

Analytical Report Cover Page	1
Case Narrative	2
Methods Summary	3
Sample Summary	4
Shipping and Receiving Documents	5
Data Summary Package.....	10
GC/MS Volatile Summary	11
General Chemistry Summary	31
GC/MS Volatile Data	1001
QC Summary	1002
Sample Data	1015
Calibration Data.....	1039
QC Data	1116
Miscellaneous	1153
General Chemistry Data.....	2001

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 #: C0J100187

Bruce Geno/Bill Smith

Cummings-Riter Consultants Inc

SEVERN TRENT LABORATORIES, INC.



Carrie L. Gamber
Project Manager

October 18, 2000

CASE NARRATIVE

CUMMINGS RITER
CummingsRiter-Viacom-Horsehead

STL Lot # C0J100187

Sample Receiving:

STL Pittsburgh received samples, for analysis on October 10, 2000. The cooler was within the proper temperature range.

GC/MS Volatiles:

There were no problems associated with the analysis.

General Chemistry:

There were no problems associated with the analysis.

METHODS SUMMARY

COJ100187

<u>PARAMETER</u>	<u>ANALYTICAL METHOD</u>	<u>PREPARATION METHOD</u>
CLP - Volatile Organic Compounds (OLM04.2)	OCLP OLM04.2	
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

COJ100187

WO #	SAMPLE#	CLIENT	SAMPLE ID	DATE	TIME
DLVAC	001	PXS-5		10/09/00	14:10
DLVAD	002	PXS-6		10/09/00	14:15
DLVAE	003	PXB-36		10/09/00	14:20
DLVAG	005	DUP-3		10/09/00	
DLVAJ	006	TB-3		10/09/00	

NOTE(S) :

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

Chain of Custody Record

Project Name: Horseheads PAF
Project Location: Horseheads, NY
Project Number: 245.20
Sampled By: (print)

Results To: Rose Gene/Bill Smith
Company: Cummings Riter
Address: 339 Mainmaker Rd
Monroeville, PA 15146
Phone: (412) 373-5240

Invoice To: Leo Krausch
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						Preservatives				Remarks
								TPH Gre	Zn	Molybda	TCF	PAH 404	As 402	HCL	HNO3	H2SO4	NaOH	
	PXS-5	10/9/00	1410	X		Soil	2	X	X									
	PXS-6	10/9/00	1415	X		Soil	2	X	X									
	PXB-36	10/9/00	1420	X		Soil	2	X	X									
	PXS-SMS/M30	10/9/00	1410	X		Soil	4	X	X									
	PXB-36 MS/M30	10/9/00	1420	X		Soil	4	X	X									
	DUP-3	10/9/00	—	X		Soil	2	X	X									
	TB-3	10/9/00	—	X		Water	3			X								See below
	PXS-7	10/9/00	1637	X		Soil	2					X	X					
	PXS-8	10/9/00	1640	X		Soil	2					X	X					
	PXS-9	10/9/00	1647	X		Soil	2					X	X					

Turnaround Time Required: 24 HR - TCE Normal
48 HR - PAHs, PAH Rush X

Sample Disposal: Return to Client
Disposal by Lab X

Known Hazard (flammable/toxic):
Yes (comment below) —
No X

1. Relinquished By: (signature) Rose Gene Date 10/9/00 Time 1830
2. Relinquished By: (signature) Bill Smith Date 10/10/00 Time 0930
3. Relinquished By: (signature) Leo Krausch Date 10/10/00 Time 0930

Special Instructions/Comments: Custody Seal No: 173401
See Quality Assurance Project Plan
for select list of PAH Compounds

Sample Condition Upon Receipt: _____

Chain of Custody Record

Project Name: <u>Horsehead</u> DAF Project Location: <u>Horsehead NY</u> Project Number: <u>245.20</u> Sampled By: (print) _____	Results To: <u>Bruce Gano / B.H. Smith</u> Company: <u>Cummings / Riter</u> Address: <u>339 Heymaker Rd</u> <u>Morseville, PA 15146</u> Phone: <u>(412) 373-5240</u>	Invoice To: <u>See pg 1 of 2</u> Company: _____ Address: _____ Phone: _____
---	--	--

Lab ID	Sample Identification	Date	Time	Grab	Composite	Sample Matrix	No. of Bottles	Analyses							Preservatives				Remarks	
								PAH	40Z	As	12 PAH	Amber	500m / plank	As	HCL	HNO3-A5	H2SO4	NaOH		
	PXS-10	10/9/00	1650	X		Soil	2	X		X										
	PXS-11	10/9/00	1652	X		Soil	2	X		X										
	PXS-12	10/9/00	1655	X		Soil	2	X		X										
	DUP-4	10/9/00	—	X		Soil	2	X		X										
	PXS-11 ^{MS}	10/9/00	1652	X		Soil	4	X		X										
	EQB-1	10/9/00	1710	X		Water	3			X	X						X			No Preserv. for PAH

Turnaround Time Required: Normal _____ Rush <u>X</u>	1. Relinquished By: (signature) <u>Bruce Gano</u>	Date <u>10/9/00</u>	Time <u>1830</u>	1. Received By: (signature) <u>Fed Ex</u>
Sample Disposal: Return to Client _____ Disposal by Lab <u>X</u>	2. Relinquished By: (signature) _____	Date _____	Time _____	2. Received By: (signature) <u>[Signature]</u>
Known Hazard (flammable/toxic): Yes (comment below) _____ No <u>X</u>	3. Relinquished By: (signature) _____	Date _____	Time _____	3. Received By: (signature) _____

Special Instructions/Comments: See pg 1 of 2

Sample Condition Upon Receipt: _____

Cooler Receipt Form

STL Pittsburgh

Client: Quincy R. Rutter Project: _____ Quote: _____

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

Coolers Opened and Unpacked on: 10/10/00 By: [Signature]

(Signature)

STL Pittsburgh Lot Number: COT 100185

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

Explain any discrepancies: _____

Level 2 Review _____

Was contacted on _____ by _____ to resolve discrepancies.

STL Pittsburgh

UP: Unpreserved

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

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

FedEx USA Airbill

FedEx
Tracking
Number

822646697703

1 From W/PA 0200

Date 10/1/90 Phone 412 372-3240

Sender's Name Beverly Green

Company Livingston Riter (for Vaccine Inc.)

Address 227 Haverhill Rd

City Altoona State PA ZIP 15106

2 Your Internal Billing Reference: 245.20

3 To Recipient's Name Sample Recipient Phone 412 826-3280

Company Sample Recipient

Address 4150 Hillman Rd City Pittsburgh State PA ZIP 15238

to "HOLD" at FedEx location, per FedEx advice

City Pittsburgh State PA ZIP 15238

822646697703



4a Express Package Service
☒ FedEx Priority Overnight
 Next business morning
☐ FedEx Standard Overnight
 Next business afternoon
☐ FedEx First Overnight
 First business morning delivery to select locations
 Packages up to 150 lbs.
 Delivery commitment may be later in some areas
 Minimum charge: Unit pound rate
 Delivery to select locations

☐ FedEx 2Day*
 Second business day
☐ FedEx Express Saver*
 Third business day

4b Express Freight Service
☐ FedEx 1Day Freight*
 Next business day
☐ FedEx 2Day Freight
 Second business day
☐ FedEx 3Day Freight
 Third business day
 Packages over 150 lbs.
 Delivery commitment may be later in some areas
 Minimum charge: Unit pound rate
 Delivery to select locations

5 Packaging
☐ FedEx Envelope/Letter
☐ FedEx Pak*
☒ Other Pkg.
 Includes FedEx Box, FedEx Tube, and customer pkg.
 * Declared value limit \$500

6 Special Handling
☐ SATURDAY Delivery
 Available for FedEx Priority Overnight 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?
☒ No ☐ Yes
 One box must be checked.
☐ As per attached Shipper's Declaration not required
☐ Shipper's Declaration required
☐ Dry Ice
 Dry Ice, UN 1845
☐ Cargo Aircraft Only
 Obtain Receipt
 Acct. No. ☐ Credit Card ☐ Cash/Check

7 Payment Bill for: Enter FedEx Acct. No. or Credit Card No. below.
☒ Sender ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check
 I will be billed.
 Dangerous Goods cannot be shipped in FedEx packaging.
 Total Packages 1 Total Weight 46 \$.00
 Total Declared Value .00
 Total Charges .00
 Credit Card Auth.

8 Release Signature
 Your liability is limited to \$100 unless you declare a higher value. See back for details.
 Sign to authorize delivery without obtaining signature.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to hold us harmless from any resulting claims.
 Questions? Call 1-800-Go-FedEx (800-463-3338)

3601

DATA SUMMARY PACKAGE

GC/MS VOLATILE SUMMARY

CUMMINGS-RITER CONSULTANTS INC

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0J100187 001

Method: OCLP OLM04.2

Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.24 / g

Date Received: 10/10/00

Work Order: DLVAC102

Date Extracted: 10/10/00

Dilution factor: 0.95

Date Analyzed: 10/10/00

Moisture %: 13

QC Batch: 0284424

Client Sample Id: PXS-5

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/kg	Q
75-35-4	1,1-Dichloroethene	11		U
71-43-2	Benzene	11		U
108-88-3	Toluene	11		U
108-90-7	Chlorobenzene	11		U
79-01-6	Trichloroethene	1.1		J

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0J100187 001

Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.2 / g Date Received: 10/10/00

Work Order: DLVAC105 Date Extracted: 10/10/00

Dilution factor: 0.96 Date Analyzed: 10/10/00

Moisture %: 13

QC Batch: 0284424

Client Sample Id: PXS-5

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/kg	Q
75-35-4	1,1-Dichloroethene	64.0	
71-43-2	Benzene	51.8	
108-88-3	Toluene	57.6	
108-90-7	Chlorobenzene	57.1	
79-01-6	Trichloroethene	51.5	

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0J100187 001

Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.23 / g Date Received: 10/10/00

Work Order: DLVAC106 Date Extracted: 10/10/00

Dilution factor: 0.96 Date Analyzed: 10/10/00

Moisture %: 13

QC Batch: 0284424

Client Sample Id: PXS-5

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/kg	Q
75-35-4	1,1-Dichloroethene	61.2		
71-43-2	Benzene	51.8		
108-88-3	Toluene	55.6		
108-90-7	Chlorobenzene	54.6		
79-01-6	Trichloroethene	52.6		

CUMMINGS-RITER CONSULTANTS INC

Lab Name:Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID:C0J100187 002

Method: OCLP OLM04.2

Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.15 / g

Date Received: 10/10/00

Work Order: DLVAD102

Date Extracted:10/10/00

Dilution factor: 0.97

Date Analyzed: 10/10/00

Moisture %:14

QC Batch: 0284424

Client Sample Id: PXS-6

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/kg	Q
79-01-6	Trichloroethene	8.9		J

CUMMINGS-RITER CONSULTANTS INC

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

Matrix: (soil/water) SOLID Lab Sample ID: C0J100187 003

Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.02 / g Date Received: 10/10/00

Work Order: DLVAE102 Date Extracted: 10/10/00

Dilution factor: 1 Date Analyzed: 10/10/00

Moisture %: 9.9

QC Batch: 0284424

Client Sample Id: PXB-36

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/kg	Q
75-35-4	1,1-Dichloroethene	11	U
71-43-2	Benzene	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
79-01-6	Trichloroethene	11	U

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0J100187 003
Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.11 / g Date Received: 10/10/00
Work Order: DLVAE105 Date Extracted: 10/10/00
Dilution factor: 0.98 Date Analyzed: 10/10/00
Moisture %: 9.9

QC Batch: 0284424

Client Sample Id: PXB-36

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/kg	Q
75-35-4	1,1-Dichloroethene	54.4	
71-43-2	Benzene	48.3	
108-88-3	Toluene	50.8	
108-90-7	Chlorobenzene	51.3	
79-01-6	Trichloroethene	46.5	

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0J100187 003

Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.09 / g Date Received: 10/10/00

Work Order: DLVAE106 Date Extracted: 10/10/00

Dilution factor: 0.98 Date Analyzed: 10/10/00

Moisture %: 9.9

QC Batch: 0284424

Client Sample Id: PXB-36

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg) ug/kg	Q
75-35-4	1,1-Dichloroethene	63.1	
71-43-2	Benzene	55.4	
108-88-3	Toluene	57.7	
108-90-7	Chlorobenzene	57.7	
79-01-6	Trichloroethene	55.1	

CUMMINGS-RITER CONSULTANTS INC

Lab Name:Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID:C0J100187 005

Method: OCLP OLM04.2

Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.18 / g

Date Received: 10/10/00

Work Order: DLVAG102

Date Extracted:10/10/00

Dilution factor: 0.97

Date Analyzed: 10/10/00

Moisture %:17

QC Batch: 0284424

Client Sample Id: DUP-3

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/kg	Q
79-01-6	Trichloroethene	8.7		J

CUMMINGS-RITER CONSULTANTS INC

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID: C0J100187 006

Method: OCLP OLM04.2

Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5 / mL

Date Received: 10/10/00

Work Order: DLVAJ101

Date Extracted: 10/13/00

Dilution factor: 1

Date Analyzed: 10/13/00

Moisture %: NA

QC Batch: 0287204

Client Sample Id: TB-3

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/L	Q
79-01-6	Trichloroethene	10		U

OCLEP OLM04.2 SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT

QESSDG:

Lot #: C0J100187

	CLIENT ID.	SRG01	SRG02	SRG03	TOT OUT
	=====	=====	=====	=====	=====
01	PXS-5	117	95	92	00
02	PXS-6	103	61	85	00
03	PXB-36	113	111	93	00
04	DUP-3	106	60	87	00
05	METHOD BLK. DLVQC101	109	98	94	00
06	PXS-5 D	114	104	103	00
07	PXB-36 D	100	91	96	00
08	PXS-5 S	108	97	98	00
09	PXB-36 S	88	83	89	00

SURROGATES

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

QC LIMITS

(84-138)
 (59-113)
 (70-121)

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

FORM II

OCIP OLM04.2 SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT

QESSDG:

Lot #: C0J100187

	CLIENT ID.	SRG01	SRG02	SRG03	TOT OUT
	=====	=====	=====	=====	=====
01	TB-3	94	92	105	00
02	METHOD BLK. DM4C21AA	92	90	103	00

SURROGATES

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

QC LIMITS

(88-110)
 (86-115)
 (76-114)

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

FORM II

OCLE 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-5

Level: (low/med) LOW

Lot #: C0J100187

WO #: DLVAC105

BATCH: 0284424

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	54.9	ND	64.0	117	59 - 172	
Trichloroethene	54.9	1.1	51.5	92	62 - 137	
Benzene	54.9	ND	51.8	94	66 - 142	
Toluene	54.9	ND	57.6	105	59 - 139	
Chlorobenzene	54.9	ND	57.1	104	60 - 133	

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 5 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-5

Level: (low/med) LOW

Lot #: C0J100187

WO #: DLVAC106

BATCH: 0284424

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
1,1-Dichloroethene	54.9	61.2	112	4.6	22	59 - 172	
Trichloroethene	54.9	52.6	94	2.2	24	62 - 137	
Benzene	54.9	51.8	94	0.060	21	66 - 142	
Toluene	54.9	55.6	101	3.5	21	59 - 139	
Chlorobenzene	54.9	54.6	99	4.6	21	60 - 133	

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 5 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

OCLE 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: PXB-36

Level: (low/med) LOW

Lot #: C0J100187

WO #: DLVAE105

BATCH: 0284424

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	54.4	ND	54.4	100	59 - 172	
Trichloroethene	54.4	ND	46.5	85	62 - 137	
Benzene	54.4	ND	48.3	89	66 - 142	
Toluene	54.4	ND	50.8	93	59 - 139	
Chlorobenzene	54.4	ND	51.3	94	60 - 133	

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 5 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: PXB-36

Level: (low/med) LOW

Lot #: C0J100187

WO #: DLVAE106

BATCH: 0284424

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS		QUAL
					RPD	REC	
1,1-Dichloroethene	54.4	63.1	116	15	22	59 - 172	
Trichloroethene	54.4	55.1	101	17	24	62 - 137	
Benzene	54.4	55.4	102	14	21	66 - 142	
Toluene	54.4	57.7	106	13	21	59 - 139	
Chlorobenzene	54.4	57.7	106	12	21	60 - 133	

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 5 outside limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DM4C21AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: WB51013.D

Lot Number: C0J100187

Date Analyzed: 10/13/00

Time Analyzed: 10:36

Matrix: WATER

Date Extracted:10/13/00

GC Column: ID: .00

Extraction Method:

Instrument ID: HP5

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	TB-3	DLVAJ101	5101303.D	10/13/00	11:50
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

CUMMINGS-RITER CONSULTANTS INC
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER Lab Sample ID: C0J130000 204

Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5 / mL Date Received: 10/05/00

Work Order: DM4C21AA Date Extracted: 10/13/00

Dilution factor: 1 Date Analyzed: 10/13/00

Moisture %: NA

QC Batch: 0287204

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	ug/L
79-01-6	Trichloroethene		

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH Contract:
 Lab Code: STL Case No.: SAS No.: SDG No.: C0J100187
 Lab File ID (Standard): CC51010N Date Analyzed: 10/10/00
 Instrument ID: HP5 Time Analyzed: 1643
 GC Column: DB624 ID: 0.20 (mm) Heated Purge: (Y/N) Y

	IS1 (BCM)	RT #	IS2 (DFB)	RT #	IS3 (CBZ)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	77623	5.80	544234	6.99	530923	9.96
UPPER LIMIT	155246	6.30	1088468	7.49	1061846	10.46
LOWER LIMIT	38812	5.30	272117	6.49	265462	9.46
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	72554	5.82	453031	7.00	466367	9.95
02 PXS-5	100109	5.81	693642	7.00	621723	9.96
03 PXS-6	85777	5.82	539755	7.01	485218	9.96
04 DUP-3	80274	5.82	534261	7.00	455242	9.96
05 PXB-36	78273	5.82	560644	7.01	500864	9.96
06 PXS-5	50883	5.82	365707	7.00	335517	9.96
07 PXS-5	51241	5.82	348419	7.01	333268	9.96
08 PXB-36	50275	5.82	319903	7.01	321081	9.96
09 PXB-36	49832	5.82	315954	7.01	320438	9.96
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-d5

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.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: C0J100187

Lab File ID (Standard): 3C51013

Date Analyzed: 10/13/00

Instrument ID: HP5

Time Analyzed: 1001

GC Column: DB624

ID: 0.53 (mm)

Heated Purge: (Y/N) N

	IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	73738	5.81	421313	7.00	360736	9.96
UPPER LIMIT	147476	6.31	842626	7.50	721472	10.46
LOWER LIMIT	36869	5.31	210657	6.50	180368	9.46
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	63159	5.82	370417	7.00	334558	9.96
02 TB-3	57703	5.82	335651	7.01	288436	9.96
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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.

GENERAL CHEMISTRY SUMMARY

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: PXS-5

General Chemistry

Lot-Sample #...: C0J100187-001 Work Order #...: DLVAC Matrix.....: SOLID
 Date Sampled...: 10/09/00 Date Received...: 10/10/00
 % Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	12.5		%	ICLP ILM04.0	10/10-10/11/00	0284384
Dilution Factor: 1				MS Run #.....: 0284221		

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: PXS-6

General Chemistry

Lot-Sample #...: C0J100187-002 Work Order #...: DLVAD Matrix.....: SOLID
 Date Sampled...: 10/09/00 Date Received...: 10/10/00
 % Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	14.3		%	ICLP ILM04.0	10/10-10/11/00	0284384
Dilution Factor: 1				MS Run #.....: 0284221		

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: PXB-36

General Chemistry

Lot-Sample #...: C0J100187-003 Work Order #...: DLVAE Matrix.....: SOLID
 Date Sampled...: 10/09/00 Date Received...: 10/10/00
 % Moisture.....: 9.9

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	9.9		%	ICLP ILM04.0	10/10-10/11/00	0284384

Dilution Factor: 1 MS Run #.....: 0284221

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: DUP-3

General Chemistry

Lot-Sample #....: C0J100187-005 Work Order #....: DLVAG Matrix.....: SOLID
Date Sampled....: 10/09/00 Date Received...: 10/10/00
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	17.0		%	ICLP ILM04.0	10/10-10/11/00	0284384

Dilution Factor: 1 MS Run #.....: 0284221

General Chemistry

Matrix.....: SOLID

Date Received..: 10/10/00

Prep Batch #...:

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0J100187

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

Matrix.....: SOLID

Date Sampled...: 10/09/00

Date Received..: 10/10/00

% Moisture.....: 9.9

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u> <u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Percent Moisture	9.9	9.8	%	1.4	(0-0.0)	SD Lot-Sample #: C0J100187-003	
					ICLP ILM04.0	10/10-10/11/00	0284384

Dilution Factor: 1

Prep Date.....: 0284221 Analysis Date..:

Prep Batch #...:

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0J100187

Work Order #...: DLV9M-SMP
DLV9M-DUP

Matrix.....: SOLID

Date Sampled...: 10/09/00

Date Received...: 10/10/00

% Moisture.....: 13

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	13.0	11.6	%	12	(0-0.0)	ICLP ILM04.0	SD Lot-Sample #: C0J100185-005 10/10-10/11/00	0284384
Dilution Factor: 1								
Prep Date.....: 0284221			Analysis Date...			Prep Batch #....:		

GC/MS VOLATILE DATA

**GC/MS VOLATILE
QC SUMMARY**

OCLP OLM04.2 SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT

QESSDG:

Lot #: C0J100187

	CLIENT ID.	SRG01	SRG02	SRG03	TOT OUT
	=====	=====	=====	=====	=====
01	PXS-5	117	95	92	00
02	PXS-6	103	61	85	00
03	PXB-36	113	111	93	00
04	DUP-3	106	60	87	00
05	METHOD BLK. DLVQC101	109	98	94	00
06	PXS-5 D	114	104	103	00
07	PXB-36 D	100	91	96	00
08	PXS-5 S	108	97	98	00
09	PXB-36 S	88	83	89	00

SURROGATES

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

QC LIMITS

(84-138)
 (59-113)
 (70-121)

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 SURROGATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: CUMMINGS-RITER CONSULTANTS INC

Lab Code: QESPIT

QESSDG:

Lot #: C0J100187

	CLIENT ID.	SRG01	SRG02	SRG03	TOT OUT
	=====	=====	=====	=====	=====
01	TB-3	94	92	105	00
02	METHOD BLK. DM4C21AA	92	90	103	00

SURROGATES

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

QC LIMITS

(88-110)
(86-115)
(76-114)

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 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-5

Level: (low/med) LOW

Lot #: C0J100187

WO #: DLVAC105

BATCH: 0284424

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	54.9	ND	64.0	117	59 - 172	
Trichloroethene	54.9	1.1	51.5	92	62 - 137	
Benzene	54.9	ND	51.8	94	66 - 142	
Toluene	54.9	ND	57.6	105	59 - 139	
Chlorobenzene	54.9	ND	57.1	104	60 - 133	

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 limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

OCLE 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-5

Level: (low/med) LOW

Lot #: C0J100187

WO #: DLVAC106

BATCH: 0284424

COMPOUND	SPIKE ADDED (ug/kg)	MSD CONCENT. (ug/kg)	MSD % REC	% RPD	QC LIMITS RPD	REC	QUAL
1,1-Dichloroethene	54.9	61.2	112	4.6	22	59 - 172	
Trichloroethene	54.9	52.6	94	2.2	24	62 - 137	
Benzene	54.9	51.8	94	0.060	21	66 - 142	
Toluene	54.9	55.6	101	3.5	21	59 - 139	
Chlorobenzene	54.9	54.6	99	4.6	21	60 - 133	

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 5 outside limits
Spike Recovery: 0 out of 5 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: PXB-36

Level: (low/med) LOW

Lot #: C0J100187

WO #: DLVAE105

BATCH: 0284424

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENT. (ug/kg)	MS CONCENT. (ug/kg)	MS % REC	LIMITS REC	QUAL
1,1-Dichloroethene	54.4	ND	54.4	100	59 - 172	
Trichloroethene	54.4	ND	46.5	85	62 - 137	
Benzene	54.4	ND	48.3	89	66 - 142	
Toluene	54.4	ND	50.8	93	59 - 139	
Chlorobenzene	54.4	ND	51.3	94	60 - 133	

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 limitsSpike Recovery: 0 out of 5 outside limits

COMMENTS:

FORM III

OCLP OLM04.2 METHOD BLANK SUMMARY

BLANK WORKORDER NO.

DM4C21AA

Lab Name: Severn Trent Laboratories, Inc.

Lab Code: QESPIT

SDG Number:

Lab File ID: WB51013.D

Lot Number: C0J100187

Date Analyzed: 10/13/00

Time Analyzed: 10:36

Matrix: WATER

Date Extracted:10/13/00

GC Column: ID: .00

Extraction Method:

Instrument ID: HP5

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	TB-3	DLVAJ101	5101303.D	10/13/00	11:50
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

FORM IV

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: 51013D

Lab File ID: BF51013

BFB Injection Date: 10/13/00

Instrument ID: HP5

BFB Injection Time: 0548

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

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.1
75	30.0 - 66.0% of mass 95	49.8
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.7 (0.9)1
174	50.0 - 120.0% of mass 95	81.3
175	4.0 - 9.0% of mass 174	6.3 (7.7)1
176	93.0 - 101.0% of mass 174	78.3 (96.3)1
177	5.0 - 9.0% of mass 176	4.9 (6.3)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	2C51013	10/13/00	0728
02	VSTD10	VSTD10	1A51013	10/13/00	0802
03	VSTD20	VSTD20	1B51013	10/13/00	0827
04	VSTD100	VSTD100	1D51013	10/13/00	0851
05	VSTD200	VSTD200	1E51013	10/13/00	0915
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL

Case No.:

SAS No.:

SDG No.: C0J100187

Lab File ID: BF51010N

BFB Injection Date: 10/10/00

Instrument ID: HP5

BFB Injection Time: 1356

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

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.0
75	30.0 - 66.0% of mass 95	47.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.2 (0.2)1
174	50.0 - 120.0% of mass 95	77.6
175	4.0 - 9.0% of mass 174	5.6 (7.2)1
176	93.0 - 101.0% of mass 174	75.1 (96.7)1
177	5.0 - 9.0% of mass 176	5.0 (6.7)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	CC51010N	10/10/00	1643
02	INTRA-LAB BL	DLVQC101	SB51010N	10/10/00	1817
03	PXS-5	DLVAC102	51010N01	10/10/00	1856
04	PXS-6	DLVAD102	51010N02	10/10/00	1925
05	DUP-3	DLVAG102	51010N03	10/10/00	1955
06	PXB-36	DLVAE102	51010N04	10/10/00	2025
07	PXS-5	DLVAC105	51010N05	10/10/00	2054
08	PXS-5	DLVAC106	51010N06	10/10/00	2122
09	PXB-36	DLVAE105	51010N07	10/10/00	2148
10	PXB-36	DLVAE106	51010N08	10/10/00	2215
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL

Case No.:

SAS No.:

SDG No.: METHODS

Lab File ID: BF51004K

BFB Injection Date: 10/04/00

Instrument ID: HP5

BFB Injection Time: 1213

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

Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	17.9
75	30.0 - 66.0% of mass 95	45.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.4 (0.5)1
174	50.0 - 120.0% of mass 95	79.0
175	4.0 - 9.0% of mass 174	5.8 (7.3)1
176	93.0 - 101.0% of mass 174	77.0 (97.5)1
177	5.0 - 9.0% of mass 176	5.0 (6.5)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD20	VSTD20	2B51004P	10/04/00	1702
02	VSTD50	VSTD50	1C51004P	10/04/00	1731
03	VSTD100	VSTD100	1D51004P	10/04/00	1801
04	VSTD200	VSTD200	1E51004P	10/04/00	1831
05	VSTD10	VSTD10	2A51004P	10/04/00	1924
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT Case No.:

SAS No.:

SDG No.: COJ100187

Lab File ID: CF51013

BFB Injection Date: 10/13/00

Instrument ID: HP5

BFB Injection Time: 0940

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

Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.0
75	30.0 - 66.0% of mass 95	47.5
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.5 (0.7)1
174	50.0 - 120.0% of mass 95	81.6
175	4.0 - 9.0% of mass 174	6.1 (7.5)1
176	93.0 - 101.0% of mass 174	79.3 (97.2)1
177	5.0 - 9.0% of mass 176	5.5 (6.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	3C51013	10/13/00	1001
02	INTRA-LAB BL	DM4C21AA	WB51013	10/13/00	1036
03	TB-3	DLVAJ101	5101303	10/13/00	1150
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL

Case No.:

SAS No.:

SDG No.: C0J100187

Lab File ID (Standard): CC51010N

Date Analyzed: 10/10/00

Instrument ID: HP5

Time Analyzed: 1643

GC Column: DB624

ID: 0.20 (mm)

Heated Purge: (Y/N) Y

	IS1 (BCM)	RT #	IS2 (DFB)	RT #	IS3 (CBZ)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	77623	5.80	544234	6.99	530923	9.96
UPPER LIMIT	155246	6.30	1088468	7.49	1061846	10.46
LOWER LIMIT	38812	5.30	272117	6.49	265462	9.46
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	72554	5.82	453031	7.00	466367	9.95
02 PXS-5	100109	5.81	693642	7.00	621723	9.96
03 PXS-6	85777	5.82	539755	7.01	485218	9.96
04 DUP-3	80274	5.82	534261	7.00	455242	9.96
05 PXB-36	78273	5.82	560644	7.01	500864	9.96
06 PXS-5	50883	5.82	365707	7.00	335517	9.96
07 PXS-5	51241	5.82	348419	7.01	333268	9.96
08 PXB-36	50275	5.82	319903	7.01	321081	9.96
09 PXB-36	49832	5.82	315954	7.01	320438	9.96
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: C0J100187

Lab File ID (Standard): 3C51013

Date Analyzed: 10/13/00

Instrument ID: HP5

Time Analyzed: 1001

GC Column: DB624

ID: 0.53 (mm)

Heated Purge: (Y/N) N

	IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	73738	5.81	421313	7.00	360736	9.96
UPPER LIMIT	147476	6.31	842626	7.50	721472	10.46
LOWER LIMIT	36869	5.31	210657	6.50	180368	9.46
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 INTRA-LAB BL	63159	5.82	370417	7.00	334558	9.96
02 TB-3	57703	5.82	335651	7.01	288436	9.96
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

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 VOLATILE
SAMPLE DATA**

CUMMINGS-RITER CONSULTANTS INC

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

Matrix: (soil/water) SOLID Lab Sample ID: C0J100187 001

Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.24 / g Date Received: 10/10/00

Work Order: DLVAC102 Date Extracted: 10/10/00

Dilution factor: 0.95 Date Analyzed: 10/10/00

Moisture %: 13

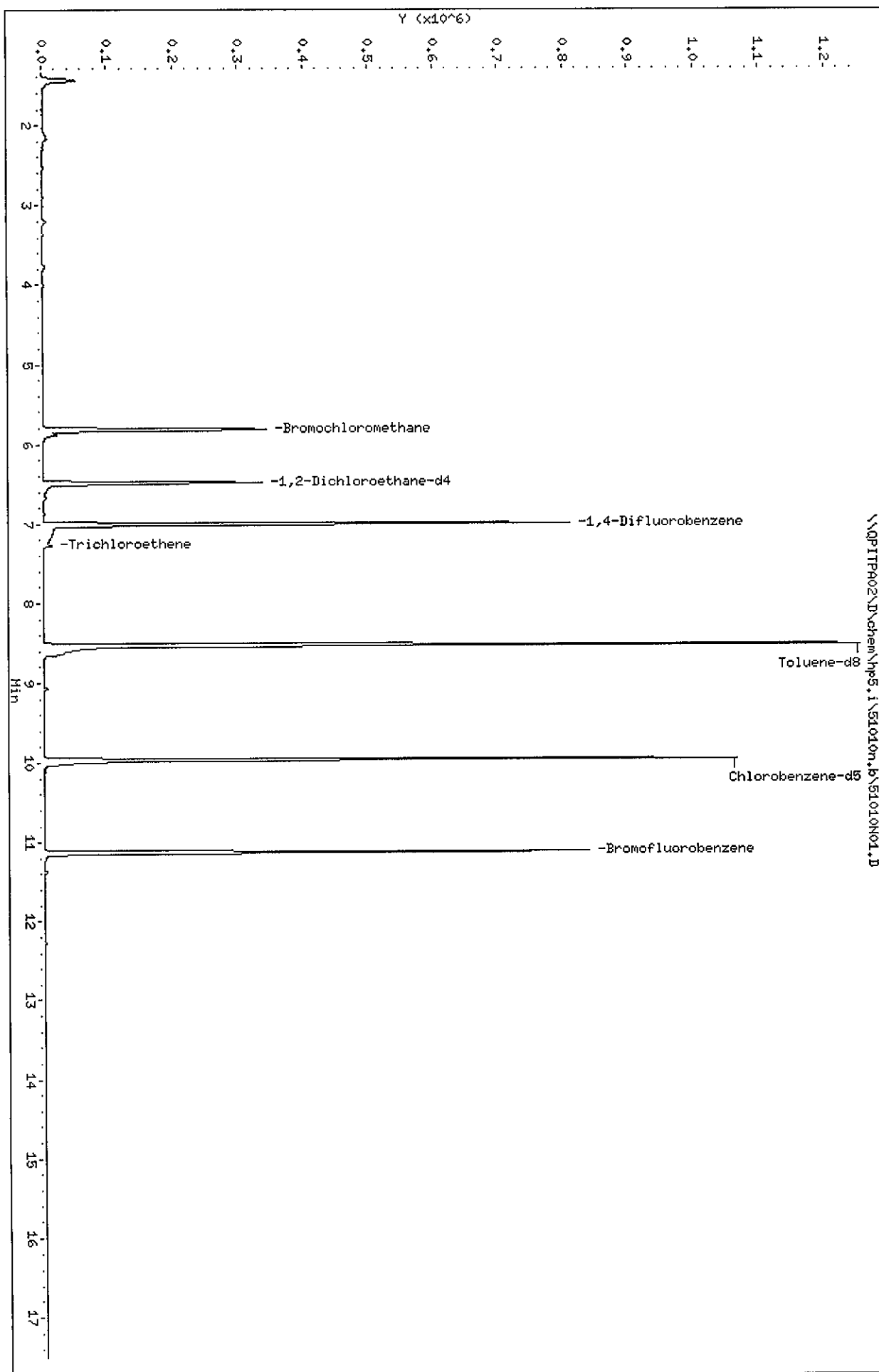
QC Batch: 0284424

Client Sample Id: PXS-5

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/kg	Q
75-35-4	1,1-Dichloroethene	11	U
71-43-2	Benzene	11	U
108-88-3	Toluene	11	U
108-90-7	Chlorobenzene	11	U
79-01-6	Trichloroethene	1.1	J

Data File: \\QPI1P402\N\chem\hp5.i\51010n.b\51010N01.D
 Date : 10-OCT-2000 18:56
 Client ID: PXS-5
 Sample Info: c0j100187-001 5.24g/5ml
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hp5.i
 Operator: 034635
 Column diameter: 0.20



STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51010n.b\51010N01.D
Lab Smp Id: DLVAC102 Client Smp ID: PXS-5
Inj Date : 10-OCT-2000 18:56 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : c0j100187-001 5.24g/5ml
Misc Info : dlvac102,51010n.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51010n.b\clpsoil.m
Meth Date : 06-Oct-2000 16:39 Quant Type: ISTD
Cal Date : 10-OCT-2000 16:43 Cal File: CC51010N.D
Als bottle: 7
Dil Factor: 0.95000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: $\text{Amt} * \text{DF} * 1/\text{Vo} * 100 / (100 - \text{M})$

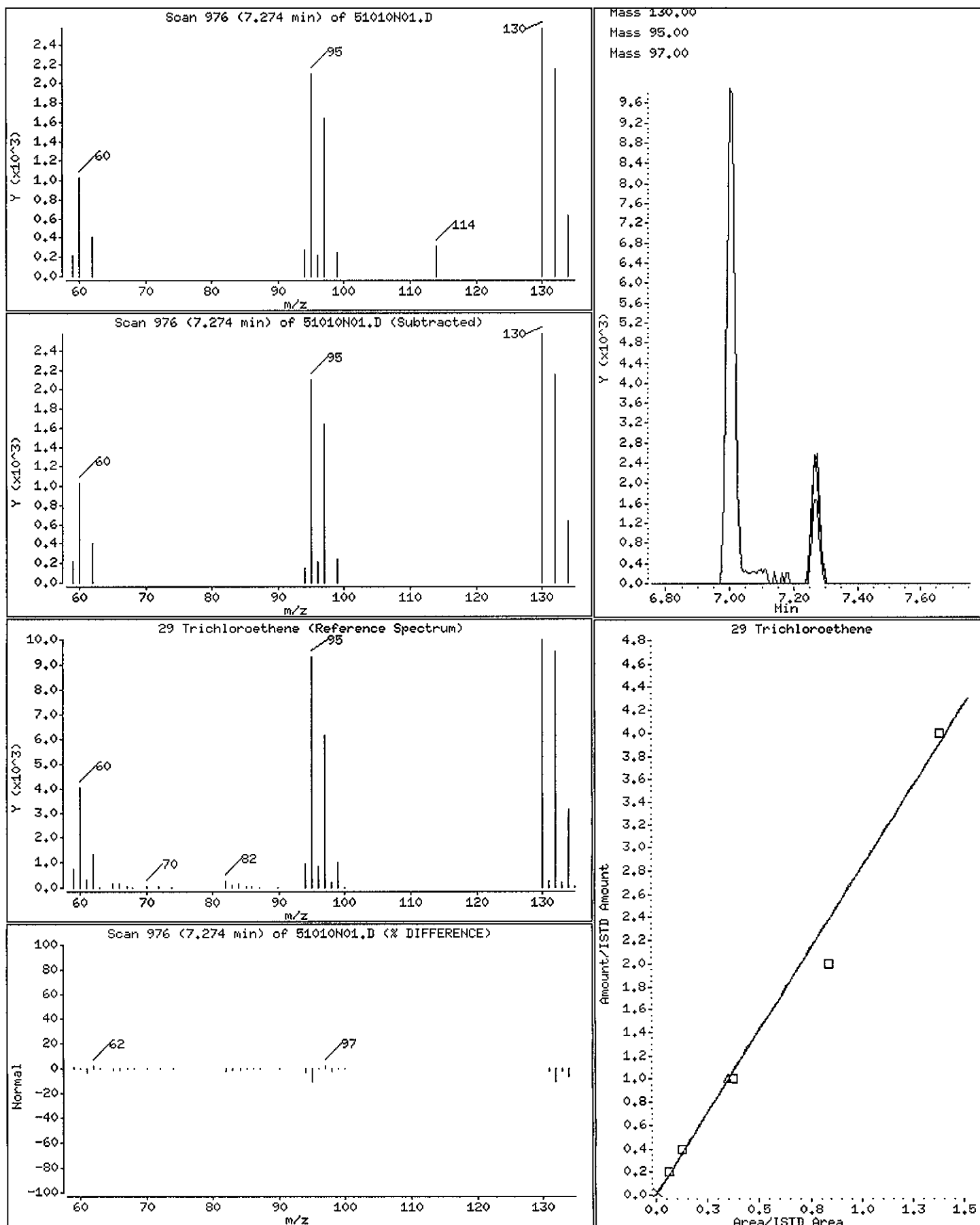
Name	Value	Description
DF	0.950	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

011 10/10/00

Compounds	QUANT	SIG						CONCENTRATIONS	
			MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/kg)
*****	=====	==	=====	=====	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128			5.814	5.801 (1.000)		100109	250.000	
* 2 1,4-Difluorobenzene	114			7.000	6.994 (1.000)		693642	250.000	
* 3 Chlorobenzene-d5	117			9.957	9.956 (1.000)		621723	250.000	
\$ 4 1,2-Dichloroethane-d4	65			6.489	6.477 (1.116)		235241	230.225	46.04
\$ 5 Toluene-d8	98			8.527	8.521 (0.856)		889134	291.947	58.39
\$ 6 Bromofluorobenzene	95			11.125	11.136 (1.117)		291917	237.425	47.48
7 Dichlorodifluoromethane	85			Compound Not Detected.					
8 Chloromethane	50			Compound Not Detected.					
10 Bromomethane	94			Compound Not Detected.					
9 Vinyl Chloride	62			Compound Not Detected.					
11 Chloroethane	64			Compound Not Detected.					
12 Trichlorofluoromethane	101			Compound Not Detected.					
15 1,1-Dichloroethene	96			Compound Not Detected.					
51 1,1,2-Trichloro-1,2,2-Trifluor	101			Compound Not Detected.					
14 Acetone	43			Compound Not Detected.					
17 Carbon Disulfide	76			Compound Not Detected.					

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(ug/kg)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43				Compound Not Detected.		
16 Methylene Chloride	84				Compound Not Detected.		
82 Methyl tert-butyl ether	73				Compound Not Detected.		
19 trans-1,2-Dichloroethene	96				Compound Not Detected.		
21 1,1-Dichloroethane	63				Compound Not Detected.		
23 cis-1,2-dichloroethene	96				Compound Not Detected.		
M 81 1,2-Dichloroethene (total)	96				Compound Not Detected.		
22 2-Butanone	43				Compound Not Detected.		
24 Chloroform	83				Compound Not Detected.		
28 Benzene	78				Compound Not Detected.		
27 1,2-Dichloroethane	62				Compound Not Detected.		
25 1,1,1-Trichloroethane	97				Compound Not Detected.		
89 Cyclohexane	56				Compound Not Detected.		
26 Carbon Tetrachloride	117				Compound Not Detected.		
29 Trichloroethene	130	7.274	7.255	(1.039)	4849	5.00851	0.9516
30 1,2-Dichloropropane	63				Compound Not Detected.		
31 Bromodichloromethane	83				Compound Not Detected.		
90 Methyl Cyclohexane	83				Compound Not Detected.		
34 cis-1,3-Dichloropropene	75				Compound Not Detected.		
38 1,1,2-Trichloroethane	97				Compound Not Detected.		
40 Dibromochloromethane	129				Compound Not Detected.		
36 trans-1,3-Dichloropropene	75				Compound Not Detected.		
33 4-Methyl-2-pentanone	43				Compound Not Detected.		
37 2-Hexanone	43				Compound Not Detected.		
46 Bromoform	173				Compound Not Detected.		
39 Tetrachloroethene	164				Compound Not Detected.		
63 1,2-Dibromoethane	107				Compound Not Detected.		
47 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
35 Toluene	91				Compound Not Detected.		
41 Chlorobenzene	112				Compound Not Detected.		
42 Ethylbenzene	106				Compound Not Detected.		
45 Styrene	104				Compound Not Detected.		
43 m + p-Xylene	106				Compound Not Detected.		
44 Xylene-o	106				Compound Not Detected.		
M 80 Xylenes (total)	106				Compound Not Detected.		
91 Isopropylbenzene	105				Compound Not Detected.		
48 1,3-Dichlorobenzene	146				Compound Not Detected.		
49 1,4-Dichlorobenzene	146				Compound Not Detected.		
50 1,2-Dichlorobenzene	146				Compound Not Detected.		
69 1,2-Dibromo-3-chloropropane	75				Compound Not Detected.		
92 1,2,4-Trichlorobenzene	180				Compound Not Detected.		

29 Trichloroethene



CUMMINGS-RITER CONSULTANTS INC

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

Matrix: (soil/water) SOLID Lab Sample ID:C0J100187 002

Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.15 / g Date Received: 10/10/00

Work Order: DLVAD102 Date Extracted:10/10/00

Dilution factor: 0.97 Date Analyzed: 10/10/00

Moisture %:14

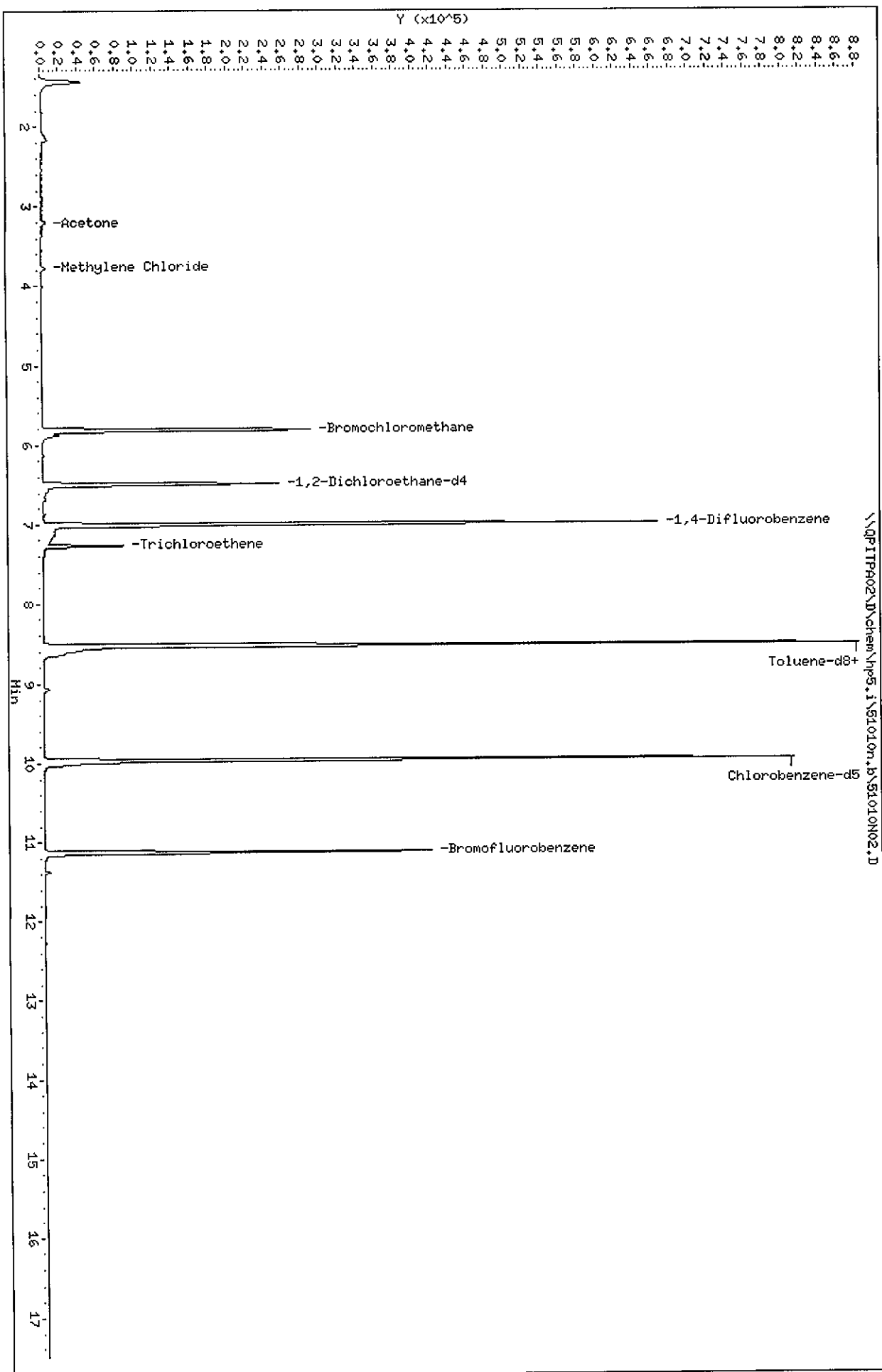
QC Batch: 0284424

Client Sample Id: PXS-6

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/kg Q
79-01-6	Trichloroethene	8.9	J

Data File: \\QPI1P02\N\chem\hp5.i\51010n.b\51010N02.D
 Date: 10-OCT-2000 19:25
 Client ID: PXS-6
 Sample Info: c0j100187-002 5.15g/5ml
 Purge Volume: 5.0
 Column Phase: DB624

Instrument: hp5.i
 Operator: 034635
 Column diameter: 0.20



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Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51010n.b\51010N02.D
Lab Smp Id: DLVAD102 Client Smp ID: PXS-6
Inj Date : 10-OCT-2000 19:25 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : c0j100187-002 5.15g/5ml
Misc Info : dl vad102,51010n.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51010n.b\clpsoil.m
Meth Date : 06-Oct-2000 16:39 Quant Type: ISTD
Cal Date : 10-OCT-2000 16:43 Cal File: CC51010N.D
Als bottle: 8
Dil Factor: 0.97000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: $\text{Amt} * \text{DF} * 1/\text{Vo} * 100 / (100 - \text{M})$

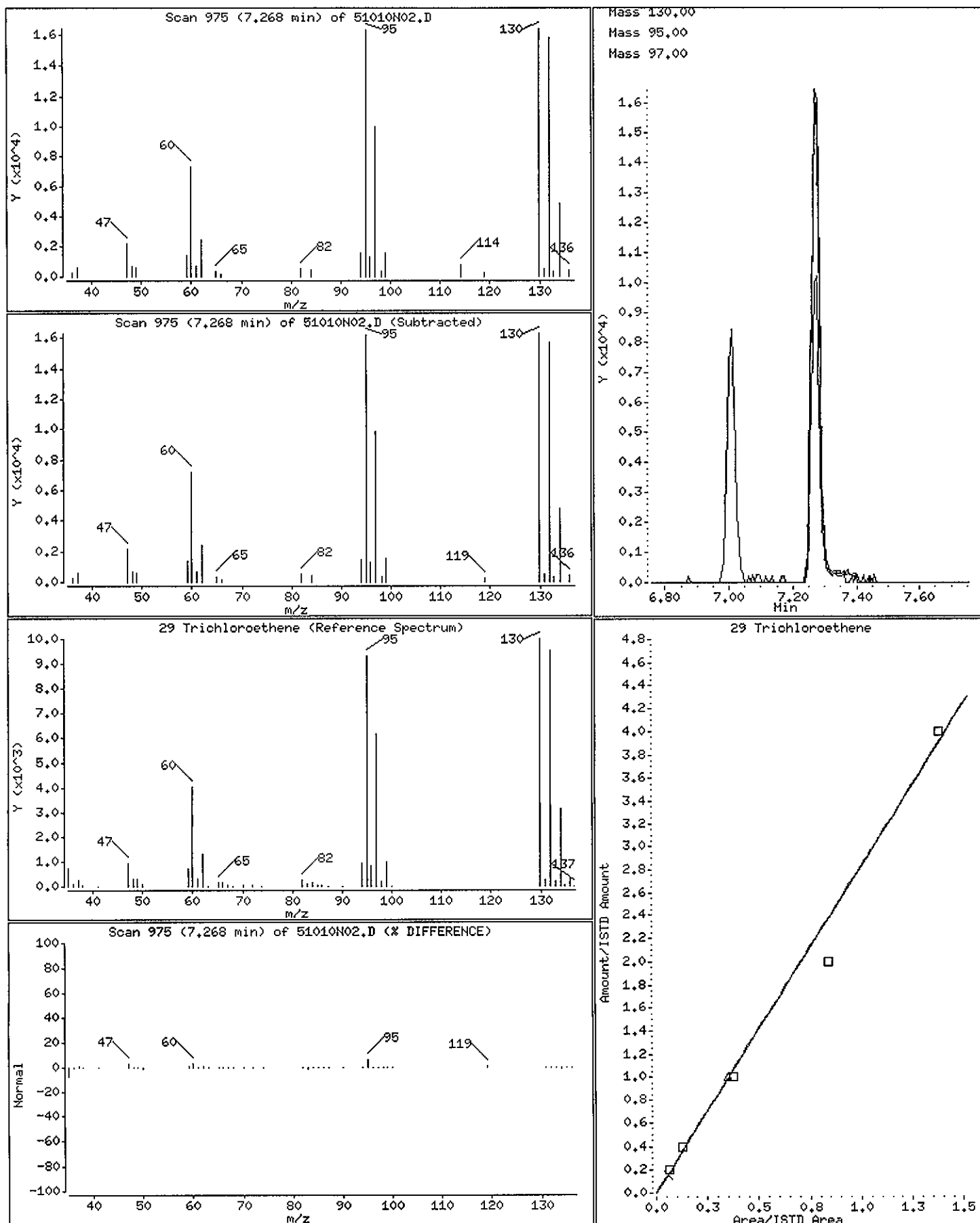
Di 10/14/00

Name	Value	Description
DF	0.970	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	FINAL	
						(ng)	(ug/kg)	
* 1 Bromochloromethane	128	5.820	5.801	(1.000)	85777	250.000		
* 2 1,4-Difluorobenzene	114	7.006	6.994	(1.000)	539755	250.000		
* 3 Chlorobenzene-d5	117	9.957	9.956	(1.000)	485218	250.000		
\$ 4 1,2-Dichloroethane-d4	65	6.489	6.477	(1.115)	185898	212.332	42.47	
\$ 5 Toluene-d8	98	8.527	8.521	(0.856)	613983	258.317	51.66	
\$ 6 Bromofluorobenzene	95	11.125	11.136	(1.117)	145571	151.706	30.34	
7 Dichlorodifluoromethane	85	Compound Not Detected.						
8 Chloromethane	50	Compound Not Detected.						
10 Bromomethane	94	Compound Not Detected.						
9 Vinyl Chloride	62	Compound Not Detected.						
11 Chloroethane	64	Compound Not Detected.						
12 Trichlorofluoromethane	101	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
51 1,1,2-Trichloro-1,2,2-Trifluor	101	Compound Not Detected.						
14 Acetone	43	3.204	3.277	(0.551)	7548	15.3154	2.971	
17 Carbon Disulfide	76	Compound Not Detected.						

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/kg)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43				Compound Not Detected.		
16 Methylene Chloride	84	3.776	3.727	(0.649)	2696	7.08240	1.374
82 Methyl tert-butyl ether	73				Compound Not Detected.		
19 trans-1,2-Dichloroethene	96				Compound Not Detected.		
21 1,1-Dichloroethane	63				Compound Not Detected.		
23 cis-1,2-dichloroethene	96				Compound Not Detected.		
M 81 1,2-Dichloroethene (total)	96				Compound Not Detected.		
22 2-Butanone	43				Compound Not Detected.		
24 Chloroform	83				Compound Not Detected.		
28 Benzene	78				Compound Not Detected.		
27 1,2-Dichloroethane	62				Compound Not Detected.		
25 1,1,1-Trichloroethane	97				Compound Not Detected.		
89 Cyclohexane	56				Compound Not Detected.		
26 Carbon Tetrachloride	117				Compound Not Detected.		
29 Trichloroethene	130	7.268	7.255	(1.037)	29591	39.2785	7.620
30 1,2-Dichloropropane	63				Compound Not Detected.		
31 Bromodichloromethane	83				Compound Not Detected.		
90 Methyl Cyclohexane	83				Compound Not Detected.		
34 cis-1,3-Dichloropropene	75				Compound Not Detected.		
38 1,1,2-Trichloroethane	97				Compound Not Detected.		
40 Dibromochloromethane	129				Compound Not Detected.		
36 trans-1,3-Dichloropropene	75				Compound Not Detected.		
33 4-Methyl-2-pentanone	43				Compound Not Detected.		
37 2-Hexanone	43				Compound Not Detected.		
46 Bromoform	173				Compound Not Detected.		
39 Tetrachloroethene	164				Compound Not Detected.		
63 1,2-Dibromoethane	107				Compound Not Detected.		
47 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
35 Toluene	91				Compound Not Detected.		
41 Chlorobenzene	112				Compound Not Detected.		
42 Ethylbenzene	106				Compound Not Detected.		
45 Styrene	104				Compound Not Detected.		
43 m + p-Xylene	106				Compound Not Detected.		
44 Xylene-o	106				Compound Not Detected.		
M 80 Xylenes (total)	106				Compound Not Detected.		
91 Isopropylbenzene	105				Compound Not Detected.		
48 1,3-Dichlorobenzene	146				Compound Not Detected.		
49 1,4-Dichlorobenzene	146				Compound Not Detected.		
50 1,2-Dichlorobenzene	146				Compound Not Detected.		
69 1,2-Dibromo-3-chloropropane	75				Compound Not Detected.		
92 1,2,4-Trichlorobenzene	180				Compound Not Detected.		

29 Trichloroethene



CUMMINGS-RITER CONSULTANTS INC

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

Matrix: (soil/water) SOLID Lab Sample ID: COJ100187 003

Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.02 / g Date Received: 10/10/00

Work Order: DLVAE102 Date Extracted: 10/10/00

Dilution factor: 1 Date Analyzed: 10/10/00

Moisture %: 9.9

QC Batch: 0284424

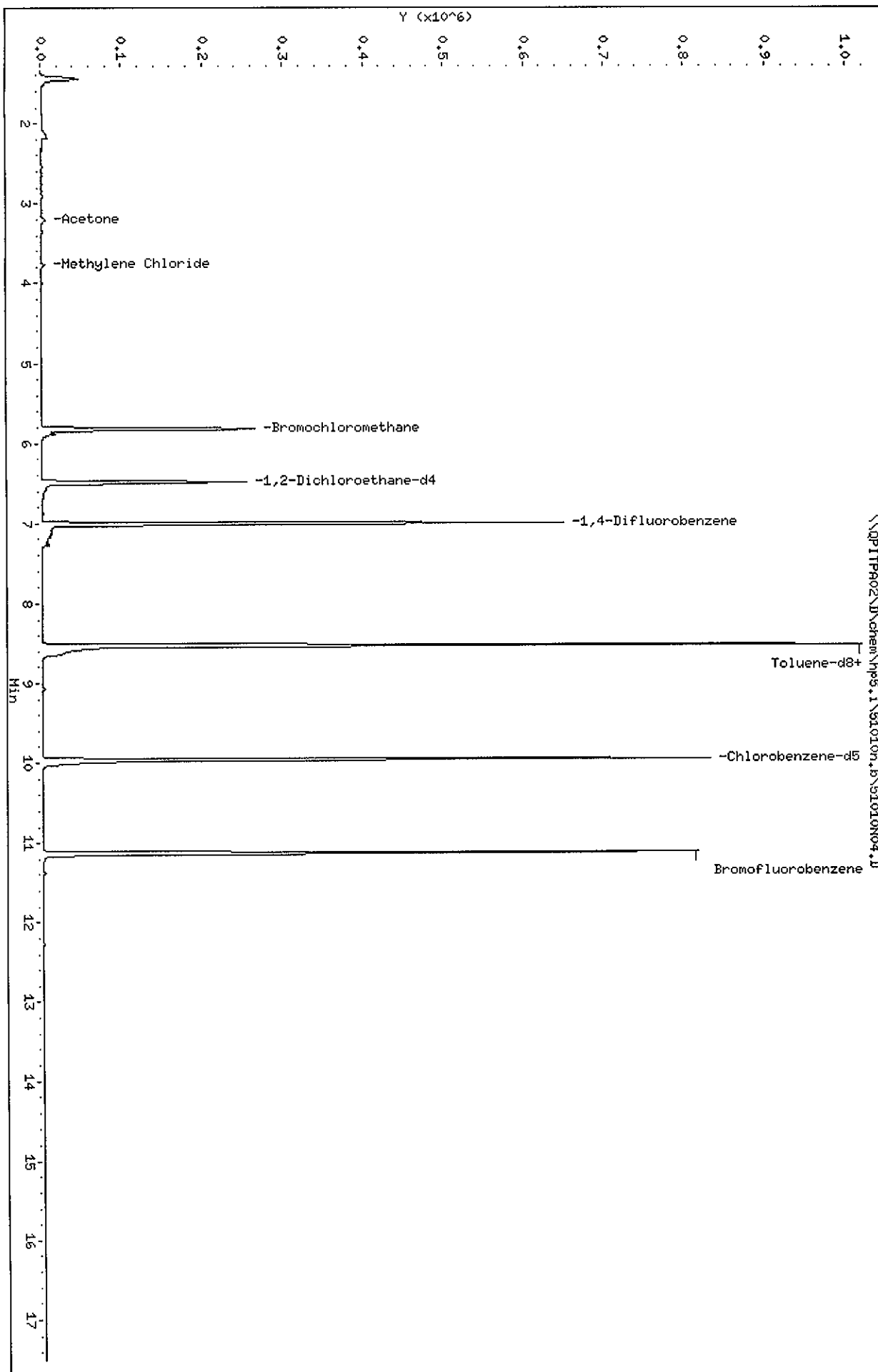
Client Sample Id: PXB-36

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/kg	Q
75-35-4	1,1-Dichloroethene	11		U
71-43-2	Benzene	11		U
108-88-3	Toluene	11		U
108-90-7	Chlorobenzene	11		U
79-01-6	Trichloroethene	11		U

Data File: \\NPITPA02\Nchem\hp5.i\51010n.b\51010N04.D
Date: 10-OCT-2000 20:25
Client ID: PXB-36
Sample Info: c0j100187-003 5.02g/5ml
Purge Volume: 5.0
Column phase: DB624

Instrument: hp5.i
Operator: 034635
Column diameter: 0.20



STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51010n.b\51010N04.D
Lab Smp Id: DLVAE102 Client Smp ID: PXB-36
Inj Date : 10-OCT-2000 20:25 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : c0j100187-003 5.02g/5ml
Misc Info : dlvae102,51010n.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51010n.b\clpsoil.m
Meth Date : 06-Oct-2000 16:39 Quant Type: ISTD
Cal Date : 10-OCT-2000 16:43 Cal File: CC51010N.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: $\text{Amt} * \text{DF} * 1/\text{Vo} * 100 / (100 - \text{M})$

PJ 10/10/00

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(ug/kg)
* 1 Bromochloromethane	128	5.820	5.801	(1.000)	78273	250.000	
* 2 1,4-Difluorobenzene	114	7.006	6.994	(1.000)	560644	250.000	
* 3 Chlorobenzene-d5	117	9.956	9.956	(1.000)	500864	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.489	6.477	(1.115)	184905	231.445	46.29
\$ 5 Toluene-d8	98	8.527	8.521	(0.856)	693483	282.651	56.53
\$ 6 Bromofluorobenzene	95	11.124	11.136	(1.117)	274466	277.097	55.42
7 Dichlorodifluoromethane	85	Compound Not Detected.					
8 Chloromethane	50	Compound Not Detected.					
10 Bromomethane	94	Compound Not Detected.					
9 Vinyl Chloride	62	Compound Not Detected.					
11 Chloroethane	64	Compound Not Detected.					
12 Trichlorofluoromethane	101	Compound Not Detected.					
15 1,1-Dichloroethene	96	Compound Not Detected.					
51 1,1,2-Trichloro-1,2,2-Trifluor	101	Compound Not Detected.					
14 Acetone	43	3.204	3.277	(0.551)	7133	15.8609	3.172
17 Carbon Disulfide	76	Compound Not Detected.					

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(ug/kg)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43				Compound Not Detected.		
16 Methylene Chloride	84	3.769	3.727	(0.648)	2637	7.59154	1.518
82 Methyl tert-butyl ether	73				Compound Not Detected.		
19 trans-1,2-Dichloroethene	96				Compound Not Detected.		
21 1,1-Dichloroethane	63				Compound Not Detected.		
23 cis-1,2-dichloroethene	96				Compound Not Detected.		
M 81 1,2-Dichloroethene (total)	96				Compound Not Detected.		
22 2-Butanone	43				Compound Not Detected.		
24 Chloroform	83				Compound Not Detected.		
28 Benzene	78				Compound Not Detected.		
27 1,2-Dichloroethane	62				Compound Not Detected.		
25 1,1,1-Trichloroethane	97				Compound Not Detected.		
89 Cyclohexane	56				Compound Not Detected.		
26 Carbon Tetrachloride	117				Compound Not Detected.		
29 Trichloroethene	130				Compound Not Detected.		
30 1,2-Dichloropropane	63				Compound Not Detected.		
31 Bromodichloromethane	83				Compound Not Detected.		
90 Methyl Cyclohexane	83				Compound Not Detected.		
34 cis-1,3-Dichloropropene	75				Compound Not Detected.		
38 1,1,2-Trichloroethane	97				Compound Not Detected.		
40 Dibromochloromethane	129				Compound Not Detected.		
36 trans-1,3-Dichloropropene	75				Compound Not Detected.		
33 4-Methyl-2-pentanone	43				Compound Not Detected.		
37 2-Hexanone	43				Compound Not Detected.		
46 Bromoform	173				Compound Not Detected.		
39 Tetrachloroethene	164				Compound Not Detected.		
63 1,2-Dibromoethane	107				Compound Not Detected.		
47 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
35 Toluene	91				Compound Not Detected.		
41 Chlorobenzene	112				Compound Not Detected.		
42 Ethylbenzene	106				Compound Not Detected.		
45 Styrene	104				Compound Not Detected.		
43 m + p-Xylene	106				Compound Not Detected.		
44 Xylene-o	106				Compound Not Detected.		
M 80 Xylenes (total)	106				Compound Not Detected.		
91 Isopropylbenzene	105				Compound Not Detected.		
48 1,3-Dichlorobenzene	146				Compound Not Detected.		
49 1,4-Dichlorobenzene	146				Compound Not Detected.		
50 1,2-Dichlorobenzene	146				Compound Not Detected.		
69 1,2-Dibromo-3-chloropropane	75				Compound Not Detected.		
92 1,2,4-Trichlorobenzene	180				Compound Not Detected.		

