
$	73 2-Fluorobiphenyl	172	7.244	7.244	(0.867)	398945	50.0000	51.950
$	74 Terphenyl-d14	244	14.830	14.830	(0.869)	422158	50.0000	51.911
$	75 Phenol-d5	99	4.334	4.334	(0.946)	259607	50.0000	53.482
$	76 2-Fluorophenol	112	3.521	3.521	(0.768)	236488	50.0000	52.494
$	77 2,4,6-Tribromophenol	330	9.857	9.857	(0.878)	79853	50.0000	52.886
$	78 2-Chlorophenol-d4	132	4.422	4.422	(0.965)	223078	50.0000	53.379
$	79 1,2-Dichlorobenzene-d4	152	4.744	4.744	(1.035)	152227	50.0000	53.801

Data File: \\QPITPA02\D\chem\721.i\d102400c\D1024CC3.D
Date : 24-OCT-2000 14:28
Client ID: SSTD080
Sample Info: SSTD080 (40ug/ml) 77-01-7 8270/clp/625

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

Column phase:



STL-Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d102400c\D1024CC3.D
Lab Smp Id: sstd80 Client Smp ID: SSTD080
Inj Date : 24-OCT-2000 14:28
Operator : 001562, DLF Inst ID: 721.i
Smp Info : SSTD080 (40ug/ml) 77-01-7 8270/clp/625
Misc Info : sstd80,d102400c.b,clp.m,1-all.sub,1,3
Comment :
Method : \\QPITPA02\D\chem\721.i\d102400c\clp.m
Meth Date : 24-Oct-2000 17:46 ferguson Quant Type: ISTD
Cal Date : 24-OCT-2000 13:29 Cal File: D1024CC1.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-24-00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	4.582	4.582	(1.000)	130745	40.0000	
* 2	Naphthalene-d8	136	5.805	5.805	(1.000)	485769	40.0000	
* 3	Acenaphthene-d10	164	8.358	8.358	(1.000)	227102	40.0000	
* 4	Phenanthrene-d10	188	11.234	11.234	(1.000)	393059	40.0000	
* 5	Chrysene-d12	240	17.080	17.080	(1.000)	339395	40.0000	
* 6	Perylene-d12	264	20.043	20.043	(1.000)	288475	40.0000	
191	Benzaldehyde	77	4.232	4.232	(0.924)	201271	80.0000	91.630
7	Phenol	94	4.353	4.353	(0.950)	384782	80.0000	76.502
8	Bis(2-chloroethyl)ether	93	4.407	4.407	(0.962)	328165	80.0000	78.936
9	2-Chlorophenol	128	4.441	4.441	(0.969)	364239	80.0000	78.548
10	1,3-Dichlorobenzene	146	4.555	4.555	(0.994)	385712	80.0000	78.520
11	1,4-Dichlorobenzene	146	4.595	4.595	(1.003)	384166	80.0000	78.904
12	1,2-Dichlorobenzene	146	4.756	4.756	(1.038)	343472	80.0000	78.448
189	Benzyl Alcohol	108	4.730	4.730	(1.032)	231768	80.0000	79.792
13	2-Methylphenol	108	4.837	4.837	(1.056)	297293	80.0000	78.259
14	2,2'-oxybis(1-Chloropropane)	45	4.857	4.857	(1.060)	423387	80.0000	78.655
192	Acetophenone	105	4.965	4.965	(1.084)	414797	80.0000	77.270
15	4-Methylphenol	108	4.965	4.965	(1.084)	272568	80.0000	76.670
16	N-Nitroso-di-n-propylamine	70	4.992	4.992	(1.089)	241054	80.0000	79.907
17	Hexachloroethane	117	5.025	5.025	(1.097)	158758	80.0000	80.598
18	Nitrobenzene	77	5.119	5.119	(0.882)	332463	80.0000	78.524
19	Isophorone	82	5.341	5.341	(0.920)	619579	80.0000	78.135
20	2-Nitrophenol	139	5.422	5.422	(0.934)	217812	80.0000	79.932
21	2,4-Dimethylphenol	107	5.455	5.455	(0.940)	307182	80.0000	78.236
22	Bis(2-chloroethoxy)methane	93	5.556	5.556	(0.957)	368293	80.0000	78.448
190	Benzoic acid	122	5.617	5.617	(0.968)	69517	80.0000	81.832

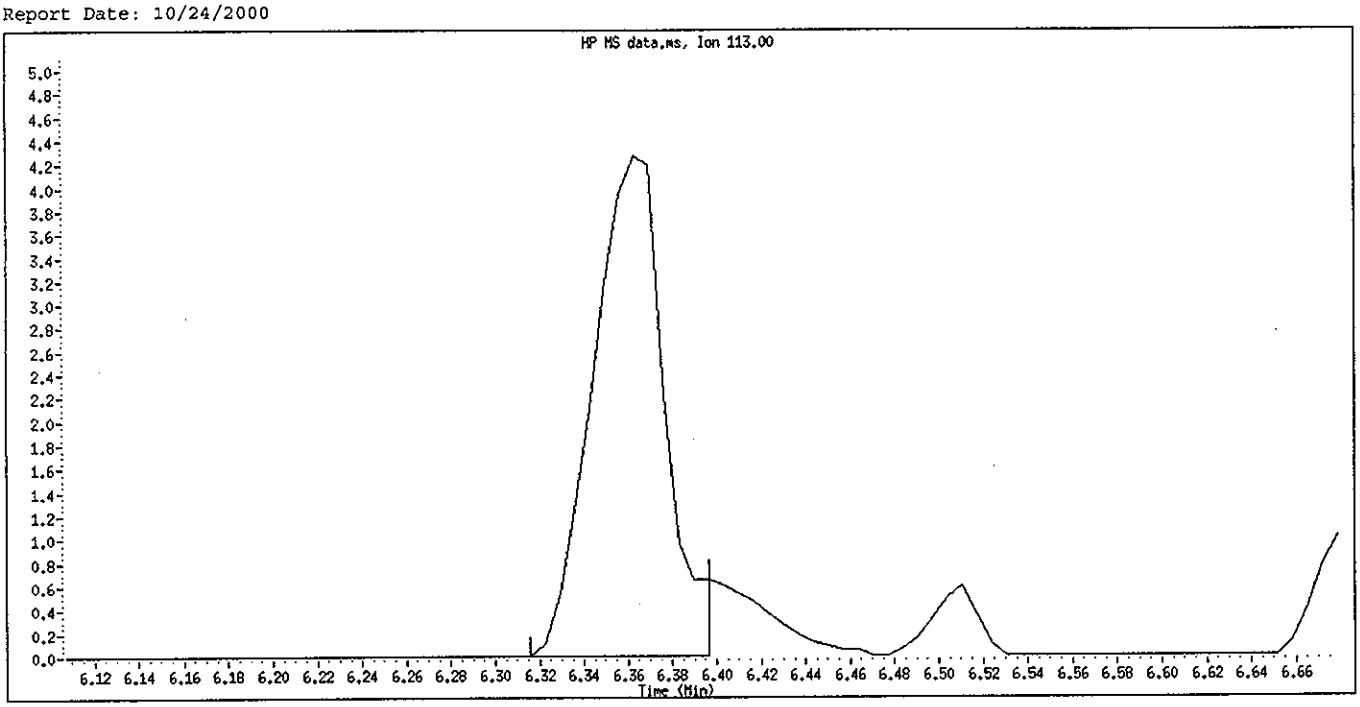
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
23	2,4-Dichlorophenol	162	5.664	5.664	(0.976)	278852	80.0000	79.233
24	1,2,4-Trichlorobenzene	180	5.751	5.751	(0.991)	296786	80.0000	79.877
25	Naphthalene	128	5.825	5.825	(1.003)	942079	80.0000	78.447
26	4-Chloroaniline	127	5.905	5.905	(1.017)	414282	80.0000	79.197
193	Caprolactam	113	6.362	6.362	(1.096)	107964	80.0000	79.014 (M)
27	Hexachlorobutadiene	225	6.026	6.026	(1.038)	177208	80.0000	80.735
28	4-Chloro-3-Methylphenol	107	6.510	6.510	(1.122)	277457	80.0000	79.576
29	2-Methylnaphthalene	142	6.678	6.678	(1.150)	570794	80.0000	78.610
30	Hexachlorocyclopentadiene	237	7.001	7.001	(0.838)	213396	80.0000	81.350
31	2,4,6-Trichlorophenol	196	7.128	7.128	(0.853)	198494	80.0000	80.267
32	2,4,5-Trichlorophenol	196	7.189	7.189	(0.860)	211648	80.0000	80.852
194	1,1'-Biphenyl	154	7.384	7.384	(0.883)	630775	80.0000	78.027
33	2-Chloronaphthalene	162	7.397	7.397	(0.885)	497925	80.0000	78.560
34	2-Nitroaniline	65	7.619	7.619	(0.912)	180778	80.0000	81.331
35	Dimethylphthalate	163	8.009	8.009	(0.958)	635490	80.0000	80.500
36	Acenaphthylene	152	8.082	8.082	(0.967)	855987	80.0000	80.326
37	2,6-Dinitrotoluene	165	8.116	8.116	(0.971)	155528	80.0000	80.410
38	3-Nitroaniline	138	8.345	8.345	(0.998)	184612	80.0000	79.970
39	Acenaphthene	153	8.418	8.418	(1.007)	515168	80.0000	79.268
40	2,4-Dinitrophenol	184	8.526	8.526	(1.020)	97268	80.0000	86.794
41	4-Nitrophenol	109	8.687	8.687	(1.039)	85015	80.0000	83.738
42	Dibenzofuran	168	8.707	8.707	(1.042)	716203	80.0000	80.215
43	2,4-Dinitrotoluene	165	8.828	8.828	(1.056)	208287	80.0000	80.308
44	Diethylphthalate	149	9.346	9.346	(1.118)	614057	80.0000	80.119
45	4-Chlorophenyl-phenylether	204	9.393	9.393	(1.124)	297160	80.0000	80.213
46	Fluorene	166	9.359	9.359	(1.120)	543352	80.0000	80.146
47	4-Nitroaniline	138	9.520	9.520	(1.139)	183386	80.0000	79.954
48	4,6-Dinitro-2-methylphenol	198	9.601	9.601	(0.855)	129900	80.0000	86.061
49	N-Nitrosodiphenylamine (1)	169	9.655	9.655	(0.859)	413793	80.0000	77.612
50	4-Bromophenyl-phenylether	248	10.360	10.360	(0.922)	178366	80.0000	79.538
51	Hexachlorobenzene	284	10.616	10.616	(0.945)	210608	80.0000	80.349
195	Atrazine	200	10.898	10.898	(0.970)	160109	80.0000	79.270
53	Pentachlorophenol	266	11.005	11.005	(0.980)	113937	80.0000	87.424
54	Phenanthrene	178	11.288	11.288	(1.005)	762409	80.0000	79.048
55	Anthracene	178	11.382	11.382	(1.013)	765269	80.0000	78.340
56	Carbazole	167	11.771	11.771	(1.048)	721074	80.0000	78.993
57	Di-n-Butylphthalate	149	12.813	12.813	(1.141)	1029197	80.0000	79.732
58	Fluoranthene	202	13.868	13.868	(1.234)	813054	80.0000	79.056
59	Pyrene	202	14.338	14.338	(0.839)	804765	80.0000	78.946
60	Butylbenzylphthalate	149	16.119	16.119	(0.944)	430136	80.0000	79.453
61	3,3'-Dichlorobenzidine	252	17.120	17.120	(1.002)	292723	80.0000	81.449
62	Benzo(a)Anthracene	228	17.046	17.046	(0.998)	718296	80.0000	79.018
63	Chrysene	228	17.147	17.147	(1.004)	654454	80.0000	79.074
64	bis(2-ethylhexyl)Phthalate	149	17.543	17.543	(1.027)	590485	80.0000	78.984
65	Di-n-octylphthalate	149	18.867	18.867	(0.941)	1011828	80.0000	81.387
66	Benzo(b)fluoranthene	252	19.337	19.337	(0.965)	722356	80.0000	75.854
67	Benzo(k)fluoranthene	252	19.391	19.391	(0.967)	688624	80.0000	85.848

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
68 Benzo(a)pyrene	252	19.942	19.942	(0.995)	634368	80.0000	79.720
69 Indeno(1,2,3-cd)pyrene	276	21.931	21.931	(1.094)	624530	80.0000	77.105
70 Dibenz(a,h)anthracene	278	21.985	21.985	(1.097)	646219	80.0000	79.395
71 Benzo(g,h,i)perylene	276	22.347	22.347	(1.115)	654505	80.0000	78.590
$ 72 Nitrobenzene-d5	82	5.099	5.099	(0.878)	355883	80.0000	79.157
$ 73 2-Fluorobiphenyl	172	7.249	7.249	(0.867)	603986	80.0000	79.069
$ 74 Terphenyl-d14	244	14.842	14.842	(0.869)	649817	80.0000	79.409
$ 75 Phenol-d5	99	4.340	4.340	(0.947)	385531	80.0000	77.507
$ 76 2-Fluorophenol	112	3.527	3.527	(0.770)	362967	80.0000	78.624
$ 77 2,4,6-Tribromophenol	330	9.870	9.870	(0.879)	126712	80.0000	81.652
$ 78 2-Chlorophenol-d4	132	4.427	4.427	(0.966)	334875	80.0000	78.196
$ 79 1,2-Dichlorobenzene-d4	152	4.743	4.743	(1.035)	227996	80.0000	78.634

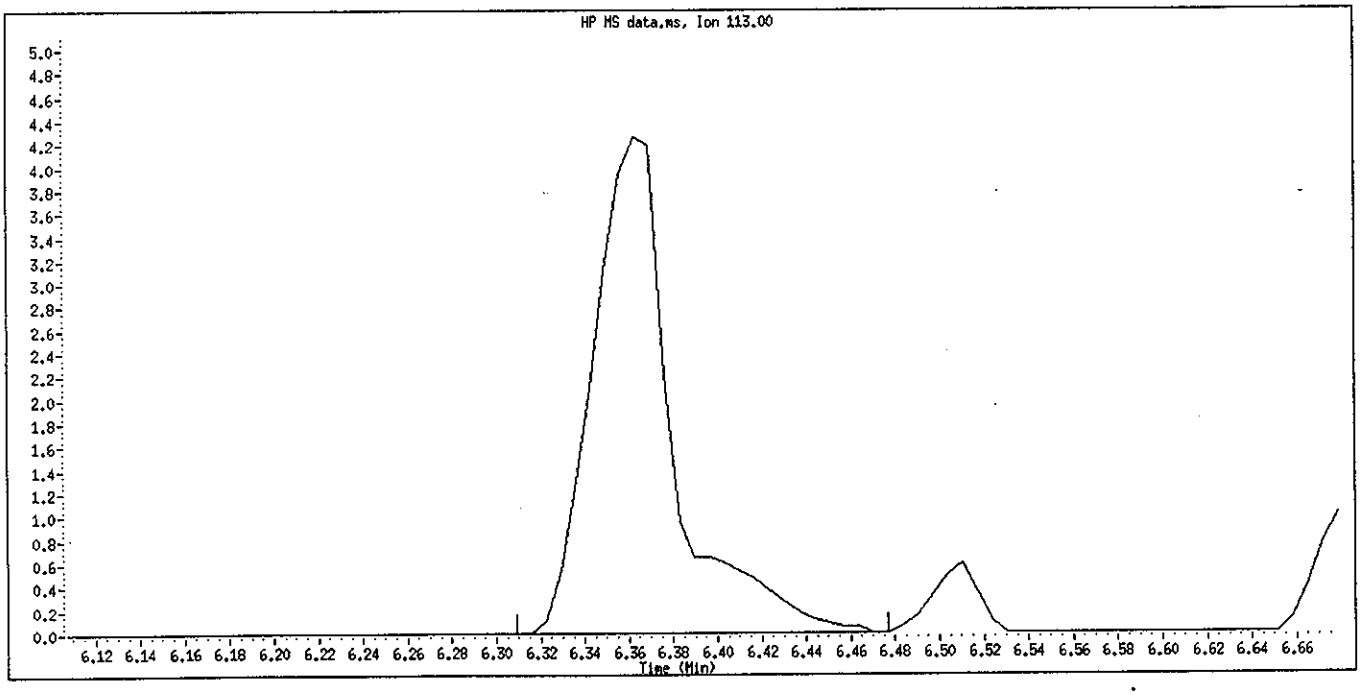
QC Flag Legend

M - Compound response manually integrated.

Data File Name: D1024CC3.D
Inj. Date and Time: 24-OCT-2000 14:28
Instrument ID: 721.i
Client ID: SSTD080
Compound Name: Caprolactam
CAS #: 105-60-2
Report Date: 10/24/2000



Original Integration



Manual Integration

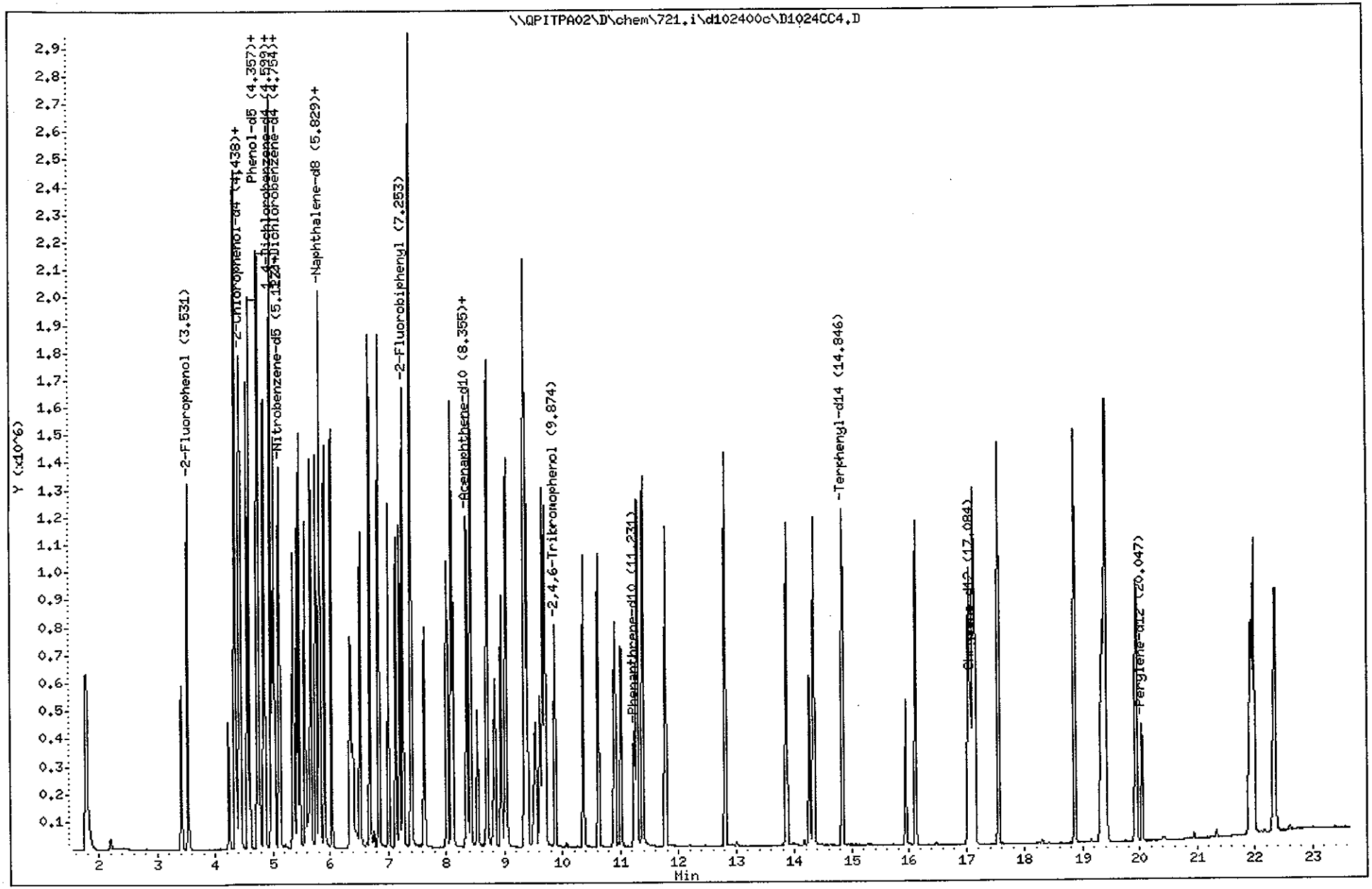
Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File: \\QPITPA02\D\chem\721.i\d102400c\D1024CC4.D
Date : 24-OCT-2000 15:27
Client ID: SSTD120
Sample Info: SSTD120 (60ug/ml) 77-01-8 8270/clp/625

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25

Column phase:



STL-Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d102400c\D1024CC4.D
Lab Smp Id: sstd120 Client Smp ID: SSTD120
Inj Date : 24-OCT-2000 15:27
Operator : 001562, DLF Inst ID: 721.i
Smp Info : SSTD120 (60ug/ml) 77-01-8 8270/clp/625
Misc Info : sstd120,d102400c.b,clp.m,1-all.sub,1,4
Comment :
Method : \\QPITPA02\D\chem\721.i\d102400c\clp.m
Meth Date : 24-Oct-2000 17:48 ferguson Quant Type: ISTD
Cal Date : 24-OCT-2000 13:29 Cal File: D1024CC1.D
Als bottle: 9 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-24-00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	4.585	4.585	(1.000)	126281	40.0000	
* 2	Naphthalene-d8	136	5.802	5.802	(1.000)	472911	40.0000	
* 3	Acenaphthene-d10	164	8.355	8.355	(1.000)	218254	40.0000	
* 4	Phenanthrene-d10	188	11.231	11.231	(1.000)	380791	40.0000	
* 5	Chrysene-d12	240	17.083	17.083	(1.000)	314999	40.0000	
* 6	Perylene-d12	264	20.046	20.046	(1.000)	277401	40.0000	
191	Benzaldehyde	77	4.236	4.236	(0.924)	141910	120.000	66.889
7	Phenol	94	4.357	4.357	(0.950)	540407	120.000	111.24
8	Bis(2-chloroethyl)ether	93	4.417	4.417	(0.963)	458161	120.000	114.10(M)
9	2-Chlorophenol	128	4.444	4.444	(0.969)	519272	120.000	115.94
10	1,3-Dichlorobenzene	146	4.559	4.559	(0.994)	554123	120.000	116.79
11	1,4-Dichlorobenzene	146	4.599	4.599	(1.003)	543722	120.000	115.62
12	1,2-Dichlorobenzene	146	4.760	4.760	(1.038)	480149	120.000	113.54
189	Benzyl Alcohol	108	4.733	4.733	(1.032)	326083	120.000	116.23
13	2-Methylphenol	108	4.841	4.841	(1.056)	424282	120.000	115.64
14	2,2'-oxybis(1-Chloropropane)	45	4.861	4.861	(1.060)	578103	120.000	111.19
192	Acetophenone	105	4.975	4.975	(1.085)	589297	120.000	113.66
15	4-Methylphenol	108	4.975	4.975	(1.085)	379812	120.000	110.61
16	N-Nitroso-di-n-propylamine	70	5.002	5.002	(1.091)	344866	120.000	118.36
17	Hexachloroethane	117	5.029	5.029	(1.097)	221051	120.000	116.19
18	Nitrobenzene	77	5.123	5.123	(0.883)	475223	120.000	115.29
19	Isophorone	82	5.351	5.351	(0.922)	908916	120.000	117.74
20	2-Nitrophenol	139	5.425	5.425	(0.935)	318951	120.000	120.23
21	2,4-Dimethylphenol	107	5.466	5.466	(0.942)	450146	120.000	117.76
22	Bis(2-chloroethoxy)methane	93	5.566	5.566	(0.959)	529905	120.000	115.94
190	Benzoic acid	122	5.647	5.647	(0.973)	122715	120.000	148.38

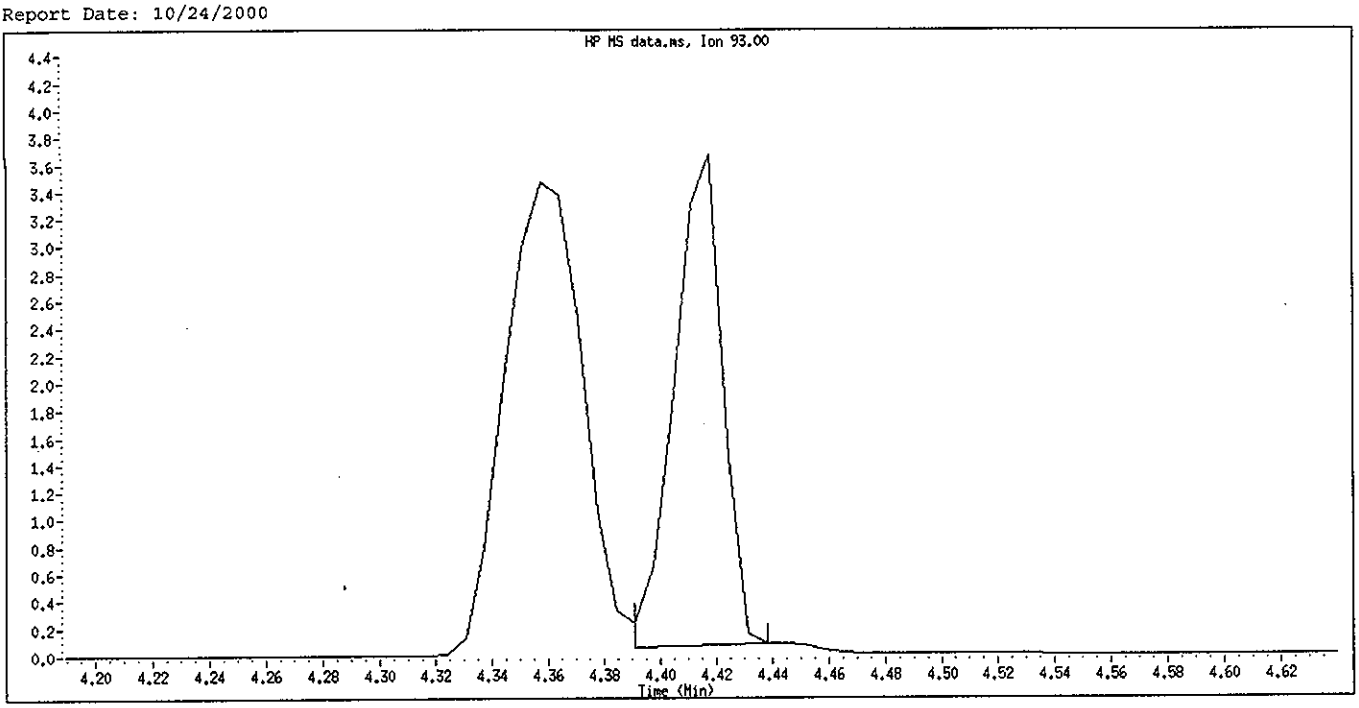
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
23	2,4-Dichlorophenol	162	5.667	5.667	(0.977)	402236	120.000	117.40
24	1,2,4-Trichlorobenzene	180	5.755	5.755	(0.992)	424855	120.000	117.46
25	Naphthalene	128	5.828	5.828	(1.005)	1325904	120.000	113.41
26	4-Chloroaniline	127	5.909	5.909	(1.019)	593037	120.000	116.45
193	Caprolactam	113	6.400	6.400	(1.103)	162733	120.000	122.34 (M)
27	Hexachlorobutadiene	225	6.030	6.030	(1.039)	254061	120.000	118.90
28	4-Chloro-3-Methylphenol	107	6.521	6.521	(1.124)	392189	120.000	115.54
29	2-Methylnaphthalene	142	6.682	6.682	(1.152)	805152	120.000	113.90
30	Hexachlorocyclopentadiene	237	7.004	7.004	(0.838)	305784	120.000	121.30
31	2,4,6-Trichlorophenol	196	7.132	7.132	(0.854)	285069	120.000	119.95
32	2,4,5-Trichlorophenol	196	7.199	7.199	(0.862)	304242	120.000	120.94
194	1,1'-Biphenyl	154	7.394	7.394	(0.885)	885689	120.000	114.00
33	2-Chloronaphthalene	162	7.407	7.407	(0.887)	717727	120.000	117.83
34	2-Nitroaniline	65	7.629	7.629	(0.913)	258607	120.000	121.06
35	Dimethylphthalate	163	8.019	8.019	(0.960)	908474	120.000	119.74
36	Acenaphthylene	152	8.093	8.093	(0.969)	1196596	120.000	116.84
37	2,6-Dinitrotoluene	165	8.126	8.126	(0.973)	225452	120.000	121.29
38	3-Nitroaniline	138	8.362	8.362	(1.001)	268463	120.000	121.01
39	Acenaphthene	153	8.422	8.422	(1.008)	734343	120.000	117.57
40	2,4-Dinitrophenol	184	8.536	8.536	(1.022)	155416	120.000	144.30
41	4-Nitrophenol	109	8.704	8.704	(1.042)	119885	120.000	122.87
42	Dibenzofuran	168	8.711	8.711	(1.043)	990528	120.000	115.44
43	2,4-Dinitrotoluene	165	8.845	8.845	(1.059)	308633	120.000	123.82
44	Diethylphthalate	149	9.356	9.356	(1.120)	861524	120.000	116.96
45	4-Chlorophenyl-phenylether	204	9.403	9.403	(1.125)	427579	120.000	120.10
46	Fluorene	166	9.363	9.363	(1.121)	748735	120.000	114.92
47	4-Nitroaniline	138	9.544	9.544	(1.142)	273500	120.000	124.08
48	4,6-Dinitro-2-methylphenol	198	9.618	9.618	(0.856)	196591	120.000	134.44
49	N-Nitrosodiphenylamine (1)	169	9.672	9.672	(0.861)	605176	120.000	117.16
50	4-Bromophenyl-phenylether	248	10.364	10.364	(0.923)	258078	120.000	118.79
51	Hexachlorobenzene	284	10.626	10.626	(0.946)	298875	120.000	117.70
195	Atrazine	200	10.915	10.915	(0.972)	231457	120.000	118.29
53	Pentachlorophenol	266	11.016	11.016	(0.981)	177558	120.000	140.63
54	Phenanthrene	178	11.298	11.298	(1.006)	1084771	120.000	116.10
55	Anthracene	178	11.392	11.392	(1.014)	1082161	120.000	114.35
56	Carbazole	167	11.782	11.782	(1.049)	1030326	120.000	116.51
57	Di-n-Butylphthalate	149	12.816	12.816	(1.141)	1448480	120.000	115.83
58	Fluoranthene	202	13.871	13.871	(1.235)	1157222	120.000	116.15
59	Pyrene	202	14.348	14.348	(0.840)	1124781	120.000	118.88
60	Butylbenzylphthalate	149	16.129	16.129	(0.944)	609381	120.000	121.28
61	3,3'-Dichlorobenzidine	252	17.123	17.123	(1.002)	397001	120.000	119.02
62	Benzo(a)Anthracene	228	17.050	17.050	(0.998)	1017266	120.000	120.57
63	Chrysene	228	17.157	17.157	(1.004)	909793	120.000	118.44
64	bis(2-ethylhexyl)Phthalate	149	17.547	17.547	(1.027)	832010	120.000	119.91
65	Di-n-octylphthalate	149	18.870	18.870	(0.941)	1413866	120.000	118.26
66	Benzo(b)fluoranthene	252	19.361	19.361	(0.966)	1211976	120.000	132.35
67	Benzo(k)fluoranthene	252	19.408	19.408	(0.968)	804252	120.000	104.26 (M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
68 Benzo(a)pyrene	252	19.952	19.952	(0.995)	920282	120.000	120.27
69 Indeno(1,2,3-cd)pyrene	276	21.941	21.941	(1.095)	969729	120.000	124.50
70 Dibenz(a,h)anthracene	278	21.995	21.995	(1.097)	969754	120.000	123.90
71 Benzo(g,h,i)perylene	276	22.364	22.364	(1.116)	1002820	120.000	125.22
$ 72 Nitrobenzene-d5	82	5.110	5.110	(0.881)	503341	120.000	115.00
$ 73 2-Fluorobiphenyl	172	7.253	7.253	(0.868)	860579	120.000	117.23
$ 74 Terphenyl-d14	244	14.846	14.846	(0.869)	898052	120.000	118.24
$ 75 Phenol-d5	99	4.350	4.350	(0.949)	543119	120.000	113.05
$ 76 2-Fluorophenol	112	3.530	3.530	(0.770)	524769	120.000	117.69
$ 77 2,4,6-Tribromophenol	330	9.873	9.873	(0.879)	180534	120.000	120.08
$ 78 2-Chlorophenol-d4	132	4.431	4.431	(0.966)	473271	120.000	114.42
$ 79 1,2-Dichlorobenzene-d4	152	4.747	4.747	(1.035)	311318	120.000	111.17

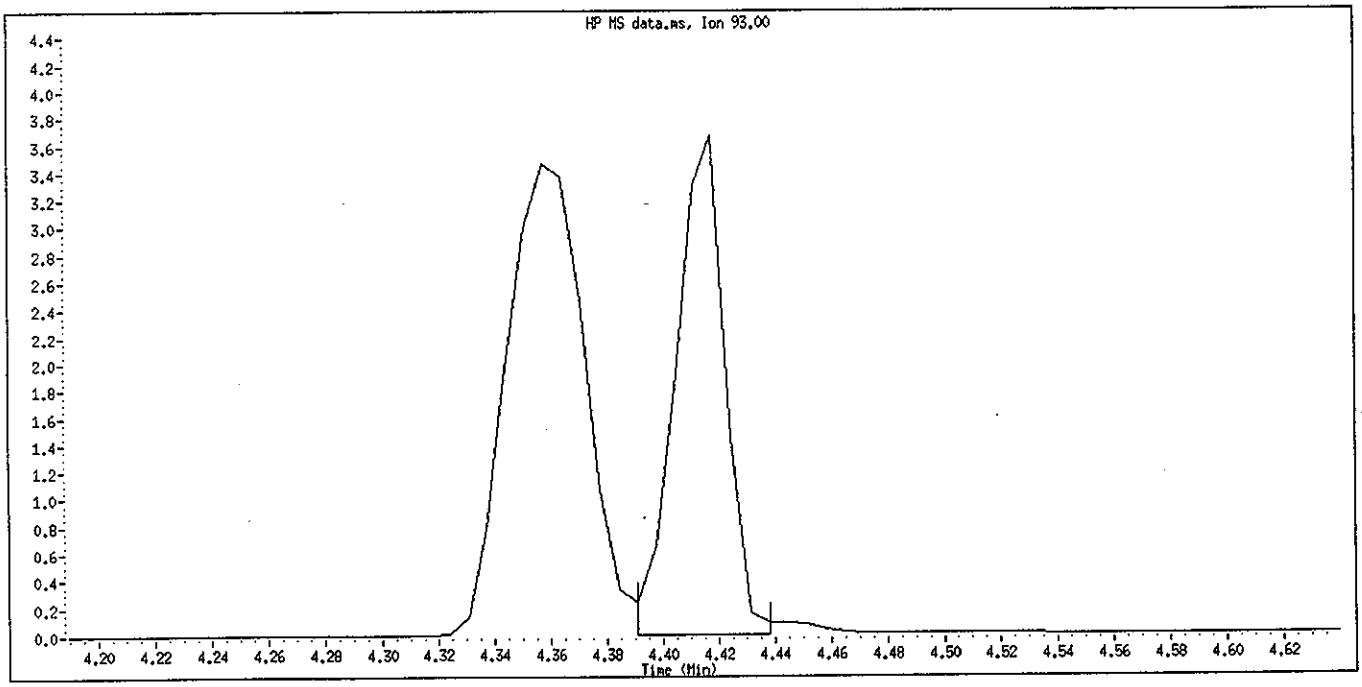
QC Flag Legend

M - Compound response manually integrated.

Data File Name: D1024CC4.D
Inj. Date and Time: 24-OCT-2000 15:27
Instrument ID: 721.i
Client ID: SSTD120
Compound Name: Bis(2-chloroethyl)ether
CAS #: 111-44-4
Report Date: 10/24/2000



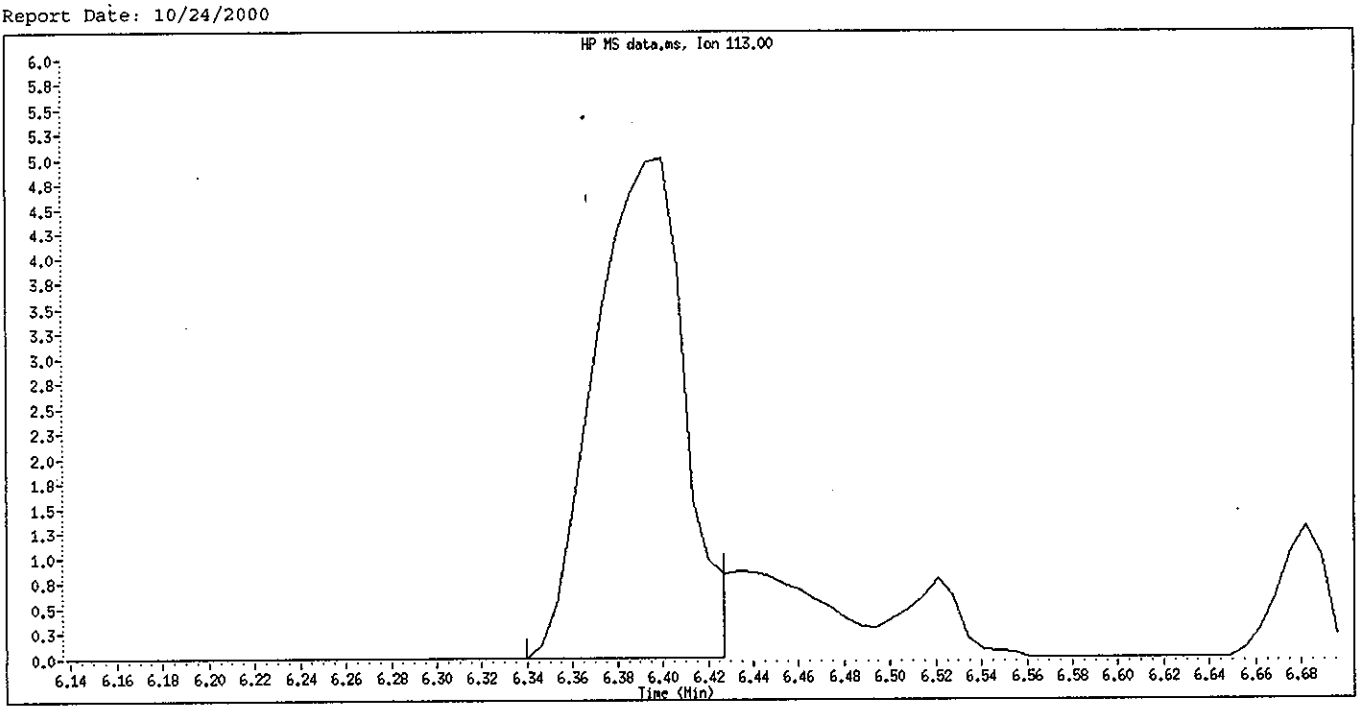
Original Integration



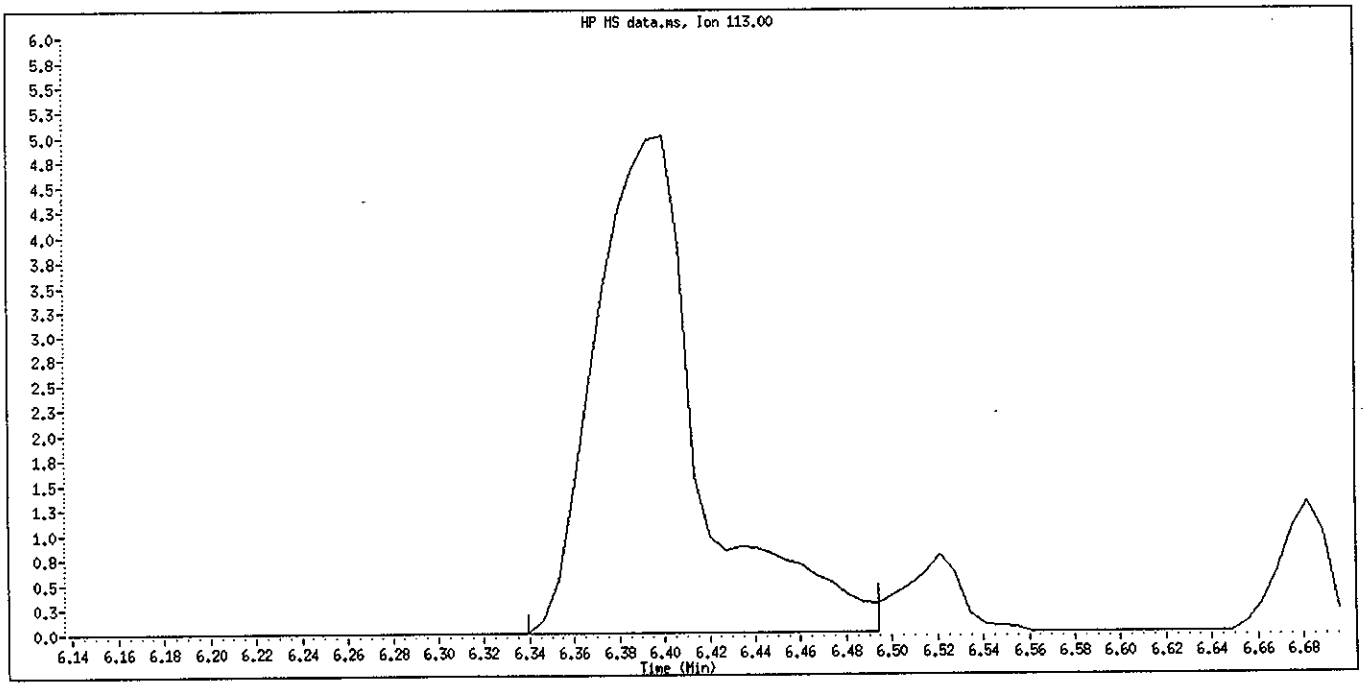
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1024CC4.D
Inj. Date and Time: 24-OCT-2000 15:27
Instrument ID: 721.i
Client ID: SSTD120
Compound Name: Caprolactam
CAS #: 105-60-2
Report Date: 10/24/2000



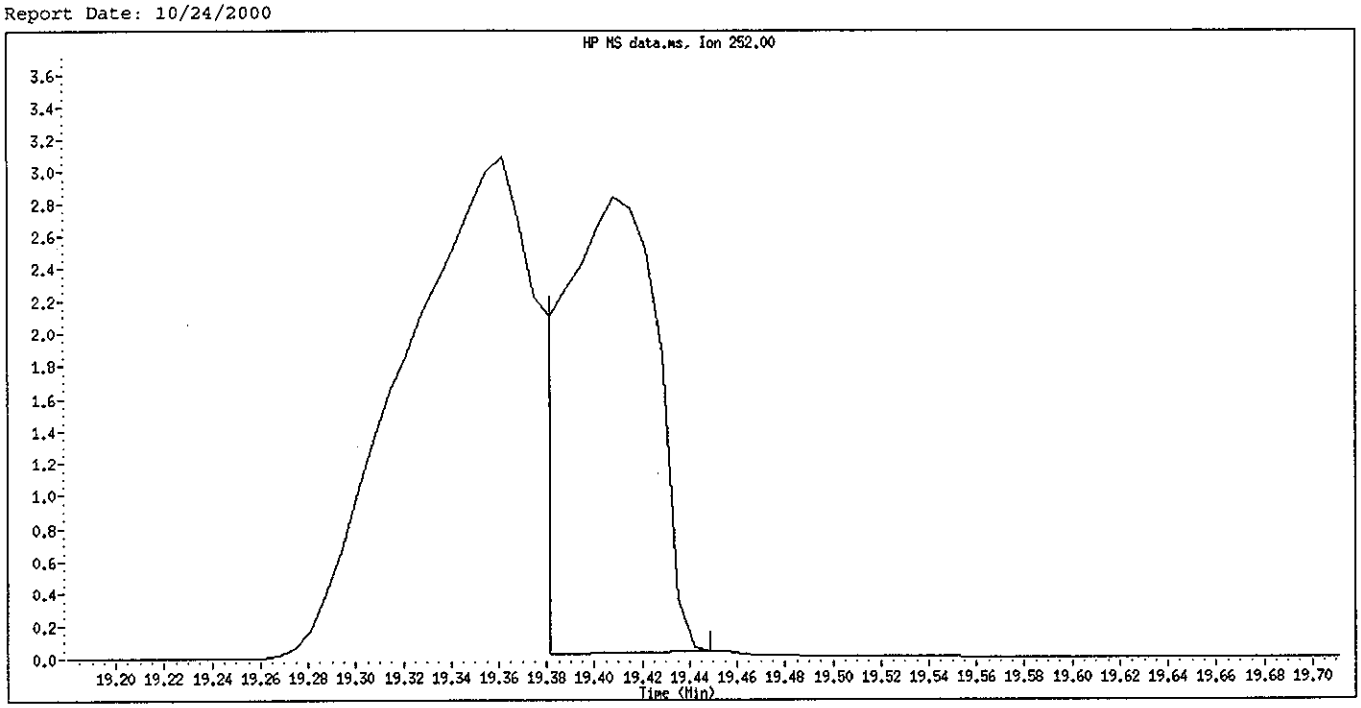
Original Integration



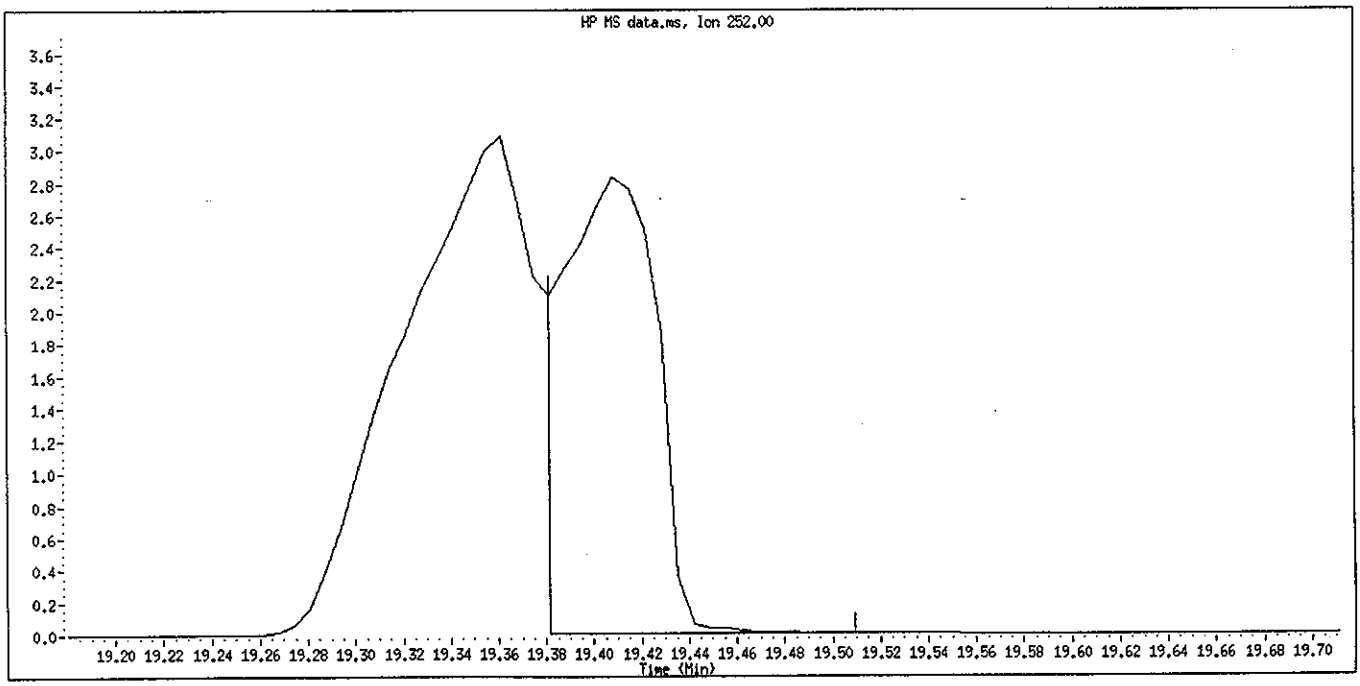
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1024CC4.D
Inj. Date and Time: 24-OCT-2000 15:27
Instrument ID: 721.i
Client ID: SSTD120
Compound Name: Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 10/24/2000



Original Integration



Manual Integration

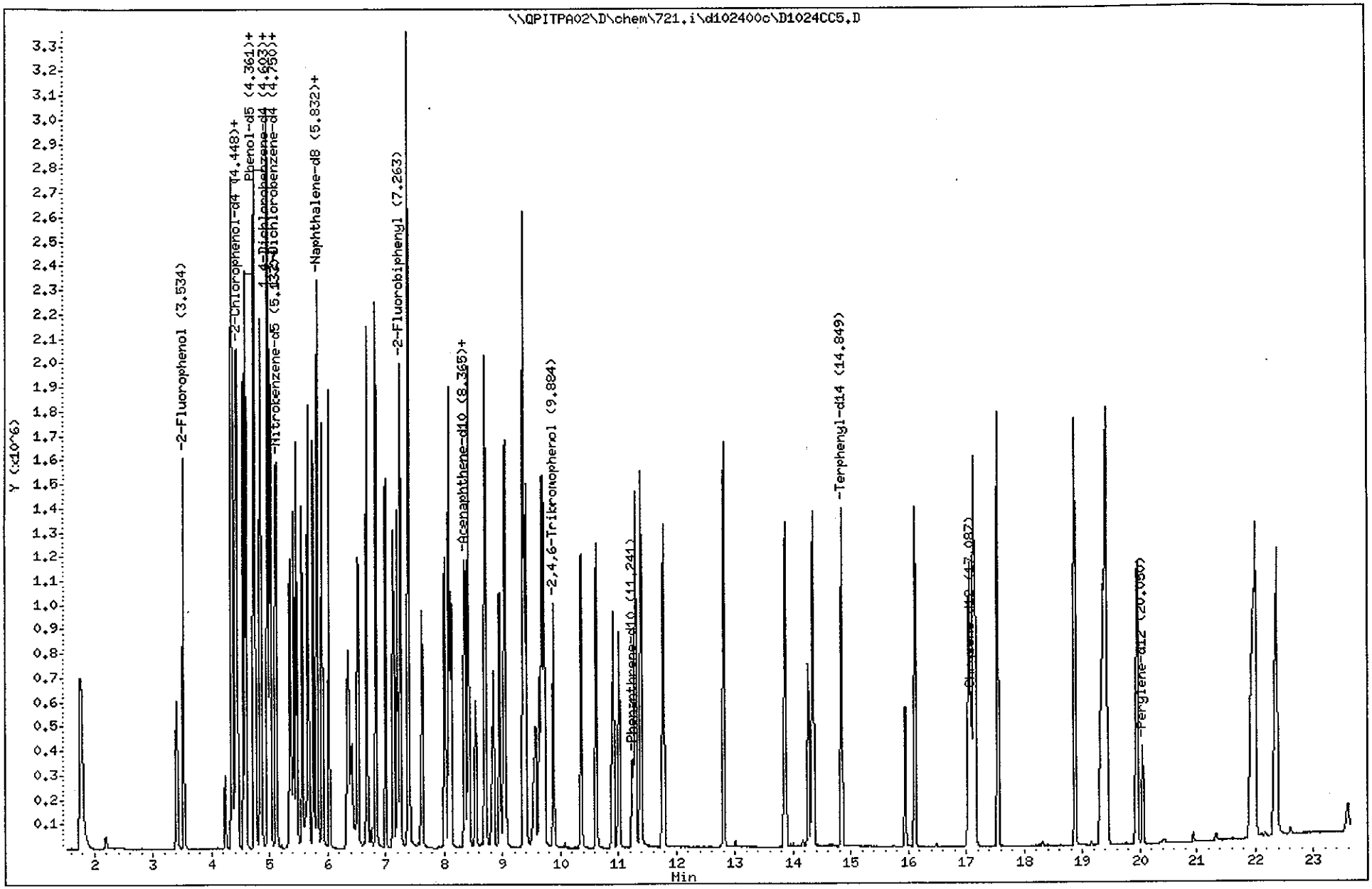
Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File: \\QPITPA02\D\chem\721.i\d102400c\D1024CC5.D
Date : 24-OCT-2000 15:57
Client ID: SSTD160
Sample Info: SSTD160 (80ug/ml) 77-01-9 8270/clp/625

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25

Column phase:



STL-Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d102400c\D1024CC5.D
Lab Smp Id: sstd160 Client Smp ID: SSTD160
Inj Date : 24-OCT-2000 15:57
Operator : 001562, DLF Inst ID: 721.i
Smp Info : SSTD160 (80ug/ml) 77-01-9 8270/clp/625
Misc Info : sstd160,d102400c.b,clp.m,1-all.sub,1,5
Comment :
Method : \\QPITPA02\D\chem\721.i\d102400c\clp.m
Meth Date : 24-Oct-2000 17:50 ferguson Quant Type: ISTD
Cal Date : 24-OCT-2000 15:57 Cal File: D1024CC5.D
Als bottle: 10 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-24-00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	4.589	4.589	(1.000)	123012	40.0000	
* 2	Naphthalene-d8	136	5.805	5.805	(1.000)	461753	40.0000	
* 3	Acenaphthene-d10	164	8.358	8.358	(1.000)	209810	40.0000	
* 4	Phenanthrene-d10	188	11.241	11.241	(1.000)	361405	40.0000	
* 5	Chrysene-d12	240	17.086	17.086	(1.000)	302524	40.0000	
* 6	Perylene-d12	264	20.056	20.056	(1.000)	274472	40.0000	
191	Benzaldehyde	77	4.232	4.232	(0.922)	100396	160.000	48.579
7	Phenol	94	4.367	4.367	(0.952)	669257	160.000	141.42
8	Bis(2-chloroethyl)ether	93	4.421	4.421	(0.963)	571988	160.000	146.23(M)
9	2-Chlorophenol	128	4.454	4.454	(0.971)	649419	160.000	148.85
10	1,3-Dichlorobenzene	146	4.562	4.562	(0.994)	699402	160.000	151.33
11	1,4-Dichlorobenzene	146	4.602	4.602	(1.003)	679276	160.000	148.29
12	1,2-Dichlorobenzene	146	4.763	4.763	(1.038)	598487	160.000	145.29
189	Benzyl Alcohol	108	4.736	4.736	(1.032)	396651	160.000	145.14
13	2-Methylphenol	108	4.844	4.844	(1.056)	527332	160.000	147.54
14	2,2'-oxybis(1-Chloropropane)	45	4.864	4.864	(1.060)	702410	160.000	138.69
192	Acetophenone	105	4.978	4.978	(1.085)	733904	160.000	145.31
15	4-Methylphenol	108	4.978	4.978	(1.085)	473857	160.000	141.67
16	N-Nitroso-di-n-propylamine	70	5.019	5.019	(1.094)	412843	160.000	145.46
17	Hexachloroethane	117	5.032	5.032	(1.097)	264081	160.000	142.50
18	Nitrobenzene	77	5.133	5.133	(0.884)	594535	160.000	147.72
19	Isophorone	82	5.361	5.361	(0.924)	1182553	160.000	156.89
20	2-Nitrophenol	139	5.429	5.429	(0.935)	394270	160.000	152.21
21	2,4-Dimethylphenol	107	5.469	5.469	(0.942)	571038	160.000	153.00
22	Bis(2-chloroethoxy)methane	93	5.570	5.570	(0.959)	666037	160.000	149.25
190	Benzoic acid	122	5.670	5.670	(0.977)	183319	160.000	227.02(A)

