

FOCUSED GROUNDWATER REMEDATION REPORT

(Volume V of V)

Appendix E-4

For The:

570 MAIN STREET PROPERTY

WESTBURY NEW YORK

(NYSDEC SITE CODE # 130043A)

Prepared For:

IMC EASTERN CORP.

C/O SUE GORNICK

9730 INDEPENDENCE AVENUE

CHATSWORTH, CA 91311

MAY 2002

Hull
& associates, inc.

APPENDIX E-4

Analytical Report from Lancaster Laboratories January 4, 2002 Post-Treatment Event



Lancaster Laboratories
Where quality is a science.

Dear Client:

Enclosed please find the requested data package.

Any questions or concerns you might have regarding this data package should be directed to your client representative, Heidi Ortenzi, at (717) 656-2300 extension 1917.

Sincerely yours,

LANCASTER LABORATORIES
Data Packages Department

Data Package

NYSDEC ASP Category B Data Package

*Analytical Data Report Package
for
Hull & Associates*

*IMC Magnetics - NY
Water Samples
Collected on 01/04/02
Sample No. 3753715-3753734*

*PA Cert. # 36-037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521*

Prepared by Amy W. Umason
Quality Assurance Review Audrey McClellan
Date 2-12-02
Delivery Date 2/13/02





**Sample Reference List for SDG Number HUL04
with a Data Package Type of NYSDEC**

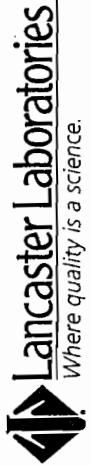
10062 - Hull & Associates
IMC Magnetics - NY

Lab Sample Number	Lab Sample Code	Client Sample Description
3753715	AW3U-	NMB008:AW-3U:G010402 Water Sample
3753716	AW3L-	NMB008:AW-3L:G010402 Water Sample
3753717	MW8U-	NMB008:MW-8U:G010402 Water Sample
3753718	MW8M-	NMB008:MW-8M:G010402 Water Sample
3753719	MW8L-	NMB008:MW-8L:G010402 Water Sample
3753720	AW1U-	NMB008:AW-1U:G010402 Unspiked Water Sample
3753721	AW1U-	NMB008:AW-1U:G010402 Matrix Spike Water Sample
3753722	AW1U-	NMB008:AW-1U:G010402 Matrix Spike Duplicate Water
3753723	AW1UD	NMB008:AW-1U:G010402D Water Sample
3753724	AW1L-	NMB008:AW-1L:G010402 Water Sample
3753725	AW2L-	NMB008:AW-2L:G010402 Water Sample
3753726	AWFB-	Field Blank Water Sample
3753727	MW9U-	NMB008:MW-9U:G010402 Water Sample
3753728	MW9L-	NMB008:MW-9L:G010402 Water Sample
3753729	--10U	NMB008:MW-10U:G010402 Water Sample
3753730	--10L	NMB008:MW-10L:G010402 Water Sample
3753731	--5U-	NMB008:MW-5U:G010402 Water Sample
3753732	--5M-	NMB008:MW-5M:G010402 Water Sample
3753733	--5L-	NMB008:MW-5L:G010402 Water Sample
3753734	--TB-	Trip Blank Water Sample

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For Lancaster Laboratories use only
 Acct. # 10062 Sample # 3753715-34
3753742-5

Please print. Instructions on reverse side correspond with circled numbers.

Client: <u>Hull & Associates</u> Acct. #: _____ Project Name: <u>IMC NMB008</u> PWSID #: _____ Project Manager: <u>Lance Turley</u> P.O.#: _____ Sampler: <u>Paul Gazzo</u> Quote #: _____ Name of state where samples were collected: <u>NY</u>			Matrix (4) Other: ☐ NPDES (if applicable) Water: ☐ Potable (if applicable) Soil: ☐ Composite: ☐		Analyses Requested (5) TOC ☒ Od ☒ TDS ☒ SO ₄ ☒ NH ₄ ☒		For lab use only FSC: _____ SCR #: <u>1161021</u>	
Sample Identification			Date Collected	Time Collected	Total # of Containers	Remarks		
NMB008: AW-3U: G010402			1-4-02	8:00	9			
NMB008: AW-3L: G010402			1-4-02	8:15	9			
NMB008: MW-8U: G010402			1-4-02	8:30	9			
NMB008: MW-8M: G010402			1-4-02	8:45	9			
NMB008: MW-8L: G010402			1-4-02	9:00	9			
NMB008: AW-1U: G010402			1-4-02	9:15	15	6 vials for MS/MSD		
NMB008: AW-1U: G010402D			1-4-02	9:20	9			
NMB008: AW-1L: G010402			1-4-02	9:45	9			
NMB008: AW-2U: G010402			1-4-02	10:00	15	6 vials for MS/MSD		
NMB008: AW-2U: G010402D			1-4-02	10:05	9			

Turnaround Time Requested (TAT) (please circle): Normal ☐ Rush ☐ (Rush TAT is subject to Lancaster Laboratories approval and surcharge.) Date results are needed: _____ Rush results requested by (please circle): Phone _____ Fax _____ Phone #: _____ Fax #: _____		Relinquished by: <u>S. Muehle</u> Relinquished by: <u>H. J. J.</u> Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Received by: _____ Received by: _____ Received by: _____ Received by: _____ Received by: _____		Date _____ Date _____ Date _____ Date _____ Date _____		Time _____ Time _____ Time _____ Time _____ Time _____	

Data Package Options (please circle if requested) QC Summary Type VI (Raw Data) Yes ☐ No ☐ Type I (Tier I) GLP Type II (Tier II) Other Type III (NJ Red. Del.) Type IV (CLP)		Site-specific QC required? Yes ☐ No ☐ (If yes, indicate QC sample and submit triplicate volume.) Internal Chain of Custody required? Yes ☐ No ☐	



For Lancaster Laboratories use only
 Acct. # 10062 Sample # 3753715-34

Please print. Instructions on reverse side correspond with circled numbers.

Client: <u>Hull Associates</u> Acct. #: _____ Project Name/ID: <u>IMC NMB008</u> PWSID #: _____ Project Manager: <u>Lance Turley</u> PO #: _____ Sampler: <u>Paul Gazzo</u> Quote #: _____ Name of state where samples were collected: <u>NY</u>		Matrix (4) ☐ NPDES (Check if applicable) ☐ Potable ☐ Other		Analyses Requested (5) FSC: _____ SCR #: <u>1161021</u>		For lab use only Temperature of samples upon receipt (if requested) (6)					
Sample Identification	Date Collected	Time Collected	Grab (3)	Composite	Soil	Water	Other	Total # of Containers	Remarks	Date	Time
NMB008:AW-2L:G010403	1-4-03	10:15						9			
Field Blank	1-4-03	10:30						9			
NMB008:MMW-9U:G010402	1-4-03	10:30						9			
NMB008:MW-9L:G010402	1-4-03	10:45						9			
NMB008:MW-10U:G010403	1-4-03	11:00						9			
NMB008:MW-10L:G010403	1-4-03	11:15						9			
NMB008:MW-5U:G010402	1-4-03	11:30						3			
NMB008:MW-5M:G010403	1-4-03	11:45						3			
NMB008:MW-5L:G010403	1-4-03	12:00						3			
Turnaround Time Requested (TAT) (please circle): Normal Rush (Rush TAT is subject to Lancaster Laboratories approval and surcharge.) Date results are needed: _____ Rush results requested by (please circle): Phone Fax Phone #: _____ Fax #: _____			Relinquished by: <u>S. Munkle</u> Relinquished by: <u>A. Z...</u> Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Received by: _____ Received by: _____ Received by: _____ Received by: _____ Received by: _____		Date _____ Date _____ Date _____ Date _____ Date _____		Time _____ Time _____ Time _____ Time _____ Time _____		
Data Package Options (please circle if requested) QC Summary Type VI (Raw Data) SDG Complete? Yes No Type I (Tier I) GLP Type II (Tier II) Other Site-specific QC required? Yes No Type III (NJ Red. Del.) (If yes, indicate QC sample and submit triplicate volume) Type IV (CLP) Internal Chain of Custody required? Yes No			Relinquished by: <u>Div...</u> Date: <u>1/16/03</u> Time: <u>10:15</u>								



For Lancaster Laboratories use only

Acct. # 10062 Sample # 3753715-34

Please print. Instructions on reverse side correspond with circled numbers.

Client: HUI & Associates Acct. #: _____
Project Name/ID: IMC NMB008 PWSID #: _____
Project Manager: Lance Turley P.O. #: _____
Sampler: Paul Gazzo Quote #: _____
Name of state where samples were collected: NY

Matrix (4)	Total # of Containers	Analyses Requested	FSC: SCR #: <u>1161021</u>	For lab use only
Soil	2	100 Qd 8021 Fe SO4 TDS		
Water				
☐ Potable (Check if applicable)				
☐ NPDES				
Other				

(3)	Grab	Composite

Sample Identification	Date Collected	Time Collected

TRIP Blank

Remarks

Turnaround Time Requested (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)

Date results are needed: _____

Rush results requested by (please circle): Phone Fax
Phone #: _____ Fax #: _____

8 Data Package Options (please circle if requested)	QC Summary	SDG Complete?
	Type VI (Raw Data)	Yes No
	Type I (Tier I)	GLP
	Type II (Tier II)	Other
	Type III (NJ Red. Del.)	Site-specific QC required? Yes No (If yes, indicate QC sample and submit triplicate volume.)
Type IV (CLP)	Internal Chain of Custody required? Yes No	

Relinquished by:	Date	Time	Received by:	Date	Time
<u>[Signature]</u>	<u>10/31/01</u>	<u>8:00</u>	<u>[Signature]</u>	<u>11/14/01</u>	<u>4:30</u>
Relinquished by:	Date	Time	Received by:	Date	Time
<u>[Signature]</u>	<u>11/14/01</u>	<u>4:30</u>	<u>[Signature]</u>	<u>11/14/01</u>	<u>4:30</u>
Relinquished by:	Date	Time	Received by:	Date	Time
<u>[Signature]</u>	<u>11/14/01</u>	<u>4:30</u>	<u>[Signature]</u>	<u>11/14/01</u>	<u>4:30</u>
Relinquished by:	Date	Time	Received by:	Date	Time
<u>[Signature]</u>	<u>11/14/01</u>	<u>4:30</u>	<u>[Signature]</u>	<u>11/14/01</u>	<u>4:30</u>
Relinquished by:	Date	Time	Received by:	Date	Time
<u>[Signature]</u>	<u>11/14/01</u>	<u>4:30</u>	<u>[Signature]</u>	<u>11/14/01</u>	<u>4:30</u>

Sample Administration Receipt Documentation Log

Client/Project: Hull Associates Shipping Container Sealed: Y N
 Date of Receipt: 01/05/02 COC Seal Present: Y / N
 Time of Receipt: 1015 COC Seal Intact: Y / N
 Source Code: 50-1 Package: Chilled / Not Chilled
 Unpacker Emp. No.: 1075

Temperature of Shipping Containers	
#1 Thermometer ID: <u>3H7353</u> Temp.: <u>2.0°C</u> Temp. Bottle / Surface Temp. Wet Ice / Dry Ice / Ice Packs Ice Present? <u>Y</u> N Loose <u>Bagged</u>	#2 Thermometer ID: <u>3H7353</u> Temp.: <u>1.5°C</u> Temp. Bottle / Surface Temp. Wet Ice / Dry Ice / Ice Packs Ice Present? <u>Y</u> / N Loose <u>Bagged</u>
#3 Thermometer ID: <u>3H7353</u> Temp.: <u>1.5°C</u> Temp. Bottle / Surface Temp. Wet Ice / Dry Ice / Ice Packs Ice Present? <u>Y</u> N Loose <u>Bagged</u>	#4 Thermometer ID: <u>3H7353</u> Temp.: <u>1.0°C</u> Temp. Bottle / Surface Temp. Wet Ice / Dry Ice / Ice Packs Ice Present? <u>Y</u> / N Loose <u>Bagged</u>

Paperwork Discrepancy/Unpacking Problems: lines - label & pw don't correspond
NMB008; AH-22 - G010402 - all bottles except (005) say #3
#3 01/05/02 TC
Entered per COC

Entered prior to unpacking

Sample Administration Internal Chain of Custody			
Name	Date	Time	Reason for Transfer
<u>[Signature]</u>	<u>01/05/02</u>	<u>1330</u>	Unpacking <u>to Storage</u>
	<u>1/5/02</u>	<u>1330</u>	Place in Storage or <u>Entry</u>
			Remove from Storage
			Place in Storage or Entry
			Entry

Chain-of-Custody Record

Secure Storage Chain of Custody
Original Sample

Client/Project: Hull & Associates

Preservative: HCL Matrix: WW SDG: HUL04

Sample # Range of Entry Group: 3753715-35 ⁽⁴³⁾ 34 Bottle Type: (52) 40 mL
glass vial
M/SN 1/28/02

(43)
1/19/02
1/28/02

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
3753715-35 ⁽⁴³⁾ 34	(1/19/02) VOA Refrigerator	VOA Refrigerator	1/5/02	1330	Entry to Storage	
3753715-35 ⁽⁴³⁾ 34	VOA Refrigerator	Debra Schaeffer	1/6/02	2230	Transfer to VOA Vial Storage	
3753715-35 ⁽⁴³⁾ 34	Debra Schaeffer	VOA Vial Storage	1/6/02	2245	Storage	
3753715-34	VOA Vial Storage	V. Mankel	01/07/02	1830	Transfer to Dept Storage	
3753715-34	V. Mankel	AS DEPT Fridg	01/07/02	1835	Storage	
3753715-34	Dept. 25 Storage	T. Smythe 115	1-14-02	04:00 05:00 3753715 1-14-02	Removed from storage for analysis	
3753715-34	T. Smythe 115	#18 Autosampler	1-14-02	04:01	analysis	
3753715-34	#18 Autosampler	T. Smythe 115	1-15-02	04:15	Transfer to storage after analysis	
3753715-34	T. Smythe 115	Dept. 25 Storage	1-15-02	04:16	Storage	
3753735	VOA VIAL STORAGE	Larry Gordon 784	1/7/02	08:41	Transfer to Dept.	
3753735	Larry Gordon 784	Dept 25 Storage	1/7/02	08:46	Storage	
3753735						
3753735						

(48)

(48) - Filled in ATF using computer tracking for dates and times. M/SN 1/28/02

2016 Rev. 04/15/99

(48) 3753735 is not part of SDG-HUL04. see corrections. M/SN 1/28/02



Digest Type (circle one): Hg Metals GF Hydrides Trial No: _____ (If not 1, fill in)

Batch No:

0	7	0	1	0

0	8	2	0

0	0	8

[illegible]

Secure Storage Chain of Custody Original Sample

Client/Project: Mull & Associates

Preservative: H₂SO₄ Matrix: WW SDG: MUL04

Sample # Range of Entry Group: 3753715-34 Bottle Type: (61) 125 ml
amber glass

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
3753715-20, 23-30	(964) SA	SA Storage	1/5/02	1330	Entry to Storage	
3753715-20, 23-30	SA Storage	BSL 189	1/7/02	1000	PH check	
3753715-20, 23-30	BSL 189	Main Storage	1/7/02	1030	Storage	
J75J715-20, 23-J0	MAIN Storage	T. Petre 11	1/11/02	0730	TOL	
J75J715-20, 23-J0	T. Petre 11	Dep. 21 Storage	1/11/02	0735	Storage	
J75J715-20, 23-J0	Dep. 21 Storage	T. Petre 11	1/11/02	1100	TOL	
J75J715-20, 23-J0	T. Petre 11	Dep. 21 Storage	1/11/02	1215	Storage	
J75J715-20, 23-J0	Dep. 21 Storage	T. Petre 11	1/14/02	1320	transfer to storage	
J75J715-20, 23-J0	T. Petre 11	MAIN Storage	1/14/02	1325	Storage	

Secure Storage Chain of Custody Original Sample

Client/Project: Hull & Associates

Preservative: HCL Matrix: WW SDG: HVL04

Sample # Range of Entry Group: 3753715-3534 ^{#3} Bottle Type: (51) 40ml
 11/57
 1/28/02
 glass vial

[illegible]

METHODOLOGY SUMMARY/REFERENCE

0254 Iron (water)

The solution resulting from the metals digestion is analyzed by Flame AA.

Reference: Test Methods for Evaluating Solid Waste
SW-846, Method 7380, September 1986

0820 Metals Water Digestion

The sample is digested with nitric and hydrochloric acids.

Reference: Test Methods for Evaluating Solid Waste
SW-846, Method 3005A, July 1992

0212 Total Dissolved Solids (water)

A well-mixed sample is filtered through a glass fiber filter. The filtrate is collected in a tared beaker and dried to a constant weight. The increase in weight is the total dissolved solids.

Reference: Methods for Chemical Analysis of Water and Wastes
USEPA 600/4-79-020, Method 160.1

1125 Sulfate (water)

The sample is converted to a barium sulfate suspension. The resulting turbidity is determined using a nephelometer by comparison to a standard curve.

Reference: Methods for Chemical Analysis of Water and Wastes
USEPA 600/4-79-020, Method 375.4



0354 Total Organic Carbon (Quad) (water)

Following acidification, the sample is purged with nitrogen to remove inorganic carbon. Persulfate is injected to oxidize organic carbon to carbon dioxide which is detected by IR. An OI Model 700 TOC Analyzer is used. The analysis is performed and reported in quadruplicate.

Reference: Test Methods for Evaluating Solid Waste,
SW-846, Method 9060, September 1986

8404 Halocarbons/Aromatics by SW846

The volatile compounds are extracted by bubbling an inert gas through the sample and are collected on a sorbent trap. The trap is thermally desorbed and the compounds are separated by gas chromatography under programmed temperature conditions. Each analyte is quantitated using an electrolytic conductivity detector.

Reference: Test Methods for Evaluating Solid Waste
SW-846, Methods 8021B, December 1996

1127 GC VOA Water Prep

An undiluted aliquot of the water sample or a dilution of the sample is purged with an inert gas and the volatiles are collected on an adsorbent trap that is subsequently desorbed onto a gas chromatographic column.

Reference: Test Methods for Evaluating Solid Waste,
SW-846, Method 5030B, Revision 2, December 1996



ANALYTICAL RESULTS

Prepared for:

Hull & Associates
6130 Wilcox Rd.
Dublin OH 43016

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 792263. Samples arrived at the laboratory on Saturday, January 05, 2002.

<u>Client Description</u>	<u>Lancaster Labs Number</u>
NMB008:AW-3U:G010402 Water Sample	3753715
NMB008:AW-3L:G010402 Water Sample	3753716
NMB008:MW-8U:G010402 Water Sample	3753717
NMB008:MW-8M:G010402 Water Sample	3753718
NMB008:MW-8L:G010402 Water Sample	3753719
NMB008:AW-1U:G010402 Unspiked Water Sample	3753720
NMB008:AW-1U:G010402 Matrix Spike Water Sample	3753721
NMB008:AW-1U:G010402 Matrix Spike Duplicate Water	3753722
NMB008:AW-1U:G010402D Water Sample	3753723
NMB008:AW-1L:G010402 Water Sample	3753724
NMB008:AW-2L:G010402 Water Sample	3753725
Field Blank Water Sample	3753726
NMB008:MW-9U:G010402 Water Sample	3753727
NMB008:MW-9L:G010402 Water Sample	3753728
NMB008:MW-10U:G010402 Water Sample	3753729
NMB008:MW-10L:G010402 Water Sample	3753730
NMB008:MW-5U:G010402 Water Sample	3753731
NMB008:MW-5M:G010402 Water Sample	3753732
NMB008:MW-5L:G010402 Water Sample	3753733
Trip Blank Water Sample	3753734

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.



1 COPY TO
1 COPY TO

Hull & Associates
Data Package Group

Attn: Mr. Bill Dennis

Questions? Contact Environmental Client Services
at (717) 656-2300.

Respectfully Submitted,

Victoria M. Martell
Chemist



Lancaster Laboratories Sample No. WW 3753715

Collected: 01/04/2002 08:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Reported: 01/15/2002 at 16:55

Discard: 01/23/2002

NMB008:AW-3U:G010402 Water Sample

IMC Magnetix - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

AW3U- SDG#: HUL04-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	19.3	1.00	mg/l	10
00212	Total Dissolved Solids	n.a.	1,830.	120.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	27.6	2.0	mg/l	1
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			27.4 mg/l			
			27.8 mg/l			
			27.8 mg/l			
			27.2 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	450.	250.	mg/l	50
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	1.4	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	< 1.0	1.0	ug/l	1



Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. WW 3753715

Collected: 01/04/2002 08:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:55

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-3U:G010402 Water Sample

IMC Magnetics - NY

AW3U- SDG#: HUL04-01

CAT			As Received	As Received		
No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT				Analysis		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 08:41	Damary S. Valentin	10
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 11:50	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	50
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 12:25	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 12:25	Todd T. Smythe	n.a.



Lancaster Laboratories Sample No. WW 3753716

Collected: 01/04/2002 08:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-3L:G010402 Water Sample

IMC Magnetics - NY

AW3L- SDG#: HUL04-02

CAT			As Received	As Received		Dilution
No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Units	Factor
00254	Iron	7439-89-6	83.2	4.00	mg/l	40
00212	Total Dissolved Solids	n.a.	4,420.	240.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	324.	50.	mg/l	25
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			335.4 mg/l			
			319.2 mg/l			
			322.1 mg/l			
			320.8 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	1,780.	500.	mg/l	100
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	< 1.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	< 1.0	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753716

Collected: 01/04/2002 08:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-3L:G010402 Water Sample

IMC Magnetix - NY

AW3L- SDG#: HUL04-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 08:43	Damary S. Valentin	40
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 12:39	Timothy M. Petree	25
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	100
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 13:09	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 13:09	Todd T. Smythe	n.a.



Lancaster Laboratories Sample No. WW 3753717

Collected: 01/04/2002 08:30 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-8U:G010402 Water Sample

IMC Magnetics - NY

MW8U- SDG#: HUL04-03

CAT			As Received	As Received		
No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	64.6	4.00	mg/l	40
00212	Total Dissolved Solids	n.a.	355.	30.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	3.0	2.0	mg/l	1
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			3.2 mg/l			
			3.2 mg/l			
			2.7 mg/l			
			2.9 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	< 500.	500.	mg/l	100
Due to interferences from the sample matrix, the reporting limit for the sulfate determination was increased.						
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	2.8	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753717

Collected: 01/04/2002 08:30 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Reported: 01/15/2002 at 16:56

Discard: 01/23/2002

NMB008:MW-8U:G010402 Water Sample

IMC Magnetix - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

MW8U- SDG#: HUL04-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	12.	1.0	ug/l	1
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 08:50	Damary S. Valentin	40
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 13:11	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	100
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 13:55	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 13:55	Todd T. Smythe	n.a.





Lancaster Laboratories Sample No. WW 3753718

Collected: 01/04/2002 08:45 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-8M:G010402 Water Sample

IMC Magnetics - NY

MW8M- SDG#: HUL04-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
00254	Iron	7439-89-6	3.91	0.100	mg/l	1
00212	Total Dissolved Solids	n.a.	378.	30.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	< 2.0	2.0	mg/l	1
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			1.9 mg/l			
			1.9 mg/l			
			1.9 mg/l			
			1.8 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	98.	25.	mg/l	5
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	< 1.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	3.2	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753718

Collected: 01/04/2002 08:45 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-8M:G010402 Water Sample

IMC Magnetics - NY

MW8M- SDG#: HUL04-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 08:50	Damary S. Valentin	1
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 14:00	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	5
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 14:40	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 14:40	Todd T. Smythe	n.a.



Lancaster Laboratories Sample No. WW 3753719

Collected: 01/04/2002 09:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-8L:G010402 Water Sample

IMC Magnetics - NY

MW8L- SDG#: HUL04-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	5.00	0.100	mg/l	1
00212	Total Dissolved Solids	n.a.	246.	30.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	< 2.0	2.0	mg/l	1
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			1.4 mg/l			
			1.3 mg/l			
			1.2 mg/l			
			1.2 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	33.	25.	mg/l	5
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	6.3	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	2.1	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	27.	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	< 1.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	5.6	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753719

Collected: 01/04/2002 09:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-8L:G010402 Water Sample

IMC Magnetics - NY

MW8L- SDG#: HUL04-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 08:51	Damary S. Valentin	1
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 14:32	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	5
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 15:25	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 15:25	Todd T. Smythe	n.a.





Lancaster Laboratories Sample No. WW 3753720

Collected: 01/04/2002 09:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-1U:G010402 Unspiked Water Sample

IMC Magnetics - NY

AW1U- SDG#: HUL04-06BKG

CAT			As Received	As Received		
No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	47.4	2.00	mg/l	20
00212	Total Dissolved Solids	n.a.	1,270.	120.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	43.	10.	mg/l	5
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			44.6 mg/l			
			43.1 mg/l			
			42.9 mg/l			
			42.6 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	380.	100.	mg/l	20
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	1.4	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	1.6	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	1.3	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753720

Collected: 01/04/2002 09:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-1U:G010402 Unspiked Water Sample

IMC Magnetics - NY

AW1U- SDG#: HUL04-06BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 08:30	Damary S. Valentin	20
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	2	01/11/2002 15:21	Timothy M. Petree	5
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	20
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 05:34	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 05:34	Todd T. Smythe	n.a.



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Lancaster Laboratories Sample No. WW 3753721

Collected: 01/04/2002 09:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Reported: 01/15/2002 at 16:56

Discard: 01/23/2002

NMB008:AW-1U:G010402 Matrix Spike Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

AW1U- SDG#: HUL04-06MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	18.	2.0	ug/l	1
08484	Chloromethane	74-87-3	8.1	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	17.	1.0	ug/l	1
08487	Bromomethane	74-83-9	15.	5.0	ug/l	1
08488	Chloroethane	75-00-3	16.	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	16.	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	20.	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	18.	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	20.	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	22.	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	24.	1.0	ug/l	1
08502	Chloroform	67-66-3	23.	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	22.	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	23.	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	22.	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	22.	1.0	ug/l	1
08512	Trichloroethene	79-01-6	21.	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	21.	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	20.	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	19.	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	21.	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	21.	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	22.	1.0	ug/l	1
08526	Chlorobenzene	108-90-7	19.	1.0	ug/l	1
08527	Bromoform	75-25-2	23.	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	22.	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	21.	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	19.	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	21.	1.0	ug/l	1
08541	Benzene	71-43-2	20.	1.0	ug/l	1
08543	Toluene	108-88-3	19.	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	20.	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	59.	3.0	ug/l	1



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Page 2 of 2

Lancaster Laboratories Sample No. WW 3753721

Collected: 01/04/2002 09:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-1U:G010402 Matrix Spike Water Sample

IMC Magnetix - NY

AW1U- SDG#: HUL04-06MS

Laboratory Chronicle

CAT	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
No.						
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 07:53	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 07:53	Todd T. Smythe	n.a.



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2216 Rev. 9/11/00



Lancaster Laboratories Sample No. WW 3753722

Collected: 01/04/2002 09:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-1U:G010402 Matrix Spike Duplicate Water

IMC Magnetics - NY

AW1U- SDG#: HUL04-06MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	19.	2.0	ug/l	1
08484	Chloromethane	74-87-3	8.4	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	15.	1.0	ug/l	1
08487	Bromomethane	74-83-9	14.	5.0	ug/l	1
08488	Chloroethane	75-00-3	15.	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	15.	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	19.	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	17.	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	20.	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	21.	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	22.	1.0	ug/l	1
08502	Chloroform	67-66-3	21.	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	21.	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	22.	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	21.	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	21.	1.0	ug/l	1
08512	Trichloroethene	79-01-6	21.	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	20.	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	20.	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	19.	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	20.	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	21.	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	22.	1.0	ug/l	1
08526	Chlorobenzene	108-90-7	19.	1.0	ug/l	1
08527	Bromoform	75-25-2	21.	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	20.	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	20.	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	19.	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	20.	1.0	ug/l	1
08541	Benzene	71-43-2	19.	1.0	ug/l	1
08543	Toluene	108-88-3	19.	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	19.	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	59.	3.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753722

Collected: 01/04/2002 09:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:56

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-1U:G010402 Matrix Spike Duplicate Water

IMC Magnetics - NY

AW1U- SDG#: HUL04-06MSD

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 08:38	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 08:38	Todd T. Smythe	n.a.



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Lancaster Laboratories Sample No. WW 3753723

Collected: 01/04/2002 09:20 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Reported: 01/15/2002 at 16:57

Discard: 01/23/2002

NMB008:AW-1U:G010402D Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

AW1UD SDG#: HUL04-07FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	49.9	4.00	mg/l	40
00212	Total Dissolved Solids	n.a.	1,230.	120.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	43.	10.	mg/l	5
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			43.4 mg/l			
			42.3 mg/l			
			43.4 mg/l			
			43.2 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	370.	100.	mg/l	20
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	1.4	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	1.6	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	1.3	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753723

Collected: 01/04/2002 09:20 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:57

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-1U:G010402D Water Sample

IMC Magnetix - NY

AW1UD SDG#: HUL04-07FD

CAT			As Received	As Received		
No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT				Analysis		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 08:51	Damary S. Valentin	40
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	2	01/11/2002 16:09	Timothy M. Petree	5
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	20
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 16:10	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 16:10	Todd T. Smythe	n.a.



Lancaster Laboratories Sample No. WW 3753724

Collected: 01/04/2002 09:45 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:57

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-1L:G010402 Water Sample

IMC Magnetics - NY

AW1L- SDG#: HUL04-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	24.8	1.00	mg/l	10
00212	Total Dissolved Solids	n.a.	1,350.	120.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	96.	20.	mg/l	10
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			98.6 mg/l			
			96.5 mg/l			
			93.8 mg/l			
			93.7 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	500.	100.	mg/l	20
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	1.3	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	< 1.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	4.9	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753724

Collected: 01/04/2002 09:45 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:57

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-1L:G010402 Water Sample

IMC Magnetix - NY

AW1L- SDG#: HUL04-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 08:53	Damary S. Valentin	10
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 16:58	Timothy M. Petree	10
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	20
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 16:55	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 16:55	Todd T. Smythe	n.a.



Lancaster Laboratories Sample No. WW 3753725

Collected: 01/04/2002 10:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:57

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-2L:G010402 Water Sample

IMC Magnetics - NY

AW2L- SDG#: HUL04-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	67.1	4.00	mg/l	40
00212	Total Dissolved Solids	n.a.	3,340.	240.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	245.	50.	mg/l	25
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			255.4 mg/l			
			246.4 mg/l			
			233.9 mg/l			
			245.4 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	1,340.	250.	mg/l	50
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	< 1.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	3.9	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753725

Collected: 01/04/2002 10:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Reported: 01/15/2002 at 16:57

Discard: 01/23/2002

NMB008:AW-2L:G010402 Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

AW2L- SDG#: HUL04-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 08:55	Damary S. Valentin	40
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 17:30	Timothy M. Petree	25
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	50
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 17:40	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 17:40	Todd T. Smythe	n.a.



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6637



Lancaster Laboratories Sample No. WW 3753726

Collected: 01/04/2002 10:20 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15
 Reported: 01/15/2002 at 16:57
 Discard: 01/23/2002
 Field Blank Water Sample
 IMC Magnetics - NY

Hull & Associates
 6130 Wilcox Rd.
 Dublin OH 43016

AWFB- SDG#: HUL04-10FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	< 0.100	0.100	mg/l	1
00212	Total Dissolved Solids	n.a.	< 30.	30.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	< 2.0	2.0	mg/l	1
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			.1 mg/l			
			.2 mg/l			
			.2 mg/l			
			.1 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	< 5.0	5.0	mg/l	1
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	< 1.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	< 1.0	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753726

Collected: 01/04/2002 10:20 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:57

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

Field Blank Water Sample

IMC Magnetix - NY

AWFB- SDG#: HUL04-10FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
00254	Iron	SW-846 7380	1	01/11/2002 08:56		Damary S. Valentin	1
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28		Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 18:18		Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45		Susan A. Engle	1
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 21:51		Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43		Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 21:51		Todd T. Smythe	n.a.





Lancaster Laboratories Sample No. WW 3753727

Collected: 01/04/2002 10:30 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:57

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-9U:G010402 Water Sample

IMC Magnetix - NY

MW9U- SDG#: HUL04-11

CAT			As Received	As Received		
No.	Analysis Name	CAS Number	Result	Limit of	Units	Dilution
00254	Iron	7439-89-6	150.	4.00	mg/l	40
00212	Total Dissolved Solids	n.a.	1,690.	120.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	103.	20.	mg/l	10
	EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:					
			105.0 mg/l			
			103.0 mg/l			
			103.5 mg/l			
			102.0 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	< 1,000.	1,000.	mg/l	200
	Due to interferences from the sample matrix, the reporting limit for the sulfate determination was increased.					
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	1.2	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753727

Collected: 01/04/2002 10:30 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:57

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-9U:G010402 Water Sample

IMC Magnetics - NY

MW9U- SDG#: HUL04-11

CAT			As Received	As Received		
No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Units	Dilution Factor
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	6.5	1.0	ug/l	1
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

This sample was submitted with headspace.

Laboratory Chronicle

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00254	Iron	SW-846 7380	1	01/11/2002 08:56	Damary S. Valentin	40
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 18:51	Timothy M. Petree	10
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	200
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 06:19	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 06:19	Todd T. Smythe	n.a.





Lancaster Laboratories Sample No. WW 3753728

Collected: 01/04/2002 10:45 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:57

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-9L:G010402 Water Sample

IMC Magnetix - NY

MW9L- SDG#: HUL04-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	20.7	1.00	mg/l	10
00212	Total Dissolved Solids	n.a.	560.	30.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	15.8	2.0	mg/l	1
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			16.2 mg/l			
			14.6 mg/l			
			15.0 mg/l			
			17.4 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	225.	50.	mg/l	10
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	3.4	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	17.	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753728

Collected: 01/04/2002 10:45 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:57

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-9L:G010402 Water Sample

IMC Magnetics - NY

MW9L- SDG#: HUL04-12

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
00254	Iron	SW-846 7380	1	01/11/2002 09:00		Damary S. Valentin	10
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28		Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	2	01/11/2002 19:39		Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45		Susan A. Engle	10
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 18:25		Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43		Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 18:25		Todd T. Smythe	n.a.



Lancaster Laboratories Sample No. WW 3753729

Collected: 01/04/2002 11:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Reported: 01/15/2002 at 16:57

Discard: 01/23/2002

NMB008:MW-10U:G010402 Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

--10U SDG#: HUL04-13

CAT			As Received	As Received		
No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	35.6	1.00	mg/l	10
00212	Total Dissolved Solids	n.a.	784.	60.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	5.2	2.0	mg/l	1
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			5.2 mg/l			
			5.7 mg/l			
			5.0 mg/l			
			4.9 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	< 1,000.	1,000.	mg/l	200
Due to interferences from the sample matrix, the reporting limit for the sulfate determination was increased.						
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	3.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753729

Collected: 01/04/2002 11:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Reported: 01/15/2002 at 16:57

Discard: 01/23/2002

NMB008:MW-10U:G010402 Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

--10U SDG#: HUL04-13

CAT			As Received	As Received		
No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Units	Dilution Factor
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	74.	1.0	ug/l	1
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT				Analysis		Dilution
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Factor
00254	Iron	SW-846 7380	1	01/11/2002 09:01	Damary S. Valentin	10
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 20:12	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	200
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 07:06	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 07:06	Todd T. Smythe	n.a.





Lancaster Laboratories Sample No. WW 3753730

Collected: 01/04/2002 11:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:58

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-10L:G010402 Water Sample

IMC Magnetics - NY

--10L SDG#: HUL04-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
00254	Iron	7439-89-6	56.3	2.00	mg/l	20
00212	Total Dissolved Solids	n.a.	2,020.	120.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	157.	20.	mg/l	10
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			150.4 mg/l			
			144.9 mg/l			
			176.4 mg/l			
			156.5 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	910.	250.	mg/l	50
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	< 1.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	11.	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753730

Collected: 01/04/2002 11:15 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:58

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-10L:G010402 Water Sample

IMC Magnetics - NY

--10L SDG#: HUL04-14

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 09:03	Damary S. Valentin	20
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 21:00	Timothy M. Petree	10
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	50
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 19:10	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 11:43	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 19:10	Todd T. Smythe	n.a.





Lancaster Laboratories Sample No. WW 3753731

Collected: 01/04/2002 11:30 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:58

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-5U:G010402 Water Sample

IMC Magnetics - NY

--5U- SDG#: HUL04-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	7.1	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 2.0	2.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	110.	5.0	ug/l	5
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Due to presence of trichloroethene, normal reporting limits were not



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Lancaster Laboratories Sample No. WW 3753731

Collected: 01/04/2002 11:30 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:58

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-5U:G010402 Water Sample

IMC Magnetix - NY

--5U- SDG#: HUL04-15

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
	attained for bromodichloromethane.					

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/15/2002 00:52	Todd T. Smythe	1
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/15/2002 03:09	Todd T. Smythe	5
01127	GC VOA Water Prep	SW-846 5030B	1	01/15/2002 00:52	Todd T. Smythe	n.a.



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Lancaster Laboratories Sample No. WW 3753732

Collected: 01/04/2002 11:45 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15
 Reported: 01/15/2002 at 16:58
 Discard: 01/23/2002
 NMB008:MW-5M:G010402 Water Sample
 IMC Magnetics - NY

Hull & Associates
 6130 Wilcox Rd.
 Dublin OH 43016

--5M- SDG#: HUL04-16

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	2.2	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	11.	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	< 1.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	< 1.0	1.0	ug/l	1
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753732

Collected: 01/04/2002 11:45 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:58

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-5M:G010402 Water Sample

IMC Magnetics - NY

--5M- SDG#: HUL04-16

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 23:21	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 23:21	Todd T. Smythe	n.a.



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Lancaster Laboratories Sample No. WW 3753733

Collected: 01/04/2002 12:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:58

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-5L:G010402 Water Sample

IMC Magnetix - NY

--5L- SDG#: HUL04-17

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	8.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	2.6	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	31.	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	< 1.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	1.3	1.0	ug/l	1
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753733

Collected: 01/04/2002 12:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:58

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:MW-5L:G010402 Water Sample

IMC Magnetix - NY

--5L- SDG#: HUL04-17

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/15/2002 00:06	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/15/2002 00:06	Todd T. Smythe	n.a.



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Lancaster Laboratories Sample No. WW 3753734

Collected: n.a.

Account Number: 10062

Submitted: 01/05/2002 10:15
 Reported: 01/15/2002 at 16:58
 Discard: 01/23/2002
 Trip Blank Water Sample
 IMC Magnetix - NY

Hull & Associates
 6130 Wilcox Rd.
 Dublin OH 43016

--TB- SDG#: HUL04-18TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	< 1.0	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	< 1.0	1.0	ug/l	1
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1



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Page 2 of 2

Lancaster Laboratories Sample No. WW 3753734

Collected: n.a.

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 16:58

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

Trip Blank Water Sample

IMC Magnetix - NY

--TB- SDG#: HUL04-18TB

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/14/2002 22:36	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/14/2002 22:36	Todd T. Smythe	n.a.



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Volatiles by GC Data

Case Narrative Conformance/Nonconformance Summary

Client : Hull & Associates
Project: IMC Magnetis - NY
Volatiles by GC - Water

SAMPLE ANALYSES

LL Sample #	Sample Designation	Matrix Soil Water	Comments
3753715	AW3U-	X	
3753716	AW3L-	X	
3753717	MW8U-	X	
3753718	MW8M-	X	
3753719	MW8L-	X	
3753720	AW1U-	X	
3753721MS	AW1U-	X	Matrix Spike
3753722MSD	AW1U-	X	Matrix Spike Dup
3753723	AW1UD	X	
3753724	AW1L-	X	
3753725	AW2L-	X	
3753726	AWFB-	X	
3753727	MW9U-	X	
3753728	MW9L-	X	
3753729	--10U	X	
3753730	--10L	X	
3753731	--5U-	X	
3753731	--5U-	X	DF 5
753732	--5M-	X	
753733	--5L-	X	
3753734	--TB-	X	

QUALITY CONTROL ANALYSES

BLK1827	X	Method Blank
BLK1828	X	Method Blank
BLK1829	X	Method Blank
BLK1830	X	Method Blank
LCS1805	X	Lab Control Sample

SAMPLE PREPARATION

Dilutions were necessary for some samples as noted in the comments section above.

ANALYSIS

The integration system reviews the chromatogram retention times, comparing them to the retention times in the ID Window column. A peak in the sample chromatogram with a retention time within the ID window is identified as a "hit."

The method used for analysis was EPA SW-846 Method 5030B/8021B. A J&W DB-VRX, 75m x 0.45mm capillary column was used for the analysis of all samples.

No problems were encountered during analysis.

Client : Hull & Associates
Project: IMC Magnetics - NY
Volatiles by GC - Water

QUALITY CONTROL AND NONCONFORMANCE SUMMARY

Client submitted batch QC was referenced.

All QC was within specifications.

The initial calibration H18314 met the requirements of SW-846 Method 8000B (section 7.7) since the average of all relative standard deviation values was < 20%. (The average % RSD was calculated using all of the compounds in the standard, though the ICAL summary form in this data package reflects only the client requested compounds.) As stated in method 8000B (section 7.5.1.2.3) the data user should be made aware that the %RSD(s) for chloromethane and methylene chloride fell outside of the < 20% criteria.

The calibration verification standard (injection #01 analyzed on 01/14/02 at 02:07) met the requirements of SW-846 Method 8000B (section 7.7) since the average of all percent drift values was < 15%. (The average % drift was calculated using all of the compounds in the standard, though the CCV summary form in this data package only reflects the client requested compounds.) As stated in method 8000B (section 7.5.1.2.3) the data user should be made aware that the %drift for chloromethane and chloroethane fell outside of the +/- 15% criteria.

The calibration verification standard (injection #11 analyzed on 01/14/02 at 10:26) met the requirements of SW-846 Method 8000B (section 7.7) since the average of all percent drift values was < 15%. (The average % drift was calculated using all of the compounds in the standard, though the CCV summary form in this data package only reflects the client requested compounds.) As stated in method 8000B (section 7.5.1.2.3) the data user should be made aware that the %drift for dichlorodifluoromethane and chloromethane fell outside of the +/- 15% criteria.

The calibration verification standard (injection #23 analyzed on 01/14/02 at 19:56) met the requirements of SW-846 Method 8000B (section 7.7) since the average of all percent drift values was < 15%. (The average % drift was calculated using all of the compounds in the standard, though the CCV summary form in this data package only reflects the client requested compounds.) As stated in method 8000B (section 7.5.1.2.3) the data user should be made aware that the %drift for dichlorodifluoromethane and chloromethane fell outside of the +/- 15% criteria.

The calibration verification standard (injection #33 analyzed on 01/15/02 at 04:03) met the requirements of SW-846 Method 8000B (section 7.7) since the average of all percent drift values was < 15%. (The average % drift was calculated using all of the compounds in the standard, though the CCV summary form in this data package only reflects the client requested compounds.) As stated in method 8000B (section 7.5.1.2.3) the data user should be made aware that the %drift for dichlorodifluoromethane and chloromethane fell outside of the +/- 15% criteria.

DATA INTERPRETATION

No explanation is necessary for the data submitted.

Due to the limitations of the data package generating software, the NYSDEC ASP forms could not be included for the GC Volatiles data. Sample results are summarized on the analysis reports, and QC and calibration information is included on summary forms in this section of the data package.

Case Narrative
SDG# HUL04

Client : Hull & Associates
Project: IMC Magnetics - NY
Volatiles by GC - Water

Narrative reviewed and approved by:

Shannon K. Price for
Steve J. Stabinger, Group Leader

1-28-02
Date

Page 3 of 3

QC Summary

Surrogate Recovery
Volatiles by GC - Water

LL Sample#	Sample Code	Dilution Factor	1B4CB-H Water-HALL % Recovery	1B4CB-P Water-PID % Recovery	TOT OUT
3753715	AW3U-	1.0	87	88	
3753716	AW3L-	1.0	87	89	
3753717	MW8U-	1.0	86	86	
3753718	MW8M-	1.0	86	88	
3753719	MW8L-	1.0	86	92	
3753720	AW1U-	1.0	91	92	
3753721MS	AW1U-	1.0	101	95	
3753722MSD	AW1U-	1.0	96	94	
3753723	AW1UD	1.0	87	87	
3753724	AW1L-	1.0	84	90	
3753725	AW2L-	1.0	85	88	
3753726	AWFB-	1.0	88	91	
3753727	MW9U-	1.0	91	91	
3753728	MW9L-	1.0	91	89	
3753729	--10U	1.0	92	89	
3753730	--10L	1.0	87	88	
3753731	--5U-	1.0	92	90	
3753731	--5U-	5.0	93		
3753732	--5M-	1.0	88	87	
3753733	--5L-	1.0	85	86	
3753734	--TB-	1.0	89	87	
BLK1827	METHOD BLANK	1.0	91	89	
BLK1828	METHOD BLANK	1.0	85	87	
BLK1829	METHOD BLANK	1.0	91	91	
BLK1830	METHOD BLANK	1.0	90		
LCS1805	LAB CONTROL	1.0	98	90	

* = Values outside quality control limits.

D = Surrogates diluted - not counted towards total out.

TOT OUT = Total # of surrogates with recovery outside control limits.

		Control Limits	
		Lower	Upper
1B4CB-H	= 1-Bromo-4-Chlorobenzene (Water - HALL)	59	132
1B4CB-P	= 1-Bromo-4-Chlorobenzene (Water - PID)	69	121

Quality Control Summary
SDG# HUL04

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK1827
Date.....: 01/14/02
Instrument.....: 5843

Batch Number.....: 02014A18
Time.....: 04:03
Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
3753720	AW1U-	01/14/02	05:34
3753727	MW9U-	01/14/02	06:19
3753729	--10U	01/14/02	07:06
3753721MS	AW1U-	01/14/02	07:53
3753722MSD	AW1U-	01/14/02	08:38
LCS1805	LAB CONTROL	01/14/02	09:23

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK1827
Date.....: 01/14/02
Instrument.....: 5843

Batch Number.....: 02014A18
Time.....: 04:03
Matrix.....: Water

Method Blank Results				
CAS Number	Compound	Blank Conc. (UG/L)	LOQ (UG/L)	MDL (UG/L)
75-71-8	DICHLORODIFLUOROMETHANE	ND	2	.2
74-87-3	CHLOROMETHANE	ND	5	.5
75-01-4	VINYL CHLORIDE	ND	1	.2
74-83-9	BROMOMETHANE	ND	5	.5
75-00-3	CHLOROETHANE	ND	1	.2
75-69-4	TRICHLOROFLUOROMETHANE	ND	1	.2
75-35-4	1,1-DICHLOROETHENE	ND	1	.2
75-09-2	METHYLENE CHLORIDE	ND	1	.2
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	1	.2
75-34-3	1,1-DICHLOROETHANE	ND	1	.2
156-59-2	CIS-1,2-DICHLOROETHENE	ND	1	.2
67-66-3	CHLOROFORM	ND	1	.2
107-06-2	1,2-DICHLOROETHANE	ND	1	.2
71-55-6	1,1,1-TRICHLOROETHANE	ND	1	.2
56-23-5	CARBON TETRACHLORIDE	ND	1	.2
71-43-2	BENZENE	ND	1	.2
78-87-5	1,2-DICHLOROPROPANE	ND	1	.2
79-01-6	TRICHLOROETHENE	ND	1	.2
75-27-4	BROMODICHLOROMETHANE	ND	1	.2
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	1	.2
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	1	.2
79-00-5	1,1,2-TRICHLOROETHANE	ND	1	.2
108-88-3	TOLUENE	ND	1	.2
124-48-1	DIBROMOCHLOROMETHANE	ND	1	.2
127-18-4	TETRACHLOROETHENE	ND	1	.2
108-90-7	CHLOROBENZENE	ND	1	.2
100-41-4	ETHYLBENZENE	ND	1	.2
75-25-2	BROMOFORM	ND	1	.2
79-34-5	1,1,2,2-TETRACHLOROETHANE	ND	1	.2
541-73-1	1,3-DICHLOROBENZENE	ND	1	.2
106-46-7	1,4-DICHLOROBENZENE	ND	1	.2
95-50-1	1,2-DICHLOROBENZENE	ND	1	.2
1330-20-7	TOTAL XYLENES	ND	3	.6

LOQ = Limit of Quantitation; MDL = Method Detection Limit
ND = None Detected; * = Above Limit of Quantitation

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK1828
Date.....: 01/14/02
Instrument.....: 5843

Batch Number.....: 02014A18
Time.....: 11:39
Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
3753715	AW3U-	01/14/02	12:25
3753716	AW3L-	01/14/02	13:09
3753717	MW8U-	01/14/02	13:55
3753718	MW8M-	01/14/02	14:40
3753719	MW8L-	01/14/02	15:25
3753723	AW1UD	01/14/02	16:10
3753724	AW1L-	01/14/02	16:55
3753725	AW2L-	01/14/02	17:40
3753728	MW9L-	01/14/02	18:25
3753730	--10L	01/14/02	19:10

Quality Control Summary
SDG# HUL04

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK1828
Date.....: 01/14/02
Instrument.....: 5843

Batch Number.....: 02014A18
Time.....: 11:39
Matrix.....: Water

Method Blank Results				
CAS Number	Compound	Blank Conc. (UG/L)	LOQ (UG/L)	MDL (UG/L)
75-71-8	DICHLORODIFLUOROMETHANE	ND	2	.2
74-87-3	CHLOROMETHANE	ND	5	.5
75-01-4	VINYL CHLORIDE	ND	1	.2
74-83-9	BROMOMETHANE	ND	5	.5
75-00-3	CHLOROETHANE	ND	1	.2
75-69-4	TRICHLOROFLUOROMETHANE	ND	1	.2
75-35-4	1,1-DICHLOROETHENE	ND	1	.2
75-09-2	METHYLENE CHLORIDE	ND	1	.2
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	1	.2
75-34-3	1,1-DICHLOROETHANE	ND	1	.2
156-59-2	CIS-1,2-DICHLOROETHENE	ND	1	.2
67-66-3	CHLOROFORM	ND	1	.2
107-06-2	1,2-DICHLOROETHANE	ND	1	.2
71-55-6	1,1,1-TRICHLOROETHANE	ND	1	.2
56-23-5	CARBON TETRACHLORIDE	ND	1	.2
71-43-2	BENZENE	ND	1	.2
78-87-5	1,2-DICHLOROPROPANE	ND	1	.2
79-01-6	TRICHLOROETHENE	ND	1	.2
75-27-4	BROMODICHLOROMETHANE	ND	1	.2
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	1	.2
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	1	.2
79-00-5	1,1,2-TRICHLOROETHANE	ND	1	.2
108-88-3	TOLUENE	ND	1	.2
124-48-1	DIBROMOCHLOROMETHANE	ND	1	.2
127-18-4	TETRACHLOROETHENE	ND	1	.2
108-90-7	CHLOROBENZENE	ND	1	.2
100-41-4	ETHYLBENZENE	ND	1	.2
75-25-2	BROMOFORM	ND	1	.2
79-34-5	1,1,2,2-TETRACHLOROETHANE	ND	1	.2
541-73-1	1,3-DICHLOROBENZENE	ND	1	.2
106-46-7	1,4-DICHLOROBENZENE	ND	1	.2
95-50-1	1,2-DICHLOROBENZENE	ND	1	.2
1330-20-7	TOTAL XYLENES	ND	3	.6

LOQ = Limit of Quantitation; MDL = Method Detection Limit
ND = None Detected; * = Above Limit of Quantitation

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK1829
Date.....: 01/14/02
Instrument.....: 5843

Batch Number.....: 02014A18
Time.....: 20:52
Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
3753726	AWFB-	01/14/02	21:51
3753734	--TB-	01/14/02	22:36
3753732	--5M-	01/14/02	23:21
3753733	--5L-	01/15/02	00:06
3753731	--5U-	01/15/02	00:52

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK1829
Date.....: 01/14/02
Instrument.....: 5843

Batch Number.....: 02014A18
Time.....: 20:52
Matrix.....: Water

Method Blank Results				
CAS Number	Compound	Blank Conc. (UG/L)	LOQ (UG/L)	MDL (UG/L)
75-71-8	DICHLORODIFLUOROMETHANE	ND	2	.2
74-87-3	CHLOROMETHANE	ND	5	.5
75-01-4	VINYL CHLORIDE	ND	1	.2
74-83-9	BROMOMETHANE	ND	5	.5
75-00-3	CHLOROETHANE	ND	1	.2
75-69-4	TRICHLOROFLUOROMETHANE	ND	1	.2
75-35-4	1,1-DICHLOROETHENE	ND	1	.2
75-09-2	METHYLENE CHLORIDE	ND	1	.2
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	1	.2
75-34-3	1,1-DICHLOROETHANE	ND	1	.2
156-59-2	CIS-1,2-DICHLOROETHENE	ND	1	.2
67-66-3	CHLOROFORM	ND	1	.2
107-06-2	1,2-DICHLOROETHANE	ND	1	.2
71-55-6	1,1,1-TRICHLOROETHANE	ND	1	.2
56-23-5	CARBON TETRACHLORIDE	ND	1	.2
71-43-2	BENZENE	ND	1	.2
78-87-5	1,2-DICHLOROPROPANE	ND	1	.2
79-01-6	TRICHLOROETHENE	ND	1	.2
75-27-4	BROMODICHLOROMETHANE	ND	1	.2
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	1	.2
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	1	.2
79-00-5	1,1,2-TRICHLOROETHANE	ND	1	.2
108-88-3	TOLUENE	ND	1	.2
124-48-1	DIBROMOCHLOROMETHANE	ND	1	.2
127-18-4	TETRACHLOROETHENE	ND	1	.2
108-90-7	CHLOROBENZENE	ND	1	.2
100-41-4	ETHYLBENZENE	ND	1	.2
75-25-2	BROMOFORM	ND	1	.2
79-34-5	1,1,2,2-TETRACHLOROETHANE	ND	1	.2
541-73-1	1,3-DICHLOROBENZENE	ND	1	.2
106-46-7	1,4-DICHLOROBENZENE	ND	1	.2
95-50-1	1,2-DICHLOROBENZENE	ND	1	.2
1330-20-7	TOTAL XYLENES	ND	3	.6

LOQ = Limit of Quantitation; MDL = Method Detection Limit
ND = None Detected; * = Above Limit of Quantitation

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK1830
Date.....: 01/15/02
Instrument.....: 5843

Batch Number.....: 02014A18
Time.....: 01:37
Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
3753731	--5U-	01/15/02	03:09

Method Blank Results				
CAS Number	Compound	Blank Conc. (UG/L)	LOQ (UG/L)	MDL (UG/L)
127-18-4	TETRACHLOROETHENE	.3	1	.2

LOQ = Limit of Quantitation; MDL = Method Detection Limit
ND = None Detected; * = Above Limit of Quantitation
Page 1 of 1

Matrix Spike/Matrix Spike Duplicate
Volatiles by GC - Water

Unspiked Sample Number.....: 3753720
Spiked Sample Number.....: 3753721MS
Spiked Dup Sample Number...: 3753722MSD

Batch Number.....: 02014A18
Date.....: 01/14/02
Matrix.....: Water

Instrument.....: 5843

This MS/MSD applies to the
following samples:
3753715 3753716 3753717 3753718
3753719 3753720 3753721 3753722
3753723 3753724 3753725 3753726
3753727 3753728 3753729 3753730
3753731 3753732 3753733 3753734

Compound	Spike Added (UG/L)	Sample Conc (UG/L)	MS Conc (UG/L)	MSD Conc (UG/L)	MS % Recov	MSD % Recov	QC Limits Recov	RPD	QC Limits RPD
DICHLORODIFLUOROMETH	20.0	0.49	18.0	19.3	88	94	18-211	7	30
CHLOROMETHANE	20.1	0.00	8.15	8.35	41	42	01-159	2	30
VINYL CHLORIDE	20.0	0.00	16.7	15.1	83	76	49-142	10	30
BROMOMETHANE	20.0	0.00	14.6	13.7	73	68	13-163	6	30
CHLOROETHANE	20.0	0.00	15.5	15.0	78	75	26-143	3	30
TRICHLOROFLUOROMETHA	20.0	0.00	15.9	15.1	80	76	52-127	5	30
1,1-DICHLOROETHENE	20.0	0.00	19.6	19.0	98	95	42-154	3	30
METHYLENE CHLORIDE	20.0	0.00	18.0	17.5	90	87	61-128	3	30
TRANS-1,2-DICHLORORE	20.0	0.00	20.3	19.6	102	98	74-133	4	30
1,1-DICHLOROETHANE	20.0	0.00	21.9	20.9	110	104	75-130	5	30
CIS-1,2-DICHLOROETHE	20.0	1.36	23.6	22.2	111	104	68-137	6	30
CHLOROFORM	20.0	0.29	22.5	21.0	111	104	76-127	7	30
1,2-DICHLOROETHANE	20.0	0.00	21.8	20.7	109	103	79-130	5	30
1,1,1-TRICHLOROETHAN	20.0	0.89	23.0	21.9	110	105	72-130	5	30
CARBON TETRACHLORIDE	20.0	0.00	22.2	21.1	111	105	72-130	5	30
BENZENE	20.0	0.00	19.5	19.4	98	97	79-119	0	30
1,2-DICHLOROPROPANE	20.0	0.00	21.8	20.6	109	103	80-128	6	30
TRICHLOROETHENE	20.0	1.57	20.8	20.6	96	95	65-130	1	30
BROMODICHLOROMETHANE	20.0	0.00	20.9	20.0	104	100	75-127	4	30
CIS-1,3-DICHLOROPROP	20.0	0.00	20.4	20.0	102	100	62-128	2	30
TRANS-1,3-DICHLOROPR	20.0	0.00	19.2	18.5	96	93	73-129	4	30
1,1,2-TRICHLOROETHAN	20.0	0.00	20.9	20.1	104	100	81-123	4	30
TOLUENE	20.0	0.00	19.2	19.3	96	96	76-120	0	30
DIBROMOCHLOROMETHANE	20.0	0.00	21.1	20.6	105	103	78-134	2	30
TETRACHLOROETHENE	20.0	1.32	22.3	21.7	105	102	72-129	3	30
CHLOROBENZENE	20.0	0.00	19.3	19.2	96	96	83-117	1	30
ETHYLBENZENE	20.0	0.00	19.5	19.5	98	97	79-121	0	30
BROMOFORM	20.0	0.00	22.6	21.1	113	106	72-143	7	30
1,1,2,2-TETRACHLOROE	20.0	0.00	21.7	20.3	108	102	80-132	6	30
1,3-DICHLOROBENZENE	20.0	0.00	20.6	19.9	103	99	81-132	4	30
1,4-DICHLOROBENZENE	20.0	0.00	19.1	19.0	96	95	84-115	1	30
1,2-DICHLOROBENZENE	20.0	0.00	20.8	19.7	104	98	78-131	6	30
TOTAL XYLENES	60.0	0.00	59.2	59.1	99	99	80-121	0	30

MS=Matrix Spike; MSD=Matrix Spike Duplicate; ND=None Detected; RPD=Relative Percent Difference

The RPD limits are advisory and are evaluated in relation to the other QC.

* = Value outside quality control limits.

0276

Quality Control Summary
SDG# HUL04

Laboratory Control Sample
Volatiles by GC - Water

Batch Number.....: 02014A18
Date.....: 01/14/02
Matrix.....: Water

Instrument.....: 5843
Calibration Date.....: 12/31/01 (HALL)
Calibration Date.....: 12/31/01 (PID)

This LCS applies to the
following samples:
3753715 3753716 3753717 3753718
3753719 3753720 3753721 3753722
3753723 3753724 3753725 3753726
3753727 3753728 3753729 3753730
3753731 3753732 3753733 3753734

Compound	Spike Added (UG/L)	LCS Conc (UG/L)	LCS % Recov	LCS Limits Recov
DICHLORODIFLUOROMETHANE	20.0	23.6	118	29-208
CHLOROMETHANE	20.1	12.1	60	17-149
VINYL CHLORIDE	20.0	18.2	91	53-137
BROMOMETHANE	20.0	15.8	79	27-153
CHLOROETHANE	20.0	16.1	80	31-137
TRICHLOROFLUOROMETHANE	20.0	17.7	89	51-125
1,1-DICHLOROETHENE	20.0	19.0	95	44-147
METHYLENE CHLORIDE	20.0	17.9	90	68-121
TRANS-1,2-DICHLOROETHENE	20.0	20.0	100	78-124
1,1-DICHLOROETHANE	20.0	20.1	101	80-122
CIS-1,2-DICHLOROETHENE	20.0	20.3	102	80-125
CHLOROFORM	20.0	20.2	101	78-122
1,2-DICHLOROETHANE	20.0	19.9	100	80-127
1,1,1-TRICHLOROETHANE	20.0	19.6	98	77-121
CARBON TETRACHLORIDE	20.0	19.9	100	75-122
BENZENE	20.0	18.5	92	85-111
1,2-DICHLOROPROPANE	20.0	19.6	98	81-126
TRICHLOROETHENE	20.0	17.8	89	82-110
BROMODICHLOROMETHANE	20.0	18.7	94	78-121
CIS-1,3-DICHLOROPROPENE	20.0	19.2	96	74-118
TRANS-1,3-DICHLOROPROPENE	20.0	17.8	89	78-124
1,1,2-TRICHLOROETHANE	20.0	19.2	96	83-122
TOLUENE	20.0	18.0	90	84-112
DIBROMOCHLOROMETHANE	20.0	20.2	101	79-132
TETRACHLOROETHENE	20.0	19.1	95	76-123
CHLOROBENZENE	20.0	18.1	90	85-114
ETHYLBENZENE	20.0	18.3	91	84-114
BROMOFORM	20.0	20.5	102	75-141
1,1,2,2-TETRACHLOROETHANE	20.0	19.2	96	84-129
1,3-DICHLOROBENZENE	20.0	19.8	99	84-128
1,4-DICHLOROBENZENE	20.0	18.1	90	86-112
1,2-DICHLOROBENZENE	20.0	19.8	99	82-127
TOTAL XYLENES	60.0	55.0	92	85-115

* = Recovery outside quality control limits.

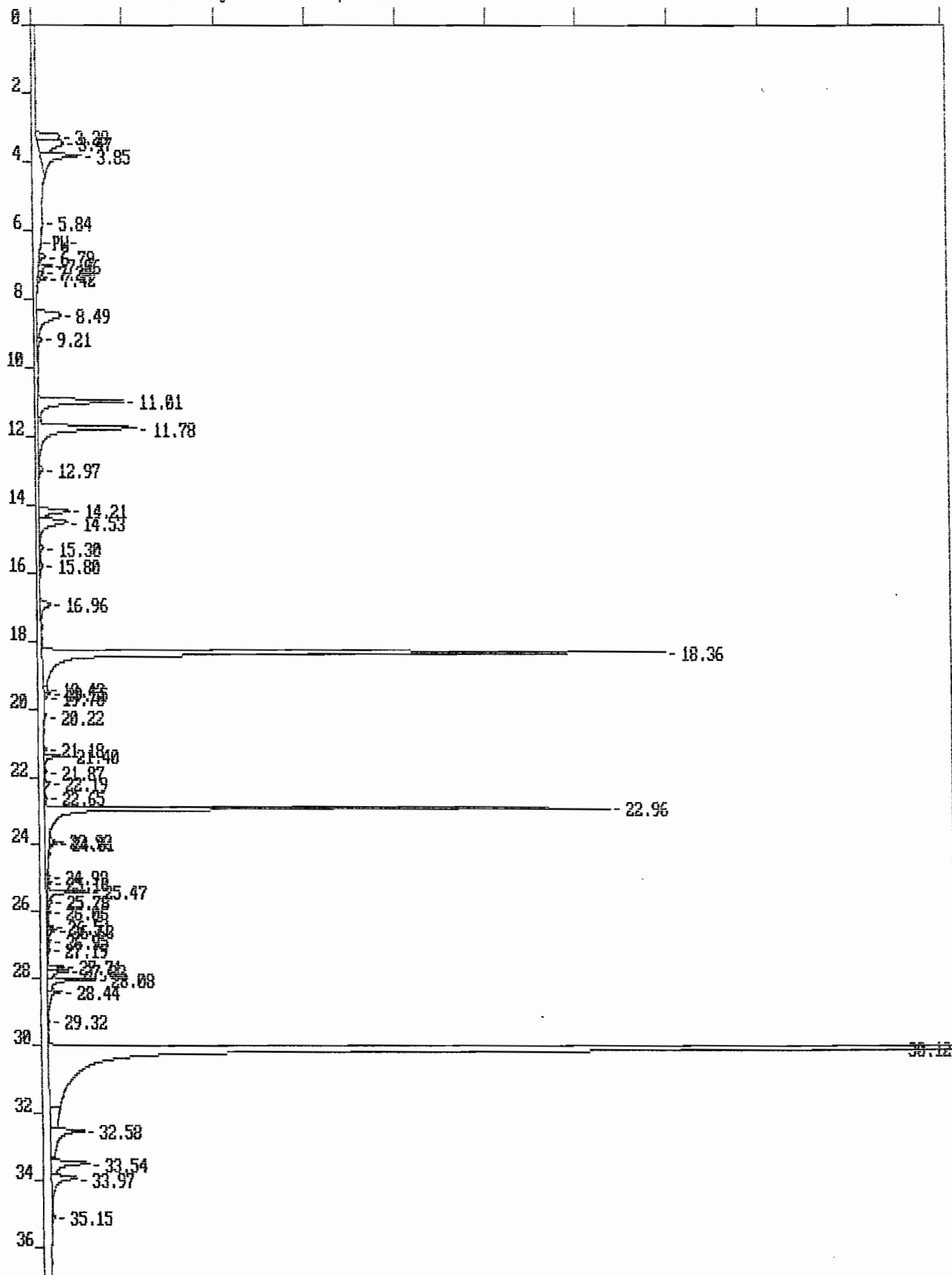
Sample Data

File=C:\CP\DATA1\18014.13R Date printed=01-14-2002 Time= 12:25:14

Sample Name=3753715

02014A181127,8404

.0 to 37.0 min. Low Y=0.018 High Y=15.018 mv Span=15.0



Sample Name: 3753715

Batch: 02014A18

Date Taken: Jan 14, 2002 12:25:08

Raw File: C:\CP\DATA1\18014.13R

Area File: C:\CP\DATA1\18014.13A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
3.855	3.797	DICHLORODIFLUOROMETH	0.3304	7370	669
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.309	4.309	VINYL CHLORIDE	0.0000	0	0
4.786	4.786	BROMOMETHANE	0.0000	0	0
4.976	4.976	CHLOROETHANE	0.0000	0	0
5.843	5.831	TRICHLOROFLUOROMETHA	0.0083	217	21
6.790	6.751	1,1-DICHLOROETHENE	0.0250	978	116
7.063	7.061	METHYLENE CHLORIDE	0.0272	1385	226
7.238	7.244	TRICHLOROTRIFLUOROET	0.0278	822	101
8.489	8.574	TRANS-1,2-DICHLOROET	0.0650	8084	406
9.215	9.222	1,1-DICHLOROETHANE	0.0150	1053	80
11.007	11.009	CIS-1,2-DICHLOROETHE	0.2821	13807	1428
11.527	11.527	BROMOCHLOROMETHANE	0.0000	0	0
11.782	11.782	CHLOROFORM	0.2677	19769	1637
12.030	12.030	2,2-DICHLOROPROPANE	0.0000	0	0
14.214	14.209	1,2-DICHLOROETHANE	0.1085	4663	519
14.533	14.528	1,1,1-TRICHLOROETHAN	0.0956	6734	475
15.296	15.290	1,1-DICHLOROPROPENE	0.0150	801	66
15.803	15.813	CARBON TETRACHLORIDE	0.0096	742	58
18.032	18.032	DIBROMOMETHANE	0.0000	0	0
18.204	18.204	1,2-DICHLOROPROPANE	0.0000	0	0
18.362	18.361	TRICHLOROETHENE	1.2864	75248	10282
18.468	18.468	BROMODICHLOROMETHANE	0.0000	0	0
19.697	19.856	2-CHLOROETHYL VINYL	0.0214	232	49
20.221	20.203	CIS-1,3-DICHLOROPROP	0.0071	402	51
21.177	21.160	TRANS-1,3-DICHLOROPR	0.0079	330	55
21.399	21.388	1,1,2-TRICHLOROETHAN	0.0360	2031	302
21.865	21.851	1,3-DICHLOROPROPANE	0.0062	244	44
22.187	22.234	DIBROMOCHLOROMETHANE	0.0160	1018	93
22.653	22.629	1,2-DIBROMOETHANE	0.0101	346	38
22.963	22.954	TETRACHLOROETHENE	0.8389	55323	9323
23.917	23.904	1,1,1,2-TETRACHLOROE	0.0073	400	85
24.014	24.002	CHLOROBENZENE	0.0233	835	129
24.682	24.682	BROMOFORM	0.0000	0	0
25.185	25.172	1,1,2,2-TETRACHLOROE	0.0093	324	60
25.466	25.375	1,2,3-TRICHLOROPROPA	0.1341	3622	684
26.063	26.041	BROMOBENZENE	0.0169	351	48
26.507	26.491	2-CHLOROTOLUENE	0.0226	415	90
26.625	26.609	4-CHLOROTOLUENE	0.0330	959	134
27.712	27.693	1,3-DICHLOROBENZENE	0.0446	1248	261
27.825	27.807	1,4-DICHLOROBENZENE	0.0552	2350	344
28.437	28.418	1,2-DICHLOROBENZENE	0.0414	2751	234
29.320	29.302	1,2-DIBROMO-3-CHLORO	0.0171	255	19
30.116	30.100	SURR-1B4CB-H	25.9841	480050	89066
32.582	32.553	1,2,4-TRICHLOROBENZE	0.1399	9217	562
33.543	33.516	HEXACHLOROBUTADIENE	0.1365	6681	647
33.973	33.940	1,2,3-TRICHLOROBENZE	0.1282	6070	438
TOTAL 1,2-DICHLOROETHENE:		0.3471			

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 86.6136%

Chrom Perfect version 6.07

Reported on 01-14-2002at 12:26:04

Sample name: 3753715

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.13R

Reviewed by: DMB/994

Verified by: Jmm49

Date: 1/17/02

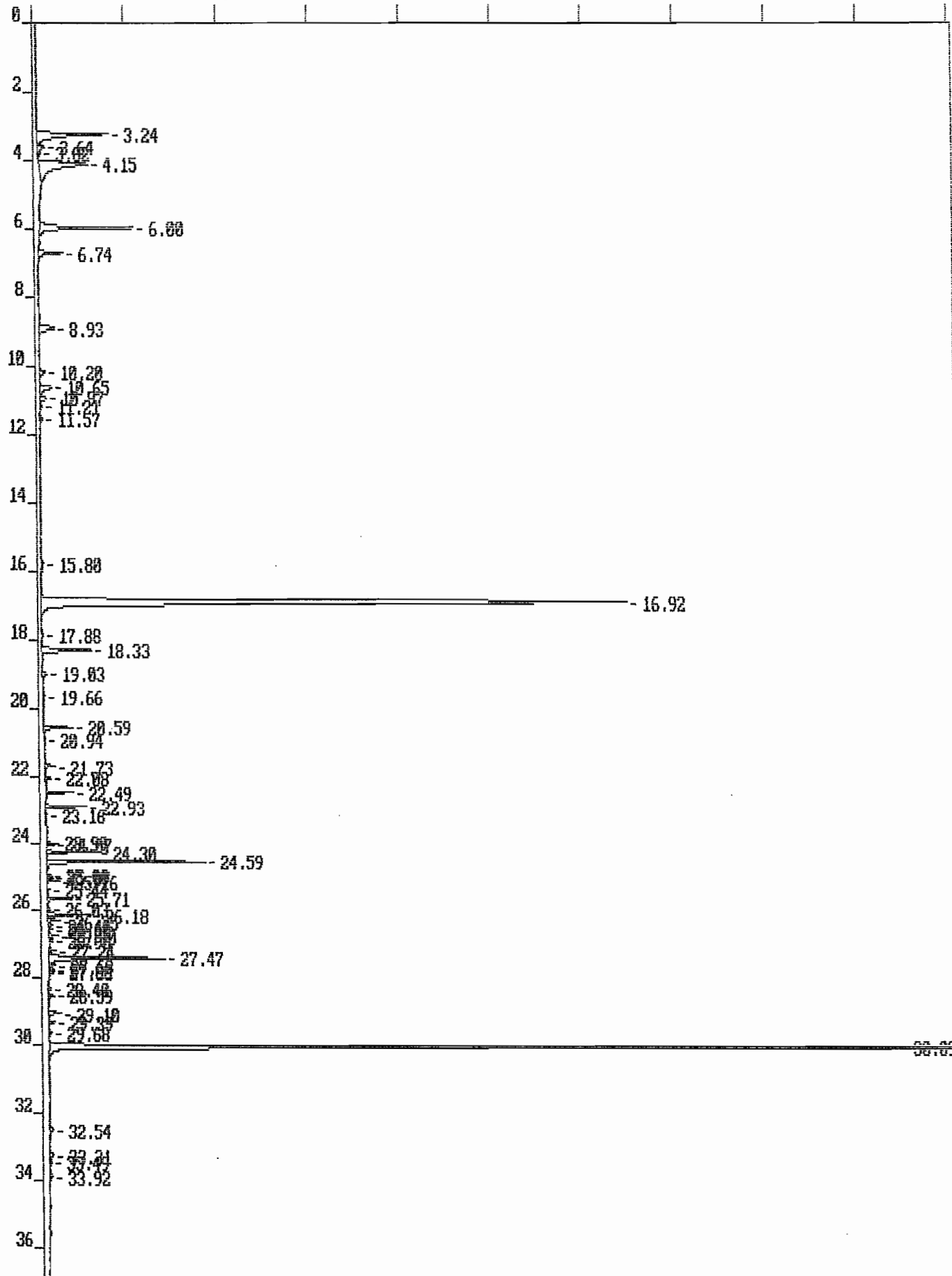
Date: 01/15/02

File=C:\CP\DATA1\180148.13R Date printed=01-14-2002 Time= 12:26:15

Sample Name=3753715

02014A181127,8404

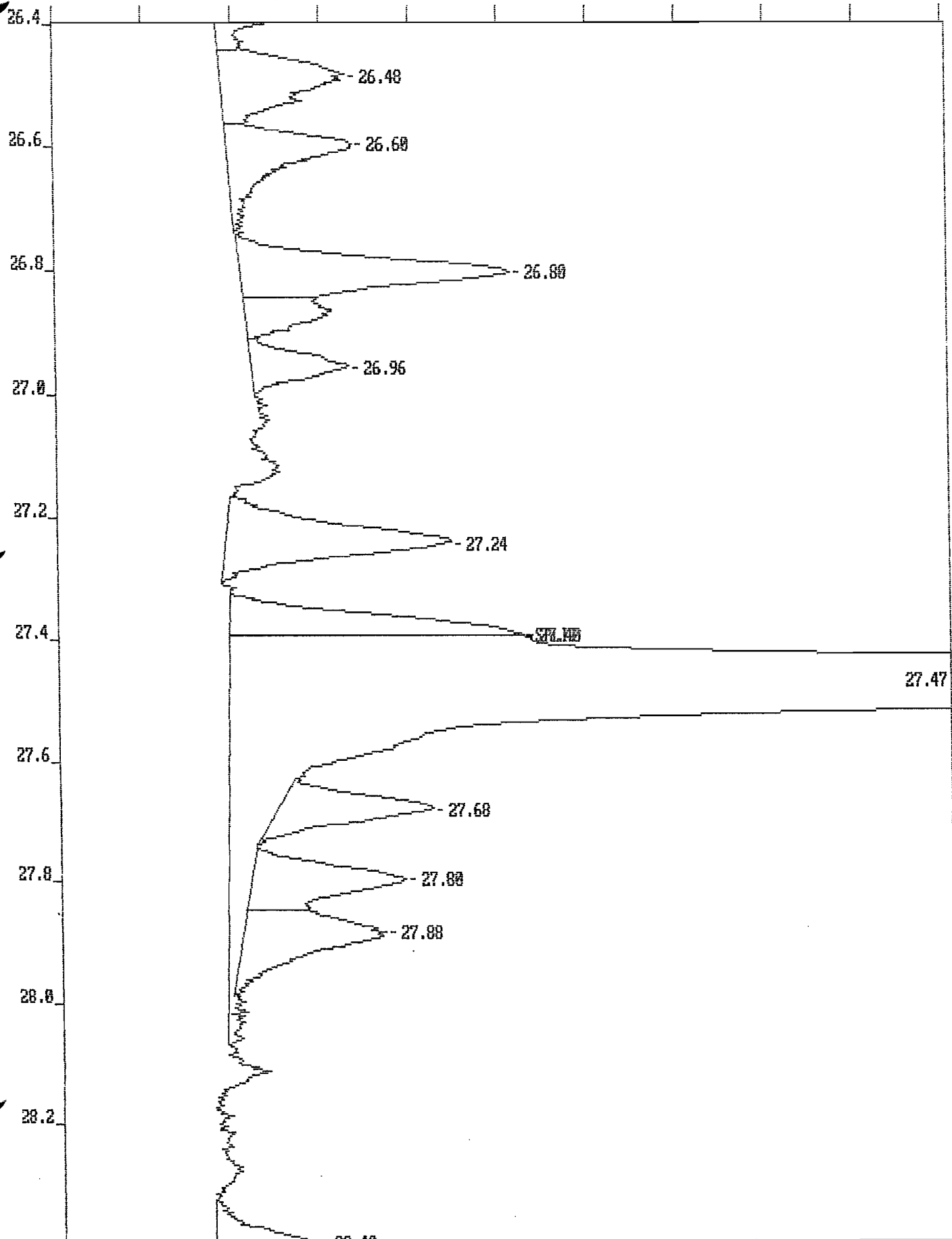
1.0 to 37.0 min. Low Y=0.001 High Y=15.001 mv Span=15.0



File=C:\CP\DATA1\18014B.13R Date printed=01-14-2002 Time= 12:52:05

Sample Name=3753715 02014A181127,8404

26.397 to 28.397 min. Low Y=0.027 High Y=0.52 mv Span=0.493



Sample Name: 3753715

Batch: 02014A18

Date Taken: Jan 14, 2002 12:25:08

Raw File: C:\CP\DATA1\18014B.13R

Area File: C:\CP\DATA1\18014B.13R

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Reprocessed to measure <Value

1/14/02

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.281	4.281	0.0000	0	0
6.744	6.722	1.1431	2209	398
8.544	8.544	0.0000	0	0
8.933	8.933	1.0774	2261	257
10.966	10.979	0.3534	865	116
15.259	15.259	0.0000	0	0
15.803	15.997	0.0526	442	37
16.921	16.930	1.0000	72254	9603
18.327	18.332	1.4156	4427	816
19.657	19.828	0.0747	146	32
20.176	20.176	0.0000	0	0
20.937	21.133	0.0498	127	26
21.727	21.720	0.1165	620	168
22.935	22.929	0.8850	2129	678
23.988	23.979	0.0318	183	62
24.303	24.293	0.5335	2512	849
24.588	24.585	1.6478	8829	2607
25.066	25.050	0.0506	332	102
25.162	25.153	0.1401	714	219
25.707	25.696	0.3291	1281	395
26.026	26.014	0.0290	171	52
26.352	26.341	0.1413	726	197
26.483	26.464	0.0453	293	69
26.597	26.584	0.0431	263	70
26.803	26.788	0.0760	456	149
27.242	27.211	0.1213	436	126
27.395	27.393	~~0.1110~~ <MDL	350	164
27.561	27.561	0.0000	0	0
27.679	27.667	0.0601	256	87
27.797	27.782	0.0592	289	86
27.884	27.868	0.0762	323	79
28.397	28.391	0.0534	261	58
28.593	28.579	0.0955	370	94
30.087	30.072	26.4678	119299	31616
32.537	32.524	0.1438	394	68
33.306	33.270	0.1289	450	71
33.494	33.487	0.1492	298	41
33.921	33.912	0.1365	364	53

XYLENES (Total): 1.7879

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 88.2260%

Chrom Perfect version 6.07

Reported on 01-14-2002at 12:55:06

Sample Name: 3753715

Batch: 02014A18

Date Taken: Jan 14, 2002 12:25:08

Raw File: C:\CP\DATA1\18014B.13R

Area File: C:\CP\DATA1\18014B.13A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\PI8365.CAL(version 24):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0
6.744	6.722	1,1-DICHLOROETHENE	1.1431	2209
8.544	8.544	TRANS-1,2-DICHLOROET	0.0000	0
8.933	8.933	METHYL T-BUTYL ETHER	1.0774	2261
10.966	10.979	CIS-1,2-DICHLOROETHE	0.3534	865
15.259	15.259	1,1-DICHLOROPROPENE	0.0000	0
15.803	15.997	BENZENE	0.0526	442
16.921	16.930	ISTD-FBENZENE	1.0000	72254
18.327	18.332	TRICHLOROETHENE	1.4156	4427
19.657	19.828	2-CHLOROETHYL VINYL	0.0747	146
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0
20.937	21.133	TRANS-1,3-DICHLOROPR	0.0498	127
21.727	21.720	TOLUENE	0.1165	620
22.935	22.929	TETRACHLOROETHENE	0.8850	2129
23.988	23.979	CHLOROBENZENE	0.0318	183
24.303	24.293	ETHYLBENZENE	0.5335	2512
24.588	24.585	M,P-XYLENE	1.6478	8829
25.066	25.050	STYRENE	0.0506	332
25.162	25.153	O-XYLENE	0.1401	714
25.707	25.696	ISOPROPYLBENZENE	0.3291	1281
26.026	26.014	BROMOBENZENE	0.0290	171
26.352	26.341	N-PROPYLBENZENE	0.1413	726
26.483	26.464	2-CHLOROTOLUENE	0.0453	293
26.597	26.584	4-CHLOROTOLUENE	0.0431	263
26.803	26.788	1,3,5-TRIMETHYLBENZE	0.0760	456
27.242	27.211	TERT-BUTYLBENZENE	0.1213	436
27.468	27.393	1,2,4-TRIMETHYLBENZE	~~1.2983~~ <i>1.2983</i>	8238
27.561	27.561	SEC-BUTYLBENZENE	0.0000	0
27.679	27.667	1,3-DICHLOROBENZENE	0.0601	256
27.797	27.782	1,4-DICHLOROBENZENE	0.0592	289
27.884	27.868	P-ISOPROPYLTOLUENE	0.0762	323
28.397	28.391	1,2-DICHLOROBENZENE	0.0534	261
28.593	28.579	N-BUTYLBENZENE	0.0955	370
30.087	30.072	SURR-1B4CB-P	26.4678	119299
32.537	32.524	1,2,4-TRICHLOROBENZE	0.1438	394
33.306	33.270	NAPHTHALENE	0.1289	450
33.494	33.487	HEXACHLOROBUTADIENE	0.1492	298
33.921	33.912	1,2,3-TRICHLOROBENZE	0.1365	364

XYLENES (Total): 1.7879

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 88.2260%

Chrom Perfect version 6.07

Reported on 01-14-2002at 12:27:35

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753715

Batch: 02014A181127.840

Raw file: C:\CP\DATA1\18014B.13R

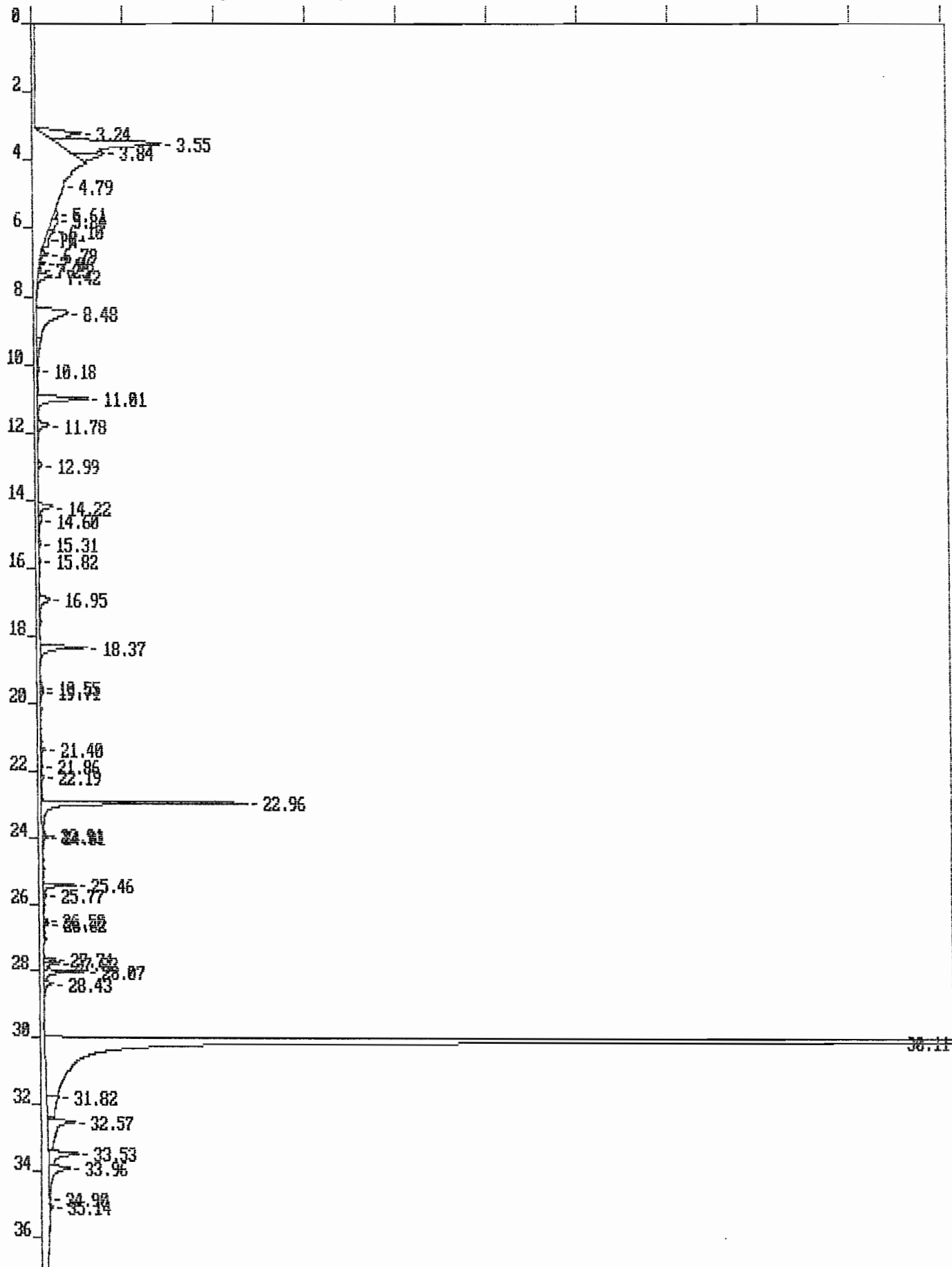
Reviewed by: MMYBPA

Verified by: MMY48

Date: 1/14/02

Date: 01/15/02

File=C:\CP\DATA1\18014.14R Date printed=01-14-2002 Time= 13:10:03
Sample Name=3753716 02014A181127,8404
0.0 to 37.0 min. Low Y=0.018 High Y=15.018 mv Span=15.0



Sample Name: 3753716

Batch: 02014A18

Date Taken: Jan 14, 2002 13:09:57

Raw File: C:\CP\DATA1\18014.14R

Area File: C:\CP\DATA1\18014.14A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.843	3.797	DICHLORODIFLUOROMETH	0.2534	5555	513
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.309	4.309	VINYL CHLORIDE	0.0000	0	0
4.786	4.786	BROMOMETHANE	0.0077	552	21
4.976	4.976	CHLOROETHANE	0.0000	0	0
5.838	5.831	TRICHLOROFLUOROMETHA	0.0462	1746	118
6.793	6.751	1,1-DICHLOROETHENE	0.0296	959	137
7.064	7.061	METHYLENE CHLORIDE	0.0123	471	102
7.251	7.244	TRICHLOROTRIFLUOROET	0.0126	303	46
8.475	8.574	TRANS-1,2-DICHLOROET	0.0853	12370	533
9.222	9.222	1,1-DICHLOROETHANE	0.0000	0	0
11.010	11.009	CIS-1,2-DICHLOROETHE	0.1658	7706	839
11.527	11.527	BROMOCHLOROMETHANE	0.0000	0	0
11.784	11.782	CHLOROFORM	0.0316	2126	194
12.030	12.030	2,2-DICHLOROPROPANE	0.0000	0	0
14.219	14.209	1,2-DICHLOROETHANE	0.0508	2108	243
14.597	14.528	1,1,1-TRICHLOROETHAN	0.0106	959	53
15.307	15.290	1,1-DICHLOROPROPENE	0.0078	309	34
15.819	15.813	CARBON TETRACHLORIDE	0.0055	557	33
18.032	18.032	DIBROMOMETHANE	0.0000	0	0
18.204	18.204	1,2-DICHLOROPROPANE	0.0000	0	0
18.366	18.361	TRICHLOROETHENE	0.0980	6188	784
18.468	18.468	BROMODICHLOROMETHANE	0.0000	0	0
19.714	19.856	2-CHLOROETHYL VINYL	0.0214	368	49
20.203	20.203	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.160	21.160	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.395	21.388	1,1,2-TRICHLOROETHAN	0.0090	553	76
21.864	21.851	1,3-DICHLOROPROPANE	0.0037	208	26
22.194	22.234	DIBROMOCHLOROMETHANE	0.0082	432	48
22.629	22.629	1,2-DIBROMOETHANE	0.0000	0	0
22.961	22.954	TETRACHLOROETHENE	0.3050	17941	3390
23.913	23.904	1,1,1,2-TETRACHLOROE	0.0043	296	51
24.014	24.002	CHLOROBENZENE	0.0163	780	90
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.461	25.375	1,2,3-TRICHLOROPROPA	0.1057	2742	540
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.504	26.491	2-CHLOROTOLUENE	0.0161	323	64
26.617	26.609	4-CHLOROTOLUENE	0.0227	494	92
27.705	27.693	1,3-DICHLOROBENZENE	0.0327	882	191
27.817	27.807	1,4-DICHLOROBENZENE	0.0428	1745	267
28.427	28.418	1,2-DICHLOROBENZENE	0.0302	1742	171
29.302	29.302	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.106	30.100	SURR-1B4CB-H	26.1508	480649	89637
32.568	32.553	1,2,4-TRICHLOROBENZE	0.1154	9335	464
33.531	33.516	HEXACHLOROBUTADIENE	0.1048	5550	497
33.960	33.940	1,2,3-TRICHLOROBENZE	0.1028	5684	351

TOTAL 1,2-DICHLOROETHENE: 0.2511

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 87.1692%

Chrom Perfect version 6.07

Reported on 01-14-2002at 13:10:52

Sample name: 3753716

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.14R

Reviewed by: MM49

Verified by: MM49

Date: 1/14/02

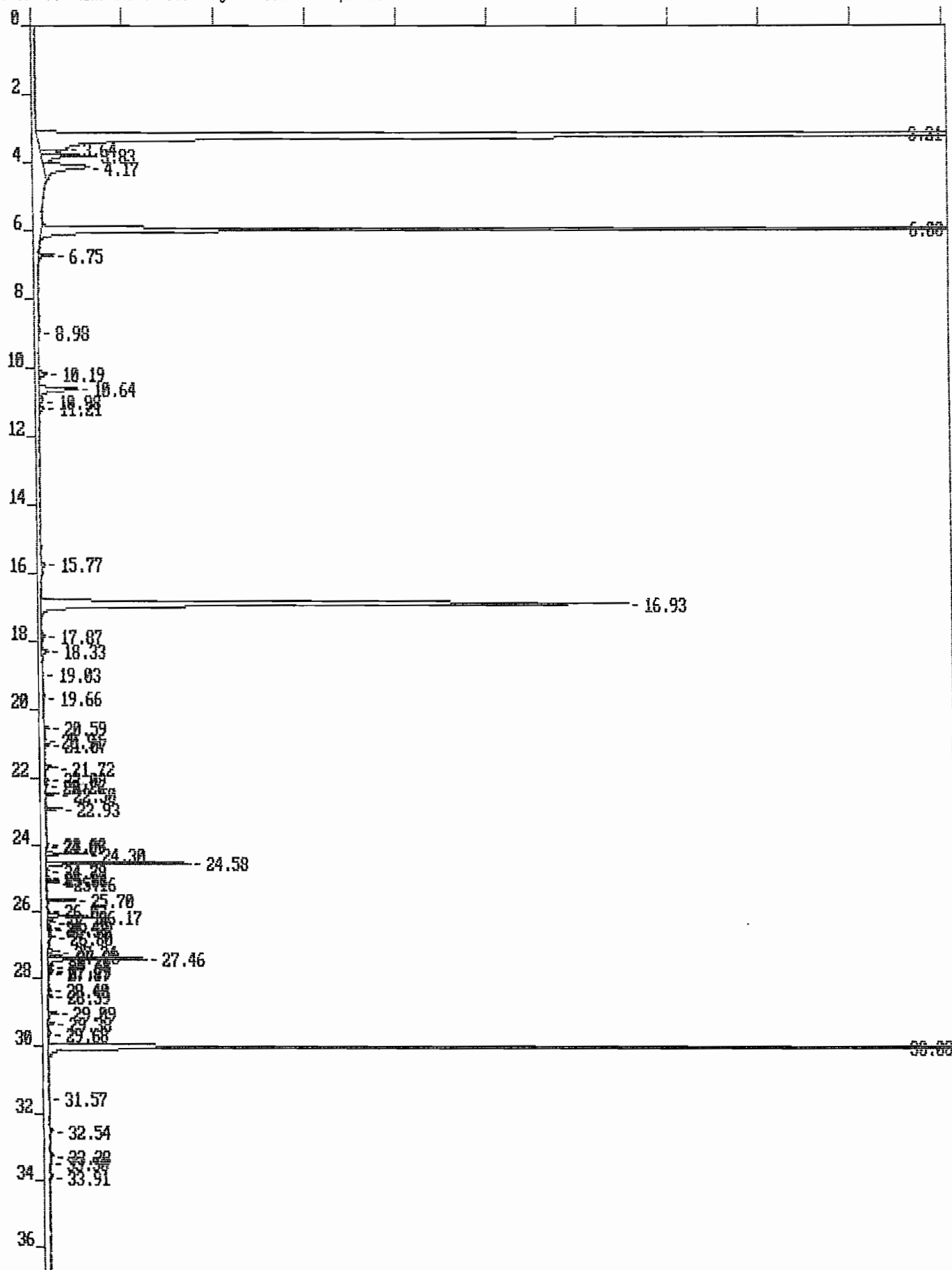
Date: 01/15/02

File=C:\CP\DATA1\180148.14R Date printed=01-14-2002 Time= 13:11:03

Sample Name=3753716

02014A181127,8404

1.0 to 37.0 min. Low Y=0.004 High Y=15.004 mv Span=15.0



Sample Name: 3753716

Batch: 02014A18

Date Taken: Jan 14, 2002 13:09:58

Raw File: C:\CP\DATA1\18014B.14R

Area File: C:\CP\DATA1\18014B.14A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0	0
6.748	6.722	1,1-DICHLOROETHENE	0.7444	1388	261
8.544	8.544	TRANS-1,2-DICHLOROET	0.0000	0	0
8.975	8.933	METHYL T-BUTYL ETHER	0.1519	234	37
10.983	10.979	CIS-1,2-DICHLOROETHE	0.2468	662	82
15.259	15.259	1,1-DICHLOROPROPENE	0.0000	0	0
15.997	15.997	BENZENE	0.0000	0	0
16.926	16.930	ISTD-FBENZENE	1.0000	72818	9676
18.334	18.332	TRICHLOROETHENE	0.1959	842	114
19.657	19.828	2-CHLOROETHYL VINYL	0.0806	179	35
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.070	21.133	TRANS-1,3-DICHLOROPR	0.1568	401	82
21.724	21.720	TOLUENE	0.1408	717	205
22.932	22.929	TETRACHLOROETHENE	0.3542	918	273
23.984	23.979	CHLOROBENZENE	0.0238	122	47
24.299	24.293	ETHYLBENZENE	0.4199	1912	673
24.584	24.585	M,P-XYLENE	1.4877	7862	2372
25.057	25.050	STYRENE	0.0313	190	63
25.157	25.153	O-XYLENE	0.1317	650	207
25.702	25.696	ISOPROPYLBENZENE	0.3936	1526	476
26.023	26.014	BROMOBENZENE	0.0202	115	37
26.347	26.341	N-PROPYLBENZENE	0.0825	400	116
26.488	26.464	2-CHLOROTOLUENE	0.0344	230	53
26.592	26.584	4-CHLOROTOLUENE	0.0324	252	53
26.800	26.788	1,3,5-TRIMETHYLBENZE	0.0484	286	96
27.236	27.211	TERT-BUTYLBENZENE	0.1813	674	190
27.379	27.393	1,2,4-TRIMETHYLBENZE	0.1593	753	236
27.561	27.561	SEC-BUTYLBENZENE	0.0000	0	0
27.670	27.667	1,3-DICHLOROBENZENE	0.0596	348	87
27.786	27.782	1,4-DICHLOROBENZENE	0.0550	297	80
27.867	27.868	P-ISOPROPYLTOLUENE	0.0603	263	63
28.397	28.391	1,2-DICHLOROBENZENE	0.0536	343	59
28.587	28.579	N-BUTYLBENZENE	0.0790	323	78
30.077	30.072	SURR-1B4CB-P	26.7758	121258	32227
32.538	32.524	1,2,4-TRICHLOROBENZE	0.1022	351	48
33.283	33.270	NAPHTHALENE	0.0966	364	54
33.504	33.487	HEXACHLOROBUTADIENE	0.1284	261	36
33.912	33.912	1,2,3-TRICHLOROBENZE	0.1036	315	41

XYLENES (Total): 1.6193

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 89.2528%

Chrom Perfect version 6.07

Reported on 01-14-2002at 13:12:24

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753716

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.14R

Reviewed by: *[Signature]*

Verified by: *Vmm49*

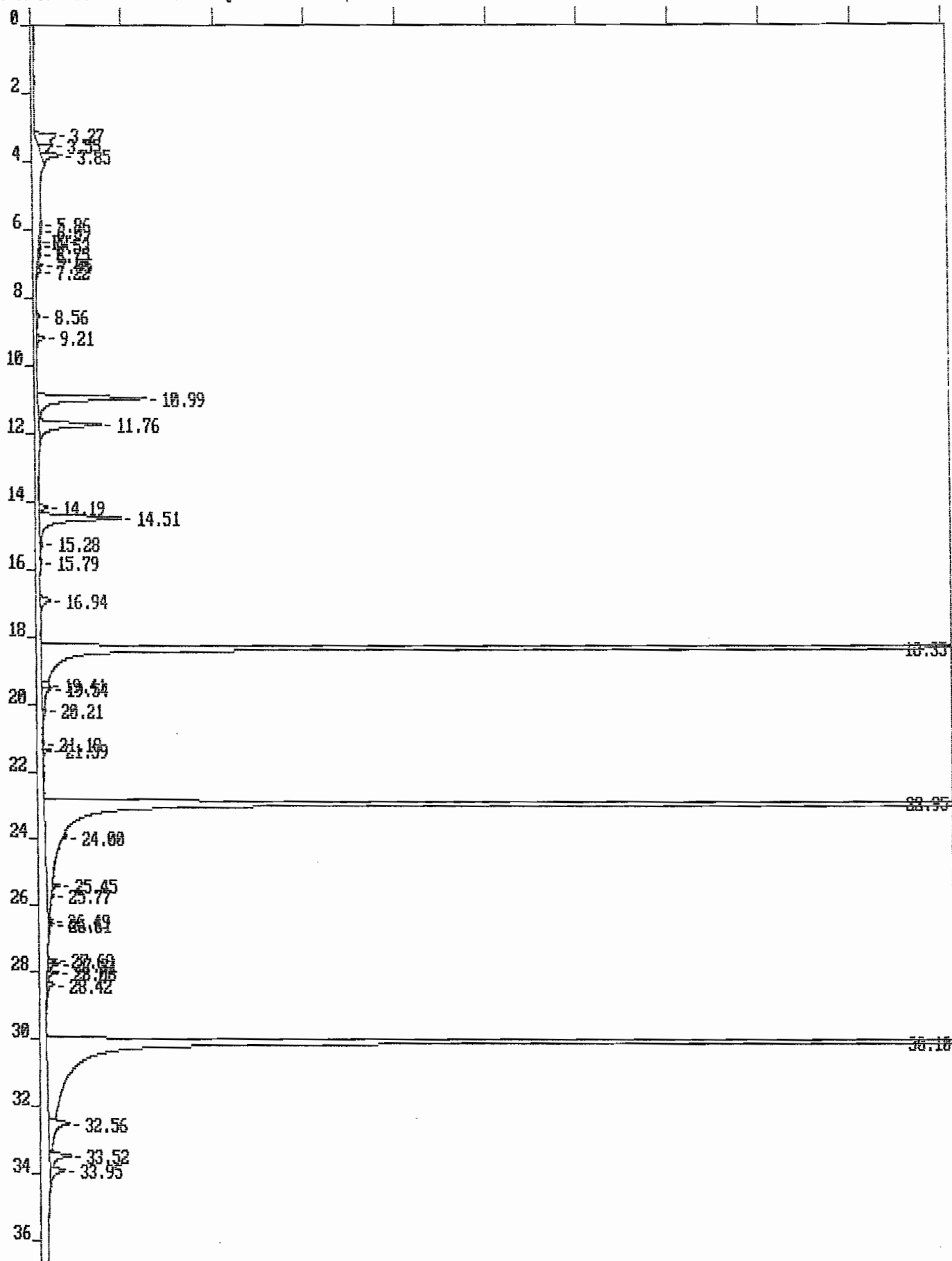
Date: *1/14/02*

Date: *01/15/02*

File=C:\CP\DATA1\18014.15R Date printed=01-14-2002 Time= 13:55:17

Sample Name=3753717 02014A181127,8404

.0 to 37.0 min. Low Y=-0.001 High Y=14.999 mv Span=15.0



Sample Name: 3753717

Batch: 02014A18

Date Taken: Jan 14, 2002 13:55:12

Raw File: C:\CP\DATA1\18014.15R

Area File: C:\CP\DATA1\18014.15A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.847	3.797	DICHLORODIFLUOROMETH	0.1646	2486	333
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.309	4.309	VINYL CHLORIDE	0.0000	0	0
4.786	4.786	BROMOMETHANE	0.0000	0	0
4.976	4.976	CHLOROETHANE	0.0000	0	0
5.859	5.831	TRICHLOROFLUOROMETHA	0.0133	525	34
6.749	6.751	1,1-DICHLOROETHENE	0.0118	580	55
7.045	7.061	METHYLENE CHLORIDE	0.0126	579	104
7.224	7.244	TRICHLOROTRIFLUOROET	0.0209	730	76
8.556	8.574	TRANS-1,2-DICHLOROET	0.0089	659	56
9.207	9.222	1,1-DICHLOROETHANE	0.0256	1248	137
10.989	11.009	CIS-1,2-DICHLOROETHE	0.3523	17547	1783
11.527	11.527	BROMOCHLOROMETHANE	0.0000	0	0
11.762	11.782	CHLOROFORM	0.1692	11186	1035
12.030	12.030	2,2-DICHLOROPROPANE	0.0000	0	0
14.192	14.209	1,2-DICHLOROETHANE	0.0301	1202	144
14.509	14.528	1,1,1-TRICHLOROETHAN	0.2717	16635	1350
15.277	15.290	1,1-DICHLOROPROPENE	0.0114	698	50
15.789	15.813	CARBON TETRACHLORIDE	0.0041	252	25
18.032	18.032	DIBROMOMETHANE	0.0000	0	0
18.204	18.204	1,2-DICHLOROPROPANE	0.0000	0	0
18.348	18.361	TRICHLOROETHENE	2.6878	149596	21484
18.468	18.468	BROMODICHLOROMETHANE	0.0000	0	0
19.856	19.856	2-CHLOROETHYL VINYL	0.0000	0	0
20.212	20.203	CIS-1,3-DICHLOROPROP	0.0086	1109	62
21.183	21.160	TRANS-1,3-DICHLOROPR	0.0046	240	32
21.390	21.388	1,1,2-TRICHLOROETHAN	0.0156	873	131
21.851	21.851	1,3-DICHLOROPROPANE	0.0000	0	0
22.234	22.234	DIBROMOCHLOROMETHANE	0.0000	0	0
22.629	22.629	1,2-DIBROMOETHANE	0.0000	0	0
22.949	22.954	TETRACHLOROETHENE	11.5514	579018	128378
23.904	23.904	1,1,1,2-TETRACHLOROE	0.0000	0	0
24.003	24.002	CHLOROBENZENE	0.0122	284	67
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.454	25.375	1,2,3-TRICHLOROPROPA	0.0264	680	135
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.490	26.491	2-CHLOROTOLUENE	0.0121	206	48
26.612	26.609	4-CHLOROTOLUENE	0.0169	384	68
27.694	27.693	1,3-DICHLOROBENZENE	0.0244	651	143
27.813	27.807	1,4-DICHLOROBENZENE	0.0317	1356	197
28.417	28.418	1,2-DICHLOROBENZENE	0.0223	1314	126
29.302	29.302	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.096	30.100	SURR-1B4CB-H	25.7212	481739	88165
32.558	32.553	1,2,4-TRICHLOROBENZE	0.0891	6843	358
33.521	33.516	HEXACHLOROBUTADIENE	0.0753	3846	357
33.947	33.940	1,2,3-TRICHLOROBENZE	0.0700	2856	239
TOTAL 1,2-DICHLOROETHENE:			0.3613		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 85.7375%

Chrom Perfect version 6.07

Reported on 01-14-2002at 13:56:07

Sample name: 3753717

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.15R

Reviewed by: *[signature]*

Verified by: *jmm48*

Date: *1/14/02*

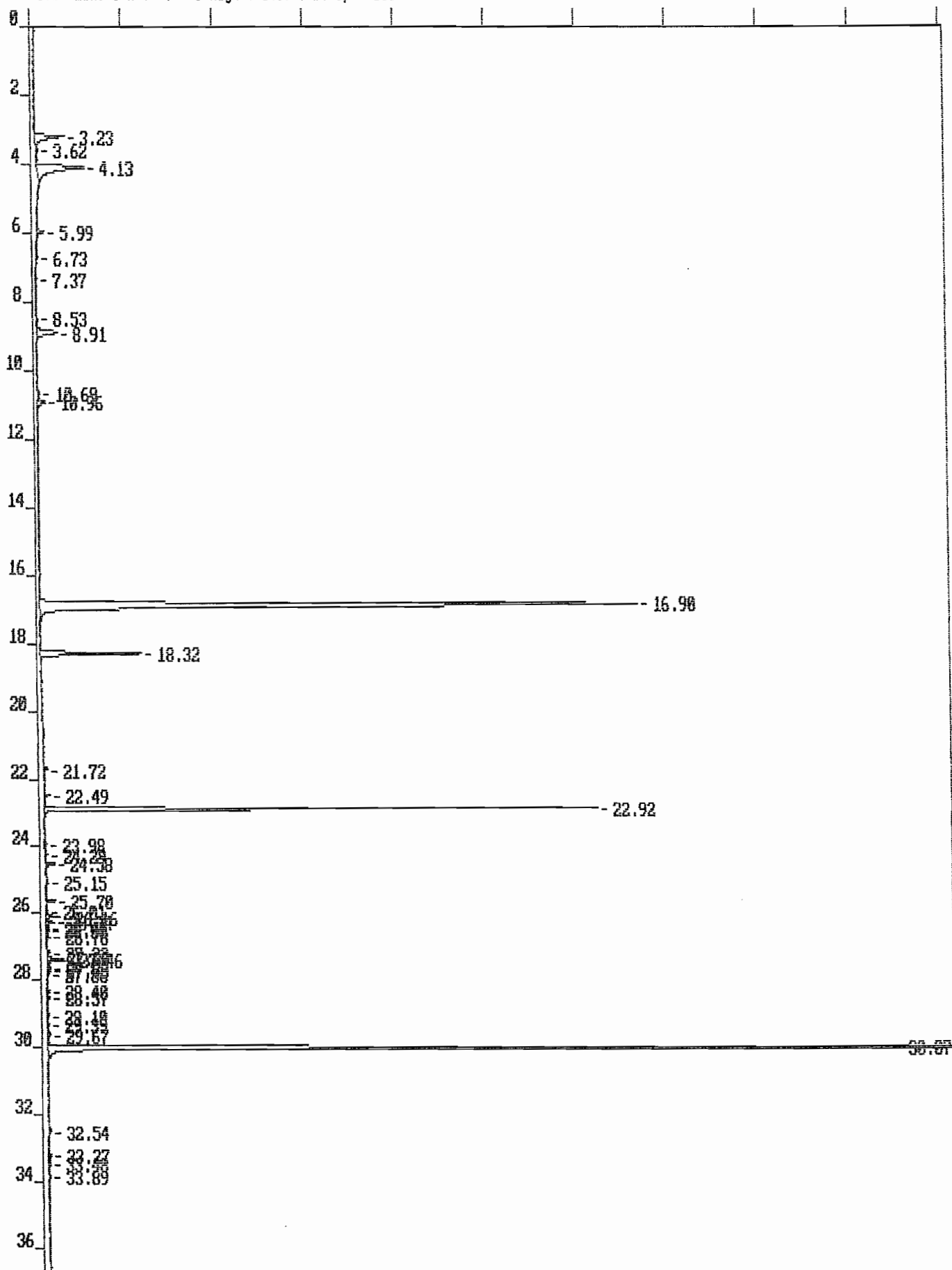
Date: *01/15/02*

File=C:\CP\DATA1\180148.15R Date printed=01-14-2002 Time= 13:56:18

Sample Name=3753717

02014A181127,8404

.0 to 37.0 min. Low Y=-0.003 High Y=14.997 mv Span=15.0



Sample Name: 3753717

Batch: 02014A18

Date Taken: Jan 14, 2002 13:55:12

Raw File: C:\CP\DATA1\18014B.15R

Area File: C:\CP\DATA1\18014B.15A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0	0
6.730	6.722	1,1-DICHLOROETHENE	0.0788	142	28
8.525	8.544	TRANS-1,2-DICHLOROET	0.0257	154	21
8.911	8.933	METHYL T-BUTYL ETHER	1.3715	2897	336
10.957	10.979	CIS-1,2-DICHLOROETHE	0.4144	1162	140
15.259	15.259	1,1-DICHLOROPROPENE	0.0000	0	0
15.997	15.997	BENZENE	0.0000	0	0
16.904	16.930	ISTD-FBENZENE	1.0000	73855	9850
18.318	18.332	TRICHLOROETHENE	2.7997	8730	1656
19.828	19.828	2-CHLOROETHYL VINYL	0.0000	0	0
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.133	21.133	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.723	21.720	TOLUENE	0.0471	258	70
22.923	22.929	TETRACHLOROETHENE	11.6043	27820	9118
23.981	23.979	CHLOROBENZENE	0.0215	191	43
24.287	24.293	ETHYLBENZENE	0.0354	177	58
24.578	24.585	M,P-XYLENE	0.0854	393	139
25.050	25.050	STYRENE	0.0000	0	0
25.149	25.153	O-XYLENE	0.0252	116	40
25.696	25.696	ISOPROPYLBENZENE	0.1163	500	143
26.007	26.014	BROMOBENZENE	0.0167	115	31
26.339	26.341	N-PROPYLBENZENE	0.0881	522	126
26.469	26.464	2-CHLOROTOLUENE	0.0280	174	44
26.578	26.584	4-CHLOROTOLUENE	0.0288	248	48
26.780	26.788	1,3,5-TRIMETHYLBENZE	0.0284	282	57
27.227	27.211	TERT-BUTYLBENZENE	0.0575	242	61
27.379	27.393	1,2,4-TRIMETHYLBENZE	0.0565	316	85
27.561	27.561	SEC-BUTYLBENZENE	0.0000	0	0
27.661	27.667	1,3-DICHLOROBENZENE	0.0381	196	56
27.781	27.782	1,4-DICHLOROBENZENE	0.0411	216	61
27.863	27.868	P-ISOPROPYLTOLUENE	0.0374	142	40
28.398	28.391	1,2-DICHLOROBENZENE	0.0368	143	41
28.573	28.579	N-BUTYLBENZENE	0.0515	293	52
30.067	30.072	SURR-1B4CB-P	25.6868	118834	31470
32.543	32.524	1,2,4-TRICHLOROBENZE	0.0641	163	31
33.266	33.270	NAPHTHALENE	0.0971	390	55
33.480	33.487	HEXACHLOROBUTADIENE	0.1165	169	33
33.890	33.912	1,2,3-TRICHLOROBENZE	0.0703	134	28

XYLENES (Total): 0.1106

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 85.6226%

Chrom Perfect version 6.07

Reported on 01-14-2002at 13:57:37

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753717

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.15R

Reviewed by: mm49

Verified by: mm49

Date: 1/14/02

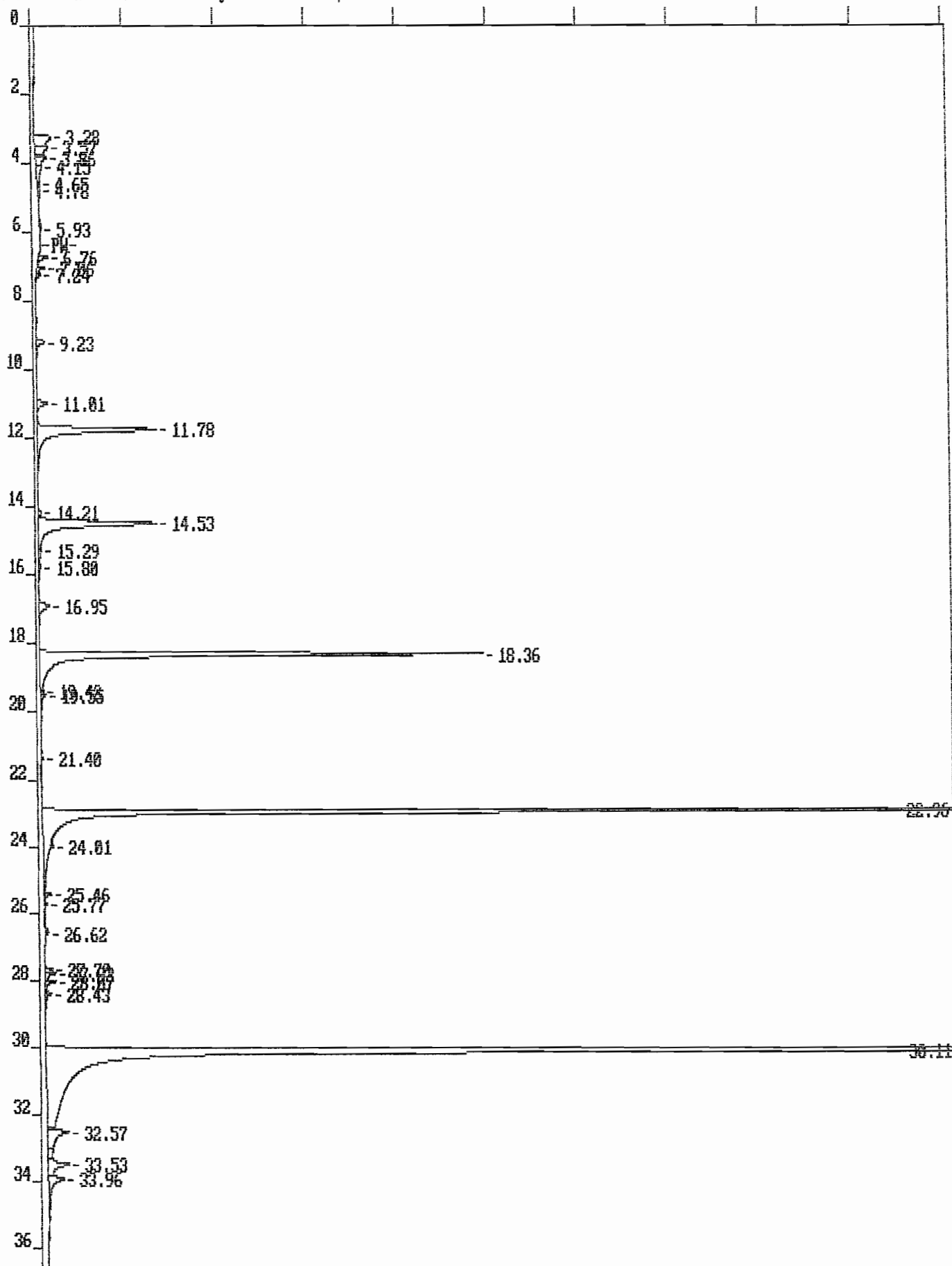
Date: 01/15/02

File=C:\CP\DATA1\18014.16R Date printed=01-14-2002 Time= 14:40:27

Sample Name=3753718

02014A181127,8404

.0 to 37.0 min. Low Y=0.008 High Y=15.008 mv Span=15.0



Sample Name: 3753718

Batch: 02014A18

Date Taken: Jan 14, 2002 14:40:21

Raw File: C:\CP\DATA1\18014.16R

Area File: C:\CP\DATA1\18014.16A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
3.859	3.797	DICHLORODIFLUOROMETH	0.0964	2314	195
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.146	4.309	VINYL CHLORIDE	0.0271	1904	96
4.784	4.786	BROMOMETHANE	0.0131	625	35
4.976	4.976	CHLOROETHANE	0.0000	0	0
5.934	5.831	TRICHLOROFLUOROMETHA	0.0072	239	18
6.762	6.751	1,1-DICHLOROETHENE	0.0353	1150	164
7.062	7.061	METHYLENE CHLORIDE	0.0148	685	123
7.240	7.244	TRICHLOROTRIFLUOROET	0.0171	543	62
8.574	8.574	TRANS-1,2-DICHLOROET	0.0000	0	0
9.227	9.222	1,1-DICHLOROETHANE	0.0263	1257	141
11.012	11.009	CIS-1,2-DICHLOROETHE	0.0345	1580	174
11.527	11.527	BROMOCHLOROMETHANE	0.0000	0	0
11.781	11.782	CHLOROFORM	0.3174	22063	1941
12.030	12.030	2,2-DICHLOROPROPANE	0.0000	0	0
14.212	14.209	1,2-DICHLOROETHANE	0.0116	441	55
14.526	14.528	1,1,1-TRICHLOROETHAN	0.3882	23336	1929
15.287	15.290	1,1-DICHLOROPROPENE	0.0118	609	52
15.801	15.813	CARBON TETRACHLORIDE	0.0047	340	28
18.032	18.032	DIBROMOMETHANE	0.0000	0	0
18.204	18.204	1,2-DICHLOROPROPANE	0.0000	0	0
18.362	18.361	TRICHLOROETHENE	0.9112	55863	7283
18.468	18.468	BROMODICHLOROMETHANE	0.0000	0	0
19.856	19.856	2-CHLOROETHYL VINYL	0.0000	0	0
20.203	20.203	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.160	21.160	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.397	21.388	1,1,2-TRICHLOROETHAN	0.0043	264	36
21.851	21.851	1,3-DICHLOROPROPANE	0.0000	0	0
22.234	22.234	DIBROMOCHLOROMETHANE	0.0000	0	0
22.629	22.629	1,2-DIBROMOETHANE	0.0000	0	0
22.957	22.954	TETRACHLOROETHENE	3.1539	168214	35051
23.904	23.904	1,1,1,2-TETRACHLOROE	0.0000	0	0
24.008	24.002	CHLOROBENZENE	0.0110	304	61
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.463	25.375	1,2,3-TRICHLOROPROPA	0.0191	478	97
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0	0
26.622	26.609	4-CHLOROTOLUENE	0.0143	339	58
27.704	27.693	1,3-DICHLOROBENZENE	0.0232	692	136
27.815	27.807	1,4-DICHLOROBENZENE	0.0286	1314	178
28.431	28.418	1,2-DICHLOROBENZENE	0.0197	1090	112
29.302	29.302	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.106	30.100	SURR-1B4CB-H	25.7908	483552	88403
32.573	32.553	1,2,4-TRICHLOROBENZE	0.0873	5830	351
33.532	33.516	HEXACHLOROBTADIENE	0.0744	4746	353
33.959	33.940	1,2,3-TRICHLOROBENZE	0.0742	4389	253

TOTAL 1,2-DICHLOROETHENE: 0.0345

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 85.9694%

Chrom Perfect version 6.07

Reported on 01-14-2002at 14:41:17

Sample name: 3753718

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.16R

Reviewed by: MM/94

Verified by: MM/49

Date: 1/14/02

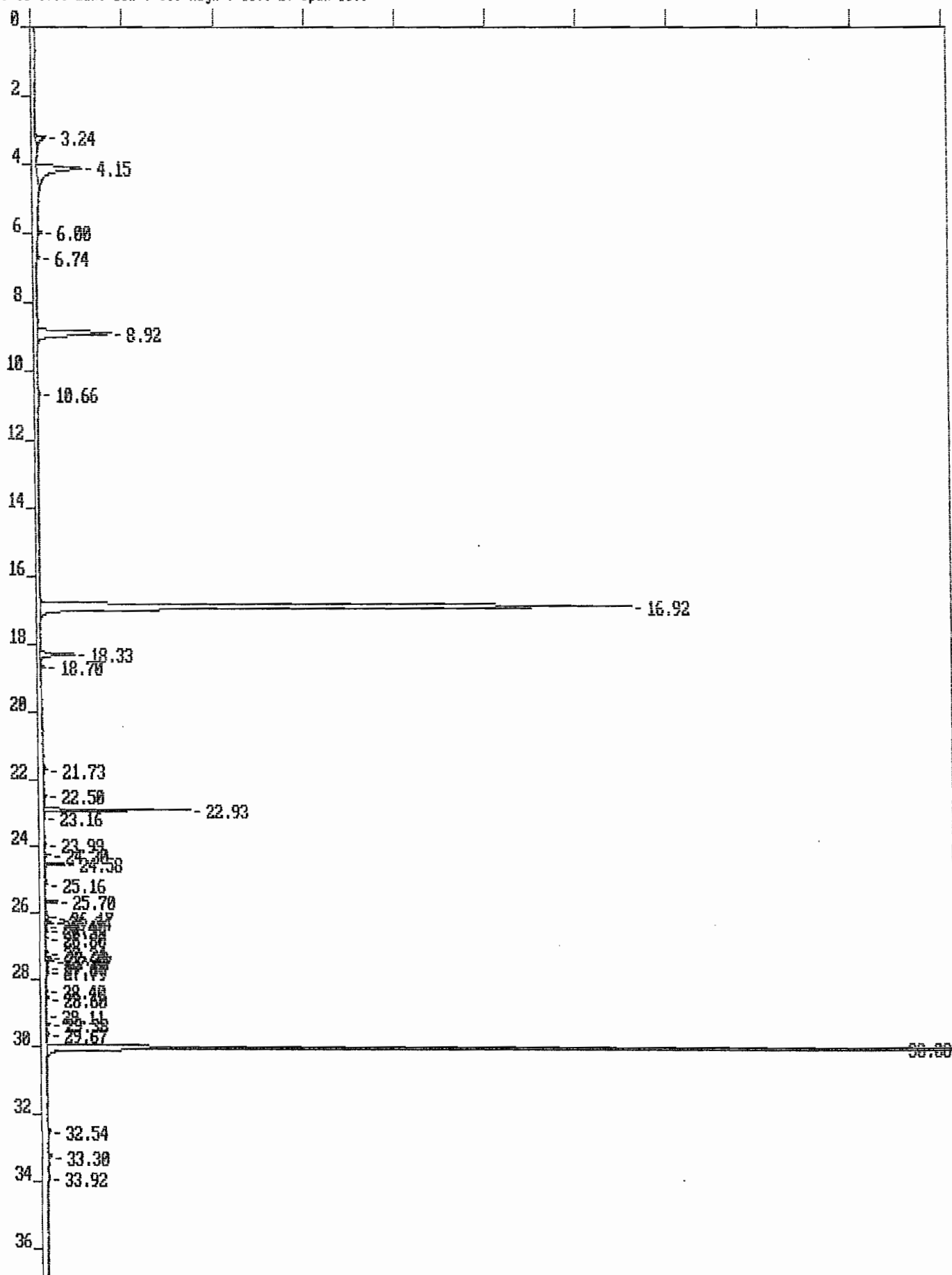
Date: 01/15/02

File=C:\CP\DATA1\18014B.16R Date printed=01-14-2002 Time= 14:41:28

Sample Name=3753718

02014A181127,8404

1.0 to 37.0 min. Low Y=0.0 High Y=15.0 mv Span=15.0



Sample Name: 3753718

Batch: 02014A18

Date Taken: Jan 14, 2002 14:40:21

Raw File: C:\CP\DATA1\18014B.16R

Area File: C:\CP\DATA1\18014B.16A

Method File: C:\CP\DATA1\18365E.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0	0
6.738	6.722	1,1-DICHLOROETHENE	0.1507	368	53
8.544	8.544	TRANS-1,2-DICHLOROET	0.0000	0	0
8.924	8.933	METHYL T-BUTYL ETHER	5.0443	10496	1222
10.979	10.979	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.259	15.259	1,1-DICHLOROPROPENE	0.0000	0	0
15.997	15.997	BENZENE	0.0000	0	0
16.919	16.930	ISTD-FBENZENE	1.0000	72844	9747
18.330	18.332	TRICHLOROETHENE	0.9839	3103	576
19.828	19.828	2-CHLOROETHYL VINYL	0.0000	0	0
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.133	21.133	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.727	21.720	TOLUENE	0.0516	302	76
22.930	22.929	TETRACHLOROETHENE	3.0972	7412	2408
23.987	23.979	CHLOROBENZENE	0.0164	102	32
24.302	24.293	ETHYLBENZENE	0.0617	352	100
24.584	24.585	M,P-XYLENE	0.2071	1212	333
25.050	25.050	STYRENE	0.0000	0	0
25.157	25.153	O-XYLENE	0.0269	103	43
25.698	25.696	ISOPROPYLBENZENE	0.1769	742	215
26.170	26.014	BROMOBENZENE	0.0990	589	181
26.344	26.341	N-PROPYLBENZENE	0.0981	563	139
26.467	26.464	2-CHLOROTOLUENE	0.0198	138	31
26.589	26.584	4-CHLOROTOLUENE	0.0268	203	44
26.796	26.788	1,3,5-TRIMETHYLBENZE	0.0230	188	46
27.237	27.211	TERT-BUTYLBENZENE	0.0461	179	49
27.393	27.393	1,2,4-TRIMETHYLBENZE	0.0483	254	72
27.561	27.561	SEC-BUTYLBENZENE	0.0000	0	0
27.672	27.667	1,3-DICHLOROBENZENE	0.0280	144	41
27.794	27.782	1,4-DICHLOROBENZENE	0.0255	108	38
27.868	27.868	P-ISOPROPYLTOLUENE	0.0000	0	0
28.397	28.391	1,2-DICHLOROBENZENE	0.0306	139	34
28.596	28.579	N-BUTYLBENZENE	0.0509	271	51
30.078	30.072	SURR-1B4CB-P	26.3538	120796	31952
32.543	32.524	1,2,4-TRICHLOROBENZE	0.0720	215	34
33.296	33.270	NAPHTHALENE	0.1085	355	61
33.487	33.487	HEXACHLOROBUTADIENE	0.0000	0	0
33.919	33.912	1,2,3-TRICHLOROBENZE	0.0695	170	27

XYLENES (Total): 0.2340

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 87.8460%

Chrom Perfect version 6.07

Reported on 01-14-2002at 14:42:48

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753718

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.16R

Reviewed by: MMB/994

Verified by: MM48

Date: 1/14/02

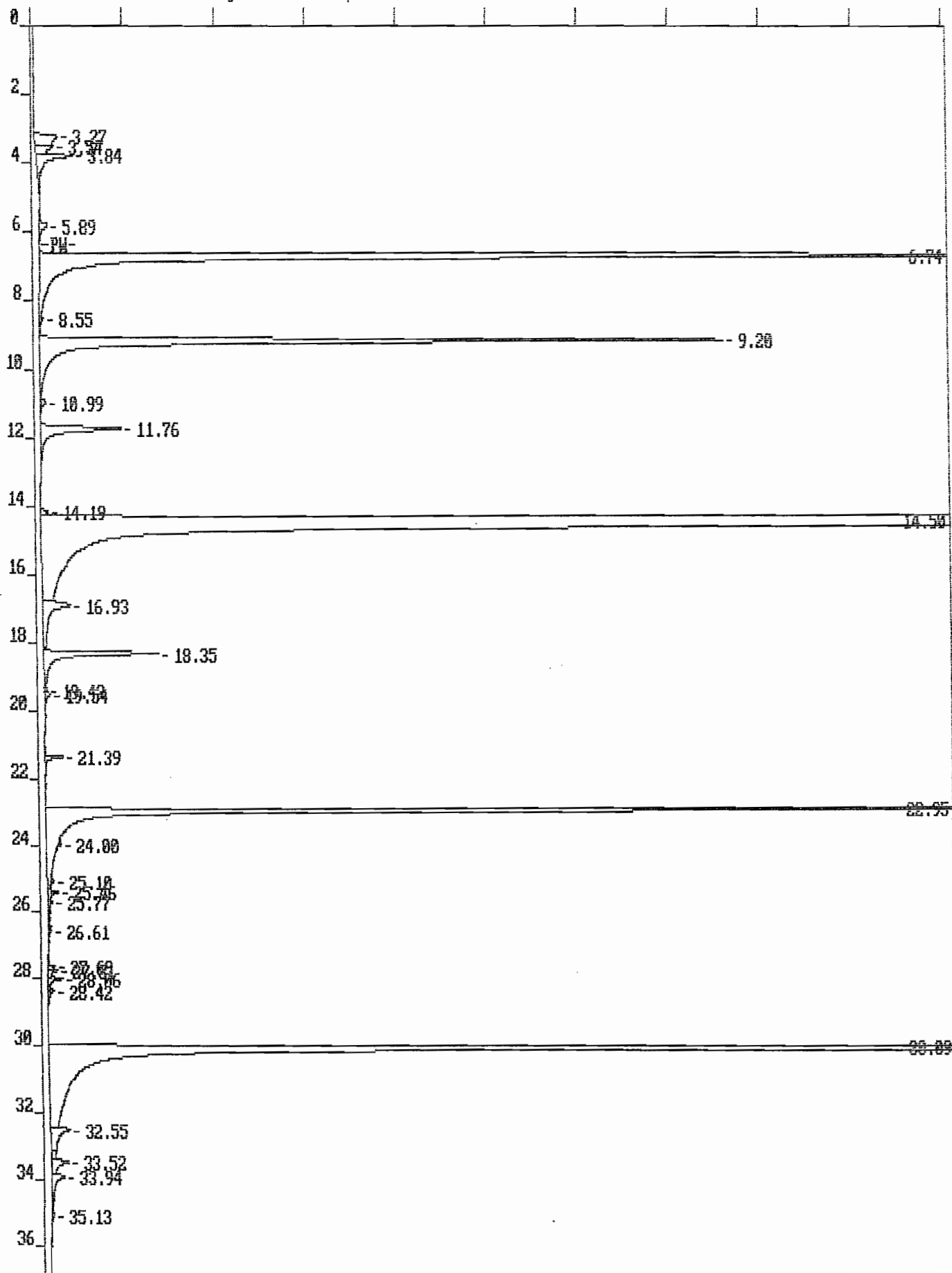
Date: 01/15/02

File=C:\CP\DATA1\18014.17R Date printed=01-14-2002 Time= 15:25:41

Sample Name=3753719

02014A181127,8404

1.0 to 37.0 min. Low Y=-0.003 High Y=14.997 mv Span=15.0



Sample Name: 3753719

Batch: 02014A18

Date Taken: Jan 14, 2002 15:25:36

Raw File: C:\CP\DATA1\18014.17R

Area File: C:\CP\DATA1\18014.17A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time Expected	Amount *	Peak	Peak
(min) RT (min) Peak Name	(ug/L)	Area	Height
3.845 3.797 DICHLORODIFLUOROMETH	0.3014	7619	610
3.996 3.996 CHLOROMETHANE	0.0000	0	0
4.309 4.309 VINYL CHLORIDE	0.0000	0	0
4.786 4.786 BROMOMETHANE	0.0000	0	0
4.976 4.976 CHLOROETHANE	0.0000	0	0
5.893 5.831 TRICHLOROFLUOROMETHA	0.0472	1686	121
6.735 6.751 1,1-DICHLOROETHENE	6.2837	211074	29090
7.061 7.061 METHYLENE CHLORIDE	0.0000	0	0
7.244 7.244 TRICHLOROTRIFLUOROET	0.0000	0	0
8.550 8.574 TRANS-1,2-DICHLOROET	0.0062	336	39
9.199 9.222 1,1-DICHLOROETHANE	2.0985	104078	11230
10.986 11.009 CIS-1,2-DICHLOROETHE	0.0161	760	81
11.527 11.527 BROMOCHLOROMETHANE	0.0000	0	0
11.757 11.782 CHLOROFORM	0.2151	15434	1315
12.030 12.030 2,2-DICHLOROPROPANE	0.0000	0	0
14.194 14.209 1,2-DICHLOROETHANE	0.0244	779	117
14.500 14.528 1,1,1-TRICHLOROETHAN	27.2345	1434927	135313
15.290 15.290 1,1-DICHLOROPROPENE	0.0000	0	0
15.813 15.813 CARBON TETRACHLORIDE	0.0000	0	0
18.032 18.032 DIBROMOMETHANE	0.0000	0	0
18.204 18.204 1,2-DICHLOROPROPANE	0.0000	0	0
18.352 18.361 TRICHLOROETHENE	0.2349	17587	1878
18.468 18.468 BROMODICHLOROMETHANE	0.0000	0	0
19.856 19.856 2-CHLOROETHYL VINYL	0.0000	0	0
20.203 20.203 CIS-1,3-DICHLOROPROP	0.0000	0	0
21.160 21.160 TRANS-1,3-DICHLOROPR	0.0000	0	0
21.390 21.388 1,1,2-TRICHLOROETHAN	0.0356	1747	299
21.851 21.851 1,3-DICHLOROPROPANE	0.0000	0	0
22.234 22.234 DIBROMOCHLOROMETHANE	0.0000	0	0
22.629 22.629 1,2-DIBROMOETHANE	0.0000	0	0
22.950 22.954 TETRACHLOROETHENE	5.5616	290140	61809
23.904 23.904 1,1,1,2-TETRACHLOROE	0.0000	0	0
24.002 24.002 CHLOROENZENE	0.0097	251	53
24.682 24.682 BROMOFORM	0.0000	0	0
25.103 25.172 1,1,2,2-TETRACHLOROE	0.0075	287	49
25.456 25.375 1,2,3-TRICHLOROPROPA	0.0262	712	134
26.041 26.041 BROMOBENZENE	0.0000	0	0
26.491 26.491 2-CHLOROTOLUENE	0.0000	0	0
26.613 26.609 4-CHLOROTOLUENE	0.0113	307	46
27.695 27.693 1,3-DICHLOROBENZENE	0.0188	534	110
27.808 27.807 1,4-DICHLOROBENZENE	0.0236	1033	147
28.420 28.418 1,2-DICHLOROBENZENE	0.0180	848	102
29.302 29.302 1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.095 30.100 SURR-1B4CB-H	25.7487	485286	88259
32.555 32.553 1,2,4-TRICHLOROBENZE	0.0793	6535	319
33.520 33.516 HEXACHLOROBTADIENE	0.0607	3766	288
33.942 33.940 1,2,3-TRICHLOROBENZE	0.0641	4168	219

TOTAL 1,2-DICHLOROETHENE: 0.0223

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 85.8290%

Chrom. Perfect version 6.07

Reported on 01-14-2002 at 15:24:31

Sample name: 3753719

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.17R

Reviewed by: SKP688

Verified by: imm49

Date: 1-14-02

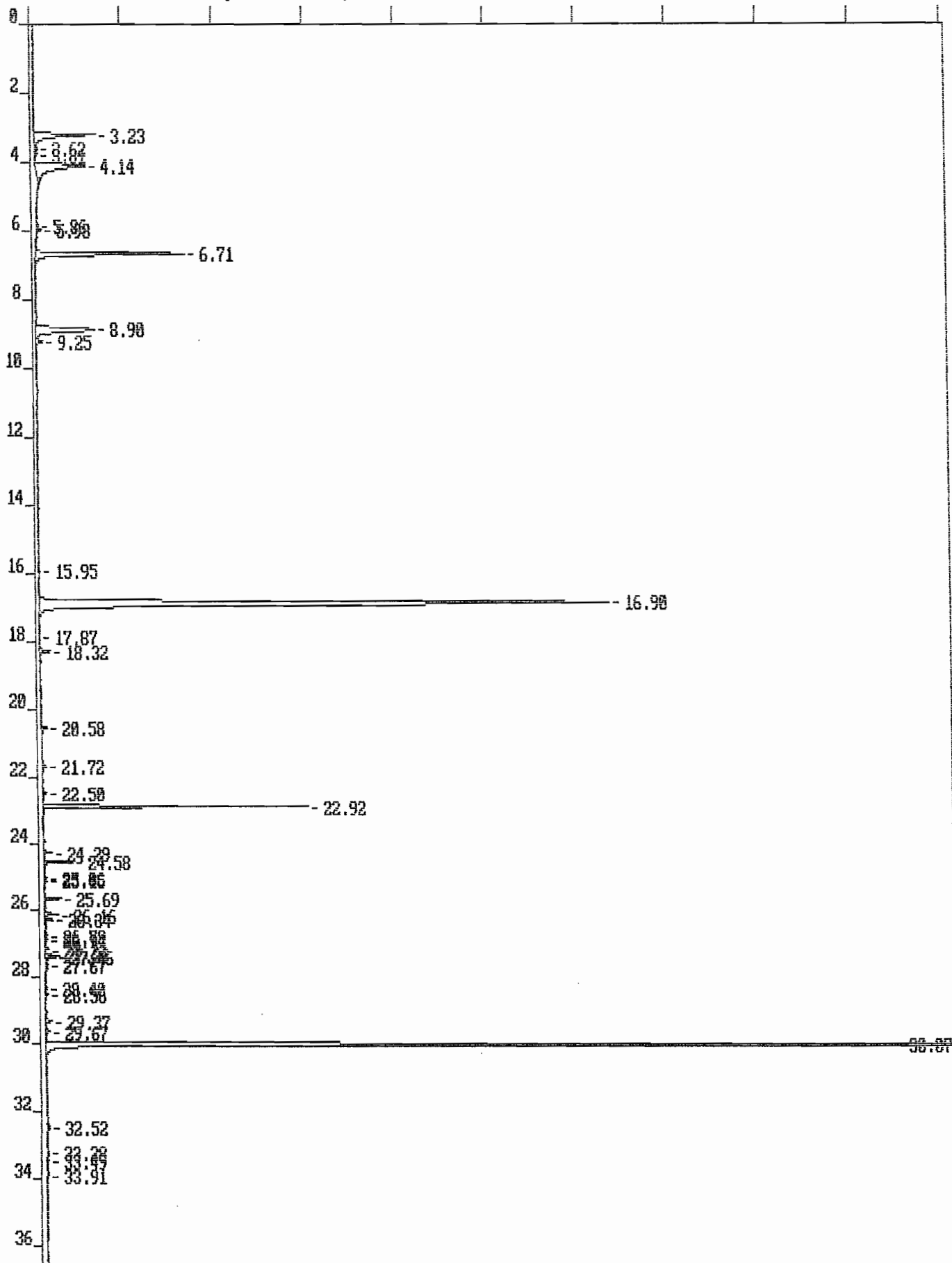
Date: 01/15/02

File=C:\CP\DATA1\180148.17R Date printed=01-14-2002 Time= 15:26:42

Sample Name=3753719

02014A181127,8404

0.0 to 37.0 min. Low Y=-0.003 High Y=14.997 mv Span=15.0



Sample Name: 3753719

Batch: 02014A18

Date Taken: Jan 14, 2002 15:25:36

Raw File: C:\CP\DATA1\18014B.17R

Area File: C:\CP\DATA1\18014B.17A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0	0
6.705	6.722	1,1-DICHLOROETHENE	7.1715	13269	2450
8.544	8.544	TRANS-1,2-DICHLOROET	0.0000	0	0
8.904	8.933	METHYL T-BUTYL ETHER	4.2118	8593	985
10.979	10.979	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.259	15.259	1,1-DICHLOROPROPENE	0.0000	0	0
15.955	15.997	BENZENE	0.0265	108	18
16.905	16.930	ISTD-FBENZENE	1.0000	71194	9411
18.316	18.332	TRICHLOROETHENE	0.3038	870	172
19.828	19.828	2-CHLOROETHYL VINYL	0.0000	0	0
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.133	21.133	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.716	21.720	TOLUENE	0.0553	357	78
22.923	22.929	TETRACHLOROETHENE	5.8239	13401	4372
23.979	23.979	CHLOROBENZENE	0.0000	0	0
24.291	24.293	ETHYLBENZENE	0.0893	408	139
24.578	24.585	M,P-XYLENE	0.3067	1686	476
25.056	25.050	STYRENE	0.0239	173	47
25.153	25.153	O-XYLENE	0.0346	161	53
25.694	25.696	ISOPROPYLBENZENE	0.2319	939	272
26.164	26.014	BROMOBENZENE	0.1315	716	232
26.343	26.341	N-PROPYLBENZENE	0.1063	558	145
26.464	26.464	2-CHLOROTOLUENE	0.0000	0	0
26.584	26.584	4-CHLOROTOLUENE	0.0000	0	0
26.787	26.788	1,3,5-TRIMETHYLBENZE	0.0218	161	42
27.228	27.211	TERT-BUTYLBENZENE	0.0704	258	72
27.383	27.393	1,2,4-TRIMETHYLBENZE	0.0623	327	90
27.561	27.561	SEC-BUTYLBENZENE	0.0000	0	0
27.670	27.667	1,3-DICHLOROBENZENE	0.0261	114	37
27.782	27.782	1,4-DICHLOROBENZENE	0.0000	0	0
27.868	27.868	P-ISOPROPYLTOLUENE	0.0000	0	0
28.396	28.391	1,2-DICHLOROBENZENE	0.0253	114	27
28.563	28.579	N-BUTYLBENZENE	0.0431	171	42
30.066	30.072	SURR-1B4CB-P	27.7276	122191	32457
32.519	32.524	1,2,4-TRICHLOROBENZE	0.0663	115	31
33.277	33.270	NAPHTHALENE	0.0591	177	32
33.487	33.487	HEXACHLOROBUTADIENE	0.0911	105	25
33.910	33.912	1,2,3-TRICHLOROBENZE	0.0652	144	25