CUMMINGS-RITER CONSULTANTS INC

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

Matrix: (soil/water) SOLID Lab Sample ID: COJ100187 005

Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.18 / g Date Received: 10/10/00

Work Order: DLVAG102 Date Extracted: 10/10/00

Dilution factor: 0.97 Date Analyzed: 10/10/00

Moisture %: 17
QC Batch: 0284424

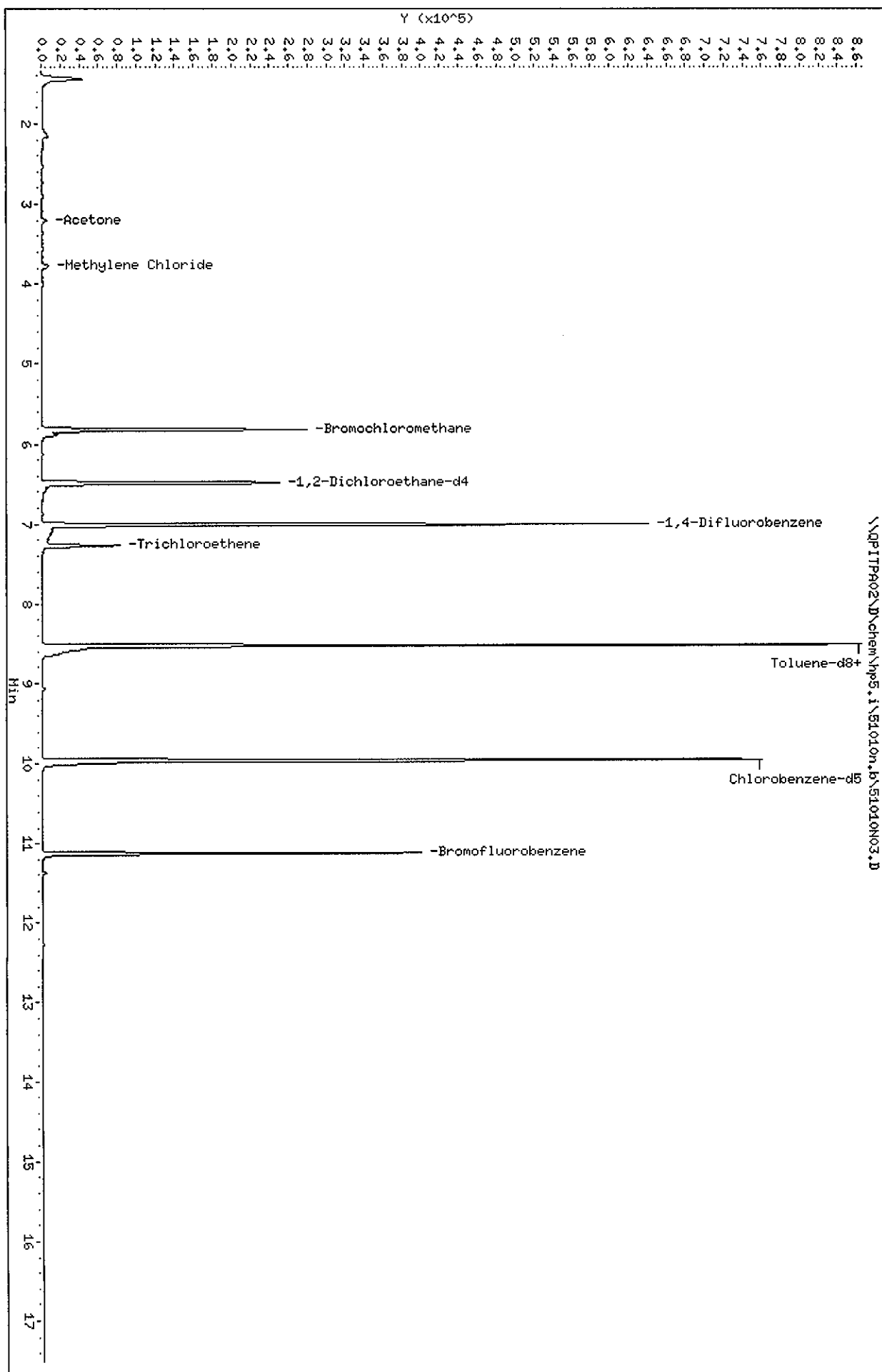
Client Sample Id: DUP-3

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/kg	Q
79-01-6	Trichloroethene	8.7		J

Data File: \\QPI1P002\Jchem\hp5.i\51010n.b\51010N03.D
Date: 10-OCT-2000 19:55
Client ID: DUP-3
Sample Info: c0j100187-005 5.18g/5ml
Purge Volume: 5.0
Column phase: DB624

Instrument: hp5.i
Operator: 034635
Column diameter: 0.20



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Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51010n.b\51010N03.D
Lab Smp Id: DLVAG102 Client Smp ID: DUP-3
Inj Date : 10-OCT-2000 19:55 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : c0j100187-005 5.18g/5ml
Misc Info : dlvg102,51010n.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51010n.b\clpsoil.m
Meth Date : 06-Oct-2000 16:39 Quant Type: ISTD
Cal Date : 10-OCT-2000 16:43 Cal File: CC51010N.D
Als bottle: 9
Dil Factor: 0.97000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

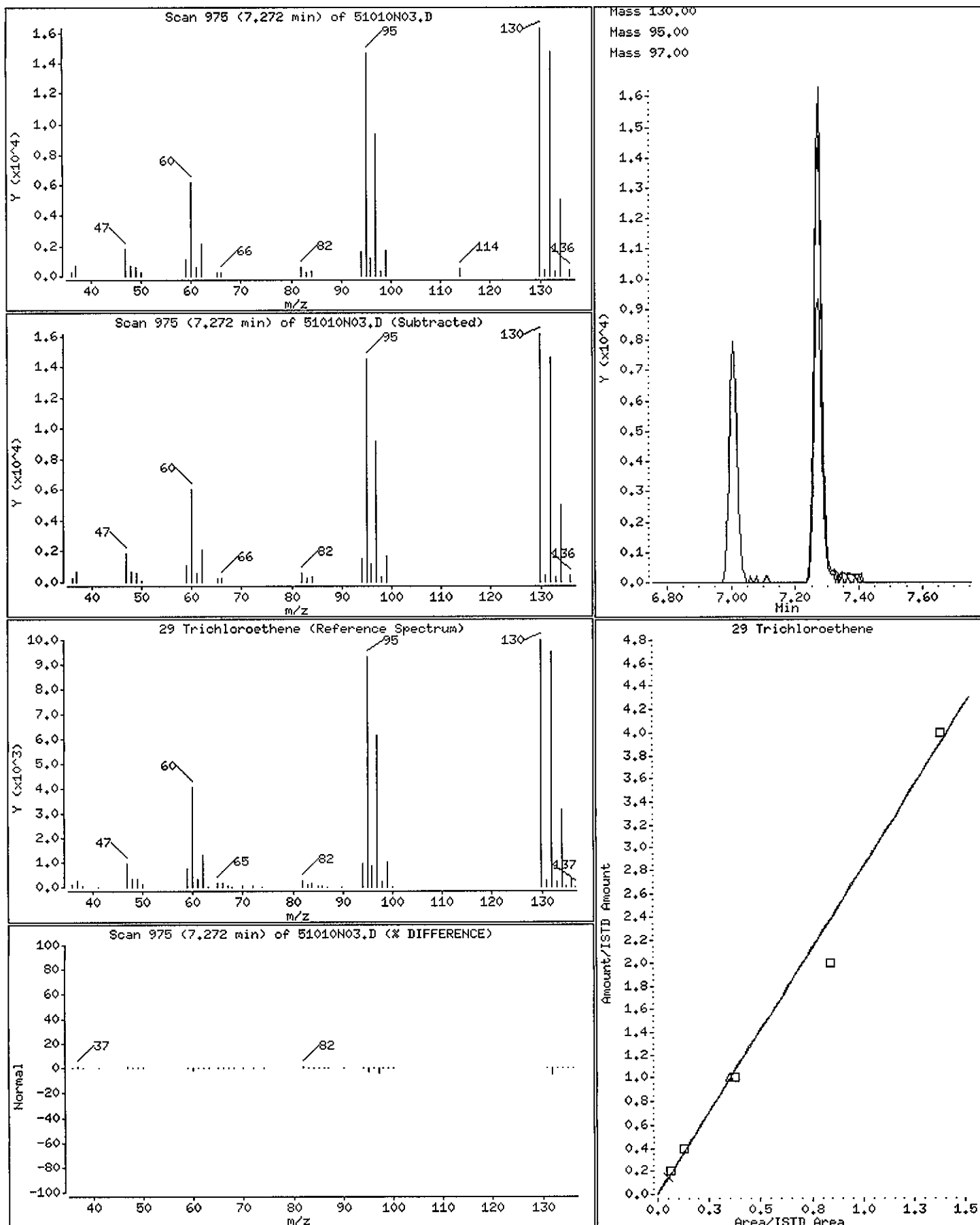
Concentration Formula: Amt * DF * 1/Vo*100/(100-M)

Name	Value	Description
DF	0.970	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

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Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(ug/kg)
=====	====	==	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128	5.818	5.801	(1.000)	80274	250.000	
* 2 1,4-Difluorobenzene	114	7.004	6.994	(1.000)	534261	250.000	
* 3 Chlorobenzene-d5	117	9.961	9.956	(1.000)	455242	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.487	6.477	(1.115)	178950	218.408	43.68
\$ 5 Toluene-d8	98	8.525	8.521	(0.856)	589120	264.177	52.84
\$ 6 Bromofluorobenzene	95	11.123	11.136	(1.117)	135587	150.605	30.12
7 Dichlorodifluoromethane	85	Compound Not Detected.					
8 Chloromethane	50	Compound Not Detected.					
10 Bromomethane	94	Compound Not Detected.					
9 Vinyl Chloride	62	Compound Not Detected.					
11 Chloroethane	64	Compound Not Detected.					
12 Trichlorofluoromethane	101	Compound Not Detected.					
15 1,1-Dichloroethene	96	Compound Not Detected.					
51 1,1,2-Trichloro-1,2,2-Trifluor	101	Compound Not Detected.					
14 Acetone	43	3.202	3.277	(0.550)	7104	15.4026	2.988
17 Carbon Disulfide	76	Compound Not Detected.					

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/kg)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43				Compound Not Detected.		
16 Methylene Chloride	84	3.774	3.727	(0.649)	4458	12.5140	2.428
82 Methyl tert-butyl ether	73				Compound Not Detected.		
19 trans-1,2-Dichloroethene	96				Compound Not Detected.		
21 1,1-Dichloroethane	63				Compound Not Detected.		
23 cis-1,2-dichloroethene	96				Compound Not Detected.		
M 81 1,2-Dichloroethene (total)	96				Compound Not Detected.		
22 2-Butanone	43				Compound Not Detected.		
24 Chloroform	83				Compound Not Detected.		
28 Benzene	78				Compound Not Detected.		
27 1,2-Dichloroethane	62				Compound Not Detected.		
25 1,1,1-Trichloroethane	97				Compound Not Detected.		
89 Cyclohexane	56				Compound Not Detected.		
26 Carbon Tetrachloride	117				Compound Not Detected.		
29 Trichloroethene	130	7.272	7.255	(1.038)	27750	37.2135	7.219
30 1,2-Dichloropropane	63				Compound Not Detected.		
31 Bromodichloromethane	83				Compound Not Detected.		
90 Methyl Cyclohexane	83				Compound Not Detected.		
34 cis-1,3-Dichloropropene	75				Compound Not Detected.		
38 1,1,2-Trichloroethane	97				Compound Not Detected.		
40 Dibromochloromethane	129				Compound Not Detected.		
36 trans-1,3-Dichloropropene	75				Compound Not Detected.		
33 4-Methyl-2-pentanone	43				Compound Not Detected.		
37 2-Hexanone	43				Compound Not Detected.		
46 Bromoform	173				Compound Not Detected.		
39 Tetrachloroethene	164				Compound Not Detected.		
63 1,2-Dibromoethane	107				Compound Not Detected.		
47 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
35 Toluene	91				Compound Not Detected.		
41 Chlorobenzene	112				Compound Not Detected.		
42 Ethylbenzene	106				Compound Not Detected.		
45 Styrene	104				Compound Not Detected.		
43 m + p-Xylene	106				Compound Not Detected.		
44 Xylene-o	106				Compound Not Detected.		
M 80 Xylenes (total)	106				Compound Not Detected.		
91 Isopropylbenzene	105				Compound Not Detected.		
48 1,3-Dichlorobenzene	146				Compound Not Detected.		
49 1,4-Dichlorobenzene	146				Compound Not Detected.		
50 1,2-Dichlorobenzene	146				Compound Not Detected.		
69 1,2-Dibromo-3-chloropropane	75				Compound Not Detected.		
92 1,2,4-Trichlorobenzene	180				Compound Not Detected.		



CUMMINGS-RITER CONSULTANTS INC

Lab Name:Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID:C0J100187 006

Method: OCLP OLM04.2

Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5 / mL

Date Received: 10/10/00

Work Order: DLVAJ101

Date Extracted:10/13/00

Dilution factor: 1

Date Analyzed: 10/13/00

Moisture %:NA

QC Batch: 0287204

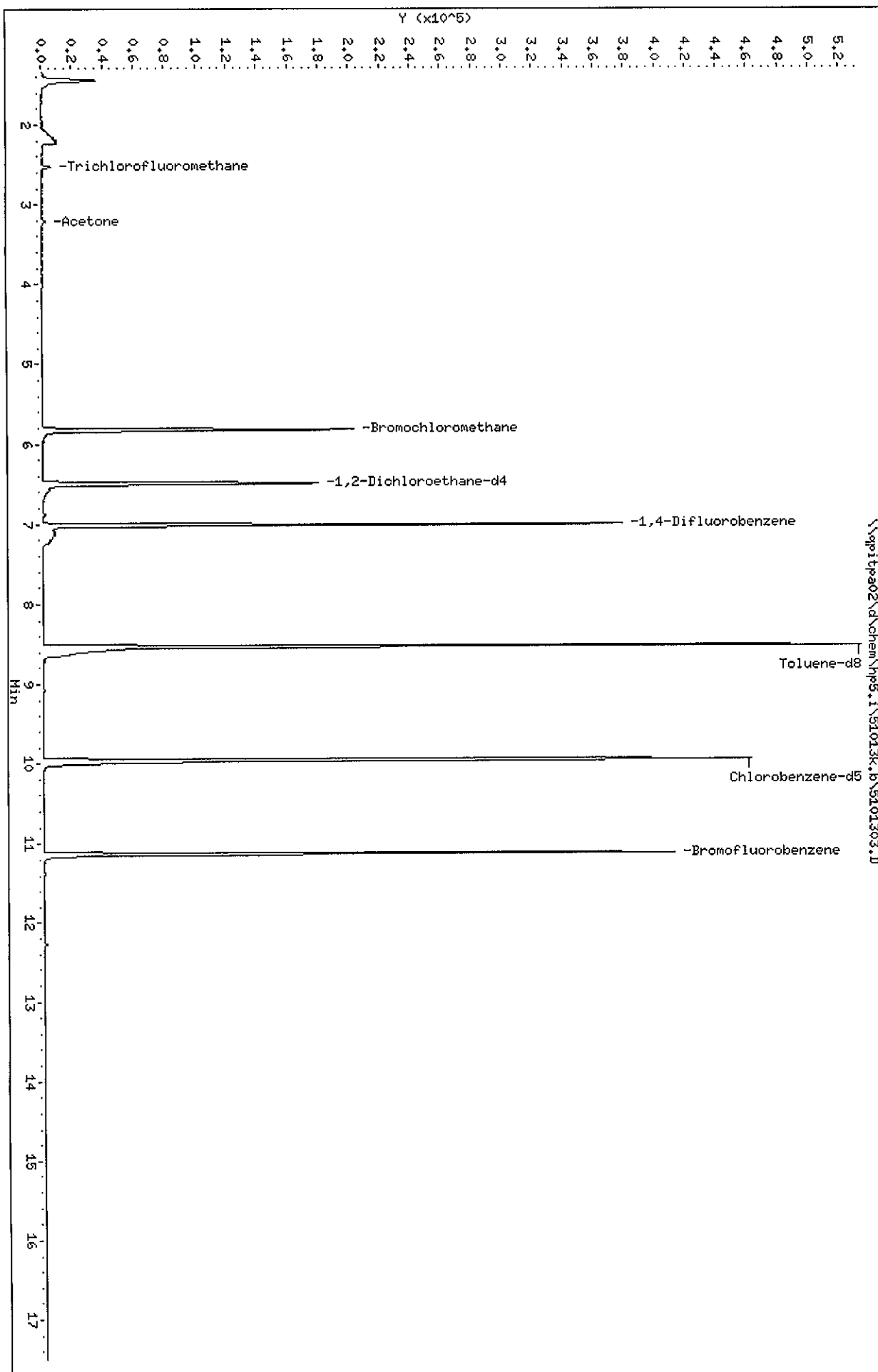
Client Sample Id: TB-3

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/L	Q
79-01-6	Trichloroethene	10		U

Data File: \\ppitpa02\chem\hp5.i\51013K.b\5101303.D
 Date: 13-OCT-2000 11:50
 Client ID: TB-3
 Sample Info: c0j100187-006 Sm1
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hp5.i
 Operator: 10099
 Column diameter: 0.53



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Volatile Report CLP OLM04.2 Method

Data file : \\qpitpa02\d\chem\hp5.i\51013k.b\5101303.D
Lab Smp Id: DLVAJ101 Client Smp ID: TB-3
Inj Date : 13-OCT-2000 11:50 MS Autotune Date: 13-MAR-2000 09:53
Operator : 10099 Inst ID: hp5.i
Smp Info : c0j100187-006 5ml
Misc Info : dlvaj101,51013k.b,clph2o.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51013k.b\clph2o.m
Meth Date : 13-Oct-2000 10:25 gordonk Quant Type: ISTD
Cal Date : 13-OCT-2000 10:01 Cal File: 3C51013.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC076

Compound Sublist: olm04.0.sub

KLG
10/13/00

Concentration Formula: Amt * DF * 1/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
* 1 Bromochloromethane	128	5.822	5.809	(1.000)	57703	250.000	
* 2 1,4-Difluorobenzene	114	7.008	7.002	(1.000)	335651	250.000	
* 3 Chlorobenzene-d5	117	9.959	9.964	(1.000)	288436	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.491	6.485	(1.115)	130884	263.387	52.68
\$ 5 Toluene-d8	98	8.529	8.529	(0.856)	388143	234.854	46.97
\$ 6 Bromofluorobenzene	95	11.127	11.132	(1.117)	136930	230.329	46.06
7 Dichlorodifluoromethane	85	Compound Not Detected.					
8 Chloromethane	50	Compound Not Detected.					
10 Bromomethane	94	Compound Not Detected.					
9 Vinyl Chloride	62	Compound Not Detected.					
11 Chloroethane	64	Compound Not Detected.					
12 Trichlorofluoromethane	101	2.525	2.469	(0.434)	5935	26.7395	5.348
15 1,1-Dichloroethene	96	Compound Not Detected.					
51 1,1,2 Trichloro-1,2,2-Trifluo	101	Compound Not Detected.					
14 Acetone	43	3.212	3.230	(0.552)	3985	12.9475	2.589
17 Carbon Disulfide	76	Compound Not Detected.					
89 Methyl Acetate	43	Compound Not Detected.					

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
16 Methylene Chloride	84		Compound	Not Detected.			
82 Methyl tert-butyl ether	73		Compound	Not Detected.			
19 trans-1,2-Dichloroethene	96		Compound	Not Detected.			
21 1,1-Dichloroethane	63		Compound	Not Detected.			
23 cis-1,2-dichloroethene	96		Compound	Not Detected.			
M 81 1,2-Dichloroethene (total)	96		Compound	Not Detected.			
22 2-Butanone	43		Compound	Not Detected.			
24 Chloroform	83		Compound	Not Detected.			
28 Benzene	78		Compound	Not Detected.			
27 1,2-Dichloroethane	62		Compound	Not Detected.			
25 1,1,1-Trichloroethane	97		Compound	Not Detected.			
90 Cyclohexane	56		Compound	Not Detected.			
26 Carbon Tetrachloride	117		Compound	Not Detected.			
29 Trichloroethene	130		Compound	Not Detected.			
30 1,2-Dichloropropane	63		Compound	Not Detected.			
31 Bromodichloromethane	83		Compound	Not Detected.			
91 Methyl Cyclohexane	83		Compound	Not Detected.			
34 cis-1,3-Dichloropropene	75		Compound	Not Detected.			
38 1,1,2-Trichloroethane	97		Compound	Not Detected.			
40 Dibromochloromethane	129		Compound	Not Detected.			
36 trans-1,3-Dichloropropene	75		Compound	Not Detected.			
33 4-Methyl-2-pentanone	43		Compound	Not Detected.			
37 2-Hexanone	43		Compound	Not Detected.			
46 Bromoform	173		Compound	Not Detected.			
39 Tetrachloroethene	164		Compound	Not Detected.			
63 1,2-Dibromoethane	107		Compound	Not Detected.			
47 1,1,2,2-Tetrachloroethane	83		Compound	Not Detected.			
35 Toluene	91		Compound	Not Detected.			
41 Chlorobenzene	112		Compound	Not Detected.			
42 Ethylbenzene	106		Compound	Not Detected.			
45 Styrene	104		Compound	Not Detected.			
43 m + p-Xylene	106		Compound	Not Detected.			
44 Xylene-o	106		Compound	Not Detected.			
M 80 Xylenes (total)	106		Compound	Not Detected.			
92 Isopropylbenzene	105		Compound	Not Detected.			
48 1,3-Dichlorobenzene	146		Compound	Not Detected.			
49 1,4-Dichlorobenzene	146		Compound	Not Detected.			
50 1,2-Dichlorobenzene	146		Compound	Not Detected.			
69 1,2-Dibromo-3-chloropropane	75		Compound	Not Detected.			
93 1,2,4 Trichlorobenzene	180		Compound	Not Detected.			

**GC/MS VOLATILE
CALIBRATION DATA**

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL

Case No.:

SAS No.:

SDG No.: METHODS

Instrument ID: HP5

Calibration Date(s): 10/04/00 10/04/00

Heated Purge: (Y/N) Y

Calibration Time(s): 1702 1924

GC Column: DB624 ID: 0.20 (mm)

LAB FILE ID:		RRF10 =2A51004P		RRF20 =2B51004P			
RRF50 =1C51004P		RRF100=1D51004P		RRF200=1E51004P			
COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	% RSD
Chloromethane		2.763	2.801	3.181	2.996	2.955	5.7
Bromomethane	*	0.188	0.218	0.308	0.297	0.261	20.2*
Vinyl Chloride	*	2.358	2.316	2.843	2.770	2.466	9.5*
Chloroethane		0.431	0.297	0.522	0.541	0.307	27.4
Methylene Chloride		1.537	1.424	1.578	2.289	2.267	23.3
Acetone		3.126	1.781	1.206	1.042	1.019	54.4
Carbon Disulfide		5.271	5.009	6.547	6.366	5.444	12.0
1,1-Dichloroethene	*	1.596	1.480	1.947	1.881	1.563	12.2*
1,1-Dichloroethane	*	3.519	3.631	4.304	4.421	3.860	10.2*
1,2-Dichloroethene (total)		2.092	2.154	2.523	2.610	2.263	9.8
Chloroform	*	3.100	3.250	3.700	3.932	3.400	9.7*
1,2-Dichloroethane	*	2.418	2.409	2.819	2.928	2.635	8.8*
2-Butanone		1.327	1.319	1.354	1.291	1.401	3.1
1,1,1-Trichloroethane	*	0.387	0.414	0.473	0.548	0.502	14.0*
Carbon Tetrachloride	*	0.322	0.346	0.411	0.477	0.431	15.8*
Bromodichloromethane	*	0.300	0.307	0.389	0.442	0.414	17.3*
1,2-Dichloropropane		0.304	0.310	0.350	0.402	0.342	11.5
cis-1,3-Dichloropropene	*	0.382	0.406	0.483	0.538	0.504	14.3*
Trichloroethene	*	0.306	0.322	0.377	0.420	0.346	12.8*
Dibromochloromethane	*	0.234	0.228	0.288	0.328	0.320	16.8*
1,1,2-Trichloroethane	*	0.254	0.242	0.288	0.308	0.297	10.2*
Benzene	*	1.162	1.220	1.372	1.563	1.384	11.7*
trans-1,3-Dichloropropene	*	0.390	0.398	0.470	0.526	0.500	13.3*
Bromoform	*	0.129	0.140	0.174	0.196	0.211	20.6*<-
4-Methyl-2-pentanone		0.358	0.336	0.383	0.373	0.436	9.9
2-Hexanone		0.285	0.261	0.284	0.283	0.338	9.9
Tetrachloroethene	*	0.272	0.308	0.346	0.365	0.320	11.2*
1,1,2,2-Tetrachloroethane	*	0.342	0.391	0.399	0.390	0.427	7.8*
Toluene	*	1.423	1.535	1.723	1.766	1.529	9.0*
Chlorobenzene	*	0.952	0.954	1.097	1.100	0.976	7.5*
Ethylbenzene	*	0.529	0.542	0.637	0.633	0.561	8.8*
Styrene	*	0.973	1.021	1.178	1.157	1.011	8.7*
Xylenes (total)	*	0.596	0.636	0.724	0.714	0.624	8.6*
Dichlorodifluoromethane		1.664	0.999	2.032	1.927	1.771	24.1
Trichlorofluoromethane		1.409	0.363	1.954	2.500	0.366	72.2
1,1,2-Trichloro-1,2,2-Triflu		1.635	1.655	2.019	2.004	1.729	10.4
1,3-Dichlorobenzene		0.672	0.730	0.797	0.799	0.732	7.1

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

Contract:

SDG No.: METHODS

10/04/00

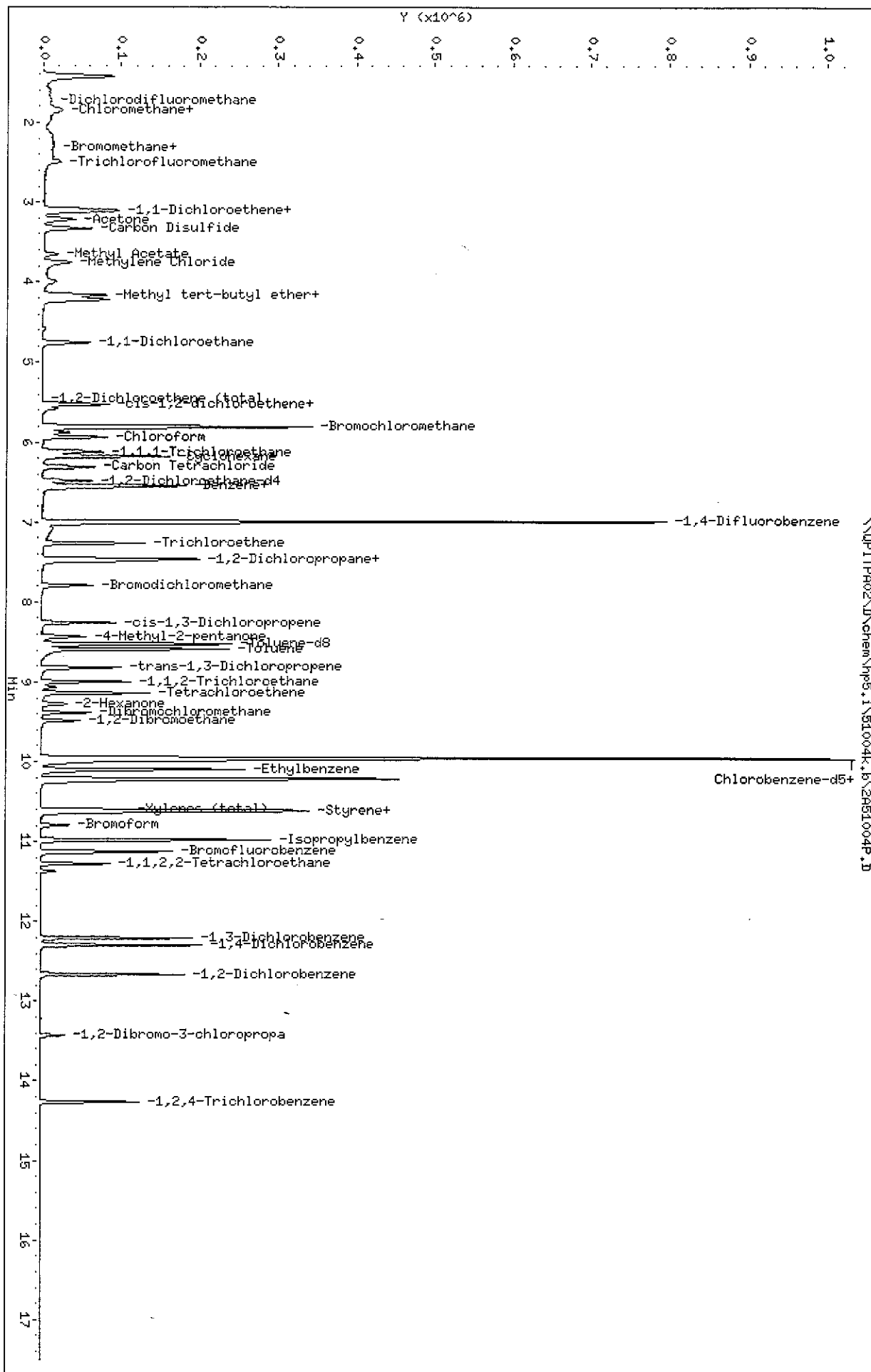
1924

ID: 0.20 (mm)

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

Data File: \NPIITPA02\chem\hp5.i\51004k.b\2A51004P.D
 Date : 04-OCT-2000 19:24
 Client ID: vstd10
 Sample Info: vstd10 Sm1
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hp5.i
 Operator: 034635
 Column diameter: 0.20



STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51004k.b\2A51004P.D
Lab Smp Id: vstd10 Client Smp ID: vstd10
Inj Date : 04-OCT-2000 19:24 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : vstd10 5ml
Misc Info : vstd10,51004k.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51004k.b\clpsoil.m
Meth Date : 06-Oct-2000 15:56 journetp Quant Type: ISTD
Cal Date : 04-OCT-2000 17:31 Cal File: 1C51004P.D
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: Amt * DF * 1/Vo*100/(100-M)

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

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Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)
-----	----	--	-----	-----	-----	-----
* 1 Bromochloromethane	128	5.809	5.809	(1.000)	108974	250.000
* 2 1,4-Difluorobenzene	114	6.995	6.995	(1.000)	731775	250.000
* 3 Chlorobenzene-d5	117	9.958	9.958	(1.000)	650805	250.000
\$ 4 1,2-Dichloroethane-d4	65	6.484	6.484	(1.116)	45028	50.0000 46.14
\$ 5 Toluene-d8	98	8.522	8.522	(0.856)	175422	50.0000 46.09
\$ 6 Bromofluorobenzene	95	11.126	11.126	(1.117)	65755	50.0000 47.26
7 Dichlorodifluoromethane	85	1.618	1.618	(0.279)	36259	50.0000 49.56
8 Chloromethane	50	1.830	1.830	(0.315)	60212	50.0000 47.00
10 Bromomethane	94	2.165	2.165	(0.373)	4096	50.0000 36.93
9 Vinyl Chloride	62	1.873	1.873	(0.322)	51392	50.0000 50.96
11 Chloroethane	64	2.256	2.256	(0.388)	9395	50.0000 72.56 (M)
12 Trichlorofluoromethane	101	2.500	2.500	(0.430)	30717	50.0000 53.44 (M)
15 1,1-Dichloroethene	96	3.090	3.090	(0.532)	34791	50.0000 47.14
51 1,1,2-Trichloro-1,2,2-Trifluor	101	3.114	3.114	(0.536)	35635	50.0000 45.20
14 Acetone	43	3.217	3.217	(0.554)	68122	50.0000 95.60
17 Carbon Disulfide	76	3.327	3.327	(0.573)	114878	50.0000 46.02

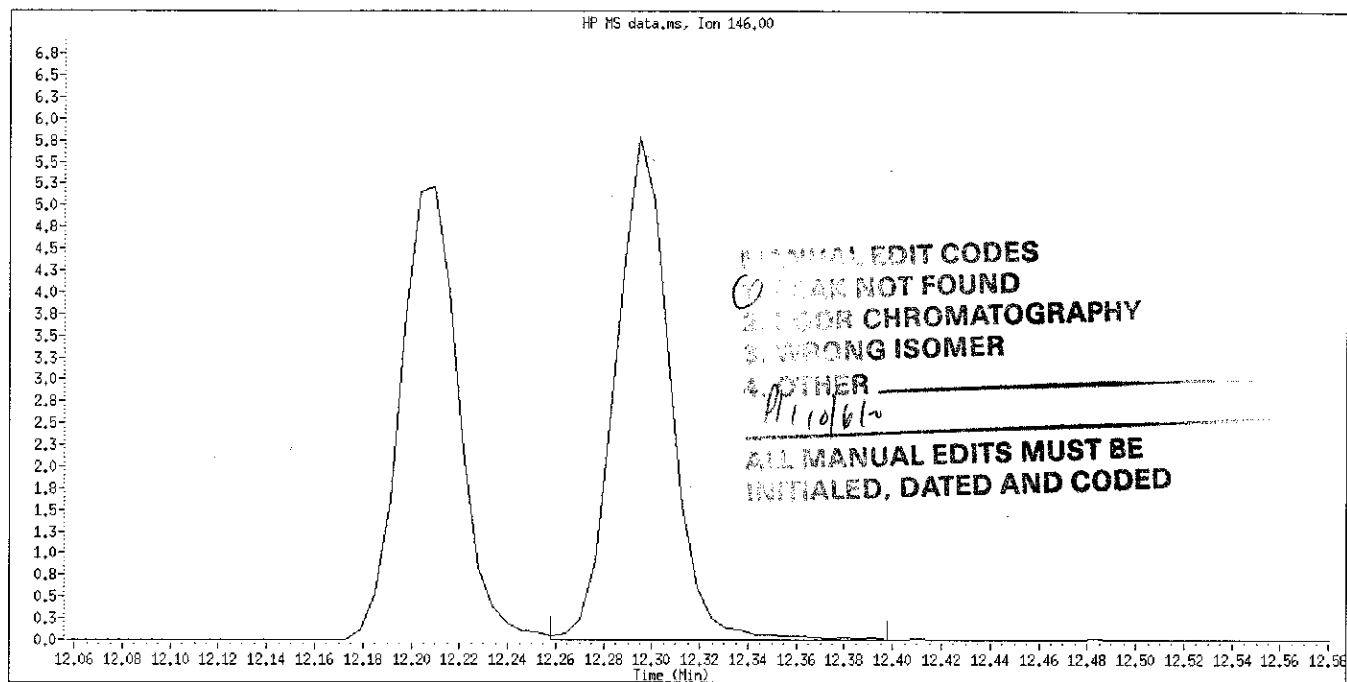
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Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43	3.655	3.655	(0.629)	33424	50.0000	65.11
16 Methylene Chloride	84	3.753	3.753	(0.646)	33504	50.0000	42.26
82 Methyl tert-butyl ether	73	4.215	4.215	(0.726)	117369	50.0000	45.87
19 trans-1,2-Dichloroethene	96	4.160	4.160	(0.716)	45462	50.0000	44.78
21 1,1-Dichloroethane	63	4.757	4.757	(0.819)	76700	50.0000	44.58
23 cis-1,2-dichloroethene	96	5.529	5.529	(0.952)	45740	50.0000	45.08
M 81 1,2-Dichloroethene (total)	96				91202	100.000	89.86
22 2-Butanone	43	5.584	5.584	(0.961)	28918	50.0000	49.56
24 Chloroform	83	5.937	5.937	(1.022)	67564	50.0000	44.58
28 Benzene	78	6.539	6.539	(0.935)	170146	50.0000	43.38
27 1,2-Dichloroethane	62	6.569	6.569	(1.131)	52711	50.0000	45.77
25 1,1,1-Trichloroethane	97	6.119	6.119	(0.875)	56696	50.0000	41.68
89 Cyclohexane	56	6.174	6.174	(0.883)	80441	50.0000	41.43
26 Carbon Tetrachloride	117	6.308	6.308	(0.902)	47212	50.0000	40.59
29 Trichloroethene	130	7.263	7.263	(1.038)	44784	50.0000	43.21
30 1,2-Dichloropropane	63	7.488	7.488	(1.070)	44467	50.0000	44.46
31 Bromodichloromethane	83	7.792	7.792	(1.114)	43927	50.0000	40.51
90 Methyl Cyclohexane	83	7.458	7.458	(1.066)	78911	50.0000	40.88
34 cis-1,3-Dichloropropene	75	8.255	8.255	(1.180)	55985	50.0000	41.34
38 1,1,2-Trichloroethane	97	8.997	8.997	(1.286)	37169	50.0000	45.72
40 Dibromochloromethane	129	9.386	9.386	(1.342)	34219	50.0000	41.79
36 trans-1,3-Dichloropropene	75	8.820	8.820	(1.261)	57149	50.0000	42.73
33 4-Methyl-2-pentanone	43	8.425	8.425	(0.846)	46585	50.0000	119.6
37 2-Hexanone	43	9.277	9.277	(0.932)	37132	50.0000	49.14
46 Bromoform	173	10.797	10.797	(1.543)	18855	50.0000	37.90
39 Tetrachloroethene	164	9.137	9.137	(0.918)	35352	50.0000	42.17
63 1,2-Dibromoethane	107	9.490	9.490	(1.357)	35455	50.0000	43.99
47 1,1,2,2-Tetrachloroethane	83	11.278	11.278	(1.133)	44571	50.0000	43.90
35 Toluene	91	8.589	8.589	(0.863)	185221	50.0000	44.60
41 Chlorobenzene	112	9.988	9.988	(1.003)	123883	50.0000	46.85
42 Ethylbenzene	106	10.104	10.104	(1.015)	68881	50.0000	45.57
45 Styrene	104	10.627	10.627	(1.067)	126692	50.0000	45.56
43 m + p-Xylene	106	10.220	10.220	(1.026)	164929	100.000	93.12 (H)
44 Xylene-o	106	10.609	10.609	(1.065)	77521	50.0000	45.20
M 80 Xylenes (total)	106				242450	50.0000	141.4
91 Isopropylbenzene	105	10.980	10.980	(1.103)	206401	50.0000	46.10
48 1,3-Dichlorobenzene	146	12.209	12.209	(1.226)	87539	50.0000	45.07
49 1,4-Dichlorobenzene	146	12.294	12.294	(1.235)	88695	50.0000	56.22 (M)
50 1,2-Dichlorobenzene	146	12.665	12.665	(1.272)	82598	50.0000	45.33
69 1,2-Dibromo-3-chloropropane	75	13.432	13.432	(1.349)	7853	50.0000	41.70
92 1,2,4-Trichlorobenzene	180	14.259	14.259	(1.432)	42279	50.0000	42.82

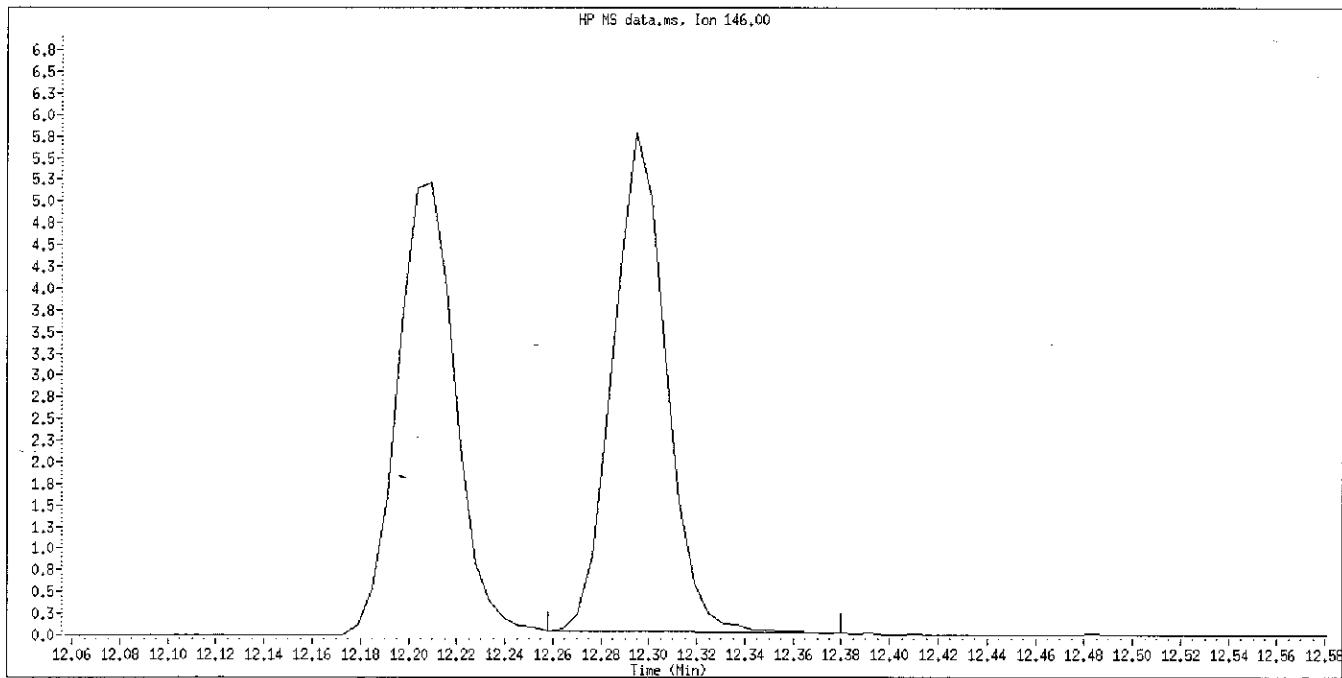
QC Flag Legend

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

Data File Name: 2A51004P.D
Inj. Date and Time: 04-OCT-2000 19:24
Instrument ID: hp5.i
Client ID: vstd10
Compound Name: 1,4-Dichlorobenzene
CAS #: 106-46-7
Report Date: 10/06/2000



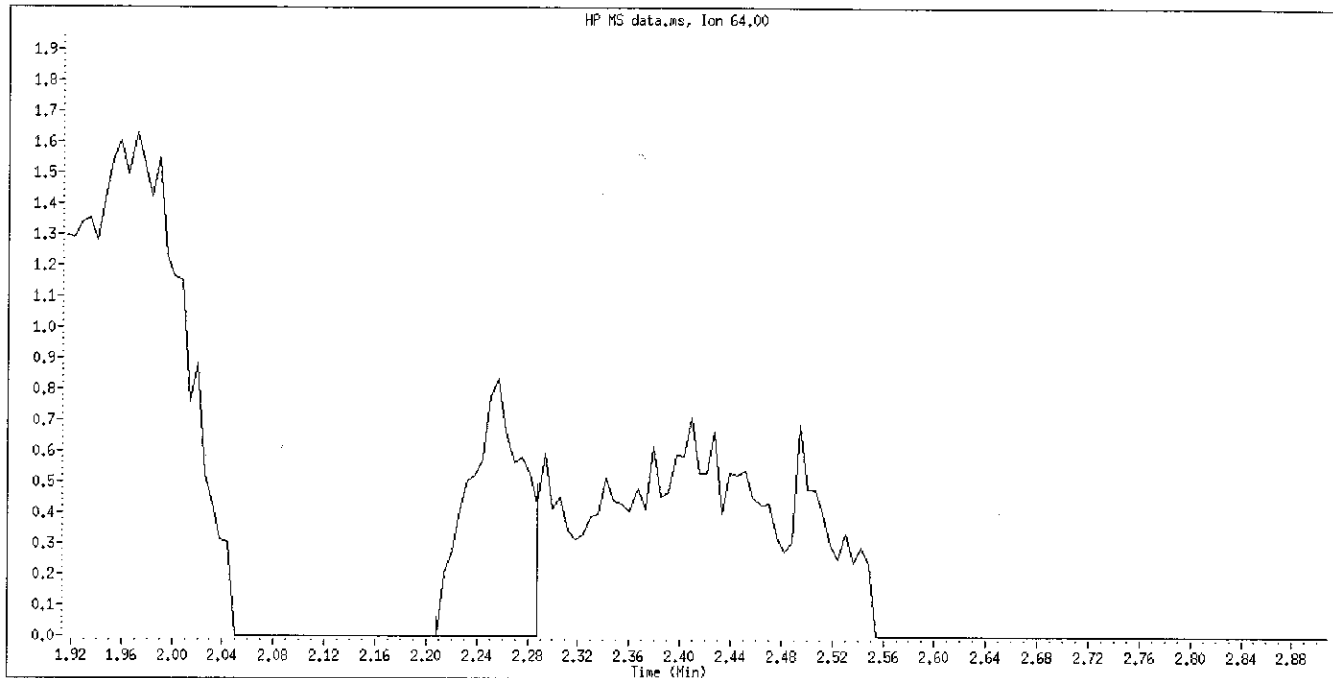
Original Integration



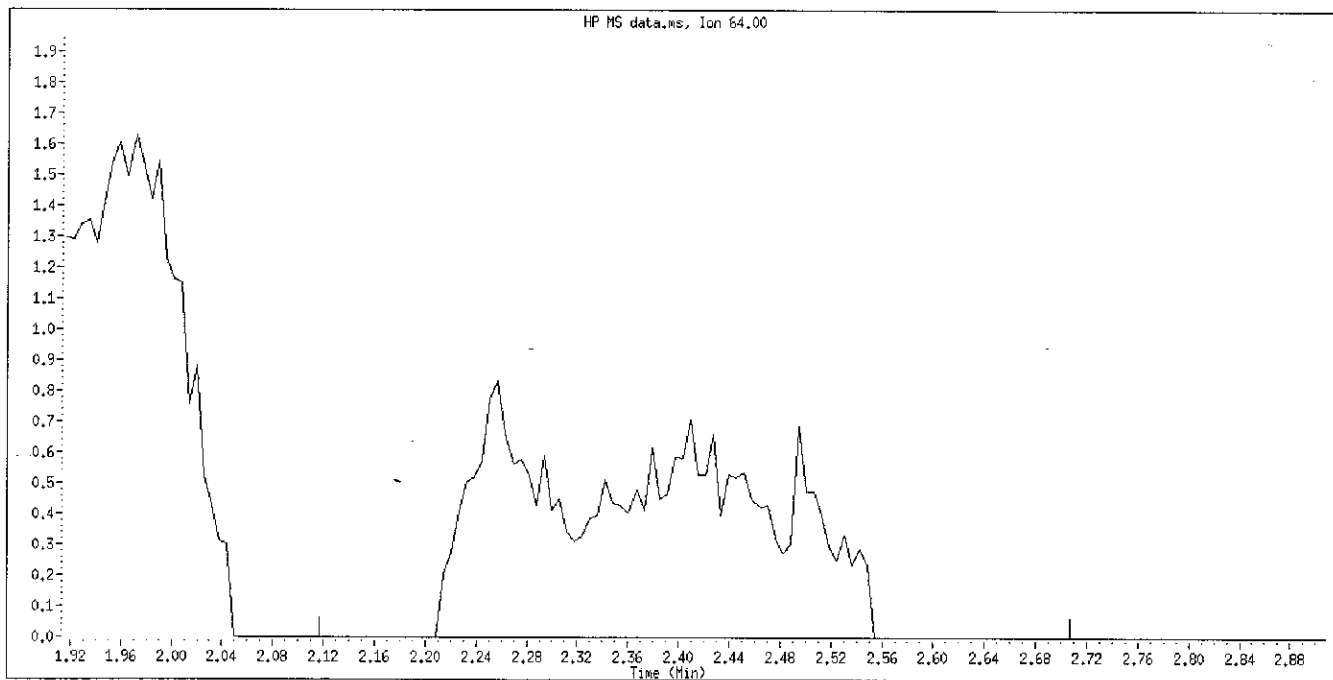
Manual Integration

Manually Integrated By: JournetP
Manual Integration Reason: Peak Not Found

Data File Name: 2A51004P.D
Inj. Date and Time: 04-OCT-2000 19:24
Instrument ID: hp5.i
Client ID: vstd10
Compound Name: Chloroethane
CAS #: 75-00-3
Report Date: 10/04/2000



Original Integration

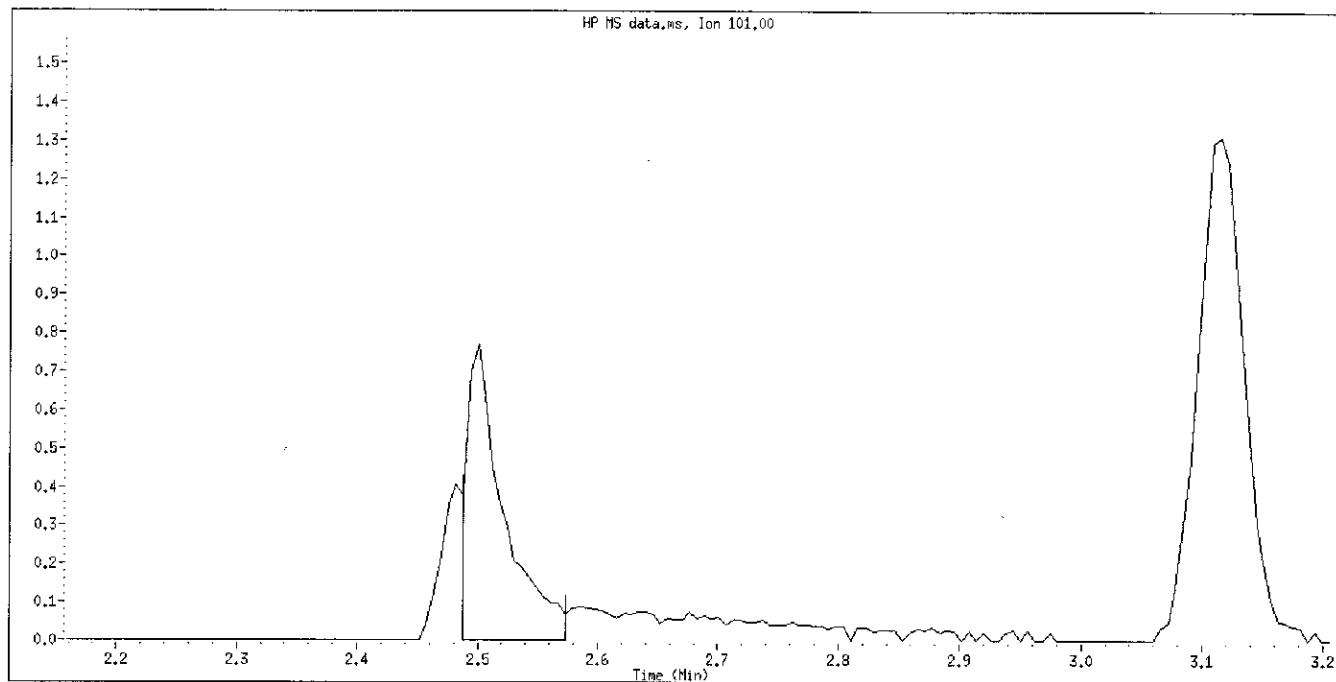


Manual Integration

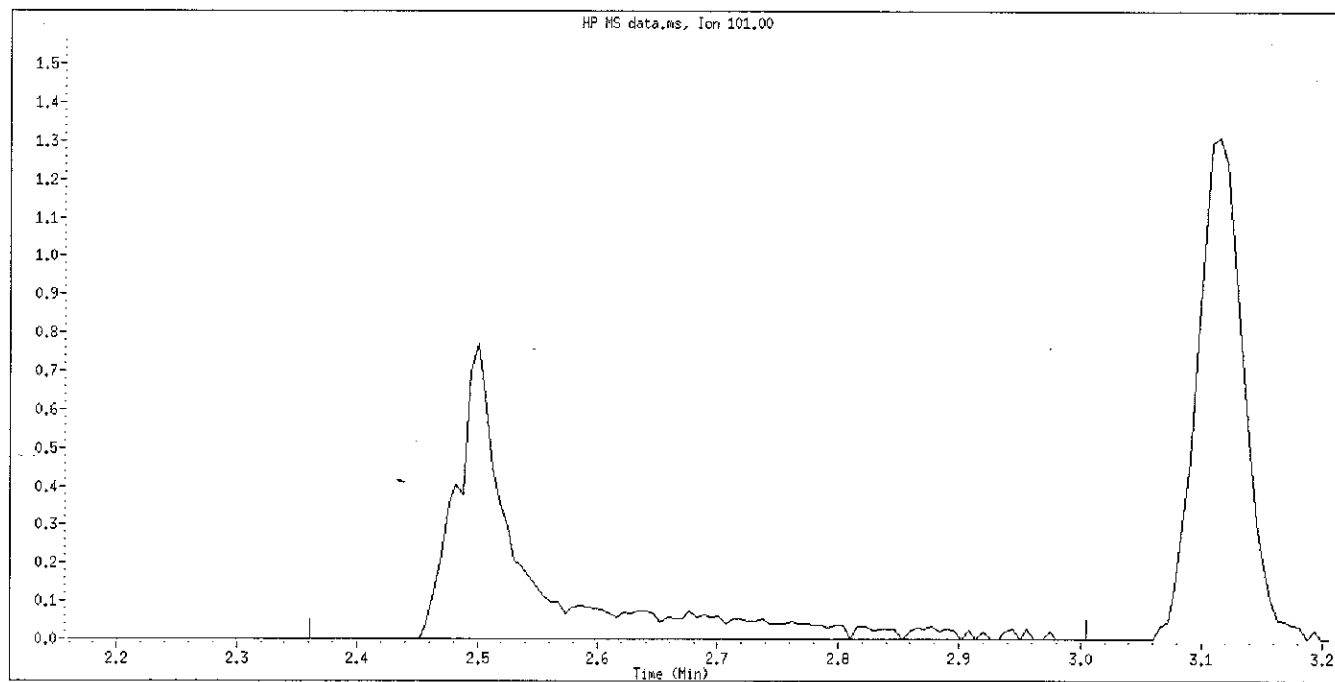
Manually Integrated By: JournetP
Manual Integration Reason: Poor Chromatography

JN 10/11/00

Data File Name: 2A51004P.D
Inj. Date and Time: 04-OCT-2000 19:24
Instrument ID: hp5.i
Client ID: vstd10
Compound Name: Trichlorofluoromethane
CAS #: 75-69-4
Report Date: 10/04/2000



Original Integration



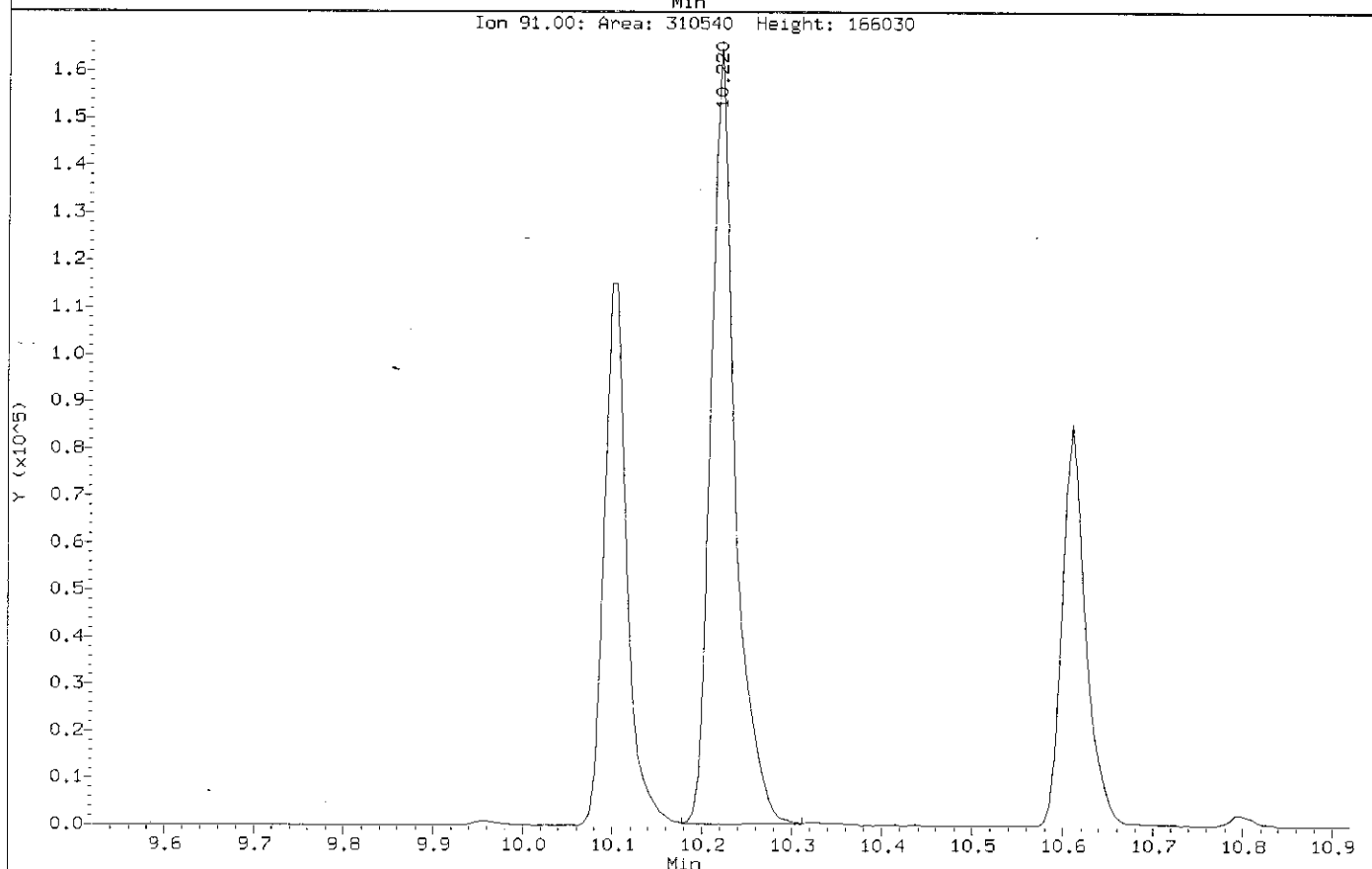
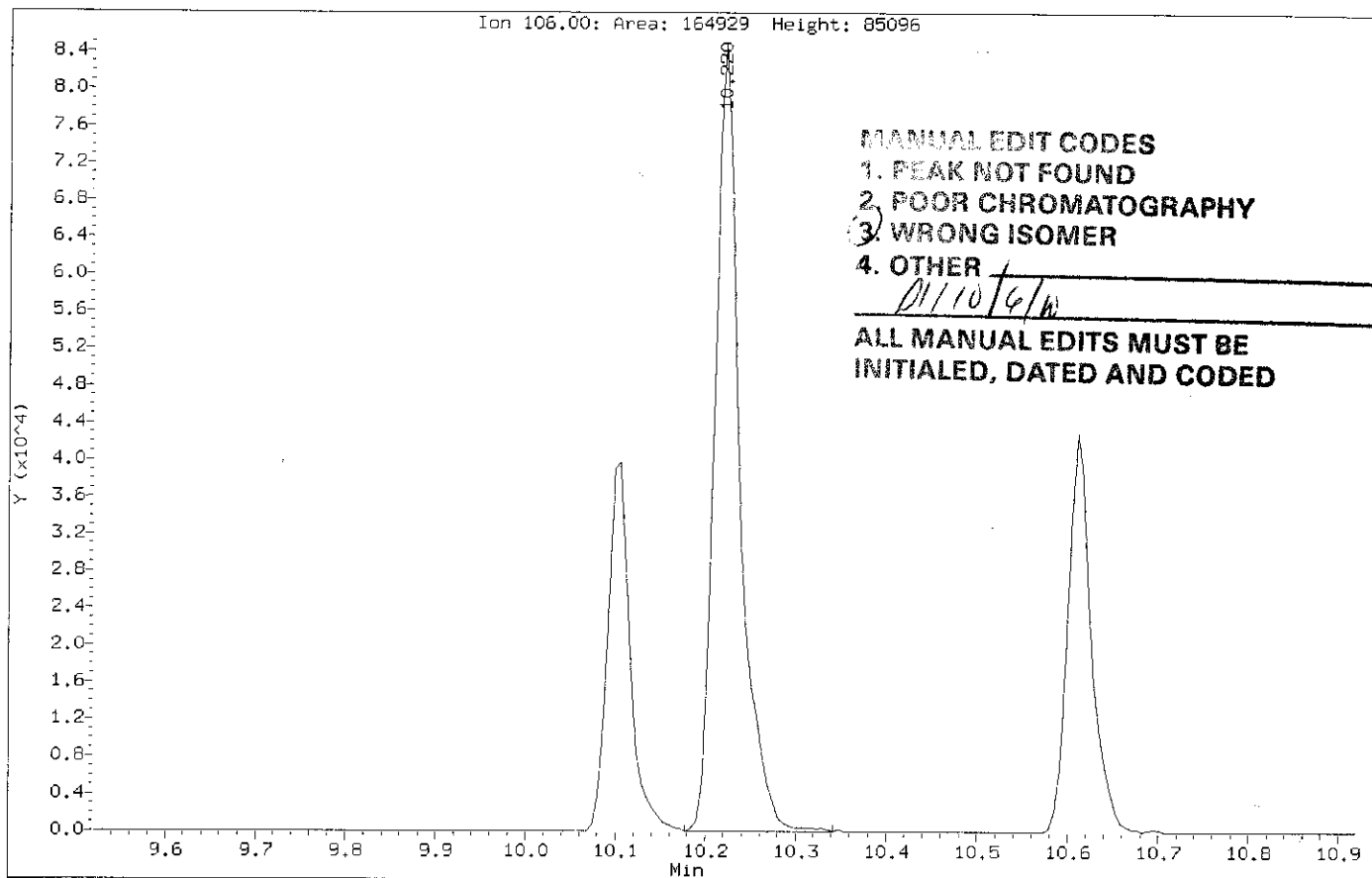
Manual Integration

Manually Integrated By: JournetP
Manual Integration Reason: Poor Chromatography

01/10/4/10

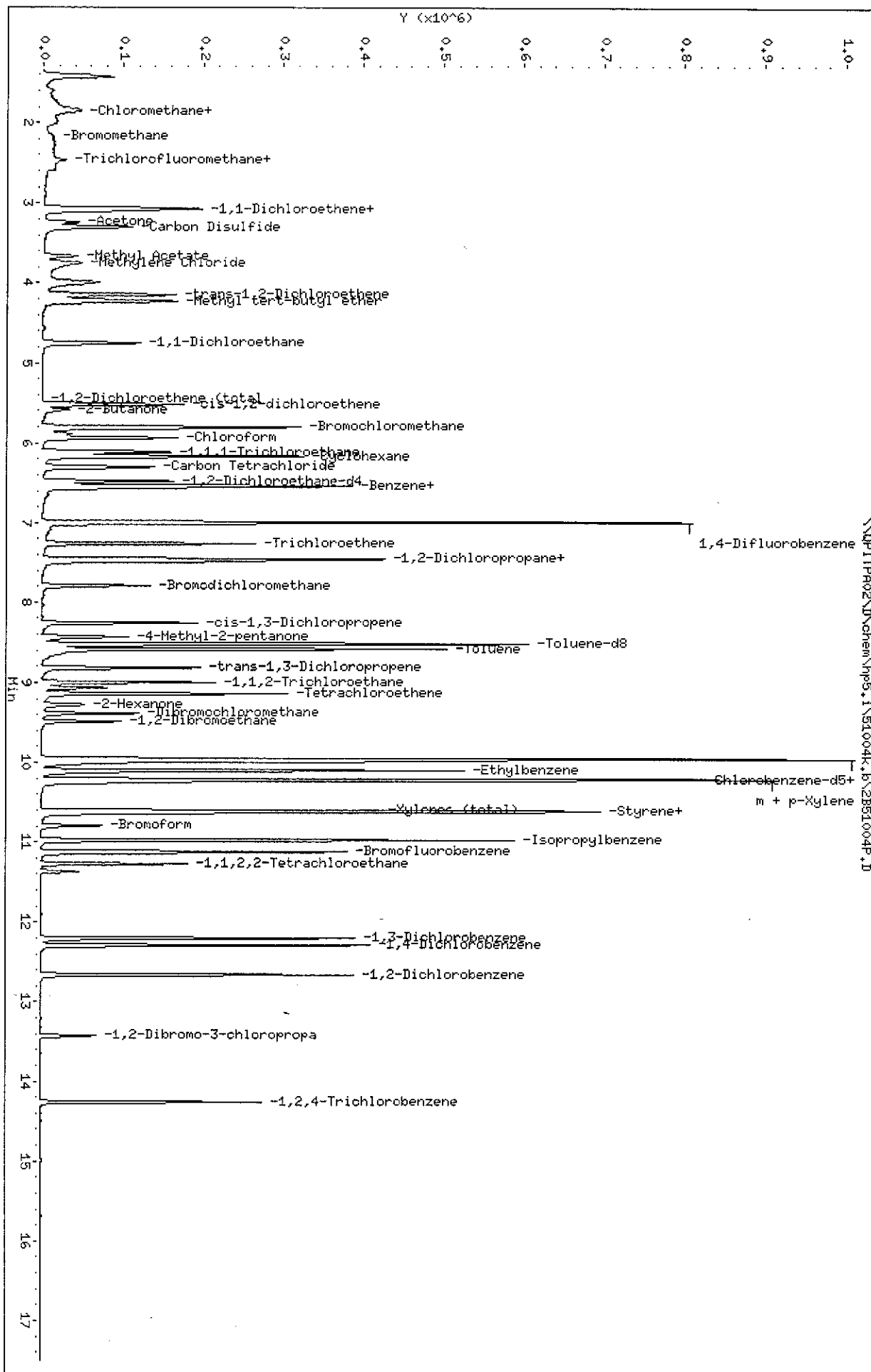
Data File: \\QPITPA02\chem\hp5.i\51004k.b\2A51004P.D
Injection Date: 04-OCT-2000 19:24
Instrument: hp5.i
Client Sample ID: vstd10

Compound: m + p-Xylene
CAS Number: 136777-61-2



Data File: \\QPI1PA02\N\chem\hp5.i\51004k.b\2B51004P.D
 Date : 04-OCT-2000 17:02
 Client ID: vstd20
 Sample Info: vstd20 5ml
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hp5.i
 Operator: 034635
 Column diameter: 0.20



STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51004k.b\2B51004P.D
Lab Smp Id: vstd20 Client Smp ID: vstd20
Inj Date : 04-OCT-2000 17:02 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : vstd20 5ml
Misc Info : vstd20,51004k.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51004k.b\clpsoil.m
Meth Date : 06-Oct-2000 15:56 journetp Quant Type: ISTD
Cal Date : 04-OCT-2000 17:31 Cal File: 1C51004P.D
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: Amt * DF * 1/Vo*100/(100-M)

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

Handwritten note: 10/10/00

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
=====	====	==	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128	5.808	5.808	(1.000)	107525	250.000	
* 2 1,4-Difluorobenzene	114	7.000	7.000	(1.000)	709504	250.000	
* 3 Chlorobenzene-d5	117	9.957	9.957	(1.000)	616409	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.483	6.483	(1.116)	108824	100.000	113.0
\$ 5 Toluene-d8	98	8.521	8.521	(0.856)	412848	100.000	114.5
\$ 6 Bromofluorobenzene	95	11.125	11.125	(1.117)	152874	100.000	116.0
7 Dichlorodifluoromethane	85	1.598	1.598	(0.275)	42970	100.000	59.52
8 Chloromethane	50	1.835	1.835	(0.316)	120484	100.000	95.31
10 Bromomethane	94	2.170	2.170	(0.374)	9359	100.000	85.51
9 Vinyl Chloride	62	1.987	1.987	(0.342)	99602	100.000	90.79
11 Chloroethane	64	2.425	2.425	(0.418)	12767	100.000	86.14
12 Trichlorofluoromethane	101	2.468	2.468	(0.425)	15628	100.000	27.55
15 1,1-Dichloroethene	96	3.064	3.064	(0.528)	63639	100.000	87.38
51 1,1,2-Trichloro-1,2,2-Trifluor	101	3.088	3.088	(0.532)	71183	100.000	91.51
14 Acetone	43	3.241	3.241	(0.558)	76599	100.000	108.9
17 Carbon Disulfide	76	3.301	3.301	(0.568)	215433	100.000	87.46