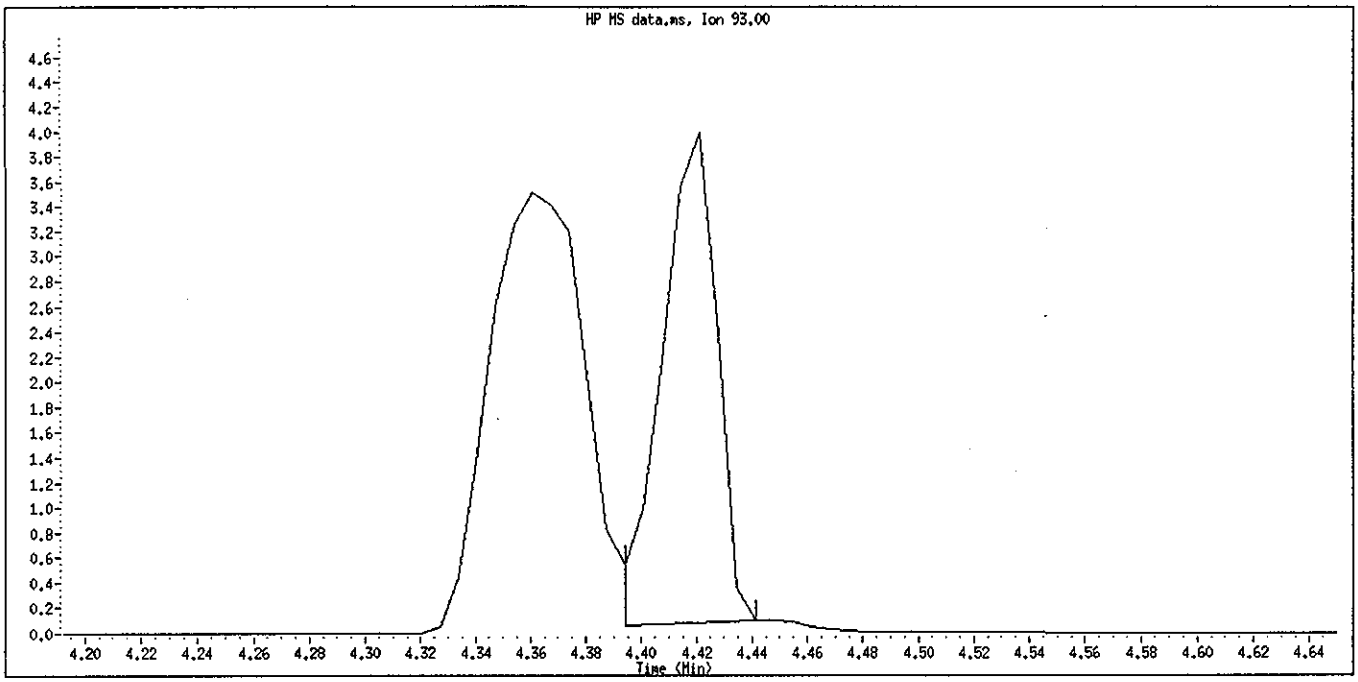
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
23	2,4-Dichlorophenol	162	5.677	5.677	(0.978)	501608	160.000	149.94
24	1,2,4-Trichlorobenzene	180	5.758	5.758	(0.992)	532382	160.000	150.74
25	Naphthalene	128	5.832	5.832	(1.005)	1652580	160.000	144.77
26	4-Chloroaniline	127	5.912	5.912	(1.019)	718409	160.000	144.48
193	Caprolactam	113	6.423	6.423	(1.106)	200251	160.000	154.18(M)
27	Hexachlorobutadiene	225	6.027	6.027	(1.038)	315293	160.000	151.12
28	4-Chloro-3-Methylphenol	107	6.530	6.530	(1.125)	502552	160.000	151.63
29	2-Methylnaphthalene	142	6.685	6.685	(1.152)	1003925	160.000	145.45
30	Hexachlorocyclopentadiene	237	7.008	7.008	(0.838)	385323	160.000	159.00
31	2,4,6-Trichlorophenol	196	7.142	7.142	(0.855)	367983	160.000	161.07(A)
32	2,4,5-Trichlorophenol	196	7.209	7.209	(0.863)	373763	160.000	154.55
194	1,1'-Biphenyl	154	7.404	7.404	(0.886)	1114318	160.000	149.20
33	2-Chloronaphthalene	162	7.411	7.411	(0.887)	895245	160.000	152.89
34	2-Nitroaniline	65	7.639	7.639	(0.914)	325360	160.000	158.44
35	Dimethylphthalate	163	8.022	8.022	(0.960)	1145838	160.000	157.11
36	Acenaphthylene	152	8.096	8.096	(0.969)	1494402	160.000	151.79
37	2,6-Dinitrotoluene	165	8.130	8.130	(0.973)	284343	160.000	159.12
38	3-Nitroaniline	138	8.372	8.372	(1.002)	340332	160.000	159.57
39	Acenaphthene	153	8.432	8.432	(1.009)	918865	160.000	153.04
40	2,4-Dinitrophenol	184	8.553	8.553	(1.023)	208408	160.000	201.29(A)
41	4-Nitrophenol	109	8.728	8.728	(1.044)	149714	160.000	159.62
42	Dibenzofuran	168	8.721	8.721	(1.043)	1246752	160.000	151.14
43	2,4-Dinitrotoluene	165	8.855	8.855	(1.059)	387687	160.000	161.80(A)
44	Diethylphthalate	149	9.366	9.366	(1.121)	1070408	160.000	151.17
45	4-Chlorophenyl-phenylether	204	9.406	9.406	(1.125)	520535	160.000	152.09
46	Fluorene	166	9.373	9.373	(1.121)	925274	160.000	147.73
47	4-Nitroaniline	138	9.574	9.574	(1.145)	346458	160.000	163.50(A)
48	4,6-Dinitro-2-methylphenol	198	9.641	9.641	(0.858)	256014	160.000	184.47(A)
49	N-Nitrosodiphenylamine (1)	169	9.682	9.682	(0.861)	732449	160.000	149.41
50	4-Bromophenyl-phenylether	248	10.374	10.374	(0.923)	322574	160.000	156.44
51	Hexachlorobenzene	284	10.629	10.629	(0.946)	379112	160.000	157.30
195	Atrazine	200	10.925	10.925	(0.972)	289133	160.000	155.69
53	Pentachlorophenol	266	11.019	11.019	(0.980)	234828	160.000	195.96(A)
54	Phenanthrene	178	11.301	11.301	(1.005)	1350449	160.000	152.28
55	Anthracene	178	11.402	11.402	(1.014)	1345835	160.000	149.84
56	Carbazole	167	11.792	11.792	(1.049)	1292810	160.000	154.03
57	Di-n-Butylphthalate	149	12.820	12.820	(1.140)	1779439	160.000	149.93
58	Fluoranthene	202	13.881	13.881	(1.235)	1433343	160.000	151.58
59	Pyrene	202	14.358	14.358	(0.840)	1408950	160.000	155.06
60	Butylbenzylphthalate	149	16.132	16.132	(0.944)	760548	160.000	157.61
61	3,3'-Dichlorobenzidine	252	17.133	17.133	(1.003)	487379	160.000	152.14
62	Benzo(a)Anthracene	228	17.059	17.059	(0.998)	1277430	160.000	157.65
63	Chrysene	228	17.167	17.167	(1.005)	1138550	160.000	154.33
64	bis(2-ethylhexyl)Phthalate	149	17.557	17.557	(1.028)	1047941	160.000	157.26
65	Di-n-octylphthalate	149	18.880	18.880	(0.941)	1760038	160.000	148.79
66	Benzo(b)fluoranthene	252	19.378	19.378	(0.966)	1576192	160.000	173.96(A)
67	Benzo(k)fluoranthene	252	19.431	19.431	(0.969)	978592	160.000	128.22(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
68	Benzo(a)pyrene	252	19.969	19.969	(0.996)	1179990	160.000	155.85
69	Indeno(1,2,3-cd)pyrene	276	21.958	21.958	(1.095)	1421070	160.000	184.40(A)
70	Dibenz(a,h)anthracene	278	22.012	22.012	(1.097)	1285517	160.000	166.00(A)
71	Benzo(g,h,i)perylene	276	22.381	22.381	(1.116)	1367528	160.000	172.58(A)
$ 72	Nitrobenzene-d5	82	5.113	5.113	(0.881)	634865	160.000	148.55
$ 73	2-Fluorobiphenyl	172	7.263	7.263	(0.869)	1066054	160.000	151.06
$ 74	Terphenyl-d14	244	14.849	14.849	(0.869)	1120799	160.000	153.66
$ 75	Phenol-d5	99	4.353	4.353	(0.949)	662737	160.000	141.61
$ 76	2-Fluorophenol	112	3.534	3.534	(0.770)	660256	160.000	152.01
$ 77	2,4,6-Tribromophenol	330	9.883	9.883	(0.879)	222646	160.000	156.04
$ 78	2-Chlorophenol-d4	132	4.434	4.434	(0.966)	590851	160.000	146.64
$ 79	1,2-Dichlorobenzene-d4	152	4.750	4.750	(1.035)	388190	160.000	142.30

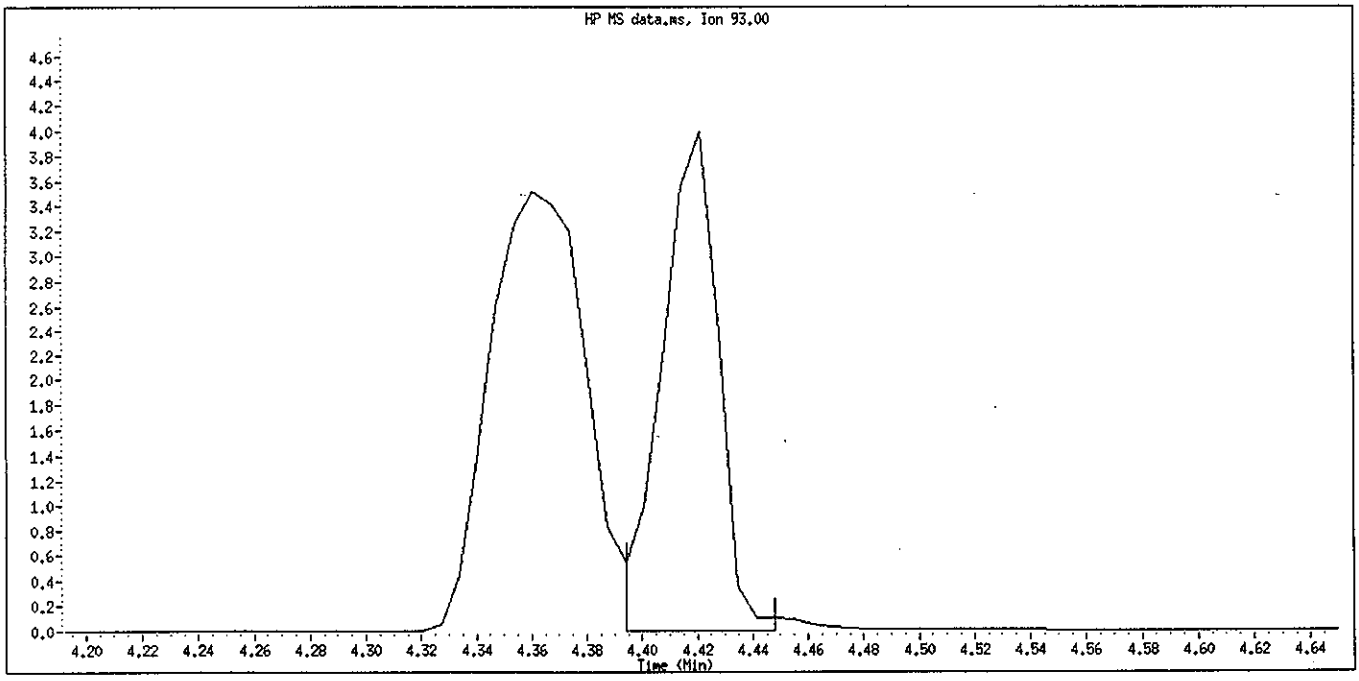
QC Flag Legend

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

Data File Name: D1024CC5.D
Inj. Date and Time: 24-OCT-2000 15:57
Instrument ID: 721.i
Client ID: SSTD160
Compound Name: Bis(2-chloroethyl)ether
CAS #: 111-44-4
Report Date: 10/24/2000



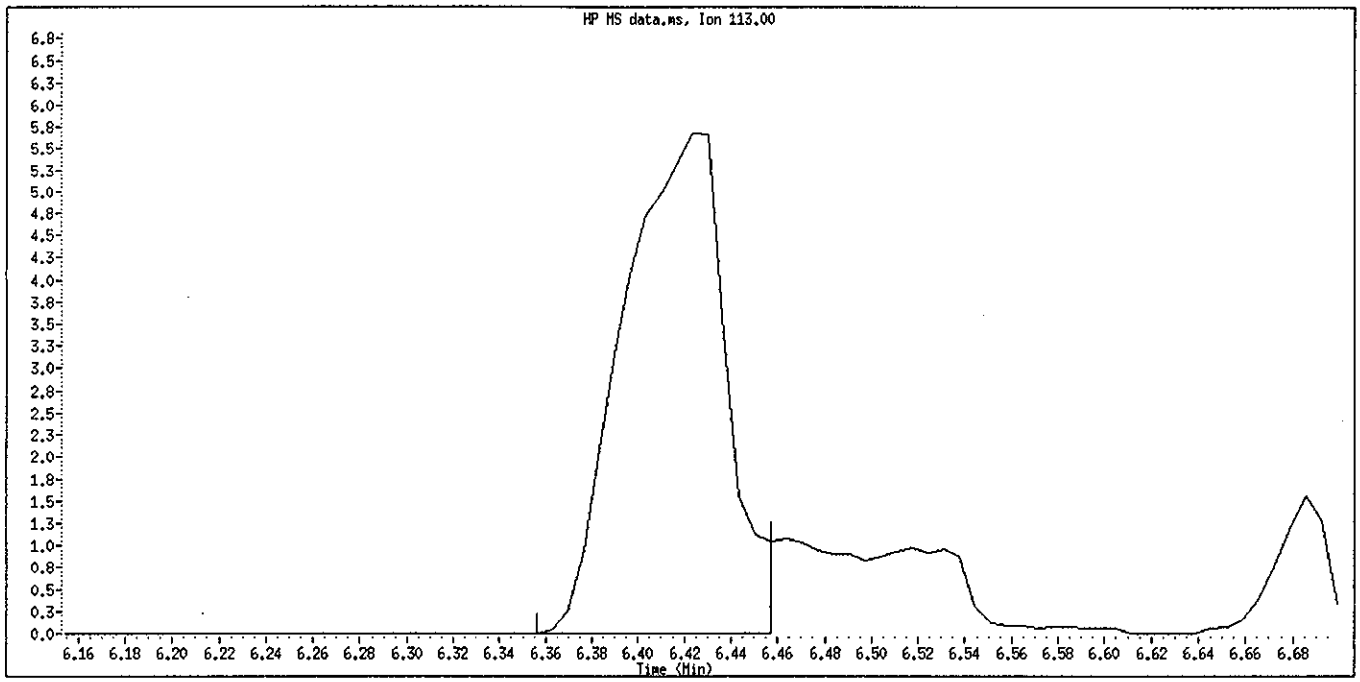
Original Integration



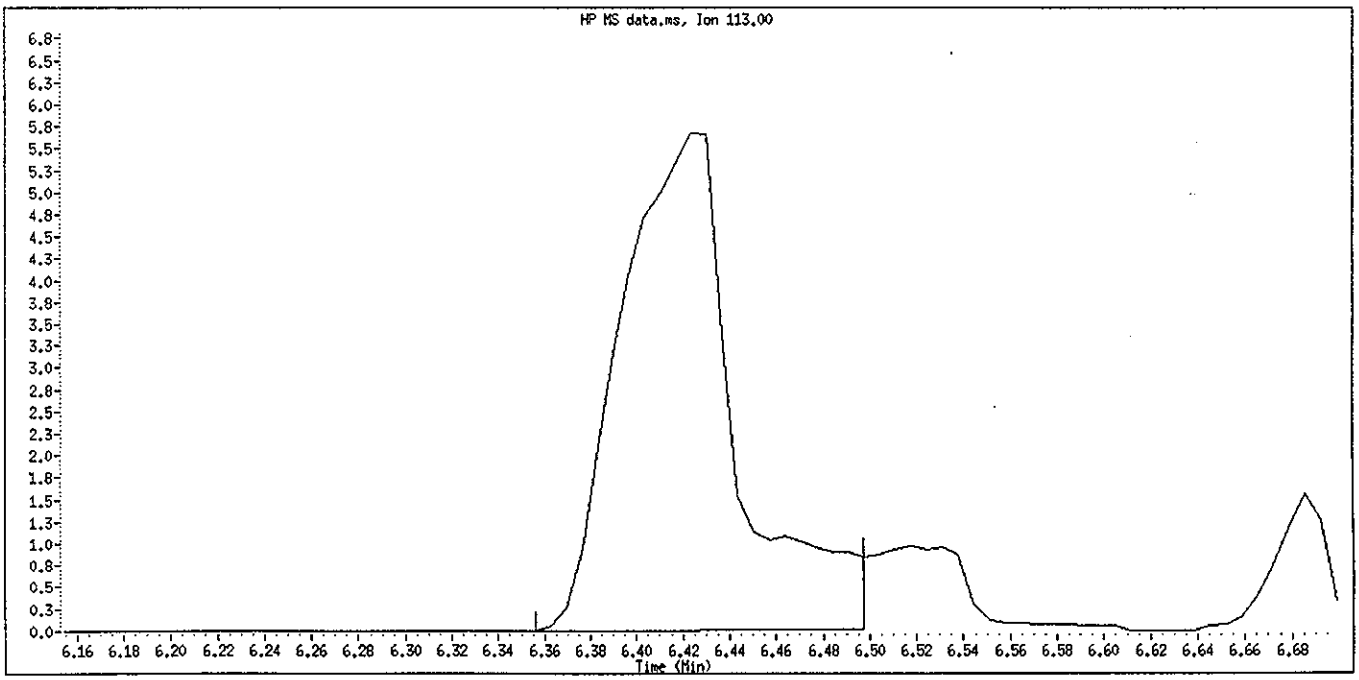
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1024CC5.D
Inj. Date and Time: 24-OCT-2000 15:57
Instrument ID: 721.i
Client ID: SSTD160
Compound Name: Caprolactam
CAS #: 105-60-2
Report Date: 10/24/2000



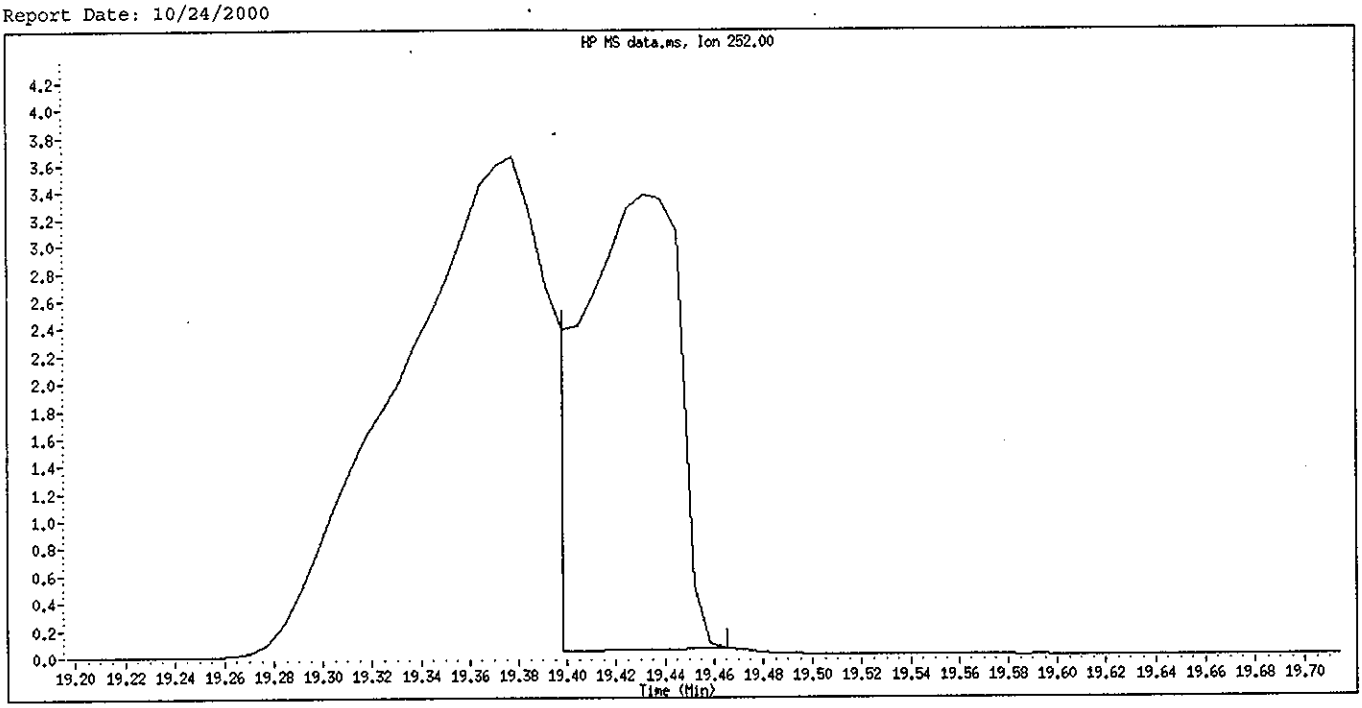
Original Integration



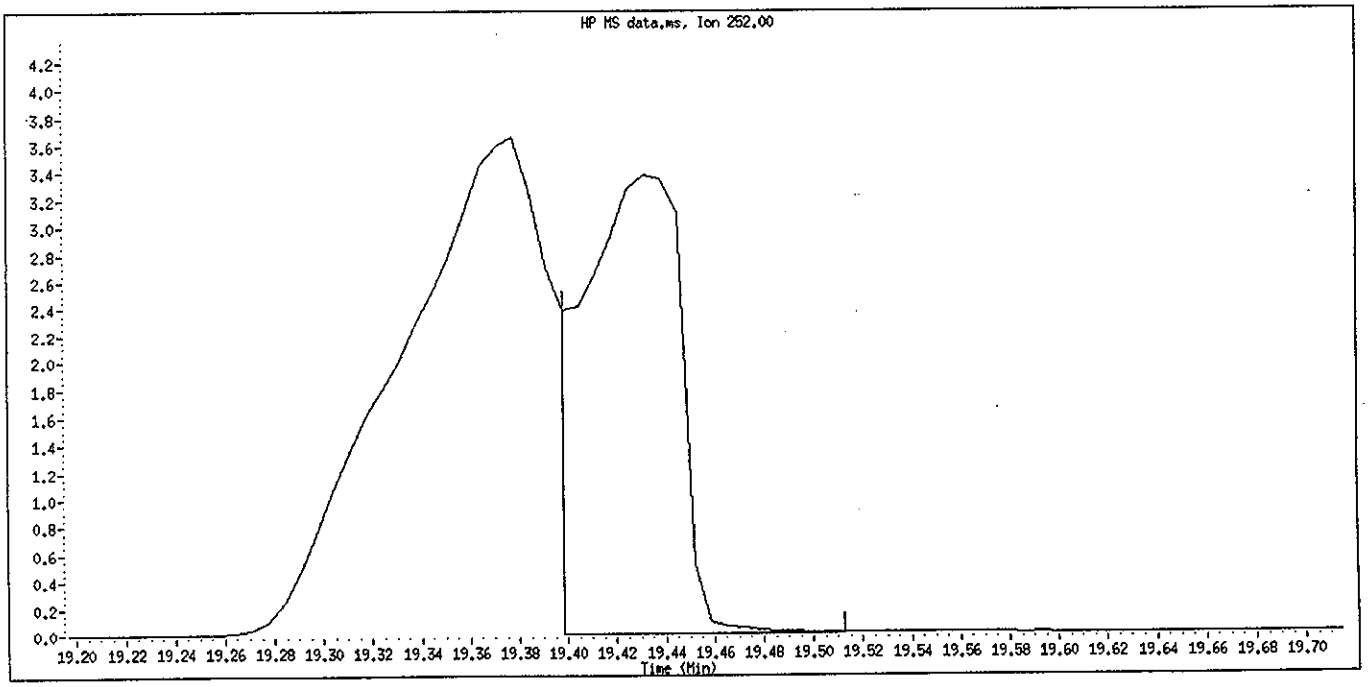
Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

Data File Name: D1024CC5.D
Inj. Date and Time: 24-OCT-2000 15:57
Instrument ID: 721.i
Client ID: SSTD160
Compound Name: Benzo(k)fluoranthene
CAS #: 207-08-9
Report Date: 10/24/2000



Original Integration



Manual Integration

Manually Integrated By: FergusonD
Manual Integration Reason: Poor Chromatography

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Instrument ID: 721 Calibration Date: 10/16/00 Time: 1402

Lab File ID: D1016CCC Init. Calib. Date(s): 10/02/00 10/02/00

EPA Sample No.(SSTD050##): SSTD050 Init. Calib. Times: 1022 1223

GC Column: ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.627	1.557	0.800	-4.3	25.0
Bis(2-chloroethyl)ether	1.191	1.139	0.700	-4.4	25.0
2-Chlorophenol	1.345	1.250	0.800	-7.1	25.0
2-Methylphenol	1.106	1.077	0.700	-2.6	25.0
2,2'-oxybis(1-Chloropropane)	1.461	1.480		1.3	
N-Nitroso-di-n-propylamine	0.809	0.799	0.500	-1.2	25.0
4-Methylphenol	1.202	1.148	0.600	-4.5	25.0
Hexachloroethane	0.666	0.645	0.300	-3.2	25.0
Nitrobenzene	0.394	0.366	0.200	-7.1	25.0
Isophorone	0.657	0.630	0.400	-4.1	25.0
2-Nitrophenol	0.222	0.206	0.100	-7.2	25.0
2,4-Dimethylphenol	0.378	0.348	0.200	-7.9	25.0
Bis(2-chloroethoxy)methane	0.408	0.380	0.300	-6.9	25.0
2,4-Dichlorophenol	0.345	0.323	0.200	-6.4	25.0
Naphthalene	1.074	0.968	0.700	-9.9	25.0
4-Chloroaniline	0.440	0.407		-7.5	
Hexachlorobutadiene	0.257	0.234		-8.9	
4-Chloro-3-Methylphenol	0.325	0.304	0.200	-6.5	25.0
2-Methylnaphthalene	0.676	0.639	0.400	-5.5	25.0
Hexachlorocyclopentadiene	0.525	0.465		-11.4	
2,4,6-Trichlorophenol	0.436	0.391	0.200	-10.3	25.0
2,4,5-Trichlorophenol	0.467	0.434	0.200	-7.1	25.0
2-Chloronaphthalene	1.224	1.128	0.800	-7.8	25.0
2-Nitroaniline	0.373	0.355		-4.8	
Dimethylphthalate	1.428	1.320		-7.6	
Acenaphthylene	1.837	1.719	0.900	-6.4	25.0
2,6-Dinitrotoluene	0.346	0.320	0.200	-7.5	25.0
3-Nitroaniline	0.355	0.332		-6.5	
Acenaphthene	1.114	1.049	0.900	-5.8	25.0
2,4-Dinitrophenol	0.245	0.219		-10.6	
4-Nitrophenol	0.300	0.293		-2.3	
Dibenzofuran	1.696	1.574	0.800	-7.2	25.0
2,4-Dinitrotoluene	0.465	0.444	0.200	-4.5	25.0
Diethylphthalate	1.566	1.470		-6.1	
4-Chlorophenyl-phenylether	0.687	0.617	0.400	-10.2	25.0
Fluorene	1.362	1.288	0.900	-5.4	25.0

All other compounds must meet a minimum RRF of 0.010.

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Instrument ID: 721 Calibration Date: 10/16/00 Time: 1402

Lab File ID: D1016CCC Init. Calib. Date(s): 10/02/00 10/02/00

EPA Sample No.(SSTD050##): SSTD050 Init. Calib. Times: 1022 1223

GC Column: ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D	
4-Nitroaniline	0.334	0.311		-6.9		
4,6-Dinitro-2-methylphenol	0.177	0.159		-10.2		
N-Nitrosodiphenylamine (1)	0.547	0.482		-11.9		
4-Bromophenyl-phenylether	0.248	0.223	0.100	-10.1	25.0	
Hexachlorobenzene	0.327	0.301	0.100	-8.0	25.0	
Pentachlorophenol	0.207	0.181	0.050	-12.6	25.0	
Phenanthrene	1.079	0.999	0.700	-7.4	25.0	
Anthracene	1.093	1.020	0.700	-6.7	25.0	
Carbazole	0.934	0.876		-6.2		
Di-n-Butylphthalate	1.367	1.265		-7.5		
Fluoranthene	1.118	1.015	0.600	-9.2	25.0	
Pyrene	1.170	1.265	0.600	8.1	25.0	
Butylbenzylphthalate	0.605	0.652		7.8		
3,3'-Dichlorobenzidine	0.472	0.463		-1.9		
Benzo(a)Anthracene	1.056	1.011	0.800	-4.3	25.0	
Chrysene	0.983	0.965	0.700	-1.8	25.0	
bis(2-ethylhexyl)Phthalate	0.812	0.806		-0.7		
Di-n-octylphthalate	1.817	1.899		4.5		
Benzo(b)fluoranthene	1.446	1.178	0.700	-18.5	25.0	
Benzo(k)fluoranthene	1.339	1.330	0.700	-0.7	25.0	
Benzo(a)pyrene	1.197	1.056	0.700	-11.8	25.0	
Indeno(1,2,3-cd)pyrene	1.377	0.890	0.500	-35.4	25.0	<-
Dibenz(a,h)anthracene	1.371	0.940	0.400	-31.4	25.0	<-
Benzo(g,h,i)perylene	1.238	0.877	0.500	-29.2	25.0	<-
Benzaldehyde	0.961	0.929		-3.3		
Acetophenone	1.862	1.808		-2.9		
Caprolactam	0.111	0.114		2.7		
1,1'-Biphenyl	1.549	1.469		-5.2		
Atrazine	0.212	0.191		-9.9		
Nitrobenzene-d5	0.420	0.393	0.200	-6.4	25.0	
2-Fluorobiphenyl	1.411	1.290	0.700	-8.6	25.0	
Terphenyl-d14	1.023	1.056	0.500	3.2	25.0	
Phenol-d5	1.537	1.530	0.800	-0.4	25.0	
2-Fluorophenol	1.229	1.111	0.600	-9.6	25.0	
2,4,6-Tribromophenol	0.194	0.186		-4.1		
2-Chlorophenol-d4	1.258	1.174	0.800	-6.7	25.0	
1,2-Dichlorobenzene-d4	0.967	0.928	0.400	-4.0	25.0	

(1) Cannot be separated from Diphenylamine

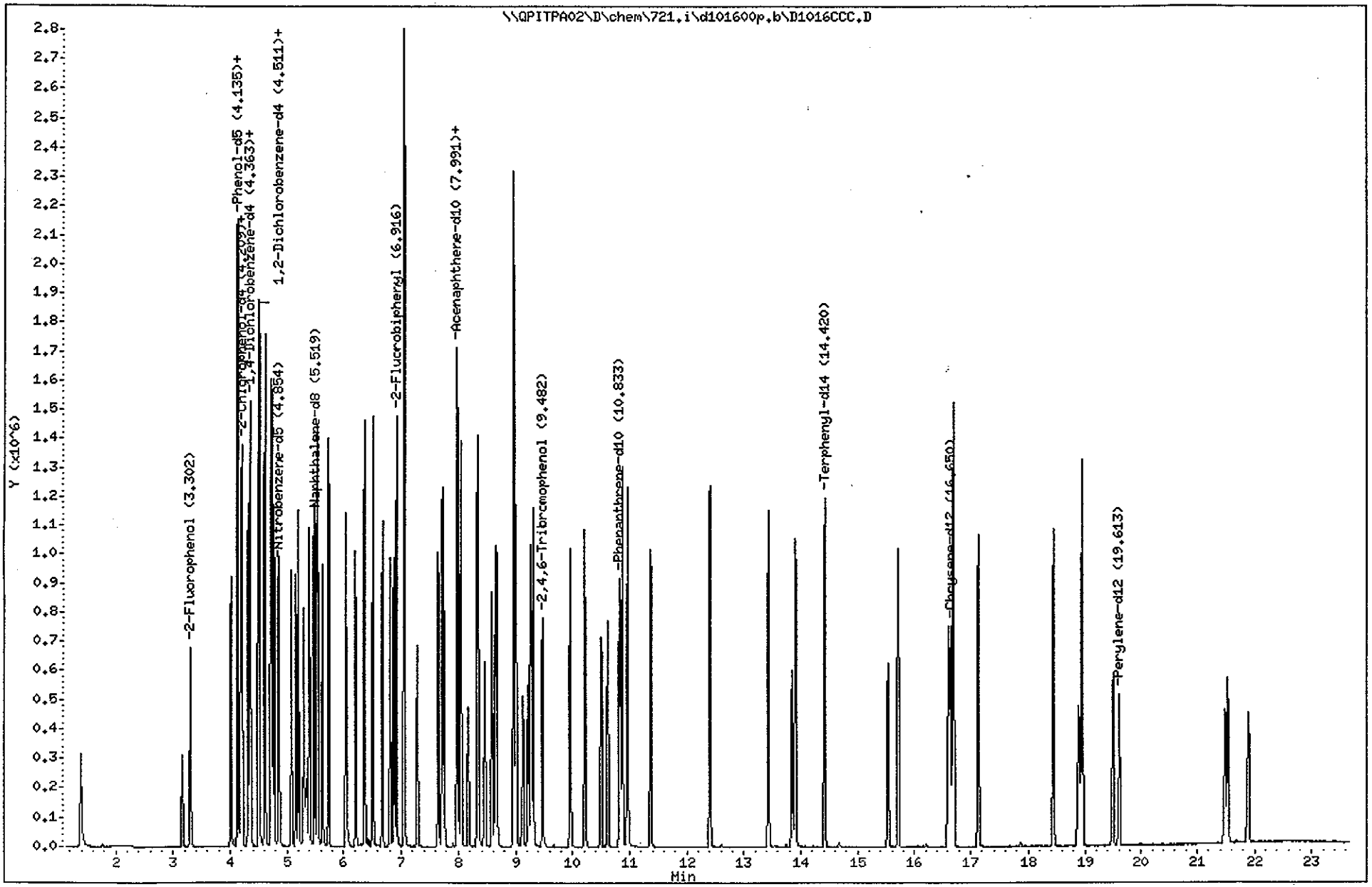
All other compounds must meet a minimum RRF of 0.010.

Data File: \\QPITPA02\D\chem\721.i\d101600p.b\D1016CCC.D
Date : 16-OCT-2000 14:02
Client ID: SSTD050
Sample Info: sstd050 (25ug/ml) 77-02-9 8270c/clp/625

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25

Column phase:



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d101600p.b\D1016CCC.D
Lab Smp Id: sstd50 Client Smp ID: SSTD050
Inj Date : 16-OCT-2000 14:02
Operator : 001562, DLF Inst ID: 721.i
Smp Info : sstd050 (25ug/ml) 77-02-9 8270c/clp/625
Misc Info : sstd50,d101600p.b,clp.m,1-all.sub,2
Comment :
Method : \\QPITPA02\D\chem\721.i\d101600p.b\clp.m
Meth Date : 16-Oct-2000 14:36 ferguson Quant Type: ISTD
Cal Date : 02-OCT-2000 12:23 Cal File: D1002CC5.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-16-00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	4.350	4.350	(1.000)	164197	40.0000	
* 2	Naphthalene-d8	136	5.518	5.518	(1.000)	580634	40.0000	
* 3	Acenaphthene-d10	164	7.991	7.991	(1.000)	355153	40.0000	
* 4	Phenanthrene-d10	188	10.832	10.832	(1.000)	636043	40.0000	
* 5	Chrysene-d12	240	16.657	16.657	(1.000)	481291	40.0000	
* 6	Perylene-d12	264	19.612	19.612	(1.000)	333444	40.0000	
191	Benzaldehyde	77	4.014	4.014	(0.923)	190619	50.0000	48.340
7	Phenol	94	4.141	4.141	(0.952)	319642	50.0000	47.874
8	Bis(2-chloroethyl)ether	93	4.182	4.182	(0.961)	233830	50.0000	47.817
9	2-Chlorophenol	128	4.215	4.215	(0.969)	256617	50.0000	46.464
10	1,3-Dichlorobenzene	146	4.323	4.323	(0.994)	282118	50.0000	46.936
11	1,4-Dichlorobenzene	146	4.363	4.363	(1.003)	303907	50.0000	48.587
12	1,2-Dichlorobenzene	146	4.517	4.517	(1.039)	276327	50.0000	47.471
189	Benzyl Alcohol	108	4.497	4.497	(1.034)	177803	50.0000	50.143
13	2-Methylphenol	108	4.612	4.612	(1.060)	221061	50.0000	48.694
14	2,2'-oxybis(1-Chloropropane)	45	4.618	4.618	(1.062)	303689	50.0000	50.624
192	Acetophenone	105	4.719	4.719	(1.085)	371052	50.0000	48.537
15	4-Methylphenol	108	4.732	4.732	(1.088)	235588	50.0000	47.745
16	N-Nitroso-di-n-propylamine	70	4.746	4.746	(1.091)	163923	50.0000	49.338
17	Hexachloroethane	117	4.773	4.773	(1.097)	132383	50.0000	48.441
18	Nitrobenzene	77	4.867	4.867	(0.882)	265982	50.0000	46.515
19	Isophorone	82	5.082	5.082	(0.921)	457024	50.0000	47.920
20	2-Nitrophenol	139	5.156	5.156	(0.934)	149357	50.0000	46.435
21	2,4-Dimethylphenol	107	5.203	5.203	(0.943)	252974	50.0000	46.048
22	Bis(2-chloroethoxy)methane	93	5.290	5.290	(0.959)	275535	50.0000	46.521
190	Benzoic acid	122	5.364	5.364	(0.972)	142207	50.0000	40.326

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
23 2,4-Dichlorophenol	162	5.398	5.398	(0.978)	234323	50.0000	46.791
24 1,2,4-Trichlorobenzene	180	5.478	5.478	(0.993)	257257	50.0000	46.474
25 Naphthalene	128	5.545	5.545	(1.005)	702227	50.0000	45.064
26 4-Chloroaniline	127	5.626	5.626	(1.019)	295566	50.0000	46.284
193 Caprolactam	113	6.049	6.049	(1.096)	82397	50.0000	51.066
27 Hexachlorobutadiene	225	5.733	5.733	(1.039)	170066	50.0000	45.572
28 4-Chloro-3-Methylphenol	107	6.217	6.217	(1.127)	220565	50.0000	46.808
29 2-Methylnaphthalene	142	6.365	6.365	(1.153)	464065	50.0000	47.300
30 Hexachlorocyclopentadiene	237	6.674	6.674	(0.835)	206516	50.0000	44.335
31 2,4,6-Trichlorophenol	196	6.808	6.808	(0.852)	173737	50.0000	44.903
32 2,4,5-Trichlorophenol	196	6.869	6.869	(0.860)	192777	50.0000	46.509
194 1,1'-Biphenyl	154	7.050	7.050	(0.882)	652261	50.0000	47.428
33 2-Chloronaphthalene	162	7.057	7.057	(0.883)	500678	50.0000	46.053
34 2-Nitroaniline	65	7.285	7.285	(0.912)	157531	50.0000	47.507
35 Dimethylphthalate	163	7.655	7.655	(0.958)	585823	50.0000	46.187
36 Acenaphthylene	152	7.729	7.729	(0.967)	763250	50.0000	46.784
37 2,6-Dinitrotoluene	165	7.762	7.762	(0.971)	141849	50.0000	46.198
38 3-Nitroaniline	138	7.991	7.991	(1.000)	147186	50.0000	46.710
39 Acenaphthene	153	8.051	8.051	(1.008)	465610	50.0000	47.064
40 2,4-Dinitrophenol	184	8.172	8.172	(1.023)	97247	50.0000	44.723
41 4-Nitrophenol	109	8.353	8.353	(1.045)	130132	50.0000	48.880
42 Dibenzofuran	168	8.333	8.333	(1.043)	698892	50.0000	46.424
43 2,4-Dinitrotoluene	165	8.461	8.461	(1.059)	197144	50.0000	47.722
44 Diethylphthalate	149	8.965	8.965	(1.122)	652405	50.0000	46.916
45 4-Chlorophenyl-phenylether	204	9.012	9.012	(1.128)	273964	50.0000	44.942
46 Fluorene	166	8.971	8.971	(1.123)	572028	50.0000	47.285
47 4-Nitroaniline	138	9.139	9.139	(1.144)	138127	50.0000	46.564
48 4,6-Dinitro-2-methylphenol	198	9.227	9.227	(0.852)	126427	50.0000	44.934
49 N-Nitrosodiphenylamine (1)	169	9.274	9.274	(0.856)	382850	50.0000	44.020
50 4-Bromophenyl-phenylether	248	9.966	9.966	(0.920)	177377	50.0000	44.916
51 Hexachlorobenzene	284	10.221	10.221	(0.944)	239427	50.0000	46.027
195 Atrazine	200	10.503	10.503	(0.970)	152095	50.0000	45.113
53 Pentachlorophenol	266	10.617	10.617	(0.980)	144182	50.0000	43.678
54 Phenanthrene	178	10.879	10.879	(1.004)	794348	50.0000	46.295
55 Anthracene	178	10.973	10.973	(1.013)	810772	50.0000	46.652
56 Carbazole	167	11.370	11.370	(1.050)	696621	50.0000	46.899
57 Di-n-Butylphthalate	149	12.411	12.411	(1.146)	1005508	50.0000	46.244
58 Fluoranthene	202	13.445	13.445	(1.241)	807257	50.0000	45.429
59 Pyrene	202	13.909	13.909	(0.835)	760970	50.0000	54.065
60 Butylbenzylphthalate	149	15.703	15.703	(0.943)	391970	50.0000	53.855
61 3,3'-Dichlorobenzidine	252	16.697	16.697	(1.002)	278756	50.0000	49.090
62 Benzo(a)Anthracene	228	16.616	16.616	(0.998)	608358	50.0000	47.873
63 Chrysene	228	16.710	16.710	(1.003)	580372	50.0000	49.080
64 bis(2-ethylhexyl)Phthalate	149	17.134	17.134	(1.029)	485003	50.0000	49.653(Q)
65 Di-n-octylphthalate	149	18.450	18.450	(0.941)	791468	50.0000	52.242
66 Benzo(b)fluoranthene	252	18.900	18.900	(0.964)	491130	50.0000	40.751
67 Benzo(k)fluoranthene	252	18.954	18.954	(0.966)	554150	50.0000	49.635

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
68	Benzo(a)pyrene	252	19.505	19.505	(0.995)	440018	50.0000	44.093
69	Indeno(1,2,3-cd)pyrene	276	21.487	21.487	(1.096)	370883	50.0000	32.304
70	Dibenz(a,h)anthracene	278	21.541	21.541	(1.098)	391759	50.0000	34.276
71	Benzo(g,h,i)perylene	276	21.897	21.897	(1.116)	365730	50.0000	35.443
$ 72	Nitrobenzene-d5	82	4.847	4.847	(0.878)	285153	50.0000	46.770
$ 73	2-Fluorobiphenyl	172	6.916	6.916	(0.865)	572518	50.0000	45.688
$ 74	Terphenyl-d14	244	14.420	14.420	(0.866)	635397	50.0000	51.638
$ 75	Phenol-d5	99	4.128	4.128	(0.949)	314084	50.0000	49.786
$ 76	2-Fluorophenol	112	3.302	3.302	(0.759)	228088	50.0000	45.210
$ 77	2,4,6-Tribromophenol	330	9.482	9.482	(0.875)	148314	50.0000	48.100
$ 78	2-Chlorophenol-d4	132	4.202	4.202	(0.966)	240900	50.0000	46.662
$ 79	1,2-Dichlorobenzene-d4	152	4.504	4.504	(1.036)	190454	50.0000	47.996

QC Flag Legend

Q - Qualifier signal failed the ratio test.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Instrument ID: 721 Calibration Date: 10/25/00 Time: 1314

Lab File ID: D1025CCC Init. Calib. Date(s): 10/24/00 10/24/00

EPA Sample No.(SSTD050##): SSTD050 Init. Calib. Times: 1329 1557

GC Column: ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.538	1.681	0.800	9.3	25.0
Bis(2-chloroethyl)ether	1.272	1.348	0.700	6.0	25.0
2-Chlorophenol	1.419	1.465	0.800	3.2	25.0
2-Methylphenol	1.162	1.222	0.700	5.2	25.0
2,2'-oxybis(1-Chloropropane)	1.647	1.829		11.0	
N-Nitroso-di-n-propylamine	0.923	0.970	0.500	5.1	25.0
4-Methylphenol	1.087	1.182	0.600	8.7	25.0
Hexachloroethane	0.603	0.632	0.300	4.8	25.0
Nitrobenzene	0.349	0.364	0.200	4.3	25.0
Isophorone	0.653	0.658	0.400	0.8	25.0
2-Nitrophenol	0.224	0.222	0.100	-0.9	25.0
2,4-Dimethylphenol	0.323	0.329	0.200	1.8	25.0
Bis(2-chloroethoxy)methane	0.387	0.396	0.300	2.3	25.0
2,4-Dichlorophenol	0.290	0.290	0.200	0.0	25.0
Naphthalene	0.989	1.016	0.700	2.7	25.0
4-Chloroaniline	0.431	0.444		3.0	
Hexachlorobutadiene	0.181	0.177		-2.2	
4-Chloro-3-Methylphenol	0.287	0.291	0.200	1.4	25.0
2-Methylnaphthalene	0.598	0.625	0.400	4.5	25.0
Hexachlorocyclopentadiene	0.462	0.459		-0.6	
2,4,6-Trichlorophenol	0.435	0.437	0.200	0.4	25.0
2,4,5-Trichlorophenol	0.461	0.479	0.200	3.9	25.0
2-Chloronaphthalene	1.116	1.158	0.800	3.8	25.0
2-Nitroaniline	0.392	0.408		4.1	
Dimethylphthalate	1.390	1.420		2.2	
Acenaphthylene	1.877	1.949	0.900	3.8	25.0
2,6-Dinitrotoluene	0.341	0.349	0.200	2.3	25.0
3-Nitroaniline	0.407	0.424		4.2	
Acenaphthene	1.145	1.185	0.900	3.5	25.0
2,4-Dinitrophenol	0.197	0.213		8.1	
4-Nitrophenol	0.179	0.195		8.9	
Dibenzofuran	1.573	1.630	0.800	3.6	25.0
2,4-Dinitrotoluene	0.457	0.461	0.200	0.9	25.0
Diethylphthalate	1.350	1.417		5.0	
4-Chlorophenyl-phenylether	0.652	0.659	0.400	1.1	25.0
Fluorene	1.194	1.256	0.900	5.2	25.0

All other compounds must meet a minimum RRF of 0.010.

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH Contract:

Lab Code: STL PIT Case No.: SAS No.: SDG No.: C0J120207

Instrument ID: 721 Calibration Date: 10/25/00 Time: 1314

Lab File ID: D1025CCC Init. Calib. Date(s): 10/24/00 10/24/00

EPA Sample No.(SSTD050##): SSTD050 Init. Calib. Times: 1329 1557

GC Column: ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
4-Nitroaniline	0.404	0.413		2.2	
4,6-Dinitro-2-methylphenol	0.153	0.168		9.8	
N-Nitrosodiphenylamine (1)	0.543	0.567		4.4	
4-Bromophenyl-phenylether	0.228	0.228	0.100	0.0	25.0
Hexachlorobenzene	0.267	0.265	0.100	-0.7	25.0
Pentachlorophenol	0.132	0.159	0.050	20.4	25.0
Phenanthrene	0.982	1.002	0.700	2.0	25.0
Anthracene	0.994	1.038	0.700	4.4	25.0
Carbazole	0.929	0.952		2.5	
Di-n-Butylphthalate	1.314	1.385		5.4	
Fluoranthene	1.047	1.101	0.600	5.2	25.0
Pyrene	1.201	1.199	0.600	-0.2	25.0
Butylbenzylphthalate	0.638	0.648		1.6	
3,3'-Dichlorobenzidine	0.423	0.447		5.7	
Benzo(a)Anthracene	1.071	1.088	0.800	1.6	25.0
Chrysene	0.976	0.990	0.700	1.4	25.0
bis(2-ethylhexyl)Phthalate	0.881	0.906		2.8	
Di-n-octylphthalate	1.724	1.845		7.0	
Benzo(b)fluoranthene	1.321	1.231	0.700	-6.8	25.0
Benzo(k)fluoranthene	1.112	1.246	0.700	12.0	25.0
Benzo(a)pyrene	1.104	1.123	0.700	1.7	25.0
Indeno(1,2,3-cd)pyrene	1.123	1.068	0.500	-4.9	25.0
Dibenz(a,h)anthracene	1.129	1.104	0.400	-2.2	25.0
Benzo(g,h,i)perylene	1.155	1.076	0.500	-6.8	25.0
Benzaldehyde	0.672	0.787		17.1	
Acetophenone	1.643	1.675		1.9	
Caprolactam	0.112	0.111		-0.9	
1,1'-Biphenyl	1.424	1.459		2.4	
Atrazine	0.206	0.193		-6.3	
Nitrobenzene-d5	0.370	0.396	0.200	7.0	25.0
2-Fluorobiphenyl	1.345	1.437	0.700	6.8	25.0
Terphenyl-d14	0.964	0.991	0.500	2.8	25.0
Phenol-d5	1.522	1.702	0.800	11.8	25.0
2-Fluorophenol	1.412	1.507	0.600	6.7	25.0
2,4,6-Tribromophenol	0.158	0.162		2.5	
2-Chlorophenol-d4	1.310	1.419	0.800	8.3	25.0
1,2-Dichlorobenzene-d4	0.887	0.982	0.400	10.7	25.0

(1) Cannot be separated from Diphenylamine

All other compounds must meet a minimum RRF of 0.010.