XYLENES (Total): 0.3413

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 92.4254%

Chrom Perfect version 6.07

Reported on 01-14-2002at 15:28:01

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753719

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.17R

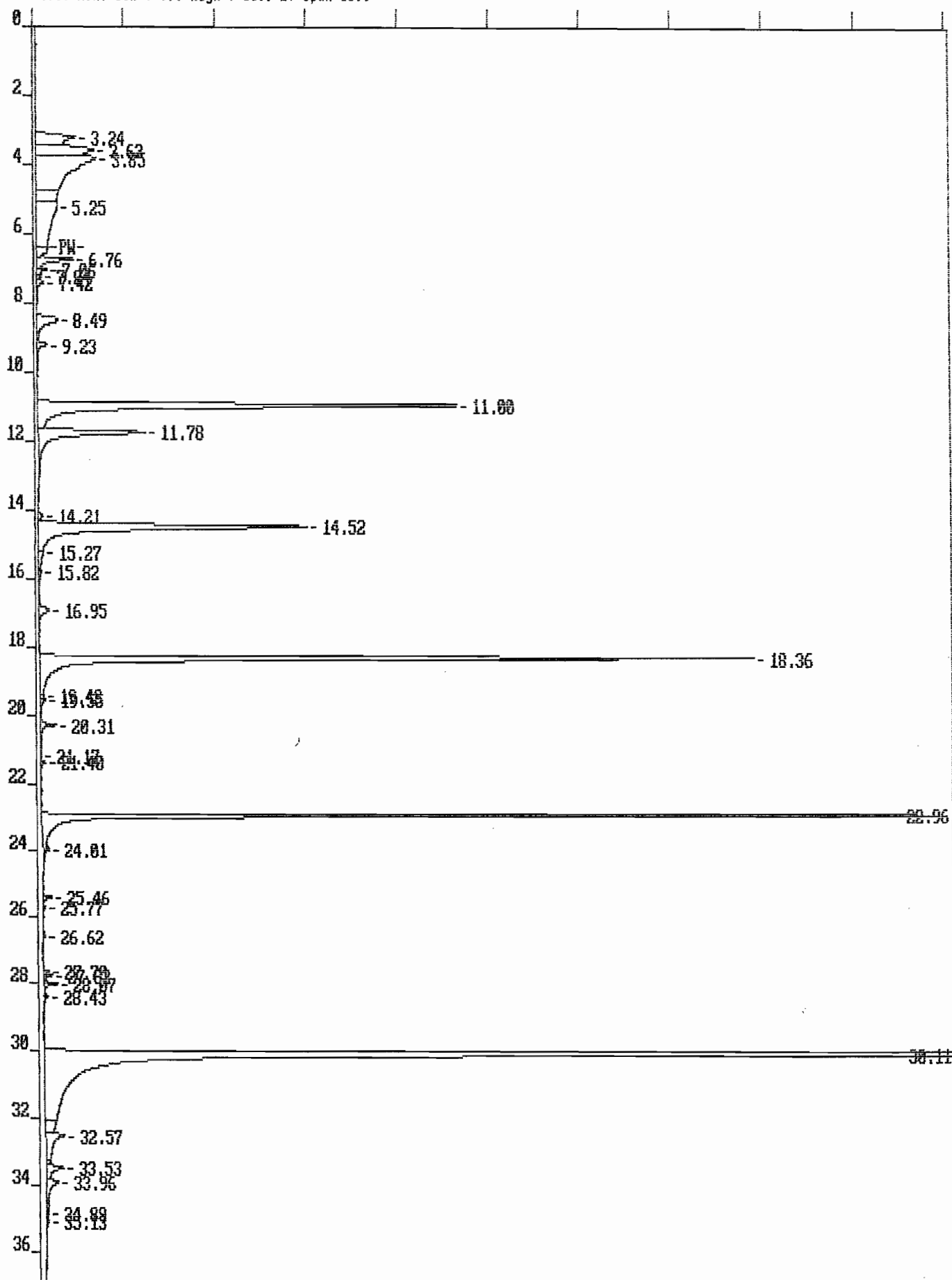
Reviewed by: SKP688

Verified by: UMM49

Date: 1-14-02

Date: 01/15/02

File=C:\CP\DATA1\18014.05R Date printed=01-14-2002 Time= 05:34:10
Sample Name=3753720 02014A181127,8404,8400,8401
.0 to 37.0 min. Low Y=0.0 High Y=15.0 mv Span=15.0



Sample Name: 3753720

Batch: 02014A18

Date Taken: Jan 14, 2002 05:34:04

Raw File: C:\CP\DATA1\18014.05R

Area File: C:\CP\DATA1\18014.05A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 21):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area Height
3.854	3.802	DICHLORODIFLUOROMETH	0.4903	36139 992
3.987	3.987	CHLOROMETHANE	0.0000	0 0
4.308	4.308	VINYL CHLORIDE	0.0000	0 0
4.780	4.780	BROMOMETHANE	0.0000	0 0
4.979	4.979	CHLOROETHANE	0.0000	0 0
5.839	5.839	TRICHLOROFLUOROMETHA	0.0000	0 0
6.764	6.758	1,1-DICHLOROETHENE	0.1305	5192 604
7.061	7.069	METHYLENE CHLORIDE	0.0211	1185 175
7.245	7.249	TRICHLOROTRIFLUOROET	0.0232	721 84
8.493	8.580	TRANS-1,2-DICHLOROET	0.0547	5967 342
9.226	9.229	1,1-DICHLOROETHANE	0.0309	1582 165
11.004	11.015	CIS-1,2-DICHLOROETHE	1.3593	63822 6879
11.534	11.534	BROMOCHLOROMETHANE	0.0000	0 0
11.780	11.790	CHLOROFORM	0.2889	21061 1767
12.039	12.039	2,2-DICHLOROPROPANE	0.0000	0 0
14.213	14.216	1,2-DICHLOROETHANE	0.0161	627 77
14.523	14.534	1,1,1-TRICHLOROETHAN	0.8874	51128 4409
15.273	15.296	1,1-DICHLOROPROPENE	0.0200	1639 88
15.820	15.818	CARBON TETRACHLORIDE	0.0075	1048 45
18.035	18.035	DIBROMOMETHANE	0.0000	0 0
18.208	18.208	1,2-DICHLOROPROPANE	0.0000	0 0
18.359	18.364	TRICHLOROETHENE	1.4673	84475 11729
18.471	18.471	BROMODICHLOROMETHANE	0.0000	0 0
19.858	19.858	2-CHLOROETHYL VINYL	0.0000	0 0
20.306	20.205	CIS-1,3-DICHLOROPROP	0.0383	2197 277
21.173	21.161	TRANS-1,3-DICHLOROPR	0.0038	202 26
21.396	21.390	1,1,2-TRICHLOROETHAN	0.0099	542 83
21.853	21.853	1,3-DICHLOROPROPANE	0.0000	0 0
22.236	22.236	DIBROMOCHLOROMETHANE	0.0000	0 0
22.630	22.630	1,2-DIBROMOETHANE	0.0000	0 0
22.957	22.956	TETRACHLOROETHENE	1.3207	71423 14677
23.906	23.906	1,1,1,2-TETRACHLOROE	0.0000	0 0
24.007	24.004	CHLOROBENZENE	0.0116	329 64
24.684	24.684	BROMOFORM	0.0000	0 0
25.174	25.174	1,1,2,2-TETRACHLOROE	0.0000	0 0
25.459	25.378	1,2,3-TRICHLOROPROPA	0.0286	748 146
26.044	26.044	BROMOBENZENE	0.0000	0 0
26.495	26.495	2-CHLOROTOLUENE	0.0000	0 0
26.619	26.613	4-CHLOROTOLUENE	0.0116	300 47
27.703	27.699	1,3-DICHLOROBENZENE	0.0164	448 96
27.815	27.814	1,4-DICHLOROBENZENE	0.0219	871 137
28.428	28.425	1,2-DICHLOROBENZENE	0.0124	363 70
29.310	29.310	1,2-DIBROMO-3-CHLORO	0.0000	0 0
30.105	30.110	SURR-1B4CB-H	27.3840	508487 93864
32.570	32.567	1,2,4-TRICHLOROBENZE	0.0757	6704 304
33.528	33.531	HEXACHLOROBUTADIENE	0.0595	3409 282
33.959	33.955	1,2,3-TRICHLOROBENZE	0.0584	3409 199
TOTAL 1,2-DICHLOROETHENE:		1.4140		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 91.2798%

Chrom Perfect version 6.07

Reported on 01-14-2002at 05:34:59

Sample name: 3753720

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.05R

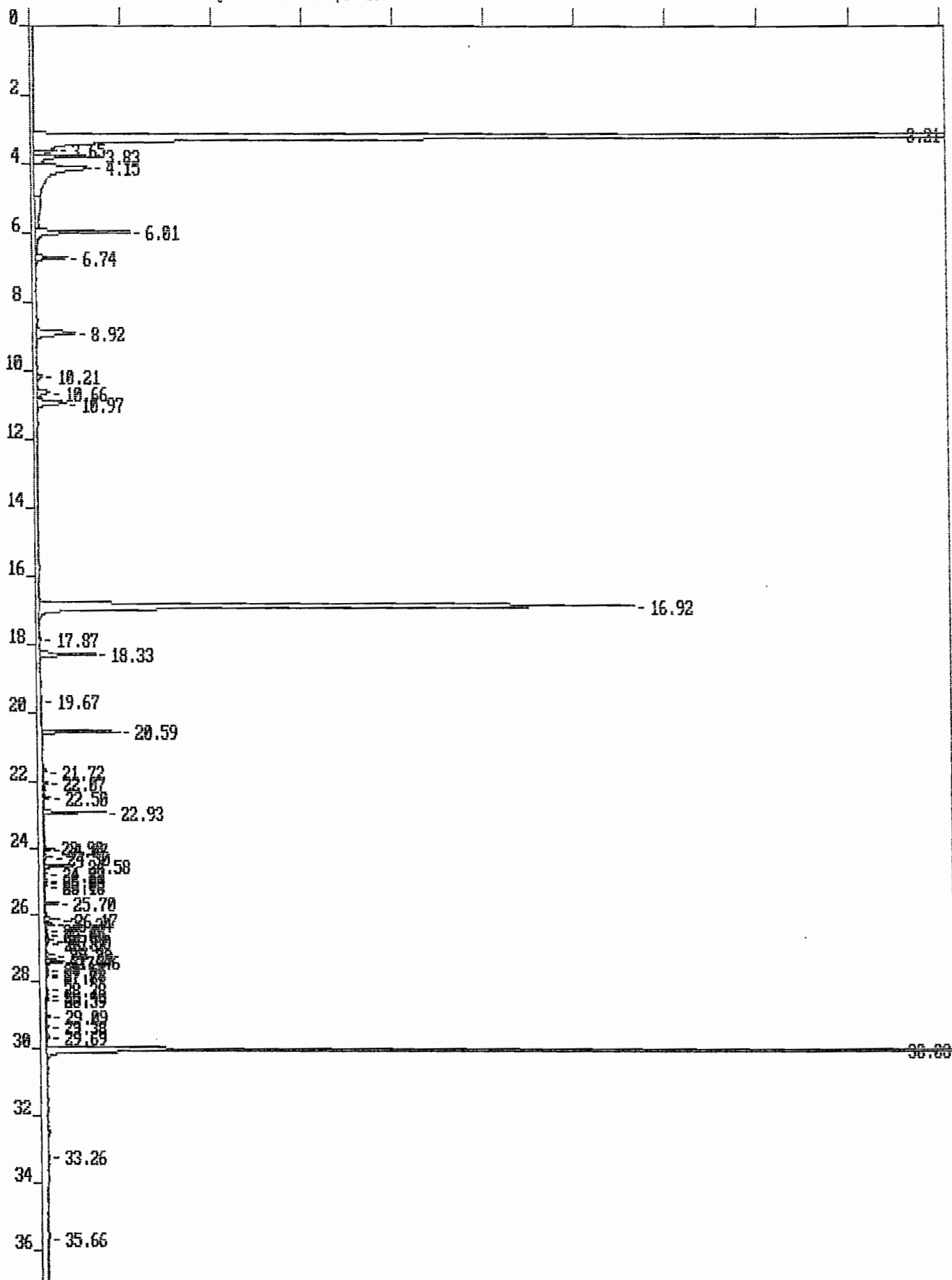
Reviewed by: TJW

Verified by: UMM48

Date: 1-14-02

Date: 01/15/02

File=C:\CP\DATA1\180148.05R Date printed=01-14-2002 Time= 05:35:10
 Sample Name=3753720 02014A181127,8404,8400,8401
 0.0 to 37.0 min. Low Y=0.007 High Y=15.007 mv Span=15.0



Sample Name: 3753720

Batch: 02014A18

Date Taken: Jan 14, 2002 05:34:04

Raw File: C:\CP\DATA1\18014B.05R

Area File: C:\CP\DATA1\18014B.05A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.279	4.279	VINYL CHLORIDE	0.0000	0	0
6.744	6.729	1,1-DICHLOROETHENE	1.4763	2998	527
8.551	8.551	TRANS-1,2-DICHLOROET	0.0000	0	0
8.923	8.939	METHYL T-BUTYL ETHER	2.6358	5551	644
10.970	10.985	CIS-1,2-DICHLOROETHE	1.4126	3674	475
15.266	15.266	1,1-DICHLOROPROPENE	0.0000	0	0
16.002	16.002	BENZENE	0.0000	0	0
16.918	16.934	ISTD-FBENZENE	1.0000	74129	9831
18.326	18.335	TRICHLOROETHENE	1.5687	4971	926
19.671	19.830	2-CHLOROETHYL VINYL	0.0577	153	25
20.177	20.177	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.135	21.135	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.720	21.721	TOLUENE	0.0523	252	77
22.929	22.930	TETRACHLOROETHENE	1.3285	3284	1042
23.989	23.981	CHLOROBENZENE	0.0215	147	43
24.297	24.295	ETHYLBENZENE	0.0895	470	146
24.583	24.587	M,P-XYLENE	0.2874	1744	466
25.063	25.053	STYRENE	0.0226	190	47
25.158	25.155	O-XYLENE	0.0352	158	56
25.699	25.699	ISOPROPYLBENZENE	0.1825	753	224
26.170	26.017	BROMOBENZENE	0.1319	782	243
26.343	26.346	N-PROPYLBENZENE	0.0989	554	141
26.483	26.469	2-CHLOROTOLUENE	0.0248	146	39
26.639	26.589	4-CHLOROTOLUENE	0.0202	174	33
26.797	26.793	1,3,5-TRIMETHYLBENZE	0.0546	389	110
27.234	27.217	TERT-BUTYLBENZENE	0.1275	469	135
27.373	27.399	1,2,4-TRIMETHYLBENZE	0.1027	575	155
27.567	27.567	SEC-BUTYLBENZENE	0.0000	0	0
27.666	27.670	1,3-DICHLOROBENZENE	0.0290	185	43
27.785	27.790	1,4-DICHLOROBENZENE	0.0330	163	49
27.872	27.870	P-ISOPROPYLTOLUENE	0.0322	166	34
28.427	28.399	1,2-DICHLOROBENZENE	0.0329	198	36
28.590	28.587	N-BUTYLBENZENE	0.0433	232	44
30.076	30.082	SURR-1B4CB-P	27.5266	127019	33660
32.539	32.539	1,2,4-TRICHLOROBENZE	0.0000	0	0
33.257	33.280	NAPHTHALENE	0.0489	168	28
33.500	33.500	HEXACHLOROBUTADIENE	0.0000	0	0
33.926	33.926	1,2,3-TRICHLOROBENZE	0.0000	0	0

XYLENES (Total): 0.3226

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 91.7554%

Chrom Perfect version 6.07

Reported on 01-14-2002at 05:36:31

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

01-14-02

Sample name: 3753720

Batch: 02014A181127,840

Raw file:

C:\CP\DATA1\18014B.05R

Reviewed by:

T. B. K.

Verified by:

Vmm49

Date:

1-14-02

Date:

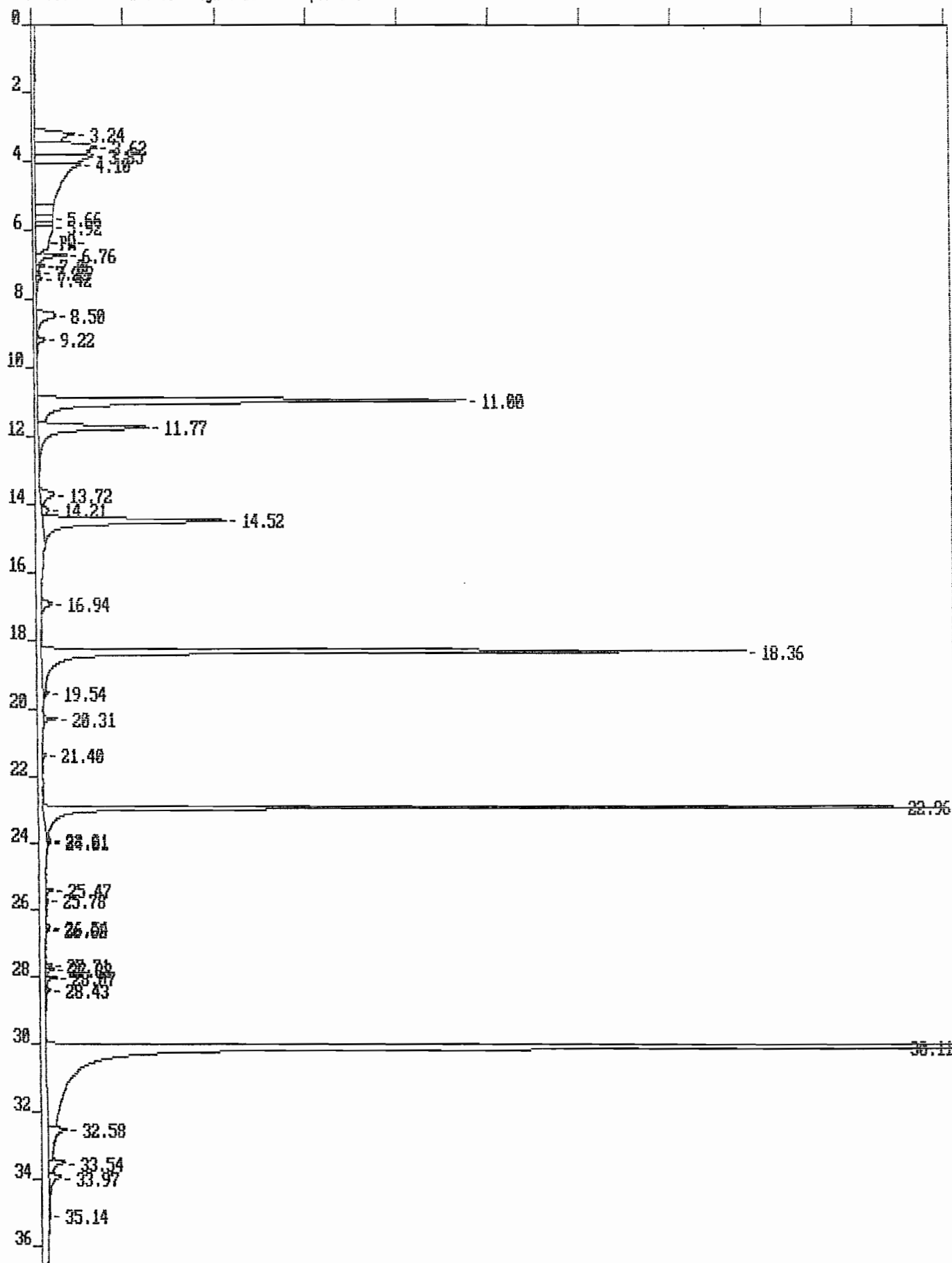
01/15/02

File=C:\CP\DATA1\18014.18R Date printed=01-14-2002 Time= 16:10:30

Sample Name=3753723

02014A181127,8404

0.0 to 37.0 min. Low Y=0.0 High Y=15.0 mv Span=15.0



Sample Name: 3753723

Batch: 02014A18

Date Taken: Jan 14, 2002 16:10:24

Raw File: C:\CP\DATA1\18014.18R

Area File: C:\CP\DATA1\18014.18A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.847	3.797	DICHLORODIFLUOROMETH	0.4758	14234	963
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.309	4.309	VINYL CHLORIDE	0.0000	0	0
4.786	4.786	BROMOMETHANE	0.0000	0	0
4.976	4.976	CHLOROETHANE	0.0000	0	0
5.916	5.831	TRICHLOROFLUOROMETHA	0.1124	11196	287
6.759	6.751	1,1-DICHLOROETHENE	0.1094	4307	507
7.056	7.061	METHYLENE CHLORIDE	0.0176	969	146
7.246	7.244	TRICHLOROTRIFLUOROET	0.0178	477	65
8.497	8.574	TRANS-1,2-DICHLOROET	0.0502	5441	314
9.217	9.222	1,1-DICHLOROETHANE	0.0255	1265	136
10.997	11.009	CIS-1,2-DICHLOROETHE	1.3864	64991	7016
11.527	11.527	BROMOCHLOROMETHANE	0.0000	0	0
11.773	11.782	CHLOROFORM	0.2963	22226	1812
12.030	12.030	2,2-DICHLOROPROPANE	0.0000	0	0
14.207	14.209	1,2-DICHLOROETHANE	0.0233	1254	112
14.523	14.528	1,1,1-TRICHLOROETHAN	0.6010	34750	2986
15.290	15.290	1,1-DICHLOROPROPENE	0.0000	0	0
15.813	15.813	CARBON TETRACHLORIDE	0.0000	0	0
18.032	18.032	DIBROMOMETHANE	0.0000	0	0
18.204	18.204	1,2-DICHLOROPROPANE	0.0000	0	0
18.360	18.361	TRICHLOROETHENE	1.4443	83410	11545
18.468	18.468	BROMODICHLOROMETHANE	0.0000	0	0
19.856	19.856	2-CHLOROETHYL VINYL	0.0000	0	0
20.309	20.203	CIS-1,3-DICHLOROPROP	0.0318	1387	230
21.160	21.160	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.402	21.388	1,1,2-TRICHLOROETHAN	0.0080	386	67
21.851	21.851	1,3-DICHLOROPROPANE	0.0000	0	0
22.234	22.234	DIBROMOCHLOROMETHANE	0.0000	0	0
22.629	22.629	1,2-DIBROMOETHANE	0.0000	0	0
22.959	22.954	TETRACHLOROETHENE	1.3174	70318	14641
23.908	23.904	1,1,1,2-TETRACHLOROE	0.0048	258	56
24.010	24.002	CHLOROBENZENE	0.0102	263	56
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.465	25.375	1,2,3-TRICHLOROPROPA	0.0244	590	124
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.539	26.491	2-CHLOROTOLUENE	0.0186	388	74
26.618	26.609	4-CHLOROTOLUENE	0.0168	476	68
27.709	27.693	1,3-DICHLOROBENZENE	0.0171	487	100
27.825	27.807	1,4-DICHLOROBENZENE	0.0219	936	137
28.434	28.418	1,2-DICHLOROBENZENE	0.0149	698	84
29.302	29.302	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.111	30.100	SURR-1B4CB-H	26.2292	494831	89906
32.583	32.553	1,2,4-TRICHLOROBENZE	0.0772	7596	310
33.537	33.516	HEXACHLOROBUTADIENE	0.0579	3450	274
33.974	33.940	1,2,3-TRICHLOROBENZE	0.0593	3624	202

TOTAL 1,2-DICHLOROETHENE: 1.4366

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 87.4308%

Chrom. Perfect version 6.07

Reported on 01-14-2002 at 16:11:20

Sample name: 3753723

Batch: 02014A181127.840

Raw file: C:\CP\DATA1\18014.18R

Reviewed by: *BSK*

Verified by: *Umm49*

VM
Date: *1-15-02*

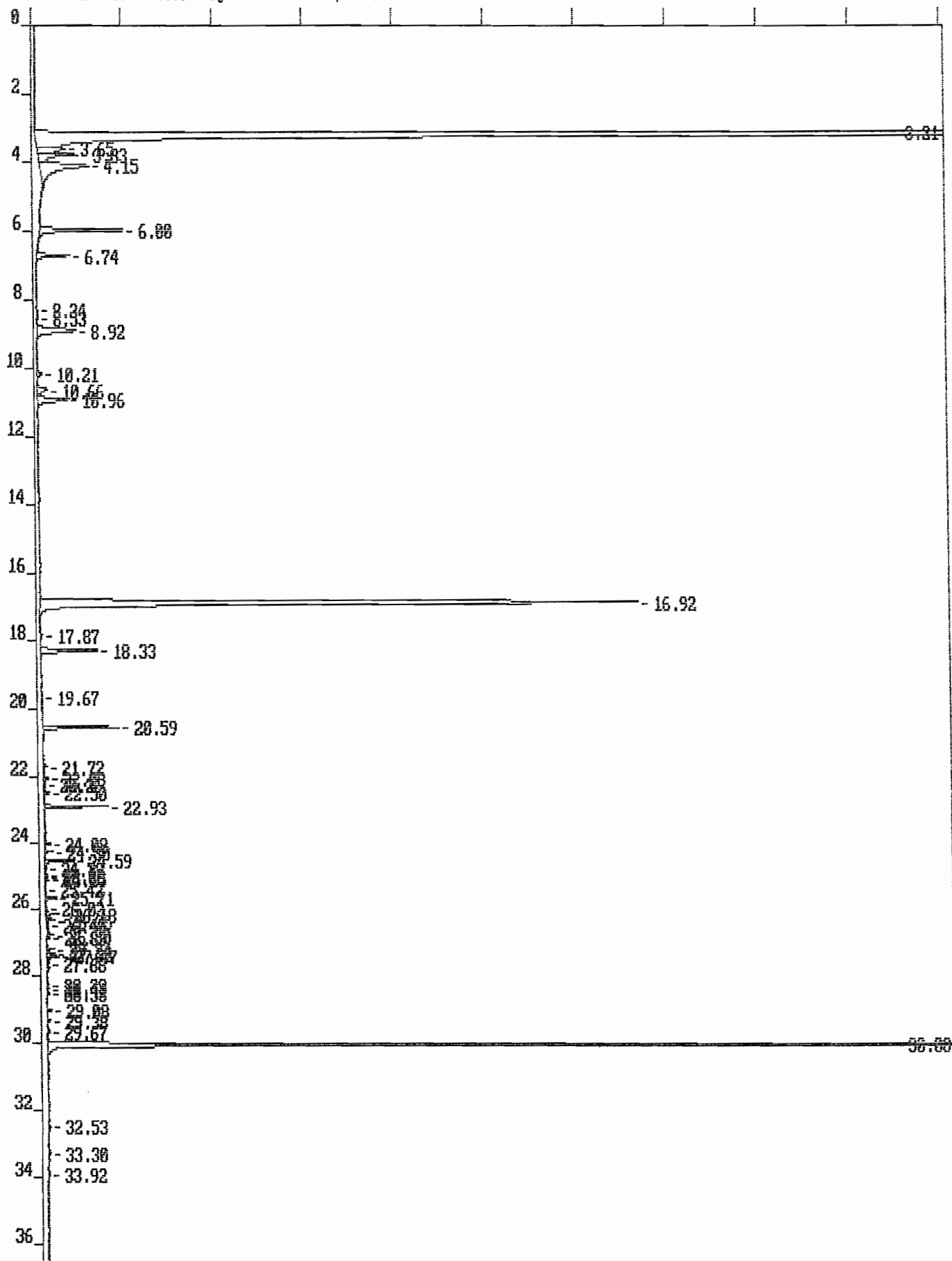
Date: *01/15/02*

File=C:\CP\DATA1\18014B.18R Date printed=01-14-2002 Time= 16:11:32

Sample Name=3753723

02014A181127,8404

0.0 to 37.0 min. Low Y=0.004 High Y=15.004 mv Span=15.0



Sample Name: 3753723

Batch: 02014A18

Date Taken: Jan 14, 2002 16:10:24

Raw File: C:\CP\DATA1\18014B.18R

Area File: C:\CP\DATA1\18014B.18A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0	0
6.738	6.722	1,1-DICHLOROETHENE	1.5610	2961	559
8.533	8.544	TRANS-1,2-DICHLOROET	0.0329	117	27
8.922	8.933	METHYL T-BUTYL ETHER	2.6875	5856	659
10.960	10.979	CIS-1,2-DICHLOROETHE	1.4513	3686	491
15.259	15.259	1,1-DICHLOROPROPENE	0.0000	0	0
15.997	15.997	BENZENE	0.0000	0	0
16.919	16.930	ISTD-FBENZENE	1.0000	74243	9874
18.327	18.332	TRICHLOROETHENE	1.6155	5147	958
19.674	19.828	2-CHLOROETHYL VINYL	0.0486	198	21
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.133	21.133	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.721	21.720	TOLUENE	0.0479	277	71
22.931	22.929	TETRACHLOROETHENE	1.3458	3310	1060
24.076	23.979	CHLOROBENZENE	0.0480	370	96
24.300	24.293	ETHYLBENZENE	0.0864	497	141
24.586	24.585	M,P-XYLENE	0.2953	1728	480
25.063	25.050	STYRENE	0.0248	199	51
25.155	25.153	O-XYLENE	0.0370	193	59
25.706	25.696	ISOPROPYLBENZENE	0.1579	788	195
26.021	26.014	BROMOBENZENE	0.0130	107	24
26.349	26.341	N-PROPYLBENZENE	0.1000	572	143
26.492	26.464	2-CHLOROTOLUENE	0.0261	147	41
26.584	26.584	4-CHLOROTOLUENE	0.0000	0	0
26.797	26.788	1,3,5-TRIMETHYLBENZE	0.0610	431	123
27.240	27.211	TERT-BUTYLBENZENE	0.1145	419	122
27.379	27.393	1,2,4-TRIMETHYLBENZE	0.0896	503	135
27.561	27.561	SEC-BUTYLBENZENE	0.0000	0	0
27.682	27.667	1,3-DICHLOROBENZENE	0.0275	119	41
27.782	27.782	1,4-DICHLOROBENZENE	0.0000	0	0
27.868	27.868	P-ISOPROPYLTOLUENE	0.0000	0	0
28.411	28.391	1,2-DICHLOROBENZENE	0.0328	224	37
28.584	28.579	N-BUTYLBENZENE	0.0490	175	50
30.083	30.072	SURR-1B4CB-P	26.1214	120958	32080
32.526	32.524	1,2,4-TRICHLOROBENZE	0.0550	195	27
33.300	33.270	NAPHTHALENE	0.0479	283	27
33.487	33.487	HEXACHLOROBUTADIENE	0.0000	0	0
33.920	33.912	1,2,3-TRICHLOROBENZE	0.0565	169	23

XYLENES (Total): 0.3322

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 87.0714%

Chrom Perfect version 6.07

Reported on 01-14-2002at 16:12:51

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753723

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.18R

Reviewed by:

TJL

Verified by:

mm48

VM

Date:

1-15-02

Date:

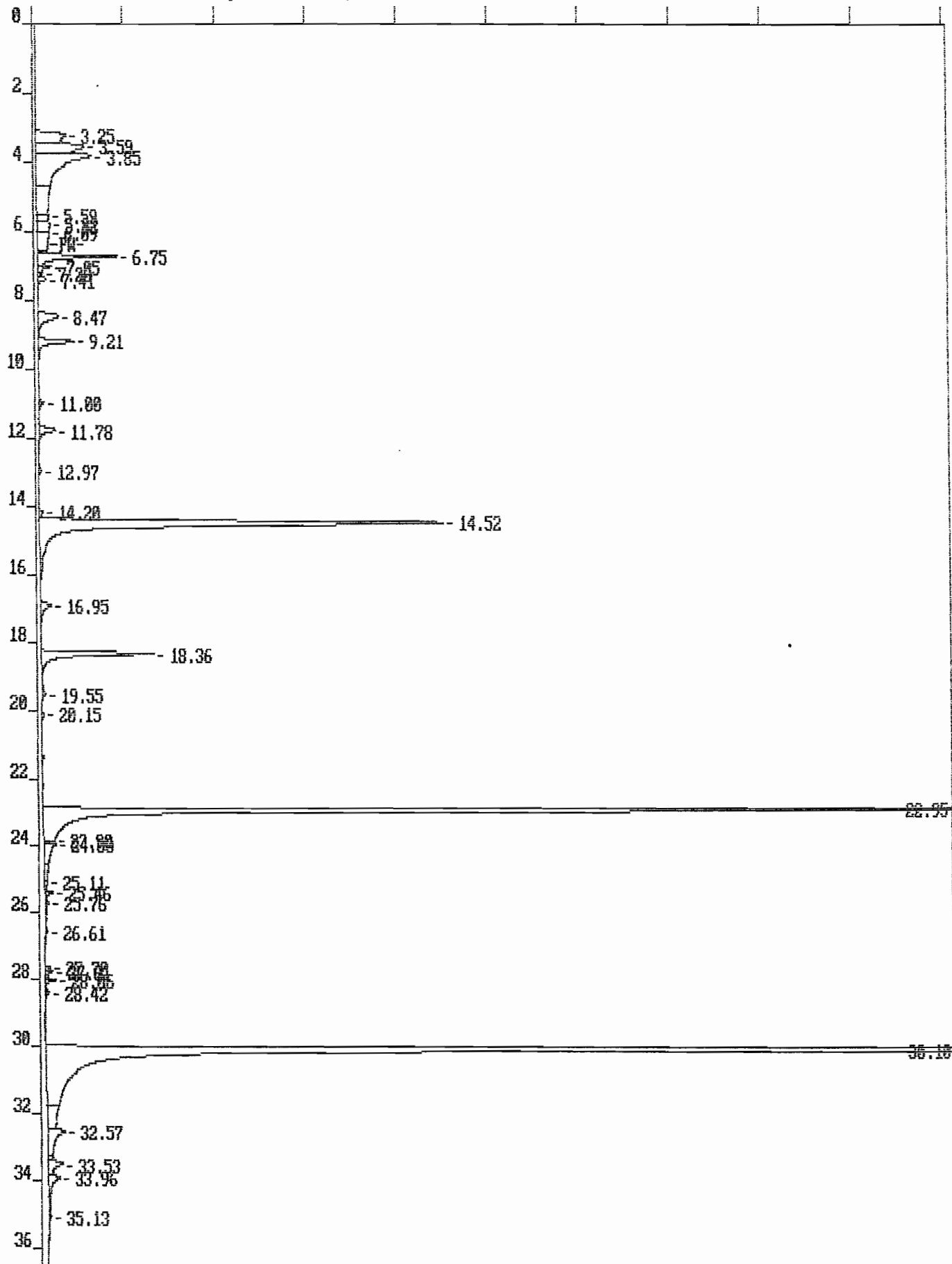
01/15/02

File=C:\CP\DATA1\18014.19R Date printed=01-14-2002 Time= 16:55:20

Sample Name=3753724

02014A181127,8404

0.0 to 37.0 min. Low Y=-0.006 High Y=14.994 mv Span=15.0



Sample Name: 3753724

Batch: 02014A18

Date Taken: Jan 14, 2002 16:55:14

Raw File: C:\CP\DATA1\18014.19R

Area File: C:\CP\DATA1\18014.19A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
3.847	3.797	DICHLORODIFLUOROMETH	0.4618	25634	935
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.309	4.309	VINYL CHLORIDE	0.0000	0	0
4.786	4.786	BROMOMETHANE	0.0000	0	0
4.976	4.976	CHLOROETHANE	0.0000	0	0
5.823	5.831	TRICHLOROFLUOROMETHA	0.0868	3924	222
6.748	6.751	1,1-DICHLOROETHENE	0.2876	10387	1331
7.053	7.061	METHYLENE CHLORIDE	0.0278	1585	230
7.219	7.244	TRICHLOROTRIFLUOROET	0.0241	704	88
8.474	8.574	TRANS-1,2-DICHLOROET	0.0526	5211	328
9.214	9.222	1,1-DICHLOROETHANE	0.1113	5102	595
11.004	11.009	CIS-1,2-DICHLOROETHE	0.0173	817	88
11.527	11.527	BROMOCHLOROMETHANE	0.0000	0	0
11.783	11.782	CHLOROFORM	0.0458	3039	280
12.030	12.030	2,2-DICHLOROPROPANE	0.0000	0	0
14.205	14.209	1,2-DICHLOROETHANE	0.0136	503	65
14.519	14.528	1,1,1-TRICHLOROETHAN	1.3371	77456	6643
15.290	15.290	1,1-DICHLOROPROPENE	0.0000	0	0
15.813	15.813	CARBON TETRACHLORIDE	0.0000	0	0
18.032	18.032	DIBROMOMETHANE	0.0000	0	0
18.204	18.204	1,2-DICHLOROPROPANE	0.0000	0	0
18.358	18.361	TRICHLOROETHENE	0.2315	14718	1850
18.468	18.468	BROMODICHLOROMETHANE	0.0000	0	0
19.856	19.856	2-CHLOROETHYL VINYL	0.0000	0	0
20.153	20.203	CIS-1,3-DICHLOROPROP	0.0054	345	39
21.160	21.160	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.388	21.388	1,1,2-TRICHLOROETHAN	0.0000	0	0
21.851	21.851	1,3-DICHLOROPROPANE	0.0000	0	0
22.234	22.234	DIBROMOCHLOROMETHANE	0.0000	0	0
22.629	22.629	1,2-DIBROMOETHANE	0.0000	0	0
22.953	22.954	TETRACHLOROETHENE	4.9004	246417	54461
23.897	23.904	1,1,1,2-TETRACHLOROE	0.0161	1020	189
23.999	24.002	CHLOROBENZENE	0.0363	4496	200
24.682	24.682	BROMOFORM	0.0000	0	0
25.108	25.172	1,1,2,2-TETRACHLOROE	0.0072	573	46
25.458	25.375	1,2,3-TRICHLOROPROPA	0.0256	880	131
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0	0
26.613	26.609	4-CHLOROTOLUENE	0.0099	328	40
27.703	27.693	1,3-DICHLOROBENZENE	0.0138	368	81
27.814	27.807	1,4-DICHLOROBENZENE	0.0190	866	119
28.421	28.418	1,2-DICHLOROBENZENE	0.0122	621	69
29.302	29.302	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.101	30.100	SURR-1B4CB-H	25.3180	470567	86783
32.566	32.553	1,2,4-TRICHLOROBENZE	0.0725	6814	291
33.532	33.516	HEXACHLOROBUTADIENE	0.0534	3470	253
33.962	33.940	1,2,3-TRICHLOROBENZE	0.0568	3378	194

TOTAL 1,2-DICHLOROETHENE: 0.0699

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 84.3934%

Chrom Perfect version 6.07

Reported on 01-14-2002 at 16:56:09

Sample name: 3753724

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.19R

Reviewed by:

TB 45

Verified by:

Vmm49

MM

Date:

1-15-02

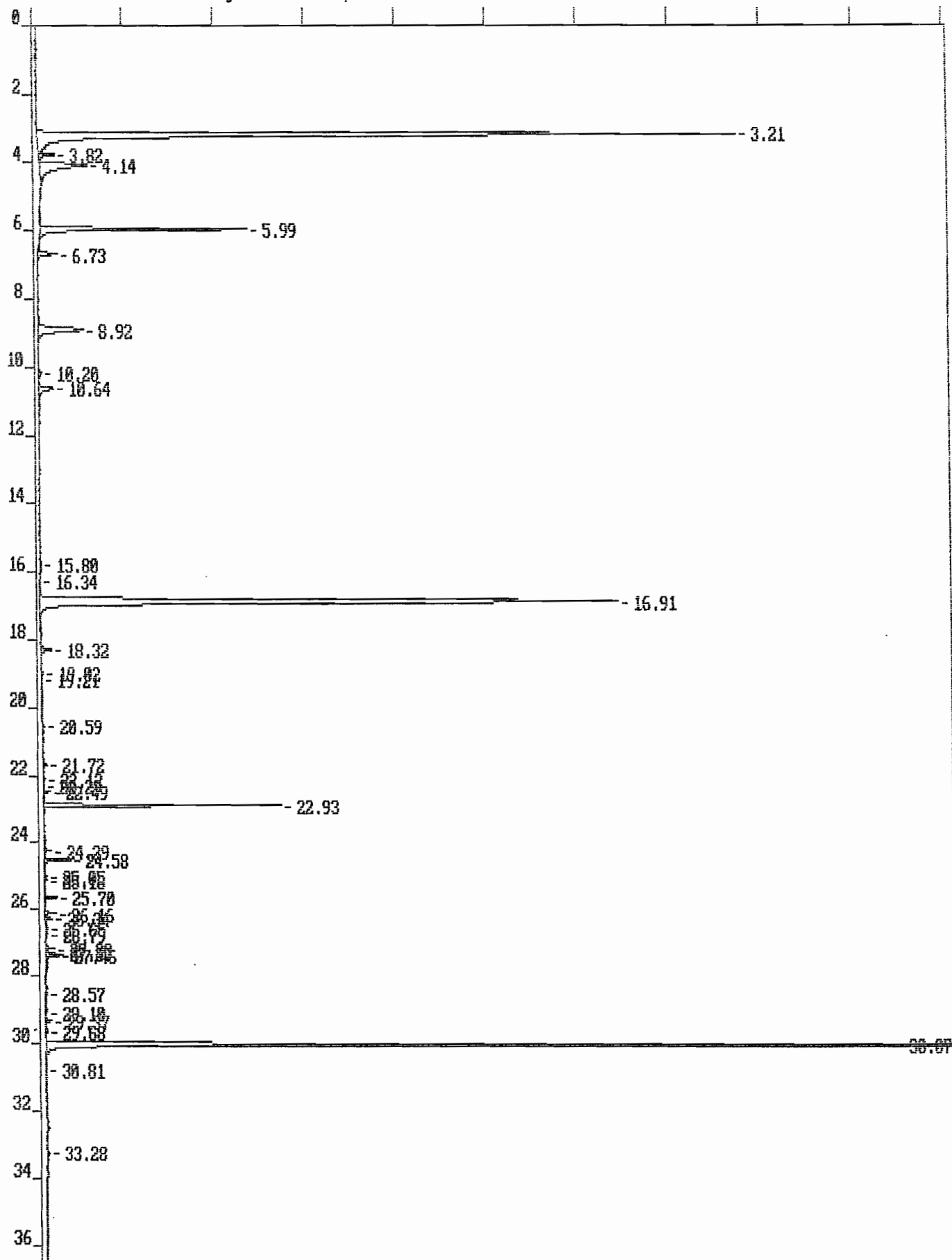
Date:

01/15/02

File=C:\CP\DATA1\180148.19R Date printed=01-14-2002 Time= 16:56:21

Sample Name=3753724 02014A181127,8404

0.0 to 37.0 min. Low Y=-0.004 High Y=14.996 mv Span=15.0



Sample Name: 3753724

Batch: 02014A18

Date Taken: Jan 14, 2002 16:55:14

Raw File: C:\CP\DATA1\18014B.19R

Area File: C:\CP\DATA1\18014B.19A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0	0
6.732	6.722	1,1-DICHLOROETHENE	0.9395	1833	325
8.544	8.544	TRANS-1,2-DICHLOROET	0.0000	0	0
8.920	8.933	METHYL T-BUTYL ETHER	3.1809	6563	754
10.979	10.979	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.259	15.259	1,1-DICHLOROPROPENE	0.0000	0	0
15.803	15.997	BENZENE	0.0304	117	21
16.914	16.930	ISTD-FBENZENE	1.0000	72271	9536
18.324	18.332	TRICHLOROETHENE	0.3039	967	174
19.828	19.828	2-CHLOROETHYL VINYL	0.0000	0	0
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.133	21.133	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.716	21.720	TOLUENE	0.0488	240	70
22.926	22.929	TETRACHLOROETHENE	5.1658	12010	3930
23.979	23.979	CHLOROBENZENE	0.0000	0	0
24.294	24.293	ETHYLBENZENE	0.0790	379	125
24.582	24.585	M,P-XYLENE	0.2750	1472	432
25.051	25.050	STYRENE	0.0207	123	41
25.156	25.153	O-XYLENE	0.0331	130	51
25.697	25.696	ISOPROPYLBENZENE	0.1656	748	197
26.164	26.014	BROMOBENZENE	0.1067	630	191
26.343	26.341	N-PROPYLBENZENE	0.0769	437	106
26.464	26.464	2-CHLOROTOLUENE	0.0000	0	0
26.584	26.584	4-CHLOROTOLUENE	0.0000	0	0
26.794	26.788	1,3,5-TRIMETHYLBENZE	0.0178	109	35
27.233	27.211	TERT-BUTYLBENZENE	0.1336	439	138
27.368	27.393	1,2,4-TRIMETHYLBENZE	0.1014	505	148
27.561	27.561	SEC-BUTYLBENZENE	0.0000	0	0
27.667	27.667	1,3-DICHLOROBENZENE	0.0000	0	0
27.782	27.782	1,4-DICHLOROBENZENE	0.0000	0	0
27.868	27.868	P-ISOPROPYLTOLUENE	0.0000	0	0
28.391	28.391	1,2-DICHLOROBENZENE	0.0000	0	0
28.571	28.579	N-BUTYLBENZENE	0.0368	147	36
30.072	30.072	SURR-1B4CB-P	27.1348	121495	32186
32.524	32.524	1,2,4-TRICHLOROBENZE	0.0000	0	0
33.280	33.270	NAPHTHALENE	0.0688	230	38
33.487	33.487	HEXACHLOROBUTADIENE	0.0000	0	0
33.912	33.912	1,2,3-TRICHLOROBENZE	0.0000	0	0

XYLENES (Total): 0.3080

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 90.4493%

Chrom Perfect version 6.07

Reported on 01-14-2002at 16:57:41

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753724

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.19R

Reviewed by: TRK

Verified by: Umm49

MM Date: 1-15-02

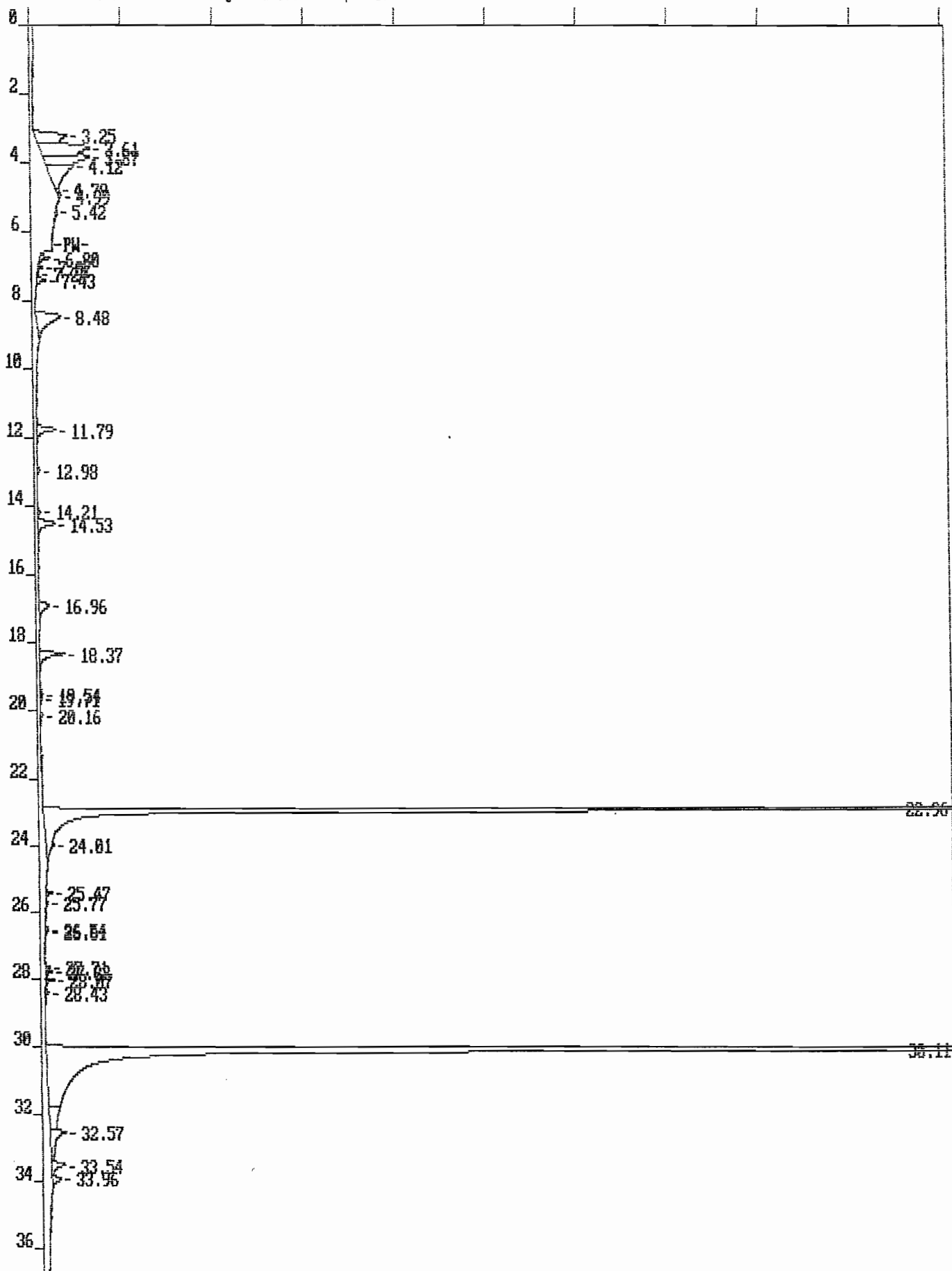
Date: 01/15/02

File=C:\CP\DATA1\18014.20R Date printed=01-14-2002 Time= 17:40:24

Sample Name=3753725

02014A181127,8404

.0 to 37.0 min. Low Y=-0.009 High Y=14.991 mv Span=15.0



Sample Name: 3753725

Batch: 02014A18

Date Taken: Jan 14, 2002 17:40:18

Raw File: C:\CP\DATA1\18014.20R

Area File: C:\CP\DATA1\18014.20A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.867	3.797	DICHLORODIFLUOROMETH	10564	769
3.996	3.996	CHLOROMETHANE	0	0
4.123	4.309	VINYL CHLORIDE	9952	450
4.791	4.786	BROMOMETHANE	515	62
4.987	4.976	CHLOROETHANE	416	47
5.831	5.831	TRICHLOROFLUOROMETHA	0	0
6.798	6.751	1,1-DICHLOROETHENE	1214	176
7.069	7.061	METHYLENE CHLORIDE	432	92
7.237	7.244	TRICHLOROTRIFLUOROET	230	35
8.477	8.574	TRANS-1,2-DICHLOROET	8142	398
9.222	9.222	1,1-DICHLOROETHANE	0	0
11.009	11.009	CIS-1,2-DICHLOROETHE	0	0
11.527	11.527	BROMOCHLOROMETHANE	0	0
11.786	11.782	CHLOROFORM	3131	312
12.030	12.030	2,2-DICHLOROPROPANE	0	0
14.210	14.209	1,2-DICHLOROETHANE	441	53
14.533	14.528	1,1,1-TRICHLOROETHAN	3576	290
15.290	15.290	1,1-DICHLOROPROPENE	0	0
15.813	15.813	CARBON TETRACHLORIDE	0	0
18.032	18.032	DIBROMOMETHANE	0	0
18.204	18.204	1,2-DICHLOROPROPANE	0	0
18.366	18.361	TRICHLOROETHENE	3744	413
18.468	18.468	BROMODICHLOROMETHANE	0	0
19.707	19.856	2-CHLOROETHYL VINYL	259	35
20.156	20.203	CIS-1,3-DICHLOROPROP	319	41
21.160	21.160	TRANS-1,3-DICHLOROPR	0	0
21.388	21.388	1,1,2-TRICHLOROETHAN	0	0
21.851	21.851	1,3-DICHLOROPROPANE	0	0
22.234	22.234	DIBROMOCHLOROMETHANE	0	0
22.629	22.629	1,2-DIBROMOETHANE	0	0
22.957	22.954	TETRACHLOROETHENE	199377	43608
23.904	23.904	1,1,1,2-TETRACHLOROE	0	0
24.012	24.002	CHLOROBENZENE	281	48
24.682	24.682	BROMOFORM	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0	0
25.465	25.375	1,2,3-TRICHLOROPROPA	477	106
26.041	26.041	BROMOBENZENE	0	0
26.543	26.491	2-CHLOROTOLUENE	295	57
26.611	26.609	4-CHLOROTOLUENE	530	58
27.707	27.693	1,3-DICHLOROBENZENE	340	83
27.820	27.807	1,4-DICHLOROBENZENE	782	115
28.428	28.418	1,2-DICHLOROBENZENE	596	70
29.302	29.302	1,2-DIBROMO-3-CHLORO	0	0
30.107	30.100	SURR-1B4CB-H	474133	87787
32.572	32.553	1,2,4-TRICHLOROBENZE	6006	267
33.537	33.516	HEXACHLOROBUTADIENE	2632	231
33.961	33.940	1,2,3-TRICHLOROBENZE	1861	162

TOTAL 1,2-DICHLOROETHENE: 0.0637

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 85.3700%

Chrom. Perfect version 6.02

Reported on 01-14-2002 at 17:41:14

Sample name: 3753725

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.20R

Reviewed by: BLS

Verified by: VM49

VM

Date: 1-15-02

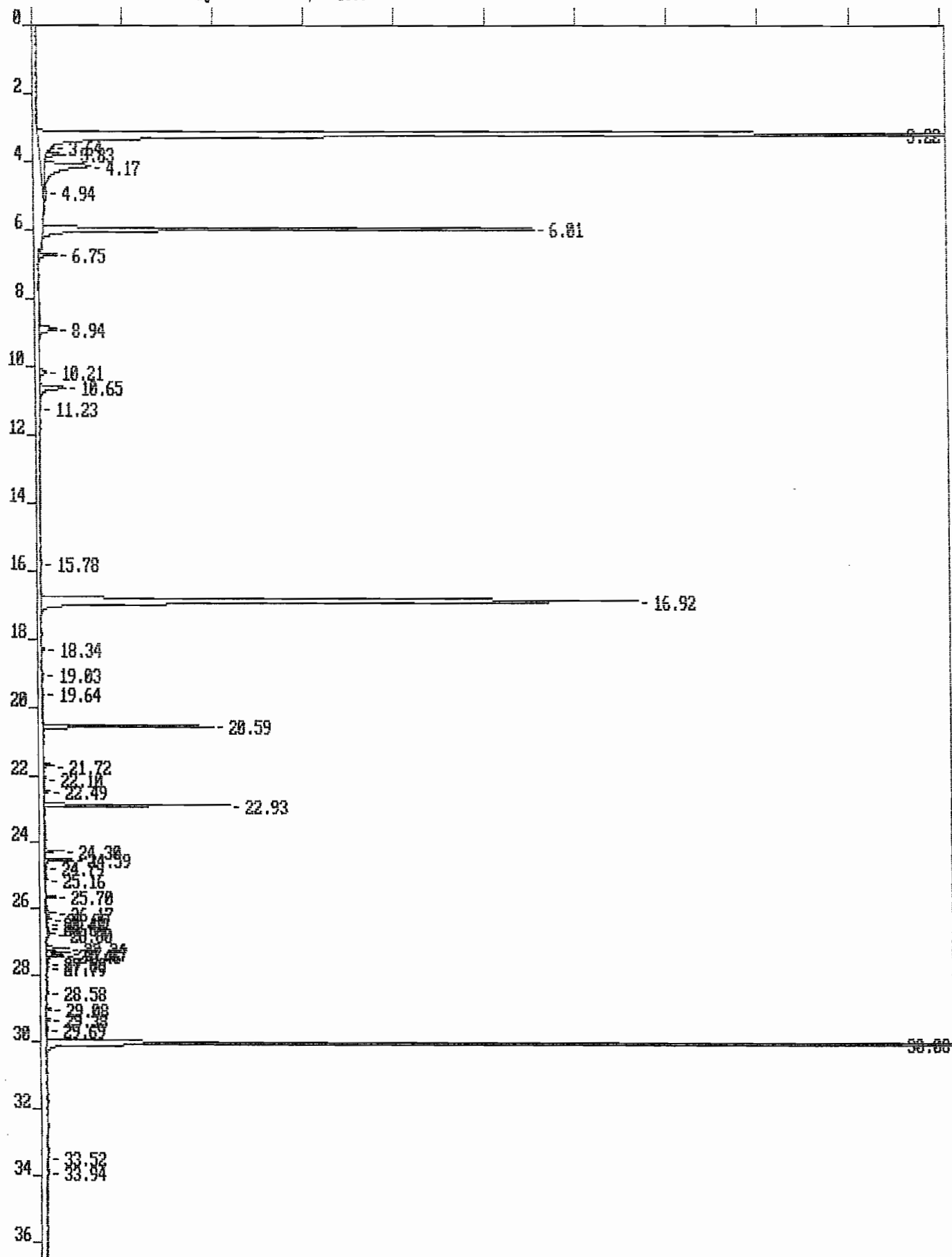
Date: 01/15/02

File=C:\CP\DATA1\180148.20R Date printed=01-14-2002 Time= 17:41:26

Sample Name=3753725

02014A181127,8404

.0 to 37.0 min. Low Y=0.0 High Y=15.0 mv Span=15.0



Sample Name: 3753725

Batch: 02014A18

Date Taken: Jan 14, 2002 17:40:18

Raw File: C:\CP\DATA1\18014B.20R

Area File: C:\CP\DATA1\18014B.20A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0	0
6.753	6.722	1,1-DICHLOROETHENE	0.9083	1821	325
8.544	8.544	TRANS-1,2-DICHLOROET	0.0000	0	0
8.937	8.933	METHYL T-BUTYL ETHER	1.2633	2835	309
10.979	10.979	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.259	15.259	1,1-DICHLOROPROPENE	0.0000	0	0
15.997	15.997	BENZENE	0.0000	0	0
16.922	16.930	ISTD-FBENZENE	1.0000	73918	9854
18.341	18.332	TRICHLOROETHENE	0.1006	343	60
19.643	19.828	2-CHLOROETHYL VINYL	0.0866	273	38
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.133	21.133	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.720	21.720	TOLUENE	0.1182	632	175
22.930	22.929	TETRACHLOROETHENE	3.9100	9439	3073
23.979	23.979	CHLOROBENZENE	0.0000	0	0
24.303	24.293	ETHYLBENZENE	0.1909	1000	312
24.586	24.585	M,P-XYLENE	0.2961	1688	481
25.050	25.050	STYRENE	0.0000	0	0
25.161	25.153	O-XYLENE	0.0344	274	55
25.704	25.696	ISOPROPYLBENZENE	0.1328	606	163
26.174	26.014	BROMOBENZENE	0.0912	555	169
26.347	26.341	N-PROPYLBENZENE	0.0658	355	94
26.480	26.464	2-CHLOROTOLUENE	0.0192	101	30
26.637	26.584	4-CHLOROTOLUENE	0.0167	136	28
26.800	26.788	1,3,5-TRIMETHYLBENZE	0.0616	337	124
27.238	27.211	TERT-BUTYLBENZENE	0.3496	1224	372
27.370	27.393	1,2,4-TRIMETHYLBENZE	0.2572	1357	388
27.561	27.561	SEC-BUTYLBENZENE	0.0000	0	0
27.682	27.667	1,3-DICHLOROBENZENE	0.0268	123	40
27.792	27.782	1,4-DICHLOROBENZENE	0.0217	104	32
27.868	27.868	P-ISOPROPYLTOLUENE	0.0000	0	0
28.391	28.391	1,2-DICHLOROBENZENE	0.0000	0	0
28.583	28.579	N-BUTYLBENZENE	0.0355	138	36
30.078	30.072	SURR-1B4CB-P	26.4300	122042	32393
32.524	32.524	1,2,4-TRICHLOROBENZE	0.0000	0	0
33.270	33.270	NAPHTHALENE	0.0000	0	0
33.519	33.487	HEXACHLOROBUTADIENE	0.0765	132	22
33.935	33.912	1,2,3-TRICHLOROBENZE	0.0625	179	25

XYLENES (Total): 0.3304

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 88.0999%

Chrom Perfect version 6.07

Reported on 01-14-2002at 17:42:45

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753725

Batch: 02014A181127.840

Raw file: C:\CP\DATA1\18014B.20R

Reviewed by: TSK

Verified by: lmm48

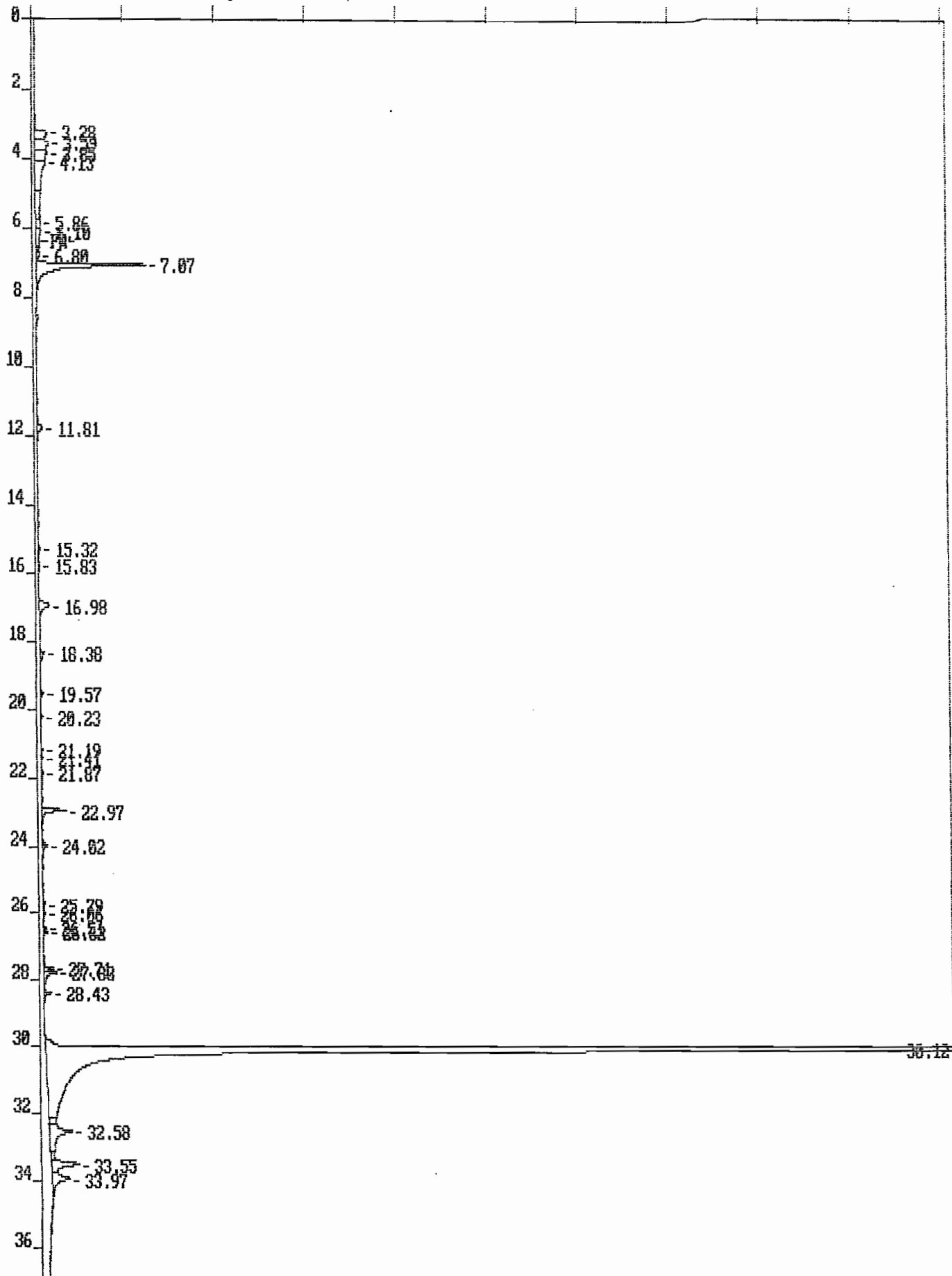
VM Date: 1-15-02

Date: 01/15/02

file-C:\CP\PHI\16014.ZSR Date printed-01-14-2002 Time- 21:51:40

Sample Name=3753726 02014A181127,8404

0.0 to 37.0 min. Low Y=-0.003 High Y=14.997 mv Span=15.0



3753726 VMM49 01/24/02

Raw File: C:\CP\DATA1\18014.25R

Area File: C:\CP\DATA1\18014.25A

02014A8

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.846	3.786	DICHLORODIFLUOROMETH	0.1018	3185	206
3.997	3.997	CHLOROMETHANE	0.0000	0	0
4.131	4.302	VINYL CHLORIDE	0.0494	6413	176
4.779	4.779	BROMOMETHANE	0.0000	0	0
4.964	4.964	CHLOROETHANE	0.0000	0	0
5.863	5.814	TRICHLOROFLUOROMETHA	0.0323	1278	83
6.798	6.735	1,1-DICHLOROETHENE	0.0147	742	68
7.074	7.042	METHYLENE CHLORIDE	0.2162	15271	1794
7.223	7.223	TRICHLOROTRIFLUOROET	0.0000	0	0
8.549	8.549	TRANS-1,2-DICHLOROET	0.0000	0	0
9.197	9.197	1,1-DICHLOROETHANE	0.0000	0	0
10.981	10.981	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.500	11.500	BROMOCHLOROMETHANE	0.0000	0	0
11.809	11.756	CHLOROFORM	0.0141	852	86
12.001	12.001	2,2-DICHLOROPROPANE	0.0000	0	0
14.187	14.187	1,2-DICHLOROETHANE	0.0000	0	0
14.505	14.505	1,1,1-TRICHLOROETHAN	0.0000	0	0
15.320	15.270	1,1-DICHLOROPROPENE	0.0100	524	44
15.833	15.793	CARBON TETRACHLORIDE	0.0044	301	27
18.018	18.018	DIBROMOMETHANE	0.0000	0	0
18.192	18.192	1,2-DICHLOROPROPANE	0.0000	0	0
18.381	18.349	TRICHLOROETHENE	0.0099	757	79
18.457	18.457	BROMODICHLOROMETHANE	0.0000	0	0
19.848	19.848	2-CHLOROETHYL VINYL	0.0000	0	0
20.230	20.196	CIS-1,3-DICHLOROPROP	0.0047	202	34
21.193	21.154	TRANS-1,3-DICHLOROPR	0.0054	224	37
21.410	21.383	1,1,2-TRICHLOROETHAN	0.0037	210	31
21.868	21.847	1,3-DICHLOROPROPANE	0.0043	221	30
22.230	22.230	DIBROMOCHLOROMETHANE	0.0000	0	0
22.626	22.626	1,2-DIBROMOETHANE	0.0000	0	0
22.970	22.952	TETRACHLOROETHENE	0.0356	2218	395
23.904	23.904	1,1,1,2-TETRACHLOROE	0.0000	0	0
24.019	24.001	CHLOROBENZENE	0.0134	348	74
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.376	25.376	1,2,3-TRICHLOROPROPA	0.0000	0	0
26.063	26.041	BROMOBENZENE	0.0119	282	34
26.509	26.491	2-CHLOROTOLUENE	0.0152	281	60
26.625	26.610	4-CHLOROTOLUENE	0.0196	547	79
27.711	27.694	1,3-DICHLOROBENZENE	0.0269	881	157
27.826	27.808	1,4-DICHLOROBENZENE	0.0325	1744	203
28.435	28.419	1,2-DICHLOROBENZENE	0.0214	839	121
29.304	29.304	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.116	30.103	SURR-1B4CB-H	26.5173	492493	90893
32.581	32.558	1,2,4-TRICHLOROBENZE	0.0945	7402	380
33.546	33.521	HEXACHLOROBUTADIENE	0.0972	5064	461
33.971	33.945	1,2,3-TRICHLOROBENZE	0.0859	4236	294

TOTAL 1,2-DICHLOROETHENE: 0.0000

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 88.3909%

Chrom Perfect version 6.07

Reported on 01-14-2002at 21:52:33

375 3726 VMM49 01/24/02

02014A18

NOV 1 1998

U.S. AIR FORCE (10017120)

Reviewed by: SKP/oss

Verified by: VMM49

Date: 1-14-02
(3) SKP/oss
1-14-02

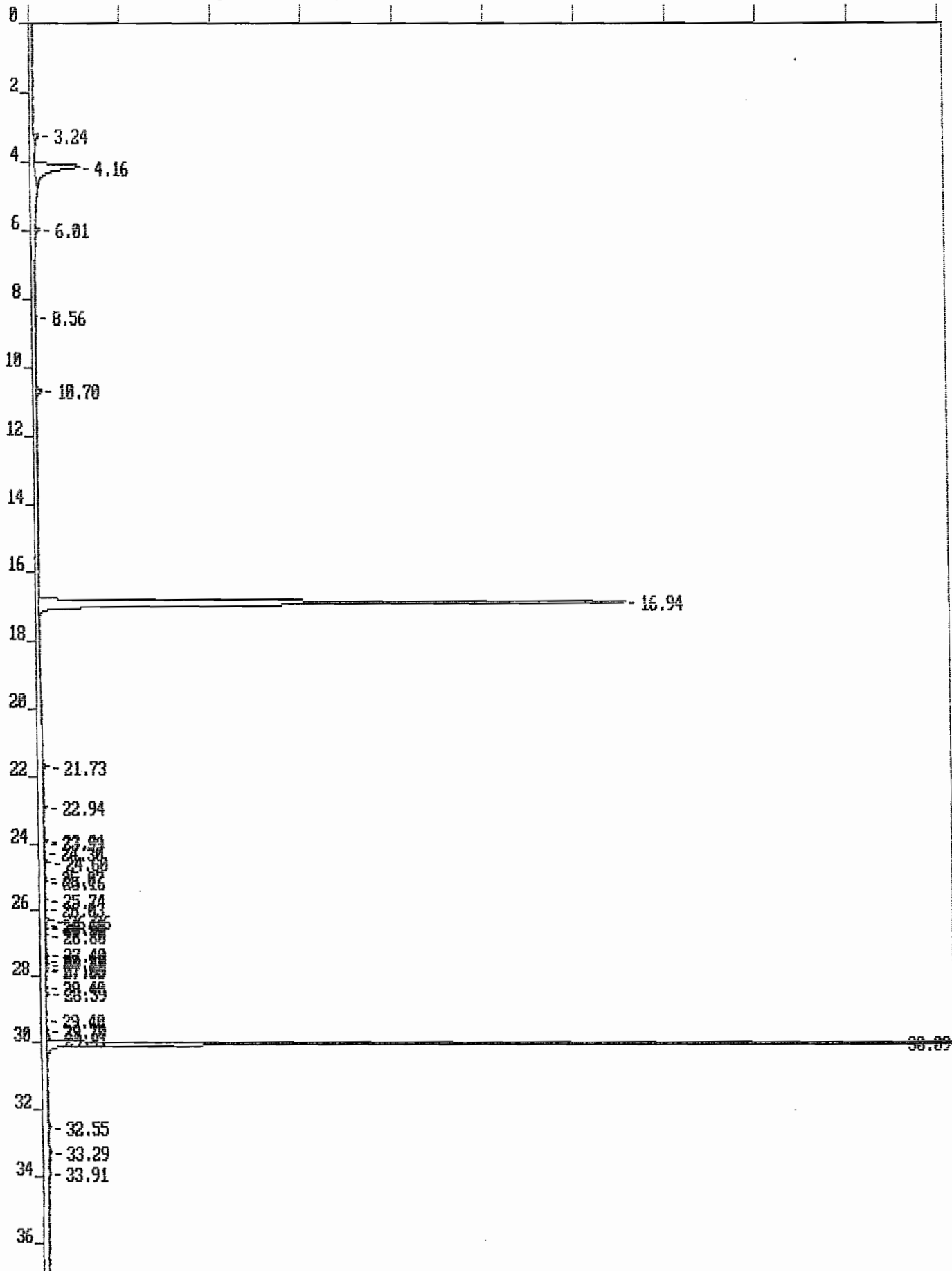
Date: 01/15/02

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Sample Name=3753726

02014A181127,8404

0.0 to 37.0 min. Low Y=0.001 High Y=15.001 mv Span=15.0



3753700

0201418

VMM49 01/24/02

DATE: 02/01/2002 DATE TAKEN: JAN 17, 2002 21:54:03

Raw File: C:\CP\DATA1\18014B.25R

Area File: C:\CP\DATA1\18014B.25A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 25):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.274	4.274	VINYL CHLORIDE	0.0000	0	0
6.706	6.706	1,1-DICHLOROETHENE	0.0000	0	0
8.556	8.520	TRANS-1,2-DICHLOROET	0.0266	113	22
8.904	8.904	METHYL T-BUTYL ETHER	0.0000	0	0
10.950	10.950	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.239	15.239	1,1-DICHLOROPROPENE	0.0000	0	0
15.978	15.978	BENZENE	0.0000	0	0
16.944	16.912	ISTD-FBENZENE	1.0000	72676	9659
18.320	18.320	TRICHLOROETHENE	0.0000	0	0
19.820	19.820	2-CHLOROETHYL VINYL	0.0000	0	0
20.168	20.168	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.127	21.127	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.731	21.715	TOLUENE	0.0723	386	105
22.940	22.926	TETRACHLOROETHENE	0.0766	239	59
23.993	23.978	CHLOROBENZENE	0.0252	117	49
24.303	24.293	ETHYLBENZENE	0.0246	110	39
24.596	24.585	M,P-XYLENE	0.0623	327	99
25.066	25.050	STYRENE	0.0221	134	45
25.164	25.153	O-XYLENE	0.0306	198	48
25.740	25.696	ISOPROPYLBENZENE	0.0494	282	60
26.027	26.014	BROMOBENZENE	0.0222	181	40
26.356	26.342	N-PROPYLBENZENE	0.0992	505	139
26.476	26.465	2-CHLOROTOLUENE	0.0260	150	40
26.594	26.584	4-CHLOROTOLUENE	0.0332	167	54
26.803	26.789	1,3,5-TRIMETHYLBENZE	0.0236	178	47
27.212	27.212	TERT-BUTYLBENZENE	0.0000	0	0
27.404	27.394	1,2,4-TRIMETHYLBENZE	0.0367	238	54
27.567	27.562	SEC-BUTYLBENZENE	0.0313	149	33
27.684	27.668	1,3-DICHLOROBENZENE	0.0377	179	55
27.803	27.783	1,4-DICHLOROBENZENE	0.0374	191	54
27.876	27.869	P-ISOPROPYLTOLUENE	0.0364	167	38
28.404	28.393	1,2-DICHLOROBENZENE	0.0391	185	43
28.591	28.580	N-BUTYLBENZENE	0.0546	207	54
30.087	30.076	SURR-1B4CB-F	27.4268	123995	32951
32.553	32.528	1,2,4-TRICHLOROBENZE	0.0782	235	37
33.293	33.274	NAPHTHALENE	0.0582	169	32
33.491	33.491	HEXACHLOROBUTADIENE	0.0000	0	0
33.908	33.916	1,2,3-TRICHLOROBENZE	0.0757	192	30

XYLENES (Total): 0.0928

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 91.4226%

Chrom Perfect version 6.07

Reported on 01-14-2002at 21:54:03

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

375 3726 02014A18

Vmm49 01/24/02

Sample name: 3753726

Date: 02014B101127,040

Raw file: C:\CP\DATA1\18014B.25R

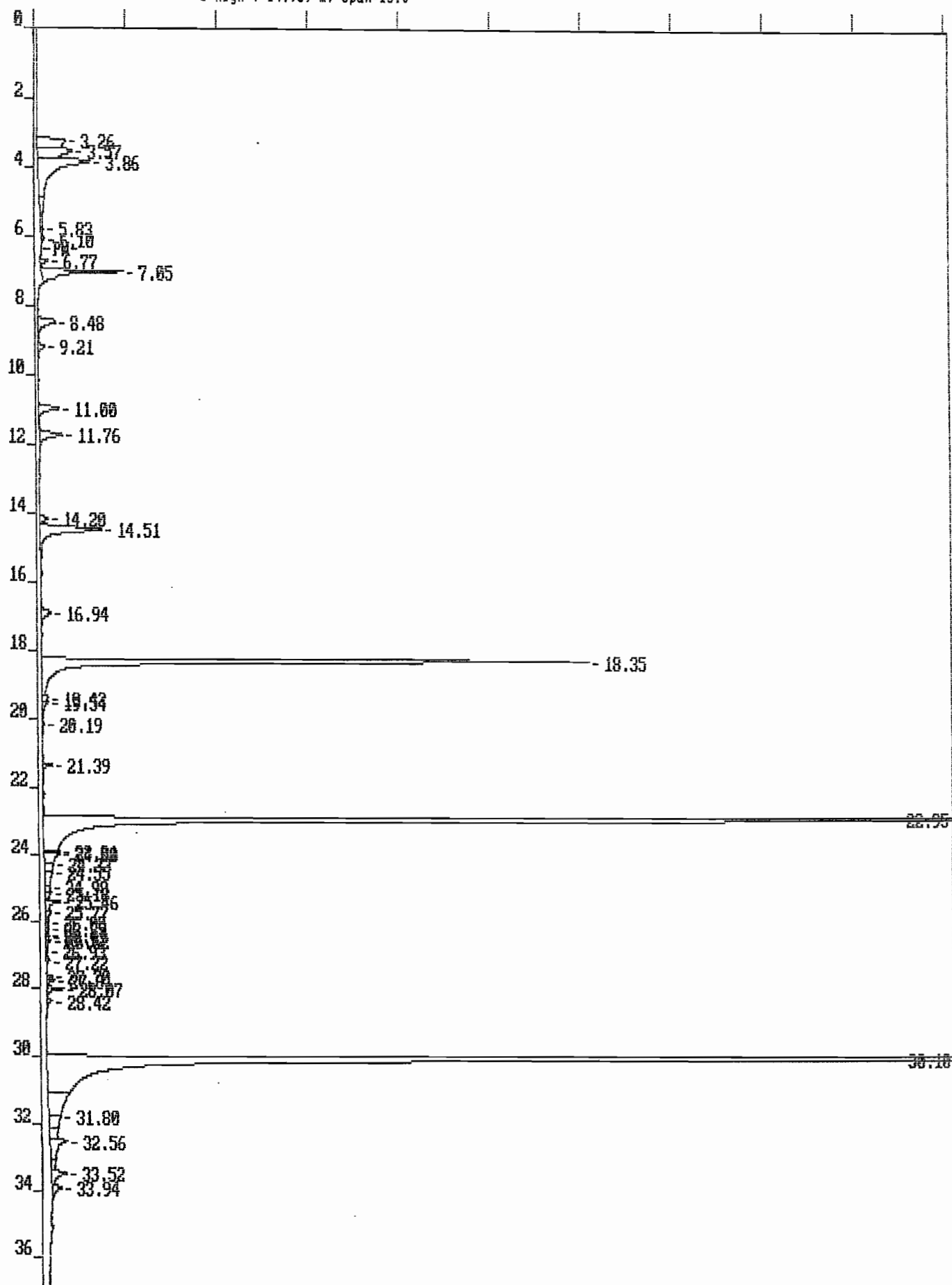
Reviewed by: SKL 088

Verified by: Vmm49

Date: 1-14-02

Date: 01/15/02

File=C:\CP\DATA1\18014.06R Date printed=01-14-2002 Time= 06:19:41
Sample Name=3753727 02014A181127,8404
0.0 to 37.0 min. Low Y=-0.011 High Y=14.989 mv Span=15.0



Sample Name: 3753727

Batch: 02014A18

Date Taken: Jan 14, 2002 06:19:35

Raw File: C:\CP\DATA1\18014.06R

Area File: C:\CP\DATA1\18014.06A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 21):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.863	3.802	DICHLORODIFLUOROMETH	0.4270	18482	864
3.987	3.987	CHLOROMETHANE	0.0000	0	0
4.308	4.308	VINYL CHLORIDE	0.0000	0	0
4.780	4.780	BROMOMETHANE	0.0000	0	0
4.979	4.979	CHLOROETHANE	0.0000	0	0
5.833	5.839	TRICHLOROFLUOROMETHA	0.0126	348	32
6.769	6.758	1,1-DICHLOROETHENE	0.0295	929	136
7.054	7.069	METHYLENE CHLORIDE	0.1616	9761	1341
7.249	7.249	TRICHLOROTRIFLUOROET	0.0000	0	0
8.484	8.580	TRANS-1,2-DICHLOROET	0.0455	3706	284
9.209	9.229	1,1-DICHLOROETHANE	0.0204	913	109
10.995	11.015	CIS-1,2-DICHLOROETHE	0.0644	3044	326
11.534	11.534	BROMOCHLOROMETHANE	0.0000	0	0
11.765	11.790	CHLOROFORM	0.0608	3892	372
12.039	12.039	2,2-DICHLOROPROPANE	0.0000	0	0
14.203	14.216	1,2-DICHLOROETHANE	0.0283	1164	135
14.511	14.534	1,1,1-TRICHLOROETHAN	0.2042	12841	1014
15.296	15.296	1,1-DICHLOROPROPENE	0.0000	0	0
15.818	15.818	CARBON TETRACHLORIDE	0.0000	0	0
18.035	18.035	DIBROMOMETHANE	0.0000	0	0
18.208	18.208	1,2-DICHLOROPROPANE	0.0000	0	0
18.351	18.364	TRICHLOROETHENE	1.1232	65789	8978
18.471	18.471	BROMODICHLOROMETHANE	0.0000	0	0
19.858	19.858	2-CHLOROETHYL VINYL	0.0000	0	0
20.186	20.205	CIS-1,3-DICHLOROPROP	0.0039	422	28
21.161	21.161	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.387	21.390	1,1,2-TRICHLOROETHAN	0.0175	858	147
21.853	21.853	1,3-DICHLOROPROPANE	0.0000	0	0
22.236	22.236	DIBROMOCHLOROMETHANE	0.0000	0	0
22.630	22.630	1,2-DIBROMOETHANE	0.0000	0	0
22.951	22.956	TETRACHLOROETHENE	6.4945	319300	72177
23.905	23.906	1,1,1,2-TETRACHLOROE	0.0213	1326	249
24.003	24.004	CHLOROBENZENE	0.0473	3704	261
24.553	24.684	BROMOFORM	0.0356	2792	131
25.178	25.174	1,1,2,2-TETRACHLOROE	0.0154	1019	100
25.455	25.378	1,2,3-TRICHLOROPROPA	0.0494	2012	252
26.050	26.044	BROMOBENZENE	0.0197	541	56
26.493	26.495	2-CHLOROTOLUENE	0.0149	354	59
26.616	26.613	4-CHLOROTOLUENE	0.0187	797	76
27.701	27.699	1,3-DICHLOROBENZENE	0.0167	482	98
27.808	27.814	1,4-DICHLOROBENZENE	0.0224	904	140
28.421	28.425	1,2-DICHLOROBENZENE	0.0161	691	91
29.310	29.310	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.100	30.110	SURR-1B4CB-H	27.2446	487048	93386
32.562	32.567	1,2,4-TRICHLOROBENZE	0.0694	5286	279
33.520	33.531	HEXACHLOROBUTADIENE	0.0527	2850	250
33.944	33.955	1,2,3-TRICHLOROBENZE	0.0452	1709	155

TOTAL 1,2-DICHLOROETHENE: 0.1099

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 90.8152%

Chrom Perfect version 6.07

Reported on 01-14-2002at 06:20:30

Raw file:

C:\CP\DATA1\18014.06R

Reviewed by:

Verified by:

Date:

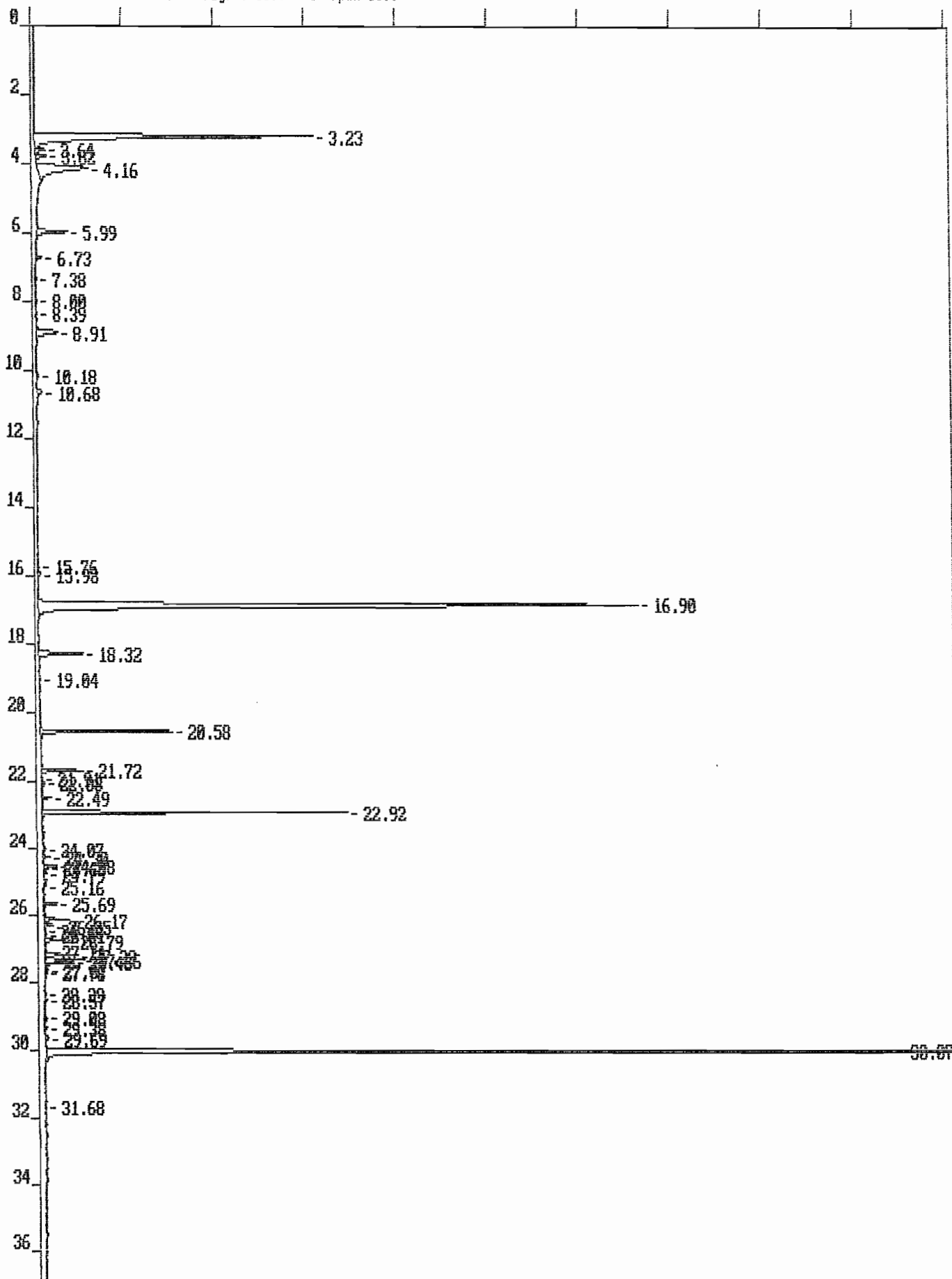
Date:

File=C:\CP\DATA1\18014B.06R Date printed=01-14-2002 Time= 06:20:42

Sample Name=3753727

02014A181127,8404

0.0 to 37.0 min. Low Y=0.006 High Y=15.006 mv Span=15.0



Sample Name: 3753727

Batch: 02014A18

Date Taken: Jan 14, 2002 06:19:35

Raw File: C:\CP\DATA1\18014B.06R

Area File: C:\CP\DATA1\18014B.06A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.279	4.279	VINYL CHLORIDE	0.0000	0	0
6.733	6.729	1,1-DICHLOROETHENE	0.3039	617	108
8.387	8.551	TRANS-1,2-DICHLOROET	0.0289	146	24
8.914	8.939	METHYL T-BUTYL ETHER	1.4475	2790	353
10.985	10.985	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.266	15.266	1,1-DICHLOROPROPENE	0.0000	0	0
15.977	16.002	BENZENE	0.0677	440	49
16.905	16.934	ISTD-FBENZENE	1.0000	73471	9821
18.318	18.335	TRICHLOROETHENE	1.2464	3977	735
19.830	19.830	2-CHLOROETHYL VINYL	0.0000	0	0
20.177	20.177	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.135	21.135	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.715	21.721	TOLUENE	0.4704	2408	694
22.924	22.930	TETRACHLOROETHENE	6.3916	15339	5008
24.069	23.981	CHLOROBENZENE	0.0180	105	36
24.296	24.295	ETHYLBENZENE	0.0721	345	117
24.580	24.587	M,P-XYLENE	0.1375	719	223
25.053	25.053	STYRENE	0.0000	0	0
25.157	25.155	O-XYLENE	0.0240	131	38
25.694	25.699	ISOPROPYLBENZENE	0.1733	829	213
26.166	26.017	BROMOBENZENE	0.2238	1246	412
26.346	26.346	N-PROPYLBENZENE	0.1008	556	143
26.478	26.469	2-CHLOROTOLUENE	0.0177	109	28
26.611	26.589	4-CHLOROTOLUENE	0.0201	195	33
26.794	26.793	1,3,5-TRIMETHYLBENZE	0.1683	1094	338
27.231	27.217	TERT-BUTYLBENZENE	0.5186	1845	550
27.363	27.399	1,2,4-TRIMETHYLBENZE	0.4081	2040	613
27.567	27.567	SEC-BUTYLBENZENE	0.0000	0	0
27.670	27.670	1,3-DICHLOROBENZENE	0.0346	141	51
27.778	27.790	1,4-DICHLOROBENZENE	0.0277	113	41
27.870	27.870	P-ISOPROPYLTOLUENE	0.0000	0	0
28.389	28.399	1,2-DICHLOROBENZENE	0.0256	161	28
28.569	28.587	N-BUTYLBENZENE	0.0364	137	37
30.072	30.082	SURR-1B4CB-P	27.2765	124711	33320
32.539	32.539	1,2,4-TRICHLOROBENZE	0.0000	0	0
33.280	33.280	NAPHTHALENE	0.0000	0	0
33.500	33.500	HEXACHLOROBUTADIENE	0.0000	0	0
33.926	33.926	1,2,3-TRICHLOROBENZE	0.0000	0	0

XYLENES (Total): 0.1615

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 90.9216%

Chrom Perfect version 6.07

Reported on 01-14-2002at 06:22:02

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753727

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.06R

Reviewed by: TSK

Verified by: MMY

Date: 1-14-02

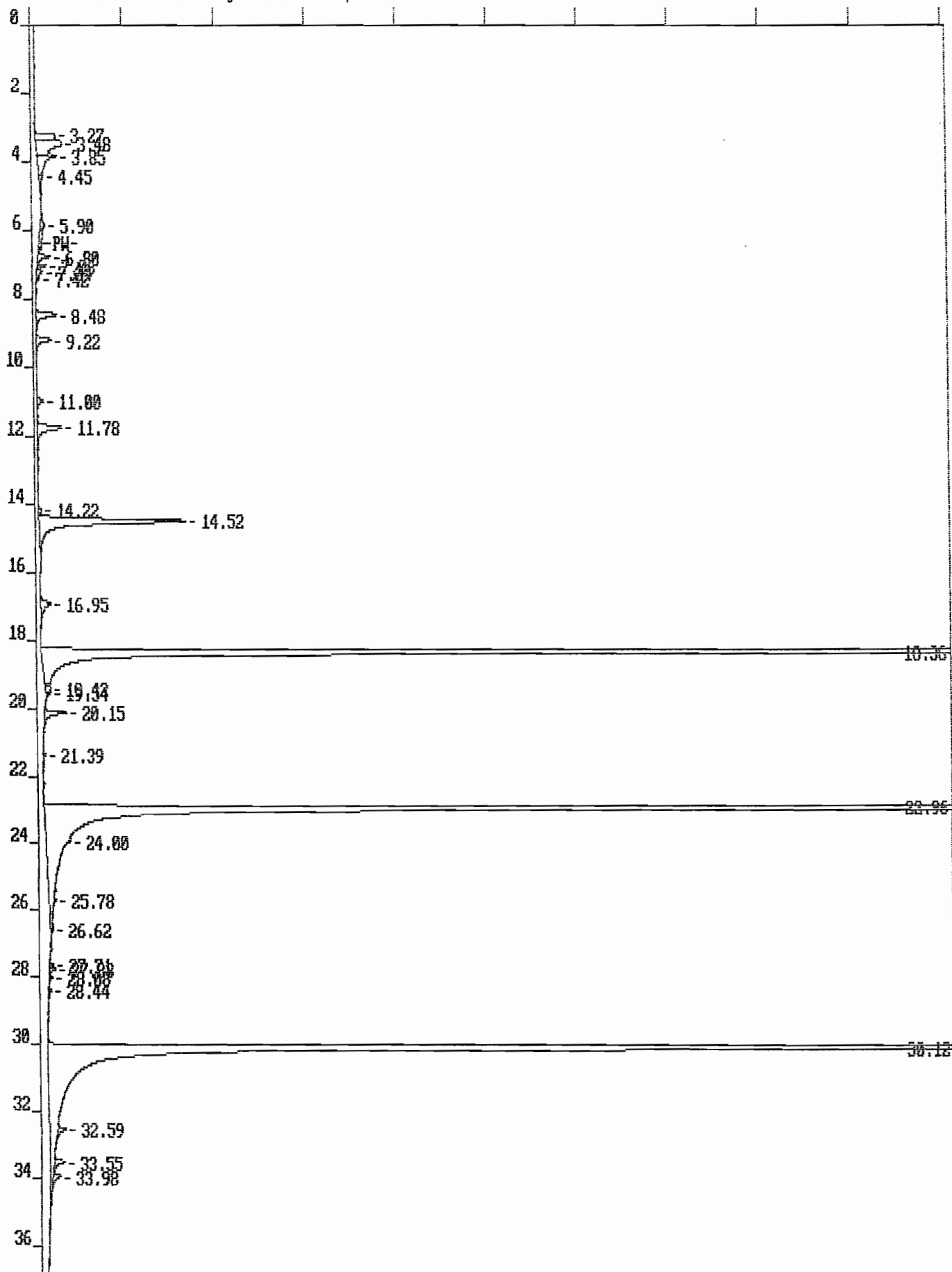
Date: 01/15/02

File=C:\CP\DATA1\18014.21R Date printed=01-14-2002 Time= 18:25:39

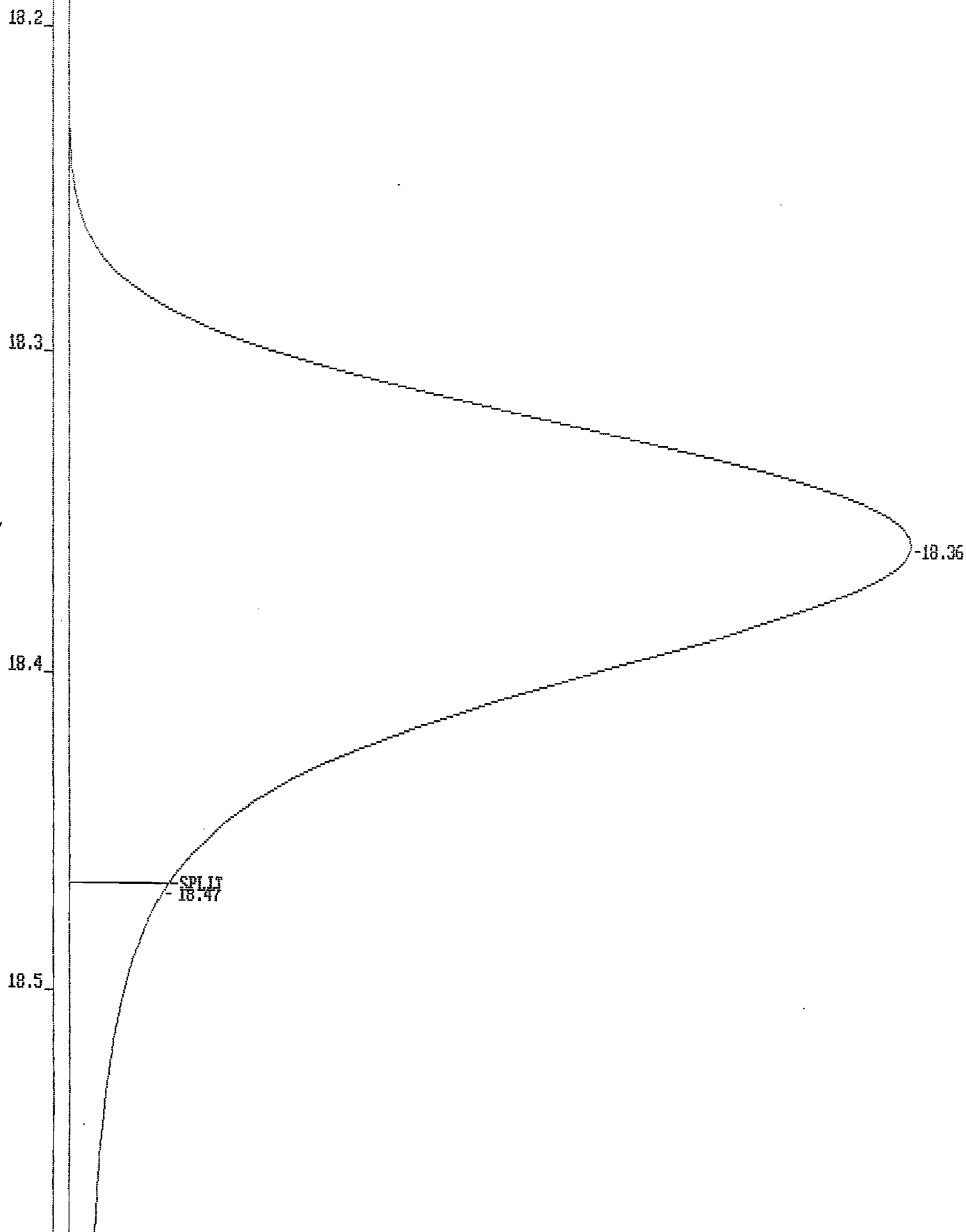
Sample Name=3753728

02014A181127,8404

0.0 to 37.0 min. Low Y=-0.014 High Y=14.986 mv Span=15.0



File=C:\CP\DATA1\18014.21R Date printed=01-14-2002 Time= 19:41:34
Sample Name=3753728 02014A181127,8404
8.187 to 18.58 min. Low Y=-0.428 High Y=28.081 mv Span=28.509



Sample Name: 3753/28

Batch: 02014A18

Date Taken: Jan 14, 2002 18:25:34

Raw File: C:\CP\DATA1\18014.21R

Area File: C:\CP\DATA1\18014.21R

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Reproc. to measure
than value

SKPL088

1-14-02

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.853	3.797	DICHLORODIFLUOROMETH	0.1650	5493 334
3.996	3.996	CHLOROMETHANE	0.0000	0 0
4.446	4.309	VINYL CHLORIDE	0.0206	883 73
4.786	4.786	BROMOMETHANE	0.0000	0 0
4.976	4.976	CHLOROETHANE	0.0000	0 0
5.896	5.831	TRICHLOROFLUOROMETHA	0.0256	2277 65
6.795	6.751	1,1-DICHLOROETHENE	0.0438	1491 203
7.056	7.061	METHYLENE CHLORIDE	0.0170	810 141
7.243	7.244	TRICHLOROTRIFLUOROET	0.0259	787 94
8.478	8.574	TRANS-1,2-DICHLOROET	0.0543	3410 339
9.221	9.222	1,1-DICHLOROETHANE	0.0459	2163 246
11.001	11.009	CIS-1,2-DICHLOROETHE	0.0194	822 98
11.527	11.527	BROMOCHLOROMETHANE	0.0000	0 0
11.779	11.782	CHLOROFORM	0.0656	4332 401
12.030	12.030	2,2-DICHLOROPROPANE	0.0000	0 0
14.216	14.209	1,2-DICHLOROETHANE	0.0110	410 52
14.525	14.528	1,1,1-TRICHLOROETHAN	0.4813	28634 2391
15.290	15.290	1,1-DICHLOROPROPENE	0.0000	0 0
15.813	15.813	CARBON TETRACHLORIDE	0.0000	0 0
18.032	18.032	DIBROMOMETHANE	0.0000	0 0
18.204	18.204	1,2-DICHLOROPROPANE	0.0000	0 0
18.359	18.361	TRICHLOROETHENE	3.2895	156612 26293
18.470	18.468	BROMODICHLOROMETHANE	0.4296	20506 2908
19.856	19.856	2-CHLOROETHYL VINYL	0.0000	0 0
20.147	20.203	CIS-1,3-DICHLOROPROP	0.0512	2759 370
21.160	21.160	TRANS-1,3-DICHLOROPR	0.0000	0 0
21.393	21.388	1,1,2-TRICHLOROETHAN	0.0056	311 47
21.851	21.851	1,3-DICHLOROPROPANE	0.0000	0 0
22.234	22.234	DIBROMOCHLOROMETHANE	0.0000	0 0
22.629	22.629	1,2-DIBROMOETHANE	0.0000	0 0
22.957	22.954	TETRACHLOROETHENE	17.1519	838286 190619
23.904	23.904	1,1,1,2-TETRACHLOROE	0.0000	0 0
24.001	24.002	CHLOROBENZENE	0.0087	214 48
24.682	24.682	BROMOFORM	0.0000	0 0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0 0
25.375	25.375	1,2,3-TRICHLOROPROPA	0.0000	0 0
26.041	26.041	BROMOBENZENE	0.0000	0 0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0 0
26.619	26.609	4-CHLOROTOLUENE	0.0089	216 36
27.713	27.693	1,3-DICHLOROBENZENE	0.0122	334 72
27.826	27.807	1,4-DICHLOROBENZENE	0.0179	747 112
28.440	28.418	1,2-DICHLOROBENZENE	0.0099	479 56
29.302	29.302	1,2-DIBROMO-3-CHLORO	0.0000	0 0
30.117	30.100	SURR-1B4CB-H	27.2002	519339 93234
32.587	32.553	1,2,4-TRICHLOROBENZE	0.0372	1531 150
33.551	33.516	HEXACHLOROBUTADIENE	0.0368	1554 174
33.980	33.940	1,2,3-TRICHLOROBENZE	0.0374	1442 128

TOTAL 1,2-DICHLOROETHENE: 0.0737

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 90.6673%

Chrom Perfect version 6.07

Reported on 01-14-2002at 19:42:42

Sample Name: 3753728

Batch: 02014A18

Date Taken: Jan 14, 2002 18:25:34

Raw File: C:\CP\DATA1\18014.21R

Area File: C:\CP\DATA1\18014.21A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.853	3.797	DICHLORODIFLUOROMETH	0.1650	5493	334
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.446	4.309	VINYL CHLORIDE	0.0206	883	73
4.786	4.786	BROMOMETHANE	0.0000	0	0
4.976	4.976	CHLOROETHANE	0.0000	0	0
5.896	5.831	TRICHLOROFLUOROMETHA	0.0256	2277	65
6.795	6.751	1,1-DICHLOROETHENE	0.0438	1491	203
7.056	7.061	METHYLENE CHLORIDE	0.0170	810	141
7.243	7.244	TRICHLOROTRIFLUOROET	0.0259	787	94
8.478	8.574	TRANS-1,2-DICHLOROET	0.0543	3410	339
9.221	9.222	1,1-DICHLOROETHANE	0.0459	2163	246
11.001	11.009	CIS-1,2-DICHLOROETHE	0.0194	822	98
11.527	11.527	BROMOCHLOROMETHANE	0.0000	0	0
11.779	11.782	CHLOROFORM	0.0656	4332	401
12.030	12.030	2,2-DICHLOROPROPANE	0.0000	0	0
14.216	14.209	1,2-DICHLOROETHANE	0.0110	410	52
14.525	14.528	1,1,1-TRICHLOROETHAN	0.4813	28634	2391
15.290	15.290	1,1-DICHLOROPROPENE	0.0000	0	0
15.813	15.813	CARBON TETRACHLORIDE	0.0000	0	0
18.032	18.032	DIBROMOMETHANE	0.0000	0	0
18.204	18.204	1,2-DICHLOROPROPANE	0.0000	0	0
18.359	18.361	TRICHLOROETHENE	3.2895	177118	26293
18.468	18.468	BROMODICHLOROMETHANE	0.0000	0	0
19.856	19.856	2-CHLOROETHYL VINYL	0.0000	0	0
20.147	20.203	CIS-1,3-DICHLOROPROP	0.0512	2759	370
21.160	21.160	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.393	21.388	1,1,2-TRICHLOROETHAN	0.0056	311	47
21.851	21.851	1,3-DICHLOROPROPANE	0.0000	0	0
22.234	22.234	DIBROMOCHLOROMETHANE	0.0000	0	0
22.629	22.629	1,2-DIBROMOETHANE	0.0000	0	0
22.957	22.954	TETRACHLOROETHENE	17.1519	838286	190619
23.904	23.904	1,1,1,2-TETRACHLOROE	0.0000	0	0
24.001	24.002	CHLOROBENZENE	0.0087	214	48
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.375	25.375	1,2,3-TRICHLOROPROPA	0.0000	0	0
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0	0
26.619	26.609	4-CHLOROTOLUENE	0.0089	216	36
27.713	27.693	1,3-DICHLOROBENZENE	0.0122	334	72
27.826	27.807	1,4-DICHLOROBENZENE	0.0179	747	112
28.440	28.418	1,2-DICHLOROBENZENE	0.0099	479	56
29.302	29.302	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.117	30.100	SURR-1B4CB-H	27.2002	519339	93234
32.587	32.553	1,2,4-TRICHLOROBENZE	0.0372	1531	150
33.551	33.516	HEXACHLOROBUTADIENE	0.0368	1554	174
33.980	33.940	1,2,3-TRICHLOROBENZE	0.0374	1442	128
TOTAL 1,2-DICHLOROETHENE:			0.0737		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 90.6673%

Chrom. Perfect version 6.07

Reported on 01-14-2002 at 18:26:29

Sample name: 3753728

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.21R

Reviewed by: gpluss

Verified by: umm49

UM

Date: 1-14-02

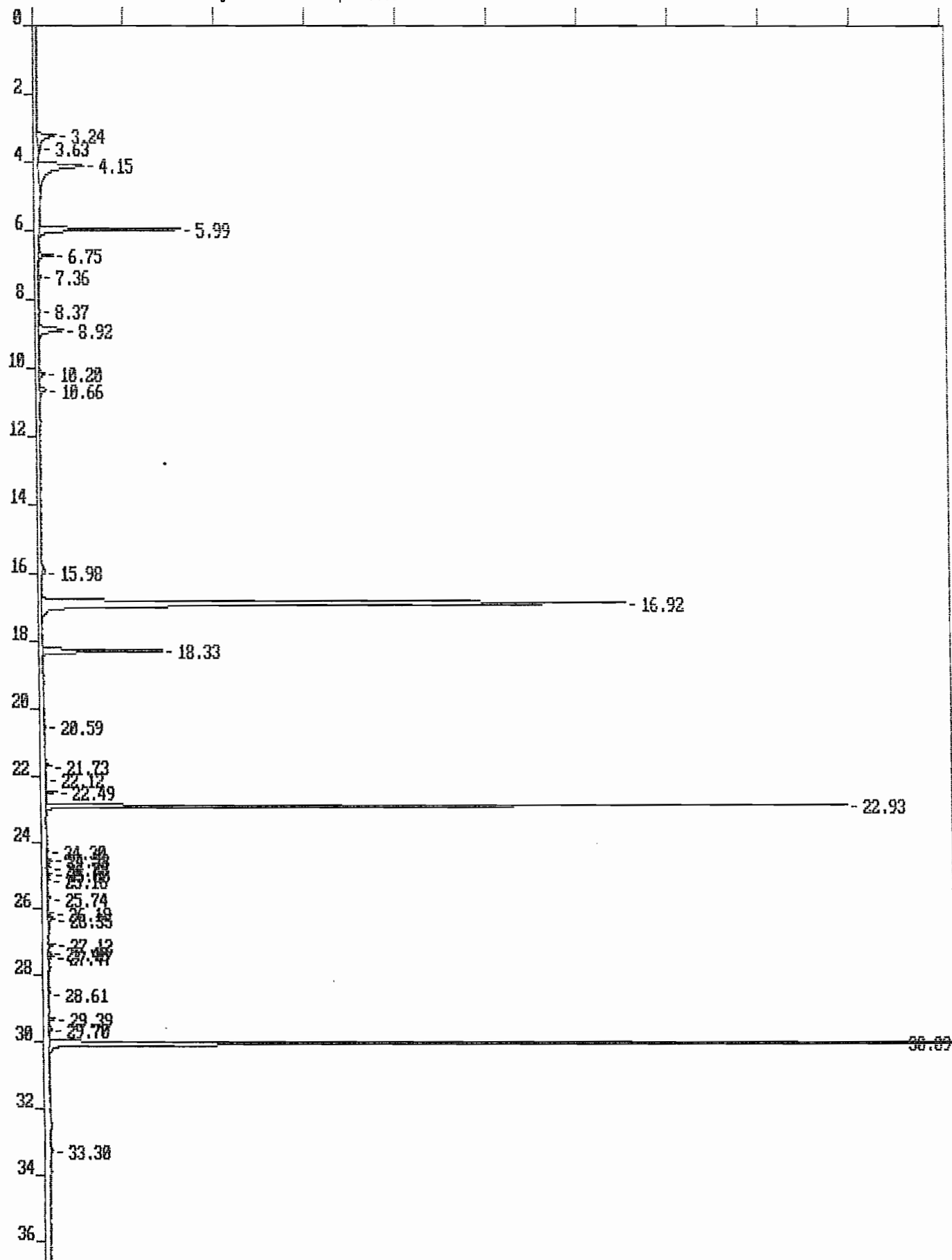
Date: 01/15/02

File=C:\CP\DATA1\180148.21R Date printed=01-14-2002 Time= 18:26:40

Sample Name=3753728

02014A181127,8404

.0 to 37.0 min. Low Y=0.006 High Y=15.006 mv Span=15.0



Sample Name: 3753728

Batch: 02014A18

Date Taken: Jan 14, 2002 18:25:34

Raw File: C:\CP\DATA1\18014B.21R

Area File: C:\CP\DATA1\18014B.21A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0	0
6.749	6.722	1,1-DICHLOROETHENE	0.7381	1552	258
8.374	8.544	TRANS-1,2-DICHLOROET	0.0310	139	25
8.921	8.933	METHYL T-BUTYL ETHER	1.7402	3652	417
10.979	10.979	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.259	15.259	1,1-DICHLOROPROPENE	0.0000	0	0
15.977	15.997	BENZENE	0.0807	485	58
16.922	16.930	ISTD-FBENZENE	1.0000	73461	9647
18.328	18.332	TRICHLOROETHENE	3.4289	10773	1986
19.828	19.828	2-CHLOROETHYL VINYL	0.0000	0	0
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.133	21.133	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.726	21.720	TOLUENE	0.0742	379	108
22.931	22.929	TETRACHLOROETHENE	17.1725	40159	13216
23.979	23.979	CHLOROBENZENE	0.0000	0	0
24.297	24.293	ETHYLBENZENE	0.0227	176	36
24.584	24.585	M,P-XYLENE	0.0509	285	81
24.996	25.050	STYRENE	0.0430	363	87
25.157	25.153	O-XYLENE	0.0328	190	51
25.736	25.696	ISOPROPYLBENZENE	0.0465	261	56
26.178	26.014	BROMOBENZENE	0.0580	346	105
26.353	26.341	N-PROPYLBENZENE	0.0808	417	113
26.464	26.464	2-CHLOROTOLUENE	0.0000	0	0
26.584	26.584	4-CHLOROTOLUENE	0.0000	0	0
26.788	26.788	1,3,5-TRIMETHYLBENZE	0.0000	0	0
27.125	27.211	TERT-BUTYLBENZENE	0.1002	330	104
27.400	27.393	1,2,4-TRIMETHYLBENZE	0.0341	175	50
27.561	27.561	SEC-BUTYLBENZENE	0.0000	0	0
27.667	27.667	1,3-DICHLOROBENZENE	0.0000	0	0
27.782	27.782	1,4-DICHLOROBENZENE	0.0000	0	0
27.868	27.868	P-ISOPROPYLTOLUENE	0.0000	0	0
28.391	28.391	1,2-DICHLOROBENZENE	0.0000	0	0
28.605	28.579	N-BUTYLBENZENE	0.0366	164	36
30.088	30.072	SURR-1B4CB-P	26.8034	120539	32163
32.524	32.524	1,2,4-TRICHLOROBENZE	0.0000	0	0
33.297	33.270	NAPHTHALENE	0.0616	174	34
33.487	33.487	HEXACHLOROBUTADIENE	0.0000	0	0
33.912	33.912	1,2,3-TRICHLOROBENZE	0.0000	0	0

XYLENES (Total): 0.0837

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 89.3448%

Chrom Perfect version 6.07

Reported on 01-14-2002at 18:28:00

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753728

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.21R

Reviewed by: SKP188

Verified by: JMM49

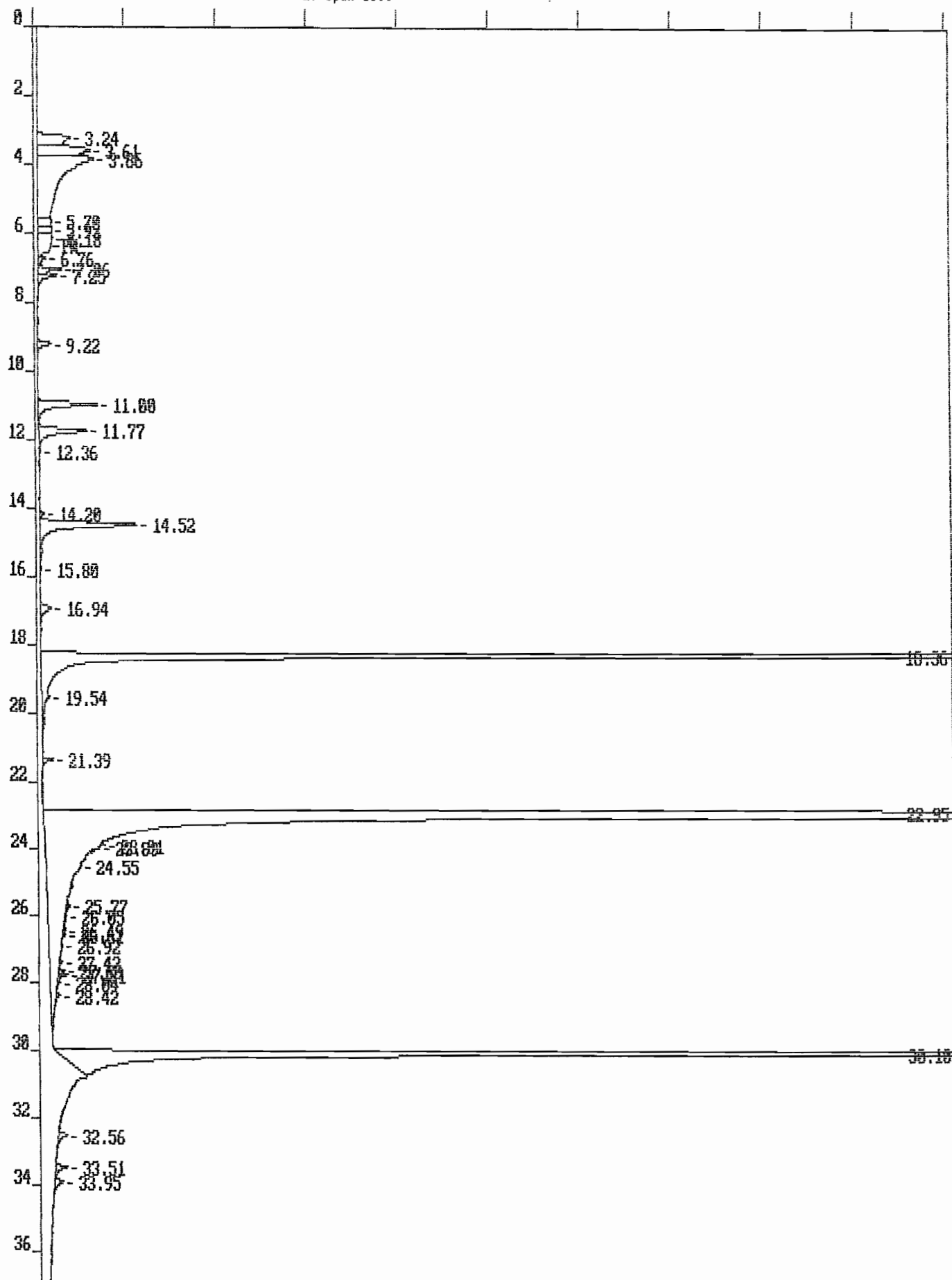
VM

Date: 1-14-02

Date: 01/15/02

File=C:\CP\DATA1\18014.07R Date printed=01-14-2002 Time= 07:06:52

Sample Name=3753729 02014A181127,8404
0.0 to 37.0 min. Low Y=-0.01 High Y=14.99 mv Span=15.0



Sample Name: 3753729

Batch: 02014A18

Date Taken: Jan 14, 2002 07:06:46

Raw File: C:\CP\DATA1\18014.07R

Area File: C:\CP\DATA1\18014.07A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 21):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.863	3.802	DICHLORODIFLUOROMETH	0.4656	45596	942
3.987	3.987	CHLOROMETHANE	0.0000	0	0
4.308	4.308	VINYL CHLORIDE	0.0000	0	0
4.780	4.780	BROMOMETHANE	0.0000	0	0
4.979	4.979	CHLOROETHANE	0.0000	0	0
5.932	5.839	TRICHLOROFLUOROMETHA	0.0931	3133	238
6.759	6.758	1,1-DICHLOROETHENE	0.0283	1365	131
7.064	7.069	METHYLENE CHLORIDE	0.0485	2510	403
7.248	7.249	TRICHLOROTRIFLUOROET	0.0872	3218	317
8.580	8.580	TRANS-1,2-DICHLOROET	0.0000	0	0
9.220	9.229	1,1-DICHLOROETHANE	0.0422	1956	226
11.001	11.015	CIS-1,2-DICHLOROETHE	0.1960	9727	992
11.534	11.534	BROMOCHLOROMETHANE	0.0000	0	0
11.773	11.790	CHLOROFORM	0.1330	8805	813
12.039	12.039	2,2-DICHLOROPROPANE	0.0000	0	0
14.201	14.216	1,2-DICHLOROETHANE	0.0154	597	73
14.521	14.534	1,1,1-TRICHLOROETHAN	0.3220	19064	1600
15.296	15.296	1,1-DICHLOROPROPENE	0.0000	0	0
15.803	15.818	CARBON TETRACHLORIDE	0.0030	288	18
18.035	18.035	DIBROMOMETHANE	0.0000	0	0
18.208	18.208	1,2-DICHLOROPROPANE	0.0000	0	0
18.356	18.364	TRICHLOROETHENE	2.9861	165898	23869
18.471	18.471	BROMODICHLOROMETHANE	0.0000	0	0
19.858	19.858	2-CHLOROETHYL VINYL	0.0000	0	0
20.205	20.205	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.161	21.161	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.393	21.390	1,1,2-TRICHLOROETHAN	0.0223	1136	187
21.853	21.853	1,3-DICHLOROPROPANE	0.0000	0	0
22.236	22.236	DIBROMOCHLOROMETHANE	0.0000	0	0
22.630	22.630	1,2-DIBROMOETHANE	0.0000	0	0
22.952	22.956	TETRACHLOROETHENE	73.6650	3587477	818683
23.912	23.906	1,1,1,2-TETRACHLOROE	0.0094	397	110
23.994	24.004	CHLOROBENZENE	0.0137	284	75
24.553	24.684	BROMOFORM	0.0124	428	46
25.174	25.174	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.378	25.378	1,2,3-TRICHLOROPROPA	0.0000	0	0
26.052	26.044	BROMOBENZENE	0.0128	358	36
26.490	26.495	2-CHLOROTOLUENE	0.0118	257	47
26.612	26.613	4-CHLOROTOLUENE	0.0145	381	59
27.695	27.699	1,3-DICHLOROBENZENE	0.0167	437	98
27.811	27.814	1,4-DICHLOROBENZENE	0.0255	1037	159
28.422	28.425	1,2-DICHLOROBENZENE	0.0121	425	69
29.310	29.310	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.097	30.110	SURR-1B4CB-H	27.7091	475776	94979
32.556	32.567	1,2,4-TRICHLOROBENZE	0.0388	1392	156
33.515	33.531	HEXACHLOROBTADIENE	0.0406	1725	193
33.946	33.955	1,2,3-TRICHLOROBENZE	0.0402	1614	137

TOTAL 1,2-DICHLOROETHENE: 0.1960

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 92.3636%

Chrom Perfect version 6.07

Reported on 01-14-2002at 07:07:41

Sample name: 3753729

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.07R

Reviewed by: MM/2014

Verified by: MM/15

Date: 1/14/02

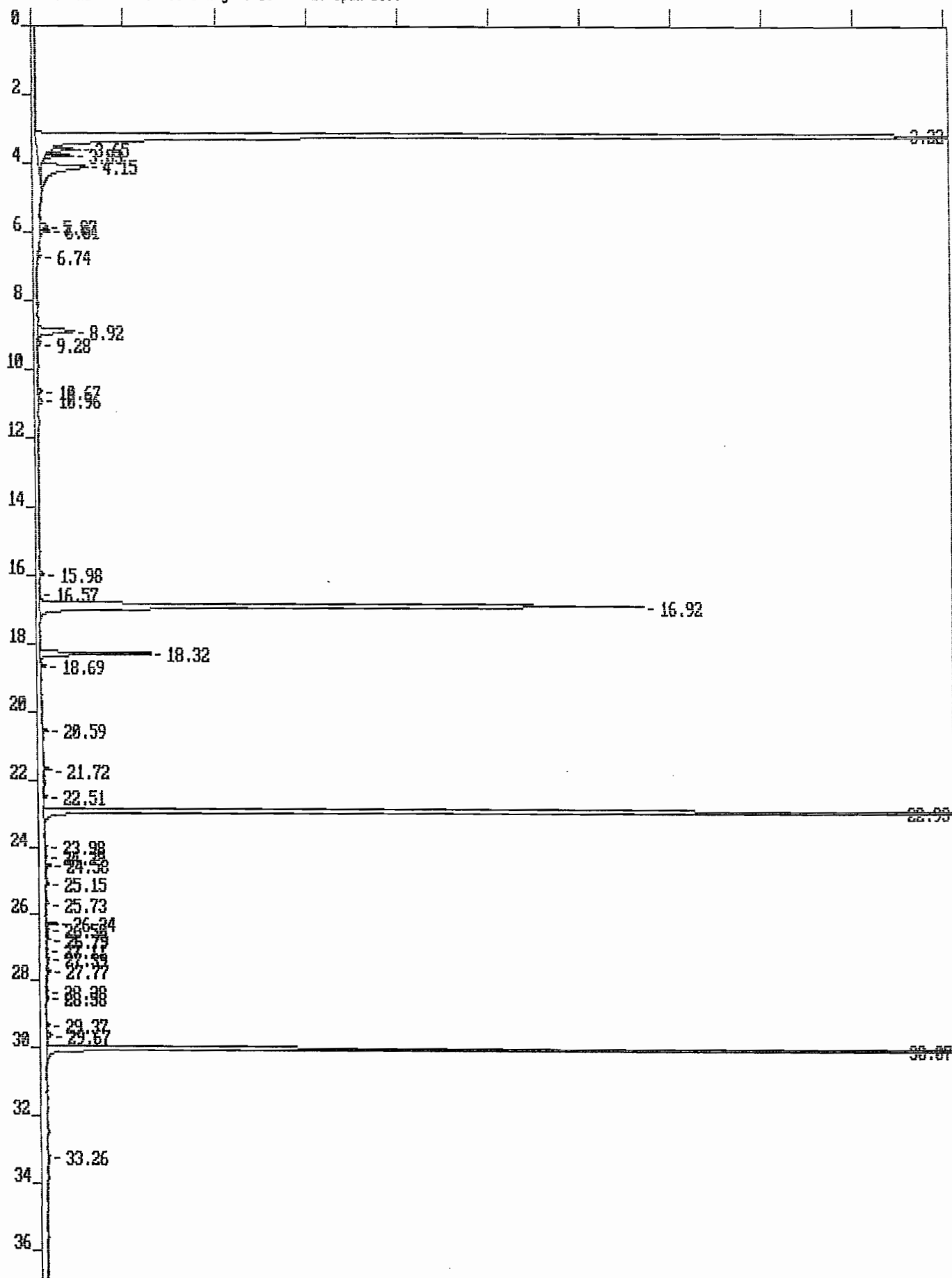
Date: 01/15/02

File=C:\CP\DATA1\180148.07R Date printed=01-14-2002 Time= 07:07:53

Sample Name=3753729

02014A181127,8404

0.0 to 37.0 min. Low Y=0.008 High Y=15.008 mv Span=15.0



Sample Name: 3753729

Batch: 02014A18

Date Taken: Jan 14, 2002 07:06:46

Raw File: C:\CP\DATA1\18014B.07R

Area File: C:\CP\DATA1\18014B.07A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.279	4.279	VINYL CHLORIDE	0.0000	0	0
6.737	6.729	1,1-DICHLOROETHENE	0.1906	432	69
8.551	8.551	TRANS-1,2-DICHLOROET	0.0000	0	0
8.920	8.939	METHYL T-BUTYL ETHER	2.4622	5357	607
10.956	10.985	CIS-1,2-DICHLOROETHE	0.2356	549	80
15.266	15.266	1,1-DICHLOROPROPENE	0.0000	0	0
15.977	16.002	BENZENE	0.1000	476	74
16.915	16.934	ISTD-FBENZENE	1.0000	74583	9917
18.324	18.335	TRICHLOROETHENE	3.0380	9530	1809
19.830	19.830	2-CHLOROETHYL VINYL	0.0000	0	0
20.177	20.177	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.135	21.135	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.720	21.721	TOLUENE	0.0852	467	127
22.927	22.930	TETRACHLOROETHENE	85.9466	207594	67994
23.979	23.981	CHLOROBENZENE	0.0190	104	38
24.293	24.295	ETHYLBENZENE	0.0231	122	38
24.582	24.587	M,P-XYLENE	0.0608	484	99
25.053	25.053	STYRENE	0.0000	0	0
25.147	25.155	O-XYLENE	0.0303	138	49
25.732	25.699	ISOPROPYLBENZENE	0.0429	301	53
26.017	26.017	BROMOBENZENE	0.0000	0	0
26.341	26.346	N-PROPYLBENZENE	0.1307	734	188
26.500	26.469	2-CHLOROTOLUENE	0.0259	162	41
26.589	26.589	4-CHLOROTOLUENE	0.0000	0	0
26.790	26.793	1,3,5-TRIMETHYLBENZE	0.0301	191	61
27.217	27.217	TERT-BUTYLBENZENE	0.0000	0	0
27.392	27.399	1,2,4-TRIMETHYLBENZE	0.0280	102	42
27.567	27.567	SEC-BUTYLBENZENE	0.0000	0	0
27.670	27.670	1,3-DICHLOROBENZENE	0.0000	0	0
27.774	27.790	1,4-DICHLOROBENZENE	0.0425	218	64
27.870	27.870	P-ISOPROPYLTOLUENE	0.0000	0	0
28.384	28.399	1,2-DICHLOROBENZENE	0.0285	106	32
28.579	28.587	N-BUTYLBENZENE	0.0434	144	44
30.068	30.082	SURR-1B4CB-P	26.6715	123681	32900
32.539	32.539	1,2,4-TRICHLOROBENZE	0.0000	0	0
33.264	33.280	NAPHTHALENE	0.0648	186	37
33.500	33.500	HEXACHLOROBUTADIENE	0.0000	0	0
33.926	33.926	1,2,3-TRICHLOROBENZE	0.0000	0	0

XYLENES (Total): 0.0910

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 88.9050%

Chrom Perfect version 6.07

Reported on 01-14-2002at 07:09:12

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753729

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.07R

Reviewed by: MM884

Verified by: MM48

Date: 1/14/02

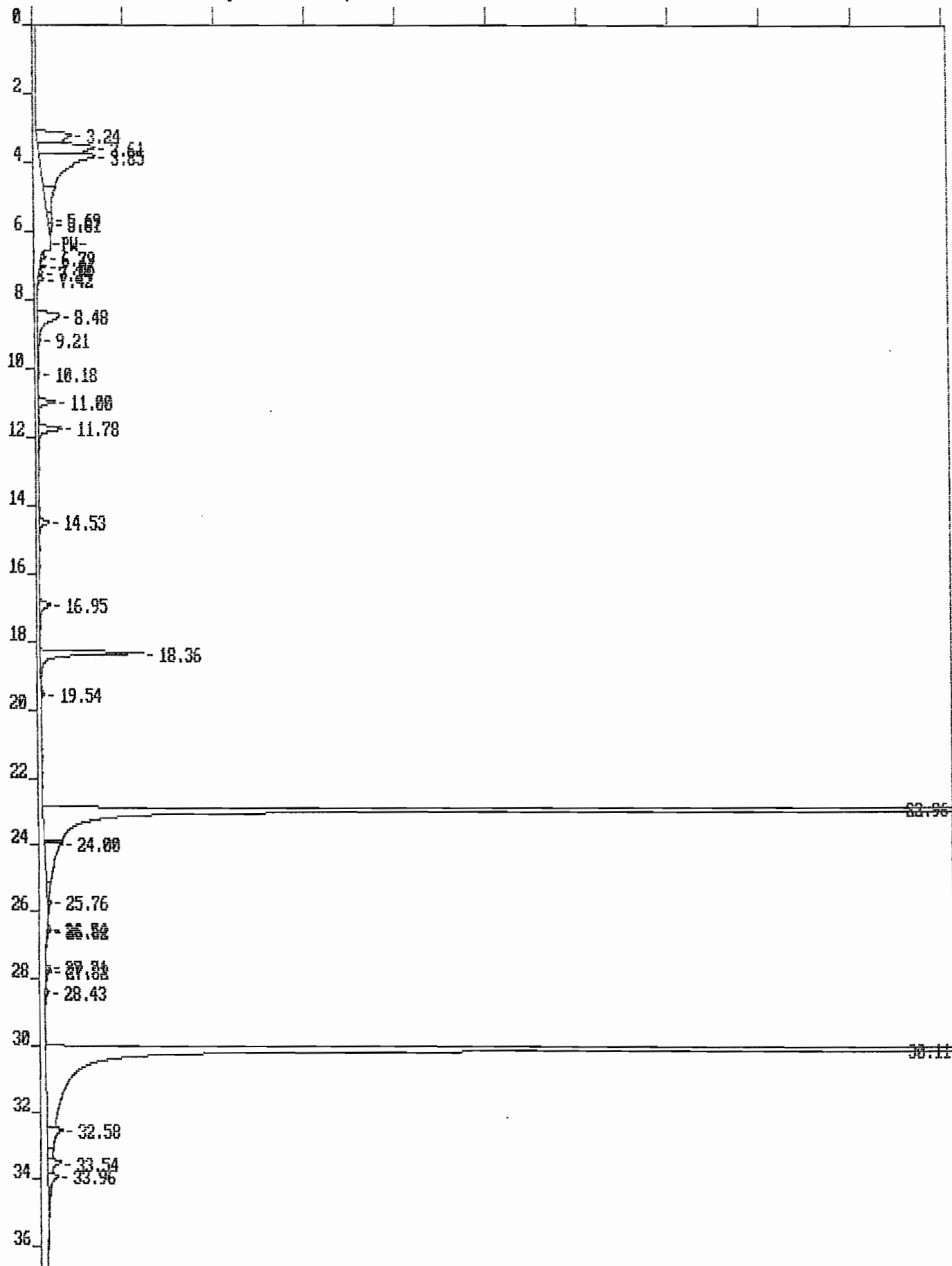
Date: 1/15/02

File=C:\CP\DATA1\18014.22R Date printed=01-14-2002 Time= 19:10:57

Sample Name=3753730

02014A181127,8404

0.0 to 37.0 min. Low Y=-0.014 High Y=14.986 mv Span=15.0



Sample Name: 3753730

Batch: 02014A18

Date Taken: Jan 14, 2002 19:10:52

Raw File: C:\CP\DATA1\18014.22R

Area File: C:\CP\DATA1\18014.22A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.847	3.797	DICHLORODIFLUOROMETH	0.4614	26554	934
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.309	4.309	VINYL CHLORIDE	0.0000	0	0
4.786	4.786	BROMOMETHANE	0.0000	0	0
4.976	4.976	CHLOROETHANE	0.0000	0	0
5.813	5.831	TRICHLOROFLUOROMETHA	0.0221	795	56
6.787	6.751	1,1-DICHLOROETHENE	0.0196	628	91
7.057	7.061	METHYLENE CHLORIDE	0.0134	538	111
7.242	7.244	TRICHLOROTRIFLUOROET	0.0183	476	66
8.479	8.574	TRANS-1,2-DICHLOROET	0.0582	7690	364
9.207	9.222	1,1-DICHLOROETHANE	0.0089	880	48
11.003	11.009	CIS-1,2-DICHLOROETHE	0.0545	2468	276
11.527	11.527	BROMOCHLOROMETHANE	0.0000	0	0
11.777	11.782	CHLOROFORM	0.0644	4383	394
12.030	12.030	2,2-DICHLOROPROPANE	0.0000	0	0
14.209	14.209	1,2-DICHLOROETHANE	0.0000	0	0
14.525	14.528	1,1,1-TRICHLOROETHAN	0.0331	1856	164
15.290	15.290	1,1-DICHLOROPROPENE	0.0000	0	0
15.813	15.813	CARBON TETRACHLORIDE	0.0000	0	0
18.032	18.032	DIBROMOMETHANE	0.0000	0	0
18.204	18.204	1,2-DICHLOROPROPANE	0.0000	0	0
18.360	18.361	TRICHLOROETHENE	0.2124	14063	1698
18.468	18.468	BROMODICHLOROMETHANE	0.0000	0	0
19.856	19.856	2-CHLOROETHYL VINYL	0.0000	0	0
20.203	20.203	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.160	21.160	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.388	21.388	1,1,2-TRICHLOROETHAN	0.0000	0	0
21.851	21.851	1,3-DICHLOROPROPANE	0.0000	0	0
22.234	22.234	DIBROMOCHLOROMETHANE	0.0000	0	0
22.629	22.629	1,2-DIBROMOETHANE	0.0000	0	0
22.955	22.954	TETRACHLOROETHENE	10.9435	532279	121622
23.904	23.904	1,1,1,2-TETRACHLOROE	0.0000	0	0
24.003	24.002	CHLOROBENZENE	0.0526	10324	290
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.375	25.375	1,2,3-TRICHLOROPROPA	0.0000	0	0
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.542	26.491	2-CHLOROTOLUENE	0.0124	262	49
26.616	26.609	4-CHLOROTOLUENE	0.0143	497	58
27.707	27.693	1,3-DICHLOROBENZENE	0.0125	331	73
27.815	27.807	1,4-DICHLOROBENZENE	0.0159	913	99
28.427	28.418	1,2-DICHLOROBENZENE	0.0108	658	61
29.302	29.302	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.106	30.100	SURR-1B4CB-H	26.2226	492074	89883
32.575	32.553	1,2,4-TRICHLOROBENZE	0.0664	5613	267
33.536	33.516	HEXACHLOROBTADIENE	0.0489	3346	232
33.962	33.940	1,2,3-TRICHLOROBENZE	0.0519	4026	177

TOTAL 1,2-DICHLOROETHENE: 0.1127

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 87.4088%

Chrom Perfect version 6.07

Reported on 01-14-2002at 19:11:47

Sample name: 3753730

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.22R

Reviewed by: SKP 6/8

Verified by: vmmlg

Date: 1-14-02

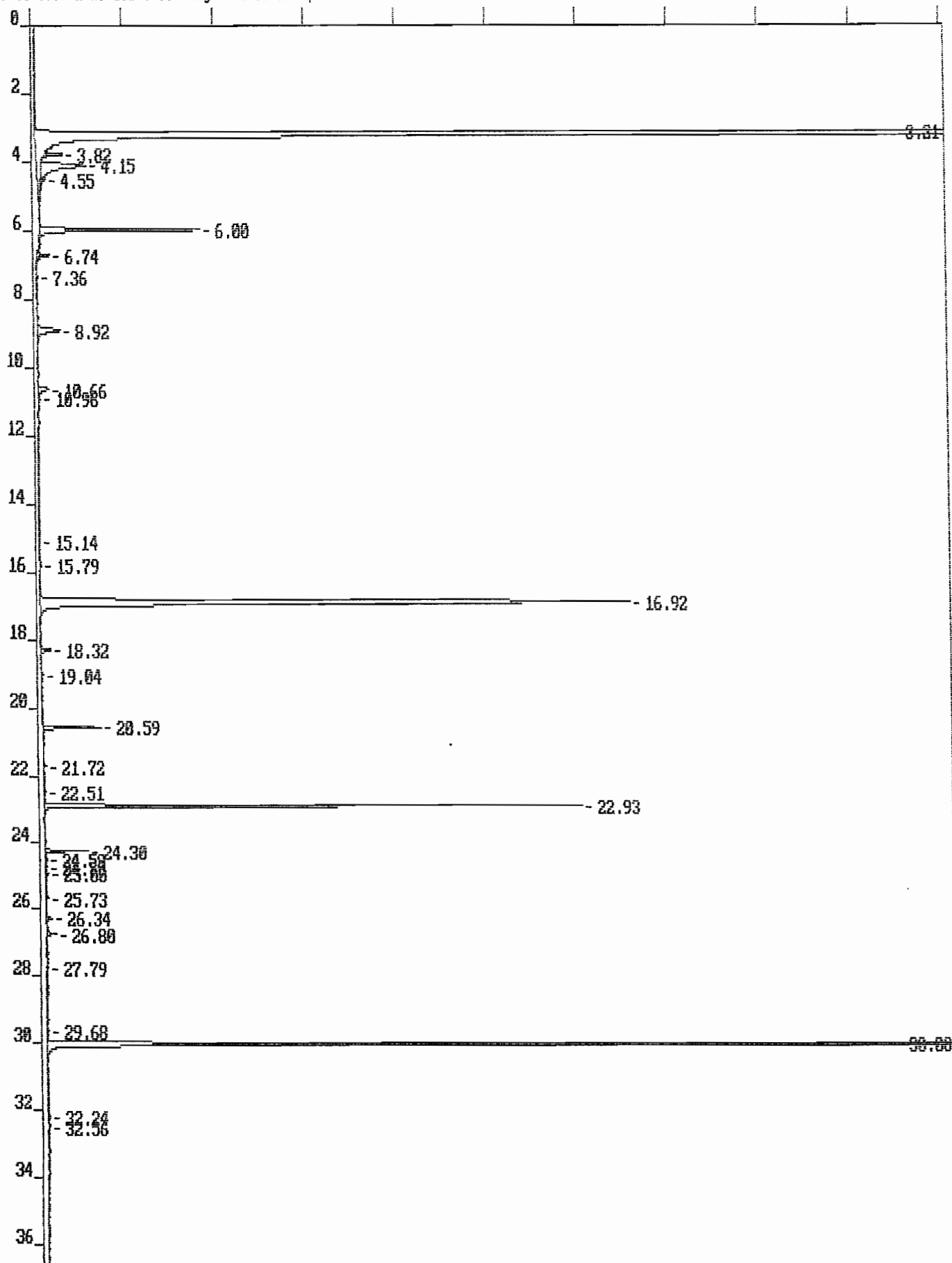
Date: 01/15/02

File=C:\CP\DATA1\18014B.22R Date printed=01-14-2002 Time= 19:11:58

Sample Name=3753730

02014A181127,8404

0.0 to 37.0 min. Low Y=0.0 High Y=15.0 mv Span=15.0



Sample Name: 3753730

Batch: 02014A18

Date Taken: Jan 14, 2002 19:10:52

Raw File: C:\CP\DATA1\18014B.22R

Area File: C:\CP\DATA1\18014B.22A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0	0
6.745	6.722	1,1-DICHLOROETHENE	0.6350	1325	224
8.544	8.544	TRANS-1,2-DICHLOROET	0.0000	0	0
8.922	8.933	METHYL T-BUTYL ETHER	1.5361	3147	370
10.960	10.979	CIS-1,2-DICHLOROETHE	0.0979	198	33
15.143	15.259	1,1-DICHLOROPROPENE	0.0546	101	16
15.997	15.997	BENZENE	0.0000	0	0
16.918	16.930	ISTD-FBENZENE	1.0000	72815	9698
18.321	18.332	TRICHLOROETHENE	0.2783	952	162
19.828	19.828	2-CHLOROETHYL VINYL	0.0000	0	0
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.133	21.133	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.723	21.720	TOLUENE	0.0354	201	52
22.929	22.929	TETRACHLOROETHENE	11.4250	26914	8839
23.979	23.979	CHLOROBENZENE	0.0000	0	0
24.303	24.293	ETHYLBENZENE	0.4393	2049	706
24.587	24.585	M,P-XYLENE	0.0249	134	40
24.996	25.050	STYRENE	0.0214	290	43
25.153	25.153	O-XYLENE	0.0000	0	0
25.730	25.696	ISOPROPYLBENZENE	0.0359	152	43
26.014	26.014	BROMOBENZENE	0.0000	0	0
26.340	26.341	N-PROPYLBENZENE	0.0672	351	94
26.464	26.464	2-CHLOROTOLUENE	0.0000	0	0
26.584	26.584	4-CHLOROTOLUENE	0.0000	0	0
26.798	26.788	1,3,5-TRIMETHYLBENZE	0.0809	498	161
27.211	27.211	TERT-BUTYLBENZENE	0.0000	0	0
27.393	27.393	1,2,4-TRIMETHYLBENZE	0.0000	0	0
27.561	27.561	SEC-BUTYLBENZENE	0.0000	0	0
27.667	27.667	1,3-DICHLOROBENZENE	0.0000	0	0
27.793	27.782	1,4-DICHLOROBENZENE	0.0196	202	29
27.868	27.868	P-ISOPROPYLTOLUENE	0.0000	0	0
28.391	28.391	1,2-DICHLOROBENZENE	0.0000	0	0
28.579	28.579	N-BUTYLBENZENE	0.0000	0	0
30.078	30.072	SURR-1B4CB-P	26.2625	119470	31680
32.557	32.524	1,2,4-TRICHLOROBENZE	0.0446	103	21
33.270	33.270	NAPHTHALENE	0.0000	0	0
33.487	33.487	HEXACHLOROBUTADIENE	0.0000	0	0
33.912	33.912	1,2,3-TRICHLOROBENZE	0.0000	0	0

XYLENES (Total): 0.0249

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 87.5417%

Chrom Perfect version 6.07

Reported on 01-14-2002at 19:13:17

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753730

Batch: 02014A181127.840

Raw file: C:\CP\DATA1\18014B.22R

Reviewed by: SLP088

Verified by: WMM46

Date: 1-14-02

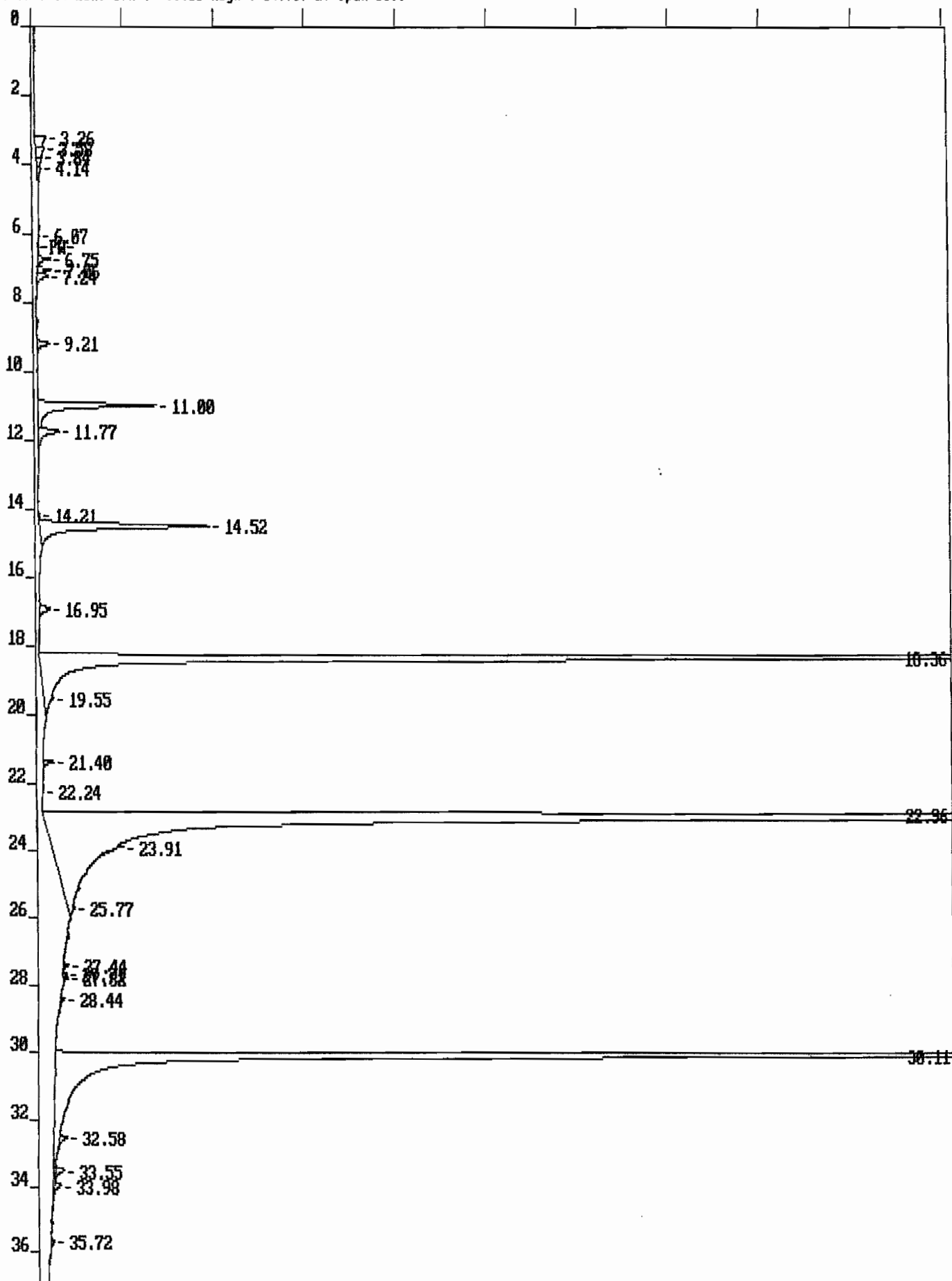
Date: 01/15/02

File=C:\CP\DATA1\18014.29R Date printed=01-15-2002 Time= 00:52:06

Sample Name=3753731

02014A181127,8404

0.0 to 37.0 min. Low Y=-0.011 High Y=14.989 mv Span=15.0

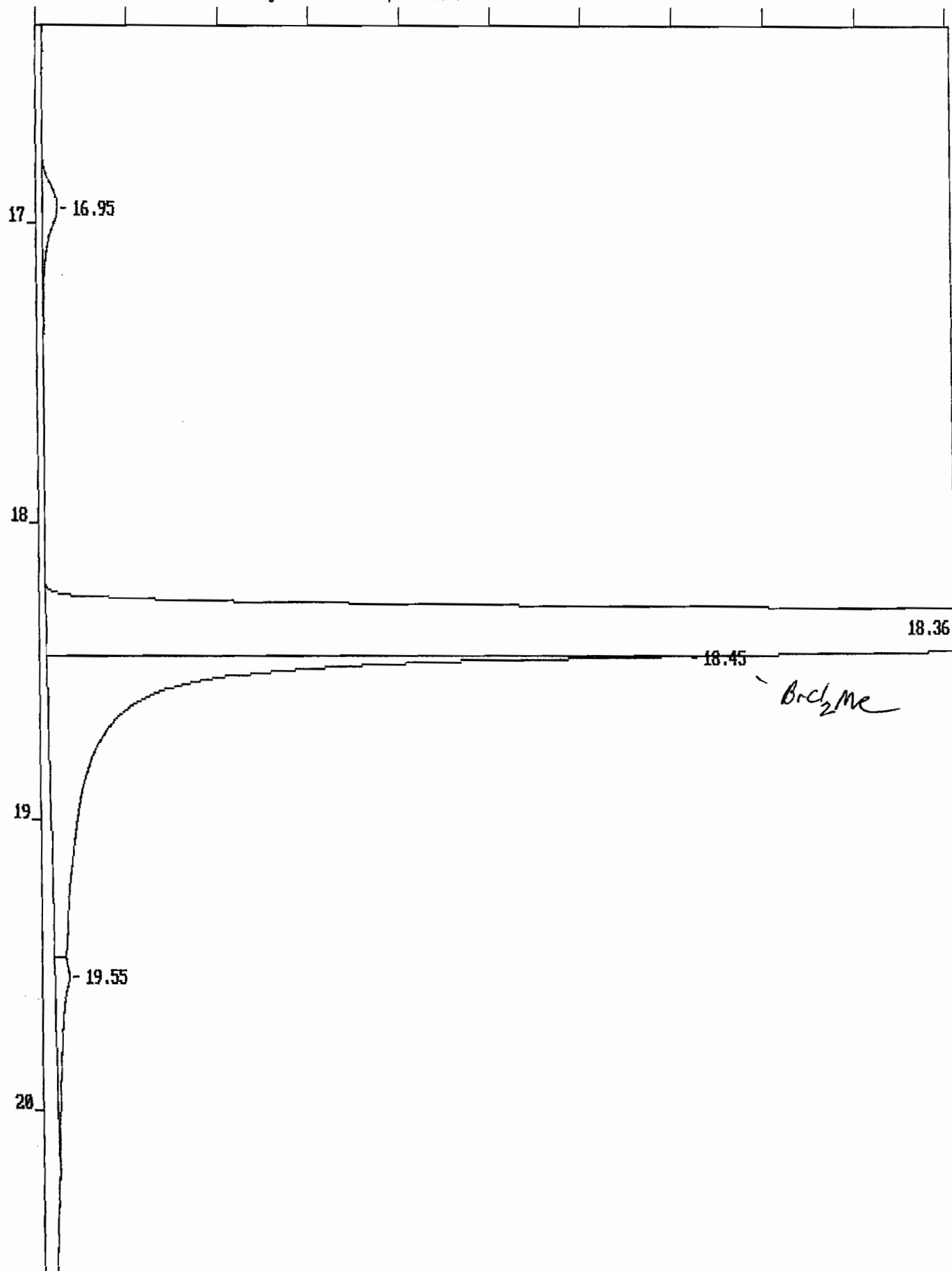


File-C:\CP\DATA1\18014.29R Date printed=01-15-2002 Time= 00:58:30

Sample Name=3753731

02014A181127,8404

6.337 to 20.603 min. Low Y=-0.024 High Y=10.743 mv Span=10.767



Sample Name: 3753731

Batch: 02014A18

Date Taken: Jan 15, 2002 00:52:00

Raw File: C:\CP\DATA1\18014.29R

Area File: C:\CP\DATA1\18014.29R

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 23):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.838	3.786	DICHLORODIFLUOROMETH	0.0483	1145 98
3.997	3.997	CHLOROMETHANE	0.0000	0 0
4.143	4.302	VINYL CHLORIDE	0.0176	1142 63
4.779	4.779	BROMOMETHANE	0.0000	0 0
4.964	4.964	CHLOROETHANE	0.0000	0 0
5.814	5.814	TRICHLOROFLUOROMETHA	0.0000	0 0
6.747	6.735	1,1-DICHLOROETHENE	0.0479	1688 222
7.055	7.042	METHYLENE CHLORIDE	0.0286	1480 237
7.239	7.223	TRICHLOROTRIFLUOROET	0.0552	2141 200
8.549	8.549	TRANS-1,2-DICHLOROET	0.0000	0 0
9.214	9.197	1,1-DICHLOROETHANE	0.0395	1959 211
10.996	10.981	CIS-1,2-DICHLOROETHE	0.3859	20025 1953
11.500	11.500	BROMOCHLOROMETHANE	0.0000	0 0
11.771	11.756	CHLOROFORM	0.0554	4257 339
12.001	12.001	2,2-DICHLOROPROPANE	0.0000	0 0
14.210	14.187	1,2-DICHLOROETHANE	0.0062	206 30
14.520	14.505	1,1,1-TRICHLOROETHAN	0.5601	31938 2783
15.270	15.270	1,1-DICHLOROPROPENE	0.0000	0 0
15.793	15.793	CARBON TETRACHLORIDE	0.0000	0 0
18.018	18.018	DIBROMOMETHANE	0.0000	0 0
18.192	18.192	1,2-DICHLOROPROPANE	0.0000	0 0
18.357	18.349	TRICHLOROETHENE	6.8462	319422 54724
18.453	18.457	BROMODICHLOROMETHANE	~~1.1168~~	43178 7559
19.848	19.848	2-CHLOROETHYL VINYL	0.0000	0 0
20.196	20.196	CIS-1,3-DICHLOROPROP	0.0000	0 0
21.154	21.154	TRANS-1,3-DICHLOROPR	0.0000	0 0
21.399	21.383	1,1,2-TRICHLOROETHAN	0.0220	1239 184
21.847	21.847	1,3-DICHLOROPROPANE	0.0000	0 0
22.242	22.230	DIBROMOCHLOROMETHANE	0.0041	210 24
22.626	22.626	1,2-DIBROMOETHANE	0.0000	0 0
22.964	22.952	TETRACHLOROETHENE	80.9239	4233294 899354
23.909	23.904	1,1,1,2-TETRACHLOROE	0.1004	45391 1175
24.001	24.001	CHLOROBENZENE	0.0000	0 0
24.682	24.682	BROMOFORM	0.0000	0 0
25.177	25.172	1,1,2,2-TETRACHLOROE	0.0427	5849 277
25.376	25.376	1,2,3-TRICHLOROPROPA	0.0000	0 0
26.041	26.041	BROMOBENZENE	0.0000	0 0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0 0
26.610	26.610	4-CHLOROTOLUENE	0.0000	0 0
27.710	27.694	1,3-DICHLOROBENZENE	0.0117	290 69
27.823	27.808	1,4-DICHLOROBENZENE	0.0142	481 89
28.436	28.419	1,2-DICHLOROBENZENE	0.0116	600 65
29.304	29.304	1,2-DIBROMO-3-CHLORO	0.0000	0 0
30.114	30.103	SURR-1B4CB-H	27.4767	508422 94182
32.581	32.558	1,2,4-TRICHLOROBENZE	0.0557	4487 224
33.545	33.521	HEXACHLOROBUTADIENE	0.0409	2364 194
33.976	33.945	1,2,3-TRICHLOROBENZE	0.0393	1884 134

TOTAL 1,2-DICHLOROETHENE: 0.3859

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 91.5889%

Chrom Perfect version 6.07

Reported on 01-15-2002 at 00:59:44

Less-than value.