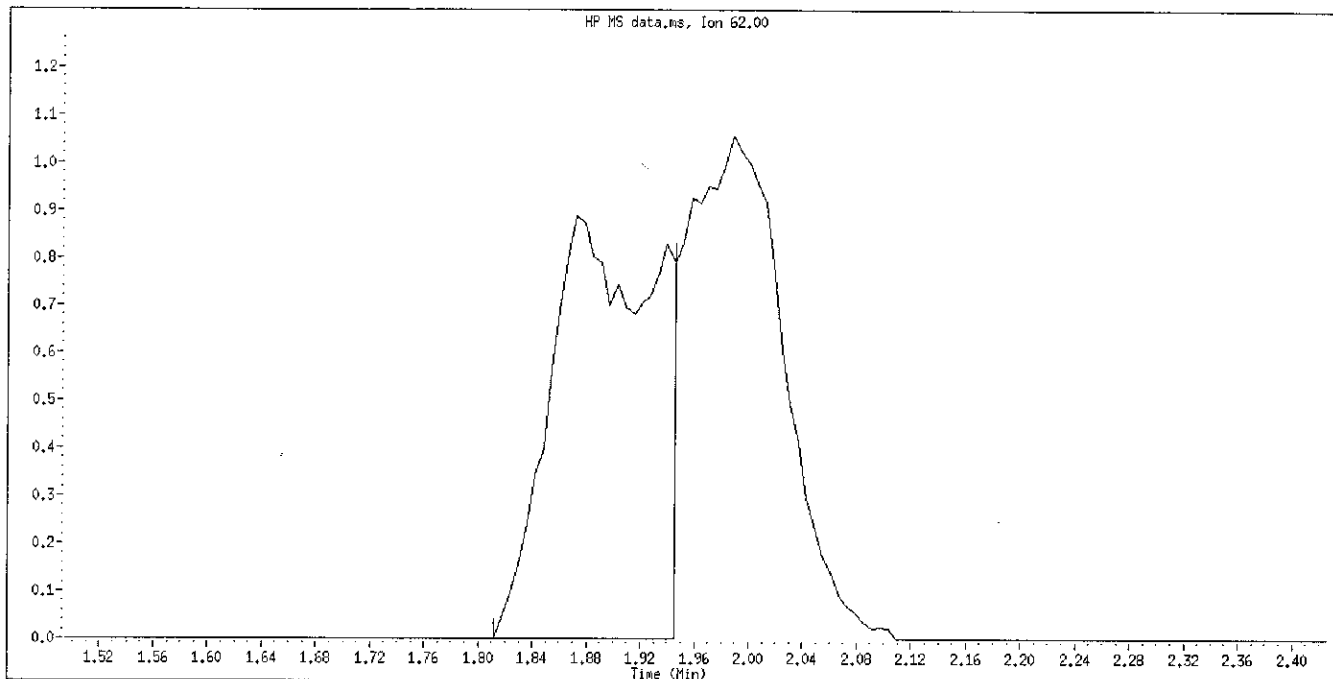
Handwritten note: 10/10/00

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43	3.666	3.666	(0.631)	75297	100.000	148.6
16 Methylene Chloride	84	3.752	3.752	(0.646)	61228	100.000	78.27
82 Methyl tert-butyl ether	73	4.226	4.226	(0.728)	234562	100.000	92.92
19 trans-1,2-Dichloroethene	96	4.153	4.153	(0.715)	93661	100.000	93.51
21 1,1-Dichloroethane	63	4.755	4.755	(0.819)	156156	100.000	91.99
23 cis-1,2-dichloroethene	96	5.522	5.522	(0.951)	91596	100.000	91.49
M 81 1,2-Dichloroethene (total)	96				185257	200.000	185.0
22 2-Butanone	43	5.589	5.589	(0.962)	56740	100.000	98.56
24 Chloroform	83	5.936	5.936	(1.022)	139786	100.000	93.48
28 Benzene	78	6.538	6.538	(0.934)	346142	100.000	91.02
27 1,2-Dichloroethane	62	6.568	6.568	(1.131)	103621	100.000	91.19
25 1,1,1-Trichloroethane	97	6.118	6.118	(0.874)	117397	100.000	89.01
89 Cyclohexane	56	6.173	6.173	(0.882)	171949	100.000	91.34
26 Carbon Tetrachloride	117	6.307	6.307	(0.901)	98213	100.000	87.08
29 Trichloroethene	130	7.262	7.262	(1.037)	91337	100.000	90.90
30 1,2-Dichloropropane	63	7.487	7.487	(1.070)	87926	100.000	90.68
31 Bromodichloromethane	83	7.797	7.797	(1.114)	87061	100.000	82.81
90 Methyl Cyclohexane	83	7.456	7.456	(1.065)	174128	100.000	93.04
34 cis-1,3-Dichloropropene	75	8.253	8.253	(1.179)	115196	100.000	87.74
38 1,1,2-Trichloroethane	97	8.996	8.996	(1.285)	68741	100.000	87.20
40 Dibromochloromethane	129	9.385	9.385	(1.341)	64866	100.000	81.71
36 trans-1,3-Dichloropropene	75	8.819	8.819	(1.260)	112990	100.000	87.13
33 4-Methyl-2-pentanone	43	8.430	8.430	(0.847)	82729	100.000	224.3
37 2-Hexanone	43	9.275	9.275	(0.932)	64401	100.000	89.98
46 Bromoform	173	10.796	10.796	(1.542)	39882	100.000	82.69
39 Tetrachloroethene	164	9.135	9.135	(0.918)	75918	100.000	95.62
63 1,2-Dibromoethane	107	9.488	9.488	(1.355)	70592	100.000	90.33
47 1,1,2,2-Tetrachloroethane	83	11.271	11.271	(1.132)	96438	100.000	100.3
35 Toluene	91	8.588	8.588	(0.863)	378482	100.000	96.22
41 Chlorobenzene	112	9.987	9.987	(1.003)	235254	100.000	93.94
42 Ethylbenzene	106	10.103	10.103	(1.015)	133653	100.000	93.36
45 Styrene	104	10.620	10.620	(1.067)	251701	100.000	95.57
43 m + p-Xylene	106	10.218	10.218	(1.026)	327423	200.000	195.2
44 Xylene-o	106	10.608	10.608	(1.065)	156821	100.000	96.54
M 80 Xylenes (total)	106				484244	100.000	298.1
91 Isopropylbenzene	105	10.979	10.979	(1.103)	416001	100.000	98.11
48 1,3-Dichlorobenzene	146	12.208	12.208	(1.226)	179969	100.000	97.83
49 1,4-Dichlorobenzene	146	12.293	12.293	(1.235)	184172	100.000	98.91 (H)
50 1,2-Dichlorobenzene	146	12.664	12.664	(1.272)	170655	100.000	98.88
69 1,2-Dibromo-3-chloropropane	75	13.430	13.430	(1.349)	16665	100.000	93.43
92 1,2,4-Trichlorobenzene	180	14.264	14.264	(1.433)	87232	100.000	93.28

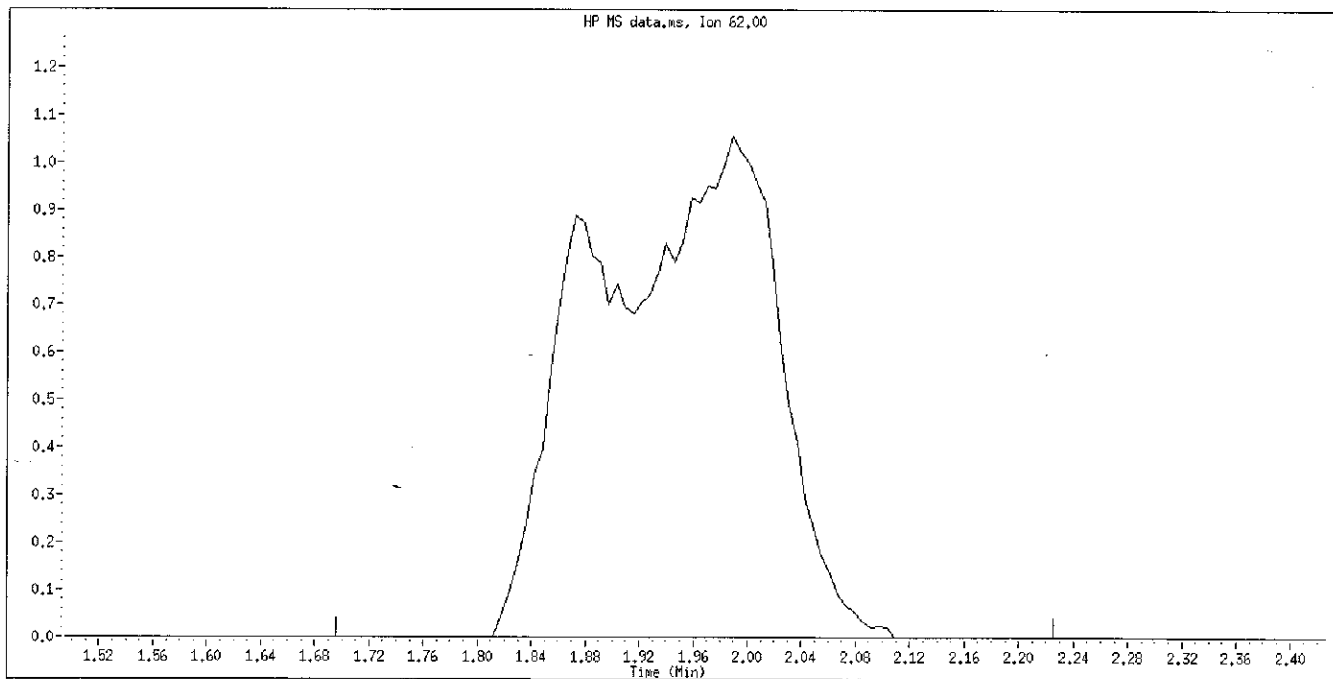
QC Flag Legend

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

Data File Name: 2B51004P.D
Inj. Date and Time: 04-OCT-2000 17:02
Instrument ID: hp5.i
Client ID: vstd20
Compound Name: Vinyl Chloride
CAS #: 75-01-4
Report Date: 10/04/2000



Original Integration

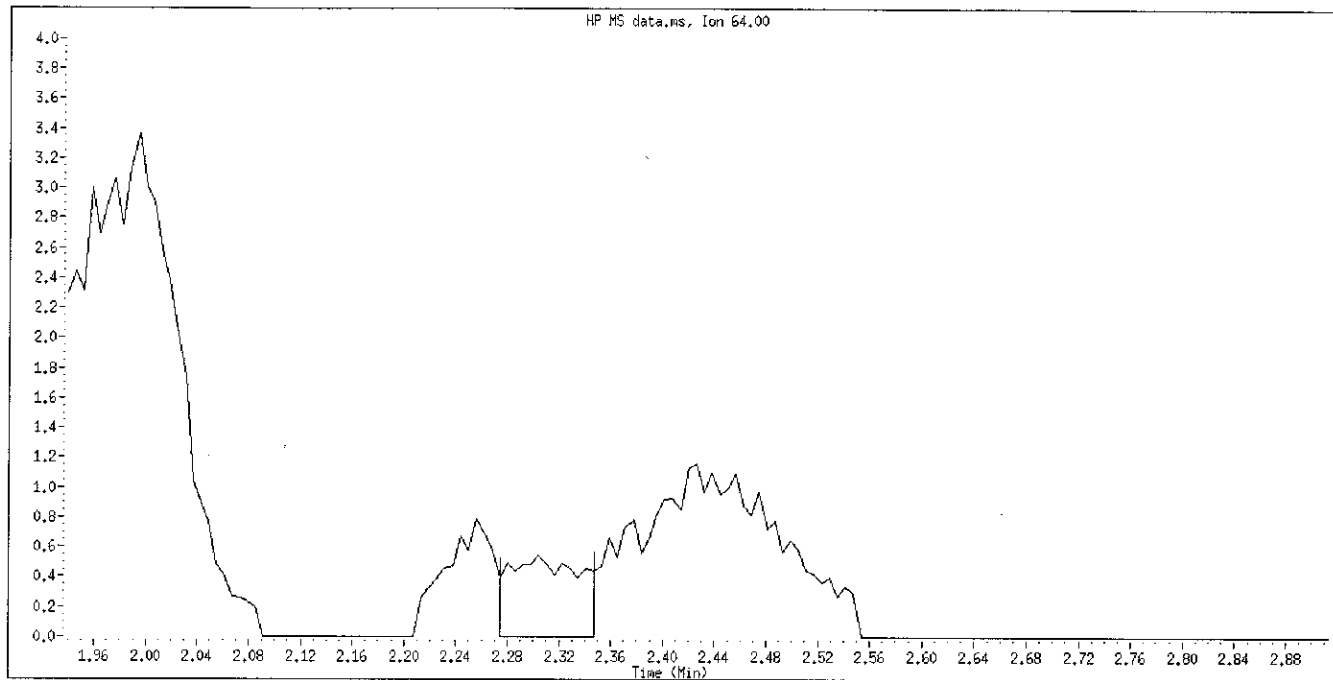


Manual Integration

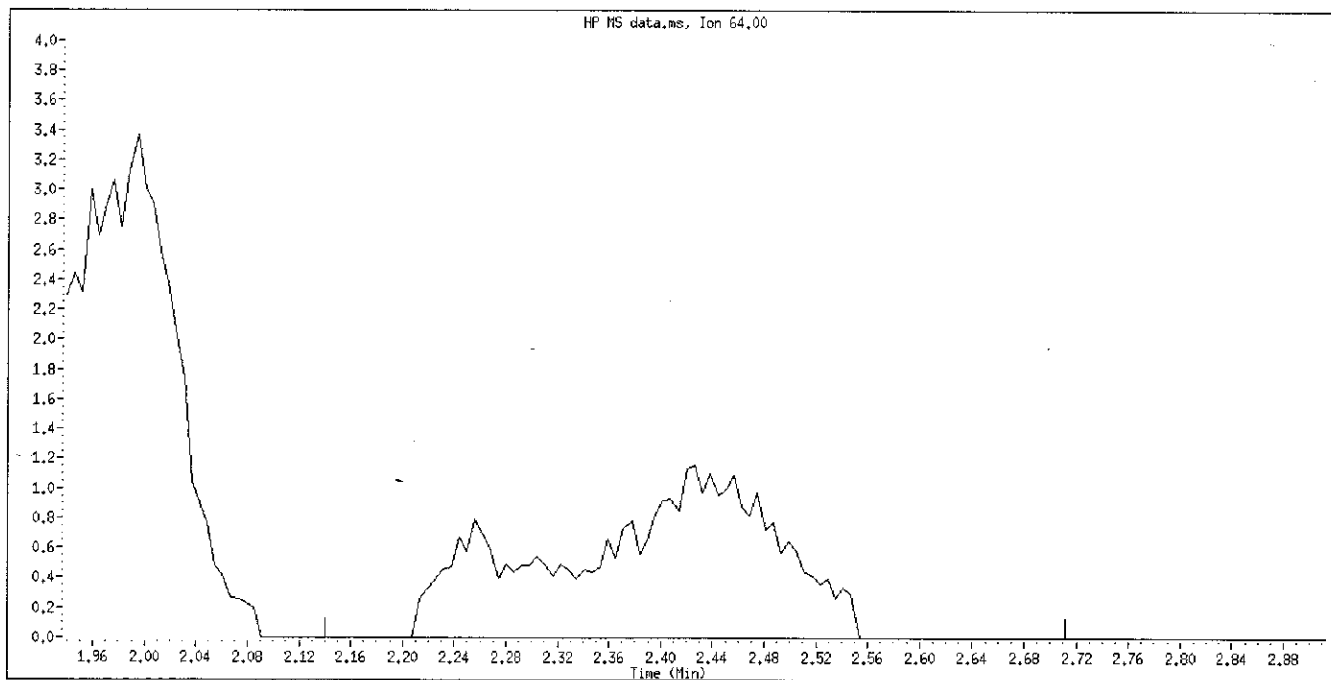
Manually Integrated By: JournetP
Manual Integration Reason: Poor Chromatography

8/11/04/10

Data File Name: 2B51004P.D
Inj. Date and Time: 04-OCT-2000 17:02
Instrument ID: hp5.i
Client ID: vstd20
Compound Name: Chloroethane
CAS #: 75-00-3
Report Date: 10/04/2000



Original Integration



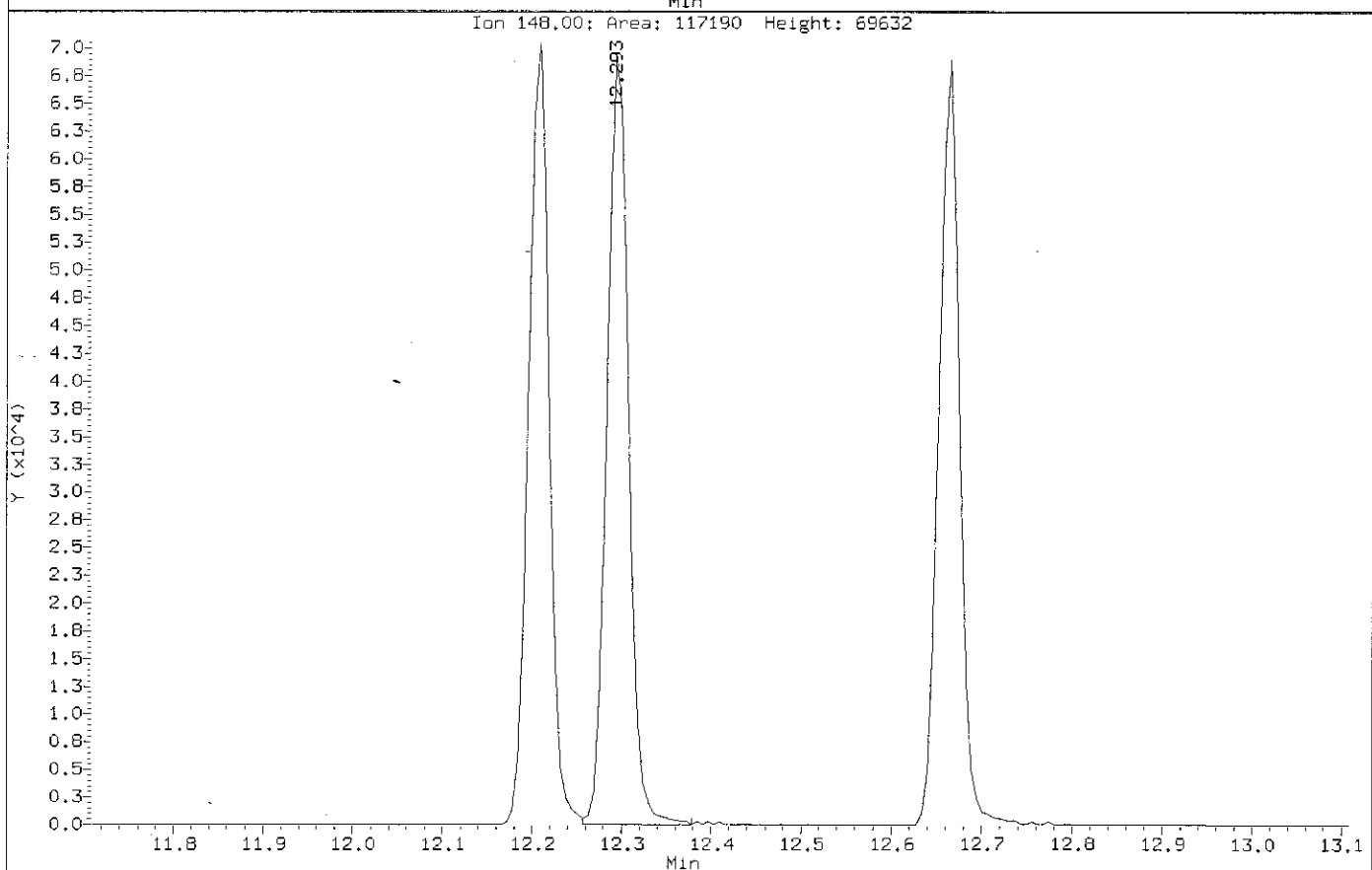
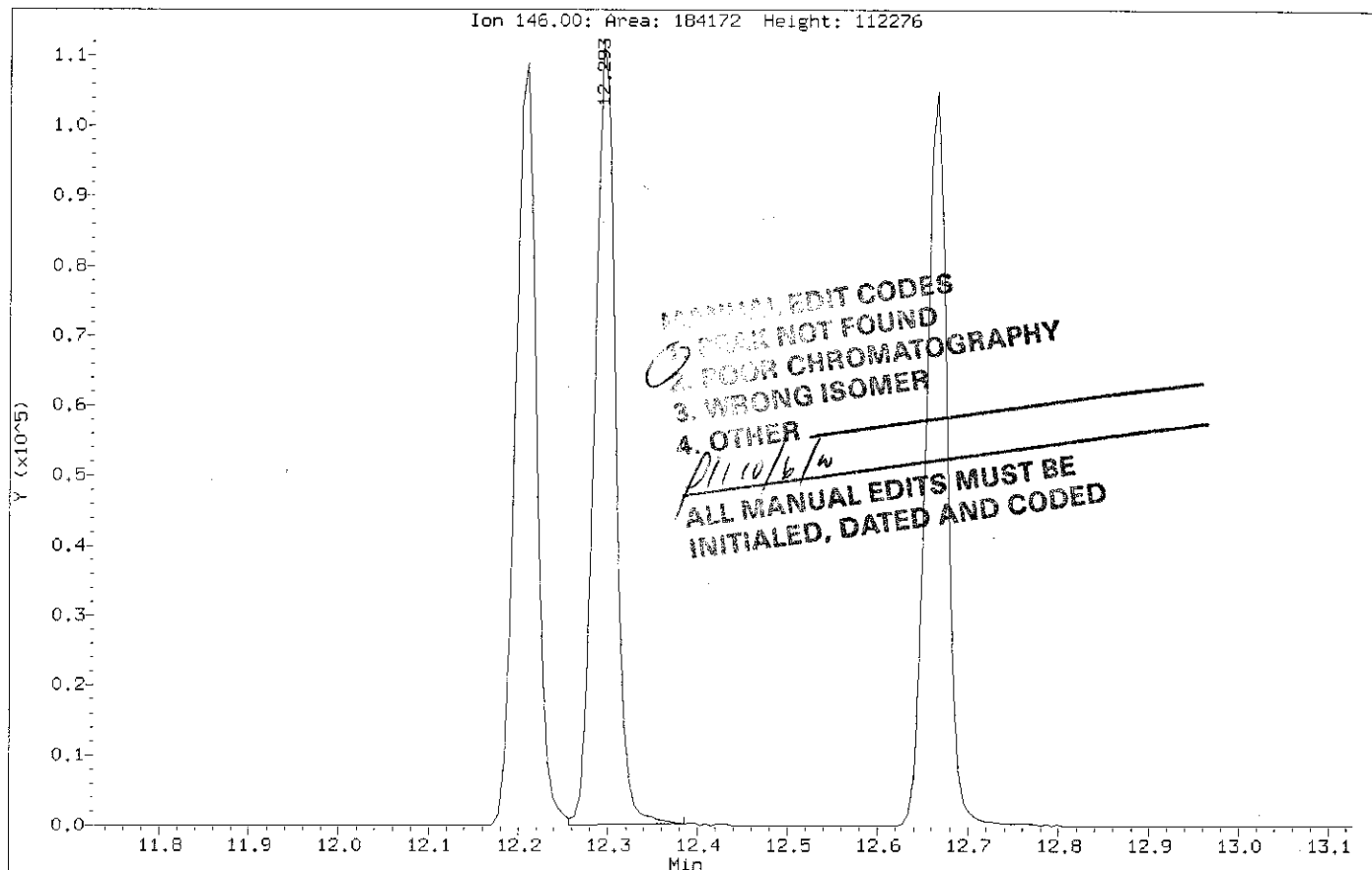
Manual Integration

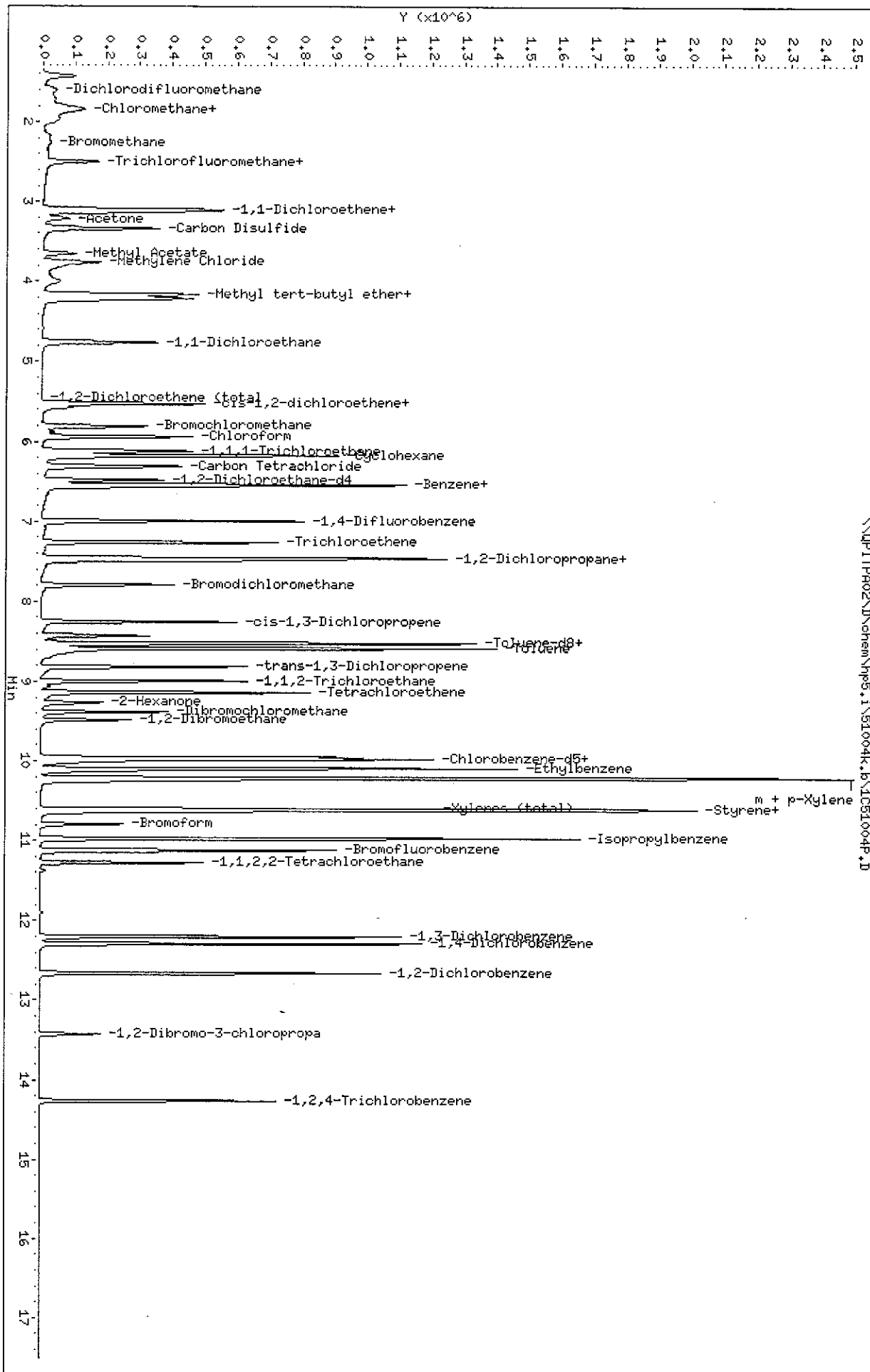
Manually Integrated By: JournetP
Manual Integration Reason: Peak Not Found

Pl 10/4/00

Data File: \\QPITPA02\chem\hp5.1\51004k.b\2B51004P.D
Injection Date: 04-OCT-2000 17:02
Instrument: hp5.1
Client Sample ID: vstd20

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7





STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51004k.b\1C51004P.D
Lab Smp Id: vstd50 Client Smp ID: vstd50
Inj Date : 04-OCT-2000 17:31 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : vstd50 5ml
Misc Info : vstd50,51004k.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51004k.b\clpsoil.m
Meth Date : 06-Oct-2000 15:56 journetp Quant Type: ISTD
Cal Date : 04-OCT-2000 17:31 Cal File: 1C51004P.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: Amt * DF * 1/Vo*100/(100-M)

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

9/11 10/6/00

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	CAL-AMT (ng)	ON-COL (ng)
*****	====	==	=====	=====	=====	=====
* 1 Bromochloromethane	128	5.809	5.809	(1.000)	105880	250.000
* 2 1,4-Difluorobenzene	114	7.001	7.001	(1.000)	723168	250.000
* 3 Chlorobenzene-d5	117	9.958	9.958	(1.000)	623515	250.000
\$ 4 1,2-Dichloroethane-d4	65	6.484	6.484	(1.116)	244266	250.000 257.6
\$ 5 Toluene-d8	98	8.522	8.522	(0.856)	970898	250.000 266.3
\$ 6 Bromofluorobenzene	95	11.126	11.126	(1.117)	348573	250.000 261.5
7 Dichlorodifluoromethane	85	1.605	1.605	(0.276)	215113	250.000 302.6
8 Chloromethane	50	1.830	1.830	(0.315)	336845	250.000 270.6
10 Bromomethane	94	2.183	2.183	(0.376)	32612	250.000 302.6
9 Vinyl Chloride	62	1.879	1.879	(0.323)	301050	250.000 278.7
11 Chloroethane	64	2.487	2.487	(0.428)	55267	250.000 378.7 (M)
12 Trichlorofluoromethane	101	2.493	2.493	(0.429)	206931	250.000 370.5
15 1,1-Dichloroethene	96	3.095	3.095	(0.533)	206110	250.000 287.4
51 1,1,2-Trichloro-1,2,2-Trifluor	101	3.120	3.120	(0.537)	213765	250.000 279.1
14 Acetone	43	3.211	3.211	(0.553)	127711	250.000 184.4
17 Carbon Disulfide	76	3.333	3.333	(0.574)	693174	250.000 285.8

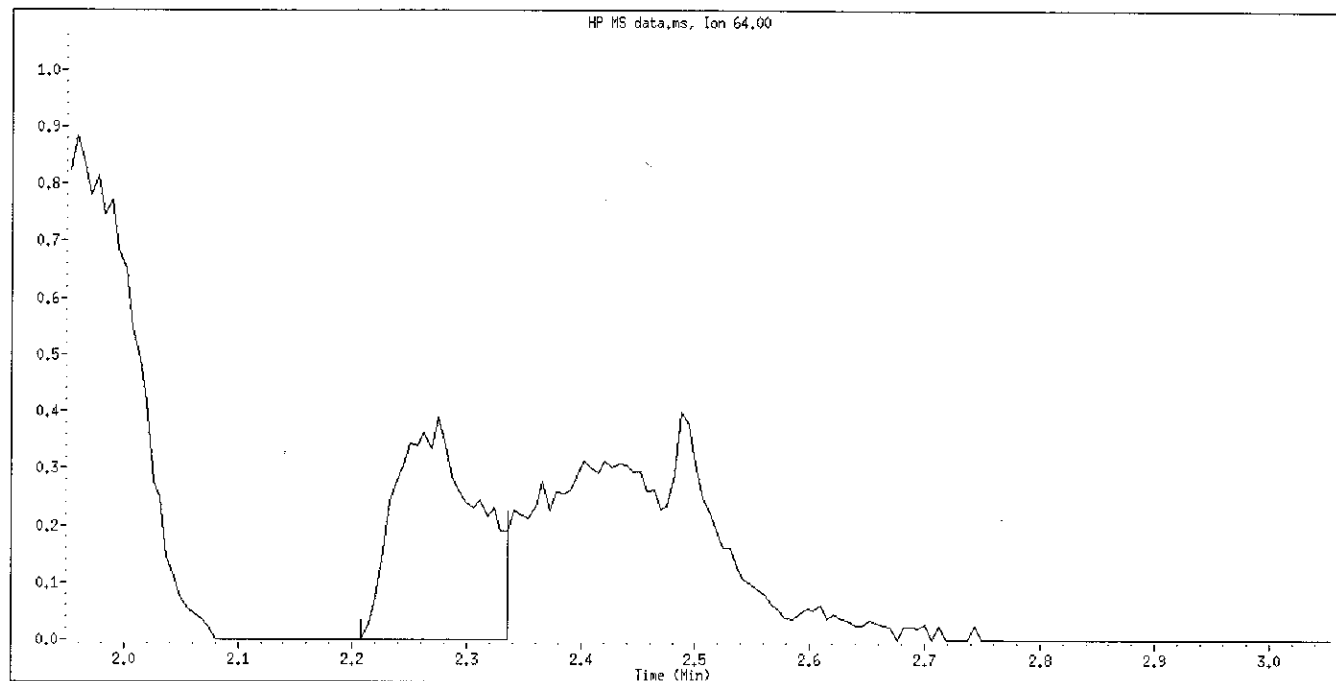
9/11 10/6/00

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43	3.655	3.655	(0.629)	185420	500.000	371.8
16 Methylene Chloride	84	3.759	3.759	(0.647)	167026	250.000	216.8
82 Methyl tert-butyl ether	73	4.215	4.215	(0.726)	653144	250.000	262.7
19 trans-1,2-Dichloroethene	96	4.166	4.166	(0.717)	265816	250.000	269.5
21 1,1-Dichloroethane	63	4.762	4.762	(0.820)	455681	250.000	272.6
23 cis-1,2-dichloroethene	96	5.529	5.529	(0.952)	268440	250.000	272.3
M 81 1,2-Dichloroethene (total)	96				534256	500.000	541.8
22 2-Butanone	43	5.578	5.578	(0.960)	143359	250.000	252.9
24 Chloroform	83	5.936	5.936	(1.022)	391788	250.000	266.1
28 Benzene	78	6.545	6.545	(0.935)	991930	250.000	255.9
27 1,2-Dichloroethane	62	6.569	6.569	(1.131)	298496	250.000	266.8
25 1,1,1-Trichloroethane	97	6.119	6.119	(0.874)	342185	250.000	254.5
89 Cyclohexane	56	6.180	6.180	(0.883)	484555	250.000	252.5
26 Carbon Tetrachloride	117	6.314	6.314	(0.902)	297207	250.000	258.5
29 Trichloroethene	130	7.269	7.269	(1.038)	272347	250.000	265.9
30 1,2-Dichloropropane	63	7.494	7.494	(1.070)	253103	250.000	256.1
31 Bromodichloromethane	83	7.798	7.798	(1.114)	281452	250.000	262.6
90 Methyl Cyclohexane	83	7.463	7.463	(1.066)	503663	250.000	264.0
34 cis-1,3-Dichloropropene	75	8.254	8.254	(1.179)	349102	250.000	260.9
38 1,1,2-Trichloroethane	97	8.996	8.996	(1.285)	208136	250.000	259.0
40 Dibromochloromethane	129	9.386	9.386	(1.341)	207983	250.000	257.0
36 trans-1,3-Dichloropropene	75	8.820	8.820	(1.260)	339757	250.000	257.0
33 4-Methyl-2-pentanone	43	8.425	8.425	(0.846)	238614	250.000	639.6
37 2-Hexanone	43	9.264	9.264	(0.930)	176885	250.000	244.3
46 Bromoform	173	10.797	10.797	(1.542)	125866	250.000	256.0
39 Tetrachloroethene	164	9.136	9.136	(0.918)	215460	250.000	268.3
63 1,2-Dibromoethane	107	9.489	9.489	(1.355)	203202	250.000	255.1
47 1,1,2,2-Tetrachloroethane	83	11.278	11.278	(1.133)	248790	250.000	255.8
35 Toluene	91	8.589	8.589	(0.863)	1074202	250.000	270.0
41 Chlorobenzene	112	9.988	9.988	(1.003)	683872	250.000	270.0
42 Ethylbenzene	106	10.104	10.104	(1.015)	397054	250.000	274.2
45 Styrene	104	10.627	10.627	(1.067)	734258	250.000	275.6
43 m + p-Xylene	106	10.219	10.219	(1.026)	934806	500.000	550.9 (H)
44 Xylene-o	106	10.609	10.609	(1.065)	451119	250.000	274.6
M 80 Xylenes (total)	106				1385925	250.000	843.5
91 Isopropylbenzene	105	10.980	10.980	(1.103)	1192724	250.000	278.1
48 1,3-Dichlorobenzene	146	12.208	12.208	(1.226)	496974	250.000	267.1
49 1,4-Dichlorobenzene	146	12.294	12.294	(1.235)	502944	250.000	267.0 (H)
50 1,2-Dichlorobenzene	146	12.665	12.665	(1.272)	458542	250.000	262.6
69 1,2-Dibromo-3-chloropropane	75	13.431	13.431	(1.349)	45926	250.000	254.6
92 1,2,4-Trichlorobenzene	180	14.265	14.265	(1.433)	242724	250.000	256.6

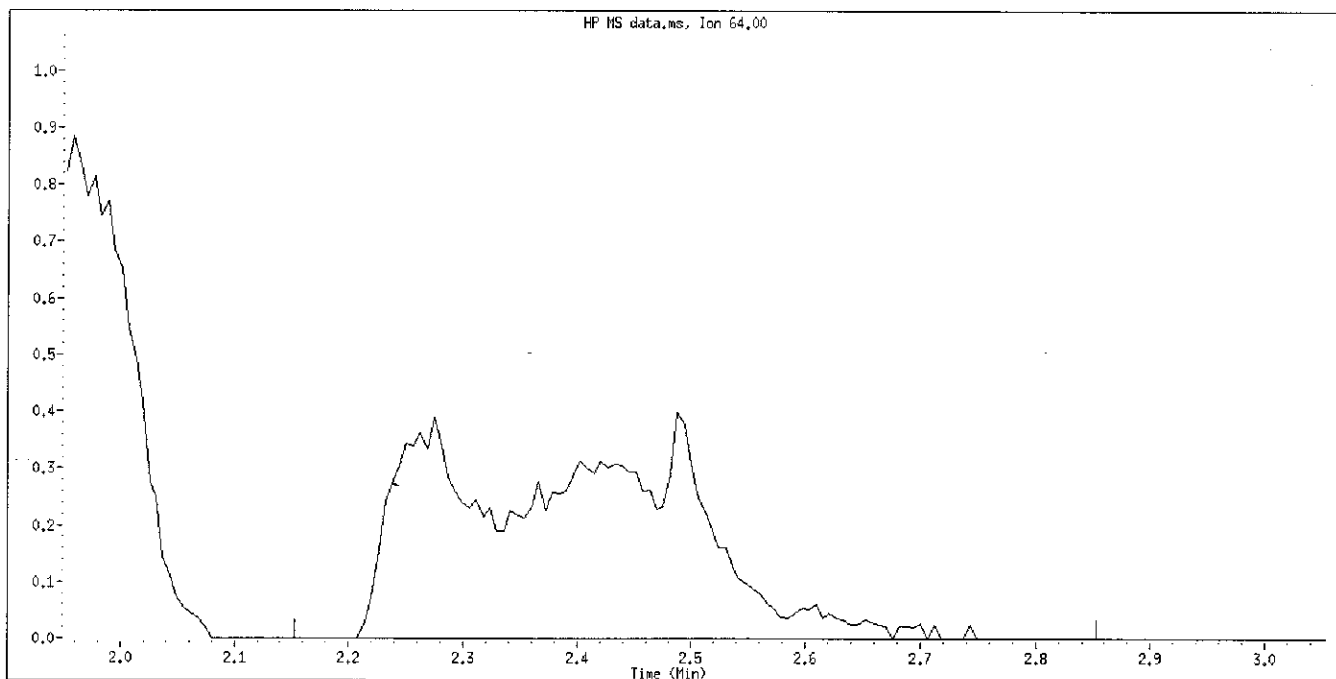
QC Flag Legend

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

Data File Name: 1C51004P.D
Inj. Date and Time: 04-OCT-2000 17:31
Instrument ID: hp5.i
Client ID: vstd50
Compound Name: Chloroethane
CAS #: 75-00-3
Report Date: 10/04/2000



Original Integration



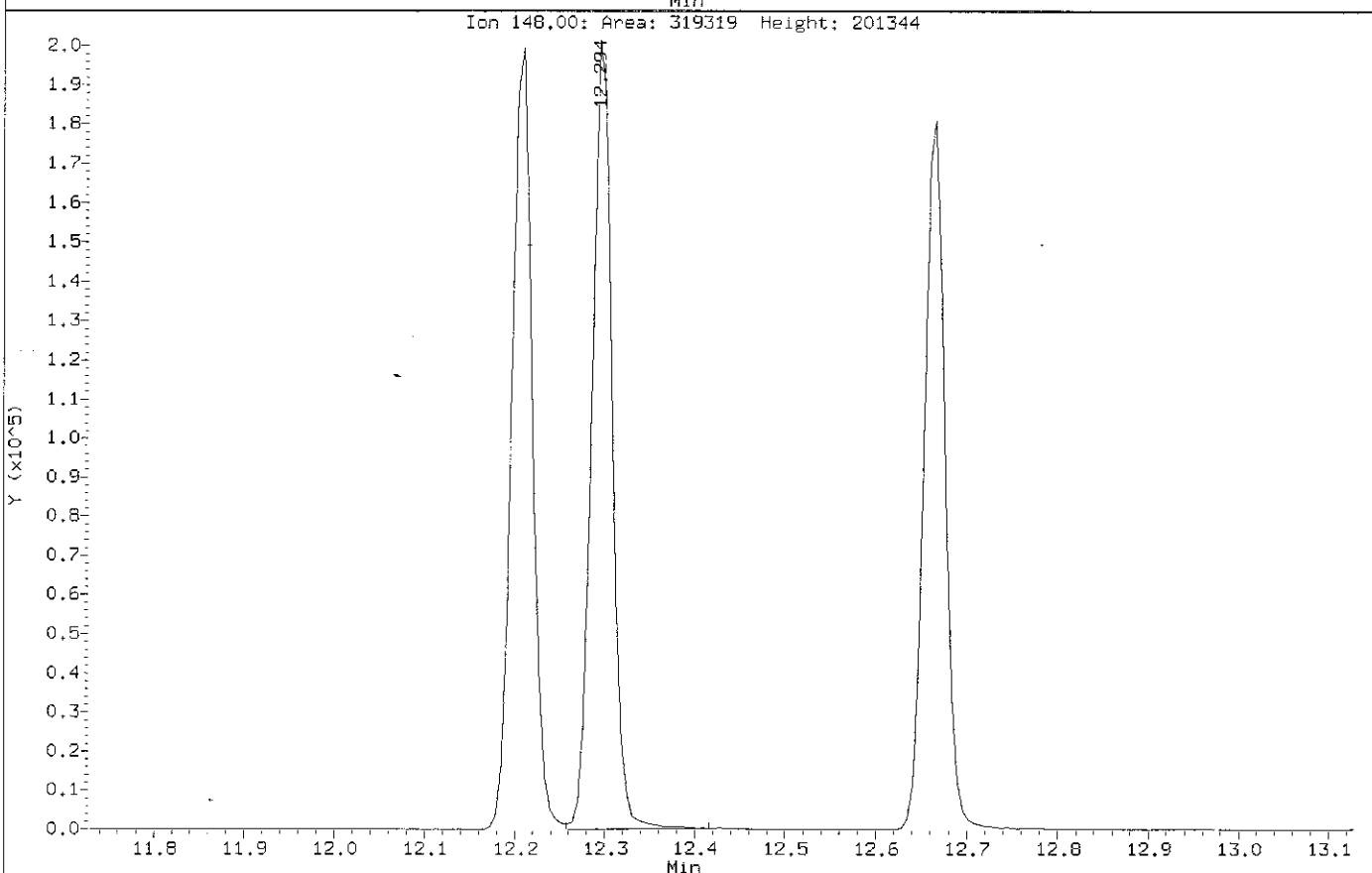
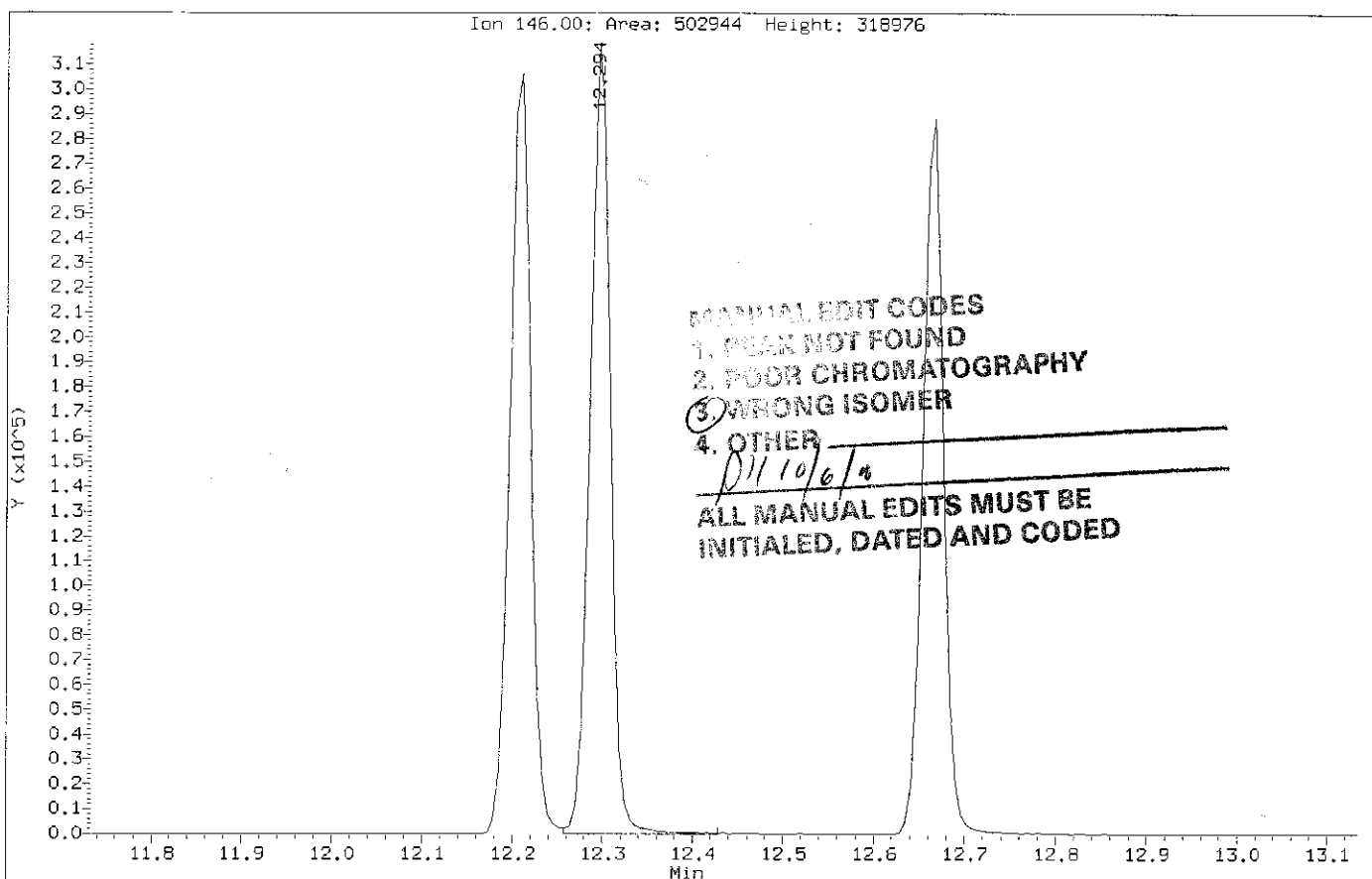
Manual Integration

Manually Integrated By: JournetP
Manual Integration Reason: Peak Not Found

Ph 10/14/00

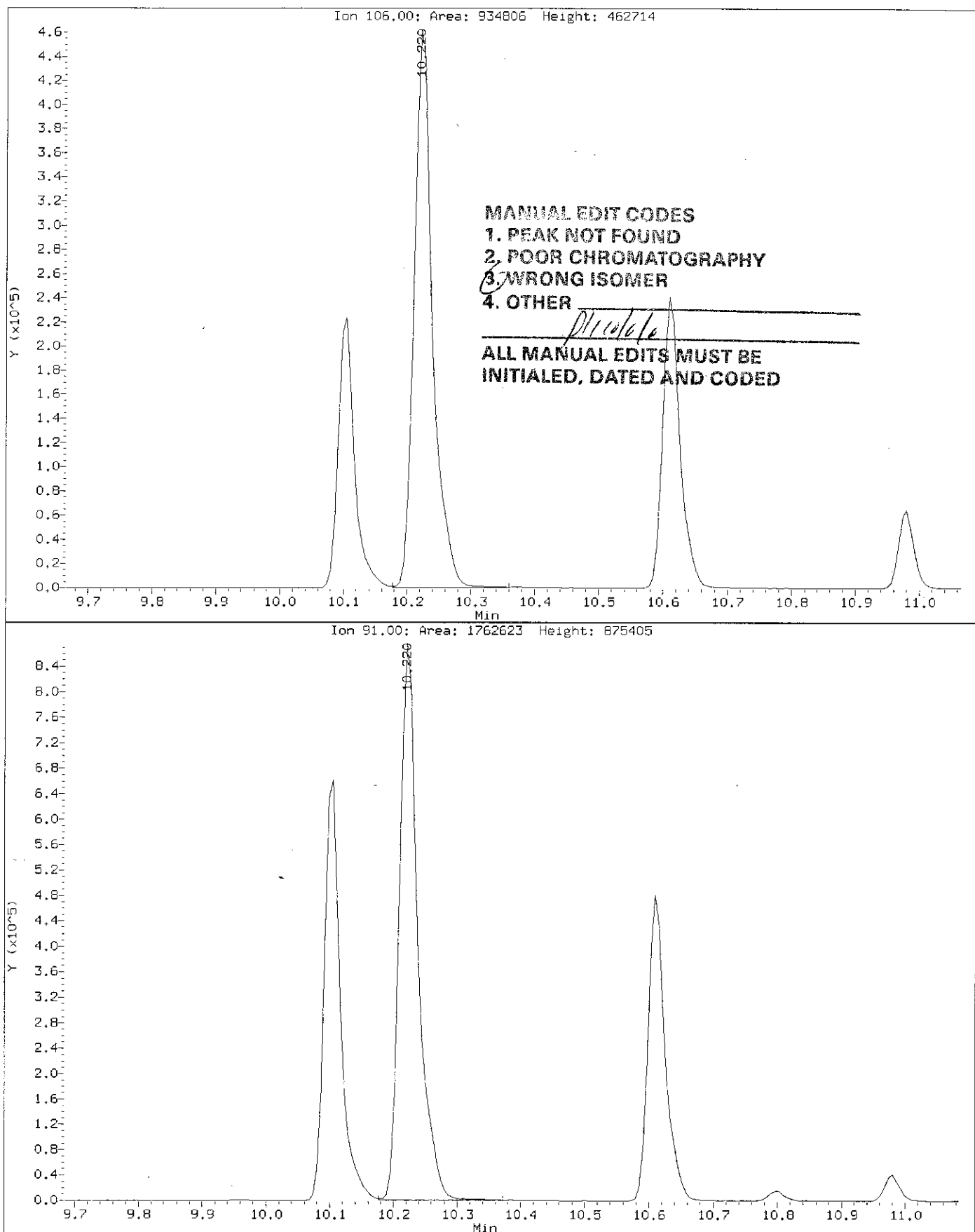
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Injection Date: 04-OCT-2000 17:31
Instrument: hp5.1
Client Sample ID: vstd50

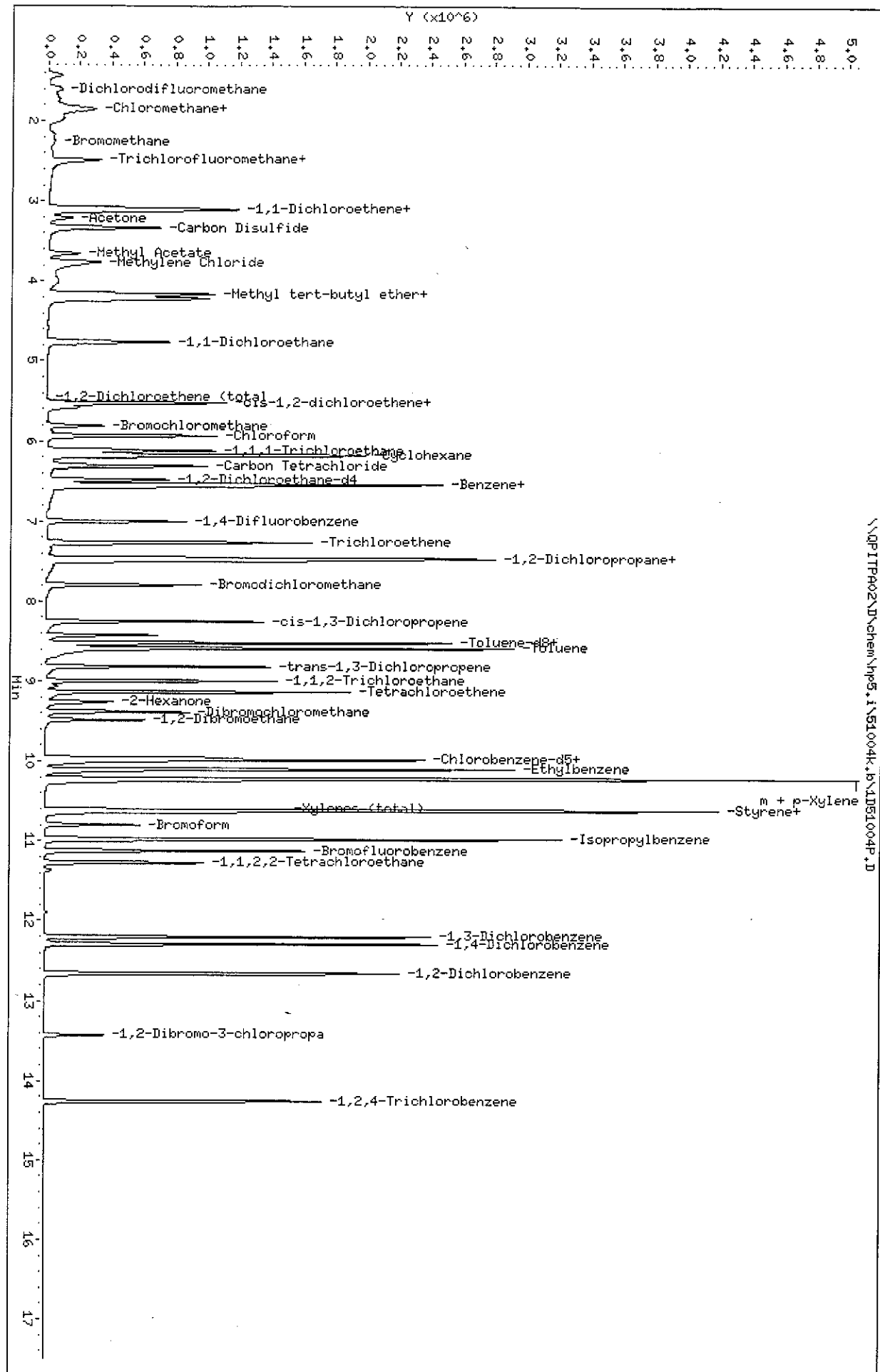
Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7



Data File: \\QPITPA02\chem\hp5.1\51004k.b\1C51004P.D
Injection Date: 04-OCT-2000 17:31
Instrument: hp5.1
Client Sample ID: vstd50

Compound: m + p-Xylene
CAS Number: 136777-61-2





STL - Pittsburgh

Volatile Report CLP OLM03.1 Method

Data file : \\QPITPA02\D\chem\hp5.i\51004k.b\1D51004P.D
Lab Smp Id: vstd100 Client Smp ID: vstd100
Inj Date : 04-OCT-2000 18:01 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : vstd100 5ml
Misc Info : vstd100,51004k.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51004k.b\clpsoil.m
Meth Date : 06-Oct-2000 15:56 journetp Quant Type: ISTD
Cal Date : 04-OCT-2000 17:31 Cal File: 1C51004P.D
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: Amt * DF * 1/Vo*100/(100-M)

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

01/10/01

Compounds	QUANT SIG				AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)
*****	****	**	*****	*****	*****	*****
* 1 Bromochloromethane	128	5.811	5.809	(1.000)	114830	250.000
* 2 1,4-Difluorobenzene	114	7.003	7.001	(1.000)	731966	250.000
* 3 Chlorobenzene-d5	117	9.960	9.958	(1.000)	649336	250.000
\$ 4 1,2-Dichloroethane-d4	65	6.486	6.484	(1.116)	499110	500.000
\$ 5 Toluene-d8	98	8.524	8.522	(0.856)	1843423	500.000
\$ 6 Bromofluorobenzene	95	11.122	11.126	(1.117)	649392	500.000
7 Dichlorodifluoromethane	85	1.607	1.605	(0.277)	442543	500.000
8 Chloromethane	50	1.838	1.830	(0.316)	688027	500.000
10 Bromomethane	94	2.173	2.183	(0.374)	68285	500.000
9 Vinyl Chloride	62	1.875	1.879	(0.323)	636146	500.000
11 Chloroethane	64	2.471	2.487	(0.425)	124303	500.000
12 Trichlorofluoromethane	101	2.489	2.493	(0.428)	574263	500.000
15 1,1-Dichloroethene	96	3.091	3.095	(0.532)	432070	500.000
51 1,1,2-Trichloro-1,2,2-Trifluor	101	3.116	3.120	(0.536)	460347	500.000
14 Acetone	43	3.213	3.211	(0.553)	239372	500.000
17 Carbon Disulfide	76	3.335	3.333	(0.574)	1461998	500.000

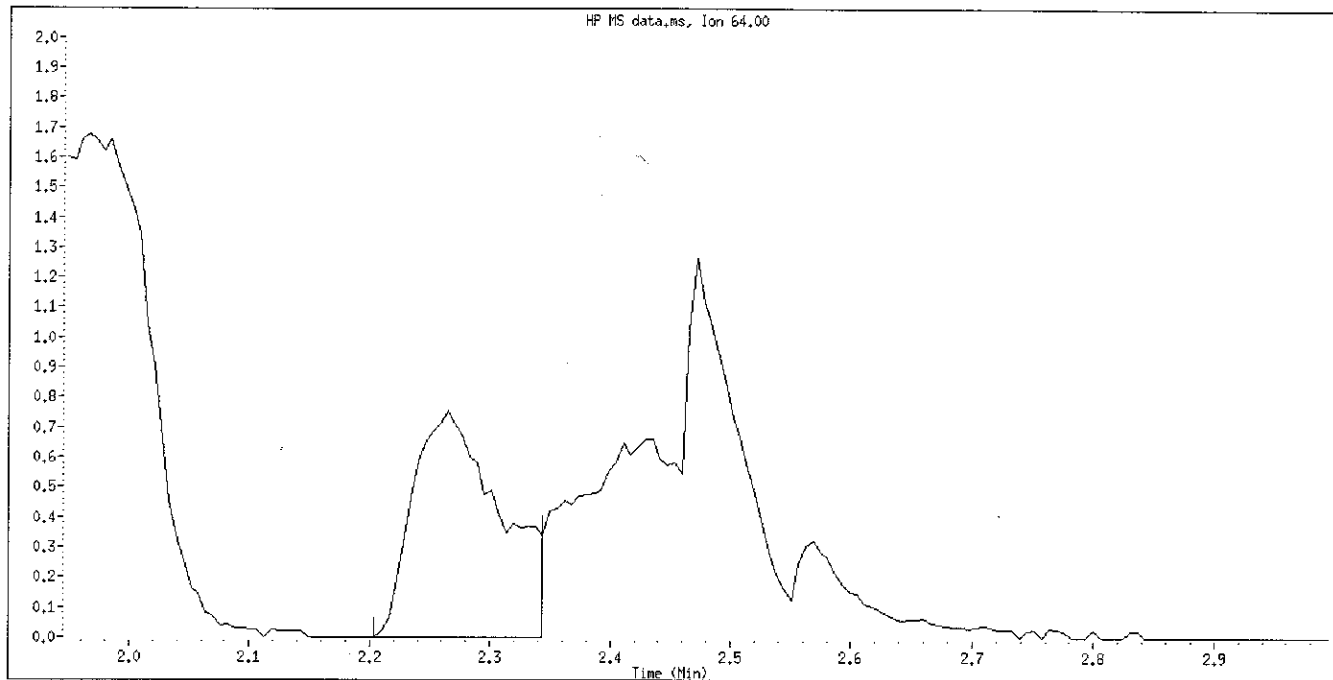
01/10/01

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43	3.657	3.655	(0.629)	363151	1000.00	671.3
16 Methylene Chloride	84	3.767	3.759	(0.648)	525738	500.000	629.3
82 Methyl tert-butyl ether	73	4.217	4.215	(0.726)	1464020	500.000	543.0
19 trans-1,2-Dichloroethene	96	4.162	4.166	(0.716)	599683	500.000	560.6
21 1,1-Dichloroethane	63	4.764	4.762	(0.820)	1015381	500.000	560.1
23 cis-1,2-dichloroethene	96	5.531	5.529	(0.952)	599165	500.000	560.4
M 81 1,2-Dichloroethene (total)	96				1198848	1000.00	1121
22 2-Butanone	43	5.580	5.578	(0.960)	296598	500.000	482.4
24 Chloroform	83	5.938	5.936	(1.022)	903033	500.000	565.5
28 Benzene	78	6.547	6.545	(0.935)	2287767	500.000	583.1
27 1,2-Dichloroethane	62	6.571	6.569	(1.131)	672554	500.000	554.2
25 1,1,1-Trichloroethane	97	6.121	6.119	(0.874)	802272	500.000	589.6
89 Cyclohexane	56	6.182	6.180	(0.883)	1138702	500.000	586.3
26 Carbon Tetrachloride	117	6.310	6.314	(0.901)	697947	500.000	599.8
29 Trichloroethene	130	7.265	7.269	(1.037)	614454	500.000	592.8
30 1,2-Dichloropropane	63	7.490	7.494	(1.069)	589019	500.000	588.8
31 Bromodichloromethane	83	7.794	7.798	(1.113)	647063	500.000	596.6
90 Methyl Cyclohexane	83	7.465	7.463	(1.066)	1132952	500.000	586.8
34 cis-1,3-Dichloropropene	75	8.256	8.254	(1.179)	787090	500.000	581.1
38 1,1,2-Trichloroethane	97	8.998	8.996	(1.285)	450735	500.000	554.2
40 Dibromochloromethane	129	9.388	9.386	(1.341)	480800	500.000	587.0
36 trans-1,3-Dichloropropene	75	8.822	8.820	(1.260)	769807	500.000	575.4
33 4-Methyl-2-pentanone	43	8.427	8.425	(0.846)	484884	500.000	1248 (H)
37 2-Hexanone	43	9.260	9.264	(0.930)	367349	500.000	487.2
46 Bromoform	173	10.799	10.797	(1.542)	286460	500.000	575.7
39 Tetrachloroethene	164	9.138	9.136	(0.918)	474644	500.000	567.5
63 1,2-Dibromoethane	107	9.485	9.489	(1.354)	443662	500.000	550.3
47 1,1,2,2-Tetrachloroethane	83	11.274	11.278	(1.132)	506649	500.000	500.2
35 Toluene	91	8.591	8.589	(0.863)	2293965	500.000	553.6
41 Chlorobenzene	112	9.984	9.988	(1.002)	1428716	500.000	541.6
42 Ethylbenzene	106	10.106	10.104	(1.015)	822515	500.000	545.4
45 Styrene	104	10.623	10.627	(1.067)	1503190	500.000	541.8
43 m + p-Xylene	106	10.221	10.219	(1.026)	1909467	1000.00	1080 (H)
44 Xylene-o	106	10.611	10.609	(1.065)	927588	500.000	542.1
M 80 Xylenes (total)	106				2837055	500.000	1658
91 Isopropylbenzene	105	10.982	10.980	(1.103)	2403619	500.000	538.1
48 1,3-Dichlorobenzene	146	12.204	12.208	(1.225)	1037929	500.000	535.6
49 1,4-Dichlorobenzene	146	12.296	12.294	(1.235)	1045371	500.000	533.0 (H)
50 1,2-Dichlorobenzene	146	12.661	12.665	(1.271)	959004	500.000	527.5
69 1,2-Dibromo-3-chloropropane	75	13.427	13.431	(1.348)	93421	500.000	497.2
92 1,2,4-Trichlorobenzene	180	14.261	14.265	(1.432)	543390	500.000	551.6

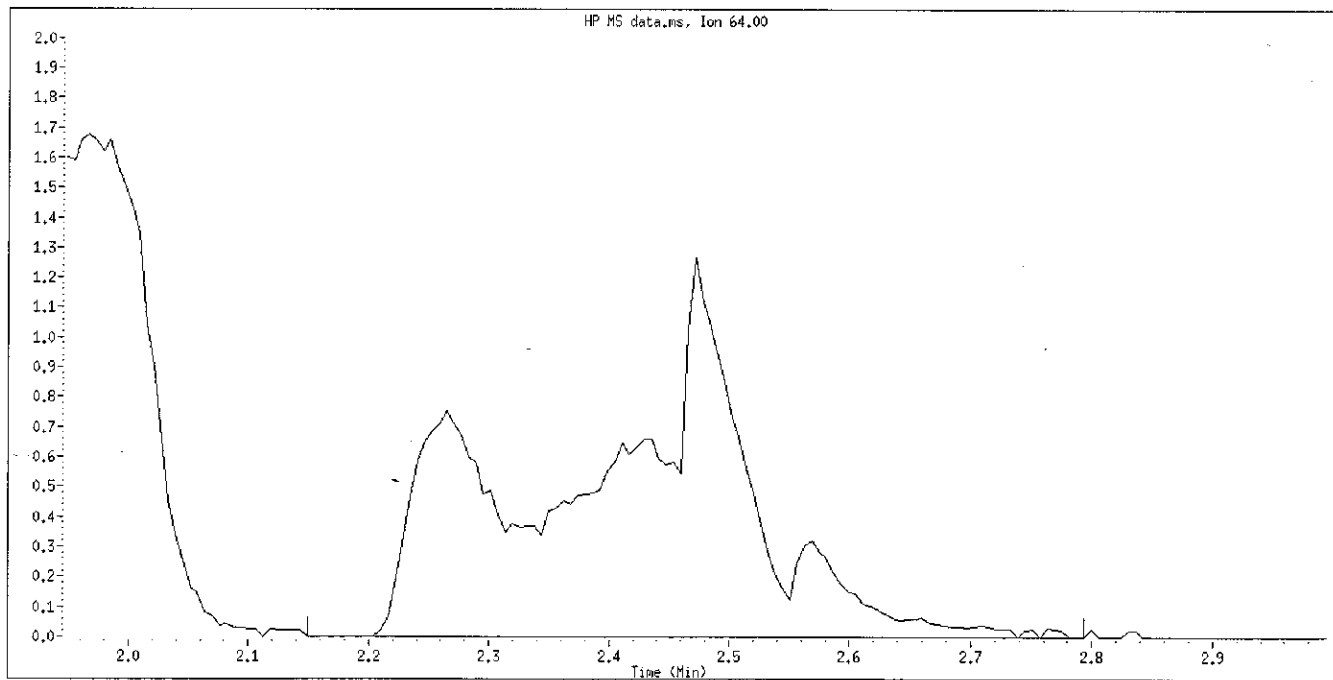
QC Flag Legend

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

Data File Name: 1D51004P.D
Inj. Date and Time: 04-OCT-2000 18:01
Instrument ID: hp5.i
Client ID: vstd100
Compound Name: Chloroethane
CAS #: 75-00-3
Report Date: 10/04/2000