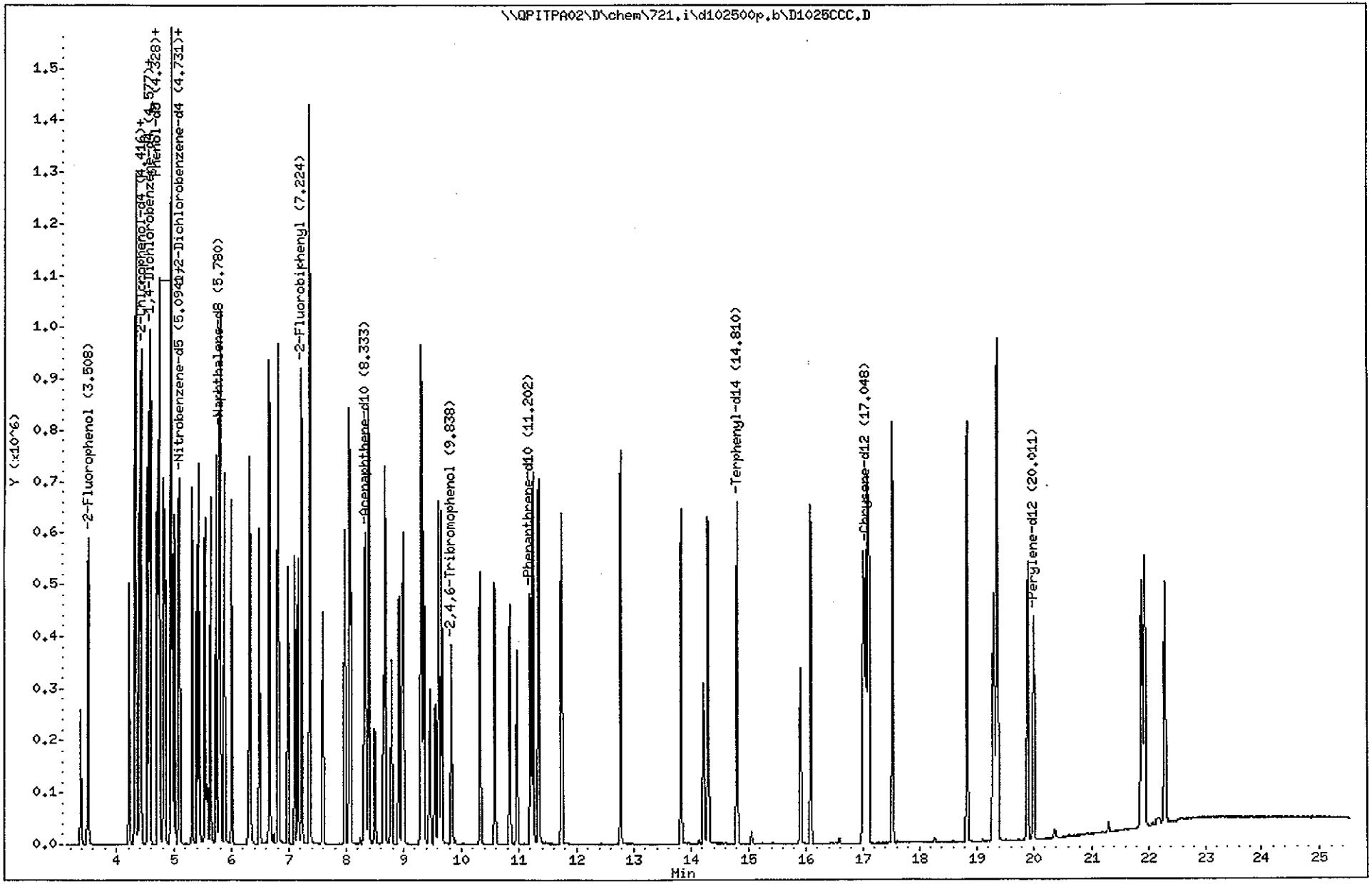
FORM VII SV-2 OLM04.2

Data File: \\QPITPA02\D\chem\721.i\d102500p.b\D1025CCC.D
Date : 25-OCT-2000 13:14
Client ID: SSTD050
Sample Info: SSTD050 (25ug/ml) 77-03-1 8270/clp/625

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25

Column phase:



STL-Pittsburgh

Semivolatile REPORT CLP4.2

Data file : \\QPITPA02\D\chem\721.i\d102500p.b\D1025CCC.D
Lab Smp Id: sstd50 Client Smp ID: SSTD050
Inj Date : 25-OCT-2000 13:14
Operator : 001562, DLF Inst ID: 721.i
Smp Info : SSTD050 (25ug/ml) 77-03-1 8270/clp/625
Misc Info : sstd50,d102500p.b,clp.m,1-all.sub,2
Comment :
Method : \\QPITPA02\D\chem\721.i\d102500p.b\clp.m
Meth Date : 25-Oct-2000 13:53 ferguson Quant Type: ISTD
Cal Date : 24-OCT-2000 15:57 Cal File: D1024CC5.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-25-00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 1	1,4-Dichlorobenzene-d4	152	4.563	4.563	(1.000)	128368	40.0000	
* 2	Naphthalene-d8	136	5.779	5.779	(1.000)	485682	40.0000	
* 3	Acenaphthene-d10	164	8.332	8.332	(1.000)	225161	40.0000	
* 4	Phenanthrene-d10	188	11.201	11.201	(1.000)	387488	40.0000	
* 5	Chrysene-d12	240	17.047	17.047	(1.000)	347939	40.0000	
* 6	Perylene-d12	264	20.010	20.010	(1.000)	295404	40.0000	
191	Benzaldehyde	77	4.213	4.213	(0.923)	126358	50.0000	58.591
7	Phenol	94	4.328	4.328	(0.948)	269694	50.0000	54.613
8	Bis(2-chloroethyl)ether	93	4.388	4.388	(0.962)	216259	50.0000	52.982
9	2-Chlorophenol	128	4.422	4.422	(0.969)	235085	50.0000	51.634
10	1,3-Dichlorobenzene	146	4.536	4.536	(0.994)	250096	50.0000	51.855
11	1,4-Dichlorobenzene	146	4.576	4.576	(1.003)	248409	50.0000	51.966
12	1,2-Dichlorobenzene	146	4.738	4.738	(1.038)	226920	50.0000	52.788
189	Benzyl Alcohol	108	4.704	4.704	(1.031)	157340	50.0000	55.172
13	2-Methylphenol	108	4.818	4.818	(1.056)	196067	50.0000	52.568
14	2,2'-oxybis(1-Chloropropane)	45	4.838	4.838	(1.060)	293519	50.0000	55.539
192	Acetophenone	105	4.939	4.939	(1.082)	268791	50.0000	50.998
15	4-Methylphenol	108	4.939	4.939	(1.082)	189587	50.0000	54.316
16	N-Nitroso-di-n-propylamine	70	4.966	4.966	(1.088)	155576	50.0000	52.527
17	Hexachloroethane	117	5.006	5.006	(1.097)	101421	50.0000	52.443
18	Nitrobenzene	77	5.094	5.094	(0.881)	221282	50.0000	52.273
19	Isophorone	82	5.315	5.315	(0.920)	399812	50.0000	50.429
20	2-Nitrophenol	139	5.396	5.396	(0.934)	134489	50.0000	49.363
21	2,4-Dimethylphenol	107	5.430	5.430	(0.940)	199626	50.0000	50.852
22	Bis(2-chloroethoxy)methane	93	5.537	5.537	(0.958)	240414	50.0000	51.218
190	Benzoic acid	122	5.577	5.577	(0.965)	69951	50.0000	82.357

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
23	2,4-Dichlorophenol	162	5.638	5.638	(0.976)	176053	50.0000	50.033
24	1,2,4-Trichlorobenzene	180	5.732	5.732	(0.992)	185109	50.0000	49.829
25	Naphthalene	128	5.799	5.799	(1.003)	616994	50.0000	51.386
26	4-Chloroaniline	127	5.880	5.880	(1.017)	269362	50.0000	51.502
193	Caprolactam	113	6.310	6.310	(1.092)	67363	50.0000	49.309
27	Hexachlorobutadiene	225	6.008	6.008	(1.040)	107400	50.0000	48.940
28	4-Chloro-3-Methylphenol	107	6.478	6.478	(1.121)	176701	50.0000	50.688
29	2-Methylnaphthalene	142	6.653	6.653	(1.151)	379600	50.0000	52.288
30	Hexachlorocyclopentadiene	237	6.982	6.982	(0.838)	129112	50.0000	49.644
31	2,4,6-Trichlorophenol	196	7.103	7.103	(0.852)	123084	50.0000	50.202
32	2,4,5-Trichlorophenol	196	7.156	7.156	(0.859)	134804	50.0000	51.941
194	1,1'-Biphenyl	154	7.358	7.358	(0.883)	410720	50.0000	51.244
33	2-Chloronaphthalene	162	7.372	7.372	(0.885)	326038	50.0000	51.884
34	2-Nitroaniline	65	7.593	7.593	(0.911)	114708	50.0000	52.051
35	Dimethylphthalate	163	7.976	7.976	(0.957)	399623	50.0000	51.058
36	Acenaphthylene	152	8.057	8.057	(0.967)	548491	50.0000	51.914
37	2,6-Dinitrotoluene	165	8.084	8.084	(0.970)	98169	50.0000	51.192
38	3-Nitroaniline	138	8.312	8.312	(0.998)	119331	50.0000	52.137
39	Acenaphthene	153	8.386	8.386	(1.006)	333490	50.0000	51.756
40	2,4-Dinitrophenol	184	8.494	8.494	(1.019)	59903	50.0000	53.913
41	4-Nitrophenol	109	8.648	8.648	(1.038)	54855	50.0000	54.497
42	Dibenzofuran	168	8.675	8.675	(1.041)	458725	50.0000	51.820
43	2,4-Dinitrotoluene	165	8.789	8.789	(1.055)	129879	50.0000	50.508
44	Diethylphthalate	149	9.313	9.313	(1.118)	398751	50.0000	52.475
45	4-Chlorophenyl-phenylether	204	9.367	9.367	(1.124)	185416	50.0000	50.481
46	Fluorene	166	9.327	9.327	(1.119)	353549	50.0000	52.599
47	4-Nitroaniline	138	9.475	9.475	(1.137)	116215	50.0000	51.105
48	4,6-Dinitro-2-methylphenol	198	9.562	9.562	(0.854)	81234	50.0000	54.593
49	N-Nitrosodiphenylamine (1)	169	9.622	9.622	(0.859)	274798	50.0000	52.283
50	4-Bromophenyl-phenylether	248	10.328	10.328	(0.922)	110542	50.0000	50.002
51	Hexachlorobenzene	284	10.590	10.590	(0.945)	128333	50.0000	49.664
195	Atrazine	200	10.852	10.852	(0.969)	93680	50.0000	47.048
53	Pentachlorophenol	266	10.973	10.973	(0.980)	76832	50.0000	59.801
54	Phenanthrene	178	11.255	11.255	(1.005)	485553	50.0000	51.067
55	Anthracene	178	11.349	11.349	(1.013)	502926	50.0000	52.224
56	Carbazole	167	11.739	11.739	(1.048)	460959	50.0000	51.224
57	Di-n-Butylphthalate	149	12.780	12.780	(1.141)	671039	50.0000	52.733
58	Fluoranthene	202	13.829	13.829	(1.235)	533243	50.0000	52.595
59	Pyrene	202	14.306	14.306	(0.839)	521334	50.0000	49.886
60	Butylbenzylphthalate	149	16.086	16.086	(0.944)	281620	50.0000	50.742
61	3,3'-Dichlorobenzidine	252	17.081	17.081	(1.002)	194356	50.0000	52.751
62	Benzo(a)Anthracene	228	17.014	17.014	(0.998)	473025	50.0000	50.758
63	Chrysene	228	17.108	17.108	(1.004)	430366	50.0000	50.722
64	bis(2-ethylhexyl)Phthalate	149	17.518	17.518	(1.028)	394173	50.0000	51.431
65	Di-n-octylphthalate	149	18.834	18.834	(0.941)	681337	50.0000	53.518
66	Benzo(b)fluoranthene	252	19.298	19.298	(0.964)	454443	50.0000	46.602
67	Benzo(k)fluoranthene	252	19.345	19.345	(0.967)	460120	50.0000	56.016

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
	68 Benzo(a)pyrene	252	19.903	19.903	(0.995)	414756	50.0000	50.899
	69 Indeno(1,2,3-cd)pyrene	276	21.892	21.892	(1.094)	394569	50.0000	47.571
	70 Dibenz(a,h)anthracene	278	21.945	21.945	(1.097)	407655	50.0000	48.910
	71 Benzo(g,h,i)perylene	276	22.302	22.302	(1.115)	397333	50.0000	46.591
$	72 Nitrobenzene-d5	82	5.080	5.080	(0.879)	240289	50.0000	53.456
$	73 2-Fluorobiphenyl	172	7.224	7.224	(0.867)	404519	50.0000	53.413
$	74 Terphenyl-d14	244	14.810	14.810	(0.869)	431170	50.0000	51.396
$	75 Phenol-d5	99	4.314	4.314	(0.946)	273158	50.0000	55.932
$	76 2-Fluorophenol	112	3.508	3.508	(0.769)	241782	50.0000	53.343
$	77 2,4,6-Tribromophenol	330	9.837	9.837	(0.878)	78701	50.0000	51.443
$	78 2-Chlorophenol-d4	132	4.408	4.408	(0.966)	227731	50.0000	54.162
$	79 1,2-Dichlorobenzene-d4	152	4.731	4.731	(1.037)	157571	50.0000	55.352

GC/MS SEMIVOLATILE
QC DATA

Data File: \\QPITPA02\D\chem\721.i\d100200p.b\D1002DF2.D

Date : 02-OCT-2000 10:02

Client ID: DFTPP02

Instrument: 721.i

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

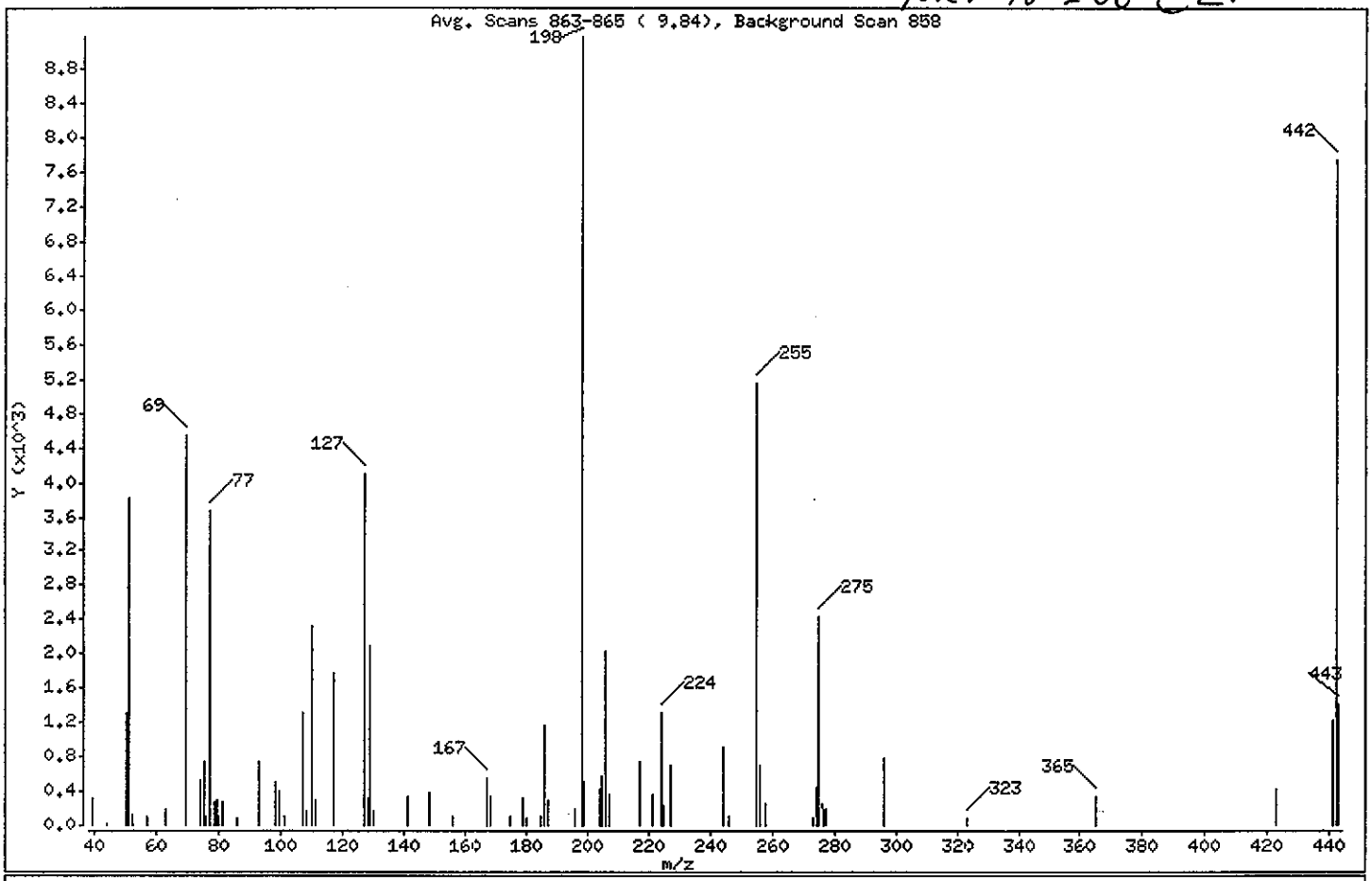
Operator: 001562, DLF

Column phase:

Column diameter: 0.25

1 dftpp

DLF 10-2-00 CLP



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	41.57
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	49.40
70	Less than 2.00% of mass 69	0.00 (0.00)
127	25.00 - 75.00% of mass 198	44.57
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	5.51
275	10.00 - 30.00% of mass 198	26.38
365	Greater than 0.75% of mass 198	3.65
441	Present, but less than mass 443	13.41
442	40.00 - 110.00% of mass 198	84.26
443	15.00 - 24.00% of mass 442	15.49 (18.38)

Date : 02-OCT-2000 10:02

Client ID: DFTPP02 Instrument: 721.i

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

Operator: 001562, DLF

Column phase: Column diameter: 0.25

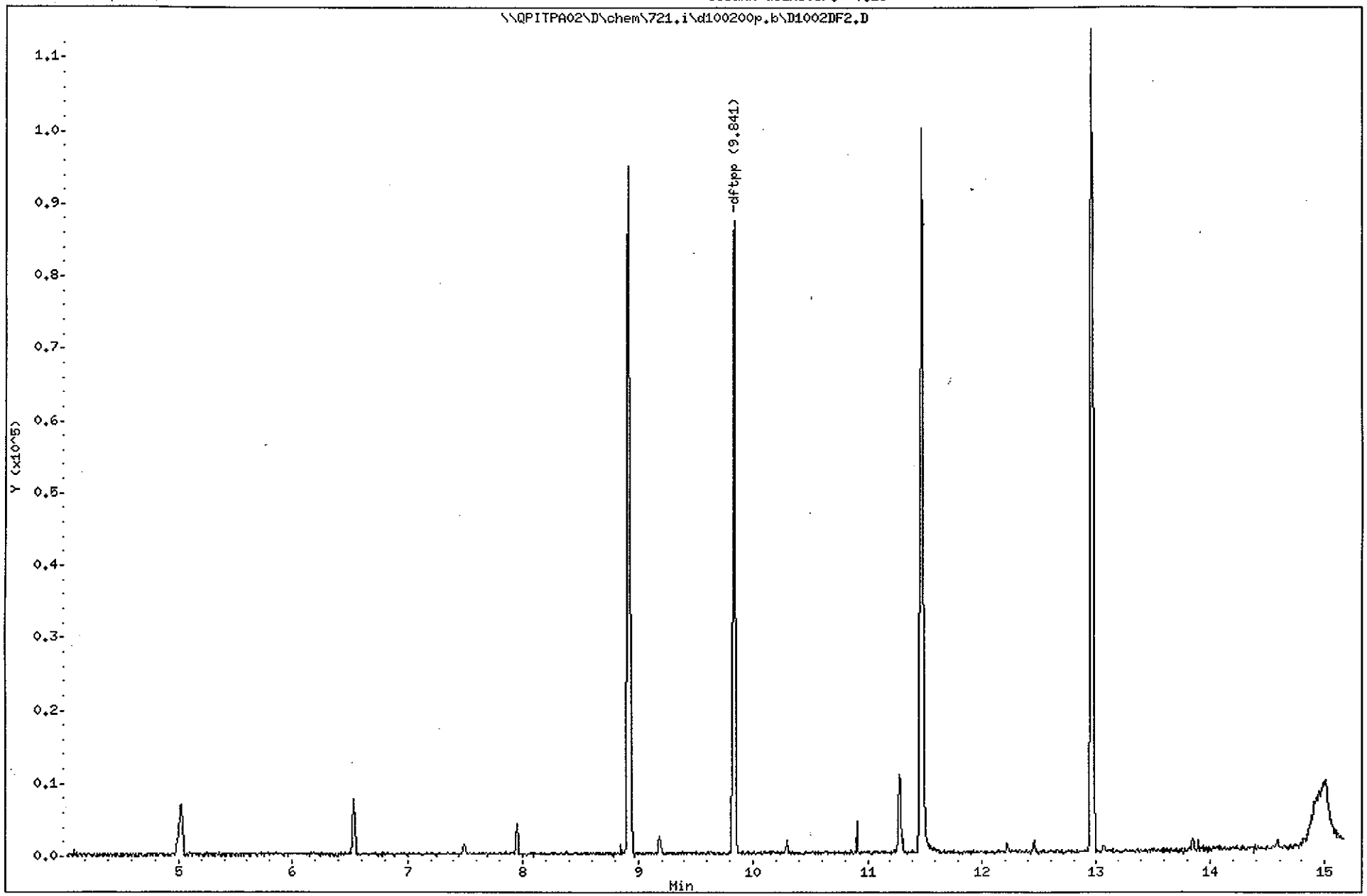
Data File: D1002DF2.D
Spectrum: Avg. Scans 863-865 (9.84), Background Scan 858
Location of Maximum: 198.00
Number of points: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	318	98.00	506	179.00	307	246.00	104
44.00	18	99.00	400	180.00	95	255.00	5150
50.00	1311	101.00	108	185.00	100	256.00	698
51.00	3819	107.00	1317	186.00	1152	258.00	263
52.00	121	108.00	178	187.00	304	273.00	93
57.00	113	110.00	2324	196.00	191	274.00	445
63.00	195	111.00	302	198.00	9188	275.00	2424
69.00	4539	117.00	1782	199.00	506	276.00	248
74.00	522	127.00	4095	204.00	429	277.00	195
75.00	739	128.00	318	205.00	579	296.00	783
76.00	111	129.00	2093	206.00	2025	323.00	91
77.00	3684	130.00	172	207.00	363	365.00	335
78.00	272	141.00	330	217.00	733	423.00	418
79.00	297	148.00	372	221.00	350	441.00	1232
80.00	102	156.00	107	224.00	1309	442.00	7742
81.00	280	167.00	558	225.00	223	443.00	1423
86.00	91	168.00	345	227.00	698		
93.00	746	175.00	99	244.00	918		

Data File: \\QPITPA02\D\chem\721.i\d100200p.b\D1002DF2.D
Date : 02-OCT-2000 10:02
Client ID: DFTPP02
Sample Info: dftpp (25ug/ml) 194-175-8

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

Column phase:



Data File: \\QPITPA02\D\chem\721.i\d101600p.b\D1016DFT.D

Date : 16-OCT-2000 13:42

Client ID: DFTPP02

Instrument: 721.i

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

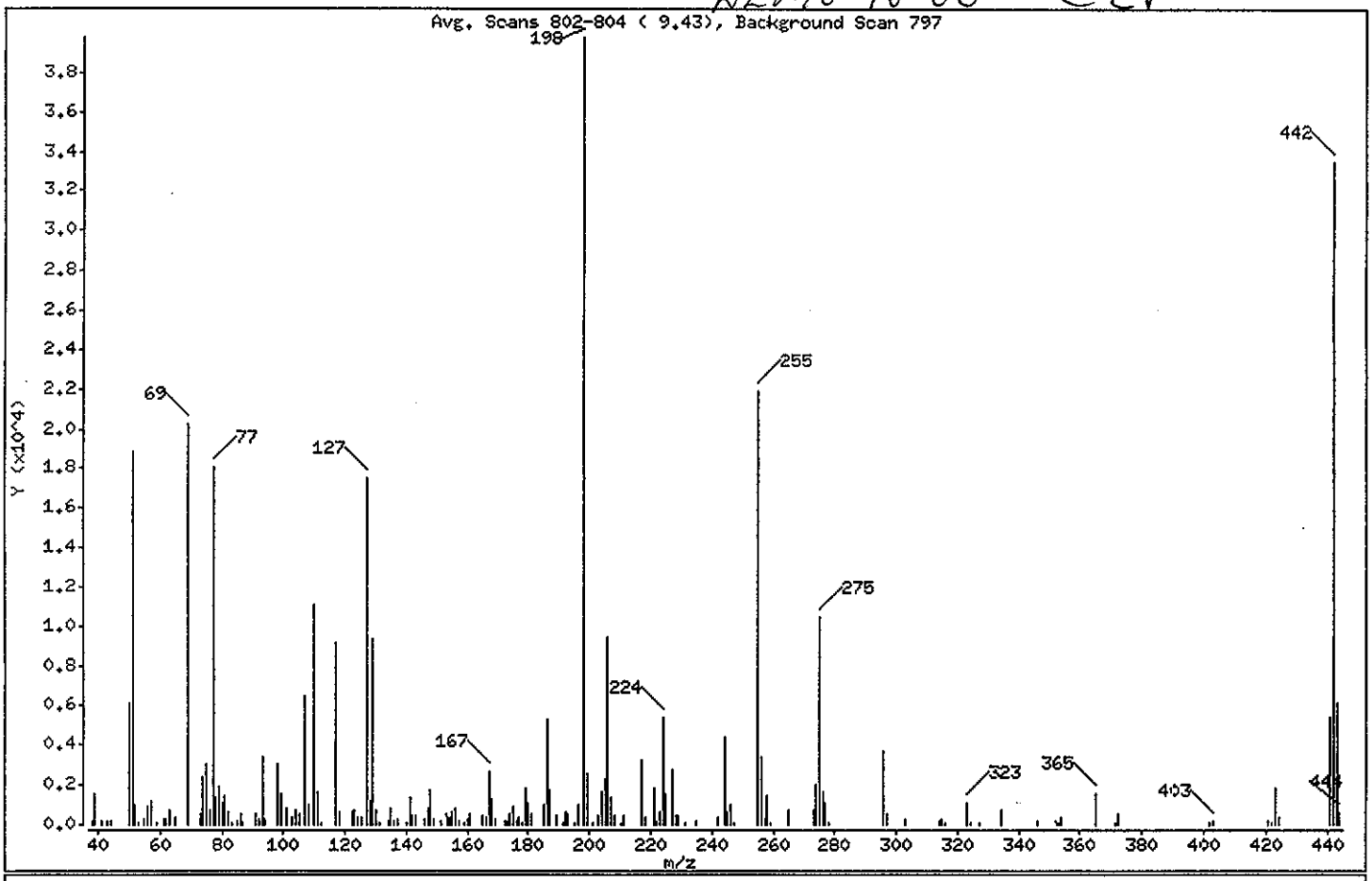
Operator: 001562, DLF

Column phase:

Column diameter: 0.25

1 dftpp

DZ 10-16-00 CLP



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	47.29
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	50.91
70	Less than 2.00% of mass 69	0.00 (0.00)
127	25.00 - 75.00% of mass 198	43.82
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.40
275	10.00 - 30.00% of mass 198	26.24
365	Greater than 0.75% of mass 198	3.85
441	Present, but less than mass 443	13.45
442	40.00 - 110.00% of mass 198	84.03
443	15.00 - 24.00% of mass 442	15.30 (18.20)

Data File: \\QPITPA02\D\chem\721.i\d101600p.b\D1016DFT.D

Date : 16-OCT-2000 13:42

Client ID: DFTPP02 Instrument: 721.i

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

Operator: 001562, DLF

Column phase: Column diameter: 0.25

Data File: D1016DFT.D
Spectrum: Avg. Scans 802-804 (9.43), Background Scan 797
Location of Maximum: 198.00
Number of points: 170

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	146	108.00	1004	174.00	531	246.00	1044
39.00	1574	110.00	11090	175.00	919	247.00	117
41.00	169	111.00	1605	176.00	200	255.00	21880
43.00	218	112.00	97	177.00	379	256.00	3425
44.00	138	117.00	9124	178.00	126	257.00	235
50.00	6111	118.00	658	179.00	1837	258.00	1502
51.00	18832	122.00	600	180.00	1090	259.00	113
52.00	964	123.00	773	181.00	520	265.00	687
53.00	96	124.00	410	185.00	967	273.00	689
55.00	266	125.00	338	186.00	5318	274.00	1997
56.00	883	127.00	17448	187.00	1768	275.00	10450
57.00	1163	128.00	1146	189.00	433	276.00	1656
59.00	88	129.00	9360	191.00	134	277.00	1089
61.00	320	130.00	727	192.00	666	278.00	85
62.00	319	131.00	99	193.00	563	296.00	3681
63.00	745	134.00	145	195.00	107	297.00	562
65.00	403	135.00	849	196.00	1024	303.00	284
69.00	20272	136.00	184	198.00	39824	314.00	192
73.00	552	137.00	266	199.00	2549	315.00	266
74.00	2413	140.00	97	201.00	99	316.00	104
75.00	3046	141.00	1414	203.00	431	323.00	1070
76.00	763	142.00	436	204.00	1620	324.00	103
77.00	18024	143.00	412	205.00	2305	327.00	114
78.00	1391	146.00	251	206.00	9392	334.00	733
79.00	1890	147.00	816	207.00	1406	346.00	190
80.00	1100	148.00	1773	208.00	478	352.00	197
81.00	1480	149.00	242	210.00	106	353.00	107
82.00	601	151.00	183	211.00	426	354.00	323
83.00	131	153.00	528	217.00	3218	365.00	1533
85.00	208	154.00	372	218.00	353	371.00	85
86.00	595	155.00	665	221.00	1846	372.00	586
87.00	137	156.00	790	222.00	179	402.00	93
91.00	571	157.00	156	223.00	631	403.00	225
92.00	264	159.00	93	224.00	5363	421.00	166
93.00	3379	160.00	315	225.00	1524	422.00	117

Date : 16-OCT-2000 13:42

Client ID: DFTPP02 Instrument: 721.i

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

Operator: 001562, DLF

Column phase: Column diameter: 0.25

Data File: D1016DFT.D

Spectrum: Avg. Scans 802-804 (9.43), Background Scan 797

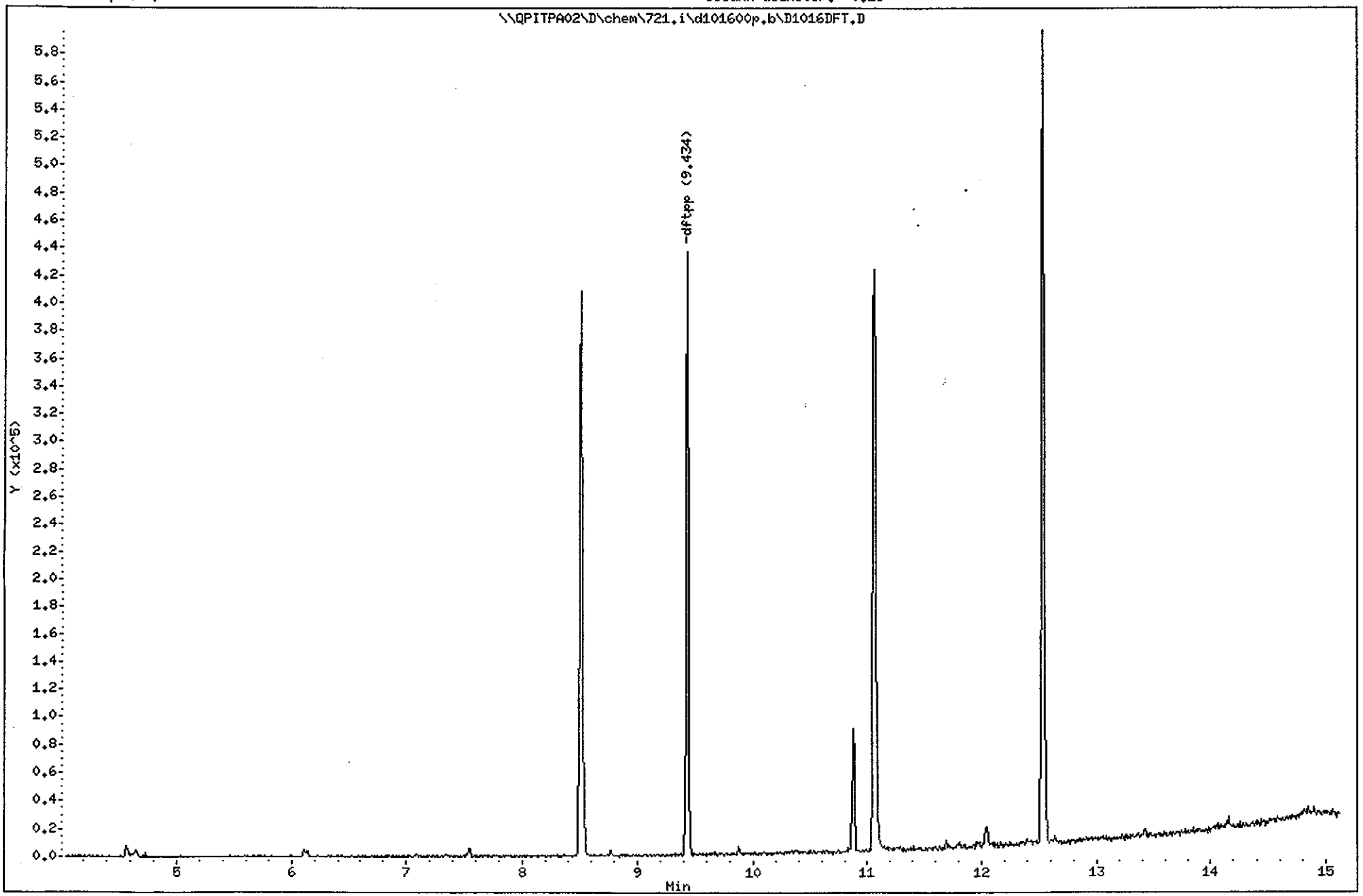
Location of Maximum: 198.00

Number of points: 170

m/z	Y	m/z	Y	m/z	Y	m/z	Y
94.00	235	161.00	542	227.00	2741	423.00	1848
98.00	3018	165.00	432	228.00	415	424.00	331
99.00	1582	166.00	366	229.00	456	441.00	5357
101.00	805	167.00	2620	231.00	83	442.00	33464
103.00	352	168.00	1300	235.00	146	443.00	6092
104.00	696	169.00	282	242.00	379	444.00	618
105.00	556	172.00	144	244.00	4417		
107.00	6498	173.00	209	245.00	653		

Data File: \\QPITPA02\D\chem\721.i\d101600p.b\D1016DFT.D
Date : 16-OCT-2000 13:42
Client ID: DFTPP02
Sample Info: dftpp (25ug/ml) 194-175-8

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



Data File: \\QPITPA02\D\chem\721.i\d102400c\D1024DFT.D

Date : 24-OCT-2000 11:27

Client ID: DFTPP

Instrument: 721.i

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

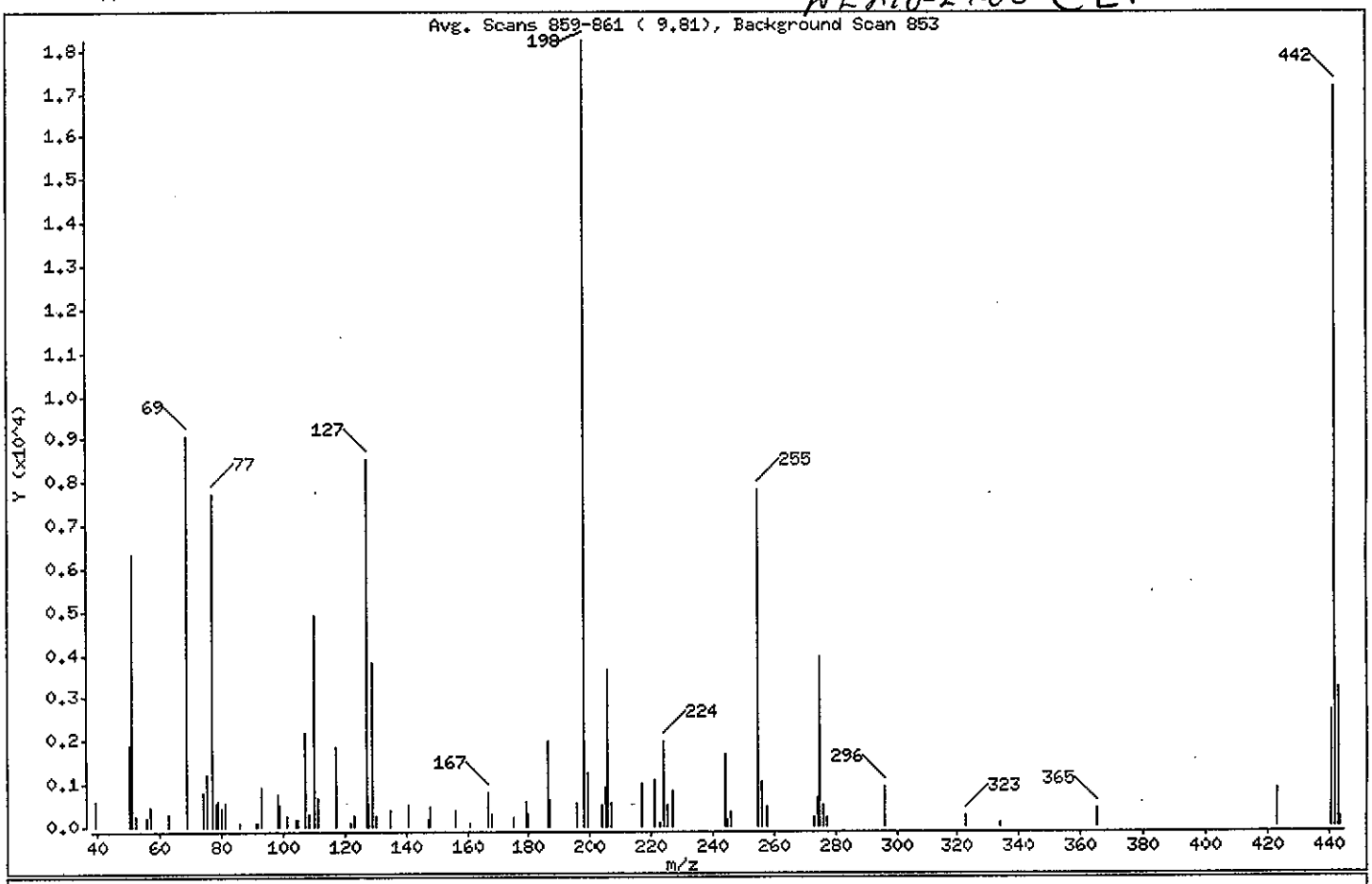
Operator: 001562, DLF

Column phase:

Column diameter: 0.25

1 dftpp

WZ 10-24-00 CLP



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	34.62
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	49.65
70	Less than 2.00% of mass 69	0.00 (0.00)
127	25.00 - 75.00% of mass 198	46.58
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.96
275	10.00 - 30.00% of mass 198	21.63
365	Greater than 0.75% of mass 198	2.19
441	Present, but less than mass 443	14.76
442	40.00 - 110.00% of mass 198	94.07
443	15.00 - 24.00% of mass 442	17.68 (18.80)

Date : 24-OCT-2000 11:27

Client ID: DFTPP Instrument: 721.i

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

Operator: 001562, DLF

Column phase: Column diameter: 0.25

Data File: D1024DFT.D

Spectrum: Avg. Scans 859-861 (9.81), Background Scan 853

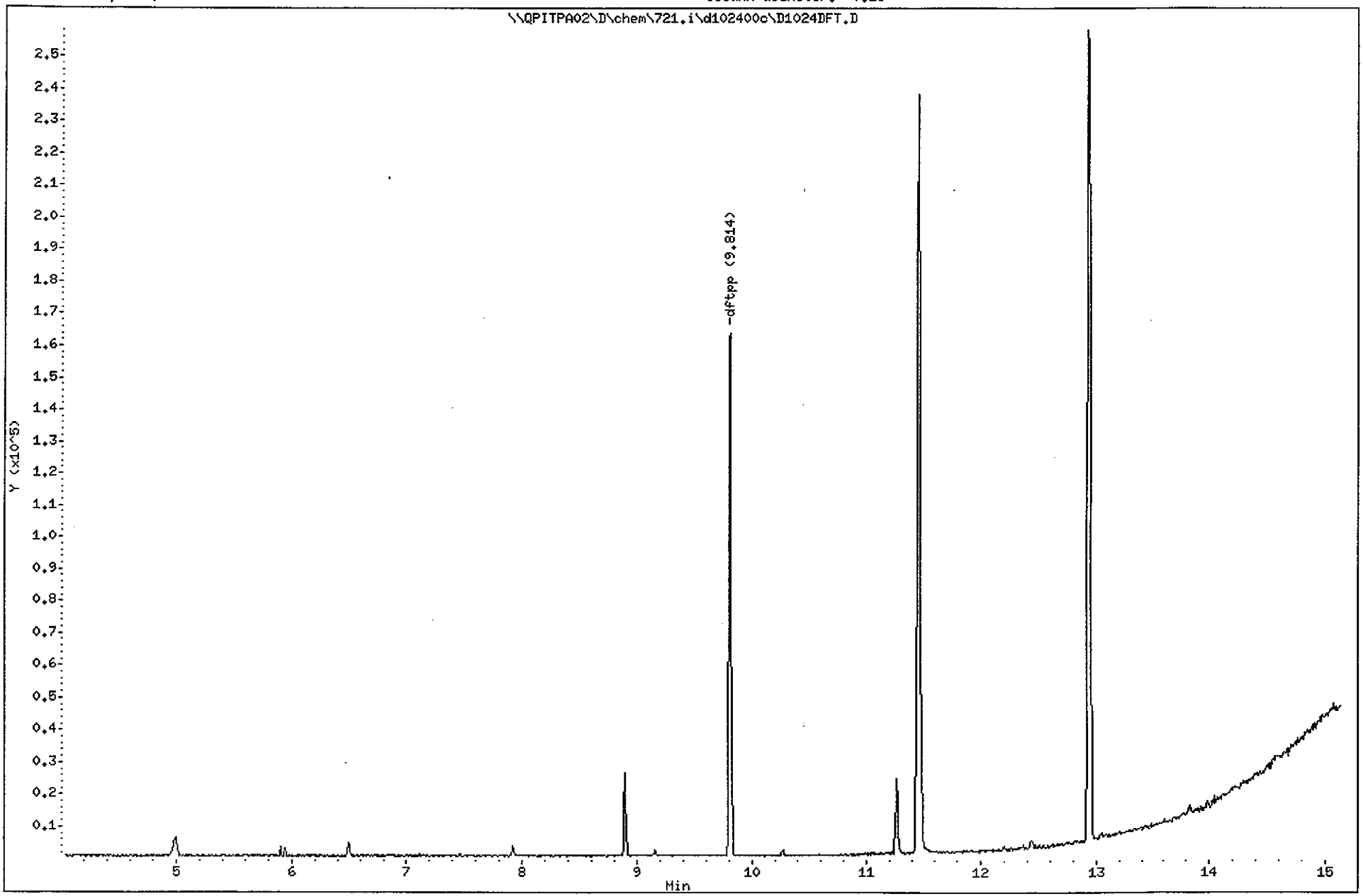
Location of Maximum: 198.00

Number of points: 81

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	583	101.00	261	168.00	285	246.00	325
50.00	1873	104.00	186	175.00	225	255.00	7788
51.00	6316	105.00	167	179.00	597	256.00	1055
52.00	261	107.00	2179	180.00	299	258.00	455
56.00	208	108.00	296	186.00	1974	273.00	202
57.00	482	110.00	4906	187.00	625	274.00	655
63.00	289	111.00	681	196.00	551	275.00	3946
69.00	9057	117.00	1863	198.00	18240	276.00	523
74.00	812	122.00	83	199.00	1270	277.00	223
75.00	1197	123.00	234	204.00	516	296.00	919
77.00	7720	127.00	8498	205.00	909	323.00	248
78.00	548	128.00	549	206.00	3657	334.00	91
79.00	602	129.00	3817	207.00	543	365.00	400
80.00	416	130.00	268	217.00	1019	423.00	901
81.00	538	135.00	389	221.00	1089	441.00	2692
86.00	84	141.00	502	223.00	97	442.00	17160
91.00	92	147.00	184	224.00	1980	443.00	3226
92.00	90	148.00	480	225.00	509	444.00	204
93.00	939	156.00	367	227.00	829		
98.00	745	161.00	86	244.00	1690		
99.00	515	167.00	786	245.00	188		

Data File: \\QPITPA02\D\chem\721.i\d102400c\D1024DFT.D
Date : 24-OCT-2000 11:27
Client ID: DFTPP
Sample Info: dftpp (25ug/ml) 194-175-8

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



Data File: \\QPITPA02\D\chem\721.i\d102500p.b\D1025DFT.D

Date : 25-OCT-2000 12:53

Client ID:

Instrument: 721.i

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

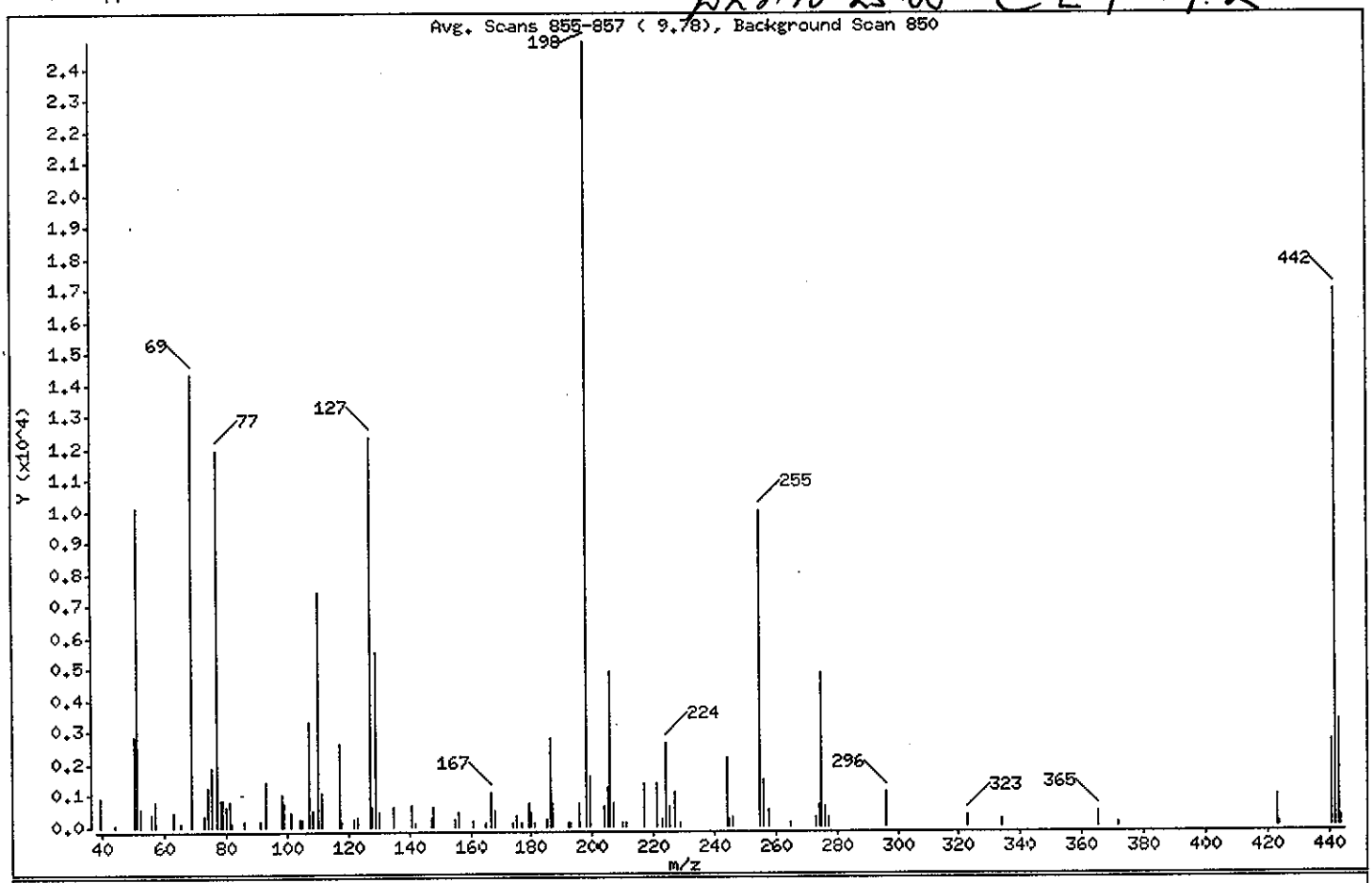
Operator: 001562, DLF

Column phase:

Column diameter: 0.25

1 dftpp

DLF 10-25-00 CLP 4.2



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	40.57
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	57.80
70	Less than 2.00% of mass 69	0.00 (0.00)
127	25.00 - 75.00% of mass 198	49.66
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.40
275	10.00 - 30.00% of mass 198	19.46
365	Greater than 0.75% of mass 198	1.90
441	Present, but less than mass 443	10.90
442	40.00 - 110.00% of mass 198	68.33
443	15.00 - 24.00% of mass 442	13.24 (19.38)

Data File: \\QPITPA02\D\chem\721.i\d102500p.b\D1025DFT.D

Date : 25-OCT-2000 12:53

Client ID:

Instrument: 721.i

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

Operator: 001562, DLF

Column phase:

Column diameter: 0.25

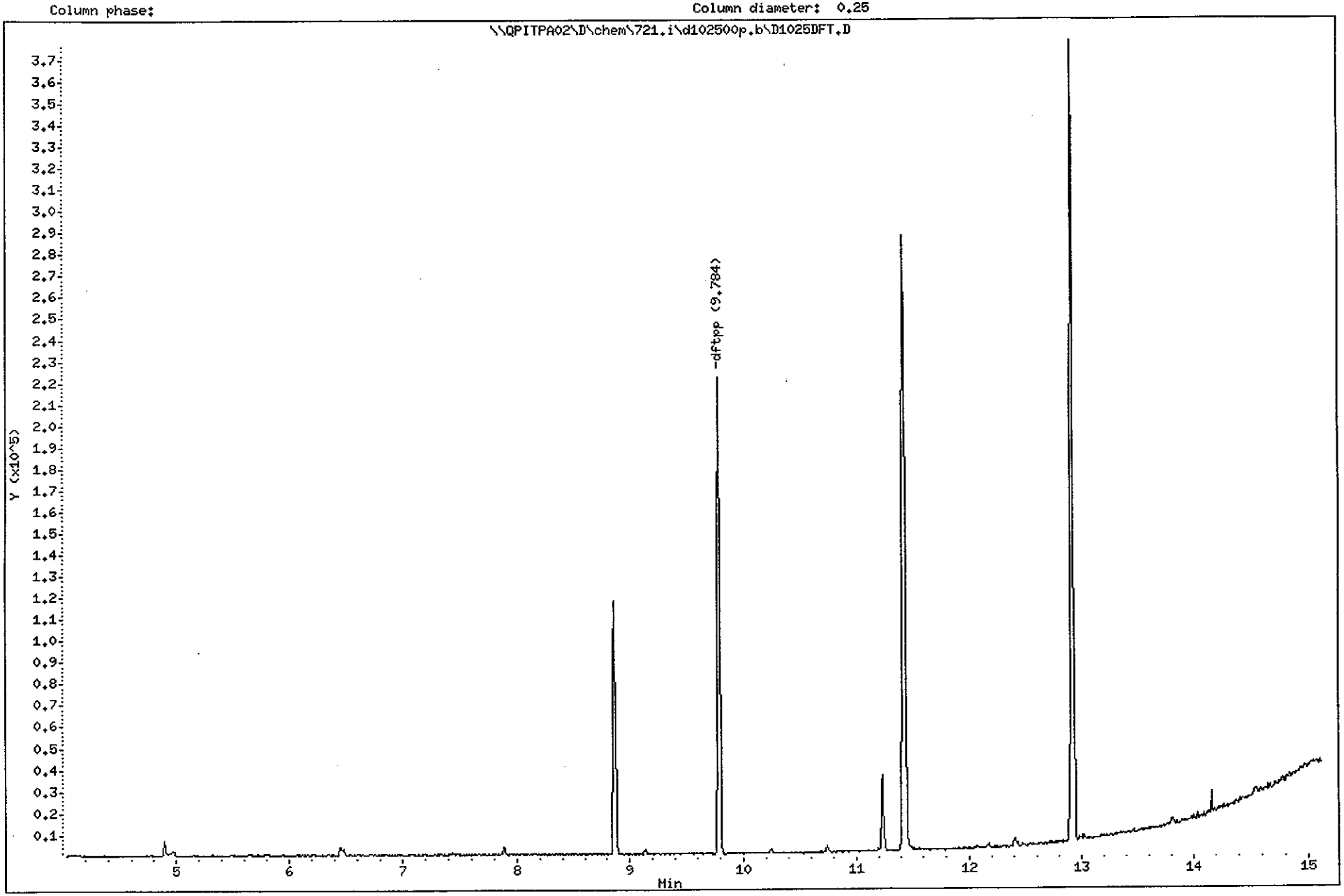
Data File: D1025DFT.D
Spectrum: Avg. Scans 855-857 (9.78), Background Scan 850
Location of Maximum: 198.00
Number of points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	940	105.00	217	177.00	88	245.00	245
44.00	37	107.00	3287	179.00	750	246.00	299
50.00	2827	108.00	528	180.00	470	255.00	9989
51.00	10079	110.00	7436	181.00	92	256.00	1511
52.00	552	111.00	1081	185.00	236	258.00	531
56.00	372	117.00	2645	186.00	2789	265.00	86
57.00	792	118.00	184	187.00	733	273.00	259
63.00	462	122.00	217	192.00	88	274.00	692
65.00	88	123.00	306	193.00	112	275.00	4836
69.00	14360	127.00	12337	196.00	755	276.00	654
73.00	345	128.00	631	198.00	24840	277.00	288
74.00	1230	129.00	5554	199.00	1591	296.00	1057
75.00	1889	130.00	473	204.00	651	323.00	370
77.00	11957	135.00	610	205.00	1236	334.00	200
78.00	863	141.00	670	206.00	4899	365.00	472
79.00	838	142.00	89	207.00	746	372.00	93
80.00	655	147.00	264	210.00	91	423.00	964
81.00	825	148.00	605	211.00	91	424.00	104
82.00	86	155.00	243	217.00	1363	441.00	2708
86.00	178	156.00	462	221.00	1383	442.00	16976
91.00	199	161.00	182	223.00	250	443.00	3290
93.00	1447	165.00	97	224.00	2623	444.00	259
98.00	1030	167.00	1071	225.00	642		
99.00	762	168.00	515	227.00	1057		
101.00	463	174.00	86	229.00	108		
104.00	218	175.00	370	244.00	2167		

Data File: \\QPITPA02\D\chem\721.i\d102500p.b\D1025DFT.D
Date : 25-OCT-2000 12:53
Client ID:
Sample Info: dftpp (25ug/ml) 194-175-8

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

Column phase:



CUMMINGS-RITER CONSULTANTS INC
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J130000 492
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM51V1AA Date Extracted:10/12/00
Dilution factor: 1 Date Analyzed: 10/16/00
Moisture %:NA

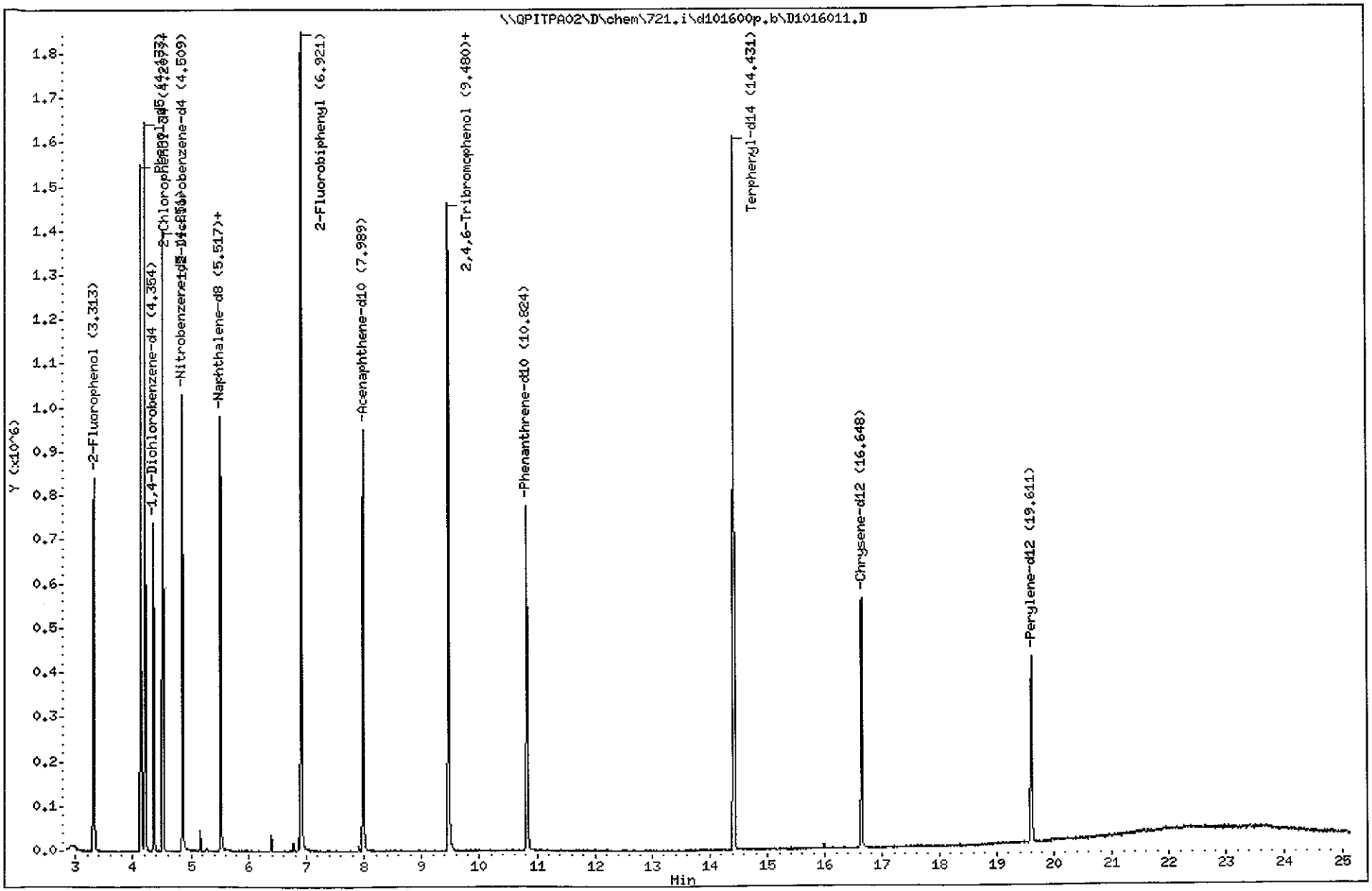
QC Batch: 0287492

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U

Data File: \\QPITPA02\D\chem\721.i\d101600p.b\D1016011.D
Date : 16-OCT-2000 19:46
Client ID: INTRA-LAB BLANK
Sample Info: c0j120207-sblk soil 10/12/00 clp4.2
Volume Injected (uL): 2.0
Column phase:

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



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d101600p.b\D1016011.D
Lab Smp Id: DM51V1AA Client Smp ID: INTRA-LAB BLANK
Inj Date : 16-OCT-2000 19:46
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0j120207-sblk soil 10/12/00 clp4.2
Misc Info : dm51v1aa,d101600p.b,clp.m,1-4.2.sub
Comment :
Method : \\QPITPA02\D\chem\721.i\d101600p.b\clp.m
Meth Date : 17-Oct-2000 10:52 ferguson Quant Type: ISTD
Cal Date : 16-OCT-2000 14:02 Cal File: D1016CCC.D
Als bottle: 13 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-4.2.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-17-00

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	gpc correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
* 1	1,4-Dichlorobenzene-d4	152	4.354	4.350	(1.000)	95113	40.0000	
* 2	Naphthalene-d8	136	5.516	5.518	(1.000)	455426	40.0000	
* 3	Acenaphthene-d10	164	7.988	7.991	(1.000)	291883	40.0000	
* 4	Phenanthrene-d10	188	10.823	10.832	(1.000)	504448	40.0000	
* 5	Chrysene-d12	240	16.648	16.657	(1.000)	372243	40.0000	
* 6	Perylene-d12	264	19.617	19.612	(1.000)	286104	40.0000	
191	Benzaldehyde	77	Compound Not Detected.					
7	Phenol	94	Compound Not Detected.					
8	Bis(2-chloroethyl)ether	93	Compound Not Detected.					
9	2-Chlorophenol	128	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
192	Acetophenone	105	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
18	Nitrobenzene	77	Compound Not Detected.					
19	Isophorone	82	Compound Not Detected.					
20	2-Nitrophenol	139	Compound Not Detected.					
21	2,4-Dimethylphenol	107	Compound Not Detected.					
22	Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
23	2,4-Dichlorophenol	162	Compound Not Detected.					
25	Naphthalene	128	Compound Not Detected.					
26	4-Chloroaniline	127	Compound Not Detected.					
193	Caprolactam	113	Compound Not Detected.					
27	Hexachlorobutadiene	224	Compound Not Detected.					
28	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
29	2-Methylnaphthalene	142	Compound Not Detected.					
30	Hexachlorocyclopentadiene	236	Compound Not Detected.					
31	2,4,6-Trichlorophenol	196	Compound Not Detected.					
32	2,4,5-Trichlorophenol	196	Compound Not Detected.					
194	1,1'-Biphenyl	154	Compound Not Detected.					
33	2-Chloronaphthalene	162	Compound Not Detected.					
34	2-Nitroaniline	65	Compound Not Detected.					
35	Dimethylphthalate	163	Compound Not Detected.					
36	Acenaphthylene	152	Compound Not Detected.					
37	2,6-Dinitrotoluene	165	Compound Not Detected.					
38	3-Nitroaniline	138	Compound Not Detected.					
39	Acenaphthene	153	Compound Not Detected.					
40	2,4-Dinitrophenol	184	Compound Not Detected.					
41	4-Nitrophenol	109	Compound Not Detected.					
42	Dibenzofuran	168	Compound Not Detected.					
43	2,4-Dinitrotoluene	165	Compound Not Detected.					
44	Diethylphthalate	149	Compound Not Detected.					
45	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
46	Fluorene	166	Compound Not Detected.					
47	4-Nitroaniline	138	Compound Not Detected.					
48	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
49	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
50	4-Bromophenyl-phenylether	248	Compound Not Detected.					
51	Hexachlorobenzene	283	Compound Not Detected.					
195	Atrazine	200	Compound Not Detected.					
53	Pentachlorophenol	265	Compound Not Detected.					
54	Phenanthrene	178	Compound Not Detected.					
55	Anthracene	178	Compound Not Detected.					
56	Carbazole	167	Compound Not Detected.					
57	Di-n-Butylphthalate	149	Compound Not Detected.					
58	Fluoranthene	202	Compound Not Detected.					
59	Pyrene	202	Compound Not Detected.					
60	Butylbenzylphthalate	149	Compound Not Detected.					
61	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
62	Benzo(a)Anthracene	228	Compound Not Detected.					
63	Chrysene	228	Compound Not Detected.					
64	bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
65	Di-n-octylphthalate	149	Compound Not Detected.					
66	Benzo(b)fluoranthene	252	Compound Not Detected.					
67	Benzo(k)fluoranthene	252	Compound Not Detected.					
68	Benzo(a)pyrene	252	Compound Not Detected.					
69	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
70	Dibenz(a,h)anthracene	278	Compound Not Detected.					
71	Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 72	Nitrobenzene-d5	82	4.851	4.847	(0.879)	315150	70.4521	1174.2
$ 73	2-Fluorobiphenyl	172	6.920	6.916	(0.866)	729982	77.5711	1292.8
$ 74	Terphenyl-d14	244	14.431	14.420	(0.867)	902371	91.8103	1530.2
$ 75	Phenol-d5	99	4.132	4.128	(0.949)	394334	108.371	1806.2(Q)
$ 76	2-Fluorophenol	112	3.313	3.302	(0.761)	224161	84.8307	1413.8
$ 77	2,4,6-Tribromophenol	330	9.486	9.482	(0.876)	284717	121.024	2017.1
$ 78	2-Chlorophenol-d4	132	4.206	4.202	(0.966)	367002	131.500	2191.7
$ 79	1,2-Dichlorobenzene-d4	152	4.508	4.504	(1.035)	174300	78.9956	1316.6

QC Flag Legend

Q - Qualifier signal failed the ratio test.