Tus

1.15-02

Sample Name: 3753731

Batch: 02014A18

Date Taken: Jan 15, 2002 00:52:00

Raw File: C:\CP\DATA1\18014.29R

* PCE amount taken from

Area File: C:\CP\DATA1\18014.29A

Method File: C:\CP\DATA1\18365.MET(version 2) DF5 data (#32).

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.838	3.786	DICHLORODIFLUOROMETH	0.0483	1145	98
3.997	3.997	CHLOROMETHANE	0.0000	0	0
4.143	4.302	VINYL CHLORIDE	0.0176	1142	63
4.779	4.779	BROMOMETHANE	0.0000	0	0
4.964	4.964	CHLOROETHANE	0.0000	0	0
5.814	5.814	TRICHLOROFLUOROMETHA	0.0000	0	0
6.747	6.735	1,1-DICHLOROETHENE	0.0479	1688	222
7.055	7.042	METHYLENE CHLORIDE	0.0286	1480	237
7.239	7.223	TRICHLOROTRIFLUOROET	0.0552	2141	200
8.549	8.549	TRANS-1,2-DICHLOROET	0.0000	0	0
9.214	9.197	1,1-DICHLOROETHANE	0.0395	1959	211
10.996	10.981	CIS-1,2-DICHLOROETHE	0.3859	20025	1953
11.500	11.500	BROMOCHLOROMETHANE	0.0000	0	0
11.771	11.756	CHLOROFORM	0.0554	4257	339
12.001	12.001	2,2-DICHLOROPROPANE	0.0000	0	0
14.210	14.187	1,2-DICHLOROETHANE	0.0062	206	30
14.520	14.505	1,1,1-TRICHLOROETHAN	0.5601	31938	2783
15.270	15.270	1,1-DICHLOROPROPENE	0.0000	0	0
15.793	15.793	CARBON TETRACHLORIDE	0.0000	0	0
18.018	18.018	DIBROMOMETHANE	0.0000	0	0
18.192	18.192	1,2-DICHLOROPROPANE	0.0000	0	0
18.357	18.349	TRICHLOROETHENE	6.8462	365054	54724
18.457	18.457	BROMODICHLOROMETHANE <2.0	~~0.0000~~	0	0
19.848	19.848	2-CHLOROETHYL VINYL	0.0000	0	0
20.196	20.196	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.154	21.154	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.399	21.383	1,1,2-TRICHLOROETHAN	0.0220	1239	184
21.847	21.847	1,3-DICHLOROPROPANE	0.0000	0	0
22.242	22.230	DIBROMOCHLOROMETHANE	0.0041	210	24
22.626	22.626	1,2-DIBROMOETHANE	0.0000	0	0
22.964	22.952	TETRACHLOROETHENE	~~80.9239~~ *	4284222	899354
23.909	23.904	1,1,1,2-TETRACHLOROE	0.0113	785	133
24.001	24.001	CHLOROBENZENE	0.0000	0	0
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.376	25.376	1,2,3-TRICHLOROPROPA	0.0000	0	0
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0	0
26.610	26.610	4-CHLOROTOLUENE	0.0000	0	0
27.710	27.694	1,3-DICHLOROBENZENE	0.0117	290	69
27.823	27.808	1,4-DICHLOROBENZENE	0.0142	481	89
28.436	28.419	1,2-DICHLOROBENZENE	0.0116	600	65
29.304	29.304	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.114	30.103	SURR-1B4CB-H	27.4767	512867	94182
32.581	32.558	1,2,4-TRICHLOROBENZE	0.0326	1327	131
33.545	33.521	HEXACHLOROBUTADIENE	0.0340	1555	161
33.976	33.945	1,2,3-TRICHLOROBENZE	0.0338	1398	115
		TOTAL 1,2-DICHLOROETHENE:	0.3859		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 91.5889%

Chrom Perfect version 6.07

Reported on 01-15-2002at 00:52:55

Sample name: 3753731

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.29R

Reviewed by: JBK

Verified by: JMM49

Date: 1-15-02

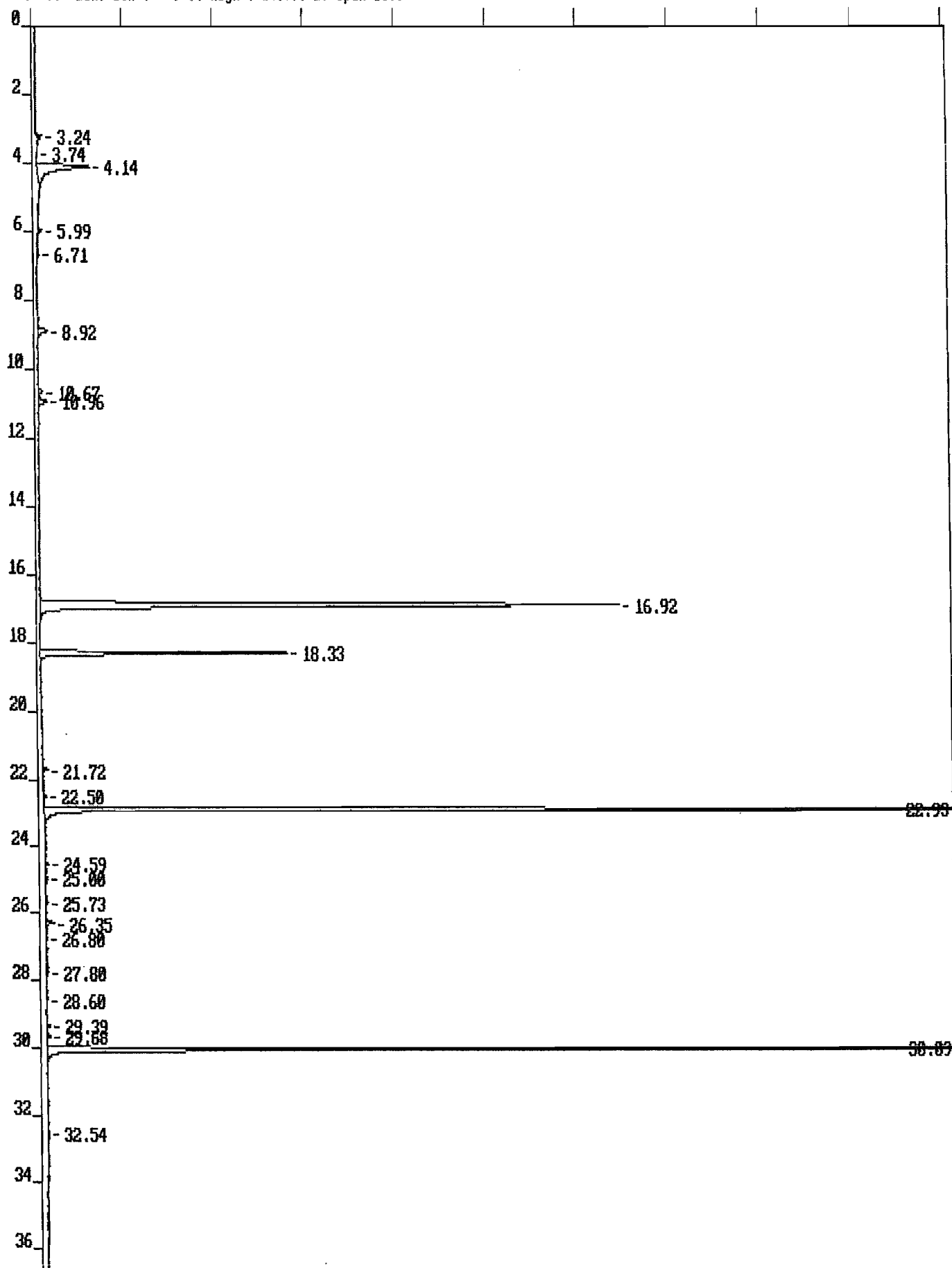
Date: 01/15/02

File:C:\CP\DATA1\180148.29R Date printed=01-15-2002 Time= 00:53:06

Sample Name=3753731

02014A181127,8404

0.0 to 37.0 min. Low Y=-0.004 High Y=14.996 mv Span=15.0



Sample Name: 3753731

Batch: 02014A18

Date Taken: Jan 15, 2002 00:52:00

Raw File: C:\CP\DATA1\18014B.29R

Area File: C:\CP\DATA1\18014B.29A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 25):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.274	4.274	VINYL CHLORIDE	0.0000	0
6.714	6.706	1,1-DICHLOROETHENE	0.0941	196
8.520	8.520	TRANS-1,2-DICHLOROET	0.0000	0
8.920	8.904	METHYL T-BUTYL ETHER	0.6569	1370
10.956	10.950	CIS-1,2-DICHLOROETHE	0.4331	1134
15.239	15.239	1,1-DICHLOROPROPENE	0.0000	0
15.978	15.978	BENZENE	0.0000	0
16.917	16.912	ISTD-FBENZENE	1.0000	71988
18.327	18.320	TRICHLOROETHENE	7.1123	21424
19.820	19.820	2-CHLOROETHYL VINYL	0.0000	0
20.168	20.168	CIS-1,3-DICHLOROPROP	0.0000	0
21.127	21.127	TRANS-1,3-DICHLOROPR	0.0000	0
21.723	21.715	TOLUENE	0.0642	329
22.933	22.926	TETRACHLOROETHENE	131.7907	305898
23.978	23.978	CHLOROBENZENE	0.0000	0
24.293	24.293	ETHYLBENZENE	0.0000	0
24.591	24.585	M,P-XYLENE	0.0297	173
24.997	25.050	STYRENE	0.0222	178
25.153	25.153	O-XYLENE	0.0000	0
25.734	25.696	ISOPROPYLBENZENE	0.0388	204
26.014	26.014	BROMOBENZENE	0.0000	0
26.350	26.342	N-PROPYLBENZENE	0.1079	669
26.465	26.465	2-CHLOROTOLUENE	0.0000	0
26.584	26.584	4-CHLOROTOLUENE	0.0000	0
26.805	26.789	1,3,5-TRIMETHYLBENZE	0.0139	124
27.212	27.212	TERT-BUTYLBENZENE	0.0000	0
27.394	27.394	1,2,4-TRIMETHYLBENZE	0.0000	0
27.562	27.562	SEC-BUTYLBENZENE	0.0000	0
27.668	27.668	1,3-DICHLOROBENZENE	0.0000	0
27.796	27.783	1,4-DICHLOROBENZENE	0.0217	173
27.869	27.869	P-ISOPROPYLTOLUENE	0.0000	0
28.393	28.393	1,2-DICHLOROBENZENE	0.0000	0
28.596	28.580	N-BUTYLBENZENE	0.0292	103
30.086	30.076	SURR-1B4CB-P	27.1054	120964
32.540	32.528	1,2,4-TRICHLOROBENZE	0.0505	142
33.274	33.274	NAPHTHALENE	0.0000	0
33.491	33.491	HEXACHLOROBUTADIENE	0.0000	0
33.916	33.916	1,2,3-TRICHLOROBENZE	0.0000	0

XYLENES (Total): 0.0297

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 90.3515%

Chrom Perfect version 6.07

Reported on 01-15-2002at 00:54:25

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753731

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.29R

Reviewed by: TDK

Verified by: mmu

Date: 1-15-02

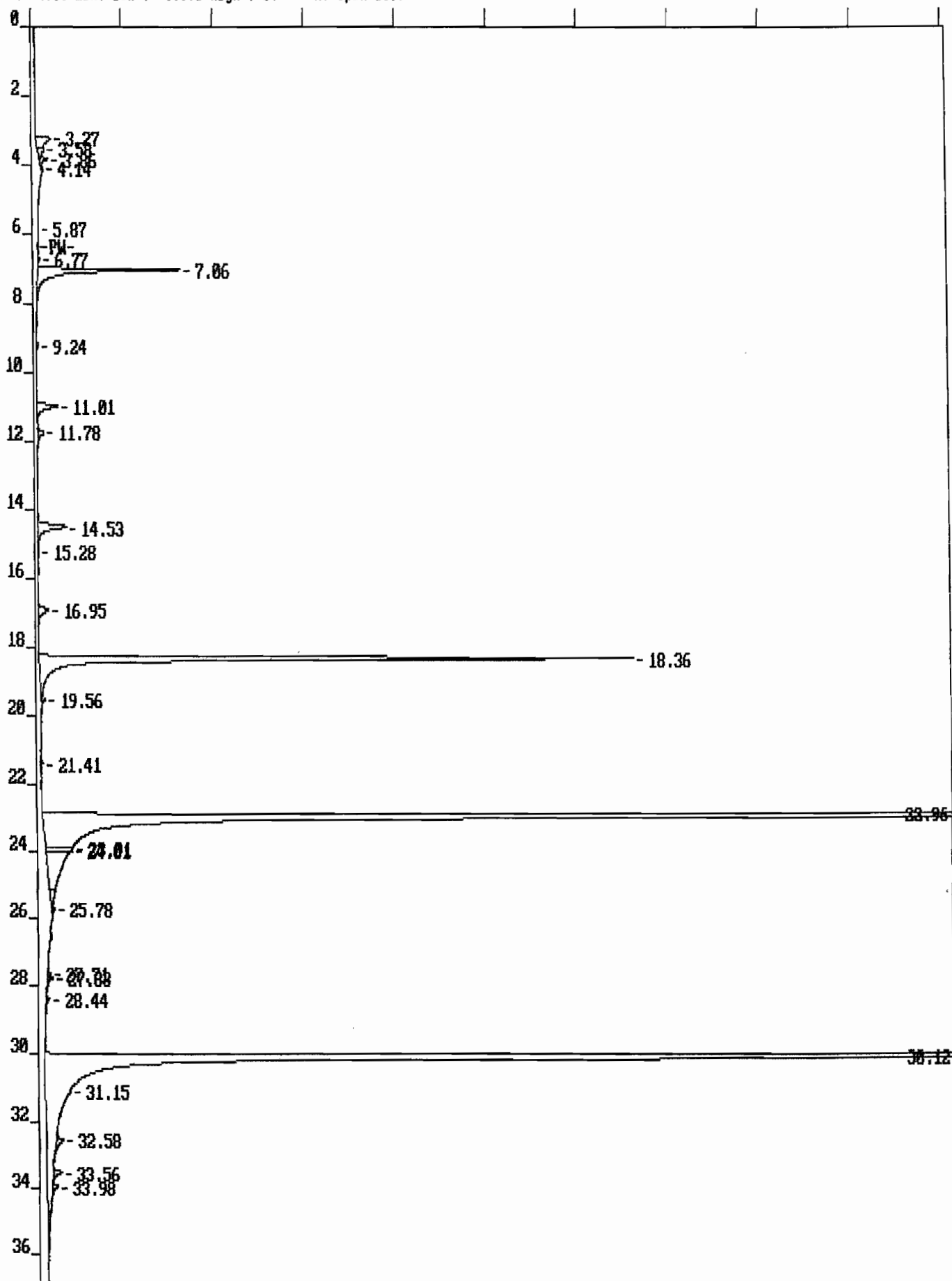
Date: 01/15/02

File=C:\CP\DATA1\18014.32R Date printed=01-15-2002 Time= 03:09:28

Sample Name=3753731

02014A181127,8404

1.0 to 37.0 min. Low Y=-0.001 High Y=14.999 mv Span=15.0



Sample Name: 3753731

Batch: 02014A18

Date Taken: Jan 15, 2002 03:09:23

Raw File: C:\CP\DATA1\18014.32R

Area File: C:\CP\DATA1\18014.32A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 5 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.856	3.786	DICHLORODIFLUOROMETH	0.3669	1053	149
3.997	3.997	CHLOROMETHANE	0.0000	0	0
4.137	4.302	VINYL CHLORIDE	0.0567	350	40
4.779	4.779	BROMOMETHANE	0.0000	0	0
4.964	4.964	CHLOROETHANE	0.0000	0	0
5.869	5.814	TRICHLOROFLUOROMETHA	0.0236	473	12
6.767	6.735	1,1-DICHLOROETHENE	0.0347	219	32
7.063	7.042	METHYLENE CHLORIDE	1.4120	18691	2343
7.223	7.223	TRICHLOROTRIFLUOROET	0.0000	0	0
8.549	8.549	TRANS-1,2-DICHLOROET	0.0000	0	0
9.236	9.197	1,1-DICHLOROETHANE	0.0350	331	37
11.012	10.981	CIS-1,2-DICHLOROETHE	0.3495	3779	354
11.500	11.500	BROMOCHLOROMETHANE	0.0000	0	0
11.780	11.756	CHLOROFORM	0.0866	1137	106
12.001	12.001	2,2-DICHLOROPROPANE	0.0000	0	0
14.187	14.187	1,2-DICHLOROETHANE	0.0000	0	0
14.533	14.505	1,1,1-TRICHLOROETHAN	0.4794	5892	476
15.277	15.270	1,1-DICHLOROPROPENE	0.0286	330	25
15.793	15.793	CARBON TETRACHLORIDE	0.0000	0	0
18.018	18.018	DIBROMOMETHANE	0.0000	0	0
18.192	18.192	1,2-DICHLOROPROPANE	0.0000	0	0
18.362	18.349	TRICHLOROETHENE	6.1070	70971	9763
18.457	18.457	BROMODICHLOROMETHANE	0.0000	0	0
19.848	19.848	2-CHLOROETHYL VINYL	0.0000	0	0
20.196	20.196	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.154	21.154	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.406	21.383	1,1,2-TRICHLOROETHAN	0.0229	209	38
21.847	21.847	1,3-DICHLOROPROPANE	0.0000	0	0
22.230	22.230	DIBROMOCHLOROMETHANE	0.0000	0	0
22.626	22.626	1,2-DIBROMOETHANE	0.0000	0	0
22.960	22.952	TETRACHLOROETHENE	111.1238	1051673	246997
23.909	23.904	1,1,1,2-TETRACHLOROE	0.1990	2802	466
24.009	24.001	CHLOROBENZENE	0.4019	16644	444
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.376	25.376	1,2,3-TRICHLOROPROPA	0.0000	0	0
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0	0
26.610	26.610	4-CHLOROTOLUENE	0.0000	0	0
27.714	27.694	1,3-DICHLOROBENZENE	0.0496	280	58
27.830	27.808	1,4-DICHLOROBENZENE	0.0666	718	83
28.442	28.419	1,2-DICHLOROBENZENE	0.0399	297	45
29.304	29.304	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.118	30.103	SURR-1B4CB-H	139.3759	533943	95548
32.585	32.558	1,2,4-TRICHLOROBENZE	0.1416	1327	114
33.556	33.521	HEXACHLOROBUTADIENE	0.1521	1385	144
33.979	33.945	1,2,3-TRICHLOROBENZE	0.1409	1155	96

TOTAL 1,2-DICHLOROETHENE: 0.3495

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 92.9173%

Chrom Perfect version 6.07

Reported on 01-15-2002at 03:10:18

Sample name: 3753731

Batch: 02014A181127,840

Raw file:

C:\CP\DATA1\18014.32R

Reviewed by:

T345

Verified by:

Vmm46

Date:

1-15-02

Date:

01/15/02

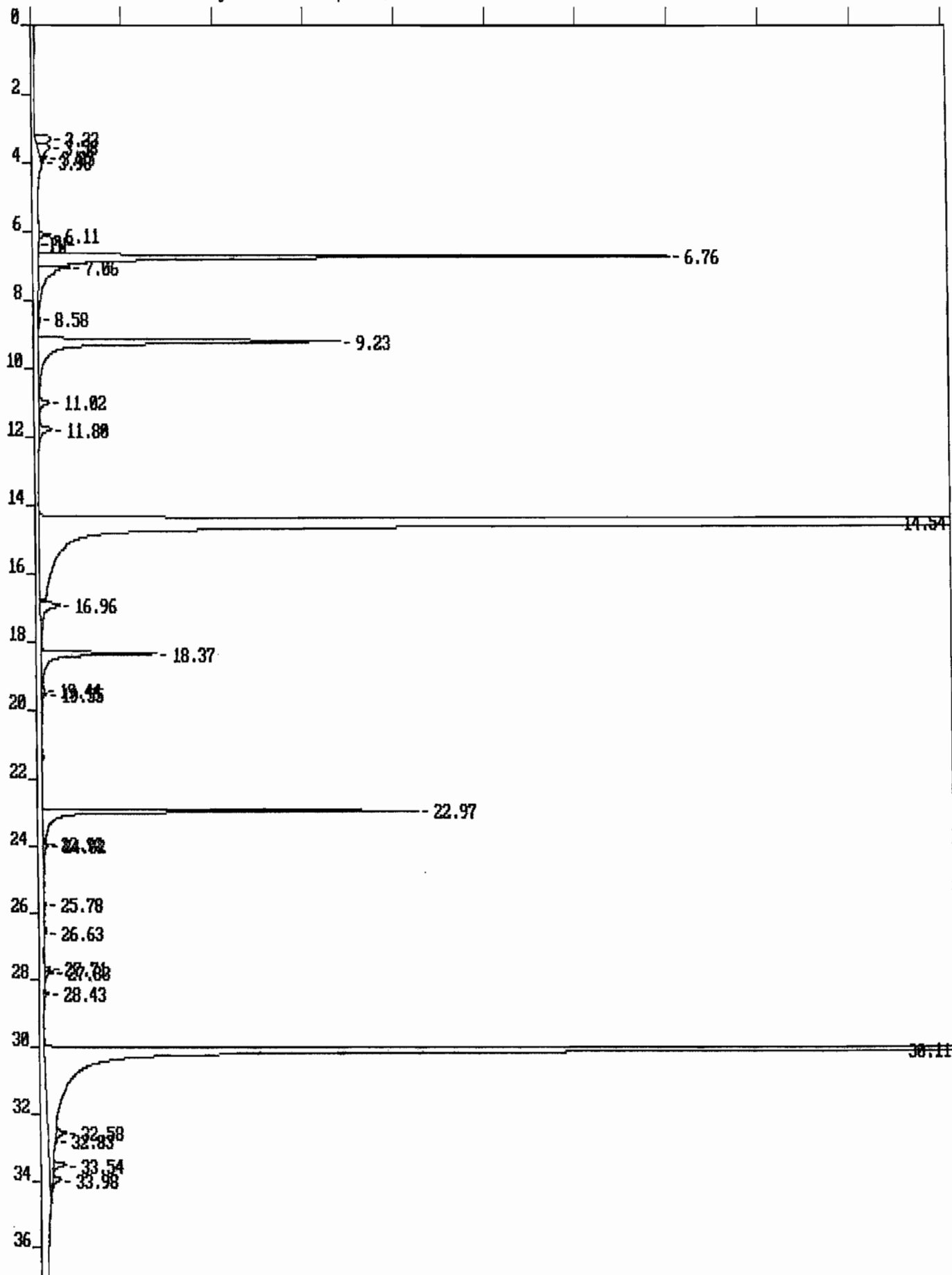
PCE only

File=C:\CP\DATA1\18014.27R Date printed=01-14-2002 Time= 23:21:41

Sample Name=3753732

02014A181127,8404

0.0 to 37.0 min. Low Y=0.001 High Y=15.001 mv Span=15.0



Sample Name: 3753732

Batch: 02014A18

Date Taken: Jan 14, 2002 23:21:35

Raw File: C:\CP\DATA1\18014.27R

Area File: C:\CP\DATA1\18014.27A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.855	3.786	DICHLORODIFLUOROMETH	0.0614	760	124
3.981	3.997	CHLOROMETHANE	0.0204	212	46
4.302	4.302	VINYL CHLORIDE	0.0000	0	0
4.779	4.779	BROMOMETHANE	0.0000	0	0
4.964	4.964	CHLOROETHANE	0.0000	0	0
5.814	5.814	TRICHLOROFLUOROMETHA	0.0000	0	0
6.758	6.735	1,1-DICHLOROETHENE	2.2459	71429	10397
7.056	7.042	METHYLENE CHLORIDE	0.0654	10815	543
7.223	7.223	TRICHLOROTRIFLUOROET	0.0000	0	0
8.577	8.549	TRANS-1,2-DICHLOROET	0.0054	316	34
9.231	9.197	1,1-DICHLOROETHANE	0.9311	48865	4983
11.022	10.981	CIS-1,2-DICHLOROETHE	0.0338	2044	171
11.500	11.500	BROMOCHLOROMETHANE	0.0000	0	0
11.800	11.756	CHLOROFORM	0.0350	2517	214
12.001	12.001	2,2-DICHLOROPROPANE	0.0000	0	0
14.187	14.187	1,2-DICHLOROETHANE	0.0000	0	0
14.535	14.505	1,1,1-TRICHLOROETHAN	10.6360	572750	52845
15.270	15.270	1,1-DICHLOROPROPENE	0.0000	0	0
15.793	15.793	CARBON TETRACHLORIDE	0.0000	0	0
18.018	18.018	DIBROMOMETHANE	0.0000	0	0
18.192	18.192	1,2-DICHLOROPROPANE	0.0000	0	0
18.373	18.349	TRICHLOROETHENE	0.2384	16654	1905
18.457	18.457	BROMODICHLOROMETHANE	0.0000	0	0
19.848	19.848	2-CHLOROETHYL VINYL	0.0000	0	0
20.196	20.196	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.154	21.154	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.383	21.383	1,1,2-TRICHLOROETHAN	0.0000	0	0
21.847	21.847	1,3-DICHLOROPROPANE	0.0000	0	0
22.230	22.230	DIBROMOCHLOROMETHANE	0.0000	0	0
22.626	22.626	1,2-DIBROMOETHANE	0.0000	0	0
22.965	22.952	TETRACHLOROETHENE	0.5565	33218	6184
23.919	23.904	1,1,1,2-TETRACHLOROE	0.0053	324	62
24.017	24.001	CHLOROBENZENE	0.0170	1412	94
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.376	25.376	1,2,3-TRICHLOROPROPA	0.0000	0	0
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0	0
26.629	26.610	4-CHLOROTOLUENE	0.0120	334	49
27.714	27.694	1,3-DICHLOROBENZENE	0.0165	435	97
27.827	27.808	1,4-DICHLOROBENZENE	0.0244	1263	152
28.434	28.419	1,2-DICHLOROBENZENE	0.0152	655	86
29.304	29.304	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.115	30.103	SURR-1B4CB-H	26.4022	502758	90499
32.583	32.558	1,2,4-TRICHLOROBENZE	0.0459	1841	184
33.545	33.521	HEXACHLOROBUTADIENE	0.0466	2065	221
33.977	33.945	1,2,3-TRICHLOROBENZE	0.0438	1756	150

TOTAL 1,2-DICHLOROETHENE: 0.0392

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 88.0072%

Chrom Perfect version 6.07

Reported on 01-14-2002at 23:22:30

Sample name: 3753732

Batch: 02014A181127,840

Raw file:

C:\CP\DATA1\18014.27R

Reviewed by:

JB 45

Verified by:

Umm49

Date:

1-14-02

Date:

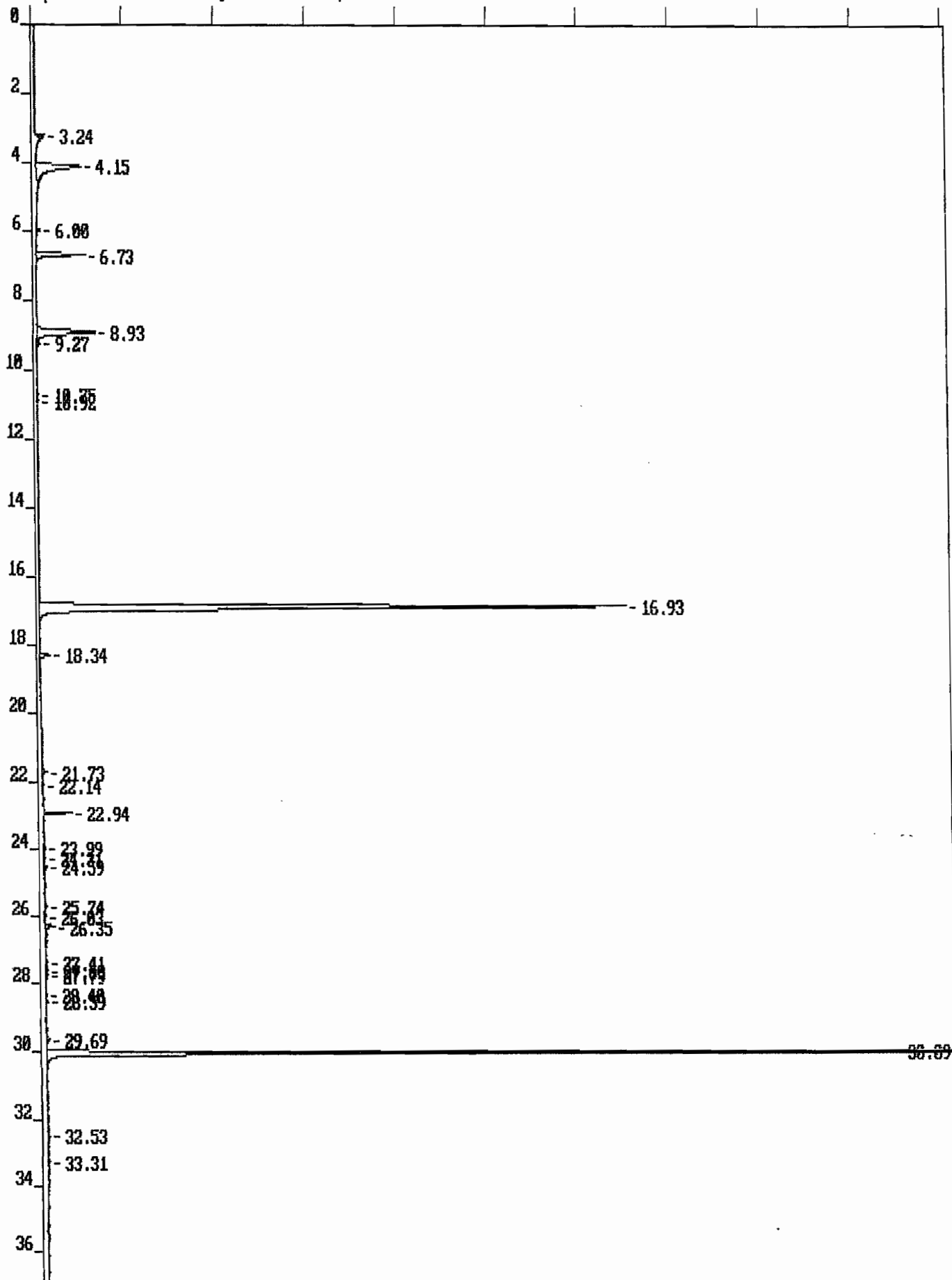
01/15/02

File=C:\CP\DATA1\180148.27R Date printed=01-14-2002 Time= 23:22:41

Sample Name=3753732

02014A181127,8404

9.0 to 37.0 min. Low Y=0.003 High Y=15.003 mv Span=15.0



Sample Name: 3753732

Batch: 02014A18

Date Taken: Jan 14, 2002 23:21:35

Raw File: C:\CP\DATA1\18014B.27R

Area File: C:\CP\DATA1\18014B.27A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 25):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.274	4.274	VINYL CHLORIDE	0.0000	0
6.726	6.706	1,1-DICHLOROETHENE	2.3275	4403
8.520	8.520	TRANS-1,2-DICHLOROET	0.0000	0
8.934	8.904	METHYL T-BUTYL ETHER	4.0347	8413
10.923	10.950	CIS-1,2-DICHLOROETHE	0.0656	177
15.239	15.239	1,1-DICHLOROPROPENE	0.0000	0
15.978	15.978	BENZENE	0.0000	0
16.934	16.912	ISTD-FBENZENE	1.0000	72619
18.337	18.320	TRICHLOROETHENE	0.2949	989
19.820	19.820	2-CHLOROETHYL VINYL	0.0000	0
20.168	20.168	CIS-1,3-DICHLOROPROP	0.0000	0
21.127	21.127	TRANS-1,3-DICHLOROPR	0.0000	0
21.731	21.715	TOLUENE	0.0596	331
22.937	22.926	TETRACHLOROETHENE	0.6280	1575
23.994	23.978	CHLOROBENZENE	0.0164	209
24.311	24.293	ETHYLBENZENE	0.0181	212
24.595	24.585	M,P-XYLENE	0.0340	276
25.050	25.050	STYRENE	0.0000	0
25.153	25.153	O-XYLENE	0.0000	0
25.738	25.696	ISOPROPYLBENZENE	0.0381	198
26.034	26.014	BROMOBENZENE	0.0175	172
26.352	26.342	N-PROPYLBENZENE	0.1082	568
26.465	26.465	2-CHLOROTOLUENE	0.0000	0
26.584	26.584	4-CHLOROTOLUENE	0.0000	0
26.789	26.789	1,3,5-TRIMETHYLBENZE	0.0000	0
27.212	27.212	TERT-BUTYLBENZENE	0.0000	0
27.407	27.394	1,2,4-TRIMETHYLBENZE	0.0232	108
27.562	27.562	SEC-BUTYLBENZENE	0.0000	0
27.690	27.668	1,3-DICHLOROBENZENE	0.0224	106
27.791	27.783	1,4-DICHLOROBENZENE	0.0268	115
27.869	27.869	P-ISOPROPYLTOLUENE	0.0000	0
28.400	28.393	1,2-DICHLOROBENZENE	0.0247	105
28.593	28.580	N-BUTYLBENZENE	0.0371	172
30.086	30.076	SURR-1B4CB-P	26.2422	118851
32.527	32.528	1,2,4-TRICHLOROBENZE	0.0546	169
33.312	33.274	NAPHTHALENE	0.0433	101
33.491	33.491	HEXACHLOROBUTADIENE	0.0000	0
33.916	33.916	1,2,3-TRICHLOROBENZE	0.0000	0

XYLENES (Total): 0.0340

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 87.4741%

Chrom Perfect version 6.07

Reported on 01-14-2002at 23:24:00

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753732

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.27R

Reviewed by: TSK

Verified by: MMK

Date: 1-14-02

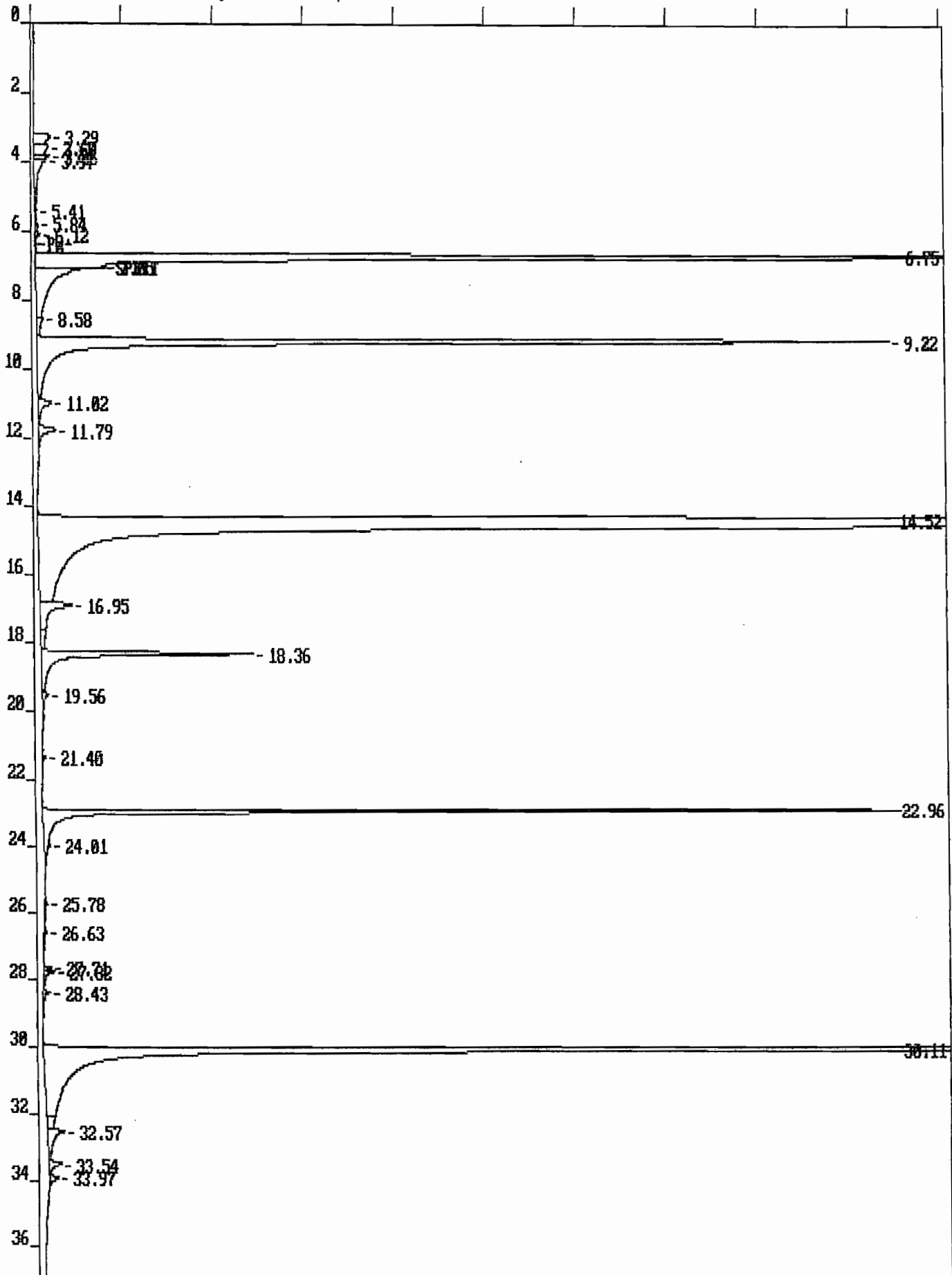
Date: 01/15/02

File=C:\CP\DATA1\18014.28R Date printed=01-15-2002 Time= 00:19:05

Sample Name=3753733

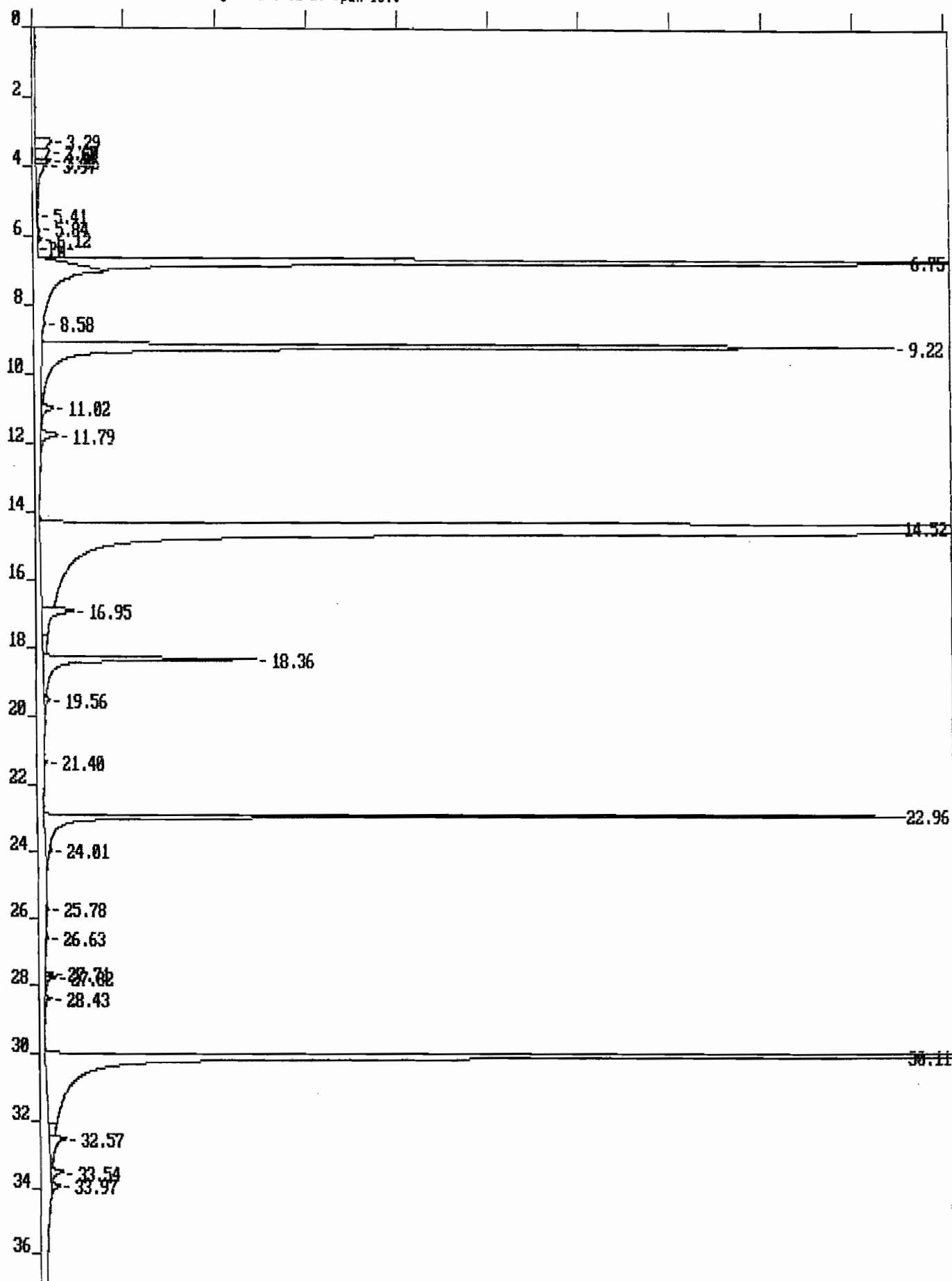
02014A181127,8404

7.0 to 37.0 min. Low Y=0.002 High Y=15.002 mv Span=15.0



File=C:\CP\DATA1\18014.28R Date printed=01-15-2002 Time= 00:06:51

Sample Name=3753733 02014A181127.8404
0.0 to 37.0 min. Low Y=0.002 High Y=15.002 mv Span=15.0



Sample Name: 3753733

Batch: 02014A18

Date Taken: Jan 15, 2002 00:06:46

Raw File: C:\CP\DATA1\18014.28R

Area File: C:\CP\DATA1\18014.28A

Method File: !C:\CP\DATA1\18365.MET(version -2)

Reprocessed - corrected baseline for the 1,1-DCE peak.

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

*AS
1-15-02*

Peak table using calibration !C:\CP\DATA1\H18365.CAL(version -23):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.856	3.786	DICHLORODIFLUOROMETH	0.1276	1909 258
3.973	3.997	CHLOROMETHANE	0.0939	4665 210
4.302	4.302	VINYL CHLORIDE	0.0000	0 0
4.779	4.779	BROMOMETHANE	0.0000	0 0
4.964	4.964	CHLOROETHANE	0.0000	0 0
5.843	5.814	TRICHLOROFLUOROMETHA	0.0197	645 50
6.752	6.735	1,1-DICHLOROETHENE	7.9594	241459 36847
7.046	7.042	METHYLENE CHLORIDE	~~0.1388~~ <i>No peak</i>	24617 1152
7.223	7.223	TRICHLOROTRIFLUOROET	0.0000	0 0
8.580	8.549	TRANS-1,2-DICHLOROET	0.0181	2341 113
9.223	9.197	1,1-DICHLOROETHANE	2.6186	130709 14013
11.017	10.981	CIS-1,2-DICHLOROETHE	0.0437	2990 221
11.500	11.500	BROMOCHLOROMETHANE	0.0000	0 0
11.793	11.756	CHLOROFORM	0.0460	3268 281
12.001	12.001	2,2-DICHLOROPROPANE	0.0000	0 0
14.187	14.187	1,2-DICHLOROETHANE	0.0000	0 0
14.523	14.505	1,1,1-TRICHLOROETHAN	31.4482	1643631 156249
15.270	15.270	1,1-DICHLOROPROPENE	0.0000	0 0
15.793	15.793	CARBON TETRACHLORIDE	0.0000	0 0
18.018	18.018	DIBROMOMETHANE	0.0000	0 0
18.192	18.192	1,2-DICHLOROPROPANE	0.0000	0 0
18.365	18.349	TRICHLOROETHENE	0.4363	30045 3487
18.457	18.457	BROMODICHLOROMETHANE	0.0000	0 0
19.848	19.848	2-CHLOROETHYL VINYL	0.0000	0 0
20.196	20.196	CIS-1,3-DICHLOROPROP	0.0000	0 0
21.154	21.154	TRANS-1,3-DICHLOROPR	0.0000	0 0
21.400	21.383	1,1,2-TRICHLOROETHAN	0.0071	365 60
21.847	21.847	1,3-DICHLOROPROPANE	0.0000	0 0
22.230	22.230	DIBROMOCHLOROMETHANE	0.0000	0 0
22.626	22.626	1,2-DIBROMOETHANE	0.0000	0 0
22.958	22.952	TETRACHLOROETHENE	1.2719	71583 14136
23.904	23.904	1,1,1,2-TETRACHLOROE	0.0000	0 0
24.010	24.001	CHLOROBENZENE	0.0091	261 50
24.682	24.682	BROMOFORM	0.0000	0 0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0 0
25.376	25.376	1,2,3-TRICHLOROPROPA	0.0000	0 0
26.041	26.041	BROMOBENZENE	0.0000	0 0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0 0
26.626	26.610	4-CHLOROTOLUENE	0.0105	340 43
27.706	27.694	1,3-DICHLOROBENZENE	0.0210	549 123
27.817	27.808	1,4-DICHLOROBENZENE	0.0277	1490 173
28.432	28.419	1,2-DICHLOROBENZENE	0.0188	875 106
29.304	29.304	1,2-DIBROMO-3-CHLORO	0.0000	0 0
30.108	30.103	SURR-1B4CB-H	25.4091	471459 87095
32.574	32.558	1,2,4-TRICHLOROBENZE	0.0680	6077 273
33.539	33.521	HEXACHLOROBUTADIENE	0.0453	2404 215
33.966	33.945	1,2,3-TRICHLOROBENZE	0.0457	1670 156

TOTAL 1,2-DICHLOROETHENE: 0.0618

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 84.6971%

Chrom Perfect version 6.07

Reported on 01-15-2002at 00:19:54

Sample Name: 3753733

Batch: 02014A18

Date Taken: Jan 15, 2002 00:06:46

Raw File: C:\CP\DATA1\18014.28R

Area File: C:\CP\DATA1\18014.28A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.856	3.786	DICHLORODIFLUOROMETH	0.1261	1882	255
3.973	3.997	CHLOROMETHANE	0.0923	4407	206
4.302	4.302	VINYL CHLORIDE	0.0000	0	0
4.779	4.779	BROMOMETHANE	0.0000	0	0
4.964	4.964	CHLOROETHANE	0.0000	0	0
5.843	5.814	TRICHLOROFLUOROMETHA	0.0151	447	38
6.752	6.735	1,1-DICHLOROETHENE	7.8798	226155	36478
7.042	7.042	METHYLENE CHLORIDE	0.0000	0	0
7.223	7.223	TRICHLOROTRIFLUOROET	0.0000	0	0
8.580	8.549	TRANS-1,2-DICHLOROET	0.0059	282	37
9.223	9.197	1,1-DICHLOROETHANE	2.6106	127182	13970
11.017	10.981	CIS-1,2-DICHLOROETHE	0.0402	2453	204
11.500	11.500	BROMOCHLOROMETHANE	0.0000	0	0
11.793	11.756	CHLOROFORM	0.0449	3082	274
12.001	12.001	2,2-DICHLOROPROPANE	0.0000	0	0
14.187	14.187	1,2-DICHLOROETHANE	0.0000	0	0
14.523	14.505	1,1,1-TRICHLOROETHAN	31.4482	1643631	156249
15.270	15.270	1,1-DICHLOROPROPENE	0.0000	0	0
15.793	15.793	CARBON TETRACHLORIDE	0.0000	0	0
18.018	18.018	DIBROMOMETHANE	0.0000	0	0
18.192	18.192	1,2-DICHLOROPROPANE	0.0000	0	0
18.365	18.349	TRICHLOROETHENE	0.4363	30045	3487
18.457	18.457	BROMODICHLOROMETHANE	0.0000	0	0
19.848	19.848	2-CHLOROETHYL VINYL	0.0000	0	0
20.196	20.196	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.154	21.154	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.400	21.383	1,1,2-TRICHLOROETHAN	0.0071	365	60
21.847	21.847	1,3-DICHLOROPROPANE	0.0000	0	0
22.230	22.230	DIBROMOCHLOROMETHANE	0.0000	0	0
22.626	22.626	1,2-DIBROMOETHANE	0.0000	0	0
22.958	22.952	TETRACHLOROETHENE	1.2719	71583	14136
23.904	23.904	1,1,1,2-TETRACHLOROE	0.0000	0	0
24.010	24.001	CHLOROBENZENE	0.0091	261	50
24.682	24.682	BROMOFORM	0.0000	0	0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.376	25.376	1,2,3-TRICHLOROPROPA	0.0000	0	0
26.041	26.041	BROMOBENZENE	0.0000	0	0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0	0
26.626	26.610	4-CHLOROTOLUENE	0.0105	340	43
27.706	27.694	1,3-DICHLOROBENZENE	0.0210	549	123
27.817	27.808	1,4-DICHLOROBENZENE	0.0277	1490	173
28.432	28.419	1,2-DICHLOROBENZENE	0.0188	875	106
29.304	29.304	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.108	30.103	SURR-1B4CB-H	25.4091	471459	87095
32.574	32.558	1,2,4-TRICHLOROBENZE	0.0680	6077	273
33.539	33.521	HEXACHLOROBUTADIENE	0.0453	2404	215
33.966	33.945	1,2,3-TRICHLOROBENZE	0.0457	1670	156

TOTAL 1,2-DICHLOROETHENE: 0.0461

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 84.6971%

Chrom Perfect version 6.07

Reported on 01-15-2002at 00:07:41

Sample name: 3753733

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014.28R

Reviewed by: TB

Verified by: Vmm

Date: 1-15-02

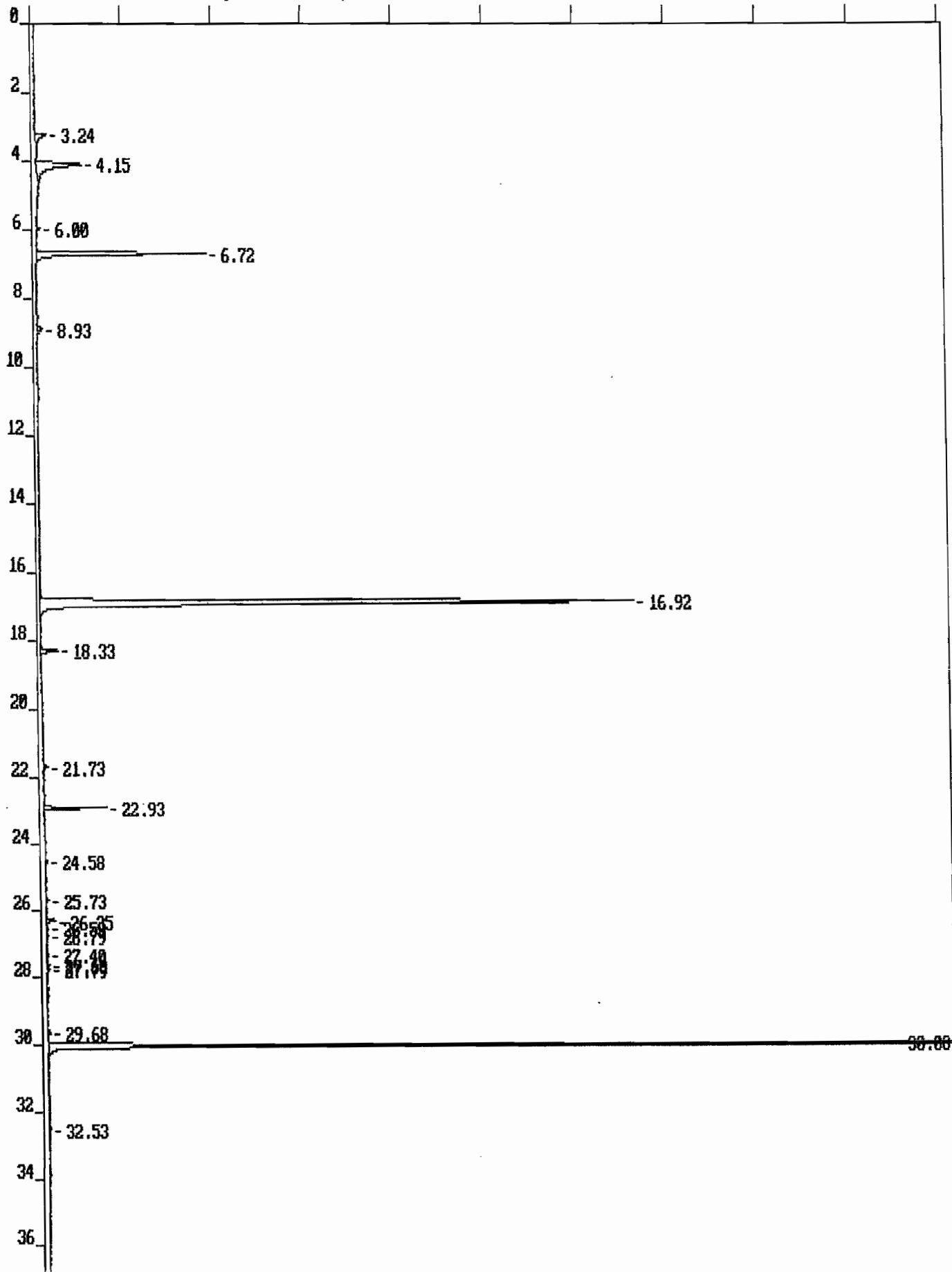
Date: 2/15/02

File=C:\CP\DATA1\180148.28R Date printed=01-15-2002 Time= 00:07:52

Sample Name=3753733

02014A181127,8404

1.0 to 37.0 min. Low Y=-0.004 High Y=14.996 mv Span=15.0



Sample Name: 3753733

Batch: 02014A18

Date Taken: Jan 15, 2002 00:06:46

Raw File: C:\CP\DATA1\18014B.28R

Area File: C:\CP\DATA1\18014B.28A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 25):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.274	4.274	VINYL CHLORIDE	0.0000	0	0
6.723	6.706	1,1-DICHLOROETHENE	7.9174	14781	2817
8.520	8.520	TRANS-1,2-DICHLOROET	0.0000	0	0
8.928	8.904	METHYL T-BUTYL ETHER	0.3681	710	90
10.950	10.950	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.239	15.239	1,1-DICHLOROPROPENE	0.0000	0	0
15.978	15.978	BENZENE	0.0000	0	0
16.925	16.912	ISTD-FBENZENE	1.0000	73946	9803
18.332	18.320	TRICHLOROETHENE	0.4985	1562	293
19.820	19.820	2-CHLOROETHYL VINYL	0.0000	0	0
20.168	20.168	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.127	21.127	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.726	21.715	TOLUENE	0.0475	285	70
22.929	22.926	TETRACHLOROETHENE	1.3455	3506	1052
23.978	23.978	CHLOROBENZENE	0.0000	0	0
24.293	24.293	ETHYLBENZENE	0.0000	0	0
24.584	24.585	M,P-XYLENE	0.0244	136	39
25.050	25.050	STYRENE	0.0000	0	0
25.153	25.153	O-XYLENE	0.0000	0	0
25.733	25.696	ISOPROPYLBENZENE	0.0404	192	49
26.014	26.014	BROMOBENZENE	0.0000	0	0
26.349	26.342	N-PROPYLBENZENE	0.1120	624	159
26.465	26.465	2-CHLOROTOLUENE	0.0000	0	0
26.588	26.584	4-CHLOROTOLUENE	0.0163	117	27
26.793	26.789	1,3,5-TRIMETHYLBENZE	0.0148	102	30
27.212	27.212	TERT-BUTYLBENZENE	0.0000	0	0
27.397	27.394	1,2,4-TRIMETHYLBENZE	0.0180	110	27
27.562	27.562	SEC-BUTYLBENZENE	0.0000	0	0
27.676	27.668	1,3-DICHLOROBENZENE	0.0287	137	42
27.793	27.783	1,4-DICHLOROBENZENE	0.0293	122	43
27.869	27.869	P-ISOPROPYLTOLUENE	0.0000	0	0
28.393	28.393	1,2-DICHLOROBENZENE	0.0000	0	0
28.580	28.580	N-BUTYLBENZENE	0.0000	0	0
30.079	30.076	SURR-1B4CB-P	25.6551	117461	31281
32.532	32.528	1,2,4-TRICHLOROBENZE	0.0725	215	35
33.274	33.274	NAPHTHALENE	0.0000	0	0
33.491	33.491	HEXACHLOROBUTADIENE	0.0000	0	0
33.916	33.916	1,2,3-TRICHLOROBENZE	0.0000	0	0

XYLENES (Total): 0.0244

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 85.5171%

Chrom Perfect version 6.07

Reported on 01-15-2002at 00:09:11

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753733

Batch: 02014A181127,840

Raw file: C:\CP\DATA1\18014B.28R

Reviewed by: BS

Verified by: ummyg

Date: 1-15-02

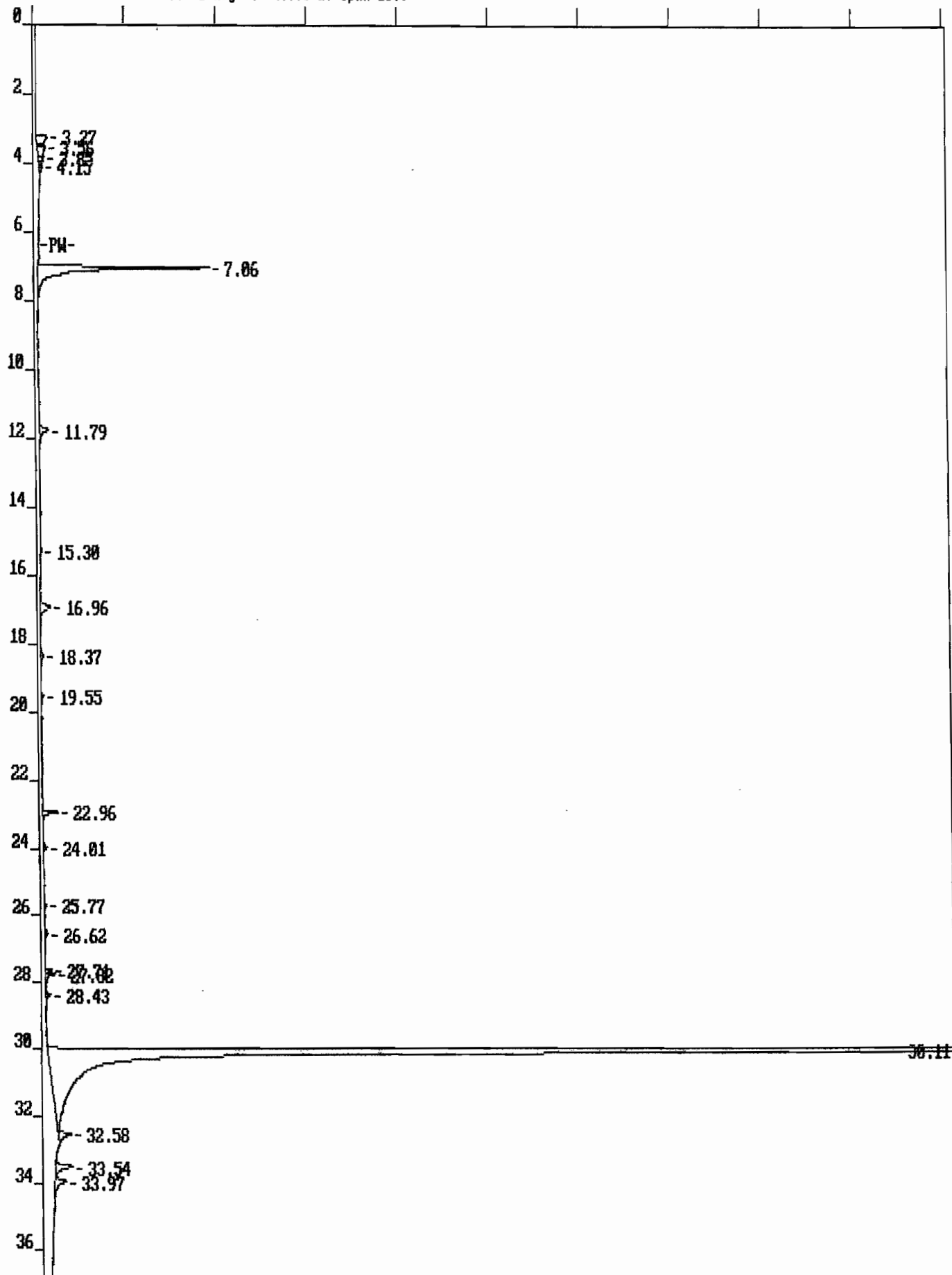
Date: 01/15/02

File=C:\CP\WHIRL\18014.Z0K Date printed=01-14-2002 Time= 22:36:32

Sample Name=3753734

02014A181127,8404

0.0 to 37.0 min. Low Y=-0.002 High Y=14.998 mv Span=15.0



375 3734 01/24/03 02014A18

DATE: 02/01/03 10:49 AM DATE TAKEN: Jan 17, 2002 22:00:00

Raw File: C:\CP\DATA1\18014.26R

Area File: C:\CP\DATA1\18014.26A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 23):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.853	3.786	DICHLORODIFLUOROMETH	0.0481	701 97
3.997	3.997	CHLOROMETHANE	0.0000	0 0
4.149	4.302	VINYL CHLORIDE	0.0144	639 51
4.779	4.779	BROMOMETHANE	0.0000	0 0
4.964	4.964	CHLOROETHANE	0.0000	0 0
5.814	5.814	TRICHLOROFLUOROMETHA	0.0000	0 0
6.735	6.735	1,1-DICHLOROETHENE	0.0000	0 0
7.056	7.042	METHYLENE CHLORIDE	0.3381	22465 2805
7.223	7.223	TRICHLOROTRIFLUOROET	0.0000	0 0
8.549	8.549	TRANS-1,2-DICHLOROET	0.0000	0 0
9.197	9.197	1,1-DICHLOROETHANE	0.0000	0 0
10.981	10.981	CIS-1,2-DICHLOROETHE	0.0000	0 0
11.500	11.500	BROMOCHLOROMETHANE	0.0000	0 0
11.786	11.756	CHLOROFORM	0.0241	1464 147
12.001	12.001	2,2-DICHLOROPROPANE	0.0000	0 0
14.187	14.187	1,2-DICHLOROETHANE	0.0000	0 0
14.505	14.505	1,1,1-TRICHLOROETHAN	0.0000	0 0
15.298	15.270	1,1-DICHLOROPROPENE	0.0054	223 24
15.793	15.793	CARBON TETRACHLORIDE	0.0000	0 0
18.018	18.018	DIBROMOMETHANE	0.0000	0 0
18.192	18.192	1,2-DICHLOROPROPANE	0.0000	0 0
18.369	18.349	TRICHLOROETHENE	0.0065	564 52
18.457	18.457	BROMODICHLOROMETHANE	0.0000	0 0
19.848	19.848	2-CHLOROETHYL VINYL	0.0000	0 0
20.196	20.196	CIS-1,3-DICHLOROPROP	0.0000	0 0
21.154	21.154	TRANS-1,3-DICHLOROPR	0.0000	0 0
21.383	21.383	1,1,2-TRICHLOROETHAN	0.0000	0 0
21.847	21.847	1,3-DICHLOROPROPANE	0.0000	0 0
22.230	22.230	DIBROMOCHLOROMETHANE	0.0000	0 0
22.626	22.626	1,2-DIBROMOETHANE	0.0000	0 0
22.961	22.952	TETRACHLOROETHENE	0.0236	1342 262
23.904	23.904	1,1,1,2-TETRACHLOROE	0.0000	0 0
24.007	24.001	CHLOROBENZENE	0.0114	359 63
24.682	24.682	BROMOFORM	0.0000	0 0
25.172	25.172	1,1,2,2-TETRACHLOROE	0.0000	0 0
25.376	25.376	1,2,3-TRICHLOROPROPA	0.0000	0 0
26.041	26.041	BROMOBENZENE	0.0000	0 0
26.491	26.491	2-CHLOROTOLUENE	0.0000	0 0
26.623	26.610	4-CHLOROTOLUENE	0.0129	295 52
27.707	27.694	1,3-DICHLOROBENZENE	0.0189	497 110
27.821	27.808	1,4-DICHLOROBENZENE	0.0235	1147 147
28.433	28.419	1,2-DICHLOROBENZENE	0.0134	396 76
29.304	29.304	1,2-DIBROMO-3-CHLORO	0.0000	0 0
30.112	30.103	SURR-1B4CB-H	26.5661	493329 91061
32.578	32.558	1,2,4-TRICHLOROBENZE	0.0533	1962 214
33.544	33.521	HEXACHLOROBUTADIENE	0.0573	2455 272
33.973	33.945	1,2,3-TRICHLOROBENZE	0.0502	1895 171
TOTAL 1,2-DICHLOROETHENE:		0.0000		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 88.5538%

Chrom Perfect version 6.07

Reported on 01-14-2002at 22:37:41

RAW FILE:

C:\CP\DATA\10014.ZOR

3753734

0201418

Vmm49 0124103

Reviewed by: SKP088

Verified by: UMM49

Date: 1-14-02

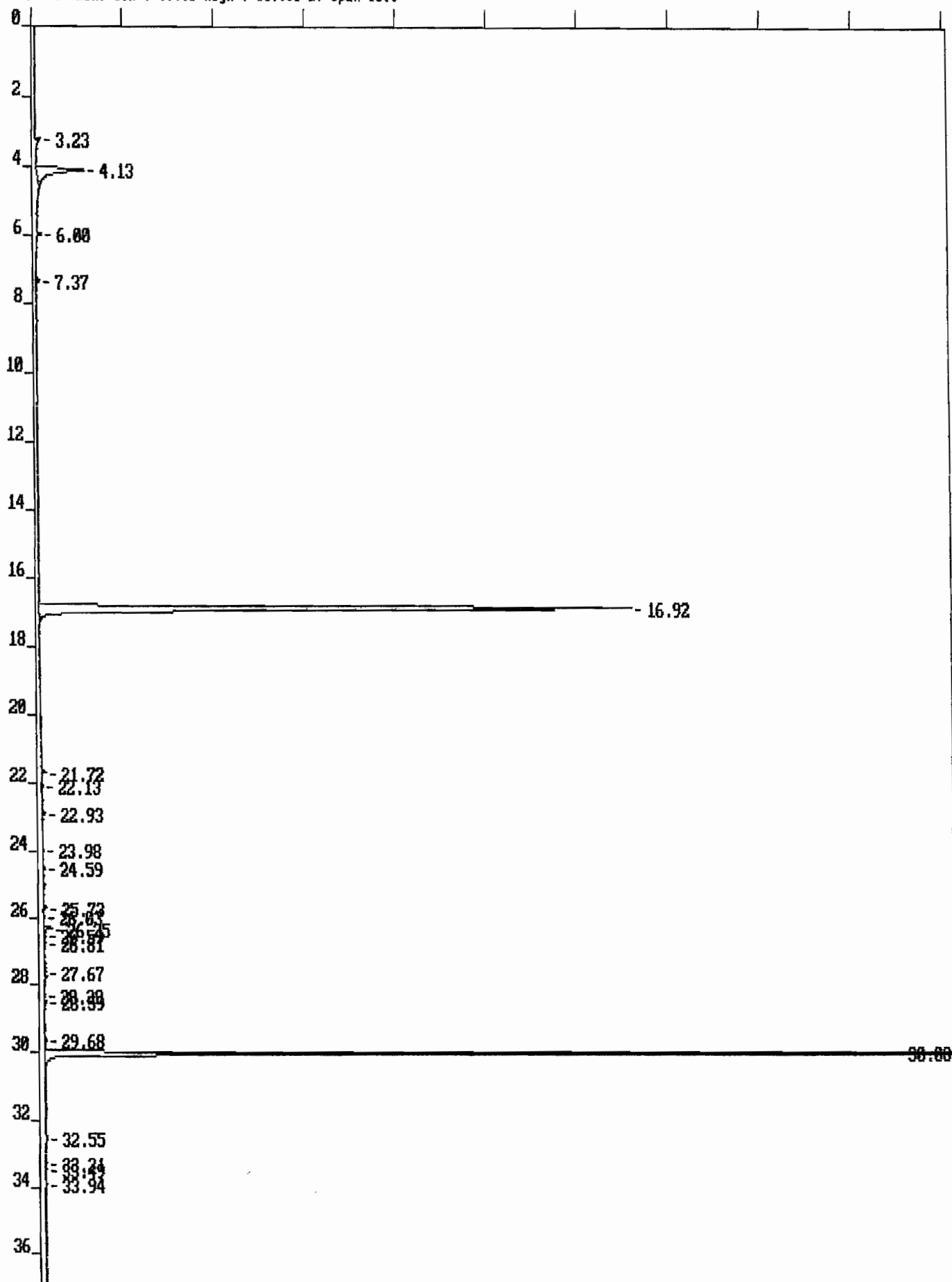
Date: 01/15/02

File=C:\CP\DATA\180148.ZOR Date printed=01-14-2002 Time= 22:57:52

Sample Name=3753734

02014A181127,8404

0.0 to 37.0 min. Low Y=0.001 High Y=15.001 mv Span=15.0



3753734 0201418 VMM48 0104103

Batch: 0201418 Date Taken: Jan 14, 2002 22:30:40
 Raw File: C:\CP\DATA1\18014B.26R
 Area File: C:\CP\DATA1\18014B.26A
 Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 25):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.274	4.274	VINYL CHLORIDE	0.0000	0	0
6.706	6.706	1,1-DICHLOROETHENE	0.0000	0	0
8.520	8.520	TRANS-1,2-DICHLOROET	0.0000	0	0
8.904	8.904	METHYL T-BUTYL ETHER	0.0000	0	0
10.950	10.950	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.239	15.239	1,1-DICHLOROPROPENE	0.0000	0	0
15.978	15.978	BENZENE	0.0000	0	0
16.921	16.912	ISTD-FBENZENE	1.0000	73228	9744
18.320	18.320	TRICHLOROETHENE	0.0000	0	0
19.820	19.820	2-CHLOROETHYL VINYL	0.0000	0	0
20.168	20.168	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.127	21.127	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.723	21.715	TOLUENE	0.0515	296	75
22.926	22.926	TETRACHLOROETHENE	0.0827	280	64
23.983	23.978	CHLOROBENZENE	0.0130	105	26
24.293	24.293	ETHYLBENZENE	0.0000	0	0
24.590	24.585	M,P-XYLENE	0.0256	127	41
25.050	25.050	STYRENE	0.0000	0	0
25.153	25.153	O-XYLENE	0.0000	0	0
25.733	25.696	ISOPROPYLBENZENE	0.0446	235	54
26.026	26.014	BROMOBENZENE	0.0136	112	25
26.355	26.342	N-PROPYLBENZENE	0.1040	613	147
26.465	26.465	2-CHLOROTOLUENE	0.0000	0	0
26.595	26.584	4-CHLOROTOLUENE	0.0233	173	38
26.806	26.789	1,3,5-TRIMETHYLBENZE	0.0191	202	38
27.212	27.212	TERT-BUTYLBENZENE	0.0000	0	0
27.394	27.394	1,2,4-TRIMETHYLBENZE	0.0000	0	0
27.562	27.562	SEC-BUTYLBENZENE	0.0000	0	0
27.668	27.668	1,3-DICHLOROBENZENE	0.0230	103	34
27.783	27.783	1,4-DICHLOROBENZENE	0.0000	0	0
27.869	27.869	P-ISOPROPYLTOLUENE	0.0000	0	0
28.387	28.393	1,2-DICHLOROBENZENE	0.0239	122	26
28.592	28.580	N-BUTYLBENZENE	0.0378	177	38
30.083	30.076	SURR-1B4CB-P	26.0372	119497	31556
32.549	32.528	1,2,4-TRICHLOROBENZE	0.0612	138	29
33.310	33.274	NAPHTHALENE	0.0413	126	23
33.491	33.491	HEXACHLOROBUTADIENE	0.1060	127	30
33.944	33.916	1,2,3-TRICHLOROBENZE	0.0569	105	22

XYLENES (Total): 0.0256

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 86.7908%

Chrom Perfect version 6.07

Reported on 01-14-2002at 22:39:12

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

3753734 02014 A18 VMM49 01124/02

Sample name: 3753734

BALCH: 02014H101127,040

Raw file: C:\CP\DATA1\18014B.26R

Reviewed by: SKP088 Verified by: VMM49

Date: 1-14-02

Date: 01/15/02

Standards Data

Quality Control Summary

SDG# HUL04

Instrument ID: 5843

Initial Calibration Summary

Calibration Batch: 01365A18

Initial Calibration Date(s): 12/31/01 (HALL)

Initial Calibration Date(s): 12/31/01 (PID)

Sample Information			
LL Sample#	Sample Code	Date	Analysis Time
CHKSTD		01/14/02	02:07
BLK1827	METHOD BLANK	01/14/02	04:03
3753720	AW1U-	01/14/02	05:34
3753727	MW9U-	01/14/02	06:19
3753729	--10U	01/14/02	07:06
3753721MS	AW1U-	01/14/02	07:53
3753722MSD	AW1U-	01/14/02	08:38
LCS1805	LAB CONTROL	01/14/02	09:23
CHKSTD		01/14/02	10:26
BLK1828	METHOD BLANK	01/14/02	11:39
3753715	AW3U-	01/14/02	12:25
3753716	AW3L-	01/14/02	13:09
3753717	MW8U-	01/14/02	13:55
3753718	MW8M-	01/14/02	14:40
3753719	MW8L-	01/14/02	15:25
3753723	AW1UD	01/14/02	16:10
3753724	AW1L-	01/14/02	16:55
3753725	AW2L-	01/14/02	17:40
3753728	MW9L-	01/14/02	18:25
3753730	--10L	01/14/02	19:10
CHKSTD		01/14/02	19:56
BLK1829	METHOD BLANK	01/14/02	20:52
3753726	AWFB-	01/14/02	21:51
3753734	--TB-	01/14/02	22:36
3753732	--5M-	01/14/02	23:21
3753733	--5L-	01/15/02	00:06
3753731	--5U-	01/15/02	00:52
BLK1830	METHOD BLANK	01/15/02	01:37
3753731	--5U-	01/15/02	03:09
CHKSTD		01/15/02	04:03

Quality Control Summary

SDG# HUL04

Instrument ID: 5843

Initial Calibration Summary

Calibration Batch: 01365A18

Initial Calibration Date(s): 12/31/01 (HALL)

Initial Calibration Date(s): 12/31/01 (PID)

STANDARD DATE INJECTED TIME INJECTED	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8	% RSD				
	12/31/01 03:25	12/31/01 04:08	12/31/01 04:52	12/31/01 05:35	12/31/01 06:18	12/31/01 07:01	12/31/01 07:44	12/31/01 08:28					
	Relative Response Factor (RRF)												
COMPOUND (DETECTOR)	Retention Time			LEVEL1	LEVEL2	LEVEL3	LEVEL4	LEVEL5	LEVEL6	LEVEL7	LEVEL8	MEAN	
	LEVEL 3	Window											
DICHLORODIFLUOROMETH (HALL)	3.867	0.10	2339.34	2176.23	2119.02	1942.12	1953.18	1811.01	1829.03			2024.27	10
CHLOROMETHANE (HALL)	4.042	0.10	3146.97	2800.32	2533.01	2210.57	1958.56	1580.24	1411.23			2234.41	28*
VINYL CHLORIDE (HALL)	4.363	0.20	4318.64	4110.27	3913.18	3609.46	3384.60	2898.41	2668.54			3557.59	17
BROMOMETHANE (HALL)	4.835	0.20	3052.65	2950.32	2905.84	2714.97	2549.96	2429.99	2210.44			2687.74	11
CHLOROETHANE (HALL)	5.037	0.20	4876.12	4683.07	4535.54	4233.82	4077.04	3851.80	3572.67			4261.44	11
TRICHLOROFLUOROMETHA (HALL)	5.895	0.20	2919.53	2662.61	2824.03	2685.61	2339.53	2290.54	2150.32			2553.17	11
1,1-DICHLOROETHENE (HALL)	6.813	0.20	5129.45	4936.30	4966.89	4793.30	4423.51	4182.14	3973.90			4629.36	9
METHYLENE CHLORIDE (HALL)	7.121	0.20	11309.1	9166.35	8754.83	8198.89	7475.36	6936.87	6237.90			8297.06	20*
TRANS-1,2-DICHLOROET (HALL)	8.634	0.20	6756.10	6716.87	6721.06	6509.96	6164.07	5690.53	5176.21			6247.83	10
1,1-DICHLOROETHANE (HALL)	9.281	0.20	5717.91	5786.36	5778.99	5536.01	5299.83	4889.83	4451.48			5351.49	10
CIS-1,2-DICHLOROETHE (HALL)	11.068	0.20	5350.32	5384.59	5444.44	5249.39	5010.98	4688.30	4296.38			5060.63	8
CHLOROFORM (HALL)	11.841	0.10	6758.99	6726.33	6589.55	6328.74	5946.63	5458.60	5003.89			6116.10	11
1,2-DICHLOROETHANE (HALL)	14.261	0.20	4947.15	5083.32	5079.30	5067.00	4742.63	4453.45	4110.45			4783.33	8
1,1,1-TRICHLOROETHAN (HALL)	14.575	0.20	5495.49	5366.96	5357.81	5243.62	4809.62	4439.62	4065.99			4968.44	11
CARBON TETRACHLORIDE (HALL)	15.856	0.20	6679.58	6564.10	6593.01	6389.14	5886.84	5347.39	4946.25			6058.04	11
BENZENE (PID)	16.038	0.20	0.0779	0.0758	0.0748	0.0739	0.0734	0.0717	0.0720	0.0737		0.0742	3
1,2-DICHLOROPROPANE (HALL)	18.236	0.10	6041.71	6080.72	6129.48	5951.99	5655.06	5217.07	4815.46			5698.78	9
TRICHLOROETHENE (PID)	18.362	0.20	0.0647	0.0620	0.0609	0.0595	0.0588	0.0573	0.0579	0.0594		0.0600	4
BROMODICHLOROMETHANE (HALL)	18.499	0.10	7603.96	7354.13	7258.92	6977.21	6576.63	6052.26	5555.74			6768.41	11
CIS-1,3-DICHLOROPROP (HALL)	20.227	0.20	7358.99	7687.71	7889.11	7646.41	7193.25	6702.38	6076.31			7222.02	9
TRANS-1,3-DICHLOROPR (HALL)	21.182	0.10	6828.53	7287.10	7593.44	7418.99	6959.85	6562.00	6016.66			6952.37	8
1,1,2-TRICHLOROETHAN (HALL)	21.410	0.10	9006.99	9275.79	9206.11	8824.55	8106.07	7568.32	6768.92			8393.82	11
TOLUENE (PID)	21.740	0.20	0.1631	0.1577	0.1541	0.1505	0.1479	0.1421	0.1406	0.1455		0.1502	5
DIBROMOCHLOROMETHANE (HALL)	22.255	0.20	5687.33	6034.95	6276.69	6088.78	5889.02	5652.64	5231.81			5837.32	6
TETRACHLOROETHENE (HALL)	22.973	0.20	12597.3	12517.5	12319.9	11578.6	10679.1	9781.82	8320.60			11113.5	15
CHLOROBENZENE (PID)	23.996	0.20	0.2134	0.2097	0.2063	0.2020	0.2012	0.1933	0.1930	0.2028		0.2027	4
ETHYLBENZENE (PID)	24.311	0.20	0.1803	0.1730	0.1699	0.1658	0.1630	0.1569	0.1548	0.1618		0.1657	5
M, P-XYLENE (PID)	24.602	0.20	0.1796	0.1726	0.1692	0.1643	0.1618	0.1569	0.1538	0.1601		0.1648	5
BROMOFORM (HALL)	24.703	0.20	3340.66	3668.29	3943.24	3824.16	3795.83	3710.17	3600.13			3697.50	5

* = %RSD outside control limits.

Quality Control Summary

SDG# HUL04

Instrument ID: 5843

Initial Calibration Summary

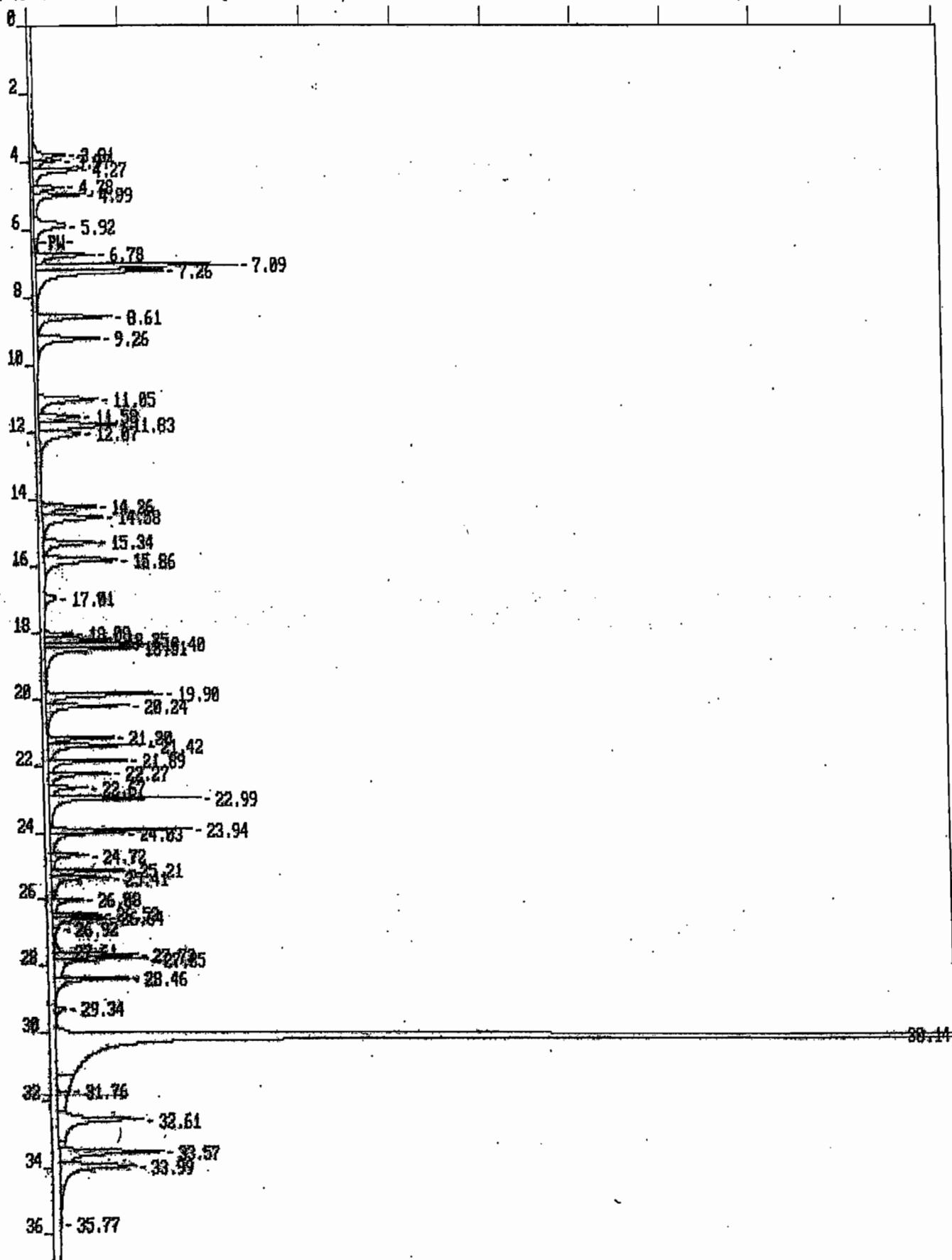
Calibration Batch: 01365A18

Initial Calibration Date(s): 12/31/01 (HALL)

Initial Calibration Date(s): 12/31/01 (PID)

STANDARD DATE INJECTED TIME INJECTED	LEVEL 1 12/31/01 03:25	LEVEL 2 12/31/01 04:08	LEVEL 3 12/31/01 04:52	LEVEL 4 12/31/01 05:35	LEVEL 5 12/31/01 06:18	LEVEL 6 12/31/01 07:01	LEVEL 7 12/31/01 07:44	LEVEL 8 12/31/01 08:28	% RSD		
	LEVEL 1 12/31/01 03:25	LEVEL 2 12/31/01 04:08	LEVEL 3 12/31/01 04:52	LEVEL 4 12/31/01 05:35	LEVEL 5 12/31/01 06:18	LEVEL 6 12/31/01 07:01	LEVEL 7 12/31/01 07:44	LEVEL 8 12/31/01 08:28			
COMPOUND (DETECTOR)	Retention Time		Relative Response Factor (RRF)						MEAN	% RSD	
	LEVEL 3 Window		LEVEL1	LEVEL2	LEVEL3	LEVEL4	LEVEL5	LEVEL6	LEVEL7	LEVEL8	
O-XYLENE (PID)	25.170	0.06	0.1762	0.1694	0.1668	0.1645	0.1645	0.1591	0.1532	0.1478	6
1,1,2,2-TETRACHLORO (HALL)	25.190	0.10	6806.88	7112.75	7126.73	6626.71	6253.45	6052.40	5451.89	6490.11	9
1,1,3-DICHLOROBENZENE (HALL)	27.713	0.20	6035.81	6123.87	6360.50	6040.12	5885.08	5512.29	5037.77	5856.49	8
1,4-DICHLOROBENZENE (PID)	27.801	0.04	0.1580	0.1545	0.1516	0.1481	0.1484	0.1445	0.1450	0.1564	3
1,2-DICHLOROBENZENE (HALL)	28.438	0.20	5865.11	5988.09	6101.37	5764.74	5729.38	5308.48	4847.43	5657.80	8
SURR-1B4CB-P (PID)	30.094	0.20	0.1189	0.1209	0.1217	0.1213	0.1246	0.1267	0.1253	0.1244	4
SURR-1B4CB-H (HALL)	30.123	0.20	3359.67	3462.94	3532.09	3335.15	3394.79	3493.53	3415.72	3427.70	2

File=C:\CP\DATA1\18365.20R Data printed=12-31-2001 Time= 16:16:30
Sample Name=MDL 01365A18
0.0 to 37.0 min. Low Y=-0.001 High Y=14.999 mv Span=15.0



Sample Name: MDL

Batch: 01365A18

Date Taken: Dec 31, 2001 16:11:18

Raw File: C:\CP\DATA1\18365.20R

Area File: C:\CP\DATA1\18365.20A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 11):

Ret Time	Expected	(min) RT	(min)	Peak Name	Amount *	Peak	Peak
					(ug/L)	Area	Height
3.811		3.805		DICHLORODIFLUOROMETH	0.2639	4736	534
3.971		3.985		CHLOROMETHANE	0.2090	3630	467
4.273		4.314		VINYL CHLORIDE	0.2046	7359	728
4.780		4.780		BROMOMETHANE	0.1847	3223	497
4.989		4.980		CHLOROETHANE	0.1904	7130	811
5.922		5.837		TRICHLOROFLUOROMETHA	0.2016	9209	515
6.777		6.761		1,1-DICHLOROETHENE	0.2100	7272	972
7.087		7.069		METHYLENE CHLORIDE	0.4008	20017	3326
7.259		7.253		TRICHLOROTRIFLUOROET	0.5776	25438	2098
8.607		8.582		TRANS-1,2-DICHLOROET	0.1980	10354	1237
9.257		9.231		1,1-DICHLOROETHANE	0.1926	10398	1031
11.052		11.019		CIS-1,2-DICHLOROETHE	0.1939	9776	981
11.575		11.537		BROMOCHLOROMETHANE	0.1862	5999	678
11.826		11.792		CHLOROFORM	0.2099	12849	1284
12.071		12.040		2,2-DICHLOROPROPANE	0.2121	11358	689
14.261		14.223		1,2-DICHLOROETHANE	0.1887	8003	903
14.579		14.542		1,1,1-TRICHLOROETHAN	0.1997	12629	992
15.341		15.305		1,1-DICHLOROPROPENE	0.1973	8532	867
15.864		15.828		CARBON TETRACHLORIDE	0.1988	13588	1204
18.082		18.048		DIBROMOMETHANE	0.1589	2915	471
18.248		18.220		1,2-DICHLOROPROPANE	0.1897	7219	1081
18.403		18.377		TRICHLOROETHENE	0.2110	10555	1687
18.509		18.485		BROMODICHLOROMETHANE	0.2052	12668	1389
19.901		19.872		2-CHLOROETHYL VINYL	0.8293	12136	1909
20.243		20.220		CIS-1,3-DICHLOROPROP	0.1884	9817	1361
21.201		21.176		TRANS-1,3-DICHLOROPR	0.1573	5887	1093
21.425		21.406		1,1,2-TRICHLOROETHAN	0.1909	10350	1602
21.888		21.869		1,3-DICHLOROPROPANE	0.1860	8008	1305
22.271		22.253		DIBROMOCHLOROMETHANE	0.1753	6767	1024
22.670		22.648		1,2-DIBROMOETHANE	0.1672	4285	629
22.986		22.974		TETRACHLOROETHENE	0.2249	15415	2500
23.935		23.925		1,1,1,2-TETRACHLOROE	0.2007	9513	2349
24.034		24.022		CHLOROBENZENE	0.2228	9046	1229
24.721		24.704		BROMOFORM	0.1684	4720	623
25.205		25.194		1,1,2,2-TETRACHLOROE	0.1865	6071	1210
25.410		25.398		1,2,3-TRICHLOROPROPA	0.1887	6495	963
26.081		26.064		BROMOBENZENE	0.1803	4073	510
26.525		26.514		2-CHLOROTOLUENE	0.2023	3589	807
26.645		26.633		4-CHLOROTOLUENE	0.2162	5265	875
27.731		27.719		1,3-DICHLOROBENZENE	0.2346	6197	1374
27.845		27.833		1,4-DICHLOROBENZENE	0.2512	12316	1566
28.457		28.444		1,2-DICHLOROBENZENE	0.2194	8978	1241
29.344		29.330		1,2-DIBROMO-3-CHLORO	0.1655	1598	186
30.140		30.132		SURR-1B4CB-H	26.2600	481548	90012
32.606		32.593		1,2,4-TRICHLOROBENZE	0.3504	18000	1408
33.568		33.559		HEXACHLOROBUTADIENE	0.3626	16410	1719
33.995		33.985		1,2,3-TRICHLOROBENZE	0.3673	18386	1255
				TOTAL 1,2-DICHLOROETHENE:	0.3919		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 87.5334%

Chrom Perfect version 6.07

Reported on 12-31-2001 at 16:17:19

Sample name: MDL

Batch: 01365A18

Raw file:

C:\CP\DATA1\18365.20R

Reviewed by: MDL

Verified by: SLP

Date: 12/31/01

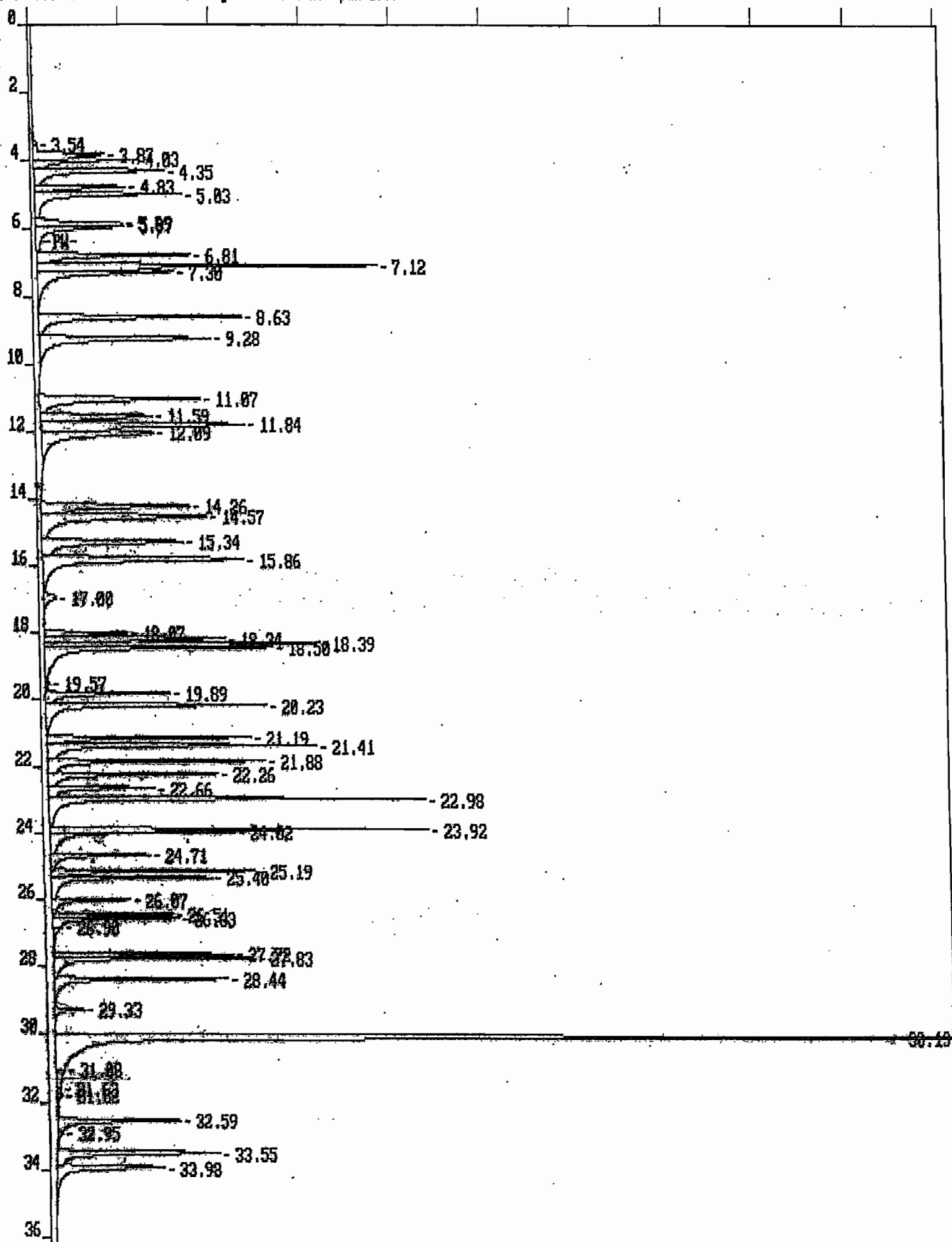
Date: 12-31-01

File=C:\CP\DATA1\18365.03R Date printed=12-31-2001 Time= 03:25:31

Sample Name=CALSTD1

01365A188400,8401,8464

0.0 to 37.0 min. Low Y=-0.024 High Y=14.976 mv Span=15.0



Sample Name: CALSTD1

Batch: 01365A18

Date Taken: Dec 31, 2001 03:25:27

Raw File: C:\CP\DATA1\18365.03R

Area File: C:\CP\DATA1\18365.03A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 2):

Ret Time	Expected	(min) RT	(min) Peak Name	Amount *	Peak	Peak
				(ug/L)	Area	Height
3.865	3.875		DICHLORODIFLUOROMETH	0.8476	9705	1186
4.030	4.064		CHLOROMETHANE	1.8207	11287	1614
4.348	4.381		VINYL CHLORIDE	0.7194	18609	2164
4.828	4.852		BROMOMETHANE	0.7358	9209	1526
5.032	5.051		CHLOROETHANE	0.9333	18955	2458
5.895	5.913		TRICHLOROFLUOROMETHA	0.6559	9334	1463
6.811	6.831		1,1-DICHLOROETHENE	0.6993	18443	2565
7.119	7.142		METHYLENE CHLORIDE	0.9129	34795	5653
7.299	7.323		TRICHLOROTRIFLUOROET	0.8109	27320	2268
8.632	8.656		TRANS-1,2-DICHLOROET	0.6505	26479	3378
9.280	9.305		1,1-DICHLOROETHANE	0.6214	27404	2859
11.069	11.096		CIS-1,2-DICHLOROETHE	0.6364	25078	2675
11.589	11.617		BROMOCHLOROMETHANE	0.5950	15893	1860
11.841	11.873		CHLOROFORM	0.6373	32670	3379
12.086	12.125		2,2-DICHLOROPROPANE	0.6673	27194	1876
14.263	14.290		1,2-DICHLOROETHANE	0.6602	21043	2474
14.575	14.607		1,1,1-TRICHLOROETHAN	0.6343	33725	2748
15.338	15.364		1,1-DICHLOROPROPENE	0.6739	22681	2353
15.856	15.886		CARBON TETRACHLORIDE	0.6233	37961	3340
18.072	18.088		DIBROMOMETHANE	0.5309	8438	1400
18.238	18.258		1,2-DICHLOROPROPANE	0.6252	20219	3021
18.393	18.414		TRICHLOROETHENE	0.6953	27812	4552
18.500	18.521		BROMODICHLOROMETHANE	0.6459	32840	3802
19.889	19.897		2-CHLOROETHYL VINYL	1.1319	13199	2069
20.231	20.243		CIS-1,3-DICHLOROPROP	0.5800	24415	3679
21.187	21.195		TRANS-1,3-DICHLOROPR	0.5571	17055	3414
21.412	21.423		1,1,2-TRICHLOROETHAN	0.6515	26551	4503
21.875	21.884		1,3-DICHLOROPROPANE	0.6602	20443	3645
22.260	22.267		DIBROMOCHLOROMETHANE	0.5533	17015	2844
22.657	22.660		1,2-DIBROMOETHANE	0.5425	10686	1780
22.975	22.985		TETRACHLOROETHENE	0.6996	34707	6299
23.924	23.932		1,1,1,2-TETRACHLOROE	0.6369	24934	6328
24.022	24.030		CHLOROBENZENE	0.7004	19180	3098
24.709	24.711		BROMOFORM	0.5075	10383	1670
25.194	25.200		1,1,2,2-TETRACHLOROE	0.6529	15608	3403
25.398	25.403		1,2,3-TRICHLOROPROPA	0.6441	16848	2690
26.068	26.070		BROMOBENZENE	0.5498	8133	1315
26.513	26.519		2-CHLOROTOLUENE	0.6434	8449	2018
26.632	26.638		4-CHLOROTOLUENE	0.6597	11519	2129
27.718	27.724		1,3-DICHLOROBENZENE	0.6471	12538	3018
27.832	27.839		1,4-DICHLOROBENZENE	0.6873	20039	3390
28.443	28.450		1,2-DICHLOROBENZENE	0.6572	17639	2933
29.333	29.336		1,2-DIBROMO-3-CHLORO	0.4961	3103	479
30.127	30.137		SURR-1B4CB-H	12.5044	187449	34269
32.588	32.597		1,2,4-TRICHLOROBENZE	0.6519	14156	2058
33.550	33.561		HEXACHLOROBUTADIENE	0.6548	20402	2718
33.978	33.987		1,2,3-TRICHLOROBENZE	0.6743	15838	1792
			TOTAL 1,2-DICHLOROETHENE:	1.2869		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 41.6814%

Sample name: CALSTD1

Batch: 01365A188400,840

Raw file: C:\CP\DATA1\18365.03R

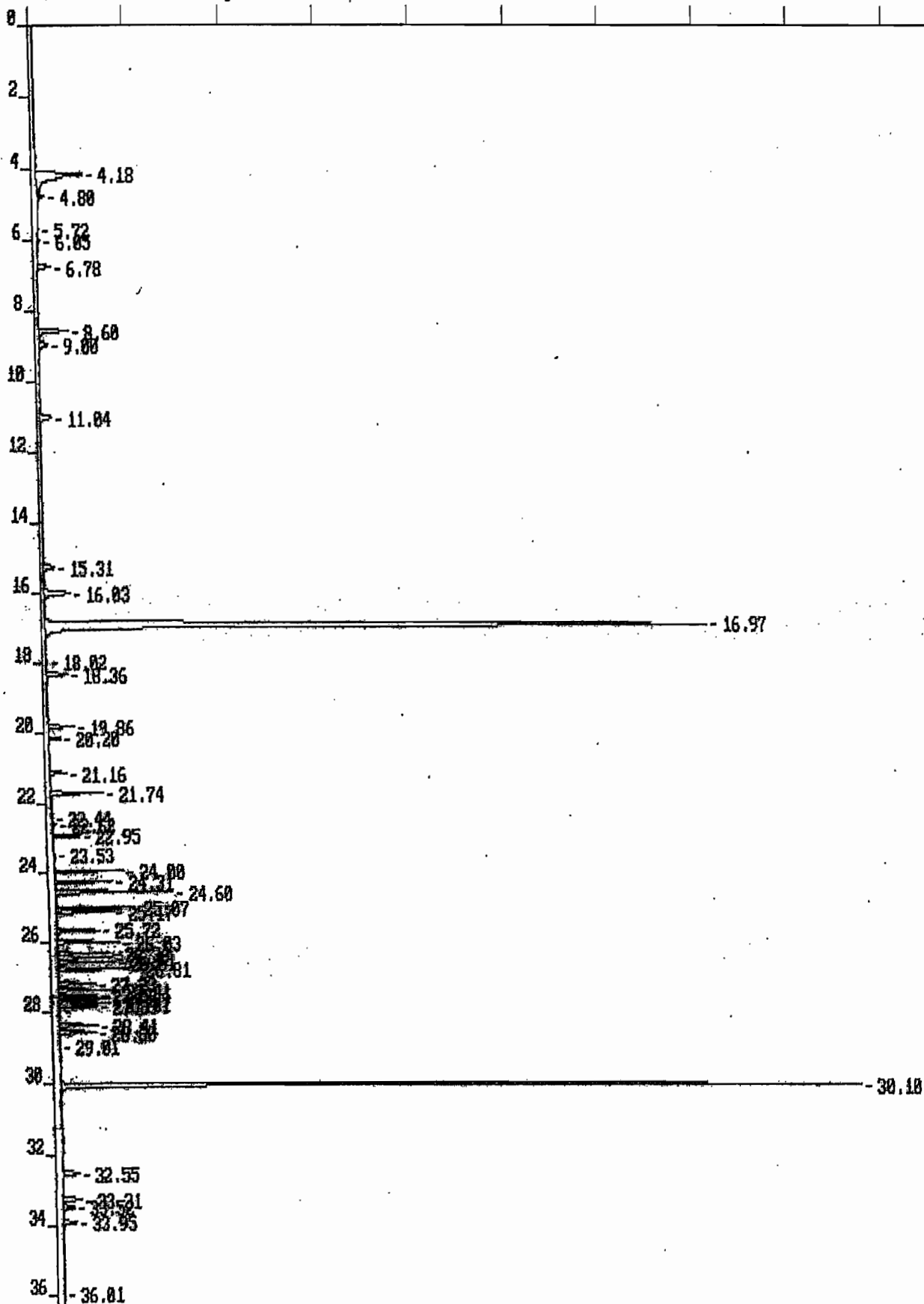
Reviewed by: PLS

Verified by: SKPLE88

Date: 12-31-01

Date: 12-31-01

File=C:\CP\DATA1\183658.03R Date printed=12-31-2001 Time= 03:27:02
Sample Name=CALSTD1 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.006 High Y=15.006 mv Span=15.0



Sample Name: CALSTD1

Batch: 01365A18

Date Taken: Dec 31, 2001 03:25:27

Raw File: C:\CP\DATA1\18365B.03R

Area File: C:\CP\DATA1\18365B.03A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 2):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.355	4.355	VINYL CHLORIDE	0.0000	0	0
6.783	6.802	1,1-DICHLOROETHENE	0.5274	1275	215
8.600	8.627	TRANS-1,2-DICHLOROET	0.5076	2812	476
8.995	9.017	METHYL T-BUTYL ETHER	0.5338	1259	143
11.040	11.066	CIS-1,2-DICHLOROETHE	0.5112	1471	193
15.311	15.337	1,1-DICHLOROPROPENE	0.5164	1266	173
16.034	16.068	BENZENE	0.4939	2925	408
16.968	17.003	ISTD-FBENZENE	1.0000	78634	10461
18.363	18.385	TRICHLOROETHENE	0.5064	1776	338
19.859	19.869	2-CHLOROETHYL VINYL	0.8863	1860	432
20.198	20.216	CIS-1,3-DICHLOROPROP	0.4977	839	207
21.159	21.168	TRANS-1,3-DICHLOROPR	0.4756	1060	286
21.740	21.754	TOLUENE	0.5109	3142	853
22.948	22.960	TETRACHLOROETHENE	0.5189	1437	456
23.998	24.006	CHLOROBENZENE	0.4966	3102	1116
24.312	24.321	ETHYLBENZENE	0.5141	2754	943
24.604	24.613	M,P-XYLENE	1.0309	6101	1878
25.071	25.079	STYRENE	0.5004	3203	1160
25.172	25.181	O-XYLENE	0.5096	2850	921
25.715	25.724	ISOPROPYLBENZENE	0.5196	2220	717
26.034	26.042	BROMOBENZENE	0.4893	2986	1013
26.361	26.370	N-PROPYLBENZENE	0.5245	2484	840
26.485	26.494	2-CHLOROTOLUENE	0.5046	2617	889
26.605	26.613	4-CHLOROTOLUENE	0.5024	2710	931
26.808	26.817	1,3,5-TRIMETHYLBENZE	0.5141	3492	1166
27.233	27.241	TERT-BUTYLBENZENE	0.5134	2093	615
27.415	27.423	1,2,4-TRIMETHYLBENZE	0.5018	2655	850
27.582	27.592	SEC-BUTYLBENZENE	0.5069	2120	623
27.689	27.698	1,3-DICHLOROBENZENE	0.4970	2566	818
27.805	27.813	1,4-DICHLOROBENZENE	0.5038	2626	827
27.889	27.899	P-ISOPROPYLTOLUENE	0.5178	1988	622
28.414	28.424	1,2-DICHLOROBENZENE	0.5088	2186	627
28.602	28.611	N-BUTYLBENZENE	0.5264	2425	598
30.097	30.109	SURR-1B4CB-P	9.4428	48363	12690
32.552	32.568	1,2,4-TRICHLOROBENZE	0.5056	1376	271
33.306	33.315	NAPHTHALENE	0.5056	1663	310
33.520	33.532	HEXACHLOROBUTADIENE	0.5535	1070	186
33.948	33.958	1,2,3-TRICHLOROBENZE	0.5207	1276	230

XYLENES (Total): 1.5405

* Amounts in ug/L for water samples, ug/kg for solid samples..

Surrogate Recovery: BrClBenzene 31.4760%

Chrom Perfect version 6.07

Reported on 12-31-2001 at 03:28:30

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 2

Updated from file = C:\CP\DATA1\18365B.03A

Amount injected = 1

Standard amount injected = 1

Calibration level = 1 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD1

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.03R

Reviewed by:

JS 45

Verified by:

SCP 088

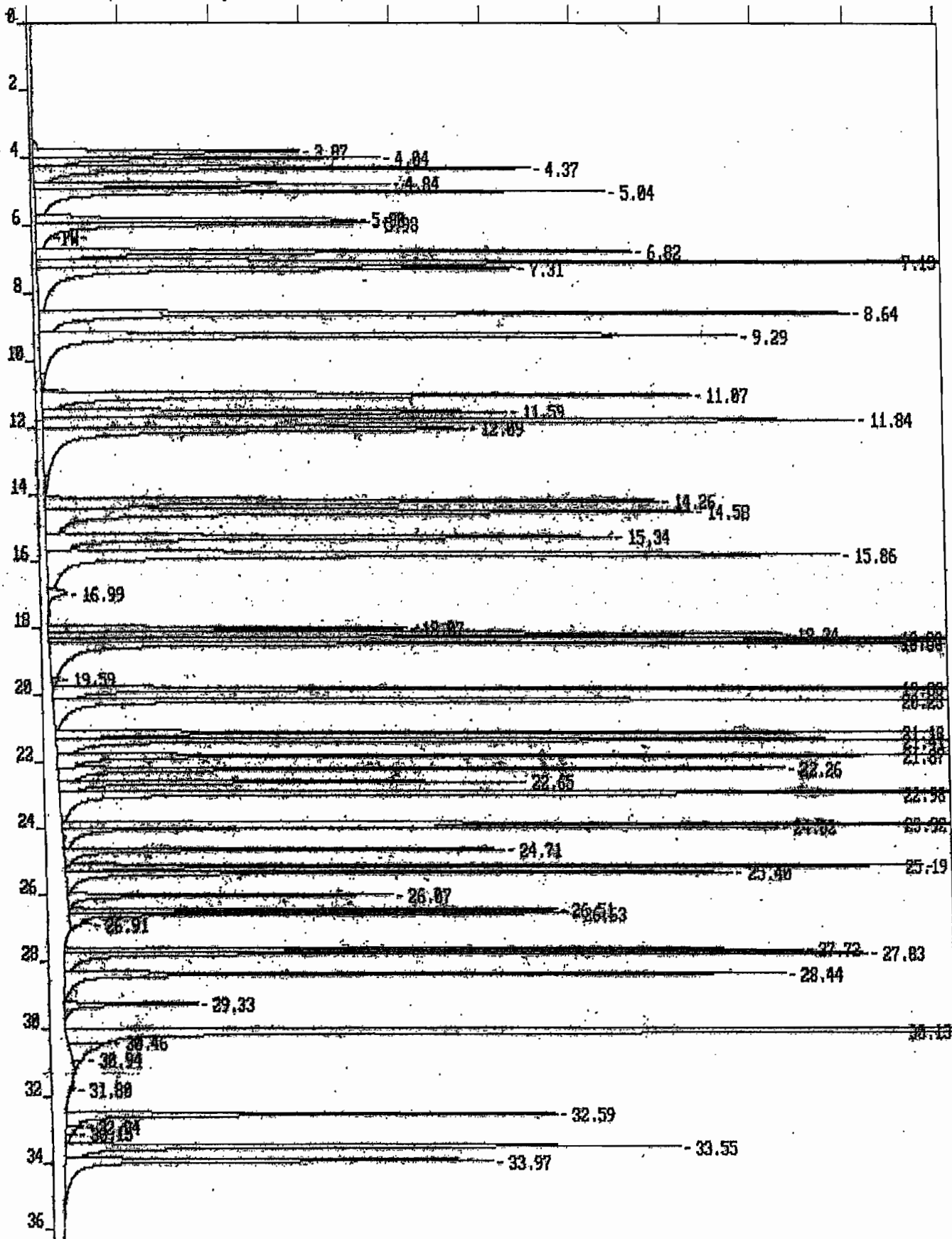
Date:

12-31-01

Date:

12-31-01

File=C:\CP\DATA\18365.04R Date printed=12-31-2001 Time= 04:09:01
Sample Name=CALSTD2 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=-0.011 High Y=14.989 mv Span=15.0



Sample Name: CALSTD2

Batch: 01365A18

Date Taken: Dec 31, 2001 04:08:56

Raw File: C:\CP\DATA1\18365.04R

Area File: C:\CP\DATA1\18365.04A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/Sq/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 3):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.875	3.865	2.9570	33049	4418
4.044	4.030	4.8946	37220	5741
4.369	4.348	2.6790	63881	8221
4.840	4.828	2.7001	33281	5901
5.043	5.032	3.2240	65240	9460
5.902	5.895	2.3460	34100	5325
6.821	6.811	2.5839	67378	9873
7.127	7.119	2.7220	111510	18333
7.309	7.299	2.6861	91222	7924
8.638	8.632	2.5165	99932	13434
9.286	9.280	2.4644	108448	11573
11.072	11.069	2.4992	95824	10769
11.592	11.589	2.4243	64548	7722
11.845	11.841	2.4889	127129	13453
12.091	12.086	2.4582	102600	7043
14.284	14.263	2.6219	83159	10167
14.577	14.575	2.4412	121174	10734
15.339	15.338	2.6086	85118	9398
15.858	15.856	2.4263	138768	13128
18.070	18.072	2.2379	35355	5972
18.238	18.238	2.4661	79463	12161
18.393	18.393	2.6085	103380	17605
18.500	18.500	2.4525	113373	14708
19.883	19.889	8.2797	84977	15621
20.229	20.231	2.3960	89056	15375
21.185	21.187	2.3522	66987	14574
21.411	21.412	2.6136	95962	18552
21.874	21.875	2.6521	73875	15184
22.258	22.260	2.3209	61103	12070
22.655	22.657	2.2847	38411	7617
22.975	22.975	2.6819	117130	25035
23.924	23.924	2.5841	100090	26369
24.023	24.022	2.5870	56526	11867
24.706	24.709	2.2040	35828	7337
25.193	25.194	2.6232	59318	14226
25.397	25.398	2.5623	53026	11081
26.065	26.068	2.2277	25715	5441
26.512	26.513	2.4997	31528	8140
26.631	26.632	2.4856	39109	8327
27.716	27.718	2.5331	48440	12248
27.830	27.832	2.5958	66383	13337
28.442	28.443	2.5814	60316	11976
29.330	29.333	2.2727	13687	2228
30.127	30.127	24.3379	347709	69259
32.585	32.588	2.4673	51005	8190
33.548	33.550	2.3992	71609	10222
33.974	33.978	2.5265	55570	7122
TOTAL 1,2-DICHLOROETHENE:		5.0157		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 81.1264%

Sample name: CALSTD2

Batch: 01365A188400,840

Raw file: C:\CP\DATA1\18365.04R

Reviewed by: TRUS

Verified by: SLCP088

Date: 12-31-01

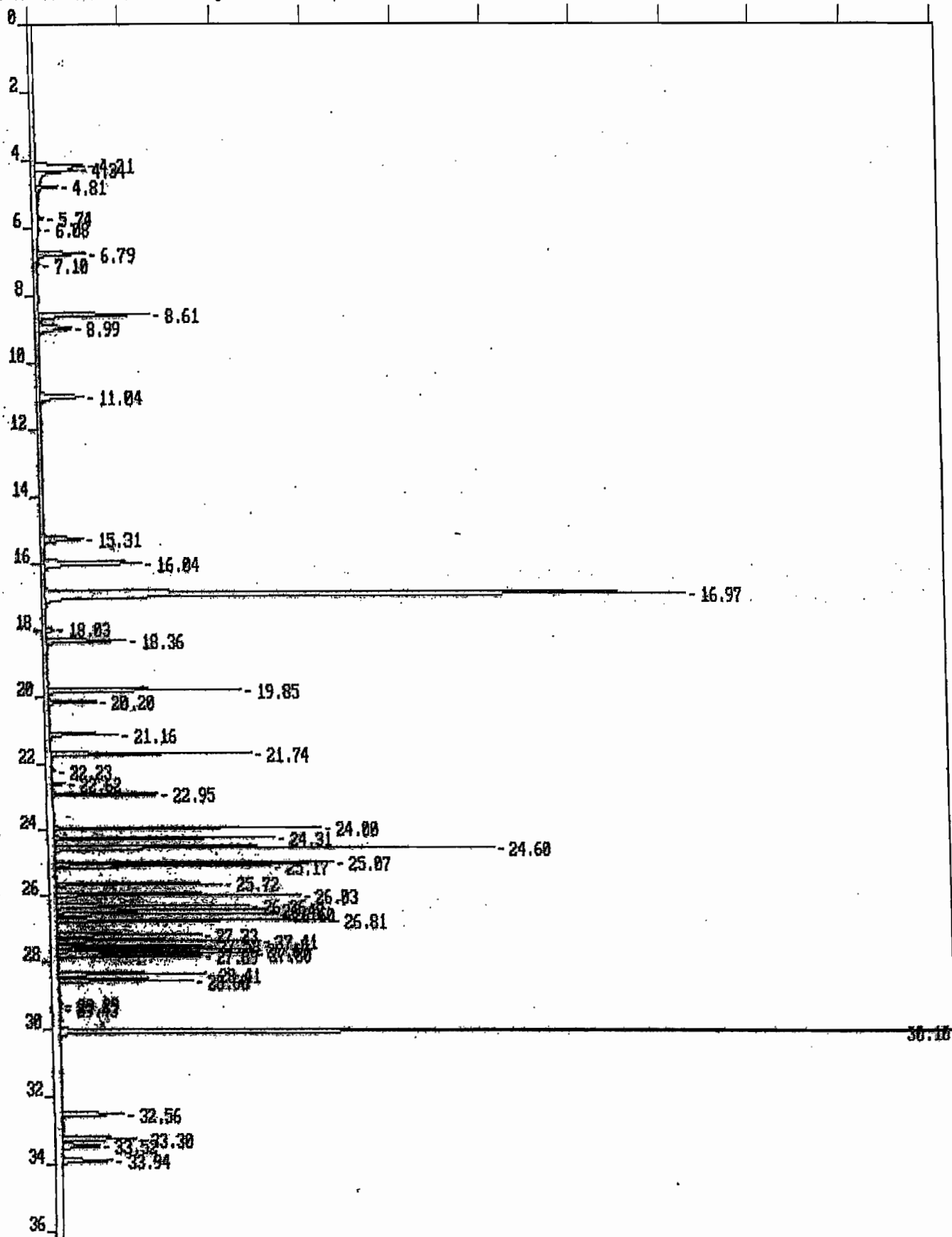
Date: 12-31-01

File=C:\CP\DATA1\18365B.04R Date printed=12-31-2001 Time= 04:10:31

Sample Name=CALSTD2

01365A188400,8401,8464

0.0 to 37.0 min. Low Y=0.004 High Y=15.004 mv Span=15.0



Sample Name: CALSTD2
 Batch: 01365A18 Date Taken: Dec 31, 2001 04:08:56
 Raw File: C:\CP\DATA1\18365B.04R
 Area File: C:\CP\DATA1\18365B.04A
 Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 3):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.339	4.355	VINYL CHLORIDE	1.9841	6075	702
6.791	6.783	1,1-DICHLOROETHENE	1.9424	4316	800
8.608	8.600	TRANS-1,2-DICHLOROET	1.9446	10582	1842
8.994	8.995	METHYL T-BUTYL ETHER	1.9887	4761	545
11.039	11.040	CIS-1,2-DICHLOROETHE	1.9378	5679	741
15.305	15.311	1,1-DICHLOROPROPENE	1.9563	4790	659
16.038	16.034	BENZENE	1.9412	11576	1615
16.972	16.968	ISTD-FBENZENE	1.0000	79950	10654
18.364	18.363	TRICHLOROETHENE	1.9603	6914	1320
19.854	19.859	2-CHLOROETHYL VINYL	6.5088	12954	3228
20.201	20.198	CIS-1,3-DICHLOROPROP	1.9199	3169	809
21.156	21.159	TRANS-1,3-DICHLOROPR	1.9053	4068	1161
21.741	21.740	TOLUENE	1.9918	11330	3359
22.949	22.948	TETRACHLOROETHENE	1.9675	5482	1755
23.998	23.998	CHLOROBENZENE	1.9648	11724	4469
24.312	24.312	ETHYLBENZENE	1.9823	10114	3686
24.604	24.604	M,P-XYLENE	3.9857	23547	7354
25.071	25.071	STYRENE	1.9758	12531	4646
25.172	25.172	O-XYLENE	1.9682	10287	3609
25.715	25.715	ISOPROPYLBENZENE	1.9861	8234	2783
26.034	26.034	BROMOBENZENE	1.9440	11805	4076
26.361	26.361	N-PROPYLBENZENE	1.9841	9360	3220
26.485	26.485	2-CHLOROTOLUENE	1.9780	10322	3530
26.604	26.605	4-CHLOROTOLUENE	1.9685	10593	3702
26.809	26.808	1,3,5-TRIMETHYLBENZE	1.9819	13620	4555
27.232	27.233	TERT-BUTYLBENZENE	1.9860	7962	2409
27.414	27.415	1,2,4-TRIMETHYLBENZE	1.9818	10343	3400
27.582	27.582	SEC-BUTYLBENZENE	1.9686	8144	2448
27.688	27.689	1,3-DICHLOROBENZENE	1.9489	10117	3257
27.804	27.805	1,4-DICHLOROBENZENE	1.9724	10109	3291
27.889	27.889	P-ISOPROPYLTOLUENE	1.9707	7865	2401
28.414	28.414	1,2-DICHLOROBENZENE	1.9503	8208	2449
28.602	28.602	N-BUTYLBENZENE	1.9380	7810	2247
30.098	30.097	SURR-1B4CB-P	18.7709	97067	25762
32.555	32.552	1,2,4-TRICHLOROBENZE	1.8981	5023	1042
33.301	33.306	NAPHTHALENE	1.9635	6126	1241
33.520	33.520	HEXACHLOROBUTADIENE	1.8543	3638	630
33.943	33.948	1,2,3-TRICHLOROBENZE	1.8658	4601	853

XYLENES (Total): 5.9539

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 62.5697%

Chrom Perfect version 6.07

Reported on 12-31-2001at 04:11:59

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 3

Updated from file = C:\CP\DATA1\18365B.04A

Amount injected = 1

Standard amount injected = 1

Calibration level = 2 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD2

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.04R

Reviewed by:

PLS

Verified by:

SKPLOSS

Date:

12-31-01

Date:

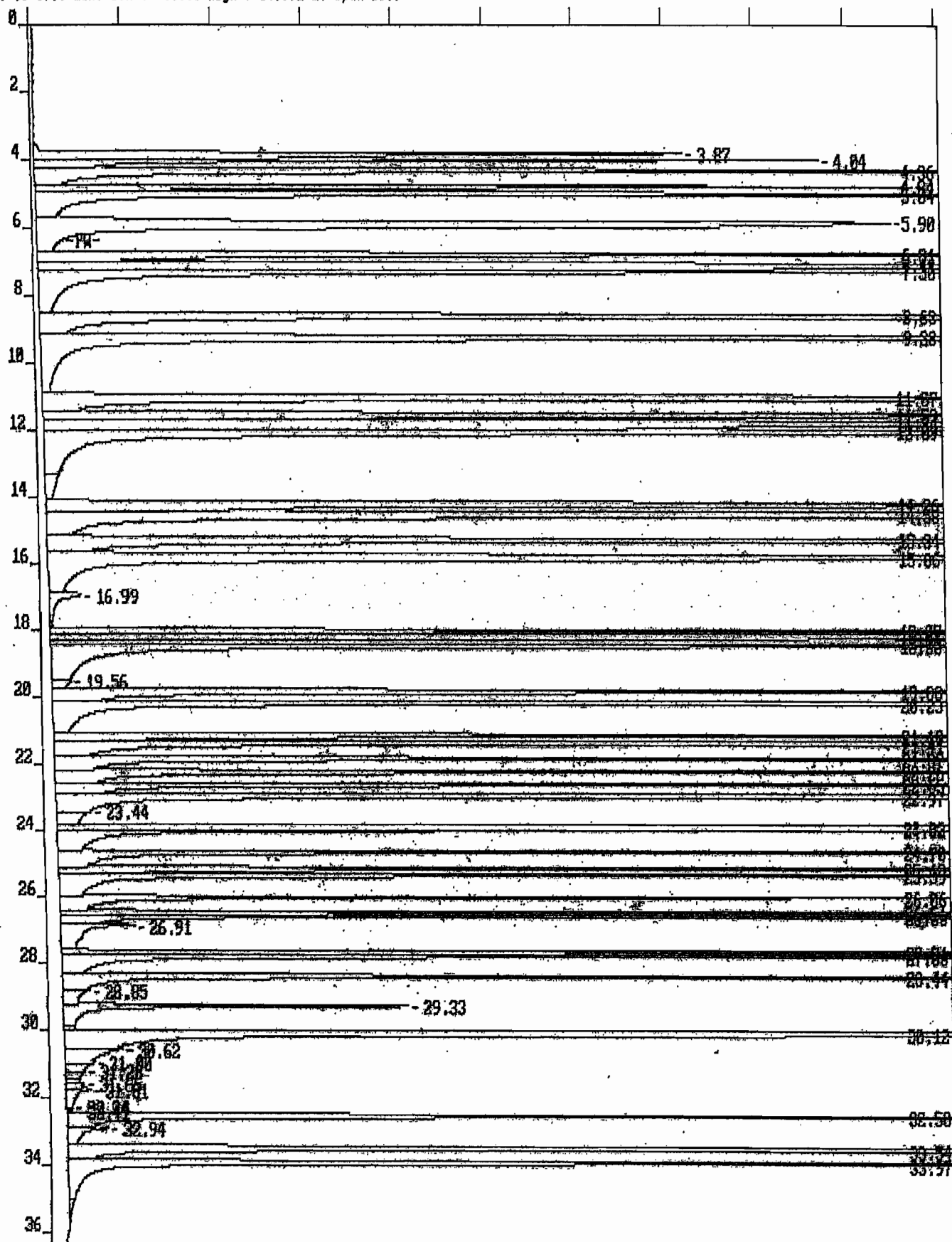
12-31-01

File=C:\CP\DATA1\18365.05R Date printed=12-31-2001 Time= 04:52:17

Sample Name=CALSTD3

01365A188400,8401,8464

0.0 to 37.0 min. Low Y=-0.008 High Y=14.992 mv Span=15.0



Sample Name: CALSTD3

Batch: 01365A18

Date Taken: Dec 31, 2001 04:52:12

Raw File: C:\CP\DATA1\18365.05R

Area File: C:\CP\DATA1\18365.05A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 4):

Ret Time	Expected	RT (min)	Peak Name	Amount *	Peak	Peak
(min)				(ug/L)	Area	Height
3.867		3.875	DICHLORODIFLUOROMETH	6.7911	76466	10743
4.042		4.044	CHLOROMETHANE	9.1361	79269	12994
4.363		4.369	VINYL CHLORIDE	6.2293	144305	19605
4.835		4.840	BROMOMETHANE	6.3969	77695	14529
5.037		5.043	CHLOROETHANE	7.1489	146354	22859
5.895		5.902	TRICHLOROFLUOROMETHA	6.2188	201184	14148
6.813		6.821	1,1-DICHLOROETHENE	6.2613	161286	24834
7.121		7.127	METHYLENE CHLORIDE	6.1951	256391	43774
7.302		7.309	TRICHLOROTRIFLUOROET	6.3150	208674	19458
8.634		8.638	TRANS-1,2-DICHLOROET	6.1260	240889	33605
9.281		9.286	1,1-DICHLOROETHANE	6.0251	262307	28895
11.068		11.072	CIS-1,2-DICHLOROETHE	6.1568	234314	27222
11.587		11.592	BROMOCHLOROMETHANE	5.8879	157153	19203
11.841		11.845	CHLOROFORM	5.9662	306588	32948
12.089		12.091	2,2-DICHLOROPROPANE	6.0251	236632	17531
14.261		14.264	1,2-DICHLOROETHANE	6.2724	204888	25397
14.575		14.577	1,1,1-TRICHLOROETHAN	5.9495	289682	26789
15.337		15.339	1,1-DICHLOROPROPENE	6.3026	207073	23620
15.856		15.858	CARBON TETRACHLORIDE	5.9732	332840	32965
18.067		18.070	DIBROMOMETHANE	5.6381	89666	15270
18.236		18.238	1,2-DICHLOROPROPANE	6.0640	198344	30647
18.392		18.393	TRICHLOROETHENE	6.2480	255062	43601
18.499		18.500	BROMODICHLOROMETHANE	5.9282	261995	36295
19.880		19.883	2-CHLOROETHYL VINYL	20.3889	210343	40003
20.227		20.229	CIS-1,3-DICHLOROPROP	6.0253	218957	39446
21.182		21.185	TRANS-1,3-DICHLOROPR	6.0214	170776	37967
21.410		21.411	1,1,2-TRICHLOROETHAN	6.2540	229975	46031
21.871		21.874	1,3-DICHLOROPROPANE	6.4454	180811	38514
22.255		22.258	DIBROMOCHLOROMETHANE	5.9183	153554	31383
22.650		22.655	1,2-DIBROMOETHANE	5.8542	96665	19973
22.973		22.975	TETRACHLOROETHENE	6.3506	276721	61600
23.922		23.924	1,1,1,2-TETRACHLOROE	6.2300	247800	65349
24.020		24.023	CHLOROBENZENE	6.3709	142402	30287
24.703		24.706	BROMOFORM	5.8242	97341	19716
25.190		25.193	1,1,2,2-TETRACHLOROE	6.3035	147849	35634
25.394		25.397	1,2,3-TRICHLOROPROPA	6.2163	136165	27903
26.061		26.065	BROMOBENZENE	5.9971	74331	14907
26.509		26.512	2-CHLOROTOLUENE	6.3459	84626	21453
26.628		26.631	4-CHLOROTOLUENE	6.2582	96793	21699
27.713		27.716	1,3-DICHLOROBENZENE	6.3324	126897	31803
27.827		27.830	1,4-DICHLOROBENZENE	6.3800	165086	34111
28.438		28.442	1,2-DICHLOROBENZENE	6.3046	146568	30507
29.325		29.330	1,2-DIBROMO-3-CHLORO	5.6735	38805	5744
30.123		30.127	SURR-1B4CB-H	35.8508	534372	105963
32.580		32.585	1,2,4-TRICHLOROBENZE	6.1486	127629	21342
33.543		33.548	HEXACHLOROBUTADIENE	5.8543	173638	25550
33.969		33.974	1,2,3-TRICHLOROBENZE	6.1148	130738	18027
			TOTAL 1,2-DICHLOROETHENE:	12.2828		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 119.5025%