Original Integration



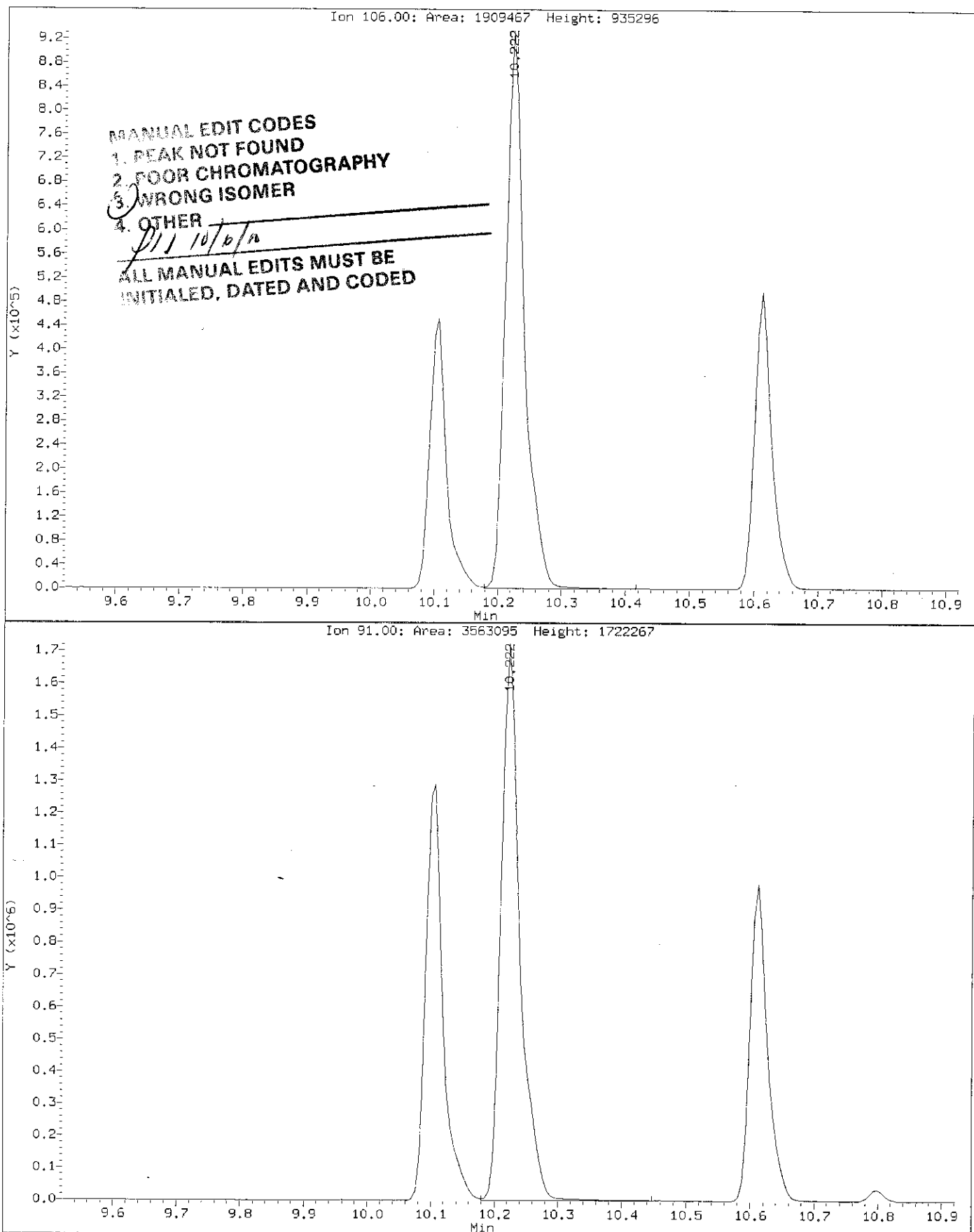
Manual Integration

Manually Integrated By: JournetP
Manual Integration Reason: Peak Not Found

9/10/04

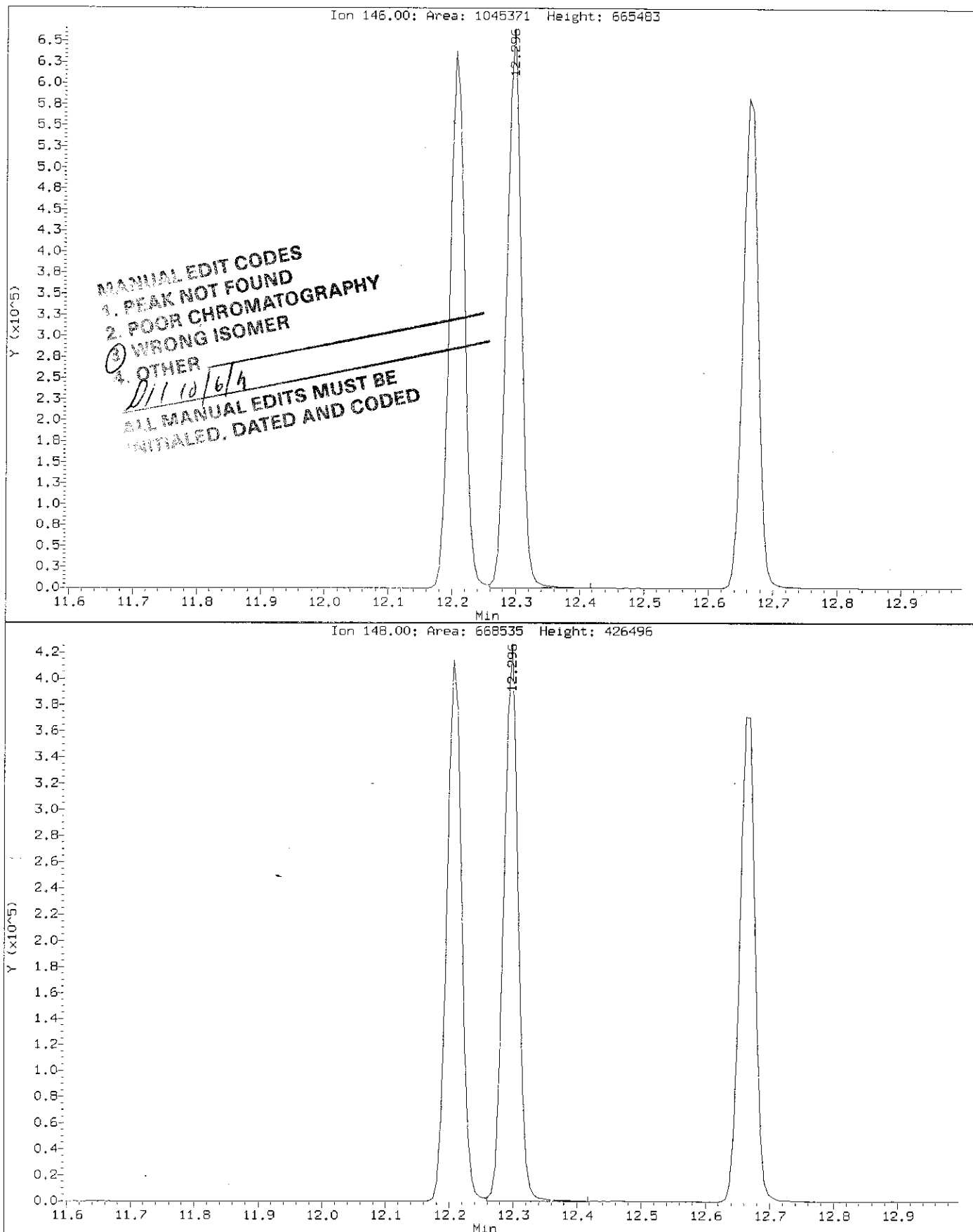
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Injection Date: 04-OCT-2000 18:01
Instrument: hp5.1
Client Sample ID: vstd100

Compound: m + p-Xylene
CAS Number: 136777-61-2



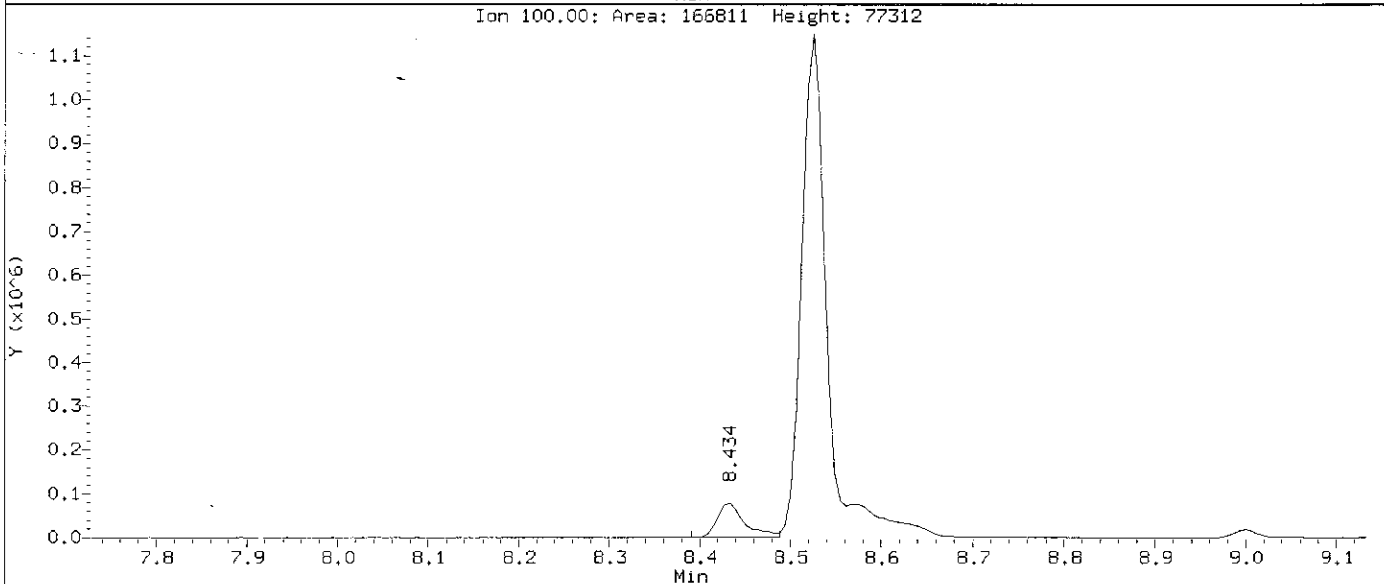
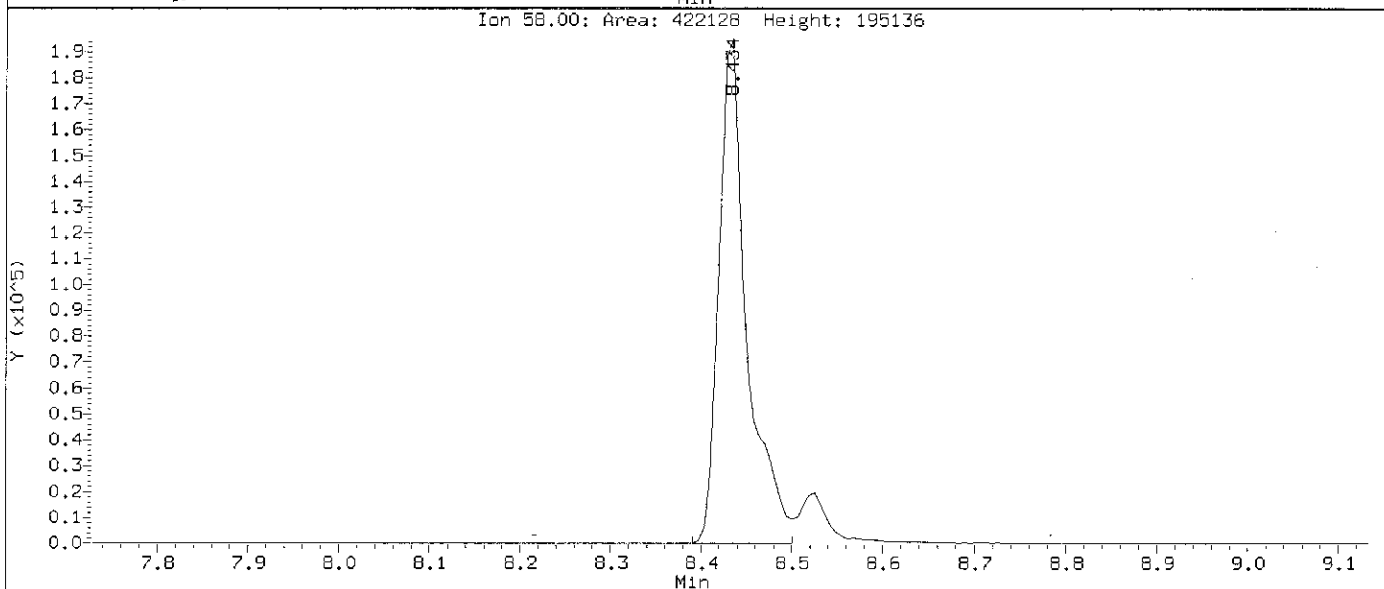
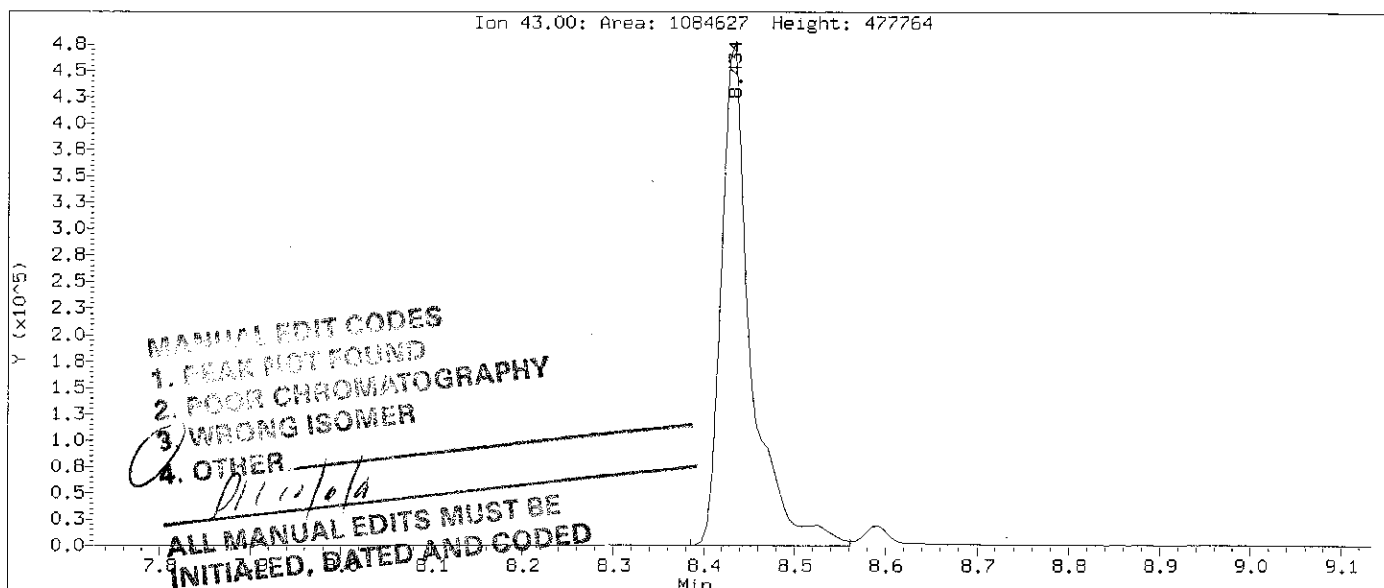
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Injection Date: 04-OCT-2000 18:01
Instrument: hp5.1
Client Sample ID: vstd100

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7



Data File: \\QPI\TPA02\N\chem\hp5.1\51004k.b\1E51004P.D
Injection Date: 04-OCT-2000 18:31
Instrument: hp5.1
Client Sample ID: vstd200

Compound: 4-Methyl-2-pentanone
CAS Number: 108-10-1



Date : 04-OCT-2000 18:31

Client ID: vstd200

Sample Info: vstd200 5ml

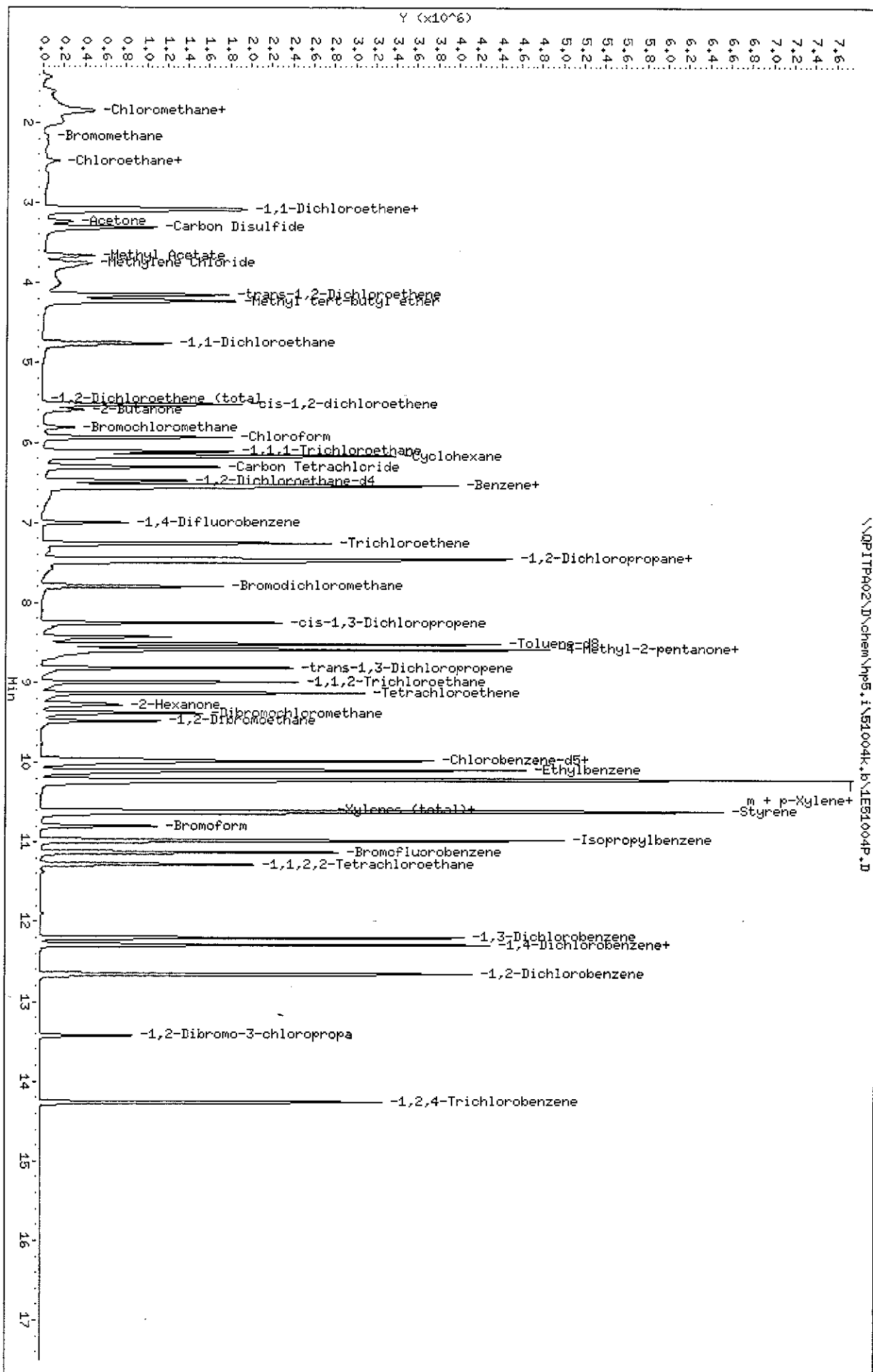
Purge Volume: 5.0

Column phase: DB624

Instrument: hp5.i

Operator: 034635

Column diameter: 0.53



STL - Pittsburgh

Volatile Report CLP OLM03.1 Method

Data file : \\QPITPA02\D\chem\hp5.i\51004k.b\1E51004P.D
Lab Smp Id: vstd200 Client Smp ID: vstd200
Inj Date : 04-OCT-2000 18:31 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : vstd200 5ml
Misc Info : vstd200,51004k.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51004k.b\clpsoil.m
Meth Date : 06-Oct-2000 15:56 journetp Quant Type: ISTD
Cal Date : 04-OCT-2000 17:31 Cal File: 1C51004P.D
Als bottle: 9 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: Amt * DF * 1/Vo*100/(100-M)

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

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						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)
=====	====	==	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128	5.811	5.809	(1.000)	112421	250.000	
* 2 1,4-Difluorobenzene	114	6.997	7.001	(1.000)	685148	250.000	
* 3 Chlorobenzene-d5	117	9.960	9.958	(1.000)	622239	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.480	6.484	(1.115)	952445	1000.00	946.0
\$ 5 Toluene-d8	98	8.524	8.522	(0.856)	3263412	1000.00	896.8
\$ 6 Bromofluorobenzene	95	11.128	11.126	(1.117)	1214137	1000.00	912.8
7 Dichlorodifluoromethane	85	1.601	1.605	(0.276)	796451	1000.00	1055 (M)
8 Chloromethane	50	1.839	1.830	(0.316)	1328683	1000.00	1005
10 Bromomethane	94	2.161	2.183	(0.372)	117582	1000.00	1028
9 Vinyl Chloride	62	1.991	1.879	(0.343)	1108964	1000.00	966.8
11 Chloroethane	64	2.441	2.487	(0.420)	138237	1000.00	892.1
12 Trichlorofluoromethane	101	2.477	2.493	(0.426)	164704	1000.00	277.7
15 1,1-Dichloroethene	96	3.074	3.095	(0.529)	702694	1000.00	922.8
51 1,1,2-Trichloro-1,2,2-Trifluor	101	3.092	3.120	(0.532)	777483	1000.00	956.0
14 Acetone	43	3.238	3.211	(0.557)	458135	1000.00	623.2
17 Carbon Disulfide	76	3.311	3.333	(0.570)	2448045	1000.00	950.5

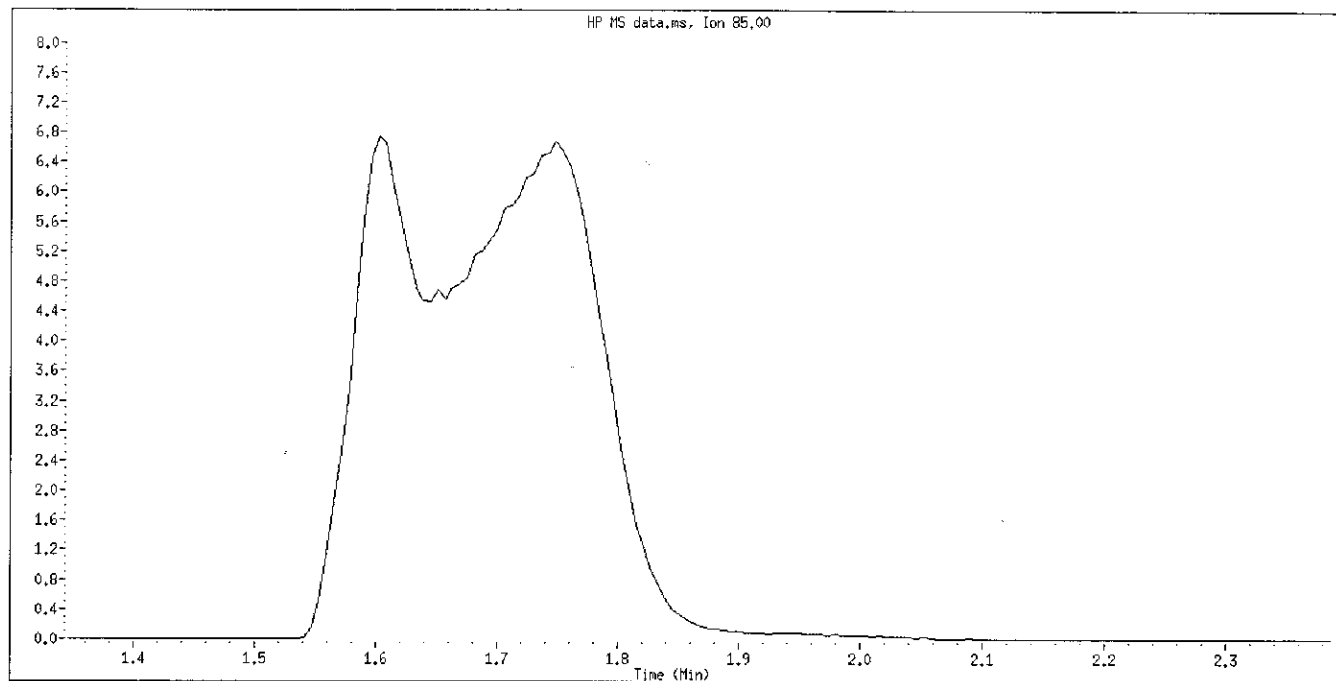
Handwritten signature

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	----	==	=====	-----	=====	=====	=====
88 Methyl Acetate	43	3.664	3.655	(0.630)	843529	2000.00	1593
16 Methylene Chloride	84	3.755	3.759	(0.646)	1019258	1000.00	1246
82 Methyl tert-butyl ether	73	4.229	4.215	(0.728)	2682366	1000.00	1016
19 trans-1,2-Dichloroethene	96	4.156	4.166	(0.715)	1015814	1000.00	970.0
21 1,1-Dichloroethane	63	4.759	4.762	(0.819)	1735785	1000.00	978.0
23 cis-1,2-dichloroethene	96	5.525	5.529	(0.951)	1019248	1000.00	973.7
M 81 1,2-Dichloroethene (total)	96				2035062	2000.00	1944
22 2-Butanone	43	5.586	5.578	(0.961)	629985	1000.00	1047
24 Chloroform	83	5.939	5.936	(1.022)	1529065	1000.00	978.1
28 Benzene	78	6.541	6.545	(0.935)	3792184	1000.00	1032
27 1,2-Dichloroethane	62	6.572	6.569	(1.131)	1184955	1000.00	997.3
25 1,1,1-Trichloroethane	97	6.115	6.119	(0.874)	1374426	1000.00	1079
89 Cyclohexane	56	6.176	6.180	(0.883)	1954894	1000.00	1075
26 Carbon Tetrachloride	117	6.310	6.314	(0.902)	1180153	1000.00	1084
29 Trichloroethene	130	7.265	7.269	(1.038)	948339	1000.00	977.4
30 1,2-Dichloropropane	63	7.490	7.494	(1.070)	937916	1000.00	1002
31 Bromodichloromethane	83	7.794	7.798	(1.114)	1134830	1000.00	1118
90 Methyl Cyclohexane	83	7.460	7.463	(1.066)	1847061	1000.00	1022
34 cis-1,3-Dichloropropene	75	8.257	8.254	(1.180)	1382087	1000.00	1090
38 1,1,2-Trichloroethane	97	8.999	8.996	(1.286)	813813	1000.00	1069
40 Dibromochloromethane	129	9.388	9.386	(1.342)	877702	1000.00	1145
36 trans-1,3-Dichloropropene	75	8.822	8.820	(1.261)	1371325	1000.00	1095
33 4-Methyl-2-pentanone	43	8.433	8.425	(0.847)	1084627	1000.00	2913 (H)
37 2-Hexanone	43	9.285	9.264	(0.932)	842336	1000.00	1166
46 Bromoform	173	10.800	10.797	(1.543)	577254	1000.00	1239
39 Tetrachloroethene	164	9.139	9.136	(0.918)	795276	1000.00	992.3
63 1,2-Dibromoethane	107	9.486	9.489	(1.356)	826872	1000.00	1096
47 1,1,2,2-Tetrachloroethane	83	11.274	11.278	(1.132)	1063228	1000.00	1095
35 Toluene	91	8.591	8.589	(0.863)	3806289	1000.00	958.6
41 Chlorobenzene	112	9.984	9.988	(1.002)	2428580	1000.00	960.6
42 Ethylbenzene	106	10.100	10.104	(1.014)	1397519	1000.00	967.1
45 Styrene	104	10.623	10.627	(1.067)	2517088	1000.00	946.8
43 m + p-Xylene	106	10.222	10.219	(1.026)	3084172	2000.00	1821 (M)
44 Xylene-o	106	10.611	10.609	(1.065)	1554566	1000.00	948.1
M 80 Xylenes (total)	106				4638738	1000.00	2829
91 Isopropylbenzene	105	10.982	10.980	(1.103)	3888026	1000.00	908.3
48 1,3-Dichlorobenzene	146	12.205	12.208	(1.225)	1821123	1000.00	980.7
49 1,4-Dichlorobenzene	146	12.296	12.294	(1.235)	1838976	1000.00	978.4 (H)
50 1,2-Dichlorobenzene	146	12.661	12.665	(1.271)	1740624	1000.00	999.1
69 1,2-Dibromo-3-chloropropane	75	13.428	13.431	(1.348)	219472	1000.00	1219
92 1,2,4-Trichlorobenzene	180	14.261	14.265	(1.432)	1020658	1000.00	1081

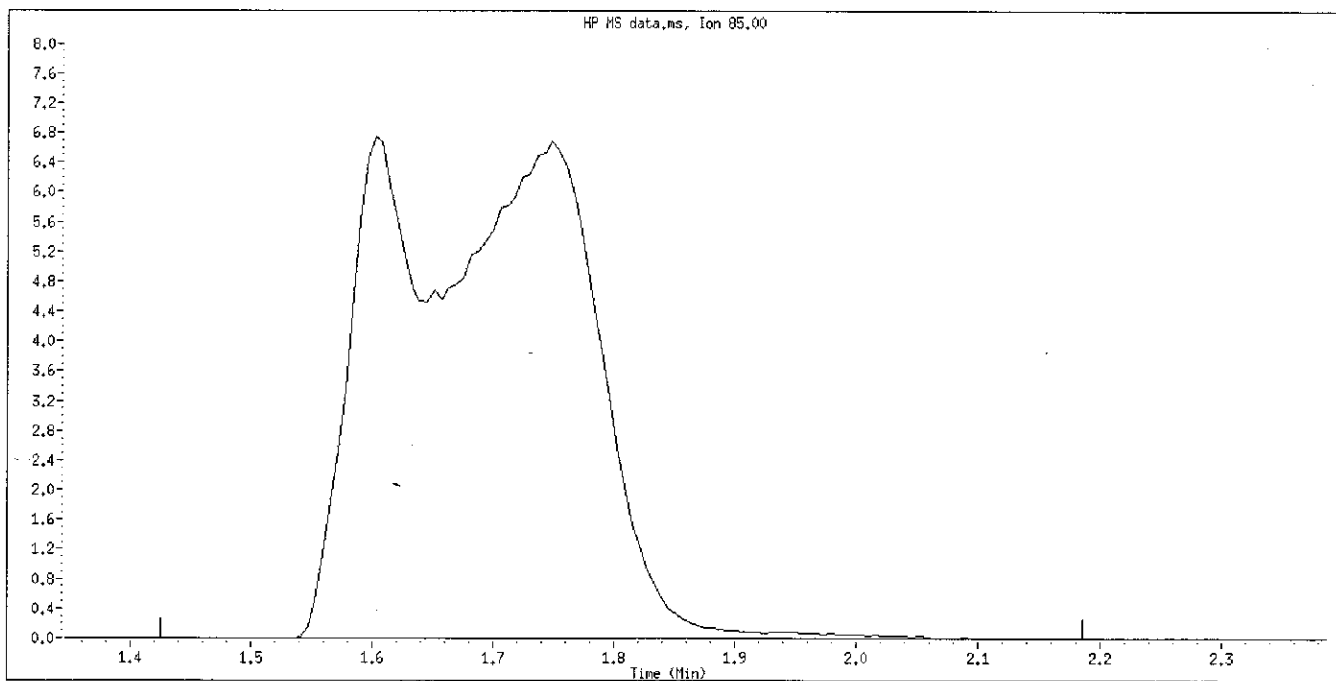
QC Flag Legend

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

Data File Name: 1E51004P.D
Inj. Date and Time: 04-OCT-2000 18:31
Instrument ID: hp5.i
Client ID: vstd200
Compound Name: Dichlorodifluoromethane
CAS #: 75-71-8
Report Date: 10/04/2000



Original Integration

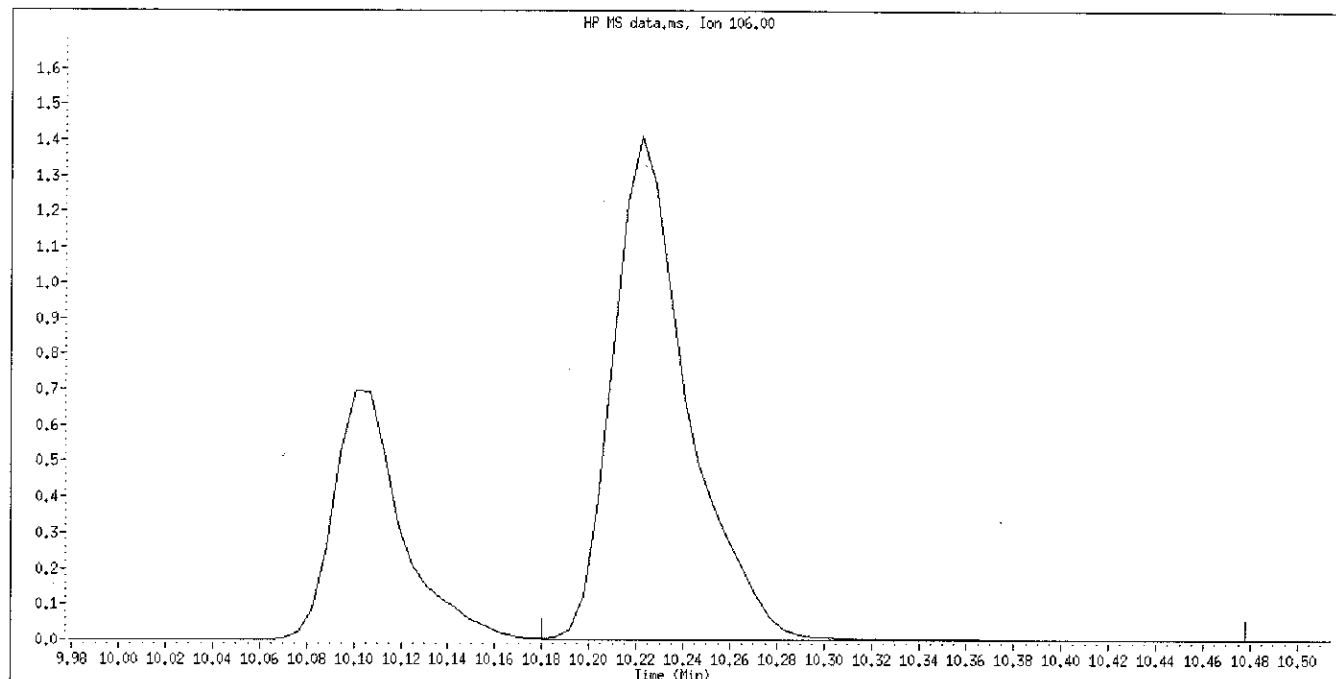


Manual Integration

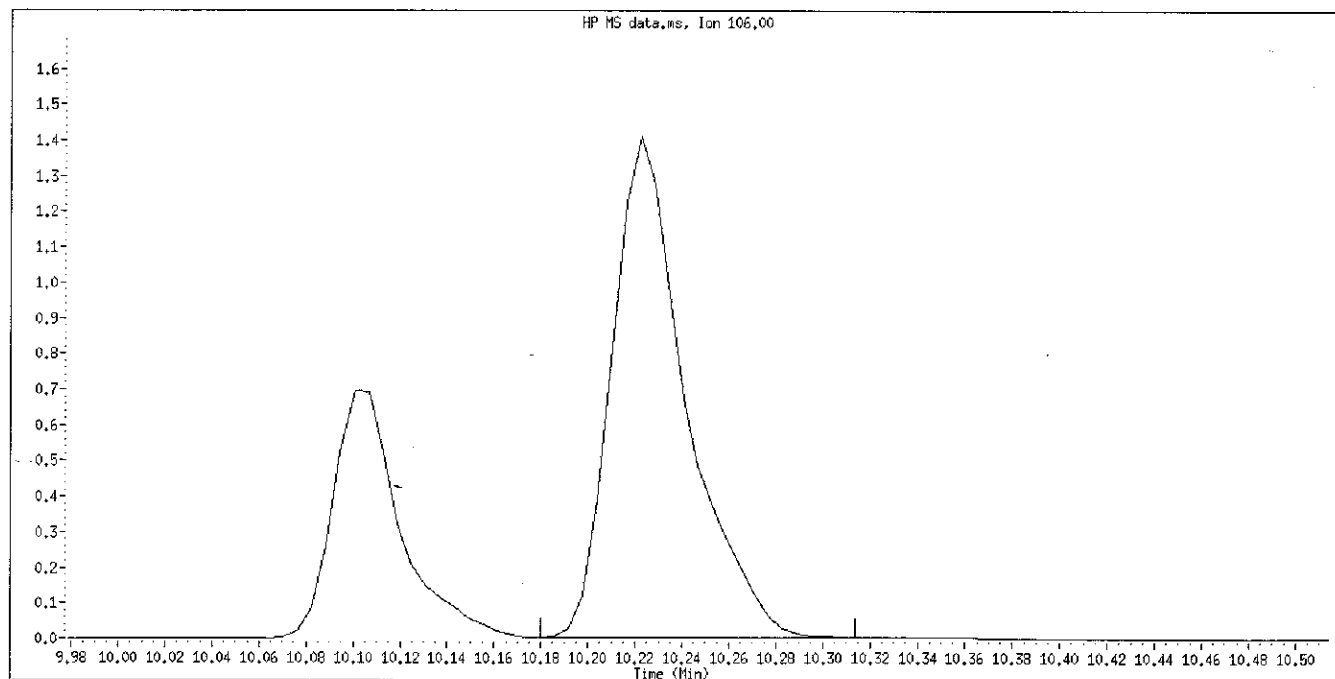
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Manual Integration Reason: Poor Chromatography

Printed

Data File Name: 1E51004P.D
Inj. Date and Time: 04-OCT-2000 18:31
Instrument ID: hp5.i
Client ID: vstd200
Compound Name: m + p-Xylene
CAS #: 136777-61-2
Report Date: 10/04/2000



Original Integration



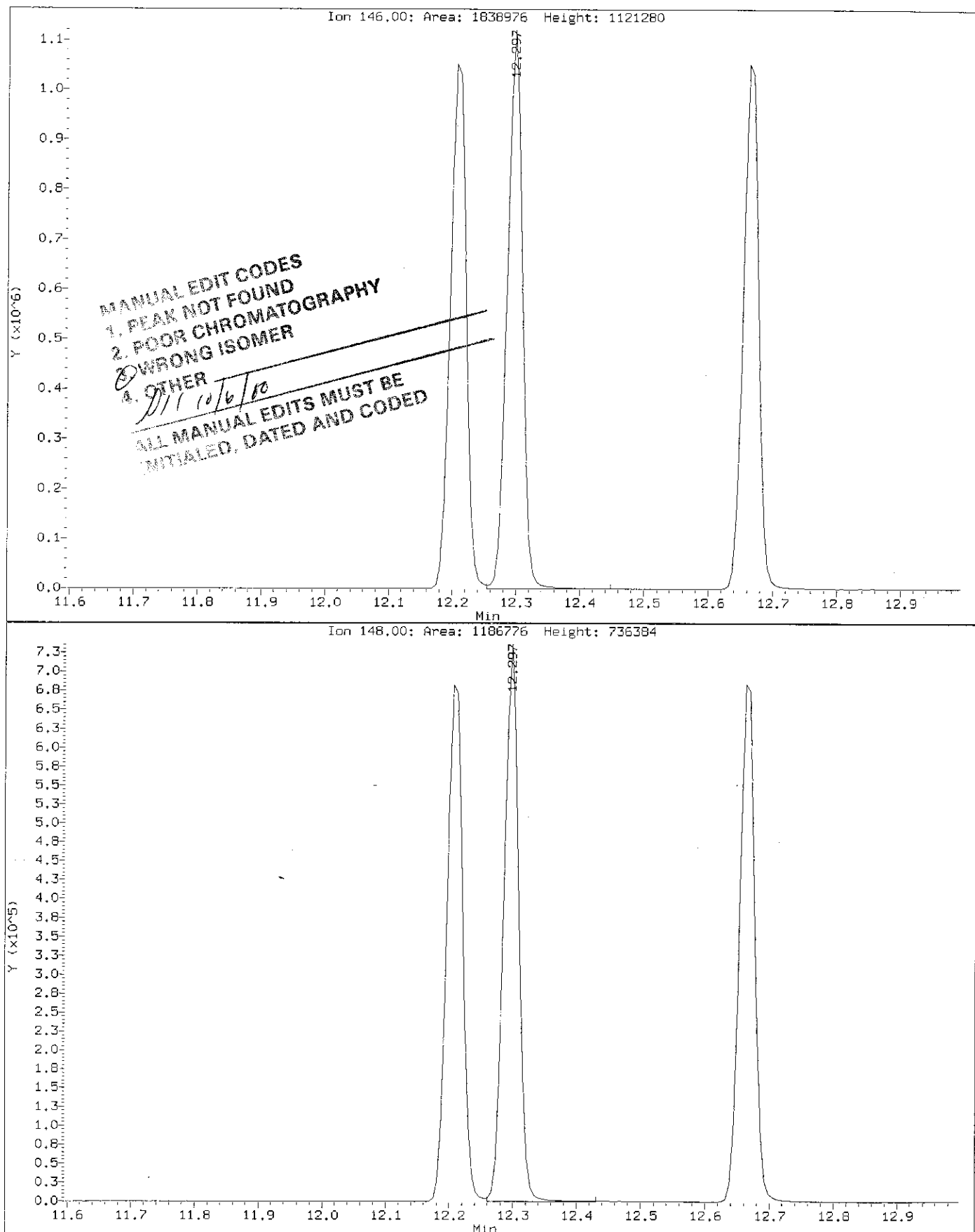
Manual Integration

Manually Integrated By: JournetP
Manual Integration Reason: Wrong Isomer

Handwritten signature/initials

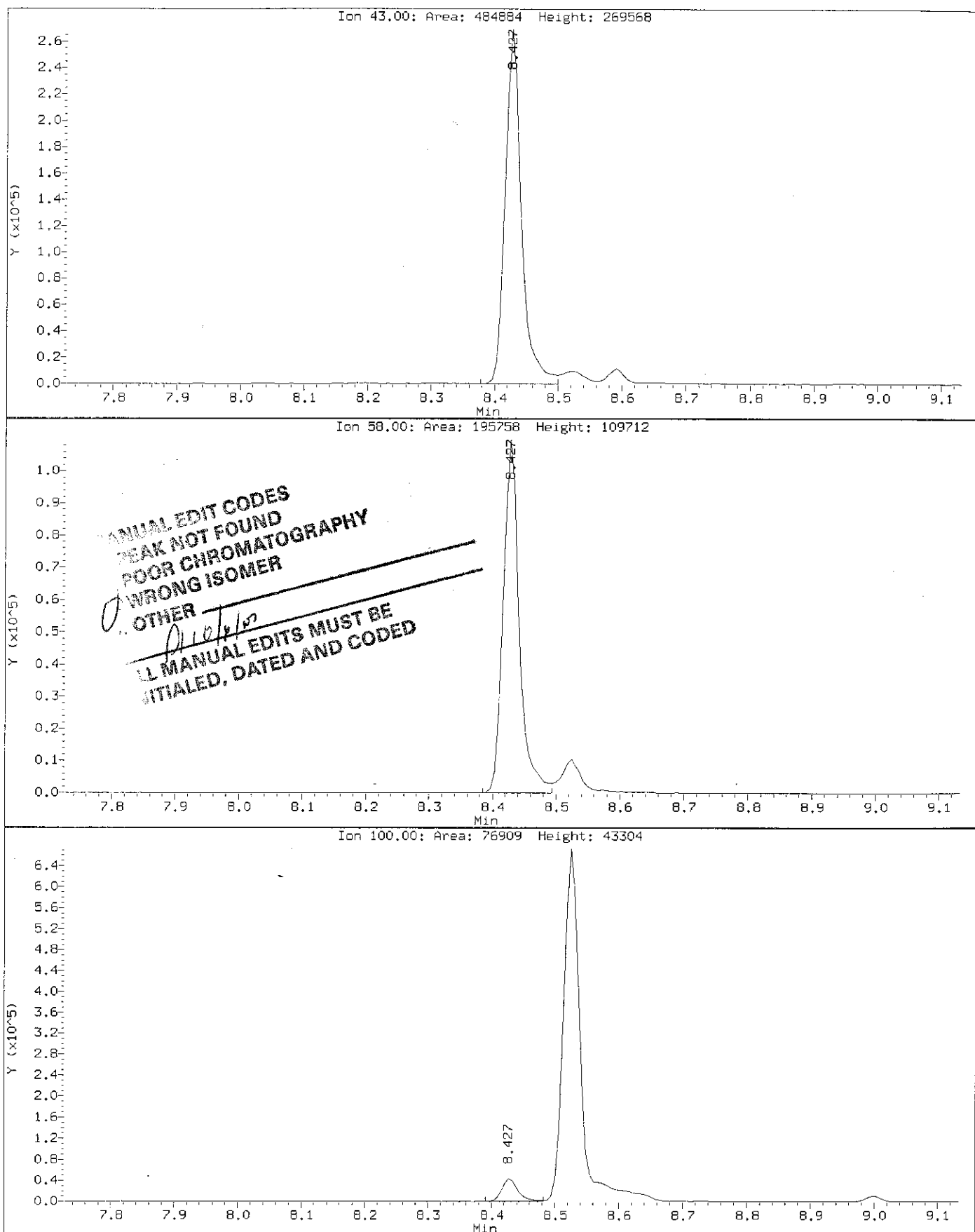
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Injection Date: 04-OCT-2000 18:31
Instrument: hp5.1
Client Sample ID: vstd200

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7



Data File: \\QPITPA02\chem\hp5.1\51004k.b\1D51004P.D
Injection Date: 04-OCT-2000 18:01
Instrument: hp5.1
Client Sample ID: vstd100

Compound: 4-Methyl-2-pentanone
CAS Number: 108-10-1



6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STLPIT

Case No.:

SAS No.:

SDG No.: 51013D

Instrument ID: HP5

Calibration Date(s): 10/13/00 10/13/00

Heated Purge: (Y/N) N

Calibration Time(s): 0728 0915

GC Column: DB624

ID: 0.53 (mm)

LAB FILE ID:		RRF10 =1A51013		RRF20 =1B51013			
RRF50 =2C51013		RRF100=1D51013		RRF200=1E51013			
COMPOUND		RRF10	RRF20	RRF50	RRF100	RRF200	% RSD
Chloromethane		3.741	3.029	3.577	3.108	3.376	9.0
Bromomethane	*	0.839	0.694	0.805	0.650	0.736	10.4*
Vinyl Chloride	*	2.983	2.692	2.971	2.791	3.212	6.8*
Chloroethane		0.655	0.586	0.793	0.698	0.704	11.0
Methylene Chloride		2.074	2.466	2.204	2.125	2.392	7.5
Acetone		2.979	1.793	1.411	1.208	1.133	44.4
Carbon Disulfide		8.196	7.741	8.102	7.818	8.136	2.6
1,1-Dichloroethene	*	2.480	2.250	2.354	2.279	2.372	3.8*
1,1-Dichloroethane	*	3.760	3.659	3.750	3.636	3.768	3.715
1,2-Dichloroethene (total)		2.303	2.097	2.126	2.069	2.185	2.156
Chloroform	*	3.349	3.281	3.326	3.262	3.372	3.318
1,2-Dichloroethane	*	2.791	2.813	2.931	2.870	3.004	2.882
2-Butanone		1.361	1.235	1.260	1.301	1.300	1.291
1,1,1-Trichloroethane	*	0.503	0.484	0.511	0.524	0.598	0.524
Carbon Tetrachloride	*	0.401	0.398	0.435	0.443	0.507	0.437
Bromodichloromethane	*	0.405	0.414	0.427	0.450	0.537	0.447
1,2-Dichloropropane		0.380	0.378	0.390	0.359	0.462	0.394
cis-1,3-Dichloropropene	*	0.436	0.455	0.504	0.539	0.650	0.517
Trichloroethene	*	0.365	0.376	0.368	0.402	0.373	0.377
Dibromochloromethane	*	0.325	0.328	0.349	0.375	0.438	0.363
1,1,2-Trichloroethane	*	0.365	0.368	0.360	0.373	0.423	0.378
Benzene	*	1.412	1.416	1.420	1.546	1.368	1.432
trans-1,3-Dichloropropene	*	0.531	0.560	0.592	0.610	0.741	0.607
Bromoform	*	0.194	0.200	0.227	0.257	0.293	0.234
4-Methyl-2-pentanone		0.382	0.401	0.385	0.433	0.422	0.405
2-Hexanone		0.272	0.252	0.278	0.302	0.302	0.281
Tetrachloroethene	*	0.273	0.295	0.295	0.302	0.322	0.297
1,1,2,2-Tetrachloroethane	*	0.476	0.471	0.456	0.480	0.461	0.469
Toluene	*	1.357	1.548	1.510	1.525	0.960	1.380
Chlorobenzene	*	1.062	1.032	1.018	0.971	1.020	1.021
Ethylbenzene	*	0.578	0.575	0.568	0.542	0.566	0.566
Styrene	*	1.080	1.108	1.132	1.112	1.119	1.110
Xylenes (total)	*	0.653	0.680	0.689	0.684	0.703	0.682
Dichlorodifluoromethane		3.026	2.702	2.873	2.765	3.015	2.876
Trichlorofluoromethane		1.175	1.016	1.220	1.093	1.000	1.101
1,1,2 Trichloro-1,2,2-Triflu		2.593	2.240	2.472	2.298	2.490	2.419
1,3-Dichlorobenzene	*	0.744	0.792	0.775	0.772	0.777	0.772

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

6A

Contract :

SDG No.: 51013D

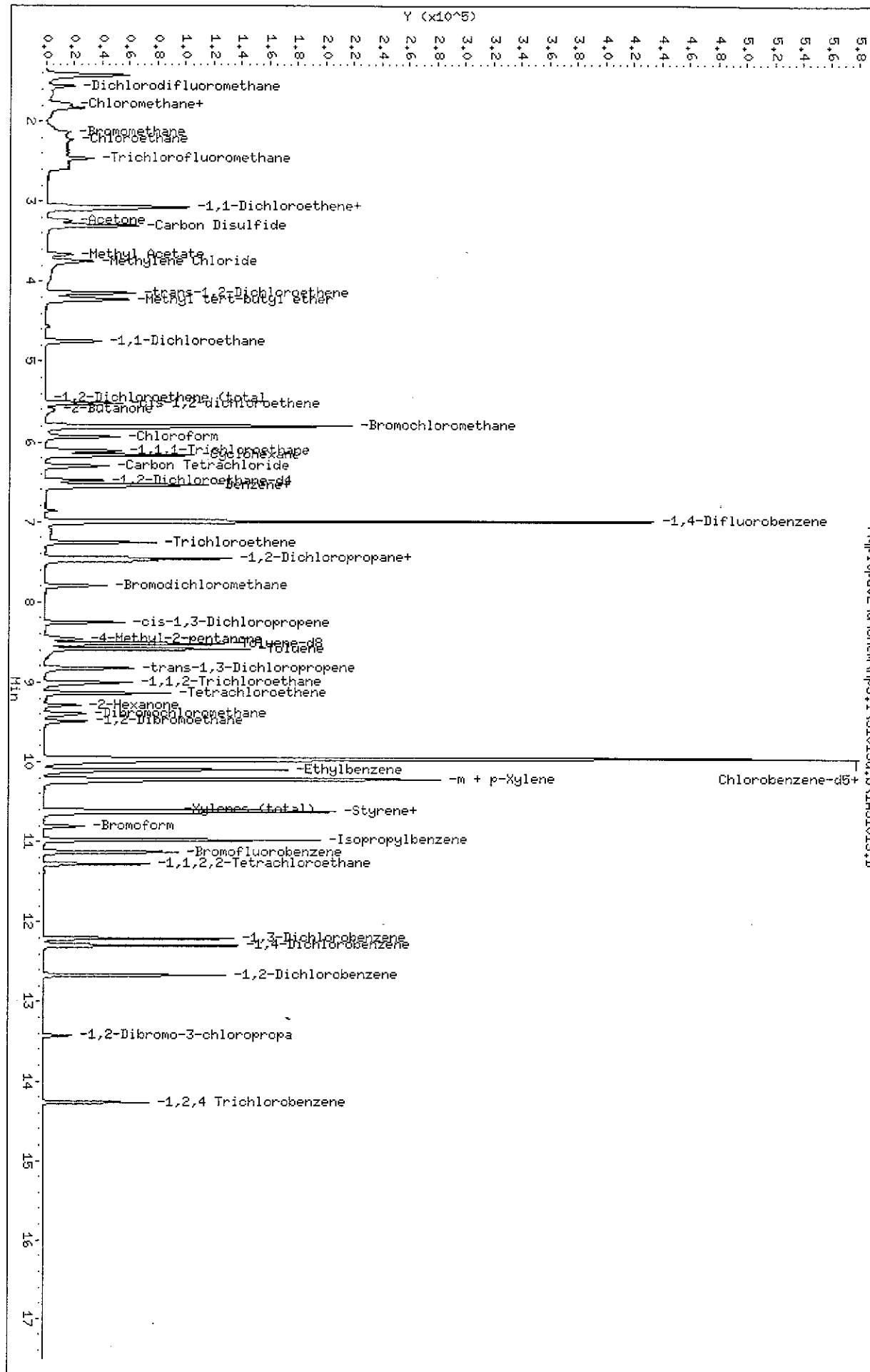
Calibration Date(s) : 10/13/00 10/13/00

Calibration Time(s): 0728 0915

ID: 0.53 (mm)

LAB FILE ID:	RRF10 =1A51013	RRF20 =1B51013
RRF50 =2C51013	RRF100=1D51013	RRF200=1E51013

All other compounds must meet a minimum RRF of 0.010.



STL - Pittsburgh

Volatile Report CLP OLM04.2 Method

Data file : \\qpitpa02\d\chem\hp5.i\51013d.b\1A51013.D
Lab Smp Id: vstd10 Client Smp ID: vstd10
Inj Date : 13-OCT-2000 08:02 MS Autotune Date: 13-MAR-2000 09:53
Operator : 10099 Inst ID: hp5.i
Smp Info : vstd10 5ml
Misc Info : ,51013d.b,clph2o.m,olm04.0.sub
Comment :
Method : \\qpitpa02\d\chem\hp5.i\51013d.b\clph2o.m
Meth Date : 13-Oct-2000 08:27 gordonk Quant Type: ISTD
Cal Date : 13-OCT-2000 07:28 Cal File: 2C51013.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE
Target Version: 4.04
Processing Host: PITPC063

*KL6
10/13/00*

Compound Sublist: olm04.0.sub

Concentration Formula: Amt * DF * 1/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample volume

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ng)	(ng)
*****	****	==	=====	=====	=====	=====	=====	=====
* 1 Bromochloromethane		128	5.809	5.809	(1.000)	65982	250.000	
* 2 1,4-Difluorobenzene		114	7.001	7.001	(1.000)	358411	250.000	
* 3 Chlorobenzene-d5		117	9.958	9.958	(1.000)	378714	250.000	
\$ 4 1,2-Dichloroethane-d4		65	6.484	6.484	(1.116)	28929	50.0000	50.23
\$ 5 Toluene-d8		98	8.522	8.522	(0.856)	89522	50.0000	48.74
\$ 6 Bromofluorobenzene		95	11.132	11.132	(1.118)	34136	50.0000	47.43
7 Dichlorodifluoromethane		85	1.562	1.562	(0.269)	39930	50.0000	51.30
8 Chloromethane		50	1.794	1.794	(0.309)	49367	50.0000	51.12
10 Bromomethane		94	2.134	2.134	(0.367)	11071	50.0000	51.03
9 Vinyl Chloride		62	1.836	1.836	(0.316)	39361	50.0000	50.10
11 Chloroethane		64	2.226	2.226	(0.383)	8647	50.0000	45.24
12 Trichlorofluoromethane		101	2.463	2.463	(0.424)	15511	50.0000	49.08
15 1,1-Dichloroethene		96	3.065	3.065	(0.528)	32729	50.0000	51.31
51 1,1,2 Trichloro-1,2,2-Trifluo		101	3.083	3.083	(0.531)	34220	50.0000	51.19
14 Acetone		43	3.235	3.235	(0.557)	39314	50.0000	67.85
17 Carbon Disulfide		76	3.302	3.302	(0.569)	108156	50.0000	50.29
89 Methyl Acetate		43	3.661	3.661	(0.630)	34509	50.0000	56.50

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
16 Methylene Chloride	84	3.746	3.746	(0.645)	27375	50.0000	48.49
82 Methyl tert-butyl ether	73	4.227	4.227	(0.728)	78569	50.0000	50.59
19 trans-1,2-Dichloroethene	96	4.148	4.148	(0.714)	32970	50.0000	53.84
21 1,1-Dichloroethane	63	4.756	4.756	(0.819)	49621	50.0000	50.07
23 cis-1,2-dichloroethene	96	5.523	5.523	(0.951)	27819	50.0000	49.99
M 81 1,2-Dichloroethene (total)	96				60789	100.000	104.0
22 2-Butanone	43	5.602	5.602	(0.964)	17961	50.0000	51.92
24 Chloroform	83	5.936	5.936	(1.022)	44194	50.0000	50.17
28 Benzene	78	6.539	6.539	(0.934)	101249	50.0000	49.87
27 1,2-Dichloroethane	62	6.569	6.569	(1.131)	36829	50.0000	48.77
25 1,1,1-Trichloroethane	97	6.113	6.113	(0.873)	36079	50.0000	49.62
90 Cyclohexane	56	6.168	6.168	(0.881)	50125	50.0000	48.59
26 Carbon Tetrachloride	117	6.302	6.302	(0.900)	28773	50.0000	48.01
29 Trichloroethene	130	7.263	7.263	(1.037)	26167	50.0000	49.83
30 1,2-Dichloropropane	63	7.488	7.488	(1.070)	27264	50.0000	49.38
31 Bromodichloromethane	83	7.798	7.798	(1.114)	29040	50.0000	48.68
91 Methyl Cyclohexane	83	7.457	7.457	(1.065)	46958	50.0000	48.15
34 cis-1,3-Dichloropropene	75	8.260	8.260	(1.180)	31294	50.0000	46.39
38 1,1,2-Trichloroethane	97	9.003	9.003	(1.286)	26193	50.0000	50.37
40 Dibromochloromethane	129	9.398	9.398	(1.342)	23279	50.0000	48.22
36 trans-1,3-Dichloropropene	75	8.826	8.826	(1.261)	38076	50.0000	47.31
33 4-Methyl-2-pentanone	43	8.467	8.467	(0.850)	28901	50.0000	49.77
37 2-Hexanone	43	9.288	9.288	(0.933)	20626	50.0000	49.46
46 Bromoform	173	10.815	10.815	(1.545)	13885	50.0000	46.06
39 Tetrachloroethene	164	9.136	9.136	(0.918)	20706	50.0000	48.12
63 1,2-Dibromoethane	107	9.489	9.489	(0.953)	24720	50.0000	49.17
47 1,1,2,2-Tetrachloroethane	83	11.278	11.278	(1.133)	36034	50.0000	51.06
35 Toluene	91	8.589	8.589	(0.863)	102776	50.0000	47.33
41 Chlorobenzene	112	9.988	9.988	(1.003)	80406	50.0000	51.05
42 Ethylbenzene	106	10.104	10.104	(1.015)	43764	50.0000	50.43
45 Styrene	104	10.633	10.633	(1.068)	81796	50.0000	48.81
43 m + p-Xylene	106	10.219	10.219	(1.026)	106676	100.000	101.3 (M)
44 Xylene-o	106	10.615	10.615	(1.066)	49443	50.0000	48.66
M 80 Xylenes (total)	106				156119	50.0000	153.7
92 Isopropylbenzene	105	10.980	10.980	(1.103)	136288	50.0000	48.66
48 1,3-Dichlorobenzene	146	12.209	12.209	(1.226)	56366	50.0000	48.97
49 1,4-Dichlorobenzene	146	12.300	12.300	(1.235)	58325	50.0000	49.28 (H)
50 1,2-Dichlorobenzene	146	12.665	12.665	(1.272)	54808	50.0000	49.42
69 1,2-Dibromo-3-chloropropane	75	13.431	13.431	(1.349)	4926	50.0000	48.71
93 1,2,4 Trichlorobenzene	180	14.265	14.265	(1.433)	24222	50.0000	48.74

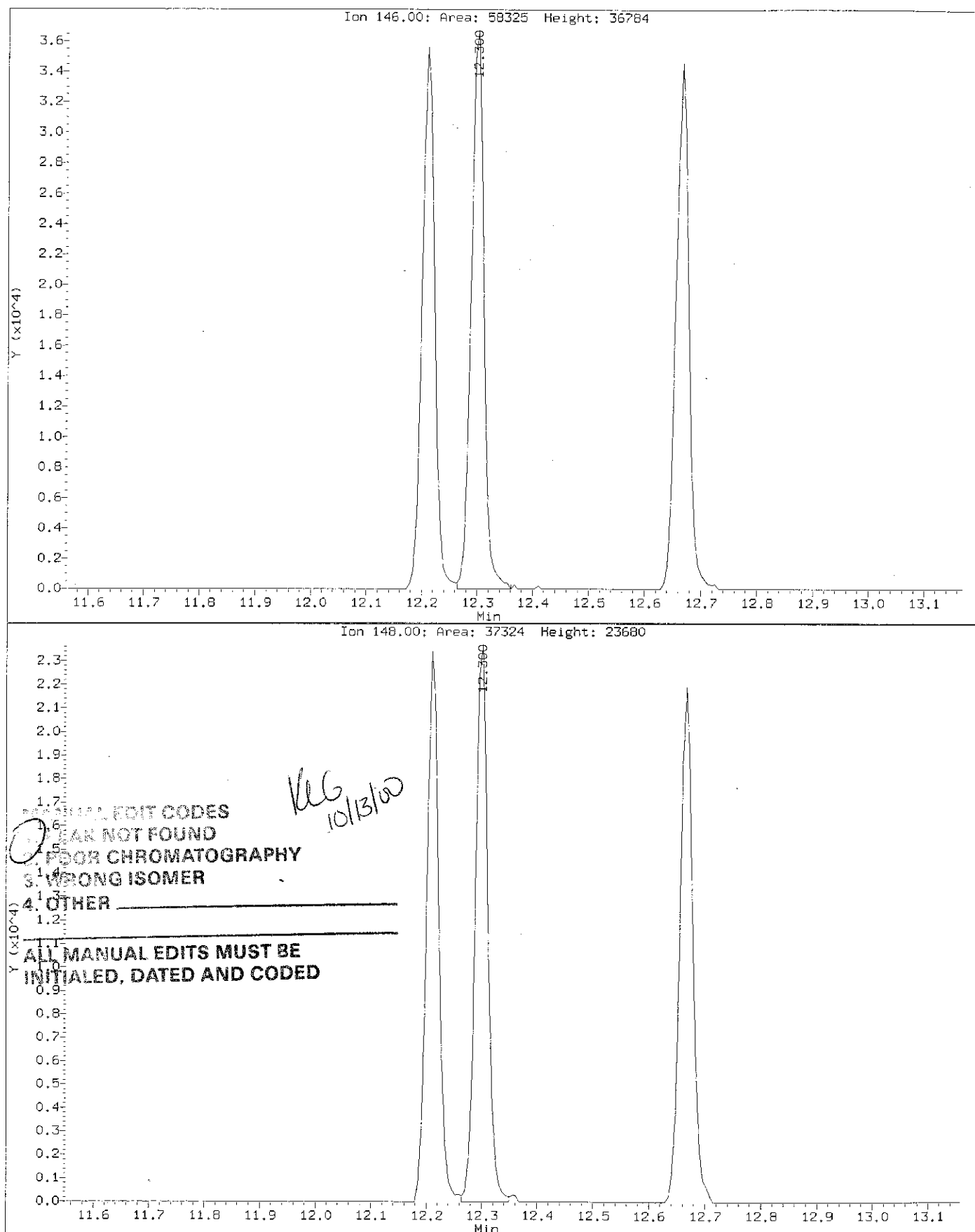
KEG
10/13/00

QC Flag Legend

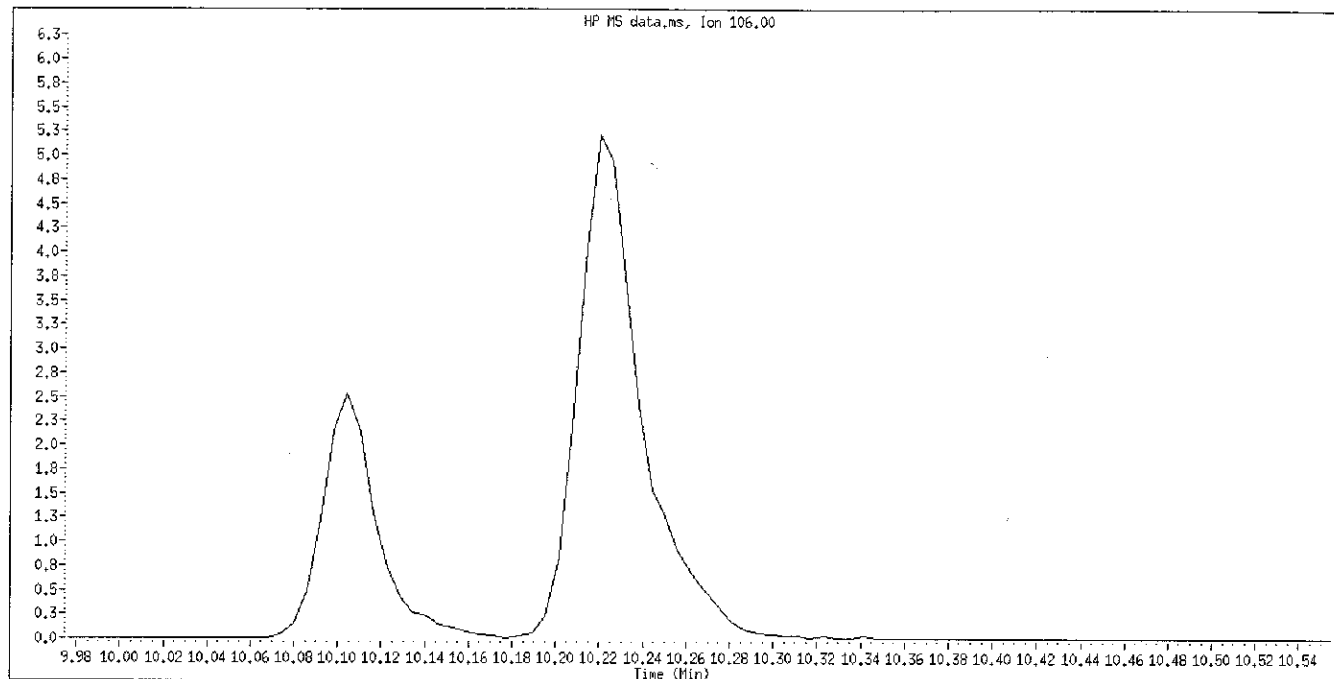
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\qpitpa02\d\chem\hp5.1\51013d,b\1A51013.D
Injection Date: 13-OCT-2000 08:02
Instrument: hp5.1
Client Sample ID: vstd10

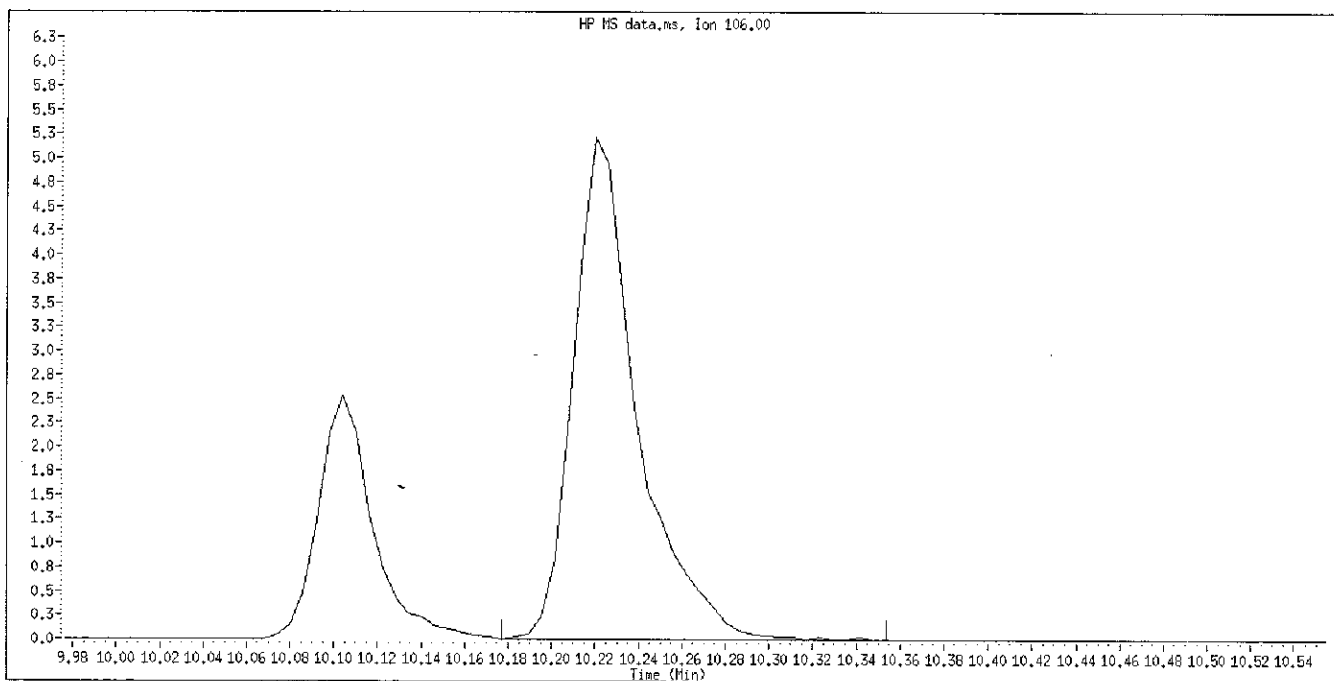
Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7