CUMMINGS-RITER CONSULTANTS INC
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J180000 466
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DNDVH1AA Date Extracted:10/18/00
Dilution factor: 1 Date Analyzed: 10/25/00
Moisture %:NA

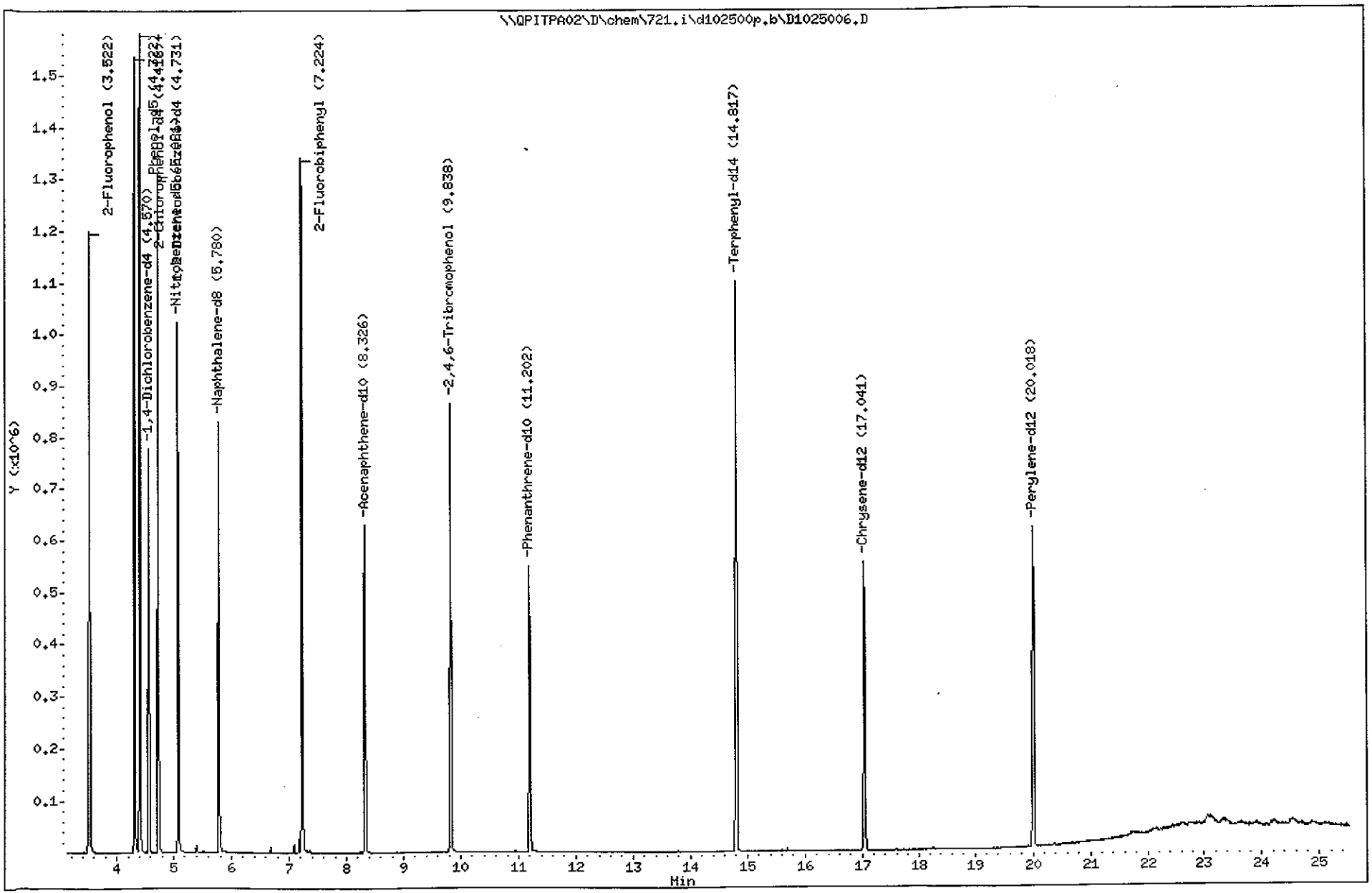
QC Batch: 0292466

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
56-55-3	Benzo(a)anthracene	330	U
205-99-2	Benzo(b)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U

Data File: \\QPITPA02\D\chem\721.i\d102500p.b\D1025006.D
Date : 25-OCT-2000 16:53
Client ID: INTRA-LAB BLANK
Sample Info: c0j120207-sblk/re soil 10/18/00 clp4.2
Volume Injected (uL): 2.0
Column phase:

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



STL-Pittsburgh

Semivolatile REPORT CLP4.2

Data file : \\QPITPA02\D\chem\721.i\d102500p.b\D1025006.D
Lab Smp Id: DNDVH1AA Client Smp ID: INTRA-LAB BLANK
Inj Date : 25-OCT-2000 16:53
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0j120207-sblk/re soil 10/18/00 clp4.2
Misc Info : dndvh1aa,d102500p.b,clp.m,1-4.2.sub
Comment :
Method : \\QPITPA02\D\chem\721.i\d102500p.b\clp.m
Meth Date : 26-Oct-2000 07:57 ferguson Quant Type: ISTD
Cal Date : 25-OCT-2000 13:14 Cal File: D1025CCC.D
Als bottle: 9 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-4.2.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-26-00

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	gpc correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
* 1	1,4-Dichlorobenzene-d4	152	4.570	4.563	(1.000)	146217	40.0000	
* 2	Naphthalene-d8	136	5.779	5.779	(1.000)	526717	40.0000	
* 3	Acenaphthene-d10	164	8.326	8.332	(1.000)	237350	40.0000	
* 4	Phenanthrene-d10	188	11.202	11.201	(1.000)	384877	40.0000	
* 5	Chrysene-d12	240	17.041	17.047	(1.000)	390890	40.0000	
* 6	Perylene-d12	264	20.017	20.010	(1.000)	456735	40.0000	
191	Benzaldehyde	77	Compound Not Detected.					
7	Phenol	94	Compound Not Detected.					
8	Bis(2-chloroethyl)ether	93	Compound Not Detected.					
9	2-Chlorophenol	128	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
192	Acetophenone	105	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
18	Nitrobenzene	77	Compound Not Detected.					
19	Isophorone	82	Compound Not Detected.					
20	2-Nitrophenol	139	Compound Not Detected.					
21	2,4-Dimethylphenol	107	Compound Not Detected.					
22	Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
23	2,4-Dichlorophenol	162	Compound Not Detected.					
25	Naphthalene	128	Compound Not Detected.					
26	4-Chloroaniline	127	Compound Not Detected.					
193	Caprolactam	113	Compound Not Detected.					
27	Hexachlorobutadiene	224	Compound Not Detected.					
28	4-Chloro-3-Methylphenol	107	Compound Not Detected.					
29	2-Methylnaphthalene	142	Compound Not Detected.					
30	Hexachlorocyclopentadiene	236	Compound Not Detected.					
31	2,4,6-Trichlorophenol	196	Compound Not Detected.					
32	2,4,5-Trichlorophenol	196	Compound Not Detected.					
194	1,1'-Biphenyl	154	Compound Not Detected.					
33	2-Chloronaphthalene	162	Compound Not Detected.					
34	2-Nitroaniline	65	Compound Not Detected.					
35	Dimethylphthalate	163	Compound Not Detected.					
36	Acenaphthylene	152	Compound Not Detected.					
37	2,6-Dinitrotoluene	165	Compound Not Detected.					
38	3-Nitroaniline	138	Compound Not Detected.					
39	Acenaphthene	153	Compound Not Detected.					
40	2,4-Dinitrophenol	184	Compound Not Detected.					
41	4-Nitrophenol	109	Compound Not Detected.					
42	Dibenzofuran	168	Compound Not Detected.					
43	2,4-Dinitrotoluene	165	Compound Not Detected.					
44	Diethylphthalate	149	Compound Not Detected.					
45	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
46	Fluorene	166	Compound Not Detected.					
47	4-Nitroaniline	138	Compound Not Detected.					
48	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
49	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
50	4-Bromophenyl-phenylether	248	Compound Not Detected.					
51	Hexachlorobenzene	283	Compound Not Detected.					
195	Atrazine	200	Compound Not Detected.					
53	Pentachlorophenol	265	Compound Not Detected.					
54	Phenanthrene	178	Compound Not Detected.					
55	Anthracene	178	Compound Not Detected.					
56	Carbazole	167	Compound Not Detected.					
57	Di-n-Butylphthalate	149	Compound Not Detected.					
58	Fluoranthene	202	Compound Not Detected.					
59	Pyrene	202	Compound Not Detected.					
60	Butylbenzylphthalate	149	Compound Not Detected.					
61	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
62	Benzo(a)Anthracene	228	Compound Not Detected.					
63	Chrysene	228	Compound Not Detected.					
64	bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
65	Di-n-octylphthalate	149	Compound Not Detected.					
66	Benzo(b)fluoranthene	252	Compound Not Detected.					
67	Benzo(k)fluoranthene	252	Compound Not Detected.					
68	Benzo(a)pyrene	252	Compound Not Detected.					
69	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
70	Dibenz(a,h)anthracene	278	Compound Not Detected.					
71	Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 72	Nitrobenzene-d5	82	5.080	5.080	(0.879)	381163	73.1344	1218.9
$ 73	2-Fluorobiphenyl	172	7.224	7.224	(0.868)	634183	74.3618	1239.4
$ 74	Terphenyl-d14	244	14.816	14.810	(0.869)	759211	78.3669	1306.1
$ 75	Phenol-d5	99	4.321	4.314	(0.946)	671505	107.911	1798.5
$ 76	2-Fluorophenol	112	3.521	3.508	(0.771)	554201	100.617	1677.0
$ 77	2,4,6-Tribromophenol	330	9.838	9.837	(0.878)	202351	129.429	2157.1
$ 78	2-Chlorophenol-d4	132	4.415	4.408	(0.966)	611495	117.869	1964.5
$ 79	1,2-Dichlorobenzene-d4	152	4.731	4.731	(1.035)	252925	70.4603	1174.3

CUMMINGS-RITER CONSULTANTS INC
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J130000 492
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM51V1AC Date Extracted:10/12/00
Dilution factor: 1 Date Analyzed: 10/16/00
Moisture %:NA

QC Batch: 0287492

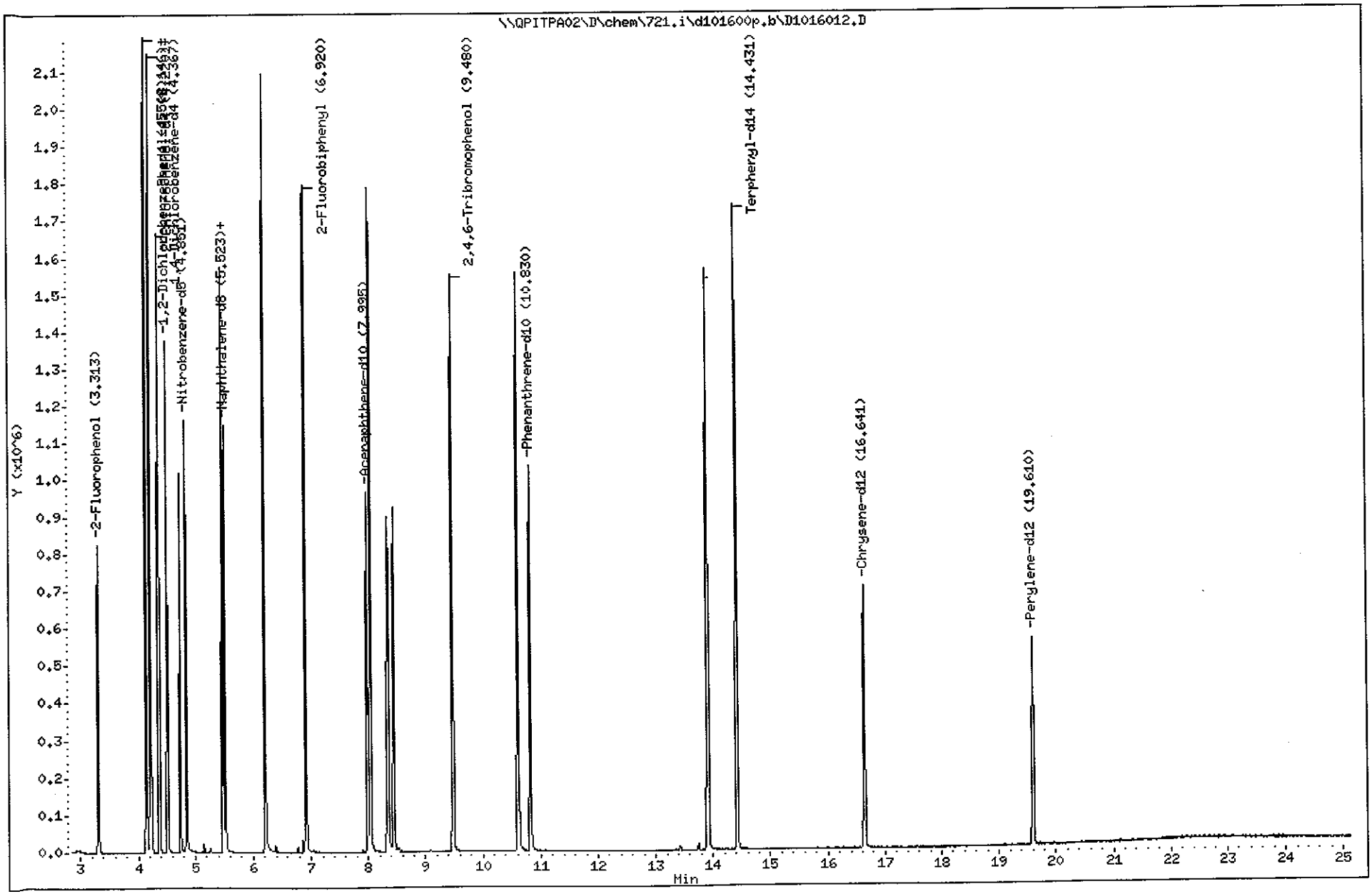
Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	1420	
95-57-8	2-Chlorophenol	1610	
621-64-7	N-Nitrosodi-n-propylamine	1370	
59-50-7	4-Chloro-3-methylphenol	1810	
83-32-9	Acenaphthene	1180	
100-02-7	4-Nitrophenol	1750	
121-14-2	2,4-Dinitrotoluene	1180	
87-86-5	Pentachlorophenol	1850	
129-00-0	Pyrene	1300	

Data File: \\QPITPA02\D\chem\721.i\d101600p.b\D1016012.D
Date : 16-OCT-2000 20:17
Client ID: INTRA-LAB CHECK
Sample Info: c0j120207-lcs soil 10/12/00 clp4.2
Volume Injected (uL): 2.0
Column phase:

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d101600p.b\D1016012.D
Lab Smp Id: DM51V1AC Client Smp ID: LCS
Inj Date : 16-OCT-2000 20:17
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0j120207-lcs soil 10/12/00 clp4.2
Misc Info : dm51v1ac,d101600p.b,clp.m,1-4.2.sub
Comment :
Method : \\QPITPA02\D\chem\721.i\d101600p.b\clp.m
Meth Date : 17-Oct-2000 10:52 ferguson Quant Type: ISTD
Cal Date : 16-OCT-2000 14:02 Cal File: D1016CCC.D
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-4.2.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-17-00

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	gpc correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
* 1	1,4-Dichlorobenzene-d4	152	4.360	4.350	(1.000)	122463	40.0000	
* 2	Naphthalene-d8	136	5.522	5.518	(1.000)	553156	40.0000	
* 3	Acenaphthene-d10	164	7.994	7.991	(1.000)	340161	40.0000	
* 4	Phenanthrene-d10	188	10.829	10.832	(1.000)	599690	40.0000	
* 5	Chrysene-d12	240	16.647	16.657	(1.000)	481048	40.0000	
* 6	Perylene-d12	264	19.610	19.612	(1.000)	382541	40.0000	
191	Benzaldehyde	77	Compound Not Detected.					
7	Phenol	94	4.152	4.141	(0.952)	406677	85.2935	1421.6(Q)
8	Bis(2-chloroethyl)ether	93	Compound Not Detected.					
9	2-Chlorophenol	128	4.219	4.215	(0.968)	369782	96.6030	1610.0
13	2-Methylphenol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
192	Acetophenone	105	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)
16 N-Nitroso-di-n-propylamine	70	4.743	4.746	(1.088)	200430	81.9697	1366.2
17 Hexachloroethane	117	Compound Not Detected.					
18 Nitrobenzene	77	Compound Not Detected.					
19 Isophorone	82	Compound Not Detected.					
20 2-Nitrophenol	139	Compound Not Detected.					
21 2,4-Dimethylphenol	107	Compound Not Detected.					
22 Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
23 2,4-Dichlorophenol	162	Compound Not Detected.					
25 Naphthalene	128	Compound Not Detected.					
26 4-Chloroaniline	127	Compound Not Detected.					
193 Caprolactam	113	Compound Not Detected.					
27 Hexachlorobutadiene	224	Compound Not Detected.					
28 4-Chloro-3-Methylphenol	107	6.208	6.217	(1.124)	457214	108.795	1813.2
29 2-Methylnaphthalene	142	Compound Not Detected.					
30 Hexachlorocyclopentadiene	236	Compound Not Detected.					
31 2,4,6-Trichlorophenol	196	Compound Not Detected.					
32 2,4,5-Trichlorophenol	196	Compound Not Detected.					
194 1,1'-Biphenyl	154	Compound Not Detected.					
33 2-Chloronaphthalene	162	Compound Not Detected.					
34 2-Nitroaniline	65	Compound Not Detected.					
35 Dimethylphthalate	163	Compound Not Detected.					
36 Acenaphthylene	152	Compound Not Detected.					
37 2,6-Dinitrotoluene	165	Compound Not Detected.					
38 3-Nitroaniline	138	Compound Not Detected.					
39 Acenaphthene	153	8.048	8.051	(1.007)	628775	70.4975	1175.0
40 2,4-Dinitrophenol	184	Compound Not Detected.					
41 4-Nitrophenol	109	8.357	8.353	(1.045)	261597	104.942	1749.0(Q)
42 Dibenzofuran	168	Compound Not Detected.					
43 2,4-Dinitrotoluene	165	8.458	8.461	(1.058)	267907	70.9417	1182.4
44 Diethylphthalate	149	Compound Not Detected.					
45 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
46 Fluorene	166	Compound Not Detected.					
47 4-Nitroaniline	138	Compound Not Detected.					
48 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
49 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
50 4-Bromophenyl-phenylether	248	Compound Not Detected.					
51 Hexachlorobenzene	283	Compound Not Detected.					
195 Atrazine	200	Compound Not Detected.					
53 Pentachlorophenol	266	10.621	10.617	(0.981)	301762	110.990	1849.8
54 Phenanthrene	178	Compound Not Detected.					
55 Anthracene	178	Compound Not Detected.					
56 Carbazole	167	Compound Not Detected.					
57 Di-n-Butylphthalate	149	Compound Not Detected.					
58 Fluoranthene	202	Compound Not Detected.					
59 Pyrene	202	13.920	13.909	(0.836)	1190849	78.2850	1304.7
60 Butylbenzylphthalate	149	Compound Not Detected.					
61 3,3'-Dichlorobenzidine	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
62	Benzo(a)Anthracene	228	Compound Not Detected.					
63	Chrysene	228	Compound Not Detected.					
64	bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
65	Di-n-octylphthalate	149	Compound Not Detected.					
66	Benzo(b)fluoranthene	252	Compound Not Detected.					
67	Benzo(k)fluoranthene	252	Compound Not Detected.					
68	Benzo(a)pyrene	252	Compound Not Detected.					
69	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
70	Dibenz(a,h)anthracene	278	Compound Not Detected.					
71	Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 72	Nitrobenzene-d5	82	4.851	4.847	(0.878)	344688	63.4414	1057.4
$ 73	2-Fluorobiphenyl	172	6.920	6.916	(0.866)	731187	66.6715	1111.2
$ 74	Terphenyl-d14	244	14.430	14.420	(0.867)	1031813	81.2354	1353.9
$ 75	Phenol-d5	99	4.138	4.128	(0.949)	409432	87.3909	1456.5(Q)
$ 76	2-Fluorophenol	112	3.312	3.302	(0.760)	198712	58.4053	973.42(Q)
$ 77	2,4,6-Tribromophenol	330	9.486	9.482	(0.876)	311224	111.281	1854.7
$ 78	2-Chlorophenol-d4	132	4.212	4.202	(0.966)	374806	104.304	1738.4
$ 79	1,2-Dichlorobenzene-d4	152	4.508	4.504	(1.034)	174530	61.4342	1023.9

QC Flag Legend

Q - Qualifier signal failed the ratio test.

CUMMINGS-RITER CONSULTANTS INC
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J180000 466
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DNDVH1AC Date Extracted:10/18/00
Dilution factor: 1 Date Analyzed: 10/25/00
Moisture %:NA

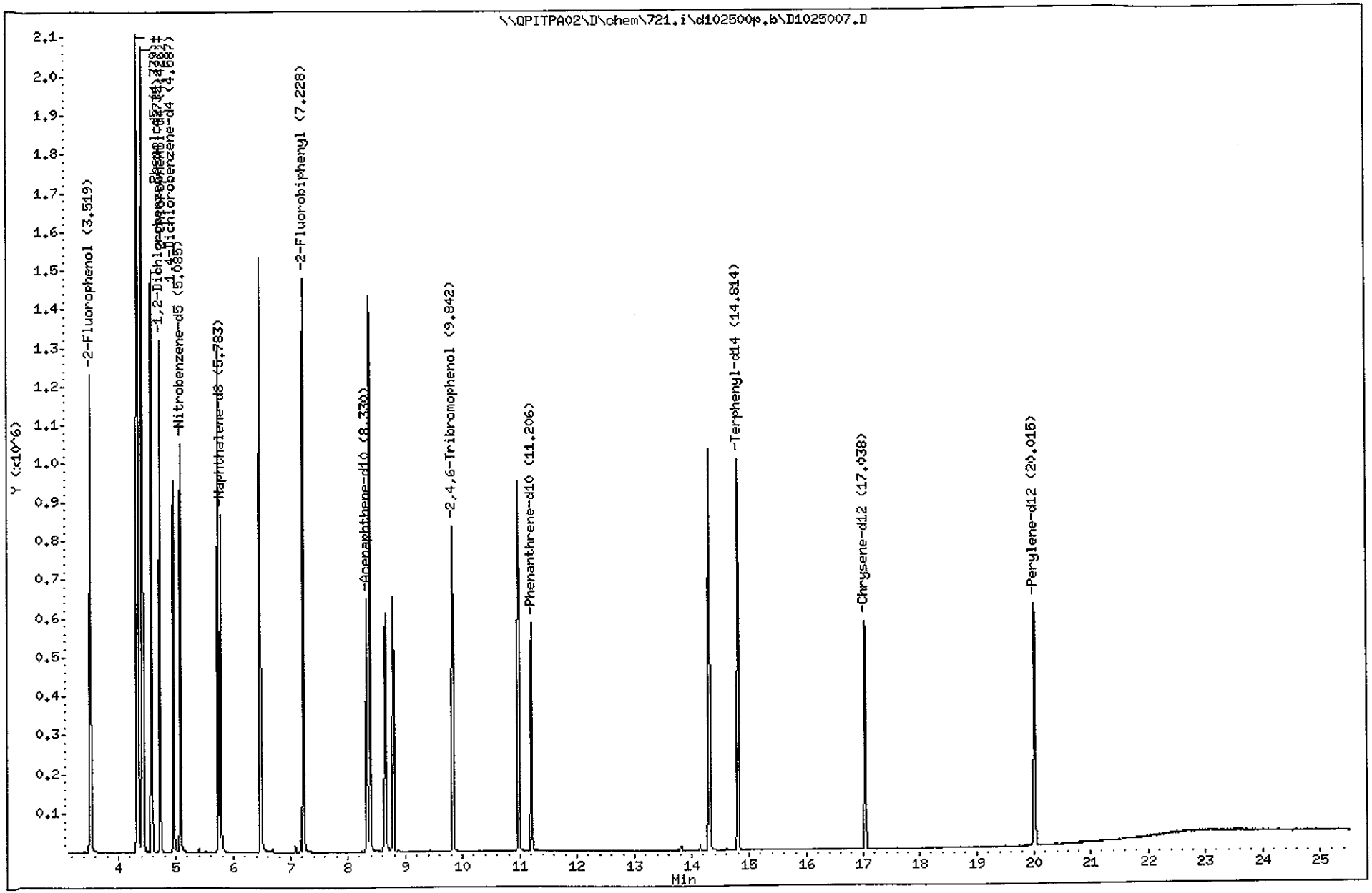
QC Batch: 0292466

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	1780	
95-57-8	2-Chlorophenol	1890	
621-64-7	N-Nitrosodi-n-propylamine	1310	
59-50-7	4-Chloro-3-methylphenol	1990	
83-32-9	Acenaphthene	1360	
100-02-7	4-Nitrophenol	1940	
121-14-2	2,4-Dinitrotoluene	1340	
87-86-5	Pentachlorophenol	2390	
129-00-0	Pyrene	1280	

Data File: \\QPITPA02\D\chem\721.i\d102500p.b\D1025007.D
Date : 25-OCT-2000 17:25
Client ID: INTRA-LAB CHECK
Sample Info: c0j120207-lcs/re soil 10/18/00 clp4.2
Volume Injected (uL): 2.0
Column phase:

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



STL-Pittsburgh

Semivolatile REPORT CLP4.2

Data file : \\QPITPA02\D\chem\721.i\d102500p.b\D1025007.D
Lab Smp Id: DNDVH1AC Client Smp ID: LCS
Inj Date : 25-OCT-2000 17:25
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0j120207-lcs/re soil 10/18/00 clp4.2
Misc Info : dndvh1ac,d102500p.b,clp.m,1-4.2.sub
Comment :
Method : \\QPITPA02\D\chem\721.i\d102500p.b\clp.m
Meth Date : 26-Oct-2000 07:57 ferguson Quant Type: ISTD
Cal Date : 25-OCT-2000 13:14 Cal File: D1025CCC.D
Als bottle: 10 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-4.2.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-26-00

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	gpc correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)
* 1 1,4-Dichlorobenzene-d4	152	4.573	4.563	(1.000)	146009	40.0000	
* 2 Naphthalene-d8	136	5.783	5.779	(1.000)	545278	40.0000	
* 3 Acenaphthene-d10	164	8.329	8.332	(1.000)	250867	40.0000	
* 4 Phenanthrene-d10	188	11.205	11.201	(1.000)	404603	40.0000	
* 5 Chrysene-d12	240	17.038	17.047	(1.000)	413756	40.0000	
* 6 Perylene-d12	264	20.014	20.010	(1.000)	474225	40.0000	
191 Benzaldehyde	77	Compound Not Detected.					
7 Phenol	94	4.345	4.328	(0.950)	656192	106.956	1782.6(Q)
8 Bis(2-chloroethyl)ether	93	Compound Not Detected.					
9 2-Chlorophenol	128	4.432	4.422	(0.969)	606172	113.349	1889.2
13 2-Methylphenol	108	Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
192 Acetophenone	105	Compound Not Detected.					
15 4-Methylphenol	108	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)
16 N-Nitroso-di-n-propylamine	70	4.970	4.966	(1.087)	277466	78.3997	1306.7
17 Hexachloroethane	117	Compound Not Detected.					
18 Nitrobenzene	77	Compound Not Detected.					
19 Isophorone	82	Compound Not Detected.					
20 2-Nitrophenol	139	Compound Not Detected.					
21 2,4-Dimethylphenol	107	Compound Not Detected.					
22 Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
23 2,4-Dichlorophenol	162	Compound Not Detected.					
25 Naphthalene	128	Compound Not Detected.					
26 4-Chloroaniline	127	Compound Not Detected.					
193 Caprolactam	113	Compound Not Detected.					
27 Hexachlorobutadiene	224	Compound Not Detected.					
28 4-Chloro-3-Methylphenol	107	6.475	6.478	(1.120)	472813	119.167	1986.1
29 2-Methylnaphthalene	142	Compound Not Detected.					
30 Hexachlorocyclopentadiene	236	Compound Not Detected.					
31 2,4,6-Trichlorophenol	196	Compound Not Detected.					
32 2,4,5-Trichlorophenol	196	Compound Not Detected.					
194 1,1'-Biphenyl	154	Compound Not Detected.					
33 2-Chloronaphthalene	162	Compound Not Detected.					
34 2-Nitroaniline	65	Compound Not Detected.					
35 Dimethylphthalate	163	Compound Not Detected.					
36 Acenaphthylene	152	Compound Not Detected.					
37 2,6-Dinitrotoluene	165	Compound Not Detected.					
38 3-Nitroaniline	138	Compound Not Detected.					
39 Acenaphthene	153	8.390	8.386	(1.007)	607736	81.7809	1363.0
40 2,4-Dinitrophenol	184	Compound Not Detected.					
41 4-Nitrophenol	109	8.659	8.648	(1.040)	142192	116.326	1938.8
42 Dibenzofuran	168	Compound Not Detected.					
43 2,4-Dinitrotoluene	165	8.793	8.789	(1.056)	232659	80.3897	1339.8
44 Diethylphthalate	149	Compound Not Detected.					
45 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
46 Fluorene	166	Compound Not Detected.					
47 4-Nitroaniline	138	Compound Not Detected.					
48 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
49 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
50 4-Bromophenyl-phenylether	248	Compound Not Detected.					
51 Hexachlorobenzene	283	Compound Not Detected.					
195 Atrazine	200	Compound Not Detected.					
53 Pentachlorophenol	266	10.984	10.973	(0.980)	230222	143.484	2391.4
54 Phenanthrene	178	Compound Not Detected.					
55 Anthracene	178	Compound Not Detected.					
56 Carbazole	167	Compound Not Detected.					
57 Di-n-Butylphthalate	149	Compound Not Detected.					
58 Fluoranthene	202	Compound Not Detected.					
59 Pyrene	202	14.316	14.306	(0.840)	954123	76.9515	1282.5
60 Butylbenzylphthalate	149	Compound Not Detected.					
61 3,3'-Dichlorobenzidine	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
62	Benzo(a)Anthracene	228	Compound Not Detected.					
63	Chrysene	228	Compound Not Detected.					
64	bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
65	Di-n-octylphthalate	149	Compound Not Detected.					
66	Benzo(b)fluoranthene	252	Compound Not Detected.					
67	Benzo(k)fluoranthene	252	Compound Not Detected.					
68	Benzo(a)pyrene	252	Compound Not Detected.					
69	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
70	Dibenz(a,h)anthracene	278	Compound Not Detected.					
71	Benzo(g,h,i)perylene	276	Compound Not Detected.					
$ 72	Nitrobenzene-d5	82	5.084	5.080	(0.879)	398979	73.9469	1232.4
$ 73	2-Fluorobiphenyl	172	7.228	7.224	(0.868)	663703	73.6299	1227.2
$ 74	Terphenyl-d14	244	14.820	14.810	(0.870)	732548	71.4359	1190.6
$ 75	Phenol-d5	99	4.332	4.314	(0.947)	669232	107.699	1795.0
$ 76	2-Fluorophenol	112	3.519	3.508	(0.769)	567496	103.178	1719.6
$ 77	2,4,6-Tribromophenol	330	9.841	9.837	(0.878)	205744	125.183	2086.4
$ 78	2-Chlorophenol-d4	132	4.419	4.408	(0.966)	609524	117.656	1960.9
$ 79	1,2-Dichlorobenzene-d4	152	4.735	4.731	(1.035)	256425	71.5371	1192.3

QC Flag Legend

Q - Qualifier signal failed the ratio test.

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 001
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2GW1AG Date Extracted:10/12/00
Dilution factor: 1 Date Analyzed: 10/16/00
Moisture %:13

QC Batch: 0287492

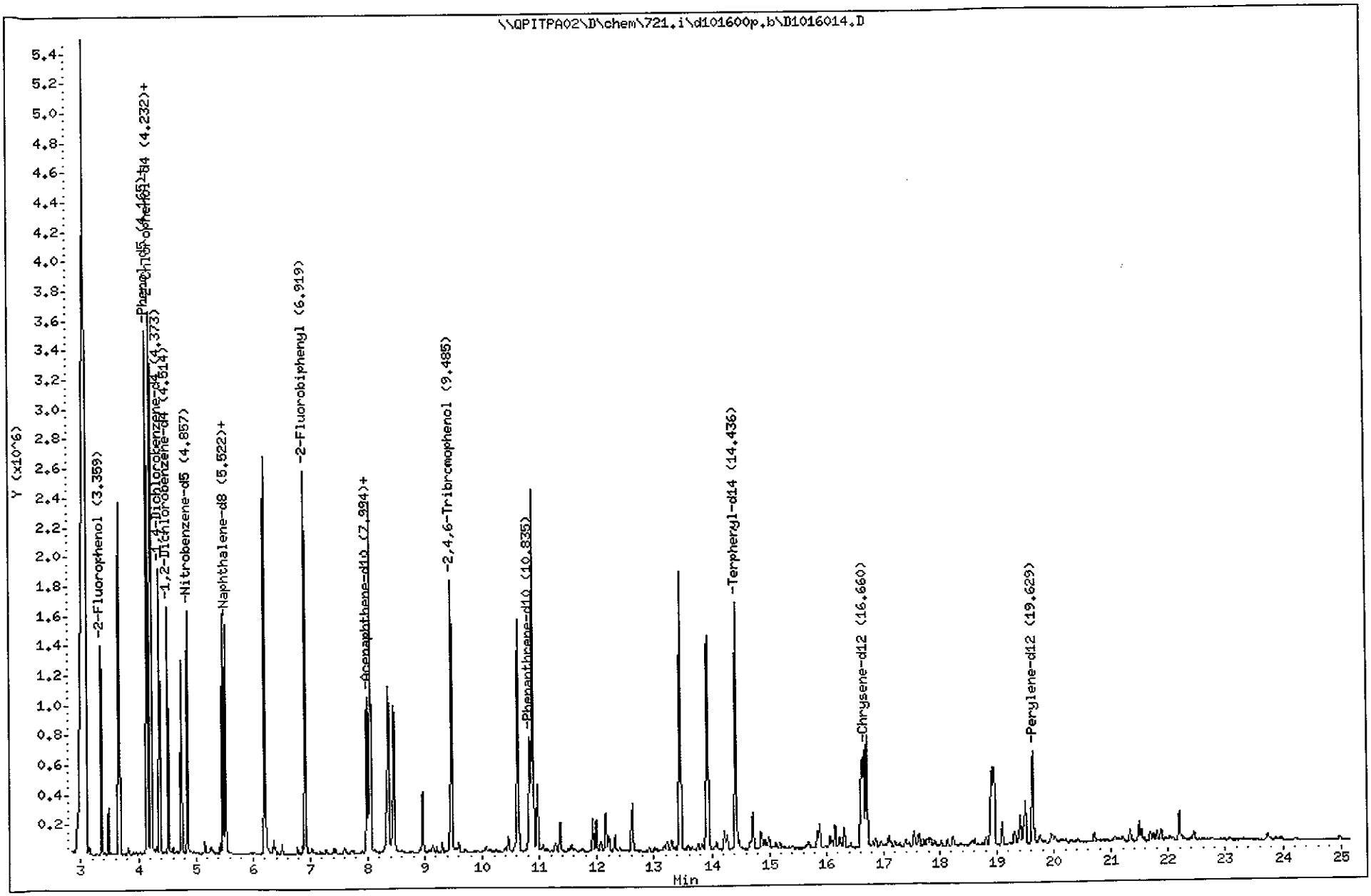
Client Sample Id: PXS-19

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	2030	
95-57-8	2-Chlorophenol	2300	
621-64-7	N-Nitrosodi-n-propylamine	1380	
59-50-7	4-Chloro-3-methylphenol	2510	
83-32-9	Acenaphthene	1700	
100-02-7	4-Nitrophenol	2370	
121-14-2	2,4-Dinitrotoluene	1590	
87-86-5	Pentachlorophenol	2220	
129-00-0	Pyrene	1820	

Data File: \\QPITPA02\D\chem\721.i\d101600p.b\D1016014.D
Date : 16-OCT-2000 21:18
Client ID: PXS-19
Sample Info: c0j120207-001ms soil 10/12/00 clp4.2
Volume Injected (uL): 2.0
Column phase:

Instrument: 721.i

Operator: 001562, DLF
Column diameter: 0.25



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d101600p.b\D1016014.D
Lab Smp Id: DM2GW1AG Client Smp ID: PXS-19MS
Inj Date : 16-OCT-2000 21:18
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0j120207-001ms soil 10/12/00 clp4.2
Misc Info : dm2gw1ag,d101600p.b,clp.m,1-4.2.sub
Comment :
Method : \\QPITPA02\D\chem\721.i\d101600p.b\clp.m
Meth Date : 17-Oct-2000 10:52 ferguson Quant Type: ISTD
Cal Date : 16-OCT-2000 14:02 Cal File: D1016CCC.D
Als bottle: 16 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-4.2.sub
Target Version: 4.04
Processing Host: PITPC013

DL 10-17-00

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	gpc correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)
* 1	1,4-Dichlorobenzene-d4	152	4.366	4.350	(1.000)	185931	40.0000	
* 2	Naphthalene-d8	136	5.521	5.518	(1.000)	684576	40.0000	
* 3	Acenaphthene-d10	164	7.993	7.991	(1.000)	387395	40.0000	
* 4	Phenanthrene-d10	188	10.835	10.832	(1.000)	576696	40.0000	
* 5	Chrysene-d12	240	16.659	16.657	(1.000)	374257	40.0000	
* 6	Perylene-d12	264	19.629	19.612	(1.000)	393729	40.0000	
191	Benzaldehyde	77	Compound Not Detected.					
7	Phenol	94	4.164	4.141	(0.954)	768759	106.196	1769.9(Q)
8	Bis(2-chloroethyl)ether	93	Compound Not Detected.					
9	2-Chlorophenol	128	4.238	4.215	(0.971)	700611	120.552	2009.2
13	2-Methylphenol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
192	Acetophenone	105	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)
16 N-Nitroso-di-n-propylamine	70	4.749	4.746	(1.088)	268341	72.2821	1204.7
17 Hexachloroethane	117	Compound Not Detected.					
18 Nitrobenzene	77	Compound Not Detected.					
19 Isophorone	82	Compound Not Detected.					
20 2-Nitrophenol	139	Compound Not Detected.					
21 2,4-Dimethylphenol	107	Compound Not Detected.					
22 Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
23 2,4-Dichlorophenol	162	Compound Not Detected.					
25 Naphthalene	128	5.541	5.545	(1.004)	67894	4.10020	68.337(a)
26 4-Chloroaniline	127	Compound Not Detected.					
193 Caprolactam	113	Compound Not Detected.					
27 Hexachlorobutadiene	224	Compound Not Detected.					
28 4-Chloro-3-Methylphenol	107	6.213	6.217	(1.125)	684947	131.696	2194.9
29 2-Methylnaphthalene	142	6.361	6.365	(1.152)	30812	2.81574	46.929(a)
30 Hexachlorocyclopentadiene	236	Compound Not Detected.					
31 2,4,6-Trichlorophenol	196	Compound Not Detected.					
32 2,4,5-Trichlorophenol	196	Compound Not Detected.					
194 1,1'-Biphenyl	154	Compound Not Detected.					
33 2-Chloronaphthalene	162	Compound Not Detected.					
34 2-Nitroaniline	65	Compound Not Detected.					
35 Dimethylphthalate	163	Compound Not Detected.					
36 Acenaphthylene	152	Compound Not Detected.					
37 2,6-Dinitrotoluene	165	Compound Not Detected.					
38 3-Nitroaniline	138	Compound Not Detected.					
39 Acenaphthene	153	8.054	8.051	(1.008)	904548	89.0514	1484.2
40 2,4-Dinitrophenol	184	Compound Not Detected.					
41 4-Nitrophenol	109	8.370	8.353	(1.047)	351971	123.981	2066.3(QR)
42 Dibenzofuran	168	8.323	8.333	(1.041)	132984	8.72209	145.37(aQ)
43 2,4-Dinitrotoluene	165	8.470	8.461	(1.060)	358589	83.3767	1389.6
44 Diethylphthalate	149	Compound Not Detected.					
45 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
46 Fluorene	166	8.967	8.971	(1.122)	176694	14.1591	235.98(a)
47 4-Nitroaniline	138	Compound Not Detected.					
48 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
49 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
50 4-Bromophenyl-phenylether	248	Compound Not Detected.					
51 Hexachlorobenzene	283	Compound Not Detected.					
195 Atrazine	200	Compound Not Detected.					
53 Pentachlorophenol	266	10.633	10.617	(0.981)	303995	116.269	1937.8
54 Phenanthrene	178	10.895	10.879	(1.006)	1819296	126.300	2105.0
55 Anthracene	178	10.969	10.973	(1.012)	277853	18.8984	314.97(aQ)
56 Carbazole	167	11.366	11.370	(1.049)	130856	10.3587	172.64(a)
57 Di-n-Butylphthalate	149	Compound Not Detected.					
58 Fluoranthene	202	13.468	13.445	(1.243)	1464626	100.052	1667.5
59 Pyrene	202	13.932	13.909	(0.836)	1125723	95.1200	1585.3
60 Butylbenzylphthalate	149	Compound Not Detected.					
61 3,3'-Dichlorobenzidine	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
62	Benzo(a)Anthracene	228	16.626	16.616	(0.998)	450270	47.5906	793.18(Q)
63	Chrysene	228	16.713	16.710	(1.003)	416771	46.1741	769.57
64	bis(2-ethylhexyl)Phthalate	149	17.130	17.134	(1.028)	15829	2.09854	34.976(a)
65	Di-n-octylphthalate	149	Compound Not Detected.					
66	Benzo(b)fluoranthene	252	18.917	18.900	(0.964)	467330	40.2924	671.54
67	Benzo(k)fluoranthene	252	18.950	18.954	(0.965)	378372	28.9126	481.88
68	Benzo(a)pyrene	252	19.501	19.505	(0.993)	161510	15.5426	259.04(aQ)
69	Indeno(1,2,3-cd)pyrene	276	21.483	21.487	(1.094)	84003	9.59077	159.85(aQ)
70	Dibenz(a,h)anthracene	278	21.530	21.541	(1.097)	43826	4.73705	78.951(a)
71	Benzo(g,h,i)perylene	276	21.879	21.897	(1.115)	33614	3.89184	64.864(a)
$ 72	Nitrobenzene-d5	82	4.856	4.847	(0.880)	497301	73.9592	1232.6
$ 73	2-Fluorobiphenyl	172	6.918	6.916	(0.866)	1105898	88.5436	1475.7
$ 74	Terphenyl-d14	244	14.436	14.420	(0.867)	903745	91.4552	1524.2
$ 75	Phenol-d5	99	4.157	4.128	(0.952)	790733	111.165	1852.7
$ 76	2-Fluorophenol	112	3.358	3.302	(0.769)	324570	62.8332	1047.2
$ 77	2,4,6-Tribromophenol	330	9.485	9.482	(0.875)	360502	134.040	2234.0
$ 78	2-Chlorophenol-d4	132	4.225	4.202	(0.968)	701145	128.515	2141.9
$ 79	1,2-Dichlorobenzene-d4	152	4.520	4.504	(1.035)	228907	53.0704	884.51

QC Flag Legend

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

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 001
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2GW1AH Date Extracted:10/12/00
Dilution factor: 1 Date Analyzed: 10/16/00
Moisture %:13

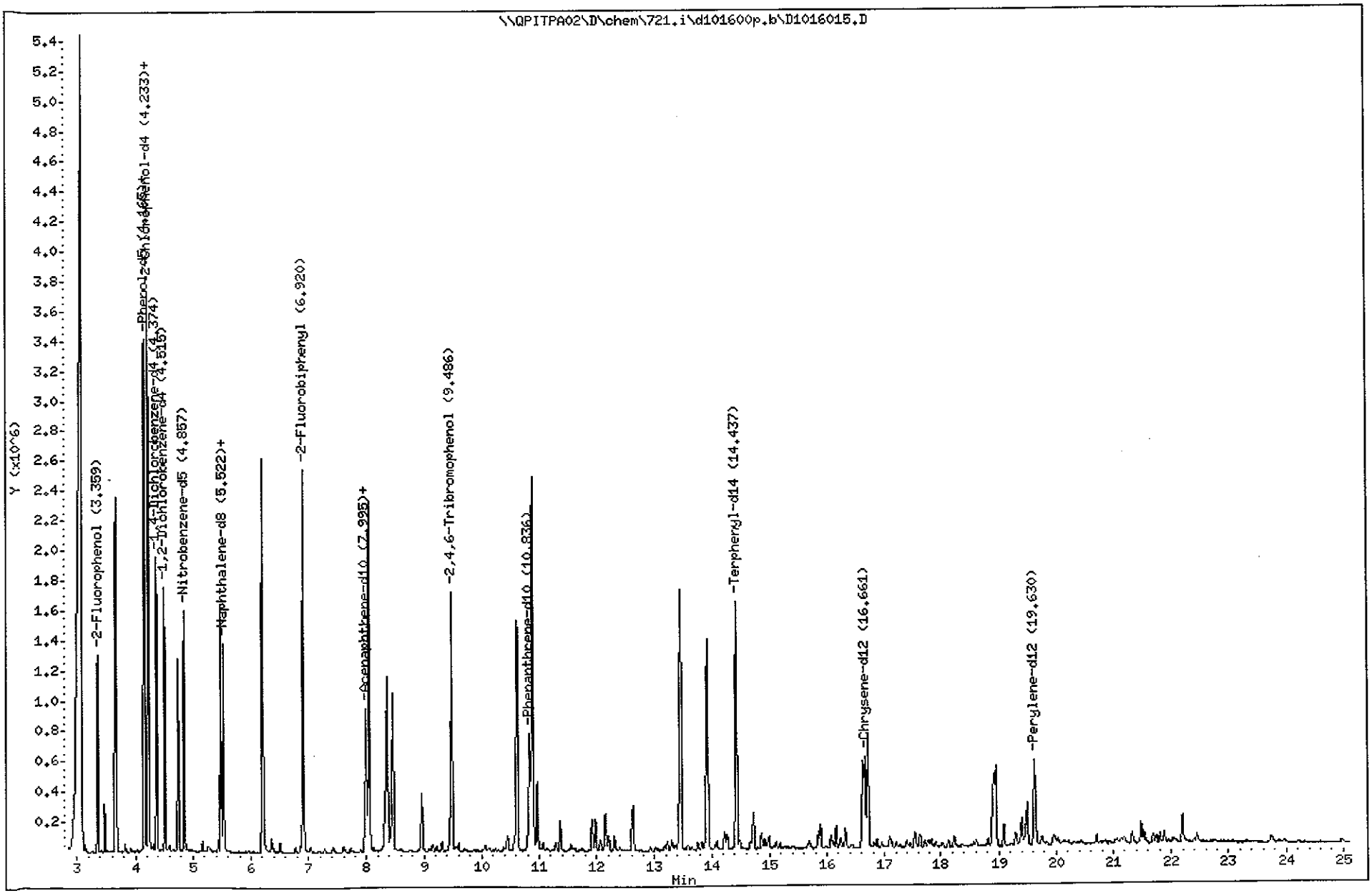
QC Batch: 0287492

Client Sample Id: PXS-19

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	2160	
95-57-8	2-Chlorophenol	2450	
621-64-7	N-Nitrosodi-n-propylamine	1460	
59-50-7	4-Chloro-3-methylphenol	2650	
83-32-9	Acenaphthene	1790	
100-02-7	4-Nitrophenol	2600	
121-14-2	2,4-Dinitrotoluene	1720	a
87-86-5	Pentachlorophenol	2270	
129-00-0	Pyrene	1910	

Data File: \\QPITPA02\D\chem\721.i\d101600p.b\D1016015.D
Date : 16-OCT-2000 21:49
Client ID: PXS-19
Sample Info: c0j120207-001msd soil 10/12/00 clp4.2
Volume Injected (uL): 2.0
Column phase:

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



STL - Pittsburgh

Semivolatile REPORT CLP3.2

Data file : \\QPITPA02\D\chem\721.i\d101600p.b\D1016015.D
Lab Smp Id: DM2GW1AH Client Smp ID: PXS-19MSD
Inj Date : 16-OCT-2000 21:49
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0j120207-001msd soil 10/12/00 clp4.2
Misc Info : dm2gw1ah,d101600p.b,clp.m,1-4.2.sub
Comment :
Method : \\QPITPA02\D\chem\721.i\d101600p.b\clp.m
Meth Date : 17-Oct-2000 10:52 ferguson Quant Type: ISTD
Cal Date : 16-OCT-2000 14:02 Cal File: D1016CCC.D
Als bottle: 17 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1-4.2.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-17-00