Sample name: CALSTD3

Batch: 01365A188400,840

Raw file: C:\CP\DATA1\18365.05R

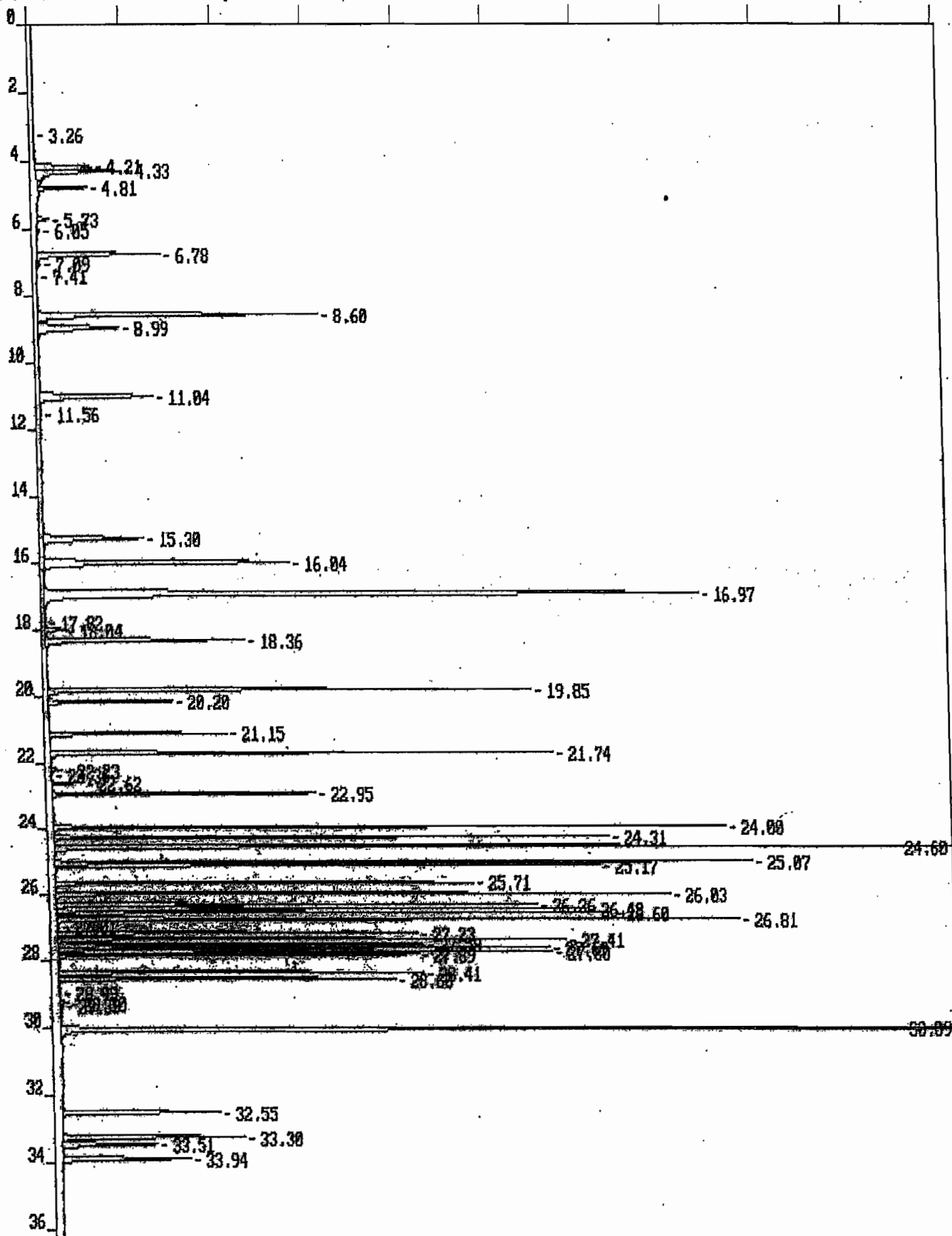
Reviewed by: Plus

Verified by: SKP L088

Date: 12-31-01

Date: 12-31-01

File-C:\CP\DATA1\18365B.05R Date printed=12-31-2001 Time= 04:53:47
Sample Name=CALSTD3 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=-0.001 High Y=14.999 mv Span=15.0



Sample Name: CALSTD3

Batch: 01365A18

Date Taken: Dec 31, 2001 04:52:12

Raw File: C:\CP\DATA1\18365B.05R

Area File: C:\CP\DATA1\18365B.05A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 4):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.333	4.339	VINYL CHLORIDE	3.9707	9846	1379
6.783	6.791	1,1-DICHLOROETHENE	4.8335	10551	2008
8.604	8.608	TRANS-1,2-DICHLOROET	4.8231	26233	4608
8.991	8.994	METHYL T-BUTYL ETHER	4.7626	11442	1325
11.036	11.039	CIS-1,2-DICHLOROETHE	4.7891	13678	1853
15.304	15.305	1,1-DICHLOROPROPENE	4.8261	12214	1644
16.038	16.038	BENZENE	4.8309	29348	4056
16.971	16.972	ISTD-FBENZENE	1.0000	82303	10847
18.362	18.364	TRICHLOROETHENE	4.8440	17535	3302
19.852	19.854	2-CHLOROETHYL VINYL	15.9861	32321	8054
20.199	20.201	CIS-1,3-DICHLOROPROP	4.8155	7887	2053
21.154	21.156	TRANS-1,3-DICHLOROPR	4.7763	9878	2944
21.740	21.741	TOLUENE	4.9026	28069	8356
22.947	22.949	TETRACHLOROETHENE	4.8333	13367	4365
23.996	23.998	CHLOROBENZENE	4.8684	29121	11187
24.311	24.312	ETHYLBENZENE	4.9023	24983	9214
24.602	24.604	M,P-XYLENE	9.8417	58485	18353
25.068	25.071	STYRENE	4.8905	31308	11628
25.170	25.172	O-XYLENE	4.8821	25697	9045
25.713	25.715	ISOPROPYLBENZENE	4.9081	20806	6954
26.032	26.034	BROMOBENZENE	4.8338	29554	10248
26.359	26.361	N-PROPYLBENZENE	4.8855	23228	8021
26.483	26.485	2-CHLOROTOLUENE	4.8852	25759	8810
26.602	26.604	4-CHLOROTOLUENE	4.8635	26381	9253
26.806	26.809	1,3,5-TRIMETHYLBENZE	4.8952	34008	11373
27.229	27.232	TERT-BUTYLBENZENE	4.8842	19779	5993
27.411	27.414	1,2,4-TRIMETHYLBENZE	4.8859	25847	8480
27.579	27.582	SEC-BUTYLBENZENE	4.8557	20319	6105
27.686	27.688	1,3-DICHLOROBENZENE	4.8420	25404	8200
27.801	27.804	1,4-DICHLOROBENZENE	4.8529	25134	8223
27.886	27.889	P-ISOPROPYLTOLUENE	4.8620	19523	5991
28.411	28.414	1,2-DICHLOROBENZENE	4.7830	20301	6091
28.598	28.602	N-BUTYLBENZENE	4.7888	19399	5620
30.094	30.098	SURR-1B4CB-P	28.4200	149043	39607
32.550	32.555	1,2,4-TRICHLOROBENZE	4.7036	12430	2633
33.296	33.301	NAPHTHALENE	4.7161	15044	3060
33.511	33.520	HEXACHLOROBUTADIENE	4.6026	8939	1574
33.937	33.943	1,2,3-TRICHLOROBENZE	4.5965	11285	2141

XYLENES (Total): 14.7239

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 94.7334%

Chrom Perfect version 6.07

Reported on 12-31-2001 at 04:55:15

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 4

Updated from file = C:\CP\DATA1\18365B.05A

Amount injected = 1

Standard amount injected = 1

Calibration level = 3 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD3

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.05R

Reviewed by:

Bus

Verified by:

S/CP/088

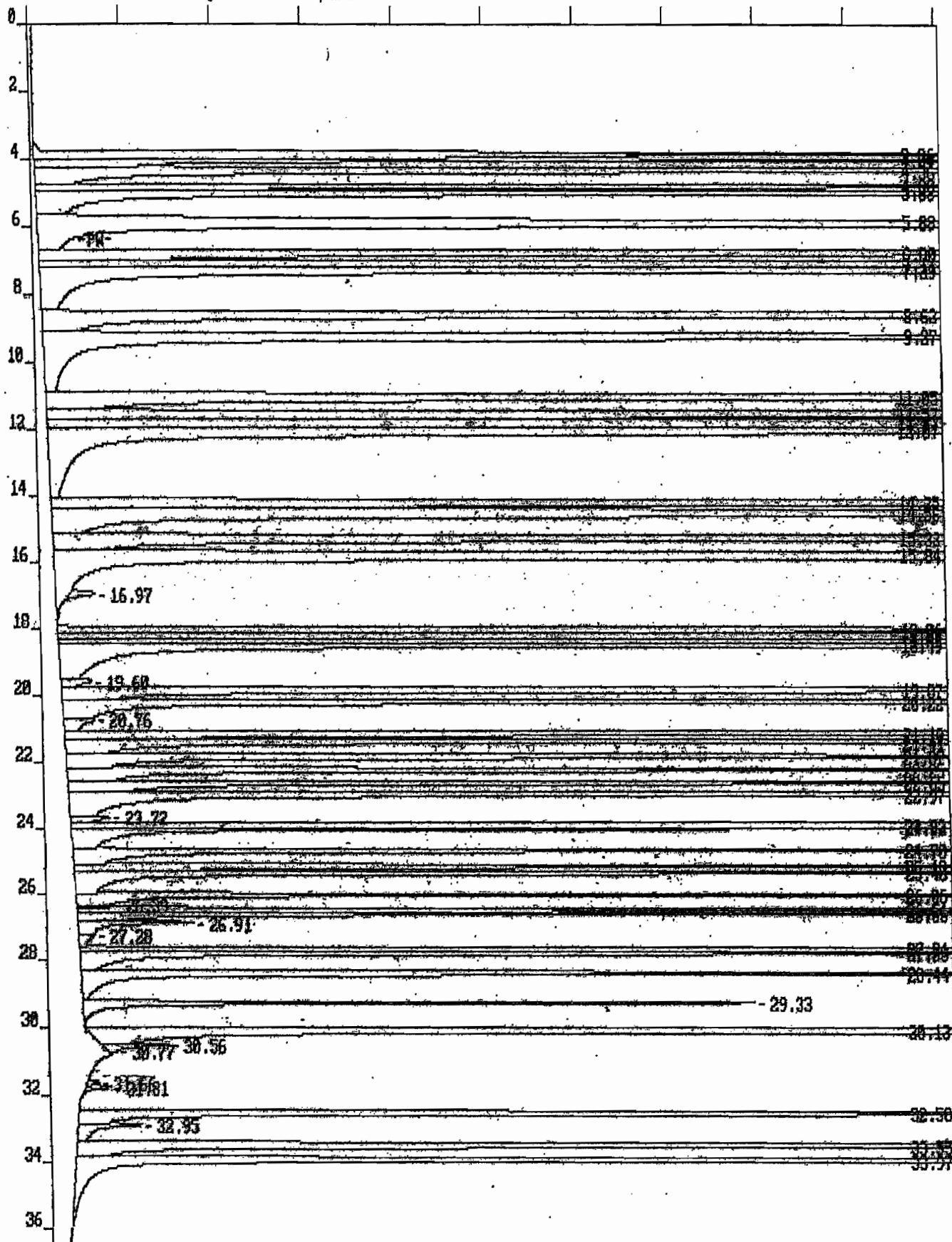
Date:

12-31-01

Date:

12-31-01

File=C:\CP\DATA\18365.06R Date printed=12-31-2001 Time= 05:35:06
Sample Name=CALSTD4 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.01 High Y=15.01 mv Span=15.0



Sample Name: CALSTD4

Batch: 01365A18

Date Taken: Dec 31, 2001 05:35:00

Raw File: C:\CP\DATA1\18365.06R

Area File: C:\CP\DATA1\18365.06A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 5):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area Height
3.861	3.867	DICHLORODIFLUOROMETH	11.5670	139322 19615
4.041	4.042	CHLOROMETHANE	13.7642	136726 22769
4.363	4.363	VINYL CHLORIDE	11.0204	262016 36095
4.831	4.835	BROMOMETHANE	11.3711	144159 27150
5.031	5.037	CHLOROETHANE	12.3304	262780 42762
5.885	5.895	TRICHLOROFLUOROMETHA	11.3387	370530 26856
6.804	6.813	1,1-DICHLOROETHENE	11.5820	305222 47933
7.113	7.121	METHYLENE CHLORIDE	11.0546	475324 81989
7.294	7.302	TRICHLOROTRIFLUOROET	11.3877	379205 36766
8.623	8.634	TRANS-1,2-DICHLOROET	11.4713	455692 65100
9.270	9.281	1,1-DICHLOROETHANE	11.2141	484905 55360
11.054	11.068	CIS-1,2-DICHLOROETHE	11.4586	448230 52494
11.571	11.587	BROMOCHLOROMETHANE	11.2683	307282 37745
11.827	11.841	CHLOROFORM	11.1711	583081 63287
12.073	12.089	2,2-DICHLOROPROPANE	11.3042	446094 33878
14.246	14.261	1,2-DICHLOROETHANE	12.0147	405491 50670
14.562	14.575	1,1,1-TRICHLOROETHAN	11.3625	554646 52436
15.323	15.337	1,1-DICHLOROPROPENE	11.9558	400262 46641
15.843	15.856	CARBON TETRACHLORIDE	11.3298	635242 63891
18.057	18.067	DIBROMOMETHANE	11.3097	182388 31181
18.230	18.236	1,2-DICHLOROPROPANE	11.4476	389856 59320
18.384	18.392	TRICHLOROETHENE	11.5538	488758 83644
18.493	18.499	BROMODICHLOROMETHANE	11.1167	479290 69772
19.874	19.880	2-CHLOROETHYL VINYL	38.6026	402704 78680
20.223	20.227	CIS-1,3-DICHLOROPROP	11.3990	393477 76464
21.179	21.182	TRANS-1,3-DICHLOROPR	11.5206	326685 74190
21.407	21.410	1,1,2-TRICHLOROETHAN	11.6048	425816 88246
21.870	21.871	1,3-DICHLOROPROPANE	11.9901	337210 74666
22.254	22.255	DIBROMOCHLOROMETHANE	11.2238	282530 60888
22.648	22.650	1,2-DIBROMOETHANE	11.1423	179204 38959
22.973	22.973	TETRACHLOROETHENE	11.4760	510656 115786
23.923	23.922	1,1,1,2-TETRACHLOROE	11.2015	459269 121250
24.021	24.020	CHLOROBENZENE	11.2785	244831 55839
24.702	24.703	BROMOFORM	11.0467	174911 38242
25.191	25.190	1,1,2,2-TETRACHLOROE	11.2783	268837 66267
25.395	25.394	1,2,3-TRICHLOROPROPA	11.0625	232247 51410
26.061	26.061	BROMOBENZENE	11.4045	132205 29250
26.510	26.509	2-CHLOROTOLUENE	11.8434	160869 41801
26.629	26.628	4-CHLOROTOLUENE	11.7151	179071 42238
27.713	27.713	1,3-DICHLOROBENZENE	11.5366	236008 60401
27.828	27.827	1,4-DICHLOROBENZENE	11.3958	289721 63655
28.440	28.438	1,2-DICHLOROBENZENE	11.4287	266768 57647
29.326	29.325	1,2-DIBROMO-3-CHLORO	10.7564	60650 11120
30.125	30.123	SURR-1B4CB-H	43.7339	664960 134073
32.584	32.580	1,2,4-TRICHLOROBENZE	11.3801	238631 41184
33.548	33.543	HEXACHLOROBUTADIENE	10.9251	325717 49003
33.973	33.969	1,2,3-TRICHLOROBENZE	11.3305	240880 34863
		TOTAL 1,2-DICHLOROETHENE:	22.9300	

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 145.7795%

Sample name: CALSTD4

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365.06R

Reviewed by:

TB 46

Verified by:

SKP 688

Date:

12-31-01

Date:

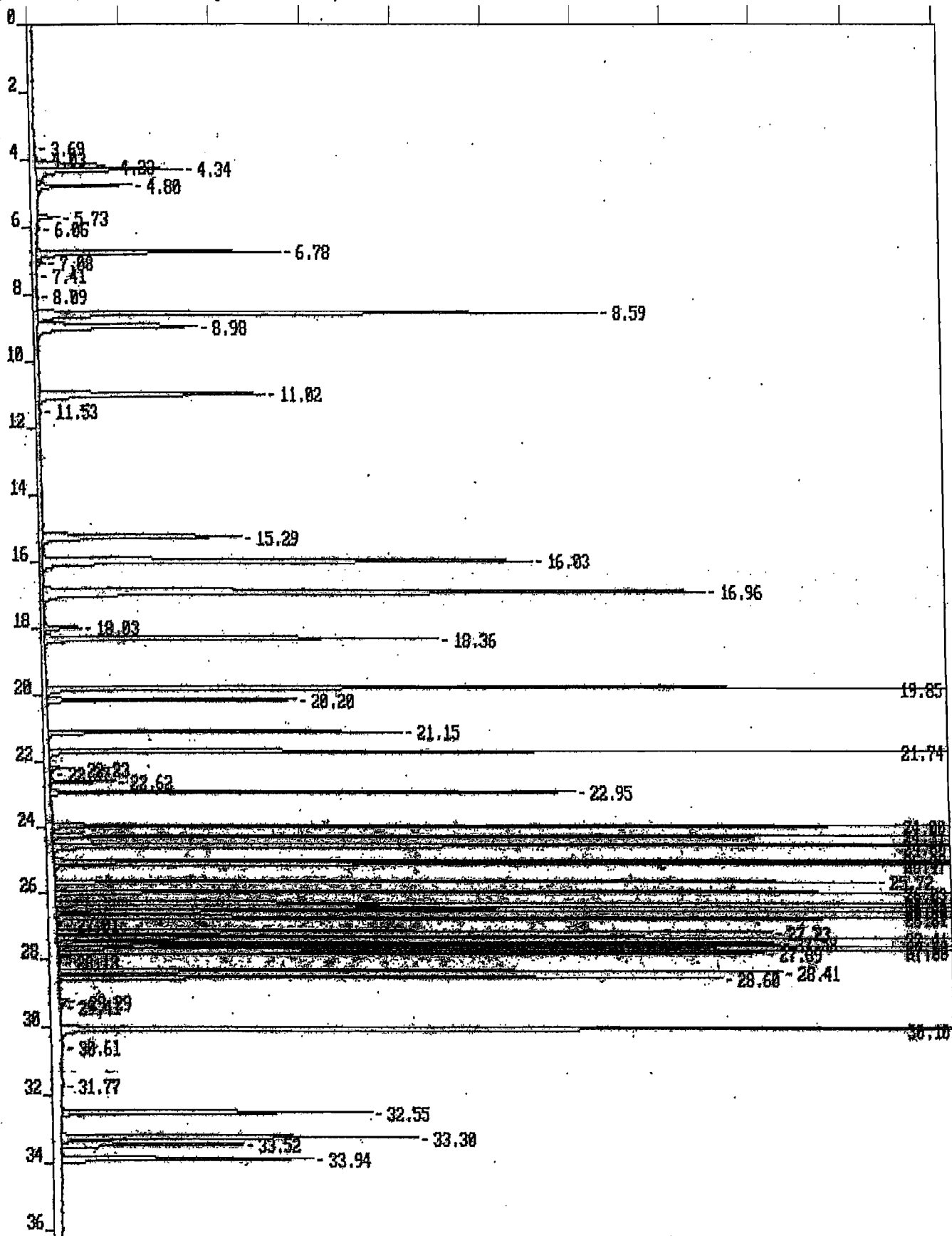
12-31-01

File=C:\CP\DATA\183658.06R Date printed=12-31-2001 Time= 05:36:36

Sample Name=CALSTD4

01365A188400,8401,8464

0.0 to 37.0 min. Low Y=0.005 High Y=15.005 mv Span=15.0



Sample Name: CALSTD4

Batch: 01365A18

Date Taken: Dec 31, 2001 05:35:00

Raw File: C:\CP\DATA1\18365B.06R

Area File: C:\CP\DATA1\18365B.06A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 5):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.336	4.333	VINYL CHLORIDE	6.9444	16515	2426
6.775	6.783	1,1-DICHLOROETHENE	9.6904	21032	4045
8.593	8.604	TRANS-1,2-DICHLOROET	9.6487	52713	9267
8.983	8.991	METHYL T-BUTYL ETHER	9.4708	23221	2652
11.023	11.036	CIS-1,2-DICHLOROETHE	9.5776	27606	3729
15.293	15.304	1,1-DICHLOROPROPENE	9.6071	24306	3291
16.025	16.038	BENZENE	9.6334	58468	8130
16.961	16.971	ISTD-FBENZENE	1.0000	83137	10998
18.356	18.362	TRICHLOROETHENE	9.5395	34335	6541
19.846	19.852	2-CHLOROETHYL VINYL	31.7589	64581	16077
20.196	20.199	CIS-1,3-DICHLOROPROP	9.6854	15919	4152
21.151	21.154	TRANS-1,3-DICHLOROPR	9.5402	19688	5902
21.738	21.740	TOLUENE	9.6611	55564	16553
22.947	22.947	TETRACHLOROETHENE	9.5793	26609	8712
23.997	23.996	CHLOROBENZENE	9.6080	57666	22220
24.312	24.311	ETHYLBENZENE	9.6420	49272	18233
24.603	24.602	M,P-XYLENE	19.2648	115252	36140
25.070	25.068	STYRENE	9.6511	62091	23085
25.171	25.170	O-XYLENE	9.7117	51517	18092
25.715	25.713	ISOPROPYLBENZENE	9.6085	40949	13700
26.033	26.032	BROMOBENZENE	9.5589	58335	20395
26.361	26.359	N-PROPYLBENZENE	9.5422	45699	15777
26.484	26.483	2-CHLOROTOLUENE	9.5982	50791	17414
26.603	26.602	4-CHLOROTOLUENE	9.5732	52047	18342
26.807	26.806	1,3,5-TRIMETHYLBENZE	9.5908	66749	22433
27.231	27.229	TERT-BUTYLBENZENE	9.6402	39100	11897
27.412	27.411	1,2,4-TRIMETHYLBENZE	9.5844	51000	16736
27.581	27.579	SEC-BUTYLBENZENE	9.5065	39847	12025
27.687	27.686	1,3-DICHLOROBENZENE	9.4788	50204	16170
27.802	27.801	1,4-DICHLOROBENZENE	9.5361	50150	16292
27.888	27.886	P-ISOPROPYLTOLUENE	9.4792	37956	11758
28.412	28.411	1,2-DICHLOROBENZENE	9.3980	39831	12049
28.600	28.598	N-BUTYLBENZENE	9.3482	37781	11051
30.097	30.094	SURR-1B4CB-P	38.1926	201016	53624
32.555	32.550	1,2,4-TRICHLOROBENZE	9.1860	24538	5188
33.302	33.296	NAPHTHALENE	9.0687	29167	5940
33.518	33.511	HEXACHLOROBUTADIENE	8.8875	17200	3049
33.944	33.937	1,2,3-TRICHLOROBENZE	8.9547	22185	4204

XYLENES (Total): 28.9766

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 127.3088%

Chrom Perfect version 6.07

Reported on 12-31-2001at 05:38:05

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 5

Updated from file = C:\CP\DATA1\18365B.06A

Amount injected = 1

Standard amount injected = 1

Calibration level = 4 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD4

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.06R

Reviewed by:

TJ 65

Verified by:

SLCP LAPP

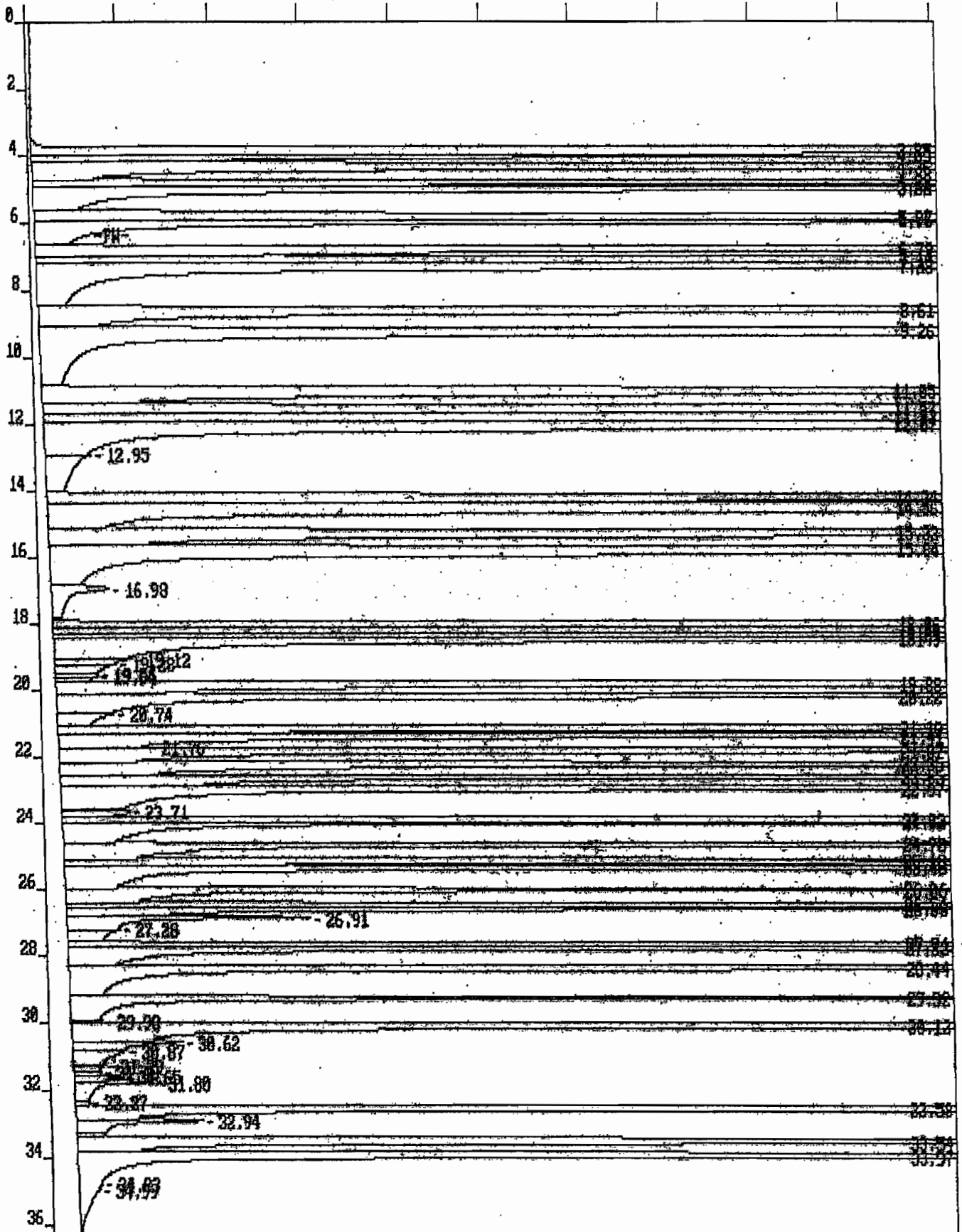
Date:

12-31-01

Date:

12-31-01

File=C:\CP\DATA1\18365.07R Date printed=12-31-2001 Time= 06:18:18
Sample Name=CALSTD5 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.018 High Y=15.018 mv Span=15.0



Sample Name: CALSTD5
 Batch: 01365A18 Date Taken: Dec 31, 2001 06:18:14
 Raw File: C:\CP\DATA1\18365.07R
 Area File: C:\CP\DATA1\18365.07A
 Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 6):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.847	3.861	DICHLORODIFLUOROMETH	22.3138	282366	39650
4.035	4.041	CHLOROMETHANE	21.6536	250739	40151
4.359	4.363	VINYL CHLORIDE	19.9973	489100	67692
4.821	4.831	BROMOMETHANE	20.5357	275445	50999
5.018	5.031	CHLOROETHANE	22.2300	498144	82356
5.873	5.885	TRICHLOROFLUOROMETHA	19.2909	300324	46791
6.793	6.804	1,1-DICHLOROETHENE	20.6136	574348	88470
7.101	7.113	METHYLENE CHLORIDE	19.3771	891560	149507
7.282	7.294	TRICHLOROTRIFLUOROET	20.4582	693880	68584
8.611	8.623	TRANS-1,2-DICHLOROET	21.0604	857497	123282
9.260	9.270	1,1-DICHLOROETHANE	20.9982	911995	105997
11.047	11.054	CIS-1,2-DICHLOROETHE	21.2892	848667	100220
11.566	11.571	BROMOCHLOROMETHANE	20.9810	582485	71920
11.822	11.827	CHLOROFORM	20.5205	1101948	118933
12.070	12.073	2,2-DICHLOROPROPANE	19.7036	768743	60508
14.245	14.246	1,2-DICHLOROETHANE	21.6282	759919	94853
14.562	14.562	1,1,1-TRICHLOROETHAN	20.3912	1015978	96193
15.323	15.323	1,1-DICHLOROPROPENE	21.0685	733299	85443
15.844	15.843	CARBON TETRACHLORIDE	20.3817	1154496	117737
18.058	18.057	DIBROMOMETHANE	21.0639	346039	59507
18.230	18.230	1,2-DICHLOROPROPANE	21.1852	732976	113101
18.386	18.384	TRICHLOROETHENE	20.2147	891434	151234
18.494	18.493	BROMODICHLOROMETHANE	20.4577	875329	131533
19.876	19.874	2-CHLOROETHYL VINYL	69.3340	753730	146925
20.224	20.223	CIS-1,3-DICHLOROPROP	20.9788	735117	143865
21.180	21.179	TRANS-1,3-DICHLOROPR	21.1012	613374	139197
21.409	21.407	1,1,2-TRICHLOROETHAN	20.6199	772813	162121
21.871	21.870	1,3-DICHLOROPROPANE	20.9848	614024	136427
22.254	22.254	DIBROMOCHLOROMETHANE	21.2200	540691	117780
22.649	22.648	1,2-DIBROMOETHANE	21.1847	345019	75740
22.974	22.973	TETRACHLOROETHENE	20.5198	937280	213583
23.924	23.923	1,1,1,2-TETRACHLOROE	21.1542	877094	234179
24.022	24.021	CHLOROBENZENE	21.0048	463688	107553
24.702	24.702	BROMOFORM	21.4926	344105	75917
25.191	25.191	1,1,2,2-TETRACHLOROE	20.5318	507413	125069
25.395	25.395	1,2,3-TRICHLOROPROPA	21.0107	449391	100620
26.061	26.061	BROMOBENZENE	22.1641	264861	58309
26.510	26.510	2-CHLOROTOLUENE	22.0977	312517	80978
26.629	26.629	4-CHLOROTOLUENE	21.6894	340942	81041
27.713	27.713	1,3-DICHLOROBENZENE	21.7206	460257	117702
27.828	27.828	1,4-DICHLOROBENZENE	21.2217	558148	122697
28.439	28.440	1,2-DICHLOROBENZENE	21.9603	536186	114588
29.324	29.326	1,2-DIBROMO-3-CHLORO	22.5011	142401	23814
30.124	30.125	SURR-1B4CB-H	54.3021	860506	171097
32.579	32.584	1,2,4-TRICHLOROBENZE	21.3420	462840	79739
33.544	33.548	HEXACHLOROBUTADIENE	19.2651	588735	88068
33.969	33.973	1,2,3-TRICHLOROBENZE	21.2739	470813	67695
		TOTAL 1,2-DICHLOROETHENE:	42.3497		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 181.0070%

Sample name: CALSTD5

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365.07R

Reviewed by:

TS 45

Verified by:

SLP LAB

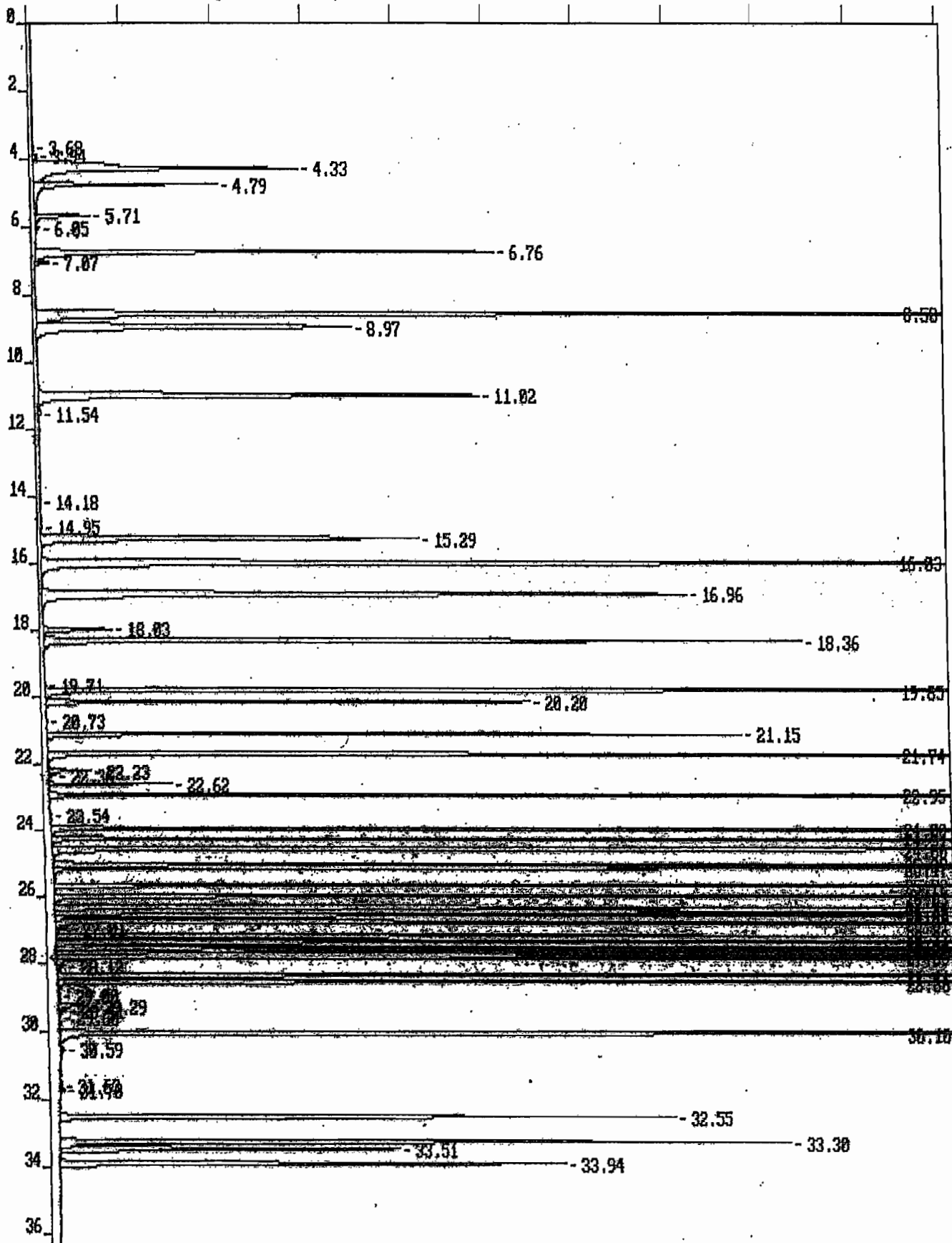
Date:

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Date:

12-31-01

File=C:\CP\DATA1\183658.07R Date printed=12-31-2001 Time= 06:19:47
Sample Name=CALSTD5 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.013 High Y=15.013 mv Span=15.0



Sample Name: CALSTD5

Batch: 01365A18

Date Taken: Dec 31, 2001 06:18:14

Raw File: C:\CP\DATA1\18365B.07R

Area File: C:\CP\DATA1\18365B.07A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 6):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
4.331	4.336	VINYL CHLORIDE	12.8694	39240	4361
6.765	6.775	1,1-DICHLOROETHENE	18.9124	40830	7579
8.582	8.593	TRANS-1,2-DICHLOROET	19.5042	103120	18018
8.972	8.983	METHYL T-BUTYL ETHER	19.2191	45866	5204
11.017	11.023	CIS-1,2-DICHLOROETHE	19.4263	53882	7276
15.293	15.293	1,1-DICHLOROPROPENE	18.9719	46369	6253
16.029	16.025	BENZENE	19.2872	112628	15676
16.962	16.961	ISTD-FBENZENE	1.0000	80543	10671
18.357	18.356	TRICHLOROETHENE	18.9620	65074	12540
19.848	19.846	2-CHLOROETHYL VINYL	63.1644	124291	30930
20.198	20.196	CIS-1,3-DICHLOROROP	19.4024	30407	8032
21.153	21.151	TRANS-1,3-DICHLOROPR	19.3073	38101	11533
21.739	21.738	TOLUENE	19.1153	106353	31575
22.949	22.947	TETRACHLOROETHENE	18.9911	50791	16683
23.999	23.997	CHLOROBENZENE	19.2477	111027	42937
24.312	24.312	ETHYLBENZENE	19.0690	94237	34797
24.604	24.603	M,P-XYLENE	38.1223	220811	69052
25.070	25.070	STYRENE	19.3145	119976	44588
25.172	25.171	O-XYLENE	19.5381	99853	35102
25.715	25.715	ISOPROPYLBENZENE	19.0919	77985	26255
26.033	26.033	BROMOBENZENE	19.2463	113124	39661
26.361	26.361	N-PROPYLBENZENE	18.9204	87023	30187
26.484	26.484	2-CHLOROTOLUENE	19.2554	98044	33693
26.603	26.603	4-CHLOROTOLUENE	19.1994	100715	35528
26.808	26.807	1,3,5-TRIMETHYLBENZE	18.9617	128253	42771
27.232	27.231	TERT-BUTYLBENZENE	18.9618	74536	22577
27.413	27.412	1,2,4-TRIMETHYLBENZE	19.1579	98621	32265
27.581	27.581	SEC-BUTYLBENZENE	18.6139	75396	22706
27.687	27.687	1,3-DICHLOROBENZENE	19.3369	98026	31856
27.802	27.802	1,4-DICHLOROBENZENE	19.1704	97456	31672
27.888	27.888	P-ISOPROPYLTOLUENE	18.6969	72816	22362
28.413	28.412	1,2-DICHLOROBENZENE	19.2090	78315	23773
28.600	28.600	N-BUTYLBENZENE	18.2382	71711	20785
30.096	30.097	SURR-1B4CB-P	49.3573	251983	67001
32.550	32.555	1,2,4-TRICHLOROBENZE	18.8173	48574	10252
33.297	33.302	NAPHTHALENE	19.1668	59497	12141
33.515	33.518	HEXACHLOROBUTADIENE	17.2617	31999	5676
33.939	33.944	1,2,3-TRICHLOROBENZE	18.6275	44468	8427

XYLENES (Total): 57.6604

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 164.5243%

Chrom Perfect version 6.07

Reported on 12-31-2001at 06:21:16

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 6

Updated from file = C:\CP\DATA1\18365B.07A

Amount injected = 1

Standard amount injected = 1

Calibration level = 5 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD5

Batch: 01365A188400,840

Raw file: C:\CP\DATA1\18365B.07R

Reviewed by:

PKS

Verified by:

SKP C088

Date:

12-31-01

Date:

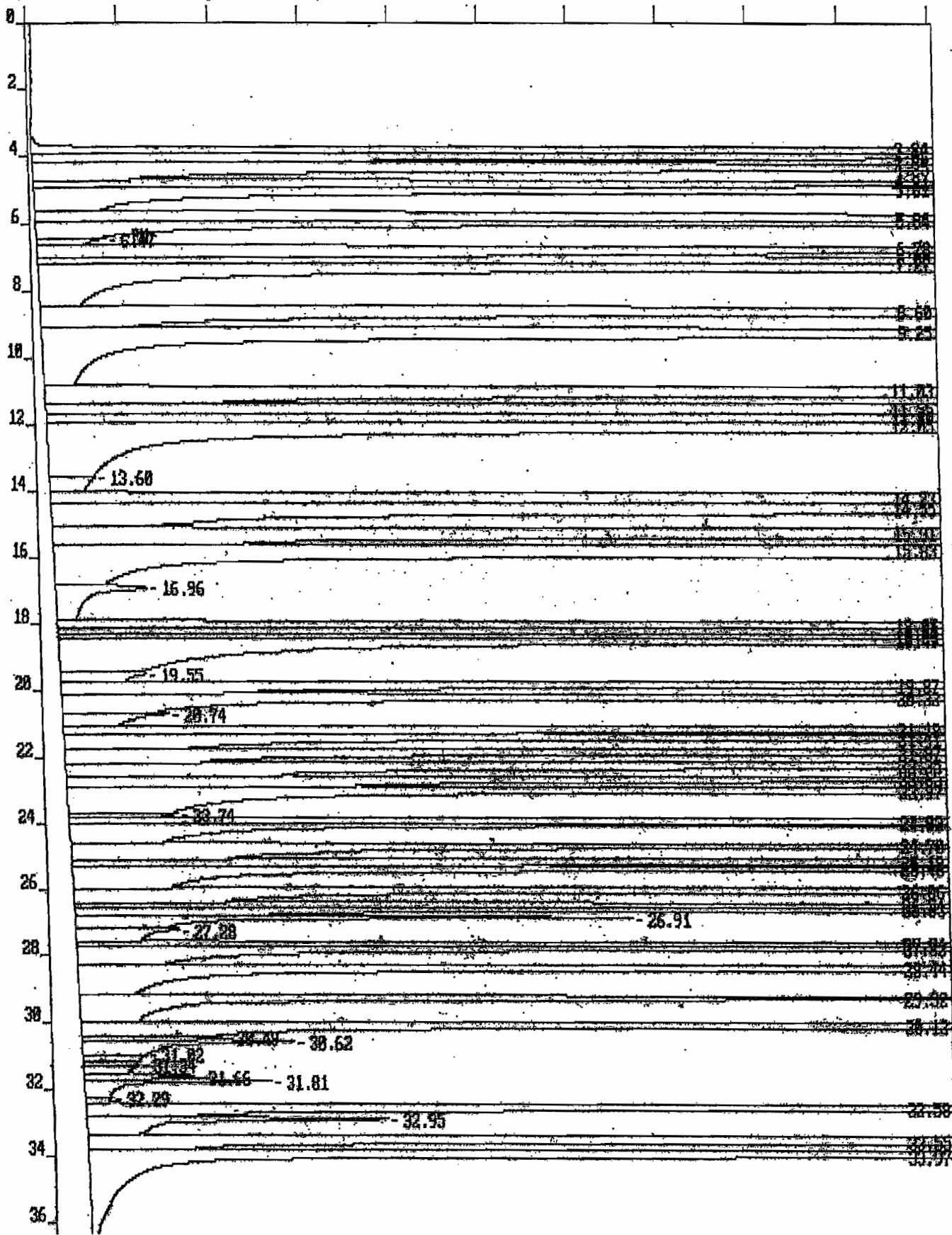
12-31-01

File=C:\CP\DATA1\18365.08R Date printed=12-31-2001 Time= 07:01:15

Sample Name=CALSTD6

01365A188400,8401,8464

0.0 to 37.0 min. Low Y=0.04 High Y=15.04 mv Span=15.0



Sample Name: CALSTD6

Batch: 01365A18

Date Taken: Dec 31, 2001 07:01:10

Raw File: C:\CP\DATA1\18365.08R

Area File: C:\CP\DATA1\18365.08A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 7):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
3.836	3.847	DICHLORODIFLUOROMETH	39.6050	510632	73527
4.036	4.035	CHLOROMETHANE	32.2469	434070	64790
4.352	4.359	VINYL CHLORIDE	33.5576	915397	116227
4.814	4.821	BROMOMETHANE	38.0814	531425	97200
5.010	5.018	CHLOROETHANE	39.6293	927936	155228
5.859	5.873	TRICHLOROFLUOROMETHA	37.7689	665393	91851
6.782	6.793	1,1-DICHLOROETHENE	47.6277	1335041	209107
7.091	7.101	METHYLENE CHLORIDE	43.8496	2043485	346844
7.273	7.282	TRICHLOROTRIFLUOROET	43.4513	1507783	150290
8.599	8.611	TRANS-1,2-DICHLOROET	47.4658	1971031	284527
9.246	9.260	1,1-DICHLOROETHANE	47.4037	2070230	244492
11.030	11.047	CIS-1,2-DICHLOROETHE	48.5502	1987471	234415
11.549	11.566	BROMOCHLOROMETHANE	49.2871	1401455	172260
11.805	11.822	CHLOROFORM	46.2539	2537817	272930
12.052	12.070	2,2-DICHLOROPROPANE	46.4775	1858731	145042
14.229	14.245	1,2-DICHLOROETHANE	49.2283	1800365	222673
14.547	14.562	1,1,1-TRICHLOROETHAN	46.2659	2363053	221981
15.310	15.323	1,1-DICHLOROPROPENE	47.7306	1705900	199136
15.832	15.844	CARBON TETRACHLORIDE	45.5774	2624753	267370
18.049	18.058	DIBROMOMETHANE	51.1749	872356	146808
18.223	18.230	1,2-DICHLOROPROPANE	47.7197	1714421	260854
18.378	18.386	TRICHLOROETHENE	46.0219	2077796	352205
18.487	18.494	BROMODICHLOROMETHANE	46.2560	2032992	302613
19.871	19.876	2-CHLOROETHYL VINYL	101.3369	1128536	220783
20.220	20.224	CIS-1,3-DICHLOROPROP	48.0943	1680651	335119
21.177	21.180	TRANS-1,3-DICHLOROPR	48.7659	1436451	328100
21.406	21.409	1,1,2-TRICHLOROETHAN	46.9572	1794891	378416
21.869	21.871	1,3-DICHLOROPROPANE	48.3053	1429510	323002
22.253	22.254	DIBROMOCHLOROMETHANE	50.0393	1280529	282632
22.647	22.649	1,2-DIBROMOETHANE	51.4188	842782	186781
22.973	22.974	TETRACHLOROETHENE	45.7475	2149703	489091
23.924	23.924	1,1,1,2-TETRACHLOROE	47.0497	2031671	533958
24.021	24.022	CHLOROBENZENE	47.3820	1034907	249702
24.701	24.702	BROMOFORM	51.7094	824946	185509
25.192	25.191	1,1,2,2-TETRACHLOROE	48.5644	1208752	302620
25.395	25.395	1,2,3-TRICHLOROPROPA	48.2497	1024480	236733
26.060	26.061	BROMOBENZENE	53.2593	636522	143620
26.511	26.510	2-CHLOROTOLUENE	49.7696	726384	188706
26.630	26.629	4-CHLOROTOLUENE	48.8060	778951	188375
27.715	27.713	1,3-DICHLOROBENZENE	49.3190	1085408	275615
27.830	27.828	1,4-DICHLOROBENZENE	47.7269	1256106	284505
28.440	28.439	1,2-DICHLOROBENZENE	49.2342	1215845	265424
29.323	29.324	1,2-DIBROMO-3-CHLORO	54.7480	344254	59485
30.124	30.124	SURR-1B4CB-H	64.4599	1043599	209612
32.581	32.579	1,2,4-TRICHLOROBENZE	50.5984	1118438	194496
33.546	33.544	HEXACHLOROBUTADIENE	45.5425	1403836	210706
33.971	33.969	1,2,3-TRICHLOROBENZE	48.9854	1081576	160656
		TOTAL 1,2-DICHLOROETHENE:	96.0160		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 214.8664%

Sample name: CALSTD6

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365.08R

Reviewed by: *MMH*

Verified by: *SKP*

Date: *12/31/01*

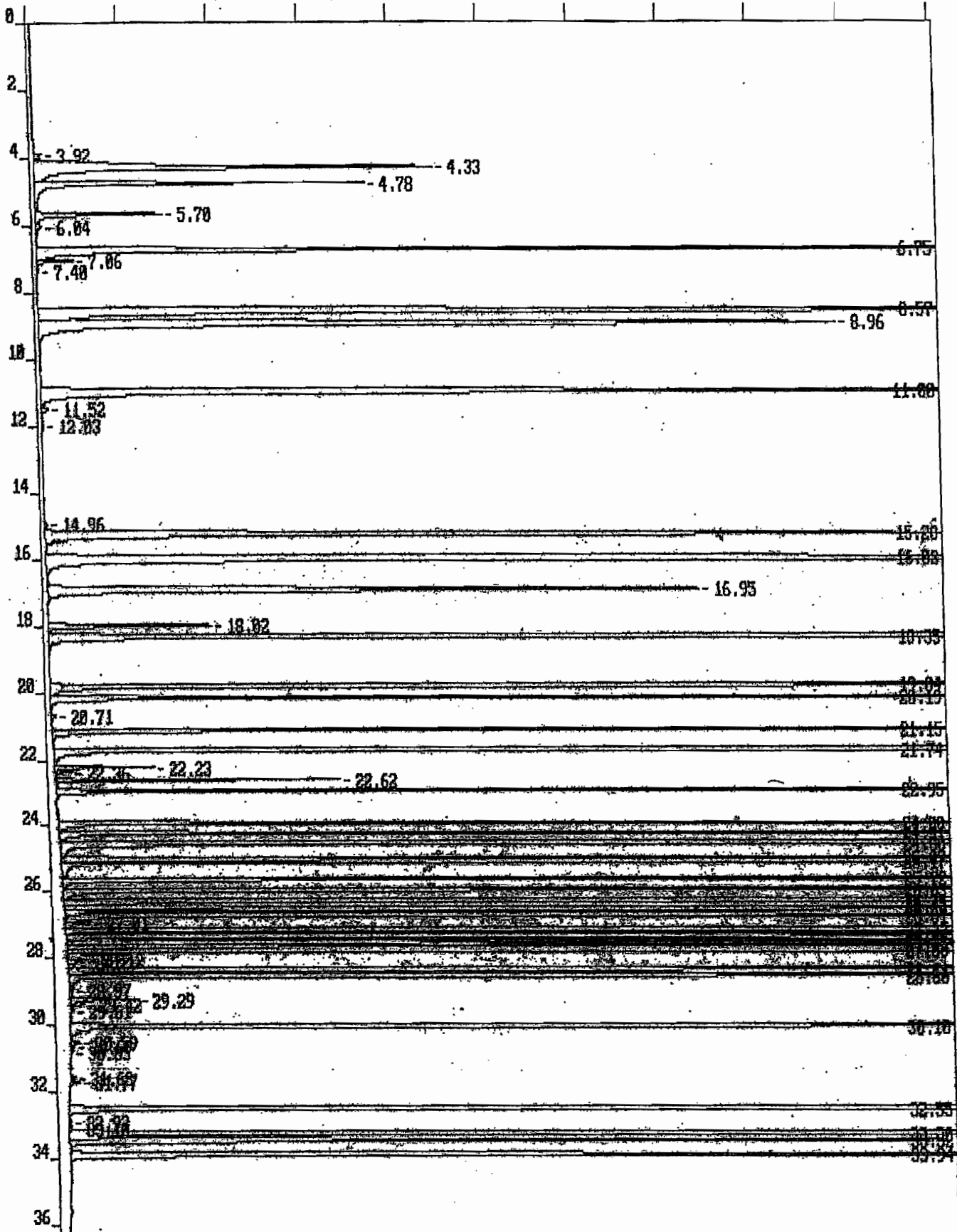
Date: *12-31-01*

File=C:\CP\DATA1\18365B.08R Date printed=12-31-2001 Time= 07:02:46

Sample Name=CALSTD6

01365A188400,8401,8464

0.0 to 37.0 min. Low Y=0.015 High Y=15.015 mv Span=15.0



Sample Name: CALSTD6

Batch: 01365A18

Date Taken: Dec 31, 2001 07:01:10

Raw File: C:\CP\DATA1\18365B.08R

Area File: C:\CP\DATA1\18365B.08A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 7):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
4.328	4.331	VINYL CHLORIDE	19.0298	58993	6633
6.753	6.765	1,1-DICHLOROETHENE	47.4892	101239	19197
8.570	8.582	TRANS-1,2-DICHLOROET	47.9320	256028	44925
8.959	8.972	METHYL T-BUTYL ETHER	48.2075	117503	13256
11.000	11.017	CIS-1,2-DICHLOROETHE	48.4714	136296	18403
15.279	15.293	1,1-DICHLOROPROPENE	46.9381	115835	15650
16.017	16.029	BENZENE	47.3352	280581	38965
16.951	16.962	ISTD-FBENZENE	1.0000	81353	10870
18.350	18.357	TRICHLOROETHENE	46.6103	161741	31151
19.844	19.848	2-CHLOROETHYL VINYL	94.5254	189287	46826
20.194	20.198	CIS-1,3-DICHLOROPROP	47.2179	75470	19787
21.151	21.153	TRANS-1,3-DICHLOROPR	47.8901	94725	28906
21.739	21.739	TOLUENE	46.1771	258964	77224
22.948	22.949	TETRACHLOROETHENE	46.2159	124379	41100
23.998	23.999	CHLOROBENZENE	46.4943	271490	105083
24.313	24.312	ETHYLBENZENE	46.1358	230739	85282
24.605	24.604	M,P-XYLENE	92.9776	540322	170529
25.070	25.070	STYRENE	46.8052	294849	109468
25.173	25.172	O-XYLENE	47.5023	244222	86485
25.716	25.715	ISOPROPYLBENZENE	46.0175	191143	64085
26.034	26.033	BROMOBENZENE	46.9873	279178	98255
26.362	26.361	N-PROPYLBENZENE	46.1678	214695	74590
26.486	26.484	2-CHLOROTOLUENE	46.4888	240966	82503
26.605	26.603	4-CHLOROTOLUENE	46.8124	248375	87820
26.809	26.808	1,3,5-TRIMETHYLBENZE	46.2800	315799	105681
27.233	27.232	TERT-BUTYLBENZENE	46.1838	184059	55663
27.416	27.413	1,2,4-TRIMETHYLBENZE	46.6358	243003	79591
27.583	27.581	SEC-BUTYLBENZENE	46.1086	189263	56841
27.689	27.687	1,3-DICHLOROBENZENE	47.2245	242941	79009
27.805	27.802	1,4-DICHLOROBENZENE	46.7808	242676	78527
27.890	27.888	P-ISOPROPYLTOLUENE	46.1416	179402	55803
28.414	28.413	1,2-DICHLOROBENZENE	47.1050	194094	59204
28.601	28.600	N-BUTYLBENZENE	45.8738	182234	52747
30.096	30.096	SURR-1B4CB-P	59.8308	308915	82650
32.553	32.550	1,2,4-TRICHLOROBENZE	47.2518	123651	26059
33.299	33.297	NAPHTHALENE	47.5199	150445	30623
33.517	33.515	HEXACHLOROBUTADIENE	44.0704	82430	14531
33.943	33.939	1,2,3-TRICHLOROBENZE	46.9858	113465	21517

XYLENES (Total): 140.4799

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 199.4361%

Chrom Perfect version 6.07

Reported on 12-31-2001at 07:04:16

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 7

Updated from file = C:\CP\DATA1\18365B.08A

Amount injected = 1

Standard amount injected = 1

Calibration level = 6 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD6

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.08R

Reviewed by: MPB

Verified by: SCP LEB

Date: 12/4/01

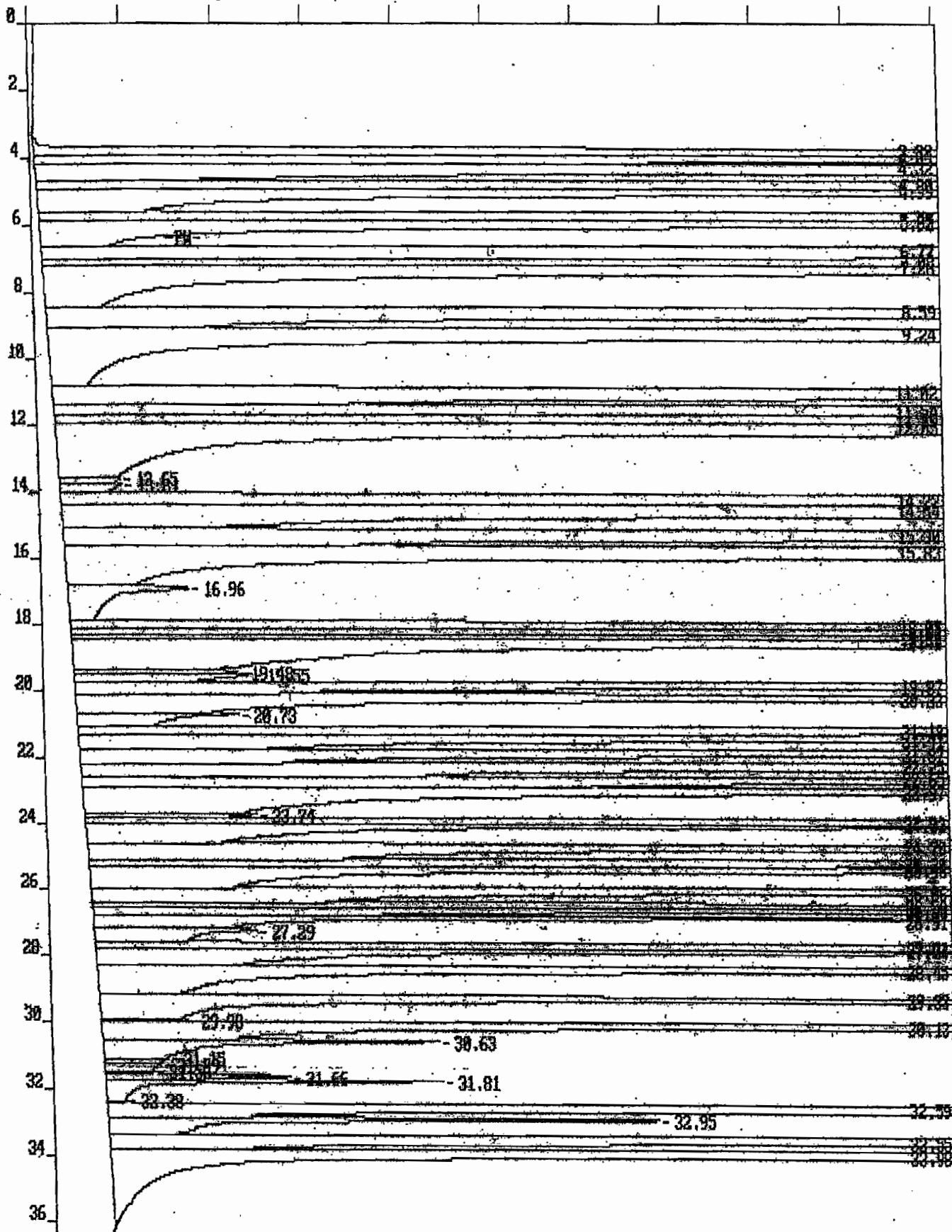
Date: 12-31-01

File=C:\CP\DATA1\18365.09R Date printed=12-31-2001 Time= 07:44:23

Sample Name=CALSTD7

01365A188400,8401,8464

0.0 to 37.0 min. Low Y=0.078 High Y=15.078 mv Span=15.0



Sample Name: CALSTD7

Batch: 01365A18

Date Taken: Dec 31, 2001 07:44:18

Raw File: C:\CP\DATA1\18365.09R

Area File: C:\CP\DATA1\18365.09A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 8):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.819	3.836	DICHLORODIFLUOROMETH	76.7176	1023224	148518
4.028	4.036	CHLOROMETHANE	54.2278	808766	115862
4.325	4.352	VINYL CHLORIDE	60.9826	1666801	213751
4.801	4.814	BROMOMETHANE	67.3048	985234	176836
4.994	5.010	CHLOROETHANE	70.1997	1726018	288315
5.846	5.859	TRICHLOROFLUOROMETHA	69.1757	1254056	172456
6.768	6.782	1,1-DICHLOROETHENE	88.0326	2555678	397391
7.078	7.091	METHYLENE CHLORIDE	76.6907	3714919	623790
7.260	7.273	TRICHLOROTRIFLUOROET	82.7406	2883438	292521
8.589	8.599	TRANS-1,2-DICHLOROET	84.3669	3634547	517622
9.239	9.246	1,1-DICHLOROETHANE	84.5834	3779192	445148
11.024	11.030	CIS-1,2-DICHLOROETHE	86.7767	3671501	429639
11.542	11.549	BROMOCHLOROMETHANE	90.8033	2644711	323997
11.798	11.805	CHLOROFORM	83.2672	4722545	500389
12.045	12.052	2,2-DICHLOROPROPANE	82.9109	3364430	264074
14.225	14.229	1,2-DICHLOROETHANE	88.1548	3355221	411045
14.543	14.547	1,1,1-TRICHLOROETHAN	83.1707	4371166	406600
15.304	15.310	1,1-DICHLOROPROPENE	86.8048	3185780	372525
15.827	15.832	CARBON TETRACHLORIDE	82.9297	4901648	494626
18.045	18.049	DIBROMOMETHANE	98.7521	1699288	287899
18.221	18.223	1,2-DICHLOROPROPANE	86.0620	3186914	481546
18.376	18.378	TRICHLOROETHENE	80.9782	3776430	635574
18.485	18.487	BROMODICHLOROMETHANE	83.2922	3752939	555575
19.871	19.871	2-CHLOROETHYL VINYL	126.6075	1458587	284256
20.220	20.220	CIS-1,3-DICHLOROPROP	85.3432	3042564	607632
21.176	21.177	TRANS-1,3-DICHLOROPR	87.7717	2666502	601667
21.407	21.406	1,1,2-TRICHLOROETHAN	82.0017	3223827	676893
21.870	21.869	1,3-DICHLOROPROPANE	84.3158	2568021	580347
22.253	22.253	DIBROMOCHLOROMETHANE	90.8030	2371005	523181
22.647	22.647	1,2-DIBROMOETHANE	96.2820	1590603	356838
22.975	22.973	TETRACHLOROETHENE	75.9187	3732938	832061
23.928	23.924	1,1,1,2-TETRACHLOROE	73.0960	3361602	849375
24.023	24.021	CHLOROBENZENE	82.7644	1850877	448424
24.703	24.701	BROMOFORM	98.8004	1571073	360014
25.195	25.192	1,1,2,2-TETRACHLOROE	85.4233	2181992	545189
25.398	25.395	1,2,3-TRICHLOROPROPA	85.9873	1843390	431225
26.064	26.060	BROMOBENZENE	99.8921	1197926	276855
26.516	26.511	2-CHLOROTOLUENE	89.9744	1351582	351321
26.634	26.630	4-CHLOROTOLUENE	88.8147	1441204	352110
27.721	27.715	1,3-DICHLOROBENZENE	87.7512	2010687	503777
27.837	27.830	1,4-DICHLOROBENZENE	84.5663	2278157	516899
28.448	28.440	1,2-DICHLOROBENZENE	87.5244	2210155	484743
29.331	29.323	1,2-DIBROMO-3-CHLORO	105.2431	632392	116371
30.132	30.124	SURR-1B4CB-H	71.3734	1208339	238759
32.591	32.581	1,2,4-TRICHLOROBENZE	92.7959	2097772	365559
33.554	33.546	HEXACHLOROBUTADIENE	85.6622	2681603	401766
33.980	33.971	1,2,3-TRICHLOROBENZE	91.8591	2011370	307919
		TOTAL 1,2-DICHLOROETHENE:	171.1435		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 237.9115%

Sample name: CALSTD7

Batch: 01365A188400,840

Raw file: C:\CP\DATA1\18365.09R

Reviewed by: MMB

Verified by: SCP

Date: 12/31/01

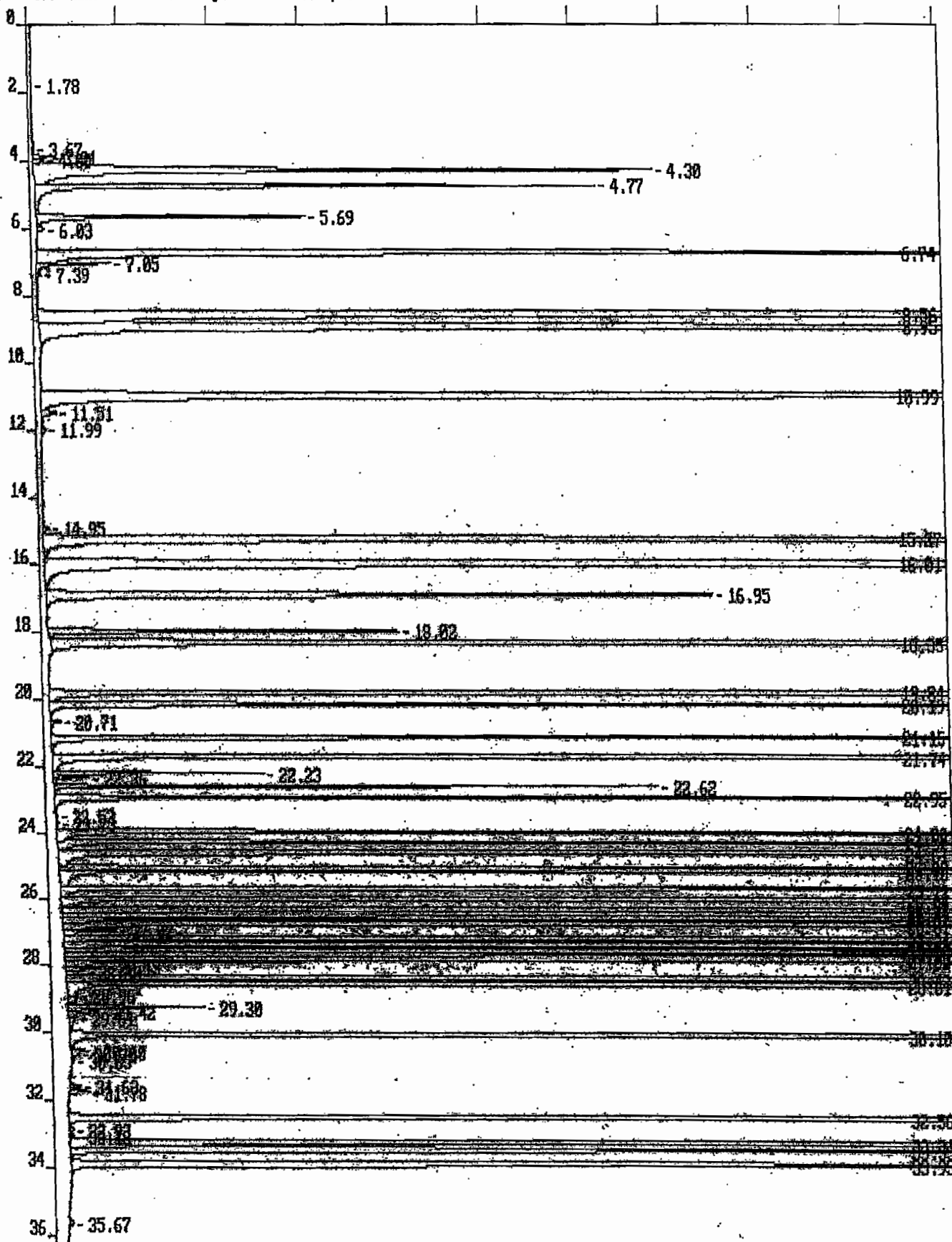
Date: 12-31-01

File=C:\CP\DATA\183658.09R Date printed=12-31-2001 Time= 07:45:56

Sample Name=CALSTD7

01365A188400,8401,8464

0.0 to 37.0 min. Low Y=0.014 High Y=15.014 mv Span=15.0



Sample Name: CALSTD7

Batch: 01365A18

Date Taken: Dec 31, 2001 07:44:18

Raw File: C:\CP\DATA1\18365B.09R

Area File: C:\CP\DATA1\18365B.09A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 8):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.302	4.328	VINYL CHLORIDE	29.0280	84372	10241
6.740	6.753	1,1-DICHLOROETHENE	92.5743	200101	37774
8.561	8.570	TRANS-1,2-DICHLOROET	93.3006	505996	88318
8.952	8.959	METHYL T-BUTYL ETHER	93.7472	231434	25998
10.994	11.000	CIS-1,2-DICHLOROETHE	94.6153	269849	36287
15.275	15.279	1,1-DICHLOROPROPENE	94.5928	237149	31782
16.014	16.017	BENZENE	95.8101	573869	79580
16.946	16.951	ISTD-FBENZENE	1.0000	83220	11059
18.349	18.350	TRICHLOROETHENE	95.0276	331692	63986
19.844	19.844	2-CHLOROETHYL VINYL	126.6911	254968	63053
20.193	20.194	CIS-1,3-DICHLOROPROP	96.8295	155265	40888
21.151	21.151	TRANS-1,3-DICHLOROPR	97.0580	195135	58991
21.740	21.739	TOLUENE	92.1249	523975	155459
22.949	22.948	TETRACHLOROETHENE	93.4444	255735	83748
24.000	23.998	CHLOROBENZENE	93.6720	549213	213399
24.315	24.313	ETHYLBENZENE	91.9041	465029	171227
24.608	24.605	M,P-XYLENE	183.8568	1082300	340274
25.074	25.070	STYRENE	92.3358	590047	217749
25.177	25.173	O-XYLENE	92.3493	484387	169449
25.720	25.716	ISOPROPYLBENZENE	91.5765	385343	128519
26.038	26.034	BROMOBENZENE	95.1123	566188	200534
26.367	26.362	N-PROPYLBENZENE	92.0849	435128	150017
26.491	26.486	2-CHLOROTOLUENE	92.3978	486421	165295
26.610	26.605	4-CHLOROTOLUENE	93.6148	499825	177135
26.814	26.809	1,3,5-TRIMETHYLBENZE	92.3758	636318	212559
27.239	27.233	TERT-BUTYLBENZENE	91.9249	371997	111708
27.422	27.416	1,2,4-TRIMETHYLBENZE	92.7709	489794	159564
27.591	27.583	SEC-BUTYLBENZENE	93.9105	387202	116555
27.696	27.689	1,3-DICHLOROBENZENE	94.9856	495346	160225
27.812	27.805	1,4-DICHLOROBENZENE	94.7441	492930	160325
27.897	27.890	P-ISOPROPYLTOLUENE	93.1524	365274	113384
28.422	28.414	1,2-DICHLOROBENZENE	94.8609	392875	120171
28.609	28.601	N-BUTYLBENZENE	93.5301	374004	108121
30.105	30.096	SURR-1B4CB-P	69.4678	361236	96828
32.563	32.553	1,2,4-TRICHLOROBENZE	95.7123	250282	52936
33.309	33.299	NAPHTHALENE	95.8309	304095	61834
33.526	33.517	HEXACHLOROBUTADIENE	92.1203	171964	30339
33.952	33.943	1,2,3-TRICHLOROBENZE	95.9520	231578	43958

XYLENES (Total): 276.2061

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 231.5595%

Chrom Perfect version 6.07

Reported on 12-31-2001at 07:47:26

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 8

Updated from file = C:\CP\DATA1\18365B.09A

Amount injected = 1

Standard amount injected = 1

Calibration level = 7 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD7

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.09R

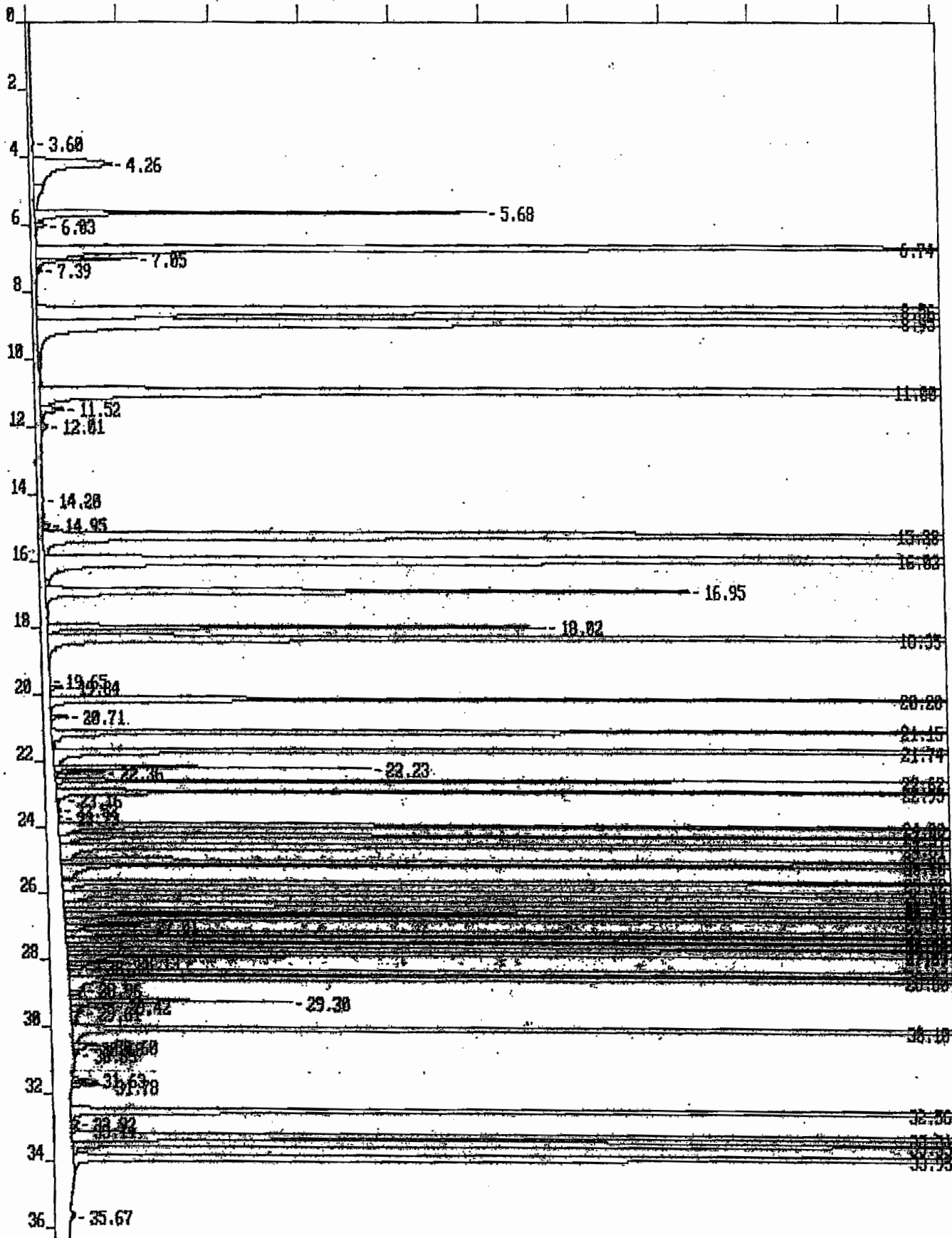
Reviewed by: DMH

Verified by: SLP

Date: 12/31/01

Date: 12-31-01

File=C:\CP\DATA1\18365B.10R Date printed=12-31-2001 Time= 08:29:14
Sample Name=CALSTD8 .01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.012 High Y=15.012 mv Span=15.0



Sample Name: CALSTD8

Batch: 01365A18

Date Taken: Dec 31, 2001 08:28:06

Raw File: C:\CP\DATA1\18365B.10R

Area File: C:\CP\DATA1\18365B.10A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04

Dil. factor: 1

Analyst: 115

Threshold: -1

Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 9):

Ret Time Expected

(min) RT	(min) Peak Name	Amount * (ug/L)	Peak Area	Peak Height
4.261	4.302 VINYL CHLORIDE	3.8429	25734	1306
6.741	6.740 1,1-DICHLOROETHENE	125.3854	274799	49235
8.561	8.561 TRANS-1,2-DICHLOROET	132.6768	691606	120715
8.954	8.952 METHYL T-BUTYL ETHER	140.3393	336713	37371
10.997	10.994 CIS-1,2-DICHLOROETHE	135.3545	372162	49895
15.281	15.275 1,1-DICHLOROPROPENE	134.6190	325705	43495
16.018	16.014 BENZENE	138.1202	795403	110242
16.950	16.946 ISTD-FBENZENE	1.0000	81291	10684
18.353	18.349 TRICHLOROETHENE	137.6148	465760	88922
19.837	19.844 2-CHLOROETHYL VINYL	0.5033	1237	240
20.196	20.193 CIS-1,3-DICHLOROPROP	141.0949	216498	57227
21.153	21.151 TRANS-1,3-DICHLOROPR	144.6904	281638	84231
21.741	21.740 TOLUENE	134.6221	735350	217644
22.949	22.949 TETRACHLOROETHENE	138.4370	362335	118798
24.000	24.000 CHLOROBENZENE	139.0872	782001	303341
24.314	24.315 ETHYLBENZENE	135.7634	657694	241955
24.608	24.608 M,P-XYLENE	270.2164	1535403	478849
25.073	25.074 STYRENE	137.1462	840921	309382
25.175	25.177 O-XYLENE	126.0187	662473	221048
25.718	25.720 ISOPROPYLBENZENE	134.9204	544207	181236
26.036	26.038 BROMOBENZENE	142.6195	811299	287652
26.364	26.367 N-PROPYLBENZENE	136.6509	617750	213021
26.488	26.491 2-CHLOROTOLUENE	137.5796	693636	235589
26.606	26.610 4-CHLOROTOLUENE	139.4110	713527	252359
26.811	26.814 1,3,5-TRIMETHYLBENZE	136.1951	904754	300025
27.235	27.239 TERT-BUTYLBENZENE	136.7191	530172	158923
27.419	27.422 1,2,4-TRIMETHYLBENZE	138.1013	699494	227240
27.587	27.591 SEC-BUTYLBENZENE	139.6506	555329	165847
27.692	27.696 1,3-DICHLOROBENZENE	142.5577	716046	230154
27.808	27.812 1,4-DICHLOROBENZENE	144.5458	708324	233991
27.892	27.897 P-ISOPROPYLTOLUENE	139.4006	529319	162272
28.417	28.422 1,2-DICHLOROBENZENE	143.6025	569667	174013
28.603	28.609 N-BUTYLBENZENE	140.8082	540296	155370
30.100	30.105 SURR-1B4CB-P	86.7604	433837	115682
32.562	32.563 1,2,4-TRICHLOROBENZE	146.3202	364242	77173
33.309	33.309 NAPHTHALENE	150.4951	457319	92668
33.526	33.526 HEXACHLOROBUTADIENE	139.1936	248091	43558
33.953	33.952 1,2,3-TRICHLOROBENZE	149.4318	342764	65191

XYLENES (Total): 396.2351

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene

289.2014%

Chrom Perfect version 6.07

Reported on 12-31-2001 at 08:30:38

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 9

Updated from file = C:\CP\DATA1\18365B.10A

Amount injected = 1

Standard amount injected = 1

Calibration level = 8 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD8

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.10R

Reviewed by:

[Signature]

Verified by:

[Signature]

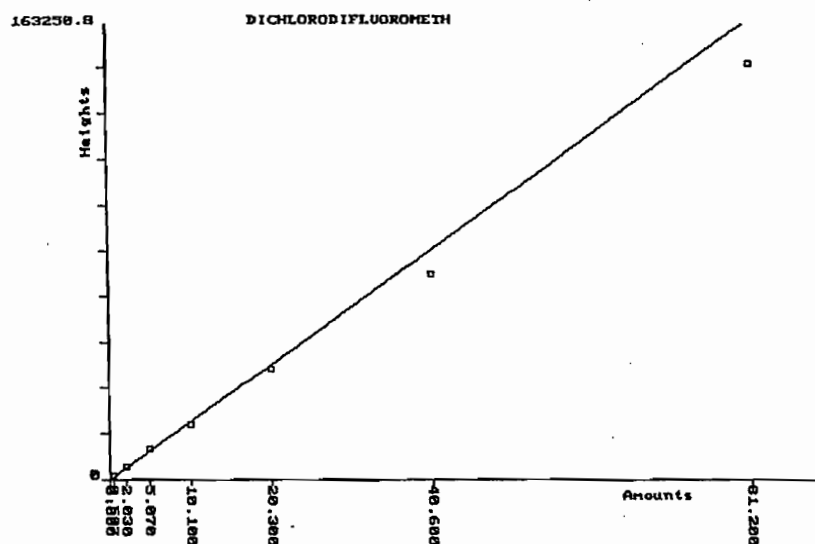
Date:

12/31/01

Date:

12-31-01

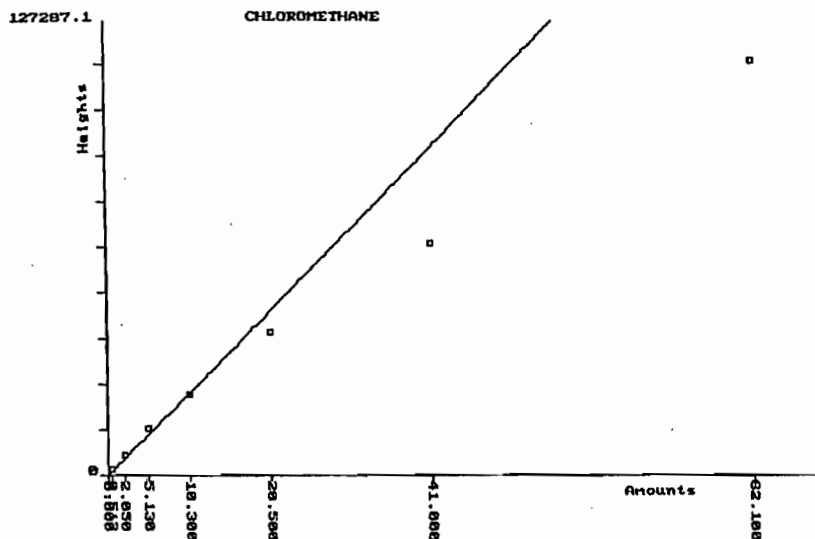
DICHLORODIFLUOROMETH Ret time= 3.805 min. Search window= 0.100 min.
 reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50700	1186	23393.4E-01	18365.03A	12-31-2001 03:26
2	2.03000	4418	21762.3E-01	18365.04A	12-31-2001 04:10
3	5.07000	10743	21190.2E-01	18365.05A	12-31-2001 04:53
4	10.10000	19615	19421.3E-01	18365.06A	12-31-2001 05:36
5	20.30000	39650	19531.8E-01	18365.07A	12-31-2001 06:19
6	40.60000	73527	18110.1E-01	18365.08A	12-31-2001 07:02
7	81.20000	148518	18290.4E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9888541 Ave error=6.9053%
 Height = +20.243e02*X^1
 Average CF (EPA method 8000) = 2024.2787 with %RSD = 9.603%

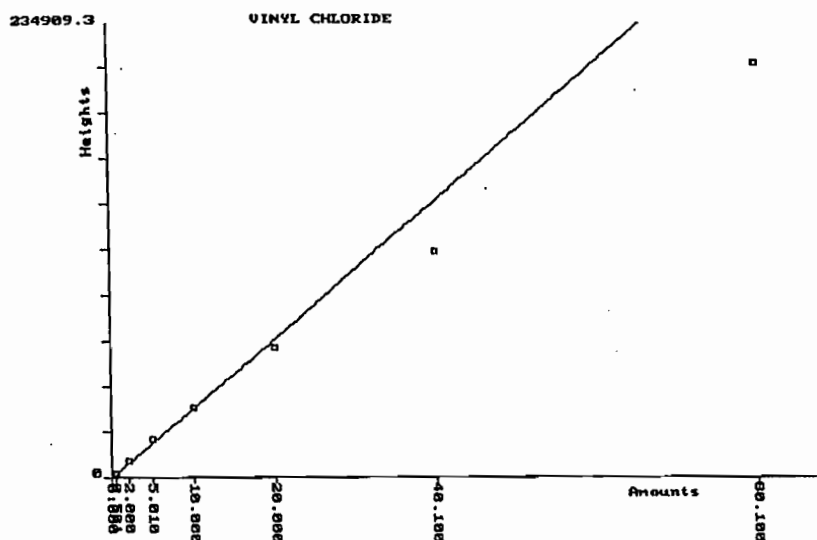
2 CHLOROMETHANE Ret time= 3.985 min. Search window= 0.100 min.
 reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.51300	1614	31469.7E-01	18365.03A	12-31-2001 03:26
2	2.05000	5741	28003.2E-01	18365.04A	12-31-2001 04:10
3	5.13000	12994	25330.2E-01	18365.05A	12-31-2001 04:53
4	10.30000	22769	22105.8E-01	18365.06A	12-31-2001 05:36
5	20.50000	40151	19585.7E-01	18365.07A	12-31-2001 06:19
6	41.00000	64790	15802.4E-01	18365.08A	12-31-2001 07:02
7	82.10000	115862	14112.3E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .7332793 Ave error=21.9857%
 Height = +22.344e02*X^1
 Average CF (EPA method 8000) = 2234.4182 with %RSD = 28.449%

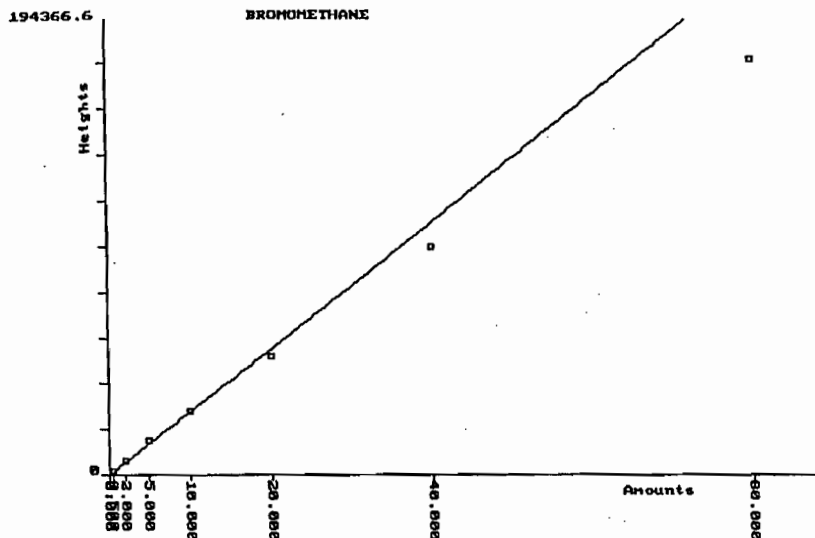
2 VINYL CHLORIDE Ret time= 4.314 min. Search window= 0.200 min.
 1 reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50100	2164	43186.4E-01	18365.03A	12-31-2001 03:26
2	2.00000	8221	41102.8E-01	18365.04A	12-31-2001 04:10
3	5.01000	19605	39131.9E-01	18365.05A	12-31-2001 04:53
4	10.00000	36095	36094.6E-01	18365.06A	12-31-2001 05:36
5	20.00000	67692	33846.0E-01	18365.07A	12-31-2001 06:19
6	40.10000	116227	28984.2E-01	18365.08A	12-31-2001 07:02
7	80.10000	213751	26685.5E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9117069 Ave error=12.8453%
 Height = +35.576e02*X^1
 Average CF (EPA method 8000) = 3557.5903 with %RSD = 17.284%

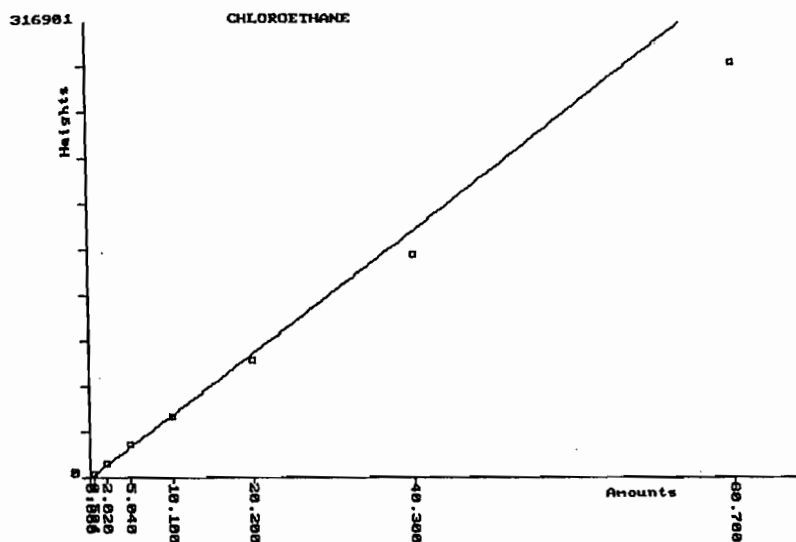
4 BROMOMETHANE Ret time= 4.780 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	1526	30526.5E-01	18365.03A	12-31-2001 03:26
2	2.00000	5901	29503.2E-01	18365.04A	12-31-2001 04:10
3	5.00000	14529	29058.5E-01	18365.05A	12-31-2001 04:53
4	10.00000	27150	27149.7E-01	18365.06A	12-31-2001 05:36
5	20.00000	50999	25499.6E-01	18365.07A	12-31-2001 06:19
6	40.00000	97200	24300.0E-01	18365.08A	12-31-2001 07:02
7	80.00000	176836	22104.5E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9644855 Ave error=8.3707%
 Height = +26.877e02*X^1
 Average CF (EPA method 8000) = 2687.7434 with %RSD = 11.404%

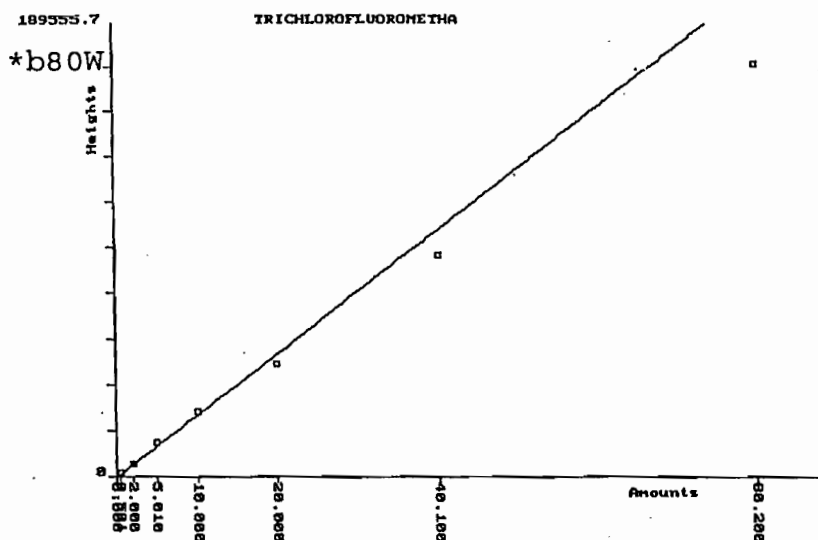
5 CHLOROETHANE Ret time= 4.980 min. Search window= 0.200 min.
 reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50400	2458	48761.2E-01	18365.03A	12-31-2001 03:26
2	2.02000	9460	46830.8E-01	18365.04A	12-31-2001 04:10
3	5.04000	22859	45355.5E-01	18365.05A	12-31-2001 04:53
4	10.10000	42762	42338.3E-01	18365.06A	12-31-2001 05:36
5	20.20000	82356	40770.4E-01	18365.07A	12-31-2001 06:19
6	40.30000	155228	38518.1E-01	18365.08A	12-31-2001 07:02
7	80.70000	288315	35726.8E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9709858 Ave error=7.8427%
 Height = +42.614e02*X^1
 Average CF (EPA method 8000) = 4261.4434 with %RSD = 10.955%

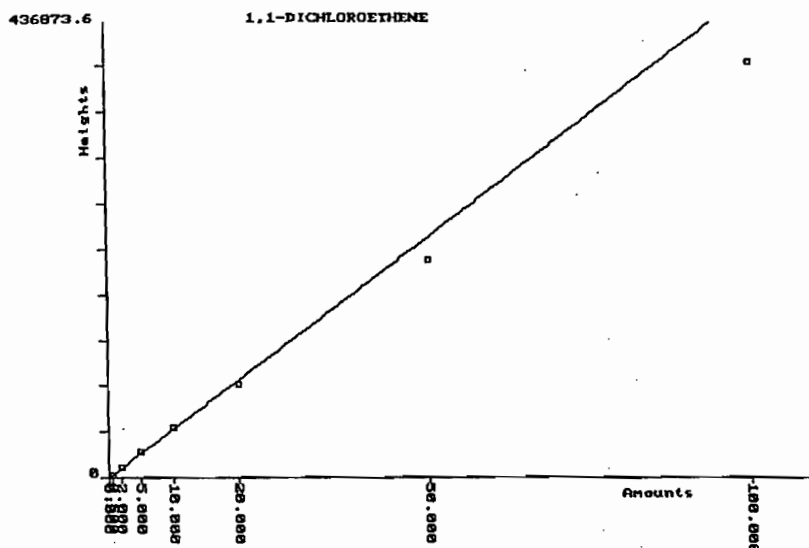
6 TRICHLOROFLUOROMETHA Ret time= 5.837 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50100	1463	29195.3E-01	18365.03A	12-31-2001 03:26
2	2.00000	5325	26626.1E-01	18365.04A	12-31-2001 04:10
3	5.01000	14148	28240.3E-01	18365.05A	12-31-2001 04:53
4	10.00000	26856	26856.1E-01	18365.06A	12-31-2001 05:36
5	20.00000	46791	23395.3E-01	18365.07A	12-31-2001 06:19
6	40.10000	91851	22905.4E-01	18365.08A	12-31-2001 07:02
7	80.20000	172456	21503.3E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9715227 Ave error=8.8141%
 Height = +25.532e02*X^1
 Average CF (EPA method 8000) = 2553.1702 with %RSD = 11.464%

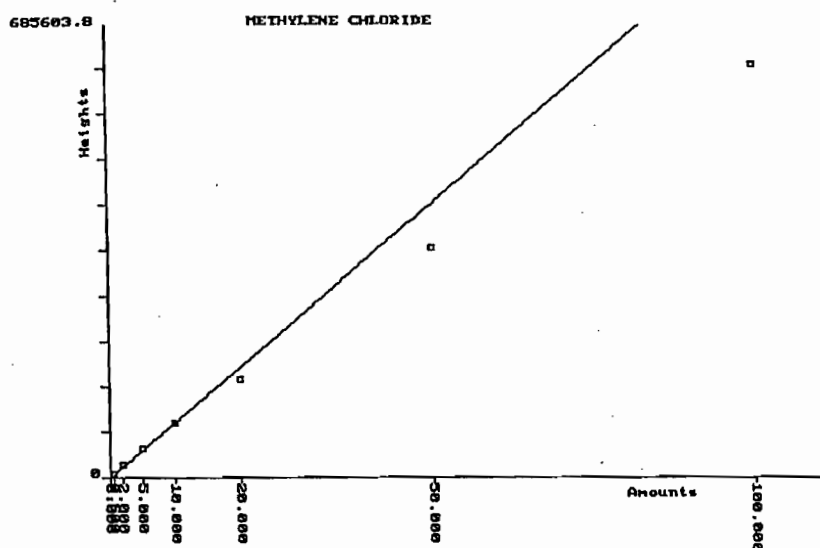
7 1,1-DICHLOROETHENE Ret time= 6.761 min. Search window= 0.200 min.
 reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2565	51294.6E-01	18365.03A	12-31-2001 03:26
2	2.00000	9873	49363.1E-01	18365.04A	12-31-2001 04:10
3	5.00000	24834	49668.9E-01	18365.05A	12-31-2001 04:53
4	10.00000	47933	47933.0E-01	18365.06A	12-31-2001 05:36
5	20.00000	88470	44235.2E-01	18365.07A	12-31-2001 06:19
6	50.00000	209107	41821.5E-01	18365.08A	12-31-2001 07:02
7	100.00000	397391	39739.1E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9773208 Ave error=7.2530%
 Height = +46.294e02*X^1
 Average CF (EPA method 8000) = 4629.3623 with %RSD = 9.486%

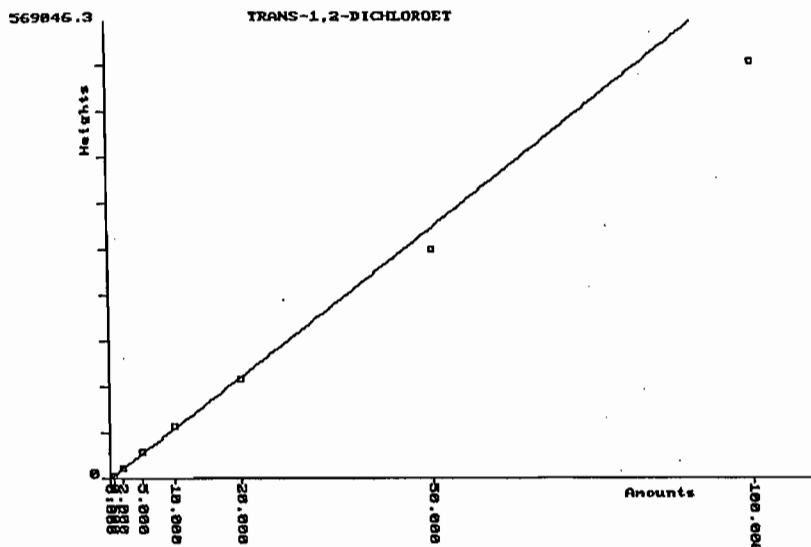
* METHYLENE CHLORIDE Ret time= 7.069 min. Search window= 0.200 min.
 Reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	5655	11309.2E+00	18365.03A	12-31-2001 03:26
2	2.00000	18333	91663.6E-01	18365.04A	12-31-2001 04:10
3	5.00000	43774	87548.4E-01	18365.05A	12-31-2001 04:53
4	10.00000	81989	81988.9E-01	18365.06A	12-31-2001 05:36
5	20.00000	149507	74753.7E-01	18365.07A	12-31-2001 06:19
6	50.00000	346844	69368.8E-01	18365.08A	12-31-2001 07:02
7	100.00000	623790	62379.0E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9125173 Ave error=13.2693%
 Height = +82.971e02*X^1
 Average CF (EPA method 8000) = 8297.0615 with %RSD = 20.176%

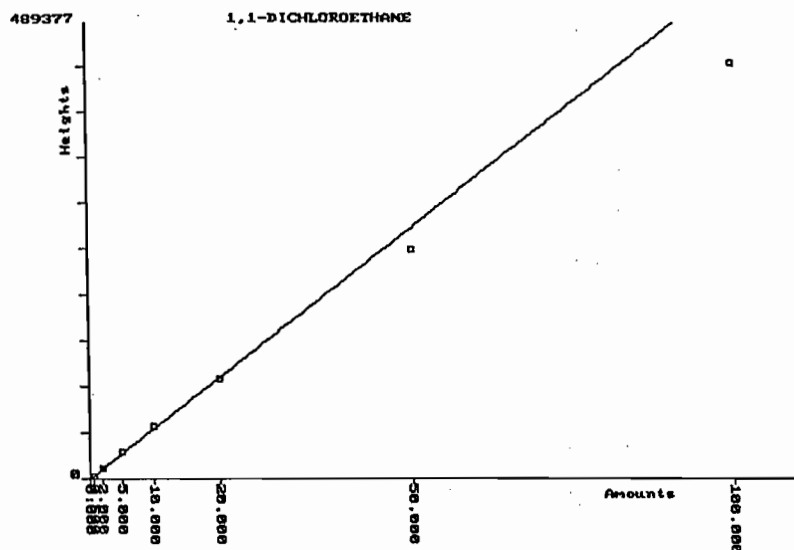
10 TRANS-1,2-DICHLOROET Ret time= 8.582 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard for this compound.
 Group number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3378	67561.0E-01	18365.03A	12-31-2001 03:26
2	2.00000	13434	67168.8E-01	18365.04A	12-31-2001 04:10
3	5.00000	33605	67210.7E-01	18365.05A	12-31-2001 04:53
4	10.00000	65100	65099.7E-01	18365.06A	12-31-2001 05:36
5	20.00000	123282	61640.8E-01	18365.07A	12-31-2001 06:19
6	50.00000	284527	56905.3E-01	18365.08A	12-31-2001 07:02
7	100.00000	517622	51762.2E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9667889 Ave error=7.1786%
 Height = +62.478e02*X^1
 Average CF (EPA method 8000) = 6247.8345 with %RSD = 9.773%

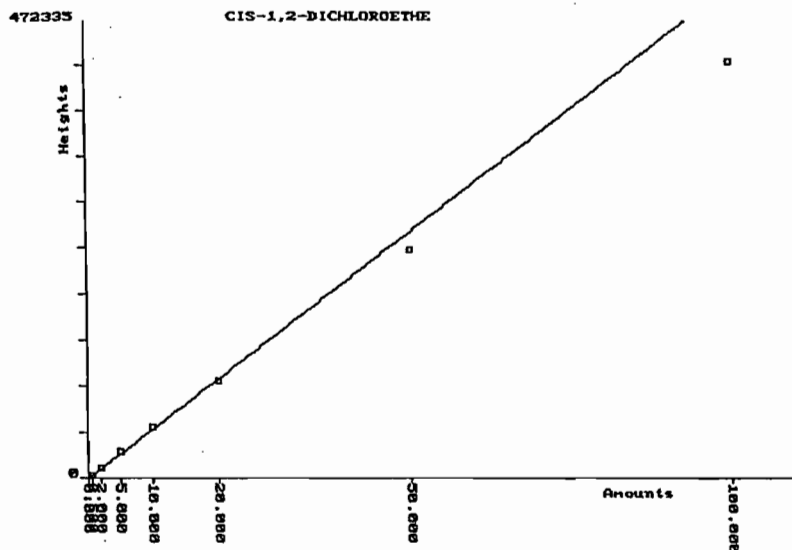
11 1,1-DICHLOROETHANE Ret time= 9.231 min. Search window= 0.200 min.
 N eference peak for this compound.
 N ternal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2859	57179.2E-01	18365.03A	12-31-2001 03:26
2	2.00000	11573	57863.6E-01	18365.04A	12-31-2001 04:10
3	5.00000	28895	57789.9E-01	18365.05A	12-31-2001 04:53
4	10.00000	55360	55360.2E-01	18365.06A	12-31-2001 05:36
5	20.00000	105997	52998.3E-01	18365.07A	12-31-2001 06:19
6	50.00000	244492	48898.4E-01	18365.08A	12-31-2001 07:02
7	100.00000	445148	44514.8E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9683654 Ave error=6.9111%
 Height = +53.515e02*X^1
 Average CF (EPA method 8000) = 5351.4922 with %RSD = 9.547%

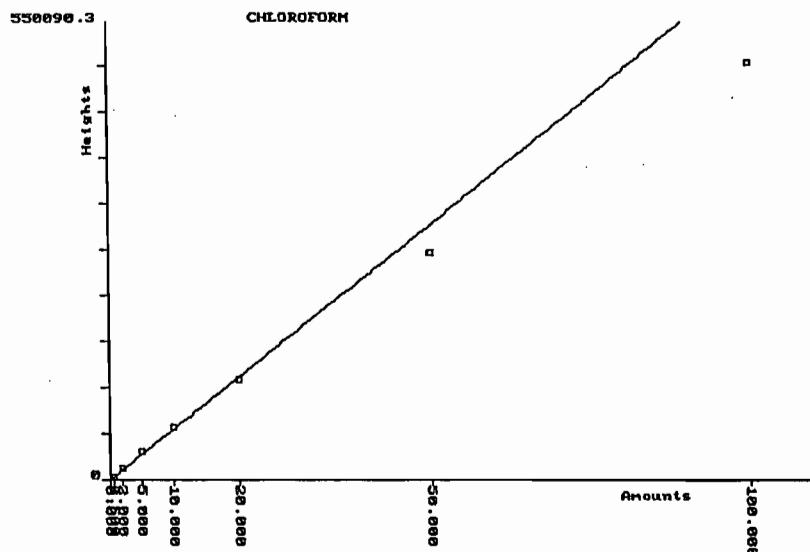
12 CIS-1,2-DICHLOROETHE Ret time= 11.019 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard for this compound.
 Group number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2675	53503.3E-01	18365.03A	12-31-2001 03:26
2	2.00000	10769	53846.0E-01	18365.04A	12-31-2001 04:10
3	5.00000	27222	54444.5E-01	18365.05A	12-31-2001 04:53
4	10.00000	52494	52493.9E-01	18365.06A	12-31-2001 05:36
5	20.00000	100220	50109.8E-01	18365.07A	12-31-2001 06:19
6	50.00000	234415	46883.1E-01	18365.08A	12-31-2001 07:02
7	100.00000	429639	42963.9E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9755295 Ave error=6.0996%
 Height = +50.606e02*X^1
 Average CF (EPA method 8000) = 5060.6343 with %RSD = 8.449%

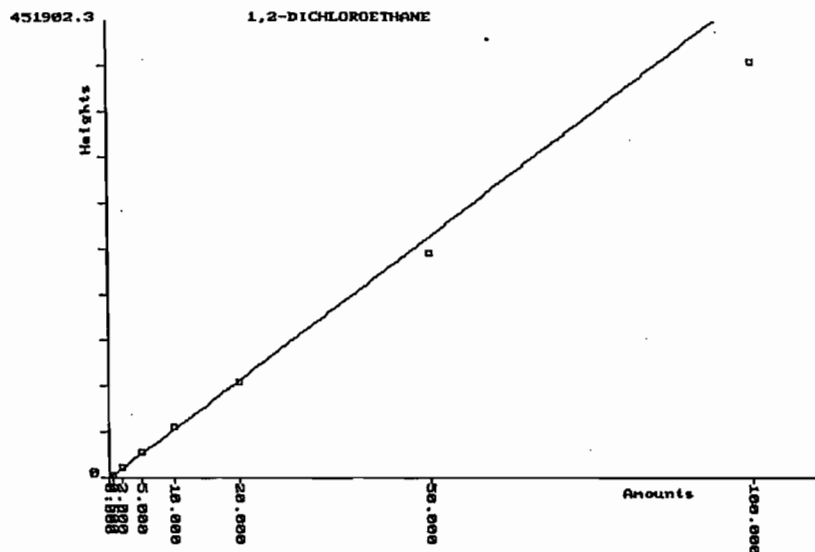
14 CHLOROFORM Ret time= 11.792 min. Search window= 0.100 min.
 reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3379	67590.0E-01	18365.03A	12-31-2001 03:26
2	2.00000	13453	67263.3E-01	18365.04A	12-31-2001 04:10
3	5.00000	32948	65895.5E-01	18365.05A	12-31-2001 04:53
4	10.00000	63287	63287.4E-01	18365.06A	12-31-2001 05:36
5	20.00000	118933	59466.4E-01	18365.07A	12-31-2001 06:19
6	50.00000	272930	54586.1E-01	18365.08A	12-31-2001 07:02
7	100.00000	500389	50038.9E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9608657 Ave error=8.2813%
 Height = +61.161e02*X^1
 Average CF (EPA method 8000) = 6116.1094 with %RSD = 11.075%

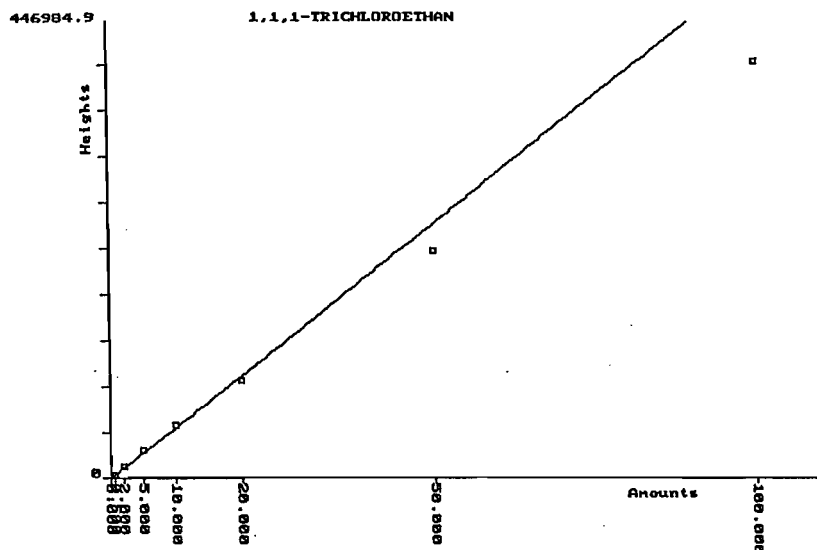
16 1,2-DICHLOROETHANE Ret time= 14.223 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2474	49471.5E-01	18365.03A	12-31-2001 03:26
2	2.00000	10167	50833.2E-01	18365.04A	12-31-2001 04:10
3	5.00000	25397	50793.1E-01	18365.05A	12-31-2001 04:53
4	10.00000	50670	50670.0E-01	18365.06A	12-31-2001 05:36
5	20.00000	94853	47426.4E-01	18365.07A	12-31-2001 06:19
6	50.00000	222673	44534.5E-01	18365.08A	12-31-2001 07:02
7	100.00000	411045	41104.5E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9791604 Ave error=5.6592%
 Height = +47.833e02*X^1
 Average CF (EPA method 8000) = 4783.3325 with %RSD = 7.86%

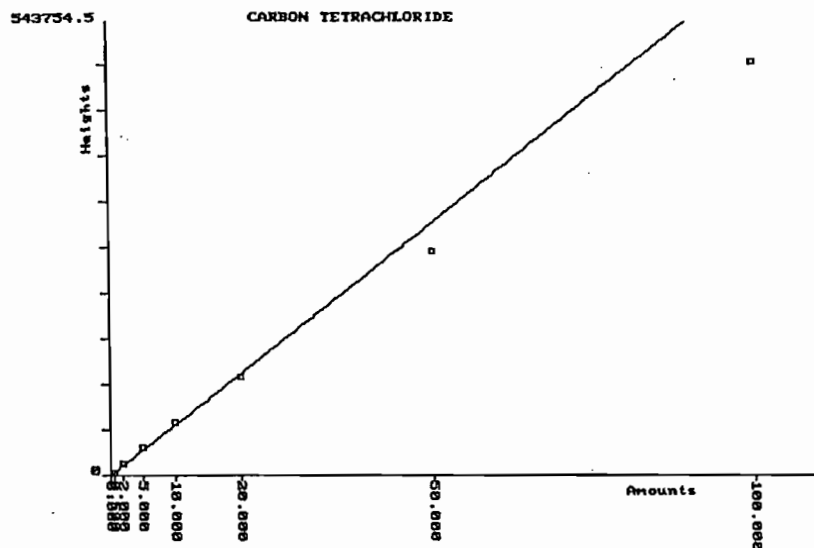
17 1,1,1-TRICHLOROETHAN Ret time= 14.542 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2748	54955.0E-01	18365.03A	12-31-2001 03:26
2	2.00000	10734	53669.6E-01	18365.04A	12-31-2001 04:10
3	5.00000	26789	53578.1E-01	18365.05A	12-31-2001 04:53
4	10.00000	52436	52436.2E-01	18365.06A	12-31-2001 05:36
5	20.00000	96193	48096.3E-01	18365.07A	12-31-2001 06:19
6	50.00000	221981	44396.3E-01	18365.08A	12-31-2001 07:02
7	100.00000	406600	40660.0E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9610208 Ave error=8.3674%
 Height = +49.684e02*X^1
 Average CF (EPA method 8000) = 4968.4492 with %RSD = 10.972%

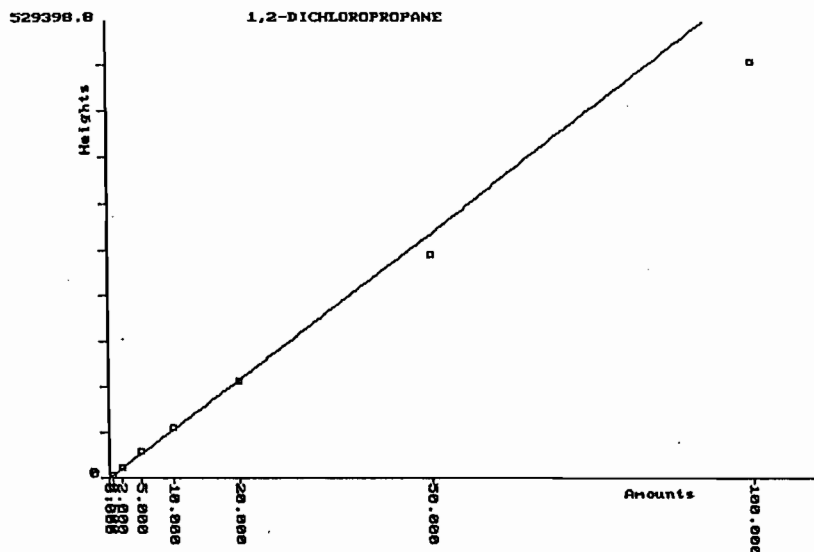
10 CARBON TETRACHLORIDE Ret time= 15.828 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3340	66795.9E-01	18365.03A	12-31-2001 03:26
2	2.00000	13128	65641.0E-01	18365.04A	12-31-2001 04:10
3	5.00000	32965	65930.1E-01	18365.05A	12-31-2001 04:53
4	10.00000	63891	63891.5E-01	18365.06A	12-31-2001 05:36
5	20.00000	117737	58868.5E-01	18365.07A	12-31-2001 06:19
6	50.00000	267370	53474.0E-01	18365.08A	12-31-2001 07:02
7	100.00000	494626	49462.6E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9592839 Ave error=8.6233%
 Height = +60.58e02*X^1
 Average CF (EPA method 8000) = 6058.0493 with %RSD = 11.294%

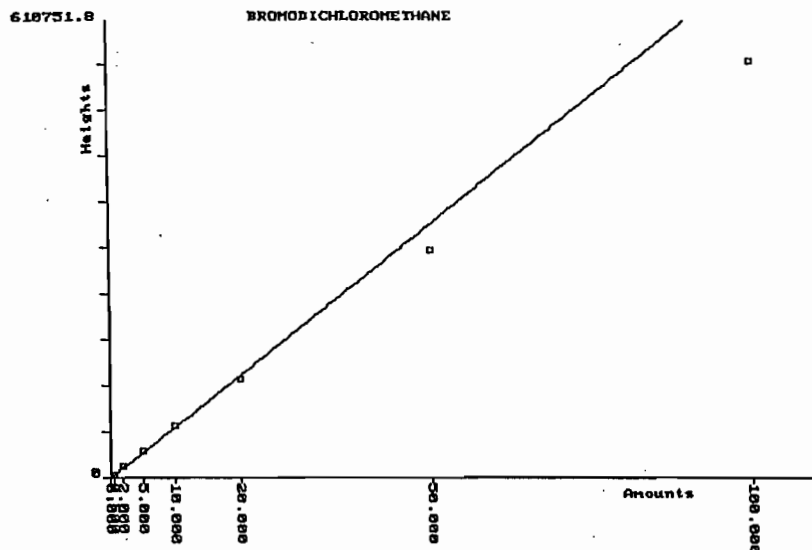
21 1,2-DICHLOROPROPANE Ret time= 18.220 min. Search window= 0.100 min.
 Reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3021	60417.2E-01	18365.03A	12-31-2001 03:26
2	2.00000	12161	60807.2E-01	18365.04A	12-31-2001 04:10
3	5.00000	30647	61294.9E-01	18365.05A	12-31-2001 04:53
4	10.00000	59520	59519.9E-01	18365.06A	12-31-2001 05:36
5	20.00000	113101	56550.7E-01	18365.07A	12-31-2001 06:19
6	50.00000	260854	52170.8E-01	18365.08A	12-31-2001 07:02
7	100.00000	481546	48154.6E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9735468 Ave error=6.4485%
 Height = +56.988e02*X^1
 Average CF (EPA method 8000) = 5698.79 with %RSD = 8.853%

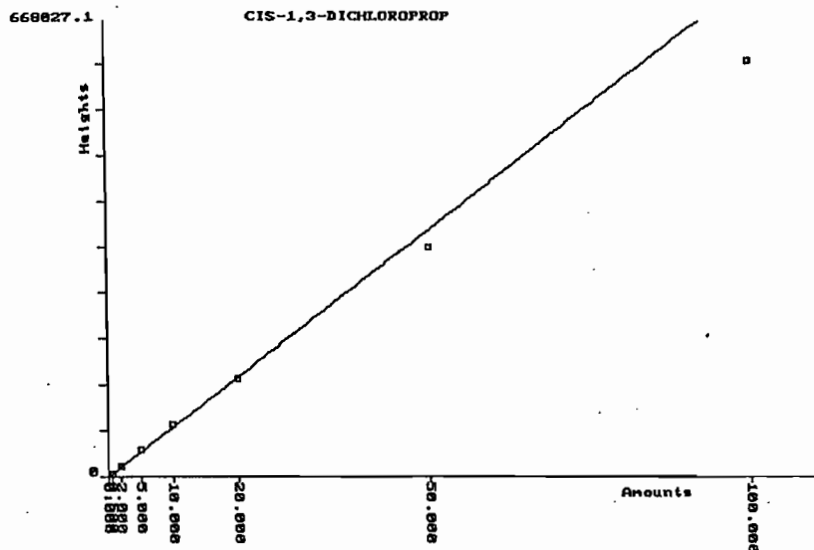
23 BROMODICHLOROMETHANE Ret time= 18.485 min. Search window= 0.100 min.
 Reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3802	76039.6E-01	18365.03A	12-31-2001 03:26
2	2.00000	14708	73541.4E-01	18365.04A	12-31-2001 04:10
3	5.00000	36295	72589.3E-01	18365.05A	12-31-2001 04:53
4	10.00000	69772	69772.1E-01	18365.06A	12-31-2001 05:36
5	20.00000	131533	65766.4E-01	18365.07A	12-31-2001 06:19
6	50.00000	302613	60522.6E-01	18365.08A	12-31-2001 07:02
7	100.00000	555575	55557.5E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .962226 Ave error=8.1599%
 Height = +67.684e02*X^1
 Average CF (EPA method 8000) = 6768.4116 with %RSD = 11.033%

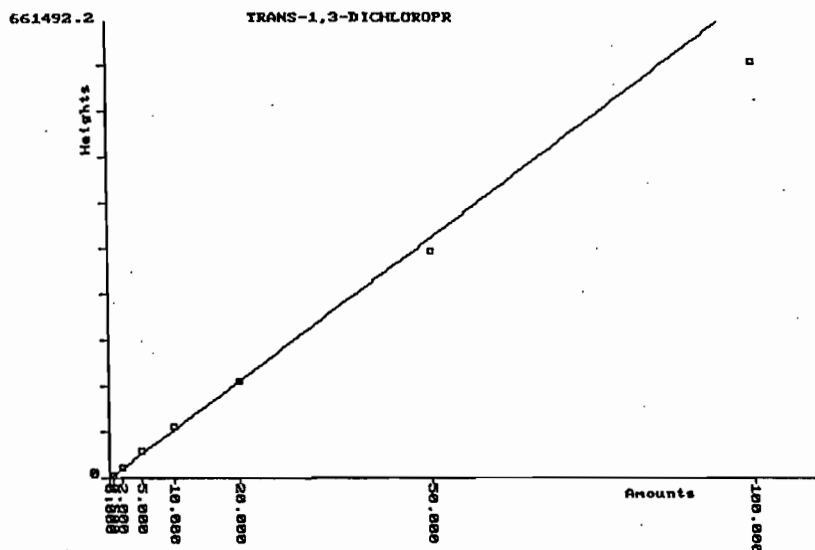
25 CIS-1,3-DICHLOROPROP Ret time= 20.220 min. Search window= 0.200 min.
 Reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3679	73589.9E-01	18365.03A	12-31-2001 03:26
2	2.00000	15375	76877.2E-01	18365.04A	12-31-2001 04:10
3	5.00000	39446	78891.2E-01	18365.05A	12-31-2001 04:53
4	10.00000	76464	76464.2E-01	18365.06A	12-31-2001 05:36
5	20.00000	143865	71932.5E-01	18365.07A	12-31-2001 06:19
6	50.00000	335119	67023.9E-01	18365.08A	12-31-2001 07:02
7	100.00000	607632	60763.2E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9728716 Ave error=6.1166%
 Height = +72.22e02*X^1
 Average CF (EPA method 8000) = 7222.0303 with %RSD = 8.838%

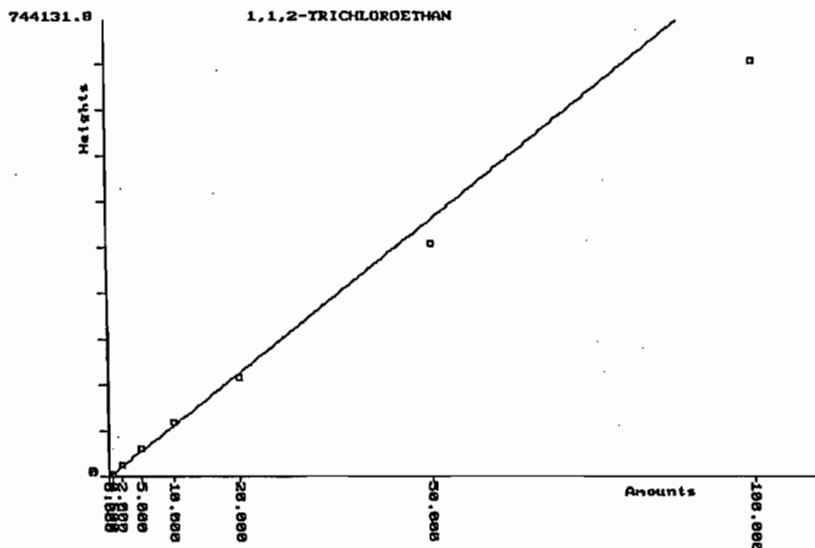
26 TRANS-1,3-DICHLOROPR Ret time= 21.176 min. Search window= 0.100 min.
 Reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3414	68285.4E-01	18365.03A	12-31-2001 03:26
2	2.00000	14574	72871.1E-01	18365.04A	12-31-2001 04:10
3	5.00000	37967	75934.5E-01	18365.05A	12-31-2001 04:53
4	10.00000	74190	74189.9E-01	18365.06A	12-31-2001 05:36
5	20.00000	139197	69598.5E-01	18365.07A	12-31-2001 06:19
6	50.00000	328100	65620.0E-01	18365.08A	12-31-2001 07:02
7	100.00000	601667	60166.7E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9815217 Ave error=5.3434%
 Height = +69.524e02*X^1
 Average CF (EPA method 8000) = 6952.3726 with %RSD = 7.843%

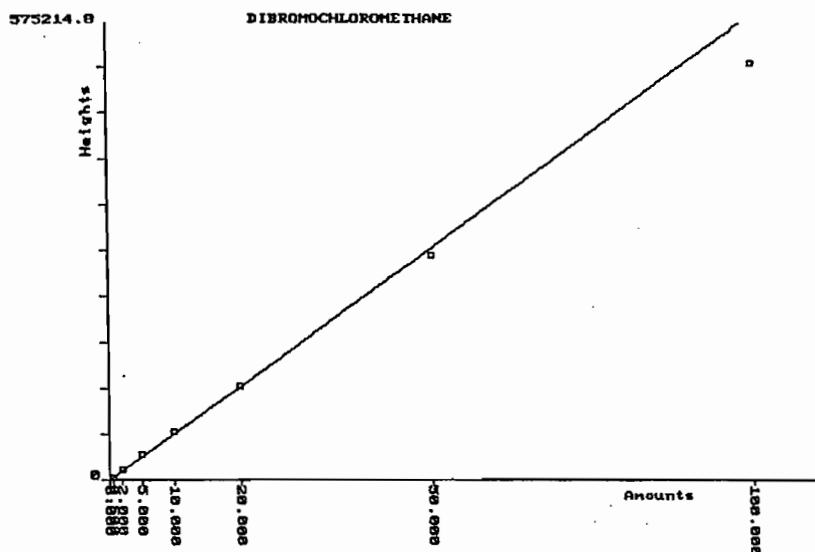
27 1,1,2-TRICHLOROETHAN Ret time= 21.406 min. Search window= 0.100 min.
 Y reference peak for this compound.
 N internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	4503	90069.9E-01	18365.03A	12-31-2001 03:26
2	2.00000	18552	92757.9E-01	18365.04A	12-31-2001 04:10
3	5.00000	46031	92061.1E-01	18365.05A	12-31-2001 04:53
4	10.00000	88246	88245.5E-01	18365.06A	12-31-2001 05:36
5	20.00000	162121	81060.7E-01	18365.07A	12-31-2001 06:19
6	50.00000	378416	75683.3E-01	18365.08A	12-31-2001 07:02
7	100.00000	676893	67689.3E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9558294 Ave error=8.5603%
 Height = +83.938e02*X^1
 Average CF (EPA method 8000) = 8393.8262 with %RSD = 11.306%

29 DIBROMOCHLOROMETHANE Ret time= 22.253 min. Search window= 0.200 min.
 Is reference peak for this compound.
 Is internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.

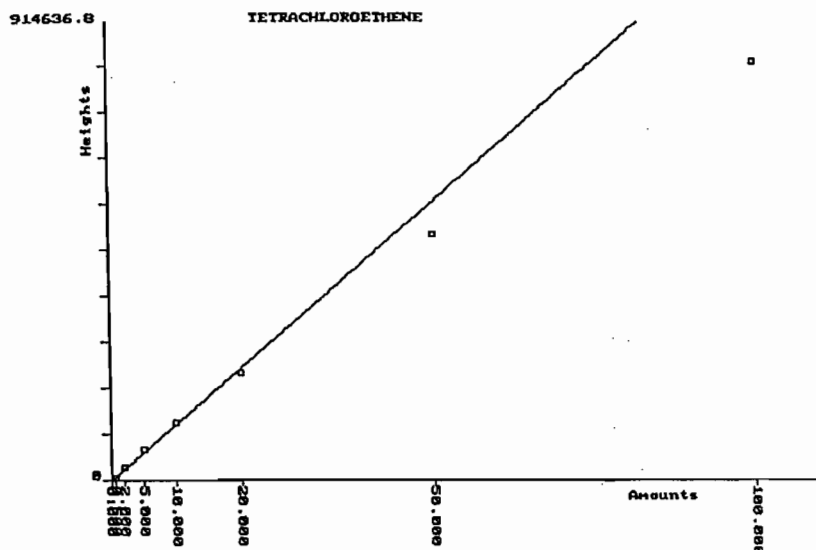


LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2844	56873.3E-01	18365.03A	12-31-2001 03:26
2	2.00000	12070	60349.6E-01	18365.04A	12-31-2001 04:10
3	5.00000	31383	62766.9E-01	18365.05A	12-31-2001 04:53
4	10.00000	60888	60887.9E-01	18365.06A	12-31-2001 05:36
5	20.00000	117780	58890.2E-01	18365.07A	12-31-2001 06:19
6	50.00000	282632	56526.4E-01	18365.08A	12-31-2001 07:02
7	100.00000	523181	52318.1E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9898901 Ave error=4.0951%
 Height = +58.373e02*X^1
 Average CF (EPA method 8000) = 5837.3203 with %RSD = 5.94%

4.0951%

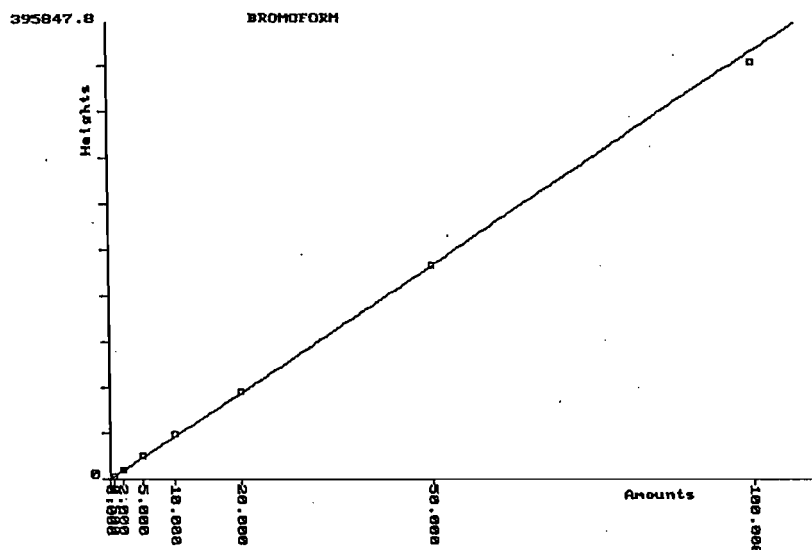
31 TETRACHLOROETHENE Ret time= 22.974 min. Search window= 0.200 min.
 reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	6299	12597.4E+00	18365.03A	12-31-2001 03:26
2	2.00000	25035	12517.6E+00	18365.04A	12-31-2001 04:10
3	5.00000	61600	12319.9E+00	18365.05A	12-31-2001 04:53
4	10.00000	115786	11578.6E+00	18365.06A	12-31-2001 05:36
5	20.00000	213583	10679.1E+00	18365.07A	12-31-2001 06:19
6	50.00000	489091	97818.3E-01	18365.08A	12-31-2001 07:02
7	100.00000	832061	83206.1E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9170033 Ave error=11.0066%
 Height = +11.114e03*X^1
 Average CF (EPA method 8000) = 11113.583 with %RSD = 14.512%

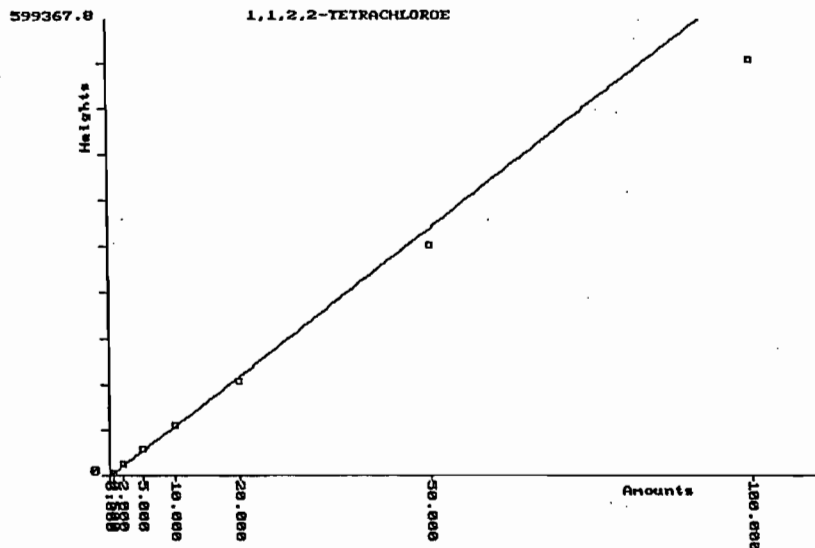
34 BROMOFORM Ret time= 24.704 min. Search window= 0.200 min.
 reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	1670	33406.7E-01	18365.03A	12-31-2001 03:26
2	2.00000	7337	36683.0E-01	18365.04A	12-31-2001 04:10
3	5.00000	19716	39432.4E-01	18365.05A	12-31-2001 04:53
4	10.00000	38242	38241.7E-01	18365.06A	12-31-2001 05:36
5	20.00000	75917	37958.4E-01	18365.07A	12-31-2001 06:19
6	50.00000	185509	37101.7E-01	18365.08A	12-31-2001 07:02
7	100.00000	360014	36001.4E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9994046 Ave error=3.3323%
 Height = +36.975e02*X^1
 Average CF (EPA method 8000) = 3697.5027 with %RSD = 5.225%

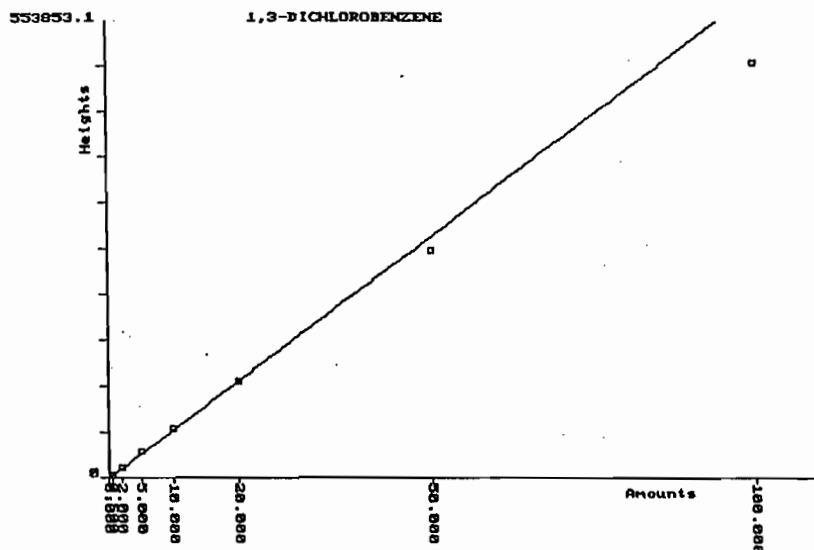
35 1,1,2,2-TETRACHLORO Ret time= 25.194 min. Search window= 0.100 min.
 7 reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3403	68068.8E-01	18365.03A	12-31-2001 03:26
2	2.00000	14226	71127.6E-01	18365.04A	12-31-2001 04:10
3	5.00000	35634	71267.4E-01	18365.05A	12-31-2001 04:53
4	10.00000	66267	66267.2E-01	18365.06A	12-31-2001 05:36
5	20.00000	125069	62534.5E-01	18365.07A	12-31-2001 06:19
6	50.00000	302620	60524.0E-01	18365.08A	12-31-2001 07:02
7	100.00000	545189	54518.9E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9724752 Ave error=6.8077%
 Height = +64.901e02*X^1
 Average CF (EPA method 8000) = 6490.1196 with %RSD = 9.409%

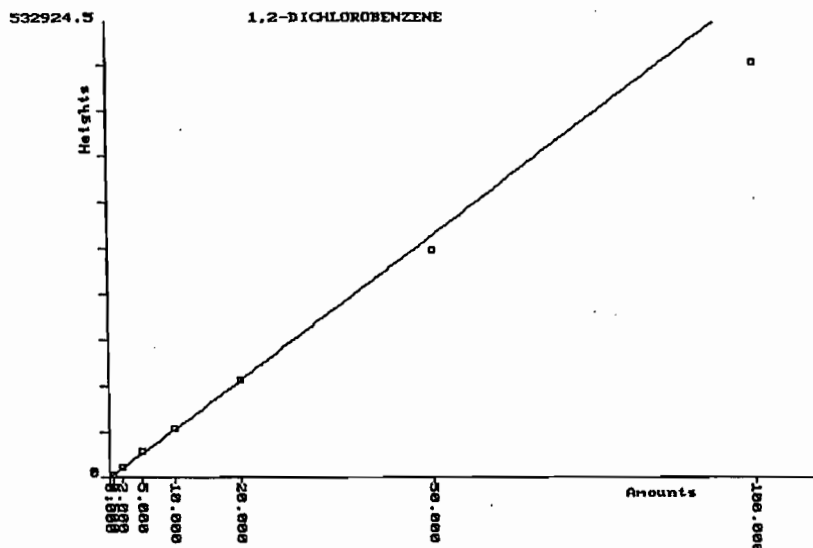
40 1,3-DICHLOROBENZENE Ret time= 27.719 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3018	60358.1E-01	18365.03A	12-31-2001 03:26
2	2.00000	12248	61238.7E-01	18365.04A	12-31-2001 04:10
3	5.00000	31803	63605.0E-01	18365.05A	12-31-2001 04:53
4	10.00000	60401	60401.3E-01	18365.06A	12-31-2001 05:36
5	20.00000	117702	58850.9E-01	18365.07A	12-31-2001 06:19
6	50.00000	275615	55122.9E-01	18365.08A	12-31-2001 07:02
7	100.00000	503777	50377.7E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9798821 Ave error=5.1604%
 Height = +58.565e02*X^1
 Average CF (EPA method 8000) = 5856.4946 with %RSD = 7.575%

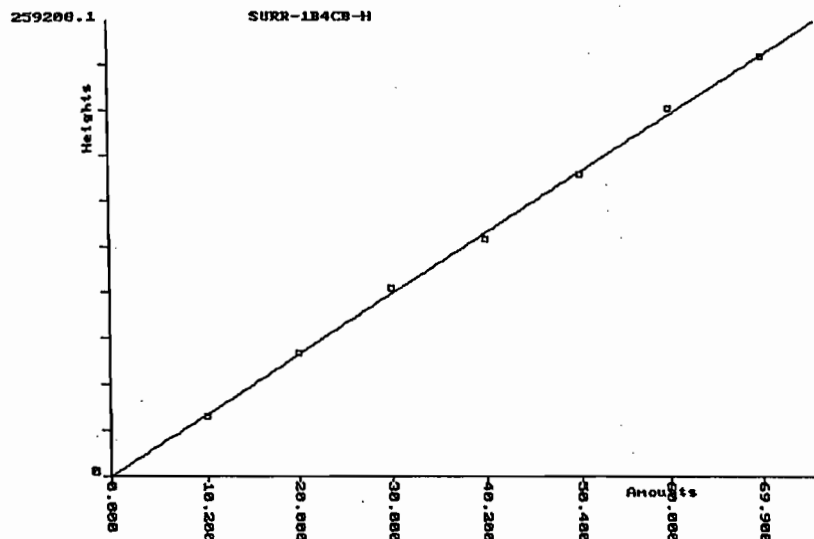
40 1,2-DICHLOROBENZENE Ret time= 28.444 min. Search window= 0.200 min.
 Reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2933	58651.1E-01	18365.03A	12-31-2001 03:26
2	2.00000	11976	59881.0E-01	18365.04A	12-31-2001 04:10
3	5.00000	30507	61013.7E-01	18365.05A	12-31-2001 04:53
4	10.00000	57647	57647.4E-01	18365.06A	12-31-2001 05:36
5	20.00000	114588	57293.9E-01	18365.07A	12-31-2001 06:19
6	50.00000	265424	53084.8E-01	18365.08A	12-31-2001 07:02
7	100.00000	484743	48474.3E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9786952 Ave error=5.3404%
 Height = +56.578e02*X^1
 Average CF (EPA method 8000) = 5657.8047 with %RSD = 7.718%

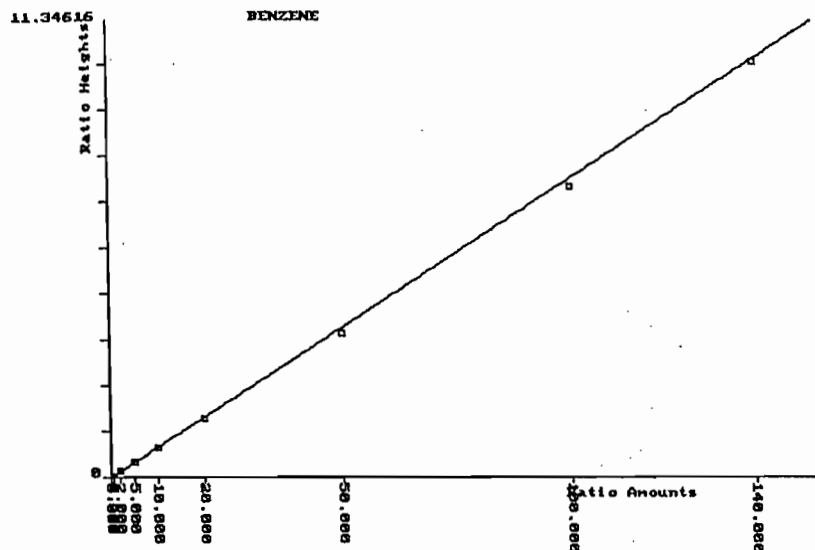
4.1 SURR-1B4CB-H Ret time= 30.132 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	10.20000	34269	33596.7E-01	18365.03A	12-31-2001 03:26
2	20.00000	69259	34629.5E-01	18365.04A	12-31-2001 04:10
3	30.00000	105963	35321.0E-01	18365.05A	12-31-2001 04:53
4	40.20000	134073	33351.6E-01	18365.06A	12-31-2001 05:36
5	50.40000	171097	33947.9E-01	18365.07A	12-31-2001 06:19
6	60.00000	209612	34935.3E-01	18365.08A	12-31-2001 07:02
7	69.90000	238759	34157.2E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9997359 Ave error=1.4972%
 Height = +34.277e02*X^1
 Average CF (EPA method 8000) = 3427.7031 with %RSD = 2.093%

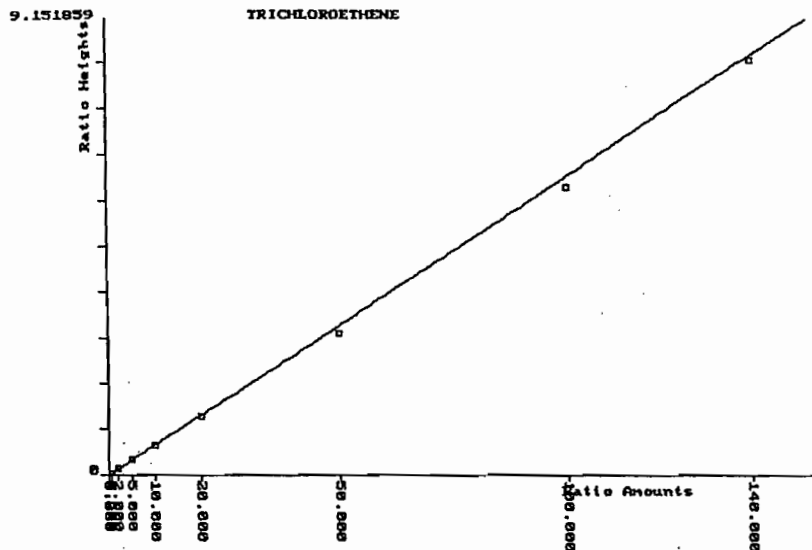
7 BENZENE Ret time= 16.012 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
	0.50000	408	1.0000	10461	0.5000	0.0390	18365B.03A	12-31-2001 03:28
	2.00000	1615	1.0000	10654	2.0000	0.1516	18365B.04A	12-31-2001 04:12
3	5.00000	4056	1.0000	10847	5.0000	0.3740	18365B.05A	12-31-2001 04:55
4	10.00000	8130	1.0000	10998	10.0000	0.7392	18365B.06A	12-31-2001 05:38
5	20.00000	15676	1.0000	10671	20.0000	1.4690	18365B.07A	12-31-2001 06:21
6	50.00000	38965	1.0000	10870	50.0000	3.5846	18365B.08A	12-31-2001 07:04
7	100.00000	79580	1.0000	11059	100.0000	7.1957	18365B.09A	12-31-2001 07:47
8	140.00000	110242	1.0000	10684	140.0000	10.3182	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .999612 Ave error=1.8006%
 Ratio Height = $+74.152e-03 \times X^1$
 Average CF (EPA method 8000) = 0.0742 with %RSD = 2.741%

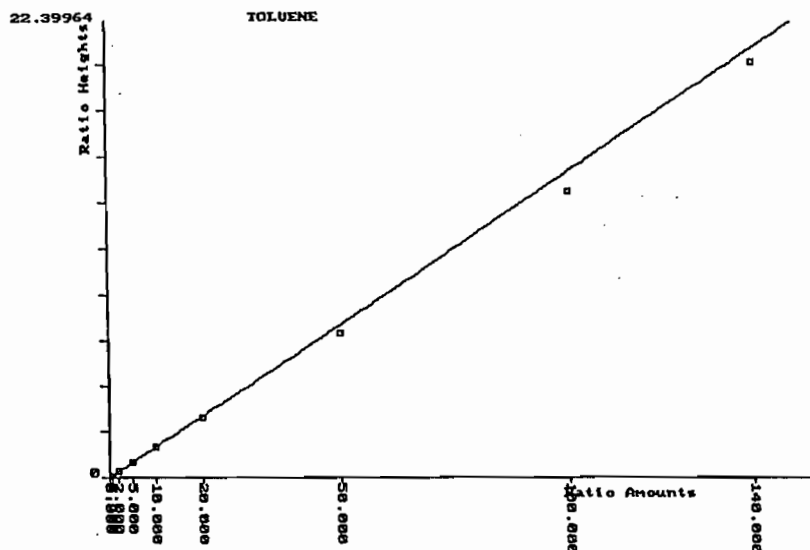
3 TRICHLOROETHENE Ret time= 18.349 min. Search window= 0.200 min.
 2 reference peak for this compound.
 1 internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
	0.50000	338	1.0000	10461	0.5000	0.0323	18365B.03A	12-31-2001 03:28
	2.00000	1320	1.0000	10654	2.0000	0.1239	18365B.04A	12-31-2001 04:12
	5.00000	3302	1.0000	10847	5.0000	0.3044	18365B.05A	12-31-2001 04:55
4	10.00000	6541	1.0000	10998	10.0000	0.5948	18365B.06A	12-31-2001 05:38
5	20.00000	12540	1.0000	10671	20.0000	1.1751	18365B.07A	12-31-2001 06:21
6	50.00000	31151	1.0000	10870	50.0000	2.8657	18365B.08A	12-31-2001 07:04
7	100.00000	63986	1.0000	11059	100.0000	5.7857	18365B.09A	12-31-2001 07:47
8	140.00000	88922	1.0000	10684	140.0000	8.3228	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9993412 Ave error=2.7027%
 Ratio Height = +60.046e-03*X^1
 Average CF (EPA method 8000) = 0.06 with %RSD = 4.002%

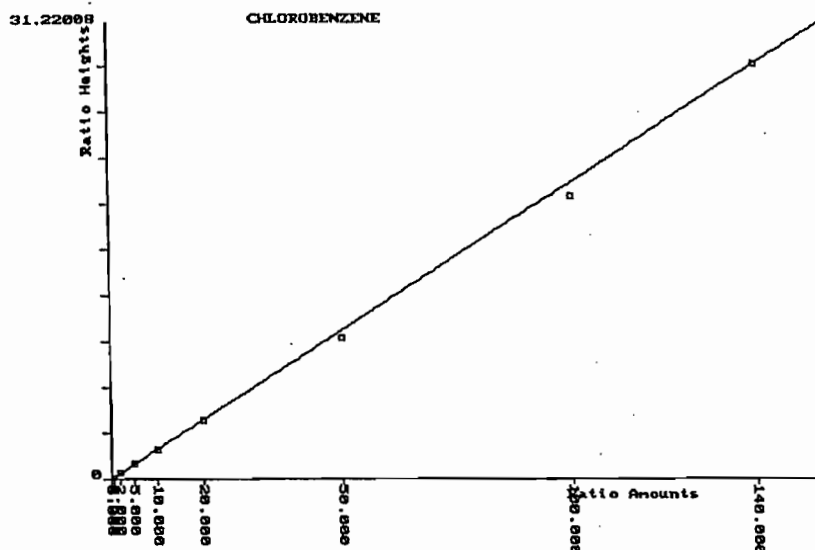
13 TOLUENE Ret time= 21.738 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
	0.50000	853	1.0000	10461	0.5000	0.0816	18365B.03A	12-31-2001 03:28
	2.00000	3359	1.0000	10654	2.0000	0.3153	18365B.04A	12-31-2001 04:12
3	5.00000	8356	1.0000	10847	5.0000	0.7704	18365B.05A	12-31-2001 04:55
4	10.00000	16553	1.0000	10998	10.0000	1.5052	18365B.06A	12-31-2001 05:38
5	20.00000	31575	1.0000	10671	20.0000	2.9588	18365B.07A	12-31-2001 06:21
6	50.00000	77224	1.0000	10870	50.0000	7.1042	18365B.08A	12-31-2001 07:04
7	100.00000	155459	1.0000	11059	100.0000	14.0568	18365B.09A	12-31-2001 07:47
8	140.00000	217644	1.0000	10684	140.0000	20.3707	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9977458 Ave error=3.6331%
 Ratio Height = $+15.019e-02 \times X^1$
 Average CF (EPA method 8000) = 0.1502 with %RSD = 5.181%

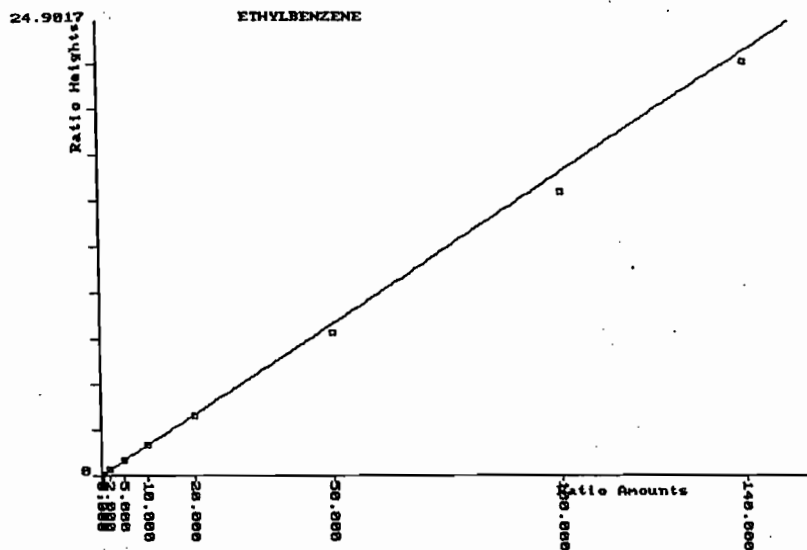
15 CHLOROBENZENE Ret time= 23.999 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
	0.50000	1116	1.0000	10461	0.5000	0.1067	18365B.03A	12-31-2001 03:28
	2.00000	4469	1.0000	10654	2.0000	0.4195	18365B.04A	12-31-2001 04:12
	5.00000	11187	1.0000	10847	5.0000	1.0314	18365B.05A	12-31-2001 04:55
4	10.00000	22220	1.0000	10998	10.0000	2.0204	18365B.06A	12-31-2001 05:38
5	20.00000	42937	1.0000	10671	20.0000	4.0236	18365B.07A	12-31-2001 06:21
6	50.00000	105083	1.0000	10870	50.0000	9.6671	18365B.08A	12-31-2001 07:04
7	100.00000	213399	1.0000	11059	100.0000	19.2958	18365B.09A	12-31-2001 07:47
8	140.00000	303341	1.0000	10684	140.0000	28.3916	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9990926 Ave error=2.3471%
 Ratio Height = +20.272e-02*X^1
 Average CF (EPA method 8000) = 0.2027 with %RSD = 3.547%

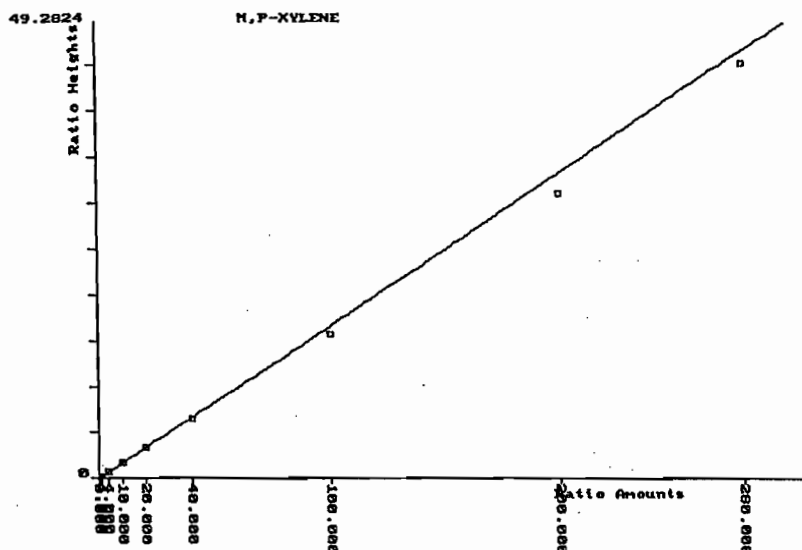
16 ETHYLBENZENE Ret time= 24.314 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
	0.50000	943	1.0000	10461	0.5000	0.0901	18365B.03A	12-31-2001 03:28
	2.00000	3686	1.0000	10654	2.0000	0.3460	18365B.04A	12-31-2001 04:12
	5.00000	9214	1.0000	10847	5.0000	0.8495	18365B.05A	12-31-2001 04:55
4	10.00000	18233	1.0000	10998	10.0000	1.6579	18365B.06A	12-31-2001 05:38
5	20.00000	34797	1.0000	10671	20.0000	3.2608	18365B.07A	12-31-2001 06:21
6	50.00000	85282	1.0000	10870	50.0000	7.8455	18365B.08A	12-31-2001 07:04
7	100.00000	171227	1.0000	11059	100.0000	15.4826	18365B.09A	12-31-2001 07:47
8	140.00000	241955	1.0000	10684	140.0000	22.6461	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9979748 Ave error=3.5014%
 Ratio Height = $+16.569e-02 \cdot X^1$
 Average CF (EPA method 8000) = 0.1657 with %RSD = 5.106%

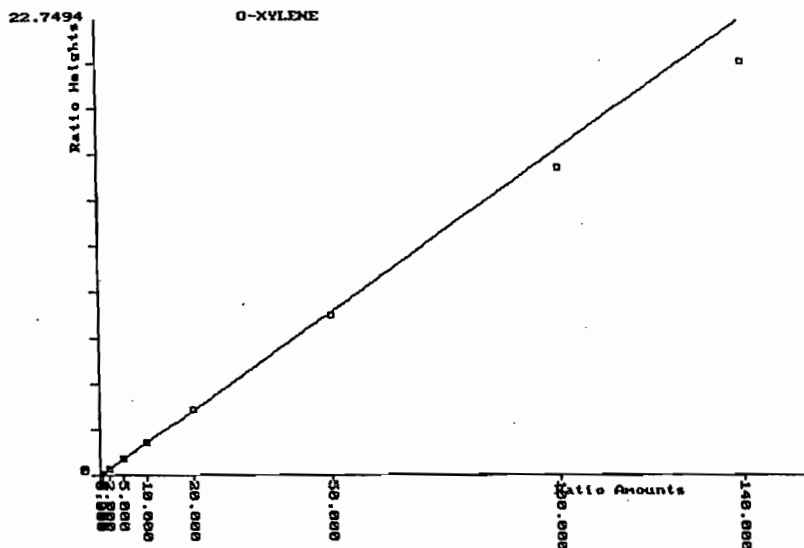
17 M,P-XYLENE Ret time= 24.606 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 Group number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
	1.00000	1878	1.0000	10461	1.0000	0.1796	18365B.03A	12-31-2001 03:28
	4.00000	7354	1.0000	10654	4.0000	0.6902	18365B.04A	12-31-2001 04:12
3	10.00000	18353	1.0000	10847	10.0000	1.6920	18365B.05A	12-31-2001 04:55
4	20.00000	36140	1.0000	10998	20.0000	3.2861	18365B.06A	12-31-2001 05:38
5	40.00000	69052	1.0000	10671	40.0000	6.4708	18365B.07A	12-31-2001 06:21
6	100.00000	170529	1.0000	10870	100.0000	15.6878	18365B.08A	12-31-2001 07:04
7	200.00000	340274	1.0000	11059	200.0000	30.7680	18365B.09A	12-31-2001 07:47
8	280.00000	478849	1.0000	10684	280.0000	44.8185	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9978033 Ave error=3.6196%
 Ratio Height = +16.477e-02*X^1
 Average CF (EPA method 8000) = 0.1648 with %RSD = 5.19%

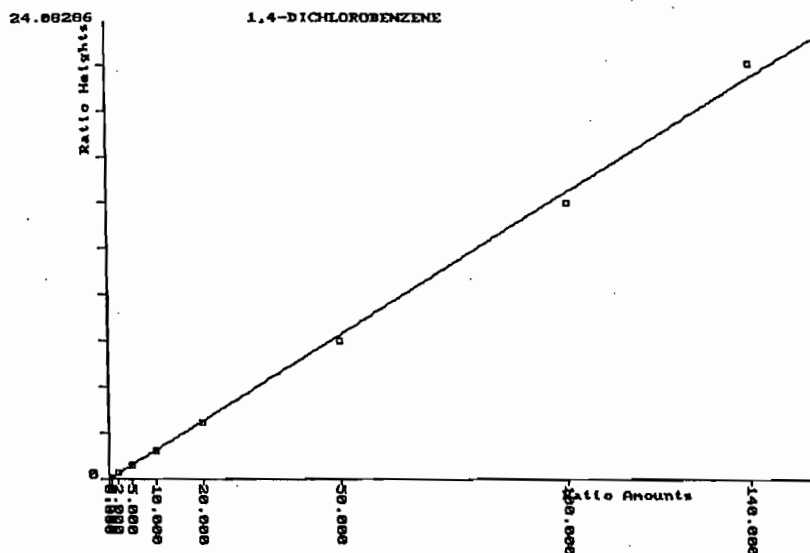
19 O-XYLENE Ret time= 25.175 min. Search window= 0.060 min.
 Reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 Group number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
	0.50000	921	1.0000	10461	0.5000	0.0881	18365B.03A	12-31-2001 03:28
	2.00000	3609	1.0000	10654	2.0000	0.3387	18365B.04A	12-31-2001 04:12
3	5.00000	9045	1.0000	10847	5.0000	0.8339	18365B.05A	12-31-2001 04:55
4	10.00000	18092	1.0000	10998	10.0000	1.6450	18365B.06A	12-31-2001 05:38
5	20.00000	35102	1.0000	10671	20.0000	3.2894	18365B.07A	12-31-2001 06:21
6	50.00000	86485	1.0000	10870	50.0000	7.9562	18365B.08A	12-31-2001 07:04
7	100.00000	169449	1.0000	11059	100.0000	15.3218	18365B.09A	12-31-2001 07:47
8	140.00000	221048	1.0000	10684	140.0000	20.6893	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9928726 Ave error=3.8619%
 Ratio Height = $+16.268e-02 \cdot X^1$
 Average CF (EPA method 8000) = 0.1627 with %RSD = 5.568%

30 1,4-DICHLOROBENZENE Ret time= 27.808 min. Search window= 0.040 min.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.