Data File Name: 1A51013.D
Inj. Date and Time: 13-OCT-2000 08:02
Instrument ID: hp5.1
Client ID: vstd10
Compound Name: m + p-Xylene
CAS #: 136777-61-2
Report Date: 10/13/2000



Original Integration



Manual Integration

Manually Integrated By: GordonK
Manual Integration Reason: Peak Not Found

KLG 10/13/00

Client ID: vstd20

Sample Info: vstd20 5ml

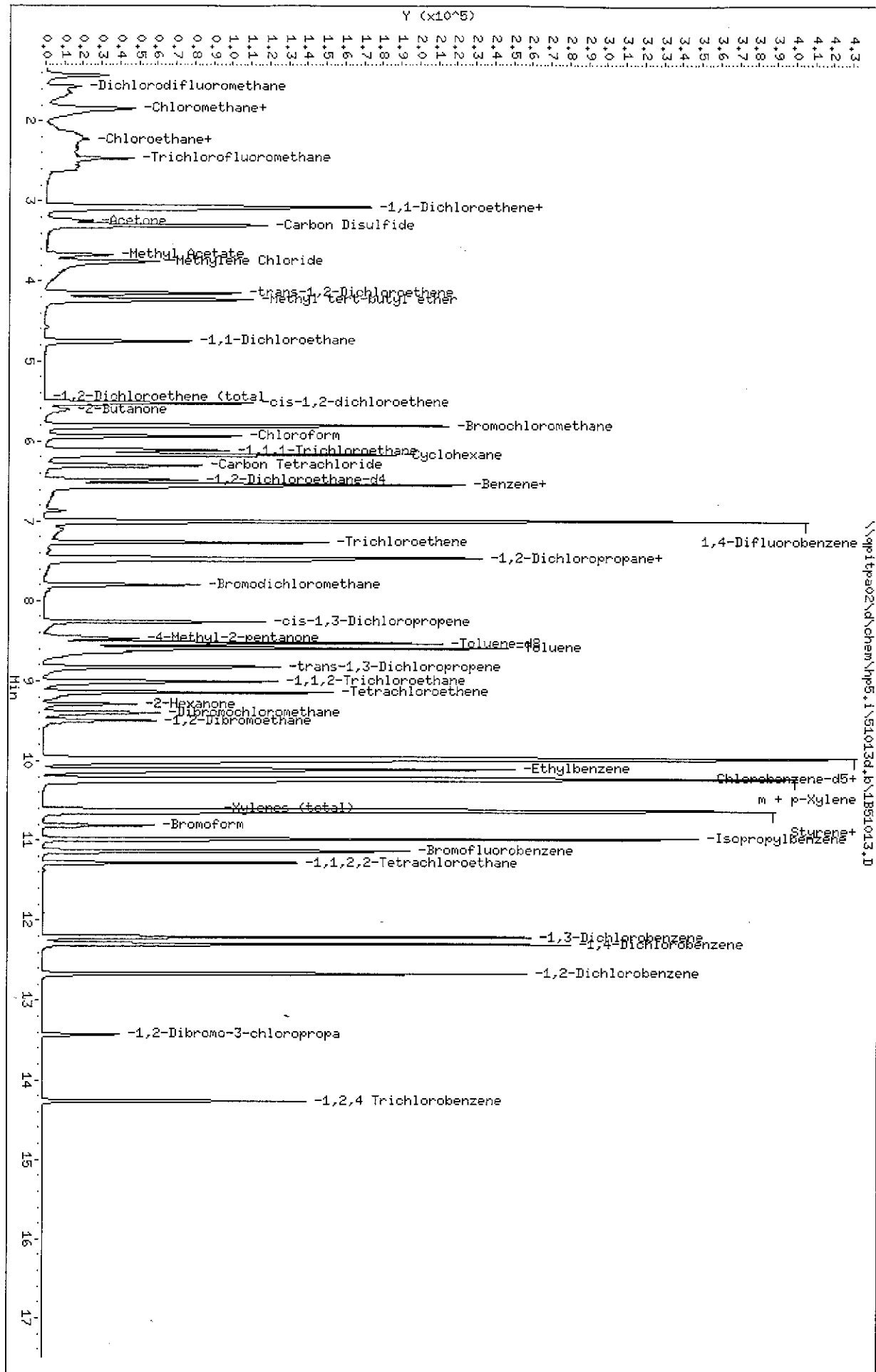
Purge Volume: 5.0

Column phase: DB624

Instrument: hp5.1

Operator: 10099

Column diameter: 0.53



STL - Pittsburgh

Volatile Report CLP OLM04.2 Method

Data file : \\qpitpa02\d\chem\hp5.i\51013d.b\1B51013.D
Lab Smp Id: vstd20 Client Smp ID: vstd20
Inj Date : 13-OCT-2000 08:27 MS Autotune Date: 13-MAR-2000 09:53
Operator : 10099 Inst ID: hp5.i
Smp Info : vstd20 5ml
Misc Info : ,51013d.b,clph2o.m,olm04.0.sub
Comment :
Method : \\qpitpa02\d\chem\hp5.i\51013d.b\clph2o.m
Meth Date : 13-Oct-2000 08:53 gordonk Quant Type: ISTD
Cal Date : 13-OCT-2000 07:28 Cal File: 2C51013.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC063

Concentration Formula: Amt * DF * 1/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample volume

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ng)	ON-COL (ng)
* 1 Bromochloromethane	128	5.814	5.814 (1.000)	64863	250.000			
* 2 1,4-Difluorobenzene	114	7.006	7.006 (1.000)	341704	250.000			
* 3 Chlorobenzene-d5	117	9.969	9.969 (1.000)	351137	250.000			
\$ 4 1,2-Dichloroethane-d4	65	6.489	6.489 (1.116)	55577	100.000	98.77		
\$ 5 Toluene-d8	98	8.527	8.527 (0.855)	183825	100.000	105.2		
\$ 6 Bromofluorobenzene	95	11.137	11.137 (1.117)	69682	100.000	102.9		
7 Dichlorodifluoromethane	85	1.568	1.568 (0.270)	70117	100.000	94.26		
8 Chloromethane	50	1.854	1.854 (0.319)	78584	100.000	87.82		
10 Bromomethane	94	2.188	2.188 (0.376)	18004	100.000	89.05 (MH)		
9 Vinyl Chloride	62	1.848	1.848 (0.318)	69840	100.000	93.41		
11 Chloroethane	64	2.237	2.237 (0.385)	15216	100.000	86.47		
12 Trichlorofluoromethane	101	2.468	2.468 (0.425)	26362	100.000	89.36		
15 1,1-Dichloroethene	96	3.064	3.064 (0.527)	58374	100.000	95.28		
51 1,1,2 Trichloro-1,2,2-Trifluo	101	3.089	3.089 (0.531)	58122	100.000	91.99		
14 Acetone	43	3.241	3.241 (0.557)	46515	100.000	86.98		
17 Carbon Disulfide	76	3.301	3.301 (0.568)	200854	100.000	96.61		
89 Methyl Acetate	43	3.673	3.673 (0.632)	66117	100.000	106.5		

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
16 Methylene Chloride	84	3.758	3.758	(0.646)	63980	100.000	109.7
82 Methyl tert-butyl ether	73	4.232	4.232	(0.728)	146367	100.000	97.21
19 trans-1,2-Dichloroethene	96	4.153	4.153	(0.714)	54216	100.000	93.14
21 1,1-Dichloroethane	63	4.755	4.755	(0.818)	94946	100.000	98.29
23 cis-1,2-dichloroethene	96	5.528	5.528	(0.951)	54594	100.000	99.86
M 81 1,2-Dichloroethene (total)	96				108810	200.000	192.8
22 2-Butanone	43	5.607	5.607	(0.964)	32051	100.000	96.10
24 Chloroform	83	5.942	5.942	(1.022)	85123	100.000	98.86
28 Benzene	78	6.544	6.544	(0.934)	193501	100.000	99.98
27 1,2-Dichloroethane	62	6.574	6.574	(1.131)	72988	100.000	98.88
25 1,1,1-Trichloroethane	97	6.118	6.118	(0.873)	66207	100.000	96.97
90 Cyclohexane	56	6.173	6.173	(0.881)	92241	100.000	95.77
26 Carbon Tetrachloride	117	6.307	6.307	(0.900)	54345	100.000	96.69
29 Trichloroethene	130	7.268	7.268	(1.037)	51347	100.000	101.7
30 1,2-Dichloropropane	63	7.493	7.493	(1.069)	51701	100.000	98.81
31 Bromodichloromethane	83	7.803	7.803	(1.114)	56550	100.000	99.63
91 Methyl Cyclohexane	83	7.463	7.463	(1.065)	88740	100.000	96.91
34 cis-1,3-Dichloropropene	75	8.260	8.260	(1.179)	62237	100.000	97.82
38 1,1,2-Trichloroethane	97	9.008	9.008	(1.286)	50247	100.000	100.9
40 Dibromochloromethane	129	9.397	9.397	(1.341)	44800	100.000	98.20
36 trans-1,3-Dichloropropene	75	8.825	8.825	(1.260)	76622	100.000	99.90
33 4-Methyl-2-pentanone	43	8.472	8.472	(0.850)	56338	100.000	103.0
37 2-Hexanone	43	9.294	9.294	(0.932)	35343	100.000	94.10
46 Bromoform	173	10.815	10.815	(1.544)	27377	100.000	96.78
39 Tetrachloroethene	164	9.142	9.142	(0.917)	41439	100.000	102.5
63 1,2-Dibromoethane	107	9.494	9.494	(0.952)	48025	100.000	102.0
47 1,1,2,2-Tetrachloroethane	83	11.283	11.283	(1.132)	66209	100.000	100.8
35 Toluene	91	8.594	8.594	(0.862)	217398	100.000	105.2
41 Chlorobenzene	112	9.993	9.993	(1.002)	144959	100.000	99.51
42 Ethylbenzene	106	10.109	10.109	(1.014)	80716	100.000	100.2
45 Styrene	104	10.638	10.638	(1.067)	155560	100.000	100.1
43 m + p-Xylene	106	10.224	10.224	(1.026)	196853	200.000	201.1 (H)
44 Xylene-o	106	10.620	10.620	(1.065)	95474	100.000	100.9
M 80 Xylenes (total)	106				292327	100.000	308.9
92 Isopropylbenzene	105	10.985	10.985	(1.102)	261503	100.000	100.5
48 1,3-Dichlorobenzene	146	12.214	12.214	(1.225)	111201	100.000	102.8
49 1,4-Dichlorobenzene	146	12.299	12.299	(1.234)	114250	100.000	102.7 (H)
50 1,2-Dichlorobenzene	146	12.664	12.664	(1.270)	104790	100.000	101.3
69 1,2-Dibromo-3-chloropropane	75	13.430	13.430	(1.347)	9344	100.000	99.77
93 1,2,4 Trichlorobenzene	180	14.264	14.264	(1.431)	43781	100.000	96.63

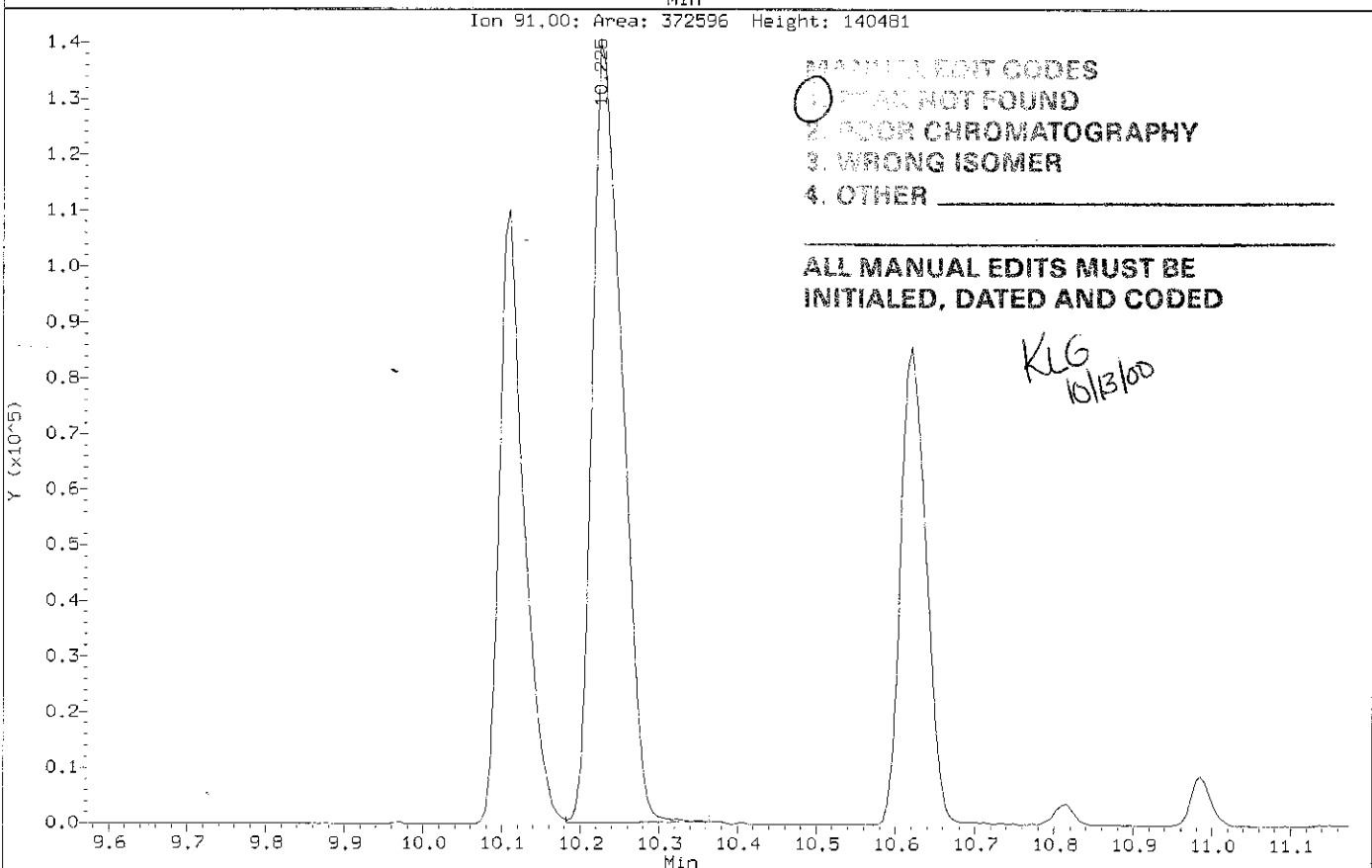
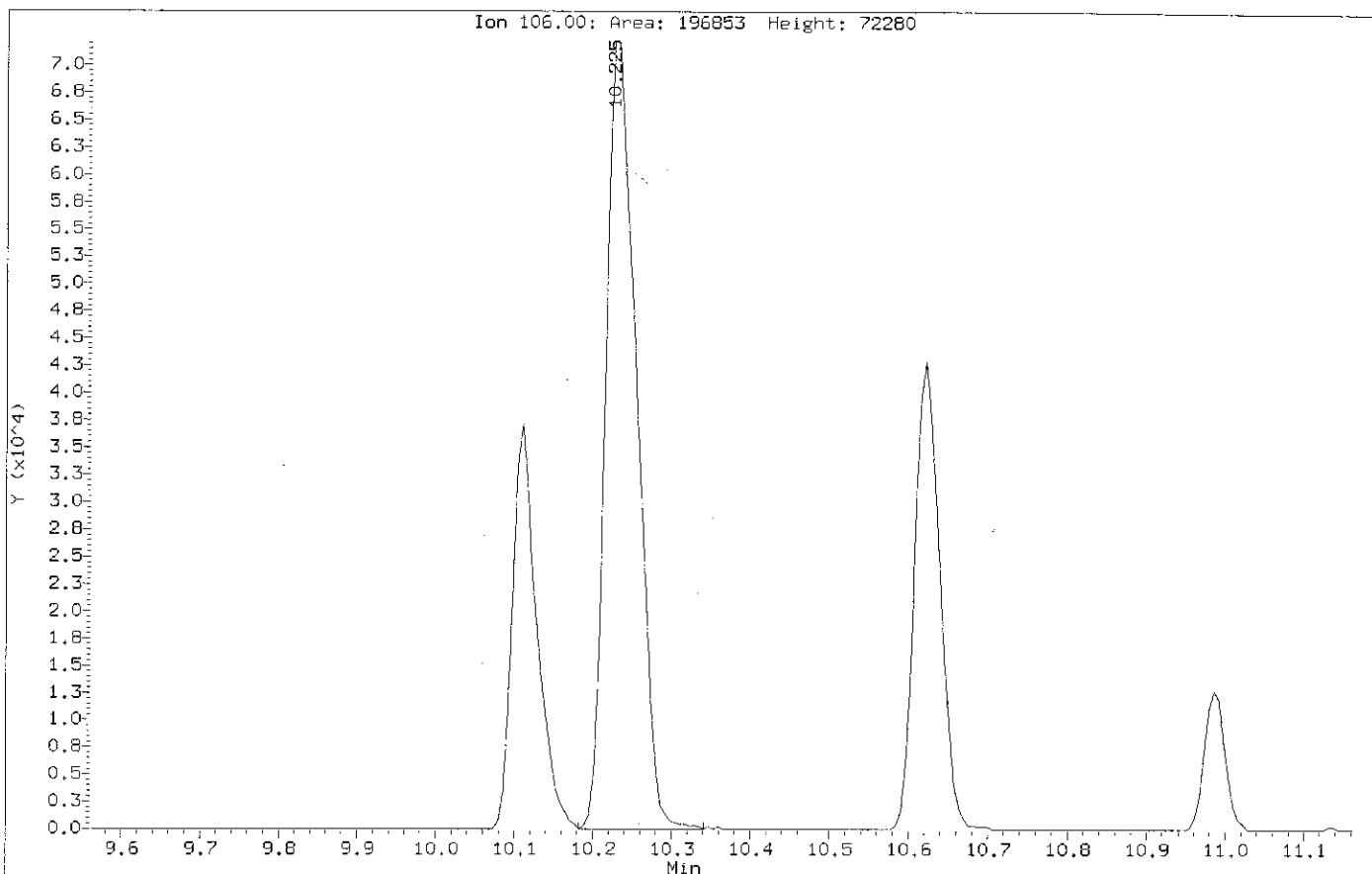
KLG
KLB/KO

QC Flag Legend

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

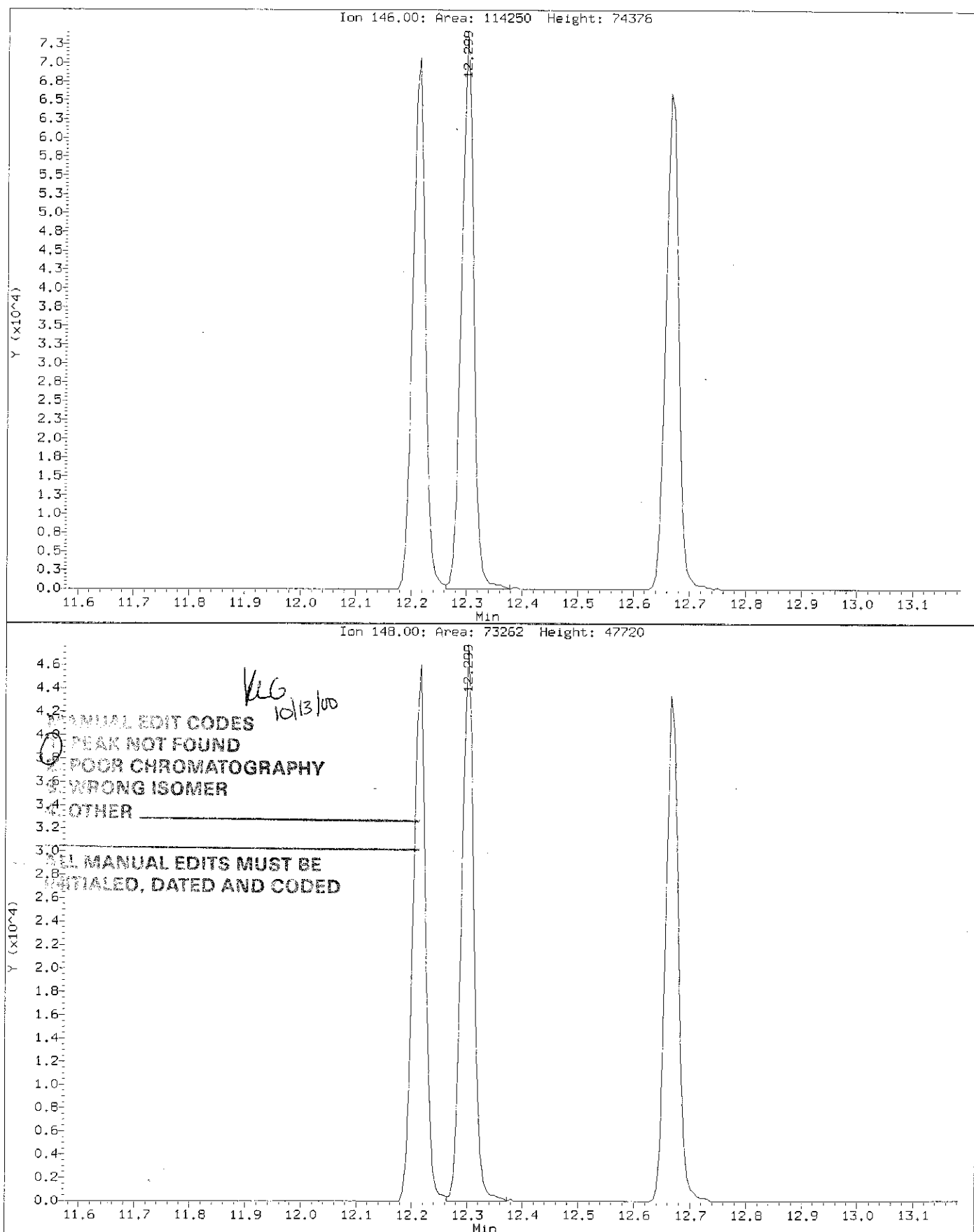
Data File: \\qpitpa02\d\chem\hp5.1\51013d.b\1B51013.D
Injection Date: 13-OCT-2000 08:27
Instrument: hp5.1
Client Sample ID: vstd20

Compound: m + p-Xylene
CAS Number: 136777-61-2

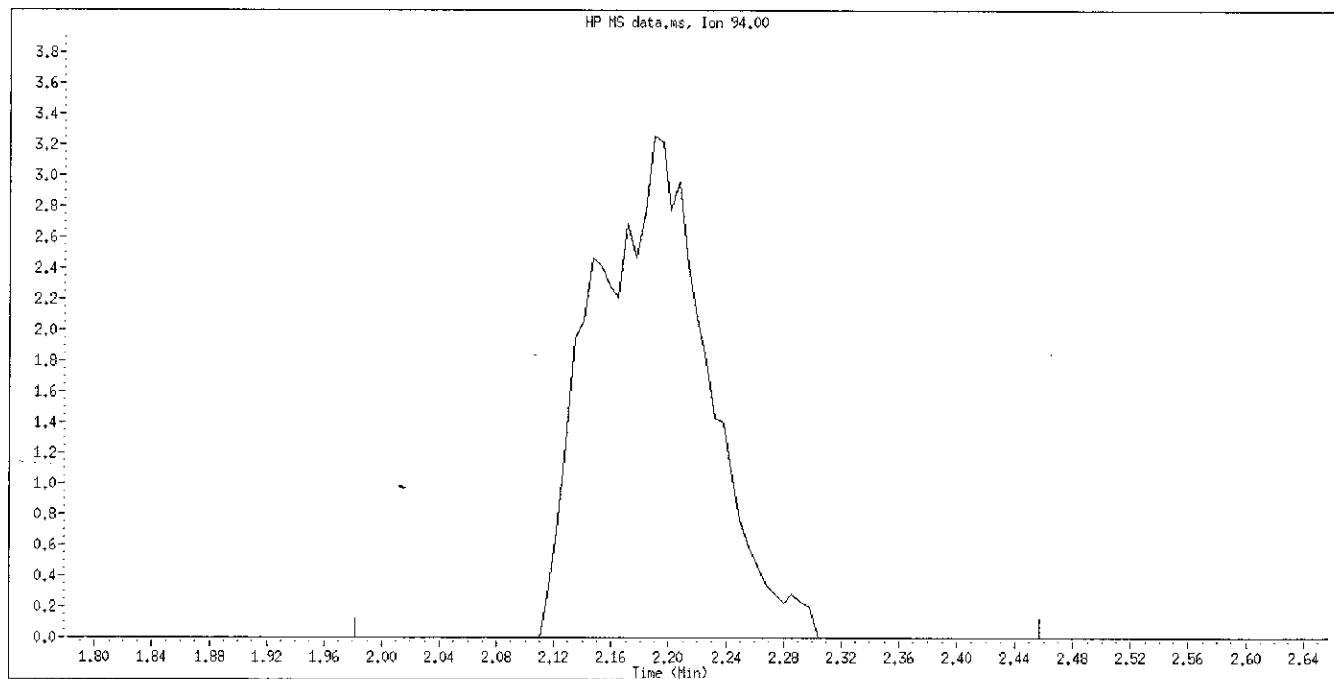
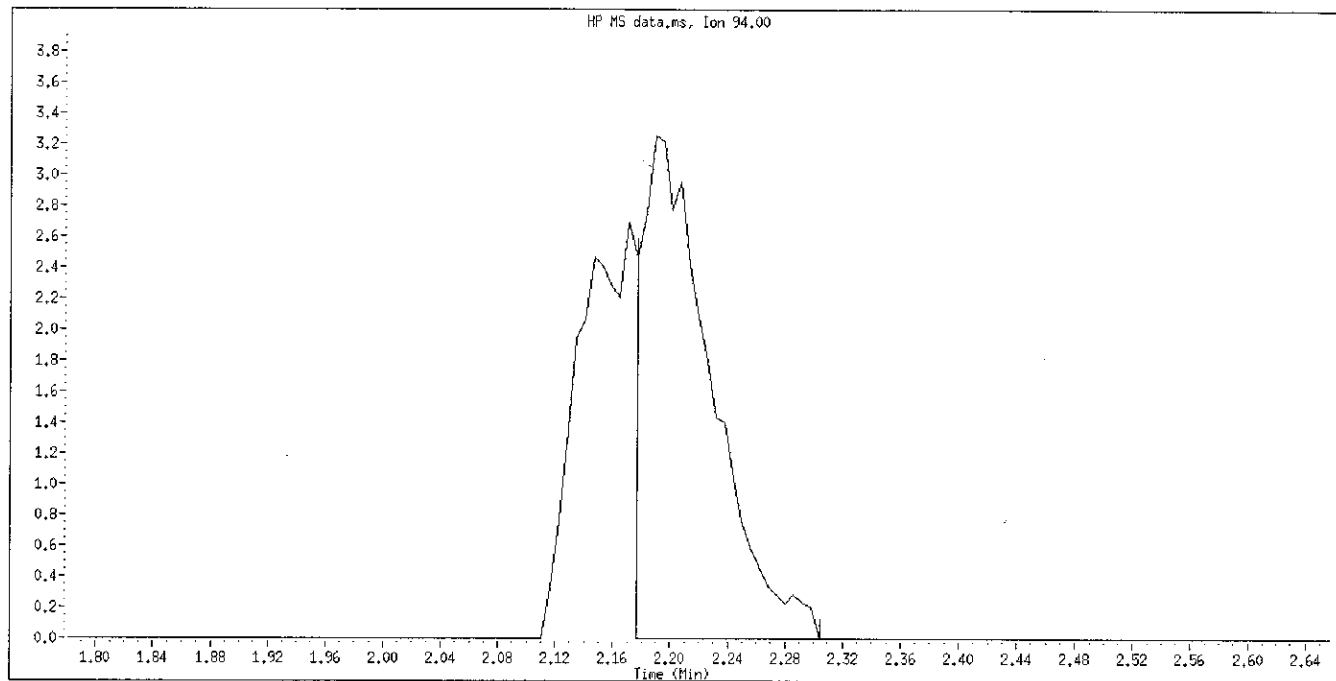


Data File: \\qpitpa02\d\chem\hp5.1\51013d.b\1B51013.D
Injection Date: 13-OCT-2000 08:27
Instrument: hp5.1
Client Sample ID: vstd20

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7



Data File Name: 1B51013.D
Inj. Date and Time: 13-OCT-2000 08:27
Instrument ID: hp5.i
Client ID: vstd20
Compound Name: Bromomethane
CAS #: 74-83-9
Report Date: 10/13/2000

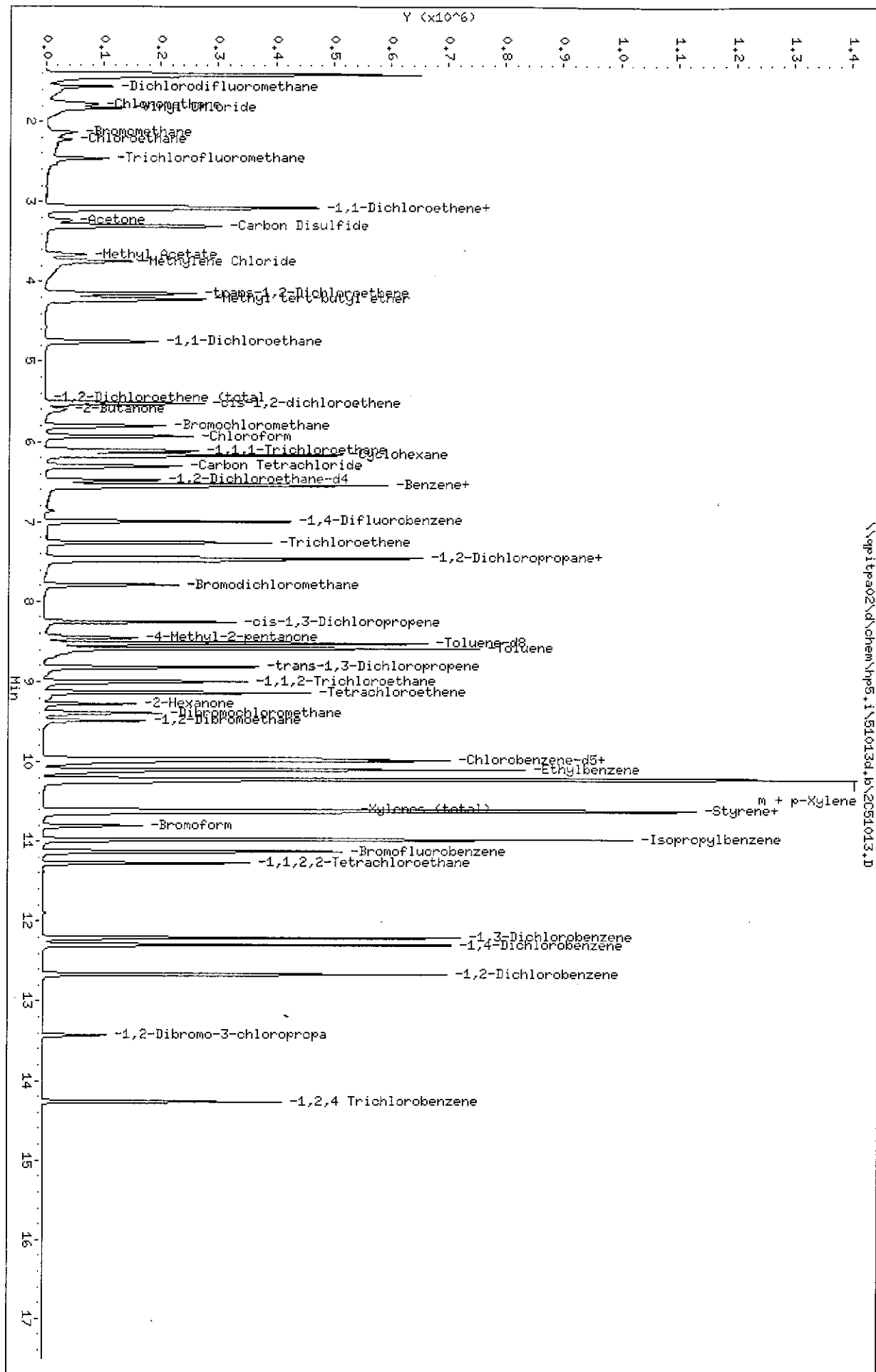


Manually Integrated By: GordonK
Manual Integration Reason: Poor Chromatography

KG
10/13/00

Data File: \\spitpa02\chem\hp5.1\510134.b\2051013.D
 Date : 13-OCT-2000 07:28
 Client ID: vstd50
 Sample Info: vstd50 5ml
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hp5.1
 Operator: 10099
 Column diameter: 0.53



STL - Pittsburgh

Volatile Report CLP OLM04.2 Method

Data file : \\gpitpa02\d\chem\hp5.i\51013d.b\2C51013.D
Lab Smp Id: vstd50 Client Smp ID: vstd50
Inj Date : 13-Oct-2000 07:28 MS Autotune Date: 13-MAR-2000 09:53
Operator : 10099 Inst ID: hp5.i
Smp Info : vstd50 5ml
Misc Info : ,51013d.b,clph2o.m,olm04.0.sub
Comment :
Method : \\gpitpa02\d\chem\hp5.i\51013d.b\clph2o.m
Meth Date : 13-Oct-2000 07:57 gordonk Quant Type: ISTD
Cal Date : 13-OCT-2000 07:28 Cal File: 2C51013.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC063

Concentration Formula: Amt * DF * 1/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample volume

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
* 1 Bromochloromethane	128	5.808	5.808	(1.000)	63378	250.000	
* 2 1,4-Difluorobenzene	114	7.001	7.001	(1.000)	350778	250.000	
* 3 Chlorobenzene-d5	117	9.963	9.963	(1.000)	372877	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.483	6.483	(1.116)	137639	250.000	258.8
\$ 5 Toluene-d8	98	8.521	8.521	(0.855)	463494	250.000	265.1
\$ 6 Bromofluorobenzene	95	11.131	11.131	(1.117)	186285	250.000	254.2
7 Dichlorodifluoromethane	85	1.562	1.562	(0.269)	182080	250.000	273.6
8 Chloromethane	50	1.787	1.787	(0.308)	226683	250.000	281.1
10 Bromomethane	94	2.134	2.134	(0.367)	51014	250.000	442.2
9 Vinyl Chloride	62	1.836	1.836	(0.316)	188278	250.000	264.6
11 Chloroethane	64	2.225	2.225	(0.383)	50262	250.000	390.6
12 Trichlorofluoromethane	101	2.462	2.462	(0.424)	77290	250.000	385.2
15 1,1-Dichloroethene	96	3.071	3.071	(0.529)	149169	250.000	292.4
51 1,1,2 Trichloro-1,2,2-Trifluo	101	3.089	3.089	(0.532)	156681	250.000	296.3
14 Acetone	43	3.235	3.235	(0.557)	89454	250.000	194.7
17 Carbon Disulfide	76	3.308	3.308	(0.570)	513477	250.000	292.8
89 Methyl Acetate	43	3.661	3.661	(0.630)	127575	250.000	249.6

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
16 Methylene Chloride	84	3.746	3.746	(0.645)	139674	250.000	253.2
82 Methyl tert-butyl ether	73	4.220	4.220	(0.727)	368486	250.000	262.7
19 trans-1,2-Dichloroethene	96	4.147	4.147	(0.714)	135778	250.000	255.1
21 1,1-Dichloroethane	63	4.750	4.750	(0.818)	237668	250.000	256.3
23 cis-1,2-dichloroethene	96	5.522	5.522	(0.951)	133675	250.000	253.4
M 81 1,2-Dichloroethene (total)	96				269453	500.000	508.4
22 2-Butanone	43	5.601	5.601	(0.964)	79869	250.000	235.1
24 Chloroform	83	5.936	5.936	(1.022)	210813	250.000	256.3
28 Benzene	78	6.538	6.538	(0.934)	498096	250.000	251.7
27 1,2-Dichloroethane	62	6.569	6.569	(1.131)	185779	250.000	267.2
25 1,1,1-Trichloroethane	97	6.112	6.112	(0.873)	179220	250.000	270.4
90 Cyclohexane	56	6.167	6.167	(0.881)	259500	250.000	268.1
26 Carbon Tetrachloride	117	6.307	6.307	(0.901)	152480	250.000	278.2
29 Trichloroethene	130	7.262	7.262	(1.037)	128914	250.000	262.0
30 1,2-Dichloropropane	63	7.487	7.487	(1.070)	136759	250.000	269.6
31 Bromodichloromethane	83	7.798	7.798	(1.114)	149783	250.000	258.9
91 Methyl Cyclohexane	83	7.457	7.457	(1.065)	247460	250.000	260.2
34 cis-1,3-Dichloropropene	75	8.254	8.254	(1.179)	176985	250.000	256.7
38 1,1,2-Trichloroethane	97	9.002	9.002	(1.286)	126302	250.000	265.4
40 Dibromochloromethane	129	9.391	9.391	(1.341)	122349	250.000	269.3
36 trans-1,3-Dichloropropene	75	8.820	8.820	(1.260)	207547	250.000	268.1
33 4-Methyl-2-pentanone	43	8.455	8.455	(0.849)	143612	250.000	245.1 (H)
37 2-Hexanone	43	9.282	9.282	(0.932)	103769	250.000	236.5
46 Bromoform	173	10.809	10.809	(1.544)	79578	250.000	270.7
39 Tetrachloroethene	164	9.136	9.136	(0.917)	109887	250.000	243.5
63 1,2-Dibromoethane	107	9.489	9.489	(0.952)	125818	250.000	242.6
47 1,1,2,2-Tetrachloroethane	83	11.277	11.277	(1.132)	170021	250.000	252.4
35 Toluene	91	8.588	8.588	(0.862)	562945	250.000	286.2
41 Chlorobenzene	112	9.988	9.988	(1.002)	379540	250.000	255.6
42 Ethylbenzene	106	10.103	10.103	(1.014)	211777	250.000	254.0
45 Styrene	104	10.626	10.626	(1.067)	422228	250.000	263.0
43 m + p-Xylene	106	10.219	10.219	(1.026)	511527	500.000	502.2 (M)
44 Xylene-o	106	10.614	10.614	(1.065)	256764	250.000	257.6
M 80 Xylenes (total)	106				768291	250.000	770.8
92 Isopropylbenzene	105	10.979	10.979	(1.102)	707849	250.000	267.6
48 1,3-Dichlorobenzene	146	12.208	12.208	(1.225)	289140	250.000	254.3
49 1,4-Dichlorobenzene	146	12.299	12.299	(1.234)	295485	250.000	253.8 (H)
50 1,2-Dichlorobenzene	146	12.664	12.664	(1.271)	276147	250.000	254.3
69 1,2-Dibromo-3-chloropropane	75	13.431	13.431	(1.348)	25533	250.000	239.7
93 1,2,4 Trichlorobenzene	180	14.264	14.264	(1.432)	125380	250.000	240.4

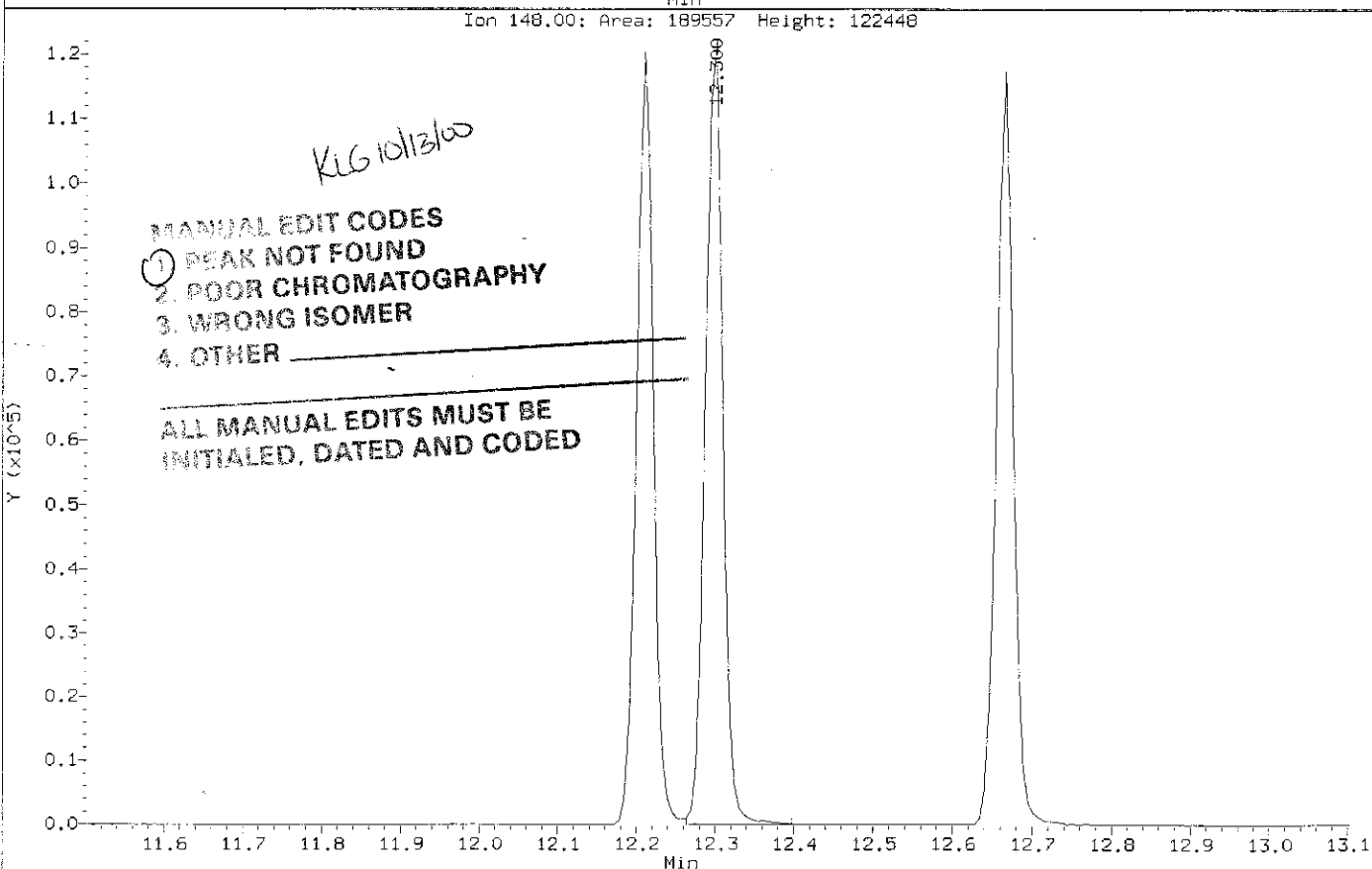
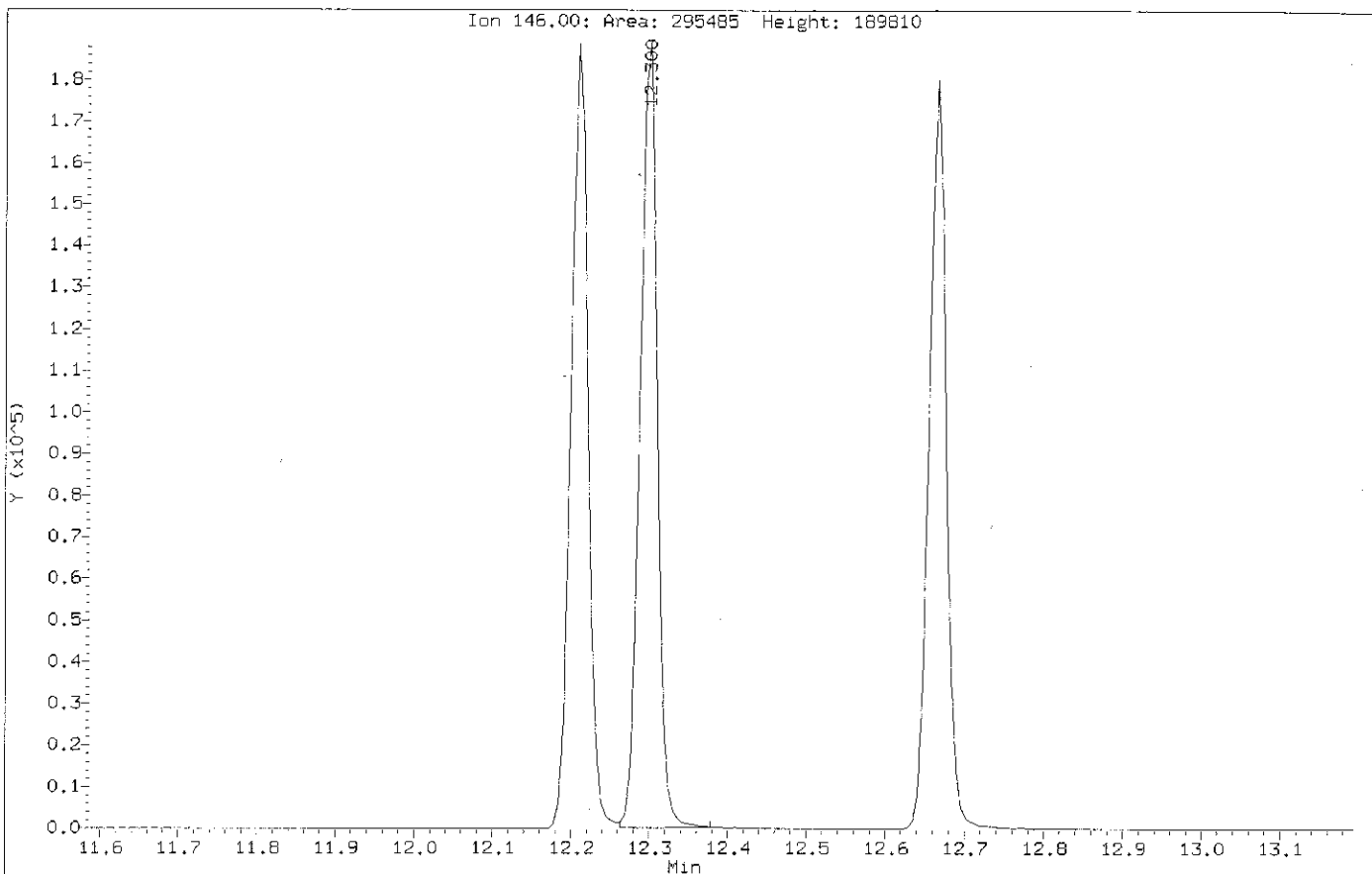
KLG
10/13/00

QC Flag Legend

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

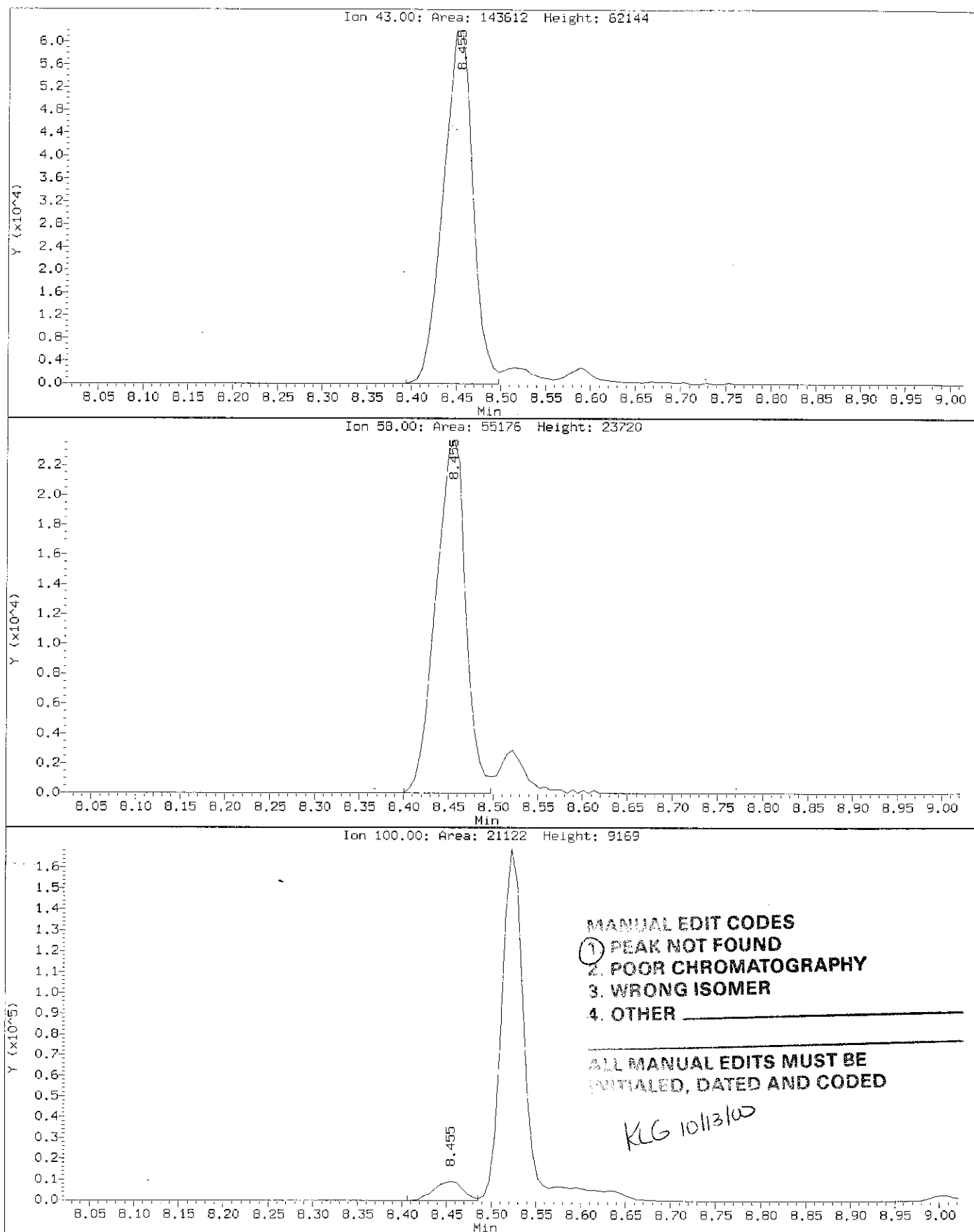
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Injection Date: 13-OCT-2000 07:28
Instrument: hp5.1
Client Sample ID: vstd50

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7

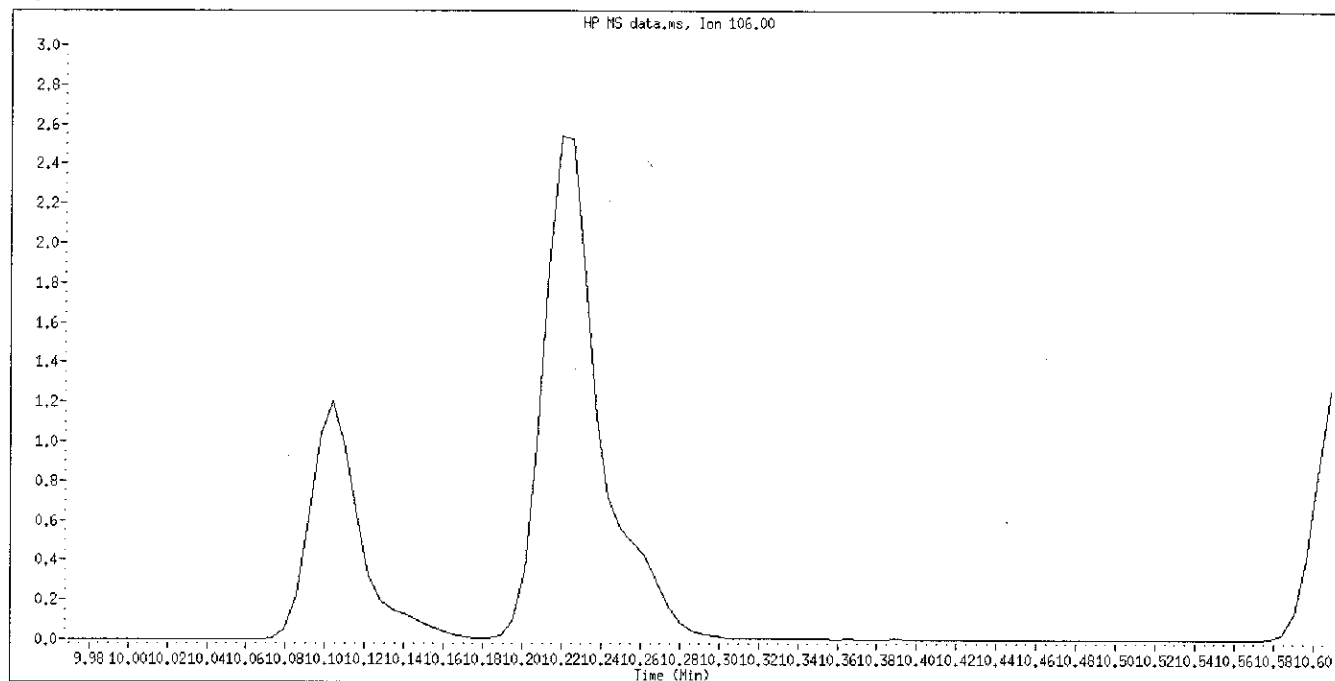


Data File: \\qpitpa02\d\chem\hp5.1\51013d.b\2C51013.D
Injection Date: 13-OCT-2000 07:28
Instrument: hp5.1
Client Sample ID: vstd50

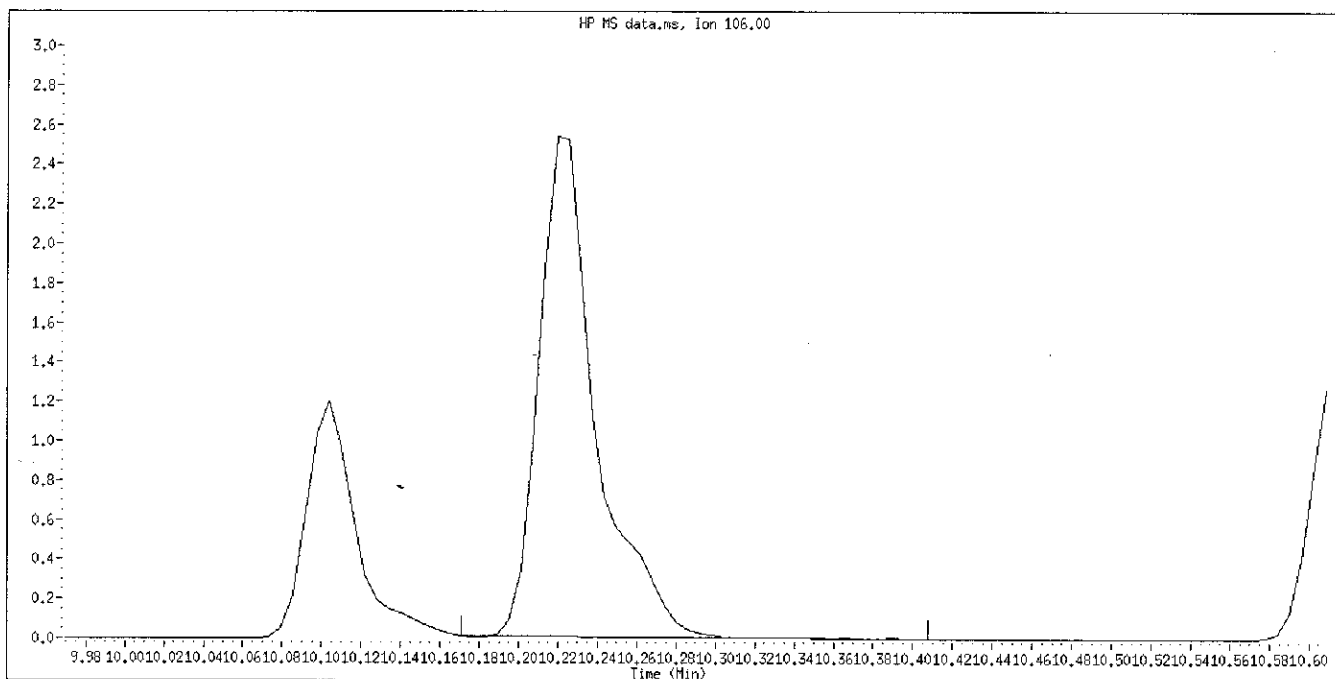
Compound: 4-Methyl-2-pentanone
CAS Number: 108-10-1



Data File Name: 2C51013.D
Inj. Date and Time: 13-OCT-2000 07:28
Instrument ID: hp5.i
Client ID: vstd50
Compound Name: m + p-Xylene
CAS #: 136777-61-2
Report Date: 10/13/2000



Original Integration



Manual Integration

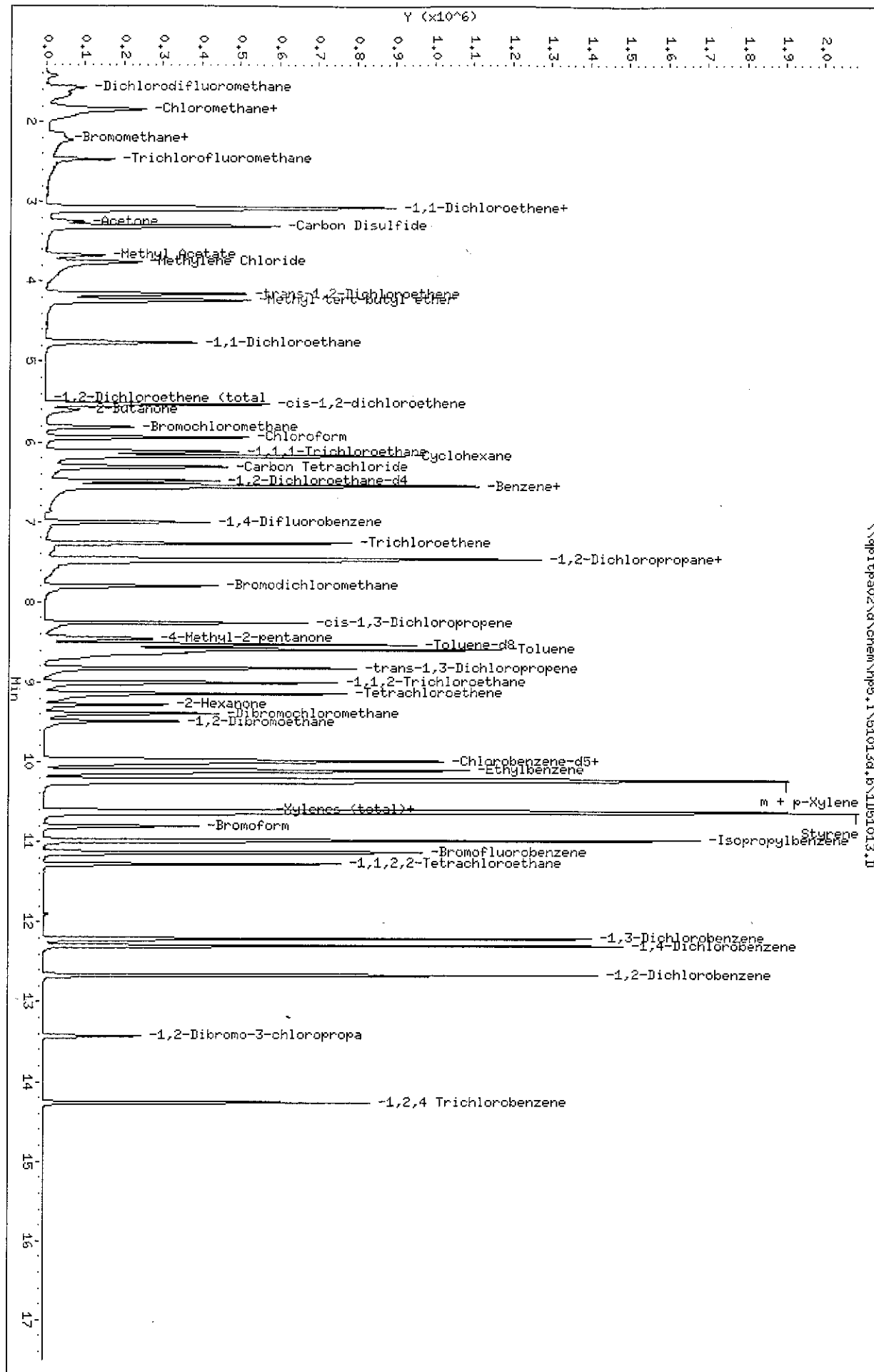
Manually Integrated By: GordonK

Manual Integration Reason: Peak Not Found

KLG 10/13/00

Data File: \\spitpa02\chem\hp5.i\51013d.b\1D51013.D
 Date : 13-OCT-2000 08:51
 Client ID: vstd100
 Sample Info: vstd100 5ml
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hp5.i
 Operator: 10099
 Column diameter: 0.53



STL - Pittsburgh

Volatile Report CLP OLM04.2 Method

Data file : \\qpitpa02\d\chem\hp5.i\51013d.b\1D51013.D
Lab Smp Id: vstd100 Client Smp ID: vstd100
Inj Date : 13-OCT-2000 08:51 MS Autotune Date: 13-MAR-2000 09:53
Operator : 10099 Inst ID: hp5.i
Smp Info : vstd100 5ml
Misc Info : ,51013d.b,clph2o.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51013d.b\clph2o.m
Meth Date : 13-Oct-2000 09:15 gordonk Quant Type: ISTD
Cal Date : 13-OCT-2000 07:28 Cal File: 2C51013.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC063

KLG
10/13/00

Concentration Formula: Amt * DF * 1/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample volume

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
*****	====	==	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128	5.814	5.814	(1.000)	65655	250.000	
* 2 1,4-Difluorobenzene	114	7.007	7.007	(1.000)	355484	250.000	
* 3 Chlorobenzene-d5	117	9.969	9.969	(1.000)	373718	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.490	6.490	(1.116)	284589	500.000	499.8
\$ 5 Toluene-d8	98	8.528	8.528	(0.855)	962324	500.000	512.8
\$ 6 Bromofluorobenzene	95	11.131	11.131	(1.117)	375322	500.000	515.4
7 Dichlorodifluoromethane	85	1.568	1.568	(0.270)	363085	500.000	486.5
8 Chloromethane	50	1.836	1.836	(0.316)	408110	500.000	462.0
10 Bromomethane	94	2.201	2.201	(0.379)	85311	500.000	434.9
9 Vinyl Chloride	62	1.848	1.848	(0.318)	366499	500.000	488.1
11 Chloroethane	64	2.237	2.237	(0.385)	91696	500.000	511.0
12 Trichlorofluoromethane	101	2.469	2.469	(0.425)	143584	500.000	485.5
15 1,1-Dichloroethene	96	3.071	3.071	(0.528)	299236	500.000	486.8
51 1,1,2 Trichloro-1,2,2-Trifluo	101	3.095	3.095	(0.532)	301686	500.000	478.5
14 Acetone	43	3.247	3.247	(0.559)	158643	500.000	326.9
17 Carbon Disulfide	76	3.308	3.308	(0.569)	1026622	500.000	490.8
89 Methyl Acetate	43	3.673	3.673	(0.632)	265032	500.000	439.0

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
16 Methylene Chloride	84	3.758	3.758	(0.646)	278983	500.000	479.1
82 Methyl tert-butyl ether	73	4.239	4.239	(0.729)	724947	500.000	481.5
19 trans-1,2-Dichloroethene	96	4.160	4.160	(0.715)	271622	500.000	470.2
21 1,1-Dichloroethane	63	4.762	4.762	(0.819)	477502	500.000	491.2
23 cis-1,2-dichloroethene	96	5.528	5.528	(0.951)	271720	500.000	493.2
M 81 1,2-Dichloroethene (total)	96				543342	1000.00	962.9
22 2-Butanone	43	5.601	5.601	(0.963)	170798	500.000	504.4
24 Chloroform	83	5.942	5.942	(1.022)	428286	500.000	493.5
28 Benzene	78	6.544	6.544	(0.934)	1099112	500.000	533.6
27 1,2-Dichloroethane	62	6.575	6.575	(1.131)	376828	500.000	503.2
25 1,1,1-Trichloroethane	97	6.125	6.125	(0.874)	372850	500.000	518.4
90 Cyclohexane	56	6.179	6.179	(0.882)	512756	500.000	508.8
26 Carbon Tetrachloride	117	6.313	6.313	(0.901)	314676	500.000	528.1
29 Trichloroethene	130	7.268	7.268	(1.037)	286009	500.000	532.6
30 1,2-Dichloropropane	63	7.493	7.493	(1.069)	254996	500.000	475.9
31 Bromodichloromethane	83	7.804	7.804	(1.114)	319891	500.000	530.6
91 Methyl Cyclohexane	83	7.463	7.463	(1.065)	496437	500.000	515.7
34 cis-1,3-Dichloropropene	75	8.260	8.260	(1.179)	383435	500.000	557.2
38 1,1,2-Trichloroethane	97	9.008	9.008	(1.286)	265260	500.000	508.9
40 Dibromochloromethane	129	9.392	9.392	(1.340)	266612	500.000	544.9
36 trans-1,3-Dichloropropene	75	8.826	8.826	(1.260)	433945	500.000	532.2
33 4-Methyl-2-pentanone	43	8.461	8.461	(0.849)	323623	500.000	541.0
37 2-Hexanone	43	9.282	9.282	(0.931)	226124	500.000	547.7
46 Bromoform	173	10.809	10.809	(1.543)	182554	500.000	585.1
39 Tetrachloroethene	164	9.142	9.142	(0.917)	225610	500.000	518.2
63 1,2-Dibromoethane	107	9.495	9.495	(0.952)	263571	500.000	519.2
47 1,1,2,2-Tetrachloroethane	83	11.277	11.277	(1.131)	358397	500.000	509.4
35 Toluene	91	8.595	8.595	(0.862)	1139644	500.000	513.4
41 Chlorobenzene	112	9.994	9.994	(1.002)	726118	500.000	475.9
42 Ethylbenzene	106	10.109	10.109	(1.014)	405201	500.000	479.2
45 Styrene	104	10.633	10.633	(1.067)	831318	500.000	501.9
43 m + p-Xylene	106	10.231	10.231	(1.026)	1023603	1000.00	986.8 (H)
44 Xylene-o	106	10.614	10.614	(1.065)	511455	500.000	505.9
M 80 Xylenes (total)	106				1535058	500.000	1518
92 Isopropylbenzene	105	10.985	10.985	(1.102)	1337342	500.000	486.9
48 1,3-Dichlorobenzene	146	12.208	12.208	(1.225)	576999	500.000	500.7
49 1,4-Dichlorobenzene	146	12.299	12.299	(1.234)	592351	500.000	500.2 (H)
50 1,2-Dichlorobenzene	146	12.664	12.664	(1.270)	553559	500.000	502.0
69 1,2-Dibromo-3-chloropropane	75	13.431	13.431	(1.347)	58528	500.000	562.6
93 1,2,4 Trichlorobenzene	180	14.264	14.264	(1.431)	253622	500.000	519.2

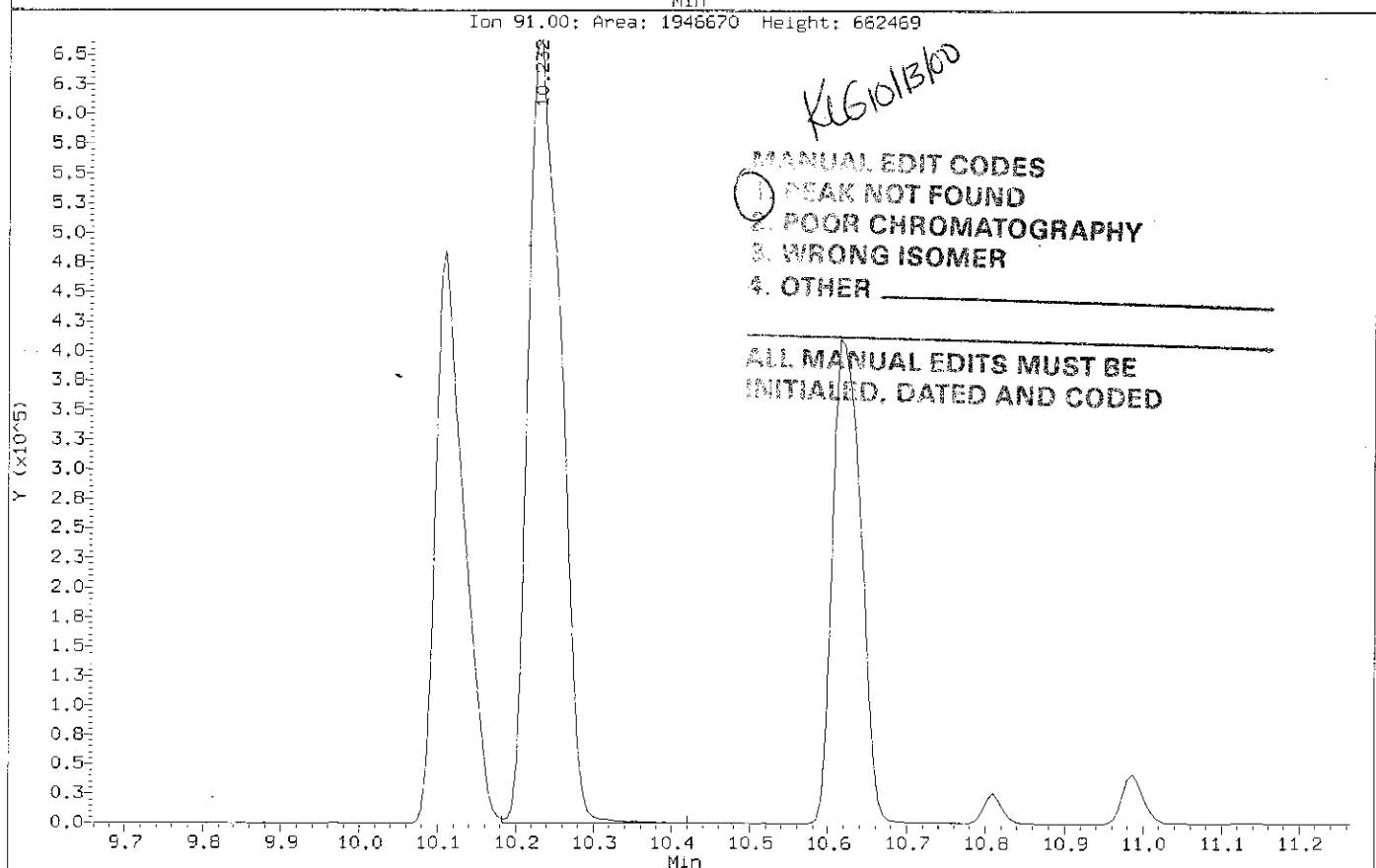
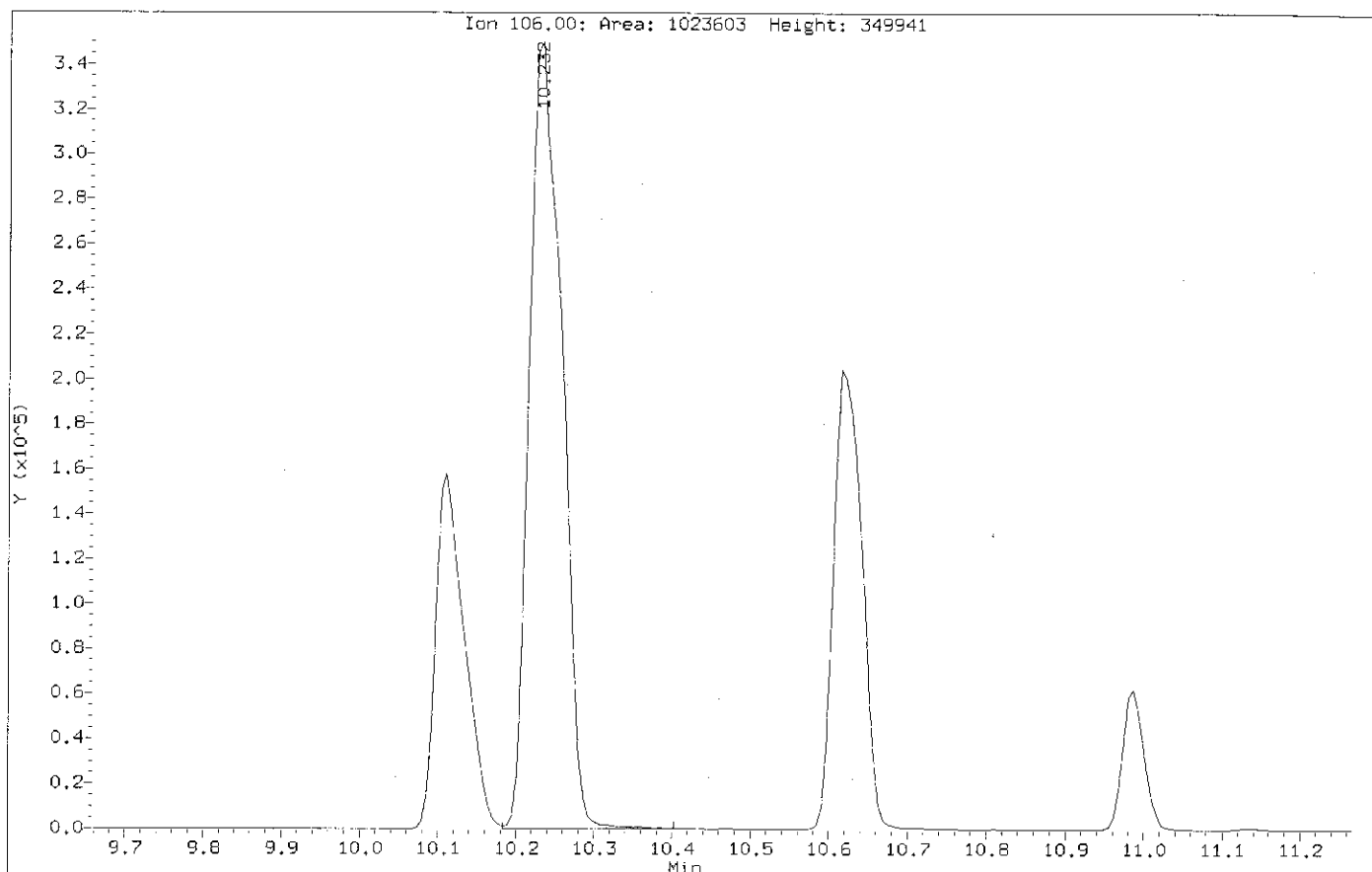
*KL6
10/13/00*

QC Flag Legend

H - Operator selected an alternate compound hit.