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	2.000	gpc correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
* 1 1,4-Dichlorobenzene-d4	152	4.367	4.350	(1.000)	173752	40.0000	
* 2 Naphthalene-d8	136	5.522	5.518	(1.000)	643453	40.0000	
* 3 Acenaphthene-d10	164	7.994	7.991	(1.000)	363295	40.0000	
* 4 Phenanthrene-d10	188	10.836	10.832	(1.000)	555623	40.0000	
* 5 Chrysene-d12	240	16.660	16.657	(1.000)	353706	40.0000	
* 6 Perylene-d12	264	19.629	19.612	(1.000)	368280	40.0000	
191 Benzaldehyde	77	Compound Not Detected.					
7 Phenol	94	4.165	4.141	(0.954)	765357	113.137	1885.6(Q)
8 Bis(2-chloroethyl)ether	93	Compound Not Detected.					
9 2-Chlorophenol	128	4.232	4.215	(0.969)	697229	128.379	2139.6
13 2-Methylphenol	108	Compound Not Detected.					
14 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
192 Acetophenone	105	Compound Not Detected.					
15 4-Methylphenol	108	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
16	N-Nitroso-di-n-propylamine	70	4.749	4.746	(1.088)	264854	76.3435	1272.4
17	Hexachloroethane	117	Compound Not Detected.					
18	Nitrobenzene	77	Compound Not Detected.					
19	Isophorone	82	Compound Not Detected.					
20	2-Nitrophenol	139	Compound Not Detected.					
21	2,4-Dimethylphenol	107	Compound Not Detected.					
22	Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
23	2,4-Dichlorophenol	162	Compound Not Detected.					
25	Naphthalene	128	5.542	5.545	(1.004)	68552	4.40452	73.409(a)
26	4-Chloroaniline	127	Compound Not Detected.					
193	Caprolactam	113	Compound Not Detected.					
27	Hexachlorobutadiene	224	Compound Not Detected.					
28	4-Chloro-3-Methylphenol	107	6.214	6.217	(1.125)	677659	138.621	2310.4
29	2-Methylnaphthalene	142	6.362	6.365	(1.152)	30298	2.94572	49.095(a)
30	Hexachlorocyclopentadiene	236	Compound Not Detected.					
31	2,4,6-Trichlorophenol	196	Compound Not Detected.					
32	2,4,5-Trichlorophenol	196	Compound Not Detected.					
194	1,1'-Biphenyl	154	Compound Not Detected.					
33	2-Chloronaphthalene	162	Compound Not Detected.					
34	2-Nitroaniline	65	Compound Not Detected.					
35	Dimethylphthalate	163	Compound Not Detected.					
36	Acenaphthylene	152	Compound Not Detected.					
37	2,6-Dinitrotoluene	165	Compound Not Detected.					
38	3-Nitroaniline	138	Compound Not Detected.					
39	Acenaphthene	153	8.055	8.051	(1.008)	891823	93.6230	1560.4
40	2,4-Dinitrophenol	184	Compound Not Detected.					
41	4-Nitrophenol	109	8.370	8.353	(1.047)	361971	135.961	2266.0(QR)
42	Dibenzofuran	168	8.323	8.333	(1.041)	132588	9.27300	154.55(aQ)
43	2,4-Dinitrotoluene	165	8.464	8.461	(1.059)	362743	89.9377	1499.0
44	Diethylphthalate	149	Compound Not Detected.					
45	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
46	Fluorene	166	8.968	8.971	(1.122)	178411	15.2451	254.08(a)
47	4-Nitroaniline	138	Compound Not Detected.					
48	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
49	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
50	4-Bromophenyl-phenylether	248	Compound Not Detected.					
51	Hexachlorobenzene	283	Compound Not Detected.					
195	Atrazine	200	Compound Not Detected.					
53	Pentachlorophenol	266	10.634	10.617	(0.981)	299685	118.968	1982.8
54	Phenanthrene	178	10.896	10.879	(1.006)	1833421	132.108	2201.8
55	Anthracene	178	10.970	10.973	(1.012)	274671	19.3906	323.18(aQ)
56	Carbazole	167	11.360	11.370	(1.048)	131060	10.7684	179.47(a)
57	Di-n-Butylphthalate	149	Compound Not Detected.					
58	Fluoranthene	202	13.469	13.445	(1.243)	1442758	102.296	1704.9
59	Pyrene	202	13.933	13.909	(0.836)	1118520	100.003	1666.7
60	Butylbenzylphthalate	149	Compound Not Detected.					
61	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
62	Benzo(a)Anthracene	228	16.627	16.616	(0.998)	437816	48.9630	816.05(Q)
63	Chrysene	228	16.714	16.710	(1.003)	414764	48.6217	810.36
64	bis(2-ethylhexyl)Phthalate	149	17.130	17.134	(1.028)	15657	2.19634	36.606(a)
65	Di-n-octylphthalate	149	Compound Not Detected.					
66	Benzo(b)fluoranthene	252	18.911	18.900	(0.963)	468395	43.1748	719.58
67	Benzo(k)fluoranthene	252	18.951	18.954	(0.965)	355847	29.0704	484.51
68	Benzo(a)pyrene	252	19.502	19.505	(0.993)	155000	15.9469	265.78(a)
69	Indeno(1,2,3-cd)pyrene	276	21.484	21.487	(1.094)	83048	10.1369	168.95(aQ)
70	Dibenz(a,h)anthracene	278	21.524	21.541	(1.097)	45356	5.24120	87.353(aQ)
71	Benzo(g,h,i)perylene	276	21.880	21.897	(1.115)	34431	4.26191	71.032(a)
$ 72	Nitrobenzene-d5	82	4.857	4.847	(0.880)	480344	76.0029	1266.7
$ 73	2-Fluorobiphenyl	172	6.919	6.916	(0.866)	1090395	93.0938	1551.6
$ 74	Terphenyl-d14	244	14.437	14.420	(0.867)	881792	94.4183	1573.6
$ 75	Phenol-d5	99	4.158	4.128	(0.952)	788551	118.629	1977.1
$ 76	2-Fluorophenol	112	3.359	3.302	(0.769)	313107	64.8628	1081.0
$ 77	2,4,6-Tribromophenol	330	9.486	9.482	(0.875)	357269	137.876	2297.9
$ 78	2-Chlorophenol-d4	132	4.225	4.202	(0.968)	689777	135.294	2254.9
$ 79	1,2-Dichlorobenzene-d4	152	4.514	4.504	(1.034)	225687	55.9915	933.19

QC Flag Legend

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

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 002
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2G31AE Date Extracted:10/18/00
Dilution factor: 2 Date Analyzed: 10/25/00
Moisture %:14

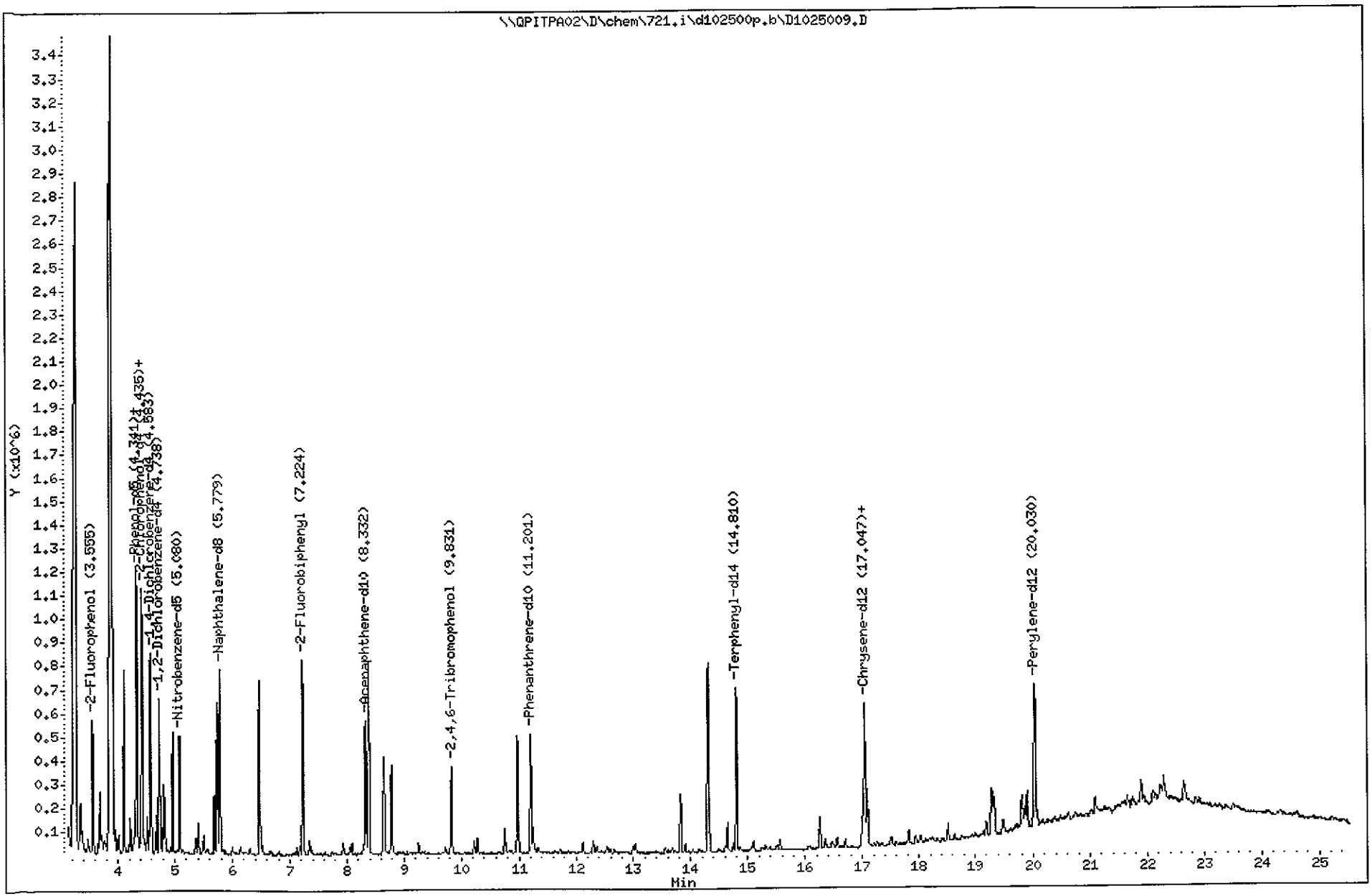
QC Batch: 0292466

Client Sample Id: PXS-20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	2190	
95-57-8	2-Chlorophenol	2150	
621-64-7	N-Nitrosodi-n-propylamine	1570	
59-50-7	4-Chloro-3-methylphenol	2390	
83-32-9	Acenaphthene	1880	
100-02-7	4-Nitrophenol	2910	
121-14-2	2,4-Dinitrotoluene	1760	a
87-86-5	Pentachlorophenol	3000	
129-00-0	Pyrene	2250	

Data File: \\QPITPA02\D\chem\721.i\d102500p.b\D1025009.D
Date : 25-OCT-2000 18:28
Client ID: BXS-20MS
Sample Info: c0j120207-002ms/re 2x soil 10/18/00 clp4.2
Volume Injected (uL): 2.0
Column phase:

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



STL-Pittsburgh

Semivolatile REPORT CLP4.2

Data file : \\QPITPA02\D\chem\721.i\d102500p.b\D1025009.D
Lab Smp Id: DM2G31AE Client Smp ID: PXS-20MS
Inj Date : 25-OCT-2000 18:28
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0j120207-002ms/re 2x soil 10/18/00 clp4.2
Misc Info : dm2g31ae,d102500p.b,clp.m,1-4.2.sub
Comment :
Method : \\QPITPA02\D\chem\721.i\d102500p.b\clp.m
Meth Date : 26-Oct-2000 07:57 ferguson Quant Type: ISTD
Cal Date : 25-OCT-2000 13:14 Cal File: D1025CCC.D
Als bottle: 12 QC Sample: MS
Dil Factor: 2.00000
Integrator: HP RTE Compound Sublist: 1-4.2.sub
Target Version: 4.04
Processing Host: PITPC013

DLF 10-26-00

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

Name	Value	Description
DF	2.000	Dilution Factor
Uf	2.000	gpc correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
* 1	1,4-Dichlorobenzene-d4	152	4.576	4.563	(1.000)	132386	40.0000	
* 2	Naphthalene-d8	136	5.779	5.779	(1.000)	478911	40.0000	
* 3	Acenaphthene-d10	164	8.332	8.332	(1.000)	213674	40.0000	
* 4	Phenanthrene-d10	188	11.201	11.201	(1.000)	345844	40.0000	
* 5	Chrysene-d12	240	17.047	17.047	(1.000)	401964	40.0000	
* 6	Perylene-d12	264	20.030	20.010	(1.000)	425236	40.0000	
191	Benzaldehyde	77	Compound Not Detected.					
7	Phenol	94	4.347	4.328	(0.950)	315688	56.7507	1891.7(Q)
8	Bis(2-chloroethyl)ether	93	Compound Not Detected.					
9	2-Chlorophenol	128	4.441	4.422	(0.971)	270369	55.7592	1858.6
13	2-Methylphenol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
192	Acetophenone	105	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)
16	N-Nitroso-di-n-propylamine	70	4.965	4.966	(1.085)	130866	40.7820	1359.4
17	Hexachloroethane	117	Compound Not Detected.					
18	Nitrobenzene	77	Compound Not Detected.					
19	Isophorone	82	Compound Not Detected.					
20	2-Nitrophenol	139	Compound Not Detected.					
21	2,4-Dimethylphenol	107	Compound Not Detected.					
22	Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
23	2,4-Dichlorophenol	162	Compound Not Detected.					
25	Naphthalene	128	Compound Not Detected.					
26	4-Chloroaniline	127	Compound Not Detected.					
193	Caprolactam	113	Compound Not Detected.					
27	Hexachlorobutadiene	224	Compound Not Detected.					
28	4-Chloro-3-Methylphenol	107	6.471	6.478	(1.120)	216092	62.0107	2067.0
29	2-Methylnaphthalene	142	Compound Not Detected.					
30	Hexachlorocyclopentadiene	236	Compound Not Detected.					
31	2,4,6-Trichlorophenol	196	Compound Not Detected.					
32	2,4,5-Trichlorophenol	196	Compound Not Detected.					
194	1,1'-Biphenyl	154	Compound Not Detected.					
33	2-Chloronaphthalene	162	Compound Not Detected.					
34	2-Nitroaniline	65	Compound Not Detected.					
35	Dimethylphthalate	163	Compound Not Detected.					
36	Acenaphthylene	152	Compound Not Detected.					
37	2,6-Dinitrotoluene	165	Compound Not Detected.					
38	3-Nitroaniline	138	Compound Not Detected.					
39	Acenaphthene	153	8.386	8.386	(1.006)	308734	48.7768	1625.9
40	2,4-Dinitrophenol	184	Compound Not Detected.					
41	4-Nitrophenol	109	8.648	8.648	(1.038)	78409	75.3115	2510.4
42	Dibenzofuran	168	Compound Not Detected.					
43	2,4-Dinitrotoluene	165	8.782	8.789	(1.054)	112544	45.6557	1521.8(R)
44	Diethylphthalate	149	Compound Not Detected.					
45	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
46	Fluorene	166	Compound Not Detected.					
47	4-Nitroaniline	138	Compound Not Detected.					
48	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
49	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
50	4-Bromophenyl-phenylether	248	Compound Not Detected.					
51	Hexachlorobenzene	283	Compound Not Detected.					
195	Atrazine	200	Compound Not Detected.					
53	Pentachlorophenol	266	10.979	10.973	(0.980)	106758	77.8406	2594.7
54	Phenanthrene	178	11.248	11.255	(1.004)	70869	8.17650	272.55(a)
55	Anthracene	178	Compound Not Detected.					
56	Carbazole	167	Compound Not Detected.					
57	Di-n-Butylphthalate	149	Compound Not Detected.					
58	Fluoranthene	202	13.828	13.829	(1.235)	185105	19.4465	648.22(a)
59	Pyrene	202	14.312	14.306	(0.840)	701961	58.2751	1942.5
60	Butylbenzylphthalate	149	Compound Not Detected.					
61	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
62	Benzo(a)Anthracene	228	17.006	17.014	(0.998)	88695	8.11523	270.51(aQ)
63	Chrysene	228	17.094	17.108	(1.003)	117858	11.8524	395.08(a)
64	bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
65	Di-n-octylphthalate	149	Compound Not Detected.					
66	Benzo(b)fluoranthene	252	19.291	19.298	(0.963)	134369	10.2701	342.34(a)
67	Benzo(k)fluoranthene	252	19.331	19.345	(0.965)	118788	8.96722	298.91(a)
68	Benzo(a)pyrene	252	19.902	19.903	(0.994)	90027	7.53939	251.31(a)
69	Indeno(1,2,3-cd)pyrene	276	21.891	21.892	(1.093)	63121	5.55658	185.22(aQ)
70	Dibenz(a,h)anthracene	278	Compound Not Detected.					
71	Benzo(g,h,i)perylene	276	22.294	22.302	(1.113)	53114	4.64313	154.77(a)
$ 72	Nitrobenzene-d5	82	5.080	5.080	(0.879)	189968	40.0879	1336.3
$ 73	2-Fluorobiphenyl	172	7.223	7.224	(0.867)	353968	46.1038	1536.8
$ 74	Terphenyl-d14	244	14.809	14.810	(0.869)	437910	43.9564	1465.2
$ 75	Phenol-d5	99	4.334	4.314	(0.947)	324307	57.5608	1918.7
$ 76	2-Fluorophenol	112	3.554	3.508	(0.777)	220374	44.1897	1473.0
$ 77	2,4,6-Tribromophenol	330	9.837	9.837	(0.878)	77439	55.1223	1837.4
$ 78	2-Chlorophenol-d4	132	4.428	4.408	(0.968)	273839	58.2986	1943.3
$ 79	1,2-Dichlorobenzene-d4	152	4.737	4.731	(1.035)	112599	34.6452	1154.8

QC Flag Legend

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

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J120207 002
Method: OCLP OLM04.2
Semi-Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 30 / g Date Received: 10/12/00
Work Order: DM2G31AF Date Extracted:10/18/00
Dilution factor: 2 Date Analyzed: 10/25/00
Moisture %:14

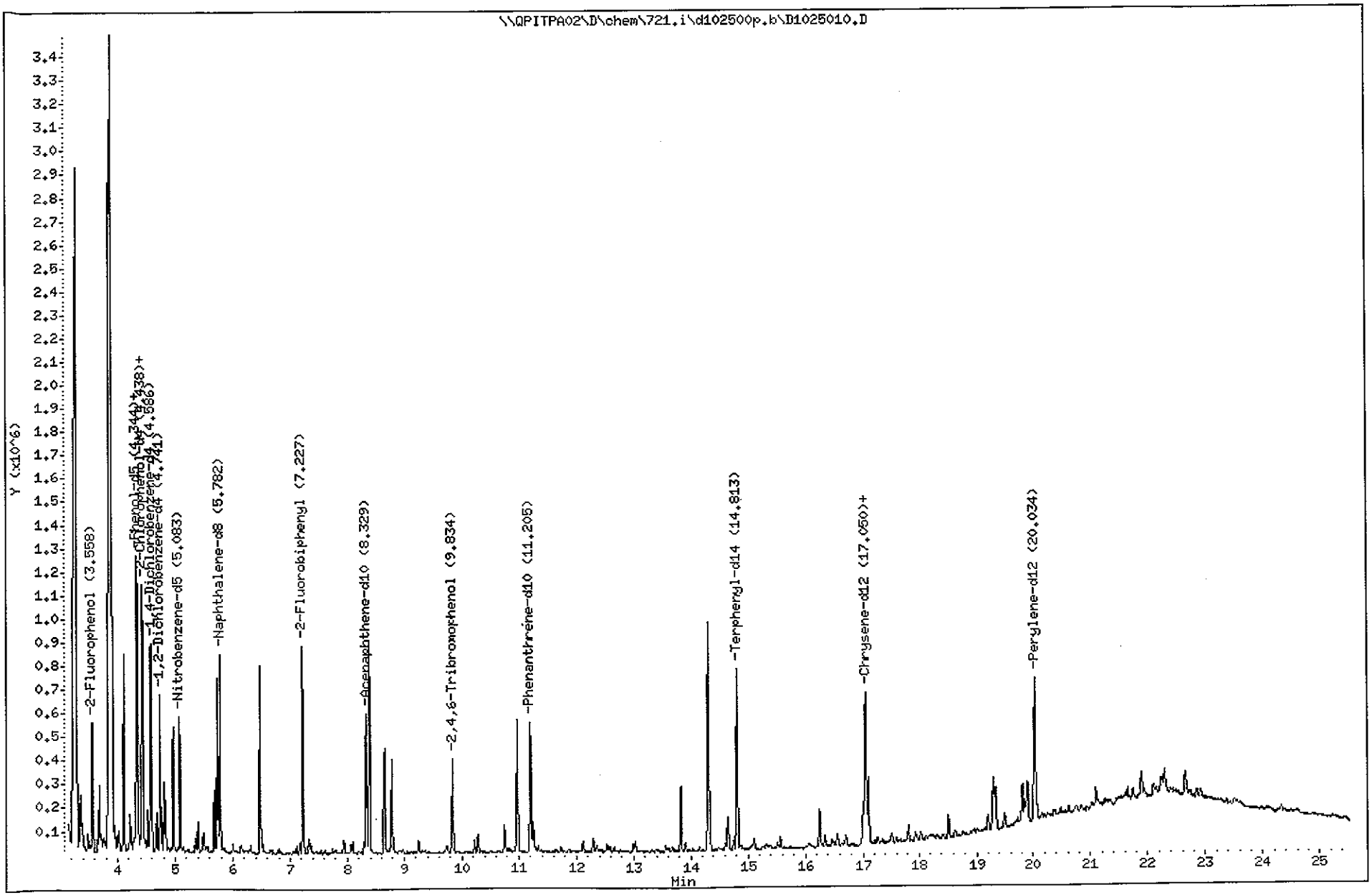
QC Batch: 0292466

Client Sample Id: PXS-20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg	Q
108-95-2	Phenol	2250	
95-57-8	2-Chlorophenol	2180	
621-64-7	N-Nitrosodi-n-propylamine	1570	
59-50-7	4-Chloro-3-methylphenol	2500	
83-32-9	Acenaphthene	2010	
100-02-7	4-Nitrophenol	3160	
121-14-2	2,4-Dinitrotoluene	1880	a
87-86-5	Pentachlorophenol	3180	a
129-00-0	Pyrene	2310	

Data File: \\QPITPA02\D\chem\721.i\d102500p.b\D1025010.D
Date : 25-OCT-2000 18:59
Client ID: PXS-20 MSD
Sample Info: c0j120207-002msd/re 2x soil 10/18/00 clp4.2
Volume Injected (uL): 2.0
Column phase:

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



STL-Pittsburgh

Semivolatile REPORT CLP4.2

Data file : \\QPITPA02\D\chem\721.i\d102500p.b\D1025010.D
Lab Smp Id: DM2G31AF Client Smp ID: PXS-20MSD
Inj Date : 25-OCT-2000 18:59
Operator : 001562, DLF Inst ID: 721.i
Smp Info : c0j120207-002msd/re 2x soil 10/18/00 clp4.2
Misc Info : dm2g31af,d102500p.b,clp.m,1-4.2.sub
Comment :
Method : \\QPITPA02\D\chem\721.i\d102500p.b\clp.m
Meth Date : 26-Oct-2000 07:57 ferguson Quant Type: ISTD
Cal Date : 25-OCT-2000 13:14 Cal File: D1025CCC.D
Als bottle: 13 QC Sample: MSD
Dil Factor: 2.00000 DLF 10-26-00
Integrator: HP RTE Compound Sublist: 1-4.2.sub
Target Version: 4.04
Processing Host: PITPC013

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

Name	Value	Description
DF	2.000	Dilution Factor
Uf	2.000	gpc correction factor
Vt	500.000	Volume of final extract (uL)(1000 low, 2
Vi	2.000	Volume injected (uL)
Ws	30.000	Weight of sample extracted (g)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)
* 1	1,4-Dichlorobenzene-d4	152	4.579	4.563	(1.000)	137074	40.0000	
* 2	Naphthalene-d8	136	5.782	5.779	(1.000)	494112	40.0000	
* 3	Acenaphthene-d10	164	8.328	8.332	(1.000)	219732	40.0000	
* 4	Phenanthrene-d10	188	11.204	11.201	(1.000)	368123	40.0000	
* 5	Chrysene-d12	240	17.050	17.047	(1.000)	449733	40.0000	
* 6	Perylene-d12	264	20.033	20.010	(1.000)	460886	40.0000	
191	Benzaldehyde	77	Compound Not Detected.					
7	Phenol	94	4.351	4.328	(0.950)	335361	58.2255	1940.8(Q)
8	Bis(2-chloroethyl)ether	93	Compound Not Detected.					
9	2-Chlorophenol	128	4.438	4.422	(0.969)	283686	56.5047	1883.5
13	2-Methylphenol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
192	Acetophenone	105	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)
16	N-Nitroso-di-n-propylamine	70	4.969	4.966	(1.085)	135525	40.7895	1359.6
17	Hexachloroethane	117	Compound Not Detected.					
18	Nitrobenzene	77	Compound Not Detected.					
19	Isophorone	82	Compound Not Detected.					
20	2-Nitrophenol	139	Compound Not Detected.					
21	2,4-Dimethylphenol	107	Compound Not Detected.					
22	Bis(2-chloroethoxy)methane	93	Compound Not Detected.					
23	2,4-Dichlorophenol	162	Compound Not Detected.					
25	Naphthalene	128	Compound Not Detected.					
26	4-Chloroaniline	127	Compound Not Detected.					
193	Caprolactam	113	Compound Not Detected.					
27	Hexachlorobutadiene	224	Compound Not Detected.					
28	4-Chloro-3-Methylphenol	107	6.474	6.478	(1.120)	233320	64.8948	2163.2
29	2-Methylnaphthalene	142	Compound Not Detected.					
30	Hexachlorocyclopentadiene	236	Compound Not Detected.					
31	2,4,6-Trichlorophenol	196	Compound Not Detected.					
32	2,4,5-Trichlorophenol	196	Compound Not Detected.					
194	1,1'-Biphenyl	154	Compound Not Detected.					
33	2-Chloronaphthalene	162	Compound Not Detected.					
34	2-Nitroaniline	65	Compound Not Detected.					
35	Dimethylphthalate	163	Compound Not Detected.					
36	Acenaphthylene	152	Compound Not Detected.					
37	2,6-Dinitrotoluene	165	Compound Not Detected.					
38	3-Nitroaniline	138	Compound Not Detected.					
39	Acenaphthene	153	8.389	8.386	(1.007)	339566	52.1688	1739.0
40	2,4-Dinitrophenol	184	Compound Not Detected.					
41	4-Nitrophenol	109	8.658	8.648	(1.040)	87674	81.8888	2729.6
42	Dibenzofuran	168	Compound Not Detected.					
43	2,4-Dinitrotoluene	165	8.785	8.789	(1.055)	123761	48.8219	1627.4(R)
44	Diethylphthalate	149	Compound Not Detected.					
45	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
46	Fluorene	166	Compound Not Detected.					
47	4-Nitroaniline	138	Compound Not Detected.					
48	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
49	N-Nitrosodiphenylamine (1)	169	Compound Not Detected.					
50	4-Bromophenyl-phenylether	248	Compound Not Detected.					
51	Hexachlorobenzene	283	Compound Not Detected.					
195	Atrazine	200	Compound Not Detected.					
53	Pentachlorophenol	266	10.976	10.973	(0.980)	120477	82.5272	2750.9(R)
54	Phenanthrene	178	11.245	11.255	(1.004)	79983	8.66955	288.98(a)
55	Anthracene	178	Compound Not Detected.					
56	Carbazole	167	Compound Not Detected.					
57	Di-n-Butylphthalate	149	Compound Not Detected.					
58	Fluoranthene	202	13.831	13.829	(1.234)	213302	21.0526	701.75
59	Pyrene	202	14.315	14.306	(0.840)	805699	59.7826	1992.8
60	Butylbenzylphthalate	149	Compound Not Detected.					
61	3,3'-Dichlorobenzidine	252	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)
62	Benzo(a)Anthracene	228	17.010	17.014	(0.998)	105363	8.61633	287.21(aQ)
63	Chrysene	228	17.097	17.108	(1.003)	141215	12.6929	423.10(a)
64	bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.					
65	Di-n-octylphthalate	149	Compound Not Detected.					
66	Benzo(b)fluoranthene	252	19.294	19.298	(0.963)	155314	10.9528	365.09(a)
67	Benzo(k)fluoranthene	252	19.334	19.345	(0.965)	137105	9.54938	318.31(a)
68	Benzo(a)pyrene	252	19.906	19.903	(0.994)	97950	7.56841	252.28(a)
69	Indeno(1,2,3-cd)pyrene	276	21.894	21.892	(1.093)	64622	5.24868	174.96(aQ)
70	Dibenz(a,h)anthracene	278	Compound Not Detected.					
71	Benzo(g,h,i)perylene	276	22.298	22.302	(1.113)	56489	4.55619	151.87(a)
$ 72	Nitrobenzene-d5	82	5.083	5.080	(0.879)	208820	42.7105	1423.7
$ 73	2-Fluorobiphenyl	172	7.226	7.224	(0.868)	380665	48.2141	1607.1
$ 74	Terphenyl-d14	244	14.812	14.810	(0.869)	499025	44.7705	1492.4
$ 75	Phenol-d5	99	4.337	4.314	(0.947)	342230	58.6646	1955.5
$ 76	2-Fluorophenol	112	3.564	3.508	(0.778)	227976	44.1506	1471.7
$ 77	2,4,6-Tribromophenol	330	9.833	9.837	(0.878)	82243	54.9989	1833.3
$ 78	2-Chlorophenol-d4	132	4.425	4.408	(0.966)	287797	59.1747	1972.5
$ 79	1,2-Dichlorobenzene-d4	152	4.740	4.731	(1.035)	120734	35.8777	1195.9

QC Flag Legend

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

GC/MS SEMIVOLATILE
MISCELLANEOUS

STL Pittsburgh

STL - Pittsburgh B#0287492 *Sonication Extraction Worksheet*

Logbook ID: OP4

Start Date	Date Completed	Parameter	Method	Solvent	Solvent Lot	Solvent Mfg	GPC Number
10-13-00	10-16-00	CLP BNA	OLM04.2	mecl/Acetone	T23272/ 144ST 111465	Baker/Mallinckrodt	"A"

	Lot Number	Sample ID	Client ID	Sample Weight (g)	Final Volume (mL)	Surrogate #	Surr Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	GPC Date
1.	COJ/20207	BLK	NA	30.0g	0.5	77-02-07	0.5ml	NA	NA	10-15-00
2.		LCS		30.0g				77-02-03	0.5ml	
3.		001MS		30.0g						
4.		001MSD		30.0g						
5.		001		30.0g				NA	NA	
6.		002		30.0g						
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
16.										
17.										
18.										
19.										
20.										
21.										
22.										
23.										
Analyst:		B.P.	B.P.	B.P.	JM	B.P.	B.P.	B.P.	B.P.	B.P.

B.P. 10-13-00

Extract(s) (record line # from above)	Extract(s) Received Date	Time	Analyst	Location	Extract(s) Relinquished Date	Time	Analyst	Location
All Above	10-13-00	1820	Brian A. Pino	Org. Prep.	10-13-00	1830	Brian A. Pino	REF12EXT
All Above	10-15-00	1500	Brian A. Pino	REF12Ext	10-15-00	1630	Brian A. Pino	GPC "A"
All Above	10-16-00	0700	James Miller	GPC "A"	10-16-00	1105	James Miller	REF1-BNA
all above	10-16-00	1330	Don Ferguson	REF1BNA	10-16-00	1515	Don Ferguson	REF2BNA

Sodium Sulfate Mfg/Lot Number	Reviewed by:	Date:
Baker/T24596	James Miller	10-16-00

STL Pittsburgh

GPC Log Sheet

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

Committed To Your Success

Projects: COJ120207 | Collect: 20:24 | Dump 21:18 | Load 6.7 | Wash 10:00 | Inst ID "A"

	Date	Run #	Lot #	Sample I.D.	Client ID	Pos. No.	Comments
1.	10-15-00	NA	COJ120207	BLK	NA	1	CLP BNA (OLM04.2)
2.	↓	↓	↓	LCS	↓	2	↓
3.				001MS		3	
4.				001MSD		4	
5.				001		5	
6.				002		6	
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.			D.P. 10-15-00				
18.							
19.							
20.							
21.							
22.							
23.							
24.							
Analyst	B.P.	B.P.	B.P.	B.P.	B.P.	B.P.	B.P.

Comments:

Reviewed By: James Miller | Date: 10-16-00

RUN #1

GC/MS		GC
24:18	DUMP	29:33
20:42	COLLECT	15:27
10:00	WASH	10:00

RUN #1 10-9-00 JD

GAC (A) WEEKLY CAL 10-9-00

GC/MS		GC
24:18	DUMP	29:33
20:42	COLLECT	15:27
10:00	WASH	10:00

Start 10-9-00

End 10-16-00

ANALYST: JD

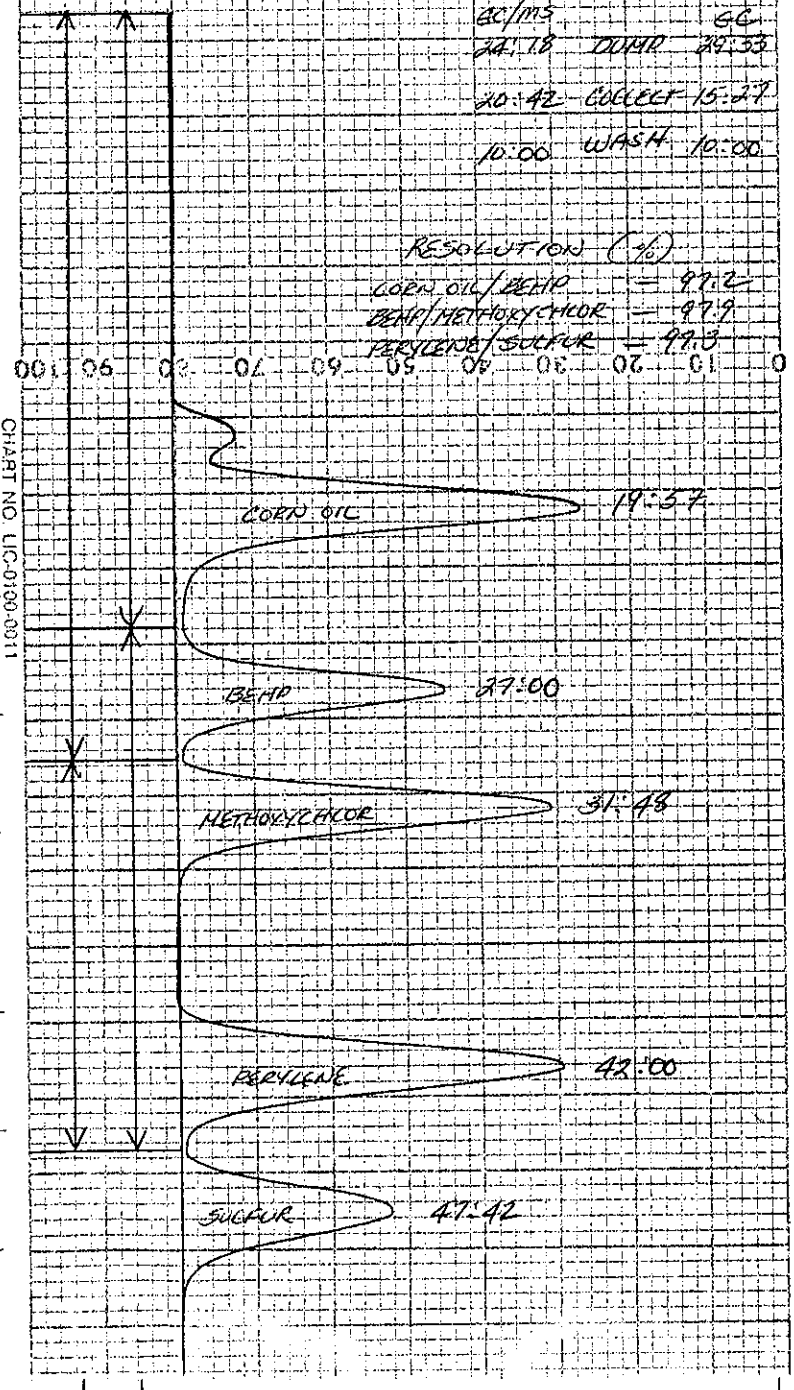
STANDARD ID: 186-16-7

RESOLUTION (%)

CORN OIL/BEHP = 97.2

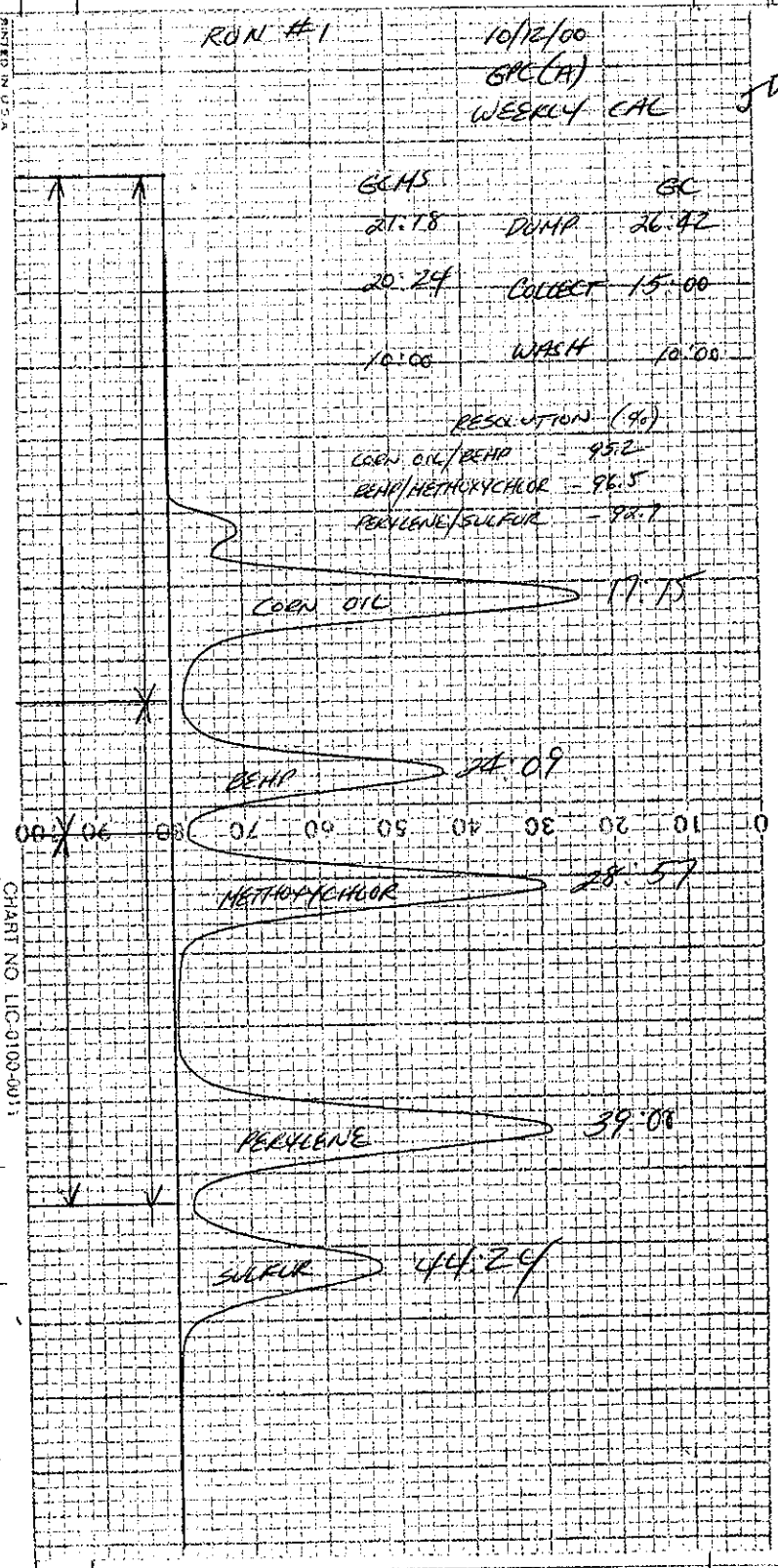
BEHP/METHOXYCHLOR = 97.9

PERYLENE/SULFUR = 97.0



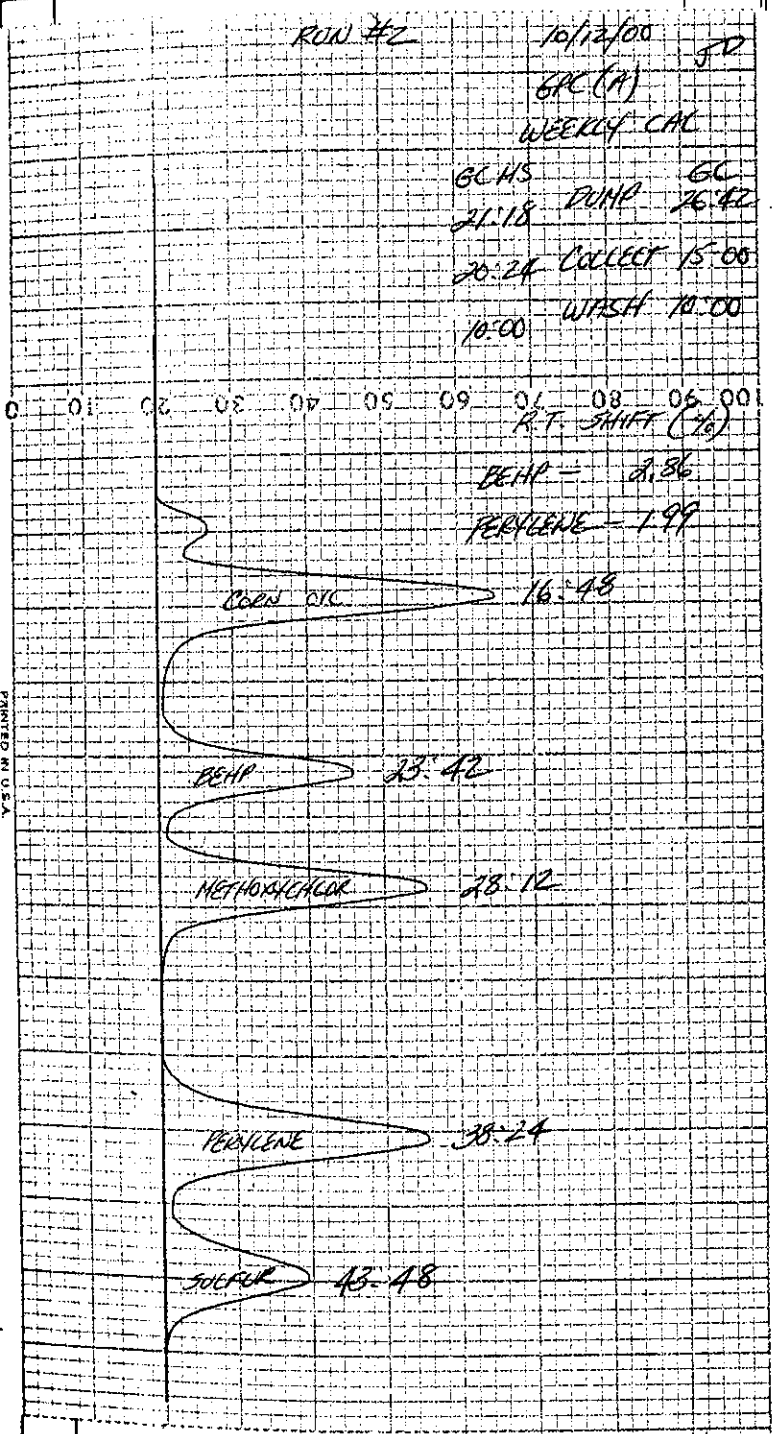
20:24 COLLECT 15:00
10:00 WASH 10:00

RUN #1



RUN #2

GCMS		GC
21:18	DUMP	26:42
20:24	COLLECT	15:00
10:00	WASH	10:00



10-12-00

Start 10/12/00

END 10/19/00

ANALYST: JD

STD

ID 186-16-7

Start 10/12/00

JD 10/19/00

ANALYST: JD

TD

ED : 186-16-7

STL Pittsburgh

GPC Log Sheet

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

Committed To Your Success

Projects: COJ120207, COJ140138, COJ160197 | Collect: 25:30 | Dump 27:54 | Load 8.2 | Wash 10:00 | Inst ID "B"

	Date	Run #	Lot #	Sample I.D.	Client ID	Pos. No.	Comments
1.	10-23-00		COJ120207	BLK	NA	1	CLP BNA (alm04.2)
2.				LCS		2	
3.				002MS		3	
4.				002MSD		4	
5.				002		5	
6.			COJ140138	BLK		6	CLP BNA (alm03.2)
7.				001MS		7	
8.				001MSD		8	
9.				001		9	
10.				002		10	
11.				003		11	
12.				004		12	
13.				005		13	
14.			COJ160197	003		14	
15.				004		15	
16.				005		16	
17.				006		17	
18.							
19.							
20.		B.P.	10-23-00				
21.							
22.							
23.							
24.							
Analyst	B.P.	B.P.	B.P.	B.P.	B.P.	B.P.	B.P.

Comments:

Reviewed By: James McAllen | Date: 10-24-00 COJ120207

11174

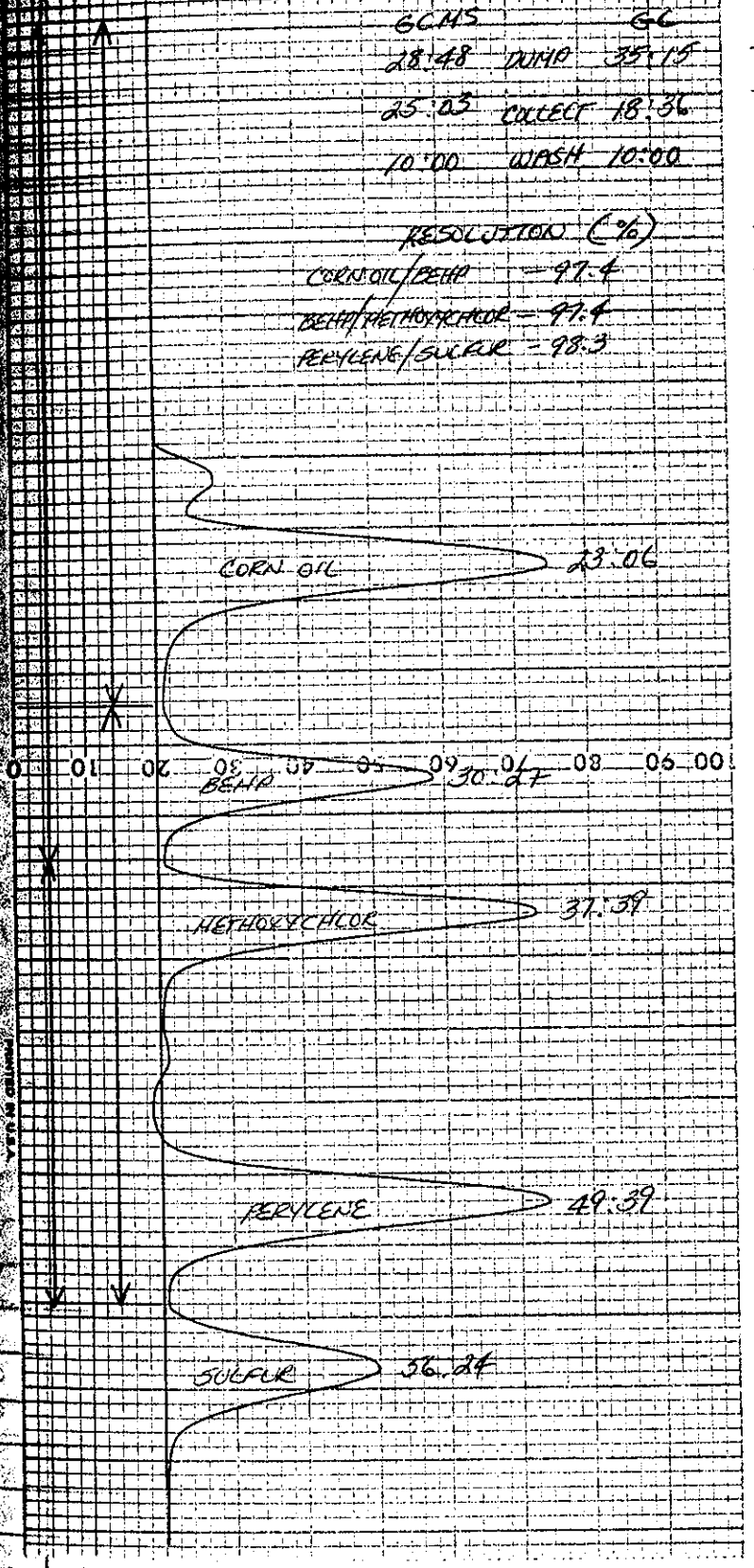
RUN # 1

GPC(B)
10-9-00
WEEKLY CAL

JD 10-9-00

GCMS		GC
28:48	DUMP	35:15
25:03	COLLECT	18:36
10:00	WASH	10:00

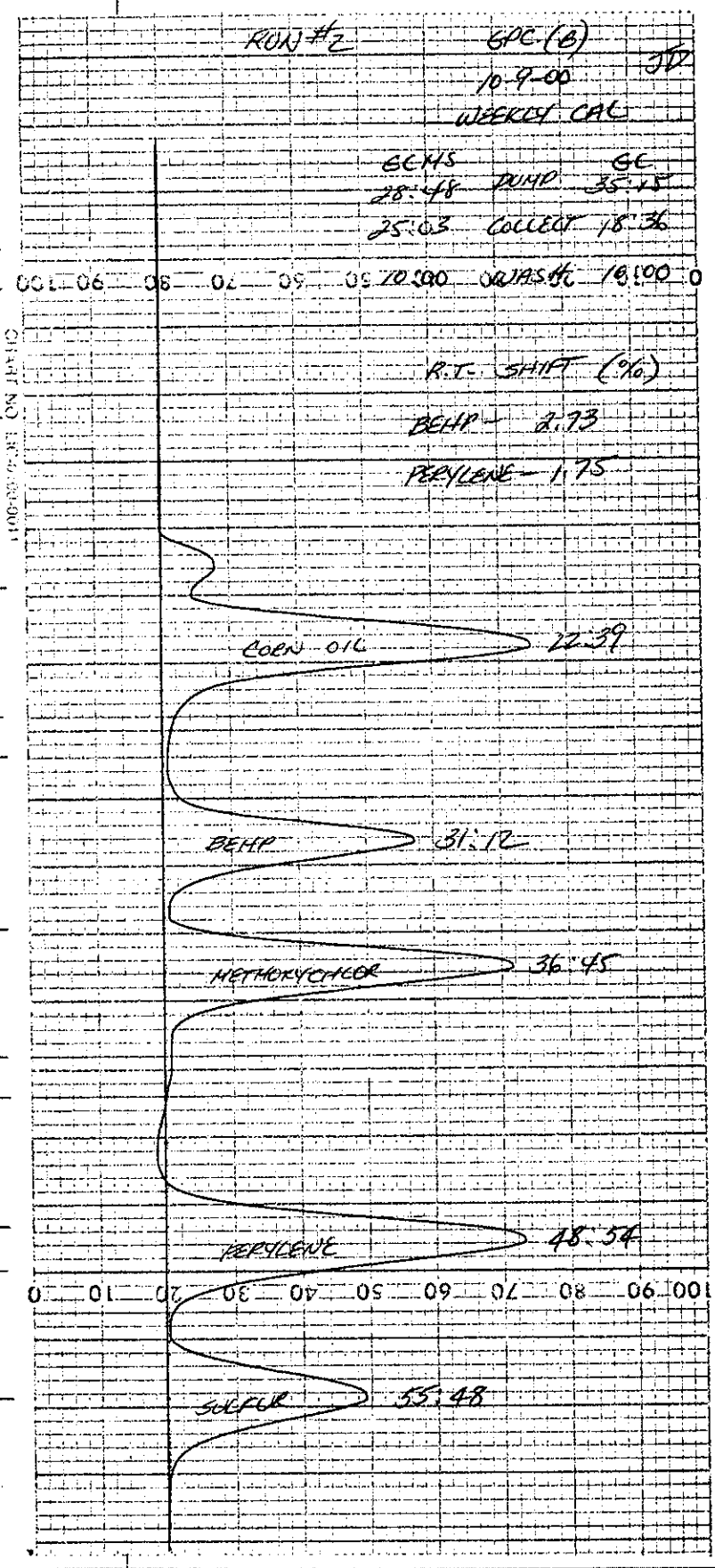
RESOLUTION (%)
CORN OIL/BEHP = 97.4
BEHP/METHOXYCHLOR = 97.4
PERYLENE/SULFUR = 98.3



ANALYST: JD
STD ID: 186-16-7

GCMS		GC
28:48	DUMP	35:15
25:03	COLLECT	18:36
10:00	WASH	10:00

start 10/9/00
end 10/16/00

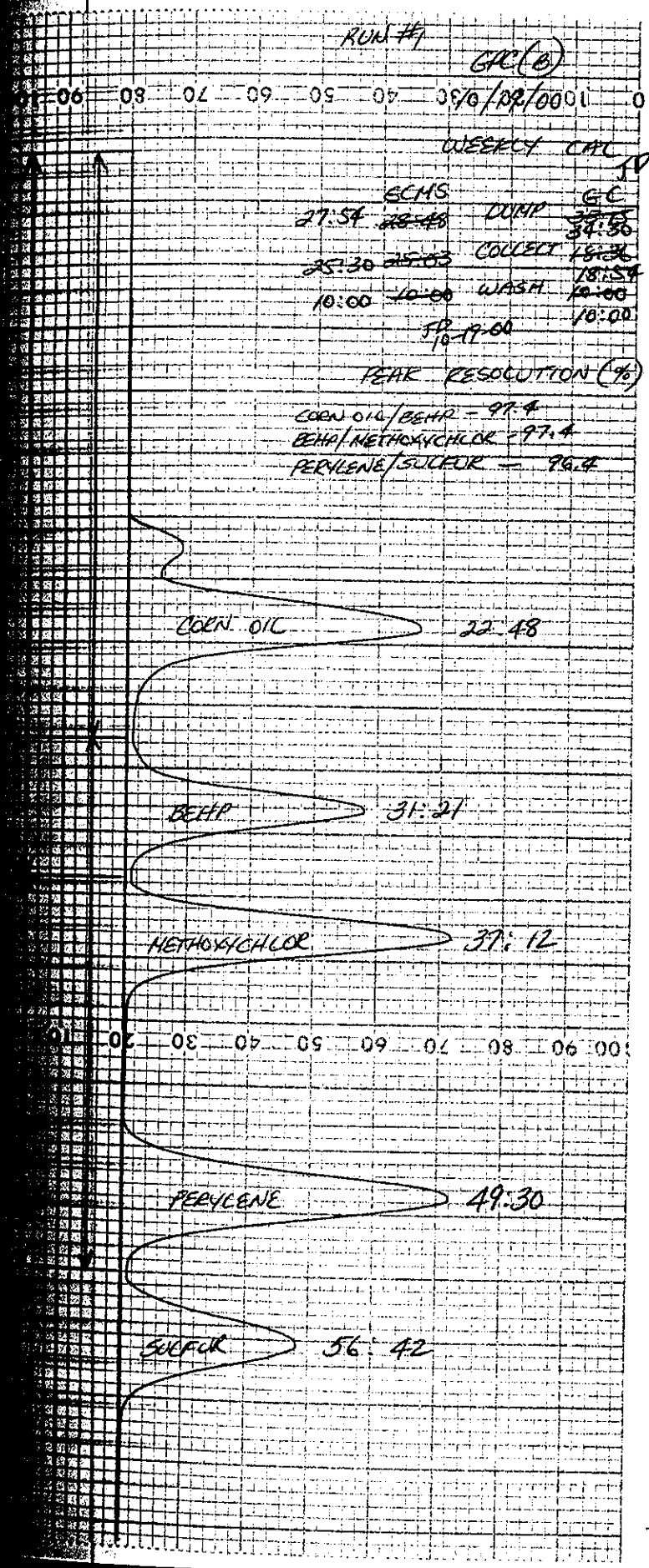


10-9-00

ANALYST: JD

STD ID: 186-16-7

GCMS		GC
28:48	DUMP	35:15
25:03	COLLECT	18:36
10:00	WASH	10:00



10-19-00

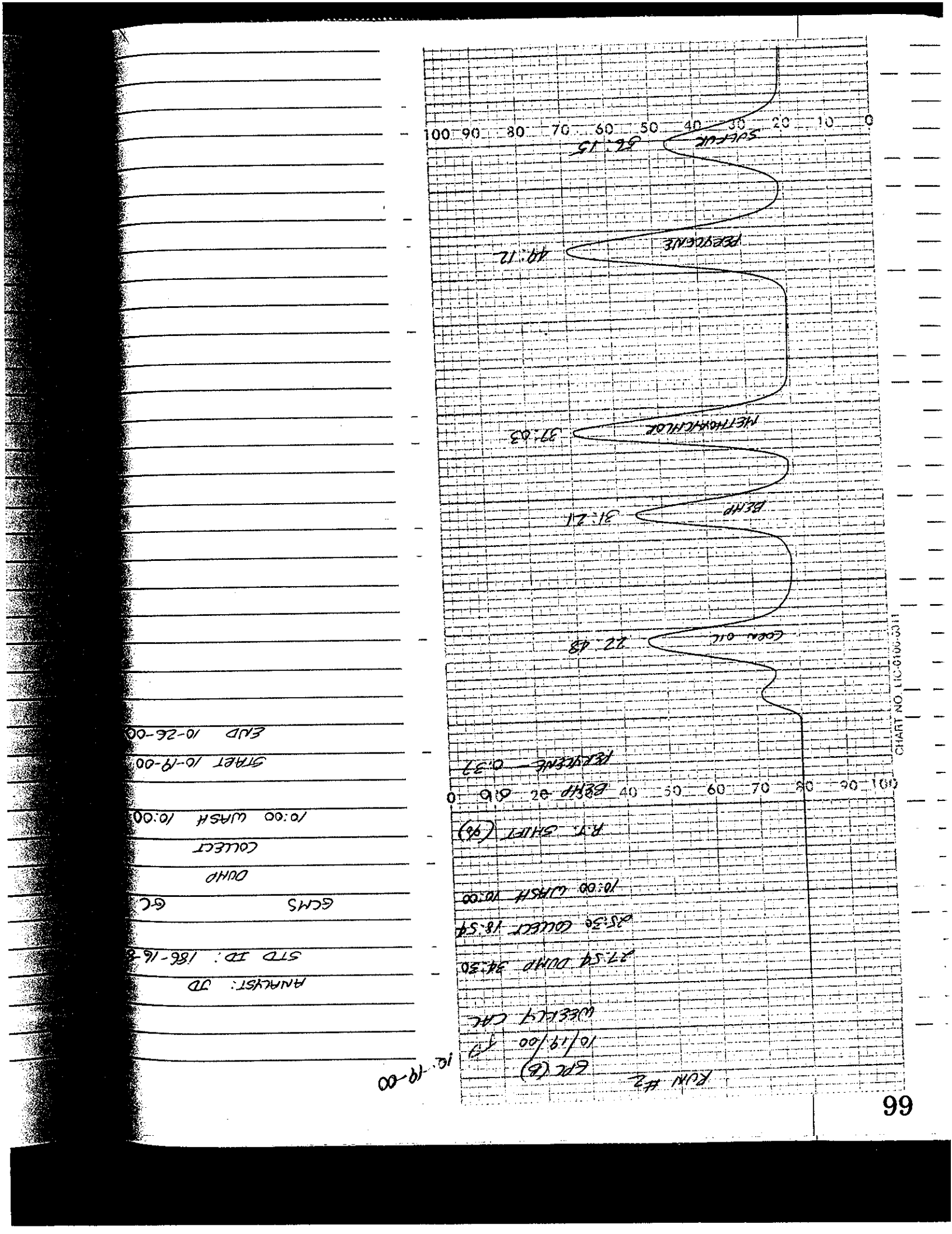
ANALYST: JD

STD ID: 186-16-8

GCMS		GC
27:54	DUMP	34:30
25:30	COLLECT	18:54
10:00	WASH	10:00

START 10-19-00

END 10-26-00


Run #2
GPC (B)
10/19/00
Quality Cal
ANALYST: JD
STD ID: 186-16-2
GCMS
GC
DUMP
COLLECT
10:00 WASH 10:00
START 10-19-00
END 10-26-00
10:00 WASH 10:00
COLLECT
DUMP
R.T. SHIFT (%)
RESOLUTION 0.37
BENZENE
TOLUENE
ETHYLBENZENE
M/P-XYLENE
O-XYLENE
CUMENE
STYRENE
P-DICHLOROBENZENE
1,2,4-TRICHLOROBENZENE
NAPHTHALENE
1,2,3-TRICHLOROBENZENE
CHART NO. HC-6100-3011

STL Pittsburgh

STL - Pittsburgh B#029246 R/E Sonication Extraction Worksheet

Logbook ID: OP4

Start Date	Date Completed	Parameter	Method	Solvent	Solvent Lot	Solvent Mfg	GPC Number
10-18-00	10-24-00	CLP BNA	OLM04.2	MeCl/Acetone	T23272/#1451 #11463	Baker/Mallinckrodt	"B"

	Lot Number	Sample ID	Client ID	Sample Weight (g)	Final Volume (mL)	Surrogate #	Surr Vol (mL)	Matrix Spike Lot #	MS Vol (mL)	GPC Date
1.	COJ120207	BLK	NA	30.0g	0.5	77-02-07	0.5ml	NA	NA	10-23-00
2.		LCS		30.0g				77-02-03	0.5ml	
3.		002MS		30.0g						
4.		002MSD		30.0g						
5.		002		30.0g				NA	NA	
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
16.										
17.										
18.										
19.										
20.										
21.										
22.										
23.										
Analyst:	B.P.	B.P.	B.P.	B.P.	KG/JM	B.P.	B.P.	B.P.	B.P.	B.P.