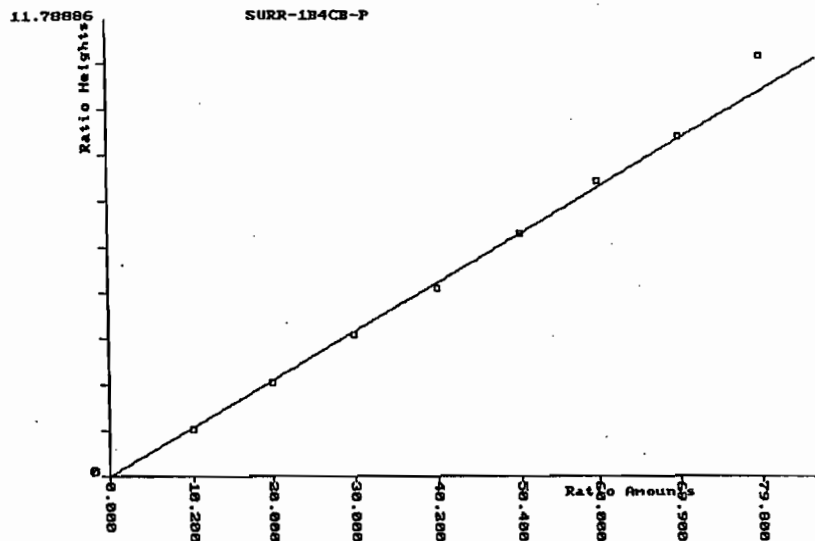


LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	827	1.0000	10461	0.5000	0.0790	18365B.03A	12-31-2001 03:28
2	2.00000	3291	1.0000	10654	2.0000	0.3089	18365B.04A	12-31-2001 04:12
3	5.00000	8223	1.0000	10847	5.0000	0.7581	18365B.05A	12-31-2001 04:55
4	10.00000	16292	1.0000	10998	10.0000	1.4814	18365B.06A	12-31-2001 05:38
5	20.00000	31672	1.0000	10671	20.0000	2.9680	18365B.07A	12-31-2001 06:21
6	50.00000	78527	1.0000	10870	50.0000	7.2240	18365B.08A	12-31-2001 07:04
7	100.00000	160325	1.0000	11059	100.0000	14.4968	18365B.09A	12-31-2001 07:47
8	140.00000	233991	1.0000	10684	140.0000	21.9007	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9985886 Ave error=2.5466%
 Ratio Height = +15.082e-02*X^1
 Average CF (EPA method 8000) = 0.1508 with %RSD = 3.411%

5077-0

34 SURR-1B4CB-P Ret time= 30.104 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
	10.20000	12690	1.0000	10461	10.2000	1.2131	18365B.03A	12-31-2001 03:28
	20.00000	25762	1.0000	10654	20.0000	2.4181	18365B.04A	12-31-2001 04:12
	30.00000	39607	1.0000	10847	30.0000	3.6515	18365B.05A	12-31-2001 04:55
	40.20000	53624	1.0000	10998	40.2000	4.8759	18365B.06A	12-31-2001 05:38
	50.40000	67001	1.0000	10671	50.4000	6.2786	18365B.07A	12-31-2001 06:21
	60.00000	82650	1.0000	10870	60.0000	7.6034	18365B.08A	12-31-2001 07:04
	69.90000	96828	1.0000	11059	69.9000	8.7553	18365B.09A	12-31-2001 07:47
	79.80000	115682	1.0000	10684	79.8000	10.8274	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9974188 Ave error=2.5813%
 Ratio Height = . +12.438e-02*X^1
 Average CF (EPA method 8000) = 0.1244 with %RSD = 4.216%

Quality Control Summary
SDG# HUL04
Instrument ID: 5843
Beginning Calibration Verification Summary

CCV Batch: 02014A18
Data File: C:\CP\DATA1\18014.01R
Date Injected: 01/14/02 Time Injected: 02:07
Initial Calibration Date(s): 12/31/01(HALL)
Initial Calibration Date(s): 12/31/01(PID)

Sample Information			
LL Sample#	Sample Code	Date	Analysis Time
BLK1827	METHOD BLANK	01/14/02	04:03
3753720	AW1U-	01/14/02	05:34
3753727	MW9U-	01/14/02	06:19
3753729	--10U	01/14/02	07:06
3753721MS	AW1U-	01/14/02	07:53
3753722MSD	AW1U-	01/14/02	08:38
LCS1805	LAB CONTROL	01/14/02	09:23

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	23.6	18	-20 to +20
CHLOROMETHANE (HALL)	20.0	12.0	-40 *	-20 to +20
VINYL CHLORIDE (HALL)	20.0	19.9	-1	-20 to +20
BROMOMETHANE (HALL)	20.0	16.9	-15	-20 to +20
CHLOROETHANE (HALL)	20.0	14.6	-27 *	-20 to +20
TRICHLOROFUOROMETHA (HALL)	20.0	18.3	-8	-20 to +20
1,1-DICHLOROETHENE (HALL)	20.0	18.7	-7	-15 to +15
METHYLENE CHLORIDE (HALL)	20.0	18.0	-10	-15 to +15
TRANS-1,2-DICHLOROET (HALL)	20.0	20.4	2	-15 to +15
1,1-DICHLOROETHANE (HALL)	20.0	20.8	4	-15 to +15
CIS-1,2-DICHLOROETHE (HALL)	20.0	20.7	3	-15 to +15
CHLOROFORM (HALL)	20.0	20.5	2	-15 to +15
1,2-DICHLOROETHANE (HALL)	20.0	20.7	3	-15 to +15
1,1,1-TRICHLOROETHAN (HALL)	20.0	20.2	1	-15 to +15
CARBON TETRACHLORIDE (HALL)	20.0	20.2	1	-15 to +15

* = %DRIFT outside control limits.

Quality Control Summary
SDG# HUL04
Instrument ID: 5843
Beginning Calibration Verification Summary

CCV Batch: 02014A18
Data File: C:\CP\DATA1\18014.01R
Date Injected: 01/14/02 Time Injected: 02:07
Initial Calibration Date(s): 12/31/01 (HALL)
Initial Calibration Date(s): 12/31/01 (PID)

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
BENZENE (PID)	20.0	18.6	-7	-15 to +15
1,2-DICHLOROPROPANE (HALL)	20.0	20.1	1	-15 to +15
TRICHLOROETHENE (PID)	20.0	18.4	-8	-15 to +15
BROMODICHLOROMETHANE (HALL)	20.0	19.5	-3	-15 to +15
CIS-1,3-DICHLOROPROP (HALL)	20.0	20.2	1	-15 to +15
TRANS-1,3-DICHLOROPR (HALL)	20.0	18.6	-7	-15 to +15
1,1,2-TRICHLOROETHAN (HALL)	20.0	20.1	0	-15 to +15
TOLUENE (PID)	20.0	18.3	-9	-15 to +15
DIBROMOCHLOROMETHANE (HALL)	20.0	20.6	3	-15 to +15
TETRACHLOROETHENE (HALL)	20.0	19.1	-5	-15 to +15
CHLOROBENZENE (PID)	20.0	18.6	-7	-15 to +15
ETHYLBENZENE (PID)	20.0	18.5	-8	-15 to +15
M, P-XYLENE (PID)	40.0	37.2	-7	-15 to +15
BROMOFORM (HALL)	20.0	21.7	9	-15 to +15
O-XYLENE (PID)	20.0	18.9	-5	-15 to +15
1,1,2,2-TETRACHLOROE (HALL)	20.0	20.9	5	-15 to +15
1,3-DICHLOROBENZENE (HALL)	20.0	20.0	0	-15 to +15
1,4-DICHLOROBENZENE (PID)	20.0	18.5	-8	-15 to +15
1,2-DICHLOROBENZENE (HALL)	20.0	20.0	0	-15 to +15
SURR-1B4CB-P (PID)	30.0	28.1	-6	-31 to +21
SURR-1B4CB-H (HALL)	30.0	29.3	-2	-41 to +32

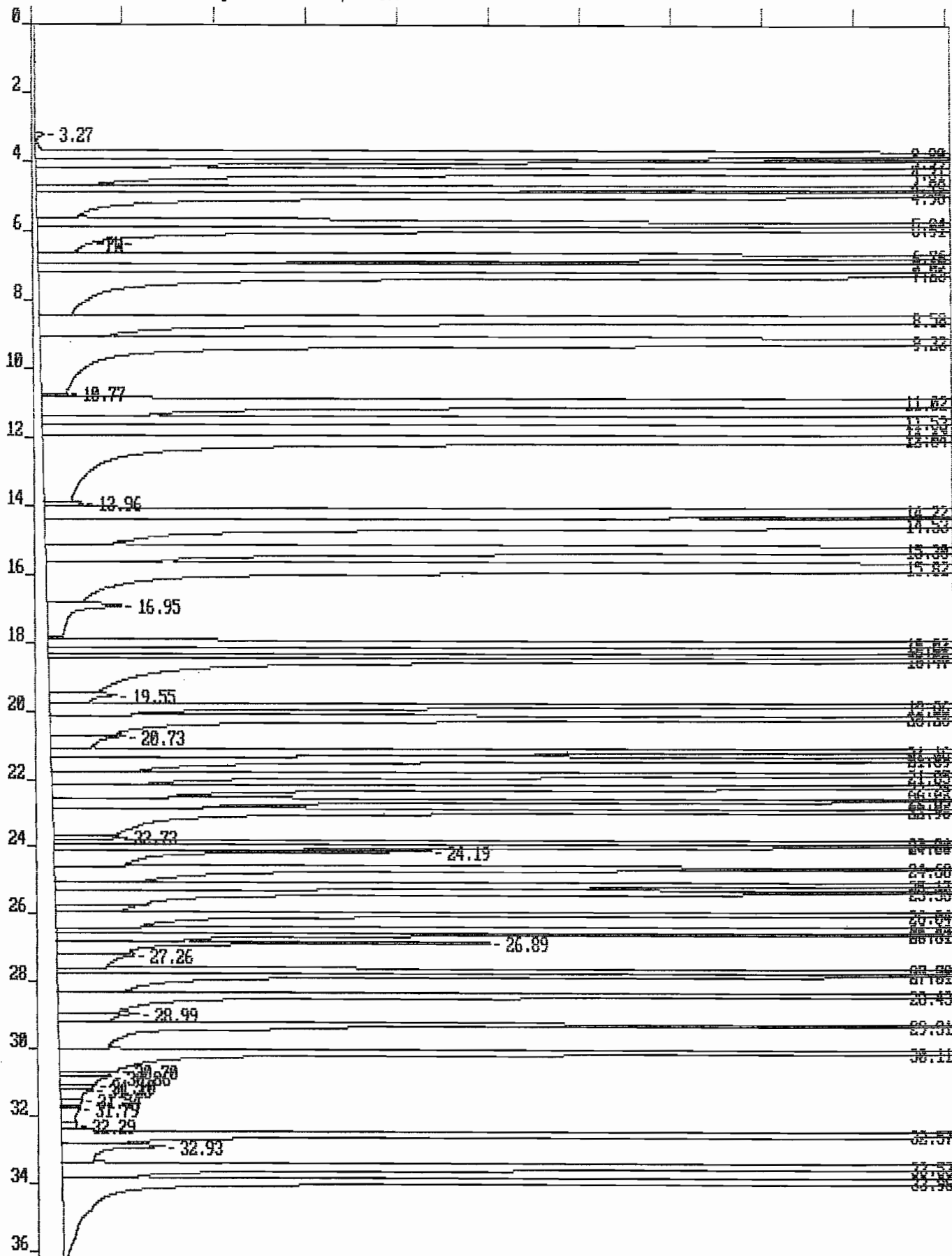
Mean %Drift for all calibration compounds (HALL) = -3.9
Mean %Drift for all calibration compounds (PID) = -9.7

File=C:\CP\DATA1\18014.01R Date printed=01-14-2002 Time= 02:08:05

Sample Name=CHKSTD

02014A188400,8401

0.0 to 37.0 min. Low Y=0.001 High Y=15.001 mv Span=15.0



Sample Name: CHKSTD

Batch: 02014A18

Date Taken: Jan 14, 2002 02:07:58

Raw File: C:\CP\DATA1\18014.01R

Area File: C:\CP\DATA1\18014.01A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#13HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 20):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.802	3.800	DICHLORODIFLUOROMETH	23.5883	320373	47749
3.987	3.991	CHLOROMETHANE	12.0397	174478	26902
4.308	4.314	VINYL CHLORIDE	19.8854	501474	70744
4.780	4.785	BROMOMETHANE	16.9030	250303	45431
4.979	4.983	CHLOROETHANE	14.6035	384081	62232
5.839	5.844	TRICHLOROFLUOROMETHA	18.3344	310741	46811
6.758	6.772	1,1-DICHLOROETHENE	18.6882	546670	86514
7.069	7.083	METHYLENE CHLORIDE	17.9893	865136	149258
7.249	7.265	TRICHLOROTRIFLUOROET	17.7288	665811	64398
8.580	8.602	TRANS-1,2-DICHLOROET	20.4344	889531	127671
9.229	9.253	1,1-DICHLOROETHANE	20.7502	959839	111044
11.015	11.049	CIS-1,2-DICHLOROETHE	20.6967	884627	104739
11.534	11.571	BROMOCHLOROMETHANE	21.1261	619831	76892
11.790	11.827	CHLOROFORM	20.4687	1153432	125189
12.039	12.080	2,2-DICHLOROPROPANE	19.5796	853019	63589
14.216	14.262	1,2-DICHLOROETHANE	20.6760	792490	98900
14.534	14.580	1,1,1-TRICHLOROETHAN	20.1572	1068507	100150
15.296	15.344	1,1-DICHLOROPROPENE	19.9885	746689	87873
15.818	15.869	CARBON TETRACHLORIDE	20.2122	1208376	122447
18.035	18.085	DIBROMOMETHANE	20.8878	363138	61915
18.208	18.257	1,2-DICHLOROPROPANE	20.1461	739661	114808
18.364	18.413	TRICHLOROETHENE	19.0974	889759	152650
18.471	18.520	BROMODICHLOROMETHANE	19.4543	915261	131674
19.858	19.903	2-CHLOROETHYL VINYL	22.0294	271943	50705
20.205	20.251	CIS-1,3-DICHLOROPROP	20.2175	739080	146012
21.161	21.206	TRANS-1,3-DICHLOROPR	18.5961	569375	129287
21.390	21.435	1,1,2-TRICHLOROETHAN	20.0944	807064	168669
21.853	21.897	1,3-DICHLOROPROPANE	19.8473	626482	139318
22.236	22.280	DIBROMOCHLOROMETHANE	20.6416	557525	120491
22.630	22.675	1,2-DIBROMOETHANE	20.6297	356642	77655
22.956	23.000	TETRACHLOROETHENE	19.0867	942541	212122
23.906	23.949	1,1,1,2-TETRACHLOROE	19.7654	863520	231302
24.004	24.046	CHLOROBENZENE	19.3432	420572	106738
24.684	24.730	BROMOFORM	21.7402	368674	80384
25.174	25.219	1,1,2,2-TETRACHLOROE	20.9317	545697	135849
25.378	25.424	1,2,3-TRICHLOROPROPA	21.1990	471521	108174
26.044	26.092	BROMOBENZENE	19.7728	262884	55967
26.495	26.542	2-CHLOROTOLUENE	19.5966	299342	78143
26.613	26.661	4-CHLOROTOLUENE	19.4912	335233	78872
27.699	27.750	1,3-DICHLOROBENZENE	19.9529	456553	116854
27.814	27.864	1,4-DICHLOROBENZENE	19.7084	564641	122837
28.425	28.478	1,2-DICHLOROBENZENE	19.9820	526667	113054
29.310	29.366	1,2-DIBROMO-3-CHLORO	22.5681	177991	25394
30.110	30.169	SURR-1B4CB-H	29.3100	522166	100466
32.567	32.638	1,2,4-TRICHLOROBENZE	20.0782	466202	80686
33.531	33.605	HEXACHLOROBUTADIENE	20.7106	650668	98206
33.955	34.032	1,2,3-TRICHLOROBENZE	20.8882	500237	71357

TOTAL 1,2-DICHLOROETHENE: 41.1312

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 97.7000%

Sample name: CHKSTD

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014.01R

Reviewed by: TB us

Verified by: Vmm49

Date: 1-14-02

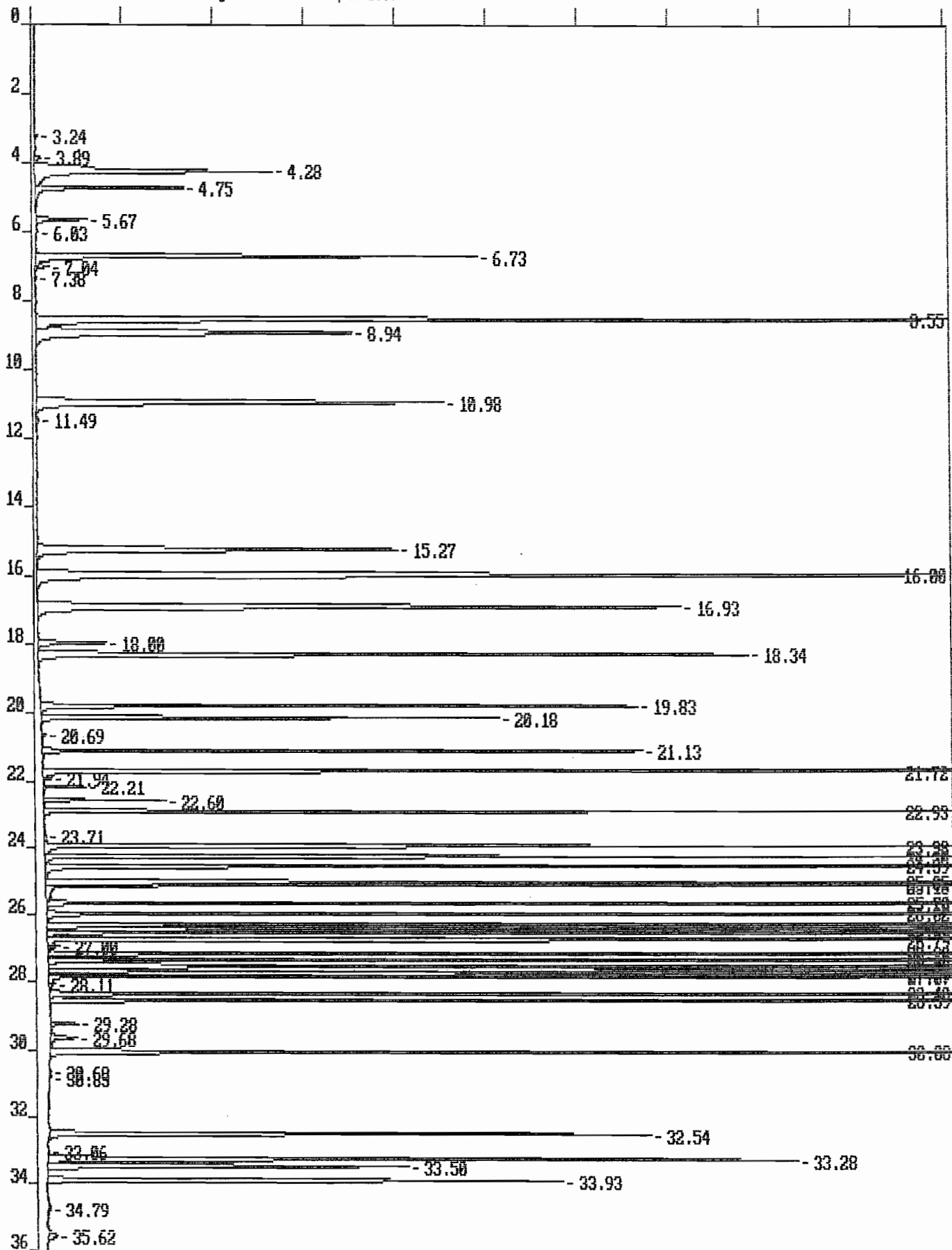
Date: 01/15/02

File=C:\CP\DATA1\180148.01R Date printed=01-14-2002 Time= 02:09:10

Sample Name=CHKSTD

02014A188400,8401

0.0 to 37.0 min. Low Y=0.001 High Y=15.001 mv Span=15.0



Sample Name: CHKSTD

Batch: 02014A18

Date Taken: Jan 14, 2002 02:07:58

Raw File: C:\CP\DATA1\18014B.01R

Area File: C:\CP\DATA1\18014B.01A

Reprocessed - updated RTs.

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.279	4.279	VINYL CHLORIDE	11.6336	32275	3910
6.729	6.729	1,1-DICHLOROETHENE	18.9699	38091	7277
8.551	8.551	TRANS-1,2-DICHLOROET	18.2448	93667	16252
8.939	8.939	METHYL T-BUTYL ETHER	19.7401	45525	5184
10.985	10.985	CIS-1,2-DICHLOROETHE	18.4731	49553	6684
15.266	15.266	1,1-DICHLOROPROPENE	18.6727	44032	5923
16.002	16.002	BENZENE	18.6383	105253	14606
16.934	16.934	ISTD-FBENZENE	1.0000	79768	10569
18.335	18.335	TRICHLOROETHENE	18.3619	60530	11652
19.830	19.830	2-CHLOROETHYL VINYL	20.7862	39543	9794
20.177	20.177	CIS-1,3-DICHLOROPROP	18.8165	28365	7517
21.135	21.135	TRANS-1,3-DICHLOROPR	17.2091	32623	9866
21.721	21.721	TOLUENE	18.2870	97416	29026
22.930	22.930	TETRACHLOROETHENE	18.5759	47962	15661
23.981	23.981	CHLOROBENZENE	18.5653	104284	39775
24.295	24.295	ETHYLBENZENE	18.4954	88048	32386
24.587	24.587	M,P-XYLENE	37.2440	207016	64857
25.053	25.053	STYRENE	18.7618	111435	41596
25.155	25.155	O-XYLENE	18.9440	93202	32570
25.699	25.699	ISOPROPYLBENZENE	19.1661	75692	25289
26.017	26.017	BROMOBENZENE	18.4624	104948	36573
26.346	26.346	N-PROPYLBENZENE	18.6362	83047	28554
26.469	26.469	2-CHLOROTOLUENE	18.6356	91013	31341
26.589	26.589	4-CHLOROTOLUENE	18.5762	93324	33034
26.793	26.793	1,3,5-TRIMETHYLBENZE	18.6916	120404	40444
27.217	27.217	TERT-BUTYLBENZENE	18.9092	71182	21600
27.399	27.399	1,2,4-TRIMETHYLBENZE	18.8701	92807	30523
27.567	27.567	SEC-BUTYLBENZENE	18.7860	72644	21915
27.673	27.670	1,3-DICHLOROBENZENE	18.5078	90805	29363
27.789	27.790	1,4-DICHLOROBENZENE	18.4759	90553	29450
27.875	27.870	P-ISOPROPYLTOLUENE	19.6547	72790	22523
28.399	28.399	1,2-DICHLOROBENZENE	18.2913	71880	21795
28.587	28.587	N-BUTYLBENZENE	19.1931	71051	20792
30.082	30.082	SURR-1B4CB-P	28.0982	137514	36937
32.539	32.539	1,2,4-TRICHLOROBENZE	19.0856	47643	9880
33.284	33.280	NAPHTHALENE	20.2619	60130	12286
33.502	33.500	HEXACHLOROBUTADIENE	19.3950	33395	5937
33.926	33.926	1,2,3-TRICHLOROBENZE	19.7554	44366	8461

XYLENES (Total): 56.1880

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 93.6608%

Chrom Perfect version 6.07

Reported on 01-14-2002at 02:18:10

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: CHKSTD

Batch: 02014A188400.840

Raw file: C:\CP\DATA1\18014B.01R

Reviewed by: RS WS

Verified by: Vmm48

Date: 1-14-02

Date: 01/15/02

Quality Control Summary
SDG# HU04
Instrument ID: 5843
Beginning Calibration Verification Summary

CCV Batch: 02014A18
Data File: C:\CP\DATA1\18014.11R
Date Injected: 01/14/02 Time Injected: 10:26
Initial Calibration Date(s): 12/31/01 (HALL)
Initial Calibration Date(s): 12/31/01 (PID)

Sample Information			
LL Sample#	Sample Code	Date	Analysis Time
BLK1828	METHOD BLANK	01/14/02	11:39
3753715	AW3U-	01/14/02	12:25
3753716	AW3L-	01/14/02	13:09
3753717	MW8U-	01/14/02	13:55
3753718	MW8M-	01/14/02	14:40
3753719	MW8L-	01/14/02	15:25
3753723	AW1UD	01/14/02	16:10
3753724	AW1L-	01/14/02	16:55
3753725	AW2L-	01/14/02	17:40
3753728	MW9L-	01/14/02	18:25
3753730	--10L	01/14/02	19:10

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	% DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	25.1	25 *	-20 to +20
CHLOROMETHANE (HALL)	20.0	12.6	-37 *	-20 to +20
VINYL CHLORIDE (HALL)	20.0	20.1	0	-20 to +20
BROMOMETHANE (HALL)	20.0	17.1	-15	-20 to +20
CHLOROETHANE (HALL)	20.0	16.1	-20	-20 to +20
TRICHLOROFLUOROMETHA (HALL)	20.0	18.0	-10	-20 to +20
1,1-DICHLOROETHENE (HALL)	20.0	19.0	-5	-15 to +15
METHYLENE CHLORIDE (HALL)	20.0	18.0	-10	-15 to +15
TRANS-1,2-DICHLOROET (HALL)	20.0	20.1	0	-15 to +15
1,1-DICHLOROETHANE (HALL)	20.0	20.7	4	-15 to +15
CIS-1,2-DICHLOROETHE (HALL)	20.0	20.2	1	-15 to +15

* = %DRIFT outside control limits.

Quality Control Summary
SDG# HUL04
Instrument ID: 5843
Beginning Calibration Verification Summary

CCV Batch: 02014A18

Data File: C:\CP\DATA1\18014.11R
Date Injected: 01/14/02 Time Injected: 10:26
Initial Calibration Date(s): 12/31/01 (HALL)
Initial Calibration Date(s): 12/31/01 (PID)

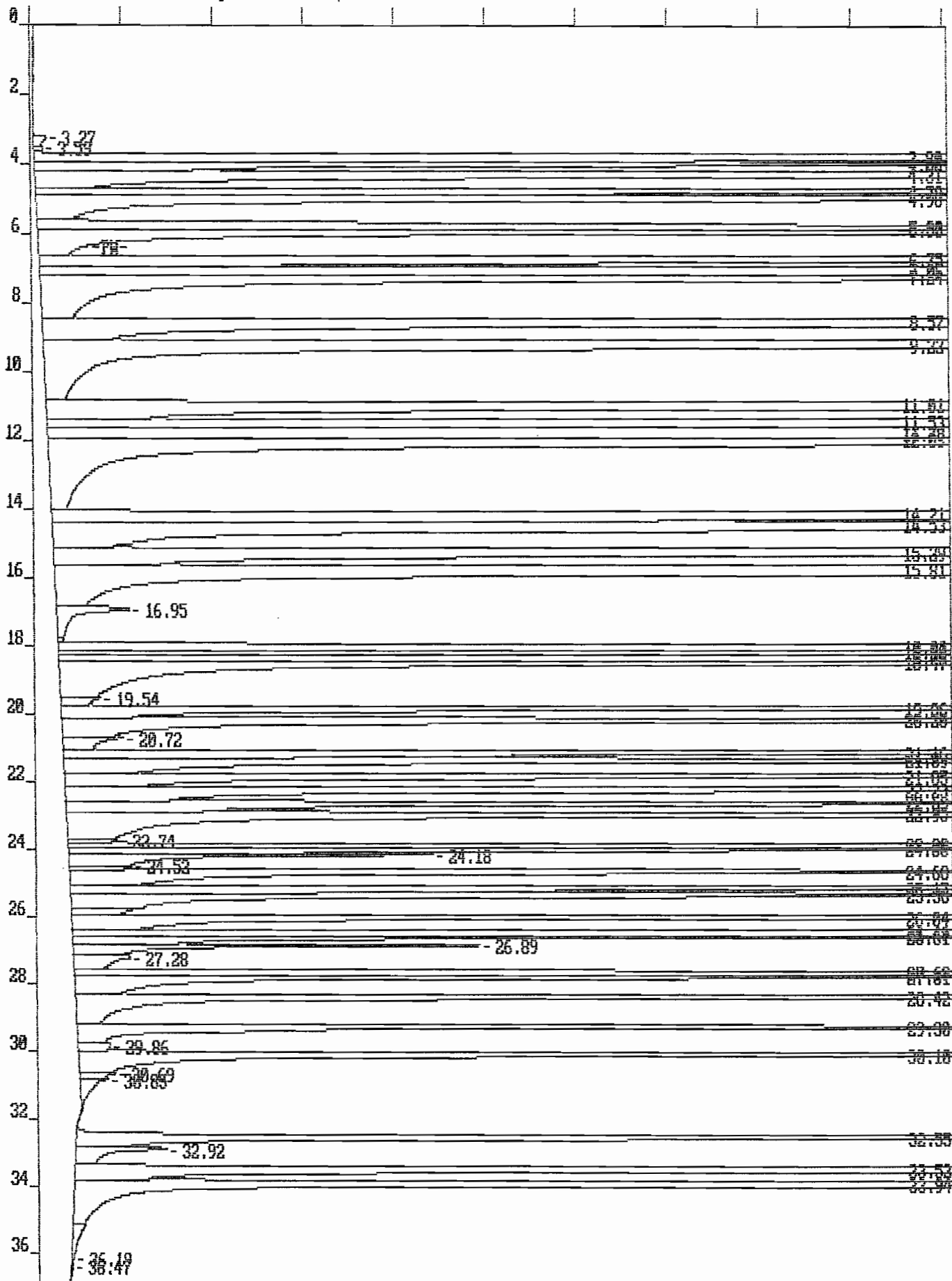
COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
CHLOROFORM (HALL)	20.0	20.2	1	-15 to +15
1,2-DICHLOROETHANE (HALL)	20.0	20.6	3	-15 to +15
1,1,1-TRICHLOROETHAN (HALL)	20.0	20.0	0	-15 to +15
CARBON TETRACHLORIDE (HALL)	20.0	20.4	2	-15 to +15
BENZENE (PID)	20.0	18.6	-7	-15 to +15
1,2-DICHLOROPROPANE (HALL)	20.0	20.4	2	-15 to +15
TRICHLOROETHENE (PID)	20.0	18.1	-9	-15 to +15
BROMODICHLOROMETHANE (HALL)	20.0	19.5	-3	-15 to +15
CIS-1,3-DICHLOROPROP (HALL)	20.0	19.9	-1	-15 to +15
TRANS-1,3-DICHLOROPR (HALL)	20.0	18.3	-8	-15 to +15
1,1,2-TRICHLOROETHAN (HALL)	20.0	19.8	-1	-15 to +15
TOLUENE (PID)	20.0	18.5	-7	-15 to +15
DIBROMOCHLOROMETHANE (HALL)	20.0	20.8	4	-15 to +15
TETRACHLOROETHENE (HALL)	20.0	19.3	-4	-15 to +15
CHLOROBENZENE (PID)	20.0	18.7	-6	-15 to +15
ETHYLBENZENE (PID)	20.0	18.9	-6	-15 to +15
M,P-XYLENE (PID)	40.0	38.0	-5	-15 to +15
BROMOFORM (HALL)	20.0	21.4	7	-15 to +15
O-XYLENE (PID)	20.0	19.3	-4	-15 to +15
1,1,2,2-TETRACHLOROE (HALL)	20.0	20.8	4	-15 to +15
1,3-DICHLOROBENZENE (HALL)	20.0	20.2	1	-15 to +15
1,4-DICHLOROBENZENE (PID)	20.0	18.9	-5	-15 to +15
1,2-DICHLOROBENZENE (HALL)	20.0	20.1	0	-15 to +15
SURR-1B4CB-P (PID)	30.0	27.9	-7	-31 to +21
SURR-1B4CB-H (HALL)	30.0	29.3	-2	-41 to +32

Mean %Drift for all calibration compounds (HALL) = -3.8
Mean %Drift for all calibration compounds (PID) = -8.8

File=C:\CP\DATA1\18014.11R Date printed=01-14-2002 Time= 10:26:29

Sample Name=CHKSTD 02014A188400.8401

0.0 to 37.0 min. Low Y=0.044 High Y=15.044 mv Span=15.0



Sample Name: CHKSTD

Batch: 02014A18

Date Taken: Jan 14, 2002 10:26:22

Raw File: C:\CP\DATA1\18014.11R

Area File: C:\CP\DATA1\18014.11A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 21):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.797	3.802	DICHLORODIFLUOROMETH	25.0912	343962	50792
3.996	3.987	CHLOROMETHANE	12.6245	194740	28208
4.309	4.308	VINYL CHLORIDE	20.1059	500938	71529
4.786	4.780	BROMOMETHANE	17.0712	261042	45883
4.976	4.979	CHLOROETHANE	16.0613	422413	68444
5.831	5.839	TRICHLOROFLUOROMETHA	18.0019	289459	45962
6.751	6.758	1,1-DICHLOROETHENE	19.0015	562468	87965
7.061	7.069	METHYLENE CHLORIDE	18.0039	874591	149380
7.244	7.249	TRICHLOROTRIFLUOROET	18.5277	703649	67299
8.574	8.580	TRANS-1,2-DICHLOROET	20.0592	875133	125327
9.222	9.229	1,1-DICHLOROETHANE	20.7178	959366	110871
11.009	11.015	CIS-1,2-DICHLOROETHE	20.2108	863707	102279
11.527	11.534	BROMOCHLOROMETHANE	20.2091	594364	73555
11.782	11.790	CHLOROFORM	20.1646	1139268	123329
12.030	12.039	2,2-DICHLOROPROPANE	19.0004	822551	61708
14.209	14.216	1,2-DICHLOROETHANE	20.5584	782435	98338
14.528	14.534	1,1,1-TRICHLOROETHAN	20.0316	1061225	99526
15.290	15.296	1,1-DICHLOROPROPENE	19.8361	740456	87203
15.813	15.818	CARBON TETRACHLORIDE	20.4389	1210013	123820
18.032	18.035	DIBROMOMETHANE	20.3339	353438	60273
18.204	18.208	1,2-DICHLOROPROPANE	20.3839	747050	116164
18.361	18.364	TRICHLOROETHENE	19.1954	914618	153433
18.468	18.471	BROMODICHLOROMETHANE	19.4984	895016	131973
19.856	19.858	2-CHLOROETHYL VINYL	22.1066	269700	50883
20.203	20.205	CIS-1,3-DICHLOROPROP	19.8575	726082	143412
21.160	21.161	TRANS-1,3-DICHLOROPR	18.3102	559526	127299
21.388	21.390	1,1,2-TRICHLOROETHAN	19.8388	792052	166523
21.851	21.853	1,3-DICHLOROPROPANE	19.8200	622671	139127
22.234	22.236	DIBROMOCHLOROMETHANE	20.8359	557213	121626
22.629	22.630	1,2-DIBROMOETHANE	20.3461	351551	76587
22.954	22.956	TETRACHLOROETHENE	19.2684	941009	214141
23.904	23.906	1,1,1,2-TETRACHLOROE	19.8881	864434	232739
24.002	24.004	CHLOROBENZENE	19.1547	420672	105698
24.682	24.684	BROMOFORM	21.4178	359564	79192
25.172	25.174	1,1,2,2-TETRACHLOROE	20.8154	541194	135094
25.375	25.378	1,2,3-TRICHLOROPROPA	20.8020	459248	106148
26.041	26.044	BROMOBENZENE	19.8163	257677	56090
26.491	26.495	2-CHLOROTOLUENE	20.0781	305802	80063
26.609	26.613	4-CHLOROTOLUENE	19.8980	338384	80518
27.693	27.699	1,3-DICHLOROBENZENE	20.2112	459954	118367
27.807	27.814	1,4-DICHLOROBENZENE	19.2239	549581	119818
28.418	28.425	1,2-DICHLOROBENZENE	20.0793	525359	113605
29.302	29.310	1,2-DIBROMO-3-CHLORO	22.3805	152056	25183
30.100	30.110	SURR-1B4CB-H	29.2661	511382	100315
32.553	32.567	1,2,4-TRICHLOROBENZE	20.5058	473152	82404
33.516	33.531	HEXACHLOROBUTADIENE	20.4003	641556	96735
33.940	33.955	1,2,3-TRICHLOROBENZE	21.1226	487793	72158
TOTAL 1,2-DICHLOROETHENE:			40.2700		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 97.5535%

Chrom Perfect version 6.07

Reported on 01-14-2002at 10:27:19

Raw file: C:\CP\DATA1\18014..11R

Reviewed by: MMB/994

Verified by: WMM/US

Date: 1/14/02

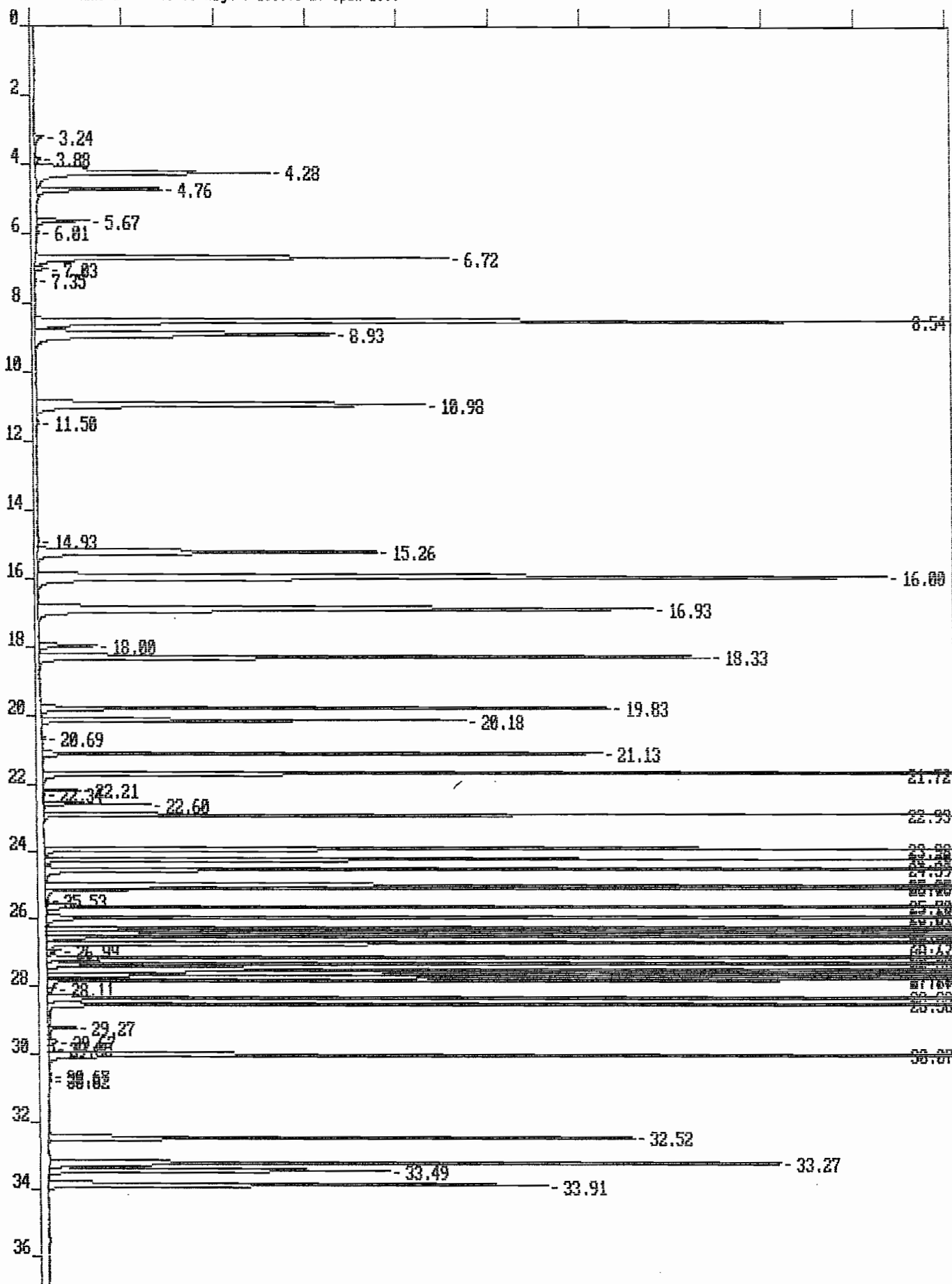
Date: 01/15/02

File=C:\CP\DATA1\180148.11R Date printed=01-14-2002 Time= 10:27:34

Sample Name=CHKSTD

02014A188400,8401

0.0 to 37.0 min. Low Y=0.006 High Y=15.006 mv Span=15.0



Sample Name: CHKSTD

Batch: 02014A18

Date Taken: Jan 14, 2002 10:26:22

Raw File: C:\CP\DATA1\18014B.11R

Area File: C:\CP\DATA1\18014B.11A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.279	VINYL CHLORIDE	11.9205	30177	3818
6.722	6.729	1,1-DICHLOROETHENE	18.4732	35725	6754
8.544	8.551	TRANS-1,2-DICHLOROET	18.1356	88202	15396
8.933	8.939	METHYL T-BUTYL ETHER	19.5130	43152	4883
10.979	10.985	CIS-1,2-DICHLOROETHE	18.4012	46829	6345
15.259	15.266	1,1-DICHLOROPROPENE	18.3468	41108	5546
15.997	16.002	BENZENE	18.5959	99756	13889
16.930	16.934	ISTD-FBENZENE	1.0000	75833	10072
18.332	18.335	TRICHLOROETHENE	18.1460	57117	10975
19.828	19.830	2-CHLOROETHYL VINYL	20.7694	37508	9326
20.176	20.177	CIS-1,3-DICHLOROPROP	18.2535	26388	6949
21.133	21.135	TRANS-1,3-DICHLOROPR	16.7660	30388	9161
21.720	21.721	TOLUENE	18.5044	94004	27992
22.929	22.930	TETRACHLOROETHENE	18.4256	45118	14805
23.979	23.981	CHLOROBENZENE	18.7265	99406	38236
24.293	24.295	ETHYLBENZENE	18.8660	85394	31484
24.585	24.587	M,P-XYLENE	37.9836	200715	63038
25.050	25.053	STYRENE	18.9894	108060	40123
25.153	25.155	O-XYLENE	19.2559	89380	31551
25.696	25.699	ISOPROPYLBENZENE	19.7632	74039	24852
26.014	26.017	BROMOBENZENE	18.8820	102504	35648
26.341	26.346	N-PROPYLBENZENE	19.0410	80438	27804
26.464	26.469	2-CHLOROTOLUENE	19.0902	89157	30597
26.584	26.589	4-CHLOROTOLUENE	18.9870	91226	32179
26.788	26.793	1,3,5-TRIMETHYLBENZE	19.1311	117782	39451
27.211	27.217	TERT-BUTYLBENZENE	19.3389	69496	21053
27.393	27.399	1,2,4-TRIMETHYLBENZE	19.3463	90724	29824
27.561	27.567	SEC-BUTYLBENZENE	19.0666	70340	21198
27.667	27.670	1,3-DICHLOROBENZENE	18.8678	88801	28528
27.782	27.790	1,4-DICHLOROBENZENE	18.9393	88451	28770
27.868	27.870	P-ISOPROPYLTOLUENE	20.0400	70920	21886
28.391	28.399	1,2-DICHLOROBENZENE	18.8325	70668	21386
28.579	28.587	N-BUTYLBENZENE	19.2259	68572	19849
30.072	30.082	SURR-1B4CB-P	27.8775	131226	34925
32.524	32.539	1,2,4-TRICHLOROBENZE	19.4991	45845	9620
33.270	33.280	NAPHTHALENE	20.7580	58753	11996
33.487	33.500	HEXACHLOROBUTADIENE	19.1955	31770	5600
33.912	33.926	1,2,3-TRICHLOROBENZE	20.1016	43327	8205

XYLENES (Total): 57.2394

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 92.9250%

Chrom Perfect version 6.07

Reported on 01-14-2002at 10:29:04

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: CHKSTD

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014B.11R

Reviewed by: mm49

Verified by: mm49

Date: 1/14/02

Date: 01/15/02

Quality Control Summary
SDG# RuL04
Instrument ID: 5843
Beginning Calibration Verification Summary

CCV Batch: 02014A18
Data File: C:\CP\DATA\18014.23R
Date Injected: 01/14/02 Time Injected: 19:56
Initial Calibration Date(s): 12/31/01 (HALL)
Initial Calibration Date(s): 12/31/01 (PID)

Sample Information			
L/L Sample#	Sample Code	Date	Analysis Time
BLK1829	METHOD BLANK	01/14/02	20:52
3753726	AWFB-	01/14/02	21:51
3753734	--TB-	01/14/02	22:36
3753732	--5M-	01/14/02	23:21
3753733	--5L-	01/15/02	00:06
3753731	--5U-	01/15/02	00:52
BLK1830	METHOD BLANK	01/15/02	01:37
3753731	--5U-	01/15/02	03:09

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	% DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	25.4	27 *	-20 to +20
CHLOROMETHANE (HALL)	20.0	12.8	-36 *	-20 to +20
VINYL CHLORIDE (HALL)	20.0	20.0	0	-20 to +20
BROMOMETHANE (HALL)	20.0	16.3	-19	-20 to +20
CHLOROETHANE (HALL)	20.0	16.3	-19	-20 to +20
TRICHLOROFLUOROMETHA (HALL)	20.0	17.5	-12	-20 to +20
1,1-DICHLOROETHENE (HALL)	20.0	18.8	-6	-15 to +15
METHYLENE CHLORIDE (HALL)	20.0	17.6	-12	-15 to +15
TRANS-1,2-DICHLOROET (HALL)	20.0	19.7	-1	-15 to +15
1,1-DICHLOROETHANE (HALL)	20.0	20.4	2	-15 to +15
CIS-1,2-DICHLOROETHE (HALL)	20.0	20.6	3	-15 to +15
CHLOROFORM (HALL)	20.0	20.6	3	-15 to +15
1,2-DICHLOROETHANE (HALL)	20.0	19.8	-1	-15 to +15
1,1,1-TRICHLOROETHAN (HALL)	20.0	19.4	-3	-15 to +15

* = %DRIFT outside control limits.

Quality Control Summary

SDG# HUL04

Instrument ID: 5843

Beginning Calibration Verification Summary

CCV Batch: 02014A18

Data File: C:\CP\DATA1\18014.23R

Date Injected: 01/14/02 Time Injected: 19:56

Initial Calibration Date(s): 12/31/01(HALL)

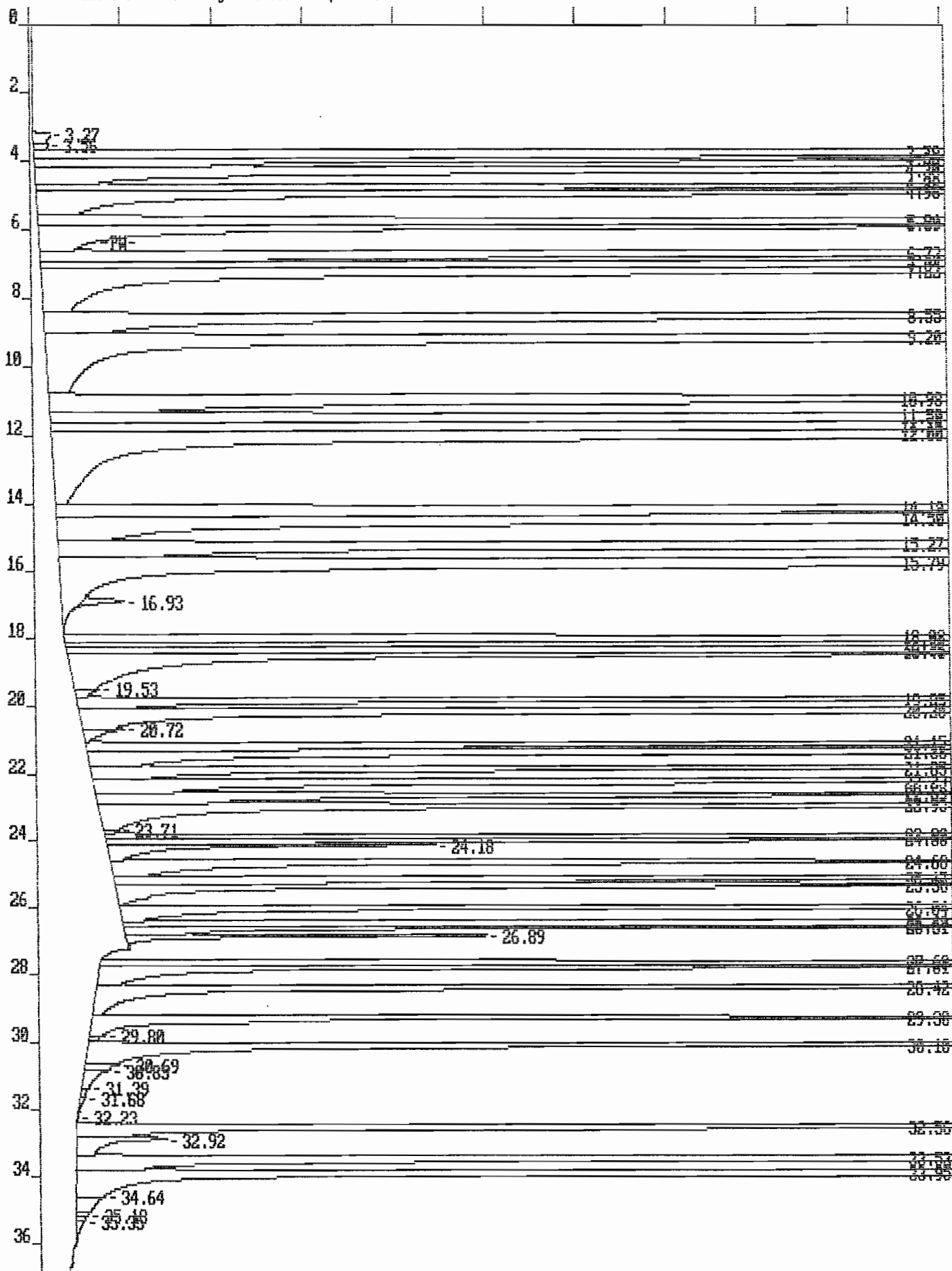
Initial Calibration Date(s): 12/31/01(PID)

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
CARBON TETRACHLORIDE (HALL)	20.0	19.8	-1	-15 to +15
BENZENE (PID)	20.0	18.8	-6	-15 to +15
1, 2-DICHLOROPROPANE (HALL)	20.0	20.1	0	-15 to +15
TRICHLOROETHENE (PID)	20.0	18.2	-9	-15 to +15
BROMODICHLOROMETHANE (HALL)	20.0	19.3	-4	-15 to +15
CIS-1, 3-DICHLOROPROP (HALL)	20.0	19.8	-1	-15 to +15
TRANS-1, 3-DICHLOROPR (HALL)	20.0	18.3	-8	-15 to +15
1, 1, 2-TRICHLOROETHAN (HALL)	20.0	20.2	1	-15 to +15
TOLUENE (PID)	20.0	18.5	-7	-15 to +15
DIBROMOCHLOROMETHANE (HALL)	20.0	20.4	2	-15 to +15
TETRACHLOROETHENE (HALL)	20.0	19.4	-3	-15 to +15
CHLOROBENZENE (PID)	20.0	18.8	-6	-15 to +15
ETHYLBENZENE (PID)	20.0	18.9	-5	-15 to +15
M, P-XYLENE (PID)	40.0	37.9	-5	-15 to +15
BROMOFORM (HALL)	20.0	21.8	9	-15 to +15
O-XYLENE (PID)	20.0	19.3	-4	-15 to +15
1, 1, 2, 2-TETRACHLOROE (HALL)	20.0	21.2	6	-15 to +15
1, 3-DICHLOROBENZENE (HALL)	20.0	19.6	-2	-15 to +15
1, 4-DICHLOROBENZENE (PID)	20.0	18.8	-6	-15 to +15
1, 2-DICHLOROBENZENE (HALL)	20.0	19.6	-2	-15 to +15
SURR-1B4CB-P (PID)	30.0	28.8	-4	-31 to +21
SURR-1B4CB-H (HALL)	30.0	29.5	-2	-41 to +32

Mean %Drift for all calibration compounds (HALL) = -4.4

Mean %Drift for all calibration compounds (PID) = -8.3

File=C:\CP\DATA1\18014.23R Date printed=01-14-2002 Time= 19:56:11
 Sample Name=CHKSTD 02014A188400,8401
 7.0 to 37.0 min. Low Y=-0.01 High Y=14.99 mv Span=15.0



Sample Name: CHKSTD

Batch: 02014A18

Date Taken: Jan 14, 2002 19:56:05

Raw File: C:\CP\DATA1\18014.23R

Area File: C:\CP\DATA1\18014.23A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.786	3.797	DICHLORODIFLUOROMETH	25.4290	355659	51475
3.997	3.996	CHLOROMETHANE	12.7975	199828	28595
4.302	4.309	VINYL CHLORIDE	19.9611	505368	71014
4.779	4.786	BROMOMETHANE	16.2925	257181	43790
4.964	4.976	CHLOROETHANE	16.2774	437211	69365
5.814	5.831	TRICHLOROFLUOROMETHA	17.5271	282234	44750
6.735	6.751	1,1-DICHLOROETHENE	18.7589	567611	86842
7.042	7.061	METHYLENE CHLORIDE	17.5729	860499	145803
7.223	7.244	TRICHLOROTRIFLUOROET	18.1040	694691	65761
8.549	8.574	TRANS-1,2-DICHLOROET	19.7021	853722	123096
9.197	9.222	1,1-DICHLOROETHANE	20.4393	947629	109381
10.981	11.009	CIS-1,2-DICHLOROETHE	20.5960	877420	104229
11.500	11.527	BROMOCHLOROMETHANE	20.5684	604231	74863
11.756	11.782	CHLOROFORM	20.6174	1159846	126098
12.001	12.030	2,2-DICHLOROPROPANE	18.9953	824264	61692
14.187	14.209	1,2-DICHLOROETHANE	19.8471	758717	94935
14.505	14.528	1,1,1-TRICHLOROETHAN	19.3970	1028777	96373
15.270	15.290	1,1-DICHLOROPROPENE	19.1025	714721	83978
15.793	15.813	CARBON TETRACHLORIDE	19.8248	1180290	120100
18.018	18.032	DIBROMOMETHANE	20.0580	349205	59455
18.192	18.204	1,2-DICHLOROPROPANE	20.0714	744425	114383
18.349	18.361	TRICHLOROETHENE	18.8173	883649	150411
18.457	18.468	BROMODICHLOROMETHANE	19.2726	883535	130445
19.848	19.856	2-CHLOROETHYL VINYL	22.0179	265558	50679
20.196	20.203	CIS-1,3-DICHLOROPROP	19.7779	713620	142837
21.154	21.160	TRANS-1,3-DICHLOROPR	18.3292	557211	127432
21.383	21.388	1,1,2-TRICHLOROETHAN	20.1853	799582	169432
21.847	21.851	1,3-DICHLOROPROPANE	20.0837	623671	140978
22.230	22.234	DIBROMOCHLOROMETHANE	20.3768	544073	118946
22.626	22.629	1,2-DIBROMOETHANE	20.4893	346526	77126
22.952	22.954	TETRACHLOROETHENE	19.4230	924245	215859
23.904	23.904	1,1,1,2-TETRACHLOROE	20.2513	879916	236989
24.001	24.002	CHLOROBENZENE	19.5992	425039	108150
24.682	24.682	BROMOFORM	21.8065	349466	80630
25.172	25.172	1,1,2,2-TETRACHLOROE	21.2482	545255	137903
25.376	25.375	1,2,3-TRICHLOROPROPA	21.4824	460608	109620
26.041	26.041	BROMOBENZENE	19.5874	239335	55443
26.491	26.491	2-CHLOROTOLUENE	20.0051	299571	79772
26.610	26.609	4-CHLOROTOLUENE	19.6833	327061	79649
27.694	27.693	1,3-DICHLOROBENZENE	19.5926	440726	114744
27.808	27.807	1,4-DICHLOROBENZENE	19.3086	535267	120345
28.419	28.418	1,2-DICHLOROBENZENE	19.5527	499922	110625
29.304	29.302	1,2-DIBROMO-3-CHLORO	21.9294	143624	24675
30.103	30.100	SURR-1B4CB-H	29.4550	511939	100963
32.558	32.553	1,2,4-TRICHLOROBENZE	20.1442	464549	80951
33.521	33.516	HEXACHLOROBUTADIENE	19.8969	625130	94348
33.945	33.940	1,2,3-TRICHLOROBENZE	21.0946	477984	72062

TOTAL 1,2-DICHLOROETHENE: 40.2982

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 98.1834%

Chrom. Perfect version 6.07

Reported on 01-14-2002 at 19:57:00

Sample name: **CHKSTD**

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014.23R

Reviewed by: SKP088

Verified by: Vmm49

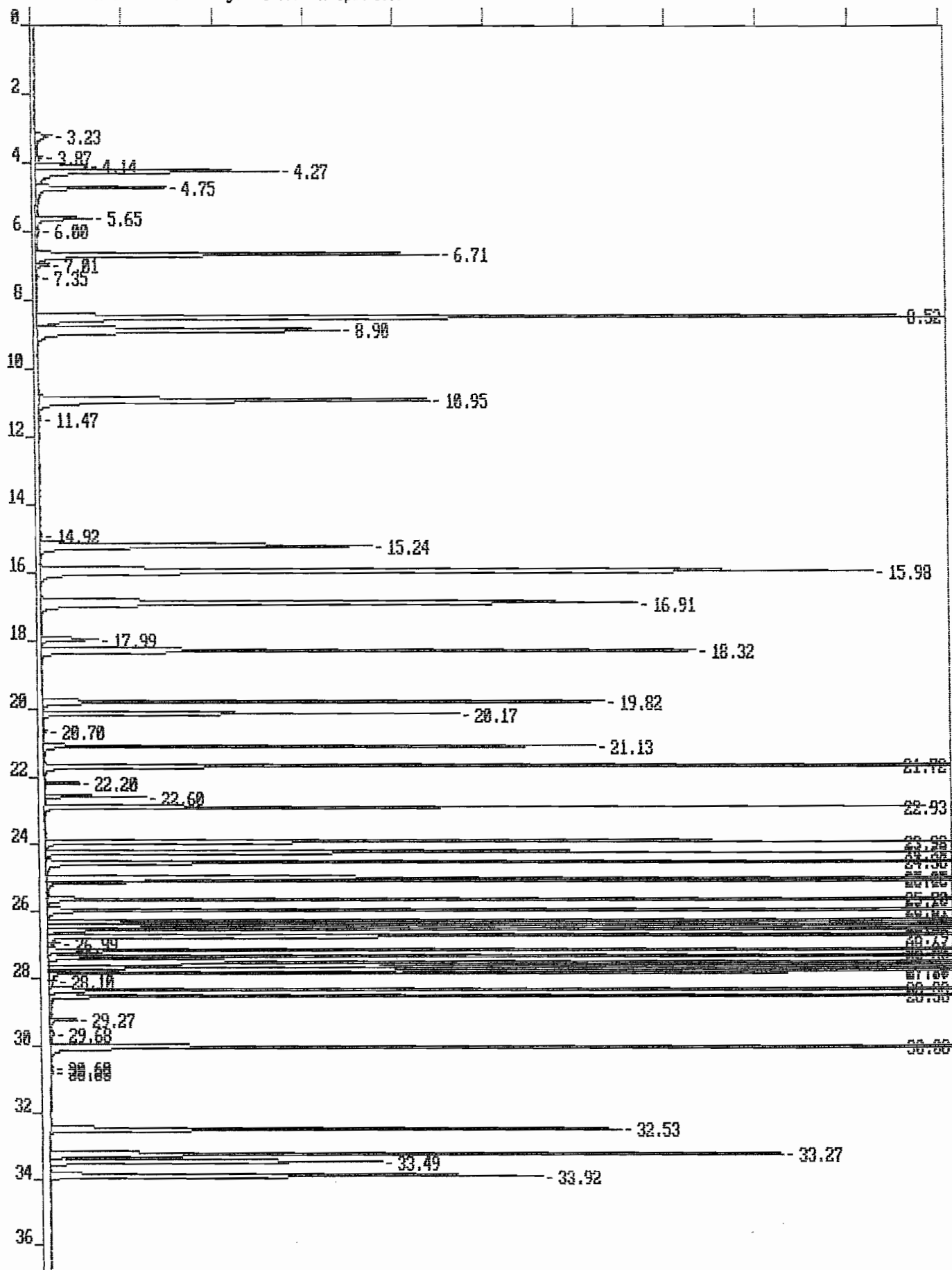
Date: 1-14-02

Date: 01/15/02

File=C:\CP\DATA1\180148.23R Date printed=01-14-2002 Time= 19:57:16

Sample Name=CHKSTD 02014A188400,8401

0.0 to 37.0 min. Low Y=-0.004 High Y=14.996 mv Span=15.0



Sample Name: CHKSTD

Batch: 02014A18

Date Taken: Jan 14, 2002 19:56:05

Raw File: C:\CP\DATA1\18014B.23R

Area File: C:\CP\DATA1\18014B.23A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.274	4.281	VINYL CHLORIDE	12.8128	26431	4022
6.706	6.722	1,1-DICHLOROETHENE	18.5745	36546	6655
8.520	8.544	TRANS-1,2-DICHLOROET	18.6632	88690	15527
8.904	8.933	METHYL T-BUTYL ETHER	20.4205	44183	5008
10.950	10.979	CIS-1,2-DICHLOROETHE	19.1360	47617	6467
15.239	15.259	1,1-DICHLOROPROPENE	18.4984	40851	5480
15.978	15.997	BENZENE	18.7583	99116	13730
16.912	16.930	ISTD-FBENZENE	1.0000	74785	9871
18.320	18.332	TRICHLOROETHENE	18.2413	56641	10812
19.820	19.828	2-CHLOROETHYL VINYL	21.0892	37586	9281
20.168	20.176	CIS-1,3-DICHLOROPROP	18.5000	26275	6902
21.127	21.133	TRANS-1,3-DICHLOROPR	17.0270	30202	9117
21.715	21.720	TOLUENE	18.5323	92207	27473
22.926	22.929	TETRACHLOROETHENE	18.4226	44302	14507
23.978	23.979	CHLOROBENZENE	18.7562	97223	37531
24.293	24.293	ETHYLBENZENE	18.9387	83433	30973
24.585	24.585	M,P-XYLENE	37.9431	195955	61711
25.050	25.050	STYRENE	19.0237	105563	39392
25.153	25.153	O-XYLENE	19.2541	87159	30917
25.696	25.696	ISOPROPYLBENZENE	19.5870	71926	24138
26.014	26.014	BROMOBENZENE	18.7382	99683	34669
26.342	26.341	N-PROPYLBENZENE	18.8250	77972	26939
26.465	26.464	2-CHLOROTOLUENE	19.0202	86609	29875
26.584	26.584	4-CHLOROTOLUENE	18.8366	88495	31286
26.789	26.788	1,3,5-TRIMETHYLBENZE	19.0967	114443	38592
27.212	27.211	TERT-BUTYLBENZENE	19.2015	67590	20485
27.394	27.393	1,2,4-TRIMETHYLBENZE	19.1601	88013	28946
27.562	27.561	SEC-BUTYLBENZENE	18.8536	68588	20542
27.668	27.667	1,3-DICHLOROBENZENE	18.8358	85756	27910
27.783	27.782	1,4-DICHLOROBENZENE	18.7842	85589	27964
27.869	27.868	P-ISOPROPYLTOLUENE	19.7934	68921	21185
28.393	28.391	1,2-DICHLOROBENZENE	18.8172	69251	20941
28.580	28.579	N-BUTYLBENZENE	19.0241	67010	19248
30.076	30.072	SURR-1B4CB-P	28.7937	132806	35352
32.528	32.524	1,2,4-TRICHLOROBENZE	19.5825	44844	9468
33.274	33.270	NAPHTHALENE	21.3589	59221	12096
33.491	33.487	HEXACHLOROBUTADIENE	19.2369	31188	5500
33.916	33.912	1,2,3-TRICHLOROBENZE	20.3727	42823	8149

XYLENES (Total): 57.1972

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 95.9790%

Chrom Perfect version 6.07

Reported on 01-14-2002at 19:58:46

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: CHKSTD

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014B.23R

Reviewed by: SKL088

Verified by: MM49

Date: 1-14-02

Date: 01/15/02

Quality Control Summary
SDG# H0404
Instrument ID: 5843
Ending Calibration Verification Summary

CCV Batch: 02014A18
Data File: C:\CP\DATA\18014.33R
Date Injected: 01/15/02 Time Injected: 04:03
Initial Calibration Date(s): 12/31/01 (HALL)

Sample Information			
IL Sample#	Sample Code	Date	Analysis Time
BLK1829	METHOD BLANK	01/14/02	20:52
3753726	AWFB-	01/14/02	21:51
3753734	--TB-	01/14/02	22:36
3753732	--5M-	01/14/02	23:21
3753733	--5L-	01/15/02	00:06
3753731	--5U-	01/15/02	00:52
BLK1830	METHOD BLANK	01/15/02	01:37
3753731	--5U-	01/15/02	03:09

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	% DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	25.2	26 *	-20 to +20
CHLOROMETHANE (HALL)	20.0	13.4	-33 *	-20 to +20
VINYL CHLORIDE (HALL)	20.0	20.1	0	-20 to +20
BROMOMETHANE (HALL)	20.0	16.7	-17	-20 to +20
CHLOROETHANE (HALL)	20.0	16.3	-18	-20 to +20
TRICHLOROFLUOROMETHA (HALL)	20.0	18.4	-8	-20 to +20
1,1-DICHLOROETHENE (HALL)	20.0	18.9	-5	-15 to +15
METHYLENE CHLORIDE (HALL)	20.0	17.7	-11	-15 to +15
TRANS-1,2-DICHLOROET (HALL)	20.0	19.7	-1	-15 to +15
1,1-DICHLOROETHANE (HALL)	20.0	20.5	2	-15 to +15
CIS-1,2-DICHLOROETHE (HALL)	20.0	20.3	2	-15 to +15
CHLOROFORM (HALL)	20.0	20.3	2	-15 to +15
1,2-DICHLOROETHANE (HALL)	20.0	20.6	3	-15 to +15
1,1,1-TRICHLOROETHAN (HALL)	20.0	20.3	1	-15 to +15
CARBON TETRACHLORIDE (HALL)	20.0	20.1	0	-15 to +15

* = %DRIFT outside control limits.

Quality Control Summary
SDG# HUL04
Instrument ID: 5843
Ending Calibration Verification Summary

CCV Batch: 02014A18
Data File: C:\CP\DATA\18014.33R
Date Injected: 01/15/02 Time Injected: 04:03
Initial Calibration Date(s): 12/31/01 (HALL)

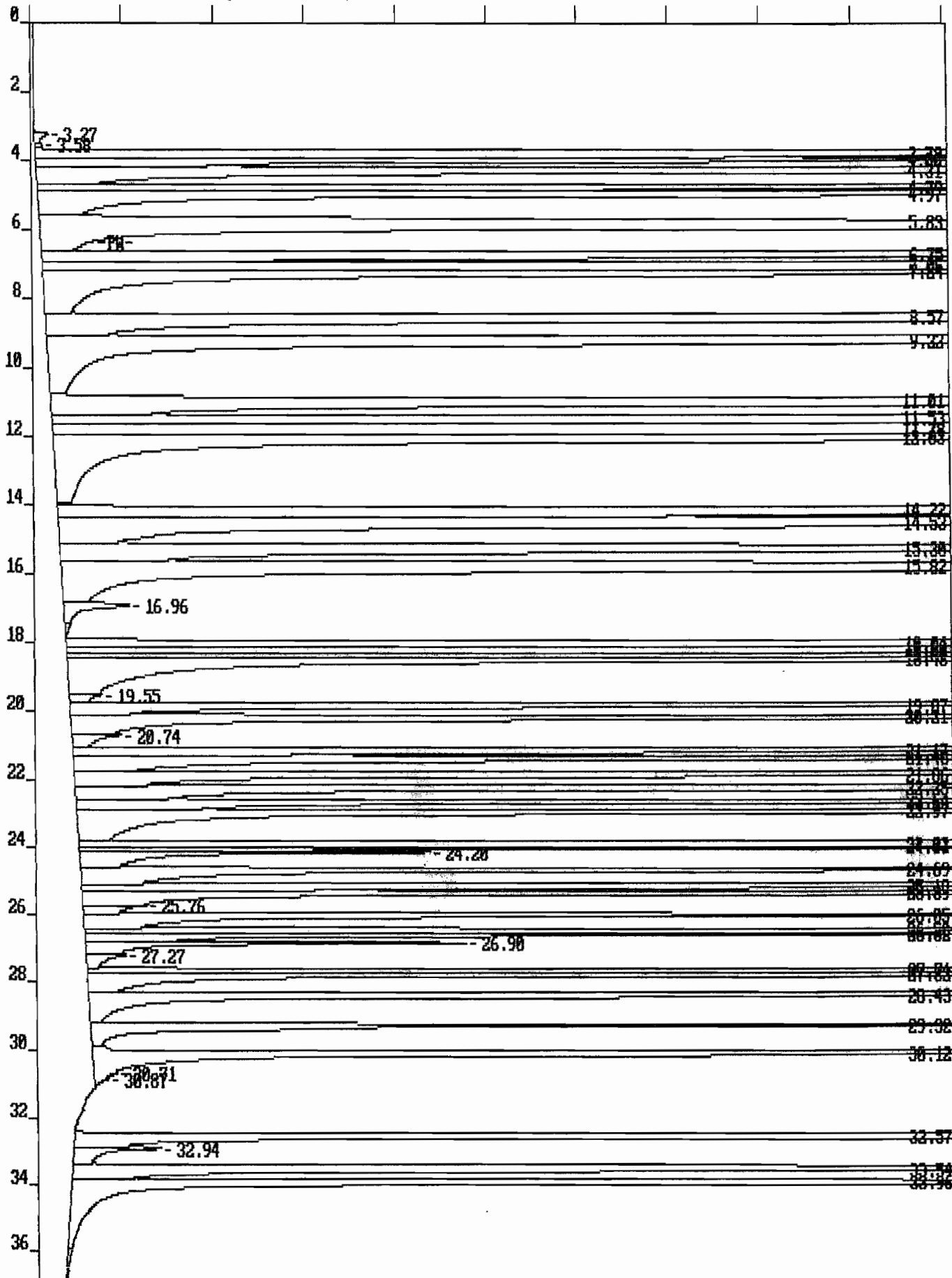
COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
1,2-DICHLOROPROPANE (HALL)	20.0	20.1	1	-15 to +15
BROMODICHLOROMETHANE (HALL)	20.0	18.9	-6	-15 to +15
CIS-1,3-DICHLOROPROP (HALL)	20.0	19.2	-4	-15 to +15
TRANS-1,3-DICHLOROPR (HALL)	20.0	17.7	-11	-15 to +15
1,1,2-TRICHLOROETHAN (HALL)	20.0	19.5	-2	-15 to +15
DIBROMOCHLOROMETHANE (HALL)	20.0	20.5	3	-15 to +15
TETRACHLOROETHENE (HALL)	20.0	18.7	-6	-15 to +15
BROMOFORM (HALL)	20.0	21.2	6	-15 to +15
1,1,2,2-TETRACHLOROE (HALL)	20.0	20.5	3	-15 to +15
1,3-DICHLOROBENZENE (HALL)	20.0	19.5	-3	-15 to +15
1,2-DICHLOROBENZENE (HALL)	20.0	19.5	-3	-15 to +15
SURR-1B4CB-H (HALL)	30.0	28.8	-4	-41 to +32

Mean %Drift for all calibration compounds (HALL) = -5.4

File=C:\CP\DATA1\18014.33R Date printed=01-15-2002 Time= 04:03:23

Sample Name=CHKSTD 02014A188400,8401

0.0 to 37.0 min. Low Y=-0.006 High Y=14.994 mv Span=15.0



Sample Name: CHKSTD

Batch: 02014A18

Date Taken: Jan 15, 2002 04:03:17

Raw File: C:\CP\DATA1\18014.33R

Area File: C:\CP\DATA1\18014.33A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 23):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
3.793	3.786	DICHLORODIFLUOROMETH	25.2480	352795	51109
3.996	3.997	CHLOROMETHANE	13.3856	206615	29909
4.306	4.302	VINYL CHLORIDE	20.0836	498608	71449
4.785	4.779	BROMOMETHANE	16.6733	256764	44814
4.974	4.964	CHLOROETHANE	16.3227	436561	69558
5.830	5.814	TRICHLOROFLUOROMETHA	18.4406	673606	47082
6.750	6.735	1,1-DICHLOROETHENE	18.9091	556705	87537
7.061	7.042	METHYLENE CHLORIDE	17.7066	845634	146913
7.241	7.223	TRICHLOROTRIFLUOROET	17.6545	668536	64128
8.573	8.549	TRANS-1,2-DICHLOROET	19.7011	854536	123089
9.222	9.197	1,1-DICHLOROETHANE	20.4504	936207	109440
11.009	10.981	CIS-1,2-DICHLOROETHE	20.3067	864672	102765
11.529	11.500	BROMOCHLOROMETHANE	20.5257	602269	74707
11.784	11.756	CHLOROFORM	20.3111	1147363	124225
12.033	12.001	2,2-DICHLOROPROPANE	18.6689	800966	60632
14.215	14.187	1,2-DICHLOROETHANE	20.6055	787635	98563
14.534	14.505	1,1,1-TRICHLOROETHAN	20.2865	1068914	100793
15.298	15.270	1,1-DICHLOROPROPENE	19.6911	736164	86566
15.821	15.793	CARBON TETRACHLORIDE	20.0834	1193721	121666
18.043	18.018	DIBROMOMETHANE	20.0124	345283	59320
18.215	18.192	1,2-DICHLOROPROPANE	20.1184	742499	114651
18.372	18.349	TRICHLOROETHENE	18.5881	871697	148579
18.480	18.457	BROMODICHLOROMETHANE	18.8571	873100	127632
19.867	19.848	2-CHLOROETHYL VINYL	21.5470	261163	49595
20.214	20.196	CIS-1,3-DICHLOROPROP	19.1598	696765	138373
21.170	21.154	TRANS-1,3-DICHLOROPR	17.7032	541107	123079
21.399	21.383	1,1,2-TRICHLOROETHAN	19.5481	778425	164083
21.862	21.847	1,3-DICHLOROPROPANE	19.4432	608061	136482
22.245	22.230	DIBROMOCHLOROMETHANE	20.5269	546147	119822
22.640	22.626	1,2-DIBROMOETHANE	19.8173	340344	74596
22.965	22.952	TETRACHLOROETHENE	18.7390	911506	208257
23.916	23.904	1,1,1,2-TETRACHLOROE	19.6053	855191	229428
24.013	24.001	CHLOROBENZENE	18.9259	407937	104435
24.694	24.682	BROMOFORM	21.2432	352962	78547
25.184	25.172	1,1,2,2-TETRACHLOROE	20.5361	532556	133282
25.388	25.376	1,2,3-TRICHLOROPROPA	20.7512	452646	105889
26.054	26.041	BROMOBENZENE	19.0247	244691	53850
26.504	26.491	2-CHLOROTOLUENE	19.4071	294555	77387
26.622	26.610	4-CHLOROTOLUENE	18.9517	320438	76689
27.707	27.694	1,3-DICHLOROBENZENE	19.4718	444067	114036
27.822	27.808	1,4-DICHLOROBENZENE	19.2890	533845	120223
28.433	28.419	1,2-DICHLOROBENZENE	19.4824	499454	110228
29.318	29.304	1,2-DIBROMO-3-CHLORO	21.8719	143496	24610
30.118	30.103	SURR-1B4CB-H	28.7598	503724	98580
32.575	32.558	1,2,4-TRICHLOROBENZE	19.5665	451475	78629
33.538	33.521	HEXACHLOROBUTADIENE	19.1766	600848	90932
33.963	33.945	1,2,3-TRICHLOROBENZE	20.3587	474316	69548

TOTAL 1,2-DICHLOROETHENE: 40.0077

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 95.8661%

Chrom Perfect version 6.07

Reported on 01-15-2002at 04:04:12

Sample name: CHKSTD

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014.33R

Reviewed by: JB 45

Verified by: UMM49

Date: 1-15-02

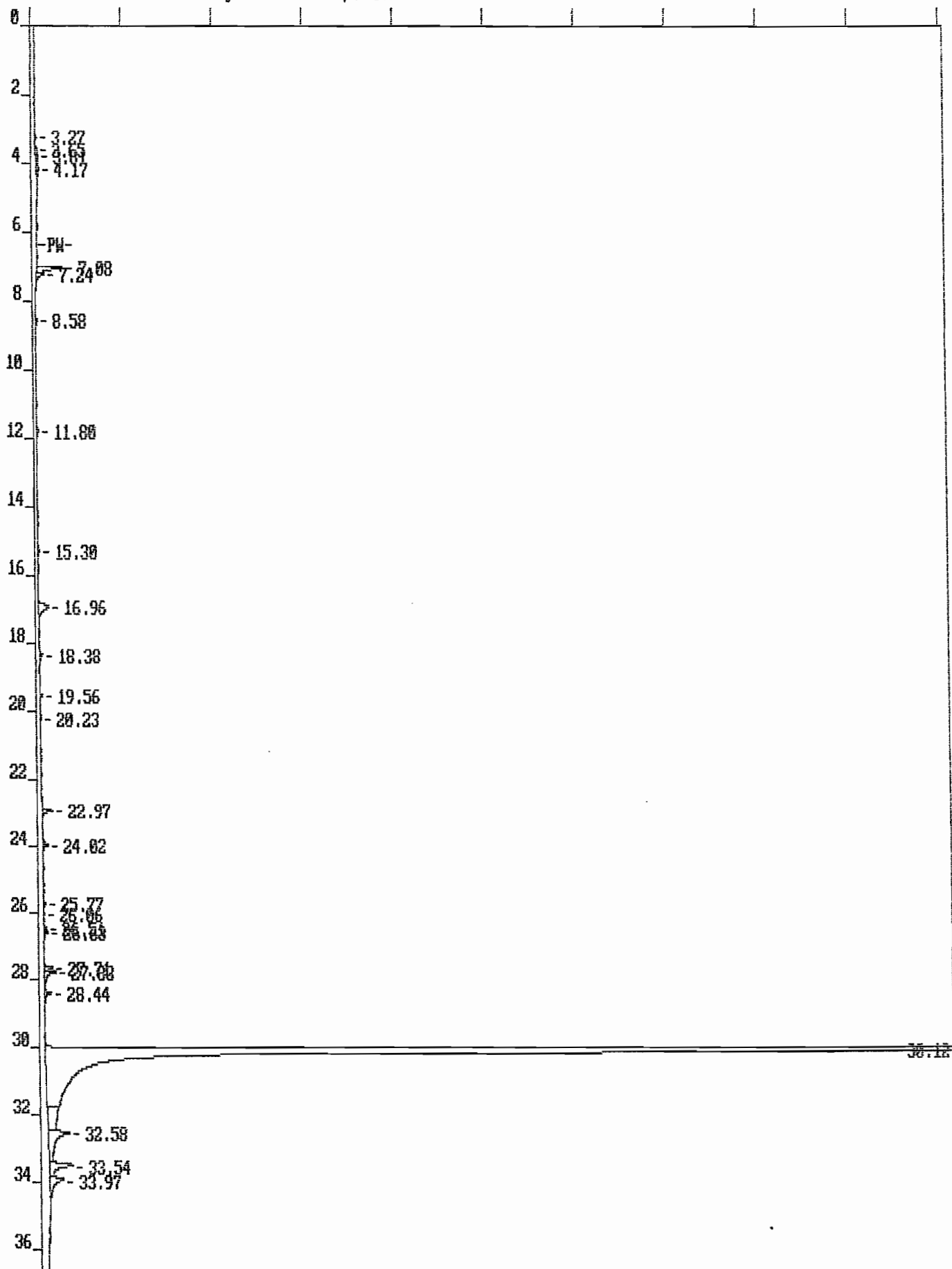
Date: 01/15/02

Raw QC Data

File=C:\CP\DATA1\18014.03R Date printed=01-14-2002 Time= 04:03:38

Sample Name=BLK1827 02014A188400,8401

0.0 to 37.0 min. Low Y=-0.007 High Y=14.993 mv Span=15.0



Sample Name: BLK1827

Batch: 02014A18

Date Taken: Jan 14, 2002 04:03:32

Raw File: C:\CP\DATA1\18014.03R

Area File: C:\CP\DATA1\18014.03A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 21):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.812	3.802	DICHLORODIFLUOROMETH	0.0234	740	47
3.987	3.987	CHLOROMETHANE	0.0000	0	0
4.169	4.308	VINYL CHLORIDE	0.0144	854	51
4.780	4.780	BROMOMETHANE	0.0000	0	0
4.979	4.979	CHLOROETHANE	0.0000	0	0
5.839	5.839	TRICHLOROFLUOROMETHA	0.0000	0	0
6.758	6.758	1,1-DICHLOROETHENE	0.0000	0	0
7.077	7.069	METHYLENE CHLORIDE	0.0537	2840	446
7.244	7.249	TRICHLOROTRIFLUOROET	0.0371	1197	135
8.581	8.580	TRANS-1,2-DICHLOROET	0.0045	223	28
9.229	9.229	1,1-DICHLOROETHANE	0.0000	0	0
11.015	11.015	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.534	11.534	BROMOCHLOROMETHANE	0.0000	0	0
11.797	11.790	CHLOROFORM	0.0046	312	28
12.039	12.039	2,2-DICHLOROPROPANE	0.0000	0	0
14.216	14.216	1,2-DICHLOROETHANE	0.0000	0	0
14.534	14.534	1,1,1-TRICHLOROETHAN	0.0000	0	0
15.297	15.296	1,1-DICHLOROPROPENE	0.0062	225	27
15.818	15.818	CARBON TETRACHLORIDE	0.0000	0	0
18.035	18.035	DIBROMOMETHANE	0.0000	0	0
18.208	18.208	1,2-DICHLOROPROPANE	0.0000	0	0
18.379	18.364	TRICHLOROETHENE	0.0066	462	53
18.471	18.471	BROMODICHLOROMETHANE	0.0000	0	0
19.858	19.858	2-CHLOROETHYL VINYL	0.0000	0	0
20.232	20.205	CIS-1,3-DICHLOROPROP	0.0037	223	27
21.161	21.161	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.390	21.390	1,1,2-TRICHLOROETHAN	0.0000	0	0
21.853	21.853	1,3-DICHLOROPROPANE	0.0000	0	0
22.236	22.236	DIBROMOCHLOROMETHANE	0.0000	0	0
22.630	22.630	1,2-DIBROMOETHANE	0.0000	0	0
22.966	22.956	TETRACHLOROETHENE	0.0164	926	183
23.906	23.906	1,1,1,2-TETRACHLOROE	0.0000	0	0
24.017	24.004	CHLOROBENZENE	0.0156	549	86
24.684	24.684	BROMOFORM	0.0000	0	0
25.174	25.174	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.378	25.378	1,2,3-TRICHLOROPROPA	0.0000	0	0
26.063	26.044	BROMOBENZENE	0.0088	200	25
26.507	26.495	2-CHLOROTOLUENE	0.0149	300	60
26.627	26.613	4-CHLOROTOLUENE	0.0138	695	76
27.714	27.699	1,3-DICHLOROBENZENE	0.0242	648	142
27.827	27.814	1,4-DICHLOROBENZENE	0.0305	1633	190
28.437	28.425	1,2-DICHLOROBENZENE	0.0204	983	115
29.310	29.310	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.116	30.110	SURR-1B4CB-H	27.4288	501508	94018
32.583	32.567	1,2,4-TRICHLOROBENZE	0.0882	7342	354
33.542	33.531	HEXACHLOROBUTADIENE	0.0822	4181	390
33.969	33.955	1,2,3-TRICHLOROBENZE	0.0689	3194	235
		TOTAL 1,2-DICHLOROETHENE:	0.0045		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 91.4294%

Chrom Perfect version 6.07

Reported on 01-14-2002at 04:04:27

Sample name: BLK1827

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014.03R

Reviewed by: JS us

Verified by: ummm48

Date: 1-14-02

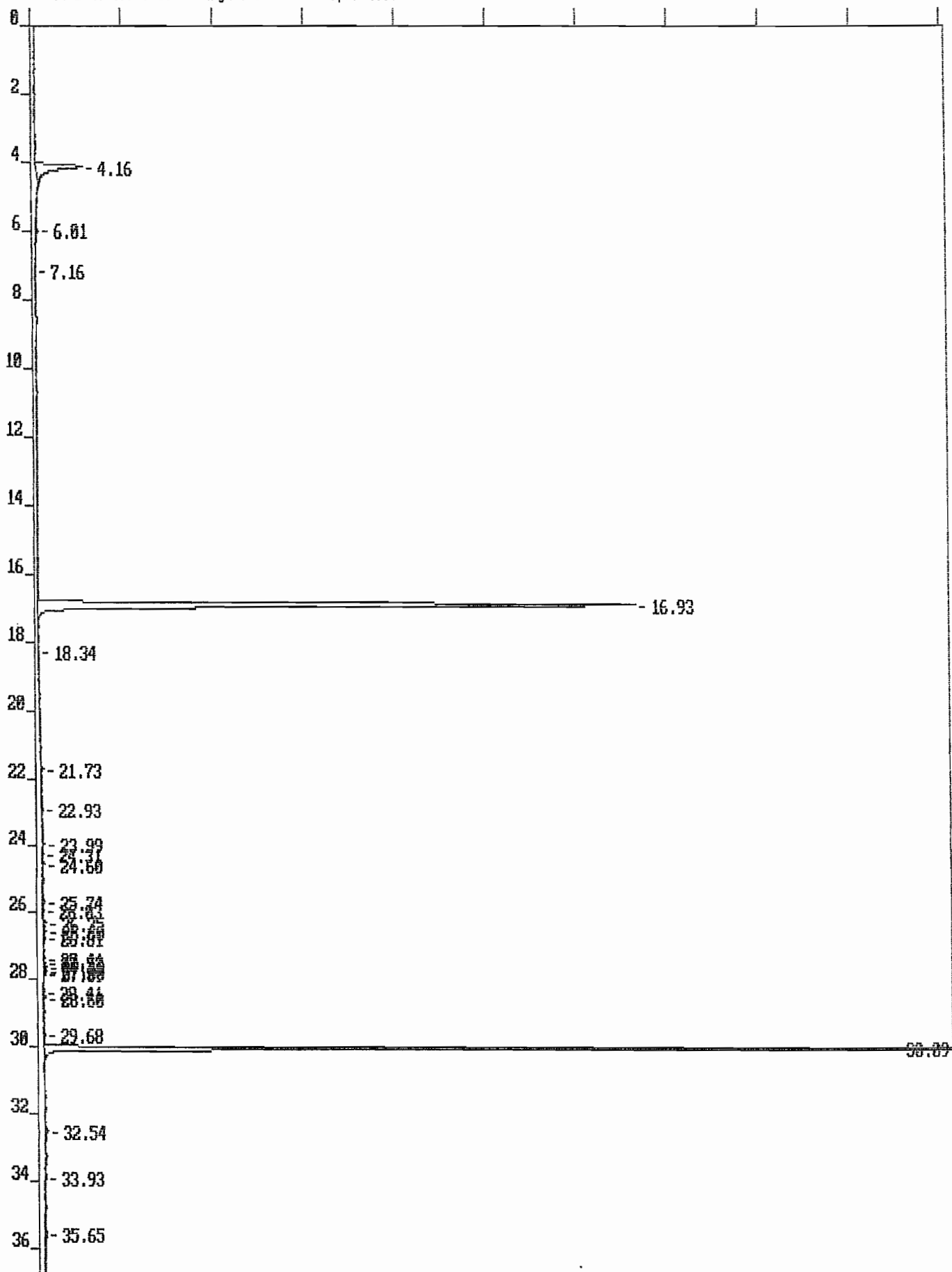
Date: 01/15/02

File=C:\CP\DATA1\180148.03R Date printed=01-14-2002 Time= 04:04:37

Sample Name=BLK1827

02014A188400,8401

0.0 to 37.0 min. Low Y=0.003 High Y=15.003 mv Span=15.0



Sample Name: BLK1827

Batch: 02014A18

Date Taken: Jan 14, 2002 04:03:32

Raw File: C:\CP\DATA1\18014B.03R

Area File: C:\CP\DATA1\18014B.03A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.279	4.279	VINYL CHLORIDE	0.0000	0	0
6.729	6.729	1,1-DICHLOROETHENE	0.0000	0	0
8.551	8.551	TRANS-1,2-DICHLOROET	0.0000	0	0
8.939	8.939	METHYL T-BUTYL ETHER	0.0000	0	0
10.985	10.985	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.266	15.266	1,1-DICHLOROPROPENE	0.0000	0	0
16.002	16.002	BENZENE	0.0000	0	0
16.928	16.934	ISTD-FBENZENE	1.0000	73946	9824
18.337	18.335	TRICHLOROETHENE	0.0347	157	20
19.830	19.830	2-CHLOROETHYL VINYL	0.0000	0	0
20.177	20.177	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.135	21.135	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.727	21.721	TOLUENE	0.0355	168	52
22.928	22.930	TETRACHLOROETHENE	0.0424	125	33
23.993	23.981	CHLOROBENZENE	0.0218	102	43
24.307	24.295	ETHYLBENZENE	0.0199	103	32
24.596	24.587	M,P-XYLENE	0.0312	181	50
25.053	25.053	STYRENE	0.0000	0	0
25.155	25.155	O-XYLENE	0.0000	0	0
25.738	25.699	ISOPROPYLBENZENE	0.0438	243	54
26.029	26.017	BROMOBENZENE	0.0156	102	29
26.353	26.346	N-PROPYLBENZENE	0.0419	233	60
26.469	26.469	2-CHLOROTOLUENE	0.0000	0	0
26.600	26.589	4-CHLOROTOLUENE	0.0275	149	45
26.806	26.793	1,3,5-TRIMETHYLBENZE	0.0200	144	40
27.217	27.217	TERT-BUTYLBENZENE	0.0000	0	0
27.411	27.399	1,2,4-TRIMETHYLBENZE	0.0236	141	35
27.573	27.567	SEC-BUTYLBENZENE	0.0301	127	33
27.680	27.670	1,3-DICHLOROBENZENE	0.0345	187	51
27.802	27.790	1,4-DICHLOROBENZENE	0.0387	190	57
27.885	27.870	P-ISOPROPYLTOLUENE	0.0413	274	44
28.413	28.399	1,2-DICHLOROBENZENE	0.0308	155	34
28.600	28.587	N-BUTYLBENZENE	0.0512	294	52
30.088	30.082	SURR-1B4CB-P	26.5721	122087	32469
32.544	32.539	1,2,4-TRICHLOROBENZE	0.0937	273	45
33.280	33.280	NAPHTHALENE	0.0000	0	0
33.500	33.500	HEXACHLOROBUTADIENE	0.0000	0	0
33.926	33.926	1,2,3-TRICHLOROBENZE	0.0772	223	31

XYLENES (Total): 0.0312

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 88.5737%

Chrom Perfect version 6.07

Reported on 01-14-2002at 04:05:57

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: BLK1827

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014B.03R

Reviewed by:

Verified by:

Date:

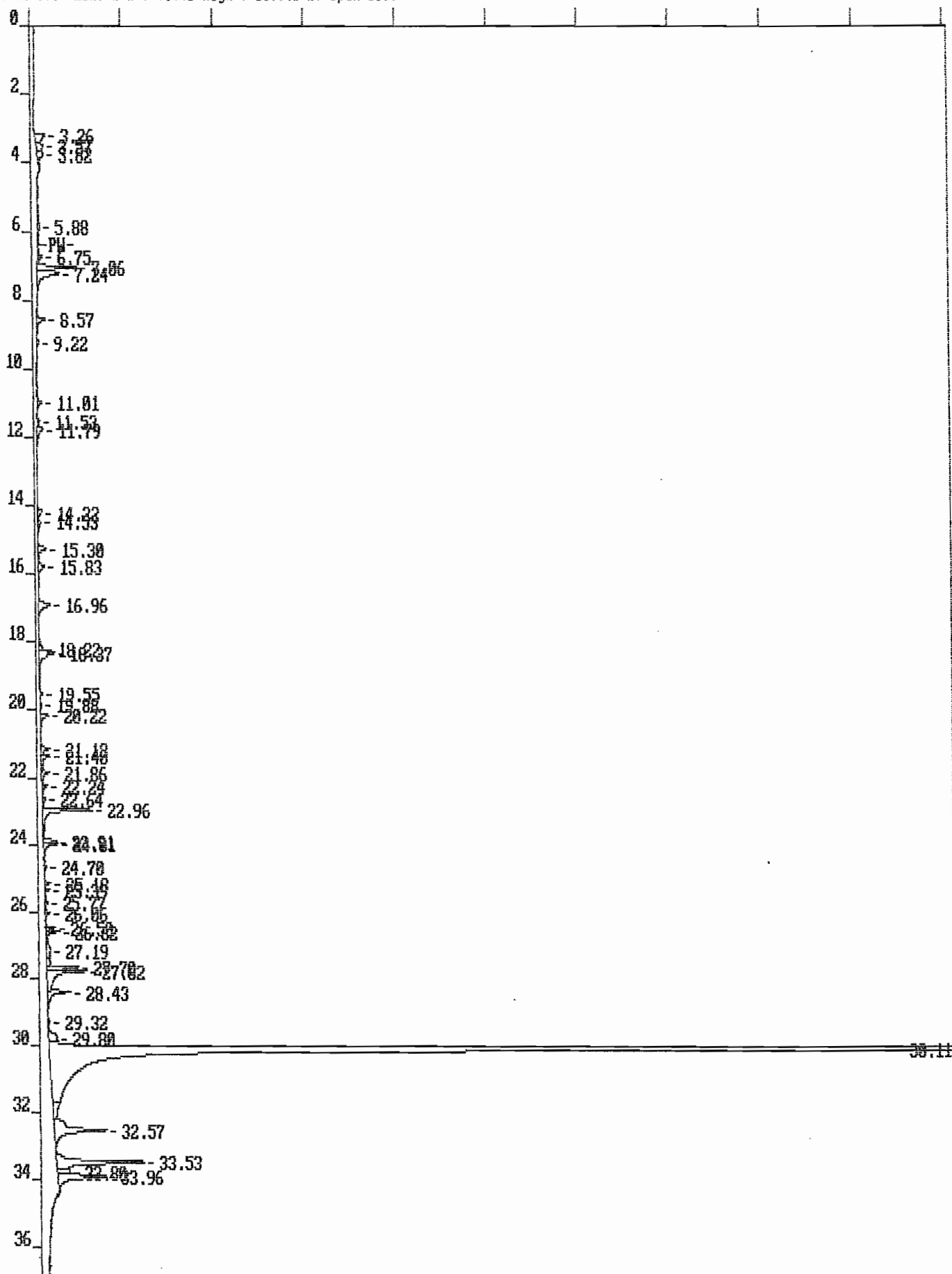
Date:

File=C:\CP\DATA1\18014.12R Date printed=01-14-2002 Time= 11:40:02

Sample Name=BLK1828

02014A188400,8401

7.0 to 37.0 min. Low Y=0.041 High Y=15.041 mv Span=15.0



Sample Name: BLK1828

Batch: 02014A18

Date Taken: Jan 14, 2002 11:39:56

Raw File: C:\CP\DATA1\18014.12R

Area File: C:\CP\DATA1\18014.12A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 22):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
3.817	3.797	DICHLORODIFLUOROMETH	0.0495	1168	100
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.309	4.309	VINYL CHLORIDE	0.0000	0	0
4.786	4.786	BROMOMETHANE	0.0000	0	0
4.976	4.976	CHLOROETHANE	0.0000	0	0
5.880	5.831	TRICHLOROFLUOROMETHA	0.0148	522	38
6.754	6.751	1,1-DICHLOROETHENE	0.0162	633	75
7.060	7.061	METHYLENE CHLORIDE	0.0768	3926	637
7.238	7.244	TRICHLOROTRIFLUOROET	0.0998	4382	362
8.574	8.574	TRANS-1,2-DICHLOROET	0.0211	1151	132
9.221	9.222	1,1-DICHLOROETHANE	0.0064	271	34
11.010	11.009	CIS-1,2-DICHLOROETHE	0.0146	701	74
11.534	11.527	BROMOCHLOROMETHANE	0.0119	383	43
11.793	11.782	CHLOROFORM	0.0156	1346	95
12.030	12.030	2,2-DICHLOROPROPANE	0.0000	0	0
14.221	14.209	1,2-DICHLOROETHANE	0.0158	705	76
14.528	14.528	1,1,1-TRICHLOROETHAN	0.0099	756	49
15.297	15.290	1,1-DICHLOROPROPENE	0.0310	1307	136
15.828	15.813	CARBON TETRACHLORIDE	0.0165	1266	100
18.032	18.032	DIBROMOMETHANE	0.0000	0	0
18.220	18.204	1,2-DICHLOROPROPANE	0.0110	427	62
18.371	18.361	TRICHLOROETHENE	0.0315	2896	252
18.468	18.468	BROMODICHLOROMETHANE	0.0000	0	0
19.880	19.856	2-CHLOROETHYL VINYL	0.0099	213	23
20.218	20.203	CIS-1,3-DICHLOROPROP	0.0201	967	145
21.177	21.160	TRANS-1,3-DICHLOROPR	0.0217	880	151
21.399	21.388	1,1,2-TRICHLOROETHAN	0.0177	1205	148
21.862	21.851	1,3-DICHLOROPROPANE	0.0179	897	126
22.244	22.234	DIBROMOCHLOROMETHANE	0.0145	704	84
22.639	22.629	1,2-DIBROMOETHANE	0.0157	489	59
22.960	22.954	TETRACHLOROETHENE	0.0748	5168	832
23.913	23.904	1,1,1,2-TETRACHLOROE	0.0188	958	221
24.008	24.002	CHLOROBENZENE	0.0432	1770	239
24.702	24.682	BROMOFORM	0.0143	494	53
25.178	25.172	1,1,2,2-TETRACHLOROE	0.0174	563	113
25.386	25.375	1,2,3-TRICHLOROPROPA	0.0165	523	84
26.056	26.041	BROMOBENZENE	0.0310	560	88
26.499	26.491	2-CHLOROTOLUENE	0.0430	740	172
26.619	26.609	4-CHLOROTOLUENE	0.0600	1421	243
27.703	27.693	1,3-DICHLOROBENZENE	0.0883	2520	517
27.816	27.807	1,4-DICHLOROBENZENE	0.1057	6526	659
28.426	28.418	1,2-DICHLOROBENZENE	0.0707	3184	400
29.321	29.302	1,2-DIBROMO-3-CHLORO	0.0305	275	34
30.107	30.100	SURR-1B4CB-H	25.5579	466900	87605
32.568	32.553	1,2,4-TRICHLOROBENZE	0.2162	10563	869
33.530	33.516	HEXACHLOROBUTADIENE	0.3042	11981	1443
33.955	33.940	1,2,3-TRICHLOROBENZE	0.2330	7379	796

TOTAL 1,2-DICHLOROETHENE: 0.0357

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 85.1931%

Chrom Perfect version 6.07

Reported on 01-14-2002at 11:40:52

Sample name: BLK1828

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014.12R

Reviewed by: MMB 894

Verified by: Nmm49

Date: 1/14/02

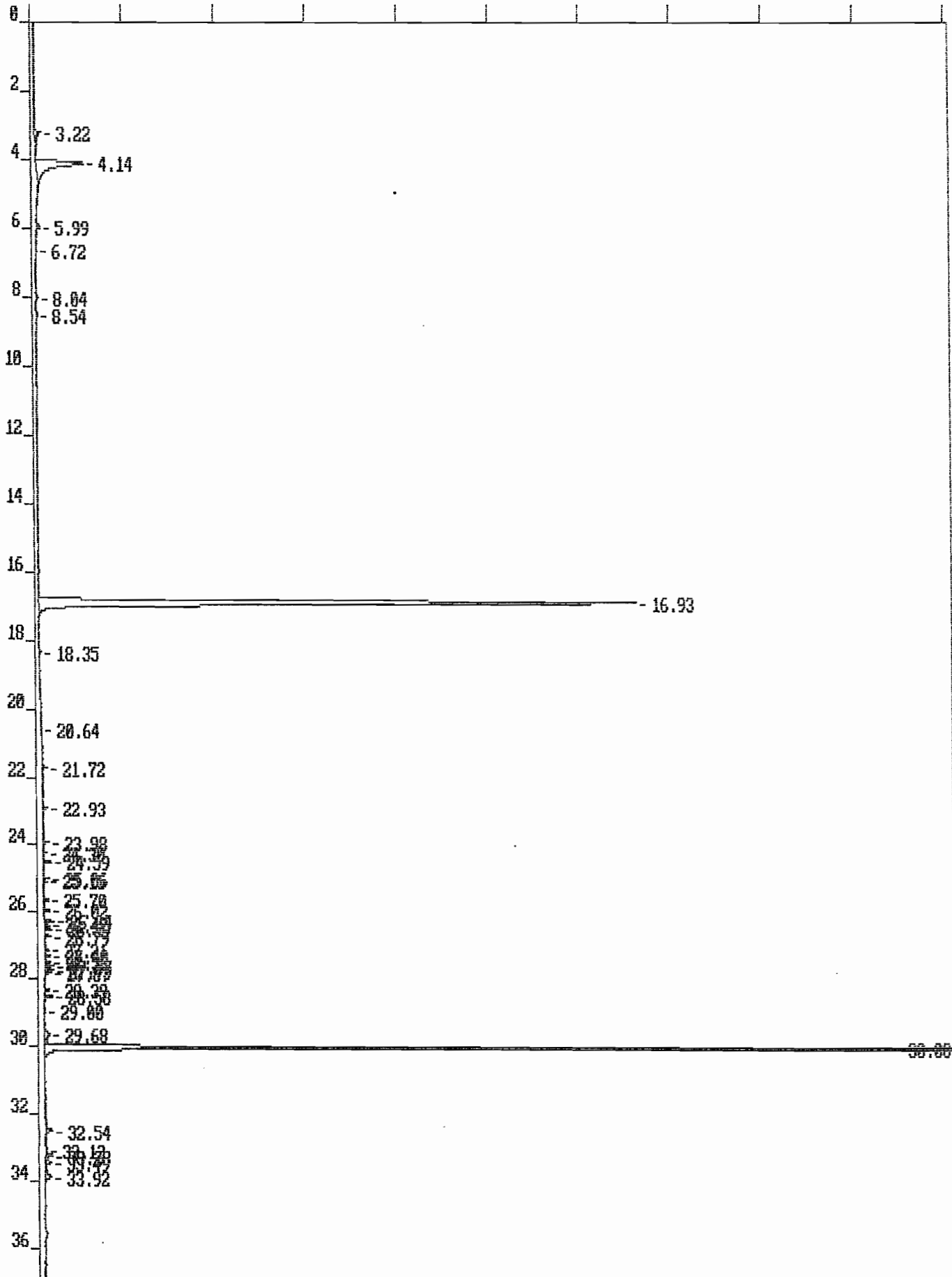
Date: 01/15/02

File=C:\CP\DATA1\180148.12R Date printed=01-14-2002 Time= 11:41:03

Sample Name=BLK1828

02014A188400,8401

.0 to 37.0 min. Low Y=-0.001 High Y=14.999 mv Span=15.0



Sample Name: BLK1828

Batch: 02014A18

Date Taken: Jan 14, 2002 11:39:56

Raw File: C:\CP\DATA1\18014B.12R

Area File: C:\CP\DATA1\18014B.12A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 24):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.281	4.281	VINYL CHLORIDE	0.0000	0	0
6.718	6.722	1,1-DICHLOROETHENE	0.0504	114	18
8.542	8.544	TRANS-1,2-DICHLOROET	0.0330	171	27
8.933	8.933	METHYL T-BUTYL ETHER	0.0000	0	0
10.979	10.979	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.259	15.259	1,1-DICHLOROPROPENE	0.0000	0	0
15.997	15.997	BENZENE	0.0000	0	0
16.930	16.930	ISTD-FBENZENE	1.0000	73427	9807
18.354	18.332	TRICHLOROETHENE	0.0569	145	33
19.828	19.828	2-CHLOROETHYL VINYL	0.0000	0	0
20.176	20.176	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.133	21.133	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.720	21.720	TOLUENE	0.0596	287	88
22.930	22.929	TETRACHLOROETHENE	0.1136	324	89
23.983	23.979	CHLOROBENZENE	0.0521	331	104
24.300	24.293	ETHYLBENZENE	0.0375	189	61
24.587	24.585	M,P-XYLENE	0.0882	449	142
25.056	25.050	STYRENE	0.0446	252	92
25.153	25.153	O-XYLENE	0.0381	180	61
25.700	25.696	ISOPROPYLBENZENE	0.0678	365	83
26.017	26.014	BROMOBENZENE	0.0551	329	101
26.344	26.341	N-PROPYLBENZENE	0.1103	542	157
26.467	26.464	2-CHLOROTOLUENE	0.0585	266	91
26.588	26.584	4-CHLOROTOLUENE	0.0734	399	121
26.787	26.788	1,3,5-TRIMETHYLBENZE	0.0593	442	119
27.213	27.211	TERT-BUTYLBENZENE	0.0663	291	70
27.396	27.393	1,2,4-TRIMETHYLBENZE	0.0658	377	99
27.564	27.561	SEC-BUTYLBENZENE	0.0874	376	95
27.673	27.667	1,3-DICHLOROBENZENE	0.0989	449	146
27.786	27.782	1,4-DICHLOROBENZENE	0.1039	485	154
27.870	27.868	P-ISOPROPYLTOLUENE	0.0983	351	105
28.393	28.391	1,2-DICHLOROBENZENE	0.0778	294	86
28.585	28.579	N-BUTYLBENZENE	0.1458	533	147
30.078	30.072	SURR-1B4CB-P	26.0764	119977	31810
32.537	32.524	1,2,4-TRICHLOROBENZE	0.2074	541	100
33.283	33.270	NAPHTHALENE	0.2155	748	121
33.490	33.487	HEXACHLOROBUTADIENE	0.3256	565	92
33.920	33.912	1,2,3-TRICHLOROBENZE	0.2462	797	98

XYLENES (Total): 0.1263

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 86.9214%

Chrom Perfect version 6.07

Reported on 01-14-2002at 11:42:21

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: BLK1828

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014B.12R

Reviewed by: MM/1994

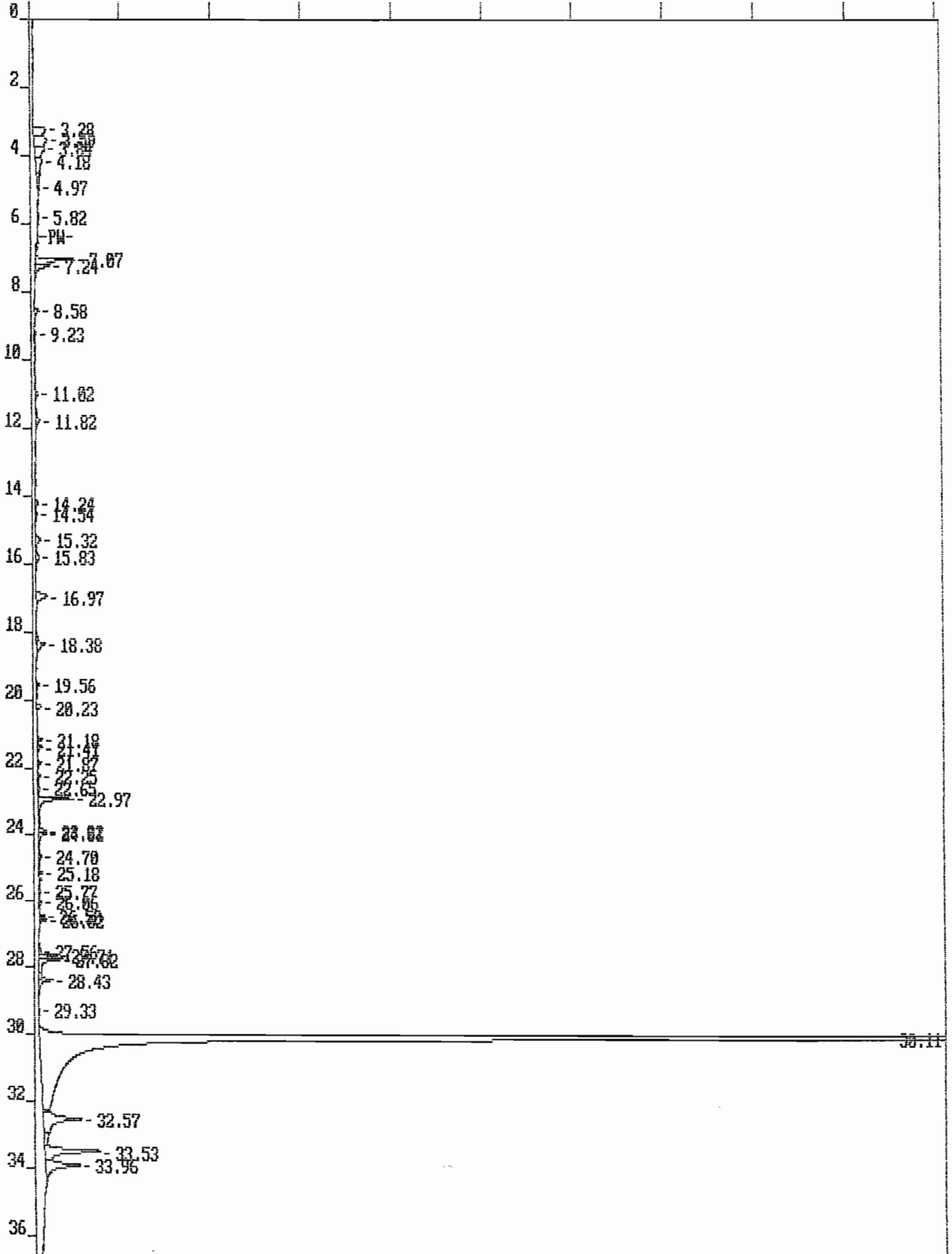
Verified by: MM/49

Date: 1/14/02

Date: 01/15/02

File=C:\CP\DATA1\18014.24R Date printed=01-14-2002 Time= 20:52:21
Sample Name=BLK1829 02014A188400,8401

0.0 to 37.0 min. Low Y=0.029 High Y=15.029 mv Span=15.0



Sample Name: BLK1829

Batch: 02014A18

Date Taken: Jan 14, 2002 20:52:15

Raw File: C:\CP\DATA1\18014.24R

Area File: C:\CP\DATA1\18014.24A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.844	3.786	DICHLORODIFLUOROMETH	0.0842	2663	170
3.997	3.997	CHLOROMETHANE	0.0000	0	0
4.176	4.302	VINYL CHLORIDE	0.0316	2330	112
4.779	4.779	BROMOMETHANE	0.0000	0	0
4.967	4.964	CHLOROETHANE	0.0076	220	32
5.820	5.814	TRICHLOROFLUOROMETHA	0.0088	332	22
6.735	6.735	1,1-DICHLOROETHENE	0.0000	0	0
7.073	7.042	METHYLENE CHLORIDE	0.0787	4027	653
7.243	7.223	TRICHLOROTRIFLUOROET	0.0687	2593	250
8.585	8.549	TRANS-1,2-DICHLOROET	0.0121	528	76
9.233	9.197	1,1-DICHLOROETHANE	0.0043	213	23
11.024	10.981	CIS-1,2-DICHLOROETHE	0.0095	479	48
11.500	11.500	BROMOCHLOROMETHANE	0.0000	0	0
11.816	11.756	CHLOROFORM	0.0098	564	60
12.001	12.001	2,2-DICHLOROPROPANE	0.0000	0	0
14.237	14.187	1,2-DICHLOROETHANE	0.0107	460	51
14.544	14.505	1,1,1-TRICHLOROETHAN	0.0053	336	26
15.317	15.270	1,1-DICHLOROPROPENE	0.0183	847	80
15.832	15.793	CARBON TETRACHLORIDE	0.0087	564	53
18.018	18.018	DIBROMOMETHANE	0.0000	0	0
18.192	18.192	1,2-DICHLOROPROPANE	0.0000	0	0
18.383	18.349	TRICHLOROETHENE	0.0181	1437	145
18.457	18.457	BROMODICHLOROMETHANE	0.0000	0	0
19.848	19.848	2-CHLOROETHYL VINYL	0.0000	0	0
20.225	20.196	CIS-1,3-DICHLOROPROP	0.0118	564	85
21.180	21.154	TRANS-1,3-DICHLOROPR	0.0123	490	86
21.406	21.383	1,1,2-TRICHLOROETHAN	0.0101	607	85
21.868	21.847	1,3-DICHLOROPROPANE	0.0101	532	71
22.251	22.230	DIBROMOCHLOROMETHANE	0.0087	409	51
22.650	22.626	1,2-DIBROMOETHANE	0.0105	376	40
22.965	22.952	TETRACHLOROETHENE	0.0545	3710	605
23.916	23.904	1,1,1,2-TETRACHLOROE	0.0111	567	130
24.014	24.001	CHLOROBENZENE	0.0262	1050	145
24.700	24.682	BROMOFORM	0.0106	392	39
25.183	25.172	1,1,2,2-TETRACHLOROE	0.0105	325	68
25.376	25.376	1,2,3-TRICHLOROPROPA	0.0000	0	0
26.060	26.041	BROMOBENZENE	0.0179	355	51
26.502	26.491	2-CHLOROTOLUENE	0.0254	441	101
26.622	26.610	4-CHLOROTOLUENE	0.0343	752	139
27.706	27.694	1,3-DICHLOROBENZENE	0.0514	1486	301
27.819	27.808	1,4-DICHLOROBENZENE	0.0592	3002	369
28.430	28.419	1,2-DICHLOROBENZENE	0.0444	2077	251
29.334	29.304	1,2-DIBROMO-3-CHLORO	0.0197	250	22
30.108	30.103	SURR-1B4CB-H	27.3248	509583	93661
32.571	32.558	1,2,4-TRICHLOROBENZE	0.1618	8903	650
33.533	33.521	HEXACHLOROBUTADIENE	0.1933	8757	916
33.961	33.945	1,2,3-TRICHLOROBENZE	0.1693	6565	578

TOTAL 1,2-DICHLOROETHENE: 0.0217

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 91.0825%

Chrom Perfect version 6.07

Reported on 01-14-2002at 20:53:11

Sample name: BLK1829

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014.24R

Reviewed by: TBks

Verified by: umm49

VM

Date: 1-15-02

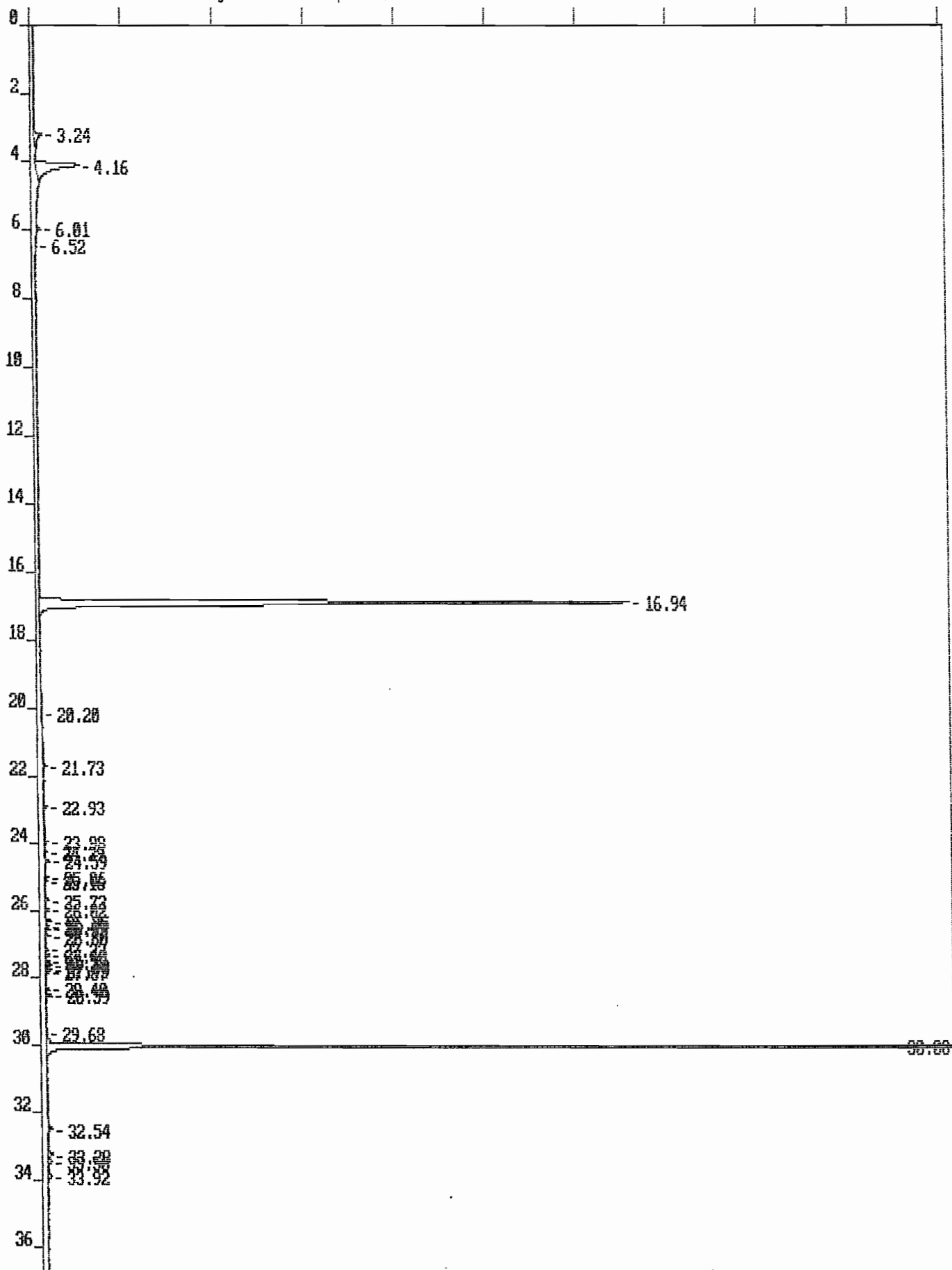
Date: 01/15/02

File=C:\CP\DATA1\180148.24R Date printed=01-14-2002 Time= 20:53:22

Sample Name=BLK1829

02014A188400,8401

.0 to 37.0 min. Low Y=0.005 High Y=15.005 mv Span=15.0



Sample Name: BLK1829

Batch: 02014A18

Date Taken: Jan 14, 2002 20:52:15

Raw File: C:\CP\DATA1\18014B.24R

Area File: C:\CP\DATA1\18014B.24A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 25):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.274	4.274	0.0000	0	0
6.517	6.706	0.0533	141	19
8.520	8.520	0.0000	0	0
8.904	8.904	0.0000	0	0
10.950	10.950	0.0000	0	0
15.239	15.239	0.0000	0	0
15.978	15.978	0.0000	0	0
16.941	16.912	1.0000	72628	9718
18.320	18.320	0.0000	0	0
19.820	19.820	0.0000	0	0
20.197	20.168	0.0549	102	20
21.127	21.127	0.0000	0	0
21.726	21.715	0.0420	212	61
22.927	22.926	0.0855	263	66
23.981	23.978	0.0303	183	60
24.294	24.293	0.0281	133	45
24.591	24.585	0.0550	341	88
25.057	25.050	0.0283	164	58
25.160	25.153	0.0270	196	43
25.724	25.696	0.0477	260	58
26.022	26.014	0.0324	205	59
26.347	26.342	0.0725	370	102
26.473	26.465	0.0401	183	62
26.593	26.584	0.0486	282	79
26.797	26.789	0.0381	254	76
27.217	27.212	0.0328	106	34
27.401	27.394	0.0460	279	68
27.570	27.562	0.0650	241	70
27.676	27.668	0.0654	337	95
27.790	27.783	0.0651	324	95
27.873	27.869	0.0637	228	67
28.399	28.393	0.0563	251	62
28.586	28.580	0.0960	362	96
30.079	30.076	27.3172	124890	33019
32.537	32.528	0.1584	541	75
33.285	33.274	0.1451	563	81
33.496	33.491	0.2244	425	63
33.920	33.916	0.1843	536	73

XYLENES (Total): 0.0820

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 91.0575%

Chrom Perfect version 6.07

Reported on 01-14-2002at 20:54:41

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: BLK1829

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014B.24R

Reviewed by:

TSK

Verified by:

mmmm49

VM Date:

1-15-02

Date:

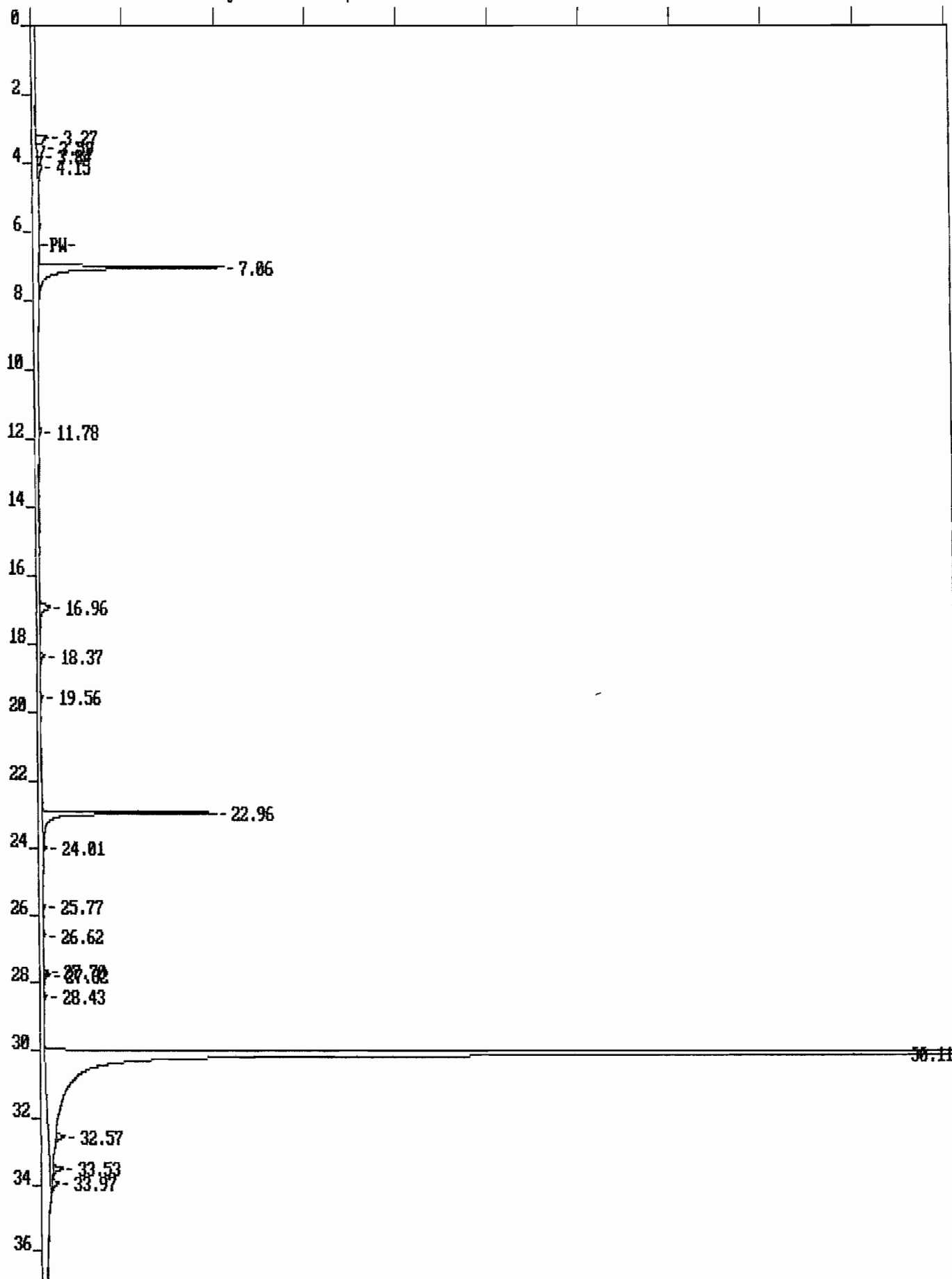
01/15/02

File=C:\CP\DATA1\18014.30R Date printed=01-15-2002 Time= 01:37:14

Sample Name=BLK1830

02014A188400,8401

0.0 to 37.0 min. Low Y=-0.006 High Y=14.994 mv Span=15.0



Sample Name: BLK1830

Batch: 02014A18

Date Taken: Jan 15, 2002 01:37:08

Raw File: C:\CP\DATA1\18014.30R

Area File: C:\CP\DATA1\18014.30A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 23):

Ret Time	Expected	(min)	RT (min)	Peak Name	Amount *	(ug/L)	Peak	Area	Peak	Height
3.844		3.786		DICHLORODIFLUOROMETH	0.0440		991		89	
3.997		3.997		CHLOROMETHANE	0.0000		0		0	
4.154		4.302		VINYL CHLORIDE	0.0202		1455		72	
4.779		4.779		BROMOMETHANE	0.0000		0		0	
4.964		4.964		CHLOROETHANE	0.0000		0		0	
5.814		5.814		TRICHLOROFLUOROMETHA	0.0000		0		0	
6.735		6.735		1,1-DICHLOROETHENE	0.0000		0		0	
7.057		7.042		METHYLENE CHLORIDE	0.3667		23787		3042	
7.223		7.223		TRICHLOROTRIFLUOROET	0.0000		0		0	
8.549		8.549		TRANS-1,2-DICHLOROET	0.0000		0		0	
9.197		9.197		1,1-DICHLOROETHANE	0.0000		0		0	
10.981		10.981		CIS-1,2-DICHLOROETHE	0.0000		0		0	
11.500		11.500		BROMOCHLOROMETHANE	0.0000		0		0	
11.783		11.756		CHLOROFORM	0.0080		591		49	
12.001		12.001		2,2-DICHLOROPROPANE	0.0000		0		0	
14.187		14.187		1,2-DICHLOROETHANE	0.0000		0		0	
14.505		14.505		1,1,1-TRICHLOROETHAN	0.0000		0		0	
15.270		15.270		1,1-DICHLOROPROPENE	0.0000		0		0	
15.793		15.793		CARBON TETRACHLORIDE	0.0000		0		0	
18.018		18.018		DIBROMOMETHANE	0.0000		0		0	
18.192		18.192		1,2-DICHLOROPROPANE	0.0000		0		0	
18.369		18.349		TRICHLOROETHENE	0.0099		666		79	
18.457		18.457		BROMODICHLOROMETHANE	0.0000		0		0	
19.848		19.848		2-CHLOROETHYL VINYL	0.0000		0		0	
20.196		20.196		CIS-1,3-DICHLOROPROP	0.0000		0		0	
21.154		21.154		TRANS-1,3-DICHLOROPR	0.0000		0		0	
21.383		21.383		1,1,2-TRICHLOROETHAN	0.0000		0		0	
21.847		21.847		1,3-DICHLOROPROPANE	0.0000		0		0	
22.230		22.230		DIBROMOCHLOROMETHANE	0.0000		0		0	
22.626		22.626		1,2-DIBROMOETHANE	0.0000		0		0	
22.959		22.952		TETRACHLOROETHENE	0.2554		15870		2838	
23.904		23.904		1,1,1,2-TETRACHLOROE	0.0000		0		0	
24.010		24.001		CHLOROBENZENE	0.0096		304		53	
24.682		24.682		BROMOFORM	0.0000		0		0	
25.172		25.172		1,1,2,2-TETRACHLOROE	0.0000		0		0	
25.376		25.376		1,2,3-TRICHLOROPROPA	0.0000		0		0	
26.041		26.041		BROMOBENZENE	0.0000		0		0	
26.491		26.491		2-CHLOROTOLUENE	0.0000		0		0	
26.620		26.610		4-CHLOROTOLUENE	0.0096		338		39	
27.704		27.694		1,3-DICHLOROBENZENE	0.0131		337		77	
27.820		27.808		1,4-DICHLOROBENZENE	0.0168		831		105	
28.429		28.419		1,2-DICHLOROBENZENE	0.0110		621		62	
29.304		29.304		1,2-DIBROMO-3-CHLORO	0.0000		0		0	
30.106		30.103		SURR-1B4CB-H	26.8533		504133		92045	
32.567		32.558		1,2,4-TRICHLOROBENZE	0.0366		1454		147	
33.527		33.521		HEXACHLOROBUTADIENE	0.0356		1590		169	
33.966		33.945		1,2,3-TRICHLOROBENZE	0.0351		1321		120	