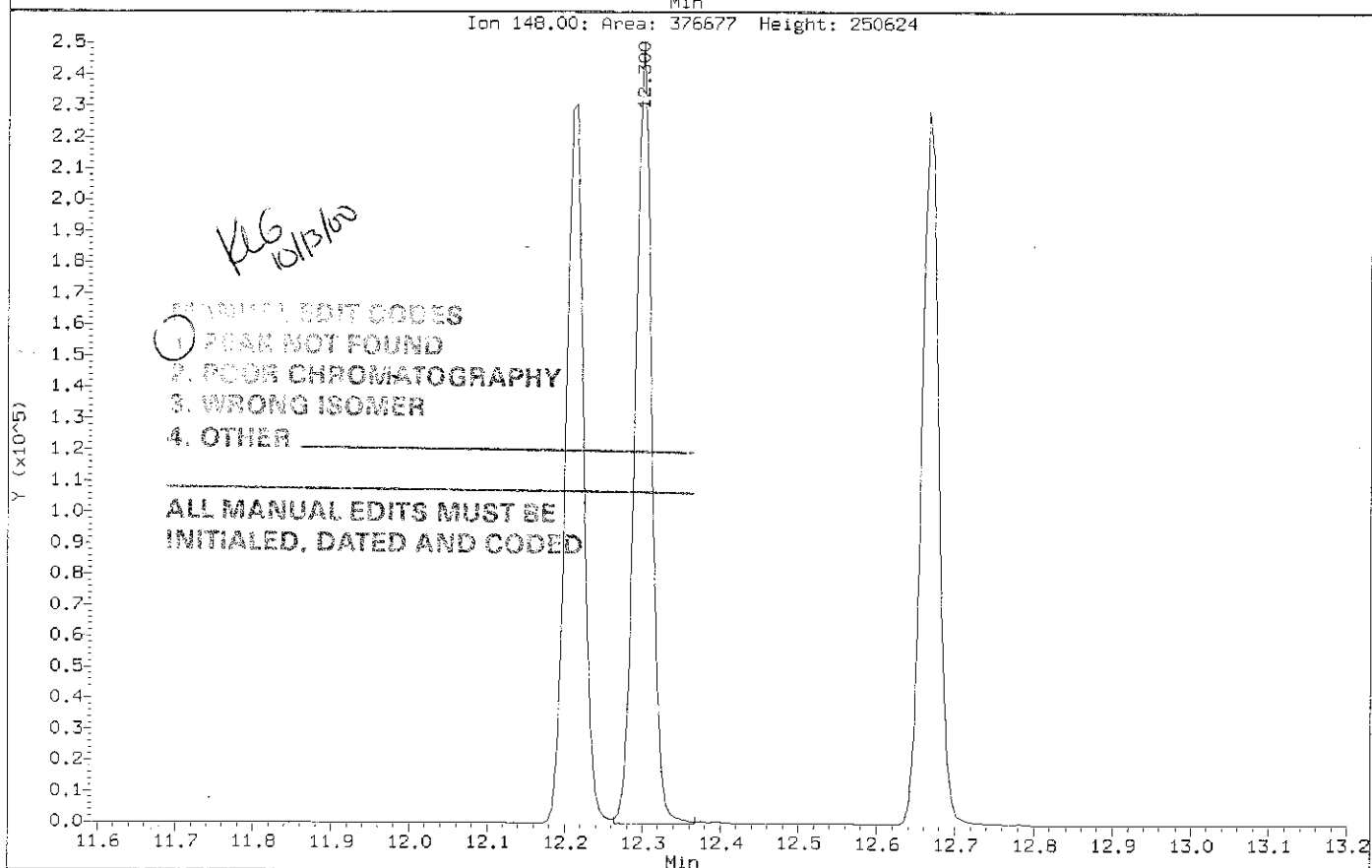
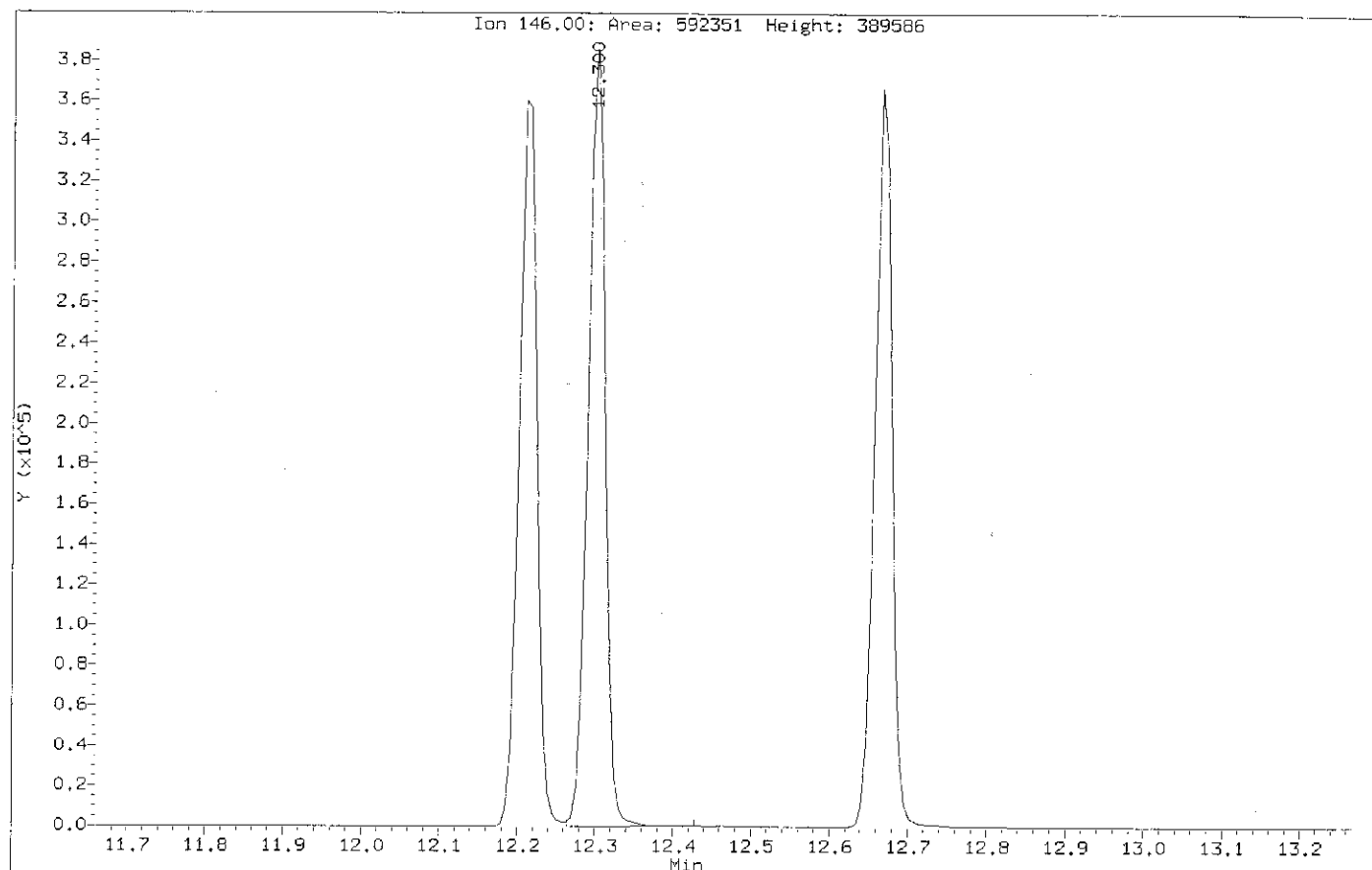
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Injection Date: 13-OCT-2000 08:51
Instrument: hp5.1
Client Sample ID: vstd100

Compound: m + p-Xylene
CAS Number: 136777-61-2



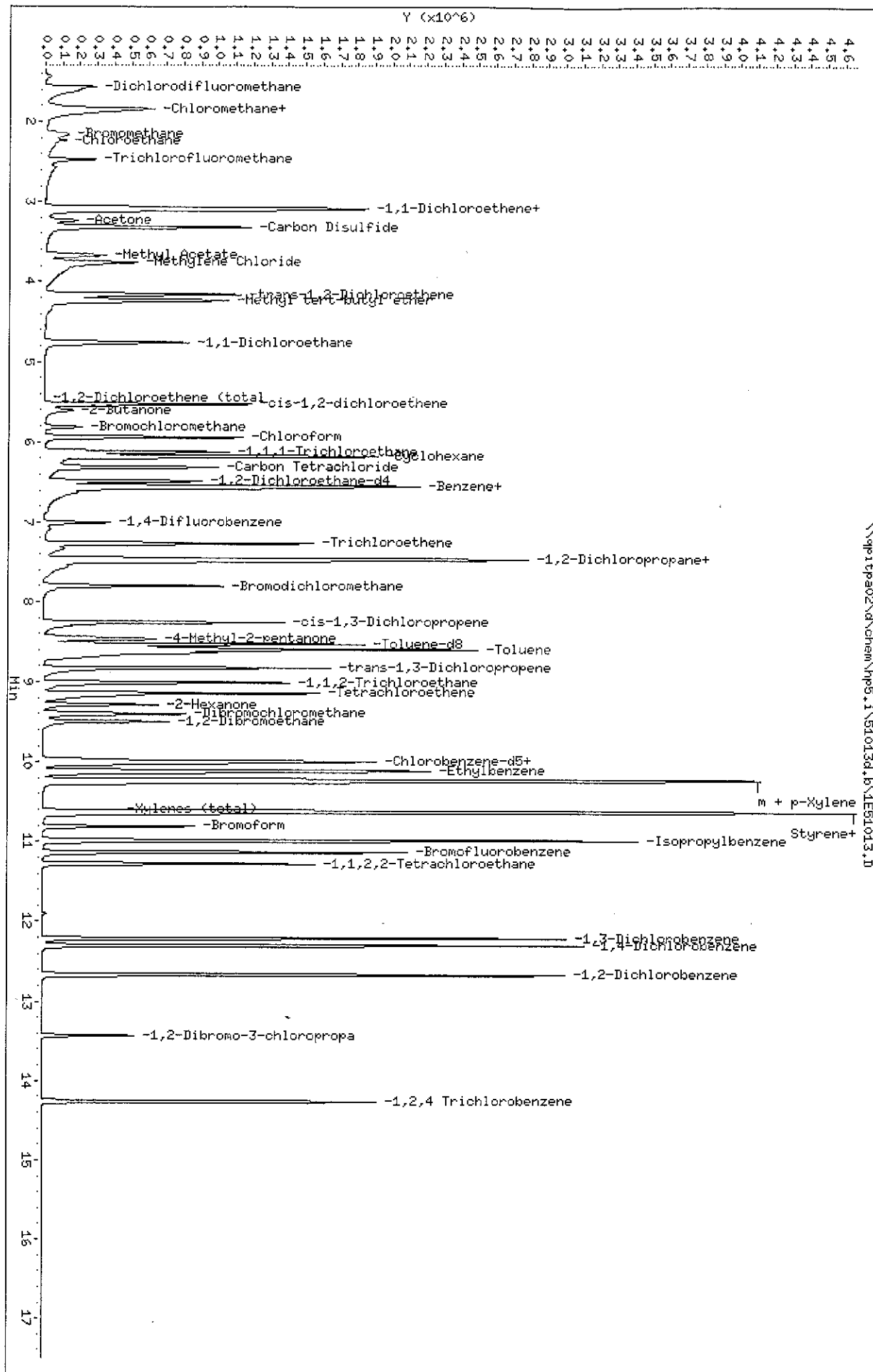
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Injection Date: 13-OCT-2000 08:51
Instrument: hp5.1
Client Sample ID: vstd100

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7



Data File: \\spitpa02\chem\hp5.i\51013d.b\151013.D
 Date : 13-OCT-2000 09:15
 Client ID: vstd200
 Sample Info: vstd200 5ml
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hp5.i
 Operator: 10099
 Column diameter: 0.53



STL - Pittsburgh

Volatile Report CLP OLM04.2 Method

Data file : \\qpitpa02\d\chem\hp5.i\51013d.b\1E51013.D
Lab Smp Id: vstd200 Client Smp ID: vstd200
Inj Date : 13-OCT-2000 09:15 MS Autotune Date: 13-MAR-2000 09:53
Operator : 10099 Inst ID: hp5.i
Smp Info : vstd200 5ml
Misc Info : ,51013d.b,clph2o.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51013d.b\clph2o.m
Meth Date : 13-Oct-2000 09:40 gordonk Quant Type: ISTD
Cal Date : 13-OCT-2000 07:28 Cal File: 2C51013.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC063

Concentration Formula: Amt * DF * 1/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample volume

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
* 1 Bromochloromethane	128	5.815	5.815	(1.000)	66921	250.000	
* 2 1,4-Difluorobenzene	114	7.008	7.008	(1.000)	335902	250.000	
* 3 Chlorobenzene-d5	117	9.970	9.970	(1.000)	391797	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.491	6.491	(1.116)	600854	1000.00	1028
\$ 5 Toluene-d8	98	8.529	8.529	(0.855)	1240247	1000.00	680.7
\$ 6 Bromofluorobenzene	95	11.132	11.132	(1.117)	798422	1000.00	1036
7 Dichlorodifluoromethane	85	1.563	1.563	(0.269)	807084	1000.00	1048
8 Chloromethane	50	1.843	1.843	(0.317)	903835	1000.00	1003
10 Bromomethane	94	2.153	2.153	(0.370)	196993	1000.00	988.2
9 Vinyl Chloride	62	1.837	1.837	(0.316)	859960	1000.00	1096
11 Chloroethane	64	2.232	2.232	(0.384)	188454	1000.00	1024
12 Trichlorofluoromethane	101	2.469	2.469	(0.425)	267793	1000.00	908.6
15 1,1-Dichloroethene	96	3.078	3.078	(0.529)	635020	1000.00	1011
51 1,1,2 Trichloro-1,2,2-Trifluo	101	3.102	3.102	(0.533)	666578	1000.00	1030
14 Acetone	43	3.236	3.236	(0.556)	303380	1000.00	664.7
17 Carbon Disulfide	76	3.315	3.315	(0.570)	2177777	1000.00	1017
89 Methyl Acetate	43	3.668	3.668	(0.631)	630864	1000.00	1020

						AMOUNTS	
		QUANT SIG					
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	====	==	=====	=====	=====	=====	=====
16 Methylene Chloride	84	3.759	3.759	(0.646)	640397	1000.00	1062
82 Methyl tert-butyl ether	73	4.234	4.234	(0.728)	1530392	1000.00	997.8
19 trans-1,2-Dichloroethene	96	4.161	4.161	(0.715)	588849	1000.00	1000
21 1,1-Dichloroethane	63	4.763	4.763	(0.819)	1008705	1000.00	1014
23 cis-1,2-dichloroethene	96	5.529	5.529	(0.951)	581108	1000.00	1028
M 81 1,2-Dichloroethene (total)	96				1169957	2000.00	2027
22 2-Butanone	43	5.602	5.602	(0.963)	347995	1000.00	1007
24 Chloroform	83	5.943	5.943	(1.022)	902639	1000.00	1016
28 Benzene	78	6.552	6.552	(0.935)	1838121	1000.00	955.0
27 1,2-Dichloroethane	62	6.576	6.576	(1.131)	804118	1000.00	1042
25 1,1,1-Trichloroethane	97	6.126	6.126	(0.874)	802927	1000.00	1140
90 Cyclohexane	56	6.180	6.180	(0.882)	1117361	1000.00	1134
26 Carbon Tetrachloride	117	6.314	6.314	(0.901)	680747	1000.00	1160
29 Trichloroethene	130	7.269	7.269	(1.037)	500682	1000.00	989.4
30 1,2-Dichloropropane	63	7.501	7.501	(1.070)	621440	1000.00	1174
31 Bromodichloromethane	83	7.805	7.805	(1.114)	721980	1000.00	1203
91 Methyl Cyclohexane	83	7.464	7.464	(1.065)	1118257	1000.00	1175
34 cis-1,3-Dichloropropene	75	8.261	8.261	(1.179)	872865	1000.00	1256
38 1,1,2-Trichloroethane	97	9.009	9.009	(1.286)	567819	1000.00	1119
40 Dibromochloromethane	129	9.399	9.399	(1.341)	588071	1000.00	1206
36 trans-1,3-Dichloropropene	75	8.827	8.827	(1.260)	995727	1000.00	1221
33 4-Methyl-2-pentanone	43	8.468	8.468	(0.849)	662094	1000.00	1044
37 2-Hexanone	43	9.289	9.289	(0.932)	473402	1000.00	1074
46 Bromoform	173	10.810	10.810	(1.543)	393380	1000.00	1251
39 Tetrachloroethene	164	9.143	9.143	(0.917)	504396	1000.00	1082
63 1,2-Dibromoethane	107	9.496	9.496	(0.952)	585076	1000.00	1078
47 1,1,2,2-Tetrachloroethane	83	11.278	11.278	(1.131)	722478	1000.00	983.5
35 Toluene	91	8.596	8.596	(0.862)	1504902	1000.00	695.9
41 Chlorobenzene	112	10.001	10.001	(1.003)	1598944	1000.00	999.6
42 Ethylbenzene	106	10.110	10.110	(1.014)	886651	1000.00	1000
45 Styrene	104	10.640	10.640	(1.067)	1754235	1000.00	1008
43 m + p-Xylene	106	10.232	10.232	(1.026)	2214890	2000.00	2029
44 Xylene-o	106	10.621	10.621	(1.065)	1102210	1000.00	1032
M 80 Xylenes (total)	106				3317100	1000.00	3105
92 Isopropylbenzene	105	10.986	10.986	(1.102)	2683709	1000.00	944.9
48 1,3-Dichlorobenzene	146	12.209	12.209	(1.225)	1218269	1000.00	1007
49 1,4-Dichlorobenzene	146	12.300	12.300	(1.234)	1230777	1000.00	993.2
50 1,2-Dichlorobenzene	146	12.665	12.665	(1.270)	1170079	1000.00	1010
69 1,2-Dibromo-3-chloropropane	75	13.432	13.432	(1.347)	121068	1000.00	1086
93 1,2,4 Trichlorobenzene	180	14.265	14.265	(1.431)	583477	1000.00	1108

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH

Contract:

Lab Code: STL

Case No.:

SAS No.:

SDG No.: METHODS

Instrument ID: HP5

Calibration Date: 10/10/00

Time: 1643

Lab File ID: CC51010N

Init. Calib. Date(s): 10/04/00

10/04/00

Heated Purge: (Y/N) Y

Init. Calib. Times: 1702

1924

GC Column: DB624

ID: 0.20 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
Chloromethane	2.939	2.686		-8.6	
Bromomethane	0.254	0.288	0.100	13.4	25.0
Vinyl Chloride	2.551	1.978	0.100	-22.5	25.0
Chloroethane	0.420	0.271		-35.5	
Methylene Chloride	1.819	1.109		-39.0	
Acetone	1.635	1.436		-12.2	
Carbon Disulfide	5.727	5.401		-5.7	
1,1-Dichloroethene	1.693	1.826	0.100	7.8	25.0
1,1-Dichloroethane	3.947	3.929	0.200	-0.4	25.0
1,2-Dichloroethene (total)	2.328	2.432		4.5	
Chloroform	3.476	3.755	0.200	8.0	25.0
1,2-Dichloroethane	2.642	2.971	0.100	12.4	25.0
2-Butanone	1.338	1.356		1.3	
1,1,1-Trichloroethane	0.465	0.446	0.100	-4.1	25.0
Carbon Tetrachloride	0.397	0.369	0.100	-7.0	25.0
Bromodichloromethane	0.370	0.372	0.200	0.5	25.0
1,2-Dichloropropane	0.342	0.339		-0.9	
cis-1,3-Dichloropropene	0.463	0.459	0.200	-0.9	25.0
Trichloroethene	0.354	0.349	0.300	-1.4	25.0
Dibromochloromethane	0.280	0.263	0.100	-6.1	25.0
1,1,2-Trichloroethane	0.278	0.303	0.100	9.0	25.0
Benzene	1.340	1.350	0.500	0.7	25.0
trans-1,3-Dichloropropene	0.457	0.463	0.100	1.3	25.0
Bromoform	0.170	0.188	0.100	10.6	25.0
4-Methyl-2-pentanone	0.377	0.216		-42.7	
2-Hexanone	0.290	0.254		-12.4	
Tetrachloroethene	0.322	0.272	0.200	-15.5	25.0
1,1,2,2-Tetrachloroethane	0.390	0.423	0.300	8.5	25.0
Toluene	1.595	1.431	0.400	-10.3	25.0
Chlorobenzene	1.016	0.932	0.500	-8.3	25.0
Ethylbenzene	0.580	0.537	0.100	-7.4	25.0
Styrene	1.068	1.042	0.300	-2.4	25.0
Xylenes (total)	0.659	0.614	0.300	-6.8	25.0
Dichlorodifluoromethane	1.679	0.830		-50.6	
Trichlorofluoromethane	1.318	0.390		-70.4	
1,1,2-Trichloro-1,2,2-Triflu	1.808	2.307		27.6	
1,3-Dichlorobenzene	0.746	0.757		1.5	

All other compounds must meet a minimum RRF of 0.010.

7A
VOLATILE CONTINUING CALIBRATION CHECK

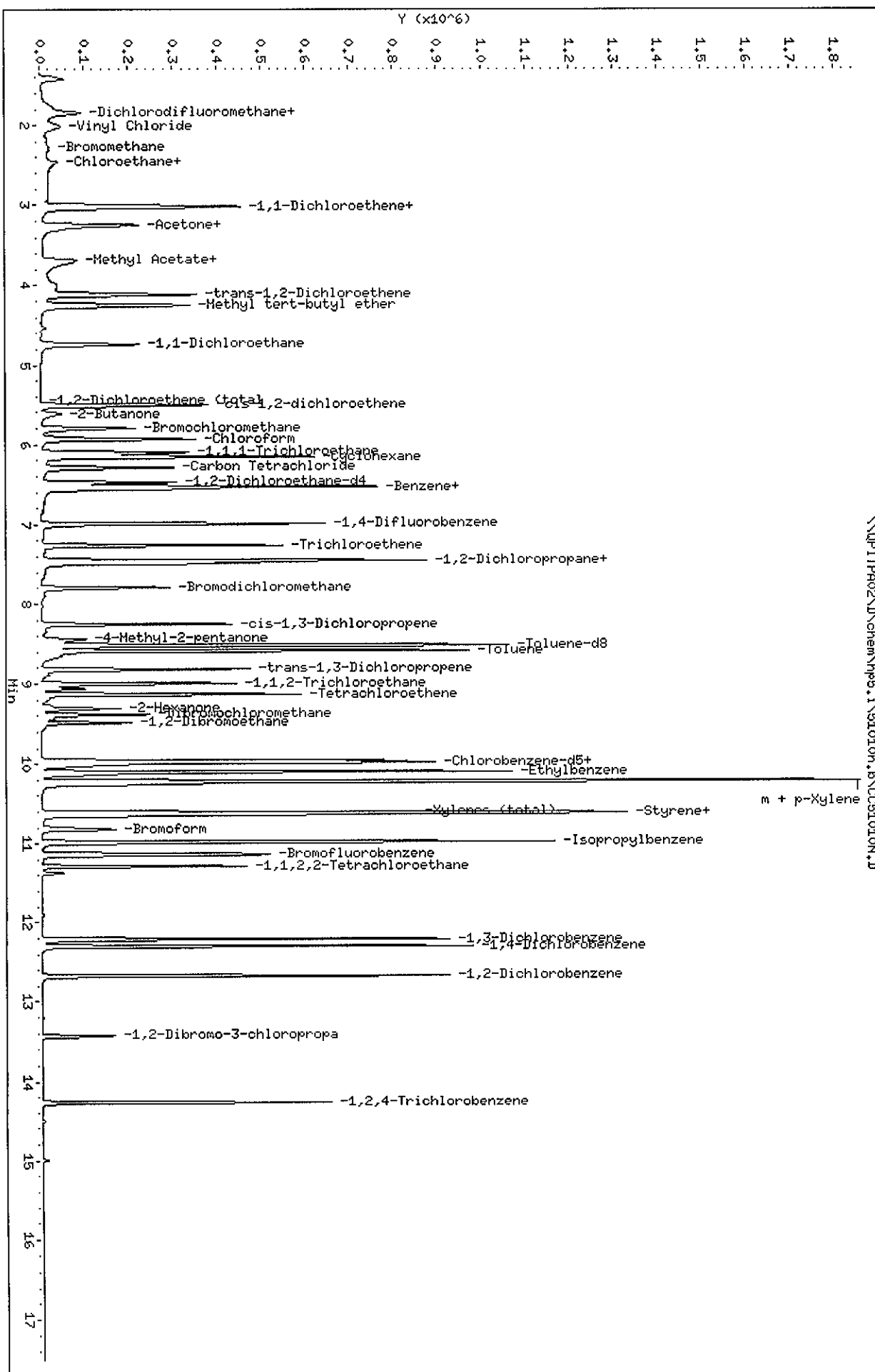
Lab Name: STL PITTSBURGH Contract:
 Lab Code: STL Case No.: SAS No.: SDG No.: METHODS
 Instrument ID: HP5 Calibration Date: 10/10/00 Time: 1643
 Lab File ID: CC51010N Init. Calib. Date(s): 10/04/00 10/04/00
 Heated Purge: (Y/N) Y Init. Calib. Times: 1702 1924
 GC Column: DB624 ID: 0.20 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.756	0.778		2.9	
1,2-Dichlorobenzene	0.700	0.732		4.6	
1,2-Dibromoethane	0.275	0.285		3.6	
1,2-Dibromo-3-chloropropane	0.072	0.077		6.9	
Methyl tert-butyl ether	5.870	6.264		6.7	
Methyl Acetate	1.178	0.951		-19.3	
Cyclohexane	0.663	0.607		-8.4	
Methyl Cyclohexane	0.659	0.654		-0.8	
Isopropylbenzene	1.720	1.688		-1.9	
1,2,4-Trichlorobenzene	0.379	0.394		4.0	
=====	=====	=====	=====	=====	=====
Toluene-d8	1.462	1.225		-16.2	
Bromofluorobenzene	0.534	0.494	0.200	-7.5	25.0
1,2-Dichloroethane-d4	2.239	2.552		14.0	

All other compounds must meet a minimum RRF of 0.010.

Data File: \\QPI1P402\ND\chem\hp5.i\51010n.b\CC51010N.D
 Date: 10-OCT-2000 16:43
 Client ID: vsta50
 Sample Info: vsta50 5ml
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hp5.i
 Operator: 034635
 Column diameter: 0.20



STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51010n.b\CC51010N.D
Lab Smp Id: vstd50 Client Smp ID: vstd50
Inj Date : 10-OCT-2000 16:43 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : vstd50 5ml
Misc Info : vstd50,51010n.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51010n.b\clpsoil.m
Meth Date : 06-Oct-2000 16:39 Quant Type: ISTD
Cal Date : 10-OCT-2000 16:43 Cal File: CC51010N.D
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: Amt * DF * 1/Vo*100/(100-M)

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

DN 10/10/00

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
* 1 Bromochloromethane	128	5.801	5.801	(1.000)	77623	250.000	
* 2 1,4-Difluorobenzene	114	6.994	6.994	(1.000)	544234	250.000	
* 3 Chlorobenzene-d5	117	9.956	9.956	(1.000)	530923	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.477	6.477	(1.116)	198070	250.000	284.9
\$ 5 Toluene-d8	98	8.521	8.521	(0.856)	650186	250.000	209.4
\$ 6 Bromofluorobenzene	95	11.136	11.136	(1.119)	262487	250.000	231.3
7 Dichlorodifluoromethane	85	1.774	1.774	(0.306)	64458	250.000	123.7
8 Chloromethane	50	1.841	1.841	(0.317)	208467	250.000	228.4
10 Bromomethane	94	2.291	2.291	(0.395)	22371	250.000	283.1 (M)
9 Vinyl Chloride	62	2.005	2.005	(0.346)	153500	250.000	193.8
11 Chloroethane	64	2.486	2.486	(0.429)	21014	250.000	161.2
12 Trichlorofluoromethane	101	2.461	2.461	(0.424)	30289	250.000	73.97
15 1,1-Dichloroethene	96	3.009	3.009	(0.519)	141786	250.000	269.7
51 1,1,2-Trichloro-1,2,2-Trifluor	101	3.027	3.027	(0.522)	179052	250.000	318.9
14 Acetone	43	3.277	3.277	(0.565)	111497	250.000	219.7
17 Carbon Disulfide	76	3.246	3.246	(0.560)	419229	250.000	235.8

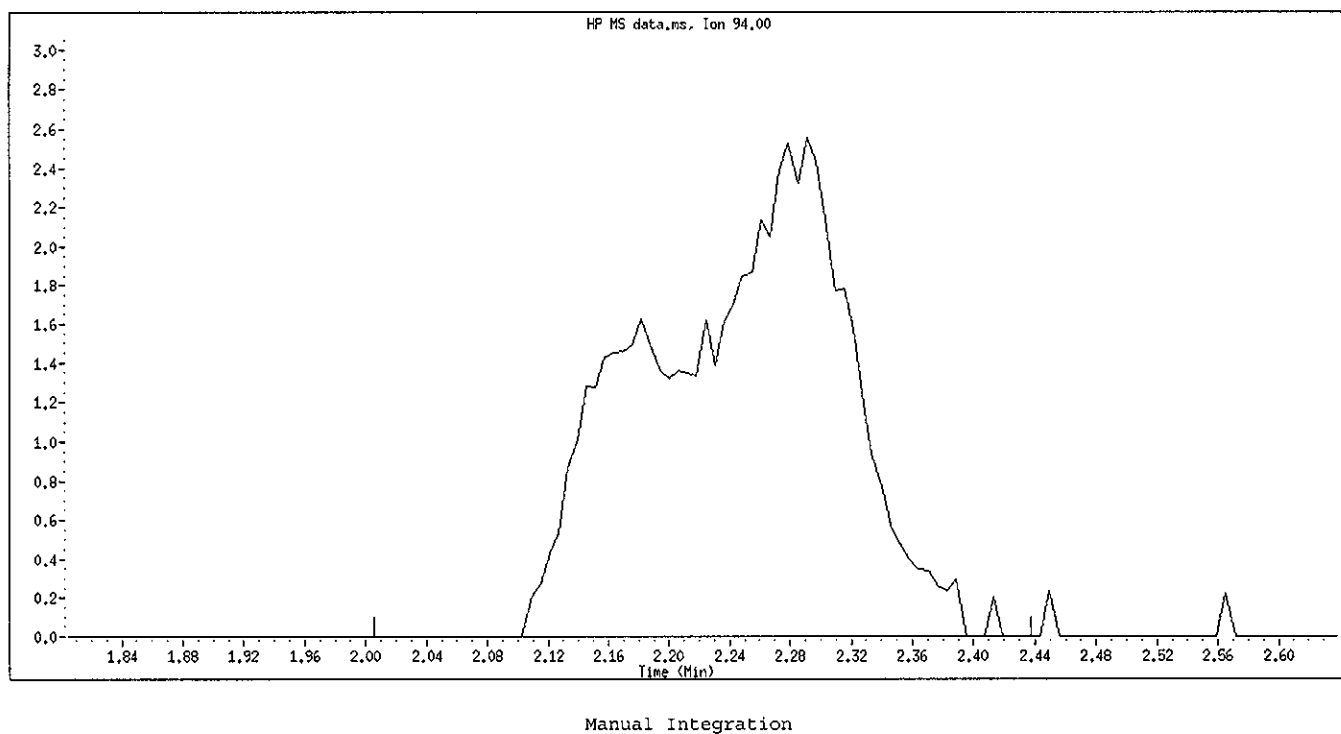
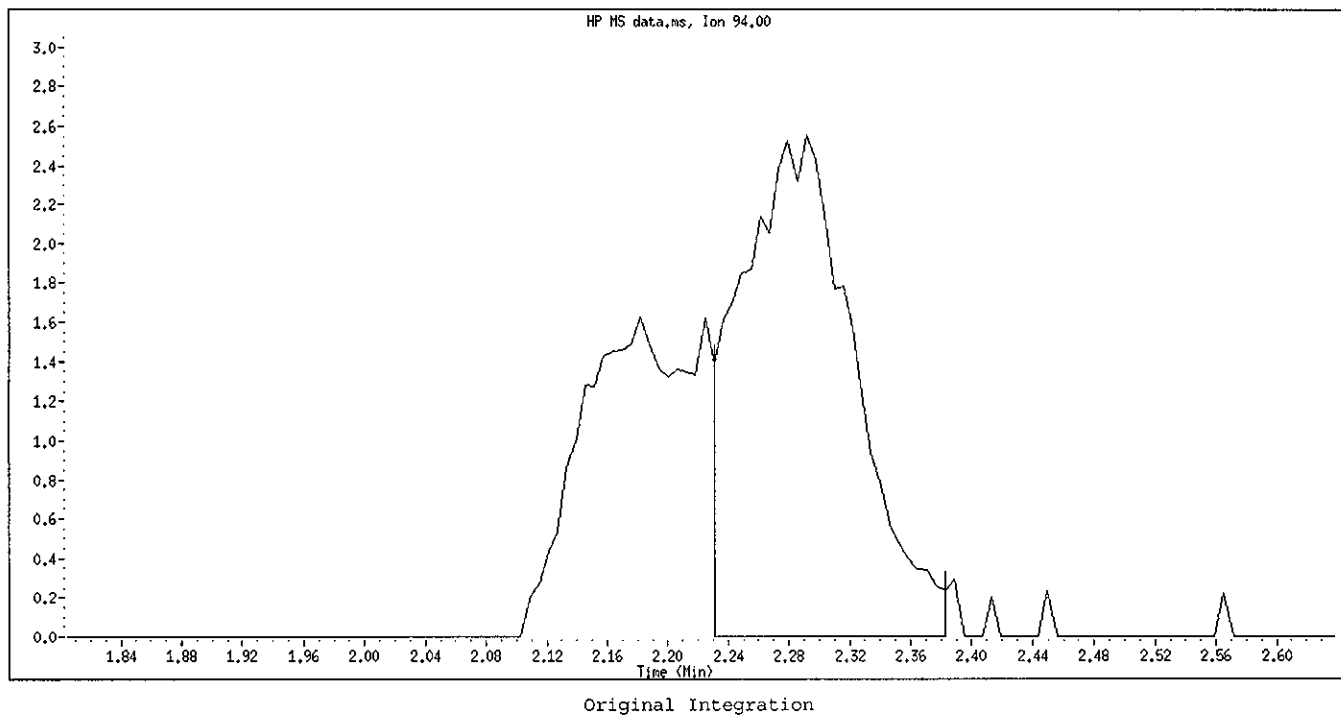
DN 10/10/00

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43	3.678	3.678	(0.634)	147611	500.000	403.7
16 Methylene Chloride	84	3.727	3.727	(0.642)	86119	250.000	152.5
82 Methyl tert-butyl ether	73	4.250	4.250	(0.733)	486223	250.000	266.8
19 trans-1,2-Dichloroethene	96	4.116	4.116	(0.710)	185696	250.000	256.8
21 1,1-Dichloroethane	63	4.737	4.737	(0.817)	304958	250.000	248.8
23 cis-1,2-dichloroethene	96	5.509	5.509	(0.950)	191895	250.000	265.5
M 81 1,2-Dichloroethene (total)	96				377591	500.000	522.3
22 2-Butanone	43	5.619	5.619	(0.969)	105251	250.000	253.2
24 Chloroform	83	5.929	5.929	(1.022)	291500	250.000	270.0
28 Benzene	78	6.531	6.531	(0.934)	734925	250.000	251.9
27 1,2-Dichloroethane	62	6.562	6.562	(1.131)	230626	250.000	281.1
25 1,1,1-Trichloroethane	97	6.099	6.099	(0.872)	242643	250.000	239.8
89 Cyclohexane	56	6.154	6.154	(0.880)	330217	250.000	228.7
26 Carbon Tetrachloride	117	6.288	6.288	(0.899)	200839	250.000	232.2
29 Trichloroethene	130	7.255	7.255	(1.037)	189904	250.000	246.4
30 1,2-Dichloropropane	63	7.486	7.486	(1.070)	184436	250.000	248.0
31 Bromodichloromethane	83	7.791	7.791	(1.114)	202773	250.000	251.4
90 Methyl Cyclohexane	83	7.450	7.450	(1.065)	356120	250.000	248.1
34 cis-1,3-Dichloropropene	75	8.253	8.253	(1.180)	249810	250.000	248.0
38 1,1,2-Trichloroethane	97	9.001	9.001	(1.287)	164808	250.000	272.6
40 Dibromochloromethane	129	9.384	9.384	(1.342)	143166	250.000	235.1
36 trans-1,3-Dichloropropene	75	8.819	8.819	(1.261)	252041	250.000	253.4
33 4-Methyl-2-pentanone	43	8.435	8.435	(0.847)	114602	250.000	143.1
37 2-Hexanone	43	9.311	9.311	(0.935)	134770	250.000	218.6
46 Bromoform	173	10.820	10.820	(1.547)	102404	250.000	276.8
39 Tetrachloroethene	164	9.135	9.135	(0.918)	144338	250.000	211.1
63 1,2-Dibromoethane	107	9.488	9.488	(1.357)	155354	250.000	259.2
47 1,1,2,2-Tetrachloroethane	83	11.282	11.282	(1.133)	224747	250.000	271.4
35 Toluene	91	8.587	8.587	(0.863)	759554	250.000	224.2
41 Chlorobenzene	112	9.987	9.987	(1.003)	494616	250.000	229.3
42 Ethylbenzene	106	10.096	10.096	(1.014)	284936	250.000	231.1
45 Styrene	104	10.625	10.625	(1.067)	552975	250.000	243.8
43 m + p-Xylene	106	10.218	10.218	(1.026)	664459	500.000	459.9 (H) <i>p'110/10</i>
44 Xylene-o	106	10.607	10.607	(1.065)	325840	250.000	232.9
M 80 Xylenes (total)	106				990299	250.000	707.8
91 Isopropylbenzene	105	10.978	10.978	(1.103)	896177	250.000	245.4
48 1,3-Dichlorobenzene	146	12.213	12.213	(1.227)	402173	250.000	253.8
49 1,4-Dichlorobenzene	146	12.298	12.298	(1.235)	413087	250.000	257.4 (H) <i>(10)10/10</i>
50 1,2-Dichlorobenzene	146	12.669	12.669	(1.273)	388898	250.000	261.6
69 1,2-Dibromo-3-chloropropane	75	13.430	13.430	(1.349)	40954	250.000	266.6
92 1,2,4-Trichlorobenzene	180	14.263	14.263	(1.433)	209409	250.000	260.0

QC Flag Legend

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

Data File Name: CC51010N.D
Inj. Date and Time: 10-OCT-2000 16:43
Instrument ID: hp5.i
Client ID: vstd50
Compound Name: Bromomethane
CAS #: 74-83-9
Report Date: 10/10/2000

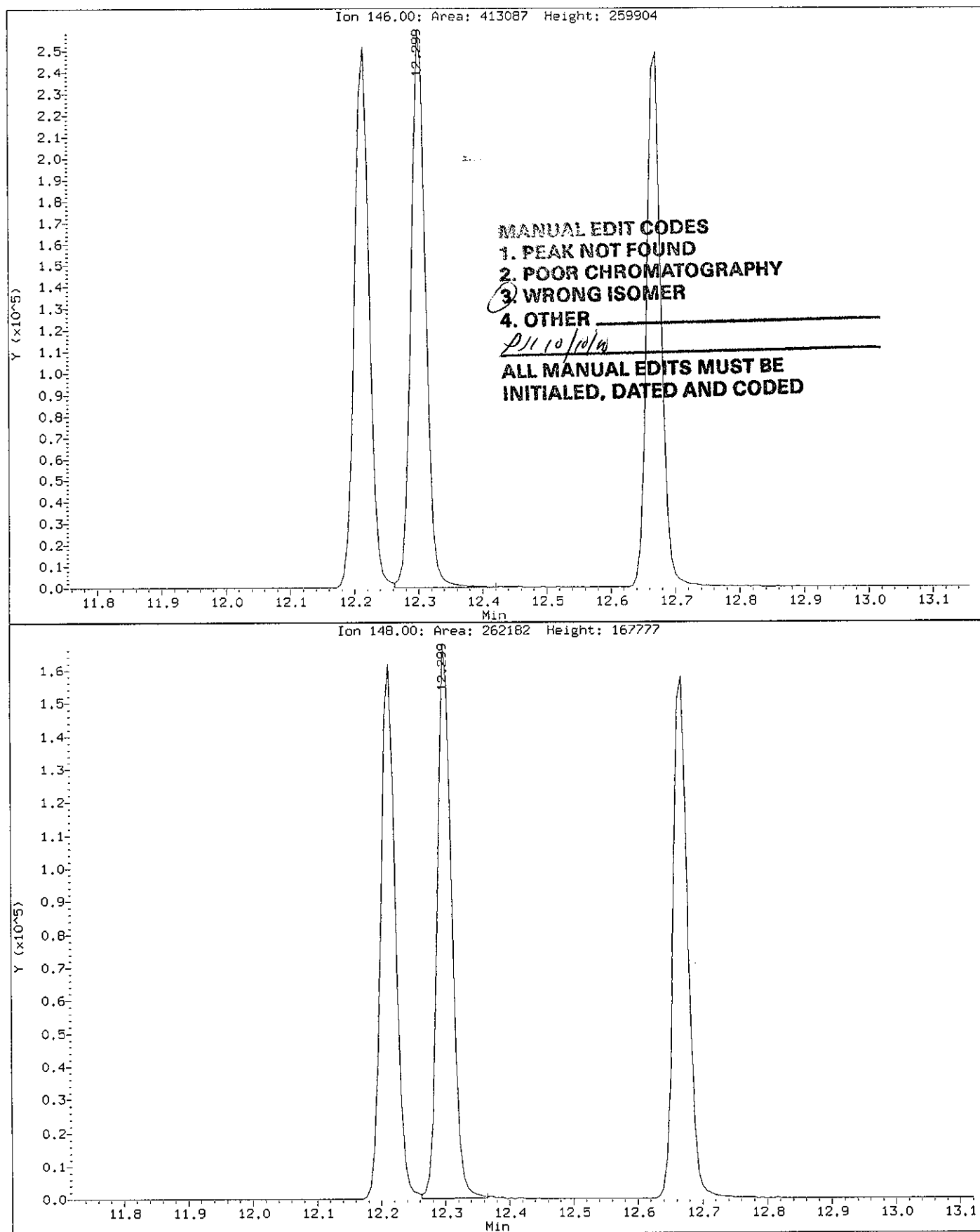


Manually Integrated By: JournetP
Manual Integration Reason: Poor Chromatography

P/H 10/11/00

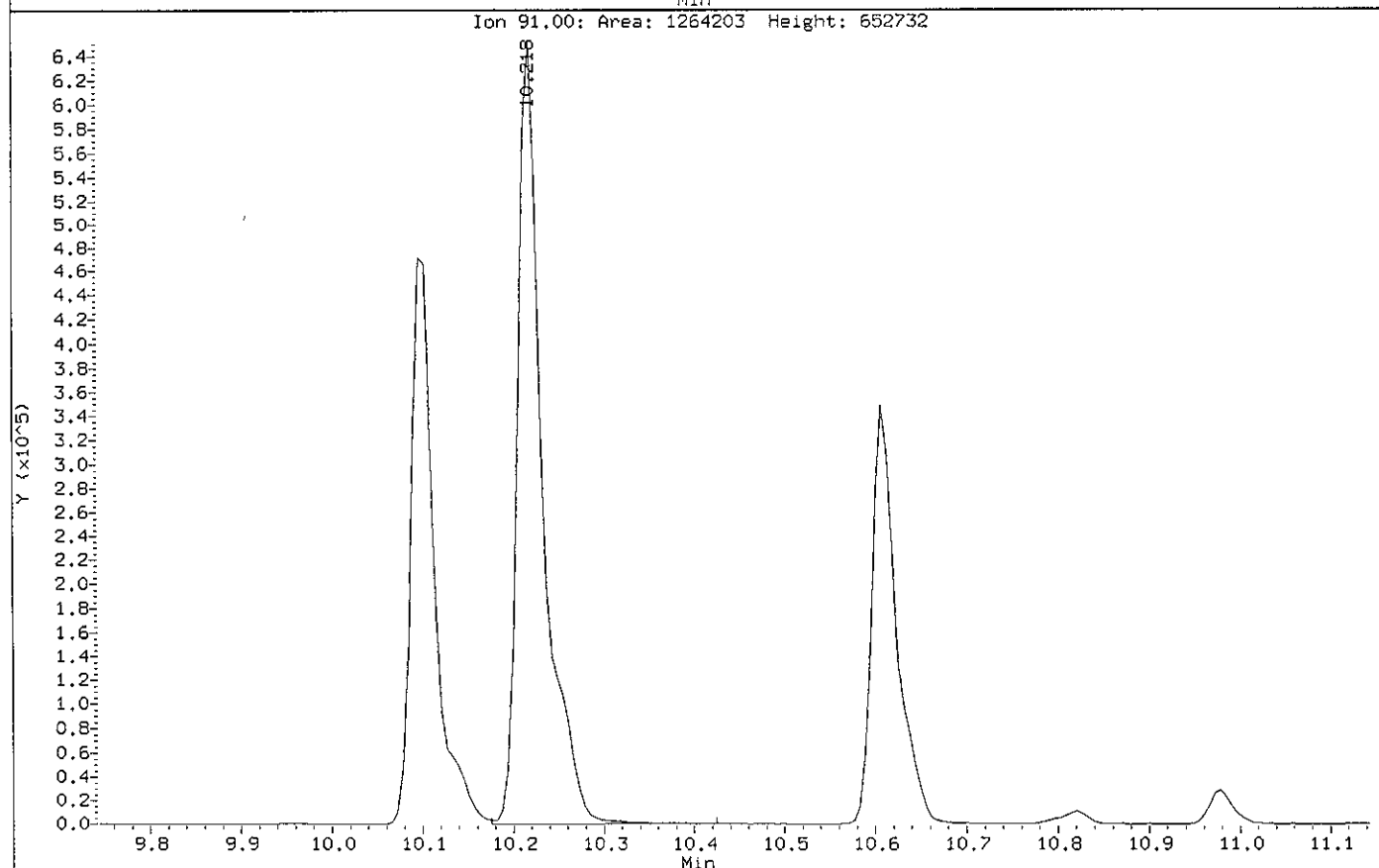
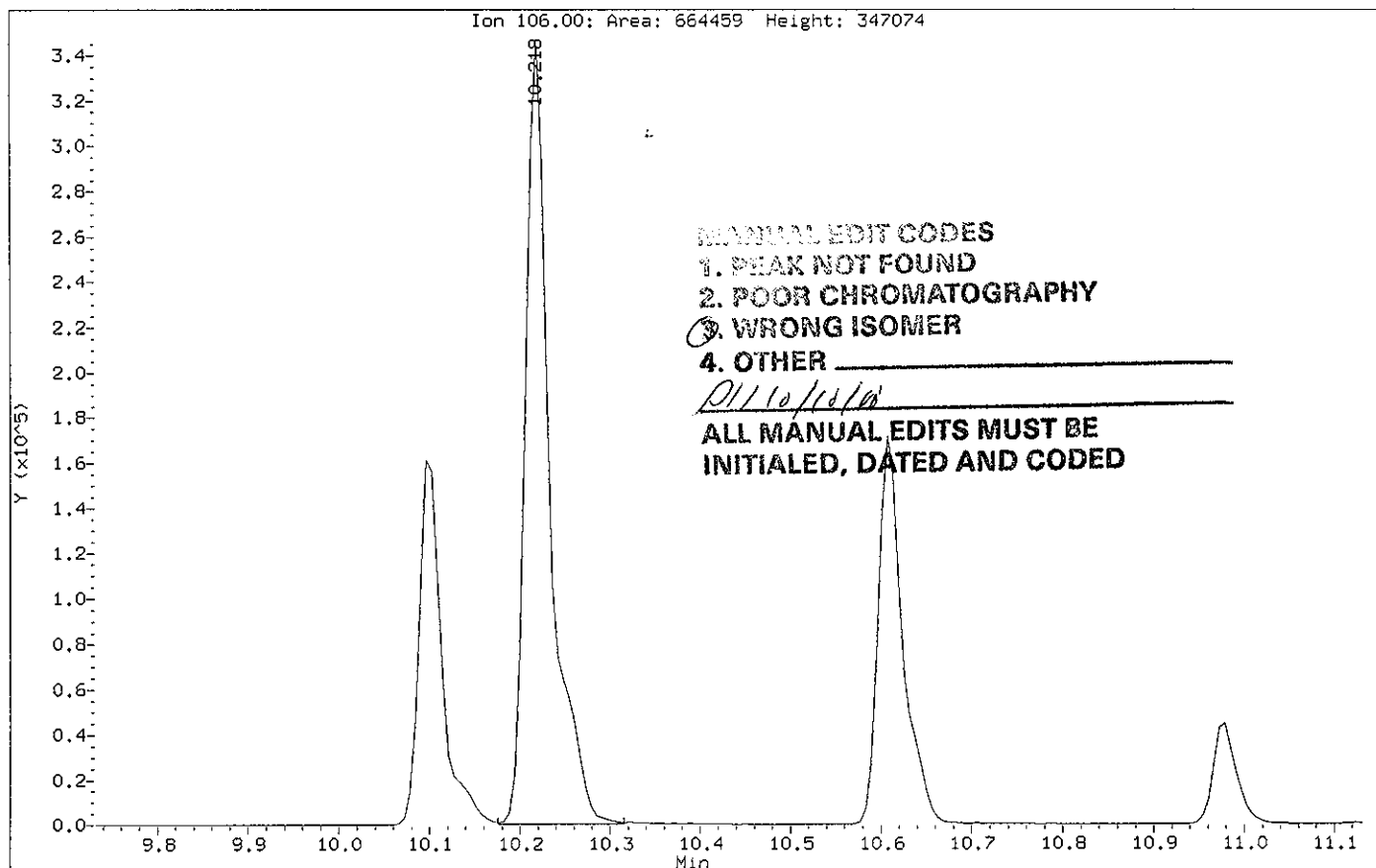
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Injection Date: 10-OCT-2000 16:43
Instrument: hp5.i
Client Sample ID: vstd50

Compound: 1,4-Dichlorobenzene
CAS Number: 106-46-7



Data File: \\QPITPA02\D\chem\hp5.1\51010n.b\CC51010N.D
Injection Date: 10-OCT-2000 16:43
Instrument: hp5.1
Client Sample ID: vstd50

Compound: m + p-Xylene
CAS Number: 136777-61-2



7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: STL PITTSBURGH Contract:
 Lab Code: STLPIT Case No.: SAS No.: SDG No.: 51013K
 Instrument ID: HP5 Calibration Date: 10/13/00 Time: 1001
 Lab File ID: 3C51013 Init. Calib. Date(s): 10/13/00 10/13/00
 Heated Purge: (Y/N) N Init. Calib. Times: 0728 0915
 GC Column: DB624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	3.366	2.569		-23.7	
Bromomethane	0.745	0.655	0.100	-12.1	25.0
Vinyl Chloride	2.930	2.482	0.100	-15.3	25.0
Chloroethane	0.687	0.652		-5.1	
Methylene Chloride	2.252	2.034		-9.7	
Acetone	1.705	1.334		-21.8	
Carbon Disulfide	7.999	7.470		-6.6	
1,1-Dichloroethene	2.347	2.116	0.100	-9.8	25.0
1,1-Dichloroethane	3.715	3.482	0.200	-6.3	25.0
1,2-Dichloroethene (total)	2.156	2.015		-6.5	
Chloroform	3.318	3.186	0.200	-4.0	25.0
1,2-Dichloroethane	2.882	2.826	0.100	-1.9	25.0
2-Butanone	1.291	1.186		-8.1	
1,1,1-Trichloroethane	0.524	0.444	0.100	-15.3	25.0
Carbon Tetrachloride	0.437	0.389	0.100	-11.0	25.0
Bromodichloromethane	0.447	0.415	0.200	-7.2	25.0
1,2-Dichloropropane	0.394	0.366		-7.1	
cis-1,3-Dichloropropene	0.517	0.494	0.200	-4.4	25.0
Trichloroethene	0.377	0.338	0.300	-10.3	25.0
Dibromochloromethane	0.363	0.296	0.100	-18.4	25.0
1,1,2-Trichloroethane	0.378	0.310	0.100	-18.0	25.0
Benzene	1.432	1.405	0.500	-1.9	25.0
trans-1,3-Dichloropropene	0.607	0.529	0.100	-12.8	25.0
Bromoform	0.234	0.190	0.100	-18.8	25.0
4-Methyl-2-pentanone	0.405	0.389		-4.0	
2-Hexanone	0.281	0.278		-1.1	
Tetrachloroethene	0.297	0.321	0.200	8.1	25.0
1,1,2,2-Tetrachloroethane	0.469	0.468	0.300	-0.2	25.0
Toluene	1.380	1.629	0.400	18.0	25.0
Chlorobenzene	1.021	0.999	0.500	-2.2	25.0
Ethylbenzene	0.566	0.570	0.100	0.7	25.0
Styrene	1.110	1.103	0.300	-0.6	25.0
Xylenes (total)	0.682	0.680	0.300	-0.3	25.0
Dichlorodifluoromethane	2.876	2.427		-15.6	
Trichlorofluoromethane	1.101	0.962		-12.6	
1,1,2 Trichloro-1,2,2-Triflu	2.419	2.120		-12.4	
1,3-Dichlorobenzene	0.772	0.759	0.600	-1.7	25.0

All other compounds must meet a minimum RRF of 0.010.

7A
VOLATILE CONTINUING CALIBRATION CHECK

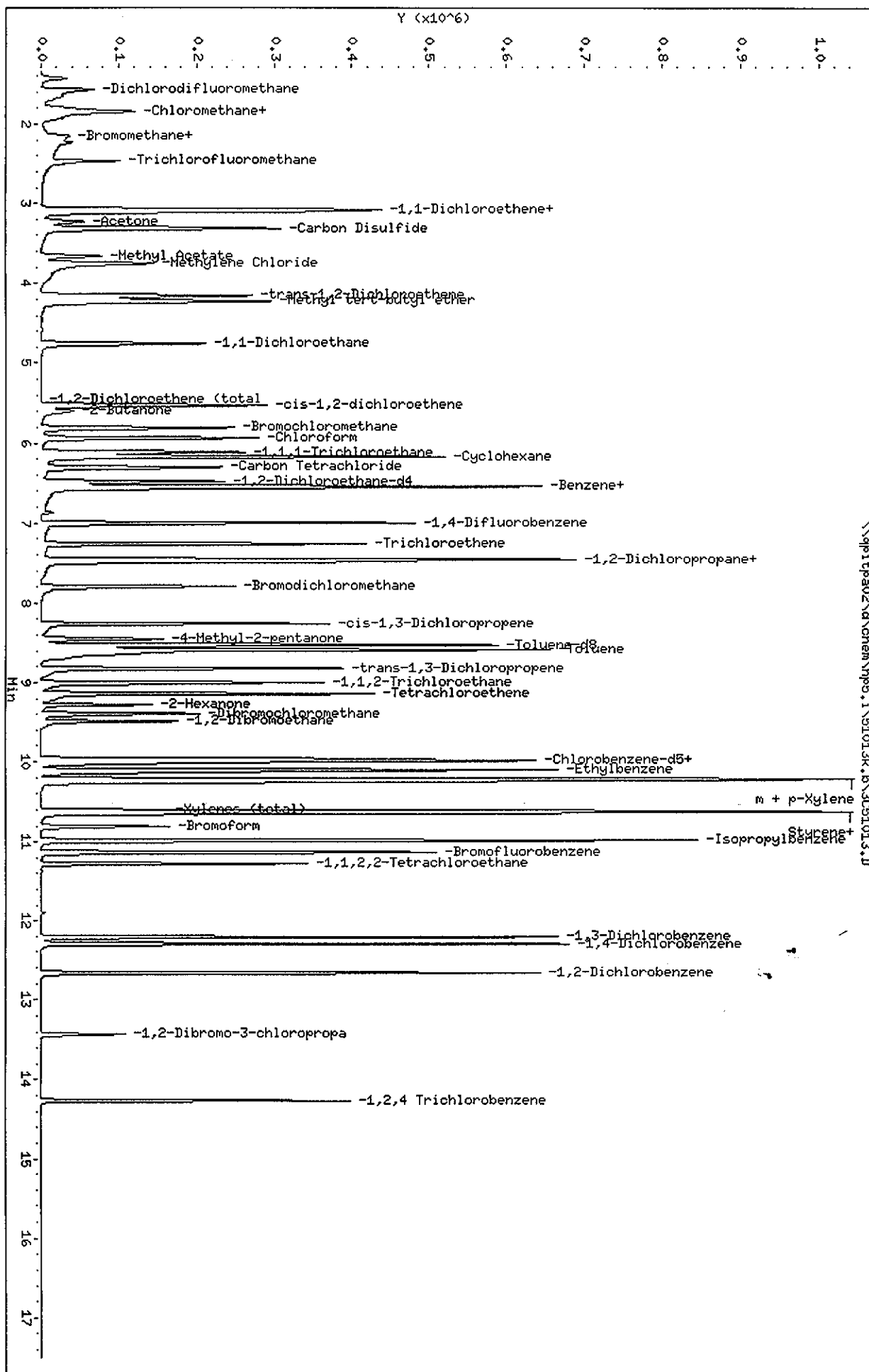
Lab Name: STL PITTSBURGH Contract:
 Lab Code: STLPIT Case No.: SAS No.: SDG No.: 51013K
 Instrument ID: HP5 Calibration Date: 10/13/00 Time: 1001
 Lab File ID: 3C51013 Init. Calib. Date(s): 10/13/00 10/13/00
 Heated Purge: (Y/N) N Init. Calib. Times: 0728 0915
 GC Column: DB624 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
=====	=====	=====	=====	=====	=====
1,4-Dichlorobenzene	0.790	0.789	0.500	-0.1	25.0
1,2-Dichlorobenzene	0.740	0.733	0.400	-0.9	25.0
1,2-Dibromoethane	0.346	0.365		5.5	
1,2-Dibromo-3-chloropropane	0.071	0.072		1.4	
Methyl tert-butyl ether	5.729	5.536		-3.4	
Methyl Acetate	2.310	1.928		-16.5	
Cyclohexane	0.733	0.620		-15.4	
Methyl Cyclohexane	0.708	0.617		-12.8	
Isopropylbenzene	1.812	1.811		-0.0	
1,2,4 Trichlorobenzene	0.336	0.339	0.200	0.9	25.0
=====	=====	=====	=====	=====	=====
Toluene-d8	1.163	1.432		23.1	
Bromofluorobenzene	0.492	0.515	0.200	4.7	25.0
1,2-Dichloroethane-d4	2.184	2.153		-1.4	

All other compounds must meet a minimum RRF of 0.010.