B.P. 10-18-00

Extract(s) (record line # from above)	Extract(s) Received Date	Time	Analyst	Location	Extract(s) Relinquished Date	Time	Analyst	Location
All Above	10-18-00	2025	Brian A. Pino	Org. Prep	10-18-00	2035	Brian A. Pino	REFIG Ext.
All Above	10-23-00	1945	Brian A. Pino	REFIG Ext	10-23-00	2120	Brian A. Pino	GPC "B"
ALL ABOVE	10-24-00	0930	James Miller	GPC "B"	10-24-00	1500	James Miller	RFØ1-BNA
all above	10-25-00	1230	Dunfergusen	RFØ1 BNA	10-25-00	1410	Dunfergusen	RFØ2 BNA

Sodium Sulfate Mfg/Lot Number	Reviewed by:	Date:
Baker / T24596	James Miller	10-24-00

Sequence Name: D:\HPCHEM\1\SEQUENCE\D100200.S [redacted]
Comment: STL PITT HP5972-1 Log 2ul inj 100ul + 1ul IS
Operator: 001562, DLF
Data Path: D:\HPCHEM\1\DATA\d100200.b\
Pre-Seq Cmd:
Post-Seq Cmd:

DLF 10-2-00 CLP

NEW COLUMN NEW 5 PTS

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

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

I.S. = 194-183-6

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	D1002WUP	70EARLY	warm up 120
2	Sample	1	D1002DFT	DFTHP90	dftpp (25ug/ml) 194-175-8
3	Sample	1	D1002DF2	DFTHP90	dftpp (25ug/ml) 194-175-8
4	Sample	2	D1002CC1	70EARLY	sstd020 (10ug/ml) 77-01-5 827
5	Sample	3	D1002CC2	70EARLY	sstd050 (25ug/ml) 77-01-6 827
6	Sample	4	D1002CC3	70EARLY	sstd080 (40ug/ml) 77-01-7 827
7	Sample	5	D1002CC4	70EARLY	sstd120 (60ug/ml) 77-01-8 827
8	Sample	6	D1002CC5	70EARLY	sstd160 (80ug/ml) 77-01-9 827
9	Sample	7	D1002STV	70EARLY	std ver 194-183-8
10	Sample	1	D1002DF3	DFTHP90	dftpp (25ug/ml) 194-175-8
11	Sample	3	D1002CCC	70EARLY	sstd050 (25ug/ml) 77-01-6 827
12	Sample	4	D1002001	CLP	c0i200158-sblk soil 9/20/00 c
13	Sample	10	D1002007	CLP	c0i200159-004 soil 9/20/00 cl — SENT FOR REX
14	Sample	5	D1002002	CLPOK	c0i200158-001 soil 9/20/00 cl
15	Sample	6	D1002003	CLPOK	c0i200158-001ms soil 9/20/00
16	Sample	7	D1002004	CLPOK	c0i200158-001msd soil 9/20/00
17	Sample	8	D1002005	CLP	c0i200158-002 soil 9/20/00 cl
18	Sample	9	D1002006	CLPOK	c0i200159-003 soil 9/20/00 cl
19	Sample	11	D1002008	CLP-CLEAN	c0i210287-sblk soil 9/25/00 c
20	Sample	12	D1002009	CLPOK	c0i210287-002 soil 9/25/00 cl
21	Sample	13	D1002010	CLP ? CONFIRM	c0i210287-003 soil 9/25/00 cl
22	Sample	14	D1002011	CLP	c0i210287-003ms soil 9/25/00
23	Sample	15	D1002012	CLP	c0i210287-003msd soil 9/25/00
24	Sample	16	D1002013	CLP	c0i210287-004 soil 9/25/00 cl
25	Sample	17	D1002014	CLP	c0i210287-005 soil 9/25/00 cl
26	Sample	18	D1002015	CLP	c0i210287-006 soil 9/25/00 cl
27	Sample	19	D1002016	CLP	c0i210287-007 soil 9/25/00 cl — SENT FOR REX
28	Sample	20	D1002017	CLP	c0i210287-008 soil 9/25/00 cl
29	Sample	21	D1002018	CLP	c0i210287-009 soil 9/25/00 cl
30	Sample	22	D1002019	CLP	c0i210287-010 soil 9/25/00 cl
31	Sample	23	D1002020	CLP	c0i210287-011 soil 9/25/00 cl
32	Sample	24	D1002021	CLP	c0i210287-012 soil 9/25/00 cl
33	Sample	25	D1002022	CLP	c0i210287-013 soil 9/25/00 cl
34	Sample	26	D1002023	CLP	blank
35	Sample	27	D1002024	8270C	c0i250134-sblk h2o 9/27/00 62
36	Sample	28	D1002025	8270C	c0i250134-lcs h2o 9/27/00 625
37	Sample	29	D1002026	8270C	c0i250134-lcsd h2o 9/27/00 62
38	Sample	30	D1002027	8270C	c0i250134-001 h2o 9/27/00 625
39	Sample	31	D1002028	8270C	c0i250134-002 h2o 9/27/00 625
40	Sample	32	D1002029	8270C	c0i250134-005 h2o 9/27/00 625
41	Sample	33	D1002030	8270C	c0i250134-006 h2o 9/27/00 625
42	Sample	34	D1002031	8270C	c0i250134-007 h2o 9/27/00 625
43	Sample	35	D1002032	8270C	c0i250134-008 h2o 9/27/00 625 — SENT FOR REX

10/4/00

Last Modified: Mon Oct 02 15:32:40 2000 Page: 1

Sequence Name: D:\HPCHEM\1\SEQUENCE\D101600.S[redacted]
Comment: STL PITT HP5972-1 Log 2ul inj 100ul + 1ul IS
Operator: 001562, DLF
Data Path: D:\HPCHEM\1\DATA\d101600.b\
Pre-Seq Cmd:
Post-Seq Cmd:

DLF 10-16-00

CLP 8270C

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

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

I.S. = 194-183-6

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	D1016WUP	70EARLY	warm up 50
2	Sample 1342 10-16-00	1	D1016DFT	DFTHP90	dftpp (25ug/ml) 194-175-8
3	Sample CLP/8270C	2	D1016CCC	70EARLY	sstd050 (25ug/ml) 77-02-9 827
4	Sample method blk	3	D1016001	CLP	c0j110177-sblk soil 10/11/00
5	Sample PQ	4	D1016002	CLP	c0j110177-001DL 200x soil 10/11
6	Sample (2) PQK PQ	7	D1016005	CLP	c0j110177-006 soil 10/11/00 c
7	Sample (2) VOK PQ	5	D1016003	CLP	c0j110177-004 soil 10/11/00 c
8	Sample PQ	6	D1016004	CLP	c0j110177-005DL 2x soil 10/11/0
9	Sample PQ	8	D1016006	CLP	c0i290173-sblk soil 10/3/00 c
10	Sample PQ NRR 8X	9	D1016007	CLP (E)	c0i290173-001 soil 10/3/00 cl
11	Sample Q	10	D1016008	CLP	c0i290173-001ms soil 10/3/00
12	Sample Q	11	D1016009	CLP	c0i290173-001msd soil 10/3/00
13	Sample (2) VOK PQ	12	D1016010	CLP	c0i290173-002 soil 10/3/00 cl
14	Sample PQ	13	D1016011	CLP ✓	c0j120207-sblk soil 10/12/00
15	Sample PQ	14	D1016012	CLP ✓	c0j120207-lcs soil 10/12/00 c
16	Sample PQ	15	D1016013	CLP ✓	c0j120207-001 soil 10/12/00 c
17	Sample PQ	16	D1016014	CLP ✓	c0j120207-001ms soil 10/12/00
18	Sample PQ	17	D1016015	CLP ✓	c0j120207-001msd soil 10/12/0
19	Sample (2) V NRRQ	18	D1016016	CLP ✓	c0j120207-002 2x MATRIX soil 10/12/0 - SENT FOR REX
20	Sample PQ	19	D1016017	8270C	c0j060292-004 soil 10/11/00 8
21	Sample	20	D1016018	8270C	c0j060292-005 soil 10/11/00 8
22	Sample	21	D1016019	70EARLY	c0j070143-001 10x soil 10/11/
23	Sample	22	D1016020	8270C	c0j100208-005 soil 10/11/00 8
24	Sample	23	D1016021	8270C	c0j100208-006 2x MATRIX soil 10/11/0
25	Sample (2) V NRR	24	D1016022	8270C	c0j100208-007 soil 10/11/00 8
26	Sample NRR ST	25	D1016023	70EARLY	c0j100221-001 soil 10/11/00 8
27	Sample	26	D1016024	70EARLY	blank
28	Sample	26	D1016025	70EARLY	blank
29					

Out of time time

do not need this — 002 was re-extracted within hold time and surrogate worked

Last Modified: Mon Oct 16 15:31:32 2000 Page: 1

Sequence Name: D:\HPCHEM\1\SEQUENCE\D102400.S [redacted]
Comment: STL PITT HP5972-1 Log 2ul inj 100ul + 1ul IS
Operator: 001562, DLF
Data Path: D:\HPCHEM\1\DATA\d102400.b\
Pre-Seq Cmd:
Post-Seq Cmd:

AXF 10-24-00

CLP2.1 8270C NEW 5 PT CLP3.2 CLP4.2

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

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

IS = 194-183-6

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	D1024WUP	CLPLOW	warm up 20/80
2	Sample	1127-8.2401	D1024DFT	DFTHP90	dftpp (25ug/ml) 194-175-8
3	Sample	ECLP2.1 2	D1024CCC	CLPLOW	sstd20 (20/80ug/ml) 77-02-15
4	Sample	PQT SURROK 4	D1024002	CLPLOW	c0j100239-020 4x h2o 10/13/00
5	Sample	PQT-METHOD 3	D1024001	CLPLOW	c0j100241-sblk h2o 10/13/00 c
6	Sample	6	D1024CC1	70EARLY	SSTD020 (10ug/ml) 77-01-5 827
7	Sample	NEW 7	D1024CC2	70EARLY	SSTD050 (25ug/ml) 77-03-1 827
8	Sample	5 8	D1024CC3	70EARLY	SSTD080 (40ug/ml) 77-01-7 827
9	Sample	DONT NEED 6	D1024CB1	70EARLY	SSTD020 (10ug/ml) 77-01-5 827
10	Sample	POINT 9	D1024CC4	70EARLY	SSTD120 (60ug/ml) 77-01-8 827
11	Sample	10	D1024CC5	70EARLY	SSTD160 (80ug/ml) 77-01-9 827
12	Sample	1	D1024DF2	DFTHP90	dftpp (25ug/ml) 194-175-8
13	Sample	7	D1024CC7	CLP	SSTD050 (25ug/ml) 77-03-1 827
14	Sample	11	D1024003	CLP	std ver
15	Sample	12	D1024004	CLP	c0j200195-sblk soil 10/22/00
16	Sample	13	D1024005	CLP	c0j200195-lcs soil 10/22/00 c
17	Sample	14	D1024006	CLP	c0j200195-001 soil 10/22/00 c
18	Sample	15	D1024007	CLP	c0j200195-001ms soil 10/22/00
19	Sample	16	D1024008	CLP	c0j200195-001msd soil 10/22/0
20	Sample	17	D1024009	CLP	c0j190175-sblk soil 10/19/00
21	Sample	18	D1024010	CLP	c0j190175-lcs soil 10/19/00 c
22	Sample	19	D1024011	CLP	c0j190175-001 soil 10/19/00 c
23	Sample	20	D1024012	CLP	c0j190175-001ms soil 10/19/00
24	Sample	21	D1024013	CLP	c0j190175-001msd soil 10/19/0
25	Sample	22	D1024014	CLP	c0j190175-002 soil 10/19/00 c
26	Sample	23	D1024015	CLP	c0j190175-003 5x soil 10/19/0
27	Sample	24	D1024016	CLP	c0j190175-004 2x soil 10/19/0
28	Sample	25	D1024017	CLP	c0j190175-006 soil 10/19/00 c
29	Sample	26	D1024018	CLP	c0j190175-007 soil 10/19/00 c
30	Sample	27	D1024019	CLP	c0j190175-008 soil 10/19/00 c
31	Sample	28	D1024020	CLP	c0j190175-009 soil 10/19/00 c
32	Sample	29	D1024021	CLP	c0j200201-sblk soil 10/22/00
33	Sample	30	D1024022	CLP	c0j200201-lcs soil 10/22/00 c
34	Sample	31	D1024023	CLP	c0j200201-001 soil 10/22/00 c
35	Sample	32	D1024024	CLP	c0j200201-001ms soil 10/22/00
36	Sample	33	D1024025	CLP	c0j200201-001msd soil 10/22/0
37	Sample	34	D1024026	CLP	c0j200201-002 2x soil 10/22/0
38	Sample	35	D1024027	CLP	blank
39	Sample	35	D1024028	CLP	blank

Sequence Name: D:\HPCHEM\1\SEQUENCE\D102500.S[redacted]
Comment: STL PITT HP5972-1 Log 2ul inj 100ul + 1ul IS
Operator: 001562, DLF
Data Path: D:\HPCHEM\1\DATA\d102500.b\
Pre-Seq Cmd:
Post-Seq Cmd:

DLF 10-25-00

CLP 4.2 & 2.1

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

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

I.S. -194-183-6

Line	Type	Vial	DataFile	Method	Sample Name
1	Sample	100	D1025WUP	70EARLY	warm up 25
2	Sample	1	D1025DFT	DFTHP90	dftpp (25ug/ml) 194-175-8
3	Sample	2	D1025CCC	CLP	SSTD050 (25ug/ml) 77-03-1 827
4	Sample	3	D1025CC2	CLPLOW	sstd20 (20/80ug/ml) 77-02-15
5	Sample	4	D1025001	CLP	c0j190175-004 soil 10/19/00 c
6	Sample	5	D1025002	CLP	c0j190175-sblk soil 10/19/00
7	Sample	6	D1025003	CLP	c0j190175-008 DL 2x soil 10/19/0
8	Sample	7	D1025004	CLP	c0j200201-001msd soil 10/22/0
9	Sample	8	D1025005	CLP	c0j200201-002 4x soil 10/22/0
10	Sample	9	D1025006	CLP	c0j120207-sblk/re soil 10/18/
11	Sample	10	D1025007	CLP	c0j120207-lcs/re soil 10/18/0
12	Sample	11	D1025008	CLP	c0j120207-002/re MATRIX 2x soil 10/1
13	Sample	12	D1025009	CLP	c0j120207-002ms/re 2x soil 10
14	Sample	13	D1025010	CLP	c0j120207-002msd/re 2x soil 1
15	Sample	14	D1025011	CLPLOW	c0j120268-sblk h2o 10/17/00 c
16	Sample	15	D1025012	CLPLOW	c0j120268-lcs h2o 10/17/00 cl
17	Sample	16	D1025013	CLPLOW	c0j120268-lcsd h2o 10/17/00 c
18	Sample	17	D1025014	CLPLOW	c0j120268-001 h2o 10/17/00 cl
19	Sample	18	D1025015	CLPLOW	c0j120268-003 h2o 10/17/00 cl
20	Sample	19	D1025016	CLPLOW	c0j120263-003 h2o 10/17/00 cl
21	Sample	20	D1025017	CLPLOW	c0j130219-002 h2o 10/17/00 cl
22	Sample	21	D1025018	CLPLOW	c0j130219-003 h2o 10/17/00 cl
23	Sample	22	D1025019	CLPLOW	c0j130219-009 h2o 10/17/00 cl
24	Sample	23	D1025020	CLPLOW	c0j120302-001 h2o 10/17/00 cl
25	Sample	24	D1025021	CLPLOW	c0j120302-002 h2o 10/17/00 cl
26	Sample	25	D1025022	CLPLOW	blank

DOES NOT MATCH SAMPLE

BNE562AC

Last Modified: Wed Oct 25 14:09:38 2000

REQUESTED BY: **PINOB**

METHOD: 00 Semi-Volatile Organic Compounds - CLP (OLM04.2)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
3B	DM2GW-1-AC	___ ___ ___	273115	061313	A-13-00	C0J120207	001	QC	SOLID	0	2 1
3B	DM2G3-1-AC	___ ___ ___	273116	061313	A-13-00	C0J120207	002		SOLID	0	2 1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
Brian A. Pino	Brian A. Pino	10-13-00 1340
Brian A. Pino	Brian A. Pino	10-13-00 2130

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

REQUESTED BY: **GEEHRINK**

METHOD: 00 Semi-Volatile Organic Compounds - CLP (OLM04.2)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
3B	DM2G3-2-AC	___ ___ ___	274723	061313	A-13-00	C0J120207	002	ac	SOLID	0	2 1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
Brian A. Pino	Brian A. Pino	10-18-00 1355
Brian A. Pino	Brian A. Pino	10-18-00 2145

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

METALS DATA

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
PXS-19	DM2GW
PXS-19S	DM2GWS
PXS-19X	DM2GWX
PXS-20	DM2G3

Comments: CUMMINGS RITER
C0J120207
ILM04.0

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

REVIEWED BY: MTW
DATE: 10-17-00

Version 4.10.2

Cover Page Equivalent

METALS
RESULTS

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DM2GW **Client ID:** PXS-19

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 12.68

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.48	2.3	7.7	*	1	ICPST	10/16/00	11:17

Comments: Lot #: C0J120207 Sample #: 1 COLOR: PRE-BROWN POST-BROWN TEXTURE: PRE-MEDIUM POST-MEDIUM ARTIFACTS: STONES

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DM2G3 **Client ID:** PXS-20

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 13.62

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.04	0.49	2.3	8.2	*	1	ICPST	10/16/00	11:33

Comments: Lot #: C0J120207 Sample #: 2 COLOR: PRE-BROWN POST-BROWN TEXTURE: PRE-MEDIUM POST-MEDIUM ARTIFACTS: STONES

Version 4.10.2

U Result is less than the IDL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Verification Standard

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

Chart Number: T01016A.ARC **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** 0057-101-14

Element	WL/ Mass	True Conc	ICV3-1 10/16/00 9:20 AM Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	250.0	256.38	**102.6**								

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

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

Chart Number: T01016A.ARC **Acceptable Range:** 90% - 110%

Standard Source: Inorganic Ventures **Standard ID:** 0057-094-6

Element	WL/ Mass	True Conc	CCV3-1 10/16/00 9:41 AM Found	% Rec	CCV3-2 10/16/00 10:31 AM Found	% Rec	CCV3-3 10/16/00 11:00 AM Found	% Rec	CCV3-4 10/16/00 11:50 AM Found	% Rec	Found	% Rec
Arsenic	189.042	500.0	515.75	**103.2**	514.89	**103.0**	515.06	**103.0**	536.44	**107.3**		

Version 4.10.2

Form 2A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Contract Required Detection Limit Standard

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

Chart Number: T01016A.ARC **Acceptable Range:** 50% - 150%

Standard Source: Inorganic Ventures **Standard ID:** 0057-079-2

Element	WL/ Mass	True Conc	CRI-1 10/16/00 9:28 AM Found	% Rec	CRI-2 10/16/00 10:48 AM Found	% Rec	CRI-3 10/16/00 11:38 AM Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	20.0	20.44	**102.2**	20.77	**103.8**	19.51	**97.5**				

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

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

Chart Number: T01016A.ARC

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

Element	WL/ Mass	Report Limit	ICB1 10/16/00 9:24 AM Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	189.042	10	2.1	U								

Version 4.10.2

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

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

Chart Number: T01016A.ARC

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

Element	WL/ Mass	Report Limit	CCB1 10/16/00 9:45 AM Found	Q	CCB2 10/16/00 10:35 AM Found	Q	CCB3 10/16/00 11:04 AM Found	Q	CCB4 10/16/00 11:54 AM Found	Q	Found	Q
Arsenic	189.042	10	2.1	U	2.1	U	2.1	U	2.1	U		

Version 4.10.2

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DM4CWB

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** NA

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	0.42	2.0	0.42	U	1	ICPST	10/16/00	11:09

Comments: Lot #: C0J120207

Version 4.10.2

U Result is less than the IDL

B Result is between IDL and RL

Form 3 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard A

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

Chart Number: T01016A.ARC **Acceptable Range:** 0% - 0%

Standard Source: Inorganic Ventures **Standard ID:** 0057-078-10

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 10/16/00 9:32 AM Found	ICSA 10/16/00 10:52 AM Found	ICSA 10/16/00 11:42 AM Found	Found	Found
Arsenic	189.042	10		3	0	1		

U Result is less than the IDL

B Result is between IDL and RL

Form 4 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard AB

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

Chart Number: T01016A.ARC **Acceptable Range:** 80% - 120%

Standard Source: Inorganic Ventures **Standard ID:** 0057-104-1

Element	WL/ Mass	True Conc	ICSAB 10/16/00 9:37 AM Found	% Rec	ICSAB 10/16/00 10:56 AM Found	% Rec	ICSAB 10/16/00 11:46 AM Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	189.042	100	103.9	**103.9**	105.5	**105.5**	108.9	**108.9**				

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DM2GWS

Original Sample ID: DM2GW **Client ID:** PXS-19S

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 12.68

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Arsenic	189.0	7.7		14.8		9.1617	77.4	1	1	ICPST	10/16/00	11:17	10/16/00	11:29

Comments: Lot #: C0J120207 Sample #: 1

Version 4.10.2

U Result is less than the IDL
B Result is between IDL 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

Duplicate Sample Results

Lab Sample ID: DM2GWX **Client ID:** PXS-19X

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 12.68

Element	WL/ Mass	IDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	0.48	2.3	14.1	*	1	ICPST	10/16/00	11:25

Comments: Lot #: C0J120207 Sample #: 1

Version 4.10.2

U Result is less than the IDL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Duplicate RPD Report

Duplicate Sample ID: DM2GWX

Original Sample ID: DM2GW **Client ID:** PXS-19X

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 12.68

Element	WL/ Mass	OS Conc	Q	Dupe Conc	Q	RPD	OS DF	Dupe DF	Instr	OS Anal Date	OS Anal Time	Dupe Anal Date	Dupe Anal Time
Arsenic	189.042	7.7		14.1	*	6.4 %	1	1	ICPST	10/16/00	11:17	10/16/00	11:25

U Result is less than the IDL

B Result is between IDL and RL

* Duplicate analysis RPD was not within limits

Form 6 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DM4CWC

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	189.042	136	137	100.8		75-125	1	ICPST	10/16/00	11:13

Comments: Lot #: C0J120207

Version 4.10.2

U Result is less than the IDL

B Result is between IDL and RL

Form 7 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DM2GWP

Original Sample ID: DM2GW **Client ID:** PXS-19

Matrix: Soil **Units:** mg/kg **Prep Date:** 10/13/00 **Prep Batch:** 0287201

Weight: 1.00 **Volume:** 200 **Percent Moisture:** 12.68

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Arsenic	189.042	7.7		7.7	B		1	5	ICPST	10/16/00	11:17	10/16/00	11:21

Comments:

Version 4.10.2

U Result is less than the IDL

B Result is between IDL and RL

E Serial dilution percent difference not within limits

Form 9 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST **Units:** ppb

Element	Wavelength /Mass	Reporting Limit	IDL	Date of IDL
Arsenic	189.04	10	2.1	10/5/00

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST **Units:** ppb

Element	Wavelength /Mass	Reporting Limit	IDL	Date of IDL
Arsenic	189.04	10	2.1	10/5/00

STL-Pittsburgh

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST **Date of IEC's:** 10/13/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(-0.000163)
Aluminum	308.215	Pb(0.000539)
Chromium	267.716	Sb(0.007445)
Chromium	267.716	As(-0.003079), Sb(0.013117)
Cobalt	228.616	Pb(0.000043), Se(-0.000467)
Cobalt	228.616	Cd(-0.000073), Fe(0.086957), Ni(-0.000735), Pb(0.000049), Se(0.000496), Tl(0.002407)
Iron	271.441	Cd(0.000118), Pb(0.000082), Sb(0.000025), Se(-0.00001), Tl(-0.000021), V(-0.000341), Zn(0.000124)
Iron	271.441	Pb(0.000048), Se(-0.000347)
Magnesium	279.078	Fe(-0.00058)
Manganese	257.61	Se(-0.000214), Tl(-0.003614)
Manganese	257.61	Se(0.000533)
Molybdenum	202.03	As(-0.000927), Pb(-0.000446), Sb(-0.002435), Tl(-0.000488)
Molybdenum	202.03	Pb(-0.000742), Sb(-0.011507), Se(0.000246)
Nickel	231.604	Pb(0.000124)
Nickel	231.604	Pb(0.000274), Sb(-0.00125), Zn(0.005251)
Vanadium	292.402	Al(0.020017), Be(-0.008152), Cr(-0.00015), Fe(0.009334), Sb(-0.008099), Se(0.000269), Tl(0.001468)
Vanadium	292.402	Pb(-0.000307), Se(0.000106)

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPST **Units:** ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	189.04	10000	10/5/00

STL-Pittsburgh

Metals Data Reporting Form

Preparation Log

Preparation Batch: 0287201 **Instrument:** ICP **Matrix:** Soil

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DM4CWB	10/13/00	1.00	200	NA
DM4CWC	10/13/00	1.00	200	NA
DM2G3	10/13/00	1.00	200	13.62
DM2GW	10/13/00	1.00	200	12.68
DM2GWS	10/13/00	1.00	200	12.68
DM2GWX	10/13/00	1.00	200	12.68

STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** T01016A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		10/16/00	8:53
ZZZZZZ		10/16/00	8:58
STD1		10/16/00	9:08
STD6		10/16/00	9:12
STD7		10/16/00	9:16
ICV3-1		10/16/00	9:20
ICB1		10/16/00	9:24
CRI-1		10/16/00	9:28
ICSA		10/16/00	9:32
ICSAB		10/16/00	9:37
CCV3-1		10/16/00	9:41
CCB1		10/16/00	9:45
ZZZZZZ		10/16/00	9:49
ZZZZZZ		10/16/00	9:53
ZZZZZZ		10/16/00	9:57
ZZZZZZ		10/16/00	10:01
ZZZZZZ		10/16/00	10:06
ZZZZZZ		10/16/00	10:10
ZZZZZZ		10/16/00	10:14
ZZZZZZ		10/16/00	10:18
ZZZZZZ		10/16/00	10:22
ZZZZZZ		10/16/00	10:26
CCV3-2		10/16/00	10:31
CCB2		10/16/00	10:35
ZZZZZZ		10/16/00	10:39
ZZZZZZ		10/16/00	10:44
CRI-2		10/16/00	10:48
ICSA		10/16/00	10:52
ICSAB		10/16/00	10:56
CCV3-3		10/16/00	11:00
CCB3		10/16/00	11:04
DM4CWB		10/16/00	11:09
DM4CWC		10/16/00	11:13
DM2GW	PXS-19	10/16/00	11:17
DM2GWP	PXS-19	10/16/00	11:21
DM2GWX	PXS-19X	10/16/00	11:25
DM2GWS	PXS-19S	10/16/00	11:29
DM2G3	PXS-20	10/16/00	11:33
CRI-3		10/16/00	11:38

STL-Pittsburgh

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST **Chart Number:** T01016A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ICSA		10/16/00	11:42
ICSAB		10/16/00	11:46
CCV3-4		10/16/00	11:50
CCB4		10/16/00	11:54

METALS
RAW DATA

#	Sample Name	AS
1	STD1	-.00758
2	STD6	5.28837
3	STD7	
4	ICV3-1 0057-101-14	.25638
5	ICB1	-.00047
6	CRI-1 0057-079-2	.02044
7	ICSA 0057-078-10	.00313
8	ICSAB 0057-104-1	.10393
9	CCV3-1 0057-094-6	.51575
10	CCB1	-.00048
11	DM13MB	-.00046
12	DM13MC	.69961
13	DLX8G	.11064
14	DLX8GP5	.02373
15	DLX8GX	.09593
16	DLX8GS	.11432
17	DLX8J	.05847
18	DLX8L	.04001
19	DLX8N	.05180
20	DLX8P	.04532
21	CCV3-2	.51489
22	CCB2	-.00030
23	DLX8T	1.7450
24	DLX8GA As=.22ppm	.32303
25	CRI-2	.02077
26	ICSA 0057-078-10	-.00037
27	ICSAB 0057-104-1	.10549
28	CCV3-3	.51506
29	CCB3	-.00026
30	DM4CWB	-.00042
31	DM4CWC	.68510
32	DM2GW	.03368
33	DM2GWP5	.00676
34	DM2GWX	.06164
35	DM2GWS	.06463
36	DM2G3	.03539
37	CRI-3	.01951
38	ICSA 0057-078-10	.00143
39	ICSAB 0057-104-1	.10887
40	CCV3-4	.53644
41	CCB4	-.00044

RB101600

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T01016A	METTRA	10/16/00	09:08		X	IR
2	STD6	T01016A	METTRA	10/16/00	09:12		X	IR
3	STD7	T01016A	METTRA	10/16/00	09:16		X	IR
4	ICV3-1 0057-101-14	T01016A	METTRA	10/16/00	09:20	RJG	S	CONC
5	ICB1	T01016A	METTRA	10/16/00	09:24	RJG	S	CONC
6	CRI-1 0057-079-2	T01016A	METTRA	10/16/00	09:28	RJG	S	CONC
7	ICSA 0057-078-10	T01016A	METTRA	10/16/00	09:32	RJG	Q	CONC
8	ICSAB 0057-104-1	T01016A	METTRA	10/16/00	09:37	RJG	Q	CONC
9	CCV3-1 0057-094-6	T01016A	METTRA	10/16/00	09:41	RJG	S	CONC
10	CCB1	T01016A	METTRA	10/16/00	09:45	RJG	S	CONC
11	DM13MB	T01016A	METTRA	10/16/00	09:49	RJG	S	CONC
12	DM13MC	T01016A	METTRA	10/16/00	09:53	RJG	S	CONC
13	DLX8G	T01016A	METTRA	10/16/00	09:57	RJG	S	CONC
14	DLX8GP5	T01016A	METTRA	10/16/00	10:01	RJG	S	CONC
15	DLX8GX	T01016A	METTRA	10/16/00	10:06	RJG	S	CONC
16	DLX8GS	T01016A	METTRA	10/16/00	10:10	RJG	S	CONC
17	DLX8J	T01016A	METTRA	10/16/00	10:14	RJG	S	CONC
18	DLX8L	T01016A	METTRA	10/16/00	10:18	RJG	S	CONC
19	DLX8N	T01016A	METTRA	10/16/00	10:22	RJG	S	CONC
20	DLX8P	T01016A	METTRA	10/16/00	10:26	RJG	S	CONC
21	CCV3-2	T01016A	METTRA	10/16/00	10:31	RJG	S	CONC
22	CCB2	T01016A	METTRA	10/16/00	10:35	RJG	S	CONC
23	DLX8T	T01016A	METTRA	10/16/00	10:39	RJG	S	CONC
24	DLX8GA As=.22ppm	T01016A	METTRA	10/16/00	10:44	RJG	S	CONC
25	CRI-2	T01016A	METTRA	10/16/00	10:48	RJG	S	CONC
26	ICSA 0057-078-10	T01016A	METTRA	10/16/00	10:52	RJG	Q	CONC
27	ICSAB 0057-104-1	T01016A	METTRA	10/16/00	10:56	RJG	Q	CONC
28	CCV3-3	T01016A	METTRA	10/16/00	11:00	RJG	S	CONC
29	CCB3	T01016A	METTRA	10/16/00	11:04	RJG	S	CONC
30	DM4CWB	T01016A	METTRA	10/16/00	11:09	RJG	S	CONC
31	DM4CWC	T01016A	METTRA	10/16/00	11:13	RJG	S	CONC
32	DM2GW	T01016A	METTRA	10/16/00	11:17	RJG	S	CONC
33	DM2GWP5	T01016A	METTRA	10/16/00	11:21	RJG	S	CONC
34	DM2GWX	T01016A	METTRA	10/16/00	11:25	RJG	S	CONC
35	DM2GWS	T01016A	METTRA	10/16/00	11:29	RJG	S	CONC
36	DM2G3	T01016A	METTRA	10/16/00	11:33	RJG	S	CONC
37	CRI-3	T01016A	METTRA	10/16/00	11:38	RJG	S	CONC
38	ICSA 0057-078-10	T01016A	METTRA	10/16/00	11:42	RJG	Q	CONC
39	ICSAB 0057-104-1	T01016A	METTRA	10/16/00	11:46	RJG	Q	CONC
40	CCV3-4	T01016A	METTRA	10/16/00	11:50	RJG	S	CONC
41	CCB4	T01016A	METTRA	10/16/00	11:54	RJG	S	CONC

Method: METTRA Standard: STD1
Run Time: 10/16/00 09:08:27

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	.00283	.10211	-.00758	.00201	-.03483	.00298	.00239
SDev	.00390	.00228	.00404	.00065	.00079	.00003	.00026
%RSD	137.97	2.2349	53.270	32.496	2.2577	.84143	11.085
#1	.00558	.10372	-.01044	.00248	-.03427	.00300	.00258
#2	.00007	.10050	-.00472	.00155	-.03538	.00297	.00221

Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00028	.00469	.00366	.00021	.00163	.00288	.00198
SDev	.00039	.00166	.00006	.00019	.00085	.00066	.00046
%RSD	141.42	35.360	1.5116	93.812	51.882	22.970	23.149
#1	.00000	.00586	.00370	.00007	.00223	.00335	.00230
#2	-.00055	.00352	.00362	.00034	.00103	.00241	.00166

Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00097	.04505	-.01213	-.00410	.01111	-.10538	.05871
SDev	.00040	.01319	.01256	.01029	.01074	.02174	.00295
%RSD	41.178	29.265	103.61	250.80	96.652	20.628	5.0197
#1	.00126	.05437	-.02101	-.01138	.01871	-.12076	.06080
#2	.00069	.03573	-.00324	.00317	.00352	-.09001	.05663

Elem	TL	V	ZN
Avge	-.03011	.00028	-.00009
SDev	.00053	.00000	.00017
%RSD	1.7656	.84143	198.80
#1	-.02974	.00028	.00003
#2	-.03049	.00028	-.00021

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14412	--	--	--	--	--	--
SDev	121.2688	--	--	--	--	--	--
%RSD	.8414316	--	--	--	--	--	--
#1	14326	--	--	--	--	--	--
#2	14498	--	--	--	--	--	--

Method: METTRA Standard: STD6 0057-018-11
Run Time: 10/16/00 09:12:38

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	9.0608	5.2884	12.444	4.9198	6.7023	8.0902	4.5184
SDev	.0005	.0006	.013	.0027	.0676	.0584	.0259
%RSD	.00527	.01150	.10544	.05500	1.0093	.72229	.57317
#1	9.0611	5.2888	12.453	4.9217	6.6544	8.0489	4.5001
#2	9.0605	5.2879	12.434	4.9179	6.7501	8.1315	4.5368

Elem	SE/1	SE/2	TL
Avge	4.5948	3.4449	3.2703
SDev	.0084	.0207	.0071
%RSD	.18348	.60024	.21821
#1	4.5888	3.4303	3.2653
#2	4.6007	3.4595	3.2754

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14198	--	--	--	--	--	--
SDev	11.73770	--	--	--	--	--	--
%RSD	.0826729	--	--	--	--	--	--
#1	14206	--	--	--	--	--	--
#2	14189	--	--	--	--	--	--

Method: METTRA Standard: STD7 0057.078.12
Run Time: 10/16/00 09:16:48

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	6.0786	12.347	10.656	4.6979	2.6567	10.528	2.9088
SDev	.0164	.031	.011	.0103	.0046	.023	.0070
%RSD	.26998	.24920	.10655	.21956	.17333	.21391	.24193
#1	6.0670	12.325	10.648	4.6906	2.6534	10.512	2.9039
#2	6.0903	12.369	10.664	4.7052	2.6599	10.544	2.9138

Elem	FE	MG	MN	MO	NI	V	ZN
Avge	3.3569	12.872	8.5733	2.3699	2.0236	.77877	2.3739
SDev	.0080	.023	.0138	.0107	.0063	.00221	.0043
%RSD	.23723	.17759	.16108	.44965	.30934	.28429	.18156
#1	3.3513	12.856	8.5635	2.3624	2.0192	.77720	2.3708
#2	3.3625	12.888	8.5830	2.3774	2.0280	.78033	2.3769

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13835	--	--	--	--	--	--
SDev	30.58237	--	--	--	--	--	--
%RSD	.2210463	--	--	--	--	--	--
#1	13814	--	--	--	--	--	--
#2	13857	--	--	--	--	--	--

Method: METTRA Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.220800	-.000624	10/16/00 09:16:48
AL	308.215	STD7	STD1	8.37945	-.855630	10/16/00 09:16:48
AS	189.042	STD6	STD1	.188823	.001431	10/16/00 09:16:48
BA	493.409	STD7	STD1	.324024	-.000653	10/16/00 09:16:48
BE	313.042	STD7	STD1	.371106	.012925	10/16/00 09:16:48
CA	317.933	STD7	STD1	21.2998	-.063552	10/16/00 09:16:48
CD	226.502	STD6	STD1	.080378	-.000192	10/16/00 09:16:48
CO	228.616	STD7	STD1	1.50548	.000415	10/16/00 09:16:48
CR	267.716	STD7	STD1	.380047	-.001783	10/16/00 09:16:48
CU	324.753	STD7	STD1	1.37685	-.005040	10/16/00 09:16:48
FE	271.441	STD7	STD1	14.9931	-.003109	10/16/00 09:16:48
MG	279.078	STD7	STD1	7.76961	-.012697	10/16/00 09:16:48
MN	257.610	STD7	STD1	.466724	-.001345	10/16/00 09:16:48
MO	202.030	STD7	STD1	1.68924	-.003344	10/16/00 09:16:48
NI	231.604	STD7	STD1	1.97618	-.001923	10/16/00 09:16:48
PB/1	220.351	STD6	STD1	.205139	-.009242	10/16/00 09:16:48
PB/2	220.352	STD6	STD1	.148934	.001806	10/16/00 09:16:48
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.123543	.000507	10/16/00 09:16:48
SB/2	206.832	STD6	STD1	.221861	-.002465	10/16/00 09:16:48
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.212758	.022421	10/16/00 09:16:48
SE/2	196.022	STD6	STD1	.295316	-.017339	10/16/00 09:16:48
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.605977	.018247	10/16/00 09:16:48
V	292.402	STD7	STD1	5.11623	-.001420	10/16/00 09:16:48
ZN	213.856	STD7	STD1	1.69639	.000146	10/16/00 09:16:48

Method: METTRA Sample Name: ICV3-1 0057-101-14 Operator: RJG
Run Time: 10/16/00 09:20:28
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Reviewed 10/16/00

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50768	11.705	.25638	.98780	.98647	24.600	.25020
SDev	.00161	.019	.00364	.00241	.00199	.075	.00059
%RSD	.31606	.16551	1.4185	.24390	.20176	.30310	.23595
#1	.50881	11.691	.25895	.98950	.98788	24.653	.25062
#2	.50654	11.718	.25381	.98610	.98507	24.547	.24978
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	1.0022	1.0004	.95521	12.292	23.870	.98095	1.0092
SDev	.0007	.0010	.00026	.010	.012	.00023	.0003
%RSD	.07097	.10323	.02737	.07907	.05091	.02312	.03066
#1	1.0017	1.0011	.95503	12.285	23.878	.98079	1.0094
#2	1.0027	.99969	.95540	12.298	23.861	.98111	1.0089
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	.99046	.25014	.25226	.25155	.25366	.25617	.25533
SDev	.01141	.00265	.00146	.00009	.00164	.00233	.00210
%RSD	1.1523	1.0575	.57827	.03662	.64795	.90985	.82321
#1	.99853	.24827	.25329	.25162	.25482	.25782	.25682
#2	.98239	.25201	.25123	.25149	.25250	.25452	.25385
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	.25561	.25855	.25757	.51867	.98780	1.0219
SDev	.00188	.00192	.00191	.00737	.00307	.0041
%RSD	.73702	.74275	.74084	1.4218	.31073	.39868
#1	.25428	.25720	.25622	.52388	.98997	1.0248
#2	.25694	.25991	.25892	.51345	.98563	1.0191
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	14224	--	--	--	--	--	--
SDev	18.06644	--	--	--	--	--	--
%RSD	.1270162	--	--	--	--	--	--
#1	14236	--	--	--	--	--	--
#2	14211	--	--	--	--	--	--

Method: METTRA Sample Name: ICB1 Operator: RJG
Run Time: 10/16/00 09:24:38
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00091	-.00119	-.00048	.00016	.00020	.01716	.00017
SDev	.00012	.00842	.00005	.00009	.00007	.00149	.00011
%RSD	12.981	707.54	9.8662	56.163	34.597	8.6988	66.369
#1	-.00099	-.00715	-.00045	.00010	.00025	.01611	.00009
#2	-.00082	.00476	-.00051	.00023	.00015	.01822	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00000	-.00041	.00035	.00945	-.00189	.00029	.00147
SDev	.00059	.00023	.00020	.01476	.00070	.00008	.00031
%RSD	34634.	56.818	57.563	156.18	37.180	26.517	20.777
#1	-.00042	-.00057	.00020	-.00099	-.00140	.00024	.00169
#2	.00042	-.00024	.00049	.01988	-.00239	.00035	.00125
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	-.00034	-.00400	.00218	.00012	.00106	-.00068	-.00010
SDev	.00088	.00034	.00022	.00004	.00180	.00099	.00126
%RSD	259.54	8.3890	10.282	30.473	170.47	144.91	1224.5
#1	-.00097	-.00424	.00234	.00015	.00233	.00002	.00079
#2	.00028	-.00376	.00202	.00010	-.00022	-.00138	-.00099
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	.00018	.00406	.00277	-.00247	-.00088	.00183
SDev	.00364	.00130	.00035	.00372	.00026	.00013
%RSD	1985.3	32.036	12.521	150.72	29.408	6.9994
#1	-.00239	.00497	.00252	.00016	-.00107	.00174
#2	.00276	.00314	.00301	-.00510	-.00070	.00192
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	14383	--	--	--	--	--	--
SDev	79.44317	--	--	--	--	--	--
%RSD	.5523571	--	--	--	--	--	--
#1	14439	--	--	--	--	--	--
#2	14326	--	--	--	--	--	--

Method: METTRA Sample Name: CRI-1 0057-079-2 Operator: RJG
Run Time: 10/16/00 09:28:47
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	.01964	.39836	.02045	.40615	.00973	10.080	.01018
SDev	.00005	.00584	.00052	.00023	.00006	.019	.00016
%RSD	.23527	1.4671	2.5692	.05768	.65798	.19175	1.5334
#1	.01961	.40249	.02082	.40598	.00978	10.093	.01029
#2	.01967	.39423	.02007	.40631	.00969	10.066	.01006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.03000	.60000	.03000	.60000	.01500	15.000	.01500
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	.10363	.02019	.04832	.16184	9.7162	.03007	-.00058
SDev	.00035	.00027	.00004	.00493	.0043	.00004	.00035
%RSD	.33624	1.3273	.07731	3.0470	.04447	.12032	59.297
#1	.10387	.02038	.04834	.16533	9.7132	.03010	-.00034
#2	.10338	.02000	.04829	.15835	9.7193	.03005	-.00083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.15000	.03000	.07500	.30000	15.000	.04500	
Low	.05000	.01000	.02500	.10000	5.0000	.01500	

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08066	.00358	.00854	.00689	.12290	.12317	.12308
SDev	.00061	.00016	.00135	.00096	.00386	.00042	.00157
%RSD	.76276	4.6103	15.795	13.862	3.1374	.34396	1.2728
#1	.08110	.00369	.00950	.00757	.12562	.12347	.12419
#2	.08023	.00346	.00759	.00621	.12017	.12287	.12197
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.12000			.00900			.18000
Low	.04000			.00300			.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00946	.01640	.01409	.01725	.10308	.04189
SDev	.00354	.00490	.00209	.00143	.00002	.00023
%RSD	37.404	29.844	14.810	8.3056	.02028	.56205
#1	.00696	.01986	H.01557	.01623	.10310	.04206
#2	.01196	.01294	.01261	.01826	.10307	.04173
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.01500	.03000	.15000	.06000
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	14083	--	--	--	--	--	--
SDev	37.22945	--	--	--	--	--	--
%RSD	.2643560	--	--	--	--	--	--
#1	14057	--	--	--	--	--	--
#2	14109	--	--	--	--	--	--

Method: METTRA Sample Name: ICSA 0057-078-10 Operator: RJG
Run Time: 10/16/00 09:32:56
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00062	525.63	.00314	.00129	-.00157	487.82	-.00004
SDev	.00025	.45	.00133	.00008	.00003	1.71	.00019
%RSD	40.896	.08496	42.376	6.1980	2.0087	.35068	530.58
#1	-.00044	525.95	.00408	.00135	-.00160	489.03	.00010
#2	-.00079	525.32	.00220	.00124	-.00155	486.61	-.00017
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	-.00051	.00048	-.00134	204.85	531.44	.00731	-.00244
SDev	.00049	.00035	.00037	.37	1.61	.00003	.00018
%RSD	96.210	73.191	27.747	.18124	.30248	.40936	7.5498
#1	-.00016	.00073	-.00160	205.12	532.57	.00733	-.00231
#2	-.00086	.00023	-.00108	204.59	530.30	.00729	-.00257
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	.00081	-.01586	.00835	.00029	.00232	.00221	.00225
SDev	.00129	.00619	.00214	.00063	.00828	.00753	.00227
%RSD	159.24	39.018	25.618	217.45	356.63	339.96	100.69
#1	-.00010	-.01148	.00684	.00074	-.00353	.00754	.00385
#2	.00172	-.02024	.00987	-.00016	.00817	-.00311	.00065
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	-.00085	.00047	.00003	-.00264	.01273	.00499
SDev	.00302	.00005	.00097	.00075	.00046	.00002
%RSD	355.18	11.099	2932.9	28.430	3.6012	.46354
#1	-.00299	.00051	-.00065	-.00211	.01240	.00498
#2	.00129	.00044	.00072	-.00317	.01305	.00501
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value						
Range						

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13025	--	--	--	--	--	--
SDev	6.894291	--	--	--	--	--	--
%RSD	.0529327	--	--	--	--	--	--
#1	13020	--	--	--	--	--	--
#2	13030	--	--	--	--	--	--

Method: METTRA Sample Name: ICSAB 0057-104-1 Operator: RJG
Run Time: 10/16/00 09:37:06
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	.21440	497.78	.10393	.50192	.48126	462.69	.91034
SDev	.00068	2.20	.00143	.00094	.00022	.47	.00025
%RSD	.31862	.44211	1.3797	.18668	.04614	.10247	.02765
#1	.21489	496.22	.10292	.50126	.48142	463.02	.91016
#2	.21392	499.34	.10495	.50258	.48110	462.35	.91051
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	500.00	.10000	.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	.47260	.48505	.51382	194.43	503.90	.49185	-.00235
SDev	.00088	.00091	.00102	.40	.87	.00049	.00000
%RSD	.18690	.18724	.19815	.20749	.17217	.09945	.08921
#1	.47198	.48569	.51310	194.15	503.29	.49150	-.00235
#2	.47323	.48441	.51454	194.72	504.51	.49219	-.00235
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.50000	.50000	.50000	200.00	500.00	.50000	
Range	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	.94703	.03728	.05503	.04912	.60777	.61965	.61569
SDev	.00519	.00897	.00234	.00143	.01624	.01263	.00302
%RSD	.54759	24.057	4.2517	2.9023	2.6722	2.0386	.49006
#1	.95069	.04362	.05338	.05013	.59629	.62858	.61783
#2	.94336	.03093	.05668	.04811	.61926	.61071	.61356
Errors	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass
Value	1.0000			.05000			.60000
Range	20.000			20.000			20.000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05360	.04931	.05074	.09944	.50483	1.0122
SDev	.01232	.01071	.00304	.00668	.00185	.0011
%RSD	22.980	21.715	5.9925	6.7127	.36730	.11208
#1	.06231	.04174	.04859	.10417	.50615	1.0114
#2	.04489	.05688	.05289	.09472	.50352	1.0130
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass
Value			.05000	.10000	.50000	1.0000
Range			20.000	20.000	20.000	20.000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13596	--	--	--	--	--	--
SDev	28.67304	--	--	--	--	--	--
%RSD	.2108859	--	--	--	--	--	--
#1	13576	--	--	--	--	--	--
#2	13617	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-1 0057-094-6 Operator: RJG
Run Time: 10/16/00 09:41:15
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0347	23.892	.51575	1.9848	2.0071	49.801	.49700
SDev	.0066	.074	.00228	.0133	.0129	.234	.00517
%RSD	.63600	.30825	.44216	.66812	.64085	.47073	1.0401
#1	1.0393	23.840	.51736	1.9942	2.0162	49.967	.50066
#2	1.0300	23.944	.51414	1.9754	1.9980	49.635	.49335
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	2.0078	1.9978	1.9462	24.750	48.515	1.9865	2.0162
SDev	.0076	.0112	.0091	.079	.145	.0098	.0058
%RSD	.37749	.56032	.46790	.32048	.29815	.49289	.28868
#1	2.0131	2.0057	1.9526	24.806	48.617	1.9934	2.0203
#2	2.0024	1.9899	1.9398	24.694	48.413	1.9796	2.0120
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0073	.50538	.50758	.50685	.51411	.51466	.51448
SDev	.0248	.00061	.00666	.00424	.00040	.00309	.00193
%RSD	1.2352	.12068	1.3130	.83695	.07859	.60035	.37442
#1	2.0248	.50495	.51229	.50985	.51440	.51247	.51311
#2	1.9897	.50582	.50286	.50385	.51383	.51684	.51584
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	.52150	.51693	.51846	1.0383	1.9854	2.0234
SDev	.00335	.00179	.00007	.0033	.0147	.0148
%RSD	.64281	.34545	.01442	.31709	.73847	.73099
#1	.51913	.51820	.51851	1.0406	1.9958	2.0339
#2	.52388	.51567	.51840	1.0360	1.9750	2.0130
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	14125	--	--	--	--	--	--
SDev	67.91747	--	--	--	--	--	--
%RSD	.4808155	--	--	--	--	--	--
#1	14077	--	--	--	--	--	--
#2	14174	--	--	--	--	--	--