TOTAL 1,2-DICHLOROETHENE: 0.0000

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 89.5111%

Chrom Perfect version 6.07

Reported on 01-15-2002at 01:38:03

Sample name: BLK1830

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014.30R

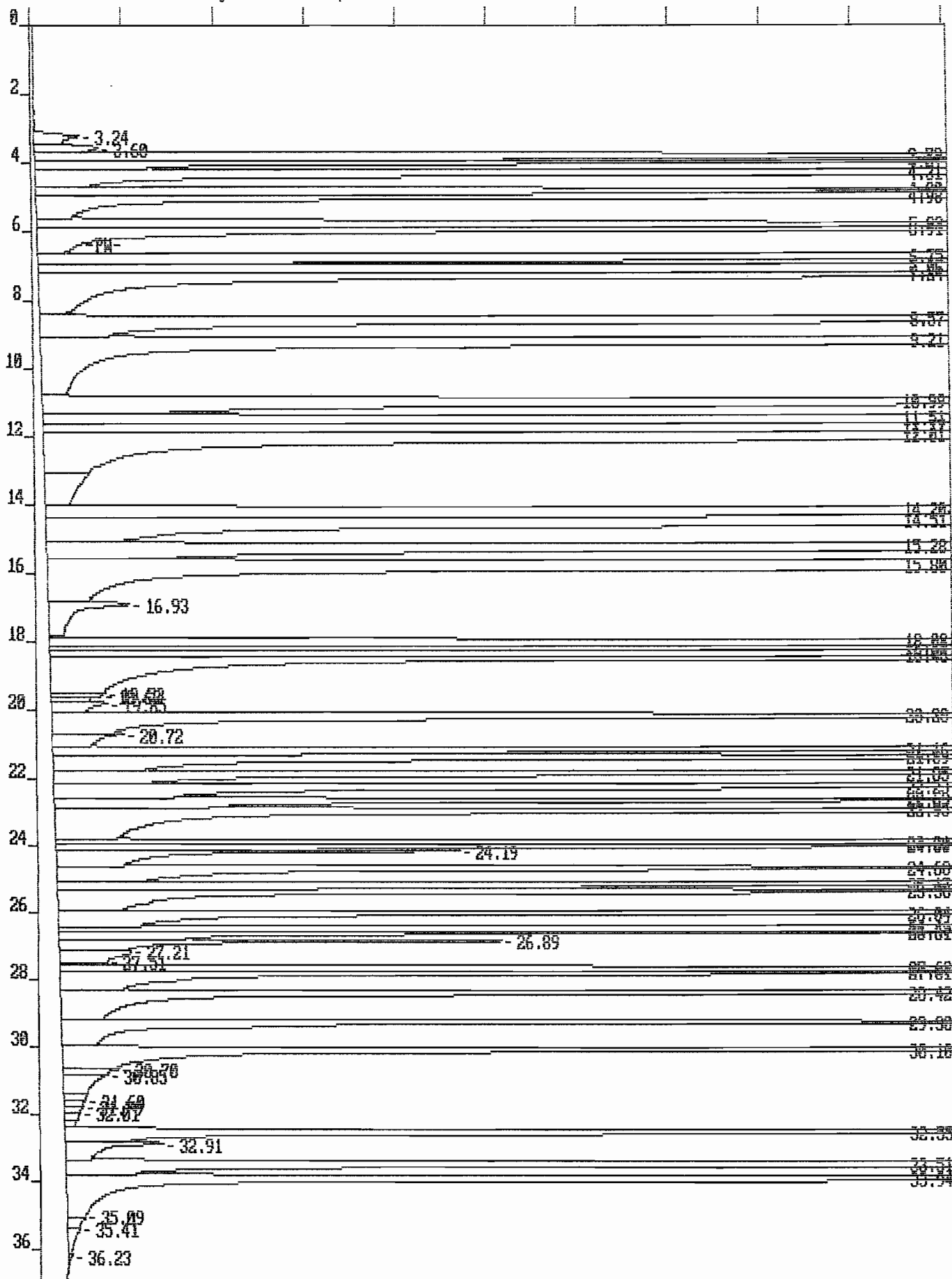
Reviewed by: JBK

Verified by: Ummu

Date: 1-15-02

Date: 01/15/02

File=C:\CP\DATA1\18014.08R Date printed=01-14-2002 Time= 07:53:25
Sample Name=3753721 MS 02014A181127,8404,8400,8401
.0 to 37.0 min. Low Y=0.024 High Y=15.024 mv Span=15.0



Sample Name: 3753721 MS

Batch: 02014A18

Date Taken: Jan 14, 2002 07:53:19

Raw File: C:\CP\DATA1\18014.08R

Area File: C:\CP\DATA1\18014.08A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 21):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.791	3.802	DICHLORODIFLUOROMETH	18.0103	262472	36458
4.012	3.987	CHLOROMETHANE	8.1489	115388	18208
4.306	4.308	VINYL CHLORIDE	16.6947	422802	59393
4.805	4.780	BROMOMETHANE	14.5832	228321	39196
4.984	4.979	CHLOROETHANE	15.5201	423002	66138
5.830	5.839	TRICHLOROFLUOROMETHA	15.9269	246018	40664
6.749	6.758	1,1-DICHLOROETHENE	19.6485	591781	90960
7.059	7.069	METHYLENE CHLORIDE	17.9707	879425	149104
7.241	7.249	TRICHLOROTRIFLUOROET	18.7628	712138	68154
8.566	8.580	TRANS-1,2-DICHLOROET	20.3407	843968	127085
9.211	9.229	1,1-DICHLOROETHANE	21.9274	1000965	117344
10.993	11.015	CIS-1,2-DICHLOROETHE	23.5961	1000972	119411
11.511	11.534	BROMOCHLOROMETHANE	22.1641	645996	80670
11.766	11.790	CHLOROFORM	22.5478	1259276	137905
12.013	12.039	2,2-DICHLOROPROPANE	21.1403	896126	68658
14.195	14.216	1,2-DICHLOROETHANE	21.8317	833493	104428
14.514	14.534	1,1,1-TRICHLOROETHAN	22.9600	1219517	114076
15.276	15.296	1,1-DICHLOROPROPENE	21.9858	817942	96654
15.800	15.818	CARBON TETRACHLORIDE	22.1537	1318501	134208
18.023	18.035	DIBROMOMETHANE	21.6030	374900	64035
18.197	18.208	1,2-DICHLOROPROPANE	21.7917	804926	124187
18.354	18.364	TRICHLOROETHENE	22.3362	1048894	178538
18.462	18.471	BROMODICHLOROMETHANE	20.8773	967572	141306
19.847	19.858	2-CHLOROETHYL VINYL	0.3991	14096	919
20.200	20.205	CIS-1,3-DICHLOROPROP	20.3984	745711	147318
21.158	21.161	TRANS-1,3-DICHLOROPR	19.2043	587166	133516
21.387	21.390	1,1,2-TRICHLOROETHAN	20.8805	836210	175267
21.851	21.853	1,3-DICHLOROPROPANE	20.7585	653303	145715
22.234	22.236	DIBROMOCHLOROMETHANE	21.0788	572097	123043
22.629	22.630	1,2-DIBROMOETHANE	21.4423	370125	80713
22.955	22.956	TETRACHLOROETHENE	22.2785	1098400	247594
23.906	23.906	1,1,1,2-TETRACHLOROE	20.9834	918097	245556
24.004	24.004	CHLOROBENZENE	20.5652	445713	113481
24.684	24.684	BROMOFORM	22.6338	383545	83689
25.173	25.174	1,1,2,2-TETRACHLOROE	21.6849	563910	140738
25.377	25.378	1,2,3-TRICHLOROPROPA	21.8572	501721	111533
26.042	26.044	BROMOBENZENE	21.0005	276230	59442
26.492	26.495	2-CHLOROTOLUENE	21.3651	324118	85195
26.610	26.613	4-CHLOROTOLUENE	20.8445	357213	84348
27.694	27.699	1,3-DICHLOROBENZENE	20.5726	469770	120483
27.808	27.814	1,4-DICHLOROBENZENE	20.1482	579760	125579
28.418	28.425	1,2-DICHLOROBENZENE	20.8290	556335	117847
29.302	29.310	1,2-DIBROMO-3-CHLORO	23.9802	175491	26983
30.101	30.110	SURR-1B4CB-H	30.4066	539654	104225
32.552	32.567	1,2,4-TRICHLOROBENZE	20.7573	478967	83415
33.513	33.531	HEXACHLOROBUTADIENE	19.7596	618884	93697
33.937	33.955	1,2,3-TRICHLOROBENZE	21.0772	486510	72002

TOTAL 1,2-DICHLOROETHENE: 43.9368

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 101.3554%

Chrom Perfect version 6.07

Reported on 01-14-2002at 07:54:14

Sample name: 3753721 MS
Raw file: C:\CP\DATA1\18014.08R

Batch: 02014A181127,840

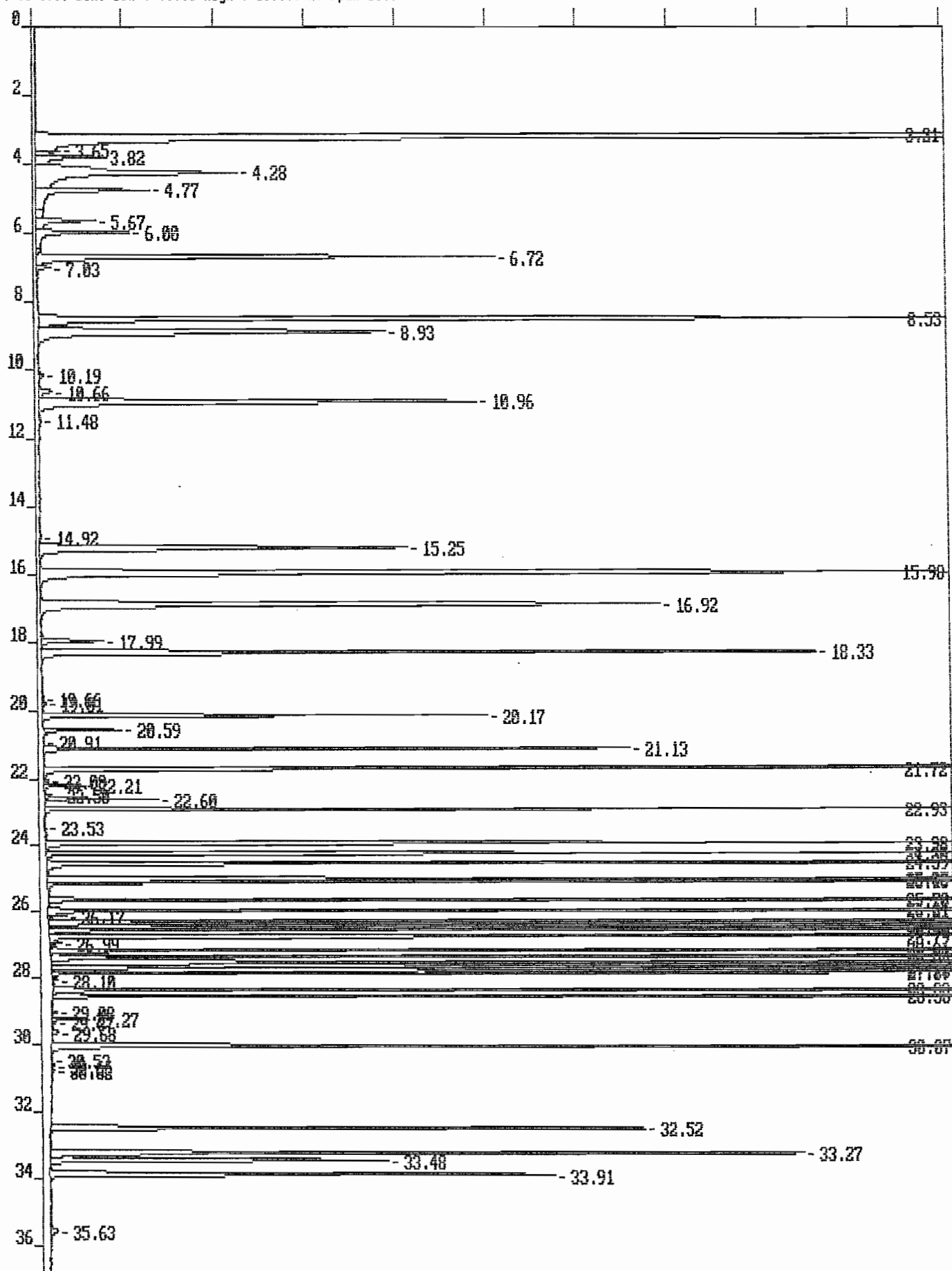
Reviewed by: DM/BA

Verified by: Umm48

Date: 11/14/02

Date: 01/15/02

File:C:\CP\DATA1\180148.08R Date printed=01-14-2002 Time= 07:54:27
Sample Name=3753721 MS 02014A181127,8404,8400,8401
0 to 37.0 min. Low Y=0.008 High Y=15.008 mv Span=15.0



Sample Name: 3753721 MS

Batch: 02014A18

Date Taken: Jan 14, 2002 07:53:19

Raw File: C:\CP\DATA1\18014B.08R

Area File: C:\CP\DATA1\18014B.08A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.277	4.279	VINYL CHLORIDE	10.2225	37699	3322
6.722	6.729	1,1-DICHLOROETHENE	20.3746	41874	7558
8.534	8.551	TRANS-1,2-DICHLOROET	19.0967	93697	16449
8.926	8.939	METHYL T-BUTYL ETHER	22.5023	50037	5714
10.961	10.985	CIS-1,2-DICHLOROETHE	20.6326	53225	7219
15.247	15.266	1,1-DICHLOROPROPENE	19.6866	44745	6038
15.982	16.002	BENZENE	19.5198	106639	14792
16.916	16.934	ISTD-FBENZENE	1.0000	76568	10219
18.325	18.335	TRICHLOROETHENE	20.8132	66326	12772
19.813	19.830	2-CHLOROETHYL VINYL	0.1600	488	73
20.173	20.177	CIS-1,3-DICHLOROPROP	18.9552	27773	7322
21.131	21.135	TRANS-1,3-DICHLOROPR	17.4341	32043	9665
21.719	21.721	TOLUENE	19.2399	98983	29530
22.929	22.930	TETRACHLOROETHENE	20.9665	51836	17093
23.981	23.981	CHLOROBENZENE	19.2767	103461	39934
24.295	24.295	ETHYLBENZENE	19.5196	89342	33051
24.587	24.587	M,P-XYLENE	39.4685	211095	66460
25.052	25.053	STYRENE	19.3594	110999	41503
25.154	25.155	O-XYLENE	19.7172	92307	32779
25.697	25.699	ISOPROPYLBENZENE	20.2712	76841	25864
26.014	26.017	BROMOBENZENE	19.0402	103910	36472
26.343	26.346	N-PROPYLBENZENE	19.4871	83374	28872
26.465	26.469	2-CHLOROTOLUENE	19.4681	91405	31659
26.585	26.589	4-CHLOROTOLUENE	19.2728	93460	33141
26.790	26.793	1,3,5-TRIMETHYLBENZE	19.5962	121367	41001
27.212	27.217	TERT-BUTYLBENZENE	19.7282	71525	21791
27.394	27.399	1,2,4-TRIMETHYLBENZE	19.5854	94369	30634
27.562	27.567	SEC-BUTYLBENZENE	19.2973	72229	21768
27.667	27.670	1,3-DICHLOROBENZENE	19.1371	90144	29358
27.783	27.790	1,4-DICHLOROBENZENE	19.1476	90056	29512
27.869	27.870	P-ISOPROPYLTOLUENE	20.2039	72025	22388
28.392	28.399	1,2-DICHLOROBENZENE	18.8558	71148	21725
28.580	28.587	N-BUTYLBENZENE	19.4135	69075	20336
30.073	30.082	SURR-1B4CB-P	28.4897	134774	36214
32.523	32.539	1,2,4-TRICHLOROBENZE	19.5665	46292	9794
33.267	33.280	NAPHTHALENE	21.1321	60524	12390
33.483	33.500	HEXACHLOROBUTADIENE	18.7822	31408	5559
33.907	33.926	1,2,3-TRICHLOROBENZE	20.1217	43873	8333

XYLENES (Total): 59.1857

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 94.9655%

Chrom Perfect version 6.07

Reported on 01-14-2002at 07:55:44

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753721 MS

Batch: 02014A181127.840

Raw file: C:\CP\DATA1\18014B.08R

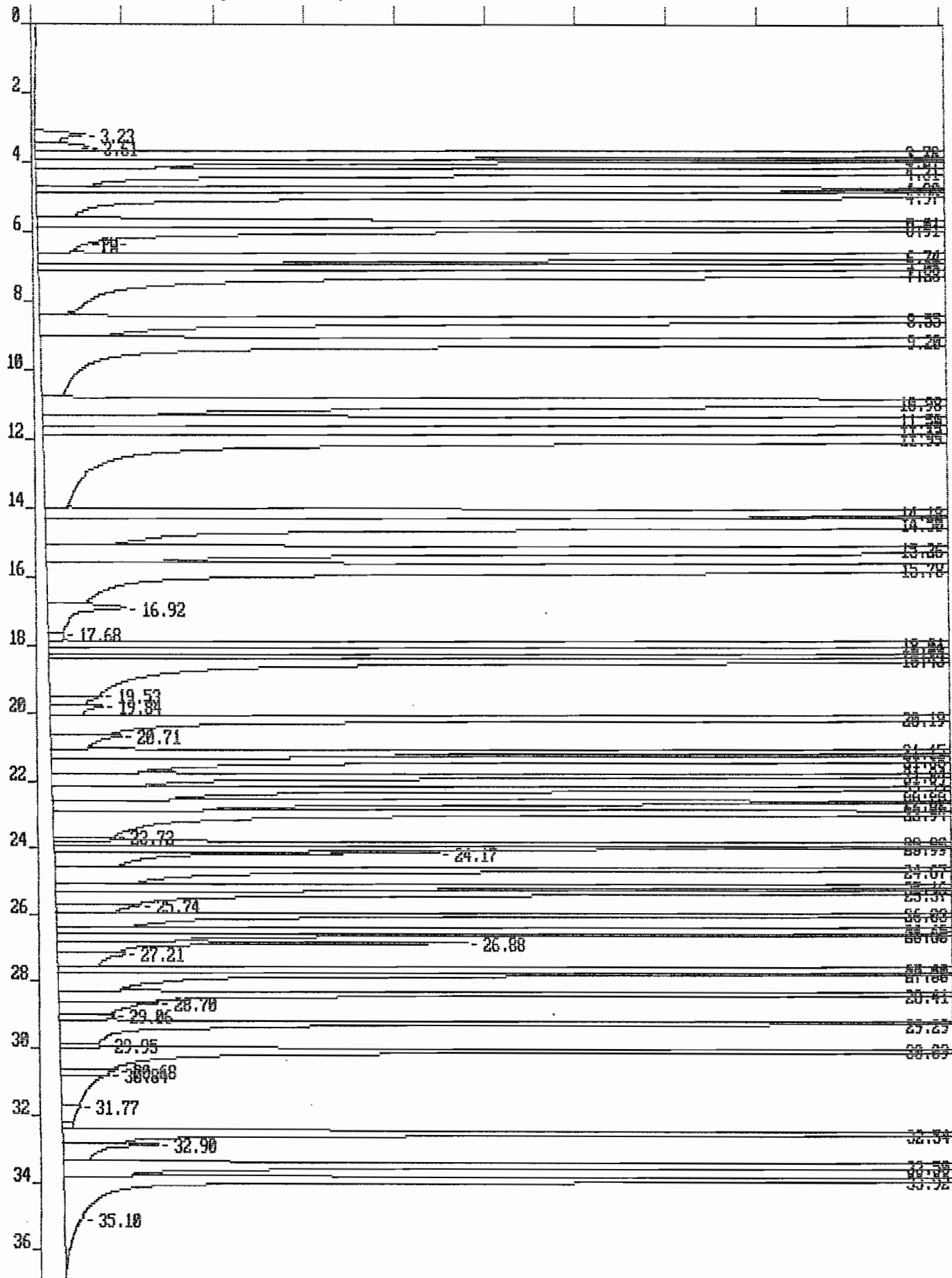
Reviewed by: NMB/24

Verified by: UMM/49

Date: 1/14/02

Date: 01/15/02

File=C:\CP\DATA1\18014.09R Date printed=01-14-2002 Time= 08:38:37
 Sample Name=3753722 MSD 02014A181127,8404,8400,8401
 1.0 to 37.0 min. Low Y=0.069 High Y=15.069 mv Span=15.0



Sample Name: 3753722 MSD

Batch: 02014A18

Date Taken: Jan 14, 2002 08:38:31

Raw File: C:\CP\DATA1\18014.09R

Area File: C:\CP\DATA1\18014.09A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 21):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.780	3.802	DICHLORODIFLUOROMETH	19.3056	277620	39080
4.010	3.987	CHLOROMETHANE	8.3543	116703	18667
4.309	4.308	VINYL CHLORIDE	15.1312	428928	53831
4.799	4.780	BROMOMETHANE	13.6884	224847	36791
4.974	4.979	CHLOROETHANE	15.0390	424555	64088
5.813	5.839	TRICHLOROFLUOROMETHA	15.1416	239057	38659
6.737	6.758	1,1-DICHLOROETHENE	19.0020	589212	87967
7.046	7.069	METHYLENE CHLORIDE	17.4635	869618	144896
7.228	7.249	TRICHLOROTRIFLUOROET	18.7830	736871	68227
8.552	8.580	TRANS-1,2-DICHLOROET	19.5973	819619	122441
9.199	9.229	1,1-DICHLOROETHANE	20.8781	959606	111729
10.979	11.015	CIS-1,2-DICHLOROETHE	22.2391	948856	112544
11.496	11.534	BROMOCHLOROMETHANE	20.7171	608648	75404
11.752	11.790	CHLOROFORM	21.0349	1188856	128652
11.995	12.039	2,2-DICHLOROPROPANE	19.8257	860869	64389
14.180	14.216	1,2-DICHLOROETHANE	20.6683	792818	98863
14.496	14.534	1,1,1-TRICHLOROETHAN	21.9273	1163551	108945
15.260	15.296	1,1-DICHLOROPROPENE	20.8521	782384	91670
15.783	15.818	CARBON TETRACHLORIDE	21.0648	1261237	127611
18.009	18.035	DIBROMOMETHANE	20.6068	360936	61082
18.182	18.208	1,2-DICHLOROPROPANE	20.5946	758322	117365
18.340	18.364	TRICHLOROETHENE	21.3262	1019989	170465
18.447	18.471	BROMODICHLOROMETHANE	19.9616	927224	135108
19.835	19.858	2-CHLOROETHYL VINYL	0.3813	12537	878
20.188	20.205	CIS-1,3-DICHLOROPROP	20.0451	734480	144766
21.147	21.161	TRANS-1,3-DICHLOROPR	18.5092	568947	128683
21.376	21.390	1,1,2-TRICHLOROETHAN	20.0719	806932	168480
21.839	21.853	1,3-DICHLOROPROPANE	20.0538	633315	140768
22.223	22.236	DIBROMOCHLOROMETHANE	20.6404	561695	120485
22.618	22.630	1,2-DIBROMOETHANE	20.8735	360946	78572
22.944	22.956	TETRACHLOROETHENE	21.6714	1062862	240847
23.895	23.906	1,1,1,2-TETRACHLOROE	20.5177	902719	240106
23.993	24.004	CHLOROBENZENE	20.1169	434229	111008
24.673	24.684	BROMOFORM	21.1051	357091	78036
25.162	25.174	1,1,2,2-TETRACHLOROE	20.3266	529603	131922
25.366	25.378	1,2,3-TRICHLOROPROPA	20.5510	454596	104867
26.030	26.044	BROMOBENZENE	19.5861	259003	55439
26.480	26.495	2-CHLOROTOLUENE	19.8261	304055	79058
26.599	26.613	4-CHLOROTOLUENE	19.5963	334282	79297
27.682	27.699	1,3-DICHLOROBENZENE	19.8647	453221	116338
27.796	27.814	1,4-DICHLOROBENZENE	19.5858	557336	122073
28.406	28.425	1,2-DICHLOROBENZENE	19.6624	498022	111246
29.288	29.310	1,2-DIBROMO-3-CHLORO	22.3210	166321	25116
30.087	30.110	SURR-1B4CB-H	28.8470	514056	98879
32.538	32.567	1,2,4-TRICHLOROBENZE	19.7034	456630	79179
33.500	33.531	HEXACHLOROBUTADIENE	18.9262	595698	89745
33.924	33.955	1,2,3-TRICHLOROBENZE	20.5570	489837	70225
TOTAL 1,2-DICHLOROETHENE:			41.8364		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 96.1567%

Chrom Perfect version 6.07

Reported on 01-14-2002at 08:39:27

Sample name: 3753722 MSD
Raw file: C:\CP\DATA1\18014.09R

Batch: 02014A181127,840

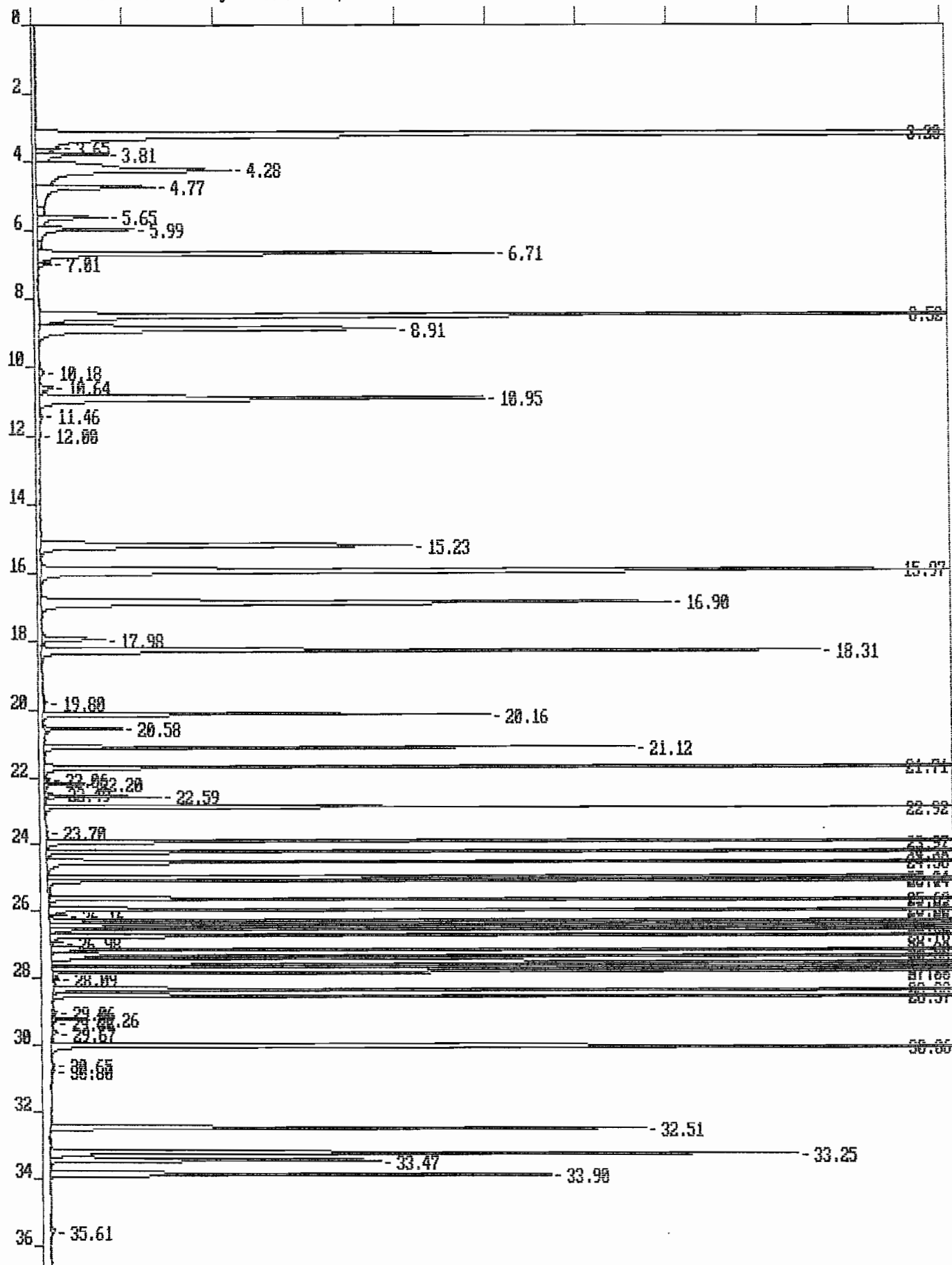
Reviewed by: MM49

Verified by: MM49

Date: 1/14/02

Date: 01/15/02

File=C:\CP\DATA1\180148.09R Date printed=01-14-2002 Time= 08:39:39
Sample Name=3753722 MSD 02014A181127,8404,8400,8401
0 to 37.0 min. Low Y=0.011 High Y=15.011 mv Span=15.0



Sample Name: 3753722 MSD

Batch: 02014A18

Date Taken: Jan 14, 2002 08:38:31

Raw File: C:\CP\DATA1\18014B.09R

Area File: C:\CP\DATA1\18014B.09A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 23):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.279	4.279	9.7234	40838	3207
6.709	6.729	19.9501	42828	7512
8.521	8.551	19.5145	97560	17063
8.913	8.939	22.7514	51457	5865
10.948	10.985	20.6129	54144	7321
15.230	15.266	19.6461	45593	6117
15.966	16.002	19.4235	108112	14941
16.900	16.934	1.0000	77909	10374
18.312	18.335	20.5751	67808	12816
19.800	19.830	0.1383	358	64
20.161	20.177	18.7897	28167	7368
21.120	21.135	17.2705	32238	9719
21.707	21.721	19.2704	101044	30023
22.918	22.930	20.8908	52904	17288
23.970	23.981	19.1611	105247	40295
24.284	24.295	19.4920	90881	33503
24.576	24.587	39.3700	214567	67296
25.041	25.053	19.2028	112557	41790
25.143	25.155	19.7562	94219	33340
25.686	25.699	20.2866	78312	26275
26.003	26.017	19.0664	105472	37074
26.331	26.346	19.4424	84507	29241
26.454	26.469	19.3584	92902	31956
26.573	26.589	19.2296	94708	33566
26.778	26.793	19.4687	122838	41350
27.201	27.217	19.7001	72616	22088
27.383	27.399	19.4823	95414	30933
27.550	27.567	19.2675	73182	22063
27.655	27.670	19.1254	91331	29783
27.771	27.790	19.0374	90877	29786
27.857	27.870	20.1723	73549	22691
28.379	28.399	18.7982	71807	21986
28.567	28.587	19.2754	69942	20497
30.059	30.082	28.1209	135466	36286
32.509	32.539	19.2972	46403	9806
33.253	33.280	20.6725	60363	12304
33.472	33.500	18.1119	30744	5442
33.895	33.926	19.6206	43651	8248

XYLENES (Total): 59.1263

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 93.7363%

Chrom Perfect version 6.07

Reported on 01-14-2002at 08:40:57

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753722 MSD
Raw file: C:\CP\DATA1\18014B.09R

Batch: 02014A181127,840

Reviewed by: mm49

Verified by: Umm49

Date: 1/14/02

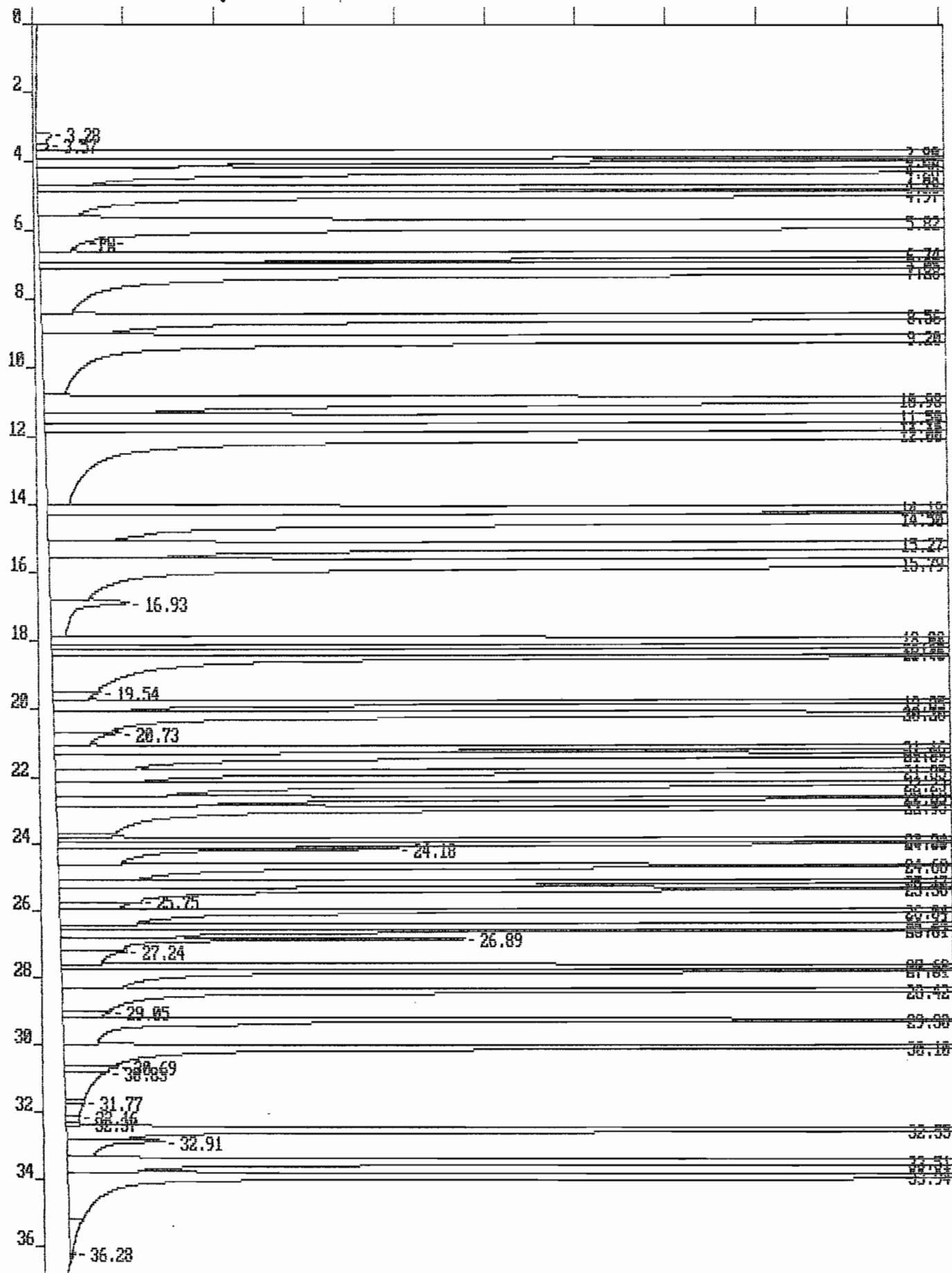
Date: 01/15/02

File=C:\CP\DATA1\18014.10R Date printed=01-14-2002 Time= 09:23:26

Sample Name=LCS1805

02014A188400,8401

.0 to 37.0 min. Low Y=0.082 High Y=15.082 mv Span=15.0



Sample Name: LCS1805

Batch: 02014A18

Date Taken: Jan 14, 2002 09:23:20

Raw File: C:\CP\DATA1\18014.10R

Area File: C:\CP\DATA1\18014.10A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 21):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.798	3.802	23.5754	305403	47723
3.996	3.987	12.0701	173511	26970
4.285	4.308	18.1791	435033	64674
4.780	4.780	15.7726	240339	42393
4.970	4.979	16.0784	423548	68517
5.825	5.839	17.7189	631913	45239
6.741	6.758	19.0164	559271	88034
7.051	7.069	17.9061	856414	148568
7.229	7.249	18.6964	701944	67912
8.557	8.580	19.9612	864913	124714
9.204	9.229	20.1170	929335	107656
10.984	11.015	20.3158	867280	102811
11.501	11.534	20.2747	597237	73794
11.756	11.790	20.1653	1130200	123333
12.003	12.039	19.3029	838686	62691
14.186	14.216	19.9121	763148	95246
14.504	14.534	19.5533	1042141	97149
15.268	15.296	19.5710	735203	86038
15.791	15.818	19.9033	1190597	120575
18.018	18.035	19.4837	341030	57753
18.192	18.208	19.6400	730396	111924
18.350	18.364	18.4824	867771	147734
18.458	18.471	18.7113	883945	126646
19.851	19.858	20.6231	255480	47468
20.198	20.205	19.2068	706597	138712
21.156	21.161	17.7887	545528	123673
21.385	21.390	19.1651	769425	160868
21.849	21.853	19.2181	607388	134902
22.233	22.236	20.2449	545662	118176
22.628	22.630	19.6121	339463	73824
22.954	22.956	19.0713	939474	211951
23.906	23.906	19.6052	858441	229428
24.004	24.004	19.0402	413392	105066
24.684	24.684	20.4743	347944	75704
25.173	25.174	19.2189	503227	124733
25.377	25.378	19.4612	432224	99306
26.042	26.044	19.3007	254959	54631
26.492	26.495	19.5735	297056	78051
26.610	26.613	19.2239	329954	77790
27.694	27.699	19.8236	449223	116097
27.808	27.814	19.5686	558317	121966
28.419	28.425	19.8464	524246	112287
29.302	29.310	20.5734	155546	23149
30.101	30.110	29.3149	520167	100483
32.552	32.567	19.8885	460494	79923
33.515	33.531	19.9372	626941	94539
33.939	33.955	20.1272	470349	68757
TOTAL 1,2-DICHLOROETHENE:		40.2770		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 97.7162%

Chrom Perfect version 6.07

Reported on 01-14-2002at 09:24:15

Sample name: LCS1805

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014.10R

Reviewed by: MM/2014

Verified by: Vmm49

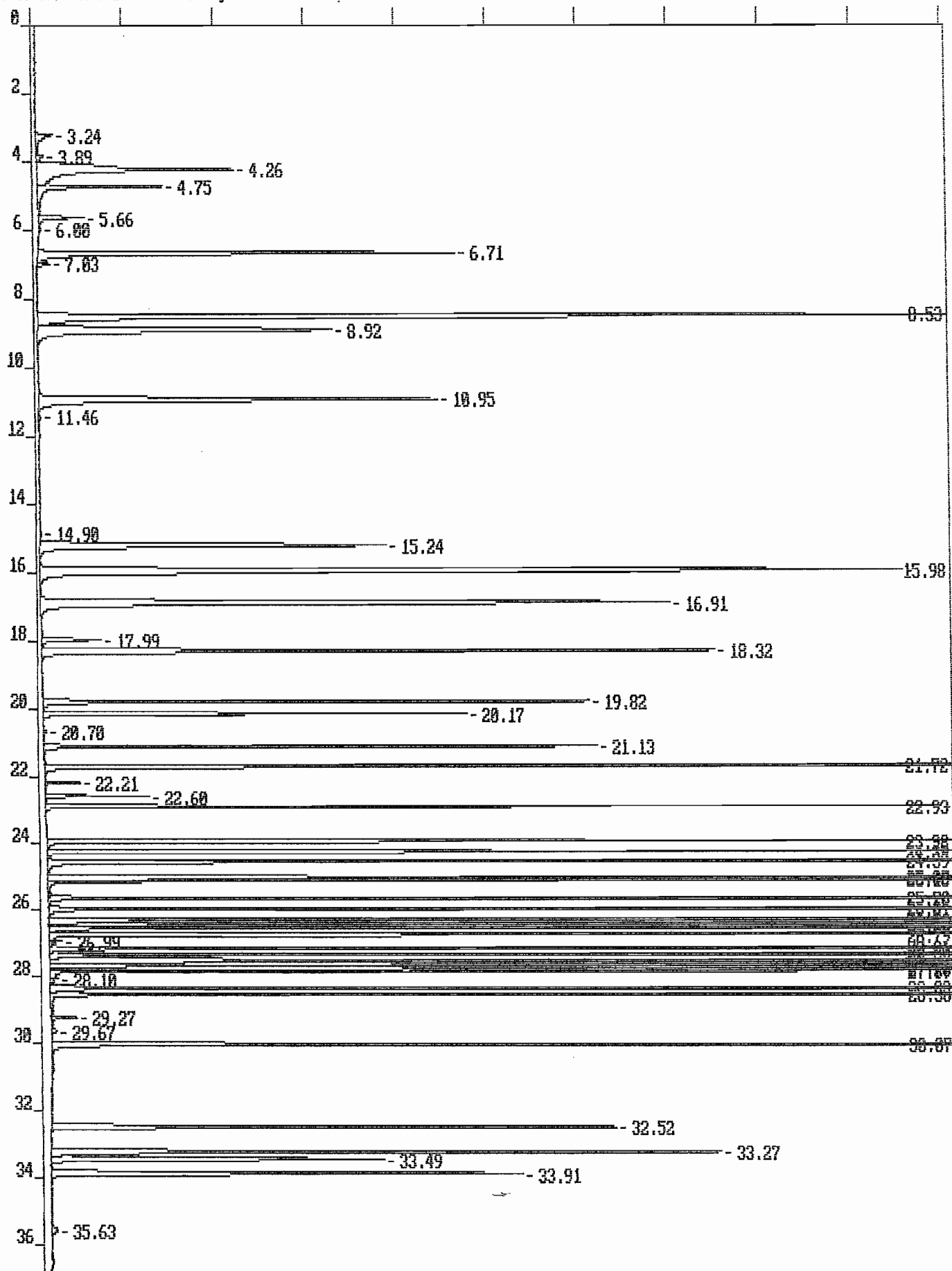
Date: 1/14/02

Date: 01/15/02

File=C:\CP\DATA1\180148.10R Date printed=01-14-2002 Time= 09:24:27

Sample Name=LCS1805 02014A188400,8401

.0 to 37.0 min. Low Y=0.007 High Y=15.007 mv Span=15.0



Sample Name: LCS1805

Batch: 02014A18

Date Taken: Jan 14, 2002 09:23:20

Raw File: C:\CP\DATA1\18014B.10R

Area File: C:\CP\DATA1\18014B.10A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 23):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.257	4.279	VINYL CHLORIDE	9.8170	33719	3238
6.712	6.729	1,1-DICHLOROETHENE	18.2504	36134	6871
8.528	8.551	TRANS-1,2-DICHLOROET	18.1774	90522	15891
8.923	8.939	METHYL T-BUTYL ETHER	18.7865	42441	4842
10.954	10.985	CIS-1,2-DICHLOROETHE	18.4967	48600	6568
15.237	15.266	1,1-DICHLOROPROPENE	18.2858	42489	5693
15.975	16.002	BENZENE	18.4617	102558	14199
16.908	16.934	ISTD-FBENZENE	1.0000	78240	10372
18.321	18.335	TRICHLOROETHENE	17.7891	58188	11079
19.822	19.830	2-CHLOROETHYL VINYL	19.4740	36235	9005
20.171	20.177	CIS-1,3-DICHLOROPROP	17.7900	26628	6975
21.129	21.135	TRANS-1,3-DICHLOROPR	16.1946	30171	9112
21.717	21.721	TOLUENE	18.0441	94341	28108
22.928	22.930	TETRACHLOROETHENE	17.8390	44858	14761
23.980	23.981	CHLOROBENZENE	18.0844	98794	38025
24.295	24.295	ETHYLBENZENE	18.2513	84552	31365
24.587	24.587	M,P-XYLENE	36.4817	198759	62349
25.052	25.053	STYRENE	18.3415	106874	39909
25.154	25.155	O-XYLENE	18.4835	88309	31188
25.697	25.699	ISOPROPYLBENZENE	18.8463	72534	24405
26.015	26.017	BROMOBENZENE	18.1454	100689	35278
26.343	26.346	N-PROPYLBENZENE	18.1341	78649	27269
26.466	26.469	2-CHLOROTOLUENE	18.3371	87447	30266
26.585	26.589	4-CHLOROTOLUENE	18.1425	89687	31664
26.790	26.793	1,3,5-TRIMETHYLBENZE	18.3117	115514	38886
27.212	27.217	TERT-BUTYLBENZENE	18.3488	67805	20570
27.394	27.399	1,2,4-TRIMETHYLBENZE	18.4185	89093	29239
27.562	27.567	SEC-BUTYLBENZENE	18.0738	68797	20693
27.668	27.670	1,3-DICHLOROBENZENE	18.1909	86874	28324
27.783	27.790	1,4-DICHLOROBENZENE	18.0757	86669	28276
27.869	27.870	P-ISOPROPYLTOLUENE	18.8741	69329	21227
28.392	28.399	1,2-DICHLOROBENZENE	17.8699	68982	20897
28.580	28.587	N-BUTYLBENZENE	18.2406	67006	19393
30.073	30.082	SURR-1B4CB-P	26.9416	130469	34759
32.524	32.539	1,2,4-TRICHLOROBENZE	18.3372	43975	9316
33.268	33.280	NAPHTHALENE	18.5789	54146	11056
33.486	33.500	HEXACHLOROBUTADIENE	18.2682	31061	5488
33.909	33.926	1,2,3-TRICHLOROBENZE	18.4873	40852	7771

XYLENES (Total): 54.9652

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 89.8054%

Chrom Perfect version 6.07

Reported on 01-14-2002at 09:25:45

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: LCS1805

Batch: 02014A188400,840

Raw file: C:\CP\DATA1\18014B.10R

Reviewed by: mm49

Verified by: mm49

Date: 1/14/02

Date: 01/15/02

Problems or comments are as follows:

Data file	SampleName	Batch#	DF	Analysis#s	CL-CK	QCCode	Bottle	Upload	Verify	Comments
18365.01R	CBLK	01365A18	1.0							
18365.02R	CBLK	01365A18	1.0							
18365.03R	CALSTD1	01365A18	1.0	8400,8401,8464		C1				OK
18365.04R	CALSTD2	01365A18	1.0	8400,8401,8464		C2				
18365.05R	CALSTD3	01365A18	1.0	8400,8401,8464		C3				
18365.06R	CALSTD4	01365A18	1.0	8400,8401,8464		C4				
18365.07R	CALSTD5	01365A18	1.0	8400,8401,8464		C5				
18365.08R	CALSTD6	01365A18	1.0	8400,8401,8464		C6				
18365.09R	CALSTD7	01365A18	1.0	8400,8401,8464		C7				
18365.10R	CALSTD8	01365A18	1.0	8400,8401,8464		C8				PP only
18365.11R	CBLK	01365A18	1.0							
18365.12R	CBLK	01365A18	1.0							
18365.13R	CBLK	01365A18	1.0							
18365.14R	CBLK	01365A18	1.0							
18365.15R	SETUP	01365A18	1.0							
18365.16R	CBLK	01365A18	1.0							
18365.17R	CHKSTD	01365A18	1.0	8400,8401						Reg. In Spec
18365.18R	CBLK	01365A18	1.0							
18365.19R	BLK1808	01365A18	1.0	8400,8401						OK
18365.20R	MDL	01365A18	1.0							OK
18365.21R	DL31802	01365A18	1.0							

Revised sequence
SPR 1018
12-31-01

Problems or comments are as follows:



* ① See nonconformance form regarding 3753727

Data file	SampleName	Batch#	DF	Analysis#s	CL-CK	QCCode	Bottle	Upload	Verify	Comments
18014.01R	CHKSTD	02014A18	1.0	8400,8401					OK	Avg in spec
18014.02R	BLK	02014A18	1.0							
18014.03R	BLK1827	02014A18	1.0	8400,8401				994	419	OK
18014.04R	DLS1820	02014A18	1.0						OK	OK
18014.05R	3753720	02014A18	1.0	1127,8404,8400,8401		BGM	52A	994	419	OK
18014.06R	3753727	02014A18	1.0	1127,8404	A			994		OK Headspace - ①
18014.07R	3753729	02014A18	1.0	1127,8404	A			994		OK
18014.08R	3753721	M 02014A18	1.0	1127,8404,8400,8401		MS	52C	994		OK
18014.09R	3753722	M 02014A18	1.0	1127,8404,8400,8401		MSD	52C	994		OK
18014.10R	LCS1805	02014A18	1.0	8400,8401		LCS		994		OK In Spec
18014.11R	CHKSTD	02014A18	1.0	8400,8401					OK	Avg in spec
18014.12R	BLK1828	02014A18	1.0	8400,8401					OK	OK
18014.13R	3753715	02014A18	1.0	1127,8404			52A	115	419	OK
18014.14R	3753716	02014A18	1.0	1127,8404						OK
18014.15R	3753717	02014A18	1.0	1127,8404						OK
18014.16R	3753718	02014A18	1.0	1127,8404						OK
18014.17R	3753719	02014A18	1.0	1127,8404						OK
18014.18R	3753723	02014A18	1.0	1127,8404						OK
18014.19R	3753724	02014A18	1.0	1127,8404						OK
18014.20R	3753725	02014A18	1.0	1127,8404						OK
18014.21R	3753728	02014A18	1.0	1127,8404						OK
18014.22R	3753730	02014A18	1.0	1127,8404						OK
18014.23R	CHKSTD	02014A18	1.0	8400,8401					OK	Avg In Spec
18014.24R	BLK1829	02014A18	1.0	8400,8401					OK	OK
18014.25R	3753726	02014A18	1.0	1127,8404			52A	115	419	OK
18014.26R	3753734	02014A18	1.0	1127,8404						OK
18014.27R	3753732	02014A18	1.0	1127,8404						OK
18014.28R	3753733	02014A18	1.0	1127,8404						OK
18014.29R	3753731	02014A18	1.0	1127,8404						OK
18014.30R	CHKSTD	02014A18	1.0	8400,8401						DEF for PCE

② Revised sequence.

TS 45
 1-15-02

Problems or comments are as follows:

* _____
 * _____
 * _____

Data file	SampleName	Batch#	DF	Analysis#s	CL-CK	QCCode	Bottle	Upload	Verify	Comments
18014.30R	BLK1830	02014A18	1.0	8400,8401	---	---	---	---	OK	OK
18014.31R	3753729	02014A18	5.0	1127,8404	---	---	52B	✓	✓	Use DF1
18014.32R	3753731	02014A18	5.0	1127,8404	---	---	52B	115	115	ACE only
18014.33R	CHKSTD	02014A18	1.0	8400,8401	---	---	---	---	OK	Avg in spec

Metals Data

Case Narrative Conformance/Nonconformance Summary



Where quality is a science.

CASE NARRATIVE FOR INORGANICS

Laboratory Name: Lancaster Laboratories

SDG Number: HUL04

Date Received: 1/05/02

Analysis:

Refer to the analysis run logs for samples requiring dilutions.

Quality Control:

The recovery percentages of the matrix spike and matrix spike duplicate for iron were not used to validate the data because the sample result was greater than four times the respective amount of spike added.

Explanatory Notes:

The instrument detection limits (IDLs) are used for determining the U flags on the initial and continuing calibration blanks. The method detection limits (MDLs) are used for determining all other U flags.

The final concentration is obtained using the following calculation:

$$\text{final conc.} = \text{instrument reading} \times \frac{\text{final vol.} \times \text{dilution factor}}{\text{initial volume or weight}}$$

Calibration Standards:

Instrument calibration standards are prepared monthly from stock solutions purchased from Spex Industries Inc., JT Baker, Aldrich Chemical, VWR Scientific, EM Science, High Purity, Ultra Scientific or VHG Laboratories.

Case Narrative reviewed and approved by:

Kathleen A. Risko ^{BLV 2/12/02} ₃₅₆ Date 2-12-02
Kathleen A. Risko, Specialist
Inorganic Data Packages

QUALITY ASSURANCE SUMMARY

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Name: LANCASTER LABORATORIES

SDG No.: HUL04

Client Sample ID.

Lab Sample ID.

--10L
--10U
AW1L-
AW1U-
AW1UD
AW2L-
AW3L-
AW3U-
AWFB-
MW8L-
MW8M-
MW8U-
MW9L-
MW9U-

3753730
3753729
3753724
3753720
3753723
3753725
3753716
3753715
3753726
3753719
3753718
3753717
3753728
3753727

Were ICP interelement corrections applied ?

Yes/No YES

Were ICP background corrections applied ?

Yes/No YES

If yes - were raw data generated before
application of background corrections ?

Yes/No NO

LEGEND:=====

U = Below MDL B = Below LOQ
FLAGS: (indicate matrix interference)
N = Matrix Spike OOS
* = Duplicate OOS
W = Method F Analytical Spike Recovery
<85% or > 115% when the sample conc.
is <50% of the spike conc.
S = Analysis Determined by MSA
+ = MSA Correlation Coefficient < 0.995
E = Matrix Effects exist as proven by
Serial Dilution or Spiked Dilution
M = Duplicate Injection Precision not met
Presence of FLAGS does not invalidate data

METHODS:
A = Flame Atomic Absorption
P = Inductively Coupled Plasma
F = Graphite Furnace
AS = Hydride Generation
CV = Cold Vapor
NR = Not Required

TERMS:
MDL = Method Detection Limit
LOQ = Limit Of Quantitation
OOS = Out of Specification
MSA = Method of Standard Addition

I certify that this data package is technically accurate and complete.
Release of the data contained in this data package has been authorized by
the Laboratory Manager or the Manager's designee, as verified by the
following signature.

Signature: Kathleen A. Risko

Name: Kathleen A. Risko

Date: 1/15/02

Title: Specialist
Inorganic Data Packages

Sample Data

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

--10L

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753730

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	56300			A

Color Before: _____
Color After: _____

Clarity Before: _____
Clarity After: _____

Texture: _____
Artifacts: _____

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

--10U

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753729

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	35600			A

Color Before:

Color After:

Clarity Before:

Clarity After:

Texture:

Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

AW1L-

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753724

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	24800			A

Color Before:

Color After:

Clarity Before:

Clarity After:

Texture:

Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

AW1U-

Lab Name: LANCASTER LABORATORIES____
SDG No.: HUL04
Matrix (soil/water): WATER
Level (low/med): LOW
% Solids: 0.0

Lab Sample ID: 3753720
Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L____

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	47400	-	-	A

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

AW1UD

Lab Name: LANCASTER LABORATORIES____
SDG No.: HUL04
Matrix (soil/water): WATER
Level (low/med): LOW
% Solids: 0.0

Lab Sample ID: 3753723
Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L____

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	49900	-	-	A

Color Before: _____ Clarity Before: _____ Texture: _____
Color After: _____ Clarity After: _____ Artifacts: _____

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

AW2L-

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753725

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	67100			A

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:
Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

AW3L-

Lab Name: LANCASTER LABORATORIES____
SDG No.: HUL04
Matrix (soil/water): WATER
Level (low/med): LOW
% Solids: 0.0

Lab Sample ID: 3753716
Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L____

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	83200	-	-	A

Color Before: _____
Color After: _____

Clarity Before: _____
Clarity After: _____

Texture: _____
Artifacts: _____

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

AW3U-

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753715

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	19300			A

Color Before:

Color After:

Clarity Before:

Clarity After:

Texture:

Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

AWFB-

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753726

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	50.0	U		A

Color Before:

Color After:

Clarity Before:

Clarity After:

Texture:

Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

MW8L-

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753719

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	5000			A

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:
Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

MW8M-

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753718

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	3910			A

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:
Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

MW8U-

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753717

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	64600			A

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:
Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

MW9L-

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753728

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	20700	-	-	A

Color Before: _____
Color After: _____

Clarity Before: _____
Clarity After: _____

Texture: _____
Artifacts: _____

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

MW9U-

Lab Name: LANCASTER LABORATORIES____
SDG No.: HUL04
Matrix (soil/water): WATER
Level (low/med): LOW
% Solids: 0.0

Lab Sample ID: 3753727
Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L____

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	150000	-	-	A

Color Before: _____
Color After: _____

Clarity Before: _____
Clarity After: _____

Texture: _____
Artifacts: _____

Comments:

Quality Control Data

QUALITY ASSURANCE SUMMARY

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Initial Calibration Source: LLI

Continuing Calibration Source: LLI

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(2)	Found	%R(2)	
Iron	2500.0	2482.00	99.3	500.0	489.00	97.8	483.00	96.6	A

(1) Control Limits: All Metals 90-110

(2) Control Limits: Mercury, Flame AA, Graphite Furnace AA 80-120; ICP 90-110

QUALITY ASSURANCE SUMMARY

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Initial Calibration Source: LLI

Continuing Calibration Source: LLI

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(2)	Found	%R(2)	
Iron				500.0	492.00	98.4	487.00	97.4	A

(1) Control Limits: All Metals 90-110

(2) Control Limits: Mercury, Flame AA, Graphite Furnace AA 80-120; ICP 90-110

QUALITY ASSURANCE SUMMARY

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Name: LANCASTER LABORATORIES

SDG No.: HUL04

Initial Calibration Source: LLI

Continuing Calibration Source: LLI

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(2)	Found	%R(2)	
Iron				500.0	492.00	98.4			A

(1) Control Limits: All Metals 90-110

(2) Control Limits: Mercury, Flame AA, Graphite Furnace AA 80-120; ICP 90-110

QUALITY ASSURANCE SUMMARY

CRDL STANDARD FOR AA AND ICP

Lab Name: LANCASTER LABORATORIES

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: HUL04

AA CRDL Standard Source: LLI

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Iron	100.0	96.00	96.0					

QUALITY ASSURANCE SUMMARY

BLANKS

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Iron	12.5	U	12.5	U	16.0	B	12.5	U	50.000	U	A

QUALITY ASSURANCE SUMMARY

BLANKS

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
		C	1	C	2	C	3	C		C	
Iron			12.5	U	12.5	U					A

QUALITY ASSURANCE SUMMARY

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

CLIENT SAMPLE NO.

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (Soil/Water): WATER

AWIU-S

% Solids for sample: 0.0 Concentration Units (ug/l or mg/kg dry weight): UG/L Level (low/med): LOW

Analyte	M	Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	MS %R	Q	MSD %R	Q	Control Limits %R	RPD	Q	Ctl Lim RPD
Iron	A	47360.0000		49780.0000		48540.0000		1000.00	1000.00	242		118			3		20

Note: An (N) in column "Q" indicates a spike recovery that is not within the control limits. An asterisk (*) in column "Q" indicates poor duplicate precision between the matrix spike and the matrix spike duplicate. The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample page of the Quality Assurance Summary.

QUALITY ASSURANCE SUMMARY

DUPLICATES

CLIENT SAMPLE NO.

AW1U-D

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL04

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Iron		47360.0000	50160.0000	6		A

NOTE: An asterisk(*) in column "Q" indicates poor duplicate precision (RPD > 20% OR $|(S) - (D)| > LOQ$ for values < 5x LOQ). The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample page of the Quality Assurance Summary.

QUALITY ASSURANCE SUMMARY

LABORATORY CONTROL SAMPLE

Name: LANCASTER LABORATORIES

SDG No.: HUL04

Solid LCS Source:

Aqueous LCS Source: LLI

Analyte	Aqueous (ug/L)			Solid (mg/kg)					%R
	True	Found	%R(1)	True	Found	C	Limits		
Iron	1000.0	976.00	98						

(1) Control Limits: Statistically determined

7/12/01

Statistical Windows: Waters LCS/LCSD

SW846 ICP

Element	True value mg/L	Statistical Window
AL	2	93-112
SB	0.5	94-112
AS	2	92-109
BA	2	93-109
BE	0.05	92-109
B	2	93-110
CD	0.05	93-111
CA	4	93-113
CR	0.2	95-112
CO	0.5	95-109
CU	0.25	92-110
FE	1	91-114
PB	0.5	93-110
MG	2	93-110
MN	0.5	93-110
MO	2	97-109
NI	0.5	93-110
K	4	80-120
SE	2	91-111
AG	0.05	93-110
NA	4	87-117
SR	1	91-112
TL	2	92-107
SN	4	95-112
TI	1	96-109
V	0.5	96-109
ZN	0.5	94-112
LI	2	80-120

SW846 Mercury

Element	True value mg/L	Statistical Window
HG	1	84-124

SW846 GFAA

Element	True value mg/L	Statistical Window
SB	50	83-122
AS	40	83-116
BE	2.5	80-120
CD	2.5	82-117
CR	10	79-117
CU	20	85-116
PB	20	80-117
NI	20	80-120
SE	10	83-119
AG	2.5	80-120
TL	50	90-108

SW846 Flame AA

Element	True value mg/L	Statistical Window
AL	2	77-110
BA	2	72-110
BE	0.05	80-120
CD	0.05	85-113
CA	4	80-120
CR	0.2	86-121
CU	0.25	87-106
FE	1	88-111
PB	0.5	86-114
MG	2	80-120
MN	0.5	90-108
NI	0.5	85-110
K	4	80-120
AG	0.05	82-116
NA	4	80-120
ZN	0.5	88-109

Verification of Instrument Parameters

QUALITY ASSURANCE SUMMARY

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Name: LANCASTER LABORATORIES
 SSG No.: HUL04

ICP ID Number: _____

Date: 10/15/01

Flame AA ID Number: 03907

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	IDL (ug/L)	M
Iron	248.30	BD	12.5	A

Comments:

METHOD DETECTION LIMITS (ANNUALLY)

Method: A

Date: 04/02/01

Analyte	Wave-length (nm)	Back-ground	LOQ (ug/L)	MDL (ug/L)
Iron	248.30	BD	100	50.0

** The LOQ must be adjusted for % Solids and Sample Weight for samples reporting in mg/Kg and ug.

Comments :

Preparation and Run Logs

QUALITY ASSURANCE SUMMARY

PREPARATION LOG

Name: LANCASTER LABORATORIES

SDG No.: HUL04

Method: A

Client Sample No.	Preparation Date	Weight (gram)	Volume (ml)
--10L	01/10/02		50
--10U	01/10/02		50
AW1L-	01/10/02		50
AW1U-	01/10/02		50
AW1U-D	01/10/02		50
AW1U-M	01/10/02		50
AW1U-S	01/10/02		50
AW1UD	01/10/02		50
AW2L-	01/10/02		50
AW3L-	01/10/02		50
AW3U-	01/10/02		50
AWFB-	01/10/02		50
LCSW	01/10/02		50
MW8L-	01/10/02		50
MW8M-	01/10/02		50
MW8U-	01/10/02		50
MW9L-	01/10/02		50
MW9U-	01/10/02		50
PBW	01/10/02		50

ANALYSIS RUN LOG

End Date: 01/11/02

[illegible]

QUALITY ASSURANCE SUMMARY

ANALYSIS RUN LOG

Name: LANCASTER LABORATORIES

SDG No.: HUL04

Instrument ID Number: 03907

Method: A

Start Date: 01/11/02

End Date: 01/11/02

EPA Sample No.	D/F	Time	% R	Analytes																									
				F E																									
AW3L-	40.00	0843		X																									
CCV	1.00	0844		X																									
CCB	1.00	0845		X																									
MW8U-	1.00	0845																											
MW8U-	40.00	0850		X																									
MW8M-	1.00	0850		X																									
MW8L-	1.00	0851		X																									
AW1UD	1.00	0851																											
AW1UD	40.00	0851		X																									
AW1L-	1.00	0852																											
AW1L-	10.00	0853		X																									
AW2L-	1.00	0854																											
AW2L-	40.00	0855		X																									
CCV	1.00	0855		X																									
CCB	1.00	0855		X																									
NFB-	1.00	0856		X																									
MW9U-	1.00	0856																											
MW9U-	40.00	0856		X																									
MW9L-	1.00	0857																											
MW9L-	10.00	0900		X																									
--10U	1.00	0900																											
--10U	10.00	0901		X																									
--10L	1.00	0901																											
--10L	20.00	0903		X																									
ZZZZZZ	1.00	0910																											
CCV	1.00	0913		X																									
CCB	1.00	0914		X																									

Raw Data

Flame AA Data

LANCASTER LABORATORIES

FLAME AA REPORT

DATA REVIEWED BY: D. Valentin 354

DATE: 1-11-02

DATA VERIFIED BY: S. Shumaker 360

DATE: 1/11/02

X Samples Verified

RUN NAME: 0201101A04

RUN DATE: 1/11/02

DATA FILE NAME: FE01101.FAA

RUN STARTTIME: 8:13:01

INSTRUMENT NO: 03907

RUN ENDTIME: 9:35:01

ANALYST: 354

ELEMENT: FE

INTEGRATION TIME : 3.0

ABSORBANCE/EMMISSIONS : ABSORBANCE

BC ON/OFF : ON

N20-ACETYLENE/ACETYLENE-AIR : AIR-Acetylene

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 1 1/11/02 8:13:01

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
S0	*		0.000	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			0.000	-0.001	-0.001	-0.001	-0.003	

TUBE: 2 1/11/02 8:13:03

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
S100	*		0.100	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			11.400	0.016	0.018	0.015	0.015	

TUBE: 3 1/11/02 8:13:05

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
S250	*		0.250	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			6.100	0.039	0.037	0.038	0.042	

TUBE: 4 1/11/02 8:14:01

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
S500	*		0.500	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			1.000	0.078	0.079	0.077	0.079	

TUBE: 5 1/11/02 8:14:02

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
S1000	*		1.000	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			0.900	0.149	0.150	0.149	0.147	

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 6 1/11/02 8:14:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
55000	*		5.000	1.000	1.000	1.000	1.000	1.000
			%RSD		MEAN ABS	READING1	READING2	READING3
			0.800		0.584	0.580	0.581	0.589

TUBE: 7 1/11/02 8:15:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
ICV	*		2.482	1.000	1.000	1.000	1.000	1.000
			% RECOVERY		% RSD	MEAN ABS	READING1	READING2
			99.3		1.000	0.327	0.324	0.330
							READING3	0.325

TUBE: 8 1/11/02 8:15:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
ICB	*		0.002	1.000	1.000	1.000	1.000	1.000
			%RSD		MEAN ABS	READING1	READING2	READING3
			99.900		0.000	0.001	0.001	0.000

TUBE: 9 1/11/02 8:15:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CRA	*		0.096	1.000	1.000	1.000	1.000	1.000
			%RSD		MEAN ABS	READING1	READING2	READING3
			15.600		0.015	0.017	0.016	0.013

TUBE: 10 1/11/02 8:16:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV1	*		0.489	1.000	1.000	1.000	1.000	1.000
			% RECOVERY		% RSD	MEAN ABS	READING1	READING2
			97.8		2.000	0.077	0.077	0.078
							READING3	0.075

DATA SHEET FOR FLAMEAAR RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 11 1/11/02 8:16:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB1	*		0.009	1.000	1.000	1.000	1.000	1.000
			%RSD		MEAN ABS	READING1	READING2	READING3
			99.900		0.001	0.003	-0.002	0.004

TUBE: 12 ZZZZZZ 1/11/02 8:16:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
PBW	*	020085733002	-0.003	1.000	1.000	1.000	50.000	50.000
V		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
V		—	—	99.900	0.000	0.002	-0.003	0.000

TUBE: 13 ZZZZZZ 1/11/02 8:17:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
LCSW	*	020085733002	0.946	1.000	1.000	1.000	1.000	1.000
V		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
V		—	—	2.200	0.142	0.138	0.144	0.142

TUBE: 14 ZZZZZZ 1/11/02 8:17:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3754009	U	020085733002	3.046	1.000	1.000	1.000	50.000	50.000
V		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
V		—	—	1.400	0.387	0.381	0.392	0.388

TUBE: 15 ZZZZZZ 1/11/02 8:17:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3754009	D	020085733002	2.455	1.000	1.000	1.000	50.000	50.000
V		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
V		—	—	0.500	0.324	0.325	0.322	0.324

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 16 **ZZZZZZ** 1/11/02 8:18:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3754009	R	020085733002	3.423	1.000	1.000	1.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
$\frac{V}{\checkmark}$	—	—	0.800	0.426	0.423	0.425	0.430

TUBE: 17 **ZZZZZZ** 1/11/02 8:20:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3754009	P	020085733002	4.129	1.000	1.000	1.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
$\frac{V}{\checkmark}$	—	—	0.200	0.497	0.498	0.498	0.496

TUBE: 18 **ZZZZZZ** 1/11/02 8:20:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753487	*	020085733002	0.912	1.000	1.000	1.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
$\frac{V}{X}$	—	—	0.900	0.137	0.139	0.138	0.136

TUBE: 19 1/11/02 8:25:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
PBW	*	020100820008	0.009	1.000	1.000	1.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
$\frac{V}{\checkmark}$	—	—	99.900	0.001	0.004	-0.002	0.002

TUBE: 20 1/11/02 8:25:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
LCSW	*	020100820008	0.976	1.000	1.000	1.000	1.000	1.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
$\frac{V}{\checkmark}$	—	—	1.500	0.146	0.144	0.145	0.148

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 21 AW14- 1/11/02 8:25:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	U	020100820008	50.000	1.000	1.000	1.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	20	—	0.500	1.093	1.087	1.095	1.098

TUBE: 22 1/11/02 8:26:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV2	*		0.483	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
96.6	2.200	0.076	0.077	0.074	0.076

TUBE: 23 1/11/02 8:27:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB2	*		0.016	1.000	1.000	1.000	1.000	1.000

%RSD	MEAN ABS	READING1	READING2	READING3
76.700	0.003	0.004	0.000	0.003

TUBE: 24 AW14- 1/11/02 8:30:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	U	020100820008	2.368	10.000	0.500	20.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X	—	—	0.700	0.314	0.312	0.313	0.316

TUBE: 25 AW14-A 1/11/02 8:36:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	P	020100820008	3.600	10.000	0.500	20.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
✓	—	—	0.900	0.444	0.447	0.439	0.445

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 26 AW14-L 1/11/02 8:37:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	L	020100820008	0.464	50.000	0.500	100.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		—	—	1.300	0.073	0.072	0.074	0.072

TUBE: 27 AW14-D 1/11/02 8:38:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	D	020100820008	2.508	10.000	0.500	20.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		—	—	0.600	0.329	0.330	0.331	0.327

TUBE: 28 AW14-S 1/11/02 8:38:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	R	020100820008	2.489	10.000	0.500	20.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		—	—	0.500	0.327	0.326	0.329	0.327

TUBE: 29 AW14-M 1/11/02 8:39:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	M	020100820008	2.427	10.000	0.500	20.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		—	—	1.200	0.321	0.319	0.318	0.325

TUBE: 30 AW34- 1/11/02 8:39:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753715	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		10	—	0.800	0.941	0.947	0.933	0.943

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 31 AW3U - 1/11/02 8:41:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753715	*	020100820008	1.926	10.000	1.000	10.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
~~V~~	—	—	1.600	0.264	0.265	0.259	0.267

TUBE: 32 AW3L - 1/11/02 8:41:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753716	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
~~V~~	40	—	0.700	1.204	1.214	1.199	1.198

TUBE: 33 AW3L - 1/11/02 8:43:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753716	*	020100820008	2.081	10.000	0.250	40.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
~~V~~	—	—	1.000	0.282	0.279	0.284	0.283

TUBE: 34 1/11/02 8:44:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV3	*		0.492	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
98.4	1.600	0.077	0.077	0.078	0.076

TUBE: 35 1/11/02 8:45:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB3	*		0.001	1.000	1.000	1.000	1.000	1.000

%RSD	MEAN ABS	READING1	READING2	READING3
99.900	0.000	-0.002	-0.002	0.004

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 36 MW84- 1/11/02 8:45:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753717	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	46	—	1.200	1.158	1.168	1.166	1.142

TUBE: 37 MW84- 1/11/02 8:50:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753717	*	020100820008	1.616	10.000	0.250	40.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X	—	—	0.700	0.227	0.228	0.225	0.227

TUBE: 38 MW8M- 1/11/02 8:50:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753718	*	020100820008	3.908	1.000	1.000	1.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X	—	—	0.800	0.475	0.471	0.478	0.477

TUBE: 39 MW8L- 1/11/02 8:51:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753719	*	020100820008	4.998	1.000	1.000	1.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X	—	—	0.700	0.583	0.579	0.585	0.586

TUBE: 40 AW1UD 1/11/02 8:51:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753723	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	46	—	0.400	1.119	1.119	1.114	1.123

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 41 *AW1UD* 1/11/02 8:51:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753723	*	020100820008	1.248	10.000	0.250	40.000	50.000	50.000

~~V~~	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
~~X~~	—	—	2.000	0.181	0.185	0.178	0.180

TUBE: 42 *AW1L-* 1/11/02 8:52:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753724	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	10	—	0.400	1.020	1.015	1.024	1.020

TUBE: 43 *AW1L-* 1/11/02 8:53:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753724	*	020100820008	2.477	10.000	1.000	10.000	50.000	50.000

~~V~~	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
~~X~~	—	—	0.100	0.326	0.326	0.326	0.326

TUBE: 44 *AW2L-* 1/11/02 8:54:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753725	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	46	—	0.500	1.166	1.164	1.173	1.161

TUBE: 45 *AW2L-* 1/11/02 8:55:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753725	*	020100820008	1.677	10.000	0.250	40.000	50.000	50.000

~~V~~	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
~~X~~	—	—	1.200	0.234	0.233	0.237	0.232

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TUBE: 46 1/11/02 8:55:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV4	*		0.487	1.000	1.000	1.000	1.000	1.000
% RECOVERY			% RSD	MEAN ABS	READING1	READING2	READING3	
97.4			0.500	0.076	0.077	0.076	0.076	

TUBE: 47 1/11/02 8:55:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB4	*		-0.006	1.000	1.000	1.000	1.000	1.000
% RSD			MEAN ABS	READING1	READING2	READING3		
99.900			-0.001	-0.004	-0.001	0.002		

TUBE: 48 AWF B- 1/11/02 8:56:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753726	*	020100820008	0.017	1.000	1.000	1.000	50.000	50.000
RR RD			% RSD	MEAN ABS	READING1	READING2	READING3	
— —			81.700	0.003	0.003	0.000	0.005	

TUBE: 49 MW9U- 1/11/02 8:56:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753727	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
RR RD			% RSD	MEAN ABS	READING1	READING2	READING3	
40 —			0.400	1.266	1.260	1.269	1.269	

TUBE: 50 MW9U- 1/11/02 8:56:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753727	*	020100820008	3.747	10.000	0.250	40.000	50.000	50.000
RR RD			% RSD	MEAN ABS	READING1	READING2	READING3	
— —			0.200	0.459	0.460	0.459	0.458	

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 51 MW9L- 1/11/02 8:57:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753728	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3	
—	10	—	0.400	0.979	0.979	0.983	0.974	

TUBE: 52 MW9L- 1/11/02 9:00:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753728	*	020100820008	2.068	10.000	1.000	10.000	50.000	50.000
X	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3	
—	—	—	0.300	0.280	0.280	0.280	0.281	

TUBE: 53 -104 1/11/02 9:00:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753729	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3	
—	10	—	0.800	1.066	1.069	1.056	1.073	

TUBE: 54 -104 1/11/02 9:01:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753729	*	020100820008	3.561	10.000	1.000	10.000	50.000	50.000
X	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3	
—	—	—	0.700	0.440	0.437	0.443	0.440	

TUBE: 55 -10L 1/11/02 9:01:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753730	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3	
—	20	—	0.800	1.127	1.136	1.128	1.118	

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 56 --101 1/11/02 9:03:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753730	*	020100820008	2.814	10.000	0.500	20.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X	—	—	0.100	0.362	0.362	0.362	0.363

TUBE: 57 ZZZZZZ 1/11/02 9:10:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
PBW	*	020100820009	0.015	1.000	1.000	1.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
V	—	—	99.900	0.002	0.004	0.005	-0.002

TUBE: 58 1/11/02 9:13:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV5	*		0.492	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
98.4	1.300	0.077	0.076	0.076	0.077

TUBE: 59 1/11/02 9:14:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB5	*		0.002	1.000	1.000	1.000	1.000	1.000

%RSD	MEAN ABS	READING1	READING2	READING3
99.900	0.000	0.002	-0.001	0.000

TUBE: 60 1/11/02 9:14:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
LCSW	*	020100820009	0.967	1.000	1.000	1.000	1.000	1.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
V	—	—	0.700	0.144	0.143	0.145	0.144

Extraction/Distillation/Digestion Logs

Instrumental Analysis Data

Case Narrative Conformance/Nonconformance Summary



Where quality is a science.

CLIENT: Hull & Associates
SDG: HUL04

LANCASTER LABORATORIES

INSTRUMENTAL WET CHEMISTRY

SAMPLE NUMBERS:

<u>Sample #</u>	<u>Sample Code</u>	<u>Comments</u>
3753715	AW3U-	
3753716	AW3L-	DF25
3753717	MW8U-	
3753718	MW8M-	
3753719	MW8L-	
3753720	AW1U-	Background/DF5
3753723	AW1UD	DF5
3753724	AW1L-	DF10
3753725	AW2L-	DF25
3753726	AWFB-	Client Blank
3753727	MW9U-	DF10
3753728	MW9L-	
3753729	--10U	
3753730	--10L	DF10
LCS		DF5

ANALYSIS:

Dilutions for the total organic carbon analysis are listed in the comments section above.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

QC was within specification.

DATA INTERPRETATION:

Due to the limitations of the data package software, Form I's are not available for the Instrumental analysis data. Please refer to the analysis reports for this information.

TOC water (mg/l) = raw result (mg/l) X dilution factor

No further interpretation is necessary for the data submitted.

Case Narrative Reviewed and Approved by:

 Date: 1-16-02
Sandra J. Miller
Specialist/Coordinator

QC Summary

Lancaster Laboratories

Quality Control Summary
Method Blank
Instrumental Water Quality
SDG: HUL04

Method Blank Analysis						Matrix: WATER			
Parameter	Sample Number	Sample Code	Method	Analysis Date	Batch Number	Blank Results	Units	MDL	LOQ
TOC	3753715	AW3U-	TOC	1/10/02	02010011111	ND	mg/l	0.6	2
	3753716	AW3L-							
	3753717	MW8U-							
	3753718	MW8M-							
	3753719	MW8L-							
	3753720	AW1U- B,S,M							
	3753723	AW1UD							
	3753724	AW1L-							
	3753725	AW2L-							
	3753726	AWFB-							
	3753727	MW9U-							
	3753728	MW9L-							
	3753729	--10U							
	3753730	--10L							
	P753742	B,S,M							

Comments: The blank is acceptable when the result is less than the limit of quantitation.

ABBREVIATION KEY

IC = Ion Chromatography	< = Less Than
TOC = Total Organic Carbon	ND = Not Detected
TOX = Total Organic Halogen	J = Estimated Value < LOQ
TKN = Total Kjeldahl Nitrogen	MDL = Method Detection Limit
AK = Alpkem	LOQ = Limit of Quantitation
DOC = Dissolved Organic Carbon	NA = Not Applicable
B = Background	* = Out of Specification
S = Spike	D = Duplicate
M = Matrix Spike Duplicate	U = Under
P = Post Distillation Spike	

Sample Info.	Matrix Spike Analysis				Matrix: WATER														
Sample Number	Sample Code	Batch Number	Parameter	ME	Analysis Date	BKG Sample	BKG Result	MS Sample	MS Spike Added	MS Result	MSD Sample	MSD Spike Added	MSD Result	Units	MS Rec (%)	MSD Rec (%)	Acceptance Window (%)	RPD (%)	% RPD Limits
3753715	AW3U-	02010011111	TOC	TOC	1/11/02	3753720	43	3753720	49	93.1	3753720	49	98.0	mg/l	102	111	73 - 128	5	20
3753716	AW3L-			TOC	1/11/02	P753742	28.0	P753742	9.8	36.5	P753742	9.8	37.0	mg/l	88	92	73 - 128	1	20
3753717	MW8U-																		
3753718	MW8M-																		
3753719	MW8L-																		
3753720	AW1U-																		
3753723	AW1UD																		
3753724	AW1L-																		
3753725	AW2L-																		
3753726	AWFB-																		
3753727	MW9U-																		
3753728	MW9L-																		
3753729	--10U																		
3753730	--10L																		

ABBREVIATION KEY

IC = Ion Chromatography	< = Less Than
TOC = Total Organic Carbon	ND = Not Detected
TOX = Total Organic Halogen	ME = Method
TKN = Total Kjeldahl Nitrogen	LOQ = Limit of Quantitation
AK = Alpkem	* = Out of Specification
DOC = Dissolved Organic Carbon	NA = Not Applicable
RA = Rapid Analyzer	U = Under
B = Background	P = Post Distillation Spike (PDS)
S = Spike	D = Duplicate
MSD = Matrix Spike Duplicate	J = Estimated Value < LOQ

Std mass:
Calib. Const:

25.0 ug C
0.06035 ug C/mV

Quality Control Summary
Initial Calibration & Linearity Check
Instrument Analysis
Total Organic Carbon
Instrument Identification: 5214
Calibration Date: 1/9/02
Matrix: WATER
SDG: HUL04

Blank: 5.21568 mv
Blank: 5.29326 mv
Blank: 5.06054 mv
Average: 5.18983 mv

Standard: 410.784 mv
Standard: 413.298 mv
Standard: 418.552 mv
Average: 414.211 mv

Batch Number	This IC applies to samples:	Sample Code	Analysis #	Method Blank	ICV/	ICV/	ICV/	ICV/	ICV/	ICV/	Units= mg/L
02010011111	Blank LCS 3753715 3753716 3753717 3753718 3753719 3753720 3753723 3753724 3753725 3753726 3753727 3753728 3753729 3753730 P753742	AW3U- AW3L- MW8U- MW8M- MW8L- AW1U- B,S,M AW1UD AW1L- AW2L- AWFB- MW9U- MW9L- --10U --10L B,S,M	354	0.149	1.951	7.157	9.706	24.917	50.018	NA	

Continuing Calibration Dates: 1/10/02, 1/11/02
Concentration Units: mg/L

Parameter	Reference Concentration	Result Cont. Cal	% Recovery	Acceptance Range +/- 10%	Out of Specifications
TOC	25	24.735	99	22.375 - 27.6	
CCV	25	24.762	99	22.375 - 27.6	
CCV	25	24.563	98	22.375 - 27.6	
CCV	25	25.259	101	22.375 - 27.6	
CCV	25	24.784	99	22.375 - 27.6	
CCV	25	24.753	99	22.375 - 27.6	
CCV	25	25.287	101	22.375 - 27.6	
CCV	25	25.193	101	22.375 - 27.6	
CCV	25	25.265	101	22.375 - 27.6	
CCV	25	25.271	101	22.375 - 27.6	
CCV	25	26.038	104	22.375 - 27.6	

Dept. 27 MDL/LOQ Values

Date Last Printed: 11/21/01

Analysis Name	Analysis Number	Method	Calc. MDL	Calc. LOQ	True MDL	True LOQ	Units
Total Kjeldahl Nitrogen (Water)	0217	AK	0.21	0.6	0.3	1	mg/l
Nitrite-Nitrogen	0219(S)	AK	0.09	0.26	0.2	0.6	mg/kg
Nitrite Nitrogen	0219(W)	AK	0.003	0.008	0.015	0.05	mg/l
Nitrate-Nitrogen	0220(S)	AK	0.5	1.6	0.6	1.7	mg/kg
Nitrate Nitrogen	0220/7882	AK	0.033	0.099	0.04	0.1	mg/l
Ammonia Nitrogen	0222	AK	0.018	0.055	0.02	0.1	mg/l
Total Phosphorus	0227/0345	AK	0.01	0.029	0.04	0.05	mg/l
Total Cyanide, EPA	0237	AK	0.0007	0.0022	0.004	0.005	mg/l
Free Cyanide	0241	AK	0.002	0.005	0.004	0.005	mg/l
Phenol (Water), EPA	0434	AK	0.007	0.02	0.009	0.03	mg/l
Reactive Cyanide	1123	AK	15	46	100	100	mg/kg
Total Kjeldahl Nitrogen (Solid)	1511	AK	116	348	150	500	mg/kg
Soluble Phosphorus	1546	AK	0.04	0.13	0.05	0.15	mg/l
Hydrolyzable Phosphorus	1547	AK	0.008	0.025	0.04	0.05	mg/l
Amenable Cyanide, Waters	1549	AK	0.0015	0.0045	0.004	0.005	mg/l
Phenol (Water), SW-846	2393	AK	0.003	0.01	0.009	0.03	mg/l
CLP Cyanide (IDL)	3343/5910	AK	1.4	4.2	4	10	ug/l
Nitrocellulose, WW	370	AK	500	1500	500	1500	ug/l
Nitrocellulose, SW	371	AK	60	180	60	180	mg/kg
Total Phosphorus (Solid)	5893/5894	AK	5.9	17.6	10	20	mg/kg
Total CN (Solid)	5895	AK	0.08	0.24	0.18	0.5	mg/kg
Amenable Cyanide, Solids	5898	AK	0.08	0.24	0.18	0.5	mg/kg
Phenol (Solid)	5912	AK	0.16	0.49	0.2	0.7	mg/kg
Total Cyanide, SW-846	8255	AK	0.0015	0.0045	0.004	0.005	mg/l
Chloride	0224	IC	0.07	0.2	0.3	0.4	mg/l
Sulfate	0228	IC	0.11	0.32	0.3	1	mg/l
Nitrite-Nitrogen	0332/1506	IC	0.009	0.026	0.08	0.1	mg/l
Nitrate-Nitrogen	0368	IC	0.007	0.021	0.08	0.1	mg/l
Fluoride	1504	IC	0.008	0.024	0.08	0.1	mg/l
Bromide	1505	IC	0.05	0.15	0.4	0.5	mg/l
Hexavalent Chromium (Solid)	5892	IC	0.12	0.36	0.2	1	mg/kg
Hexavalent Chromium (Water)	6467	IC	1.2	3.5	5	10	ug/l
Orthophosphate	7322	IC	0.15	0.46	0.35	1	mg/l
Fluoride, Solid	7332	IC	0.22	0.67	0.8	1	mg/kg
Chloride, Solid	7333	IC	0.77	2.3	3	4	mg/kg
Nitrite, Solid	7334	IC	0.11	0.34	0.8	1	mg/kg
Bromide, Solid	7335	IC	0.93	2.8	4	5	mg/kg
Nitrate, Solid	7336	IC	0.25	0.75	0.8	1.5	mg/kg
Orthophosphate, Solid	7337	IC	2.2	6.6	3	10	mg/kg
Sulfate, Solid	7338	IC	1.3	3.8	3	10	mg/kg
Titrimetric Cyanide	2109	NA	0.58	1.7	0.6	2	mg/l
Moisture	2111/2118/2121/2353	RA	0.39	1.2	1.5	1.5	%
Moisture	7116/7119	RA	0.65	2	2	2	%
Total Carbon	1550	TC	0.09	0.26	0.6	2	mg/l
TOC (Solid)	0138	TOC	9.8	30	17	50	mg/kg
TOC (Water)	0273/0354	TOC	0.57	1.7	0.6	2	mg/l
TOC Combustion	2079/0383	TOC	56	167	60	170	mg/kg
Dissolved Organic Carbon	7547	TOC	0.57	1.7	0.6	2	mg/l
TOX (Water)	0574/0555	TOX	3.03	9.08	4	10	ug/l
TOX (Solid)	1503	TOX	46	139	50	150	mg/kg

LEGEND

AK = Alpkem

IC = Ion Chromotography

TOC = Total Organic Carbon

TOX = Total Organic Halogens

TC = Total Carbon

RA = Rapid Analyzer

***NOTE:** The MDL and LOQ for moisture are the same to avoid inconsistencies between reporting types.

****NOTE:** To obtain values for Total Phosphorus as PO4 (#345, 5894), multiply above values by 3.07

Reported MDL's are based on calculated MDLs for most compounds.
Some reported MDLs are set higher based on our experience with specific compounds.

Raw Data

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 01-09-02 / 01-10-02 Analyst: J.M.

Calibration Constant: 0.06635 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
BLANK	5.21528				1				Slope = 1.0615
↓	5.29326		$\bar{x} = 5.18983$		2				1/Intercept = -0.12396
↓	5.06054				3				Corrcoef = 0.999952
25.0 µg C STD	410.784				4				
↓	413.298		$\bar{x} = 414.211$		5				
↓	418.552				6				
RINSE	0.281				7				
METHOD BLANK	0.149		Ⓟ		8				
ICV-2.0 µg/L	1.951				9				
7.5 µg/L	7.157				10				
10.0 µg/L	9.706				11				
25.0 µg/L	24.917				12				
50.0 µg/L	50.018				13				
RINSE	0.615				14				
ICB/RS	0.160		Ⓟ		15				
J746879 (A)	44.658	1	44.7	2	16	1510	020030111 11A		Confirms A bottle high
LEV	26.489		Ⓟ		17	1518			14 = 146.6
LOP	0.849		↓		18	1526			data 11/9/02
RINSE	0.519		0.519		19	0443	01/10/02		
RINSE	0.341		0.341		20	0451			
LEV	24.818		Ⓟ		21	0508			10 = 99.1
LOP	0.191		↓		22	0508			
750010 (A)	0.169	1	0.169	2	23	0514	020030111 11B		

Verified by: J.M. Date: 1/10/02

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 01-10-02 Analyst: JBL

Calibration Constant: 0.06035 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
J750010 (B)	0.442	1	0.201	2	24	0535	02010 0111 118		
(C)	0.092				25	0537			
(D)	0.075				26	0541			
LCV	24.735		0.05		27	0547			100-99.1
CCB	0.182				28	0557			1/10/02
PBW	-0.016	1	0.05	1	29	0605	02010 0111 11A		
LCBW	3.165	5*	15.8	1	30	0614			2pt. PS. B. 51.5mg 100-3.6 bottle codes
J75J159 (A)	29.720	1x	30.0	1	31	0622			
(B)	29.970		29.9		32	0630			
(C)	30.268				33	0638			
(D)	30.166				34	0642			
J75J160 (A)	1.036	1x	0.519	1	35	0654			bottle A 2pt. PS. B. 13 EB
(B)	0.309				36	0702			
(C)	0.403				37	0710			
(D)	0.330				38	0718			
LCV	24.762		0.05		39	0726			100-99.1
LCB	0.197				40	0734			
J75J175 (A)	26.793	1x	REPEAT	1	41	0742	02010 0111 11A	HULL 04	2pt PS. 13
(B)	26.409				42	0751			
(C)	26.757				43	0759			
(D)	27.030				44	0807			
J75J176 (A)	189.109	1x	0.02	1	45	0815			2pt. PS. 14
(D)	188.852				46	0823			

Verified by: JBL Date: 1/11/02

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 01-10-02 / 01-11-02 Analyst: JML

Calibration Constant: 0.02635 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
J75J742 (D)	28.879	1x	REPEAT	1	116	1749	02010 0111 11B	HML 05	
J75J742 R	26.989	1x		1	117	1757			+7.5 mg/L, 10% L
J742 M	27.111	1x		1	118	1808			↓ PD = 100% L
J75J745 (A)	24.735	1x		1	119	1813			Ret. 05.17
(B)	24.772	1x		1	120	1821			
(C)	28.657	1x		1	121	1829			
(D)	24.926	1x		1	122	1837			
LEV	25.984	1x		1	123	1845			104% L
CB	1.163	1x		1	124	1853			✓ 100% 1/11/02
RINSE	0.144	1x	0.144	1	125	1860	01-11-02		
RINSE	0.298	1x	0.298	1	126	1869			
RINSE	0.171	1x	0.171	1	127	1877			
LEV	24.523	1x		1	128	1885			104% 98% L
CB	0.044	1x		1	129	1893			
PBW	0.083	1x	0.083 N/A	1	130	0912			
LCW	10.070	5x	50.0	2	131	0911	02010 0111 11A		51.5 mg/L 104% 97% L
LCW	10.181	5x	51.0	3	132	0921			51.5 mg/L 104% 98% L
J75J160 (A)	0.584	1x		2	133	1142			
J75J715 (A)	27.447	1x		2	134	1150		HML 04	
(B)	27.789	1x	27.6	1	135	1157			
(C)	27.848	1x		1	136	1207			
(D)	27.217	1x		1	137	1215			
LEV	25.259	1x		1	138	1223			104% 101% L

Verified by: V. Anderson Date: 1/14/02

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 11.11.02 Analyst: DMH

Calibration Constant: 0.06035 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
128	0.409		Ⓟ		135	1251			
J75J716 (A)	13.414	25x		2	146	1239	02010 CHL 11A	HHLO4	
(B)	12.766		324.	X	141	1247			
(C)	12.882				142	1255			
(D)	12.838				147	1303			
J75J717 (A)	J.183	1x		2	144	1311			
(B)	J.192		3.0	X	141	1319			
(C)	2.712				146	1327			
(D)	2.851				147	1336			
129	24.784				148	1344			12-99.2
128	0.297				149	1352			
J75J718 (A)	1.919	1x		2	150	1466	02010 CHL 11A	HHLO4	
(B)	1.909		1.858	X	151	1468			
(C)	1.859				152	1416			
(D)	1.834				153	1424			
J75J719 (A)	1.404	1x		2	154	1432			
(B)	1.292		1.287	X	155	1440			
(C)	1.227				156	1448			
(D)	1.225				157	1456			
129	24.783		Ⓟ		158	1504			12-99.2
128	0.229				159	1513			
J75J720 (A)	8.914	5x	43.	X	160	1521	02010 CHL 11A	HHLO4	
(B)	8.615				161	1529			

Verified by: 1/10/02 Date: 1/14/02

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 01-11-02 Analyst: JDS

Calibration Constant: 0.06035 µg C/mv Run #:

0	2	0	0	7	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
J75 J720 (a)	8.589	5x		2	162	1537	02010 0111 11A	HML04	
(b)	8.520	↓		↓	162	1545			
J75 J720 Z	18.627	16x (5x) + 1x Sample	93.1	2	164	1553			+49.0 mg/L, RE=102.1.
↓ J720 M	17.551	↓	95.0	2	165	1601			↓ PPD=4.8 RE=111.1.
J75 J723 (A)	8.680	5x		2	166	1609			
(B)	8.457	↓	43.	↓	166	1617			
(C)	8.680	↓		↓	166	1625			
(D)	8.674	↓		↓	166	1633			
REV	25.287				170	1641			RE=101.1.
CB	0.389				171	1650			
J75 J724 (A)	9.859	16x		2	172	1658	02010 0111 11A	HML04	
(B)	9.646	↓	96.	↓	172	1706			
(C)	9.777	↓		↓	174	1714			
(D)	9.770	↓		↓	175	1722			
J75 J725 (A)	10.214	25x		2	176	1726	02010 0111 11B		
(B)	9.857	↓	245.	↓	177	1735			
(C)	9.755	↓		↓	178	1746			
(D)	9.816	↓		↓	179	1754			
REV	25.193				180	1802			RE=101.1.
CB	0.297				181	1810			
J75 J726 (A)	0.142	1x		2	182	1818	02010 0111 11B	HML04	
(B)	0.234	↓	0.160	↓	187	1827			
(C)	0.160	↓		↓	189	1835			

Verified by: JDS Date: 1/14/02

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 01-11-02 Analyst: [Signature]

Calibration Constant: 1.16035 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
J75J726 (A)	0.102	1x		2	115	1143	02010 C111 118	HHL04	
J75J727 (A)	10.498	10x		2	116	1151			
(B)	10.360		103. X		117	1155			
(C)	10.347				118	1167			
(D)	10.196				119	1175			
LCV	25.265		OB		120	1123			100-101. L
LCB	0.474				121	1131			
J75J728 (A)	14.162	1x		2	122	1239	02010 C111 118	HHL04	
(B)	14.633		15.8 X		123	1241			
(C)	15.012				124	1255			
(D)	17.366				125	2004			
J75J729 (A)	5.152	1x		2	126	2012			
(B)	5.725		5.2 X		127	2020			
(C)	4.998				128	2028			
(D)	4.928				129	2036			
LCV	25.271		OB		200	2044			100-101. L
LCB	0.319				201	2052			
J75J730 (A)	15.038	10x		2	202	2100	02010 C111 118	HHL04	
(B)	14.494		157. X		203	2108			
(C)	17.642				204	2116			
(D)	15.645				205	2124			
J75J742 (A)	25.147	1x	28.0 X	2	206	2132		HHL05	
(B)	28.524				207	2141			

Verified by: [Signature] Date: 1/15/02

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 01-11-02 / 01-14-02 Analyst: JPR

Calibration Constant: 0.06035 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
J75 J742 (A)	29.126	1x		2	24	2149	02010 CIII 118	HULOS	
(D)	29.019	↓		↓	27	2157			
J75 J742 R	26.542	16ml 2ml 500ppm	26.5	2	210	2205			+9.8mg/L, re=88.1.
↓ J742 M	26.978	↓	27.0	2	211	2213		↓	↓ RPD=1 re=92.1.
CEV	26.638		Ⓟ		212	2221			re=104.1.
CEB	0.782		↓		213	2229			
J75 J745 (A)	24.579	1x		2	214	2237	02010 CIII 118	HULOS	
(B)	24.871	↓	25.6	↓	215	2245			
(C)	28.663	↓		↓	216	2253			
(D)	24.510	↓		↓	217	2301		↓	
CEV	26.581		Ⓟ		218	2309			re=106.1.
CEB	0.688		↓		219	2318			
RINSE	0.174		0.174		220	0617	01-14-02		
RINSE	0.136		0.136		221	0625			
RINSE	0.054		0.054		222	0633			
CEV	24.626		Ⓟ		223	0641			re=99.1.
CEB	0.136		↓		224	0649			
PDW	0.037	1	0.037 (B)	1	225	0800	02014 CIII 11A		
LCOW	10.258	5x	51. ↓	1	226	0808			51.8mg/L re=99.1.
J75 4532	10.307	1	10.3	1	227	0816		DPL 16	
4533	4.310	1	4.3	1	228	0824		↓	
4534	14.484	1	14.5	1	229	0832			
4535	7.898	1	7.9	1	230	0840			

Verified by: J/mk/170 Date: 1/14/02

Rn# 020091

1/9/02

✓ M. H. 110
1/9/02

SPL# 000001	11:57:38	TIC =	0.74097 mV	0.04236 ug C	0.04236 ppn
SPL# 000001	12:02:38	TOC =	5.21568 mV	0.29823 ug C	0.29823 ppn
SPL# 000002	12:05:43	TIC =	1.15038 mV	0.06577 ug C	0.06577 ppn
SPL# 000002	12:10:43	TOC =	5.29326 mV	0.30266 ug C	0.30266 ppn
SPL# 000003	12:13:48	TIC =	1.15038 mV	0.06577 ug C	0.06577 ppn
SPL# 000003	12:18:48	TOC =	5.06054 mV	0.28936 ug C	0.28936 ppn
SPL# 000004	12:23:27	TIC =	3.53829 mV	0.20231 ug C	0.20231 ppn
SPL# 000004	12:28:27	TOC =	410.784 mV	23.4885 ug C	23.4885 ppn
SPL# 000005	12:31:32	TIC =	4.87964 mV	0.27901 ug C	0.27901 ppn
SPL# 000005	12:36:32	TOC =	413.298 mV	23.6322 ug C	23.6322 ppn
SPL# 000006	12:39:37	TIC =	4.82797 mV	0.27606 ug C	0.27606 ppn
SPL# 000006	12:44:37	TOC =	418.552 mV	23.9326 ug C	23.9326 ppn

LANCASTER LABORATORIES

TOC

JAN 08 2002

*** MODEL 700 TOC ANALYZER ***

CALIBRATION FACTORS:

IC BLANK= 000000 mV	OC BLANK= 5.18983 mV	I.R. OFFSET= 177.650 mV
STD. MASS= 25.0000 ug	STD. AVG.= 414.211 mV	SCALING FACTOR= 0.06035 ug/n

VOLUMES:

SPL. VOL.= 1.00000 ml	ACID VOL.= 00002 x100ul	OXID. VOL.= 00025 x100ul

SPL# 00007	12:50:35	TIC = 4.02797 mV	0.27605 ug C	0.27605 pp
SPL# 00007	12:55:09	TOC = 418.552 mV	23.9326 ug C	23.9326 pp
SPL# 00007	12:59:10	TIC = 2.38109 mV	0.14371 ug C	0.14371 pp
SPL# 00007	13:04:10	TOC = 4.65500 mV	0.28095 ug C	0.28095 pp
SPL# 00008	13:07:15	TIC = 1.73963 mV	0.10499 ug C	0.10499 pp
SPL# 00008	13:12:15	TOC = 2.46390 mV	0.14871 ug C	0.14871 pp
SPL# 00009	13:15:20	TIC = 3.84744 mV	0.23221 ug C	0.23221 pp
SPL# 00009	13:20:20	TOC = 32.3328 mV	1.95147 ug C	1.95147 pp
SPL# 00010	13:23:25	TIC = 4.23421 mV	0.25555 ug C	0.25555 pp
SPL# 00010	13:28:25	TOC = 118.580 mV	7.15697 ug C	7.15697 pp
SPL# 00011	13:31:30	TIC = 4.46645 mV	0.26957 ug C	0.26957 pp
SPL# 00011	13:36:30	TOC = 160.821 mV	9.70649 ug C	9.70649 pp
SPL# 00012	13:39:35	TIC = 5.11225 mV	0.30855 ug C	0.30855 pp
SPL# 00012	13:44:35	TOC = 412.835 mV	24.9170 ug C	24.9170 pp
SPL# 00013	13:47:40	TIC = 6.04402 mV	0.36479 ug C	0.36479 pp
SPL# 00013	13:52:40	N.L. TOC = 828.726 mV	50.0183 ug C	50.0183 ppm
SPL# 00014	13:55:45	TIC = 6.25136 mV	0.37730 ug C	0.37730 ppm
SPL# 00014	14:00:45	TOC = 10.1844 mV	0.61468 ug C	0.61468 ppm
SPL# 00015	14:03:50	TIC = 5.83678 mV	0.35228 ug C	0.35228 ppm
SPL# 00015	14:08:50	TOC = 2.64605 mV	0.15970 ug C	0.15970 ppm
SPL# 00016	15:05:13	TIC = 175.296 mV	10.5801 ug C	10.5801 ppm
SPL# 00016	15:10:13	N.L. TOC = 739.916 mV	44.6582 ug C	44.6582 ppm
SPL# 00017	15:13:18	TIC = 6.22544 mV	0.37574 ug C	0.37574 ppm
SPL# 00017	15:18:18	TOC = 438.877 mV	26.4887 ug C	26.4887 ppm
SPL# 00018	15:21:23	TIC = 3.15220 mV	0.19025 ug C	0.19025 ppm
SPL# 00018	15:26:23	TOC = 14.0725 mV	0.84935 ug C	0.84935 ppm

JAN 09 2002

TOC

TECHNICAL LABORATORIES

SPL# 00027	05:44:19	TIC =	4.75048 mV	0.28671 ug C	0.28671 pp
SPL# 00027	05:49:19	TOC =	409.812 mV	24.7345 ug C	24.7345 pp
SPL# 00028	05:52:24	TIC =	3.56405 mV	0.21511 ug C	0.21511 pp
SPL# 00028	05:57:24	TOC =	3.08874 mV	0.18642 ug C	0.18642 pp
SPL# 00029	06:00:55	TIC =	2.07306 mV	0.12512 ug C	0.12512 pp
SPL# 00029	06:05:55	TOC =	-0.10343 mV	-0.00624 ug C	-0.00624 pp
SPL# 00030	06:09:00	TIC =	60.2105 mV	3.63405 ug C	3.63405 pp
SPL# 00030	06:14:00	TOC =	52.4425 mV	3.16520 ug C	3.16520 pp
SPL# 00031	06:17:05	TIC =	333.366 mV	20.1205 ug C	20.1205 pp
SPL# 00031	06:22:05	TOC =	492.407 mV	29.7196 ug C	29.7196 pp
SPL# 00032	06:25:10	TIC =	337.411 mV	20.3647 ug C	20.3647 pp
SPL# 00032	06:30:10	TOC =	496.550 mV	29.9696 ug C	29.9696 pp
SPL# 00033	06:33:15	TIC =	332.532 mV	20.0702 ug C	20.0702 pp
SPL# 00033	06:38:15	TOC =	501.500 mV	30.2684 ug C	30.2684 pp
SPL# 00034	06:41:20	TIC =	324.514 mV	19.5862 ug C	19.5862 pp
SPL# 00034	06:46:20	TOC =	499.810 mV	30.1664 ug C	30.1664 pp
SPL# 00035	06:49:25	TIC =	10.6826 mV	0.64475 ug C	0.64475 pp
SPL# 00035	06:54:25	TOC =	17.1607 mV	1.03575 ug C	1.03575 pp
SPL# 00036	06:57:30	TIC =	7.47168 mV	0.45095 ug C	0.45095 pp
SPL# 00036	07:02:30	TOC =	5.12604 mV	0.30938 ug C	0.30938 pp
SPL# 00037	07:05:35	TIC =	8.22646 mV	0.49651 ug C	0.49651 pp
SPL# 00037	07:10:35	TOC =	6.67382 mV	0.40280 ug C	0.40280 pp
SPL# 00038	07:13:40	TIC =	7.78384 mV	0.46979 ug C	0.46979 pp
SPL# 00038	07:18:40	TOC =	5.46658 mV	0.32993 ug C	0.32993 pp
SPL# 00039	07:21:45	TIC =	5.52611 mV	0.33353 ug C	0.33353 pp

JAN 10 2002

TOC

LANCASTER LABORATORIES

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JAN 18 2002

LAUGASTER LABORATORIES (TOC

SPL# 00037	07:05:35		TIC =	8.22646 mV	0.49651 ug C	0.49651 pf
SPL# 00037	07:10:35		TOC =	6.67382 mV	0.40280 ug C	0.40280 pf
SPL# 00038	07:13:40		TIC =	7.78384 mV	0.46979 ug C	0.46979 pf
SPL# 00038	07:18:40		TOC =	5.46658 mV	0.32993 ug C	0.32993 pf
SPL# 00039	07:21:45		TIC =	5.52611 mV	0.33353 ug C	0.33353 pf
SPL# 00039	07:26:45		TOC =	410.272 mV	24.7623 ug C	24.7623 pp
SPL# 00040	07:29:50		TIC =	3.77013 mV	0.22754 ug C	0.22754 pp
SPL# 00040	07:34:50		TOC =	3.27116 mV	0.19743 ug C	0.19743 pp
SPL# 00041	07:37:55	O.R.	TIC =	3022.52 mV	182.426 ug C	182.426 pp
SPL# 00041	07:42:55		TOC =	443.910 mV	26.7925 ug C	26.7925 pp
SPL# 00042	07:46:00	O.R.	TIC =	3016.71 mV	182.076 ug C	182.076 pp
SPL# 00042	07:51:00		TOC =	437.557 mV	26.4091 ug C	26.4091 pp
SPL# 00043	07:54:05	O.R.	TIC =	3002.65 mV	181.227 ug C	181.227 pp
SPL# 00043	07:59:05		TOC =	443.326 mV	26.7572 ug C	26.7572 pp
SPL# 00044	08:02:10	O.R.	TIC =	2877.71 mV	173.686 ug C	173.686 pp
SPL# 00044	08:07:10		TOC =	447.849 mV	27.0303 ug C	27.0303 pp
SPL# 00045	08:10:15	O.R.	TIC =	2451.75 mV	147.977 ug C	147.977 pp
SPL# 00045	08:15:15	O.R.	TOC =	3133.24 mV	189.109 ug C	189.109 pp
SPL# 00046	08:18:20	O.R.	TIC =	2683.83 mV	161.984 ug C	161.984 pp
SPL# 00046	08:23:20	O.R.	TOC =	3128.99 mV	188.852 ug C	188.852 pp
SPL# 00047	08:26:25	O.R.	TIC =	2628.68 mV	158.656 ug C	158.656 pp
SPL# 00047	08:31:25	O.R.	TOC =	3129.84 mV	188.903 ug C	188.903 pp
SPL# 00048	08:34:30	O.R.	TIC =	2558.78 mV	154.437 ug C	154.437 pp
SPL# 00048	08:39:30	O.R.	TOC =	3125.25 mV	188.627 ug C	188.627 pp
SPL# 00049	08:42:35		TIC =	32.7736 mV	1.97807 ug C	1.97807 pp

Run # 020091 1-11-02 *Handwritten signature* 1/17/02

SPL# 00125	08:05:58		TIC =	19.2891 mV	1.16421 ug C	1.16421 pp
SPL# 00125	08:10:58		TOC =	2.38588 mV	0.14400 ug C	0.14400 pp
SPL# 00126	08:14:03		TIC =	1.45771 mV	0.08798 ug C	0.08798 pp
SPL# 00126	08:19:03		TOC =	4.94279 mV	0.29832 ug C	0.29832 pp
SPL# 00127	08:22:08		TIC =	1.48332 mV	0.08952 ug C	0.08952 pp
SPL# 00127	08:27:08		TOC =	2.82828 mV	0.17070 ug C	0.17070 pp
SPL# 00128	08:30:13		TIC =	8.01811 mV	0.48393 ug C	0.48393 pp
SPL# 00128	08:35:13		TOC =	407.053 mV	24.5680 ug C	24.5680 pp
SPL# 00129	08:38:18		TIC =	6.74425 mV	0.40705 ug C	0.40705 pp
SPL# 00129	08:43:18		TOC =	0.72464 mV	0.04373 ug C	0.04373 pp
SPL# 00130	08:57:55		TIC =	1.97043 mV	0.11892 ug C	0.11892 pp
SPL# 00130	09:02:55		TOC =	1.37276 mV	0.08285 ug C	0.08285 pp
SPL# 00131	09:06:00		TIC =	4.33741 mV	0.26178 ug C	0.26178 pp
SPL# 00131	09:11:00		TOC =	166.849 mV	10.0703 ug C	10.0703 pp
SPL# 00132	09:16:41		TIC =	4.05367 mV	0.24466 ug C	0.24466 pp
SPL# 00132	09:21:41		TOC =	168.676 mV	10.1806 ug C	10.1806 pp
SPL# 00133	11:37:51		TIC =	7.67976 mV	0.46351 ug C	0.46351 pp
SPL# 00133	11:42:51		TOC =	9.68102 mV	0.58430 ug C	0.58430 pp
SPL# 00134	11:45:56	O.R.	TIC =	2904.46 mV	175.301 ug C	175.301 pp
SPL# 00134	11:50:56		TOC =	454.757 mV	27.4472 ug C	27.4472 pp
SPL# 00135	11:54:01	O.R.	TIC =	2839.97 mV	171.409 ug C	171.409 pp
SPL# 00135	11:59:01		TOC =	460.417 mV	27.7888 ug C	27.7888 pp
SPL# 00136	12:02:06	O.R.	TIC =	2801.14 mV	169.065 ug C	169.065 pp

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LANCASTER LABORATORIES

SPL# 00136	12:02:06	O.R.	TIC =	2801.14 mV	169.065 ug C	169.065 pg
SPL# 00136	12:07:06		TOC =	461.390 mV	27.8475 ug C	27.8475 pg
SPL# 00137	12:10:11	O.R.	TIC =	2802.25 mV	169.132 ug C	169.132 pg
SPL# 00137	12:15:11		TOC =	450.949 mV	27.2173 ug C	27.2173 pg
SPL# 00138	12:18:16		TIC =	18.8077 mV	1.13515 ug C	1.13515 pg
SPL# 00138	12:23:16		TOC =	418.500 mV	25.2589 ug C	25.2589 pg
SPL# 00139	12:26:21		TIC =	7.78383 mV	0.46979 ug C	0.46979 pg
SPL# 00139	12:31:21		TOC =	6.77898 mV	0.40915 ug C	0.40915 pg
SPL# 00140	12:34:26		TIC =	55.4756 mV	3.34827 ug C	3.34827 pg
SPL# 00140	12:39:26		TOC =	222.240 mV	13.4135 ug C	13.4135 pg
SPL# 00141	12:42:31		TIC =	47.3783 mV	2.85955 ug C	2.85955 pg
SPL# 00141	12:47:31		TOC =	211.505 mV	12.7655 ug C	12.7655 pg
SPL# 00142	12:50:36		TIC =	59.9755 mV	3.61987 ug C	3.61987 pg
SPL# 00142	12:55:36		TOC =	213.432 mV	12.8819 ug C	12.8819 pg
SPL# 00143	12:58:41		TIC =	50.0995 mV	3.02379 ug C	3.02379 pg
SPL# 00143	13:03:41		TOC =	212.566 mV	12.8296 ug C	12.8296 pg
SPL# 00144	13:06:46		TIC =	315.672 mV	19.0526 ug C	19.0526 pg
SPL# 00144	13:11:46		TOC =	52.7347 mV	3.18284 ug C	3.18284 pg
SPL# 00145	13:14:51		TIC =	333.737 mV	20.1429 ug C	20.1429 pg
SPL# 00145	13:19:51		TOC =	52.8809 mV	3.19167 ug C	3.19167 pg
SPL# 00146	13:22:56		TIC =	321.996 mV	19.4343 ug C	19.4343 pg
SPL# 00146	13:27:56		TOC =	44.9384 mV	2.71229 ug C	2.71229 pg
SPL# 00147	13:31:01		TIC =	332.439 mV	20.0646 ug C	20.0646 pg
SPL# 00147	13:36:01		TOC =	47.2430 mV	2.85138 ug C	2.85138 pg
SPL# 00148	13:39:06		TIC =	9.32208 mV	0.56264 ug C	0.56264 pg

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 TOC
 LANCASTER LABORATORIES

SPL# 00147	13:31:01	TIC =	332.439 mV	20.0646 ug C	20.0646 ppm
SPL# 00147	13:36:01	TOC =	47.2430 mV	2.85130 ug C	2.85130 ppm
SPL# 00148	13:39:06	TIC =	9.32208 mV	0.56264 ug C	0.56264 ppm
SPL# 00148	13:44:06	TOC =	410.631 mV	24.7839 ug C	24.7839 ppm
SPL# 00149	13:47:11	TIC =	4.67300 mV	0.28204 ug C	0.28204 ppm
SPL# 00149	13:52:11	TOC =	4.91662 mV	0.29674 ug C	0.29674 ppm
SPL# 00150	13:55:16	TIC =	470.485 mV	28.3964 ug C	28.3964 ppm
SPL# 00150	14:00:16	TOC =	31.8026 mV	1.91947 ug C	1.91947 ppm
SPL# 00151	14:03:21	TIC =	459.033 mV	27.7053 ug C	27.7053 ppm
SPL# 00151	14:08:21	TOC =	31.6352 mV	1.90937 ug C	1.90937 ppm
SPL# 00152	14:11:26	TIC =	448.144 mV	27.0480 ug C	27.0480 ppm
SPL# 00152	14:16:26	TOC =	31.3008 mV	1.88918 ug C	1.88918 ppm
SPL# 00153	14:19:31	TIC =	469.561 mV	28.3407 ug C	28.3407 ppm
SPL# 00153	14:24:31	TOC =	30.3824 mV	1.83375 ug C	1.83375 ppm
SPL# 00154	14:27:36	TIC =	520.600 mV	31.4212 ug C	31.4212 ppm
SPL# 00154	14:32:36	TOC =	23.2691 mV	1.40442 ug C	1.40442 ppm
SPL# 00155	14:35:41	TIC =	492.025 mV	29.6965 ug C	29.6965 ppm
SPL# 00155	14:40:41	TOC =	21.4137 mV	1.29244 ug C	1.29244 ppm
SPL# 00156	14:43:46	TIC =	448.144 mV	27.0480 ug C	27.0480 ppm
SPL# 00156	14:48:46	TOC =	20.3261 mV	1.22679 ug C	1.22679 ppm
SPL# 00157	14:51:51	TIC =	417.512 mV	25.1992 ug C	25.1992 ppm
SPL# 00157	14:56:51	TOC =	20.2989 mV	1.22516 ug C	1.22516 ppm
SPL# 00158	14:59:56	TIC =	8.01811 mV	0.48393 ug C	0.48393 ppm
SPL# 00158	15:04:56	TOC =	410.119 mV	24.7530 ug C	24.7530 ppm
SPL# 00159	15:08:01	TIC =	5.52611 mV	0.33353 ug C	0.33353 ppm
SPL# 00159	15:13:01	TOC =	5.30001 mV	0.32001 ug C	0.32001 ppm

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LAURENCE LABORATORIES

SPL# 00155	14:40:41	TIC =	21.4137 mV	1.27234 ug C	1.27234 pp
SPL# 00156	14:43:46	TIC =	448.144 mV	27.0480 ug C	27.0480 pp
SPL# 00156	14:48:46	TIC =	20.3261 mV	1.22679 ug C	1.22679 pp
SPL# 00157	14:51:51	TIC =	417.512 mV	25.1992 ug C	25.1992 pp
SPL# 00157	14:56:51	TIC =	20.2989 mV	1.22516 ug C	1.22516 pp
SPL# 00158	14:59:56	TIC =	8.01811 mV	0.48393 ug C	0.48393 pp
SPL# 00158	15:04:56	TIC =	410.119 mV	24.7530 ug C	24.7530 pp
SPL# 00159	15:08:01	TIC =	5.52611 mV	0.33353 ug C	0.33353 pp
SPL# 00159	15:13:01	TIC =	3.79281 mV	0.22891 ug C	0.22891 pp
SPL# 00160	15:16:06	TIC =	264.902 mV	15.9884 ug C	15.9884 pp
SPL# 00160	15:21:06	TIC =	147.683 mV	8.91351 ug C	8.91351 pp
SPL# 00161	15:24:11	TIC =	208.188 mV	12.5654 ug C	12.5654 pp
SPL# 00161	15:29:11	TIC =	142.729 mV	8.61452 ug C	8.61452 pp
SPL# 00162	15:32:16	TIC =	210.518 mV	12.7060 ug C	12.7060 pp
SPL# 00162	15:37:16	TIC =	142.310 mV	8.58920 ug C	8.58920 pp
SPL# 00163	15:40:21	TIC =	215.752 mV	13.0219 ug C	13.0219 pp
SPL# 00163	15:45:21	TIC =	141.157 mV	8.51966 ug C	8.51966 pp
SPL# 00164	15:48:26	TIC =	233.894 mV	14.1168 ug C	14.1168 pp
SPL# 00164	15:53:26	TIC =	308.626 mV	18.6273 ug C	18.6273 pp
SPL# 00165	15:56:31	TIC =	235.307 mV	14.2021 ug C	14.2021 pp
SPL# 00165	16:01:31	TIC =	323.922 mV	19.5505 ug C	19.5505 pp
SPL# 00166	16:04:36	TIC =	203.517 mV	12.2834 ug C	12.2834 pp
SPL# 00166	16:09:36	TIC =	143.815 mV	8.68003 ug C	8.68003 pp
SPL# 00167	16:12:41	TIC =	204.402 mV	12.3368 ug C	12.3368 pp
SPL# 00167	16:17:41	TIC =	140.112 mV	8.45657 ug C	8.45657 pp
SPL# 00168	16:20:46	TIC =	192.311 mV	11.6070 ug C	11.6070 pp

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LANCASTER LABORATORIES

SPL# 000175	17:22:21	TIC =	155.250 mV	9.37025 ug C	9.37025 pp
SPL# 000176	17:25:26	TIC =	39.2294 mV	2.36772 ug C	2.36772 pp
SPL# 000176	17:30:26	TIC =	169.226 mV	10.2137 ug C	10.2137 pp
SPL# 000177	17:33:31	TIC =	34.5172 mV	2.08331 ug C	2.08331 pp
SPL# 000177	17:38:31	TIC =	163.319 mV	9.85724 ug C	9.85724 pp
SPL# 000178	17:41:36	TIC =	39.3135 mV	2.37279 ug C	2.37279 pp
SPL# 000178	17:46:36	TIC =	155.000 mV	9.35514 ug C	9.35514 pp
SPL# 000179	17:49:41	TIC =	36.7136 mV	2.21587 ug C	2.21587 pp
SPL# 000179	17:54:41	TIC =	162.630 mV	9.81566 ug C	9.81566 pp
SPL# 000180	17:57:46	TIC =	7.18575 mV	0.43370 ug C	0.43370 pp
SPL# 000180	18:02:46	TIC =	417.416 mV	25.1934 ug C	25.1934 pp
SPL# 000181	18:05:51	TIC =	6.71828 mV	0.40548 ug C	0.40548 pp
SPL# 000181	18:10:51	TIC =	4.91662 mV	0.29674 ug C	0.29674 pp
SPL# 000182	18:13:56	TIC =	6.35508 mV	0.38356 ug C	0.38356 pp
SPL# 000182	18:18:56	TIC =	2.35987 mV	0.14243 ug C	0.14243 pp
SPL# 000183	18:22:01	TIC =	5.65552 mV	0.34134 ug C	0.34134 pp
SPL# 000183	18:27:01	TIC =	3.87111 mV	0.23364 ug C	0.23364 pp
SPL# 000184	18:30:06	TIC =	5.08640 mV	0.30699 ug C	0.30699 pp
SPL# 000184	18:35:06	TIC =	2.64606 mV	0.15970 ug C	0.15970 pp
SPL# 000185	18:38:11	TIC =	5.78498 mV	0.34915 ug C	0.34915 pp
SPL# 000185	18:43:11	TIC =	1.68422 mV	0.10165 ug C	0.10165 pp
SPL# 000186	18:46:16	TIC =	53.3290 mV	3.21871 ug C	3.21871 pp
SPL# 000186	18:51:16	TIC =	173.935 mV	10.4980 ug C	10.4980 pp
SPL# 000187	18:54:21	TIC =	49.7261 mV	3.00126 ug C	3.00126 pp
SPL# 000187	18:59:21	TIC =	170.657 mV	10.3001 ug C	10.3001 pp

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LANCASTER LABORATORY

SPL# 00187	18:59:21	TIC =	176.657 mV	10.3351 ug C	10.3351 ppm
SPL# 00188	19:02:26	TIC =	48.9230 mV	2.95278 ug C	2.95278 ppm
SPL# 00188	19:07:26	TOC =	171.429 mV	10.3467 ug C	10.3467 ppm
SPL# 00189	19:10:31	TIC =	43.2001 mV	2.60738 ug C	2.60738 ppm
SPL# 00189	19:15:31	TOC =	168.933 mV	10.1960 ug C	10.1960 ppm
SPL# 00190	19:18:36	TIC =	7.47168 mV	0.45095 ug C	0.45095 ppm
SPL# 00190	19:23:36	TOC =	418.604 mV	25.2651 ug C	25.2651 ppm
SPL# 00191	19:26:41	TIC =	6.61448 mV	0.39922 ug C	0.39922 ppm
SPL# 00191	19:31:41	TOC =	7.85826 mV	0.47429 ug C	0.47429 ppm
SPL# 00192	19:34:46	TIC =	358.524 mV	21.6390 ug C	21.6390 ppm
SPL# 00192	19:39:46	TOC =	267.786 mV	16.1624 ug C	16.1624 ppm
SPL# 00193	19:42:51	TIC =	314.359 mV	18.9733 ug C	18.9733 ppm
SPL# 00193	19:47:51	TOC =	242.442 mV	14.6328 ug C	14.6328 ppm
SPL# 00194	19:50:56	TIC =	354.180 mV	21.3768 ug C	21.3768 ppm
SPL# 00194	19:55:56	TOC =	248.732 mV	15.0124 ug C	15.0124 ppm
SPL# 00195	19:59:01	TIC =	348.346 mV	21.0247 ug C	21.0247 ppm
SPL# 00195	20:04:01	TOC =	287.634 mV	17.3604 ug C	17.3604 ppm
SPL# 00196	20:07:06	TIC =	396.223 mV	23.9143 ug C	23.9143 ppm
SPL# 00196	20:12:06	TOC =	85.3635 mV	5.15217 ug C	5.15217 ppm
SPL# 00197	20:15:11	TIC =	385.427 mV	23.2627 ug C	23.2627 ppm
SPL# 00197	20:20:11	TOC =	94.8518 mV	5.72485 ug C	5.72485 ppm
SPL# 00198	20:23:16	TIC =	423.742 mV	25.5752 ug C	25.5752 ppm
SPL# 00198	20:28:16	TOC =	82.8015 mV	4.99755 ug C	4.99755 ppm
SPL# 00199	20:31:21	TIC =	413.060 mV	24.9305 ug C	24.9305 ppm
SPL# 00199	20:36:21	TOC =	81.6499 mV	4.92804 ug C	4.92804 ppm
SPL# 00200	20:39:24	TIC =	8.54526 mV	0.51696 ug C	0.51696 ppm

2007

TOC

LANCASTER LANGSTON

SPL# 00199	20:31:21	TIC =	413.060 mV	24.9305 ug C	24.9305 ppb	
SPL# 00199	20:36:21	TOC =	81.6499 mV	4.92804 ug C	4.92804 ppb	
SPL# 00200	20:39:26	TIC =	8.56526 mV	0.51696 ug C	0.51696 ppb	
SPL# 00200	20:44:26	TOC =	418.707 mV	25.2714 ug C	25.2714 ppb	
SPL# 00201	20:47:31	TIC =	7.44567 mV	0.44938 ug C	0.44938 ppb	
SPL# 00201	20:52:31	TOC =	5.28318 mV	0.31887 ug C	0.31887 ppb	
SPL# 00202	20:55:36	TIC =	53.9661 mV	3.25716 ug C	3.25716 ppb	
SPL# 00202	21:00:36	TOC =	249.107 mV	15.0350 ug C	15.0350 ppb	
SPL# 00203	21:03:41	TIC =	46.8360 mV	2.82682 ug C	2.82682 ppb	
SPL# 00203	21:08:41	TOC =	240.139 mV	14.4938 ug C	14.4938 ppb	
SPL# 00204	21:11:46	TIC =	49.8410 mV	3.00819 ug C	3.00819 ppb	
SPL# 00204	21:16:46	TOC =	292.307 mV	17.6424 ug C	17.6424 ppb	
SPL# 00205	21:19:51	TIC =	48.7798 mV	2.94414 ug C	2.94414 ppb	
SPL# 00205	21:24:51	TOC =	259.206 mV	15.6446 ug C	15.6446 ppb	
SPL# 00206	21:27:56	N.L.	TIC =	811.778 mV	48.9954 ug C	48.9954 ppb
SPL# 00206	21:32:56		TOC =	416.642 mV	25.1467 ug C	25.1467 ppb
SPL# 00207	21:36:01	N.L.	TIC =	909.844 mV	54.9143 ug C	54.9143 ppb
SPL# 00207	21:41:01		TOC =	473.262 mV	28.5640 ug C	28.5640 ppb
SPL# 00208	21:44:06	N.L.	TIC =	778.428 mV	46.9825 ug C	46.9825 ppb
SPL# 00208	21:49:06		TOC =	482.566 mV	29.1256 ug C	29.1256 ppb
SPL# 00209	21:52:11		TIC =	690.892 mV	41.6993 ug C	41.6993 ppb
SPL# 00209	21:57:11		TOC =	480.798 mV	29.0189 ug C	29.0189 ppb
SPL# 00210	22:00:16		TIC =	537.428 mV	32.4369 ug C	32.4369 ppb
SPL# 00210	22:05:16		TOC =	605.439 mV	36.5417 ug C	36.5417 ppb
SPL# 00211	22:08:21		TIC =	545.360 mV	32.9156 ug C	32.9156 ppb

JAN 11 2002

TOC

LANCASTER LABORATORIES

JAN 11 2002

TOC

LAURENCE LABORATORY

SPL# 00203	21:03:41		TIC =	46.8360 mV	2.82682 ug C	2.82682 ppb
SPL# 00203	21:08:41		TOC =	240.139 mV	14.4938 ug C	14.4938 ppb
SPL# 00204	21:11:46		TIC =	49.8410 mV	3.00819 ug C	3.00819 ppb
SPL# 00204	21:16:46		TOC =	292.307 mV	17.6424 ug C	17.6424 ppb
SPL# 00205	21:19:51		TIC =	48.7798 mV	2.94414 ug C	2.94414 ppb
SPL# 00205	21:24:51		TOC =	259.206 mV	15.6446 ug C	15.6446 ppb
SPL# 00206	21:27:56	N.L.	TIC =	811.778 mV	48.9954 ug C	48.9954 ppb
SPL# 00206	21:32:56		TOC =	416.642 mV	25.1467 ug C	25.1467 ppb
SPL# 00207	21:36:01	N.L.	TIC =	909.844 mV	54.9143 ug C	54.9143 ppb
SPL# 00207	21:41:01		TOC =	473.262 mV	28.5640 ug C	28.5640 ppb
SPL# 00208	21:44:06	N.L.	TIC =	778.428 mV	46.9825 ug C	46.9825 ppb
SPL# 00208	21:49:06		TOC =	482.566 mV	29.1256 ug C	29.1256 ppb
SPL# 00209	21:52:11		TIC =	690.892 mV	41.6993 ug C	41.6993 ppb
SPL# 00209	21:57:11		TOC =	480.798 mV	29.0189 ug C	29.0189 ppb
SPL# 00210	22:00:16		TIC =	537.428 mV	32.4369 ug C	32.4369 ppb
SPL# 00210	22:05:16		TOC =	605.439 mV	36.5417 ug C	36.5417 ppb
SPL# 00211	22:08:21		TIC =	545.360 mV	32.9156 ug C	32.9156 ppb
SPL# 00211	22:13:21		TOC =	612.668 mV	36.9780 ug C	36.9780 ppb
SPL# 00212	22:16:26		TIC =	11.4696 mV	0.69225 ug C	0.69225 ppb
SPL# 00212	22:21:26		TOC =	431.405 mV	26.0377 ug C	26.0377 ppb
SPL# 00213	22:24:31		TIC =	7.28969 mV	0.43997 ug C	0.43997 ppb
SPL# 00213	22:29:31		TOC =	12.9503 mV	0.78162 ug C	0.78162 ppb
SPL# 00214	22:32:36	N.L.	TIC =	756.867 mV	45.6813 ug C	45.6813 ppb
SPL# 00214	22:37:36		TOC =	406.238 mV	24.5188 ug C	24.5188 ppb
SPL# 00215	22:40:41	N.L.	TIC =	732.144 mV	44.1891 ug C	44.1891 ppb
SPL# 00215	22:45:41		TOC =	412.066 mV	24.8705 ug C	24.8705 ppb

04/11/2002

LANCASTER LABORATORIES

TOC

Miscellaneous Analysis Data

Case Narrative Conformance/Nonconformance Summary



Where quality is a science.

CLIENT: Hull & Associates
SDG: HUL04

LANCASTER LABORATORIES

MISCELLANEOUS WET CHEMISTRY

SAMPLE NUMBERS:

<u>Sample #</u>	<u>Sample Code</u>	<u>Comments</u>
3753715	AW3U-	DF50
3753716	AW3L-	DF100
3753717	MW8U-	DF100
3753718	MW8M-	DF5
3753719	MW8L-	DF5
3753720	AW1U-	DF20
3753723	AW1UD	DF20
3753724	AW1L-	DF20
3753725	AW2L-	DF50
3753726	AWFB-	Client Blank
3753727	MW9U-	DF200
3753728	MW9L-	DF10 / BKG / DUP
3753729	--10U	DF200
3753730	--10L	DF50

ANALYSIS:

Dilution factors are listed in the comment section above for the sulfate analysis.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

QC was within specifications.

DATA INTERPRETATION:

Due to limitations of the data package software, form I's are unavailable for wet chemistry data. Please refer to analysis reports for this information.

The sulfate calculation is:

The sample NTU value is entered into the computer and the mg/L value is calculated from the calibration curve.

Concentration X Dilution Factor

Note: When dilution is used

Continued on page 2.



Lancaster Laboratories

Where quality is a science.

CLIENT: Hull & Associates
SDG: HUL04

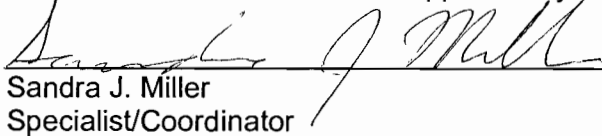
DATA INTERPRETATION CONTINUED:

The total dissolved solids calculation is:

$$\text{mg total dissolved solids/L} = \frac{(A - B) \times 1000 \times 1000}{\text{sample volume, mL}}$$

Where: A = weight of dried residue and beaker or dish, g
B = weight of beaker or dish, g

Case Narrative Reviewed and Approved by:


Sandra J. Miller
Specialist/Coordinator

Date: 1-14-02

QC Summary

Lancaster Laboratories

Quality Control Summary
Method Blank
Miscellaneous Wet Chemistry
SDG: HUL04

Method Blank Analysis					Matrix: WATER				
Parameter	Sample Number	Sample Code	Method	Analysis Date	Batch Number	Blank Results	Units	MDL	LOQ
Sulfate	3753715	AW3U-	M	1/10/02	02010112501	ND	mg/l	1.5	5
	3753716	AW3L-							
	3753717	MW8U-							
	3753718	MW8M-							
	3755319	MW8L-							
	3753720	AW1U-							
	3753723	AW1UD							
	3753724	AW1L-							
	3753725	AW2L-							
	3753726	AWFB-							
	3753727	MW9U-							
	3753728	MW9L- B,D							
	3753729	--10U							
	3753730	--10L							
	P753958	B,S,M							

Comments: The blank is acceptable when the result is less than the limit of quantitation.

ABBREVIATION KEY

CO = Colorimetric	MDL = Method Detection Limit
DI = Distillation	LOQ = Limit of Quantitation
G = Gravimetric	NA = Not Applicable
IR = Infrared Spectrophotometry	J = Estimated Value < LOQ
M = Meter	< = Less Than
OD = Oven Dried	ND = Not Detected
TI = Titration	* = Out of Specification
B = Background	D = Duplicate
S = Spike	LS = Low Spike
HS = High Spike	PDS = Post Digestion Spike

Lancaster Laboratories

Quality Control Summary
Method Blank
Miscellaneous Wet Chemistry
SDG: HUL04

Method Blank Analysis					Matrix: WATER				
Parameter	Sample Number	Sample Code	Method	Analysis Date	Batch Number	Blank Results	Units	MDL	LOQ
TDS	3753715	AW3U-	G	1/7/02	02007021201	ND	mg/l	9.7	30
	3753716	AW3L- B,S,M							
	3753717	MW8U-							
	3753718	MW8M-							
	3755319	MW8L-							
	3753720	AW1U-							
	3753723	AW1UD							
	3753724	AW1L-							
	3753725	AW2L-							
	3753726	AWFB-							
	3753727	MW9U-							
	3753728	MW9L-							
	3753729	--10U							
	3753730	--10L							
	P753159	B,D							

Comments: The blank is acceptable when the result is less than the limit of quantitation.

ABBREVIATION KEY

CO = Colorimetric	MDL = Method Detection Limit
DI = Distillation	LOQ = Limit of Quantitation
G = Gravimetric	NA = Not Applicable
IR = Infrared Spectrophotometry	J = Estimated Value < LOQ
M = Meter	< = Less Than
OD = Oven Dried	ND = Not Detected
TI = Titration	* = Out of Specification
B = Background	D = Duplicate
S = Spike	LS = Low Spike
HS = High Spike	PDS = Post Digestion Spike

Sample Info.		Matrix Spike Analysis					Matrix: WATER												
Sample Number	Sample Code	Batch Number	Parameter	ME	Analysis Date	BKG Sample	BKG Result	MS Sample	MS Spike Added	MS Result	MSD Sample	MSD Spike Added	MSD Result	Units	MS Rec (%)	MSD Rec (%)	Acceptance Window (%)	RPD (%)	% RPD Limits <=
3753715	AW3U-	02010112501	Sulfate	M	1/10/02	P753958	1.7 J	P753958	20	20.9	P753958	20	20.6	mg/l	96	94	77 - 114	1	4
3753716	AW3L-																		
3753717	MW8U-																		
3753718	MW8M-																		
3755319	MW8L-																		
3753720	AW1U-																		
3753723	AW1UD																		
3753724	AW1L-																		
3753725	AW2L-																		
3753726	AWFB-																		
3753727	MW9U-																		
3753728	MW9L-																		
3753729	--10U																		
3753730	--10L																		

ABBREVIATION KEY	
CO = Colorimetric	ND = Not Detected
DI = Distillation	ME = Method
G = Gravimetric	< = Less Than
IR = Infrared Spectrophotometry	NA = Not Applicable
M = Meter	LOQ = Limit of Quantitation
OD = Oven Dried	* = Out of Specification
TI = Titration	J = Estimated Value < LOQ

Sample Info.	Matrix Spike Analysis										Matrix: WATER								
Sample Number	Sample Code	Batch Number	Parameter	ME	Analysis Date	BKG Sample	BKG Result	MS Sample	MS Spike Added	MS Result	MSD Sample	MSD Spike Added	MSD Result	Units	MS Rec (%)	MSD Rec (%)	Acceptance Window (%)	RPD (%)	% RPD Limits
3753715	AW3U-	02007021201	TDS	G	1/7/02	3753716	4416.00	3753716	1600.00	6160.00	3753716	1600.00	6140.00	mg/l	109	108	91 - 114	0	3
3753716	AW3L-																		
3753717	MW8U-																		
3753718	MW8M-																		
3755319	MW8L-																		
3753720	AW1U-																		
3753723	AW1UD																		
3753724	AW1L-																		
3753725	AW2L-																		
3753726	AWFB-																		
3753727	MW9U-																		
3753728	MW9L-																		
3753729	--10U																		
3753730	--10L																		

ABBREVIATION KEY

CO = Colorimetric	ND = Not Detected
DI = Distillation	ME = Method
G = Gravimetric	< = Less Than
IR = Infrared Spectrophotometry	NA = Not Applicable
M = Meter	LOQ = Limit of Quantitation
OD = Oven Dried	* = Out of Specification
TI = Titration	J = Estimated Value < LOQ

Lancaster Laboratories

Quality Control Summary
Duplicate Analysis
Miscellaneous Wet Chemistry
SDG: HUL04

Sample Information		Duplicate Analysis										
		Matrix: WATER										
Sample Number	Sample Code	Batch Number	Parameter	ME	Analysis Date	BKG Sample	BKG Results	DUP Sample	DUP Results	Units	RPD (%)	Control Limits % <=
3753715	AW3U-	02010112501	Sulfate	M	1/10/02	3753728	224.7	3753728	222.9	mg/l	1	4
3753716	AW3L-											
3753717	MW8U-											
3753718	MW8M-											
3755319	MW8L-											
3753720	AW1U-											
3753723	AW1UD											
3753724	AW1L-											
3753725	AW2L-											
3753726	AWFB-											
3753727	MW9U-											
3753728	MW9L-											
3753729	--10U											
3753730	--10L											
3753715	AW3U-	02007021201	TDS	G	1/7/02	P753159	3088.00	P753159	3004.00	mg/l	3	4
3753716	AW3L-											
3753717	MW8U-											
3753718	MW8M-											
3755319	MW8L-											
3753720	AW1U-											
3753723	AW1UD											
3753724	AW1L-											
3753725	AW2L-											
3753726	AWFB-											
3753727	MW9U-											
3753728	MW9L-											
3753729	--10U											
3753730	--10L											

Comments: If the background and/or the duplicate result was less than the limit of quantitation, the RPD is not required.