Data File: \\ppitpa02\chem\hps.i\51013K.b\3C51013.D
 Date : 13-OCT-2000 10:01
 Client ID: vstd50
 Sample Info: vstd50 5ml
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hps.i
 Operator: 10099
 Column diameter: 0.53



STL - Pittsburgh

Volatile Report CLP OLM04.2 Method

Data file : \\qpitpa02\d\chem\hp5.i\51013k.b\3C51013.D
Lab Smp Id: vstd50 Client Smp ID: vstd50
Inj Date : 13-OCT-2000 10:01 MS Autotune Date: 13-MAR-2000 09:53
Operator : 10099 Inst ID: hp5.i
Smp Info : vstd50 5ml
Misc Info : ,51013k.b,clph2o.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51013k.b\clph2o.m
Meth Date : 13-Oct-2000 10:25 gordonk Quant Type: ISTD
Cal Date : 13-OCT-2000 10:01 Cal File: 3C51013.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC063

KLG
10/13/00

Concentration Formula: Amt * DF * 1/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample volume

							AMOUNTS	
QUANT SIG							CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ng)	
=====	====	==	=====	=====	=====	=====	=====	
* 1 Bromochloromethane	128	5.809	5.809	(1.000)	73738	250.000		
* 2 1,4-Difluorobenzene	114	7.002	7.002	(1.000)	421313	250.000		
* 3 Chlorobenzene-d5	117	9.964	9.964	(1.000)	360736	250.000		
\$ 4 1,2-Dichloroethane-d4	65	6.485	6.485	(1.116)	158755	250.000	246.5	
\$ 5 Toluene-d8	98	8.529	8.529	(0.856)	516744	250.000	308.0	
\$ 6 Bromofluorobenzene	95	11.132	11.132	(1.117)	185880	250.000	262.0	
7 Dichlorodifluoromethane	85	1.569	1.569	(0.270)	178935	250.000	210.9	
8 Chloromethane	50	1.825	1.825	(0.314)	189426	250.000	190.8	
10 Bromomethane	94	2.147	2.147	(0.370)	48329	250.000	220.0	
9 Vinyl Chloride	62	1.843	1.843	(0.317)	183024	250.000	211.8	
11 Chloroethane	64	2.232	2.232	(0.384)	48047	250.000	237.0	
12 Trichlorofluoromethane	101	2.469	2.469	(0.425)	70916	250.000	218.4	
15 1,1-Dichloroethene	96	3.078	3.078	(0.530)	156028	250.000	225.4	
51 1,1,2 Trichloro-1,2,2-Trifluo	101	3.102	3.102	(0.534)	156305	250.000	219.1	
14 Acetone	43	3.230	3.230	(0.556)	98347	250.000	195.6	
17 Carbon Disulfide	76	3.315	3.315	(0.571)	550832	250.000	233.5	
89 Methyl Acetate	43	3.662	3.662	(0.630)	142189	250.000	208.7	

						AMOUNTS	
		QUANT	SIG				
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	=====	==	=====	=====	=====	=====	=====
16 Methylene Chloride	84	3.753	3.753	(0.646)	149997	250.000	225.8
82 Methyl tert-butyl ether	73	4.228	4.228	(0.728)	408238	250.000	241.6
19 trans-1,2-Dichloroethene	96	4.155	4.155	(0.715)	148121	250.000	228.3
21 1,1-Dichloroethane	63	4.757	4.757	(0.819)	256753	250.000	234.3
23 cis-1,2-dichloroethene	96	5.529	5.529	(0.952)	148993	250.000	239.1
M 81 1,2-Dichloroethene (total)	96				297114	500.000	467.2
22 2-Butanone	43	5.596	5.596	(0.963)	87474	250.000	229.6
24 Chloroform	83	5.937	5.937	(1.022)	234923	250.000	240.0
28 Benzene	78	6.545	6.545	(0.935)	592136	250.000	245.3
27 1,2-Dichloroethane	62	6.570	6.570	(1.131)	208360	250.000	245.1
25 1,1,1-Trichloroethane	97	6.120	6.120	(0.874)	186877	250.000	211.6
90 Cyclohexane	56	6.174	6.174	(0.882)	261073	250.000	211.2
26 Carbon Tetrachloride	117	6.314	6.314	(0.902)	163972	250.000	222.8
29 Trichloroethene	130	7.263	7.263	(1.037)	142508	250.000	224.5
30 1,2-Dichloropropane	63	7.494	7.494	(1.070)	154041	250.000	232.0
31 Bromodichloromethane	83	7.799	7.799	(1.114)	174854	250.000	232.3
91 Methyl Cyclohexane	83	7.464	7.464	(1.066)	259819	250.000	217.7
34 cis-1,3-Dichloropropene	75	8.255	8.255	(1.179)	208288	250.000	239.0
38 1,1,2-Trichloroethane	97	9.003	9.003	(1.286)	130488	250.000	205.0
40 Dibromochloromethane	129	9.392	9.392	(1.341)	124528	250.000	203.7
36 trans-1,3-Dichloropropene	75	8.827	8.827	(1.261)	222763	250.000	217.8
33 4-Methyl-2-pentanone	43	8.456	8.456	(0.849)	140379	250.000	240.4
37 2-Hexanone	43	9.277	9.277	(0.931)	100467	250.000	247.4
46 Bromoform	173	10.810	10.810	(1.544)	79941	250.000	202.6
39 Tetrachloroethene	164	9.143	9.143	(0.918)	115928	250.000	270.2
63 1,2-Dibromoethane	107	9.490	9.490	(0.952)	131681	250.000	263.5
47 1,1,2,2-Tetrachloroethane	83	11.278	11.278	(1.132)	169020	250.000	249.9
35 Toluene	91	8.589	8.589	(0.862)	587521	250.000	295.1
41 Chlorobenzene	112	9.989	9.989	(1.002)	360295	250.000	244.6
42 Ethylbenzene	106	10.104	10.104	(1.014)	205773	250.000	252.1
45 Styrene	104	10.633	10.633	(1.067)	397895	250.000	248.4
43 m + p-Xylene	106	10.226	10.226	(1.026)	496612	500.000	494.2 (H)
44 Xylene-o	106	10.615	10.615	(1.065)	245358	250.000	249.4
M 80 Xylenes (total)	106				741970	250.000	754.2
92 Isopropylbenzene	105	10.980	10.980	(1.102)	653345	250.000	249.8
48 1,3-Dichlorobenzene	146	12.209	12.209	(1.225)	273817	250.000	245.8
49 1,4-Dichlorobenzene	146	12.300	12.300	(1.234)	284533	250.000	249.4
50 1,2-Dichlorobenzene	146	12.665	12.665	(1.271)	264325	250.000	247.7
69 1,2-Dibromo-3-chloropropane	75	13.432	13.432	(1.348)	26070	250.000	254.0
93 1,2,4 Trichlorobenzene	180	14.265	14.265	(1.432)	122238	250.000	252.2

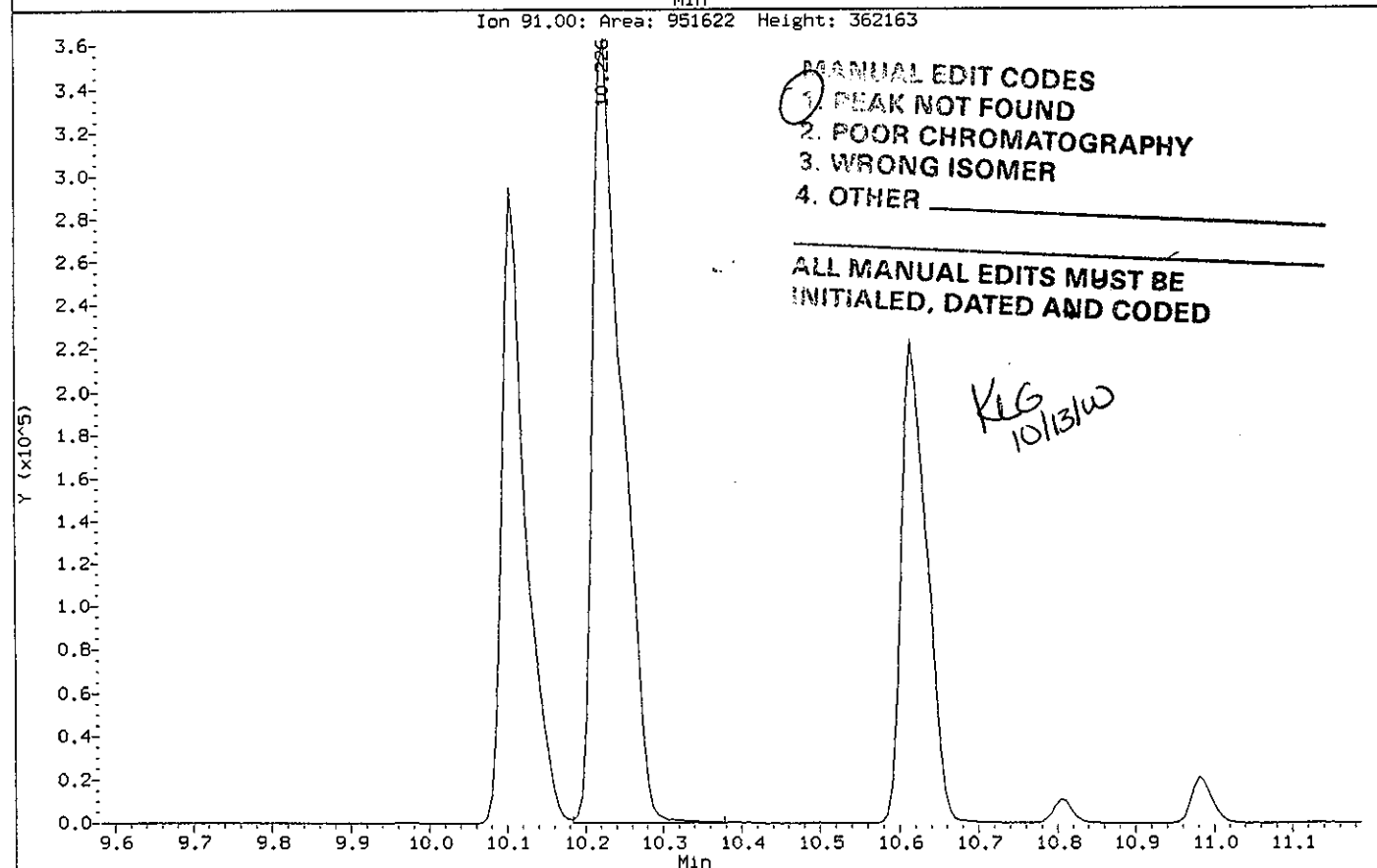
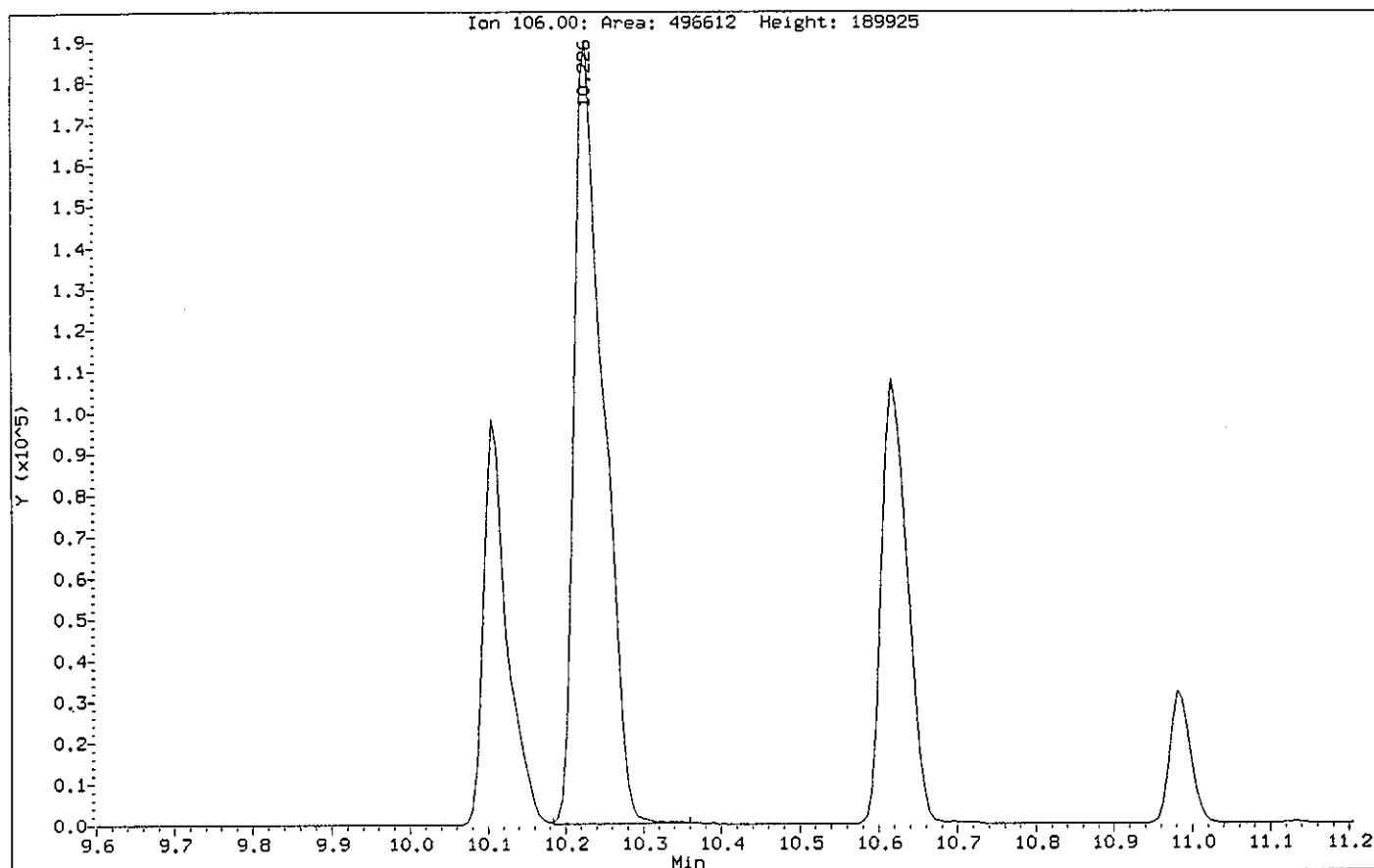
426
10/13/00

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\qpitpa02\\d\\chem\\hp5.1\\51013k.b\\3C51013.D
Injection Date: 13-OCT-2000 10:01
Instrument: hp5.1
Client Sample ID: vstd50

Compound: m + p-Xylene
CAS Number: 136777-61-2



**GC/MS VOLATILE
QC DATA**

Date : 04-OCT-2000 12:13

Client ID: 50NCBFB

Instrument: hp5.i

Sample Info: BFB 192-192-2 50NG

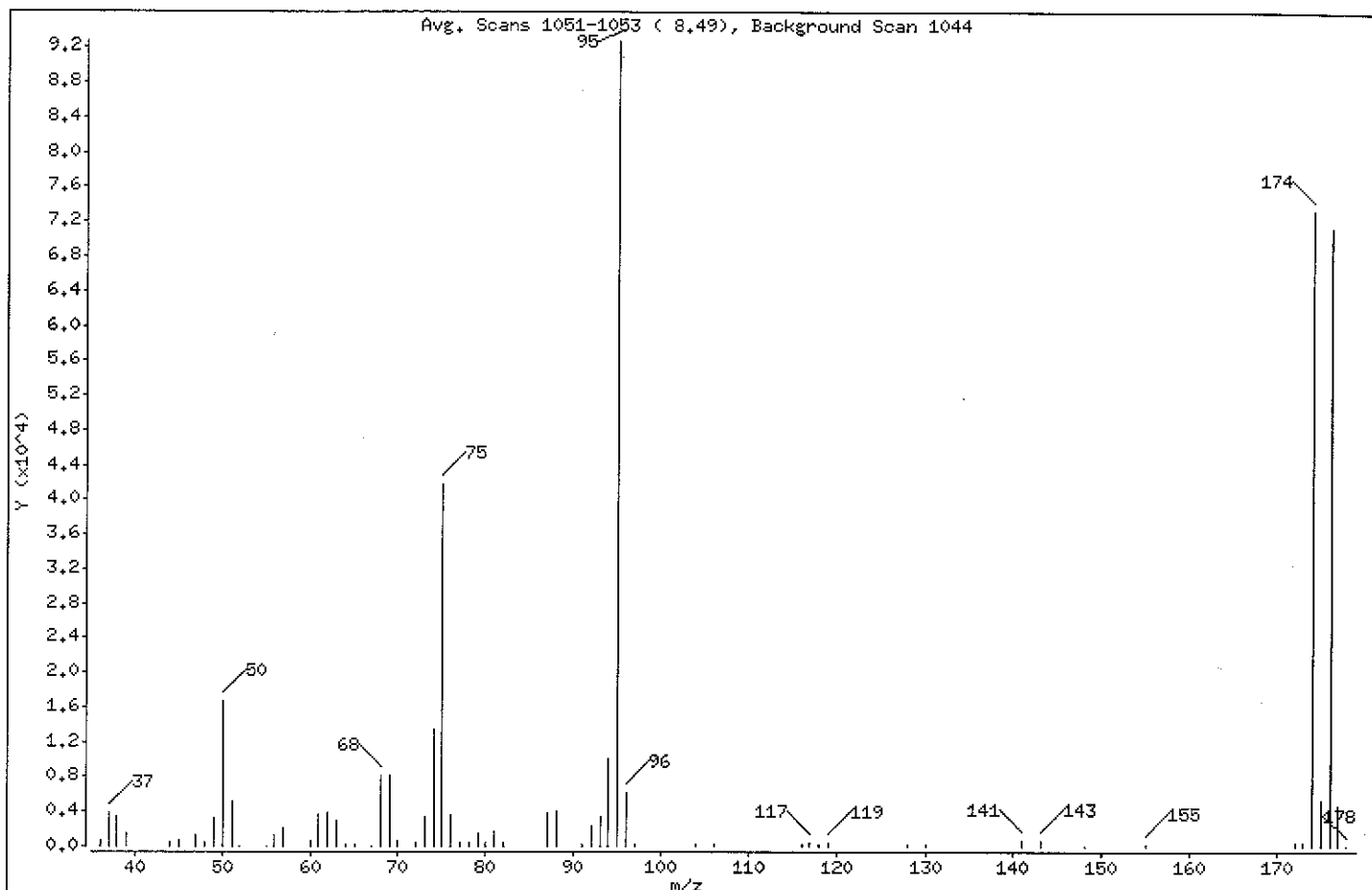
Volume Injected (uL): 2.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.20

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	17.86
75	30.00 - 66.00% of mass 95	45.13
96	5.00 - 9.00% of mass 95	6.58
173	Less than 2.00% of mass 174	0.41 (0.52)
174	50.00 - 120.00% of mass 95	78.99
175	4.00 - 9.00% of mass 174	5.78 (7.32)
176	93.00 - 101.00% of mass 174	77.04 (97.53)
177	5.00 - 9.00% of mass 176	5.01 (6.50)

Date : 04-OCT-2000 12:13

Client ID: 50NGBFB

Instrument: hp5.i

Sample Info: BFB 192-192-2 50NG

Volume Injected (uL): 2.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.20

Data File: BF51004K.D

Spectrum: Avg. Scans 1051-1053 (8.49), Background Scan 1044

Location of Maximum: 95.00

Number of points: 64

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	614	62.00	3774	81.00	1640	128.00	305
37.00	3860	63.00	2934	82.00	335	130.00	195
38.00	3357	64.00	208	87.00	3869	141.00	696
39.00	1408	65.00	206	88.00	3976	143.00	613
44.00	325	67.00	77	91.00	163	148.00	69
45.00	698	68.00	8065	92.00	2440	155.00	192
47.00	1180	69.00	8023	93.00	3455	172.00	433
48.00	513	70.00	602	94.00	10061	173.00	383
49.00	3285	72.00	397	95.00	92728	174.00	73248
50.00	16560	73.00	3485	96.00	6102	175.00	5363
51.00	5208	74.00	13410	97.00	147	176.00	71440
52.00	71	75.00	41840	104.00	275	177.00	4645
55.00	79	76.00	3695	106.00	272	178.00	69
56.00	1175	77.00	466	116.00	179		
57.00	2066	78.00	392	117.00	353		
60.00	668	79.00	1515	118.00	162		
61.00	3567	80.00	458	119.00	349		

Data File: \\NPITPA02\chem\hp5.i\51004k.b\BF51004K.D
Date : 04-OCT-2000 12:13

Client ID: 50NGBFB

Sample Info: BFB 192-192-2 50NG

Volume Injected (uL): 2.0

Column phase: DB624 20m

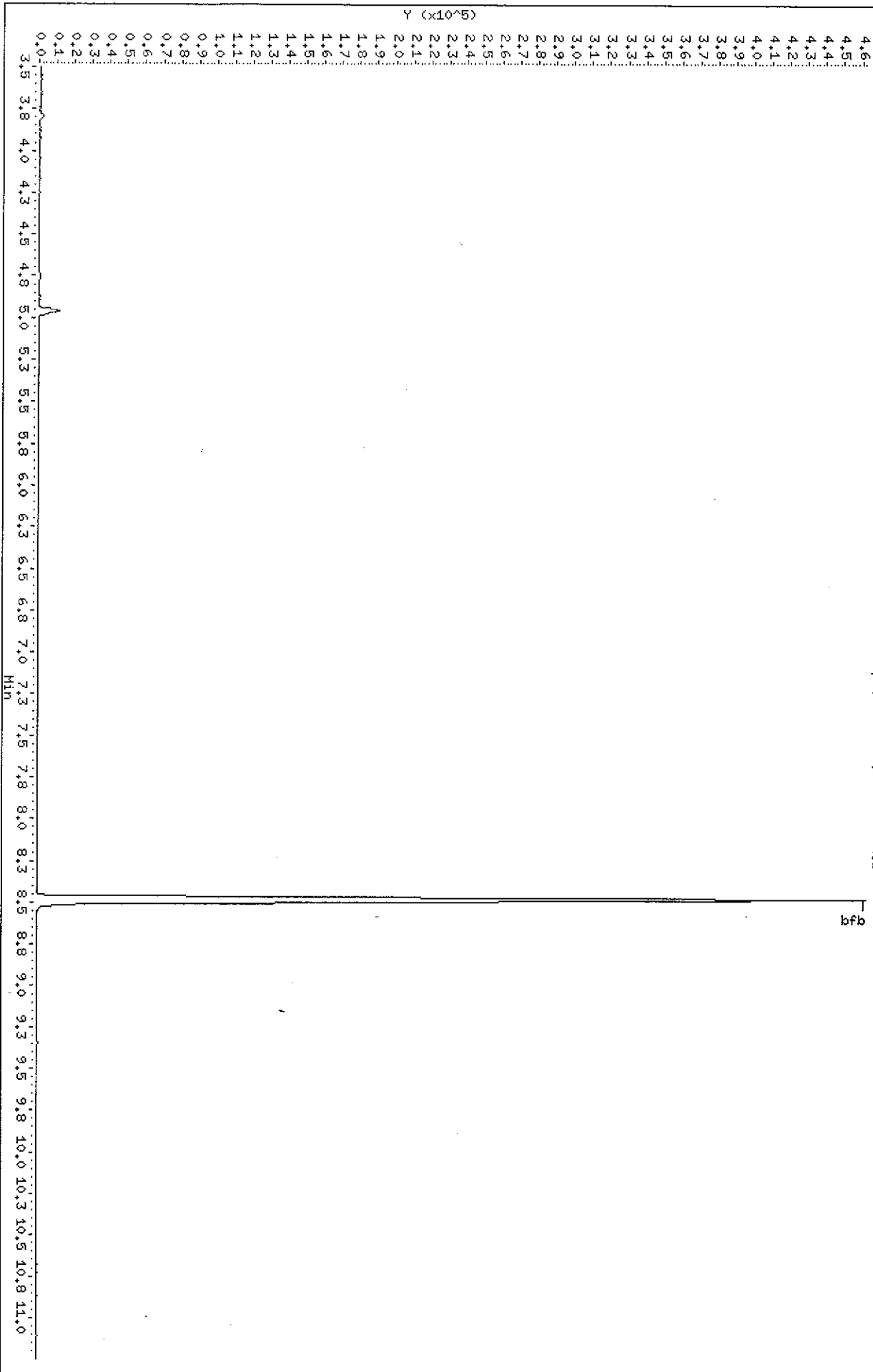
Instrument: hp5.i

Operator: 10099

Column diameter: 0.20

\\NPITPA02\chem\hp5.i\51004k.b\BF51004K.D

bfb



Date : 13-OCT-2000 05:48

Client ID: 50NGBFB

Instrument: hp5.i

Sample Info: BFB 192-192-2 50NG

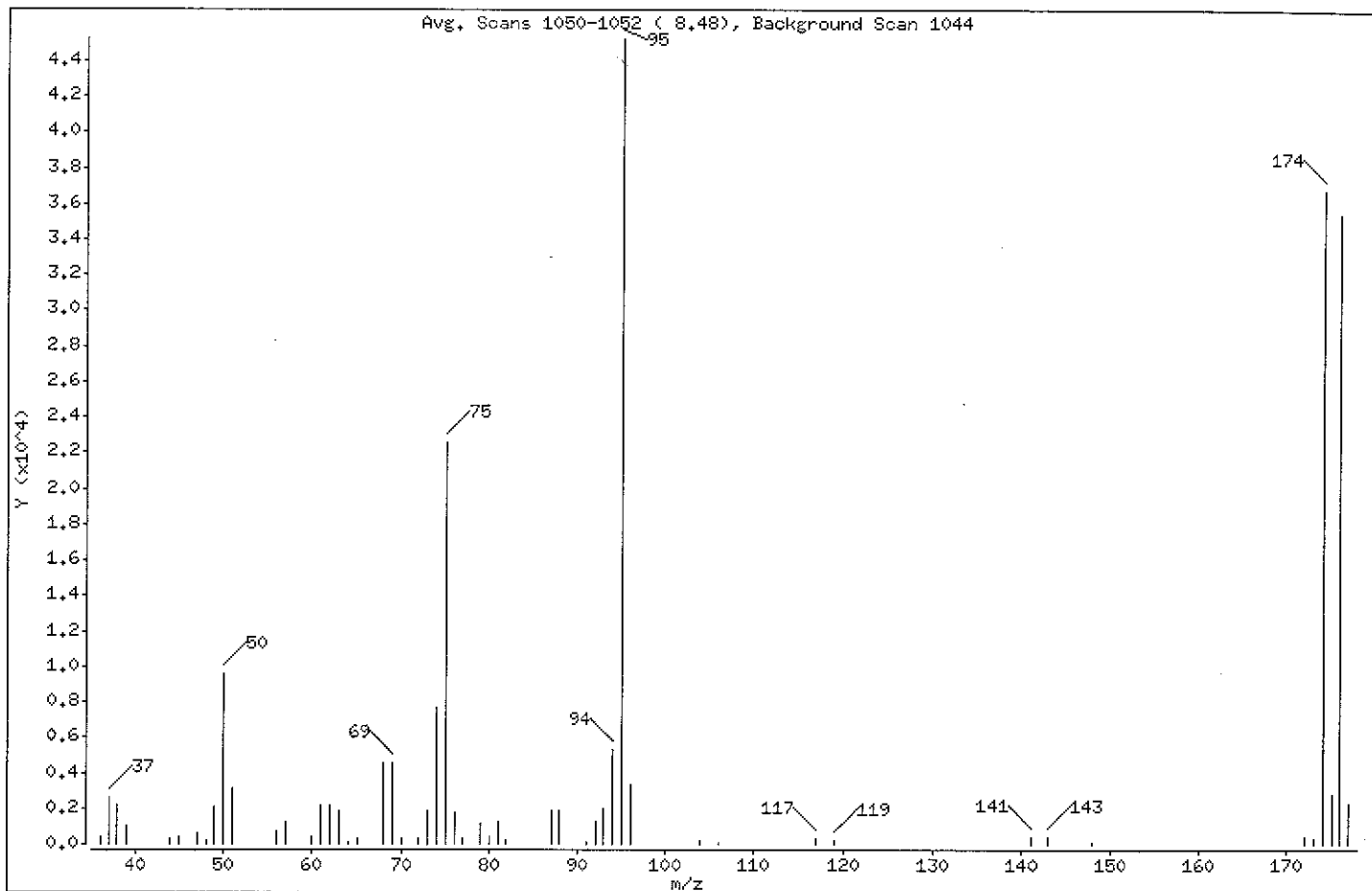
Volume Injected (UL): 2.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.20

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	21.14
75	30.00 - 66.00% of mass 95	49.83
96	5.00 - 9.00% of mass 95	7.39
173	Less than 2.00% of mass 174	0.71 (0.87)
174	50.00 - 120.00% of mass 95	81.33
175	4.00 - 9.00% of mass 174	6.29 (7.74)
176	93.00 - 101.00% of mass 174	78.30 (96.28)
177	5.00 - 9.00% of mass 176	4.95 (6.32)

Date : 13-OCT-2000 05:48

Client ID: 50NGBFB

Instrument: hp5.i

Sample Info: BFB 192-192-2 50NG

Volume Injected (uL): 2.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.20

Data File: BF51013.D

Spectrum: Avg. Scans 1050-1052 (8.48), Background Scan 1044

Location of Maximum: 95.00

Number of points: 53

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	413	61.00	2185	79.00	1170	117.00	261
37.00	2629	62.00	2161	80.00	381	119.00	166
38.00	2168	63.00	1837	81.00	1268	141.00	460
39.00	1060	64.00	76	82.00	256	143.00	382
44.00	351	65.00	308	87.00	1913	148.00	75
45.00	436	68.00	4541	88.00	1862	172.00	406
47.00	654	69.00	4552	91.00	67	173.00	321
48.00	200	70.00	361	92.00	1236	174.00	36784
49.00	2103	72.00	304	93.00	2024	175.00	2846
50.00	9564	73.00	1899	94.00	5304	176.00	35416
51.00	3078	74.00	7695	95.00	45232	177.00	2237
56.00	750	75.00	22536	96.00	3342		
57.00	1262	76.00	1797	104.00	178		
60.00	432	77.00	323	106.00	71		

Data File: \NQPITP002\chem\hp5.i\51013d.b\BF51013.D
Date: 13-OCT-2000 05:48

Client ID: 50NGCBFB

Sample Info: BFB 192-192-2 50NG

Volume Injected (uL): 2.0

Column phase: DB624 20m

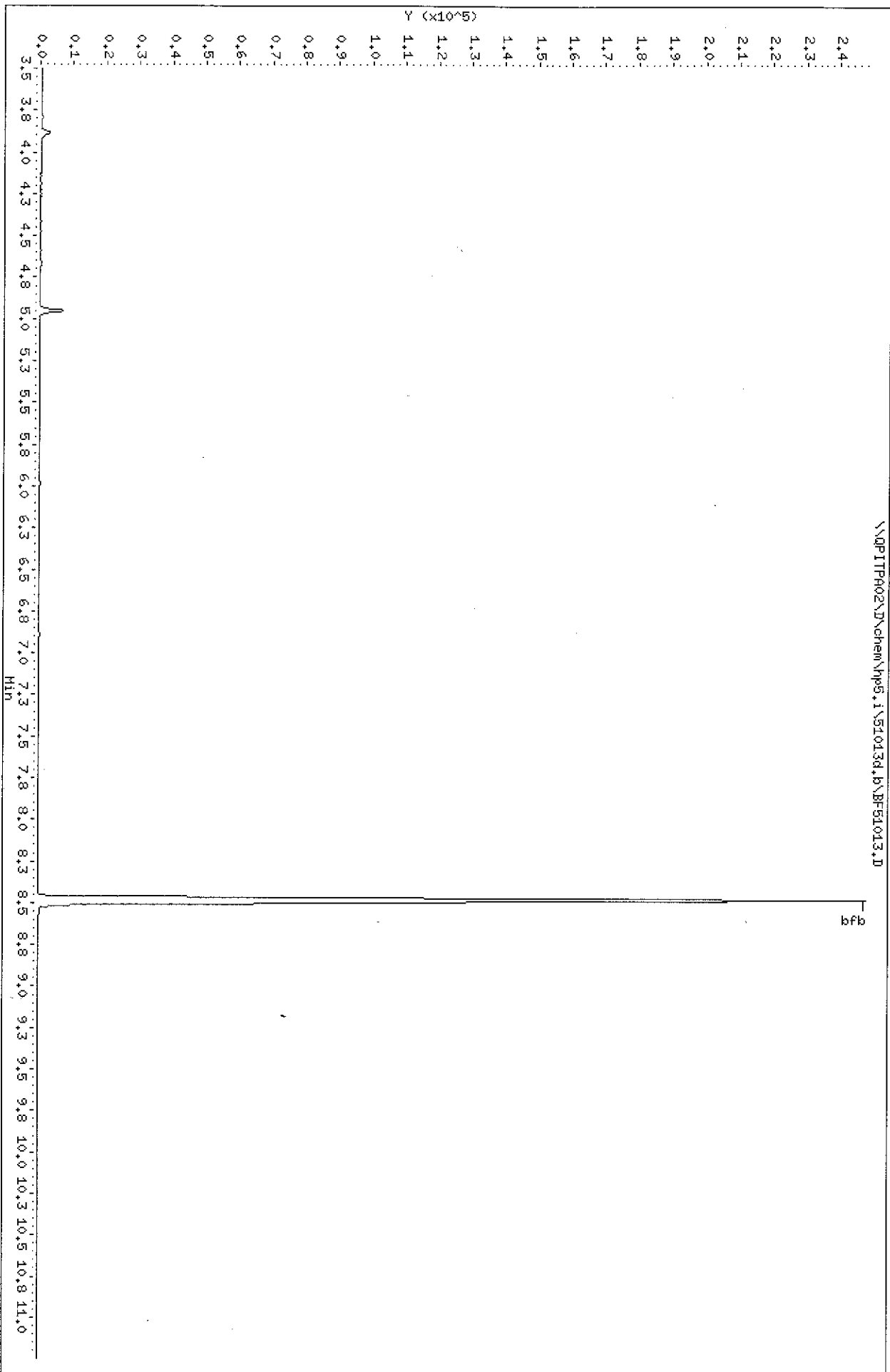
Instrument: hp5.i

Operator: 10099

Column diameter: 0.20

\NQPITP002\chem\hp5.i\51013d.b\BF51013.D

bfb



Date : 10-OCT-2000 13:56

Client ID: 50NGBFB

Instrument: hp5.i

Sample Info: BFB 192-192-2 50NG

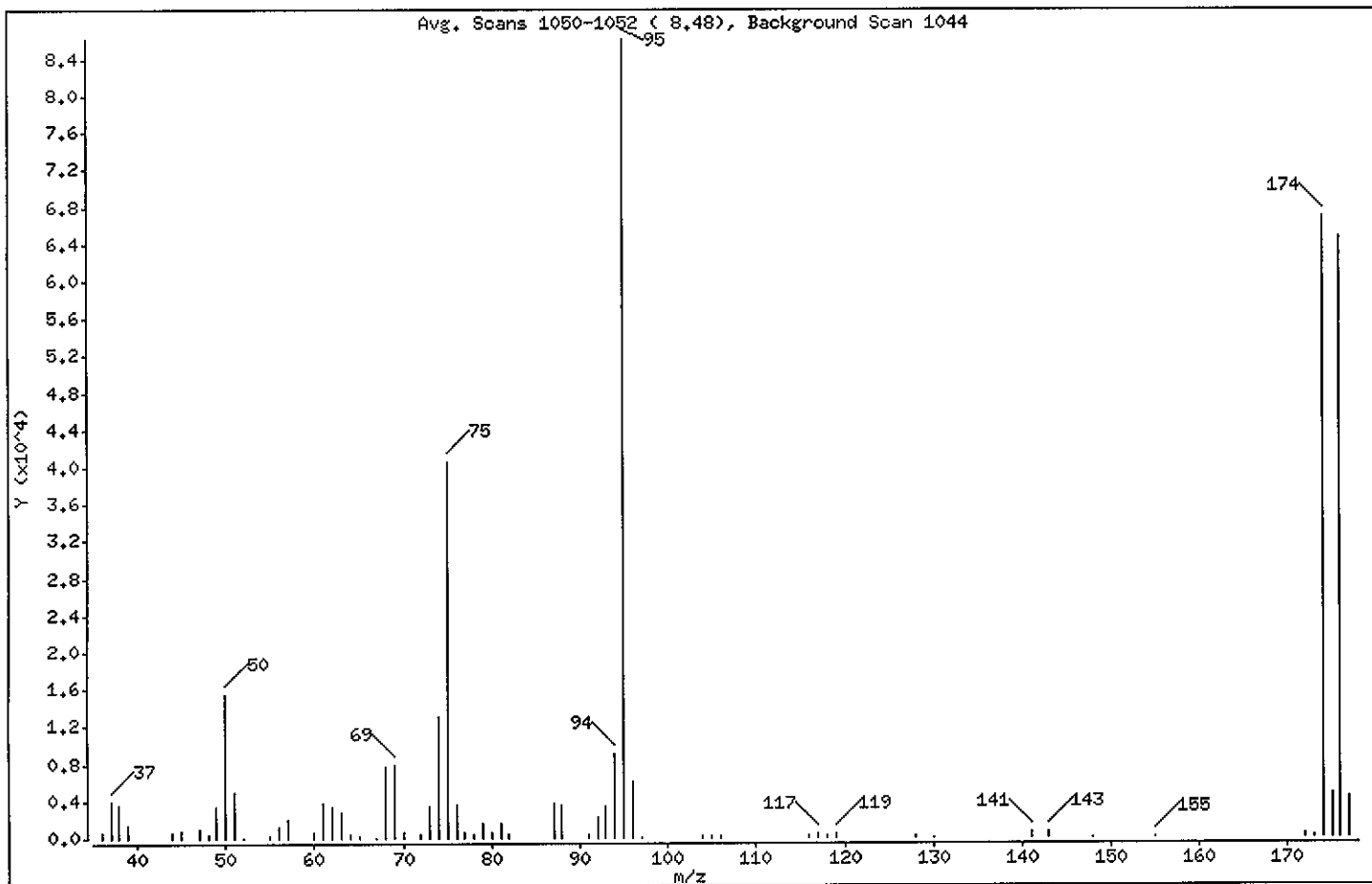
Volume Injected (uL): 2.0

Operator: 034635

Column phase: DB624 20m

Column diameter: 0.20

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	17.97
75	30.00 - 66.00% of mass 95	47.04
96	5.00 - 9.00% of mass 95	7.08
173	Less than 2.00% of mass 174	0.18 (0.23)
174	50.00 - 120.00% of mass 95	77.65
175	4.00 - 9.00% of mass 174	5.62 (7.24)
176	93.00 - 101.00% of mass 174	75.08 (96.69)
177	5.00 - 9.00% of mass 176	5.01 (6.68)

Date : 10-OCT-2000 13:56

Client ID: 50NGBFB

Instrument: hp5.i

Sample Info: BFB 192-192-2 50NG

Volume Injected (uL): 2.0

Operator: 034635

Column phase: DB624 20m

Column diameter: 0.20

Data File: BF51010N.D
Spectrum: Avg. Scans 1050-1052 (8.48), Background Scan 1044
Location of Maximum: 95.00
Number of points: 64

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	633	62.00	3360	81.00	1594	119.00	382
37.00	3921	63.00	2701	82.00	371	128.00	251
38.00	3511	64.00	321	87.00	3729	130.00	92
39.00	1392	65.00	197	88.00	3479	141.00	643
44.00	511	67.00	78	91.00	464	143.00	616
45.00	705	68.00	7737	92.00	2161	148.00	75
47.00	1049	69.00	7972	93.00	3390	155.00	80
48.00	492	70.00	653	94.00	9118	172.00	424
49.00	3331	72.00	488	95.00	86160	173.00	154
50.00	15486	73.00	3269	96.00	6102	174.00	66904
51.00	5050	74.00	13007	97.00	75	175.00	4845
52.00	67	75.00	40528	104.00	197	176.00	64688
55.00	156	76.00	3605	105.00	166	177.00	4319
56.00	1152	77.00	529	106.00	251		
57.00	2065	78.00	377	116.00	268		
60.00	691	79.00	1530	117.00	453		
61.00	3793	80.00	515	118.00	166		

Date : 10-OCT-2000 13:56

Client ID: 50N38FB

Sample Info: BFB 192-192-2 50NC

Volume Injected (uL): 2.0

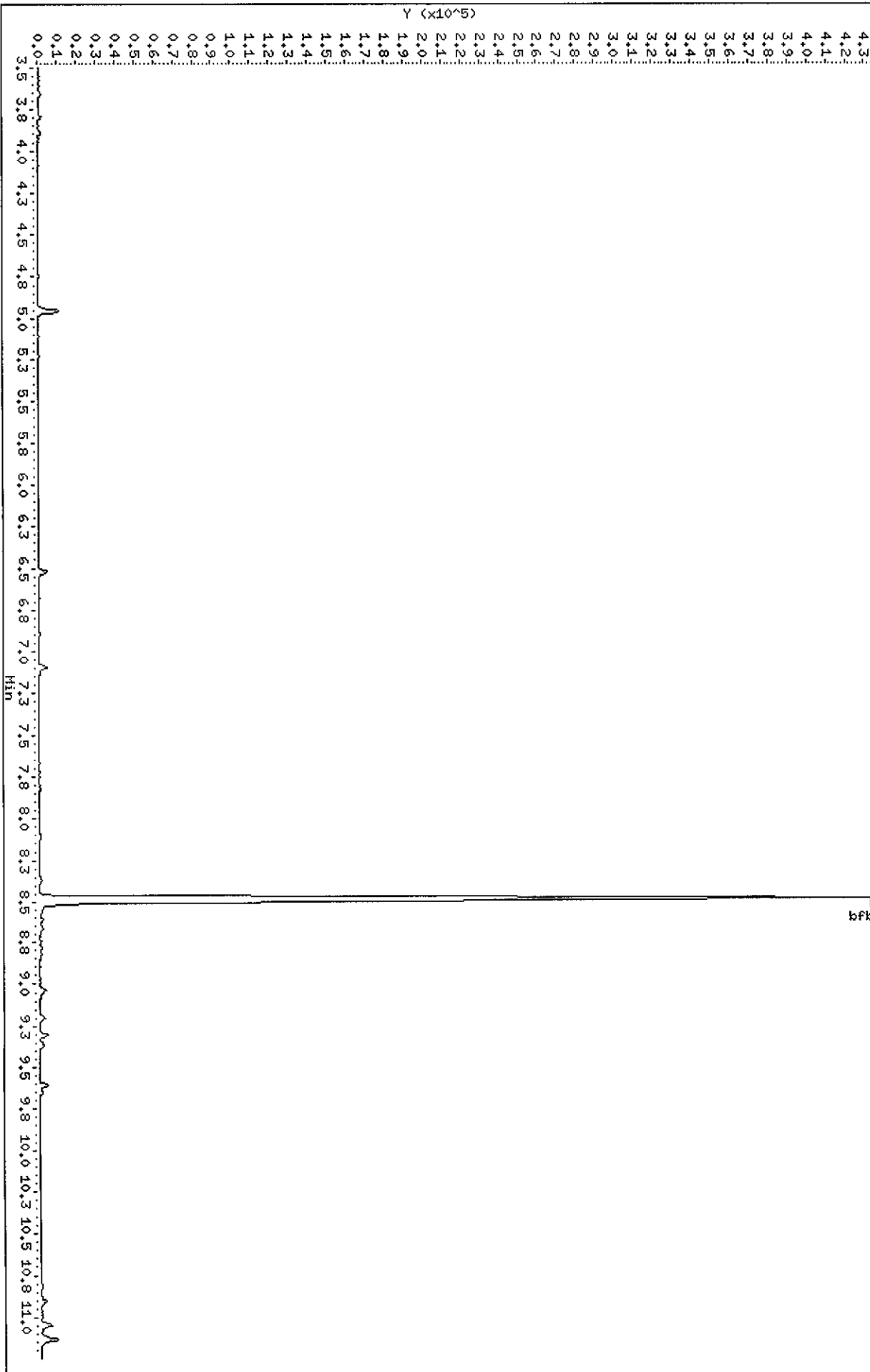
Column phase: DB624 20m

Instrument: hp5.i

Operator: 034635

Column diameter: 0.20

\\QPITPA02\N\chem\hp5.i\51010n.b\BF51010N.D



Date : 13-OCT-2000 09:40

Client ID: 50NCBFB

Instrument: hp5.i

Sample Info: BFB 192-192-2 50NC

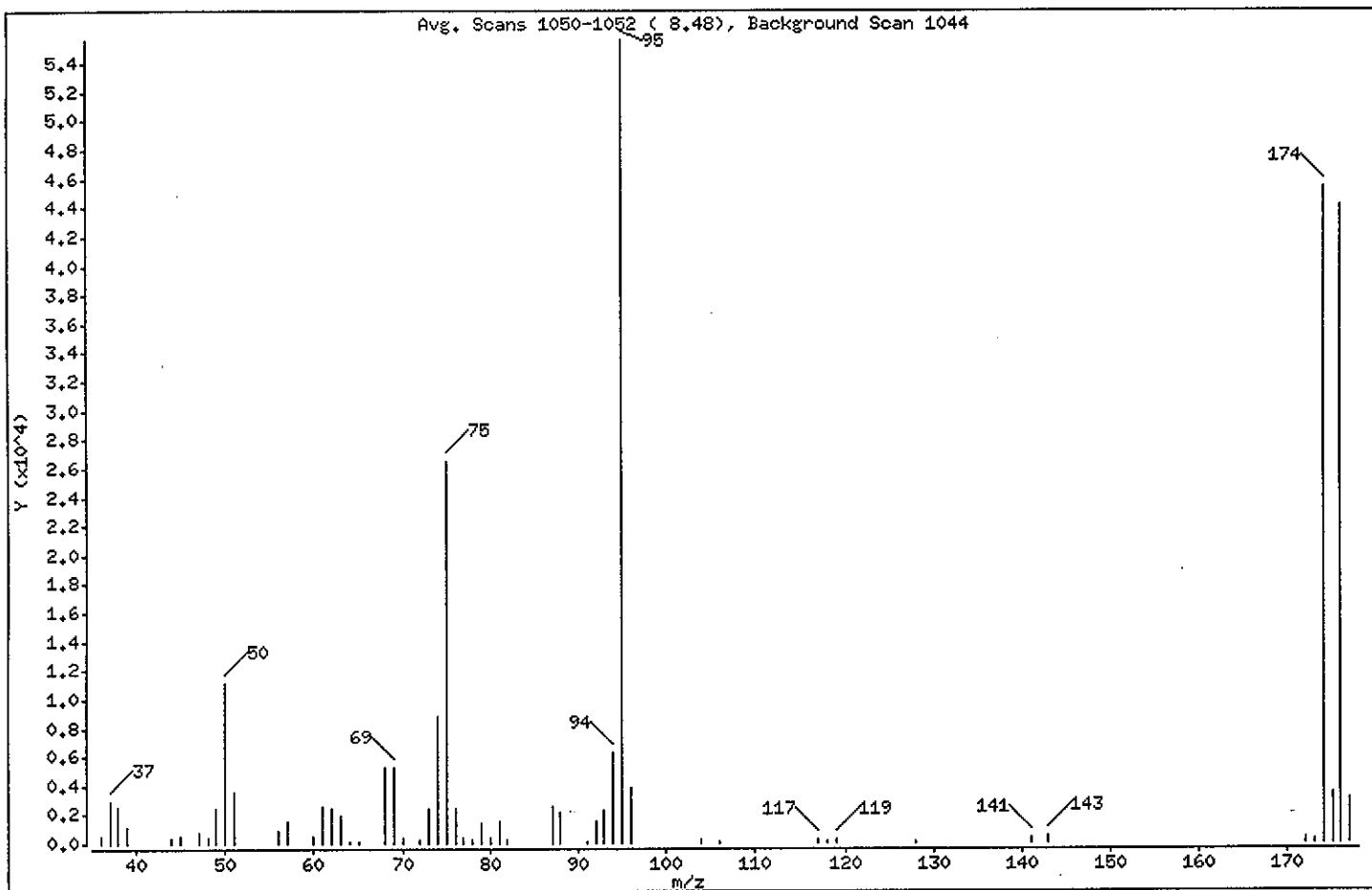
Volume Injected (uL): 2.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.20

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	20.03
75	30.00 - 66.00% of mass 95	47.52
96	5.00 - 9.00% of mass 95	7.00
173	Less than 2.00% of mass 174	0.54 (0.66)
174	50.00 - 120.00% of mass 95	81.61
175	4.00 - 9.00% of mass 174	6.12 (7.50)
176	93.00 - 101.00% of mass 174	79.33 (97.21)
177	5.00 - 9.00% of mass 176	5.51 (6.95)

Date : 13-OCT-2000 09:40

Client ID: 50NCBFB

Instrument: hp5.i

Sample Info: BFB 192-192-2 50NG

Volume Injected (uL): 2.0

Operator: 10099

Column phase: DB624 20m

Column diameter: 0.20

Data File: CF51013.D

Spectrum: Avg. Scans 1050-1052 (8.48), Background Scan 1044

Location of Maximum: 95.00

Number of points: 55

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	547	61.00	2597	78.00	235	106.00	90
37.00	2888	62.00	2451	79.00	1446	117.00	307
38.00	2572	63.00	1893	80.00	448	118.00	90
39.00	1123	64.00	158	81.00	1543	119.00	261
44.00	383	65.00	81	82.00	318	128.00	85
45.00	528	68.00	5235	87.00	2555	141.00	435
47.00	817	69.00	5310	88.00	2230	143.00	497
48.00	360	70.00	380	91.00	166	172.00	402
49.00	2456	72.00	254	92.00	1595	173.00	300
50.00	11157	73.00	2448	93.00	2285	174.00	45448
51.00	3526	74.00	8852	94.00	6327	175.00	3407
56.00	868	75.00	26456	95.00	55688	176.00	44176
57.00	1595	76.00	2384	96.00	3899	177.00	3069
60.00	537	77.00	368	104.00	239		

Data File: \\APIPA02\J\chem\hp5.i\51013k.b\CF51013.D

Date : 13-OCT-2000 09:40

Client ID: 50NGCB

Sample Info: BFB 192-192-2 50NG

Volume Injected (uL): 2.0

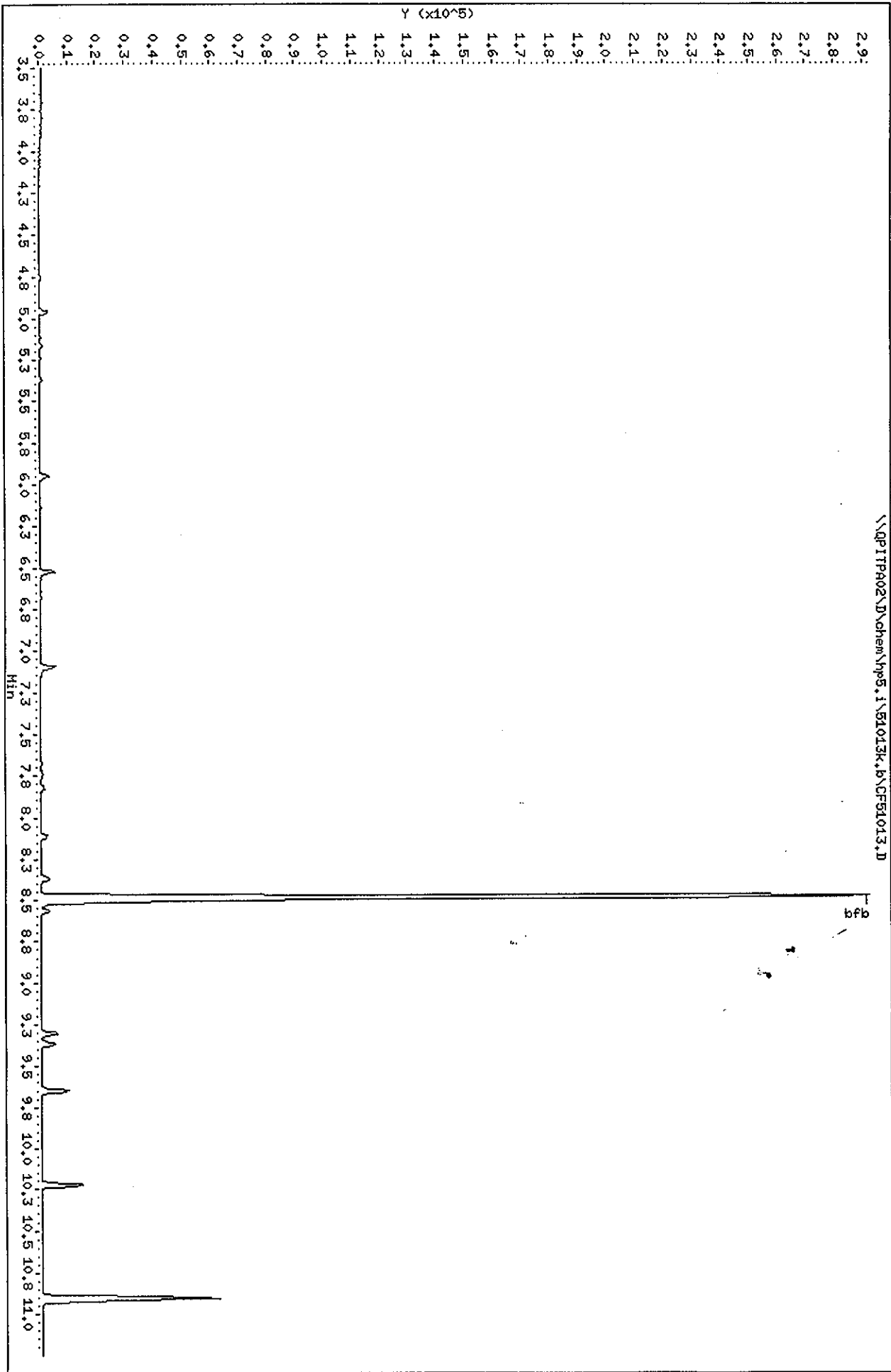
Column phase: DB624 20m

Instrument: hp5.i

Operator: 10099

Column diameter: 0.20

\\APIPA02\J\chem\hp5.i\51013k.b\CF51013.D



CUMMINGS-RITER CONSULTANTS INC
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0J100000 424
Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5 / g Date Received: 10/10/00
Work Order: DLVQC101 Date Extracted: 10/10/00
Dilution factor: 1 Date Analyzed: 10/10/00
Moisture %: NA

QC Batch: 0284424

Client Sample Id: INTRA-LAB BLANK

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/kg	Q
79-01-6	Trichloroethene	10	U

Date : 10-OCT-2000 18:17

Client ID: INTRA-LAB BLANK

Sample Info: vblk 5.0g/5ml

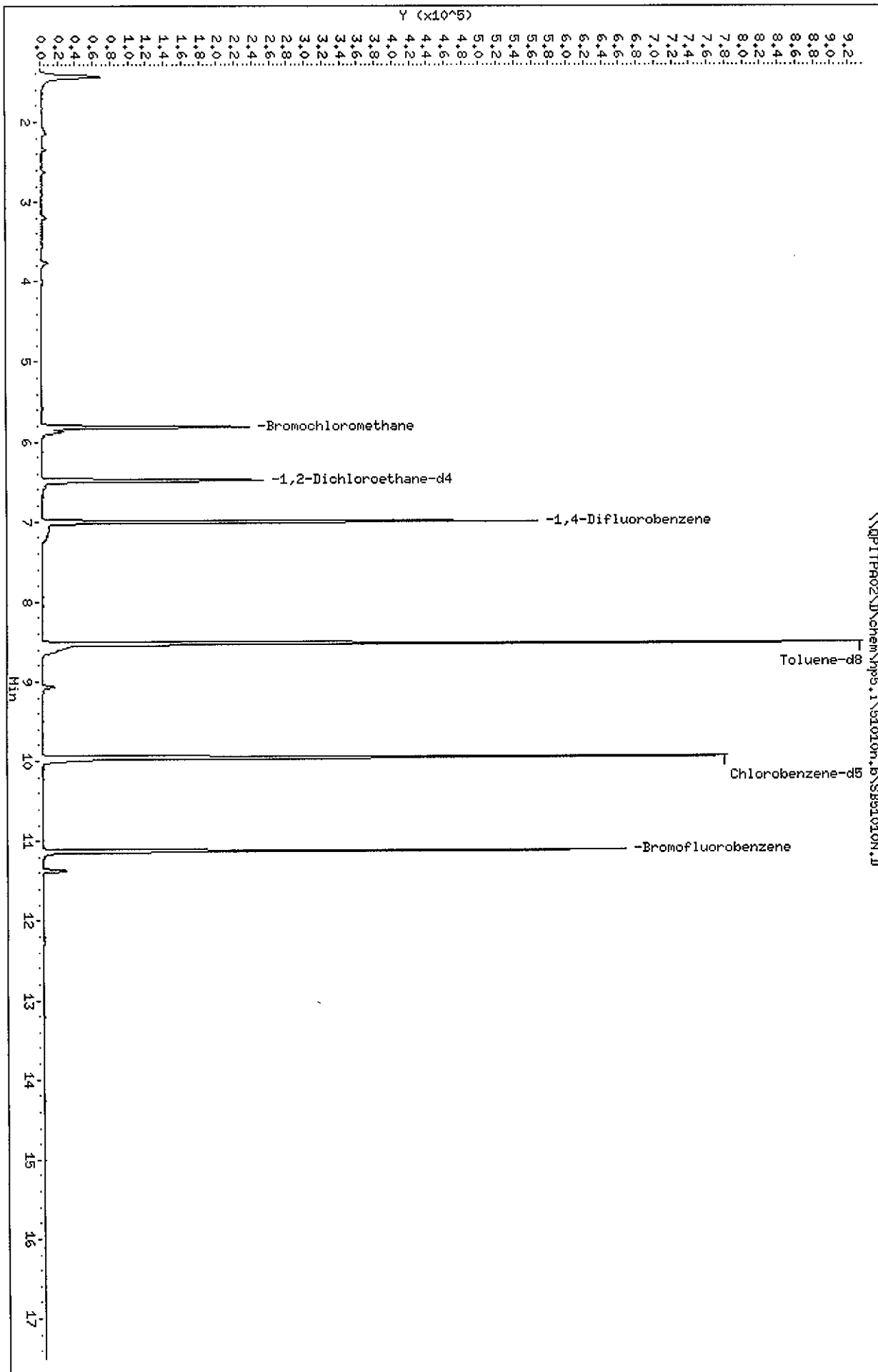
Purge Volume: 5.0

Column phase: DB624

Instrument: hp5.i

Operator: 034635

Column diameter: 0.20



STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51010n.b\SB51010N.D
Lab Smp Id: DLVQC101 Client Smp ID: INTRA-LAB BLANK
Inj Date : 10-OCT-2000 18:17 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : vblk 5.0g/5ml
Misc Info : dlvqc101,51010n.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51010n.b\clpsoil.m
Meth Date : 06-Oct-2000 16:39 Quant Type: ISTD
Cal Date : 10-OCT-2000 16:43 Cal File: CC51010N.D
Als bottle: 6 QC Sample: METHOD BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: $\text{Amt} * \text{DF} * 1/\text{Vo} * 100 / (100 - \text{M})$

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

Handwritten: 10/10/00

						CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ng)	(ug/kg)
=====		=====	==	=====	=====	=====	=====	=====
*	1 Bromochloromethane	128	5.817	5.801	(1.000)	72554	250.000	
*	2 1,4-Difluorobenzene	114	7.003	6.994	(1.000)	453031	250.000	
*	3 Chlorobenzene-d5	117	9.954	9.956	(1.000)	466367	250.000	
\$	4 1,2-Dichloroethane-d4	65	6.486	6.477	(1.115)	174842	236.100	47.22
\$	5 Toluene-d8	98	8.524	8.521	(0.856)	620729	271.712	54.34
\$	6 Bromofluorobenzene	95	11.122	11.136	(1.117)	225875	244.909	48.98
	7 Dichlorodifluoromethane	85	Compound Not Detected.					
	8 Chloromethane	50	Compound Not Detected.					
10	Bromomethane	94	Compound Not Detected.					
	9 Vinyl Chloride	62	Compound Not Detected.					
11	Chloroethane	64	Compound Not Detected.					
12	Trichlorofluoromethane	101	Compound Not Detected.					
15	1,1-Dichloroethene	96	Compound Not Detected.					
51	1,1,2-Trichloro-1,2,2-Trifluor	101	Compound Not Detected.					
14	Acetone	43	Compound Not Detected.					
17	Carbon Disulfide	76	Compound Not Detected.					

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/kg)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43				Compound Not Detected.		
16 Methylene Chloride	84				Compound Not Detected.		
82 Methyl tert-butyl ether	73				Compound Not Detected.		
19 trans-1,2-Dichloroethene	96				Compound Not Detected.		
21 1,1-Dichloroethane	63				Compound Not Detected.		
23 cis-1,2-dichloroethene	96				Compound Not Detected.		
M 81 1,2-Dichloroethene (total)	96				Compound Not Detected.		
22 2-Butanone	43				Compound Not Detected.		
24 Chloroform	83				Compound Not Detected.		
28 Benzene	78				Compound Not Detected.		
27 1,2-Dichloroethane	62				Compound Not Detected.		
25 1,1,1-Trichloroethane	97				Compound Not Detected.		
89 Cyclohexane	56				Compound Not Detected.		
26 Carbon Tetrachloride	117				Compound Not Detected.		
29 Trichloroethene	130				Compound Not Detected.		
30 1,2-Dichloropropane	63				Compound Not Detected.		
31 Bromodichloromethane	83				Compound Not Detected.		
90 Methyl Cyclohexane	83				Compound Not Detected.		
34 cis-1,3-Dichloropropene	75				Compound Not Detected.		
38 1,1,2-Trichloroethane	97				Compound Not Detected.		
40 Dibromochloromethane	129				Compound Not Detected.		
36 trans-1,3-Dichloropropene	75				Compound Not Detected.		
33 4-Methyl-2-pentanone	43				Compound Not Detected.		
37 2-Hexanone	43				Compound Not Detected.		
46 Bromoform	173				Compound Not Detected.		
39 Tetrachloroethene	164				Compound Not Detected.		
63 1,2-Dibromoethane	107				Compound Not Detected.		
47 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
35 Toluene	91				Compound Not Detected.		
41 Chlorobenzene	112				Compound Not Detected.		
42 Ethylbenzene	106				Compound Not Detected.		
45 Styrene	104				Compound Not Detected.		
43 m + p-Xylene	106				Compound Not Detected.		
44 Xylene-o	106				Compound Not Detected.		
M 80 Xylenes (total)	106				Compound Not Detected.		
91 Isopropylbenzene	105				Compound Not Detected.		
48 1,3-Dichlorobenzene	146				Compound Not Detected.		
49 1,4-Dichlorobenzene	146				Compound Not Detected.		
50 1,2-Dichlorobenzene	146				Compound Not Detected.		
69 1,2-Dibromo-3-chloropropane	75				Compound Not Detected.		
92 1,2,4-Trichlorobenzene	180				Compound Not Detected.		

CUMMINGS-RITER CONSULTANTS INC
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER Lab Sample ID: C0J130000 204

Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5 / mL Date Received: 10/05/00

Work Order: DM4C21AA Date Extracted: 10/13/00

Dilution factor: 1 Date Analyzed: 10/13/00

Moisture %: NA QC Batch: 0287204

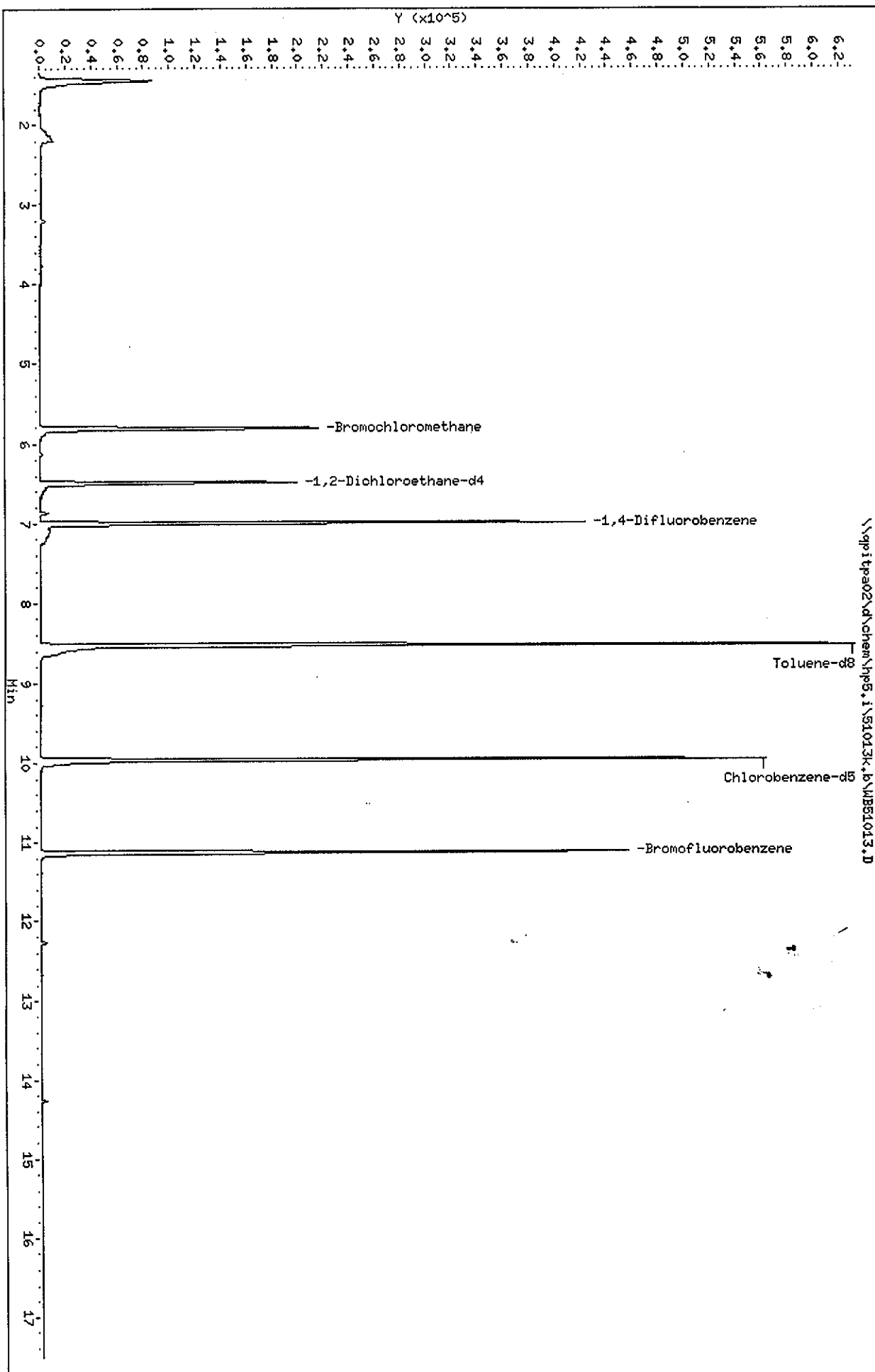
Client Sample Id: INTRA-LAB BLANK

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/L
79-01-6	Trichloroethene		

Data File: \\ppitpa02\chem\hp5.i\51013k.b\MB51013.D
Date : 13-OCT-2000 10:36

Client ID:
Sample Info: vblk 5ml
Purge Volume: 5.0
Column phase: DB624

Instrument: hp5.i
Operator: 10099
Column diameter: 0.53



STL - Pittsburgh

Volatile Report CLP OLM04.2 Method

Data file : \\qpitpa02\d\chem\hp5.i\51013k.b\WB51013.D

Lab Smp Id:

Inj Date : 13-OCT-2000 10:36

MS Autotune Date: 13-MAR-2000 09:53

Operator : 10099

Inst ID: hp5.i

Smp Info : vblk 5ml

Misc Info : ,51013k.b,clph2o.m,olm04.0.sub

Comment :

Method : \\QPITPA02\D\chem\hp5.i\51013k.b\clph2o.m

Meth Date : 13-Oct-2000 10:25 gordonk

Quant Type: ISTD

Cal Date : 13-OCT-2000 10:01

Cal File: 3C51013.D

Als bottle: 3

Dil Factor: 1.00000

Integrator: HP RTE

Compound Sublist: olm04.0.sub

Target Version: 4.04

Processing Host: PITPC076

KLG
10/13/00

Concentration Formula: Amt * DF * 1/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample volume

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(ug/L)
*****	----	--	-----	-----	-----	-----	-----
* 1 Bromochloromethane	128	5.815	5.809	(1.000)	63159	250.000	
* 2 1,4-Difluorobenzene	114	7.001	7.002	(1.000)	370417	250.000	
* 3 Chlorobenzene-d5	117	9.958	9.964	(1.000)	334558	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.484	6.485	(1.115)	140384	258.099	51.62
\$ 5 Toluene-d8	98	8.528	8.529	(0.856)	438955	228.983	45.80
\$ 6 Bromofluorobenzene	95	11.126	11.132	(1.117)	155867	226.037	45.21
7 Dichlorodifluoromethane	85	Compound Not Detected.					
8 Chloromethane	50	Compound Not Detected.					
10 Bromomethane	94	Compound Not Detected.					
9 Vinyl Chloride	62	Compound Not Detected.					
11 Chloroethane	64	Compound Not Detected.					
12 Trichlorofluoromethane	101	Compound Not Detected.					
15 1,1-Dichloroethene	96	Compound Not Detected.					
51 1,1,2 Trichloro-1,2,2-Trifluo	101	Compound Not Detected.					
14 Acetone	43	Compound Not Detected.					
17 Carbon Disulfide	76	Compound Not Detected.					
89 Methyl Acetate	43	Compound Not Detected.					