Method: METTRA Sample Name: CCB1 Operator: RJG
Run Time: 10/16/00 09:45:24
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00028	.05001	-.00048	.00023	.00014	.05745	.00030
SDev	.00018	.03486	.00065	.00002	.00001	.02397	.00006
%RSD	63.298	69.717	134.79	8.6459	8.3593	41.724	18.985
#1	-.00016	.02536	-.00095	.00024	.00014	.04050	.00026
#2	-.00041	.07466	-.00002	.00021	.00015	.07440	.00033
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.00015	.00043	.02701	.04677	.00032	.00215
SDev	.00007	.00014	.00015	.01861	.02420	.00002	.00171
%RSD	20.682	96.629	35.052	68.911	51.737	5.2198	79.629
#1	.00042	.00005	.00032	.01385	.02966	.00031	.00335
#2	.00031	.00025	.00053	.04017	.06388	.00033	.00094
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	-.00183	.00152	.00041	.00309	.00032	.00124
SDev	.00011	.00065	.00110	.00095	.00204	.00092	.00129
%RSD	33.055	35.757	71.972	234.06	65.959	289.75	104.12
#1	-.00024	-.00137	.00230	.00108	.00453	.00097	.00215
#2	-.00039	-.00230	.00075	-.00027	.00165	-.00033	.00033
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	.00122	.00219	.00187	.00050	.00058	.00032
SDev	.00165	.00024	.00039	.00229	.00026	.00008
%RSD	134.60	10.857	20.800	459.67	44.593	25.398
#1	.00239	.00203	.00215	.00212	.00076	.00027
#2	.00006	.00236	.00160	-.00112	.00039	.00038
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	14164	--	--	--	--	--	--
SDev	56.71010	--	--	--	--	--	--
%RSD	.4003721	--	--	--	--	--	--
#1	14124	--	--	--	--	--	--
#2	14204	--	--	--	--	--	--

Method: METTRA Sample Name: DM13MB Operator: RJG
Run Time: 10/16/00 09:49:32
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	-.00089	.03672	-.00047	-.00022	-.00054	.02649	-.00002
SDev	.00010	.00914	.00071	.00001	.00004	.00047	.00010
%RSD	11.643	24.877	152.01	6.1795	6.6411	1.7705	431.35
#1	-.00096	.04318	-.00097	-.00023	-.00056	.02616	-.00009
#2	-.00081	.03026	.00003	-.00021	-.00051	.02683	.00005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00024	-.00078	.00021	.00939	.00472	-.00028	-.00029
SDev	.00000	.00053	.00007	.00085	.00171	.00003	.00088
%RSD	1.8911	68.239	33.268	9.0857	36.219	11.023	306.21
#1	-.00024	-.00040	.00016	.00999	.00592	-.00026	.00034
#2	-.00023	-.00115	.00026	.00879	.00351	-.00030	-.00091
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	-.00035	.00161	.00186	.00178	.00061	.00047	.00052
SDev	.00001	.00110	.00021	.00022	.00207	.00158	.00037
%RSD	3.0672	68.257	11.300	12.648	337.61	340.01	71.037
#1	-.00034	.00238	.00172	.00194	.00208	-.00065	.00026
#2	-.00036	.00083	.00201	.00162	-.00085	.00159	.00077
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00744	.00621	.00166	-.00246	-.00142	.00070
SDev	.00140	.00124	.00129	.00054	.00000	.00009
%RSD	18.830	19.988	77.781	21.894	.02056	12.929
#1	-.00843	.00533	.00075	-.00208	-.00142	.00076
#2	-.00645	.00709	.00258	-.00284	-.00142	.00063
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	13838	--	--	--	--	--	--
SDev	95.17699	--	--	--	--	--	--
%RSD	.6878167	--	--	--	--	--	--
#1	13770	--	--	--	--	--	--
#2	13905	--	--	--	--	--	--

Method: METTRA Sample Name: DM13MC Operator: RJG
Run Time: 10/16/00 09:53:41
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	.62686	38.648	.69961	.70688	.48074	56.829	.60393
SDev	.00179	.129	.00303	.00026	.00206	.242	.00404
%RSD	.28641	.33325	.43249	.03620	.42884	.42505	.66967
#1	.62813	38.557	.70175	.70706	.48220	57.000	.60679
#2	.62559	38.739	.69747	.70670	.47928	56.658	.60107
Errors	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High			.85500				
Low			.50500				

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.58881	.45101	.59298	73.149	14.434	1.6722	.48193
SDev	.00159	.00207	.00019	.028	.025	.0028	.00012
%RSD	.26943	.45996	.03134	.03794	.17640	.16980	.02547
#1	.58993	.45248	.59311	73.168	14.452	1.6742	.48201
#2	.58769	.44954	.59284	73.129	14.416	1.6702	.48184
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.81805	.70725	.69922	.70189	.35283	.35811	.35635
SDev	.01134	.00336	.00210	.00028	.00023	.00778	.00526
%RSD	1.3867	.47505	.30080	.04047	.06525	2.1716	1.4771
#1	.82607	.70962	.69773	.70169	.35299	.36361	.36007
#2	.81003	.70487	.70070	.70209	.35267	.35261	.35263
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High				.85000			.59500
Low				.52500			.09400

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48339	.48747	.48611	.74754	.42106	.32652
SDev	.00282	.00037	.00119	.00775	.00152	.00189
%RSD	.58413	.07593	.24421	1.0361	.36109	.57875
#1	.48140	.48721	.48527	.75302	.42214	.32785
#2	.48539	.48773	.48695	.74206	.41999	.32518
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	NOCHECK	NOCHECK
High			.55000	.99500		
Low			.32450	.39800		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14441	--	--	--	--	--	--
SDev	109.4952	--	--	--	--	--	--
%RSD	.7582232	--	--	--	--	--	--
#1	14364	--	--	--	--	--	--
#2	14518	--	--	--	--	--	--

Method: METTRA Sample Name: DLX8G Operator: RJG
Run Time: 10/16/00 09:57:49
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01063	43.901	.11064	.98350	.00591	215.44	.01040
SDev	.00022	.043	.00006	.00152	.00002	.51	.00018
%RSD	2.0679	.09905	.05188	.15400	.25900	.23542	1.7177
#1	.01078	43.870	.11060	.98457	.00590	215.80	.01052
#2	.01047	43.931	.11068	.98243	.00592	215.08	.01027
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	.02139	.10242	3.1451	69.081	35.099	4.5174	.00645
SDev	.00117	.00053	.0039	.041	.062	.0064	.00042
%RSD	5.4843	.51332	.12370	.05932	.17729	.14070	6.4907
#1	.02056	.10204	3.1479	69.110	35.143	4.5219	.00674
#2	.02222	.10279	3.1424	69.052	35.055	4.5129	.00615
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	.41482	.29976	.29838	.29884	.00412	.00235	.00294
SDev	.00331	.00441	.00021	.00161	.00064	.00091	.00039
%RSD	.79667	1.4719	.07128	.53912	15.390	38.629	13.372
#1	.41716	.30288	.29853	.29998	.00457	.00170	.00266
#2	.41249	.29664	.29823	.29770	.00368	.00299	.00322
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	.00786	.00343	.00490	.00292	.07238	1.3359
SDev	.00012	.00339	.00222	.00536	.00014	.0039
%RSD	1.5689	98.929	45.284	183.65	.18605	.28872
#1	.00795	.00103	.00333	.00671	.07228	1.3386
#2	.00777	.00583	.00647	-.00087	.07247	1.3332
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	14926	--	--	--	--	--	--
SDev	27.86028	--	--	--	--	--	--
%RSD	.1866573	--	--	--	--	--	--
#1	14906	--	--	--	--	--	--
#2	14946	--	--	--	--	--	--

Method: METTRA Sample Name: DLX8GP5 Operator: RJG
Run Time: 10/16/00 10:01:58
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00134	8.9300	.02374	.21051	.00094	47.008	.00233
SDev	.00038	.0285	.00090	.00144	.00027	.204	.00018
%RSD	27.934	.31936	3.8117	.68203	28.480	.43317	7.5518
#1	.00108	8.9502	.02438	.21153	.00113	47.152	.00245
#2	.00161	8.9099	.02310	.20950	.00075	46.864	.00221

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00464	.02170	.64998	14.833	7.3423	.96989	.00068
SDev	.00007	.00000	.00293	.028	.0215	.00235	.00001
%RSD	1.4804	.01972	.45054	.18907	.29345	.24216	.83528
#1	.00469	.02170	.65205	14.853	7.3575	.97155	.00068
#2	.00459	.02169	.64791	14.814	7.3270	.96823	.00069

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09079	.06371	.06556	.06494	.00118	.00097	.00104
SDev	.00072	.00408	.00021	.00150	.00405	.00005	.00138
%RSD	.79234	6.3977	.32296	2.3076	344.45	5.1523	133.36
#1	.09028	.06083	.06541	.06388	.00404	.00100	.00201
#2	.09130	.06660	.06571	.06600	-.00169	.00093	.00006

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00175	.00118	.00020	-.00106	.01459	.29035
SDev	.00605	.00538	.00157	.00338	.00077	.00211
%RSD	345.01	455.39	772.05	317.58	5.2584	.72634
#1	-.00603	.00498	.00131	.00132	.01404	.29184
#2	.00253	-.00262	-.00091	-.00345	.01513	.28886

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14260	--	--	--	--	--	--
SDev	20.22298	--	--	--	--	--	--
%RSD	.1418111	--	--	--	--	--	--
#1	14275	--	--	--	--	--	--
#2	14246	--	--	--	--	--	--

Method: METTRA Sample Name: DLX8GX Operator: RJG
Run Time: 10/16/00 10:06:06
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	.00245	48.039	.09593	1.0354	.00567	151.51	.01356
SDev	.00065	.117	.00026	.0011	.00003	.45	.00010
%RSD	26.437	.24403	.26602	.10356	.52662	.29371	.71836
#1	.00291	47.956	.09611	1.0346	.00565	151.83	.01363
#2	.00199	48.122	.09575	1.0361	.00569	151.20	.01349
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	.02691	.07953	3.3521	83.313	36.623	3.9001	.00239
SDev	.00022	.00023	.0024	.089	.063	.0054	.00010
%RSD	.80793	.28569	.07188	.10706	.17144	.13844	4.1836
#1	.02676	.07970	3.3504	83.376	36.667	3.9039	.00231
#2	.02707	.07937	3.3538	83.250	36.579	3.8962	.00246
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	.44384	.34227	.33850	.33976	.00254	.00268	.00263
SDev	.00371	.00482	.00165	.00271	.00219	.00207	.00065
%RSD	.83525	1.4090	.48747	.79661	86.071	77.328	24.759
#1	.44646	.34568	.33967	.34167	.00100	.00414	.00309
#2	.44122	.33886	.33734	.33784	.00409	.00121	.00217
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	.00389	.00506	.00467	-.00136	.06692	1.3532
SDev	.00235	.00257	.00250	.00156	.00199	.0065
%RSD	60.357	50.780	53.437	114.99	2.9736	.47834
#1	.00223	.00324	.00291	-.00025	.06551	1.3578
#2	.00555	.00688	.00644	-.00246	.06833	1.3486
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	14742	--	--	--	--	--	--
SDev	160.2301	--	--	--	--	--	--
%RSD	1.086903	--	--	--	--	--	--
#1	14629	--	--	--	--	--	--
#2	14855	--	--	--	--	--	--

Method: METTRA Sample Name: DLX8GS Operator: RJG
Run Time: 10/16/00 10:10:15
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04418	43.128	.11433	2.4757	.04770	185.91	.05013
SDev	.00071	.057	.00106	.0127	.00057	1.52	.00043
%RSD	1.6097	.13181	.92559	.51383	1.1938	.81589	.86243
#1	.04468	43.169	.11508	2.4847	.04810	186.98	.05044
#2	.04368	43.088	.11358	2.4667	.04729	184.84	.04983
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	.43491	.24691	3.7702	79.291	35.023	4.3846	.00297
SDev	.00370	.00173	.0137	.485	.223	.0284	.00114
%RSD	.85066	.69943	.36444	.61167	.63571	.64682	38.542
#1	.43753	.24813	3.7799	79.634	35.181	4.4047	.00216
#2	.43230	.24569	3.7605	78.948	34.866	4.3646	.00378
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	.77993	.39102	.38604	.38770	.00201	.00298	.00266
SDev	.00773	.00650	.00438	.00508	.00034	.00115	.00065
%RSD	.99042	1.6617	1.1342	1.3114	17.146	38.472	24.473
#1	.78540	.39562	.38914	.39129	.00225	.00217	.00220
#2	.77447	.38643	.38295	.38410	.00177	.00380	.00312
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	.01109	.01236	.01194	.04433	.47120	1.5411
SDev	.00071	.00130	.00063	.00428	.00804	.0161
%RSD	6.3894	10.484	5.2644	9.6600	1.7052	1.0471
#1	.01059	.01328	.01238	.04130	.47688	1.5525
#2	.01159	.01144	.01149	.04735	.46552	1.5297
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	14837	--	--	--	--	--	--
SDev	148.3868	--	--	--	--	--	--
%RSD	1.000098	--	--	--	--	--	--
#1	14732	--	--	--	--	--	--
#2	14942	--	--	--	--	--	--

Method: METTRA Sample Name: DLX8J Operator: RJG
Run Time: 10/16/00 10:14:24
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00074	52.297	.05848	.80648	.00503	92.760	.00899
SDev	.00001	1.131	.00014	.01393	.00021	1.726	.00028
%RSD	1.3116	2.1630	.24072	1.7270	4.1835	1.8609	3.1177
#1	.00075	51.498	.05838	.79663	.00518	91.539	.00880
#2	.00074	53.097	.05858	.81633	.00488	93.980	.00919
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	.02869	.06179	.78024	86.590	24.316	6.1441	.00018
SDev	.00082	.00134	.01485	1.870	.482	.1224	.00002
%RSD	2.8687	2.1610	1.9036	2.1596	1.9827	1.9917	13.185
#1	.02811	.06085	.76973	85.268	23.976	6.0575	.00020
#2	.02927	.06274	.79074	87.912	24.657	6.2306	.00017
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	.20377	.22757	.22411	.22526	.00043	.00378	.00266
SDev	.00510	.00353	.00438	.00410	.00304	.00332	.00323
%RSD	2.5044	1.5530	1.9560	1.8205	714.73	87.969	121.32
#1	.20016	.22508	.22101	.22236	-.00172	.00143	.00038
#2	.20738	.23007	.22721	.22816	.00258	.00613	.00495
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	.00533	.00369	.00424	-.00547	.07214	.62617
SDev	.00135	.00046	.00015	.00109	.00113	.01087
%RSD	25.333	12.344	3.4295	19.900	1.5738	1.7360
#1	.00628	.00337	.00434	-.00624	.07134	.61848
#2	.00437	.00402	.00414	-.00470	.07295	.63386
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	14128	--	--	--	--	--	--
SDev	241.7946	--	--	--	--	--	--
%RSD	1.711508	--	--	--	--	--	--
#1	14299	--	--	--	--	--	--
#2	13957	--	--	--	--	--	--

Method: METTRA Sample Name: DLX8L Operator: RJG
Run Time: 10/16/00 10:18:33
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	-.00855	34.902	.04001	.48055	.00397	30.385	.04532
SDev	.00020	.061	.00079	.00054	.00003	.065	.00019
%RSD	2.3197	.17539	1.9723	.11238	.85276	.21524	.43065
#1	-.00841	34.859	.03945	.48093	.00395	30.431	.04545
#2	-.00869	34.945	.04057	.48017	.00400	30.338	.04518
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	.02899	.05343	.14838	88.109	14.468	2.6740	.00080
SDev	.00037	.00051	.00025	.036	.022	.0036	.00019
%RSD	1.2704	.95668	.16950	.04140	.14998	.13365	24.358
#1	.02925	.05379	.14855	88.135	14.483	2.6765	.00066
#2	.02873	.05307	.14820	88.084	14.453	2.6715	.00094
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	.10039	.55689	.55539	.55589	.00027	.00060	.00049
SDev	.00232	.00454	.00132	.00239	.00100	.00016	.00023
%RSD	2.3085	.81464	.23727	.42988	377.13	26.695	47.028
#1	.10203	.56010	.55633	.55758	.00098	.00048	.00065
#2	.09875	.55368	.55446	.55420	-.00044	.00071	.00032
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00566	.00213	-.00046	.00243	.06979	1.0704
SDev	.00154	.00212	.00090	.00012	.00061	.0039
%RSD	27.260	99.222	193.30	5.1104	.87109	.36415
#1	-.00457	.00064	-.00110	.00234	.07022	1.0732
#2	-.00675	.00363	.00017	.00252	.06936	1.0677
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	16915	--	--	--	--	--	--
SDev	68.97744	--	--	--	--	--	--
%RSD	.4077892	--	--	--	--	--	--
#1	16866	--	--	--	--	--	--
#2	16964	--	--	--	--	--	--

Method: METTRA Sample Name: DLX8N Operator: RJG
Run Time: 10/16/00 10:22:42
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	L-.03119	32.949	.05181	.49390	.00269	7.8300	.01451
SDev	.00006	.003	.00079	.00164	.00004	.0439	.00025
%RSD	.18823	.00798	1.5303	.33136	1.5772	.56051	1.7291
#1	L-.03115	32.951	.05125	.49506	.00272	7.8611	.01469
#2	L-.03124	32.947	.05237	.49274	.00266	7.7990	.01434
Errors	LC Low	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	.02640	.05210	.09431	76.928	9.3646	2.7326	.00068
SDev	.00048	.00037	.00013	.317	.0428	.0121	.00029
%RSD	1.8104	.71401	.13980	.41206	.45691	.44199	42.831
#1	.02673	.05237	.09440	77.152	9.3949	2.7412	.00047
#2	.02606	.05184	.09421	76.704	9.3343	2.7241	.00089
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	.07663	.26306	.28170	.27549	.00113	-.00318	-.00174
SDev	.00127	.00025	.00145	.00105	.00063	.00209	.00160
%RSD	1.6580	.09602	.51465	.38153	55.709	65.766	92.033
#1	.07573	.26324	.28272	.27624	.00158	-.00170	-.00061
#2	.07753	.26288	.28067	.27475	.00069	-.00465	-.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	-.02125	.00429	-.00421	.00756	.06090	.53620
SDev	.00044	.00333	.00207	.00080	.00057	.00418
%RSD	2.0869	77.620	49.231	10.545	.93743	.77980
#1	-.02094	.00194	L-.00568	.00700	.06131	.53916
#2	-.02157	.00665	-.00275	.00812	.06050	.53324
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	15110	--	--	--	--	--	--
SDev	93.55009	--	--	--	--	--	--
%RSD	.6191372	--	--	--	--	--	--
#1	15044	--	--	--	--	--	--
#2	15176	--	--	--	--	--	--

Method: METTRA Sample Name: DLX8P Operator: RJG
Run Time: 10/16/00 10:26:51
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00098	42.286	.04533	.66333	.00257	24.966	.11238
SDev	.00033	.527	.00173	.00599	.00013	.184	.00065
%RSD	33.950	1.2464	3.8260	.90362	5.1923	.73667	.57725
#1	-.00074	41.913	.04655	.65909	.00267	24.836	.11192
#2	-.00121	42.659	.04410	.66757	.00248	25.097	.11284
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	.03732	.06460	.09957	102.59	15.626	4.1233	.00053
SDev	.00032	.00012	.00095	1.03	.129	.0390	.00043
%RSD	.84409	.18745	.95042	1.0068	.82492	.94638	80.872
#1	.03710	.06452	.09890	101.86	15.535	4.0957	.00023
#2	.03755	.06469	.10023	103.32	15.718	4.1509	.00083
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	.08135	.48757	.48038	.48277	.00111	.00335	.00260
SDev	.00076	.00367	.00738	.00615	.00069	.00062	.00019
%RSD	.93951	.75330	1.5366	1.2732	61.711	18.571	7.1301
#1	.08189	.48498	.47516	.47843	.00063	.00379	.00273
#2	.08081	.49017	.48559	.48712	.00160	.00291	.00247
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	-.00406	.00117	-.00058	-.00346	.08590	1.1732
SDev	.00068	.00371	.00270	.00485	.00084	.0091
%RSD	16.744	318.24	469.26	140.09	.97796	.77875
#1	-.00455	-.00146	-.00249	-.00003	.08531	1.1668
#2	-.00358	.00379	.00133	-.00689	.08650	1.1797
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	14624	--	--	--	--	--	--
SDev	67.13993	--	--	--	--	--	--
%RSD	.4591165	--	--	--	--	--	--
#1	14671	--	--	--	--	--	--
#2	14576	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-2 Operator: RJG
Run Time: 10/16/00 10:31:00
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	1.0327	23.421	.51490	1.9644	2.0093	49.651	.49607
SDev	.0113	.160	.00206	.0143	.0216	.597	.00678
%RSD	1.0922	.68321	.40003	.72997	1.0771	1.2022	1.3671
#1	1.0407	23.534	.51635	1.9745	2.0246	50.073	.50087
#2	1.0247	23.308	.51344	1.9542	1.9940	49.229	.49128
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	2.0105	2.0007	1.9243	24.616	48.491	1.9769	2.0213
SDev	.0202	.0212	.0144	.219	.528	.0189	.0152
%RSD	1.0042	1.0576	.75008	.88849	1.0898	.95480	.75287
#1	2.0248	2.0156	1.9346	24.770	48.864	1.9902	2.0321
#2	1.9963	1.9857	1.9141	24.461	48.117	1.9635	2.0106
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	1.9918	.50999	.50871	.50913	.51585	.51437	.51486
SDev	.0298	.00639	.00748	.00712	.00760	.01469	.01233
%RSD	1.4975	1.2532	1.4711	1.3984	1.4739	2.8554	2.3945
#1	2.0129	.51451	.51400	.51417	.52123	.52475	.52358
#2	1.9707	.50547	.50341	.50410	.51048	.50398	.50615
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	.52378	.52360	.52366	1.0322	1.9837	2.0122
SDev	.00556	.01535	.01209	.0088	.0233	.0262
%RSD	1.0618	2.9319	2.3090	.85393	1.1737	1.3031
#1	.52771	.53445	.53221	1.0385	2.0002	2.0307
#2	.51985	.51274	.51511	1.0260	1.9673	1.9936
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	14213	--	--	--	--	--	--
SDev	188.8327	--	--	--	--	--	--
%RSD	1.328594	--	--	--	--	--	--
#1	14079	--	--	--	--	--	--
#2	14346	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2 Operator: RJG
Run Time: 10/16/00 10:35:10
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	-.00050	-.01626	-.00031	.00019	.00090	.01645	.00008
SDev	.00035	.00282	.00094	.00008	.00010	.00068	.00013
%RSD	69.938	17.376	308.46	42.366	11.555	4.0995	173.40
#1	-.00074	-.01426	.00036	.00025	.00097	.01598	.00017
#2	-.00025	-.01825	-.00097	.00013	.00083	.01693	-.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	-.00104	-.00056	-.00022	.01172	.00045	.00082	.00152
SDev	.00083	.00060	.00054	.00660	.00229	.00001	.00156
%RSD	80.395	105.84	246.86	56.328	503.04	1.5896	102.52
#1	-.00163	-.00098	-.00060	.01638	.00207	.00081	.00262
#2	-.00045	-.00014	.00016	.00705	-.00116	.00083	.00042
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00099	-.00257	.00286	.00105	-.00024	.00131	.00079
SDev	.00094	.00167	.00024	.00072	.00072	.00111	.00098
%RSD	95.231	65.125	8.5283	68.392	304.04	85.121	123.80
#1	-.00166	-.00375	.00268	.00054	.00027	.00209	.00148
#2	-.00032	-.00138	.00303	.00156	-.00074	.00052	.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	.00099	.00191	.00161	-.00202	-.00072	.00064
SDev	.00066	.00073	.00071	.00496	.00048	.00003
%RSD	66.582	38.488	44.282	245.70	66.867	5.3890
#1	.00053	.00139	.00110	-.00552	-.00107	.00061
#2	.00146	.00243	.00211	.00149	-.00038	.00066
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14775	--	--	--	--	--	--
SDev	63.67483	--	--	--	--	--	--
%RSD	.4309582	--	--	--	--	--	--
#1	14730	--	--	--	--	--	--
#2	14820	--	--	--	--	--	--

Method: METTRA Sample Name: DLX8T Operator: RJG
Run Time: 10/16/00 10:39:59
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	.00055	13.497	1.7450	.58907	.00426	14.600	.00507
SDev	.00003	.035	.0104	.00115	.00011	.044	.00040
%RSD	4.8610	.25765	.59330	.19584	2.6507	.30358	7.9831
#1	.00057	13.472	1.7523	.58988	.00434	14.631	.00478
#2	.00053	13.521	1.7377	.58825	.00418	14.569	.00535
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	.02165	.05891	.18264	195.86	3.8513	.41169	.03626
SDev	.00024	.00020	.00085	.07	.0071	.00054	.00067
%RSD	1.0883	.33632	.46301	.03678	.18560	.13075	1.8379
#1	.02181	.05877	.18204	195.91	3.8563	.41207	.03674
#2	.02148	.05905	.18323	195.81	3.8462	.41131	.03579
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	.05314	.18556	.17686	.17976	.00208	.00782	.00591
SDev	.00121	.00037	.00072	.00060	.00116	.00129	.00125
%RSD	2.2802	.19834	.40406	.33334	55.965	16.464	21.087
#1	.05399	.18530	.17635	.17933	.00125	.00691	.00503
#2	.05228	.18582	.17736	.18018	.00290	.00873	.00679
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00115	.01542	.01067	.04616	.08797	.25115
SDev	.00046	.00302	.00186	.00070	.00011	.00151
%RSD	40.314	19.601	17.449	1.5188	.12969	.59921
#1	.00148	.01328	.00935	.04665	.08805	.25221
#2	.00082	.01756	.01198	.04566	.08789	.25008
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	14075	--	--	--	--	--	--
SDev	55.89665	--	--	--	--	--	--
%RSD	.3971448	--	--	--	--	--	--
#1	14035	--	--	--	--	--	--
#2	14114	--	--	--	--	--	--

Analytical spike prepared by adding .22ml of STD5A(0057-058-10) to a final volume of 10mls of sample DLX8G 10/16/00

Analysis Report 10/16/00 10:48:13 AM

PB 10/16/00

Method: METTRA Sample Name: DLX8GA As=.22ppm Operator: RJG
Run Time: 10/16/00 10:44:08
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05325	42.184	.32303	1.1542	.21125	209.17	.20906
SDev	.00078	.468	.00594	.0088	.00189	1.97	.00182
%RSD	1.4742	1.1105	1.8388	.76081	.89618	.94376	.87062
#1	.05269	41.853	.31883	1.1480	.20991	207.77	.20778
#2	.05380	42.516	.32723	1.1604	.21258	210.56	.21035
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	.22889	.30417	3.2436	66.944	34.184	4.5840	.21384
SDev	.00164	.00373	.0303	.834	.368	.0480	.00225
%RSD	.71830	1.2263	.93366	1.2458	1.0764	1.0466	1.0537
#1	.22772	.30153	3.2222	66.354	33.924	4.5501	.21225
#2	.23005	.30680	3.2650	67.534	34.444	4.6179	.21544
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	.60386	.49880	.49309	.49499	.21374	.21346	.21355
SDev	.00318	.00682	.01318	.01106	.00562	.00426	.00472
%RSD	.52642	1.3673	2.6736	2.2353	2.6300	1.9980	2.2086
#1	.60162	.49398	.48377	.48717	.20977	.21044	.21022
#2	.60611	.50362	.50241	.50282	.21772	.21647	.21689
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	.21778	.21890	.21852	.43103	.27194	1.4990
SDev	.00719	.00485	.00563	.00389	.00369	.0143
%RSD	3.3024	2.2180	2.5778	.90325	1.3578	.95494
#1	.21269	.21546	.21454	.42828	.26933	1.4889
#2	.22286	.22233	.22251	.43378	.27455	1.5091
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	15125	--	--	--	--	--	--
SDev	162.4226	--	--	--	--	--	--
%RSD	1.073882	--	--	--	--	--	--
#1	15240	--	--	--	--	--	--
#2	15010	--	--	--	--	--	--

Method: METTRA Sample Name: CRI-2 Operator: RJG
Run Time: 10/16/00 10:48:17
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	.01998	.37454	.02077	.39591	.01024	9.9190	.01000
SDev	.00056	.00826	.00076	.00517	.00006	.1195	.00026
%RSD	2.7962	2.2058	3.6340	1.3061	.58136	1.2045	2.5610
#1	.01959	.38038	.02131	.39957	.01028	10.004	.01018
#2	.02038	.36869	.02024	.39225	.01020	9.8346	.00982
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.03000	.60000	.03000	.60000	.01500	15.000	.01500
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	.10236	.01994	.04669	.19493	9.5284	.03040	-.00076
SDev	.00100	.00030	.00060	.00786	.1020	.00023	.00098
%RSD	.97230	1.5137	1.2838	4.0341	1.0703	.75294	129.41
#1	.10306	.01973	.04711	.18937	9.6005	.03056	-.00146
#2	.10166	.02015	.04627	.20049	9.4563	.03024	-.00006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.15000	.03000	.07500	.30000	15.000	.04500	
Low	.05000	.01000	.02500	.10000	5.0000	.01500	

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07948	.00599	.00574	.00583	.12191	.11955	.12033
SDev	.00031	.00275	.00188	.00034	.00164	.00208	.00084
%RSD	.39432	45.931	32.759	5.8111	1.3470	1.7385	.69761
#1	.07970	.00405	.00707	.00607	.12307	.11808	.11974
#2	.07926	.00794	.00441	.00559	.12075	.12102	.12093
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.12000			.00900			.18000
Low	.04000			.00300			.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01148	.01015	.01059	.01976	.10116	.04110
SDev	.00111	.00391	.00298	.00105	.00051	.00050
%RSD	9.6358	38.561	28.120	5.3113	.50811	1.2166
#1	.01226	.01292	.01270	.02050	.10153	.04146
#2	.01070	.00738	.00849	.01902	.10080	.04075
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.01500	.03000	.15000	.06000
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	14373	--	--	--	--	--	--
SDev	72.44323	--	--	--	--	--	--
%RSD	.5040239	--	--	--	--	--	--
#1	14322	--	--	--	--	--	--
#2	14424	--	--	--	--	--	--

Method: METTRA Sample Name: ICSA 0057-078-10 Operator: RJG
Run Time: 10/16/00 10:52:26
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00064	516.36	-.00038	.00146	-.00119	488.00	.00069
SDev	.00038	.78	.00155	.00004	.00003	.44	.00016
%RSD	59.841	.15116	412.76	2.5973	2.8306	.09084	23.169
#1	-.00037	516.92	.00072	.00144	-.00122	488.32	.00080
#2	-.00091	515.81	-.00147	.00149	-.00117	487.69	.00057
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	-.00025	.00077	-.00229	204.15	532.41	.00762	-.00289
SDev	.00061	.00035	.00008	.18	.79	.00014	.00101
%RSD	245.81	45.784	3.4238	.08984	.14772	1.8415	34.896
#1	-.00068	.00052	-.00235	204.28	532.97	.00772	-.00218
#2	.00018	.00102	-.00223	204.02	531.85	.00752	-.00360
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	.00111	-.00648	.00228	-.00064	.00557	.00277	.00370
SDev	.00022	.00282	.00061	.00134	.00385	.00647	.00303
%RSD	19.692	43.573	26.676	210.65	69.097	233.08	81.828
#1	.00096	-.00847	.00185	-.00159	.00285	.00735	.00585
#2	.00127	-.00448	.00271	.00031	.00829	-.00180	.00156
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	.00471	-.00150	.00057	-.00267	.01109	.00512
SDev	.00287	.00003	.00094	.00237	.00097	.00017
%RSD	60.935	1.6613	165.77	89.115	8.7627	3.2991
#1	.00674	-.00152	.00123	-.00099	.01178	.00524
#2	.00268	-.00148	-.00010	-.00434	.01040	.00500
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value						
Range						

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13020	--	--	--	--	--	--
SDev	17.18256	--	--	--	--	--	--
%RSD	.1319755	--	--	--	--	--	--
#1	13032	--	--	--	--	--	--
#2	13007	--	--	--	--	--	--

Method: METTRA Sample Name: ICSAB 0057-104-1 Operator: RJG
Run Time: 10/16/00 10:56:35
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	.22191	504.44	.10550	.51585	.50039	478.51	.94592
SDev	.00163	3.18	.00281	.00411	.00449	4.36	.00858
%RSD	.73287	.62981	2.6678	.79586	.89738	.91085	.90748
#1	.22306	506.69	.10749	.51875	.50357	481.59	.95199
#2	.22076	502.19	.10351	.51295	.49722	475.43	.93985
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	500.00	.10000	.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	.49191	.50509	.52591	200.46	522.58	.50887	-.00411
SDev	.00247	.00530	.00372	1.37	3.89	.00383	.00037
%RSD	.50231	1.0485	.70791	.68563	.74481	.75322	8.9173
#1	.49365	.50883	.52855	201.43	525.33	.51158	-.00437
#2	.49016	.50134	.52328	199.48	519.83	.50616	-.00385
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.50000	.50000	.50000	200.00	500.00	.50000	
Range	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	.97702	.04650	.05470	.05197	.63805	.65478	.64921
SDev	.00925	.00100	.00141	.00128	.00805	.00328	.00049
%RSD	.94657	2.1574	2.5860	2.4583	1.2611	.50032	.07616
#1	.98356	.04579	.05370	.05107	.64374	.65246	.64956
#2	.97048	.04721	.05570	.05287	.63236	.65710	.64886
Errors	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass
Value	1.0000			.05000			.60000
Range	20.000			20.000			20.000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05151	.04843	.04945	.10481	.52035	1.0464
SDev	.00752	.00445	.00046	.00324	.00575	.0089
%RSD	14.593	9.1797	.93447	3.0955	1.1060	.84581
#1	.04619	.05157	.04978	.10711	.52442	1.0527
#2	.05682	.04528	.04913	.10252	.51628	1.0401
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass
Value			.05000	.10000	.50000	1.0000
Range			20.000	20.000	20.000	20.000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13261	--	--	--	--	--	--
SDev	106.7379	--	--	--	--	--	--
%RSD	.8048903	--	--	--	--	--	--
#1	13186	--	--	--	--	--	--
#2	13337	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3 Operator: RJG
Run Time: 10/16/00 11:00:45
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	1.0348	23.410	.51506	1.9731	2.0150	49.810	.49801
SDev	.0028	.095	.00429	.0010	.0079	.177	.00329
%RSD	.27380	.40700	.83280	.05302	.39346	.35483	.65979
#1	1.0368	23.343	.51809	1.9738	2.0206	49.935	.50034
#2	1.0328	23.478	.51203	1.9724	2.0094	49.686	.49569
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	2.0195	2.0086	1.9293	24.629	48.564	1.9895	2.0314
SDev	.0072	.0071	.0018	.048	.109	.0057	.0011
%RSD	.35705	.35130	.09454	.19343	.22400	.28793	.05544
#1	2.0246	2.0135	1.9306	24.662	48.641	1.9936	2.0322
#2	2.0144	2.0036	1.9280	24.595	48.487	1.9855	2.0306
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	1.9972	.50999	.50849	.50899	.51825	.51084	.51331
SDev	.0128	.00432	.00639	.00570	.01025	.00364	.00584
%RSD	.64249	.84642	1.2557	1.1191	1.9777	.71169	1.1373
#1	2.0063	.51304	.51300	.51301	.52550	.51341	.51743
#2	1.9881	.50694	.50397	.50496	.51100	.50827	.50918
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	.52449	.52518	.52495	1.0418	1.9852	2.0148
SDev	.00001	.00920	.00613	.0031	.0075	.0113
%RSD	.00235	1.7519	1.1682	.29570	.37717	.56161
#1	.52448	.53169	.52929	1.0396	1.9905	2.0228
#2	.52450	.51868	.52062	1.0440	1.9799	2.0068
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	14185	--	--	--	--	--	--
SDev	55.40154	--	--	--	--	--	--
%RSD	.3905746	--	--	--	--	--	--
#1	14145	--	--	--	--	--	--
#2	14224	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3 Operator: RJG
Run Time: 10/16/00 11:04:53
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	-.00074	.02178	-.00027	.00023	.00089	.03722	.00004
SDev	.00012	.00243	.00023	.00001	.00012	.00056	.00023
%RSD	16.082	11.161	84.086	5.5703	13.198	1.5151	578.48
#1	-.00065	.02350	-.00011	.00024	.00097	.03762	-.00012
#2	-.00082	.02006	-.00043	.00022	.00081	.03682	.00021
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	-.00163	-.00031	-.00020	.01065	.03135	.00026	.00248
SDev	.00016	.00063	.00030	.01189	.00167	.00008	.00078
%RSD	9.8037	199.47	147.99	111.63	5.3092	29.687	31.522
#1	-.00174	.00013	.00001	.01906	.03018	.00032	.00303
#2	-.00151	-.00076	-.00041	.00224	.03253	.00021	.00192
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	-.00089	-.00051	.00262	.00158	.00141	-.00119	-.00032
SDev	.00069	.00188	.00093	.00001	.00351	.00192	.00011
%RSD	77.007	367.00	35.304	.62460	248.91	161.92	35.419
#1	-.00041	.00082	.00197	.00158	-.00107	.00017	-.00024
#2	-.00138	-.00185	.00328	.00157	.00389	-.00255	-.00040
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	.00175	.00124	.00141	.00052	-.00053	.00047
SDev	.00156	.00162	.00056	.00323	.00026	.00004
%RSD	89.199	130.43	39.832	625.18	49.591	8.1173
#1	.00285	.00010	.00101	-.00177	-.00034	.00050
#2	.00065	.00239	.00181	.00280	-.00071	.00045
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	14373	--	--	--	--	--	--
SDev	80.43340	--	--	--	--	--	--
%RSD	.5596038	--	--	--	--	--	--
#1	14316	--	--	--	--	--	--
#2	14430	--	--	--	--	--	--

Method: METTRA Sample Name: DM4CWB Operator: RJG
Run Time: 10/16/00 11:09:02
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	-.00052	.00821	-.00042	-.00035	.00019	.01946	.00021
SDev	.00034	.00013	.00148	.00002	.00013	.00105	.00010
%RSD	64.943	1.5257	350.44	4.6665	65.806	5.3750	47.166
#1	-.00076	.00830	-.00147	-.00033	.00028	.01872	.00014
#2	-.00028	.00812	.00062	-.00036	.00010	.02020	.00028
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	-.00003	-.00005	-.00008	-.00731	.00449	-.00025	.00027
SDev	.00049	.00038	.00024	.00898	.00115	.00002	.00008
%RSD	1432.5	786.34	282.43	122.77	25.723	9.3110	30.757
#1	.00031	-.00031	-.00025	-.01366	.00367	-.00026	.00033
#2	-.00038	.00022	.00008	-.00096	.00531	-.00023	.00021
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	-.00081	.00188	.00088	.00121	-.00029	.00214	.00133
SDev	.00079	.00169	.00218	.00089	.00040	.00061	.00054
%RSD	96.651	90.248	247.32	73.478	138.57	28.493	40.638
#1	-.00026	.00307	-.00066	.00058	-.00001	.00257	.00171
#2	-.00137	.00068	.00242	.00184	-.00058	.00171	.00095
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	-.00502	.00451	.00133	-.00609	-.00052	.00045
SDev	.00356	.00318	.00331	.00415	.00026	.00009
%RSD	71.039	70.611	247.91	68.067	49.013	19.428
#1	-.00754	.00226	-.00101	-.00316	-.00071	.00039
#2	-.00250	.00676	.00367	-.00903	-.00034	.00051
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	14240	--	--	--	--	--	--
SDev	1.979761	--	--	--	--	--	--
%RSD	.0139027	--	--	--	--	--	--
#1	14239	--	--	--	--	--	--
#2	14242	--	--	--	--	--	--

Method: METTRA Sample Name: DM4CWC Operator: RJG
Run Time: 10/16/00 11:13:11
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	.61647	38.824	.68511	.65328	.47070	57.595	.59283
SDev	.00141	.419	.00272	.00497	.00021	.113	.00090
%RSD	.22858	1.0785	.39664	.76036	.04471	.19691	.15111
#1	.61547	38.528	.68703	.64977	.47055	57.514	.59219
#2	.61746	39.121	.68319	.65679	.47085	57.675	.59346
Errors	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High			.85500				
Low			.50500				

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.58470	.44850	.57498	67.154	14.289	1.6356	.47762
SDev	.00012	.00122	.00437	.284	.049	.0056	.00103
%RSD	.02124	.27185	.75998	.42333	.34168	.34294	.21619
#1	.58462	.44764	.57189	66.953	14.254	1.6316	.47689
#2	.58479	.44936	.57807	67.355	14.324	1.6395	.47835
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High							
Low							

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.80008	.72722	.71847	.72138	.35050	.35218	.35162
SDev	.00245	.00501	.00506	.00504	.00223	.00374	.00324
%RSD	.30627	.68872	.70428	.69906	.63501	1.0616	.92002
#1	.79835	.73076	.72205	.72495	.35208	.35482	.35391
#2	.80181	.72368	.71489	.71782	.34893	.34953	.34933
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High				.85000			.59500
Low				.52500			.09400

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47833	.48426	.48228	.73510	.40131	.34171
SDev	.00497	.00346	.00396	.00291	.00247	.00022
%RSD	1.0397	.71383	.82147	.39557	.61542	.06537
#1	.48185	.48670	.48509	.73304	.39956	.34155
#2	.47481	.48181	.47948	.73716	.40305	.34187
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	NOCHECK	NOCHECK
High			.55000	.99500		
Low			.32450	.39800		

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14359	--	--	--	--	--	--
SDev	100.7979	--	--	--	--	--	--
%RSD	.7019635	--	--	--	--	--	--
#1	14288	--	--	--	--	--	--
#2	14431	--	--	--	--	--	--

Method: METTRA Sample Name: DM2GW Operator: RJG
Run Time: 10/16/00 11:17:20
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00032	43.507	.03369	.30853	.00254	140.35	.00111
SDev	.00037	.170	.00056	.00016	.00003	.09	.00003
%RSD	116.26	.39171	1.6619	.05182	1.1531	.06365	2.8426
#1	-.00006	43.387	.03408	.30841	.00252	140.41	.00109
#2	-.00058	43.628	.03329	.30864	.00256	140.29	.00114
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	.03337	.06192	.09374	98.627	19.352	3.6314	.00040
SDev	.00015	.00082	.00047	.199	.021	.0037	.00031
%RSD	.44839	1.3254	.50646	.20153	.10728	.10141	78.658
#1	.03326	.06250	.09340	98.486	19.337	3.6288	.00018
#2	.03347	.06134	.09407	98.767	19.367	3.6340	.00062
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	.08851	.10233	.10110	.10151	.00289	.00197	.00227
SDev	.00028	.00086	.00203	.00107	.00212	.00086	.00013
%RSD	.31510	.84024	2.0128	1.0551	73.452	43.692	5.8454
#1	.08831	.10294	.09966	.10075	.00139	.00257	.00218
#2	.08871	.10172	.10254	.10227	.00439	.00136	.00237
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	-.00344	.00324	.00101	-.00314	.07761	.38800
SDev	.00039	.00032	.00034	.00300	.00013	.00080
%RSD	11.195	9.9188	33.788	95.531	.17036	.20499
#1	-.00371	.00301	.00077	-.00102	.07770	.38856
#2	-.00317	.00346	.00126	-.00526	.07751	.38744
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	14437	--	--	--	--	--	--
SDev	63.67483	--	--	--	--	--	--
%RSD	.4410416	--	--	--	--	--	--
#1	14392	--	--	--	--	--	--
#2	14482	--	--	--	--	--	--

Method: METTRA Sample Name: DM2GWP5 Operator: RJG
Run Time: 10/16/00 11:21:29
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	-.00028	8.2749	.00676	.06119	.00088	28.422	.00015
SDev	.00010	.0279	.00020	.00052	.00005	.147	.00004
%RSD	35.085	.33764	3.0107	.84883	5.3933	.51867	25.102
#1	-.00021	8.2946	.00691	.06155	.00091	28.526	.00012
#2	-.00035	8.2551	.00662	.06082	.00084	28.317	.00017

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00611	.01220	.01700	19.788	3.8031	.72863	-.00084
SDev	.00048	.00011	.00013	.069	.0230	.00312	.00026
%RSD	7.8096	.85918	.76944	.34681	.60526	.42779	31.122
#1	.00578	.01228	.01690	19.837	3.8194	.73083	-.00066
#2	.00645	.01213	.01709	19.740	3.7868	.72643	-.00103

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01672	.02062	.02019	.02033	-.00020	.00051	.00028
SDev	.00185	.00319	.00077	.00055	.00155	.00162	.00160
%RSD	11.045	15.466	3.8206	2.6920	771.75	315.09	578.43
#1	.01803	.02287	.01964	.02072	-.00130	-.00063	-.00085
#2	.01542	.01836	.02073	.01994	.00090	.00166	.00141

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00125	.00115	.00118	-.00329	.01520	.07793
SDev	.00286	.00265	.00081	.00064	.00041	.00061
%RSD	229.43	229.58	68.723	19.449	2.7195	.77775
#1	.00327	-.00072	.00061	-.00374	.01490	.07836
#2	-.00078	.00303	.00176	-.00284	.01549	.07750

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14526	--	--	--	--	--	--
SDev	90.50967	--	--	--	--	--	--
%RSD	.6230723	--	--	--	--	--	--
#1	14462	--	--	--	--	--	--
#2	14590	--	--	--	--	--	--

Method: METTRA Sample Name: DM2GWX Operator: RJG
Run Time: 10/16/00 11:25:37
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00017	47.123	.06164	.36042	.00260	32.854	.00153
SDev	.00009	.241	.00134	.00059	.00001	.097	.00026
%RSD	49.914	.51180	2.1733	.16329	.31224	.29589	16.849
#1	-.00023	46.952	.06069	.36001	.00261	32.786	.00172
#2	-.00011	47.293	.06259	.36084	.00260	32.923	.00135
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	.03719	.06450	.11204	106.52	19.189	2.0203	.00081
SDev	.00027	.00070	.00006	.61	.079	.0074	.00016
%RSD	.72835	1.0827	.05705	.57355	.41067	.36604	19.838
#1	.03738	.06499	.11199	106.08	19.133	2.0150	.00093
#2	.03700	.06400	.11208	106.95	19.245	2.0255	.00070
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	.09384	.10868	.10402	.10557	.00313	.00298	.00303
SDev	.00148	.00158	.00307	.00152	.00104	.00001	.00034
%RSD	1.5725	1.4568	2.9468	1.4372	33.261	.22093	11.299
#1	.09488	.10980	.10185	.10450	.00386	.00297	.00327
#2	.09279	.10756	.10619	.10665	.00239	.00298	.00278
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	-.00284	.00593	.00301	-.00242	.08353	.38021
SDev	.00099	.00133	.00122	.00144	.00026	.00150
%RSD	34.902	22.386	40.362	59.383	.31044	.39441
#1	-.00354	.00499	.00215	-.00141	.08371	.37915
#2	-.00214	.00687	.00387	-.00344	.08335	.38127
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	14636	--	--	--	--	--	--
SDev	7.990169	--	--	--	--	--	--
%RSD	.0545944	--	--	--	--	--	--
#1	14641	--	--	--	--	--	--
#2	14630	--	--	--	--	--	--

Method: METTRA Sample Name: DM2GWS Operator: RJG
Run Time: 10/16/00 11:29:46
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04674	49.725	.06463	2.1493	.04995	24.740	.04732
SDev	.00122	.336	.00209	.0003	.00020	.107	.00064
%RSD	2.6046	.67564	3.2377	.01533	.39746	.43208	1.3541
#1	.04588	49.488	.06611	2.1490	.05009	24.665	.04687
#2	.04760	49.963	.06315	2.1495	.04981	24.816	.04778
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	.51231	.25210	.32943	104.06	18.116	2.2568	.00083
SDev	.00422	.00154	.00197	.63	.077	.0123	.00070
%RSD	.82457	.61023	.59891	.60896	.42550	.54342	84.262
#1	.50932	.25101	.32803	103.61	18.061	2.2481	.00133
#2	.51530	.25318	.33082	104.51	18.170	2.2654	.00034
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	.56187	.10901	.10574	.10682	-.00063	.00215	.00123
SDev	.00158	.00049	.00385	.00240	.00053	.00054	.00054
%RSD	.28062	.45340	3.6381	2.2478	84.055	25.118	43.830
#1	.56076	.10936	.10302	.10513	-.00026	.00254	.00161
#2	.56299	.10866	.10846	.10852	-.00101	.00177	.00085
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	.00793	.01263	.01106	.04311	.54032	.83777
SDev	.00365	.00024	.00137	.00094	.00203	.00358
%RSD	45.984	1.8900	12.415	2.1700	.37589	.42770
#1	.00535	.01246	.01009	.04245	.53888	.83524
#2	.01051	.01280	.01203	.04378	.54175	.84030
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	14756	--	--	--	--	--	--
SDev	95.77775	--	--	--	--	--	--
%RSD	.6490712	--	--	--	--	--	--
#1	14824	--	--	--	--	--	--
#2	14688	--	--	--	--	--	--

Method: METTRA Sample Name: DM2G3 Operator: RJG
Run Time: 10/16/00 11:33:55
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00014	43.129	.03539	.51656	.00300	81.953	.00351
SDev	.00013	.123	.00003	.00076	.00002	.027	.00003
%RSD	88.556	.28554	.07677	.14649	.64317	.03331	.85747
#1	-.00023	43.042	.03541	.51603	.00299	81.934	.00349
#2	-.00005	43.216	.03537	.51710	.00301	81.972	.00353
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	.03585	.05954	.15166	99.605	31.286	3.2875	.00119
SDev	.00026	.00014	.00005	.201	.038	.0052	.00057
%RSD	.71717	.22596	.03246	.20180	.12182	.15820	47.738
#1	.03566	.05945	.15170	99.463	31.259	3.2838	.00079
#2	.03603	.05964	.15163	99.747	31.313	3.2912	.00159
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	.08675	.11636	.11320	.11426	.00303	.00330	.00321
SDev	.00039	.00103	.00028	.00053	.00078	.00049	.00059
%RSD	.44919	.88679	.24541	.46292	25.710	15.020	18.385
#1	.08648	.11709	.11340	.11463	.00358	.00365	.00362
#2	.08703	.11563	.11301	.11388	.00248	.00295	.00279
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	-.00251	.00445	.00213	-.00485	.09291	.40774
SDev	.00180	.00124	.00143	.00305	.00032	.00079
%RSD	71.793	27.946	66.970	62.889	.34551	.19451
#1	-.00378	.00357	.00112	-.00700	.09269	.40718
#2	-.00123	.00533	.00314	-.00269	.09314	.40830
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	14713	--	--	--	--	--	--
SDev	1.590990	--	--	--	--	--	--
%RSD	.0108136	--	--	--	--	--	--
#1	14714	--	--	--	--	--	--
#2	14712	--	--	--	--	--	--

Method: METTRA Sample Name: CRI-3 Operator: RJG
Run Time: 10/16/00 11:38:05
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01947	.36348	.01952	.38769	.01059	9.7469	.00982
SDev	.00047	.00187	.00030	.00122	.00006	.0083	.00006
%RSD	2.4015	.51333	1.5223	.31609	.61155	.08540	.59256
#1	.01914	.36217	.01973	.38856	.01063	9.7528	.00986
#2	.01980	.36480	.01931	.38682	.01054	9.7410	.00978
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.03000	.60000	.03000	.60000	.01500	15.000	.01500
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	.10076	.01961	.04490	.18882	9.3858	.02979	-.00148
SDev	.00038	.00072	.00026	.01692	.0052	.00005	.00017
%RSD	.37963	3.6562	.57989	8.9585	.05587	.16969	11.667
#1	.10049	.02012	.04471	.17686	9.3821	.02976	-.00160
#2	.10103	.01910	.04508	.20078	9.3895	.02983	-.00136
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.15000	.03000	.07500	.30000	15.000	.04500	
Low	.05000	.01000	.02500	.10000	5.0000	.01500	

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07761	.00440	.00930	.00767	.12171	.11935	.12014
SDev	.00017	.00166	.00097	.00009	.00106	.00123	.00117
%RSD	.21751	37.659	10.414	1.2307	.87116	1.0315	.97741
#1	.07749	.00557	.00862	.00760	.12096	.11848	.11931
#2	.07773	.00323	.00999	.00774	.12246	.12022	.12097
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.12000			.00900			.18000
Low	.04000			.00300			.06000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01086	.01275	.01212	.02070	.10010	.04033
SDev	.00031	.00001	.00011	.00016	.00047	.00006
%RSD	2.8562	.10046	.92276	.76782	.46617	.14292
#1	.01064	.01274	.01204	.02059	.09977	.04029
#2	.01108	.01276	.01220	.02081	.10043	.04037
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.01500	.03000	.15000	.06000
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	14524	--	--	--	--	--	--
SDev	65.97362	--	--	--	--	--	--
%RSD	.4542480	--	--	--	--	--	--
#1	14570	--	--	--	--	--	--
#2	14477	--	--	--	--	--	--

Method: METTRA Sample Name: ICSA 0057-078-10 Operator: RJG
Run Time: 10/16/00 11:42:14
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00036	486.52	.00144	.00144	-.00063	467.84	.00151
SDev	.00014	3.42	.00031	.00005	.00006	5.56	.00012
%RSD	37.860	.70325	21.319	3.1575	9.4776	1.1874	7.6999
#1	-.00046	488.93	.00122	.00147	-.00059	471.77	.00143
#2	-.00026	484.10	.00165	.00141	-.00067	463.91	.00159
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	-.00006	.00060	-.00268	194.42	510.57	.00715	-.00346
SDev	.00019	.00006	.00012	1.66	4.82	.00011	.00196
%RSD	322.72	10.552	4.5678	.85400	.94446	1.4721	56.500
#1	.00008	.00064	-.00277	195.59	513.98	.00722	-.00208
#2	-.00020	.00055	-.00260	193.25	507.16	.00708	-.00484
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	.00087	-.00192	.00323	.00151	.00905	.00292	.00496
SDev	.00018	.00270	.00656	.00348	.01097	.00826	.00186
%RSD	20.821	140.56	203.26	229.73	121.18	282.71	37.383
#1	.00074	-.00001	-.00141	-.00095	.00130	.00876	.00628
#2	.00100	-.00383	.00787	.00397	.01681	-.00292	.00365
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	-.00303	-.00402	-.00369	-.00718	.00935	.00501
SDev	.01052	.00686	.00107	.00254	.00165	.00015
%RSD	346.84	170.64	29.011	35.440	17.699	3.0508
#1	.00440	-.00887	-.00445	-.00898	.01052	.00491
#2	-.01047	.00083	-.00293	-.00538	.00818	.00512
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value						
Range						

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	13434	--	--	--	--	--	--
SDev	127.5976	--	--	--	--	--	--
%RSD	.9497982	--	--	--	--	--	--
#1	13344	--	--	--	--	--	--
#2	13524	--	--	--	--	--	--

Method: METTRA Sample Name: ICSAB 0057-104-1 Operator: RJG
Run Time: 10/16/00 11:46:24
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22770	512.28	.10887	.52818	.51408	490.41	.96350
SDev	.01059	27.80	.01061	.02585	.02461	23.45	.04701
%RSD	4.6517	5.4275	9.7495	4.8951	4.7869	4.7821	4.8795
#1	.22021	492.62	.10137	.50989	.49668	473.83	.93026
#2	.23519	531.94	.11638	.54646	.53148	507.00	.99674
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.20000	500.00	.10000	.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	.50434	.51920	.53926	204.35	536.99	.52375	-.00259
SDev	.02603	.02647	.02725	10.78	27.05	.02688	.00164
%RSD	5.1617	5.0989	5.0531	5.2749	5.0382	5.1332	63.413
#1	.48594	.50048	.52000	196.73	517.86	.50474	-.00143
#2	.52275	.53792	.55853	211.97	556.12	.54276	-.00375
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK
Value	.50000	.50000	.50000	200.00	500.00	.50000	
Range	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	.99078	.05649	.05323	.05431	.64744	.66359	.65821
SDev	.04794	.00614	.01192	.00591	.04868	.01816	.02832
%RSD	4.8388	10.872	22.398	10.876	7.5188	2.7371	4.3034
#1	.95688	.06083	.04480	.05014	.61302	.65075	.63818
#2	1.0247	.05214	.06166	.05849	.68186	.67643	.67824
Errors	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass
Value	1.0000			.05000			.60000
Range	20.000			20.000			20.000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05856	.05014	.05294	.10113	.53800	1.0639
SDev	.01981	.01066	.00052	.00526	.02557	.0505
%RSD	33.827	21.270	.97646	5.1991	4.7531	4.7432
#1	.07256	.04260	.05257	.09741	.51991	1.0282
#2	.04455	.05768	.05331	.10485	.55608	1.0995
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass
Value			.05000	.10000	.50000	1.0000
Range			20.000	20.000	20.000	20.000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	12866	--	--	--	--	--	--
SDev	507.2780	--	--	--	--	--	--
%RSD	3.942764	--	--	--	--	--	--
#1	13225	--	--	--	--	--	--
#2	12507	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-4 Operator: RJG
Run Time: 10/16/00 11:50:33
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	1.0743	23.909	.53645	2.0370	2.1015	51.824	.51481
SDev	.0062	.075	.00520	.0127	.0130	.332	.00337
%RSD	.57421	.31370	.96937	.62417	.61926	.64025	.65539
#1	1.0787	23.962	.54012	2.0460	2.1107	52.058	.51719
#2	1.0699	23.856	.53277	2.0280	2.0923	51.589	.51242
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	2.1024	2.0939	1.9924	25.412	50.544	2.0718	2.1241
SDev	.0088	.0106	.0079	.081	.237	.0099	.0035
%RSD	.41669	.50417	.39557	.32028	.46833	.47962	.16292
#1	2.1086	2.1014	1.9980	25.469	50.711	2.0788	2.1266
#2	2.0962	2.0865	1.9869	25.354	50.376	2.0648	2.1217
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0651	.53014	.52358	.52576	.52895	.53312	.53173
SDev	.0153	.00367	.00170	.00008	.00623	.00546	.00156
%RSD	.74269	.69165	.32565	.01593	1.1782	1.0235	.29416
#1	2.0759	.53273	.52237	.52582	.52455	.53698	.53284
#2	2.0543	.52755	.52478	.52570	.53336	.52926	.53063
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	.54183	.53372	.53642	1.0728	2.0674	2.0848
SDev	.00087	.00137	.00062	.0042	.0146	.0124
%RSD	.16001	.25602	.11607	.39331	.70451	.59310
#1	.54244	.53275	.53598	1.0758	2.0777	2.0935
#2	.54121	.53468	.53686	1.0698	2.0571	2.0760
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	13728	--	--	--	--	--	--
SDev	86.33746	--	--	--	--	--	--
%RSD	.6288922	--	--	--	--	--	--
#1	13667	--	--	--	--	--	--
#2	13790	--	--	--	--	--	--

Method: METTRA Sample Name: CCB4 Operator: RJG
Run Time: 10/16/00 11:54:42
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	-.00085	.02775	-.00045	.00016	.00120	.03185	.00017
SDev	.00011	.00140	.00069	.00001	.00016	.00499	.00018
%RSD	12.629	5.0539	153.60	8.8252	13.058	15.666	106.33
#1	-.00093	.02676	-.00094	.00017	.00131	.03538	.00004
#2	-.00078	.02874	.00004	.00015	.00109	.02832	.00029
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	-.00061	-.00093	.00162	.02075	.00026	.00217
SDev	.00040	.00032	.00028	.00076	.00449	.00011	.00148
%RSD	139.67	52.678	30.264	46.964	21.657	42.680	68.229
#1	-.00058	-.00083	-.00113	.00216	.02393	.00034	.00321
#2	-.00000	-.00038	-.00073	.00108	.01757	.00018	.00112
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00089	-.00142	.00268	.00132	.00195	.00158	.00170
SDev	.00088	.00209	.00119	.00010	.00005	.00050	.00035
%RSD	98.147	147.41	44.220	7.2892	2.3303	31.852	20.584
#1	-.00151	.00006	.00184	.00125	.00192	.00122	.00145
#2	-.00027	-.00289	.00352	.00139	.00198	.00193	.00195
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	-.00022	-.00124	-.00090	-.00375	-.00106	.00039
SDev	.00564	.00338	.00413	.00512	.00000	.00009
%RSD	2551.5	271.83	457.48	136.47	.05966	22.600
#1	.00376	.00115	.00202	-.00737	-.00106	.00045
#2	-.00421	-.00364	-.00383	-.00013	-.00106	.00032
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14400	--	--	--	--	--	--
SDev	36.27444	--	--	--	--	--	--
%RSD	.2519120	--	--	--	--	--	--
#1	14425	--	--	--	--	--	--
#2	14374	--	--	--	--	--	--

STL - Pittsburgh

Metals Preparation Log

Logbook ID: MT2

2110

Method: ILM 9.4.0	Matrix: Soil	Start Time: 09:00	SDG:	Balance #: C94817	Reagents: 10ml 1:1 HNO_3 0057-098-3
Analyst [signature]	Date 10-13-00	Lot Number: C051202O7	Lab Lot # (book,page,line): 0014-094-1, 0057-095-10		5ml conc HNO_3 662370405 Mallinckrodt
Reviewed by Michael T Wenderlich	Date 10-13-00		MS MSB2REV, CPL LCS		10ml 30% H_2O_2 5240MISA01 Mallinckrodt 0057-091-14

	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.	DM2GW	1.00g	200ml	WPK 10-13-00	BR	BK	WPK	10-13-00	M	10-13-00 WPK 10:30 S M	S
2.	DM2GW MX				BR	BK					
3.	DM2GW MS			+2ml MSB2REV	BR	BK					
4.	DM2G3			WPK 10-13-00	BR	BK					
5.	DM4CW B	1ml DI H_2O									
6.	DM4CW C	1.00g		Lot #245							
7.											
8.											
9.											
10.											
11.											
12.											
13.											
14.											
15.											
16.											
17.											
18.											
19.				10-13-00							
20.											
21.											
22.											
23.											
24.											