ABBREVIATION KEY

CO = Colorimetric	MDL = Method Detection Limit
DI = Distillation	LOQ = Limit of Quantitation
G = Gravimetric	NA = Not Applicable
IR = Infrared Spectrophotometry	J = Estimated Value < LOQ
M = Meter	< = Less Than
OD = Oven Dried	ND = Not Detected
TI = Titration	* = Out of Specification

Lancaster Laboratories

Quality Control Summary
 Laboratory Control Standard
 Laboratory Control Standard Duplicate
 Miscellaneous Wet Chemistry
 SDG: HUL04

Sample Information	Laboratory Control Standards												
	Matrix: WATER												
Sample Number	Sample Code	Batch Number	Parameter	Analysis Date	TRUE LCS/LCSD Value	LCS Results	LCSD Results	Units	Acceptance Range			% RPD Results	% RPD Acceptance </=
3753715	AW3U-	02010112501	Sulfate	1/10/02	20	19.7	19.4	mg/l	18	-	22	2	3
3753716	AW3L-			1/10/02	20	19.4	NA	mg/l	18	-	22	NA	NA
3753717	MW8U-			1/10/02	20	19.3	NA	mg/l	18	-	22	NA	NA
3753718	MW8M-			1/10/02	20	19.3	NA	mg/l	18	-	22	NA	NA
3755319	MW8L-			1/10/02	20	19.4	NA	mg/l	18	-	22	NA	NA
3753720	AW1U-			1/10/02	20	19.4	NA	mg/l	18	-	22	NA	NA
3753723	AW1UD												
3753724	AW1L-												
3753725	AW2L-												
3753726	AWFB-												
3753727	MW9U-												
3753728	MW9L-												
3753729	--10U												
3753730	--10L												
3753715	AW3U-	02007021201	TDS	1/7/02	200	193.00	NA	mg/l	174	-	230	NA	NA
3753716	AW3L-												
3753717	MW8U-												
3753718	MW8M-												
3755319	MW8L-												
3753720	AW1U-												
3753723	AW1UD												
3753724	AW1L-												
3753725	AW2L-												
3753726	AWFB-												
3753727	MW9U-												
3753728	MW9L-												
3753729	--10U												
3753730	--10L												

Lancaster Laboratories
Method Detection Limits
Department 29 – Water Quality

ANALYSIS	LL #	MDL	ANALYSIS	LL #	MDL
Acidity	476	0.39 mg/l	Oil and Grease	231	2.5 mg/l
Acidity	4530	1.36 mg/l	Oil and Grease	236	900 mg/kg
Alkalinity to pH 4.5	202	0.41 mg/l	Oil and Grease	429	0.26 mg/l
Ammonia Nitrogen	573	8.3 mg/kg	Oil and Grease	2446	233 mg/kg
Ammonia Nitrogen	221	0.16 mg/l	Orthophosphate	226	0.0028 mg/l
Ammonia Nitrogen	6914	0.04 mg/l	Paraquat	1733	17 ug/l
BOD	235	0.80 mg/l	Petroleum Hydrocarbons	1126, 8140	0.32 mg/l
Carbonaceous BOD	1364	0.80 mg/l	Petroleum Hydrocarbons	1554	0.24 mg/l
Chemical Oxygen Demand	1553	1.67 mg/l	Petroleum Hydrocarbons	1562	9.4 mg/kg
Chemical Oxygen Demand	234	335 mg/l	Petroleum Hydrocarbons	1663	21 mg/kg
Chemical Oxygen Demand	4001	8.84 mg/l	Petroleum Hydrocarbons	1720	15.5 mg/kg
Chloride	1124	0.398 mg/l	Petroleum Hydrocarbons	8129	9 mg/kg
Chlorine Residual	240	0.04 mg/l	Petroleum Hydrocarbons	8141	12.6 mg/kg
Dissolved Oxygen	428	0.09 mg/l	Silica	559	0.024 mg/l
Dithiocarbamates	8322	0.47 ug/l	Soluble BOD	541	0.80 mg/l
Ferrous Iron	8344	0.009 mg/l	Specific Conductance	280	2 umhos/cm
Fluoride	263	0.03 mg/l	Specific Gravity	1443	0.004
Fluoride Distillation	1448	0.03 mg/l	Sulfate	1125	1.5 mg/l
Hexane Extractable Materials(Silica-Gel Treated)	8078	1.4 mg/l	Sulfide	230	0.022 mg/l
Hexane Extractable Materials	8079	1.2 mg/l	Sulfide, Acid Volatile	1630	0.39 micromol/g
Hexavalent Chromium	276	0.003 mg/l	Sulfide Titration	1333	0.53 mg/l
Hexavalent Chromium	425	0.39 mg/kg	Sulfide Titration	1122	20 mg/kg
Hexavalent Chromium	1446	0.0009 mg/l	Sulfide Titration	487	7.1 mg/kg
Hexavalent Chromium	4858	0.39 mg/kg	Sulfite	229	0.68 mg/l
Hexavalent Chromium	4859	0.004 mg/l	Total Dissolved Solids	212	9.7 mg/l
Iodide	6867	0.015 mg/l	Total Hardness	216	0.29 mg/l
Karl Fischer Moisture	4529	0.027 %	Total Solids	203	4.62 mg/l
M.B.A.S.	225	0.028 mg/l	Total Suspended Solids	206	3.0 mg/l
Moisture	111	0.5 %	Turbidity	279	0.063 NTU
Moisture	1353	0.5 %	Thiocyanate	8355	0.246 mg/l
			UV Absorbance	7120	0.006 cm-1

Revised 1/4/02

Raw Data

Raw Data Logbook
Sulfate (Turbidimetric)
Analysis #1125

Name of curve: 1125 11-29-01 SAG
Corr. Coeff.: 999541
Slope: 4.25821
Y-intercept: -2.39749
Std. Ref. (Book/pg): _____

Batch #: _____

C U R V E

Time: 10:15 Day #: 01333
Date: 11-29-01 Inst. ID#: 6165
Init/Emp. #: 5A6/227

Upld Date: _____

Upld by: _____

Before After
10NTU = 9.61 9.77
100NTU = 99.6 98.0

	Sample Number	Sample Vol. (mL)	D.F.	NTU			Conc. From Curve	Calc. Value (mg/L)	LOQ (mg/L)	Spike Added	QC#	Comments
				Sample	-Samp BL	=Corr. NTU						
1	Blank	100	1	.364	.102	.262	.62456		5			
2	5mg/L	1	1	19.0	.369	18.731	4.96182		5			1mL of 500mg/L → 7100
3	10mg/L			39.3	.304	38.996	9.72087		5			2mL
4	15mg/L			60.2	.333	59.867	14.62222		5			3mL
5	20mg/L			80.9	.581	80.319	19.42518		5			4mL
6	25mg/L			105	.437	104.563	25.11865		5			5mL
7	30mg/L			126	.316	125.684	30.07872		5			6mL
8	35mg/L			150	.717	149.283	35.62072		5			7mL
9	40mg/L			168	.804	167.196	39.82741		5			8mL
10									5			
11												
12	Blank	100	1	.934	.393	.541	.69008					Rec = 99%
13	20mg/L	1	1	81.9	.323	81.577	19.72061					
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												

1125 CURVE
11-29-01
SAG 1227

D.F. = Dilution Factor

Verified by: RN/355

Date: 11/30/01

Raw Data Logbook
Sulfate (Turbidimetric)
Analysis #1125

Name of curve: 1125 11-29-01 SAE
Corr. Coeff.: .999541
Slope: 4.25821
Y-intercept: -2.39749
Std. Ref. (Book/pg): 031987 p15

(* + 4 mL of 500 mg/L)

Batch #:

02010

112

501

A

Time: 0643
Date: 1-10-02

Day #: 02010
Inst. ID#: 6165
Init/Emp. #: SAE/227

Upld Date: 1-10-02

Upld by: 227

Before After
10 NTU = 9.71 9.68
100 NTU = 97.9 98.6

	Sample Number	Sample Vol. (mL)	D.F.	NTU			Calc. Value (mg/L)	LOQ (mg/L)	Spike Added	QC#	Comments
				Sample	-Samp BL	=Corr. NTU					
1	Blank	100	1	.796	.305	.491	.7	5			Rec: 68%
2	5mg/L			15.3	.685	14.615	3.99522	4.0	5		Rec: 80%
3	40mg/L			165	1.33	163.67	38.9937	39.0	5		Rec: 97%
4	20mg/L			81.7	.168	81.532	19.71004	19.7	5	20	Rec: 99%
5	3753715	2	50	43.1	7.33	35.77	8.96327	448.2	250		OSA
6	3753714	1	100	74.5	.942	73.558	17.83742	1783.7	500		
7	3753717	1	100	144	1.42	2.0	1.03271	103.3	500		(240)
8	3753718	20	5	109	28.2	80.8	19.53814	97.7	25		
9	20mg/L	100	1	80.4	.192	80.208	19.39911	19.4	5	20	Rec: 97% P.2%
10	3753719	20	5	85.1	59.1	26.0	6.66388	33.3	25		OSA
11	3753720	5	20	119	39.8	79.2	19.14239	383.2	100		
12	3753723			99.3	22.6	76.7	18.57529	371.5	100		
13	3753724			104	.837	103.163	24.78987	495.8	100		
14	20mg/L	100	1	80.5	.346	80.154	19.38643	19.4	5		X
15	3753725	2	50	114	.21.86	112.14	26.89844	1344.9	250		OSA
16	3753726	100	1	1.30	2.08	-.78	.37985	.4	5		
17	3753727	.5	200	122	123	-1.0	.32819	65.6	1000	(240)	1mL → 100mL Sample of Rec X
18	3753728	10	10	163	69.7	93.3	22.47364	224.7	50		
19	20mg/L	100	1	80.1	.215	79.885	19.32326	19.3	5		X
20	3753729	.5	200	52.3	50.8	1.5	.91529	183.1	1000	(240)	OSA 1mL → 100mL Sample of Rec X
21	3753730	2	50	77.0	1.86	75.14	18.20894	910.4	250		
22	3753742			128	49.4	78.6	19.62149	951.1	250		
23	3753745			119	46.5	72.5	17.58896	879.4	250		
24	20mg/L	100	1	79.9	.214	79.686	19.27652	19.3	5		X
25	3753797	10	10	91.2	.406	90.794	21.88513	218.9	50		OSA
26	3753957	100	1	.281	.210	.071	.57970	.6	5		OSA
27	3753958	100	1	5.62	.640	4.98	1.73253	1.7	5		
28	3754494	25	4	94.5	6.52	87.98	21.22429	84.9	20		
29	20mg/L	100	1	80.5	.187	80.313	19.42377	19.4	5		X
30	3753958 E			87.3	.756	86.544	20.88706	20.9	5	20	Rec: 96%
31	3753958 M			86.2	.768	85.432	20.62592	20.6	5	20	Rec: 94% P.1%
32	3753728 D	10	10	158	65.5	92.5	22.28577	222.9	50		RPD Program
33	20mg/L	100	1	80.7	.539	80.161	19.38807	19.4	5		X

D.F. = Dilution Factor

Verified by:

20463

Date:

1/10/02

Batch#: 02007021201

LLENS Worksheet for Total Dissolved Solids

Oven ID #: 6605Temperature In: 181°Temperature Out: 183° 1/9/02
182° 1/8/02Balance ID #: 8119Std. Ref. (book/pg.): 031987 p 46

#	Sample ID	Date Added	Crucible ID	Vol.	BC	Comments	Analysis#
1)	BLK	01/07/02 10:29	D25	200			
2)	LCS 200	01/07/02 10:29	BSB	100			
3)	3753159	01/07/02 10:28	SKY	25	05A		00212
4)	3753159DUP	01/07/02 10:29	KOB	25	↓		00212
5)	3753160	01/07/02 10:28	COW	200	04A		00212
6)	3753583	01/07/02 10:28	TUB	100	05A		00212
7)	3753715	01/07/02 10:28	619	50	05A		00212
8)	3753716	01/07/02 10:28	WORD	25			00212
9)	3753716MS	01/07/02 10:29	FFA	25		+10 ml of 4000	00212
10)	3753716MSD	01/07/02 10:29	TD2	25		↓	00212
11)	3753717	01/07/02 10:28	PAC	200			00212
12)	3753718	01/07/02 10:28	943	200			00212
13)	3753719	01/07/02 10:28	X47	200			00212
14)	3753720	01/07/02 10:28	9	50			00212
15)	3753723	01/07/02 10:28	1205	50			00212
16)	3753724	01/07/02 10:28	14	50			00212
17)	3753725	01/07/02 10:28	TAP	25			00212
18)	3753726	01/07/02 10:28	356	200			00212
19)	3753727	01/07/02 10:28	BK	50			00212
20)	3753728	01/07/02 10:28	DAD	200			00212
21)	3753729	01/07/02 10:28	11	100			00212
22)	3753730	01/07/02 10:28	CRX	50	V		00212

Signature: Anne L. Kuengli

Printed by 00284 on 01/07/2002 at 10:29

Date: 1/7/02✓ 20463 1/9/02

Batch#: 02007021201

LLENS Batch Chronology Report - Total Dissolved Solids

#	Operation	Instrument	Date	Time	Analyst
1)	Batch Creation		01/07/2002	10:28	00284
2)	Tare Weight	003636	01/07/2002	15:35	00284
3)	Spiking Info		01/07/2002	15:36	00284
4)	Sample Volumes		01/07/2002	15:37	00284
5)	Final Dry Weight 1	008119	01/08/2002	08:42	00284
6)	Final Dry Weight 2	008119	01/08/2002	12:08	00284
7)	Final Dry Weight 3	008119	01/09/2002	08:41	00284
8)	Final Dry Weight 4	008119	01/09/2002	11:58	00284
9)	Calculate/Transmit	LLENS3	01/09/2002	12:02	00284

Comments:

 $\sqrt{004631/9/02}$

Sample ID	BI	MAN	Rep #	Crucible ID	Tare Wt	SPK Aliquot	SPK Conc	SPK Volume	Volume	Dry wt#1	Dry wt#2	Dry wt#3	Dry wt#4	Spk Added	Rel Diff	TDS (mg/L)
BLK	A			D25	100.5725	✓			200.00	✓	100.5720	✓				-2.50
LCS 200	A			BSB	104.7459	✓			100.00	✓	104.7656	✓				193.00
3753159	A	00212		SKY	113.8686	✓			25.00	✓	113.9662	✓	113.9458	✓		3088.00
3753159DUP	A	00212		KOB	109.7042	✓			25.00	✓	109.7975	✓	109.7845	✓	109.7874	3004.00
3753160	A	00212		COW	101.3686	✓			200.00	✓	101.3677	✓	101.3682			-4.50
3753583	A	00212		TUB	93.2226	✓			100.00	✓	93.2830	✓	93.2835			604.00
3753715	A	00212		619	103.2216	✓			50.00	✓	103.3132	✓	103.3133			1832.00
3753716	A	00212		WORD	104.7373	✓			25.00	✓	104.8477	✓	104.8491			4416.00
3753716MS	A	00212		FFA	98.9588	✓	10.00	4000.00	25.00	✓	99.1128	✓	99.1137	SA 1600.00		6160.00
3753716MSD	A	00212		TD2	102.2751	✓	10.00	4000.00	25.00	✓	102.4286	✓	102.4296	SA 1600.00	0.33	6140.00
3753717	A	00212		PAC	103.4072	✓			200.00	✓	103.4805	✓	103.4782			355.00
3753718	A	00212		943	105.6243	✓			200.00	✓	105.6999	✓	105.6998			377.50
3753719	A	00212		XYZ	103.3724	✓			200.00	✓	103.4216	✓	103.4215			245.50
3753720	A	00212		9	108.6485	✓			50.00	✓	108.7121	✓	108.7121			1272.00
3753723	A	00212		1205	117.5820	✓			50.00	✓	117.6434	✓	117.6434			1228.00
3753724	A	00212		14	109.7885	✓			50.00	✓	109.8561	✓	109.8563			1352.00
3753725	A	00212		TAP	107.7521	✓			25.00	✓	107.8355	✓	107.8355			3336.00
3753726	A	00212		356	102.6523	✓			200.00	✓	102.6518	✓	102.6520			-2.50
3753727	A	00212		BK	102.7449	✓			50.00	✓	102.8295	✓	102.8297			1692.00
3753728	A	00212		DAD	107.0488	✓			200.00	✓	107.1608	✓	107.1614			560.00
3753729	A	00212		11	101.3907	✓			100.00	✓	101.4691	✓	101.4691			784.00
3753730	A	00212		CRX	105.2848	✓			50.00	✓	105.3860	✓	105.3858			2020.00
3753742	A	00212		B	100.5234	✓			25.00	✓	100.5872	✓	100.5870			2544.00
3753745	A	00212		35	102.7313	✓			25.00	✓	102.7937	✓	102.7937			2496.00

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Change Log

Sample ID	Analysis	Operation	Measurement	Original Entry		Data Changed	
				Date	Time	Analyst	Reason
3753729	00212	Final Dry Weight 1	Dry wt#1	01/08/2002	08:47	00284	01/08/2002 08:50 00284 Wrong entry

Tare Weight Summary

Sample ID	Date/Time	ID	Wt.	Analyst	Date/Time	ID	Wt.	Analyst	Date/Time	ID	Wt.	Analyst
BLK	01/03/02 12:03	D25	100.5725	00284								
LCS 200	01/03/02 12:11	BSB	104.7459	00284								
3753159	01/03/02 12:06	SKY	113.8686	00284								
3753159DUP	01/03/02 12:04	KOB	109.7042	00284								
3753160	01/03/02 12:05	COW	101.3686	00284								
3753583	01/03/02 12:02	TUB	93.2226	00284								
3753715	01/03/02 11:59	619	103.2216	00284								
3753716	01/03/02 12:04	WORD	104.7373	00284								
3753716MS	01/03/02 12:01	FFA	98.9588	00284								
3753716MSD	01/03/02 11:59	TD2	102.2751	00284								
3753717	01/03/02 11:57	PAC	103.4072	00284								
3753718	01/03/02 11:57	943	105.6243	00284								
3753719	01/03/02 11:58	XYZ	103.3724	00284								
3753720	01/03/02 12:00	9	108.6485	00284								
3753723	01/03/02 12:09	1205	117.5820	00284								
3753724	01/03/02 12:10	14	109.7885	00284								
3753725	01/03/02 12:01	TAP	107.7521	00284								
3753726	01/03/02 12:07	356	102.6523	00284								
3753727	01/03/02 12:09	BK	102.7449	00284								
3753728	01/03/02 12:05	DAD	107.0488	00284								
3753729	01/03/02 12:02	11	101.3907	00284								
3753730	01/03/02 12:08	CRX	105.2848	00284								
3753742	01/03/02 12:07	B	100.5234	00284								
3753745	01/03/02 12:00	035	102.7313	00284								
3753797	01/03/02 12:06	TD4	104.2727	00284								

Printed by 00284 on 01/09/2002 at 12:02

✓ 20463 1/9/02





Lancaster Laboratories

Where quality is a science.

Dear Client:

Enclosed please find the requested data package.

Any questions or concerns you might have regarding this data package should be directed to your client representative, Heidi Ortenzi, at (717) 656-2300 extension 1917.

Sincerely yours,

LANCASTER LABORATORIES
Data Packages Department

Data Package

NYSDEC ASP Category B Data Package

*Analytical Data Report Package
for
Hull & Associates*

*IMC Magnetics - NY
Water Samples
Collected on 01/04/02
Sample No. 3753742-3753745*

*PA Cert. # 36-037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521*

Prepared by Clayton Umanson
Quality Assurance Review Audrey McClune
Date 2-8-02
Delivery Date 2/12/02



**Sample Reference List for SDG Number HUL05
with a Data Package Type of NYSDEC**

10062 - Hull & Associates
IMC Magnetix - NY

Lab Sample Number	Lab Sample Code	Client Sample Description
3753742	A2U--	NMB008:AW-2U:G010402 Unspiked Water Sample
3753743	A2U--	NMB008:AW-2U:G010402 Matrix Spike Water Sample
3753744	A2U--	NMB008:AW-2U:G010402 Matrix Spike Duplicate Water
3753745	A2U-D	NMB008:AW-2U:G010402D Water Sample

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For Lancaster Laboratories use only

Acct. # 100602 Sample # 3753715-34
For Lancaster Laboratories use only

3753742-5

Please print. Instructions on reverse side correspond with circled numbers.

[illegible]

Sample Administration Receipt Documentation Log

Client/Project: Hull Associates
Date of Receipt: 01/05/02 (M)
Time of Receipt: 1015
Source Code: 50-1

Shipping Container Sealed: Y N
COC Seal Present: Y N
COC Seal Intact: Y N
Package: Chilled / Not Chilled
Unpacker Emp. No.: 1075

Temperature of Shipping Containers	
#1 Thermometer ID: <u>3H7353</u> Temp.: <u>2.0°C</u> Temp. Bottle / Surface Temp. Wet Ice / Dry Ice / Ice Packs Ice Present? <u>Y</u> N Loose <u>Bagged</u>	#2 Thermometer ID: <u>3H7353</u> Temp.: <u>1.5°C</u> Temp. Bottle / Surface Temp. Wet Ice / Dry Ice / Ice Packs Ice Present? <u>Y</u> N Loose <u>Bagged</u>
#3 Thermometer ID: <u>3H7353</u> Temp.: <u>1.5°C</u> Temp. Bottle / Surface Temp. Wet Ice / Dry Ice / Ice Packs Ice Present? <u>Y</u> N Loose <u>Bagged</u>	#4 Thermometer ID: <u>3H7353</u> Temp.: <u>1.5°C</u> Temp. Bottle / Surface Temp. Wet Ice / Dry Ice / Ice Packs Ice Present? <u>Y</u> N Loose <u>Bagged</u>

Paperwork Discrepancy/Unpacking Problems: lines - label & JW don't correspond
NMB008: AW-22 - G010402 - all bottles except (005) say #3
#3 B11/01/02 TC

Entered per COC

Entered prior to unpacking

Sample Administration Internal Chain of Custody			
Name	Date	Time	Reason for Transfer
<u>[Signature]</u>	<u>01/05/02</u>	<u>1330</u>	Unpacking <u>to storage</u>
<u>[Signature]</u>	<u>1/5/02</u>	<u>1330</u>	Place in Storage or <u>Entry</u>
			Remove from Storage
			Place in Storage or Entry
			Entry

Chain-of-Custody Record

Secure Storage Chain of Custody Original Sample

Client/Project: Mull & Associates

Preservative: H₂SO₄ Matrix: WW SDG: HUL05

Sample # Range of Entry Group: 3753742-5 Bottle Type: (01) 125 ml amber glass

Sample Number(s) in Custody	Released By	Received By	Date of Transfer	Time of Transfer	Reason for Change of Custody	Dist., Extr., or Digest Chain Created (X)
3753742,5	⁽⁹⁶⁴⁾ SA Storage	8A Storage	1/5/02	1330	Entry to Storage	
3753742,5	SA Storage	BSL 189	1/7/02	1000	PH Check	
3753742,5	BSL 189	Main Storage	1/7/02	1100	storage	
J75 J742,5	MAIN Storage	T. Petre 11	1/10/02	0730	TOC	
J75 J742,5	T. Petre 11	DEPT-27 Storage	1/10/02	0735	Storage	
J75 J742,5	DEPT-27 Storage	T. Petre 11	1/11/02	1100	TOC	
J75 J742,5	T. Petre 11	DEPT-27 Storage	1/11/02	1215	Storage	
J75 J742,5	DEPT-27 Storage	T. Petre 11	1/14/02	1320	transfer to storage	
J75 J742,5	T. Petre 11	MAIN Storage	1/14/02	1325	Storage	



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METHODOLOGY SUMMARY/REFERENCE

0254 Iron (water)

The solution resulting from the metals digestion is analyzed by Flame AA.

Reference: Test Methods for Evaluating Solid Waste
SW-846, Method 7380, September 1986

0820 Metals Water Digestion

The sample is digested with nitric and hydrochloric acids.

Reference: Test Methods for Evaluating Solid Waste
SW-846, Method 3005A, July 1992

0212 Total Dissolved Solids (water)

A well-mixed sample is filtered through a glass fiber filter. The filtrate is collected in a tared beaker and dried to a constant weight. The increase in weight is the total dissolved solids.

Reference: Methods for Chemical Analysis of Water and Wastes
USEPA 600/4-79-020, Method 160.1

1125 Sulfate (water)

The sample is converted to a barium sulfate suspension. The resulting turbidity is determined using a nephelometer by comparison to a standard curve.

Reference: Methods for Chemical Analysis of Water and Wastes
USEPA 600/4-79-020, Method 375.4



Where quality is a science.

0354 Total Organic Carbon (Quad) (water)

Following acidification, the sample is purged with nitrogen to remove inorganic carbon. Persulfate is injected to oxidize organic carbon to carbon dioxide which is detected by IR. An OI Model 700 TOC Analyzer is used. The analysis is performed and reported in quadruplicate.

Reference: Test Methods for Evaluating Solid Waste,
SW-846, Method 9060, September 1986

8404 Halocarbons/Aromatics by SW846

The volatile compounds are extracted by bubbling an inert gas through the sample and are collected on a sorbent trap. The trap is thermally desorbed and the compounds are separated by gas chromatography under programmed temperature conditions. Each analyte is quantitated using an electrolytic conductivity detector.

Reference: Test Methods for Evaluating Solid Waste
SW-846, Methods 8021B, December 1996

1127 GC VOA Water Prep

An undiluted aliquot of the water sample or a dilution of the sample is purged with an inert gas and the volatiles are collected on an adsorbent trap that is subsequently desorbed onto a gas chromatographic column.

Reference: Test Methods for Evaluating Solid Waste,
SW-846, Method 5030B, Revision 2, December 1996



ANALYTICAL RESULTS

Prepared for:

Hull & Associates
6130 Wilcox Rd.
Dublin OH 43016

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 792265. Samples arrived at the laboratory on Saturday, January 05, 2002.

Client Description

NMB008:AW-2U:G010402 Unspiked Water Sample
NMB008:AW-2U:G010402 Matrix Spike Water Sample
NMB008:AW-2U:G010402 Matrix Spike Duplicate Water
NMB008:AW-2U:G010402D Water Sample

Lancaster Labs Number

3753742
3753743
3753744
3753745

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the laboratory chronicles.

1 COPY TO
1 COPY TO

Hull & Associates
Data Package Group

Attn: Mr. Bill Dennis



Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681



Questions? Contact Environmental Client Services
at (717) 656-2300.

Respectfully Submitted,

Victoria M. Martell
Chemist



Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. WW 3753742

Collected: 01/04/2002 10:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Reported: 01/15/2002 at 17:00

Discard: 01/23/2002

NMB008:AW-2U:G010402 Unspiked Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

A2U-- SDG#: HUL05-01BKG

CAT			As Received	As Received		
No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	164.	5.00	mg/l	50
00212	Total Dissolved Solids	n.a.	2,540.	240.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	28.0	2.0	mg/l	1
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			25.1 mg/l			
			28.6 mg/l			
			29.1 mg/l			
			29.0 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	950.	250.	mg/l	50
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	1.1	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	14.	1.0	ug/l	1



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Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. WW 3753742

Collected: 01/04/2002 10:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 17:00

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-2U:G010402 Unspiked Water Sample

IMC Magnetics - NY

A2U-- SDG#: HUL05-01BKG

CAT			As Received	As Received		
No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT				Analysis		
No.	Analysis Name	Method	Trial#	Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 09:20	Damary S. Valentin	50
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 21:32	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	50
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/15/2002 06:34	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 14:30	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/15/2002 06:34	Todd T. Smythe	n.a.



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Lancaster Laboratories Sample No. WW 3753743

Collected: 01/04/2002 10:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 17:00

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-2U:G010402 Matrix Spike Water Sample

IMC Magnetics - NY

A2U-- SDG#: HUL05-01MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	19.	2.0	ug/l	1
08484	Chloromethane	74-87-3	9.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	18.	1.0	ug/l	1
08487	Bromomethane	74-83-9	15.	5.0	ug/l	1
08488	Chloroethane	75-00-3	17.	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	17.	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	21.	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	18.	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	21.	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	22.	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	22.	1.0	ug/l	1
08502	Chloroform	67-66-3	22.	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	21.	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	22.	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	22.	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	21.	1.0	ug/l	1
08512	Trichloroethene	79-01-6	21.	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	20.	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	21.	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	19.	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	21.	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	21.	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	34.	1.0	ug/l	1
08526	Chlorobenzene	108-90-7	20.	1.0	ug/l	1
08527	Bromoform	75-25-2	22.	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	21.	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	20.	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	19.	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	21.	1.0	ug/l	1
08541	Benzene	71-43-2	20.	1.0	ug/l	1
08543	Toluene	108-88-3	20.	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	20.	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	60.	3.0	ug/l	1





Page 2 of 2

Lancaster Laboratories Sample No. WW 3753743

Collected: 01/04/2002 10:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 17:00

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-2U:G010402 Matrix Spike Water Sample

IMC Magnetix - NY

A2U-- SDG#: HUL05-01MS

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/15/2002 08:05	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/15/2002 08:05	Todd T. Smythe	n.a.



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Lancaster Laboratories Sample No. WW 3753744

Collected: 01/04/2002 10:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Reported: 01/15/2002 at 17:01

Discard: 01/23/2002

NMB008:AW-2U:G010402 Matrix Spike Duplicate Water

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

A2U-- SDG#: HUL05-01MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	19.	2.0	ug/l	1
08484	Chloromethane	74-87-3	8.5	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	18.	1.0	ug/l	1
08487	Bromomethane	74-83-9	15.	5.0	ug/l	1
08488	Chloroethane	75-00-3	17.	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	17.	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	21.	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	19.	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	22.	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	22.	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	22.	1.0	ug/l	1
08502	Chloroform	67-66-3	22.	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	22.	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	22.	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	22.	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	22.	1.0	ug/l	1
08512	Trichloroethene	79-01-6	20.	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	21.	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	21.	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	19.	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	21.	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	21.	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	34.	1.0	ug/l	1
08526	Chlorobenzene	108-90-7	19.	1.0	ug/l	1
08527	Bromoform	75-25-2	22.	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	22.	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	20.	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	19.	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	21.	1.0	ug/l	1
08541	Benzene	71-43-2	20.	1.0	ug/l	1
08543	Toluene	108-88-3	20.	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	20.	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	60.	3.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753744

Collected: 01/04/2002 10:00 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 17:01

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-2U:G010402 Matrix Spike Duplicate Water

IMC Magnetix - NY

A2U-- SDG#: HUL05-01MSD

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis	Analyst	Dilution Factor
				Date and Time		
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/15/2002 08:50	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/15/2002 08:50	Todd T. Smythe	n.a.



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Lancaster Laboratories Sample No. WW 3753745

Collected: 01/04/2002 10:05 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Reported: 01/15/2002 at 17:01

Discard: 01/23/2002

NMB008:AW-2U:G010402D Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

A2U-D SDG#: HUL05-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
00254	Iron	7439-89-6	100.	4.00	mg/l	40
00212	Total Dissolved Solids	n.a.	2,500.	240.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	25.6	2.0	mg/l	1
EPA SW-846, Method 9060 requires total organic carbon (TOC) to be analyzed in quadruplicate. The reported result is the average of the following trials:						
			24.5 mg/l			
			24.9 mg/l			
			28.7 mg/l			
			24.5 mg/l			
01125	Sulfate (turbidimetric)	14808-79-8	880.	250.	mg/l	50
08404	Halocarbons/Aromatics by SW846					
08483	Dichlorodifluoromethane	75-71-8	< 2.0	2.0	ug/l	1
08484	Chloromethane	74-87-3	< 5.0	5.0	ug/l	1
08485	Vinyl Chloride	75-01-4	< 1.0	1.0	ug/l	1
08487	Bromomethane	74-83-9	< 5.0	5.0	ug/l	1
08488	Chloroethane	75-00-3	< 1.0	1.0	ug/l	1
08489	Trichlorofluoromethane	75-69-4	< 1.0	1.0	ug/l	1
08490	1,1-Dichloroethene	75-35-4	< 1.0	1.0	ug/l	1
08492	Methylene Chloride	75-09-2	< 1.0	1.0	ug/l	1
08494	trans-1,2-Dichloroethene	156-60-5	< 1.0	1.0	ug/l	1
08496	1,1-Dichloroethane	75-34-3	< 1.0	1.0	ug/l	1
08498	cis-1,2-Dichloroethene	156-59-2	< 1.0	1.0	ug/l	1
08502	Chloroform	67-66-3	< 1.0	1.0	ug/l	1
08504	1,2-Dichloroethane	107-06-2	< 1.0	1.0	ug/l	1
08506	1,1,1-Trichloroethane	71-55-6	< 1.0	1.0	ug/l	1
08509	Carbon Tetrachloride	56-23-5	< 1.0	1.0	ug/l	1
08511	1,2-Dichloropropane	78-87-5	< 1.0	1.0	ug/l	1
08512	Trichloroethene	79-01-6	1.2	1.0	ug/l	1
08514	Bromodichloromethane	75-27-4	< 1.0	1.0	ug/l	1
08516	cis-1,3-Dichloropropene	10061-01-5	< 1.0	1.0	ug/l	1
08517	trans-1,3-Dichloropropene	10061-02-6	< 1.0	1.0	ug/l	1
08518	1,1,2-Trichloroethane	79-00-5	< 1.0	1.0	ug/l	1
08520	Dibromochloromethane	124-48-1	< 1.0	1.0	ug/l	1
08523	Tetrachloroethene	127-18-4	16.	1.0	ug/l	1



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Lancaster Laboratories Sample No. WW 3753745

Collected: 01/04/2002 10:05 by PG

Account Number: 10062

Submitted: 01/05/2002 10:15

Hull & Associates

Reported: 01/15/2002 at 17:01

6130 Wilcox Rd.

Discard: 01/23/2002

Dublin OH 43016

NMB008:AW-2U:G010402D Water Sample

IMC Magnetics - NY

A2U-D SDG#: HUL05-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
08526	Chlorobenzene	108-90-7	< 1.0	1.0	ug/l	1
08527	Bromoform	75-25-2	< 1.0	1.0	ug/l	1
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	1.0	ug/l	1
08533	1,3-Dichlorobenzene (m)	541-73-1	< 1.0	1.0	ug/l	1
08534	1,4-Dichlorobenzene (p)	106-46-7	< 1.0	1.0	ug/l	1
08535	1,2-Dichlorobenzene (o)	95-50-1	< 1.0	1.0	ug/l	1
08541	Benzene	71-43-2	< 1.0	1.0	ug/l	1
08543	Toluene	108-88-3	< 1.0	1.0	ug/l	1
08545	Ethylbenzene	100-41-4	< 1.0	1.0	ug/l	1
08561	Xylene (total)	1330-20-7	< 3.0	3.0	ug/l	1

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
00254	Iron	SW-846 7380	1	01/11/2002 09:26	Damary S. Valentin	40
00212	Total Dissolved Solids	EPA 160.1	1	01/07/2002 10:28	Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	01/11/2002 22:37	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	01/10/2002 06:45	Susan A. Engle	50
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	01/15/2002 07:19	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	01/10/2002 14:30	Christine M. Conlin	1
01127	GC VOA Water Prep	SW-846 5030B	1	01/15/2002 07:19	Todd T. Smythe	n.a.



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Volatiles by GC Data

Case Narrative Conformance/Nonconformance Summary

Client : Hull & Associates
Project: IMC Magnetism - NY
Volatiles by GC - Water

SAMPLE ANALYSES

LL Sample #	Sample Designation	Matrix Soil Water	Comments
3753742	A2U--	X	Unspiked
3753743MS	A2U--	X	Matrix Spike
3753744MSD	A2U--	X	Matrix Spike Dup
3753745	A2U-D	X	

QUALITY CONTROL ANALYSES

BLK1831	X	Method Blank
LCS1806	X	Lab Control Sample

SAMPLE PREPARATION

sample preparation was necessary.

ANALYSIS

The integration system reviews the chromatogram retention times, comparing them to the retention times in the ID Window column. A peak in the sample chromatogram with a retention time within the ID window is identified as a "hit."

The method used for analysis was EPA SW-846 Method 5030B/8021B. A J&W DB-VRX, 75m x 0.45mm capillary column was used for the analysis of all samples.

No problems were encountered during analysis.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY

Client submitted batch QC was referenced.

All QC was within specifications.

The initial calibration H18314 met the requirements of SW-846 Method 8000B (section 7.7) since the average of all relative standard deviation values was < 20%. (The average % RSD was calculated using all of the compounds in the standard, though the ICAL summary form in this data package reflects only the client requested compounds.) As stated in method 8000B (section 7.5.1.2.3) the data user should be made aware that the %RSD(s) for chloromethane and methylene chloride fell outside of the < 20% criteria.

Client : Hull & Associates
Project: IMC Magnetics - NY
Volatiles by GC - Water

The calibration verification standard (injection #33 analyzed on 01/15/02 at 04:03) met the requirements of SW-846 Method 8000B (section 7.7) since the average of all percent drift values was < 15%. (The average % drift was calculated using all of the compounds in the standard, though the CCV summary form in this data package only reflects the client requested compounds.) As stated in method 8000B (section 7.5.1.2.3) the data user should be made aware that the %drift for dichlorodifluoromethane and chloromethane fell outside of the +/- 15% criteria.

The calibration verification standard (injection #09 analyzed on 01/15/02 at 10:36) met the requirements of SW-846 Method 8000B (section 7.7) since the average of all percent drift values was < 15%. (The average % drift was calculated using all of the compounds in the standard, though the CCV summary form in this data package only reflects the client requested compounds.) As stated in method 8000B (section 7.5.1.2.3) the data user should be made aware that the %drift for dichlorodifluoromethane and chloromethane fell outside of the +/- 15% criteria.

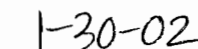
DATA INTERPRETATION

No explanation is necessary for the data submitted.

Due to the limitations of the data package generating software, the NYSDEC ASP forms could not be included for the GC Volatiles data. Sample results are summarized on the analysis reports, and QC and calibration information is included on summary forms in this section of the data package.

Narrative reviewed and approved by:


Steve J. Stabinger, Group Leader


Date

QC Summary

Surrogate Recovery
Volatiles by GC - Water

LL Sample#	Sample Code	Dilution Factor	1B4CB-H Water-HALL % Recovery	1B4CB-P Water-PID % Recovery	TOT OUT
3753742	A2U--	1.0	90	91	
3753743MS	A2U--	1.0	100	97	
3753744MSD	A2U--	1.0	102	97	
3753745	A2U-D	1.0	93	93	
BLK1831	METHOD BLANK	1.0	97	91	
LCS1806	LAB CONTROL	1.0	95	91	

* = Values outside quality control limits.

D = Surrogates diluted - not counted towards total out.

TOT OUT = Total # of surrogates with recovery outside control limits.

			Control Limits	
			Lower	Upper
1B4CB-H	=	1-Bromo-4-Chlorobenzene (Water - HALL)	59	132
1B4CB-P	=	1-Bromo-4-Chlorobenzene (Water - PID)	69	121

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK1831
Date.....: 01/15/02
Instrument.....: 5843

Batch Number.....: 02015A18
Time.....: 05:04
Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
3753742	A2U--	01/15/02	06:34
3753745	A2U-D	01/15/02	07:19
3753743MS	A2U--	01/15/02	08:05
3753744MSD	A2U--	01/15/02	08:50
LCS1806	LAB CONTROL	01/15/02	09:35

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK1831
Date.....: 01/15/02
Instrument.....: 5843

Batch Number.....: 02015A18
Time.....: 05:04
Matrix.....: Water

Method Blank Results				
CAS Number	Compound	Blank Conc. (UG/L)	LOQ (UG/L)	MDL (UG/L)
75-71-8	DICHLORODIFLUOROMETHANE	ND	2	.2
74-87-3	CHLOROMETHANE	ND	5	.5
75-01-4	VINYL CHLORIDE	ND	1	.2
74-83-9	BROMOMETHANE	ND	5	.5
75-00-3	CHLOROETHANE	ND	1	.2
75-69-4	TRICHLOROFLUOROMETHANE	ND	1	.2
75-35-4	1,1-DICHLOROETHENE	ND	1	.2
75-09-2	METHYLENE CHLORIDE	ND	1	.2
156-60-5	TRANS-1,2-DICHLOROETHENE	ND	1	.2
75-34-3	1,1-DICHLOROETHANE	ND	1	.2
156-59-2	CIS-1,2-DICHLOROETHENE	ND	1	.2
67-66-3	CHLOROFORM	ND	1	.2
107-06-2	1,2-DICHLOROETHANE	ND	1	.2
71-55-6	1,1,1-TRICHLOROETHANE	ND	1	.2
56-23-5	CARBON TETRACHLORIDE	ND	1	.2
71-43-2	BENZENE	ND	1	.2
78-87-5	1,2-DICHLOROPROPANE	ND	1	.2
79-01-6	TRICHLOROETHENE	ND	1	.2
75-27-4	BROMODICHLOROMETHANE	ND	1	.2
10061-01-5	CIS-1,3-DICHLOROPROPENE	ND	1	.2
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ND	1	.2
79-00-5	1,1,2-TRICHLOROETHANE	ND	1	.2
108-88-3	TOLUENE	ND	1	.2
124-48-1	DIBROMOCHLOROMETHANE	ND	1	.2
127-18-4	TETRACHLOROETHENE	ND	1	.2
108-90-7	CHLOROBENZENE	ND	1	.2
100-41-4	ETHYLBENZENE	ND	1	.2
75-25-2	BROMOFORM	ND	1	.2
79-34-5	1,1,2,2-TETRACHLOROETHANE	ND	1	.2
541-73-1	1,3-DICHLOROBENZENE	ND	1	.2
106-46-7	1,4-DICHLOROBENZENE	ND	1	.2
95-50-1	1,2-DICHLOROBENZENE	ND	1	.2
1330-20-7	TOTAL XYLENES	ND	3	.6

LOQ = Limit of Quantitation; MDL = Method Detection Limit
ND = None Detected; * = Above Limit of Quantitation

Matrix Spike/Matrix Spike Duplicate
Volatiles by GC - Water

Unspiked Sample Number.....: 3753742
Spiked Sample Number.....: 3753743MS
Spiked Dup Sample Number...: 3753744MSD

This MS/MSD applies to the
following samples:
3753742 3753743 3753744 3753745

Batch Number.....: 02015A18
Date.....: 01/15/02
Matrix.....: Water

Instrument.....: 5843

Compound	Spike Added (UG/L)	Sample Conc (UG/L)	MS Conc (UG/L)	MSD Conc (UG/L)	MS % Recov	MSD % Recov	QC Limits Recov	RPD	QC Limits RPD
DICHLORODIFLUOROMETH	20.0	0.51	19.4	19.5	94	95	18-211	0	30
CHLOROMETHANE	20.1	0.00	9.00	8.54	45	42	01-159	5	30
VINYL CHLORIDE	20.0	0.00	18.2	17.7	91	88	49-142	3	30
BROMOMETHANE	20.0	0.00	15.1	14.6	75	73	13-163	3	30
CHLOROETHANE	20.0	0.00	16.5	16.7	83	83	26-143	1	30
TRICHLOROFLUOROMETHA	20.0	0.00	17.4	17.0	87	85	52-127	2	30
1,1-DICHLOROETHENE	20.0	0.00	20.6	21.1	103	105	42-154	2	30
METHYLENE CHLORIDE	20.0	0.00	17.9	18.8	90	94	61-128	5	30
TRANS-1,2-DICHLORORE	20.0	0.00	21.1	21.8	105	109	74-133	3	30
1,1-DICHLOROETHANE	20.0	0.00	21.7	22.4	108	112	75-130	3	30
CIS-1,2-DICHLOROETHE	20.0	0.00	21.9	22.4	109	112	68-137	3	30
CHLOROFORM	20.0	0.21	21.7	22.5	108	111	76-127	3	30
1,2-DICHLOROETHANE	20.0	0.00	21.5	21.9	107	110	79-130	2	30
1,1,1-TRICHLOROETHAN	20.0	0.25	21.5	22.3	106	110	72-130	4	30
CARBON TETRACHLORIDE	20.0	0.00	21.7	22.4	108	112	72-130	3	30
BENZENE	20.0	0.00	20.3	20.2	102	101	79-119	0	30
1,2-DICHLOROPROPANE	20.0	0.00	21.2	21.6	106	108	80-128	2	30
TRICHLOROETHENE	20.0	1.09	20.8	20.4	99	97	65-130	2	30
BROMODICHLOROMETHANE	20.0	0.00	20.3	20.8	102	104	75-127	2	30
CIS-1,3-DICHLOROPROP	20.0	0.00	20.7	20.8	104	104	62-128	1	30
TRANS-1,3-DICHLOROPR	20.0	0.00	19.2	19.3	96	97	73-129	1	30
1,1,2-TRICHLOROETHAN	20.0	0.00	20.8	20.9	104	105	81-123	1	30
TOLUENE	20.0	0.00	19.7	19.7	99	99	76-120	0	30
DIBROMOCHLOROMETHANE	20.0	0.00	21.0	21.0	105	105	78-134	0	30
TETRACHLOROETHENE	20.0	14.3	34.1	34.4	99	100	72-129	1	30
CHLOROBENZENE	20.0	0.00	19.6	19.4	98	97	83-117	1	30
ETHYLBENZENE	20.0	0.00	20.0	20.0	100	100	79-121	0	30
BROMOFORM	20.0	0.00	22.1	22.2	110	111	72-143	0	30
1,1,2,2-TETRACHLOROE	20.0	0.00	21.4	21.7	107	109	80-132	1	30
1,3-DICHLOROBENZENE	20.0	0.00	20.1	20.1	101	100	81-132	0	30
1,4-DICHLOROBENZENE	20.0	0.00	19.4	19.2	97	96	84-115	1	30
1,2-DICHLOROBENZENE	20.0	0.00	20.8	20.7	104	104	78-131	1	30
TOTAL XYLENES	60.0	0.00	60.3	59.8	101	100	80-121	1	30

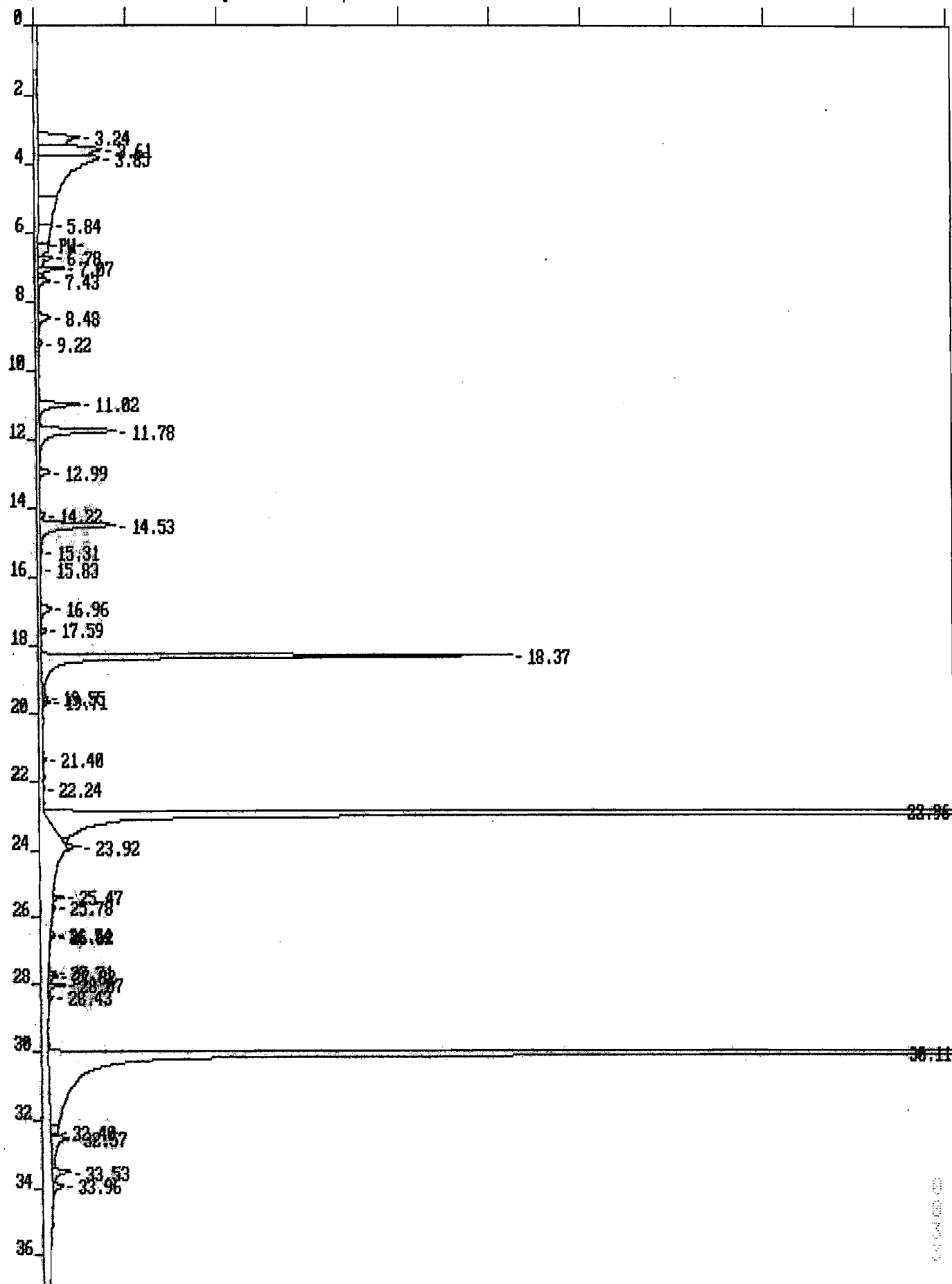
MS=Matrix Spike; MSD=Matrix Spike Duplicate; ND=None Detected; RPD=Relative Percent Difference

The RPD limits are advisory and are evaluated in relation to the other QC.

* = Value outside quality control limits.

Sample Data

File=C:\CP\DATA1\18015.04R Date printed=01-15-2002 Time= 06:34:36
Sample Name=3753742 02015A181127,8404,8400,8401
0.0 to 37.0 min. Low Y=0.001 High Y=15.001 mv Span=15.0



Sample Name: 3753742

Batch: 02015A18

Date Taken: Jan 15, 2002 06:34:30

Raw File: C:\CP\DATA1\18015.04R

Area File: C:\CP\DATA1\18015.04A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05

Dil. Factor: 1

Analyst: 115

Threshold: -3

Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 25):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.853	3.793	DICHLORODIFLUOROMETH	0.5090	40476	1030
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.306	4.306	VINYL CHLORIDE	0.0000	0	0
4.785	4.785	BROMOMETHANE	0.0000	0	0
4.974	4.974	CHLOROETHANE	0.0000	0	0
5.839	5.830	TRICHLOROFLUOROMETHA	0.0893	6731	228
6.779	6.750	1,1-DICHLOROETHENE	0.0507	2335	235
7.066	7.061	METHYLENE CHLORIDE	0.0530	2967	440
7.241	7.241	TRICHLOROTRIFLUOROET	0.0000	0	0
8.484	8.573	TRANS-1,2-DICHLOROET	0.0327	2444	204
9.220	9.222	1,1-DICHLOROETHANE	0.0101	402	54
11.016	11.009	CIS-1,2-DICHLOROETHE	0.1339	6570	678
11.529	11.529	BROMOCHLOROMETHANE	0.0000	0	0
11.785	11.784	CHLOROFORM	0.2073	14306	1268
12.033	12.033	2,2-DICHLOROPROPANE	0.0000	0	0
14.221	14.215	1,2-DICHLOROETHANE	0.0197	748	94
14.533	14.534	1,1,1-TRICHLOROETHAN	0.2513	14888	1249
15.306	15.298	1,1-DICHLOROPROPENE	0.0076	461	34
15.830	15.821	CARBON TETRACHLORIDE	0.0038	310	23
18.043	18.043	DIBROMOMETHANE	0.0000	0	0
18.215	18.215	1,2-DICHLOROPROPANE	0.0000	0	0
18.367	18.372	TRICHLOROETHENE	0.9663	56816	7724
18.480	18.480	BROMODICHLOROMETHANE	0.0000	0	0
19.706	19.867	2-CHLOROETHYL VINYL	0.0456	645	105
20.214	20.214	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.170	21.170	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.398	21.399	1,1,2-TRICHLOROETHAN	0.0067	384	56
21.862	21.862	1,3-DICHLOROPROPANE	0.0000	0	0
22.240	22.245	DIBROMOCHLOROMETHANE	0.0048	228	28
22.640	22.640	1,2-DIBROMOETHANE	0.0000	0	0
22.961	22.965	TETRACHLOROETHENE	14.3432	670623	159404
23.917	23.916	1,1,1,2-TETRACHLOROE	0.0191	760	223
24.013	24.013	CHLOROBENZENE	0.0000	0	0
24.694	24.694	BROMOFORM	0.0000	0	0
25.184	25.184	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.466	25.388	1,2,3-TRICHLOROPROPA	0.0396	936	202
26.054	26.054	BROMOBENZENE	0.0000	0	0
26.544	26.504	2-CHLOROTOLUENE	0.0190	368	76
26.617	26.622	4-CHLOROTOLUENE	0.0206	657	83
27.710	27.707	1,3-DICHLOROBENZENE	0.0193	519	113
27.821	27.822	1,4-DICHLOROBENZENE	0.0252	1051	157
28.433	28.433	1,2-DICHLOROBENZENE	0.0171	874	97
29.318	29.318	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.110	30.118	SURR-1B4CB-H	26.9646	498544	92427
32.570	32.575	1,2,4-TRICHLOROBENZE	0.0732	5700	294
33.533	33.538	HEXACHLOROBUTADIENE	0.0642	3139	305
33.959	33.963	1,2,3-TRICHLOROBENZE	0.0534	1894	182
		TOTAL 1,2-DICHLOROETHENE:	0.1666		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 89.8819%

Sample name: 3753742

Batch: 02015A181127,840

Raw file:

C:\CP\DATA1\18015.04R

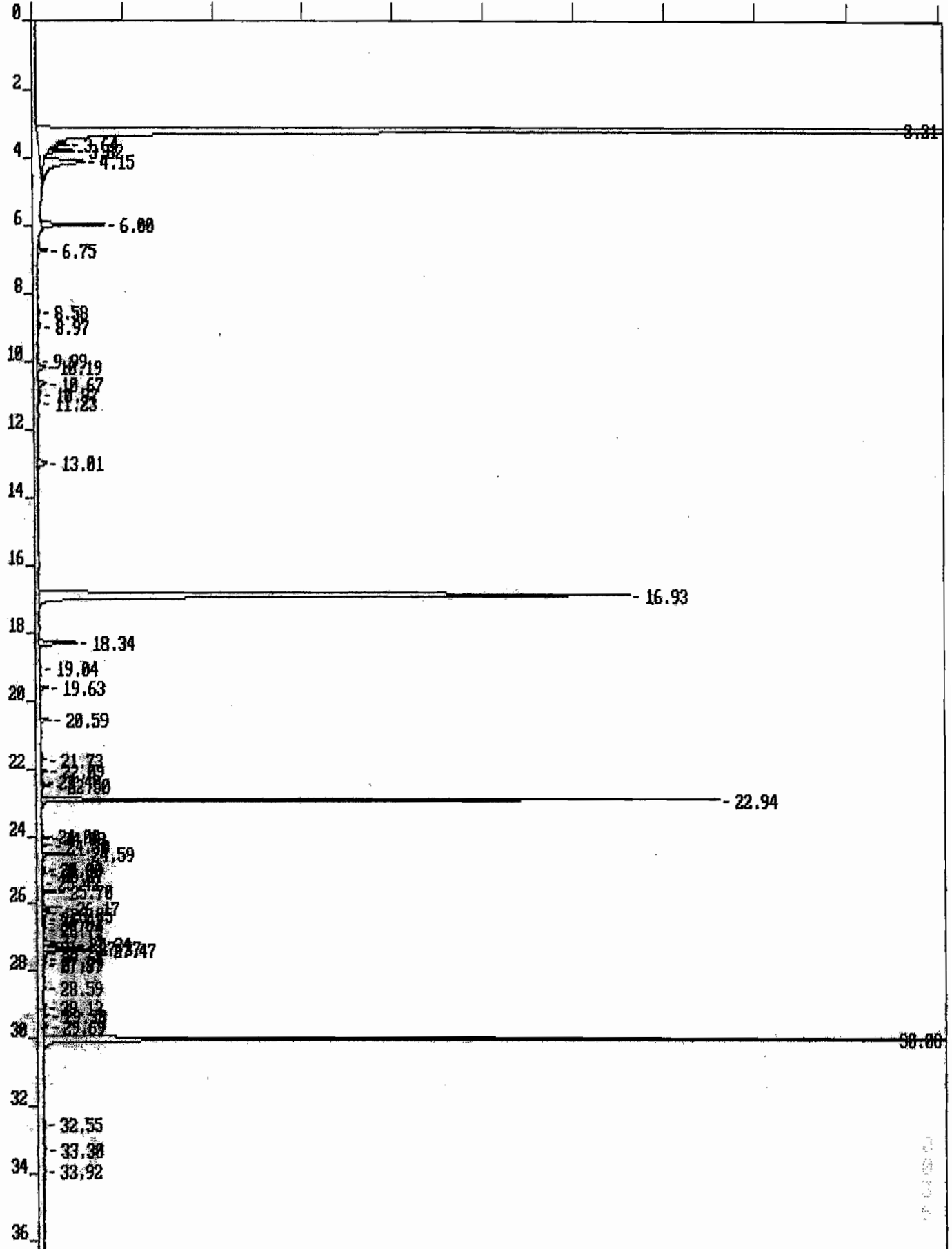
Reviewed by: TS 45

Verified by: umm49

Date: 1-15-02

Date: 01/15/02

File=C:\CP\DATA1\180158.04R Date printed=01-15-2002 Time= 06:35:38
Sample Name=3753742 02015A181127,8404,8400,8401
0.0 to 37.0 min. Low Y=0.0 High Y=15.0 mv Span=15.0



Sample Name: 3753742

Batch: 02015A18

Date Taken: Jan 15, 2002 06:34:30

Raw File: C:\CP\DATA1\18015B.04R

Area File: C:\CP\DATA1\18015B.04A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 27):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.278	4.278	VINYL CHLORIDE	0.0000	0	0
6.746	6.722	1,1-DICHLOROETHENE	0.4616	999	164
8.575	8.544	TRANS-1,2-DICHLOROET	0.0437	273	36
8.969	8.932	METHYL T-BUTYL ETHER	0.2084	416	51
10.972	10.981	CIS-1,2-DICHLOROETHE	0.1784	483	60
15.267	15.267	1,1-DICHLOROPROPENE	0.0000	0	0
16.005	16.005	BENZENE	0.0000	0	0
16.926	16.940	ISTD-FBENZENE	1.0000	73541	9809
18.335	18.344	TRICHLOROETHENE	1.0877	3449	641
19.838	19.838	2-CHLOROETHYL VINYL	0.0000	0	0
20.187	20.187	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.143	21.143	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.727	21.731	TOLUENE	0.0633	352	93
22.935	22.940	TETRACHLOROETHENE	14.3868	34074	11257
23.997	23.990	CHLOROBENZENE	0.0193	126	38
24.303	24.304	ETHYLBENZENE	0.1076	568	175
24.589	24.597	M,P-XYLENE	0.3575	2024	578
25.064	25.062	STYRENE	0.0236	145	49
25.166	25.164	O-XYLENE	0.0552	342	88
25.704	25.708	ISOPROPYLBENZENE	0.1872	882	229
26.175	26.026	BROMOBENZENE	0.1787	1051	328
26.347	26.354	N-PROPYLBENZENE	0.1489	835	212
26.489	26.478	2-CHLOROTOLUENE	0.0355	257	55
26.607	26.597	4-CHLOROTOLUENE	0.0275	308	45
26.791	26.801	1,3,5-TRIMETHYLBENZE	0.0329	341	66
27.240	27.225	TERT-BUTYLBENZENE	0.4922	1729	522
27.373	27.407	1,2,4-TRIMETHYLBENZE	0.4443	2297	667
27.575	27.575	SEC-BUTYLBENZENE	0.0000	0	0
27.669	27.681	1,3-DICHLOROBENZENE	0.0270	100	40
27.789	27.797	1,4-DICHLOROBENZENE	0.0279	127	41
27.874	27.882	P-ISOPROPYLTOLUENE	0.0308	111	33
28.406	28.406	1,2-DICHLOROBENZENE	0.0000	0	0
28.590	28.594	N-BUTYLBENZENE	0.0403	156	41
30.081	30.090	SURR-1B4CB-P	27.3711	125204	33394
32.553	32.546	1,2,4-TRICHLOROBENZE	0.0731	252	35
33.297	33.292	NAPHTHALENE	0.0648	182	36
33.509	33.509	HEXACHLOROBUTADIENE	0.0000	0	0
33.925	33.934	1,2,3-TRICHLOROBENZE	0.0672	118	27

XYLENES (Total): 0.4127

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 91.2369%

Chrom Perfect version 6.07

Reported on 01-15-2002at 06:36:57

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753742

Batch: 02015A181127,840

Raw file:

C:\CP\DATA1\18015B.04R

Reviewed by: TZUS

Verified by: AMMM49

Date: 1-15-02

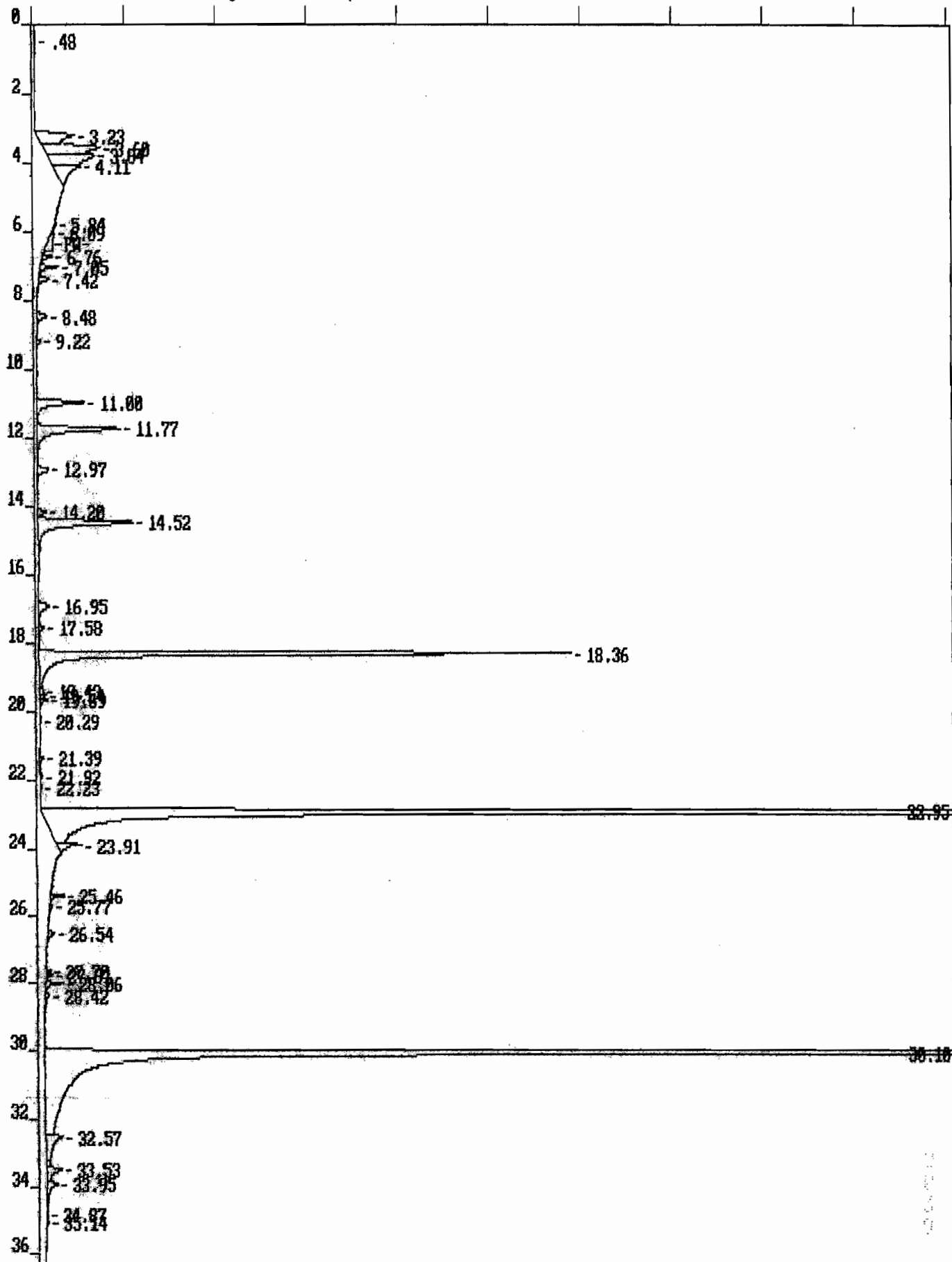
Date: 01/15/02

File=C:\CP\DATA1\18015.05R Date printed=01-15-2002 Time= 07:20:00

Sample Name=3753745

02015A181127,8404

0.0 to 37.0 min. Low Y=-0.006 High Y=14.994 mv Span=15.0



Sample Name: 3753745

Batch: 02015A18

Date Taken: Jan 15, 2002 07:19:55

Raw File: C:\CP\DATA1\18015.05R

Area File: C:\CP\DATA1\18015.05A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 25):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.841	3.793	DICHLORODIFLUOROMETH	0.3677	10857	744
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.107	4.306	VINYL CHLORIDE	0.1254	8233	446
4.785	4.785	BROMOMETHANE	0.0000	0	0
4.974	4.974	CHLOROETHANE	0.0000	0	0
5.837	5.830	TRICHLOROFLUOROMETHA	0.0117	476	30
6.762	6.750	1,1-DICHLOROETHENE	0.0352	1086	163
7.052	7.061	METHYLENE CHLORIDE	0.0366	1924	304
7.417	7.241	TRICHLOROTRIFLUOROET	0.0459	1239	167
8.483	8.573	TRANS-1,2-DICHLOROET	0.0254	1903	159
9.216	9.222	1,1-DICHLOROETHANE	0.0129	629	69
11.000	11.009	CIS-1,2-DICHLOROETHE	0.1516	7390	767
11.529	11.529	BROMOCHLOROMETHANE	0.0000	0	0
11.773	11.784	CHLOROFORM	0.2199	14920	1345
12.033	12.033	2,2-DICHLOROPROPANE	0.0000	0	0
14.203	14.215	1,2-DICHLOROETHANE	0.0282	1112	135
14.522	14.534	1,1,1-TRICHLOROETHAN	0.3108	18496	1544
15.298	15.298	1,1-DICHLOROPROPENE	0.0000	0	0
15.821	15.821	CARBON TETRACHLORIDE	0.0000	0	0
18.043	18.043	DIBROMOMETHANE	0.0000	0	0
18.215	18.215	1,2-DICHLOROPROPANE	0.0000	0	0
18.355	18.372	TRICHLOROETHENE	1.0907	63307	8718
18.480	18.480	BROMODICHLOROMETHANE	0.0000	0	0
19.694	19.867	2-CHLOROETHYL VINYL	0.0584	1211	134
20.291	20.214	CIS-1,3-DICHLOROPROP	0.0033	374	24
21.170	21.170	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.390	21.399	1,1,2-TRICHLOROETHAN	0.0064	344	54
21.915	21.862	1,3-DICHLOROPROPANE	0.0056	236	39
22.226	22.245	DIBROMOCHLOROMETHANE	0.0049	283	29
22.640	22.640	1,2-DIBROMOETHANE	0.0000	0	0
22.950	22.965	TETRACHLOROETHENE	16.2780	765466	180907
23.905	23.916	1,1,1,2-TETRACHLOROE	0.0335	2581	392
24.013	24.013	CHLOROBENZENE	0.0000	0	0
24.694	24.694	BROMOFORM	0.0000	0	0
25.184	25.184	1,1,2,2-TETRACHLOROE	0.0000	0	0
25.455	25.388	1,2,3-TRICHLOROPROPA	0.0428	1113	218
26.054	26.054	BROMOBENZENE	0.0000	0	0
26.544	26.504	2-CHLOROTOLUENE	0.0293	1162	117
26.622	26.622	4-CHLOROTOLUENE	0.0000	0	0
27.699	27.707	1,3-DICHLOROBENZENE	0.0134	343	78
27.810	27.822	1,4-DICHLOROBENZENE	0.0175	699	109
28.416	28.433	1,2-DICHLOROBENZENE	0.0127	668	72
29.318	29.318	1,2-DIBROMO-3-CHLORO	0.0000	0	0
30.098	30.118	SURR-1B4CB-H	27.7762	518006	95209
32.566	32.575	1,2,4-TRICHLOROBENZE	0.0662	5946	266
33.526	33.538	HEXACHLOROBUTADIENE	0.0536	3343	254
33.950	33.963	1,2,3-TRICHLOROBENZE	0.0523	2888	179
TOTAL 1,2-DICHLOROETHENE:			0.1770		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 92.5874%

Sample name: 3753745

Batch: 02015A181127,840

Raw file:

C:\CP\DATA1\18015.05R

Reviewed by: MMB994

Verified by: UMM49

Date: 1/15/02

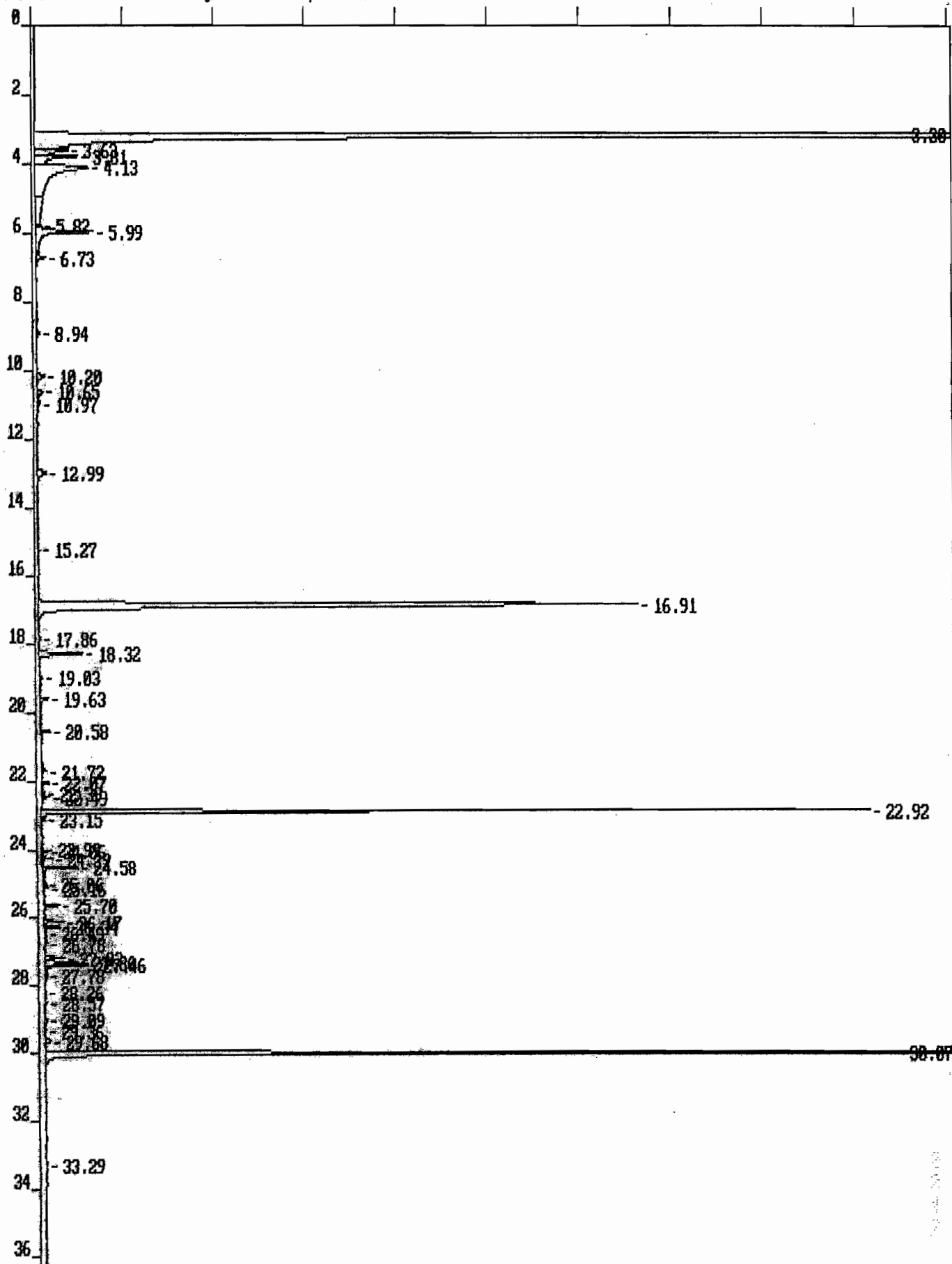
Date: 01/15/02

File=C:\CP\DATA1\180158.05R Date printed=01-15-2002 Time= 07:21:01

Sample Name=3753745

02015A181127,8404

0.0 to 37.0 min. Low Y=0.0 High Y=15.0 mv Span=15.0



Sample Name: 3753745

Batch: 02015A18

Date Taken: Jan 15, 2002 07:19:55

Raw File: C:\CP\DATA1\18015B.05R

Area File: C:\CP\DATA1\18015B.05A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 27):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.278	4.278	VINYL CHLORIDE	0.0000	0	0
6.732	6.722	1,1-DICHLOROETHENE	0.4400	1088	157
8.544	8.544	TRANS-1,2-DICHLOROET	0.0000	0	0
8.940	8.932	METHYL T-BUTYL ETHER	0.2005	392	49
10.971	10.981	CIS-1,2-DICHLOROETHE	0.1917	460	64
15.270	15.267	1,1-DICHLOROPROPENE	0.0827	181	24
16.005	16.005	BENZENE	0.0000	0	0
16.913	16.940	ISTD-FBENZENE	1.0000	73760	9820
18.323	18.344	TRICHLOROETHENE	1.2242	3858	722
19.838	19.838	2-CHLOROETHYL VINYL	0.0000	0	0
20.187	20.187	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.143	21.143	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.719	21.731	TOLUENE	0.0603	302	89
22.924	22.940	TETRACHLOROETHENE	17.3387	41460	13582
23.992	23.990	CHLOROBENZENE	0.0182	165	36
24.289	24.304	ETHYLBENZENE	0.1113	577	181
24.579	24.597	M,P-XYLENE	0.3690	2165	597
25.056	25.062	STYRENE	0.0237	174	49
25.156	25.164	O-XYLENE	0.0569	319	91
25.696	25.708	ISOPROPYLBENZENE	0.2105	938	258
26.165	26.026	BROMOBENZENE	0.1754	995	323
26.338	26.354	N-PROPYLBENZENE	0.1927	1088	274
26.487	26.478	2-CHLOROTOLUENE	0.0217	123	34
26.597	26.597	4-CHLOROTOLUENE	0.0000	0	0
26.782	26.801	1,3,5-TRIMETHYLBENZE	0.0245	200	49
27.228	27.225	TERT-BUTYLBENZENE	0.3236	1141	343
27.361	27.407	1,2,4-TRIMETHYLBENZE	0.3636	1893	546
27.575	27.575	SEC-BUTYLBENZENE	0.0000	0	0
27.681	27.681	1,3-DICHLOROBENZENE	0.0000	0	0
27.776	27.797	1,4-DICHLOROBENZENE	0.0256	140	38
27.882	27.882	P-ISOPROPYLTOLUENE	0.0000	0	0
28.406	28.406	1,2-DICHLOROBENZENE	0.0000	0	0
28.573	28.594	N-BUTYLBENZENE	0.0330	117	33
30.069	30.090	SURR-1B4CB-P	28.0245	128358	34230
32.546	32.546	1,2,4-TRICHLOROBENZE	0.0000	0	0
33.288	33.292	NAPHTHALENE	0.0429	106	24
33.509	33.509	HEXACHLOROBUTADIENE	0.0000	0	0
33.934	33.934	1,2,3-TRICHLOROBENZE	0.0000	0	0

XYLENES (Total): 0.4259

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 93.4149%

Chrom Perfect version 6.07

Reported on 01-15-2002at 07:22:22

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753745

Batch: 02015A181127,840

Raw file:

C:\CP\DATA1\18015B.05R

Reviewed by: mm49

Verified by: mm49

Date: 1/15/02

Date: 1/15/02

Standards Data

Quality Control Summary

SDG# HUL05

Instrument ID: 5843

Initial Calibration Summary

Calibration Batch: 01365A18

Initial Calibration Date(s): 12/31/01 (HALL)

Initial Calibration Date(s): 12/31/01 (PID)

Sample Information			
LL Sample#	Sample Code	Date	Analysis Time
CHKSTD		01/15/02	04:03
BLK1831	METHOD BLANK	01/15/02	05:04
3753742	A2U--	01/15/02	06:34
3753745	A2U-D	01/15/02	07:19
3753743MS	A2U--	01/15/02	08:05
3753744MSD	A2U--	01/15/02	08:50
LCS1806	LAB CONTROL	01/15/02	09:35
CHKSTD		01/15/02	10:36

STANDARD DATE INJECTED TIME INJECTED	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8	% RSD		
	12/31/01 03:25	12/31/01 04:08	12/31/01 04:52	12/31/01 05:35	12/31/01 06:18	12/31/01 07:01	12/31/01 07:44	12/31/01 08:28			
COMPOUND (DETECTOR)	Retention Time		Relative Response Factor (RRF)						MEAN	% RSD	
	LEVEL 3	Window	LEVEL1	LEVEL2	LEVEL3	LEVEL4	LEVEL5	LEVEL6	LEVEL7	LEVEL8	
	3.867	0.10	2339.34	2176.23	2119.02	1942.12	1953.18	1811.01	1829.03		2024.27
	4.042	0.10	3146.97	2800.32	2533.01	2210.57	1958.56	1580.24	1411.23		2234.41
	4.363	0.20	4318.64	4110.27	3913.18	3609.46	3384.60	2898.41	2668.54		3557.59
	4.835	0.20	3052.65	2950.32	2905.84	2714.97	2549.96	2429.99	2210.44		2687.74
	5.037	0.20	4876.12	4683.07	4535.54	4233.82	4077.04	3851.80	3572.67		4261.44
	5.895	0.20	2919.53	2662.61	2824.03	2685.61	2339.53	2290.54	2150.32		2553.17
	6.813	0.20	5129.45	4936.30	4966.89	4793.30	4423.51	4182.14	3973.90		4629.36
	7.121	0.20	11309.1	9166.35	8754.83	8198.89	7475.36	6936.87	6237.90		8297.06
	8.634	0.20	6756.10	6716.87	6721.06	6509.96	6164.07	5690.53	5176.21		6247.83
	9.281	0.20	5717.91	5786.36	5778.99	5536.01	5299.83	4889.83	4451.48		5351.49
	11.068	0.20	5350.32	5384.59	5444.44	5249.39	5010.98	4688.30	4296.38		5060.63
	11.841	0.10	6758.99	6726.33	6589.55	6328.74	5946.63	5458.60	5003.89		6116.10
	14.261	0.20	4947.15	5083.32	5079.30	5067.00	4742.63	4453.45	4110.45		4783.33

* = %RSD outside control limits.

Quality Control Summary

SDG# HUL05

Instrument ID: 5843

Initial Calibration Summary

Calibration Batch: 01365A18

Initial Calibration Date(s): 12/31/01 (HALL)

Initial Calibration Date(s): 12/31/01 (PID)

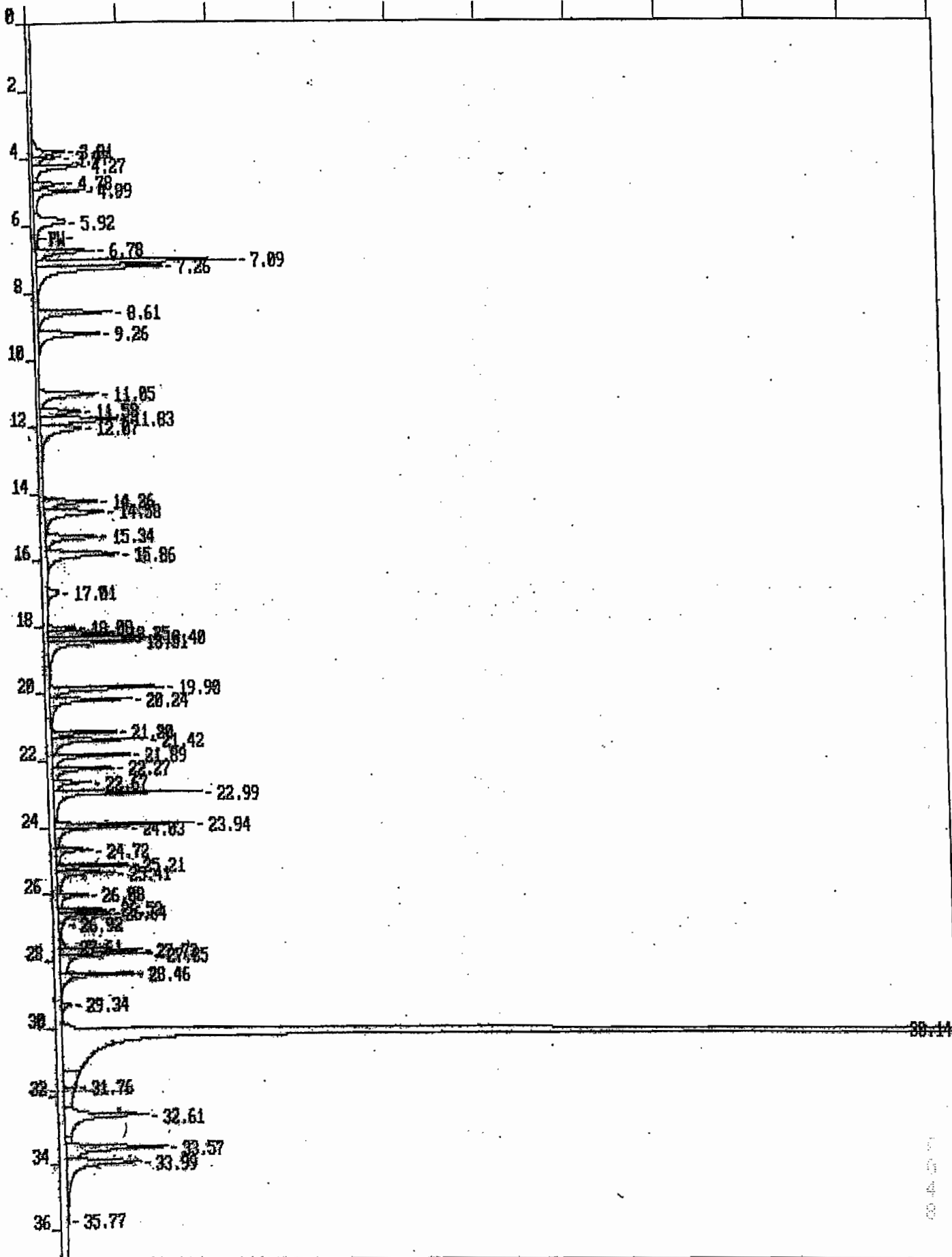
STANDARD DATE INJECTED TIME INJECTED	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8	MEAN	% RSD
	12/31/01 03:25	12/31/01 04:08	12/31/01 04:52	12/31/01 05:35	12/31/01 06:18	12/31/01 07:01	12/31/01 07:44	12/31/01 08:28		
	Relative Response Factor (RRF)									
COMPOUND (DETECTOR)	Retention Time LEVEL 3 Window	LEVEL1	LEVEL2	LEVEL3	LEVEL4	LEVEL5	LEVEL6	LEVEL7	LEVEL8	
1,1,1-TRICHLOROETHAN (HALL)	14.575	5495.49	5366.96	5357.81	5243.62	4809.62	4439.62	4065.99	4968.44	11
CARBON TETRACHLORIDE (HALL)	15.856	6679.58	6564.10	6593.01	6389.14	5886.84	5347.39	4946.25	6058.04	11
BENZENE (PID)	16.038	0.0779	0.0758	0.0748	0.0739	0.0734	0.0717	0.0720	0.0737	3
1,2-DICHLOROPROPANE (HALL)	18.236	6041.71	6080.72	6129.48	5951.99	5655.06	5217.07	4815.46	5698.78	9
TRICHLOROETHENE (PID)	18.362	0.0647	0.0620	0.0609	0.0595	0.0588	0.0573	0.0579	0.0600	4
BROMODICHLOROMETHANE (HALL)	18.499	7603.96	7354.13	7258.92	6977.21	6576.63	6052.26	5555.74	6768.41	11
CIS-1,3-DICHLOROPROP (HALL)	20.227	7358.99	7687.71	7889.11	7646.41	7193.25	6702.38	6076.31	7222.02	9
TRANS-1,3-DICHLOROPR (HALL)	21.182	6828.53	7287.10	7593.44	7418.99	6959.85	6562.00	6016.66	6952.37	8
1,1,2-TRICHLOROETHAN (HALL)	21.410	9006.99	9275.79	9206.11	8824.55	8106.07	7568.32	6768.92	8393.82	11
TOLUENE (PID)	21.740	0.1631	0.1577	0.1541	0.1505	0.1479	0.1421	0.1406	0.1502	5
DIBROMOCHLOROMETHANE (HALL)	22.255	5687.33	6034.95	6276.69	6088.78	5889.02	5652.64	5231.81	5837.32	6
TETRACHLOROETHENE (HALL)	22.973	12597.3	12517.5	12319.9	11578.6	10679.1	9781.82	8320.60	11113.5	15
CHLOROBENZENE (PID)	23.996	0.2134	0.2097	0.2063	0.2020	0.2012	0.1933	0.1930	0.2028	4
ETHYLBENZENE (PID)	24.311	0.1803	0.1730	0.1699	0.1658	0.1630	0.1569	0.1548	0.1618	5
M,P-XYLENE (PID)	24.602	0.1796	0.1726	0.1692	0.1643	0.1618	0.1569	0.1538	0.1601	5
BROMOFORM (HALL)	24.703	3340.66	3668.29	3943.24	3824.16	3795.83	3710.17	3600.13	3697.50	5
O-XYLENE (PID)	25.170	0.1762	0.1694	0.1668	0.1645	0.1645	0.1591	0.1532	0.1627	6
1,1,2,2-TETRACHLOROE (HALL)	25.190	6806.88	7112.75	7126.73	6626.71	6253.45	6052.40	5451.89	6490.11	9
1,3-DICHLOROBENZENE (HALL)	27.713	6035.81	6123.87	6360.50	6040.12	5885.08	5512.29	5037.77	5856.49	8
1,4-DICHLOROBENZENE (PID)	27.801	0.1580	0.1545	0.1516	0.1481	0.1484	0.1445	0.1450	0.1564	3
1,2-DICHLOROBENZENE (HALL)	28.438	5865.11	5988.09	6101.37	5764.74	5729.38	5308.48	4847.43	5657.80	8
SURR-1B4CB-P (PID)	30.094	0.1189	0.1209	0.1217	0.1213	0.1246	0.1267	0.1253	0.1357	4
SURR-1B4CB-H (HALL)	30.123	3359.67	3462.94	3532.09	3335.15	3394.79	3493.53	3415.72	3427.70	2

File-C:\CP\DATA1\18365.20R Date printed=12-31-2001 Time= 16:16:30

Sample Name=MDL

01365A18

0.0 to 37.0 min. Low Y=-0.001 High Y=14.999 mv Span=15.0



Sample Name: MDL

Batch: 01365A18

Date Taken: Dec 31, 2001 16:11:18

Raw File: C:\CP\DATA1\18365.20R

Area File: C:\CP\DATA1\18365.20A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 11):

Ret Time Expected	(min) RT	(min) Peak Name	Amount *	Peak	Peak
			(ug/L)	Area	Height
	3.811	3.805 DICHLORODIFLUOROMETH	0.2639	4736	534
	3.971	3.985 CHLOROMETHANE	0.2090	3630	467
	4.273	4.314 VINYL CHLORIDE	0.2046	7359	728
	4.780	4.780 BROMOMETHANE	0.1847	3223	497
	4.989	4.980 CHLOROETHANE	0.1904	7130	811
	5.922	5.837 TRICHLOROFLUOROMETHA	0.2016	9209	515
	6.777	6.761 1,1-DICHLOROETHENE	0.2100	7272	972
	7.087	7.069 METHYLENE CHLORIDE	0.4008	20017	3326
	7.259	7.253 TRICHLOROTRIFLUOROET	0.5776	25438	2098
	8.607	8.582 TRANS-1,2-DICHLOROET	0.1980	10354	1237
	9.257	9.231 1,1-DICHLOROETHANE	0.1926	10398	1031
	11.052	11.019 CIS-1,2-DICHLOROETHE	0.1939	9776	981
	11.575	11.537 BROMOCHLOROMETHANE	0.1862	5999	678
	11.826	11.792 CHLOROFORM	0.2099	12849	1284
	12.071	12.040 2,2-DICHLOROPROPANE	0.2121	11358	689
	14.261	14.223 1,2-DICHLOROETHANE	0.1887	8003	903
	14.579	14.542 1,1,1-TRICHLOROETHAN	0.1997	12629	992
	15.341	15.305 1,1-DICHLOROPROPENE	0.1973	8532	867
	15.864	15.828 CARBON TETRACHLORIDE	0.1988	13588	1204
	18.082	18.048 DIBROMOMETHANE	0.1589	2915	471
	18.248	18.220 1,2-DICHLOROPROPANE	0.1897	7219	1081
	18.403	18.377 TRICHLOROETHENE	0.2110	10555	1687
	18.509	18.485 BROMODICHLOROMETHANE	0.2052	12668	1389
	19.901	19.872 2-CHLOROETHYL VINYL	0.8293	12136	1909
	20.243	20.220 CIS-1,3-DICHLOROPROP	0.1884	9817	1361
	21.201	21.176 TRANS-1,3-DICHLOROPR	0.1573	5887	1093
	21.425	21.406 1,1,2-TRICHLOROETHAN	0.1909	10350	1602
	21.888	21.869 1,3-DICHLOROPROPANE	0.1860	8008	1305
	22.271	22.253 DIBROMOCHLOROMETHANE	0.1753	6767	1024
	22.670	22.648 1,2-DIBROMOETHANE	0.1672	4285	629
	22.986	22.974 TETRACHLOROETHENE	0.2249	15415	2500
	23.935	23.925 1,1,1,2-TETRACHLOROE	0.2007	9513	2349
	24.034	24.022 CHLOROBENZENE	0.2228	9046	1229
	24.721	24.704 BROMOFORM	0.1684	4720	623
	25.205	25.194 1,1,2,2-TETRACHLOROE	0.1865	6071	1210
	25.410	25.398 1,2,3-TRICHLOROPROPA	0.1887	6495	963
	26.081	26.064 BROMOBENZENE	0.1803	4073	510
	26.525	26.514 2-CHLOROTOLUENE	0.2023	3589	807
	26.645	26.633 4-CHLOROTOLUENE	0.2162	5265	875
	27.731	27.719 1,3-DICHLOROBENZENE	0.2346	6197	1374
	27.845	27.833 1,4-DICHLOROBENZENE	0.2512	12316	1566
	28.457	28.444 1,2-DICHLOROBENZENE	0.2194	8978	1241
	29.344	29.330 1,2-DIBROMO-3-CHLORO	0.1655	1598	186
	30.140	30.132 SURR-1B4CB-H	26.2600	481548	90012
	32.606	32.593 1,2,4-TRICHLOROBENZE	0.3504	18000	1408
	33.568	33.559 HEXACHLOROBUTADIENE	0.3626	16410	1719
	33.995	33.985 1,2,3-TRICHLOROBENZE	0.3673	18386	1255
		TOTAL 1,2-DICHLOROETHENE:	0.3919		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene

87.5334%

Chrom Perfect version 6.07

Reported on 12-31-2001at 16:17:19

Sample name: MDL

Batch: 01365A18

Raw file:

C:\CP\DATA1\18365.20R

Reviewed by:

MDL 994

Verified by:

SKP 688

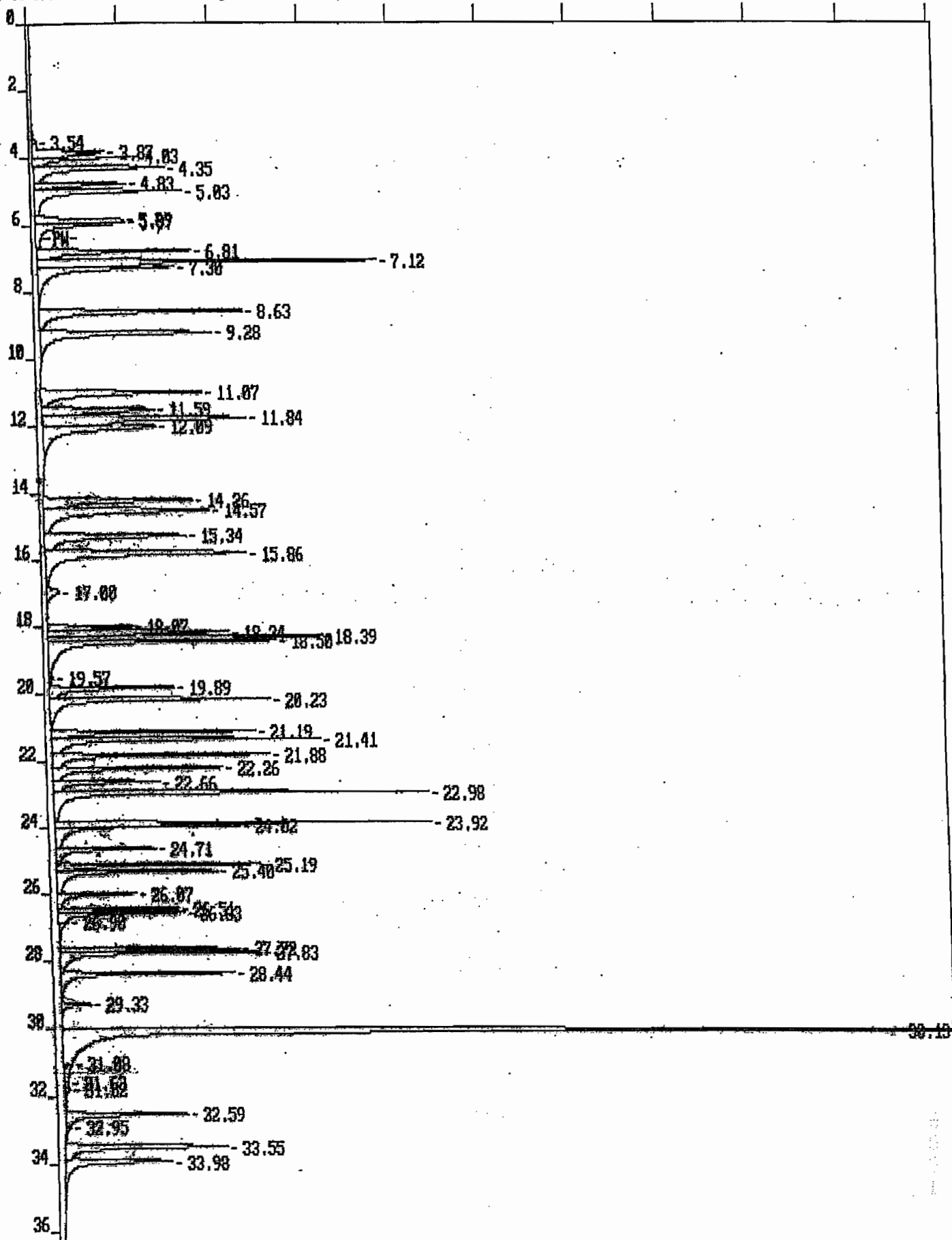
Date:

12/31/01

Date:

12-31-01

File=C:\CP\DATA1\18365.03R Date printed=12-31-2001 Time= 03:25:31
Sample Name=CALSTD1 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=-0.024 High Y=14.976 mv Span=15.0



Sample Name: CALSTD1

Batch: 01365A18

Date Taken: Dec 31, 2001 03:25:27

Raw File: C:\CP\DATA1\18365.03R

Area File: C:\CP\DATA1\18365.03A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 2):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.865	3.875	0.8476	9705	1186
4.030	4.064	1.8207	11287	1614
4.348	4.381	0.7194	18609	2164
4.828	4.852	0.7358	9209	1526
5.032	5.051	0.9333	18955	2458
5.895	5.913	0.6559	9334	1463
6.811	6.831	0.6993	18443	2565
7.119	7.142	0.9129	34795	5655
7.299	7.323	0.8109	27320	2268
8.632	8.656	0.6505	26479	3378
9.280	9.305	0.6214	27404	2859
11.069	11.096	0.6364	25078	2675
11.589	11.617	0.5950	15893	1860
11.841	11.873	0.6373	32670	3379
12.086	12.125	0.6673	27194	1876
14.263	14.290	0.6602	21043	2474
14.575	14.607	0.6343	33725	2748
15.338	15.364	0.6739	22681	2353
15.856	15.886	0.6233	37961	3340
18.072	18.088	0.5309	8438	1400
18.238	18.258	0.6252	20219	3021
18.393	18.414	0.6953	27812	4552
18.500	18.521	0.6459	32840	3802
19.889	19.897	1.1319	13199	2069
20.231	20.243	0.5800	24415	3679
21.187	21.195	0.5571	17055	3414
21.412	21.423	0.6515	26551	4503
21.875	21.884	0.6602	20443	3645
22.260	22.267	0.5533	17015	2844
22.657	22.660	0.5425	10686	1780
22.975	22.985	0.6996	34707	6299
23.924	23.932	0.6369	24934	6328
24.022	24.030	0.7004	19180	3098
24.709	24.711	0.5075	10383	1670
25.194	25.200	0.6529	15608	3403
25.398	25.403	0.6441	16848	2690
26.068	26.070	0.5498	8133	1315
26.513	26.519	0.6434	8449	2018
26.632	26.638	0.6597	11519	2129
27.718	27.724	0.6471	12538	3018
27.832	27.839	0.6873	20039	3390
28.443	28.450	0.6572	17639	2933
29.333	29.336	0.4961	3103	479
30.127	30.137	12.5044	187449	34269
32.588	32.597	0.6519	14156	2058
33.550	33.561	0.6548	20402	2718
33.978	33.987	0.6743	15838	1792
TOTAL 1,2-DICHLOROETHENE:		1.2869		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 41.6814%

Sample name: CALSTD1

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365.03R

Reviewed by:

PLS

Verified by:

SKPLe88

Date:

12-31-01

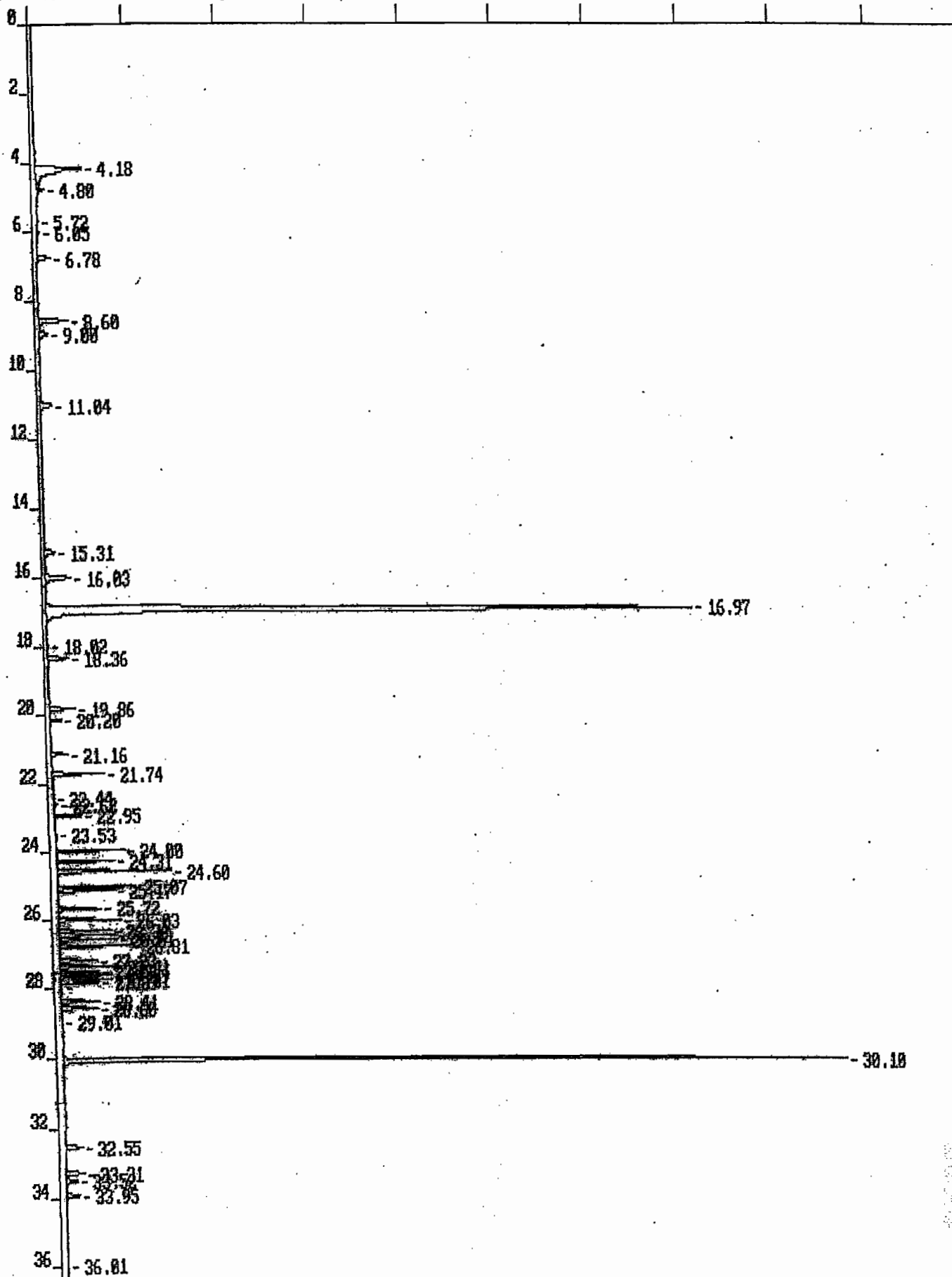
Date:

12-31-01

File=C:\CP\DATA1\18365B.03R Date printed=12-31-2001 Time= 03:27:02

Sample Name=CALSTD1 01365A188400,8401,8464

0.0 to 37.0 min. Low Y=0.006 High Y=15.006 mv Span=15.0



Sample Name: CALSTD1

Batch: 01365A18

Date Taken: Dec 31, 2001 03:25:27

Raw File: C:\CP\DATA1\18365B.03R

Area File: C:\CP\DATA1\18365B.03A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 2):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.355	4.355	0.0000	0	0
6.783	6.802	0.5274	1275	215
8.600	8.627	0.5076	2812	476
8.995	9.017	0.5338	1259	143
11.040	11.066	0.5112	1471	193
15.311	15.337	0.5164	1266	173
16.034	16.068	0.4939	2925	408
16.968	17.003	1.0000	78634	10461
18.363	18.385	0.5064	1776	338
19.859	19.869	0.8863	1860	432
20.198	20.216	0.4977	839	207
21.159	21.168	0.4756	1060	286
21.740	21.754	0.5109	3142	853
22.948	22.960	0.5189	1437	456
23.998	24.006	0.4966	3102	1116
24.312	24.321	0.5141	2754	943
24.604	24.613	1.0309	6101	1878
25.071	25.079	0.5004	3203	1160
25.172	25.181	0.5096	2850	921
25.715	25.724	0.5196	2220	717
26.034	26.042	0.4893	2986	1013
26.361	26.370	0.5245	2484	840
26.485	26.494	0.5046	2617	889
26.605	26.613	0.5024	2710	931
26.808	26.817	0.5141	3492	1166
27.233	27.241	0.5134	2093	615
27.415	27.423	0.5018	2655	850
27.582	27.592	0.5069	2120	623
27.689	27.698	0.4970	2566	818
27.805	27.813	0.5038	2626	827
27.889	27.899	0.5178	1988	622
28.414	28.424	0.5088	2186	627
28.602	28.611	0.5264	2425	598
30.097	30.109	9.4428	48363	12690
32.552	32.568	0.5056	1376	271
33.306	33.315	0.5056	1663	310
33.520	33.532	0.5535	1070	186
33.948	33.958	0.5207	1276	230

XYLENES (Total): 1.5405

* Amounts in ug/L for water samples, ug/kg for solid samples..

Surrogate Recovery: BrClBenzene 31.4760%

Chrom Perfect version 6.07

Reported on 12-31-2001 at 03:28:30

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 2

Updated from file = C:\CP\DATA1\18365B.03A

Amount injected = 1

Standard amount injected = 1

Calibration level = 1 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD1

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.03R

Reviewed by:

JS 45

Verified by:

SCP 688

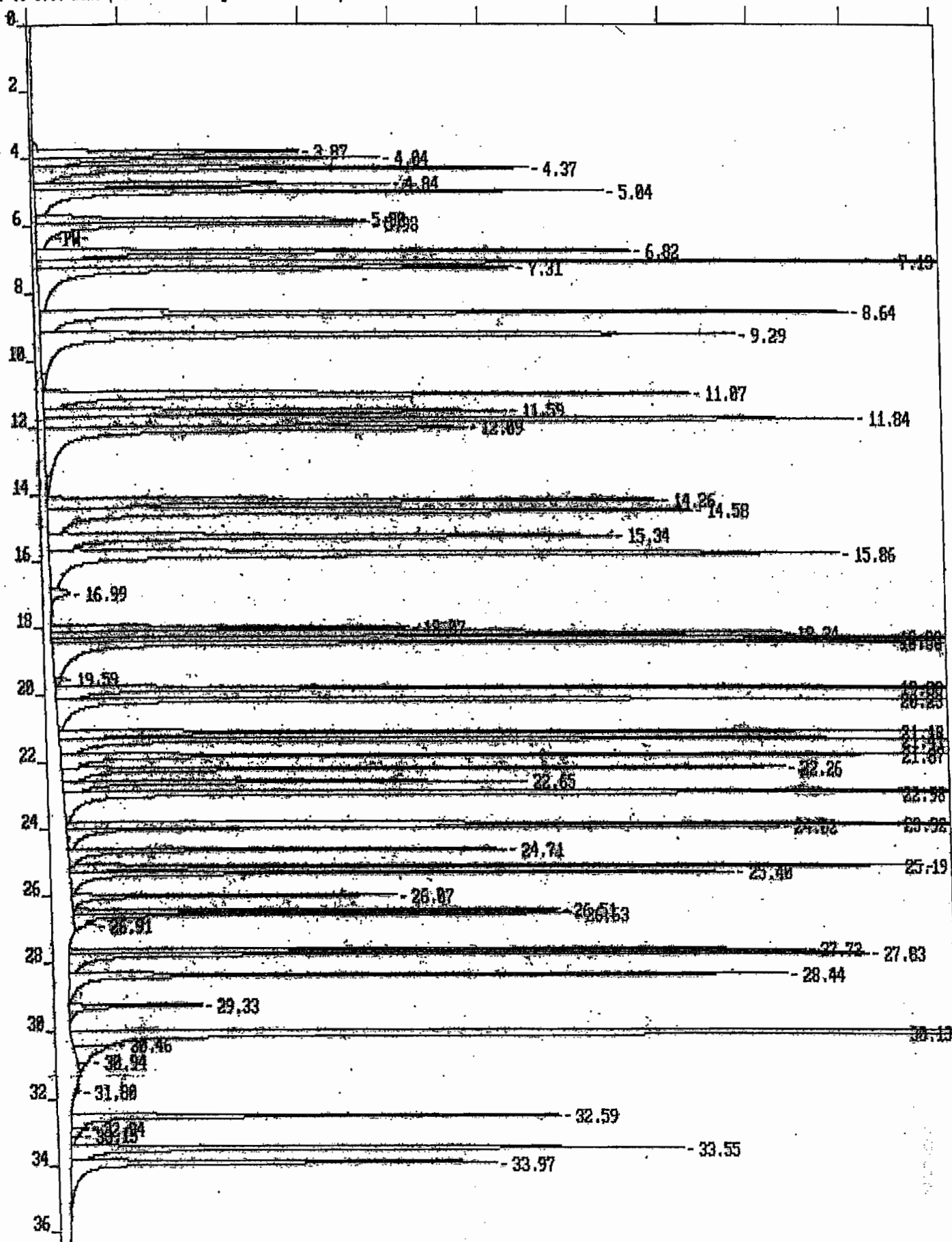
Date:

12-31-01

Date:

12-31-01

File=C:\CP\DATA1\18365.04R Date printed=12-31-2001 Time= 04:09:01
Sample Name=CHLSTD2 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=-0.011 High Y=14.989 mv Span=15.0



Sample Name: CALSTD2

Batch: 01365A18

Date Taken: Dec 31, 2001 04:08:56

Raw File: C:\CP\DATA1\18365.04R

Area File: C:\CP\DATA1\18365.04A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 3):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.875	3.865	DICHLORODIFLUOROMETH	2.9570	33049	4418
4.044	4.030	CHLOROMETHANE	4.8946	37220	5741
4.369	4.348	VINYL CHLORIDE	2.6790	63881	8221
4.840	4.828	BROMOMETHANE	2.7001	33281	5901
5.043	5.032	CHLOROETHANE	3.2240	65240	9460
5.902	5.895	TRICHLOROFLUOROMETHA	2.3460	34100	5325
6.821	6.811	1,1-DICHLOROETHENE	2.5839	67378	9873
7.127	7.119	METHYLENE CHLORIDE	2.7220	111510	18333
7.309	7.299	TRICHLOROTRIFLUOROET	2.6861	91222	7924
8.638	8.632	TRANS-1,2-DICHLOROET	2.5165	99932	13434
9.286	9.280	1,1-DICHLOROETHANE	2.4644	108448	11573
11.072	11.069	CIS-1,2-DICHLOROETHE	2.4992	95824	10769
11.592	11.589	BROMOCHLOROMETHANE	2.4243	64548	7722
11.845	11.841	CHLOROFORM	2.4889	127129	13453
12.091	12.086	2,2-DICHLOROPROPANE	2.4582	102600	7043
14.264	14.263	1,2-DICHLOROETHANE	2.6219	83159	10167
14.577	14.575	1,1,1-TRICHLOROETHAN	2.4412	121174	10734
15.339	15.338	1,1-DICHLOROPROPENE	2.6086	85118	9398
15.858	15.856	CARBON TETRACHLORIDE	2.4263	138768	13128
18.070	18.072	DIBROMOMETHANE	2.2379	35355	5972
18.238	18.238	1,2-DICHLOROPROPANE	2.4661	79463	12161
18.393	18.393	TRICHLOROETHENE	2.6085	103380	17605
18.500	18.500	BROMODICHLOROMETHANE	2.4525	113373	14708
19.883	19.889	2-CHLOROETHYL VINYL	8.2797	84977	15621
20.229	20.231	CIS-1,3-DICHLOROPROP	2.3960	89056	15375
21.185	21.187	TRANS-1,3-DICHLOROPR	2.3522	66987	14574
21.411	21.412	1,1,2-TRICHLOROETHAN	2.6136	95962	18552
21.874	21.875	1,3-DICHLOROPROPANE	2.6521	73875	15184
22.258	22.260	DIBROMOCHLOROMETHANE	2.3209	61103	12070
22.655	22.657	1,2-DIBROMOETHANE	2.2847	38411	7617
22.975	22.975	TETRACHLOROETHENE	2.6819	117130	25035
23.924	23.924	1,1,1,2-TETRACHLOROE	2.5841	100090	26369
24.023	24.022	CHLOROBENZENE	2.5870	56526	11867
24.706	24.709	BROMOFORM	2.2040	35828	7337
25.193	25.194	1,1,2,2-TETRACHLOROE	2.6232	59318	14226
25.397	25.398	1,2,3-TRICHLOROPROPA	2.5623	53026	11081
26.065	26.068	BROMOBENZENE	2.2277	25715	5441
26.512	26.513	2-CHLOROTOLUENE	2.4997	31528	8140
26.631	26.632	4-CHLOROTOLUENE	2.4856	39109	8327
27.716	27.718	1,3-DICHLOROBENZENE	2.5331	48440	12248
27.830	27.832	1,4-DICHLOROBENZENE	2.5958	66383	13337
28.442	28.443	1,2-DICHLOROBENZENE	2.5814	60316	11976
29.330	29.333	1,2-DIBROMO-3-CHLORO	2.2727	13687	2228
30.127	30.127	SURR-1B4CB-H	24.3379	347709	69259
32.585	32.588	1,2,4-TRICHLOROBENZE	2.4673	51005	8190
33.548	33.550	HEXACHLOROBUTADIENE	2.3992	71609	10222
33.974	33.978	1,2,3-TRICHLOROBENZE	2.5265	55570	7122
		TOTAL 1,2-DICHLOROETHENE:	5.0157		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 81.1264%

Sample name: CALSTD2

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365.04R

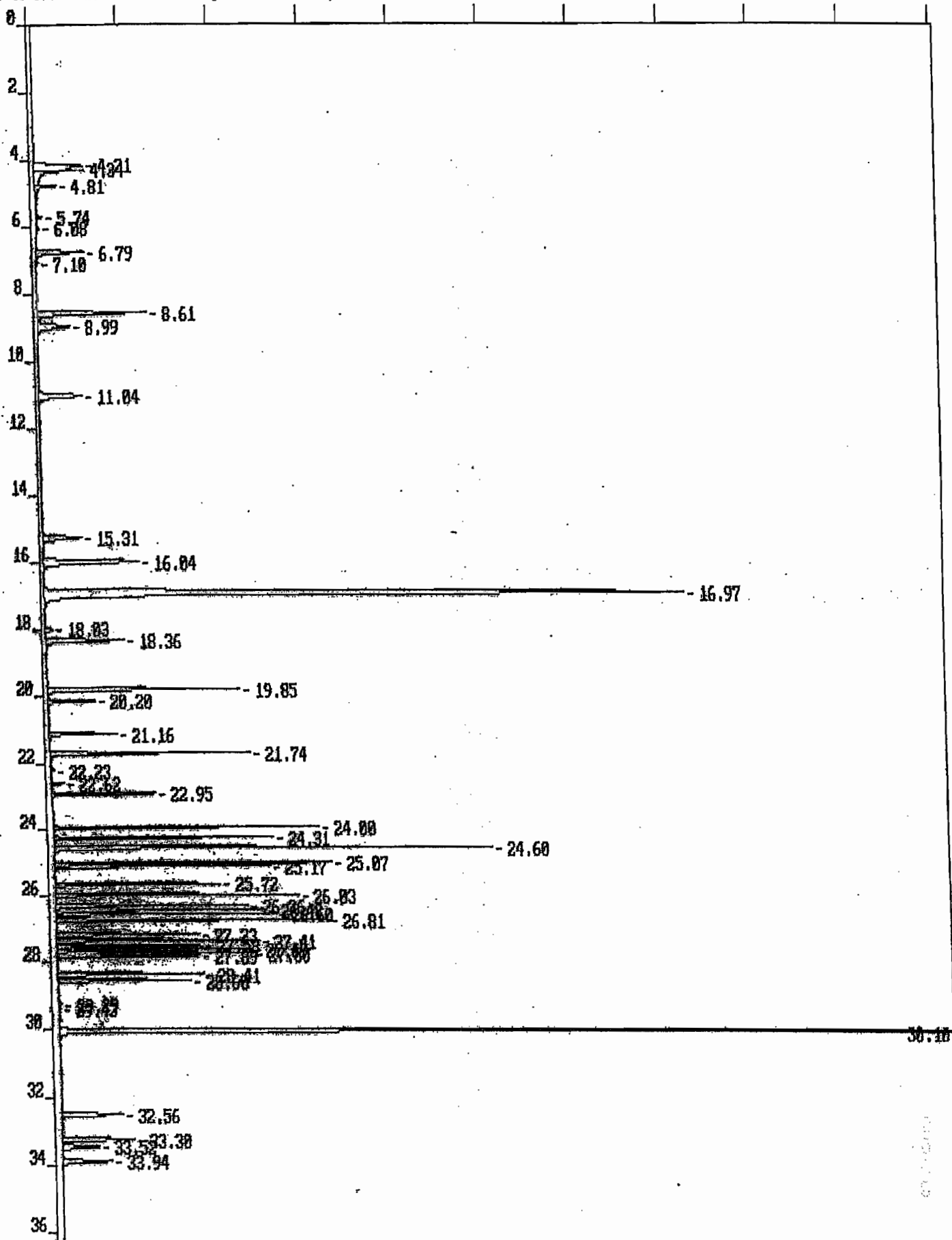
Reviewed by: T B W

Verified by: SKP 088

Date: 12-31-01

Date: 12-31-01

File=C:\CP\DATA1\183658.04R Date printed=12-31-2001 Time= 04:10:31
Sample Name=CALSTD2 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.004 High Y=15.004 mv Span=15.0



Sample Name: CALSTD2

Batch: 01365A18

Date Taken: Dec 31, 2001 04:08:56

Raw File: C:\CP\DATA1\18365B.04R

Area File: C:\CP\DATA1\18365B.04A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 3):

Ret Time Expected (min)	RT (min)	Peak Name	Amount * (ug/L)	Peak Area	Peak Height
4.339	4.355	VINYL CHLORIDE	1.9841	6075	702
6.791	6.783	1,1-DICHLOROETHENE	1.9424	4316	800
8.608	8.600	TRANS-1,2-DICHLOROET	1.9446	10582	1842
8.994	8.995	METHYL T-BUTYL ETHER	1.9887	4761	545
11.039	11.040	CIS-1,2-DICHLOROETHE	1.9378	5679	741
15.305	15.311	1,1-DICHLOROPROPENE	1.9563	4790	659
16.038	16.034	BENZENE	1.9412	11576	1615
16.972	16.968	ISTD-FBENZENE	1.0000	79950	10654
18.364	18.363	TRICHLOROETHENE	1.9603	6914	1320
19.854	19.859	2-CHLOROETHYL VINYL	6.5088	12954	3228
20.201	20.198	CIS-1,3-DICHLOROPROP	1.9199	3169	809
21.156	21.159	TRANS-1,3-DICHLOROPR	1.9053	4068	1161
21.741	21.740	TOLUENE	1.9918	11330	3359
22.949	22.948	TETRACHLOROETHENE	1.9675	5482	1755
23.998	23.998	CHLOROBENZENE	1.9648	11724	4469
24.312	24.312	ETHYLBENZENE	1.9823	10114	3686
24.604	24.604	M,P-XYLENE	3.9857	23547	7354
25.071	25.071	STYRENE	1.9758	12531	4646
25.172	25.172	O-XYLENE	1.9682	10287	3609
25.715	25.715	ISOPROPYLBENZENE	1.9861	8234	2783
26.034	26.034	BROMOBENZENE	1.9440	11805	4076
26.361	26.361	N-PROPYLBENZENE	1.9841	9360	3220
26.485	26.485	2-CHLOROTOLUENE	1.9780	10322	3530
26.604	26.605	4-CHLOROTOLUENE	1.9685	10593	3702
26.809	26.808	1,3,5-TRIMETHYLBENZE	1.9819	13620	4555
27.232	27.233	TERT-BUTYLBENZENE	1.9860	7962	2409
27.414	27.415	1,2,4-TRIMETHYLBENZE	1.9818	10343	3400
27.582	27.582	SEC-BUTYLBENZENE	1.9686	8144	2448
27.688	27.689	1,3-DICHLOROBENZENE	1.9489	10117	3257
27.804	27.805	1,4-DICHLOROBENZENE	1.9724	10109	3291
27.889	27.889	P-ISOPROPYLTOLUENE	1.9707	7865	2401
28.414	28.414	1,2-DICHLOROBENZENE	1.9503	8208	2449
28.602	28.602	N-BUTYLBENZENE	1.9380	7810	2247
30.098	30.097	SURR-1B4CB-P	18.7709	97067	25762
32.555	32.552	1,2,4-TRICHLOROBENZE	1.8981	5023	1042
33.301	33.306	NAPHTHALENE	1.9635	6126	1241
33.520	33.520	HEXACHLOROBUTADIENE	1.8543	3638	630
33.943	33.948	1,2,3-TRICHLOROBENZE	1.8658	4601	853

XYLENES (Total): 5.9539

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 62.5697%

Chrom Perfect version 6.07

Reported on 12-31-2001 at 04:11:59

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 3

Updated from file = C:\CP\DATA1\18365B.04A

Amount injected = 1

Standard amount injected = 1

Calibration level = 2 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD2

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.04R

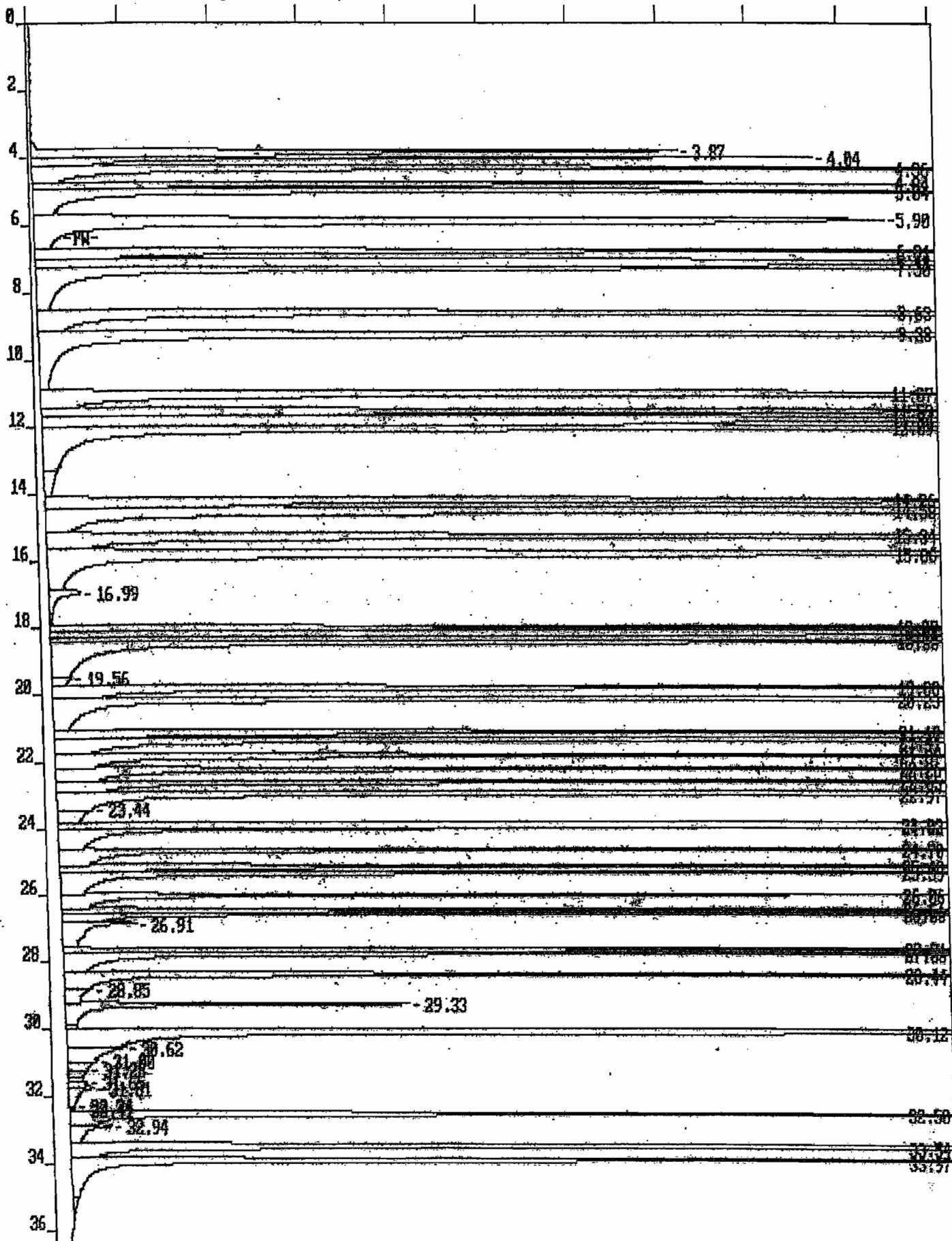
Reviewed by: PLS

Verified by: SKP LAG

Date: 12-31-01

Date: 12-31-01

File=C:\CP\DATA1\18365.05R Date printed=12-31-2001 Time= 04:52:17
Sample Name=CALSTD3 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=-0.008 High Y=14.992 mv Span=15.0



Sample Name: CALSTD3

Batch: 01365A18

Date Taken: Dec 31, 2001 04:52:12

Raw File: C:\CP\DATA1\18365.05R

Area File: C:\CP\DATA1\18365.05A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 4):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.867	3.875	6.7911	76466	10743
4.042	4.044	9.1361	79269	12994
4.363	4.369	6.2293	144305	19605
4.835	4.840	6.3969	77695	14529
5.037	5.043	7.1489	146354	22859
5.895	5.902	6.2188	201184	14148
6.813	6.821	6.2613	161286	24834
7.121	7.127	6.1951	256391	43774
7.302	7.309	6.3150	208674	19458
8.634	8.638	6.1260	240889	33605
9.281	9.286	6.0251	262307	28895
11.068	11.072	6.1568	234314	27222
11.587	11.592	5.8879	157153	19203
11.841	11.845	5.9662	306588	32948
12.089	12.091	6.0251	236632	17531
14.261	14.264	6.2724	204838	25397
14.575	14.577	5.9495	289682	26789
15.337	15.339	6.3026	207073	23620
15.856	15.858	5.9732	332840	32965
18.067	18.070	5.6381	89666	15270
18.236	18.238	6.0640	198344	30647
18.392	18.393	6.2480	255062	43601
18.499	18.500	5.9282	261995	36295
19.880	19.883	20.3889	210343	40003
20.227	20.229	6.0253	218957	39446
21.182	21.185	6.0214	170776	37967
21.410	21.411	6.2540	229975	46031
21.871	21.874	6.4454	180811	38514
22.255	22.258	5.9183	153554	31383
22.650	22.655	5.8542	96665	19973
22.973	22.975	6.3506	276721	61600
23.922	23.924	6.2300	247800	65349
24.020	24.023	6.3709	142402	30287
24.703	24.706	5.8242	97341	19716
25.190	25.193	6.3035	147849	35634
25.394	25.397	6.2163	136165	27903
26.061	26.065	5.9971	74331	14907
26.509	26.512	6.3459	84626	21453
26.628	26.631	6.2582	96793	21699
27.713	27.716	6.3324	126897	31803
27.827	27.830	6.3800	165086	34111
28.438	28.442	6.3046	146568	30507
29.325	29.330	5.6735	38805	5744
30.123	30.127	35.8508	534372	105963
32.580	32.585	6.1486	127629	21342
33.543	33.548	5.8543	173638	25550
33.969	33.974	6.1148	130738	18027
TOTAL 1,2-DICHLOROETHENE:		12.2828		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 119.5025%

Sample name: CALSTD3

Batch: 01365A188400,840

Raw file: C:\CP\DATA1\18365.05R

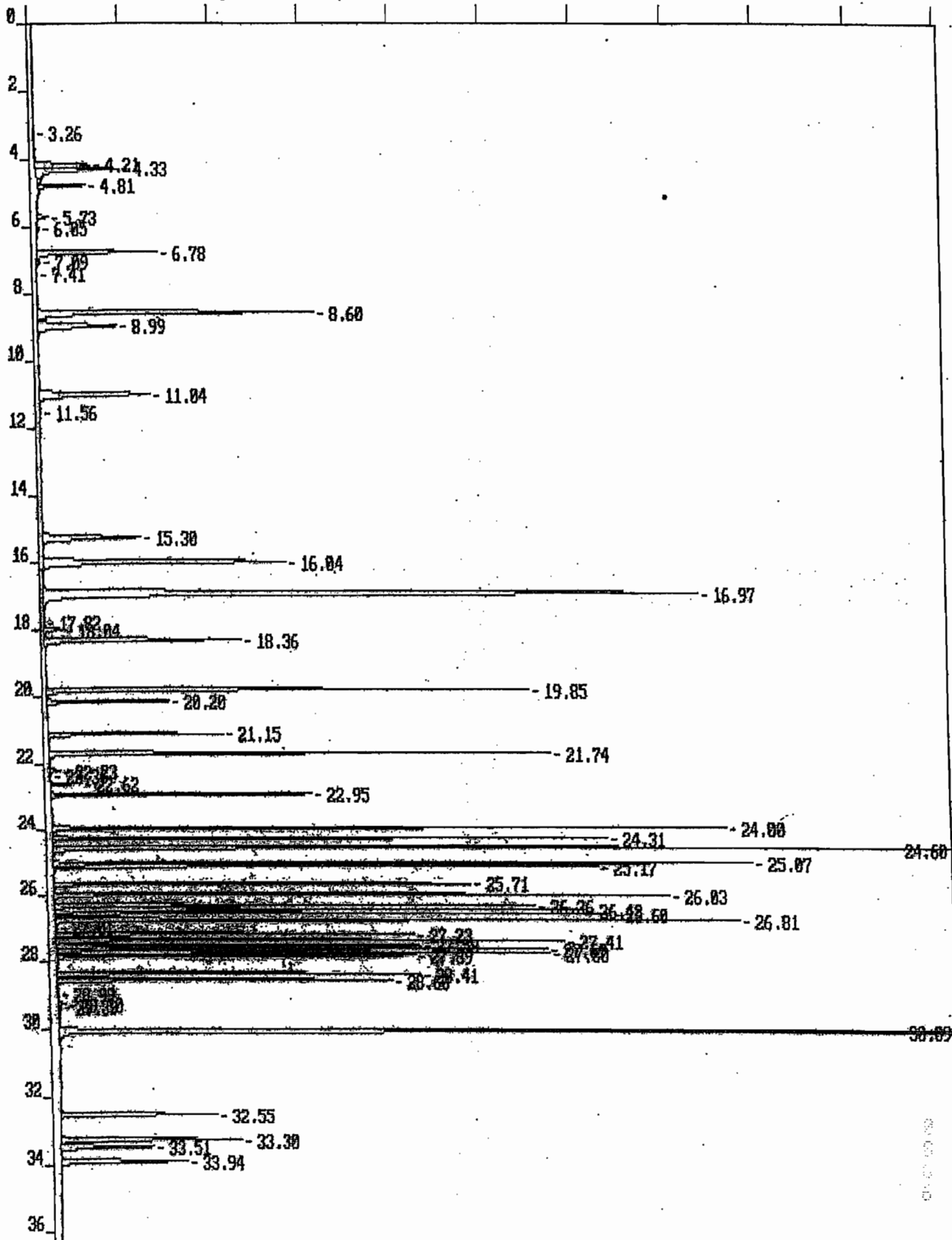
Reviewed by: PSL

Verified by: SKP Loh

Date: 12-31-01

Date: 12-31-01

File=C:\CP\DATA1\183658.05R Date printed=12-31-2001 Time= 04:53:47
Sample Name=CALSTD3 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=-0.001 High Y=14.999 mv Span=15.0



Sample Name: CALSTD3

Batch: 01365A18

Date Taken: Dec 31, 2001 04:52:12

Raw File: C:\CP\DATA1\18365B.05R

Area File: C:\CP\DATA1\18365B.05A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 4):

Ret Time	Expected	(min) RT	(min) Peak Name	Amount *	Peak	Peak
				(ug/L)	Area	Height
4.333	4.339	VINYL CHLORIDE	3.9707	9846	1379	
6.783	6.791	1,1-DICHLOROETHENE	4.8335	10551	2008	
8.604	8.608	TRANS-1,2-DICHLOROET	4.8231	26233	4608	
8.991	8.994	METHYL T-BUTYL ETHER	4.7626	11442	1325	
11.036	11.039	CIS-1,2-DICHLOROETHE	4.7891	13678	1853	
15.304	15.305	1,1-DICHLOROPROPENE	4.8261	12214	1644	
16.038	16.038	BENZENE	4.8309	29348	4056	
16.971	16.972	ISTD-FBENZENE	1.0000	82303	10847	
18.362	18.364	TRICHLOROETHENE	4.8440	17535	3302	
19.852	19.854	2-CHLOROETHYL VINYL	15.9861	32321	8054	
20.199	20.201	CIS-1,3-DICHLOROPROP	4.8155	7887	2053	
21.154	21.156	TRANS-1,3-DICHLOROPR	4.7763	9878	2944	
21.740	21.741	TOLUENE	4.9026	28069	8356	
22.947	22.949	TETRACHLOROETHENE	4.8333	13367	4365	
23.996	23.998	CHLOROBENZENE	4.8684	29121	11187	
24.311	24.312	ETHYLBENZENE	4.9023	24983	9214	
24.602	24.604	M,P-XYLENE	9.8417	58485	18353	
25.068	25.071	STYRENE	4.8905	31308	11628	
25.170	25.172	O-XYLENE	4.8821	25697	9045	
25.713	25.715	ISOPROPYLBENZENE	4.9081	20806	6954	
26.032	26.034	BROMOBENZENE	4.8338	29554	10248	
26.359	26.361	N-PROPYLBENZENE	4.8855	23228	8021	
26.483	26.485	2-CHLOROTOLUENE	4.8852	25759	8810	
26.602	26.604	4-CHLOROTOLUENE	4.8635	26381	9253	
26.806	26.809	1,3,5-TRIMETHYLBENZE	4.8952	34008	11373	
27.229	27.232	TERT-BUTYLBENZENE	4.8842	19779	5993	
27.411	27.414	1,2,4-TRIMETHYLBENZE	4.8859	25847	8480	
27.579	27.582	SEC-BUTYLBENZENE	4.8557	20319	6105	
27.686	27.688	1,3-DICHLOROBENZENE	4.8420	25404	8200	
27.801	27.804	1,4-DICHLOROBENZENE	4.8529	25134	8223	
27.886	27.889	P-ISOPROPYLTOLUENE	4.8620	19523	5991	
28.411	28.414	1,2-DICHLOROBENZENE	4.7830	20301	6091	
28.598	28.602	N-BUTYLBENZENE	4.7888	19399	5620	
30.094	30.098	SURR-1B4CB-P	28.4200	149043	39607	
32.550	32.555	1,2,4-TRICHLOROBENZE	4.7036	12430	2633	
33.296	33.301	NAPHTHALENE	4.7161	15044	3060	
33.511	33.520	HEXACHLOROBUTADIENE	4.6026	8939	1574	
33.937	33.943	1,2,3-TRICHLOROBENZE	4.5965	11285	2141	
		XYLENES (Total):	14.7239			

* Amounts in ug/L for water samples; ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 94.7334%

Chrom Perfect version 6.07

Reported on 12-31-2001at 04:55:15

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 4
Updated from file = C:\CP\DATA1\18365B.05A

Amount injected = 1

Standard amount injected = 1

Calibration level = 3 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD3

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.05R

Reviewed by:

JBW

Verified by:

S/CPW88

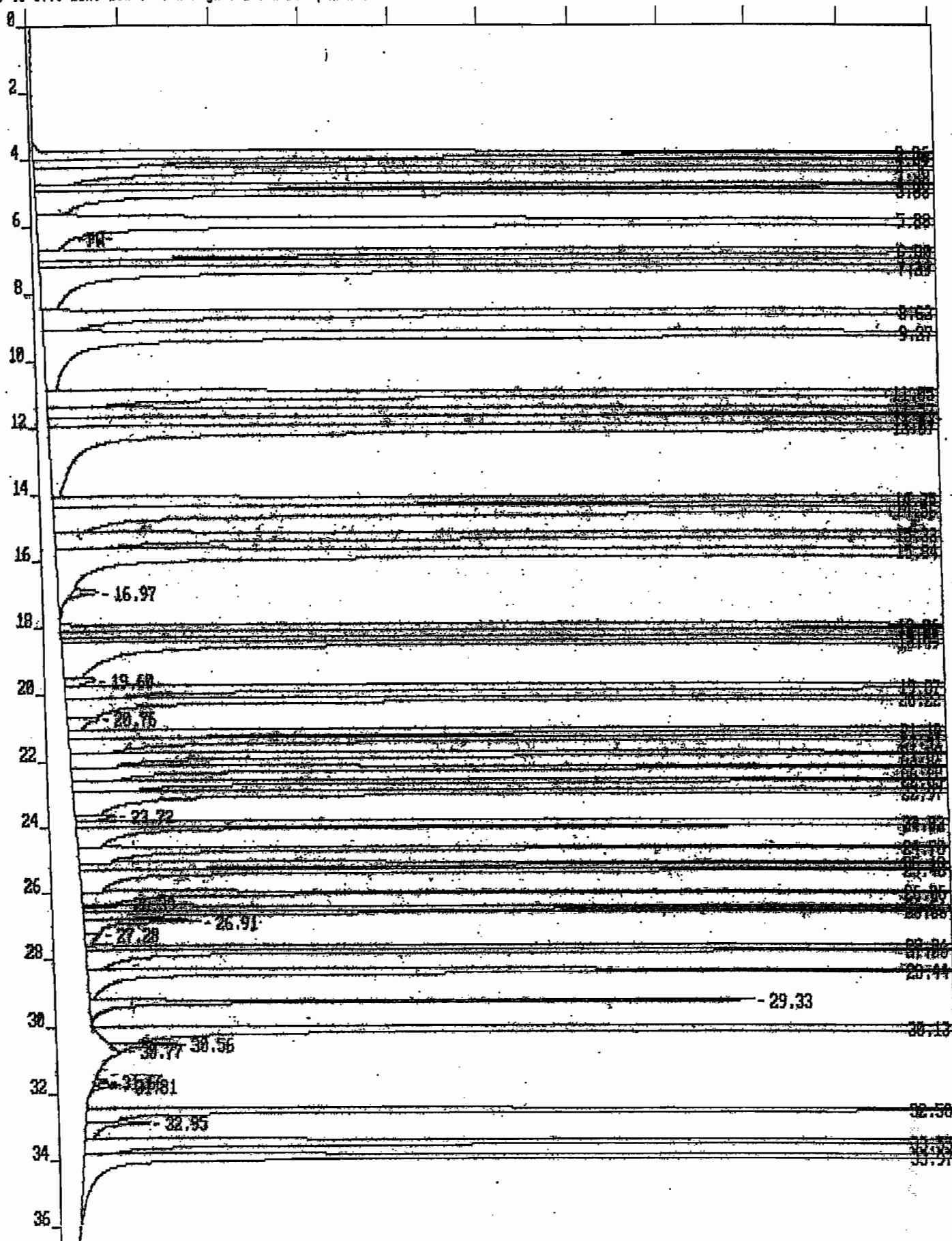
Date:

12-31-01

Date:

12-31-01

File=C:\CP\DATA1\18365.06R Date printed=12-31-2001 Time= 05:35:06
Sample Name=CALSTD4 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.01 High Y=15.01 mv Span=15.0



Sample Name: CALSTD4

Batch: 01365A18

Date Taken: Dec 31, 2001 05:35:00

Raw File: C:\CP\DATA1\18365.06R

Area File: C:\CP\DATA1\18365.06A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 5):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.861	3.867	11.5670	139322	19615
4.041	4.042	13.7642	136726	22769
4.363	4.363	11.0204	262016	36095
4.831	4.835	11.3711	144159	27150
5.031	5.037	12.3304	262780	42762
5.885	5.895	11.3387	370530	26856
6.804	6.813	11.5820	305222	47933
7.113	7.121	11.0546	475324	81989
7.294	7.302	11.3877	379205	36766
8.623	8.634	11.4713	455692	65100
9.270	9.281	11.2141	484905	55360
11.054	11.068	11.4586	448230	52494
11.571	11.587	11.2683	307282	37745
11.827	11.841	11.1711	583081	63287
12.073	12.089	11.3042	446094	33878
14.246	14.261	12.0147	405491	50670
14.562	14.575	11.3625	554646	52436
15.323	15.337	11.9558	400262	46641
15.843	15.856	11.3298	635242	63891
18.057	18.067	11.3097	182388	31181
18.230	18.236	11.4476	389856	59520
18.384	18.392	11.5538	488758	83644
18.493	18.499	11.1167	479290	69772
19.874	19.880	38.6026	402704	78680
20.223	20.227	11.3990	393477	76464
21.179	21.182	11.5206	326685	74190
21.407	21.410	11.6048	425816	88246
21.870	21.871	11.9901	337210	74666
22.254	22.255	11.2238	282530	60888
22.648	22.650	11.1423	179204	38959
22.973	22.973	11.4760	510656	115786
23.923	23.922	11.2015	459269	121250
24.021	24.020	11.2785	244831	55839
24.702	24.703	11.0467	174911	38242
25.191	25.190	11.2783	268837	66267
25.395	25.394	11.0625	232247	51410
26.061	26.061	11.4045	132205	29250
26.510	26.509	11.8434	160869	41801
26.629	26.628	11.7151	179071	42238
27.713	27.713	11.5366	236008	60401
27.828	27.827	11.3958	289721	63655
28.440	28.438	11.4287	266768	57647
29.326	29.325	10.7564	60650	11120
30.125	30.123	43.7339	664960	134073
32.584	32.580	11.3801	238631	41184
33.548	33.543	10.9251	325717	49003
33.973	33.969	11.3305	240880	34863
TOTAL 1,2-DICHLOROETHENE:		22.9300		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 145.7795%

Sample name: CALSTD4

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365.06R

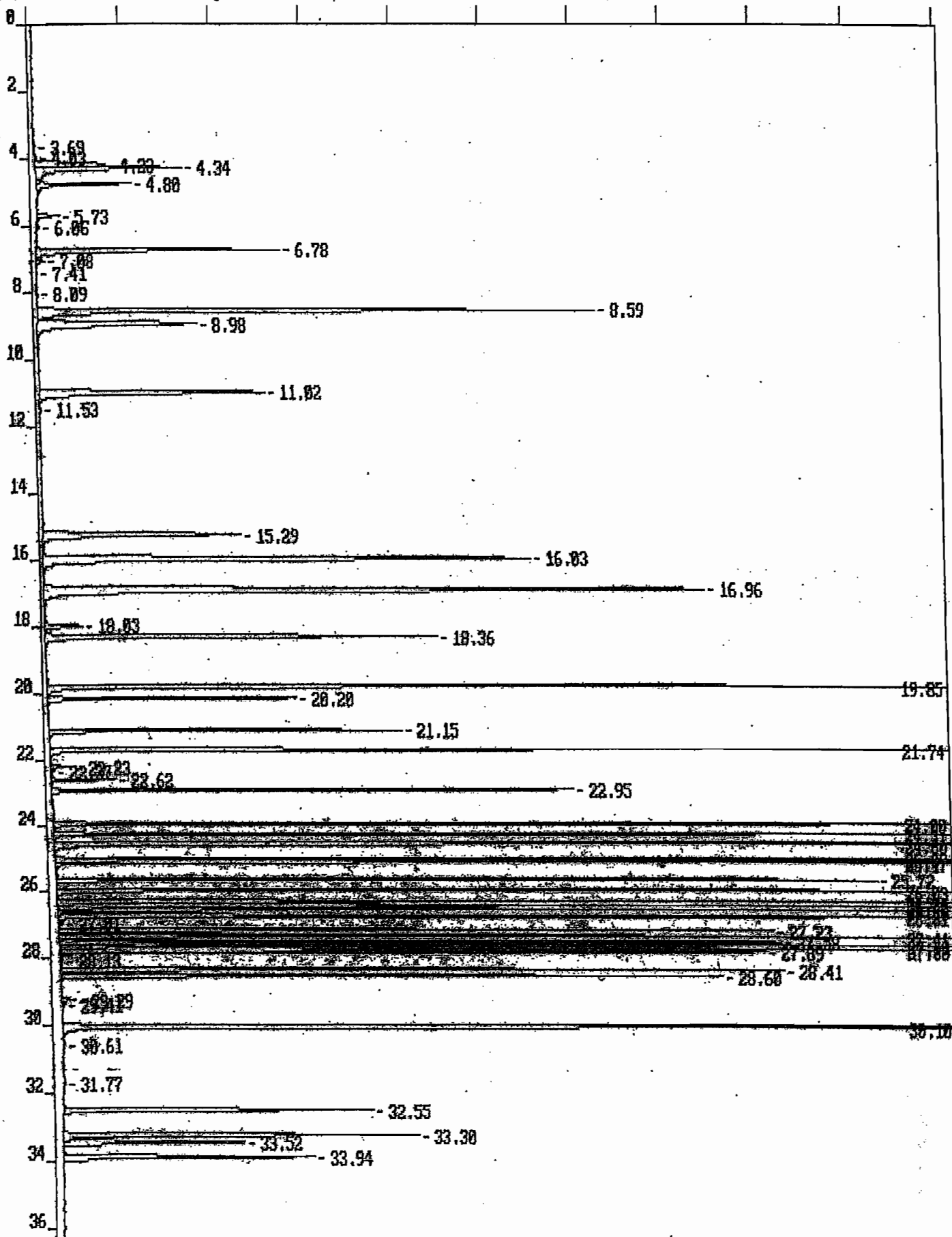
Reviewed by: TB 46

Verified by: SKP 608

Date: 12-31-01

Date: 12-31-01

File=C:\CP\DATA1\183658.06R Date printed=12-31-2001 Time= 05:36:36
Sample Name=CALSTD4 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.005 High Y=15.005 mv Span=15.0