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/L)
-----	----	--	-----	-----	-----	-----	-----
16 Methylene Chloride	84				Compound Not Detected.		
82 Methyl tert-butyl ether	73				Compound Not Detected.		
19 trans-1,2-Dichloroethene	96				Compound Not Detected.		
21 1,1-Dichloroethane	63				Compound Not Detected.		
23 cis-1,2-dichloroethene	96				Compound Not Detected.		
M 81 1,2-Dichloroethene (total)	96				Compound Not Detected.		
22 2-Butanone	43				Compound Not Detected.		
24 Chloroform	83				Compound Not Detected.		
28 Benzene	78				Compound Not Detected.		
27 1,2-Dichloroethane	62				Compound Not Detected.		
25 1,1,1-Trichloroethane	97				Compound Not Detected.		
90 Cyclohexane	56				Compound Not Detected.		
26 Carbon Tetrachloride	117				Compound Not Detected.		
29 Trichloroethene	130				Compound Not Detected.		
30 1,2-Dichloropropane	63				Compound Not Detected.		
31 Bromodichloromethane	83				Compound Not Detected.		
91 Methyl Cyclohexane	83				Compound Not Detected.		
34 cis-1,3-Dichloropropene	75				Compound Not Detected.		
38 1,1,2-Trichloroethane	97				Compound Not Detected.		
40 Dibromochloromethane	129				Compound Not Detected.		
36 trans-1,3-Dichloropropene	75				Compound Not Detected.		
33 4-Methyl-2-pentanone	43				Compound Not Detected.		
37 2-Hexanone	43				Compound Not Detected.		
46 Bromoform	173				Compound Not Detected.		
39 Tetrachloroethene	164				Compound Not Detected.		
63 1,2-Dibromoethane	107				Compound Not Detected.		
47 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
35 Toluene	91				Compound Not Detected.		
41 Chlorobenzene	112				Compound Not Detected.		
42 Ethylbenzene	106				Compound Not Detected.		
45 Styrene	104				Compound Not Detected.		
43 m + p-Xylene	106				Compound Not Detected.		
44 Xylene-o	106				Compound Not Detected.		
M 80 Xylenes (total)	106				Compound Not Detected.		
92 Isopropylbenzene	105				Compound Not Detected.		
48 1,3-Dichlorobenzene	146				Compound Not Detected.		
49 1,4-Dichlorobenzene	146				Compound Not Detected.		
50 1,2-Dichlorobenzene	146				Compound Not Detected.		
69 1,2-Dibromo-3-chloropropane	75				Compound Not Detected.		
93 1,2,4 Trichlorobenzene	180				Compound Not Detected.		

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: COJ100187 001
Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.2 / g Date Received: 10/10/00
Work Order: DLVAC105 Date Extracted: 10/10/00
Dilution factor: 0.96 Date Analyzed: 10/10/00
Moisture %: 13

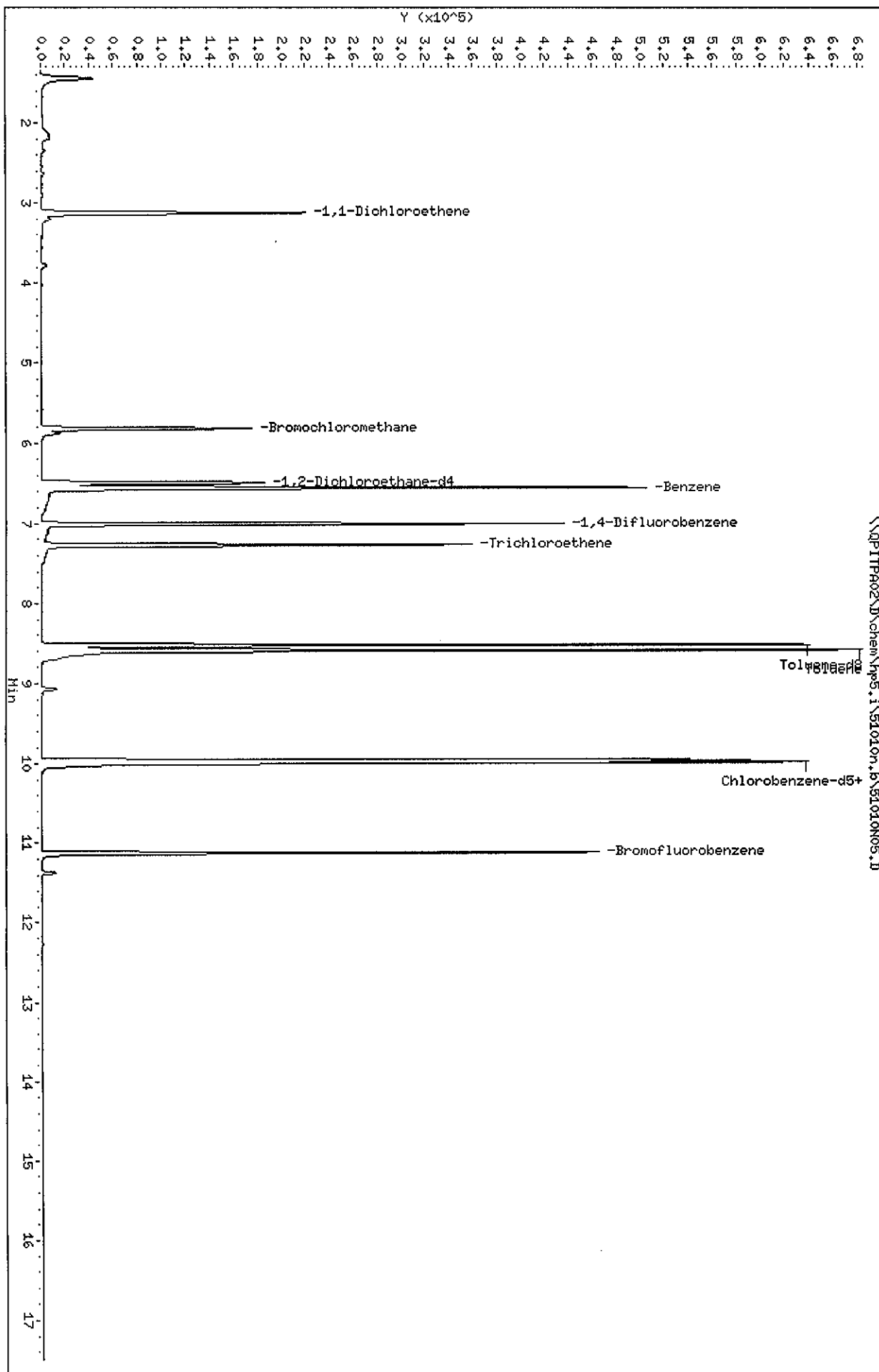
QC Batch: 0284424

Client Sample Id: PXS-5

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/kg
75-35-4	1,1-Dichloroethene	64.0	
71-43-2	Benzene	51.8	
108-88-3	Toluene	57.6	
108-90-7	Chlorobenzene	57.1	
79-01-6	Trichloroethene	51.5	

Data File: \\QPI1P02\\D\\chem\\hp5.i\\51010n.b\\51010N05.D
 Date: 10-OCT-2000 20:54
 Client ID: PXS-5
 Sample Info: c0j100187-001ms 5.20g/5ml
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hp5.i
 Operator: 034635
 Column diameter: 0.20



STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51010n.b\51010N05.D
Lab Smp Id: DLVAC105 Client Smp ID: PXS-5
Inj Date : 10-OCT-2000 20:54 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : c0j100187-001ms 5.20g/5ml
Misc Info : dlvac105,51010n.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51010n.b\clpsoil.m
Meth Date : 06-Oct-2000 16:39 Quant Type: ISTD
Cal Date : 10-OCT-2000 16:43 Cal File: CC51010N.D
Als bottle: 7 QC Sample: MS
Dil Factor: 0.96000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: $\text{Amt} * \text{DF} * 1/\text{Vo} * 100 / (100 - \text{M})$

Name	Value	Description
DF	0.960	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

Printed

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng)	(ug/kg)
* 1 Bromochloromethane		128	5.816	5.801	(1.000)	50883	250.000	
* 2 1,4-Difluorobenzene		114	7.002	6.994	(1.000)	365707	250.000	
* 3 Chlorobenzene-d5		117	9.959	9.956	(1.000)	335517	250.000	
\$ 4 1,2-Dichloroethane-d4		65	6.491	6.477	(1.116)	127676	245.838	49.17
\$ 5 Toluene-d8		98	8.529	8.521	(0.856)	442085	268.983	53.80
\$ 6 Bromofluorobenzene		95	11.121	11.136	(1.117)	160416	241.767	48.35
7 Dichlorodifluoromethane		85	Compound Not Detected.					
8 Chloromethane		50	Compound Not Detected.					
10 Bromomethane		94	Compound Not Detected.					
9 Vinyl Chloride		62	Compound Not Detected.					
11 Chloroethane		64	Compound Not Detected.					
12 Trichlorofluoromethane		101	Compound Not Detected.					
15 1,1-Dichloroethene		96	3.121	3.009	(0.537)	108483	291.801	56.02
51 1,1,2-Trichloro-1,2,2-Trifluor		101	Compound Not Detected.					
14 Acetone		43	Compound Not Detected.					
17 Carbon Disulfide		76	Compound Not Detected.					

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(ug/kg)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43				Compound Not Detected.		
16 Methylene Chloride	84				Compound Not Detected.		
82 Methyl tert-butyl ether	73				Compound Not Detected.		
19 trans-1,2-Dichloroethene	96				Compound Not Detected.		
21 1,1-Dichloroethane	63				Compound Not Detected.		
23 cis-1,2-dichloroethene	96				Compound Not Detected.		
M 81 1,2-Dichloroethene (total)	96				Compound Not Detected.		
22 2-Butanone	43				Compound Not Detected.		
24 Chloroform	83				Compound Not Detected.		
28 Benzene	78	6.552	6.531	(0.936)	466606	236.211	45.35
27 1,2-Dichloroethane	62				Compound Not Detected.		
25 1,1,1-Trichloroethane	97				Compound Not Detected.		
89 Cyclohexane	56				Compound Not Detected.		
26 Carbon Tetrachloride	117				Compound Not Detected.		
29 Trichloroethene	130	7.270	7.255	(1.038)	119656	234.419	45.01
30 1,2-Dichloropropane	63				Compound Not Detected.		
31 Bromodichloromethane	83				Compound Not Detected.		
90 Methyl Cyclohexane	83				Compound Not Detected.		
34 cis-1,3-Dichloropropene	75				Compound Not Detected.		
38 1,1,2-Trichloroethane	97				Compound Not Detected.		
40 Dibromochloromethane	129				Compound Not Detected.		
36 trans-1,3-Dichloropropene	75				Compound Not Detected.		
33 4-Methyl-2-pentanone	43				Compound Not Detected.		
37 2-Hexanone	43				Compound Not Detected.		
46 Bromoform	173				Compound Not Detected.		
39 Tetrachloroethene	164				Compound Not Detected.		
63 1,2-Dibromoethane	107				Compound Not Detected.		
47 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
35 Toluene	91	8.590	8.587	(0.863)	503736	262.362	50.37
41 Chlorobenzene	112	9.989	9.987	(1.003)	325485	260.327	49.98
42 Ethylbenzene	106				Compound Not Detected.		
45 Styrene	104				Compound Not Detected.		
43 m + p-Xylene	106				Compound Not Detected.		
44 Xylene-o	106				Compound Not Detected.		
M 80 Xylenes (total)	106				Compound Not Detected.		
91 Isopropylbenzene	105				Compound Not Detected.		
48 1,3-Dichlorobenzene	146				Compound Not Detected.		
49 1,4-Dichlorobenzene	146				Compound Not Detected.		
50 1,2-Dichlorobenzene	146				Compound Not Detected.		
69 1,2-Dibromo-3-chloropropane	75				Compound Not Detected.		
92 1,2,4-Trichlorobenzene	180				Compound Not Detected.		

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) SOLID

Lab Sample ID: C0J100187 001

Method: OCLP OLM04.2

Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.23 / g

Date Received: 10/10/00

Work Order: DLVAC106

Date Extracted: 10/10/00

Dilution factor: 0.96

Date Analyzed: 10/10/00

Moisture %: 13

QC Batch: 0284424

Client Sample Id: PXS-5

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/kg
75-35-4	1,1-Dichloroethene	61.2	
71-43-2	Benzene	51.8	
108-88-3	Toluene	55.6	
108-90-7	Chlorobenzene	54.6	
79-01-6	Trichloroethene	52.6	

Date : 10-OCT-2000 21:22

Client ID: PXS-5

Sample Info: c0j100187-001msd 5.23g/5ml

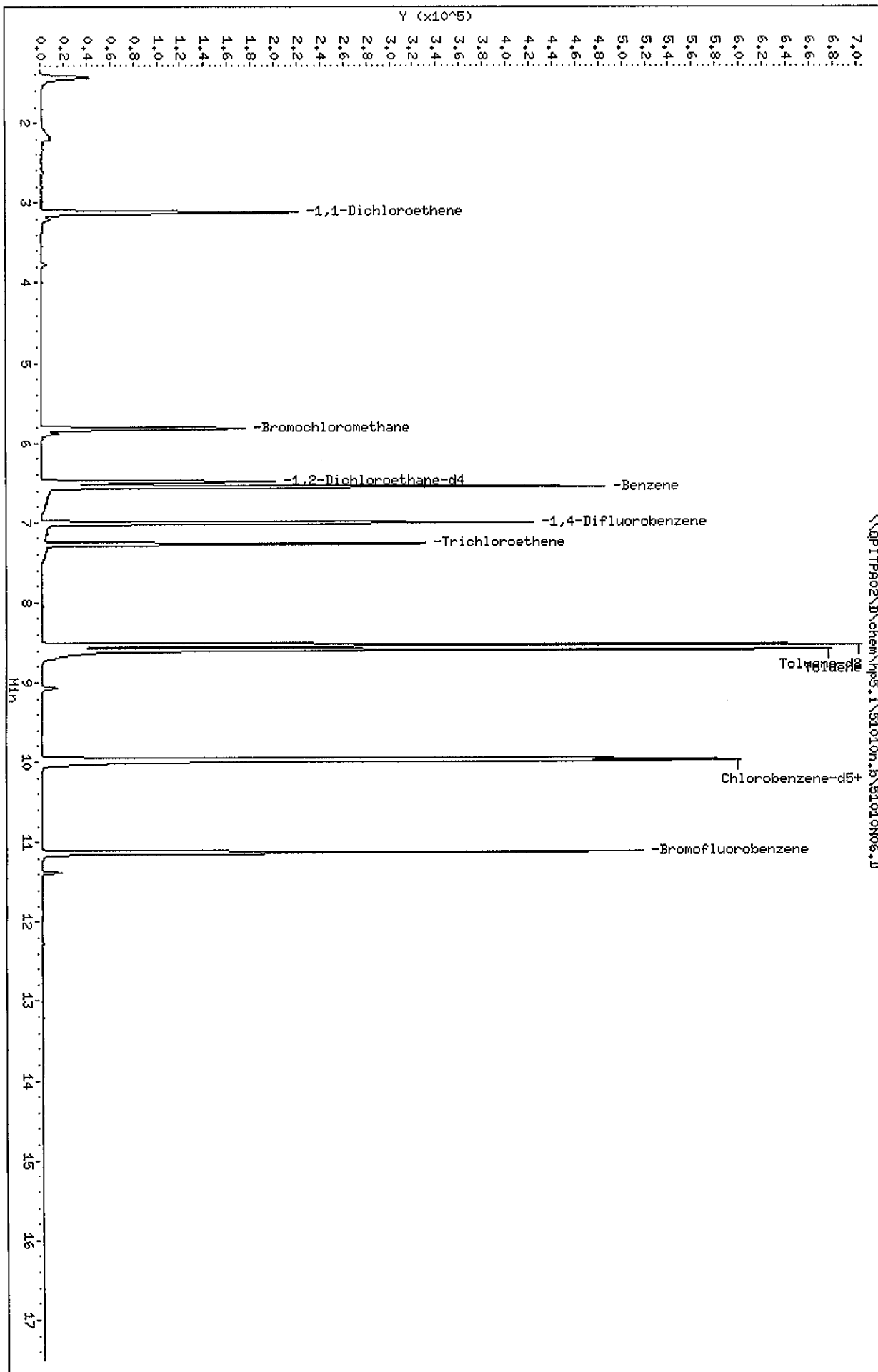
Purge Volume: 5.0

Column phase: DB624

Instrument: hp5.i

Operator: 034635

Column diameter: 0.20



STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51010n.b\51010N06.D
Lab Smp Id: DLVAC106 Client Smp ID: PXS-5
Inj Date : 10-OCT-2000 21:22 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : c0j100187-001msd 5.23g/5ml
Misc Info : dlvac106,51010n.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51010n.b\clpsoil.m
Meth Date : 06-Oct-2000 16:39 Quant Type: ISTD
Cal Date : 10-OCT-2000 16:43 Cal File: CC51010N.D
Als bottle: 8 QC Sample: MSD
Dil Factor: 0.96000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: $\text{Amt} * \text{DF} * 1/\text{Vo} * 100 / (100 - \text{M})$

Name	Value	Description
DF	0.960	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

011010/10/10

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN	FINAL
							(ng)	(ug/kg)
* 1 Bromochloromethane		128	5.820	5.801	(1.000)	51241	250.000	
* 2 1,4-Difluorobenzene		114	7.006	6.994	(1.000)	348419	250.000	
* 3 Chlorobenzene-d5		117	9.957	9.956	(1.000)	333268	250.000	
\$ 4 1,2-Dichloroethane-d4		65	6.489	6.477	(1.115)	135172	258.453	51.69
\$ 5 Toluene-d8		98	8.527	8.521	(0.856)	466680	285.864	57.17
\$ 6 Bromofluorobenzene		95	11.125	11.136	(1.117)	171893	260.812	52.16
7 Dichlorodifluoromethane		85				Compound Not Detected.		
8 Chloromethane		50				Compound Not Detected.		
10 Bromomethane		94				Compound Not Detected.		
9 Vinyl Chloride		62				Compound Not Detected.		
11 Chloroethane		64				Compound Not Detected.		
12 Trichlorofluoromethane		101				Compound Not Detected.		
15 1,1-Dichloroethene		96	3.119	3.009	(0.536)	104358	278.744	53.52
51 1,1,2-Trichloro-1,2,2-Trifluor		101				Compound Not Detected.		
14 Acetone		43				Compound Not Detected.		
17 Carbon Disulfide		76				Compound Not Detected.		

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(ug/kg)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43		Compound	Not Detected.			
16 Methylene Chloride	84		Compound	Not Detected.			
82 Methyl tert-butyl ether	73		Compound	Not Detected.			
19 trans-1,2-Dichloroethene	96		Compound	Not Detected.			
21 1,1-Dichloroethane	63		Compound	Not Detected.			
23 cis-1,2-dichloroethene	96		Compound	Not Detected.			
M 81 1,2-Dichloroethene (total)	96		Compound	Not Detected.			
22 2-Butanone	43		Compound	Not Detected.			
24 Chloroform	83		Compound	Not Detected.			
28 Benzene	78	6.550	6.531	(0.935)	444246	236.050	45.32
27 1,2-Dichloroethane	62		Compound	Not Detected.			
25 1,1,1-Trichloroethane	97		Compound	Not Detected.			
89 Cyclohexane	56		Compound	Not Detected.			
26 Carbon Tetrachloride	117		Compound	Not Detected.			
29 Trichloroethene	130	7.274	7.255	(1.038)	116480	239.520	45.99
30 1,2-Dichloropropane	63		Compound	Not Detected.			
31 Bromodichloromethane	83		Compound	Not Detected.			
90 Methyl Cyclohexane	83		Compound	Not Detected.			
34 cis-1,3-Dichloropropene	75		Compound	Not Detected.			
38 1,1,2-Trichloroethane	97		Compound	Not Detected.			
40 Dibromochloromethane	129		Compound	Not Detected.			
36 trans-1,3-Dichloropropene	75		Compound	Not Detected.			
33 4-Methyl-2-pentanone	43		Compound	Not Detected.			
37 2-Hexanone	43		Compound	Not Detected.			
46 Bromoform	173		Compound	Not Detected.			
39 Tetrachloroethene	164		Compound	Not Detected.			
63 1,2-Dibromoethane	107		Compound	Not Detected.			
47 1,1,2,2-Tetrachloroethane	83		Compound	Not Detected.			
35 Toluene	91	8.594	8.587	(0.863)	483023	253.272	48.63
41 Chlorobenzene	112	9.987	9.987	(1.003)	308728	248.591	47.73
42 Ethylbenzene	106		Compound	Not Detected.			
45 Styrene	104		Compound	Not Detected.			
43 m + p-Xylene	106		Compound	Not Detected.			
44 Xylene-o	106		Compound	Not Detected.			
M 80 Xylenes (total)	106		Compound	Not Detected.			
91 Isopropylbenzene	105		Compound	Not Detected.			
48 1,3-Dichlorobenzene	146		Compound	Not Detected.			
49 1,4-Dichlorobenzene	146		Compound	Not Detected.			
50 1,2-Dichlorobenzene	146		Compound	Not Detected.			
69 1,2-Dibromo-3-chloropropane	75		Compound	Not Detected.			
92 1,2,4-Trichlorobenzene	180		Compound	Not Detected.			

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0J100187 003
Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.11 / g Date Received: 10/10/00
Work Order: DLVAE105 Date Extracted: 10/10/00
Dilution factor: 0.98 Date Analyzed: 10/10/00
Moisture %: 9.9

QC Batch: 0284424

Client Sample Id: PXB-36

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/kg	Q
75-35-4	1,1-Dichloroethene	54.4	
71-43-2	Benzene	48.3	
108-88-3	Toluene	50.8	
108-90-7	Chlorobenzene	51.3	
79-01-6	Trichloroethene	46.5	

Date: 10-OCT-2000 21:48

Client ID: PXB-36

Sample Info: 00100187-003ms 5.11g/5ml

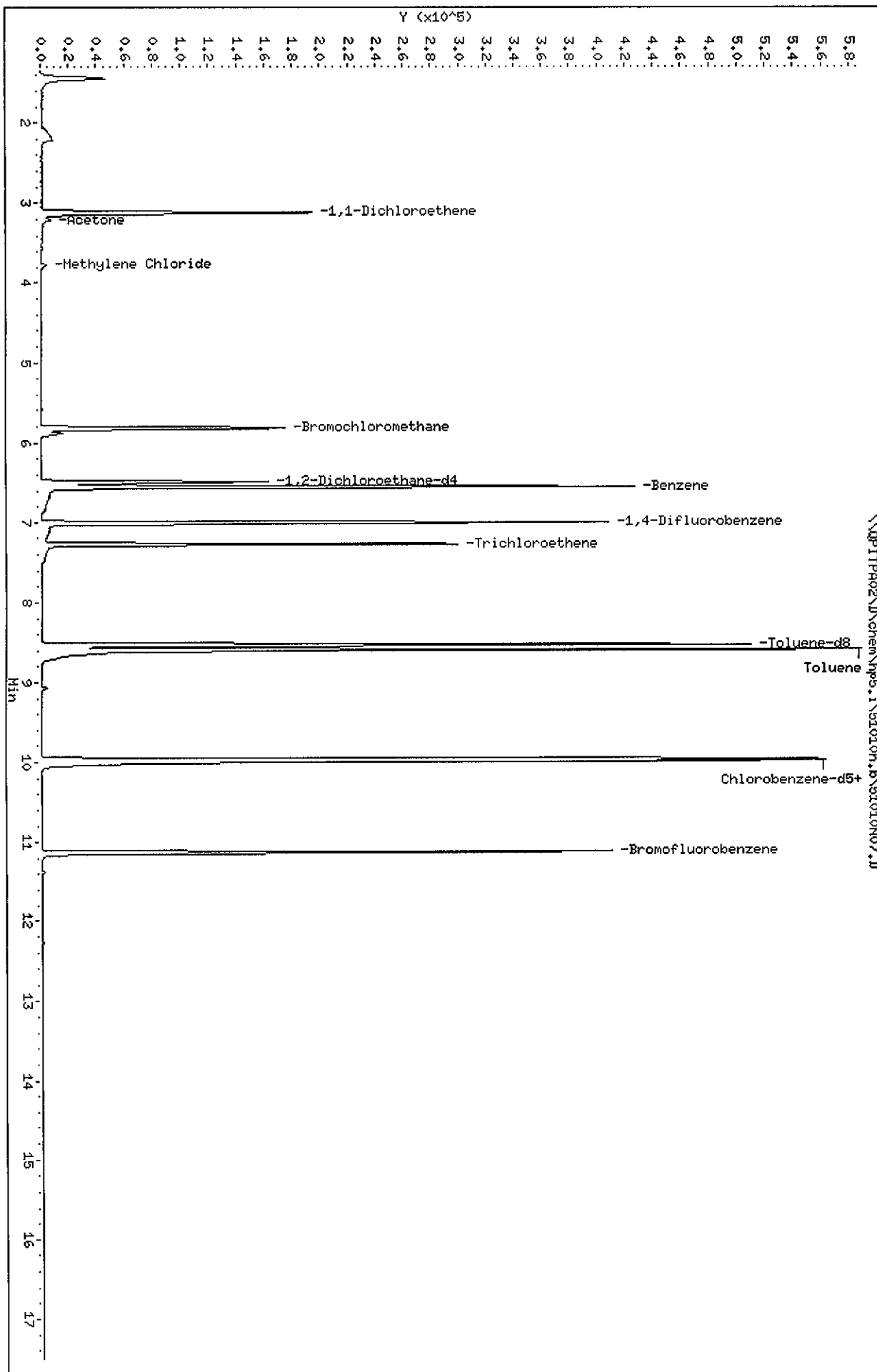
Purge Volume: 5.0

Column phase: DB624

Instrument: hp5.i

Operator: 034635

Column diameter: 0.20



STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51010n.b\51010N07.D
Lab Smp Id: DLVAE105 Client Smp ID: PXB-36
Inj Date : 10-OCT-2000 21:48 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : c0j100187-003ms 5.11g/5ml
Misc Info : dlvae105,51010n.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51010n.b\clpsoil.m
Meth Date : 06-Oct-2000 16:39 Quant Type: ISTD
Cal Date : 10-OCT-2000 16:43 Cal File: CC51010N.D
Als bottle: 10 QC Sample: MS
Dil Factor: 0.98000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: Amt * DF * 1/Vo*100/(100-M)

Name	Value	Description
DF	0.980	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

pu 10/10/00

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ng)	FINAL (ug/kg)
*****	****	==	=====	=====	=====	=====	=====
* 1 Bromochloromethane	128	5.820	5.801	(1.000)	50275	250.000	
* 2 1,4-Difluorobenzene	114	7.006	6.994	(1.000)	319903	250.000	
* 3 Chlorobenzene-d5	117	9.962	9.956	(1.000)	321081	250.000	
\$ 4 1,2-Dichloroethane-d4	65	6.489	6.477	(1.115)	114733	223.588	44.72
\$ 5 Toluene-d8	98	8.527	8.521	(0.856)	347446	220.906	44.18
\$ 6 Bromofluorobenzene	95	11.124	11.136	(1.117)	132300	208.357	41.67
7 Dichlorodifluoromethane	85	Compound Not Detected.					
8 Chloromethane	50	Compound Not Detected.					
10 Bromomethane	94	Compound Not Detected.					
9 Vinyl Chloride	62	Compound Not Detected.					
11 Chloroethane	64	Compound Not Detected.					
12 Trichlorofluoromethane	101	Compound Not Detected.					
15 1,1-Dichloroethene	96	3.119	3.009	(0.536)	91890	250.157	49.03
51 1,1,2-Trichloro-1,2,2-Trifluor	101	Compound Not Detected.					
14 Acetone	43	3.204	3.277	(0.551)	7852	27.1829	5.328
17 Carbon Disulfide	76	Compound Not Detected.					

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ng)	(ug/kg)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43				Compound Not Detected.		
16 Methylene Chloride	84	3.776	3.727	(0.649)	2395	10.7346	2.104
82 Methyl tert-butyl ether	73				Compound Not Detected.		
19 trans-1,2-Dichloroethene	96				Compound Not Detected.		
21 1,1-Dichloroethane	63				Compound Not Detected.		
23 cis-1,2-dichloroethene	96				Compound Not Detected.		
M 81 1,2-Dichloroethene (total)	96				Compound Not Detected.		
22 2-Butanone	43				Compound Not Detected.		
24 Chloroform	83				Compound Not Detected.		
28 Benzene	78	6.556	6.531	(0.936)	383353	221.852	43.48
27 1,2-Dichloroethane	62				Compound Not Detected.		
25 1,1,1-Trichloroethane	97				Compound Not Detected.		
89 Cyclohexane	56				Compound Not Detected.		
26 Carbon Tetrachloride	117				Compound Not Detected.		
29 Trichloroethene	130	7.274	7.255	(1.038)	95344	213.534	41.85
30 1,2-Dichloropropane	63				Compound Not Detected.		
31 Bromodichloromethane	83				Compound Not Detected.		
90 Methyl Cyclohexane	83				Compound Not Detected.		
34 cis-1,3-Dichloropropene	75				Compound Not Detected.		
38 1,1,2-Trichloroethane	97				Compound Not Detected.		
40 Dibromochloromethane	129				Compound Not Detected.		
36 trans-1,3-Dichloropropene	75				Compound Not Detected.		
33 4-Methyl-2-pentanone	43				Compound Not Detected.		
37 2-Hexanone	43				Compound Not Detected.		
46 Bromoform	173				Compound Not Detected.		
39 Tetrachloroethene	164				Compound Not Detected.		
63 1,2-Dibromoethane	107				Compound Not Detected.		
47 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
35 Toluene	91	8.594	8.587	(0.863)	428732	233.337	45.73
41 Chlorobenzene	112	9.987	9.987	(1.002)	282232	235.882	46.23
42 Ethylbenzene	106				Compound Not Detected.		
45 Styrene	104				Compound Not Detected.		
43 m + p-Xylene	106				Compound Not Detected.		
44 Xylene-o	106				Compound Not Detected.		
M 80 Xylenes (total)	106				Compound Not Detected.		
91 Isopropylbenzene	105				Compound Not Detected.		
48 1,3-Dichlorobenzene	146				Compound Not Detected.		
49 1,4-Dichlorobenzene	146				Compound Not Detected.		
50 1,2-Dichlorobenzene	146				Compound Not Detected.		
69 1,2-Dibromo-3-chloropropane	75				Compound Not Detected.		
92 1,2,4-Trichlorobenzene	180				Compound Not Detected.		

CUMMINGS-RITER CONSULTANTS INC
MATRIX SPIKE DUPLICATE COMPOUNDS

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

Matrix: (soil/water) SOLID Lab Sample ID: C0J100187 003
Method: OCLP OLM04.2
Volatile Organic Compounds - CLP (OLM04.2)

Sample WT/Vol: 5.09 / g Date Received: 10/10/00
Work Order: DLVAE106 Date Extracted: 10/10/00
Dilution factor: 0.98 Date Analyzed: 10/10/00
Moisture %: 9.9

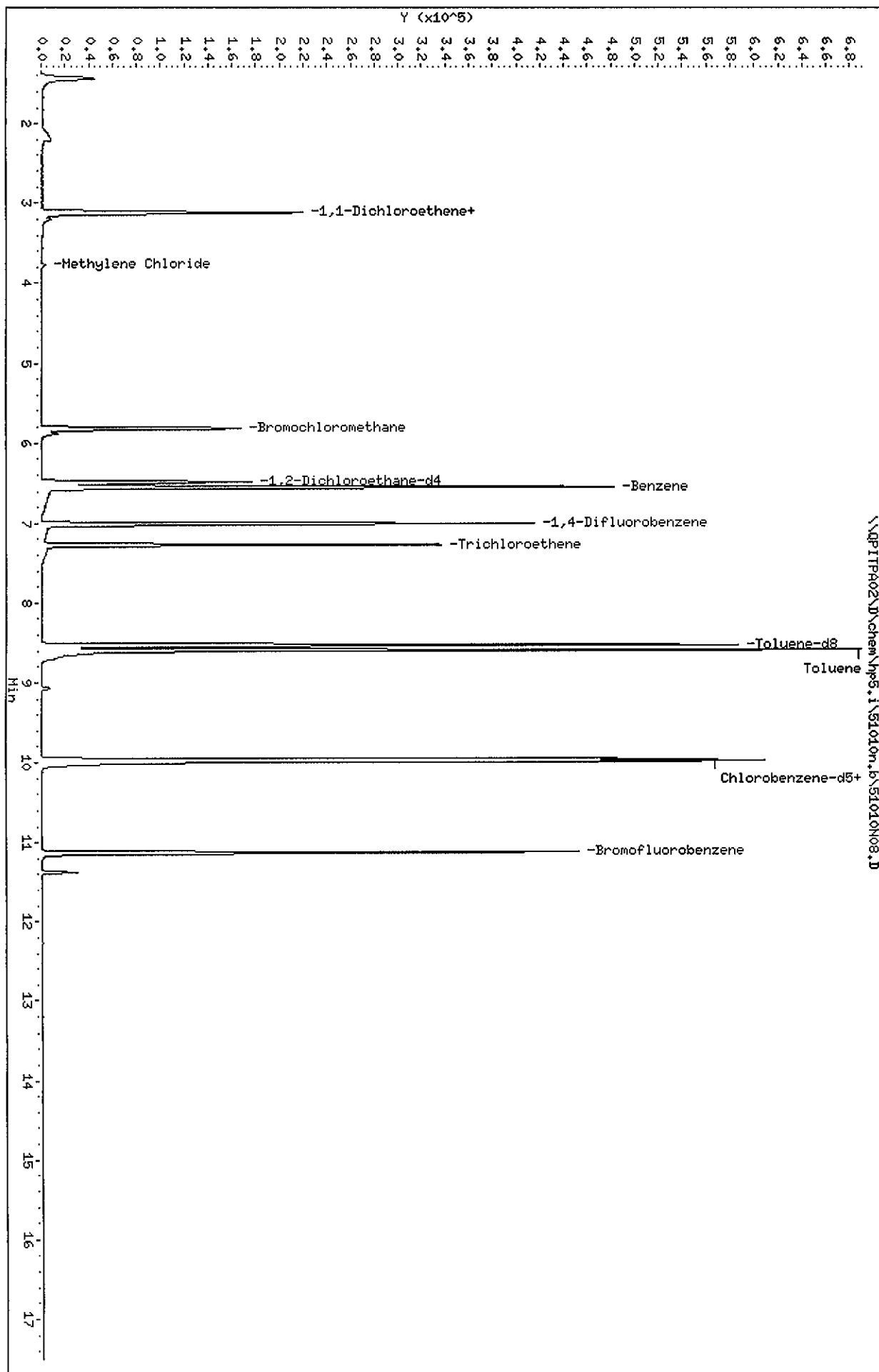
QC Batch: 0284424

Client Sample Id: PXB-36

CONCENTRATION UNITS:			
CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/kg
75-35-4	1,1-Dichloroethene	63.1	
71-43-2	Benzene	55.4	
108-88-3	Toluene	57.7	
108-90-7	Chlorobenzene	57.7	
79-01-6	Trichloroethene	55.1	

Data File: \\QPI1FA02\chem\hp5.i\51010n.b\51010N08.D
 Date: 10-OCT-2000 22:15
 Client ID: PVB-36
 Sample Info: c0j100187-003msd 5.09g/5ml
 Purge Volume: 5.0
 Column phase: DB624

Instrument: hp5.i
 Operator: 034635
 Column diameter: 0.20



STL - Pittsburgh

Volatile Report CLP OLM04.0 Method

Data file : \\QPITPA02\D\chem\hp5.i\51010n.b\51010N08.D
Lab Smp Id: DLVAE106 Client Smp ID: PXB-36
Inj Date : 10-OCT-2000 22:15 MS Autotune Date: 13-MAR-2000 09:53
Operator : 034635 Inst ID: hp5.i
Smp Info : c0j100187-003msd 5.09g/5ml
Misc Info : dlvae106,51010n.b,clpsoil.m,olm04.0.sub
Comment :
Method : \\QPITPA02\D\chem\hp5.i\51010n.b\clpsoil.m
Meth Date : 06-Oct-2000 16:39 Quant Type: ISTD
Cal Date : 10-OCT-2000 16:43 Cal File: CC51010N.D
Als bottle: 11 QC Sample: MSD
Dil Factor: 0.98000
Integrator: HP RTE Compound Sublist: olm04.0.sub
Target Version: 4.04
Processing Host: PITPC076

Concentration Formula: $\text{Amt} * \text{DF} * 1/\text{Vo} * 100 / (100 - \text{M})$

Name	Value	Description
DF	0.980	Dilution Factor
Vo	5.000	Sample Volume
M	0.000	Percent Moisture

Compounds	QUANT SIG						CONCENTRATIONS	
	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN	(ng)	FINAL
						(ng)	(ug/kg)	
* 1 Bromochloromethane	128	5.820	5.801	(1.000)	49832	250.000		
* 2 1,4-Difluorobenzene	114	7.006	6.994	(1.000)	315954	250.000		
* 3 Chlorobenzene-d5	117	9.957	9.956	(1.000)	320438	250.000		
\$ 4 1,2-Dichloroethane-d4	65	6.489	6.477	(1.115)	122010	239.883	47.98	
\$ 5 Toluene-d8	98	8.527	8.521	(0.856)	390685	248.895	49.78	
\$ 6 Bromofluorobenzene	95	11.125	11.136	(1.117)	144565	228.130	45.63	
7 Dichlorodifluoromethane	85	Compound Not Detected.						
8 Chloromethane	50	Compound Not Detected.						
10 Bromomethane	94	Compound Not Detected.						
9 Vinyl Chloride	62	Compound Not Detected.						
11 Chloroethane	64	Compound Not Detected.						
12 Trichlorofluoromethane	101	Compound Not Detected.						
15 1,1-Dichloroethene	96	3.119	3.009	(0.536)	105562	289.932	56.83	
51 1,1,2-Trichloro-1,2,2-Trifluor	101	Compound Not Detected.						
14 Acetone	43	3.204	3.277	(0.551)	8195	28.6225	5.610	
17 Carbon Disulfide	76	Compound Not Detected.						

DN 10/10/00

Compounds	QUANT SIG	CONCENTRATIONS					
		RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/kg)
=====	=====	==	=====	=====	=====	=====	=====
88 Methyl Acetate	43				Compound Not Detected.		
16 Methylene Chloride	84	3.776	3.727	(0.649)	2106	9.52317	1.866
82 Methyl tert-butyl ether	73				Compound Not Detected.		
19 trans-1,2-Dichloroethene	96				Compound Not Detected.		
21 1,1-Dichloroethane	63				Compound Not Detected.		
23 cis-1,2-dichloroethene	96				Compound Not Detected.		
M 81 1,2-Dichloroethene (total)	96				Compound Not Detected.		
22 2-Butanone	43				Compound Not Detected.		
24 Chloroform	83				Compound Not Detected.		
28 Benzene	78	6.550	6.531	(0.935)	434042	254.326	49.85
27 1,2-Dichloroethane	62				Compound Not Detected.		
25 1,1,1-Trichloroethane	97				Compound Not Detected.		
89 Cyclohexane	56				Compound Not Detected.		
26 Carbon Tetrachloride	117				Compound Not Detected.		
29 Trichloroethene	130	7.274	7.255	(1.038)	111721	253.339	49.65
30 1,2-Dichloropropane	63				Compound Not Detected.		
31 Bromodichloromethane	83				Compound Not Detected.		
90 Methyl Cyclohexane	83				Compound Not Detected.		
34 cis-1,3-Dichloropropene	75				Compound Not Detected.		
38 1,1,2-Trichloroethane	97				Compound Not Detected.		
40 Dibromochloromethane	129				Compound Not Detected.		
36 trans-1,3-Dichloropropene	75				Compound Not Detected.		
33 4-Methyl-2-pentanone	43				Compound Not Detected.		
37 2-Hexanone	43				Compound Not Detected.		
46 Bromoform	173				Compound Not Detected.		
39 Tetrachloroethene	164				Compound Not Detected.		
63 1,2-Dibromoethane	107				Compound Not Detected.		
47 1,1,2,2-Tetrachloroethane	83				Compound Not Detected.		
35 Toluene	91	8.594	8.587	(0.863)	486469	265.292	52.00
41 Chlorobenzene	112	9.987	9.987	(1.003)	316598	265.135	51.97
42 Ethylbenzene	106				Compound Not Detected.		
45 Styrene	104				Compound Not Detected.		
43 m + p-Xylene	106				Compound Not Detected.		
44 Xylene-o	106				Compound Not Detected.		
M 80 Xylenes (total)	106				Compound Not Detected.		
91 Isopropylbenzene	105				Compound Not Detected.		
48 1,3-Dichlorobenzene	146				Compound Not Detected.		
49 1,4-Dichlorobenzene	146				Compound Not Detected.		
50 1,2-Dichlorobenzene	146				Compound Not Detected.		
69 1,2-Dibromo-3-chloropropane	75				Compound Not Detected.		
92 1,2,4-Trichlorobenzene	180				Compound Not Detected.		

**GC/MS VOLATILE
MISCELLANEOUS**

MS Volatile Kun Log

Method: 10P4.2 805 Inst. ID HP5



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

Analyst DLJ Reviewed by: _____ Date: _____
 Std: 192-142.2 Std: 192-187.8 Std: _____
 Std: 192-190.1 Std: 192-190.2 Std: 192-191.7 Std: _____

Date	File ID	Lot No./Sample No.	Vol./Wt.	pH	Port#	Comments
10/4/00	1. 19251004K	1925	5.00g			12:13
	2. 19251004P	192510	5.00g			
	3. 19251004P	192510	5.00g			
	4. 19251004P	192510	5.00g			
	5. 19251004P	192510	5.00g			
	6. 19251004P	192510	5.00g			
	7. 19251004P	192510	5.00g			
	8. 19251004P	192510	5.00g			
	9. 19251004P	192510	5.00g			
	10. 19251004P	192510	5.00g			
	11. 19251004P	192510	5.00g			
	12. 19251004P	192510	5.00g			
	13. 19251004P	192510	5.00g			
	14. 19251004P	192510	5.00g			
	15. 19251004P	192510	5.00g			
	16. 19251004P	192510	5.00g			
	17. 19251004P	192510	5.00g			
	18. 19251004P	192510	5.00g			
	19. 19251004P	192510	5.00g			
	20. 19251004P	192510	5.00g			
	21. 19251004P	192510	5.00g			
	22. 19251004P	192510	5.00g			

C-MS Volatile

Run Log

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



Method: OP4.2 Soil

Inst. ID HP5

Analyst Derrick Spence

Reviewed by: DPJ 10/10/12

Date: _____

Std: 192-190-2 Soil

Std: 192-191-7 Volatiles

Std: _____

Std: 192-190-1 Soil

Std: 192-187-8 Volatiles

Std: _____

Date	File ID	Lot No./Sample No.	Vol./Wt.	pH	Port#	Comments
10/10/10	1. 18751010-1	BFB	50 mg			
	2. 19251010-1	VST050	5 mg			13.56
	3. 18751010-1	VBUK	5.0 g/5 ml			
	4. 5101010-1	C05100187-001	5.2 g/5 ml			
	5. 5101010-2	C05100187-002	5.15 g/5 ml			
	6. 5101010-3	C05100187-003	5.18 g/5 ml			
	7. 5101010-4	C05100187-003	5.02 g/5 ml			
	8. 5101010-5	C05100187-001 MS	5.20 g/5 ml			
	9. 5101010-6	C05100187-001 MSD	5.23 g/5 ml			
	10. 5101010-7	C05100187-003 MS	5.11 g/5 ml			
	11. 5101010-8	C05100187-003 MSD	5.08 g/5 ml			22.15
	12. 5101010-9	BHMS	5.0 g/5 ml			
	13. 5101010-10	466MS10	5.0 g/5 ml			
	14.					
	15.					
	16.					
	17.					
	18.					
	19.					
	20.					
	21.					
	22.					



Analyst KLG

Reviewed by:

Date:

Std: 192-192.2 BFB Std: 192-190.11A

Std: 192-190.2 SUM Std: 192-191-7 MS

Std: 192-187-8 VOA

Std: Std:

Std: Std:

Std: Std:

Date	File ID	Lot No./Sample No.	Vol./Wt.	pH	Port#	Comments
10/12/10	1. BFB	BFB	50ng			0548
	2. 2051013	V5050	5ml			
	3. 1451013	V5010	5ml			
	4. 1751013	V5020	5ml			
	5. 1051013	V50100	5ml			
	6. 151013	V50200	5ml			0915
	7. 0151013	BFB	50ng			0940
	8. 3051013	V50150	5ml			
	9. 1751013	V501K	5ml			
	10. 53101301	003060111-005	5ml	1		
	11. 53101302	003120309-011	5ml	1		
	12. 53101303	003100187-006	5ml	1		
	13. 53101304	003120309-011 MS	5ml	1		
	14. 53101305	003120309-011 MSB	5ml	1		
	15.					
	16					
	17					
	18					
	19					
	20					
	21					
	22.					

CMS Volatile

Kun Log

Method: CLP

Inst. ID HP5



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

Analyst KLG

Reviewed by:

Date:

Std: 192-192-2 BFB Std: 192-190.11nt

Std: 192-19025um

Std: 192-191-7MS

Std: 192-187-8VDA

Std:

Std:

Std:

Std:

Date	File ID	Lot No. / Sample No.	Vol. / Wt.	pH	Port#	Comments
10/12/00	1. BFB	BFB	50ng			0548
	2. 2051013	VS050	5ml			
	3. 1451013	VS010	5ml			
	4. 1851013	VS020	5ml			
	5. 1951013	VS0100	5ml			
	6. 1E51013	VS0200	5ml			0915
	7. 0F51013	BFB	50ng			0940
	8. 3051013	VS0150	5ml			
	9.					
	10.					
	11.					
	12.					
	13.					
	14.					
	15.					
	16.					
	17.					
	18.					
	19.					
	20.					
	21.					
	22.					

REQUESTED BY: JOURNETP

METHOD: 0N Volatile Organic Compounds - CLP (OLM04.2)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY		
										RCVD	REQD	
1D CLP1	DLVAC-1-02	___	272017	061313	A-15-0N	C0J100187	001		SOLID	0	5	1
1D CLP1	DLVAD-1-02	___	272018	061313	A-15-0N	C0J100187	002		SOLID	0	2	1
1D CLP1	DLVAE-1-02	___	272019	061313	A-15-0N	C0J100187	003		SOLID	0	4	1
1D CLP1	DLVAG-1-02	___	272020	061313	A-15-0N	C0J100187	005		SOLID	0	2	1
1D CLP1	DLVAJ-1-01	___	272021	061313	I-15-0N	C0J100187	006		WATER	0	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

CP1	Patrick J. J. J.	10/10/00 14:00
CP1	Larry Gordon	10/10/00 22:40
CP1	Larry Gordon	10/13/00 10:30
CP1	Larry Gordon	10/13/00 12:15

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

GENERAL CHEMISTRY DATA

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: PXS-5

General Chemistry

Lot-Sample #...: C0J100187-001 Work Order #...: DLVAC Matrix.....: SOLID
Date Sampled...: 10/09/00 Date Received...: 10/10/00
% Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	12.5		%	ICLP ILM04.0	10/10-10/11/00	0284384

Dilution Factor: 1 MS Run #.....: 0284221

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: PXS-6

General Chemistry

Lot-Sample #...: C0J100187-002 Work Order #...: DLVAD Matrix.....: SOLID
 Date Sampled...: 10/09/00 Date Received...: 10/10/00
 % Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	14.3		%	ICLP ILM04.0	10/10-10/11/00	0284384
		Dilution Factor: 1		MS Run #.....: 0284221		

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: PXB-36

General Chemistry

Lot-Sample #...: C0J100187-003 Work Order #...: DLVAE Matrix.....: SOLID
Date Sampled...: 10/09/00 Date Received...: 10/10/00
% Moisture.....: 9.9

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	9.9		%	ICLP ILM04.0	10/10-10/11/00	0284384

Dilution Factor: 1 MS Run #.....: 0284221

CUMMINGS-RITER CONSULTANTS INC

Client Sample ID: DUP-3

General Chemistry

Lot-Sample #...: C0J100187-005 Work Order #...: DLVAG Matrix.....: SOLID
 Date Sampled...: 10/09/00 Date Received...: 10/10/00
 % Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	17.0		%	ICLP ILM04.0	10/10-10/11/00	0284384

Dilution Factor: 1 MS Run #.....: 0284221

General Chemistry

Matrix.....: SOLID

Date Received..: 10/10/00

Prep Batch #...:

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0J100187

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

Matrix.....: SOLID

Date Sampled...: 10/09/00

Date Received...: 10/10/00

% Moisture.....: 9.9

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD LIMIT</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Percent Moisture	9.9	9.8	%	1.4	(0-0.0)	SD Lot-Sample #:	COJ100187-003	
						ICLP ILM04.0	10/10-10/11/00	0284384

Dilution Factor: 1

Prep Date.....: 0284221 Analysis Date...: Prep Batch #...:

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0J100187

Work Order #...: DLV9M-SMP
DLV9M-DUP

Matrix.....: SOLID

Date Sampled...: 10/09/00

Date Received...: 10/10/00

% Moisture.....: 13

PARAM RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Percent Moisture	11.6	%	12	(0-0.0)	ICLP ILM04.0	10/10-10/11/00	0284384

Dilution Factor: 1

Prep Date.....: 0284221

Analysis Date...

Prep Batch #...:

10009

STL Pittsburgh TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Lot No. C05060334 Lot No. C05100187 Lot No. 2 Batch No. 0284206 Analyst: CLLOHEYDE
C05060344 C05100185 0284208 In: Date 107000 Time 1515
C05090135 C05060309 0284383 Out: Date 101100 Time 0500
C05040244 0284384 Balance ID #: C94817
C05100191 0285110 Oven Temp: 103°C±2°C
(PARTIAL)

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
C05060334-001	30	1.07	6.25	5.90	C05100191-003	54	1.05	6.24	5.71
-001D	51	1.07	6.33	6.02	-004	40	1.05	6.10	5.88
-002	109	1.08	6.95	6.37	-005	48	1.06	7.15	6.80
-003	24	1.07	9.05	7.68	-006	68	1.05	6.18	5.11
-004	80	1.08	6.53	6.15	C05100187-001	61	1.07	6.34	5.68
-005	12	1.10	7.74	7.22	-001D	15	1.04	6.24	5.59
-006	52	1.07	7.30	6.73	-002	74	1.07	6.09	5.37
-007	63	1.11	7.52	7.13	C05100187-003	107	1.04	6.17	5.66
-008	44	1.06	7.29	6.45	-003D	100	1.07	6.17	5.67
-009	86	1.09	5.43	4.81	-005	83	1.06	5.46	4.71
-010	93	1.08	6.68	5.82	C05100185-001	33	1.06	6.29	5.67
-011	108	1.10	6.09	5.39	-002	21	1.05	7.20	6.39
-012	85	1.11	6.29	5.59	-003	21C	1.14	6.21	5.19
-013	72	1.08	6.29	5.66	-004	90	1.06	6.70	6.05
-014	105	1.10	5.94	5.40	-005	64	1.05	6.04	5.39
-015	8	1.12	6.09	5.31	-005D	110	1.05	6.85	6.18
-016	53	1.05	8.15	7.05	-006	111	1.07	6.23	5.71
-017	78	1.05	7.81	6.70	-007	7	1.08	6.23	5.61
-018	77	1.07	7.14	5.84	C05060309-001	A22	73.42	79.60	78.72
-019	73	1.08	6.48	5.69	-001D	A29	74.43	80.68	79.69
-020	102	1.07	5.52	3.81					
-021	57	1.11	6.25	5.51					
-021D	95	1.08	6.59	5.92					
-022	E1	1.15	7.39	6.40					
-023	17	1.09	6.25	5.65					
C05060344-001	20	1.09	6.92	5.71					
-002	V	1.15	5.39	4.20					
-003	26	1.03	6.85	6.14					
-004	4	1.09	6.28	5.42					
-005	37	1.10	6.30	5.17					
C05090135-001	91	1.06	6.19	5.48					
C05040244-001	55	1.12	6.56	5.07					
-002	36	1.09	6.35	5.00					
C05100191-001	153	1.13	7.35	6.35					
-001D	70	1.07	6.78	5.77					
-002	35	1.07	5.80	5.20					

[Signature]

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM	0010009	
TESTED:	CLL	10/10/00
CHECKED:	<i>ML</i>	10-11-00

CREATED:	10/10/00 10:53:09 AM
REVISED:	10/11/00 7:04:08 AM

COMMENTS:

C0J060334 C0J060344 C0J090135 C0J040244 C0J100191 C0J100187 C0J100185 C0J060309

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.
C0J060334	001	SMP	30	1.07	6.25	5.9	9:30	5:00	0.35	6.757	93.243
C0J060334	001D	SMP	51	1.07	6.33	6.02	9:30	5:00	0.31	5.894	94.106
C0J060334	002	SMP	109	1.08	6.95	6.37	9:30	5:00	0.58	9.881	90.119
C0J060334	003	SMP	24	1.07	9.05	7.68	9:30	5:00	1.37	17.168	82.832
C0J060334	004	SMP	80	1.08	6.53	6.15	9:30	5:00	0.38	6.972	93.028
C0J060334	005	SMP	12	1.1	7.74	7.22	9:30	5:00	0.52	7.831	92.169
C0J060334	006	SMP	52	1.07	7.3	6.73	9:30	5:00	0.57	9.149	90.851
C0J060334	007	SMP	63	1.11	7.52	7.13	9:30	5:00	0.39	6.084	93.916
C0J060334	008	SMP	44	1.06	7.29	6.45	9:30	5:00	0.84	13.483	86.517
C0J060334	009	SMP	86	1.09	5.43	4.81	9:30	5:00	0.62	14.286	85.714
C0J060334	010	SMP	93	1.08	6.68	5.82	9:30	5:00	0.86	15.357	84.643
C0J060334	011	SMP	108	1.1	6.09	5.39	9:30	5:00	0.7	14.028	85.972
C0J060334	012	SMP	85	1.11	6.29	5.59	9:30	5:00	0.7	13.514	86.486
C0J060334	013	SMP	72	1.08	6.29	5.66	9:30	5:00	0.63	12.092	87.908
C0J060334	014	SMP	105	1.1	5.94	5.4	9:30	5:00	0.54	11.157	88.843
C0J060334	015	SMP	8	1.12	6.09	5.31	9:30	5:00	0.78	15.694	84.306
C0J060334	016	SMP	53	1.05	8.15	7.05	9:30	5:00	1.1	15.493	84.507
060334	017	SMP	78	1.05	7.81	6.7	9:30	5:00	1.11	16.42	83.58

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM	0010009	
TESTED:	CLL	10/10/00
CHECKED:	<i>PMG</i>	10-11-00

CREATED:	10/10/00 10:53:09 AM
REVISED:	10/11/00 7:04:08 AM

COMMENTS:

C0J060334 C0J060344 C0J090135 C0J040244 C0J100191 C0J100187 C0J100185 C0J060309

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.
C0J060334	018	SMP	77	1.07	7.14	5.84	9:30	5:00	1.3	21.417	78.583
C0J060334	019	SMP	73	1.08	6.48	5.69	9:30	5:00	0.79	14.63	85.37
C0J060334	020	SMP	102	1.07	5.52	3.81	9:30	5:00	1.71	38.427	61.573
C0J060334	021	SMP	57	1.11	6.25	5.51	9:30	5:00	0.74	14.397	85.603
C0J060334	021D	SMP	95	1.08	6.59	5.92	9:30	5:00	0.67	12.16	87.84
C0J060334	022	SMP	E1	1.15	7.39	6.4	9:30	5:00	0.99	15.865	84.135
C0J060334	023	SMP	17	1.09	6.25	5.65	9:30	5:00	0.6	11.628	88.372
C0J060344	001	SMP	20	1.09	6.92	5.71	9:30	5:00	1.21	20.755	79.245
C0J060344	002	SMP	V	1.15	5.39	4.2	9:30	5:00	1.19	28.066	71.934
C0J060344	003	SMP	26	1.03	6.85	6.14	9:30	5:00	0.71	12.199	87.801
C0J060344	004	SMP	4	1.09	6.28	5.42	9:30	5:00	0.86	16.57	83.43
C0J060344	005	SMP	37	1.1	6.3	5.17	9:30	5:00	1.13	21.731	78.269
C0J090135	001	SMP	91	1.06	6.19	5.48	9:30	5:00	0.71	13.84	86.16
C0J040244	001	SMP	55	1.12	6.56	5.07	9:30	5:00	1.49	27.39	72.61
C0J040244	002	SMP	36	1.09	6.35	5	9:30	5:00	1.35	25.665	74.335
C0J100191	001	SMP	153	1.13	7.35	6.35	15:15	5:00	1	16.077	83.923
C0J100191	001D	SMP	70	1.07	6.78	5.77	15:15	5:00	1.01	17.688	82.312
100191	002	SMP	35	1.07	5.8	5.2	15:15	5:00	0.6	12.685	87.315

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM	0010009	
TESTED:	CLL	10/10/00
CHECKED:	<i>PAC</i>	<i>10-11-00</i>

CREATED:	10/10/00 10:53:09 AM
REVISED:	10/11/00 7:04:08 AM

COMMENTS:

C0J060334 C0J060344 C0J090135 C0J040244 C0J100191 C0J100187 C0J100185 C0J060309

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	003	SMP	54	1.05	6.24	5.71	15:15	5:00	0.53	10.212	89.788
C0J100191	004	SMP	40	1.05	6.1	5.88	15:15	5:00	0.22	4.356	95.644
C0J100191	005	SMP	48	1.06	7.15	6.8	15:15	5:00	0.35	5.747	94.253
C0J100191	006	SMP	68	1.05	6.18	5.11	15:15	5:00	1.07	20.858	79.142
C0J100187	001	SMP	61	1.07	6.34	5.68	15:15	5:00	0.66	12.524	87.476
C0J100187	001D	SMP	15	1.04	6.24	5.59	15:15	5:00	0.65	12.5 RPD 8.070	87.5
C0J100187	002	SMP	74	1.07	6.09	5.37	15:15	5:00	0.72	14.343	85.657
C0J100187	003	SMP	107	1.04	6.17	5.66	15:15	5:00	0.51	9.942	90.058
C0J100187	003D	SMP	100	1.07	6.17	5.67	15:15	5:00	0.5	9.804 RPD 1.400	90.196
C0J100187	005	SMP	83	1.06	5.46	4.71	15:15	5:00	0.75	17.045	82.955
C0J100185	001	SMP	33	1.06	6.29	5.67	15:15	5:00	0.62	11.855	88.145
C0J100185	002	SMP	21	1.05	7.2	6.39	15:15	5:00	0.81	13.171	86.829
C0J100185	003	SMP	21C	1.14	6.21	5.19	15:15	5:00	1.02	20.118	79.882
C0J100185	004	SMP	90	1.06	6.7	6.05	15:15	5:00	0.65	11.525	88.475
C0J100185	005	SMP	64	1.05	6.04	5.39	15:15	5:00	0.65	13.026	86.974
C0J100185	005D	SMP	110	1.05	6.85	6.18	15:15	5:00	0.67	11.552 RPD 12.070	88.448
C0J100185	006	SMP	111	1.07	6.23	5.71	15:15	5:00	0.52	10.078	89.922
C0J100185	007	SMP	7	1.08	6.23	5.61	15:15	5:00	0.62	12.039	87.961

STL - Pittsburgh WATER CONTENT SHEET

SHEET NUM	0010009	
TESTED:	CLL	10/10/00
CHECKED:	<i>pm6</i>	10-11-00

CREATED:	10/10/00 10:53:09 AM
REVISED:	10/11/00 7:04:08 AM

COMMENTS:

C0J060334 C0J060344 C0J090135 C0J040244 C0J100191 C0J100187 C0J100185 C0J060309

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.
C0J060309	001	SMP	A22	73.42	79.6	78.72	15:15	5:00	0.88	14.239	85.761
C0J060309	001D	SMP	A29	74.43	80.68	79.69	15:15	5:00	0.99	15.84	84.16

85.761

REQUESTED BY: LOHEYDEC

M. JD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SEF	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
21C CLP1	DLJ1F-1-0N	___	271722	020247	A-88-SM C0J040244	001			SOLID	0	5 1
21C CLP1	DLJ1H-1-0N	___	271723	020247	A-88-SM C0J040244	002			SOLID	0	5 1
22D CLP1	DLJAG-1-01	___	271721	076232	A-88-SM C0J060334	001			SOLID	0	6 1
1A	DLPKV-1-01	___	271692	090472	A-88-SM C0J060334	001			SOLID	0	1 1
1A	DLPKX-1-01	___	271693	090472	A-88-SM C0J060334	002			SOLID	0	1 1
1A	DLPL1-1-01	___	271694	090472	A-88-SM C0J060334	003			SOLID	0	1 1
1A	DLPL2-1-01	___	271695	090472	A-88-SM C0J060334	004			SOLID	0	1 1
1A	DLPL4-1-01	___	271696	090472	A-88-SM C0J060334	005			SOLID	0	1 1
1A	DLPL5-1-01	___	271697	090472	A-88-SM C0J060334	006			SOLID	0	1 1
1A	DLPL6-1-01	___	271698	090472	A-88-SM C0J060334	007			SOLID	0	1 1
1A	DLPL7-1-01	___	271699	090472	A-88-SM C0J060334	008			SOLID	0	1 1
1A	DLPL8-1-01	___	271700	090472	A-88-SM C0J060334	009			SOLID	0	1 1
1A	DLPLA-1-01	___	271701	090472	A-88-SM C0J060334	010			SOLID	0	1 1
1A	DLPLE-1-01	___	271702	090472	A-88-SM C0J060334	011			SOLID	0	1 1
1A	DLPLG-1-01	___	271703	090472	A-88-SM C0J060334	012			SOLID	0	1 1
1A	DLPLH-1-01	___	271704	090472	A-88-SM C0J060334	013			SOLID	0	1 1
1A	DLPLJ-1-01	___	271705	090472	A-88-SM C0J060334	014			SOLID	0	1 1
1A	DLPLK-1-01	___	271706	090472	A-88-SM C0J060334	015			SOLID	0	1 1
1A	DLPLM-1-01	___	271707	090472	A-88-SM C0J060334	016			SOLID	0	1 1
1A	DLPLN-1-01	___	271708	090472	A-88-SM C0J060334	017			SOLID	0	1 1
1A	DLPLQ-1-01	___	271709	090472	A-88-SM C0J060334	018			SOLID	0	1 1
1A	DLPLR-1-01	___	271710	090472	A-88-SM C0J060334	019			SOLID	0	1 1
1A	DLPLV-1-01	___	271711	090472	A-88-SM C0J060334	020			SOLID	0	1 1
1A	DLPM0-1-01	___	271712	090472	A-88-SM C0J060334	021			SOLID	0	1 1
1A	DLPM1-1-01	___	271713	090472	A-88-SM C0J060334	022			SOLID	0	1 1
1A	DLPM4-1-01	___	271714	090472	A-88-SM C0J060334	023			SOLID	0	1 1

REQUESTED BY: LOHEYDEC

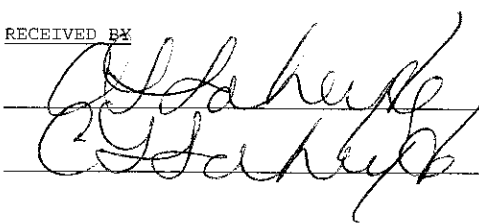
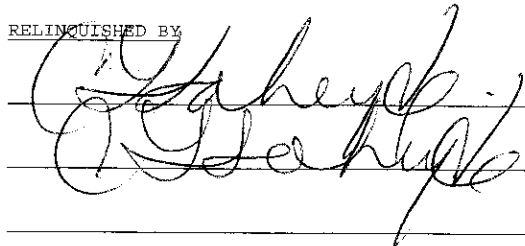
M JD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
1B CLP1	DLPQC-1-01	___	271715	378644	A-88-SM	C0J060344	001		SOLID	0	5 1
1B	DLPQE-1-01	___	271716	378644	A-88-SM	C0J060344	002		SOLID	0	1 1
1B	DLPQG-1-01	___	271717	378644	A-88-SM	C0J060344	003		SOLID	0	1 1
1B CLP1	DLPQK-1-01	___	271718	378644	A-88-SM	C0J060344	004		SOLID	0	5 1
1B CLP1	DLPQN-1-01	___	271719	378644	A-88-SM	C0J060344	005		SOLID	0	5 1
1C CLP1	DLRED-1-01	___	271720	054156	A-88-SM	C0J090135	001		SOLID	0	3 1

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MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

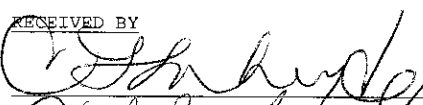
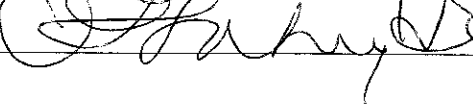
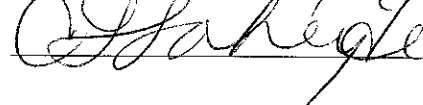
HVS

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX	QTY	QTY	
		CNTR#							DESCRIPTION	RCVD	REQD	
22D CLP1	DLPAG-1-01	_____	271931	076232	A-88-SM	COJ060309	001		SOLID	0	6	1

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METHOD: OV Moisture, Percent (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
1D CLP1	DLVAC-1-01	___	271936	061313	A-88-OV	C0J100187	001		SOLID	5	1 ² 04 10/10
1D CLP1	DLVAD-1-01	___	271937	061313	A-88-OV	C0J100187	002		SOLID	2	1
1D CLP1	DLVAE-1-01	___	271938	061313	A-88-OV	C0J100187	003		SOLID	4	2 ² 04 10/10
1D CLP1	DLVAG-1-01	___	271939	061313	A-88-OV	C0J100187	005		SOLID	2	1
1D,E	DLV9F-1-01	___	271940	061313	A-88-OV	C0J100185	002		SOLID	2	1
1D,E	DLV9H-1-01	___	271941	061313	A-88-OV	C0J100185	003		SOLID	2	1
1D,E	DLV9K-1-01	___	271942	061313	A-88-OV	C0J100185	004		SOLID	2	1
1D,E	DLV9M-1-01	___	271943	061313	A-88-OV	C0J100185	005		SOLID	6	10/10 2
1D,E	DLV9P-1-01	___	271944	061313	A-88-OV	C0J100185	006		SOLID	2	1
1D,E	DLV9R-1-01	___	271945	061313	A-88-OV	C0J100185	007		SOLID	2	1
1D,E	DLV97-1-01	___	271946	061313	A-88-OV	C0J100185	001		SOLID	2	1

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REQUESTED BY: LOHEYDEC

M JD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
1D,E CLP1	DLVCH-1-01	_____	271932	422326	A-88-SM	C0J100191	001		SOLID	2	1
1D,E CLP1	DLVCM-1-01	_____	271933	422326	A-88-SM	C0J100191	002		SOLID	2	1
1D,E CLP1	DLVCQ-1-01	_____	271934	422326	A-88-SM	C0J100191	003		SOLID	2	1
1D,E CLP1	DLVCR-1-01	_____	271935	422326	A-88-SM	C0J100191	004		SOLID	2	1

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