WPK 10-13-00

WPK 10-13-00

Artifact Codes
- S=Stones
- O=Organic (plant mat'l)
- 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)	Digestate(s) Received				Digestate(s) Relinquished			
	Date	Time	Analyst	Location	Date	Time	Analyst	Location
All above	10-13-00	16:45 WPK 10-13-00		Met-Prep	10-13-00	16:55 WPK 10-13-00		Met-1 A1
All Above	10/16/00	15:45 → 07:25	Ramaraju	METAL	10/16/00	15:55 → 11:45	Ramaraju	MET A1

Hot Plate/Block Temp	Correction Factor
#4 95°C	-0.7°C

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

REQUESTED BY: **RIZZOC**

METHOD: ON Inductively Coupled Plasma(Trace)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
3B	DM2GW	___ ___ ___	273028	061313	A-46-ON	C0J120207	001		SOLID	0	2 1
3B	DM2G3	___ ___ ___	273029	061313	A-46-ON	C0J120207	002		SOLID	0	2 1

RELINQUISHED BY	RECEIVED BY	DATE/TIME

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

GENERAL CHEMISTRY DATA

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: PXS-19

General Chemistry

Lot-Sample #...: C0J120207-001 Work Order #...: DM2GW Matrix.....: SOLID
Date Sampled...: 10/11/00 Date Received..: 10/12/00
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	12.7		%	ICLP ILM04.0	10/12-10/13/00	0287163

Dilution Factor: 1 MS Run #.....: 0286160

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: PXS-20

General Chemistry

Lot-Sample #...: C0J120207-002 Work Order #...: DM2G3 Matrix.....: SOLID
Date Sampled...: 10/11/00 Date Received..: 10/12/00
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Moisture	13.6		%	ICLP ILM04.0	10/12-10/13/00	0287163

Dilution Factor: 1 MS Run #.....: 0286160

10010

STL Pittsburgh
TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Lot No.	Lot No.	Lot No.	Batch No.
COJ110177	COJ100208	COJ120193	0286192
COJ100203	COJ050173	COJ120207	0286193
COJ100228	COJ090135	COJ120198	0286194
COJ100191	COJ060192		0286196
COJ110264	COJ120187		0286357

Analyst: CLHOHE4DE 1315
In: Date 10-12-00 Time 1000
Out: Date 10/13/00 Time 0430
Balance ID #: C94817
Oven Temp: 103°C±2°C

Additional Batches on 435A

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
COJ110177-001	26	1.05	6.43	6.01
-001D	68	1.05	6.52	6.05
-002	63	1.09	5.56	4.96
-003	36	1.06	6.48	5.79
-004	110	1.05	6.13	5.33
-005	33	1.07	6.52	5.98
-006	70	1.07	6.19	5.30
COJ100203-001	21	1.05	6.71	6.01
-001D	61	1.07	7.08	6.29
-002	7	1.04	6.07	5.48
-003	90	1.05	7.00	6.33
-004	48	1.06	6.31	5.94
-005	15	1.04	6.79	5.93
-006	153	1.13	6.07	5.05
-007	74	1.07	6.14	5.60
-008	54	1.05	6.68	6.38
-009	100	1.06	6.03	5.68
-010	21C	1.11	6.89	5.96
-011	4	1.07	8.27	7.27
COJ100228-001	91	1.05	6.32	5.65
-002	64	1.04	5.90	5.23
-003	35	1.07	7.22	6.62
-004	40	1.05	6.65	5.57
-005	51	1.04	6.08	5.41
-006	80	1.06	6.54	5.49
-007	111	1.09	6.13	5.32
COJ100191-002	53	1.03	6.21	5.50
-002D	108	1.06	6.44	5.72
-008	44	1.05	6.27	5.59
-009	V	1.12	6.11	5.28
-010	55	1.05	6.41	5.68
-011	73	1.04	6.76	5.64
-012	95	1.05	6.75	5.72
-013	8	1.09	6.39	5.46
-014	102	1.04	6.19	5.46
-015	30	1.04	7.03	6.35

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
COJ100191-016	86	1.05	6.05	5.42
-017	109	1.05	6.29	6.02
COJ110264-001	92	1.07	6.42	2.18
-002	21B	1.11	6.29	2.02
-003	84	1.06	7.58	4.75
-004	69	1.05	6.42	1.77
COJ100208-005	2	1.07	6.01	5.52
-006	3	1.06	6.38	5.59
-007	47	1.04	6.10	5.85
COJ050173-001	50	1.07	6.11	5.65
-001D	18	1.06	6.07	5.57
-002	98	1.07	7.13	6.66
-003	46	1.06	6.21	5.05
-004	88	1.07	7.31	6.44
-005	62	1.09	5.82	5.03
-006	96	1.05	6.23	5.48
-007	XX	1.11	6.45	5.71
-008	115	1.11	6.38	5.38
-009	71	1.07	6.47	5.13
-010	101	1.04	6.25	5.87
-011	75	1.08	6.39	5.54
-012	14	1.07	6.10	4.72
-013	PU	1.14	6.97	5.85
-014	1	1.05	6.80	5.91
-015	99	1.03	7.69	6.56
-016	94	1.07	6.35	5.77
-017	31	1.07	6.44	5.71
-018	10	1.07	6.98	6.30
-019	76	1.06	8.24	6.92
COJ090135-002	5	1.05	6.32	5.62
-002D	49	1.03	6.82	6.02
-004	56	1.06	6.21	5.91
COJ060192-001	12	1.05	7.80	6.79
-002	66	1.04	6.87	5.66
-003	38	1.06	7.20	6.51
-004	27	1.03	6.07	5.68

% MOIST

10:00 13:15 15:2

STL Pittsburgh

TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Lot No. | Lot No. | Lot No. | Batch No.: 0286361, 0286366, 0286367, 0286371

Analyst: C L Lohrde

In: Date 10-12-00 Time 1530

Out: Date 10-13-00 Time 0430

Balance ID #: C94817

Oven Temp: 103°C±2°C

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
MOSC60192-005	19	1.06	6.57	6.03
-006	67	1.06	5.90	5.16
-007	59	1.05	6.20	5.66
-008	181	1.10	6.42	5.78
-009	72	1.03	6.51	5.92
-010	104	1.05	6.12	5.91
-011	43	1.02	6.23	5.20
-012	39	1.03	6.58	5.62
-013	58	1.05	8.82	8.32
-014	J5	1.05	6.68	5.89
-015	P28	1.04	6.20	5.10
-016	J19	1.05	6.56	5.84
~~-017~~	~~Voided on COC~~			
-018	Y10	1.05	6.98	6.50
-019	P17	1.06	6.18	5.18
-019D	Y1	1.04	6.27	5.25
-020	P10	1.05	7.12	6.15
-021	1AA	1.00	7.23	6.34
-022	P16	1.05	8.45	7.13
-023	TF	1.01	6.61	5.49
-024	E5	1.06	7.80	6.81
-025	Z	.98	6.15	5.37
-026	Y8	1.05	6.82	6.34
-027	J7	1.05	7.31	4.65
-028	X2D	1.11	6.91	6.35
-029	P15	1.08	6.08	4.79
-030	129	1.06	8.09	7.30
-031	P8	1.05	8.05	7.40
-032	821	1.00	8.17	7.49
-033	Y20	1.04	7.95	6.38

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
1 COJ120187-001	37	1.07	5.81	4.08
1D -001D	77	1.07	5.94	4.21
2 -002	78	1.04	6.54	5.92
3 -003	CA	1.12	5.88	5.28
4 -004	E1	1.12	6.27	5.05
5 -005	42	1.05	5.94	5.37
6 -006	41	1.05	5.84	5.25
7 -007	6	1.03	5.91	4.94
8 -008	89	1.05	6.37	5.23
9 -009	24	1.06	6.53	5.82
10 -010	57	1.06	5.74	4.86
11 -011	20	1.06	5.76	4.70
12 -012	52	1.04	6.35	5.87
13 -013	102	1.04	6.57	5.49
14 -014	9	1.05	5.75	4.94
15 -015	85	1.08	6.58	6.14
16 -016	22	1.05	6.29	5.07
17 -017	28	1.05	7.25	5.95
18 -018	45	1.04	6.96	6.28
19 -019	81	1.04	5.91	4.79
20 -020	AB	1.14	6.66	5.87
21 -021	34	1.05	6.02	5.40
21D -021D	112	1.04	6.38	5.81
22 -022	13	1.06	5.61	4.42
23 -023	17	1.07	6.52	5.47
24 -024	83	1.06	5.91	5.09
25 -025	106	1.06	5.86	4.93
26 -026	82	1.08	6.74	5.60
27 -027	29	1.07	7.74	6.95
~~COJ120135-~~		~~Cancelled~~		
COJ120193-001	65	1.07	6.54	2.62
-002	97	1.05	7.01	2.32
-003	103	1.07	6.82	2.49
-004	32	1.04	7.33	2.38
-005	60	1.07	6.35	2.20
-006	11	1.05	7.36	2.63

STL Pittsburgh

TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Lot No. | Lot No. | Lot No. | Batch No.

Analyst: CHOHEYDE

In: Date 10/12/00 Time 1530

Out: Date 10/13/00 Time 0430

Balance ID #: C94817

Oven Temp: 103°C±2°C

15'30 TS

90% moist

90% moist

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
COJ120093-007	87	1.08	5.97	2.12					
-008	23	1.07	6.47	2.52					
COJ120207-001	105	1.07	6.51	5.82					
-002	16	1.01	5.12	4.56					
COJ120198-001	79	1.07	6.75	6.43					
-001D	25	1.05	7.03	6.69					
-002	93	1.06	5.66	3.37					

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0010010
TESTED: CLL 10/12/00
CHECKED: RLW 10/13/00

CREATED: 10/13/00 8:37:11 AM
REVISED: 10/13/00 9:18:13 AM

COMMENTS:
C0J110177 C0J100203 C0J100228 C0J100191 C0J110264 C0J100208 C0J050173 C-J090135 C0J060192 C0J120187 C0J120193 C0J120207 C0J120198

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0J110177	001	SMP	26	1.05	6.43	6.01	10:00	4:30	0.42	7.807	92.193
C0J110177	001D	SMP	68	1.05	6.52	6.05	10:00	4:30	0.47	8.592	91.408
C0J110177	002	SMP	63	1.09	5.56	4.96	10:00	4:30	0.6	13.423	86.577
C0J110177	003	SMP	36	1.06	6.48	5.79	10:00	4:30	0.69	12.731	87.269
C0J110177	004	SMP	110	1.05	6.13	5.33	10:00	4:30	0.8	15.748	84.252
C0J110177	005	SMP	33	1.07	6.52	5.98	10:00	4:30	0.54	9.908	90.092
C0J110177	006	SMP	70	1.07	6.19	5.3	10:00	4:30	0.89	17.383	82.617
C0J100203	001	SMP	21	1.05	6.71	6.01	10:00	4:30	0.7	12.367	87.633
C0J100203	001D	SMP	61	1.07	7.08	6.29	10:00	4:30	0.79	13.145	86.855
C0J100203	002	SMP	7	1.04	6.07	5.48	10:00	4:30	0.59	11.73	88.27
C0J100203	003	SMP	90	1.05	7	6.33	10:00	4:30	0.67	11.261	88.739
C0J100203	004	SMP	48	1.06	6.31	5.94	10:00	4:30	0.37	7.048	92.952
C0J100203	005	SMP	15	1.04	6.79	5.93	10:00	4:30	0.86	14.957	85.043
C0J100203	006	SMP	153	1.13	6.07	5.05	10:00	4:30	1.02	20.648	79.352
C0J100203	007	SMP	74	1.07	6.14	5.6	10:00	4:30	0.54	10.651	89.349
C0J100203	008	SMP	54	1.05	6.68	6.38	10:00	4:30	0.3	5.329	94.671
C0J100203	009	SMP	100	1.06	6.03	5.68	10:00	4:30	0.35	7.042	92.958
100203	010	SMP	21C	1.11	6.89	5.96	10:00	4:30	0.93	16.09	83.91

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0010010
TESTED: CLL 10/12/00
CHECKED: ELW 10/13/00

CREATED: 10/13/00 8:37:11 AM
REVISED: 10/13/00 9:18:13 AM

COMMENTS:
C0J110177 C0J100203 C0J100228 C0J100191 C0J110264 C0J100208 C0J050173 C-J090135 C0J060192 C0J120187 C0J120193 C0J120207 C0J120198

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0J100203	011	SMP	4	1.07	8.27	7.27	10:00	4:30	1	13.889	86.111
C0J100228	001	SMP	91	1.05	6.32	5.65	10:00	4:30	0.67	12.713	87.287
C0J100228	002	SMP	64	1.04	5.9	5.23	10:00	4:30	0.67	13.786	86.214
C0J100228	003	SMP	35	1.07	7.22	6.62	10:00	4:30	0.6	9.756	90.244
C0J100228	004	SMP	40	1.05	6.65	5.57	10:00	4:30	1.08	19.286	80.714
C0J100228	005	SMP	51	1.04	6.08	5.41	10:00	4:30	0.67	13.294	86.706
C0J100228	006	SMP	80	1.06	6.54	5.49	10:00	4:30	1.05	19.161	80.839
C0J100228	007	SMP	111	1.09	6.13	5.32	10:00	4:30	0.81	16.071	83.929
C0J100191	007	SMP	53	1.03	6.21	5.5	10:00	4:30	0.71	13.707	86.293
C0J100191	007D	SMP	108	1.06	6.44	5.72	10:00	4:30	0.72	13.383	86.617
C0J100191	008	SMP	44	1.05	6.27	5.59	10:00	4:30	0.68	13.027	86.973
C0J100191	009	SMP	V	1.12	6.11	5.28	10:00	4:30	0.83	16.633	83.367
C0J100191	010	SMP	55	1.05	6.41	5.68	10:00	4:30	0.73	13.619	86.381
C0J100191	011	SMP	73	1.04	6.76	5.64	10:00	4:30	1.12	19.58	80.42
C0J100191	012	SMP	95	1.05	6.75	5.72	10:00	4:30	1.03	18.07	81.93
C0J100191	013	SMP	8	1.09	6.39	5.46	10:00	4:30	0.93	17.547	82.453
C0J100191	014	SMP	102	1.04	6.19	5.46	10:00	4:30	0.73	14.175	85.825
100191	015	SMP	30	1.04	7.03	6.35	10:00	4:30	0.68	11.352	88.648

RPD 1.2%

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0010010
TESTED: CLL 10/12/00
CHECKED: ELW 10/13/00

CREATED: 10/13/00 8:37:11 AM
REVISED: 10/13/00 9:18:13 AM

COMMENTS:
C0J110177 C0J100203 C0J100228 C0J100191 C0J110264 C0J100208 C0J050173 C-J090135 C0J060192 C0J120187 C0J120193 C0J120207 C0J120198

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0J100191	016	SMP	86	1.05	6.05	5.42	10:00	4:30	0.63	12.6	87.4
C0J100191	017	SMP	109	1.05	6.29	6.02	10:00	4:30	0.27	5.153	94.847
C0J110264	001	SMP	92	1.07	6.42	2.18	13:15	4:30	4.24	79.252	20.748
C0J110264	002	SMP	21B	1.11	6.29	2.02	13:15	4:30	4.27	82.432	17.568
C0J110264	003	SMP	84	1.06	7.58	4.75	13:15	4:30	2.83	43.405	56.595
C0J110264	004	SMP	69	1.05	6.42	1.77	13:15	4:30	4.65	86.592	13.408
C0J100208	005	SMP	2	1.07	6.01	5.52	13:15	4:30	0.49	9.919	90.081
C0J100208	006	SMP	3	1.06	6.38	5.59	13:15	4:30	0.79	14.85	85.15
C0J100208	007	SMP	47	1.04	6.1	5.85	13:15	4:30	0.25	4.941	95.059
C0J050173	001	SMP	50	1.07	6.11	5.65	13:15	4:30	0.46	9.127	90.873
C0J050173	001D	SMP	18	1.06	6.07	5.57	13:15	4:30	0.5	9.98	90.02 RPD 9.4%
C0J050173	002	SMP	98	1.07	7.13	6.66	13:15	4:30	0.47	7.756	92.244
C0J050173	003	SMP	46	1.06	6.21	5.05	13:15	4:30	1.16	22.524	77.476
C0J050173	004	SMP	88	1.07	7.31	6.44	13:15	4:30	0.87	13.942	86.058
C0J050173	005	SMP	62	1.09	5.82	5.03	13:15	4:30	0.79	16.702	83.298
C0J050173	006	SMP	96	1.05	6.23	5.48	13:15	4:30	0.75	14.479	85.521
C0J050173	007	SMP	XX	1.11	6.45	5.71	13:15	4:30	0.74	13.858	86.142
J50173	008	SMP	1151	1.11	6.38	5.38	13:15	4:30	1	18.975	81.025

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0010010
TESTED: CLL 10/12/00
CHECKED: ELW 10/13/00

CREATED: 10/13/00 8:37:11 AM
REVISED: 10/13/00 9:18:13 AM

COMMENTS:
C0J110177 C0J100203 C0J100228 C0J100191 C0J110264 C0J100208 C0J050173 C-J090135 C0J060192 C0J120187 C0J120193 C0J120207 C0J120198

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0J050173	009	SMP	71	1.07	6.47	5.13	13:15	4:30	1.34	24.815	75.185
C0J050173	010	SMP	101	1.04	6.25	5.87	13:15	4:30	0.38	7.294	92.706
C0J050173	011	SMP	75	1.08	6.39	5.54	13:15	4:30	0.85	16.008	83.992
C0J050173	012	SMP	14	1.07	6.1	4.72	13:15	4:30	1.38	27.435	72.565
C0J050173	013	SMP	PU	1.14	6.97	5.85	13:15	4:30	1.12	19.211	80.789
C0J050173	014	SMP	1	1.05	6.8	5.91	13:15	4:30	0.89	15.478	84.522
C0J050173	015	SMP	99	1.03	7.69	6.56	13:15	4:30	1.13	16.967	83.033
C0J050173	016	SMP	94	1.07	6.35	5.77	13:15	4:30	0.58	10.985	89.015
C0J050173	017	SMP	31	1.07	6.44	5.71	13:15	4:30	0.73	13.594	86.406
C0J050173	018	SMP	10	1.07	6.98	6.3	13:15	4:30	0.68	11.506	88.494
C0J050173	019	SMP	76	1.06	8.24	6.92	13:15	4:30	1.32	18.384	81.616
C0J090135	002	SMP	5	1.05	6.32	5.62	13:15	4:30	0.7	13.283	86.717
C0J090135	002D	SMP	49	1.03	6.82	6.02	13:15	4:30	0.8	13.817	86.183
C0J090135	004	SMP	56	1.06	6.21	5.91	13:15	4:30	0.3	5.825	94.175
C0J060192	001	SMP	12	1.05	7.8	6.79	15:30	4:30	1.01	14.963	85.037
C0J060192	002	SMP	66	1.04	6.87	5.66	15:30	4:30	1.21	20.755	79.245
C0J060192	003	SMP	38	1.06	7.2	6.51	15:30	4:30	0.69	11.238	88.762
J60192	004	SMP	27	1.03	6.07	5.68	15:30	4:30	0.39	7.738	92.262

RPD 6.2%

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM	0010010	
TESTED:	CLL	10/12/00
CHECKED:	ELW	10/13/00

CREATED: 10/13/00 8:37:11 AM

REVISED: 10/13/00 9:18:13 AM

COMMENTS:

C0J110177 C0J100203 C0J100228 C0J100191 C0J110264 C0J100208 C0J050173 C-J090135 C0J060192 C0J120187 C0J120193 C0J120207 C0J120198

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0J060192	005	SMP	19	1.06	6.57	6.03	15:30	4:30	0.54	9.8	90.2
C0J060192	006	SMP	67	1.06	5.9	5.16	15:30	4:30	0.74	15.289	84.711
C0J060192	007	SMP	59	1.05	6.2	5.66	15:30	4:30	0.54	10.485	89.515
C0J060192	008	SMP	181	1.1	6.42	5.78	15:30	4:30	0.64	12.03	87.97
C0J060192	009	SMP	72	1.03	6.51	5.92	15:30	4:30	0.59	10.766	89.234
C0J060192	010	SMP	104	1.05	6.12	5.91	15:30	4:30	0.21	4.142	95.858
C0J060192	011	SMP	43	1.02	6.73	5.7	15:30	4:30	1.03	18.039	81.961
C0J060192	012	SMP	39	1.03	6.58	5.62	15:30	4:30	0.96	17.297	82.703
C0J060192	013	SMP	58	1.05	8.82	8.32	15:30	4:30	0.5	6.435	93.565
C0J060192	014	SMP	J5	1.05	6.68	5.89	15:30	4:30	0.79	14.032	85.968
C0J060192	015	SMP	P28	1.04	6.2	5.1	15:30	4:30	1.1	21.318	78.682
C0J060192	016	SMP	J19	1.05	6.56	5.84	15:30	4:30	0.72	13.067	86.933
C0J060192	018	SMP	Y10	1.05	6.98	6.5	15:30	4:30	0.48	8.094	91.906
C0J060192	019	SMP	P17	1.06	6.18	5.18	15:30	4:30	1	19.531	80.469
C0J060192	019D	SMP	Y1	1.04	6.27	5.25	15:30	4:30	1.02	19.503	80.497
C0J060192	020	SMP	P10	1.05	7.12	6.15	15:30	4:30	0.97	15.98	84.02
C0J060192	021	SMP	1AA	1	7.23	6.34	15:30	4:30	0.89	14.286	85.714
J060192	022	SMP	P16	1.05	8.45	7.13	15:30	4:30	1.32	17.838	82.162

RPD .03%

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0010010
TESTED: CLL 10/12/00
CHECKED: ELW 10/13/00

CREATED: 10/13/00 8:37:11 AM
REVISED: 10/13/00 9:18:13 AM

COMMENTS:
C0J110177 C0J100203 C0J100228 C0J100191 C0J110264 C0J100208 C0J050173 C-J090135 C0J060192 C0J120187 C0J120193 C0J120207 C0J120198

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0J060192	023	SMP	TF	1.01	6.61	5.49	15:30	4:30	1.12	20	80
C0J060192	024	SMP	E5	1.05	7.8	6.81	15:30	4:30	0.99	14.667	85.333
C0J060192	025	SMP	Z	0.98	6.15	5.37	15:30	4:30	0.78	15.087	84.913
C0J060192	026	SMP	Y8	1.05	6.82	6.34	15:30	4:30	0.48	8.319	91.681
C0J060192	027	SMP	J7	1.05	7.31	4.65	15:30	4:30	2.66	42.492	57.508
C0J060192	028	SMP	X2D	1.11	6.91	6.35	15:30	4:30	0.56	9.655	90.345
C0J060192	029	SMP	P15	1.08	6.08	4.79	15:30	4:30	1.29	25.8	74.2
C0J060192	030	SMP	129	1.06	8.09	7.3	15:30	4:30	0.79	11.238	88.762
C0J060192	031	SMP	P8	1.05	8.05	7.4	15:30	4:30	0.65	9.286	90.714
C0J060192	032	SMP	821	1	8.17	7.49	15:30	4:30	0.68	9.484	90.516
C0J060192	033	SMP	Y20	1.04	7.95	6.38	15:30	4:30	1.57	22.721	77.279
C0J120187	001	SMP	37	1.07	5.81	4.08	15:30	4:30	1.73	36.498	63.502
C0J120187	001D	SMP	77	1.07	5.94	4.21	15:30	4:30	1.73	35.524	64.476
C0J120187	002	SMP	78	1.04	6.54	5.92	15:30	4:30	0.62	11.273	88.727
C0J120187	003	SMP	CA	1.12	5.88	5.28	15:30	4:30	0.6	12.605	87.395
C0J120187	004	SMP	E1	1.12	6.27	5.05	15:30	4:30	1.22	23.689	76.311
C0J120187	005	SMP	42	1.05	5.94	5.37	15:30	4:30	0.57	11.656	88.344
120187	006	SMP	41	1.05	5.84	5.25	15:30	4:30	0.59	12.317	87.683

RPD 1.30

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0010010
TESTED: CLL 10/12/00
CHECKED: ELW 10/13/00

CREATED: 10/13/00 8:37:11 AM
REVISED: 10/13/00 9:18:13 AM

COMMENTS:
C0J110177 C0J100203 C0J100228 C0J100191 C0J110264 C0J100208 C0J050173 C-J090135 C0J060192 C0J120187 C0J120193 C0J120207 C0J120198

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0J120187	007	SMP	6	1.03	5.91	4.94	15:30	4:30	0.97	19.877	80.123
C0J120187	008	SMP	89	1.05	6.37	5.23	15:30	4:30	1.14	21.429	78.571
C0J120187	009	SMP	24	1.06	6.53	5.82	15:30	4:30	0.71	12.98	87.02
C0J120187	010	SMP	57	1.06	5.74	4.86	15:30	4:30	0.88	18.803	81.197
C0J120187	011	SMP	20	1.06	5.76	4.7	15:30	4:30	1.06	22.553	77.447
C0J120187	012	SMP	52	1.04	6.35	5.87	15:30	4:30	0.48	9.04	90.96
C0J120187	013	SMP	107	1.04	6.57	5.49	15:30	4:30	1.08	19.53	80.47
C0J120187	014	SMP	9	1.05	5.75	4.94	15:30	4:30	0.81	17.234	82.766
C0J120187	015	SMP	85	1.08	6.58	6.14	15:30	4:30	0.44	8	92
C0J120187	016	SMP	22	1.05	6.29	5.07	15:30	4:30	1.22	23.282	76.718
C0J120187	017	SMP	28	1.05	7.25	5.95	15:30	4:30	1.3	20.968	79.032
C0J120187	018	SMP	45	1.04	6.96	6.28	15:30	4:30	0.68	11.486	88.514
C0J120187	019	SMP	81	1.04	5.91	4.79	15:30	4:30	1.12	22.998	77.002
C0J120187	020	SMP	AB	1.14	6.66	5.87	15:30	4:30	0.79	14.312	85.688
C0J120187	021	SMP	34	1.05	6.02	5.4	15:30	4:30	0.62	12.475	87.525
C0J120187	021D	SMP	112	1.04	6.38	5.81	15:30	4:30	0.57	10.674	89.326
C0J120187	022	SMP	13	1.06	5.61	4.42	15:30	4:30	1.19	26.154	73.846
120187	023	SMP	17	1.07	6.57	5.47	15:30	4:30	1.1	20	80

RPD 2.0%

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM: 0010010
TESTED: CLL 10/12/00
CHECKED: ELW 10/13/00

CREATED: 10/13/00 8:37:11 AM
REVISED: 10/13/00 9:18:13 AM

COMMENTS:
C0J110177 C0J100203 C0J100228 C0J100191 C0J110264 C0J100208 C0J050173 C-J090135 C0J060192 C0J120187 C0J120193 C0J120207 C0J120198

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0J120187	024	SMP	83	1.06	5.91	5.09	15:30	4:30	0.82	16.907	83.093
C0J120187	025	SMP	106	1.06	5.86	4.93	15:30	4:30	0.93	19.375	80.625
C0J120187	026	SMP	82	1.08	6.74	5.6	15:30	4:30	1.14	20.141	79.859
C0J120193	027	SMP	29	1.07	7.74	6.95	15:30	4:30	0.79	11.844	88.156
C0J120193	001	SMP	65	1.07	6.54	2.62	15:30	4:30	3.92	71.664	28.336
C0J120193	002	SMP	97	1.05	7.01	2.32	15:30	4:30	4.69	78.691	21.309
C0J120193	003	SMP	103	1.07	6.82	2.49	15:30	4:30	4.33	75.304	24.696
C0J120193	004	SMP	32	1.04	7.33	2.38	15:30	4:30	4.95	78.696	21.304
C0J120193	005	SMP	60	1.07	6.35	2.2	15:30	4:30	4.15	78.598	21.402
C0J120193	006	SMP	11	1.05	7.36	2.63	15:30	4:30	4.73	74.96	25.04
C0J120193	007	SMP	87	1.08	5.97	2.12	15:30	4:30	3.85	78.732	21.268
C0J120193	008	SMP	23	1.07	6.47	2.52	15:30	4:30	3.95	73.148	26.852
C0J120207	001	SMP	105	1.07	6.51	5.82	15:30	4:30	0.69	12.684	87.316
C0J120207	002	SMP	16	1.01	5.12	4.56	15:30	4:30	0.56	13.625	86.375
C0J120198	001	SMP	79	1.07	6.75	6.43	15:30	4:30	0.32	5.634	94.366
C0J120198	001D	SMP	25	1.05	7.03	6.69	15:30	4:30	0.34	RPD 9270 5.686	94.314
C0J120198	002	SMP	93	1.06	5.66	3.37	15:30	4:30	2.29	49.783	50.217

REQUESTED BY: **LOHEYDEC**

METHOD: OV Moisture, Percent (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
2D,E	DLX8G-1-01	___ ___ ___	272451	061313	A-88-OV	C0J110177	001		SOLID	2	1
2D,E	DLX8J-1-01	___ ___ ___	272452	061313	A-88-OV	C0J110177	002		SOLID	2	1
2D,E	DLX8L-1-01	___ ___ ___	272453	061313	A-88-OV	C0J110177	003		SOLID	2	1
2D,E	DLX8N-1-01	___ ___ ___	272454	061313	A-88-OV	C0J110177	004		SOLID	2	1
2D,E	DLX8P-1-01	___ ___ ___	272455	061313	A-88-OV	C0J110177	005		SOLID	2	1
2D,E	DLX8T-1-01	___ ___ ___	272456	061313	A-88-OV	C0J110177	006		SOLID	2	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
[signature]	[signature]	10-12-00 0600
[signature]	[signature]	10-12-00 1015

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

REQUESTED BY: **LOHEYDEC**

M. .OD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
1D,E CLP1	DLVD0-1-01	___ ___ ___	272430	422326	A-88-SM	C0J100191	007		SOLID	0	3 1
1D,E CLP1	DLVD7-1-01	___ ___ ___	272431	422326	A-88-SM	C0J100191	008		SOLID	0	2 1
1D,E CLP1	DLVDC-1-01	___ ___ ___	272432	422326	A-88-SM	C0J100191	009		SOLID	0	2 1
1D,E CLP1	DLVDD-1-01	___ ___ ___	272433	422326	A-88-SM	C0J100191	010		SOLID	0	2 1
1D,E CLP1	DLVDE-1-01	___ ___ ___	272434	422326	A-88-SM	C0J100191	011		SOLID	0	2 1
1D,E CLP1	DLVDF-1-01	___ ___ ___	272435	422326	A-88-SM	C0J100191	012		SOLID	0	2 1
1D,E CLP1	DLVDG-1-01	___ ___ ___	272436	422326	A-88-SM	C0J100191	013		SOLID	0	2 1
1D,E CLP1	DLVDH-1-01	___ ___ ___	272437	422326	A-88-SM	C0J100191	014		SOLID	0	2 1
1D,E CLP1	DLVDJ-1-01	___ ___ ___	272438	422326	A-88-SM	C0J100191	015		SOLID	0	2 1
1D,E CLP1	DLVDK-1-01	___ ___ ___	272439	422326	A-88-SM	C0J100191	016		SOLID	0	2 1
CLP1	DLVDL-1-01	___ ___ ___	272440	422326	A-88-SM	C0J100191	017		SOLID	0	2 1
1E	DLVG8-1-01	___ ___ ___	272412	382811	A-88-SM	C0J100203	001		SOLID	0	1 1
1E	DLVGC-1-01	___ ___ ___	272413	382811	A-88-SM	C0J100203	002		SOLID	0	1 1
1E	DLVGD-1-01	___ ___ ___	272414	382811	A-88-SM	C0J100203	003		SOLID	0	1 1
1E	DLVGF-1-01	___ ___ ___	272415	382811	A-88-SM	C0J100203	004		SOLID	0	1 1
1E	DLVGH-1-01	___ ___ ___	272416	382811	A-88-SM	C0J100203	005		SOLID	0	1 1
1E	DLVGK-1-01	___ ___ ___	272417	382811	A-88-SM	C0J100203	006		SOLID	0	1 1
1E	DLVGL-1-01	___ ___ ___	272418	382811	A-88-SM	C0J100203	007		SOLID	0	1 1
1E	DLVGM-1-01	___ ___ ___	272419	382811	A-88-SM	C0J100203	008		SOLID	0	1 1
1E	DLVGN-1-01	___ ___ ___	272420	382811	A-88-SM	C0J100203	009		SOLID	0	1 1
1E	DLVGP-1-01	___ ___ ___	272421	382811	A-88-SM	C0J100203	010		SOLID	0	1 1
1E	DLVGQ-1-01	___ ___ ___	272422	382811	A-88-SM	C0J100203	011		SOLID	0	1 1
1F CLP1	DLVP5-1-01	___ ___ ___	272423	020247	A-88-SM	C0J100228	001		SOLID	0	3 1
1 .P1	DLVPF-1-01	___ ___ ___	272424	020247	A-88-SM	C0J100228	002		SOLID	0	3 1
1F CLP1	DLVPG-1-01	___ ___ ___	272425	020247	A-88-SM	C0J100228	003		SOLID	0	3 1
1F CLP1	DLVPJ-1-01	___ ___ ___	272426	020247	A-88-SM	C0J100228	004		SOLID	0	3 1

REQUESTED BY: **LOHEYDEC**

METHOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
1F CLP1	DLVPK-1-01	___ ___ ___	272427	020247	A-88-SM	C0J100228	005		SOLID	0	3 1
1F CLP1	DLVPM-1-01	___ ___ ___	272428	020247	A-88-SM	C0J100228	006		SOLID	0	3 1
1F CLP1	DLVPN-1-01	___ ___ ___	272429	020247	A-88-SM	C0J100228	007		SOLID	0	3 1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
[signature]	[signature]	10/12-00 0600
[signature]	[signature]	10/12-00 1015

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

REQUESTED BY: **LOHEYDEC**

M. JD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
1E, CLP1	DLVJ4-1-01	___ ___ ___	272615	407812	A-88-SM	C0J100208	005		SOLID	0	1 1
1E, CLP1	DLVJ5-1-01	___ ___ ___	272616	407812	A-88-SM	C0J100208	006		SOLID	0	1 1
1E, CLP1	DLVJ6-1-01	___ ___ ___	272617	407812	A-88-SM	C0J100208	007		SOLID	0	1 1
2F	DM06F-1-01	___ ___ ___	272611	375241	A-88-SM	C0J110264	001		SOLID	0	1 1
2F	DM06H-1-01	___ ___ ___	272612	375241	A-88-SM	C0J110264	002		SOLID	0	1 1
2F	DM06J-1-01	___ ___ ___	272613	375241	A-88-SM	C0J110264	003		SOLID	0	1 1
2F	DM06L-1-01	___ ___ ___	272614	375241	A-88-SM	C0J110264	004		SOLID	0	1 1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
[signature]	[signature]	10-12-00 1130
	[signature]	10-12-00 1330

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

REQUESTED BY: **LOHEYDEC**

ML JOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
22A	DLKHJ-1-01	___ ___ ___	272618	396447	A-88-SM	C0J050173	001		SOLID	0	1 1
22A	DLKHW-1-01	___ ___ ___	272619	396447	A-88-SM	C0J050173	002		SOLID	0	1 1
22A	DLKJ1-1-01	___ ___ ___	272620	396447	A-88-SM	C0J050173	003		SOLID	0	1 1
22A	DLKJ3-1-01	___ ___ ___	272621	396447	A-88-SM	C0J050173	004		SOLID	0	1 1
22A	DLKJ5-1-01	___ ___ ___	272622	396447	A-88-SM	C0J050173	005		SOLID	0	1 1
22A	DLKJ7-1-01	___ ___ ___	272623	396447	A-88-SM	C0J050173	006		SOLID	0	1 1
22A	DLKJ9-1-01	___ ___ ___	272624	396447	A-88-SM	C0J050173	007		SOLID	0	1 1
22A	DLKJA-1-01	___ ___ ___	272625	396447	A-88-SM	C0J050173	008		SOLID	0	1 1
22A	DLKJC-1-01	___ ___ ___	272626	396447	A-88-SM	C0J050173	009		SOLID	0	1 1
22A	DLKJF-1-01	___ ___ ___	272627	396447	A-88-SM	C0J050173	010		SOLID	0	1 1
	DLKJG-1-01	___ ___ ___	272628	396447	A-88-SM	C0J050173	011		SOLID	0	1 1
22A	DLKJH-1-01	___ ___ ___	272629	396447	A-88-SM	C0J050173	012		SOLID	0	1 1
22A	DLKJJ-1-01	___ ___ ___	272630	396447	A-88-SM	C0J050173	013		SOLID	0	1 1
22A	DLKJL-1-01	___ ___ ___	272631	396447	A-88-SM	C0J050173	014		SOLID	0	1 1
22A	DLKJN-1-01	___ ___ ___	272632	396447	A-88-SM	C0J050173	015		SOLID	0	1 1
22A	DLKJP-1-01	___ ___ ___	272633	396447	A-88-SM	C0J050173	016		SOLID	0	1 1
22A	DLKJT-1-01	___ ___ ___	272634	396447	A-88-SM	C0J050173	017		SOLID	0	1 1
22A	DLKJW-1-01	___ ___ ___	272635	396447	A-88-SM	C0J050173	018		SOLID	0	1 1
22A	DLKJX-1-01	___ ___ ___	272636	396447	A-88-SM	C0J050173	019		SOLID	0	1 1

REQUESTED BY: **LOHEYDEC**

M OD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD

RELINQUISHED BY	RECEIVED BY	DATE/TIME
[signature]	[signature]	10-12-00 1130
[signature]	[signature]	10/12/00 1330

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

REQUESTED BY: **LOHEYDEC**

METHOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
1C CLP1	DLRFD-1-11	___ ___ ___	272721	054156	A-88-SM	C0J090135	004		SOLID	3	1
1C CLP1	DLRF3-1-2Q	___ ___ ___	272722	054156	A-88-SM	C0J090135	002		SOLID	3	1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
[signature]	[signature]	10-12-00 1430
	[signature]	10-12-00 1545

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

REQUESTED BY: **LOHEYDEC**

M. OD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
22D	DLN3D-1-01	___ ___ ___	272689	396447	A-88-SM	C0J060192	001		SOLID	0	1 1
22D	DLN3H-1-01	___ ___ ___	272690	396447	A-88-SM	C0J060192	002		SOLID	0	1 1
22D	DLN3K-1-01	___ ___ ___	272691	396447	A-88-SM	C0J060192	003		SOLID	0	1 1
22D	DLN3Q-1-01	___ ___ ___	272692	396447	A-88-SM	C0J060192	004		SOLID	0	1 1
22D	DLN41-1-01	___ ___ ___	272693	396447	A-88-SM	C0J060192	005		SOLID	0	1 1
22D	DLN47-1-01	___ ___ ___	272694	396447	A-88-SM	C0J060192	006		SOLID	0	1 1
22D	DLN49-1-01	___ ___ ___	272695	396447	A-88-SM	C0J060192	007		SOLID	0	1 1
22D	DLN4D-1-01	___ ___ ___	272696	396447	A-88-SM	C0J060192	008		SOLID	0	1 1
22D	DLN4F-1-01	___ ___ ___	272697	396447	A-88-SM	C0J060192	009		SOLID	0	1 1
22D	DLN4H-1-01	___ ___ ___	272698	396447	A-88-SM	C0J060192	010		SOLID	0	1 1
	DLN4L-1-01	___ ___ ___	272699	396447	A-88-SM	C0J060192	011		SOLID	0	1 1
22D	DLN4M-1-01	___ ___ ___	272700	396447	A-88-SM	C0J060192	012		SOLID	0	1 1
22D	DLN4Q-1-01	___ ___ ___	272701	396447	A-88-SM	C0J060192	013		SOLID	0	1 1
22D	DLN4T-1-01	___ ___ ___	272702	396447	A-88-SM	C0J060192	014		SOLID	0	1 1
22D	DLN4X-1-01	___ ___ ___	272703	396447	A-88-SM	C0J060192	015		SOLID	0	1 1
22D	DLN52-1-01	___ ___ ___	272704	396447	A-88-SM	C0J060192	016		SOLID	0	1 1
22D	DLN58-1-01	___ ___ ___	272705	396447	A-88-SM	C0J060192	018		SOLID	0	1 1
22D	DLN5C-1-01	___ ___ ___	272706	396447	A-88-SM	C0J060192	019		SOLID	0	1 1
22D	DLN5E-1-01	___ ___ ___	272707	396447	A-88-SM	C0J060192	020		SOLID	0	1 1
22D	DLN5G-1-01	___ ___ ___	272708	396447	A-88-SM	C0J060192	021		SOLID	0	1 1
22D	DLN5K-1-01	___ ___ ___	272709	396447	A-88-SM	C0J060192	022		SOLID	0	1 1
22D	DLN5N-1-01	___ ___ ___	272710	396447	A-88-SM	C0J060192	023		SOLID	0	1 1
22D	DLN5Q-1-01	___ ___ ___	272711	396447	A-88-SM	C0J060192	024		SOLID	0	1 1
	DLN5X-1-01	___ ___ ___	272712	396447	A-88-SM	C0J060192	025		SOLID	0	1 1
22D	DLN64-1-01	___ ___ ___	272713	396447	A-88-SM	C0J060192	026		SOLID	0	1 1
22D	DLN68-1-01	___ ___ ___	272714	396447	A-88-SM	C0J060192	027		SOLID	0	1 1

REQUESTED BY: **LOHEYDEC**

M. OD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
22D	DLN6E-1-01	___ ___ ___	272715	396447	A-88-SM	C0J060192	028		SOLID	0	1 1
22D	DLN6G-1-01	___ ___ ___	272716	396447	A-88-SM	C0J060192	029		SOLID	0	1 1
22D	DLN6L-1-01	___ ___ ___	272717	396447	A-88-SM	C0J060192	030		SOLID	0	1 1
22D	DLN6Q-1-01	___ ___ ___	272718	396447	A-88-SM	C0J060192	031		SOLID	0	1 1
22D	DLN6X-1-01	___ ___ ___	272719	396447	A-88-SM	C0J060192	032		SOLID	0	1 1
22D	DLN73-1-01	___ ___ ___	272720	396447	A-88-SM	C0J060192	033		SOLID	0	1 1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
[signature]	[signature]	10-12-00 1430
[signature]	[signature]	10-12-00 1545

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

REQUESTED BY: **LOHEYDEC**

M.. .OD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
1F	DM2AD-1-AA		272743	054156	A-88-SM	C0J120187	001		SOLID	0	1 1
1F	DM2AG-1-AA		272744	054156	A-88-SM	C0J120187	002		SOLID	0	1 1
1F	DM2AJ-1-AA		272745	054156	A-88-SM	C0J120187	003		SOLID	0	1 1
1F	DM2AK-1-AA		272746	054156	A-88-SM	C0J120187	004		SOLID	0	1 1
1F	DM2AL-1-AA		272747	054156	A-88-SM	C0J120187	005		SOLID	0	1 1
1F	DM2AM-1-AA		272748	054156	A-88-SM	C0J120187	006		SOLID	0	1 1
1F	DM2AN-1-AA		272749	054156	A-88-SM	C0J120187	007		SOLID	0	1 1
1F	DM2AQ-1-AA		272750	054156	A-88-SM	C0J120187	008		SOLID	0	1 1
1F	DM2AR-1-AA		272751	054156	A-88-SM	C0J120187	009		SOLID	0	1 1
1F	DM2AT-1-AA		272752	054156	A-88-SM	C0J120187	010		SOLID	0	1 1
	DM2AV-1-AA		272753	054156	A-88-SM	C0J120187	011		SOLID	0	1 1
1F	DM2AW-1-AA		272754	054156	A-88-SM	C0J120187	012		SOLID	0	1 1
1F	DM2AX-1-AA		272755	054156	A-88-SM	C0J120187	013		SOLID	0	1 1
1F	DM2A0-1-AA		272756	054156	A-88-SM	C0J120187	014		SOLID	0	1 1
1F	DM2A1-1-AA		272757	054156	A-88-SM	C0J120187	015		SOLID	0	1 1
1F	DM2A2-1-AA		272758	054156	A-88-SM	C0J120187	016		SOLID	0	1 1
1F	DM2A4-1-AA		272759	054156	A-88-SM	C0J120187	017		SOLID	0	1 1
1F	DM2A5-1-AA		272760	054156	A-88-SM	C0J120187	018		SOLID	0	1 1
1F	DM2A6-1-AA		272761	054156	A-88-SM	C0J120187	019		SOLID	0	1 1
1F	DM2A7-1-AA		272762	054156	A-88-SM	C0J120187	020		SOLID	0	1 1
1F	DM2C2-1-AA		272763	054156	A-88-SM	C0J120187	021		SOLID	0	1 1
1F	DM2C5-1-AA		272764	054156	A-88-SM	C0J120187	022		SOLID	0	1 1
1F	DM2C7-1-AA		272765	054156	A-88-SM	C0J120187	023		SOLID	0	1 1
1	DM2C8-1-AA		272766	054156	A-88-SM	C0J120187	024		SOLID	0	1 1
1F	DM2DA-1-AA		272767	054156	A-88-SM	C0J120187	025		SOLID	0	1 1
1F	DM2DC-1-AA		272768	054156	A-88-SM	C0J120187	026		SOLID	0	1 1

REQUESTED BY: **LOHEYDEC**

M. .OD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
1F	DM2DD-1-AA	___ ___ ___	272769	054156	A-88-SM	C0J120187	027		SOLID	0	1 1
3B	DM2D8-1-AA	___ ___ ___	272770	375241	A-88-SM	C0J120193	001		SOLID	0	1 1
3B	DM2EC-1-AA	___ ___ ___	272771	375241	A-88-SM	C0J120193	002		SOLID	0	1 1
3B	DM2EH-1-AA	___ ___ ___	272772	375241	A-88-SM	C0J120193	003		SOLID	0	1 1
3B	DM2EK-1-AA	___ ___ ___	272773	375241	A-88-SM	C0J120193	004		SOLID	0	1 1
3B	DM2EL-1-AA	___ ___ ___	272774	375241	A-88-SM	C0J120193	005		SOLID	0	1 1
3B	DM2EN-1-AA	___ ___ ___	272775	375241	A-88-SM	C0J120193	006		SOLID	0	1 1
3B	DM2ER-1-AA	___ ___ ___	272776	375241	A-88-SM	C0J120193	007		SOLID	0	1 1
3B	DM2ET-1-AA	___ ___ ___	272777	375241	A-88-SM	C0J120193	008		SOLID	0	1 1

RELINQUISHED BY	RECEIVED BY	DATE/TIME
[signature]	[signature]	10-12-00 1430
[signature]	[signature]	12-12-00 1545

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

PSR024 10/12/00 12:27:58 MT SAMPLE CUSTODIAN REMOVAL REQUEST PAGE 001

REQUESTED BY: **LOHEYDEC**

1. JD: WM Moisture, Percent (160.3) 10% Moisture Percent

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
2F	DM2FM-1-AA	___ ___ ___	272798	413462	A-88-WM	C0J120198	001		SOLID	1	1
2F	DM2FT-1-AC	___ ___ ___	272799	413462	A-88-WM	C0J120198	002		SOLID	1	1

DM2GW1AA
DM2GW1AA cw 10/12/00
~~DM2GW1AE~~
DM2G31AA

C0J120207-001 CM
-002 10/12/00

RELINQUISHED BY	RECEIVED BY	DATE/TIME
[signature]	[signature]	10/12/00 1430
[signature]	[signature]	10/12/00 1545

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