Sample Name: CALSTD4

Batch: 01365A18

Date Taken: Dec 31, 2001 05:35:00

Raw File: C:\CP\DATA1\18365B.06R

Area File: C:\CP\DATA1\18365B.06A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 5):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.336	4.333	VINYL CHLORIDE	6.9444	16515	2426
6.775	6.783	1,1-DICHLOROETHENE	9.6904	21032	4045
8.593	8.604	TRANS-1,2-DICHLOROET	9.6487	52713	9267
8.983	8.991	METHYL T-BUTYL ETHER	9.4708	23221	2652
11.023	11.036	CIS-1,2-DICHLOROETHE	9.5776	27606	3729
15.293	15.304	1,1-DICHLOROPROPENE	9.6071	24306	3291
16.025	16.038	BENZENE	9.6334	58468	8130
16.961	16.971	ISTD-FBENZENE	1.0000	83137	10998
18.356	18.362	TRICHLOROETHENE	9.5395	34335	6541
19.846	19.852	2-CHLOROETHYL VINYL	31.7589	64581	16077
20.196	20.199	CIS-1,3-DICHLOROPROP	9.6854	15919	4152
21.151	21.154	TRANS-1,3-DICHLOROPR	9.5402	19688	5902
21.738	21.740	TOLUENE	9.6611	55564	16553
22.947	22.947	TETRACHLOROETHENE	9.5793	26609	8712
23.997	23.996	CHLOROBENZENE	9.6080	57666	22220
24.312	24.311	ETHYLBENZENE	9.6420	49272	18233
24.603	24.602	M,P-XYLENE	19.2648	115252	36140
25.070	25.068	STYRENE	9.6511	62091	23085
25.171	25.170	O-XYLENE	9.7117	51517	18092
25.715	25.713	ISOPROPYLBENZENE	9.6085	40949	13700
26.033	26.032	BROMOBENZENE	9.5589	58335	20395
26.361	26.359	N-PROPYLBENZENE	9.5422	45699	15777
26.484	26.483	2-CHLOROTOLUENE	9.5982	50791	17414
26.603	26.602	4-CHLOROTOLUENE	9.5732	52047	18342
26.807	26.806	1,3,5-TRIMETHYLBENZE	9.5908	66749	22433
27.231	27.229	TERT-BUTYLBENZENE	9.6402	39100	11897
27.412	27.411	1,2,4-TRIMETHYLBENZE	9.5844	51000	16736
27.581	27.579	SEC-BUTYLBENZENE	9.5065	39847	12025
27.687	27.686	1,3-DICHLOROBENZENE	9.4788	50204	16170
27.802	27.801	1,4-DICHLOROBENZENE	9.5361	50150	16292
27.888	27.886	P-ISOPROPYLTOLUENE	9.4792	37956	11758
28.412	28.411	1,2-DICHLOROBENZENE	9.3980	39831	12049
28.600	28.598	N-BUTYLBENZENE	9.3482	37781	11051
30.097	30.094	SURR-1B4CB-P	38.1926	201016	53624
32.555	32.550	1,2,4-TRICHLOROBENZE	9.1860	24538	5188
33.302	33.296	NAPHTHALENE	9.0687	29167	5940
33.518	33.511	HEXACHLOROBUTADIENE	8.8875	17200	3049
33.944	33.937	1,2,3-TRICHLOROBENZE	8.9547	22185	4204

XYLENES (Total): 28.9766

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 127.3088%

Chrom Perfect version 6.07

Reported on 12-31-2001 at 05:38:05

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 5

Updated from file = C:\CP\DATA1\18365B.06A

Amount injected = 1

Standard amount injected = 1

Calibration level = 4 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD4

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.06R

Reviewed by:

TB 65

Verified by:

SLCP 688

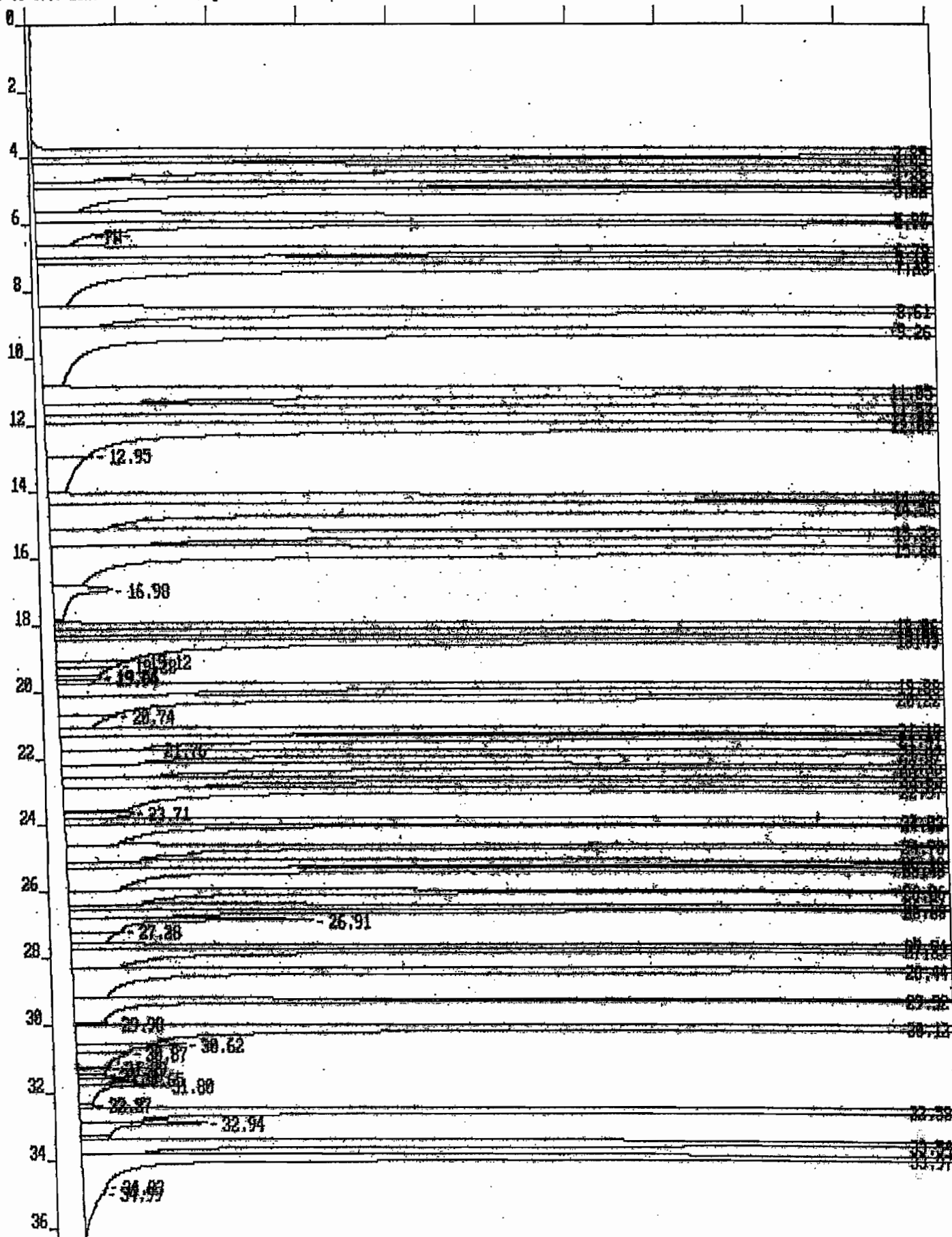
Date:

12-31-01

Date:

12-31-01

File=C:\CP\DATA1\18365.07R Date printed=12-31-2001 Time= 06:18:18
Sample Name=CALSTD5 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.018 High Y=15.018 mv Span=15.0



Sample Name: CALSTD5

Batch: 01365A18

Date Taken: Dec 31, 2001 06:18:14

Raw File: C:\CP\DATA1\18365.07R

Area File: C:\CP\DATA1\18365.07A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 6):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
3.847	3.861	DICHLORODIFLUOROMETH	22.3138	282366	39650
4.035	4.041	CHLOROMETHANE	21.6536	250739	40151
4.359	4.363	VINYL CHLORIDE	19.9973	489100	67692
4.821	4.831	BROMOMETHANE	20.5357	275445	50999
5.018	5.031	CHLOROETHANE	22.2300	498144	82356
5.873	5.885	TRICHLOROFLUOROMETHA	19.2909	300324	46791
6.793	6.804	1,1-DICHLOROETHENE	20.6136	574348	88470
7.101	7.113	METHYLENE CHLORIDE	19.3771	891560	149507
7.282	7.294	TRICHLOROTRIFLUOROET	20.4582	693880	68584
8.611	8.623	TRANS-1,2-DICHLOROET	21.0604	857497	123282
9.260	9.270	1,1-DICHLOROETHANE	20.9982	911995	105997
11.047	11.054	CIS-1,2-DICHLOROETHE	21.2892	848667	100220
11.566	11.571	BROMOCHLOROMETHANE	20.9810	582485	71920
11.822	11.827	CHLOROFORM	20.5205	1101948	118933
12.070	12.073	2,2-DICHLOROPROPANE	19.7036	768743	60508
14.245	14.246	1,2-DICHLOROETHANE	21.6282	759919	94853
14.562	14.562	1,1,1-TRICHLOROETHAN	20.3912	1015978	96193
15.323	15.323	1,1-DICHLOROPROPENE	21.0685	733299	85443
15.844	15.843	CARBON TETRACHLORIDE	20.3817	1154496	117737
18.058	18.057	DIBROMOMETHANE	21.0639	346039	59507
18.230	18.230	1,2-DICHLOROPROPANE	21.1852	732976	113101
18.386	18.384	TRICHLOROETHENE	20.2147	891434	151234
18.494	18.493	BROMODICHLOROMETHANE	20.4577	875329	131533
19.876	19.874	2-CHLOROETHYL VINYL	69.3340	753730	146925
20.224	20.223	CIS-1,3-DICHLOROPROP	20.9788	735117	143865
21.180	21.179	TRANS-1,3-DICHLOROPR	21.1012	613374	139197
21.409	21.407	1,1,2-TRICHLOROETHAN	20.6199	772813	162121
21.871	21.870	1,3-DICHLOROPROPANE	20.9848	614024	136427
22.254	22.254	DIBROMOCHLOROMETHANE	21.2200	540691	117780
22.649	22.648	1,2-DIBROMOETHANE	21.1847	345019	75740
22.974	22.973	TETRACHLOROETHENE	20.5198	937280	213583
23.924	23.923	1,1,1,2-TETRACHLOROE	21.1542	877094	234179
24.022	24.021	CHLOROBENZENE	21.0048	463688	107553
24.702	24.702	BROMOFORM	21.4926	344105	75917
25.191	25.191	1,1,2,2-TETRACHLOROE	20.5318	507413	125069
25.395	25.395	1,2,3-TRICHLOROPROPA	21.0107	449391	100620
26.061	26.061	BROMOBENZENE	22.1641	264861	58309
26.510	26.510	2-CHLOROTOLUENE	22.0977	312517	80978
26.629	26.629	4-CHLOROTOLUENE	21.6894	340942	81041
27.713	27.713	1,3-DICHLOROBENZENE	21.7206	460257	117702
27.828	27.828	1,4-DICHLOROBENZENE	21.2217	558148	122697
28.439	28.440	1,2-DICHLOROBENZENE	21.9603	536186	114588
29.324	29.326	1,2-DIBROMO-3-CHLORO	22.5011	142401	23814
30.124	30.125	SURR-1B4CB-H	54.3021	860506	171097
32.579	32.584	1,2,4-TRICHLOROBENZE	21.3420	462840	79739
33.544	33.548	HEXACHLOROBUTADIENE	19.2651	588735	88068
33.969	33.973	1,2,3-TRICHLOROBENZE	21.2739	470813	67695
		TOTAL 1,2-DICHLOROETHENE:	42.3497		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 181.0070%

Sample name: CALSTD5

Batch: 01365A188400,840

Raw file: C:\CP\DATA1\18365.07R

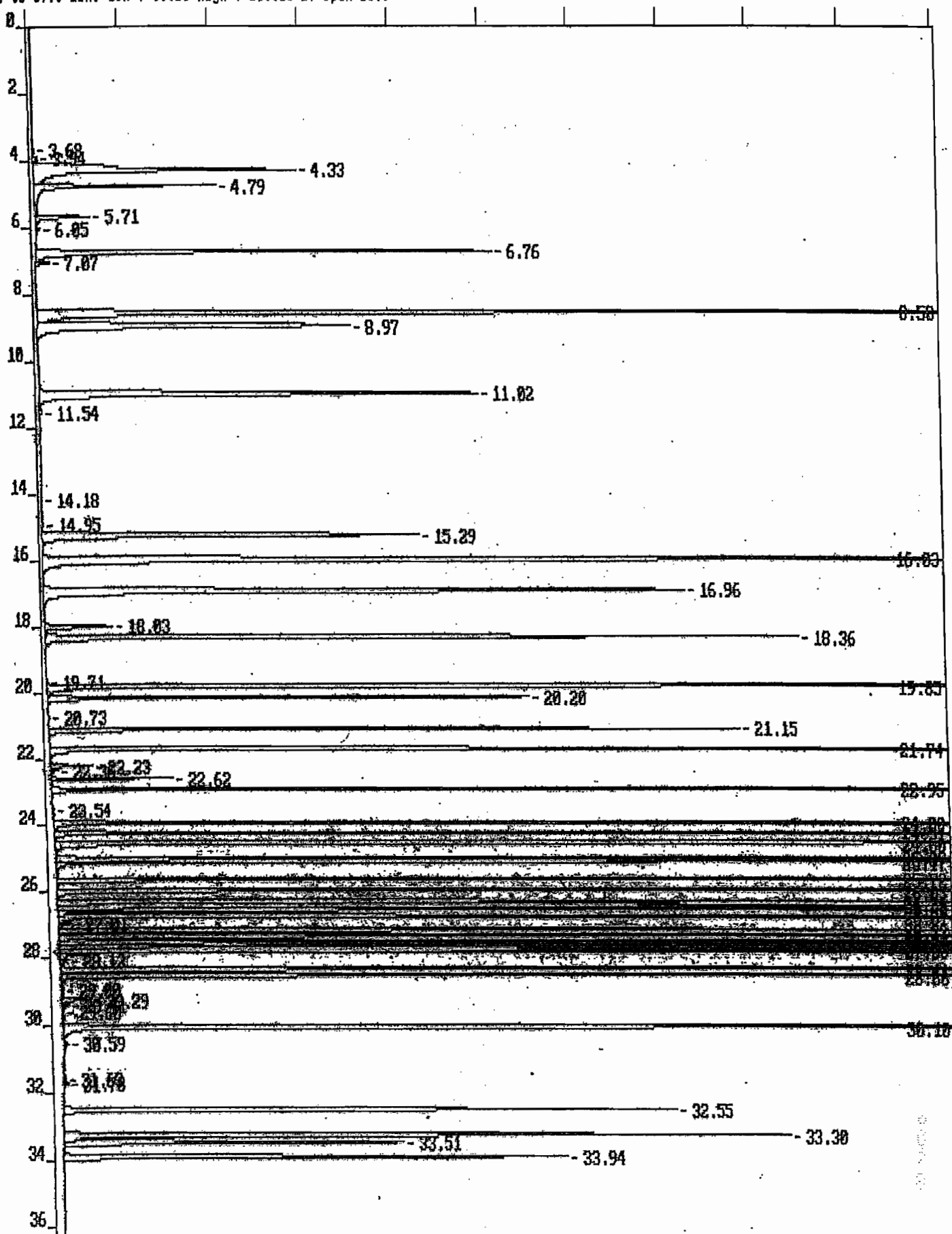
Reviewed by: TB us

Verified by: SKP Lof8

Date: 12-31-01

Date: 12-31-01

0.0 to 37.0 min. Low Y=0.013 High Y=15.013 mv Span=15.0



Sample Name: CALSTD5

Batch: 01365A18

Date Taken: Dec 31, 2001 06:18:14

Raw File: C:\CP\DATA1\18365B.07R

Area File: C:\CP\DATA1\18365B.07A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 6):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.331	4.336	VINYL CHLORIDE	12.8694	39240	4361
6.765	6.775	1,1-DICHLOROETHENE	18.9124	40830	7579
8.582	8.593	TRANS-1,2-DICHLOROET	19.5042	103120	18018
8.972	8.983	METHYL T-BUTYL ETHER	19.2191	45866	5204
11.017	11.023	CIS-1,2-DICHLOROETHE	19.4263	53882	7276
15.293	15.293	1,1-DICHLOROPROPENE	18.9719	46369	6258
16.029	16.025	BENZENE	19.2872	112628	15676
16.962	16.961	ISTD-FBENZENE	1.0000	80543	10671
18.357	18.356	TRICHLOROETHENE	18.9620	65074	12540
19.848	19.846	2-CHLOROETHYL VINYL	63.1644	124291	30930
20.198	20.196	CIS-1,3-DICHLOROPROP	19.4024	30407	8032
21.153	21.151	TRANS-1,3-DICHLOROPR	19.3073	38101	11533
21.739	21.738	TOLUENE	19.1153	106353	31575
22.949	22.947	TETRACHLOROETHENE	18.9911	50791	16683
23.999	23.997	CHLOROBENZENE	19.2477	111027	42937
24.312	24.312	ETHYLBENZENE	19.0690	94237	34797
24.604	24.603	M,P-XYLENE	38.1223	220811	69052
25.070	25.070	STYRENE	19.3145	119976	44588
25.172	25.171	O-XYLENE	19.5381	99853	35102
25.715	25.715	ISOPROPYLBENZENE	19.0919	77985	26255
26.033	26.033	BROMOBENZENE	19.2463	113124	39661
26.361	26.361	N-PROPYLBENZENE	18.9204	87023	30187
26.484	26.484	2-CHLOROTOLUENE	19.2554	98044	33693
26.603	26.603	4-CHLOROTOLUENE	19.1994	100715	35528
26.808	26.807	1,3,5-TRIMETHYLBENZE	18.9617	128253	42771
27.232	27.231	TERT-BUTYLBENZENE	18.9618	74536	22577
27.413	27.412	1,2,4-TRIMETHYLBENZE	19.1579	98621	32265
27.581	27.581	SEC-BUTYLBENZENE	18.6139	75396	22706
27.687	27.687	1,3-DICHLOROBENZENE	19.3369	98026	31856
27.802	27.802	1,4-DICHLOROBENZENE	19.1704	97456	31672
27.888	27.888	P-ISOPROPYLTOLUENE	18.6969	72816	22362
28.413	28.412	1,2-DICHLOROBENZENE	19.2090	78315	23773
28.600	28.600	N-BUTYLBENZENE	18.2382	71711	20785
30.096	30.097	SURR-1B4CB-P	49.3573	251983	67001
32.550	32.555	1,2,4-TRICHLOROBENZE	18.8173	48574	10252
33.297	33.302	NAPHTHALENE	19.1668	59497	12141
33.515	33.518	HEXACHLOROBUTADIENE	17.2617	31999	5676
33.939	33.944	1,2,3-TRICHLOROBENZE	18.6275	44468	8427

XYLENES (Total): 57.6604

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 164.5243%

Chrom Perfect version 6.07

Reported on 12-31-2001at 06:21:16

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 6

Updated from file = C:\CP\DATA1\18365B.07A

Amount injected = 1

Standard amount injected = 1

Calibration level = 5 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD5

Batch: 01365A188400,840

Raw file: C:\CP\DATA1\18365B.07R

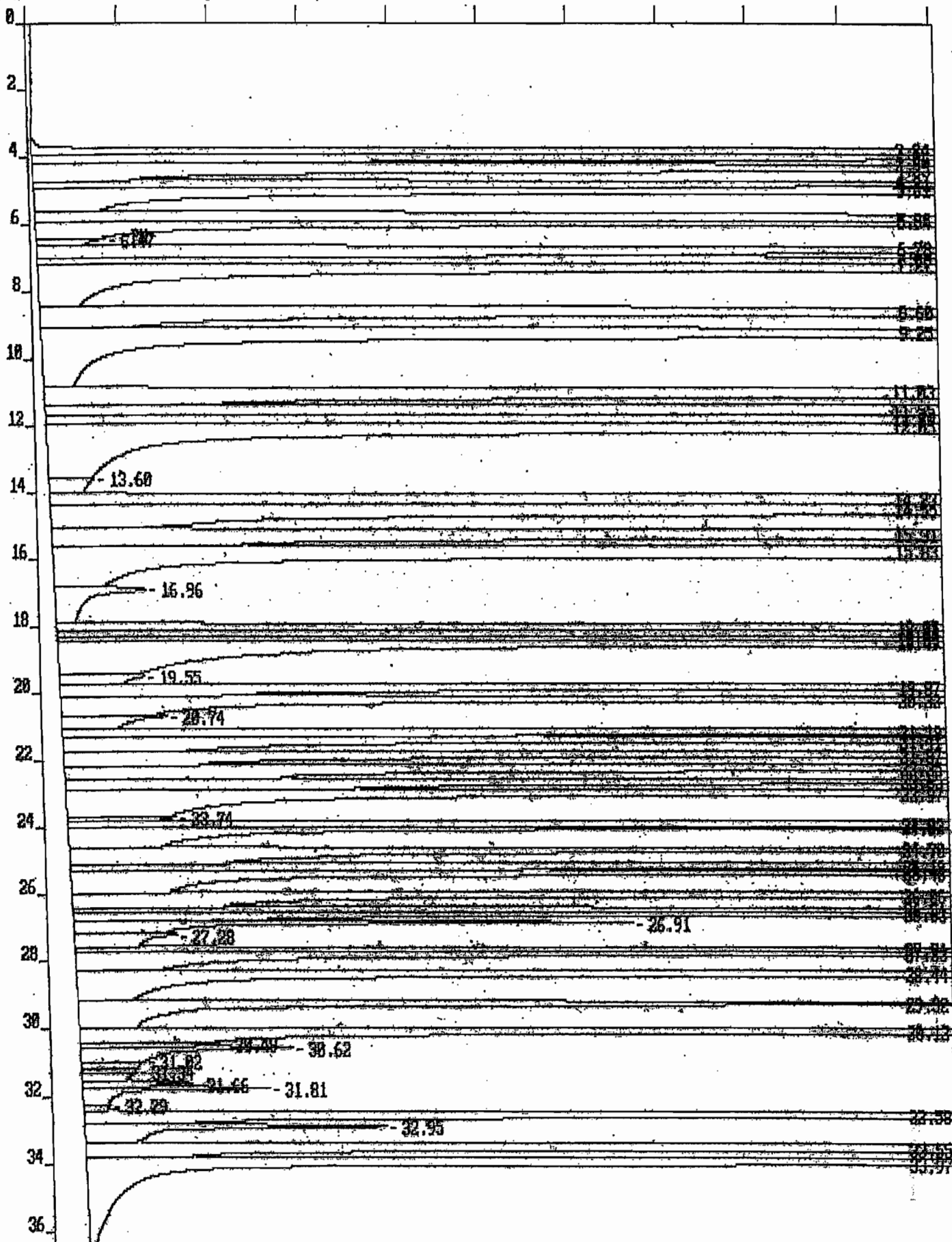
Reviewed by: TSK

Verified by: SKP C088

Date: 12-31-01

Date: 12-31-01

File=C:\GP\DATA\18365.08R Date printed=12-31-2001 Time= 07:01:15
 Sample Name=CALSTD6 01365A188400,8401,8464
 0.0 to 37.0 min. Low Y=0.04 High Y=15.04 mv Span=15.0



Sample Name: CALSTD6

Batch: 01365A18

Date Taken: Dec 31, 2001 07:01:10

Raw File: C:\CP\DATA1\18365.08R

Area File: C:\CP\DATA1\18365.08A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 7):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.836	3.847	DICHLORODIFLUOROMETH	39.6050	510632 73527
4.036	4.035	CHLOROMETHANE	32.2469	434070 64790
4.352	4.359	VINYL CHLORIDE	33.5576	915397 116227
4.814	4.821	BROMOMETHANE	38.0814	531425 97200
5.010	5.018	CHLOROETHANE	39.6293	927936 155228
5.859	5.873	TRICHLOROFLUOROMETHA	37.7689	665393 91851
6.782	6.793	1,1-DICHLOROETHENE	47.6277	1335041 209107
7.091	7.101	METHYLENE CHLORIDE	43.8496	2043485 346844
7.273	7.282	TRICHLOROTRIFLUOROET	43.4513	1507783 150290
8.599	8.611	TRANS-1,2-DICHLOROET	47.4658	1971031 284527
9.246	9.260	1,1-DICHLOROETHANE	47.4037	2070230 244492
11.030	11.047	CIS-1,2-DICHLOROETHE	48.5502	1987471 234415
11.549	11.566	BROMOCHLOROMETHANE	49.2871	1401455 172260
11.805	11.822	CHLOROFORM	46.2539	2537817 272930
12.052	12.070	2,2-DICHLOROPROPANE	46.4775	1858731 145042
14.229	14.245	1,2-DICHLOROETHANE	49.2283	1800365 222673
14.547	14.562	1,1,1-TRICHLOROETHAN	46.2659	2363053 221981
15.310	15.323	1,1-DICHLOROPROPENE	47.7306	1705900 199136
15.832	15.844	CARBON TETRACHLORIDE	45.5774	2624753 267370
18.049	18.058	DIBROMOMETHANE	51.1749	872356 146808
18.223	18.230	1,2-DICHLOROPROPANE	47.7197	1714421 260854
18.378	18.386	TRICHLOROETHENE	46.0219	2077796 352205
18.487	18.494	BROMODICHLOROMETHANE	46.2560	2032992 302613
19.871	19.876	2-CHLOROETHYL VINYL	101.3369	1128536 220783
20.220	20.224	CIS-1,3-DICHLOROPROP	48.0943	1680651 335119
21.177	21.180	TRANS-1,3-DICHLOROPR	48.7659	1436451 328100
21.406	21.409	1,1,2-TRICHLOROETHAN	46.9572	1794891 378416
21.869	21.871	1,3-DICHLOROPROPANE	48.3053	1429510 323002
22.253	22.254	DIBROMOCHLOROMETHANE	50.0393	1280529 282632
22.647	22.649	1,2-DIBROMOETHANE	51.4188	842782 186781
22.973	22.974	TETRACHLOROETHENE	45.7475	2149703 489091
23.924	23.924	1,1,1,2-TETRACHLOROE	47.0497	2031671 533958
24.021	24.022	CHLOROBENZENE	47.3820	1034907 249702
24.701	24.702	BROMOFORM	51.7094	824946 185509
25.192	25.191	1,1,2,2-TETRACHLOROE	48.5644	1208752 302620
25.395	25.395	1,2,3-TRICHLOROPROPA	48.2497	1024480 236733
26.060	26.061	BROMOBENZENE	53.2593	636522 143620
26.511	26.510	2-CHLOROTOLUENE	49.7696	726384 188706
26.630	26.629	4-CHLOROTOLUENE	48.8060	778951 188375
27.715	27.713	1,3-DICHLOROBENZENE	49.3190	1085408 275615
27.830	27.828	1,4-DICHLOROBENZENE	47.7269	1256106 284505
28.440	28.439	1,2-DICHLOROBENZENE	49.2342	1215845 265424
29.323	29.324	1,2-DIBROMO-3-CHLORO	54.7480	344254 59485
30.124	30.124	SURR-1B4CB-H	64.4599	1043599 209612
32.581	32.579	1,2,4-TRICHLOROBENZE	50.5984	1118438 194496
33.546	33.544	HEXACHLOROBUTADIENE	45.5425	1403836 210706
33.971	33.969	1,2,3-TRICHLOROBENZE	48.9854	1081576 160656

TOTAL 1,2-DICHLOROETHENE: 96.0160

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 214.8664%

Sample name: CALSTD6

Batch: 01365A188400,840

Raw file: C:\CP\DATA1\18365.08R

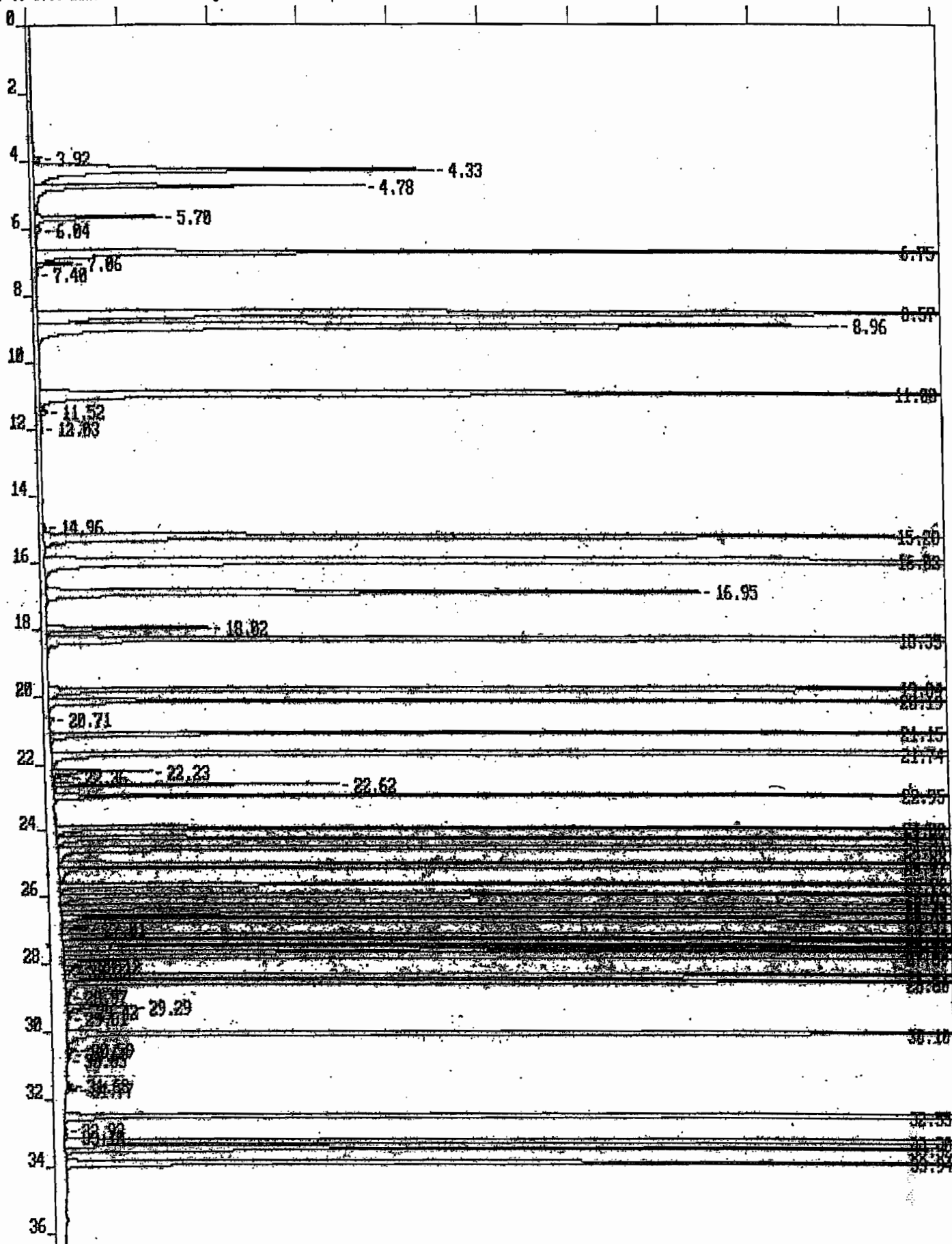
Reviewed by: *[Signature]*

Verified by: *SLCPLOP*

Date: *12/31/01*

Date: *12-31-01*

File=C:\CP\DATA\18365B.08R Date printed=12-31-2001 Time= 07:02:46
Sample Name=CALSTD6 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.015 High Y=15.015 mv Span=15.0



Sample Name: CALSTD6

Batch: 01365A18

Date Taken: Dec 31, 2001 07:01:10

Raw File: C:\CP\DATA1\18365B.08R

Area File: C:\CP\DATA1\18365B.08A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 7):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.328	4.331	VINYL CHLORIDE	19.0298	58993	6633
6.753	6.765	1,1-DICHLOROETHENE	47.4892	101239	19197
8.570	8.582	TRANS-1,2-DICHLOROET	47.9320	256028	44925
8.959	8.972	METHYL T-BUTYL ETHER	48.2075	117503	13256
11.000	11.017	CIS-1,2-DICHLOROETHE	48.4714	136296	18403
15.279	15.293	1,1-DICHLOROPROPENE	46.9381	115835	15650
16.017	16.029	BENZENE	47.3352	280581	38965
16.951	16.962	ISTD-FBENZENE	1.0000	81353	10870
18.350	18.357	TRICHLOROETHENE	46.6103	161741	31151
19.844	19.848	2-CHLOROETHYL VINYL	94.5254	189287	46826
20.194	20.198	CIS-1,3-DICHLOROPROP	47.2179	75470	19787
21.151	21.153	TRANS-1,3-DICHLOROPR	47.8901	94725	28906
21.739	21.739	TOLUENE	46.1771	258964	77224
22.948	22.949	TETRACHLOROETHENE	46.2159	124379	41100
23.998	23.999	CHLOROBENZENE	46.4943	271490	105083
24.313	24.312	ETHYLBENZENE	46.1358	230739	85282
24.605	24.604	M,P-XYLENE	92.9776	540322	170529
25.070	25.070	STYRENE	46.8052	294849	109468
25.173	25.172	O-XYLENE	47.5023	244222	86485
25.716	25.715	ISOPROPYLBENZENE	46.0175	191143	64085
26.034	26.033	BROMOBENZENE	46.9873	279178	98255
26.362	26.361	N-PROPYLBENZENE	46.1678	214695	74590
26.486	26.484	2-CHLOROTOLUENE	46.4888	240966	82503
26.605	26.603	4-CHLOROTOLUENE	46.8124	248375	87820
26.809	26.808	1,3,5-TRIMETHYLBENZE	46.2800	315799	105681
27.233	27.232	TERT-BUTYLBENZENE	46.1838	184059	55663
27.416	27.413	1,2,4-TRIMETHYLBENZE	46.6358	243003	79591
27.583	27.581	SEC-BUTYLBENZENE	46.1086	189263	56841
27.689	27.687	1,3-DICHLOROBENZENE	47.2245	242941	79009
27.805	27.802	1,4-DICHLOROBENZENE	46.7808	242676	78527
27.890	27.888	P-ISOPROPYLTOLUENE	46.1416	179402	55803
28.414	28.413	1,2-DICHLOROBENZENE	47.1050	194094	59204
28.601	28.600	N-BUTYLBENZENE	45.8738	182234	52747
30.096	30.096	SURR-1B4CB-P	59.8308	308915	82650
32.553	32.550	1,2,4-TRICHLOROBENZE	47.2518	123651	26059
33.299	33.297	NAPHTHALENE	47.5199	150445	30623
33.517	33.515	HEXACHLOROBUTADIENE	44.0704	82430	14531
33.943	33.939	1,2,3-TRICHLOROBENZE	46.9858	113465	21517

XYLENES (Total): 140.4799

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 199.4361%

Chrom Perfect version 6.07

Reported on 12-31-2001 at 07:04:16

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 7

Updated from file = C:\CP\DATA1\18365B.08A

Amount injected = 1

Standard amount injected = 1

Calibration level = 6 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD6

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.08R

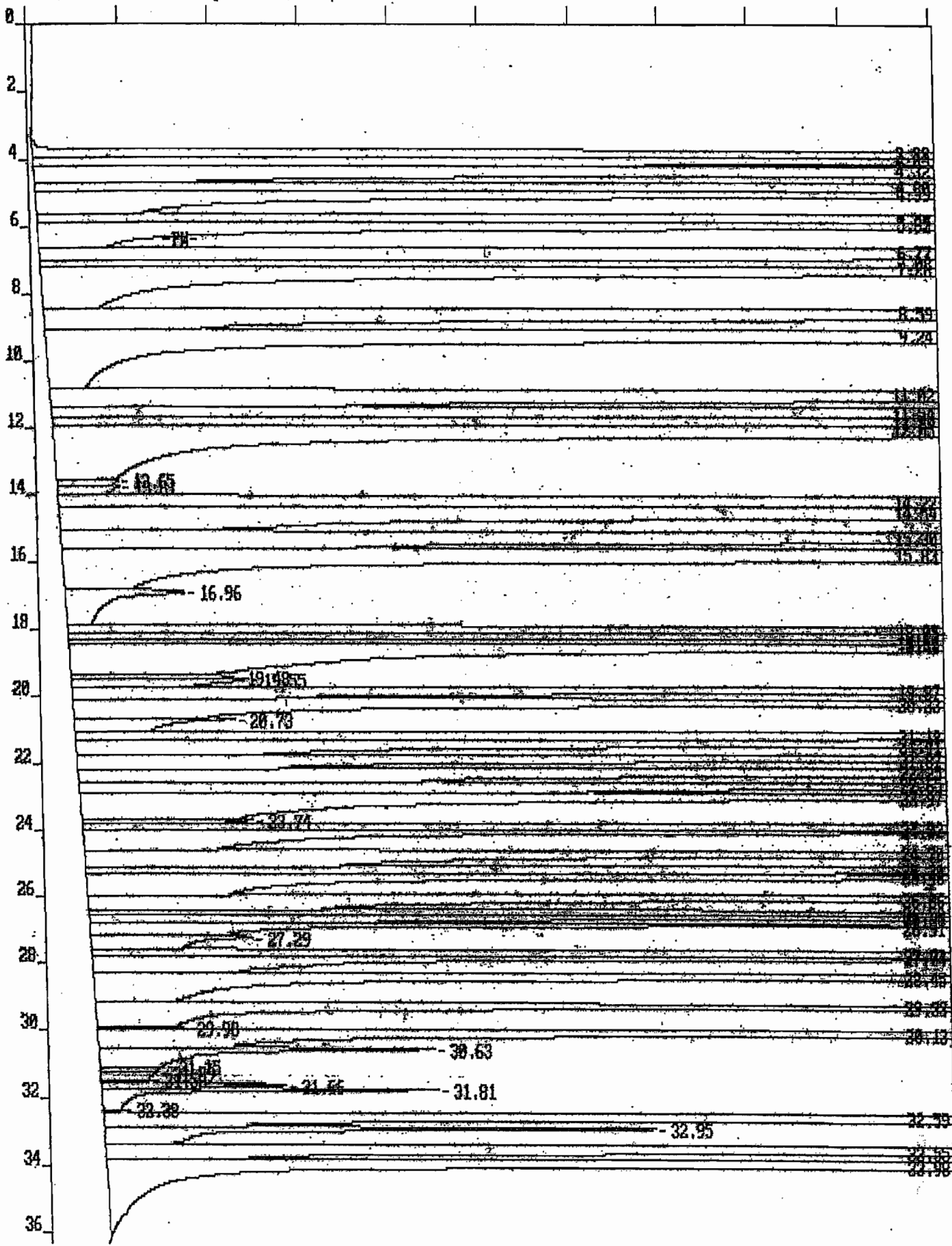
Reviewed by: MMB

Verified by: SKP

Date: 12/31/01

Date: 12-31-01

File=C:\CP\DATA1\18365.09R Date printed=12-31-2001 Time= 07:44:23
 Sample Name=CALSTD7 01365A188400,8401,8464
 0.0 to 37.0 min. Low Y=0.078 High Y=15.078 mv Span=15.0



Sample Name: CALSTD7

Batch: 01365A18

Date Taken: Dec 31, 2001 07:44:18

Raw File: C:\CP\DATA1\18365.09R

Area File: C:\CP\DATA1\18365.09A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 8):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.819	3.836	DICHLORODIFLUOROMETH	76.7176	1023224	148518
4.028	4.036	CHLOROMETHANE	54.2278	808766	115862
4.325	4.352	VINYL CHLORIDE	60.9826	1666801	213751
4.801	4.814	BROMOMETHANE	67.3048	985234	176836
4.994	5.010	CHLOROETHANE	70.1997	1726018	288315
5.846	5.859	TRICHLOROFLUOROMETHA	69.1757	1254056	172456
6.768	6.782	1,1-DICHLOROETHENE	88.0326	2555678	397391
7.078	7.091	METHYLENE CHLORIDE	76.6907	3714919	623790
7.260	7.273	TRICHLOROTRIFLUOROET	82.7406	2883438	292521
8.589	8.599	TRANS-1,2-DICHLOROET	84.3669	3634547	517622
9.239	9.246	1,1-DICHLOROETHANE	84.5834	3779192	445148
11.024	11.030	CIS-1,2-DICHLOROETHE	86.7767	3671501	429639
11.542	11.549	BROMOCHLOROMETHANE	90.8033	2644711	323997
11.798	11.805	CHLOROFORM	83.2672	4722545	500389
12.045	12.052	2,2-DICHLOROPROPANE	82.9109	3364430	264074
14.225	14.229	1,2-DICHLOROETHANE	88.1548	3355221	411045
14.543	14.547	1,1,1-TRICHLOROETHAN	83.1707	4371166	406600
15.304	15.310	1,1-DICHLOROPROPENE	86.8048	3185780	372525
15.827	15.832	CARBON TETRACHLORIDE	82.9297	4901648	494626
18.045	18.049	DIBROMOMETHANE	98.7521	1699288	287899
18.221	18.223	1,2-DICHLOROPROPANE	86.0620	3186914	481546
18.376	18.378	TRICHLOROETHENE	80.9782	3776430	635574
18.485	18.487	BROMODICHLOROMETHANE	83.2922	3752939	555575
19.871	19.871	2-CHLOROETHYL VINYL	126.6075	1458587	284256
20.220	20.220	CIS-1,3-DICHLOROPROP	85.3432	3042564	607632
21.176	21.177	TRANS-1,3-DICHLOROPR	87.7717	2666502	601667
21.407	21.406	1,1,2-TRICHLOROETHAN	82.0017	3223827	676893
21.870	21.869	1,3-DICHLOROPROPANE	84.3158	2568021	580347
22.253	22.253	DIBROMOCHLOROMETHANE	90.8030	2371005	523181
22.647	22.647	1,2-DIBROMOETHANE	96.2820	1590603	356838
22.975	22.973	TETRACHLOROETHENE	75.9187	3732938	832061
23.928	23.924	1,1,1,2-TETRACHLOROE	73.0960	3361602	849375
24.023	24.021	CHLOROBENZENE	82.7644	1850877	448424
24.703	24.701	BROMOFORM	98.8004	1571073	360014
25.195	25.192	1,1,2,2-TETRACHLOROE	85.4233	2181992	545189
25.398	25.395	1,2,3-TRICHLOROPROPA	85.9873	1843390	431225
26.064	26.060	BROMOBENZENE	99.8921	1197926	276855
26.516	26.511	2-CHLOROTOLUENE	89.9744	1351582	351321
26.634	26.630	4-CHLOROTOLUENE	88.8147	1441204	352110
27.721	27.715	1,3-DICHLOROBENZENE	87.7512	2010687	503777
27.837	27.830	1,4-DICHLOROBENZENE	84.5663	2278157	516899
28.448	28.440	1,2-DICHLOROBENZENE	87.5244	2210155	484743
29.331	29.323	1,2-DIBROMO-3-CHLORO	105.2431	632392	116371
30.132	30.124	SURR-1B4CB-H	71.3734	1208339	238759
32.591	32.581	1,2,4-TRICHLOROBENZE	92.7959	2097772	365559
33.554	33.546	HEXACHLOROBUTADIENE	85.6622	2681603	401766
33.980	33.971	1,2,3-TRICHLOROBENZE	91.8591	2011370	307919
		TOTAL 1,2-DICHLOROETHENE:	171.1435		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 237.9115%

Sample name: CALSTD7

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365.09R

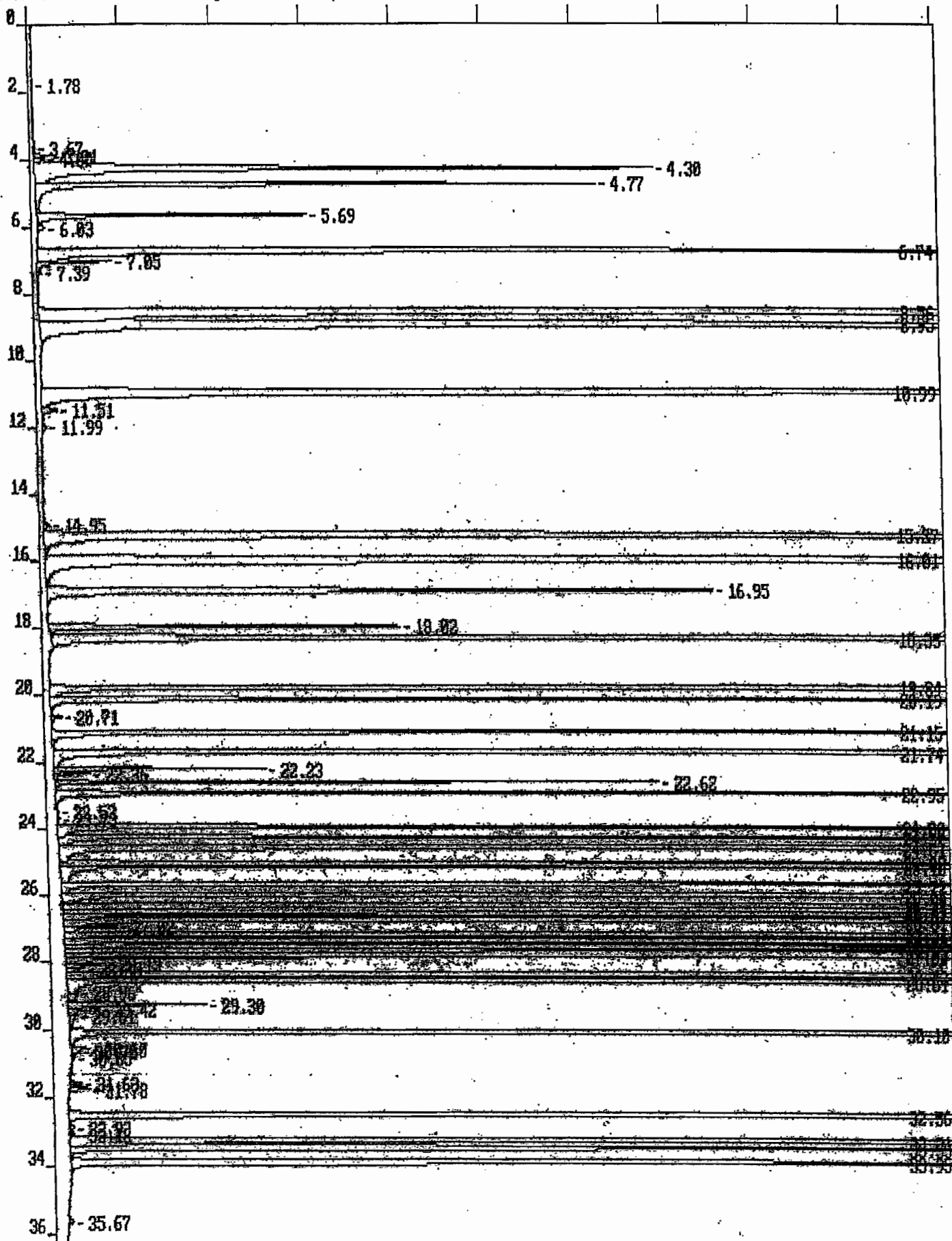
Reviewed by: MPB

Verified by: SLP

Date: 12/31/01

Date: 12-31-01

File=C:\CP\DATA1\183658.09R Date printed=12-31-2001 Time= 07:45:56
Sample Name=CALSTD7 01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.014 High Y=15.014 mV Span=15.0



Sample Name: CALSTD7

Batch: 01365A18

Date Taken: Dec 31, 2001 07:44:18

Raw File: C:\CP\DATA1\18365B.09R

Area File: C:\CP\DATA1\18365B.09A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 8):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
4.302	4.328	VINYL CHLORIDE	29.0280	84372	10241
6.740	6.753	1,1-DICHLOROETHENE	92.5743	200101	37774
8.561	8.570	TRANS-1,2-DICHLOROET	93.3006	505996	88318
8.952	8.959	METHYL T-BUTYL ETHER	93.7472	231434	25998
10.994	11.000	CIS-1,2-DICHLOROETHE	94.6153	269849	36287
15.275	15.279	1,1-DICHLOROPROPENE	94.5928	237149	31782
16.014	16.017	BENZENE	95.8101	573869	79580
16.946	16.951	ISTD-FBENZENE	1.0000	83220	11059
18.349	18.350	TRICHLOROETHENE	95.0276	331692	63986
19.844	19.844	2-CHLOROETHYL VINYL	126.6911	254968	63053
20.193	20.194	CIS-1,3-DICHLOROPROP	96.8295	155265	40888
21.151	21.151	TRANS-1,3-DICHLOROPR	97.0580	195135	58991
21.740	21.739	TOLUENE	92.1249	523975	155459
22.949	22.948	TETRACHLOROETHENE	93.4444	255735	83748
24.000	23.998	CHLOROBENZENE	93.6720	549213	213399
24.315	24.313	ETHYLBENZENE	91.9041	465029	171227
24.608	24.605	M,P-XYLENE	183.8568	1082300	340274
25.074	25.070	STYRENE	92.3358	590047	217749
25.177	25.173	O-XYLENE	92.3493	484387	169449
25.720	25.716	ISOPROPYLBENZENE	91.5765	385343	128519
26.038	26.034	BROMOBENZENE	95.1123	566188	200534
26.367	26.362	N-PROPYLBENZENE	92.0849	435128	150017
26.491	26.486	2-CHLOROTOLUENE	92.3978	486421	165295
26.610	26.605	4-CHLOROTOLUENE	93.6148	499825	177135
26.814	26.809	1,3,5-TRIMETHYLBENZE	92.3758	636318	212559
27.239	27.233	TERT-BUTYLBENZENE	91.9249	371997	111708
27.422	27.416	1,2,4-TRIMETHYLBENZE	92.7709	489794	159564
27.591	27.583	SEC-BUTYLBENZENE	93.9105	387202	116555
27.696	27.689	1,3-DICHLOROBENZENE	94.9856	495346	160225
27.812	27.805	1,4-DICHLOROBENZENE	94.7441	492930	160325
27.897	27.890	P-ISOPROPYLTOLUENE	93.1524	365274	113384
28.422	28.414	1,2-DICHLOROBENZENE	94.8609	392875	120171
28.609	28.601	N-BUTYLBENZENE	93.5301	374004	108121
30.105	30.096	SURR-1B4CB-P	69.4678	361236	96828
32.563	32.553	1,2,4-TRICHLOROBENZE	95.7123	250282	52936
33.309	33.299	NAPHTHALENE	95.8309	304095	61834
33.526	33.517	HEXACHLOROBUTADIENE	92.1203	171964	30339
33.952	33.943	1,2,3-TRICHLOROBENZE	95.9520	231578	43958

XYLENES (Total): 276.2061

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 231.5595%

Chrom Perfect version 6.07

Reported on 12-31-2001at 07:47:26

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 8

Updated from file = C:\CP\DATA1\18365B.09A

Amount injected = 1

Standard amount injected = 1

Calibration level = 7 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD7

Batch: 01365A188400,840

Raw file: C:\CP\DATA1\18365B.09R

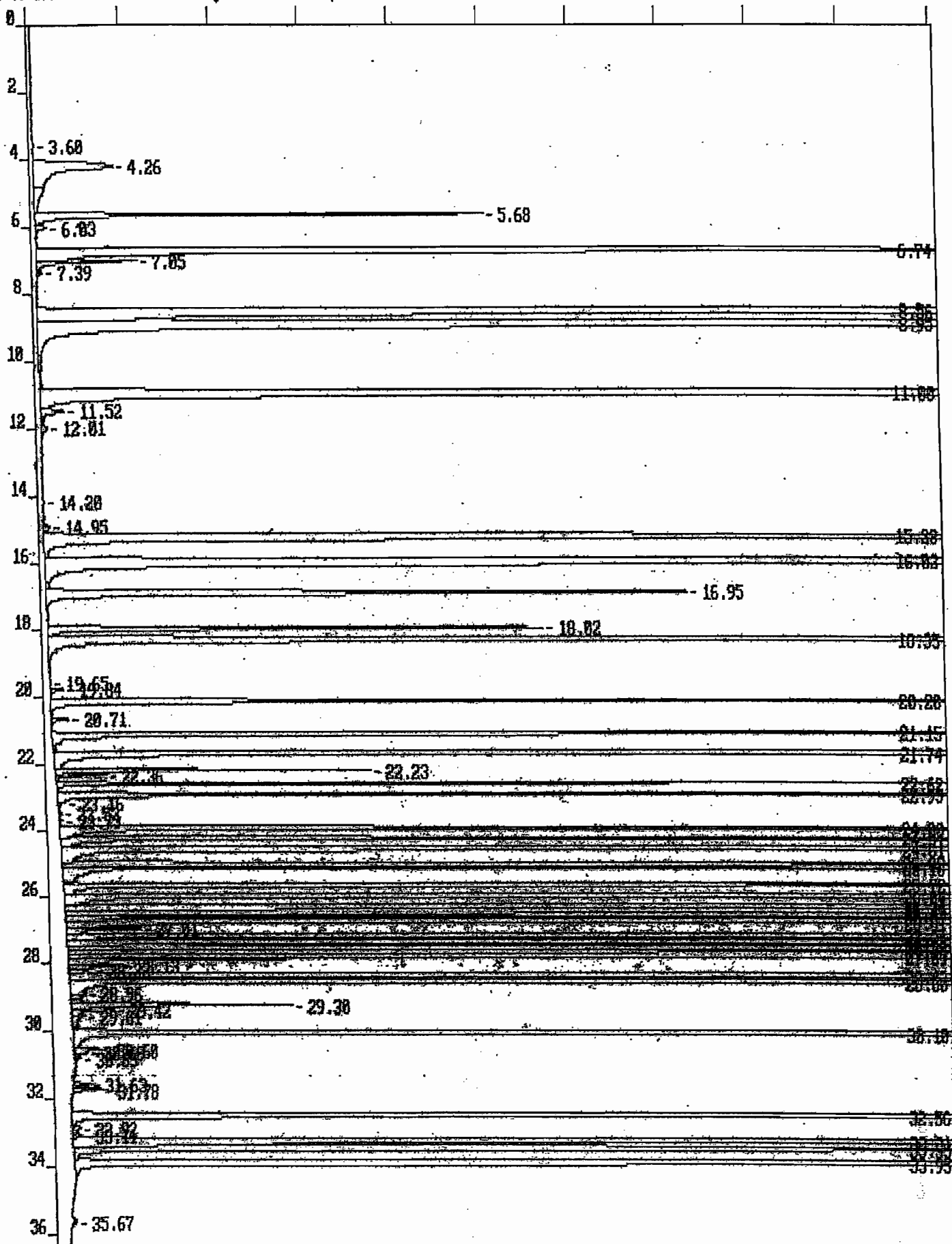
Reviewed by: DMB

Verified by: SKP

Date: 12/31/01

Date: 12-31-01

File=C:\CP\DATA1\183658.10R Date printed=12-31-2001 Time= 08:29:14
Sample Name=CALSTD8 .01365A188400,8401,8464
0.0 to 37.0 min. Low Y=0.012 High Y=15.012 mv Span=15.0



Sample Name: CALSTD8

Batch: 01365A18

Date Taken: Dec 31, 2001 08:28:06

Raw File: C:\CP\DATA1\18365B.10R

Area File: C:\CP\DATA1\18365B.10A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 9):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.261	4.302	VINYL CHLORIDE	3.8429	25734	1306
6.741	6.740	1,1-DICHLOROETHENE	125.3854	274799	49235
8.561	8.561	TRANS-1,2-DICHLOROET	132.6768	691606	120715
8.954	8.952	METHYL T-BUTYL ETHER	140.3393	336713	37371
10.997	10.994	CIS-1,2-DICHLOROETHE	135.3545	372162	49895
15.281	15.275	1,1-DICHLOROPROPENE	134.6190	325705	43495
16.018	16.014	BENZENE	138.1202	795403	110242
16.950	16.946	ISTD-FBENZENE	1.0000	81291	10684
18.353	18.349	TRICHLOROETHENE	137.6148	465760	88922
19.837	19.844	2-CHLOROETHYL VINYL	0.5033	1237	240
20.196	20.193	CIS-1,3-DICHLOROPROP	141.0949	216498	57227
21.153	21.151	TRANS-1,3-DICHLOROPR	144.6904	281638	84231
21.741	21.740	TOLUENE	134.6221	735350	217644
22.949	22.949	TETRACHLOROETHENE	138.4370	362335	118798
24.000	24.000	CHLOROBENZENE	139.0872	782001	303341
24.314	24.315	ETHYLBENZENE	135.7634	657694	241955
24.608	24.608	M,P-XYLENE	270.2164	1535403	478849
25.073	25.074	STYRENE	137.1462	840921	309382
25.175	25.177	O-XYLENE	126.0187	662473	221048
25.718	25.720	ISOPROPYLBENZENE	134.9204	544207	181236
26.036	26.038	BROMOBENZENE	142.6195	811299	287652
26.364	26.367	N-PROPYLBENZENE	136.6509	617750	213021
26.488	26.491	2-CHLOROTOLUENE	137.5796	693636	235589
26.606	26.610	4-CHLOROTOLUENE	139.4110	713527	252359
26.811	26.814	1,3,5-TRIMETHYLBENZE	136.1951	904754	300025
27.235	27.239	TERT-BUTYLBENZENE	136.7191	530172	158923
27.419	27.422	1,2,4-TRIMETHYLBENZE	138.1013	699494	227240
27.587	27.591	SEC-BUTYLBENZENE	139.6506	555329	165847
27.692	27.696	1,3-DICHLOROBENZENE	142.5577	716046	230154
27.808	27.812	1,4-DICHLOROBENZENE	144.5458	708324	233991
27.892	27.897	P-ISOPROPYLTOLUENE	139.4006	529319	162272
28.417	28.422	1,2-DICHLOROBENZENE	143.6025	569667	174013
28.603	28.609	N-BUTYLBENZENE	140.8082	540296	155370
30.100	30.105	SURR-1B4CB-P	86.7604	433837	115682
32.562	32.563	1,2,4-TRICHLOROBENZE	146.3202	364242	77173
33.309	33.309	NAPHTHALENE	150.4951	457319	92668
33.526	33.526	HEXACHLOROBUTADIENE	139.1936	248091	43558
33.953	33.952	1,2,3-TRICHLOROBENZE	149.4318	342764	65191

XYLENES (Total): 396.2351

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 289.2014%

Chrom Perfect version 6.07

Reported on 12-31-2001at 08:30:38

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P18365.CAL Current version number = 9

Updated from file = C:\CP\DATA1\18365B.10A

Amount injected = 1

Standard amount injected = 1

Calibration level = 8 Replace old values with new

Number of runs since last replace = 0

Update to both retention time and area

Sample name: CALSTD8

Batch: 01365A188400,840

Raw file:

C:\CP\DATA1\18365B.10R

Reviewed by:

[Signature]

Verified by:

[Signature]

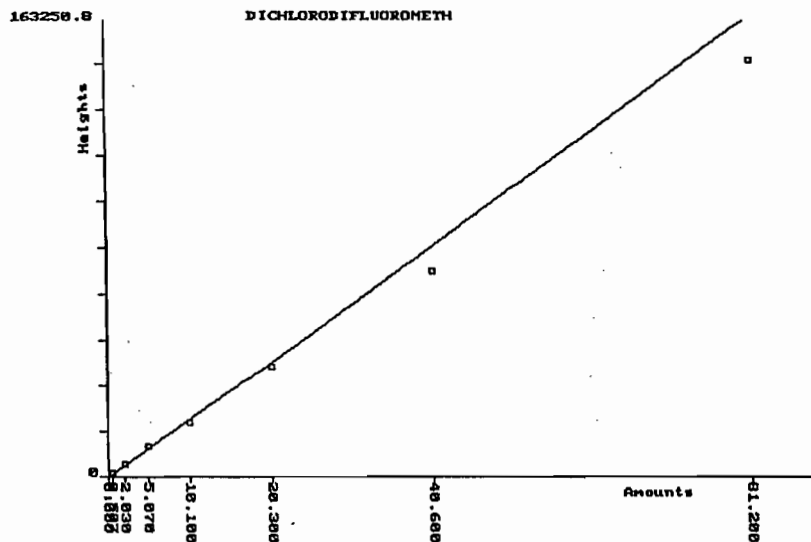
Date:

12/31/01

Date:

12-31-01

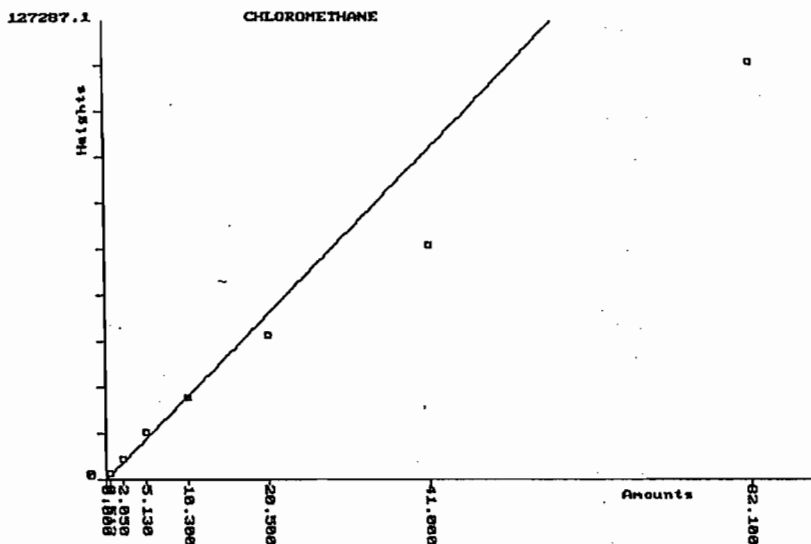
1 DICHLORODIFLUOROMETH Ret time= 3.805 min. Search window= 0.100 min.
 N reference peak for this compound.
 N internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50700	1186	23393.4E-01	18365.03A	12-31-2001 03:26
2	2.03000	4418	21762.3E-01	18365.04A	12-31-2001 04:10
3	5.07000	10743	21190.2E-01	18365.05A	12-31-2001 04:53
4	10.10000	19615	19421.3E-01	18365.06A	12-31-2001 05:36
5	20.30000	39650	19531.8E-01	18365.07A	12-31-2001 06:19
6	40.60000	73527	18110.1E-01	18365.08A	12-31-2001 07:02
7	81.20000	148518	18290.4E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9888541 Ave error=6.9053%
 Height = +20.243e02*X^1
 Average CF (EPA method 8000) = 2024.2787 with %RSD = 9.603%

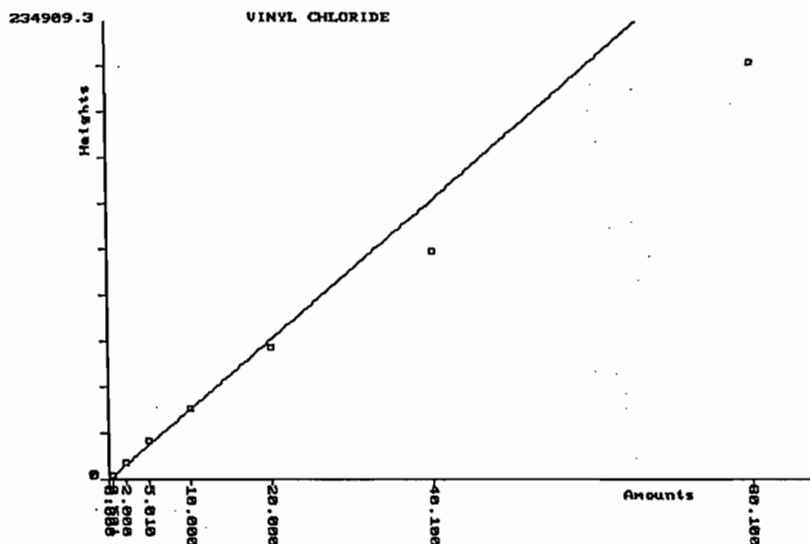
2 CHLOROMETHANE Ret time= 3.985 min. Search window= 0.100 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.51300	1614	31469.7E-01	18365.03A	12-31-2001 03:26
2	2.05000	5741	28003.2E-01	18365.04A	12-31-2001 04:10
3	5.13000	12994	25330.2E-01	18365.05A	12-31-2001 04:53
4	10.30000	22769	22105.8E-01	18365.06A	12-31-2001 05:36
5	20.50000	40151	19585.7E-01	18365.07A	12-31-2001 06:19
6	41.00000	64790	15802.4E-01	18365.08A	12-31-2001 07:02
7	82.10000	115862	14112.3E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .7332793 Ave error=21.9857%
 Height = +22.344e02*X^1
 Average CF (EPA method 8000) = 2234.4182 with %RSD = 28.449%

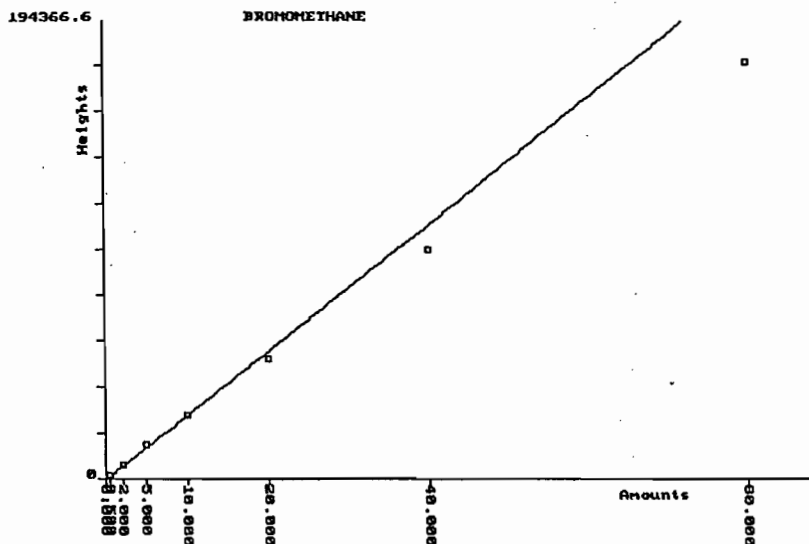
3 VINYL CHLORIDE Ret time= 4.314 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50100	2164	43186.4E-01	18365.03A	12-31-2001 03:26
2	2.00000	8221	41102.8E-01	18365.04A	12-31-2001 04:10
3	5.01000	19605	39131.9E-01	18365.05A	12-31-2001 04:53
4	10.00000	36095	36094.6E-01	18365.06A	12-31-2001 05:36
5	20.00000	67692	33846.0E-01	18365.07A	12-31-2001 06:19
6	40.10000	116227	28984.2E-01	18365.08A	12-31-2001 07:02
7	80.10000	213751	26685.5E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9117069 Ave error=12.8453%
 Height = +35.576e02*X^1
 Average CF (EPA method 8000) = 3557.5903 with %RSD = 17.284%

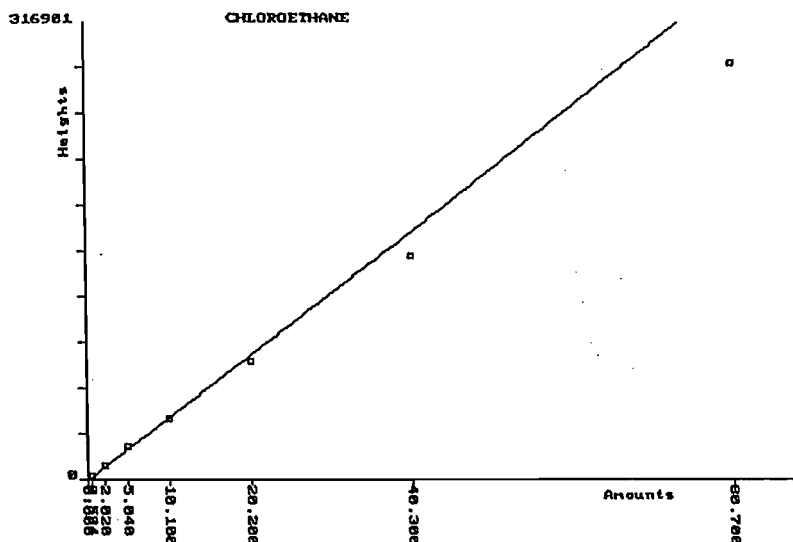
4 BROMOMETHANE Ret time= 4.780 min. Search window= 0.200 min.
 No reference peak for this compound.
 internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	1526	30526.5E-01	18365.03A	12-31-2001 03:26
2	2.00000	5901	29503.2E-01	18365.04A	12-31-2001 04:10
3	5.00000	14529	29058.5E-01	18365.05A	12-31-2001 04:53
4	10.00000	27150	27149.7E-01	18365.06A	12-31-2001 05:36
5	20.00000	50999	25499.6E-01	18365.07A	12-31-2001 06:19
6	40.00000	97200	24300.0E-01	18365.08A	12-31-2001 07:02
7	80.00000	176836	22104.5E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9644855 Ave error=8.3707%
 Height = +26.877e02*X^1
 Average CF (EPA method 8000) = 2687.7434 with %RSD = 11.404%

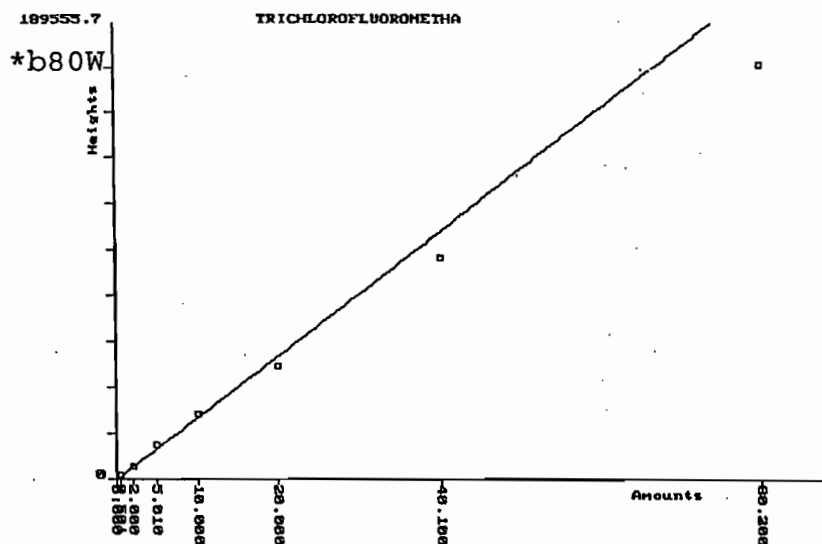
5 CHLOROETHANE Ret time= 4.980 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50400	2458	48761.2E-01	18365.03A	12-31-2001 03:26
2	2.02000	9460	46830.8E-01	18365.04A	12-31-2001 04:10
3	5.04000	22859	45355.5E-01	18365.05A	12-31-2001 04:53
4	10.10000	42762	42338.3E-01	18365.06A	12-31-2001 05:36
5	20.20000	82356	40770.4E-01	18365.07A	12-31-2001 06:19
6	40.30000	155228	38518.1E-01	18365.08A	12-31-2001 07:02
7	80.70000	288315	35726.8E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9709858 Ave error=7.8427%
 Height = +42.614e02*X^1
 Average CF (EPA method 8000) = 4261.4434 with %RSD = 10.955%

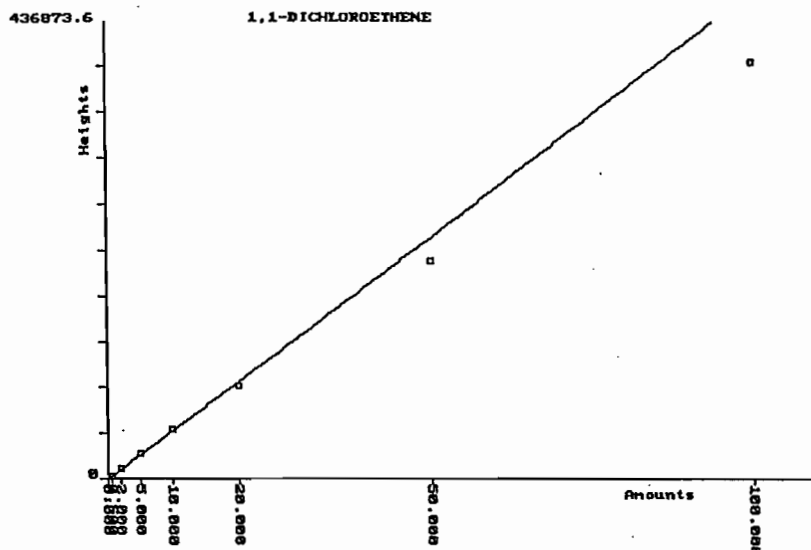
6 TRICHLOROFLUOROMETHA Ret time= 5.837 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50100	1463	29195.3E-01	18365.03A	12-31-2001 03:26
2	2.00000	5325	26626.1E-01	18365.04A	12-31-2001 04:10
3	5.01000	14148	28240.3E-01	18365.05A	12-31-2001 04:53
4	10.00000	26856	26856.1E-01	18365.06A	12-31-2001 05:36
5	20.00000	46791	23395.3E-01	18365.07A	12-31-2001 06:19
6	40.10000	91851	22905.4E-01	18365.08A	12-31-2001 07:02
7	80.20000	172456	21503.3E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9715227 Ave error=8.8141%
 Height = +25.532e02*X^1
 Average CF (EPA method 8000) = 2553.1702 with %RSD = 11.464%

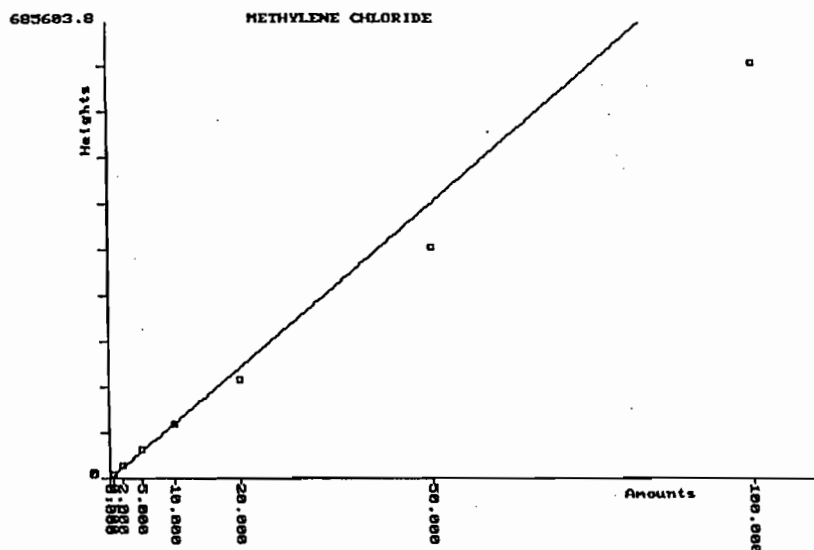
7 1,1-DICHLOROETHENE Ret time= 6.761 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2565	51294.6E-01	18365.03A	12-31-2001 03:26
2	2.00000	9873	49363.1E-01	18365.04A	12-31-2001 04:10
3	5.00000	24834	49668.9E-01	18365.05A	12-31-2001 04:53
4	10.00000	47933	47933.0E-01	18365.06A	12-31-2001 05:36
5	20.00000	88470	44235.2E-01	18365.07A	12-31-2001 06:19
6	50.00000	209107	41821.5E-01	18365.08A	12-31-2001 07:02
7	100.00000	397391	39739.1E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9773208 Ave error=7.2530%
 Height = +46.294e02*X^1
 Average CF (EPA method 8000) = 4629.3623 with %RSD = 9.486%

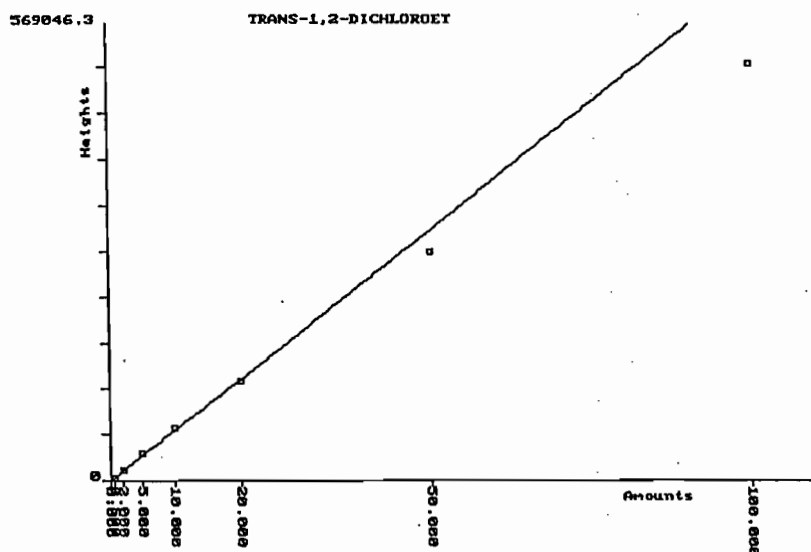
8 METHYLENE CHLORIDE Ret time= 7.069 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	5655	11309.2E+00	18365.03A	12-31-2001 03:26
2	2.00000	18333	91663.6E-01	18365.04A	12-31-2001 04:10
3	5.00000	43774	87548.4E-01	18365.05A	12-31-2001 04:53
4	10.00000	81989	81988.9E-01	18365.06A	12-31-2001 05:36
5	20.00000	149507	74753.7E-01	18365.07A	12-31-2001 06:19
6	50.00000	346844	69368.8E-01	18365.08A	12-31-2001 07:02
7	100.00000	623790	62379.0E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9125173 Ave error=13.2693%
 Height = +82.971e02*X^1
 Average CF (EPA method 8000) = 8297.0615 with %RSD = 20.176%

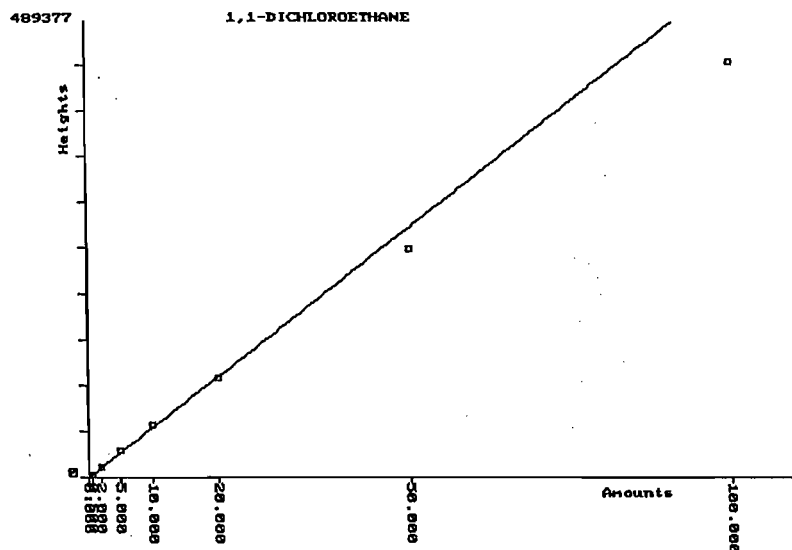
10 TRANS-1,2-DICHLOROET Ret time= 8.582 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 Sample number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3378	67561.0E-01	18365.03A	12-31-2001 03:26
2	2.00000	13434	67168.8E-01	18365.04A	12-31-2001 04:10
3	5.00000	33605	67210.7E-01	18365.05A	12-31-2001 04:53
4	10.00000	65100	65099.7E-01	18365.06A	12-31-2001 05:36
5	20.00000	123282	61640.8E-01	18365.07A	12-31-2001 06:19
6	50.00000	284527	56905.3E-01	18365.08A	12-31-2001 07:02
7	100.00000	517622	51762.2E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9667889 Ave error=7.1786%
 Height = +62.478e02*X^1
 Average CF (EPA method 8000) = 6247.8345 with %RSD = 9.773%

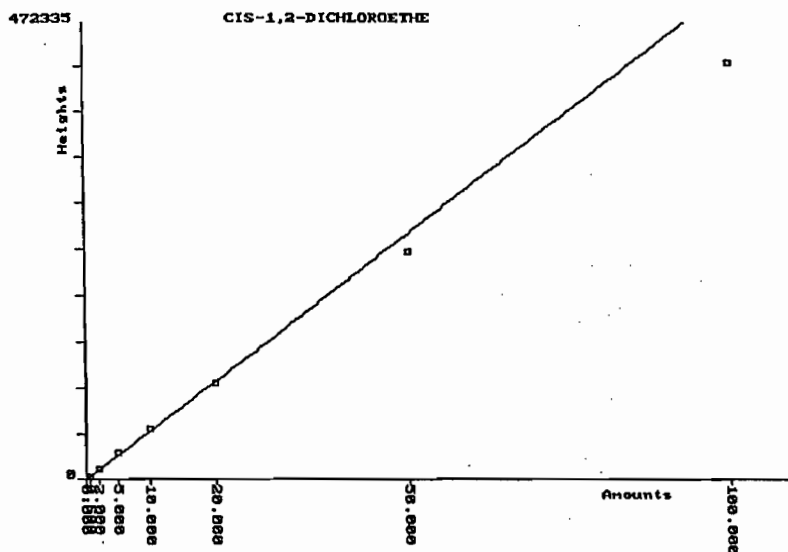
11 1,1-DICHLOROETHANE Ret time= 9.231 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2859	57179.2E-01	18365.03A	12-31-2001 03:26
2	2.00000	11573	57863.6E-01	18365.04A	12-31-2001 04:10
3	5.00000	28895	57789.9E-01	18365.05A	12-31-2001 04:53
4	10.00000	55360	55360.2E-01	18365.06A	12-31-2001 05:36
5	20.00000	105997	52998.3E-01	18365.07A	12-31-2001 06:19
6	50.00000	244492	48898.4E-01	18365.08A	12-31-2001 07:02
7	100.00000	445148	44514.8E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9683654 Ave error=6.9111%
 Height = +53.515e02*X^1
 Average CF (EPA method 8000) = 5351.4922 with %RSD = 9.547%

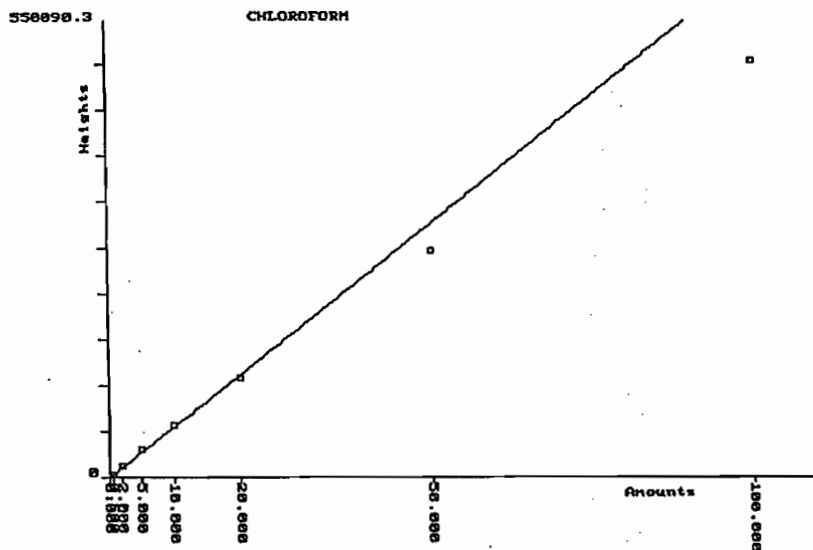
12 CIS-1,2-DICHLOROETHE Ret time= 11.019 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard for this compound.
 Sample number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2675	53503.3E-01	18365.03A	12-31-2001 03:26
2	2.00000	10769	53846.0E-01	18365.04A	12-31-2001 04:10
3	5.00000	27222	54444.5E-01	18365.05A	12-31-2001 04:53
4	10.00000	52494	52493.9E-01	18365.06A	12-31-2001 05:36
5	20.00000	100220	50109.8E-01	18365.07A	12-31-2001 06:19
6	50.00000	234415	46883.1E-01	18365.08A	12-31-2001 07:02
7	100.00000	429639	42963.9E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9755295 Ave error=6.0996%
 Height = +50.606e02*X^1
 Average CF (EPA method 8000) = 5060.6343 with %RSD = 8.449%

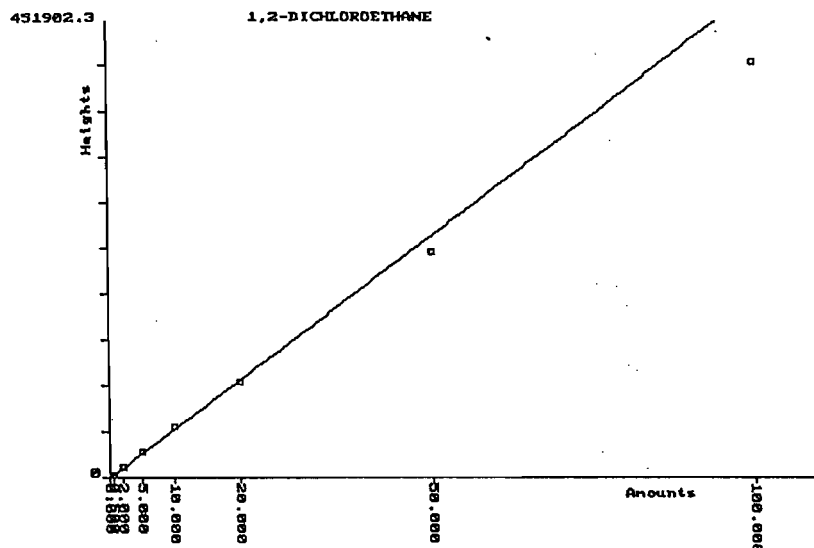
14 CHLOROFORM Ret time= 11.792 min. Search window= 0.100 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3379	67590.0E-01	18365.03A	12-31-2001 03:26
2	2.00000	13453	67263.3E-01	18365.04A	12-31-2001 04:10
3	5.00000	32948	65895.5E-01	18365.05A	12-31-2001 04:53
4	10.00000	63287	63287.4E-01	18365.06A	12-31-2001 05:36
5	20.00000	118933	59466.4E-01	18365.07A	12-31-2001 06:19
6	50.00000	272930	54586.1E-01	18365.08A	12-31-2001 07:02
7	100.00000	500389	50038.9E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9608657 Ave error=8.2813%
 Height = +61.161e02*X^1
 Average CF (EPA method 8000) = 6116.1094 with %RSD = 11.075%

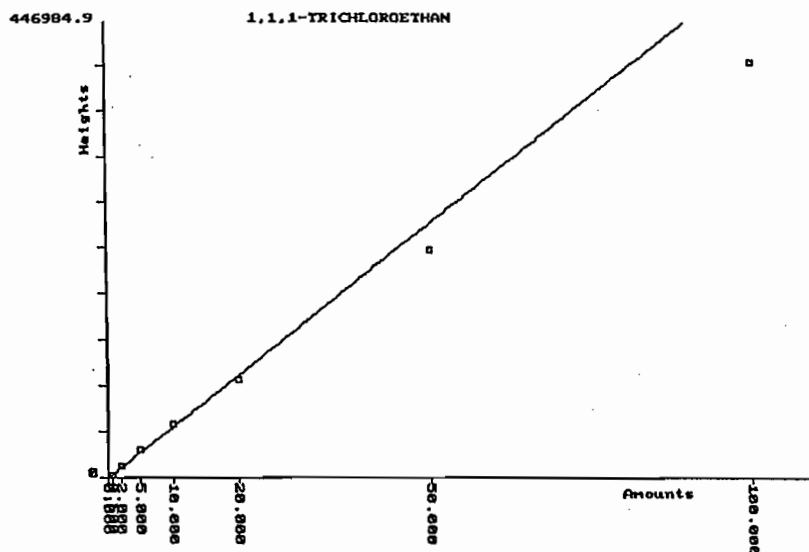
16 1,2-DICHLOROETHANE Ret time= 14.223 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2474	49471.5E-01	18365.03A	12-31-2001 03:26
	2.00000	10167	50833.2E-01	18365.04A	12-31-2001 04:10
	5.00000	25397	50793.1E-01	18365.05A	12-31-2001 04:53
4	10.00000	50670	50670.0E-01	18365.06A	12-31-2001 05:36
5	20.00000	94853	47426.4E-01	18365.07A	12-31-2001 06:19
6	50.00000	222673	44534.5E-01	18365.08A	12-31-2001 07:02
7	100.00000	411045	41104.5E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9791604 Ave error=5.6592%
 Height = +47.833e02*X^1
 Average CF (EPA method 8000) = 4783.3325 with %RSD = 7.86%

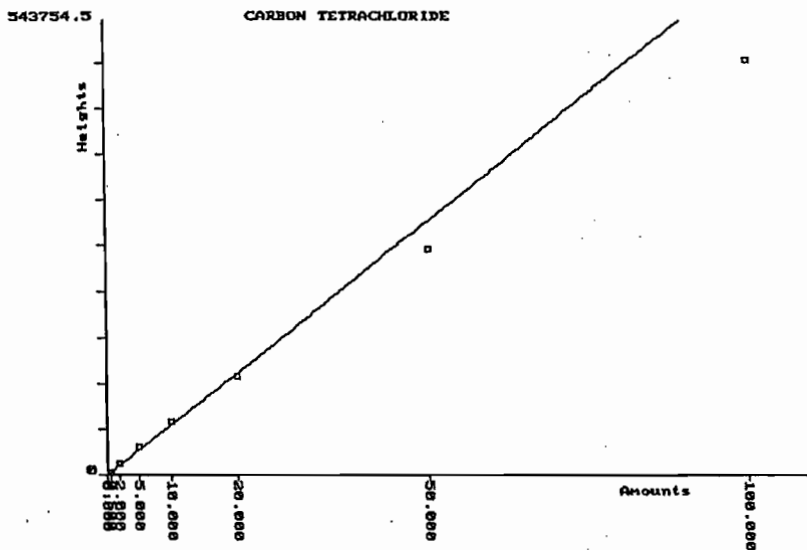
17 1,1,1-TRICHLOROETHAN Ret time= 14.542 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard for this compound.
 Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2748	54955.0E-01	18365.03A	12-31-2001 03:26
2	2.00000	10734	53669.6E-01	18365.04A	12-31-2001 04:10
3	5.00000	26789	53578.1E-01	18365.05A	12-31-2001 04:53
4	10.00000	52436	52436.2E-01	18365.06A	12-31-2001 05:36
5	20.00000	96193	48096.3E-01	18365.07A	12-31-2001 06:19
6	50.00000	221981	44396.3E-01	18365.08A	12-31-2001 07:02
7	100.00000	406600	40660.0E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9610208 Ave error=8.3674%
 Height = +49.684e02*X^1
 Average CF (EPA method 8000) = 4968.4492 with %RSD = 10.972%

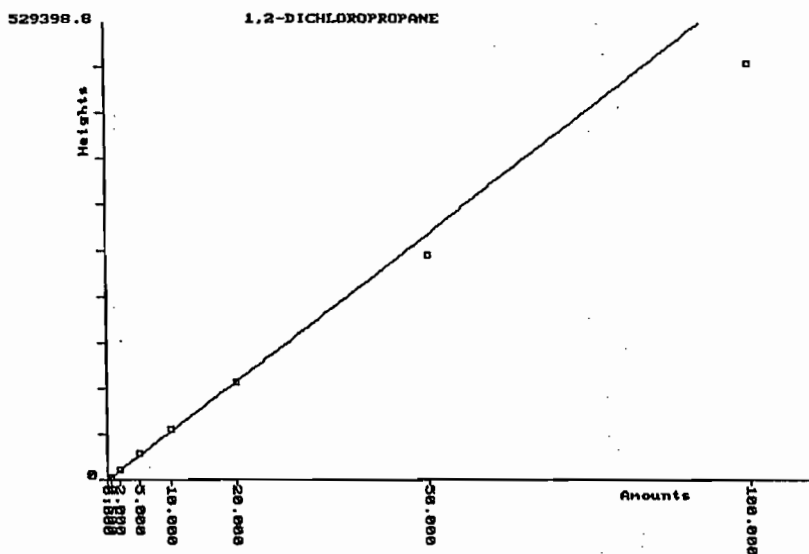
19 CARBON TETRACHLORIDE Ret time= 15.828 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3340	66795.9E-01	18365.03A	12-31-2001 03:26
2	2.00000	13128	65641.0E-01	18365.04A	12-31-2001 04:10
3	5.00000	32965	65930.1E-01	18365.05A	12-31-2001 04:53
4	10.00000	63891	63891.5E-01	18365.06A	12-31-2001 05:36
5	20.00000	117737	58868.5E-01	18365.07A	12-31-2001 06:19
6	50.00000	267370	53474.0E-01	18365.08A	12-31-2001 07:02
7	100.00000	494626	49462.6E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9592839 Ave error=8.6233%
 Height = +60.58e02*X^1
 Average CF (EPA method 8000) = 6058.0493 with %RSD = 11.294%

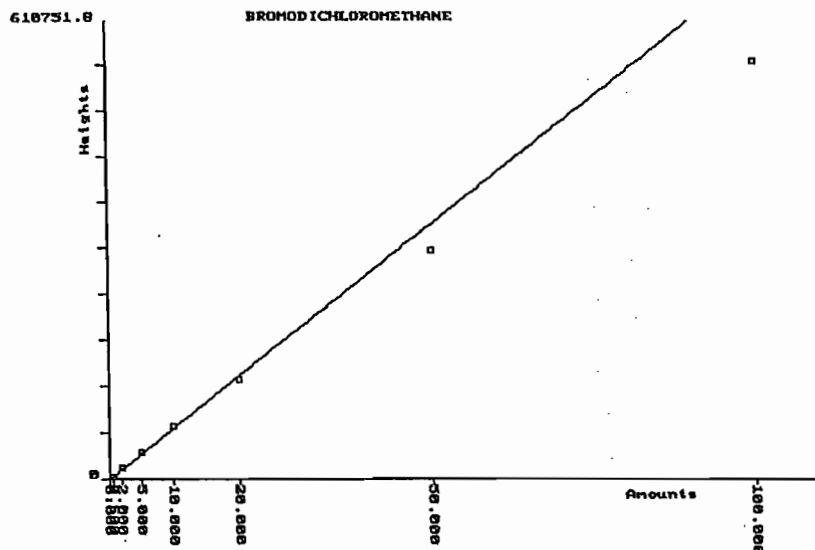
21 1,2-DICHLOROPROPANE Ret time= 18.220 min. Search window= 0.100 min.
 No reference peak for this compound.
 No internal standard for this compound.
 Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3021	60417.2E-01	18365.03A	12-31-2001 03:26
2	2.00000	12161	60807.2E-01	18365.04A	12-31-2001 04:10
3	5.00000	30647	61294.9E-01	18365.05A	12-31-2001 04:53
4	10.00000	59520	59519.9E-01	18365.06A	12-31-2001 05:36
5	20.00000	113101	56550.7E-01	18365.07A	12-31-2001 06:19
6	50.00000	260854	52170.8E-01	18365.08A	12-31-2001 07:02
7	100.00000	481546	48154.6E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9735468 Ave error=6.4485%
 Height = +56.988e02*X^1
 Average CF (EPA method 8000) = 5698.79 with %RSD = 8.853%

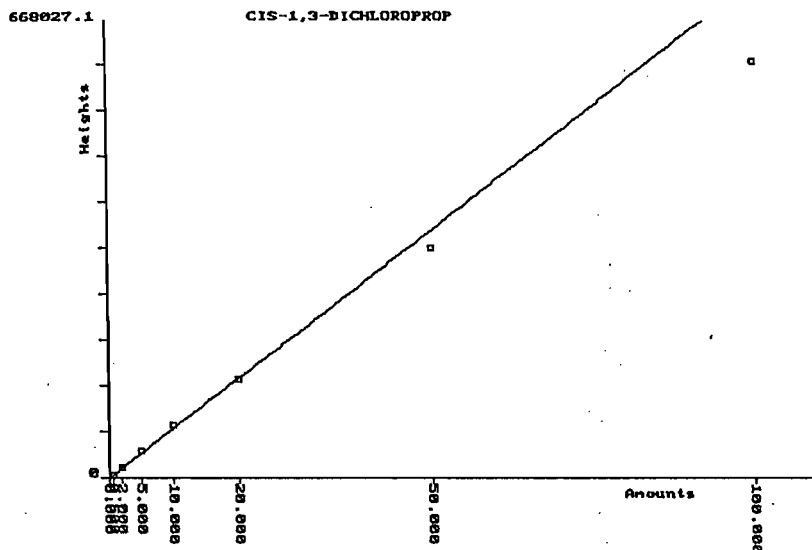
23 BROMODICHLOROMETHANE Ret time= 18.485 min. Search window= 0.100 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3802	76039.6E-01	18365.03A	12-31-2001 03:26
	2.00000	14708	73541.4E-01	18365.04A	12-31-2001 04:10
	5.00000	36295	72589.3E-01	18365.05A	12-31-2001 04:53
4	10.00000	69772	69772.1E-01	18365.06A	12-31-2001 05:36
5	20.00000	131533	65766.4E-01	18365.07A	12-31-2001 06:19
6	50.00000	302613	60522.6E-01	18365.08A	12-31-2001 07:02
7	100.00000	555575	55557.5E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .962226 Ave error=8.1599%
 Height = +67.684e02*X^1
 Average CF (EPA method 8000) = 6768.4116 with %RSD = 11.033%

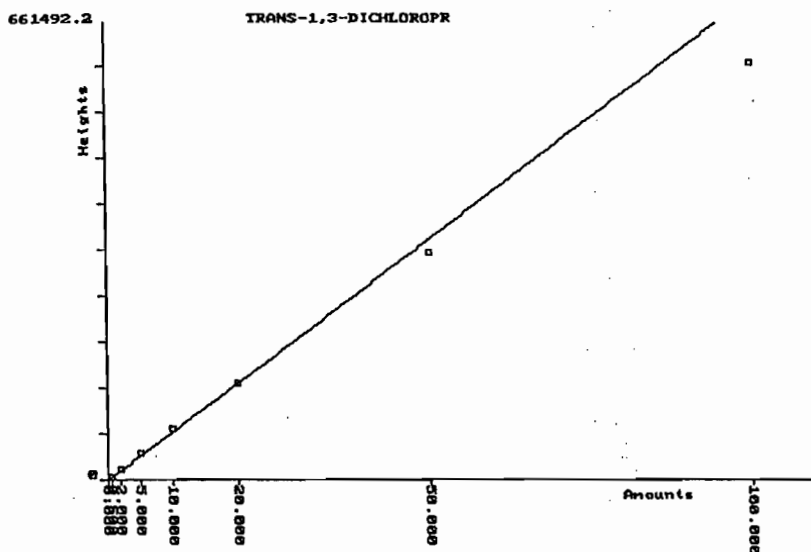
25 CIS-1,3-DICHLOROPROP Ret time= 20.220 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3679	73589.9E-01	18365.03A	12-31-2001 03:26
2	2.00000	15375	76877.2E-01	18365.04A	12-31-2001 04:10
3	5.00000	39446	78891.2E-01	18365.05A	12-31-2001 04:53
4	10.00000	76464	76464.2E-01	18365.06A	12-31-2001 05:36
5	20.00000	143865	71932.5E-01	18365.07A	12-31-2001 06:19
6	50.00000	335119	67023.9E-01	18365.08A	12-31-2001 07:02
7	100.00000	607632	60763.2E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9728716 Ave error=6.1166%
 Height = +72.22e02*X^1
 Average CF (EPA method 8000) = 7222.0303 with %RSD = 8.838%

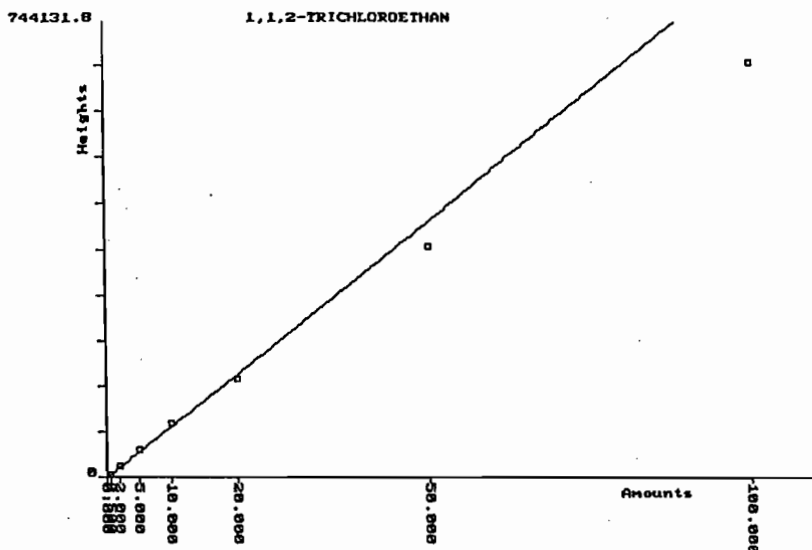
26 TRANS-1,3-DICHLOROPR Ret time= 21.176 min. Search window= 0.100 min.
 No reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3414	68285.4E-01	18365.03A	12-31-2001 03:26
2	2.00000	14574	72871.1E-01	18365.04A	12-31-2001 04:10
3	5.00000	37967	75934.5E-01	18365.05A	12-31-2001 04:53
4	10.00000	74190	74189.9E-01	18365.06A	12-31-2001 05:36
5	20.00000	139197	69598.5E-01	18365.07A	12-31-2001 06:19
6	50.00000	328100	65620.0E-01	18365.08A	12-31-2001 07:02
7	100.00000	601667	60166.7E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9815217 Ave error=5.3434%
 Height = +69.524e02*X^1
 Average CF (EPA method 8000) = 6952.3726 with %RSD = 7.843%

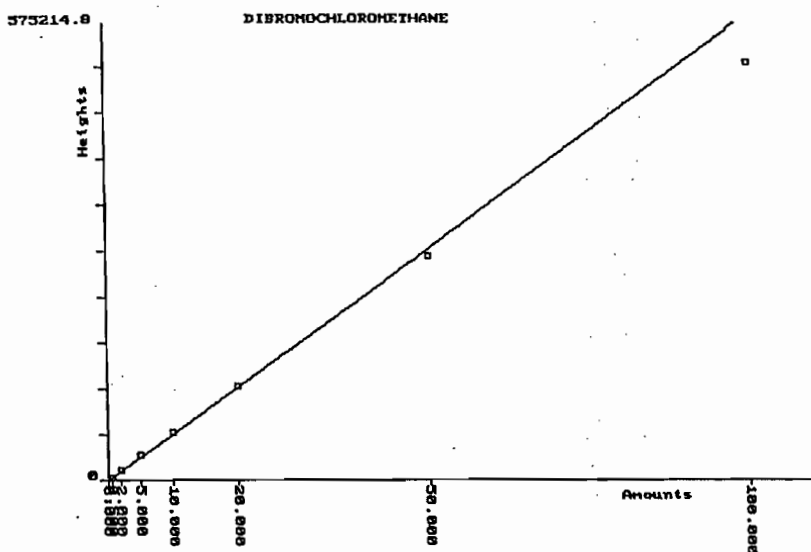
27 1,1,2-TRICHLOROETHAN Ret time= 21.406 min. Search window= 0.100 min.
 N reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	4503	90069.9E-01	18365.03A	12-31-2001 03:26
2	2.00000	18552	92757.9E-01	18365.04A	12-31-2001 04:10
3	5.00000	46031	92061.1E-01	18365.05A	12-31-2001 04:53
4	10.00000	88246	88245.5E-01	18365.06A	12-31-2001 05:36
5	20.00000	162121	81060.7E-01	18365.07A	12-31-2001 06:19
6	50.00000	378416	75683.3E-01	18365.08A	12-31-2001 07:02
7	100.00000	676893	67689.3E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9558294 Ave error=8.5603%
 Height = +83.938e02*X^1
 Average CF (EPA method 8000) = 8393.8262 with %RSD = 11.306%

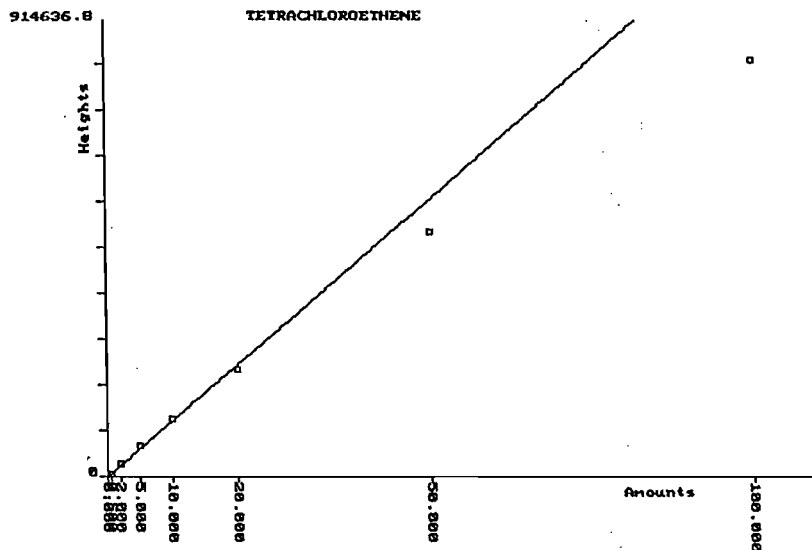
29 DIBROMOCHLOROMETHANE Ret time= 22.253 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard for this compound.
 Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2844	56873.3E-01	18365.03A	12-31-2001 03:26
2	2.00000	12070	60349.6E-01	18365.04A	12-31-2001 04:10
3	5.00000	31383	62766.9E-01	18365.05A	12-31-2001 04:53
4	10.00000	60888	60887.9E-01	18365.06A	12-31-2001 05:36
5	20.00000	117780	58890.2E-01	18365.07A	12-31-2001 06:19
6	50.00000	282632	56526.4E-01	18365.08A	12-31-2001 07:02
7	100.00000	523181	52318.1E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9898901 Ave error=4.0951%
 Height = +58.373e02*X^1
 Average CF (EPA method 8000) = 5837.3203 with %RSD = 5.94%

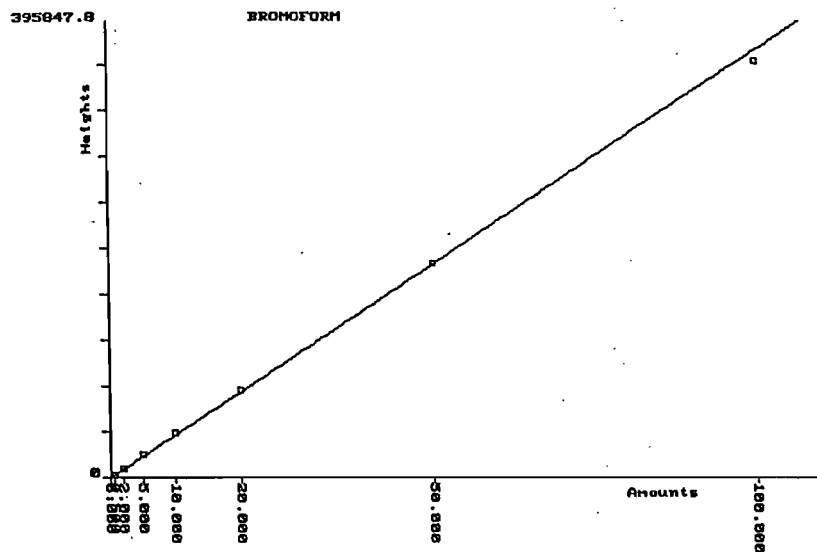
31 TETRACHLOROETHENE Ret time= 22.974 min. Search window= 0.200 min.
 reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	6299	12597.4E+00	18365.03A	12-31-2001 03:26
2	2.00000	25035	12517.6E+00	18365.04A	12-31-2001 04:10
3	5.00000	61600	12319.9E+00	18365.05A	12-31-2001 04:53
4	10.00000	115786	11578.6E+00	18365.06A	12-31-2001 05:36
5	20.00000	213583	10679.1E+00	18365.07A	12-31-2001 06:19
6	50.00000	489091	97818.3E-01	18365.08A	12-31-2001 07:02
7	100.00000	832061	83206.1E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9170033 Ave error=11.0066%
 Height = +11.114e03*X^1
 Average CF (EPA method 8000) = 11113.583 with %RSD = 14.512%

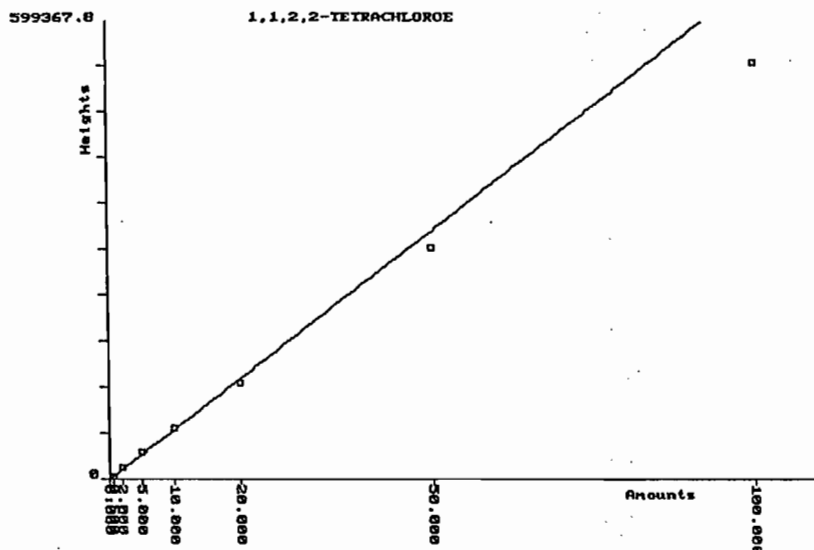
34 BROMOFORM Ret time= 24.704 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	1670	33406.7E-01	18365.03A	12-31-2001 03:26
2	2.00000	7337	36683.0E-01	18365.04A	12-31-2001 04:10
3	5.00000	19716	39432.4E-01	18365.05A	12-31-2001 04:53
4	10.00000	38242	38241.7E-01	18365.06A	12-31-2001 05:36
5	20.00000	75917	37958.4E-01	18365.07A	12-31-2001 06:19
6	50.00000	185509	37101.7E-01	18365.08A	12-31-2001 07:02
7	100.00000	360014	36001.4E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9994046 Ave error=3.3323%
 Height = +36.975e02*X^1
 Average CF (EPA method 8000) = 3697.5027 with %RSD = 5.225%

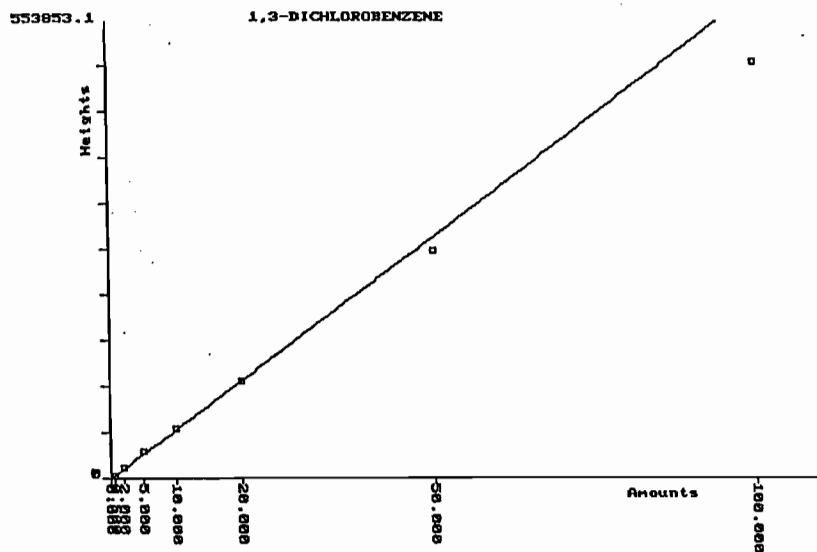
35 1,1,2,2-TETRACHLORO Ret time= 25.194 min. Search window= 0.100 min.
 No reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3403	68068.8E-01	18365.03A	12-31-2001 03:26
2	2.00000	14226	71127.6E-01	18365.04A	12-31-2001 04:10
3	5.00000	35634	71267.4E-01	18365.05A	12-31-2001 04:53
4	10.00000	66267	66267.2E-01	18365.06A	12-31-2001 05:36
5	20.00000	125069	62534.5E-01	18365.07A	12-31-2001 06:19
6	50.00000	302620	60524.0E-01	18365.08A	12-31-2001 07:02
7	100.00000	545189	54518.9E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9724752 Ave error=6.8077%
 Height = +64.901e02*X^1
 Average CF (EPA method 8000) = 6490.1196 with %RSD = 9.409%

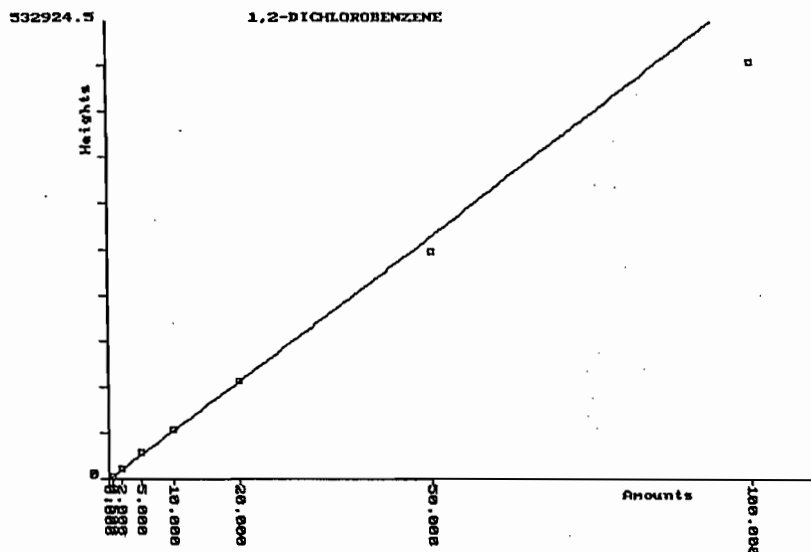
40 1,3-DICHLOROBENZENE Ret time= 27.719 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	3018	60358.1E-01	18365.03A	12-31-2001 03:26
	2.00000	12248	61238.7E-01	18365.04A	12-31-2001 04:10
	5.00000	31803	63605.0E-01	18365.05A	12-31-2001 04:53
4	10.00000	60401	60401.3E-01	18365.06A	12-31-2001 05:36
5	20.00000	117702	58850.9E-01	18365.07A	12-31-2001 06:19
6	50.00000	275615	55122.9E-01	18365.08A	12-31-2001 07:02
7	100.00000	503777	50377.7E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9798821 Ave error=5.1604%
 Height = +58.565e02*X^1
 Average CF (EPA method 8000) = 5856.4946 with %RSD = 7.575%

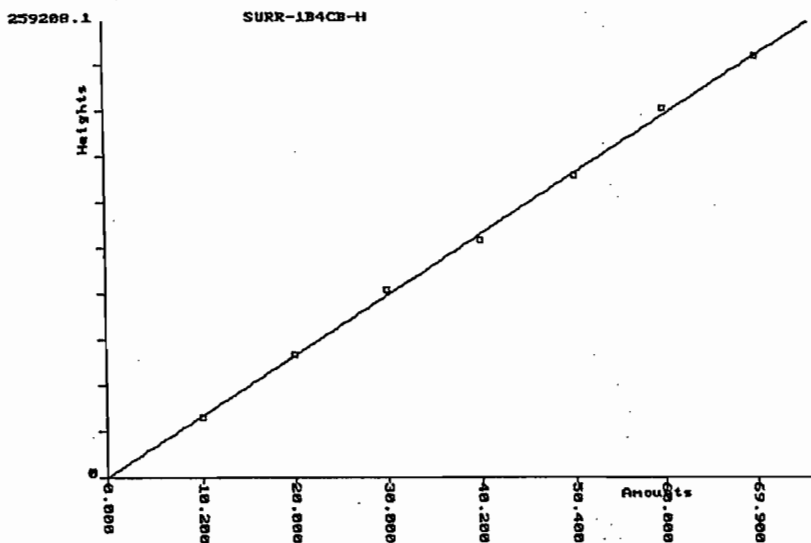
42 1,2-DICHLOROBENZENE Ret time= 28.444 min. Search window= 0.200 min.
 N reference peak for this compound.
 Internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	0.50000	2933	58651.1E-01	18365.03A	12-31-2001 03:26
2	2.00000	11976	59881.0E-01	18365.04A	12-31-2001 04:10
3	5.00000	30507	61013.7E-01	18365.05A	12-31-2001 04:53
4	10.00000	57647	57647.4E-01	18365.06A	12-31-2001 05:36
5	20.00000	114588	57293.9E-01	18365.07A	12-31-2001 06:19
6	50.00000	265424	53084.8E-01	18365.08A	12-31-2001 07:02
7	100.00000	484743	48474.3E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9786952 Ave error=5.3404%
 Height = +56.578e02*X^1
 Average CF (EPA method 8000) = 5657.8047 with %RSD = 7.718%

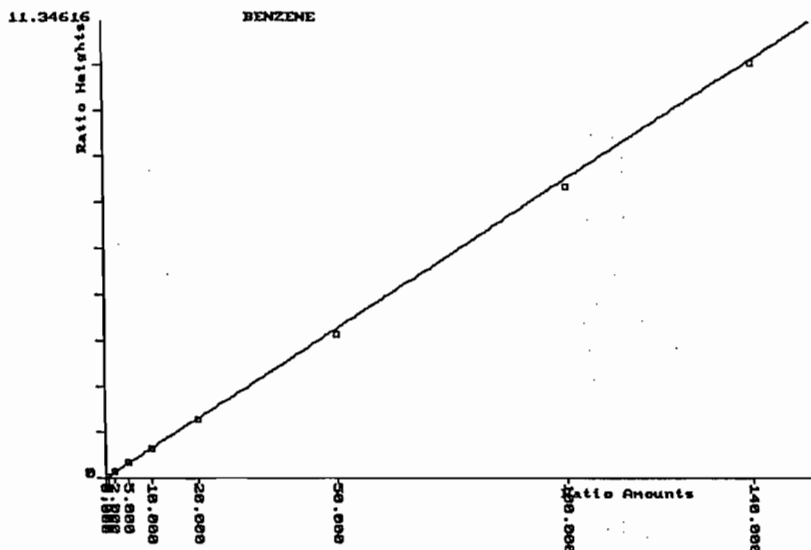
44 SURR-1B4CB-H Ret time= 30.132 min. Search window= 0.200 min.
 No reference peak for this compound.
 No internal standard for this compound.
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	HEIGHT/Amt	Source	Date Updated
1	10.20000	34269	33596.7E-01	18365.03A	12-31-2001 03:26
2	20.00000	69259	34629.5E-01	18365.04A	12-31-2001 04:10
3	30.00000	105963	35321.0E-01	18365.05A	12-31-2001 04:53
4	40.20000	134073	33351.6E-01	18365.06A	12-31-2001 05:36
5	50.40000	171097	33947.9E-01	18365.07A	12-31-2001 06:19
6	60.00000	209612	34935.3E-01	18365.08A	12-31-2001 07:02
7	69.90000	238759	34157.2E-01	18365.09A	12-31-2001 07:45

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9997359 Ave error=1.4972%
 Height = +34.277e02*X^1
 Average CF (EPA method 8000) = 3427.7031 with %RSD = 2.093%

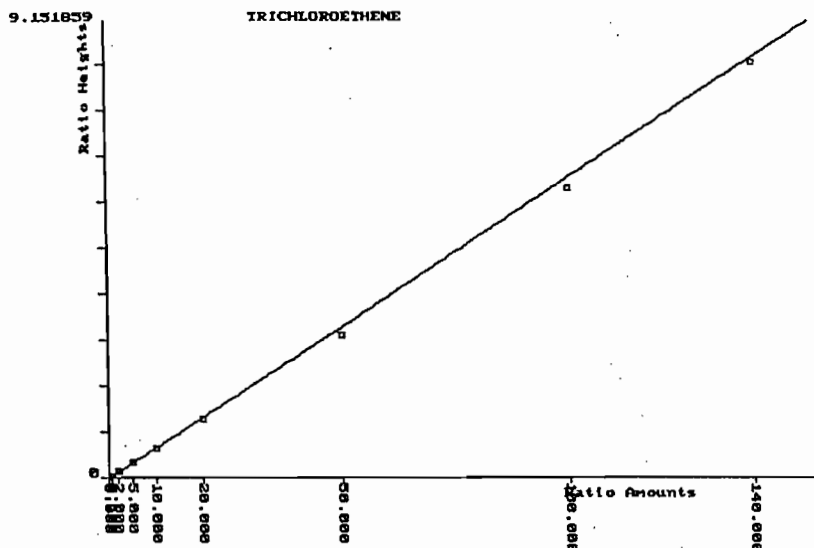
7 BENZENE Ret time= 16.012 min. Search window= 0.200 min.
 Reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
	0.50000	408	1.0000	10461	0.5000	0.0390	18365B.03A	12-31-2001 03:28
	2.00000	1615	1.0000	10654	2.0000	0.1516	18365B.04A	12-31-2001 04:12
	5.00000	4056	1.0000	10847	5.0000	0.3740	18365B.05A	12-31-2001 04:55
4	10.00000	8130	1.0000	10998	10.0000	0.7392	18365B.06A	12-31-2001 05:38
5	20.00000	15676	1.0000	10671	20.0000	1.4690	18365B.07A	12-31-2001 06:21
6	50.00000	38965	1.0000	10870	50.0000	3.5846	18365B.08A	12-31-2001 07:04
7	100.00000	79580	1.0000	11059	100.0000	7.1957	18365B.09A	12-31-2001 07:47
8	140.00000	110242	1.0000	10684	140.0000	10.3182	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .999612 Ave error=1.8006%
 Ratio Height = +74.152e-03*X^1
 Average CF (EPA method 8000) = 0.0742 with %RSD = 2.741%

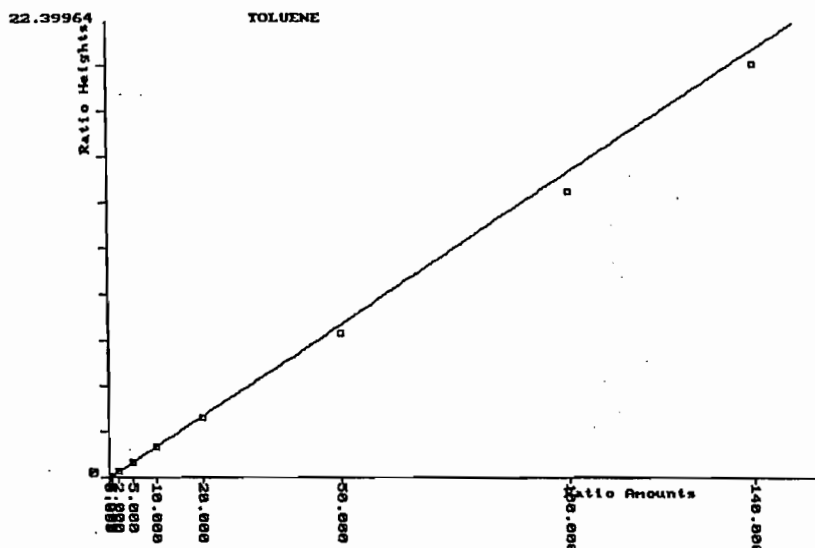
9 TRICHLOROETHENE Ret time= 18.349 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	338	1.0000	10461	0.5000	0.0323	18365B.03A	12-31-2001 03:28
	2.00000	1320	1.0000	10654	2.0000	0.1239	18365B.04A	12-31-2001 04:12
	5.00000	3302	1.0000	10847	5.0000	0.3044	18365B.05A	12-31-2001 04:55
4	10.00000	6541	1.0000	10998	10.0000	0.5948	18365B.06A	12-31-2001 05:38
5	20.00000	12540	1.0000	10671	20.0000	1.1751	18365B.07A	12-31-2001 06:21
6	50.00000	31151	1.0000	10870	50.0000	2.8657	18365B.08A	12-31-2001 07:04
7	100.00000	63986	1.0000	11059	100.0000	5.7857	18365B.09A	12-31-2001 07:47
8	140.00000	88922	1.0000	10684	140.0000	8.3228	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9993412 Ave error=2.7027%
 Ratio Height = $+60.046e-03 \times X^1$
 Average CF (EPA method 8000) = 0.06 with %RSD = 4.002%

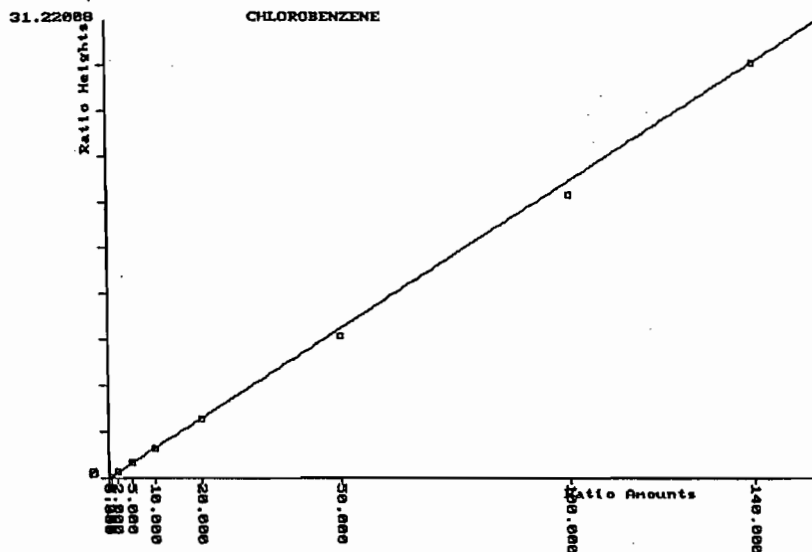
13 TOLUENE Ret time= 21.738 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	853	1.0000	10461	0.5000	0.0816	18365B.03A	12-31-2001 03:28
	2.00000	3359	1.0000	10654	2.0000	0.3153	18365B.04A	12-31-2001 04:12
	5.00000	8356	1.0000	10847	5.0000	0.7704	18365B.05A	12-31-2001 04:55
4	10.00000	16553	1.0000	10998	10.0000	1.5052	18365B.06A	12-31-2001 05:38
5	20.00000	31575	1.0000	10671	20.0000	2.9588	18365B.07A	12-31-2001 06:21
6	50.00000	77224	1.0000	10870	50.0000	7.1042	18365B.08A	12-31-2001 07:04
7	100.00000	155459	1.0000	11059	100.0000	14.0568	18365B.09A	12-31-2001 07:47
8	140.00000	217644	1.0000	10684	140.0000	20.3707	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9977458 Ave error=3.6331%
 Ratio Height = +15.019e-02*X^1
 Average CF (EPA method 8000) = 0.1502 with %RSD = 5.181%

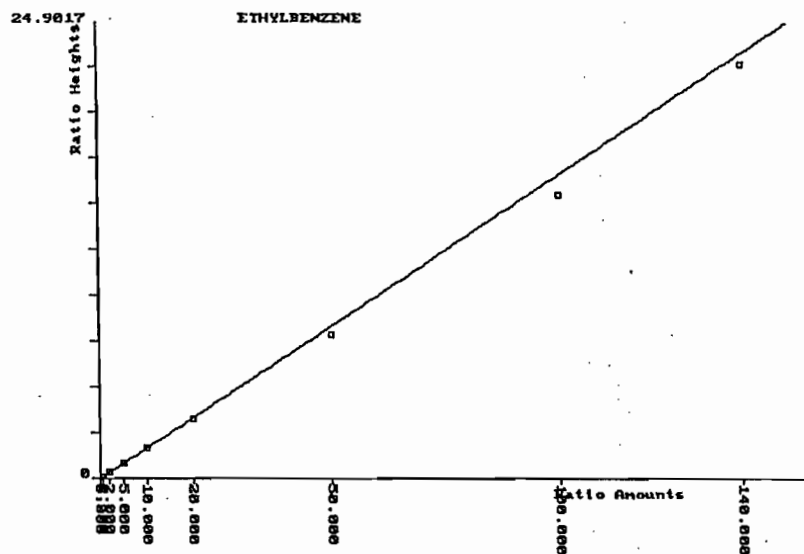
15 CHLOROBENZENE Ret time= 23.999 min. Search window= 0.200 min.
 N eference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source.	Date Updated
	0.50000	1116	1.0000	10461	0.5000	0.1067	18365B.03A	12-31-2001 03:28
	2.00000	4469	1.0000	10654	2.0000	0.4195	18365B.04A	12-31-2001 04:12
	5.00000	11187	1.0000	10847	5.0000	1.0314	18365B.05A	12-31-2001 04:55
4	10.00000	22220	1.0000	10998	10.0000	2.0204	18365B.06A	12-31-2001 05:38
5	20.00000	42937	1.0000	10671	20.0000	4.0236	18365B.07A	12-31-2001 06:21
6	50.00000	105083	1.0000	10870	50.0000	9.6671	18365B.08A	12-31-2001 07:04
7	100.00000	213399	1.0000	11059	100.0000	19.2958	18365B.09A	12-31-2001 07:47
8	140.00000	303341	1.0000	10684	140.0000	28.3916	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9990926 Ave error=2.3471%
 Ratio Height = +20.272e-02*X^1
 Average CF (EPA method 8000) = 0.2027 with %RSD = 3.547%

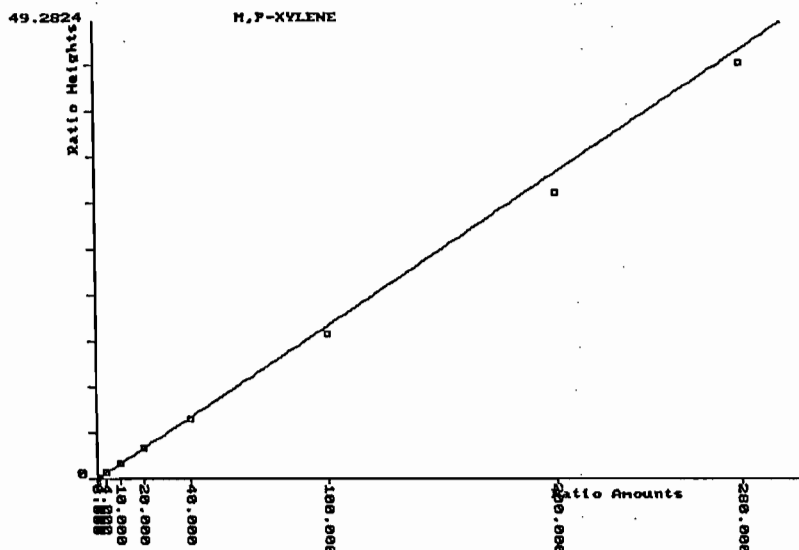
16 ETHYLBENZENE Ret time= 24.314 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	943	1.0000	10461	0.5000	0.0901	18365B.03A	12-31-2001 03:28
	2.00000	3686	1.0000	10654	2.0000	0.3460	18365B.04A	12-31-2001 04:12
	5.00000	9214	1.0000	10847	5.0000	0.8495	18365B.05A	12-31-2001 04:55
4	10.00000	18233	1.0000	10998	10.0000	1.6579	18365B.06A	12-31-2001 05:38
5	20.00000	34797	1.0000	10671	20.0000	3.2608	18365B.07A	12-31-2001 06:21
6	50.00000	85282	1.0000	10870	50.0000	7.8455	18365B.08A	12-31-2001 07:04
7	100.00000	171227	1.0000	11059	100.0000	15.4826	18365B.09A	12-31-2001 07:47
8	140.00000	241955	1.0000	10684	140.0000	22.6461	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9979748 Ave error=3.5014%
 Ratio Height = $+16.569e-02 \times X^1$
 Average CF (EPA method 8000) = 0.1657 with %RSD = 5.106%

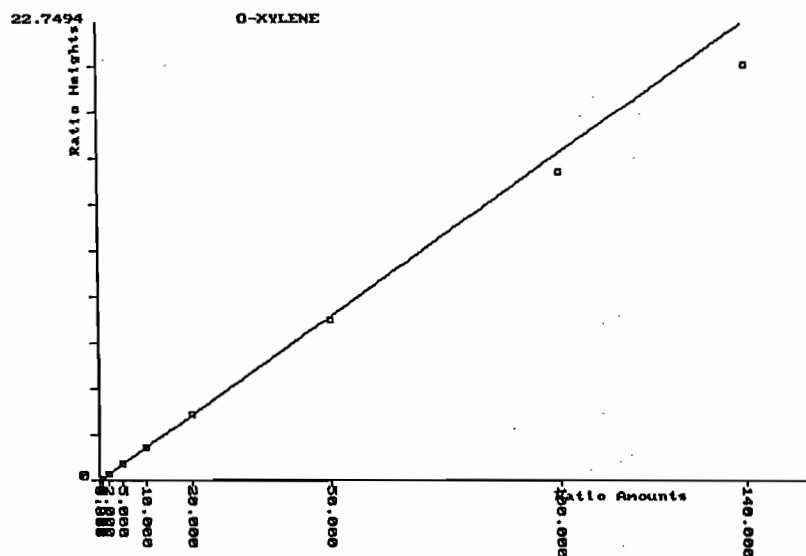
17 M,P-XYLENE Ret time= 24.606 min. Search window= 0.200 min.
 reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 Group number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	1.00000	1878	1.0000	10461	1.0000	0.1796	18365B.03A	12-31-2001 03:28
	4.00000	7354	1.0000	10654	4.0000	0.6902	18365B.04A	12-31-2001 04:12
	10.00000	18353	1.0000	10847	10.0000	1.6920	18365B.05A	12-31-2001 04:55
4	20.00000	36140	1.0000	10998	20.0000	3.2861	18365B.06A	12-31-2001 05:38
5	40.00000	69052	1.0000	10671	40.0000	6.4708	18365B.07A	12-31-2001 06:21
6	100.00000	170529	1.0000	10870	100.0000	15.6878	18365B.08A	12-31-2001 07:04
7	200.00000	340274	1.0000	11059	200.0000	30.7680	18365B.09A	12-31-2001 07:47
8	280.00000	478849	1.0000	10684	280.0000	44.8185	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9978033 Ave error=3.6196%
 Ratio Height = $+16.477e-02 \times X^1$
 Average CF (EPA method 8000) = 0.1648 with %RSD = 5.19%

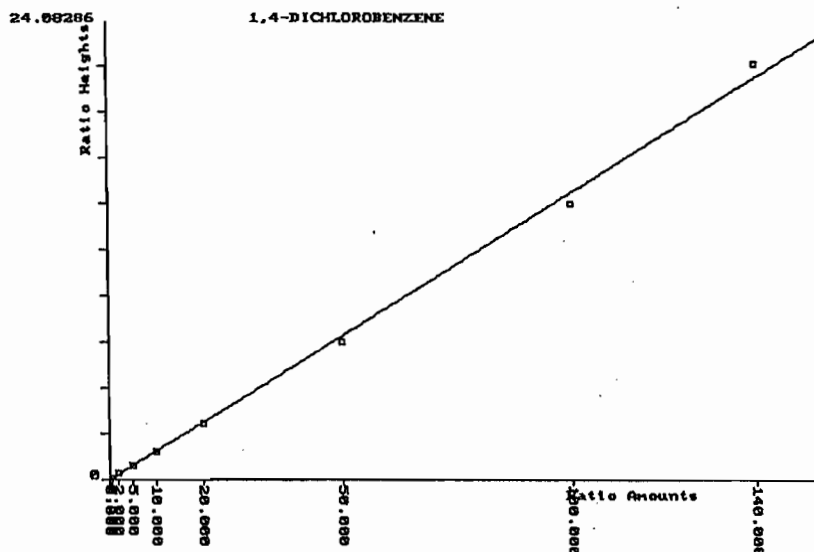
19 O-XYLENE Ret time= 25.175 min. Search window= 0.060 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 Setup number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	921	1.0000	10461	0.5000	0.0881	18365B.03A	12-31-2001 03:28
	2.00000	3609	1.0000	10654	2.0000	0.3387	18365B.04A	12-31-2001 04:12
	5.00000	9045	1.0000	10847	5.0000	0.8339	18365B.05A	12-31-2001 04:55
4	10.00000	18092	1.0000	10998	10.0000	1.6450	18365B.06A	12-31-2001 05:38
5	20.00000	35102	1.0000	10671	20.0000	3.2894	18365B.07A	12-31-2001 06:21
6	50.00000	86485	1.0000	10870	50.0000	7.9562	18365B.08A	12-31-2001 07:04
7	100.00000	169449	1.0000	11059	100.0000	15.3218	18365B.09A	12-31-2001 07:47
8	140.00000	221048	1.0000	10684	140.0000	20.6893	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9928726 Ave error=3.8619%
 Ratio Height = $+16.268e-02 \cdot X^1$
 Average CF (EPA method 8000) = 0.1627 with %RSD = 5.568%

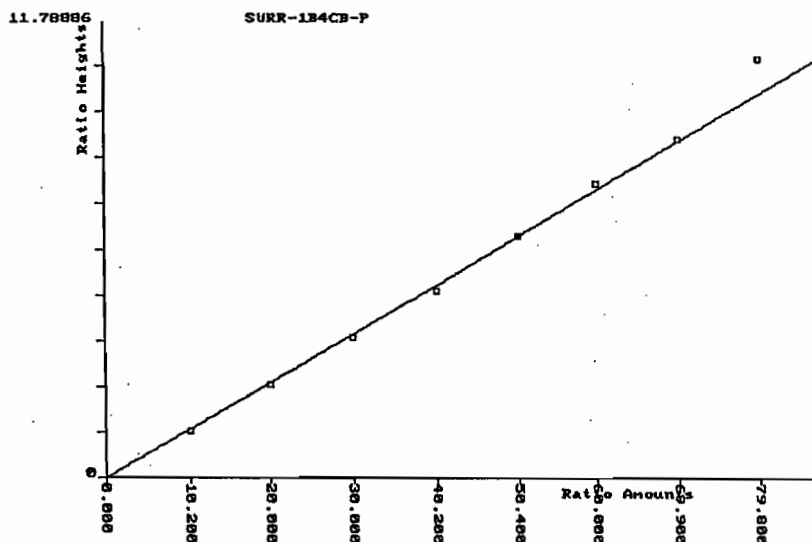
30 1,4-DICHLOROBENZENE Ret time= 27.808 min. Search window= 0.040 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	827	1.0000	10461	0.5000	0.0790	18365B.03A	12-31-2001 03:28
	2.00000	3291	1.0000	10654	2.0000	0.3089	18365B.04A	12-31-2001 04:12
	5.00000	8223	1.0000	10847	5.0000	0.7581	18365B.05A	12-31-2001 04:55
4	10.00000	16292	1.0000	10998	10.0000	1.4814	18365B.06A	12-31-2001 05:38
5	20.00000	31672	1.0000	10671	20.0000	2.9680	18365B.07A	12-31-2001 06:21
6	50.00000	78527	1.0000	10870	50.0000	7.2240	18365B.08A	12-31-2001 07:04
7	100.00000	160325	1.0000	11059	100.0000	14.4968	18365B.09A	12-31-2001 07:47
8	140.00000	233991	1.0000	10684	140.0000	21.9007	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9985886 Ave error=2.5466%
 Ratio Height = +15.082e-02*X^1
 Average CF (EPA method 8000) = 0.1508 with %RSD = 3.411%

34 SURR-1B4CB-P Ret time= 30.104 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 16.94757 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	10.20000	12690	1.0000	10461	10.2000	1.2131	18365B.03A	12-31-2001 03:28
	20.00000	25762	1.0000	10654	20.0000	2.4181	18365B.04A	12-31-2001 04:12
	30.00000	39607	1.0000	10847	30.0000	3.6515	18365B.05A	12-31-2001 04:55
4	40.20000	53624	1.0000	10998	40.2000	4.8759	18365B.06A	12-31-2001 05:38
5	50.40000	67001	1.0000	10671	50.4000	6.2786	18365B.07A	12-31-2001 06:21
6	60.00000	82650	1.0000	10870	60.0000	7.6034	18365B.08A	12-31-2001 07:04
7	69.90000	96828	1.0000	11059	69.9000	8.7553	18365B.09A	12-31-2001 07:47
8	79.80000	115682	1.0000	10684	79.8000	10.8274	18365B.10A	12-31-2001 08:30

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9974188 Ave error=2.5813%
 Ratio Height = $+12.438e-02 \times X^1$
 Average CF (EPA method 8000) = 0.1244 with %RSD = 4.216%

Quality Control Summary
SDG# HUL05

Instrument ID: 5843

Beginning Calibration Verification Summary

CCV Batch: 02015A18

Data File: C:\CP\DATA1\18014.33R

Date Injected: 01/15/02 Time Injected: 04:03

Initial Calibration Date(s): 12/31/01 (HALL)

Initial Calibration Date(s): 12/31/01 (PID)

Sample Information			
LL Sample#	Sample Code	Date	Analysis Time
BLK1831	METHOD BLANK	01/15/02	05:04
3753742	A2U--	01/15/02	06:34
3753745	A2U-D	01/15/02	07:19
3753743MS	A2U--	01/15/02	08:05
3753744MSD	A2U--	01/15/02	08:50
LCS1806	LAB CONTROL	01/15/02	09:35

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	25.2	26 *	-20 to +20
CHLOROMETHANE (HALL)	20.0	13.4	-33 *	-20 to +20
VINYL CHLORIDE (HALL)	20.0	20.1	0	-20 to +20
BROMOMETHANE (HALL)	20.0	16.7	-17	-20 to +20
CHLOROETHANE (HALL)	20.0	16.3	-18	-20 to +20
TRICHLOROFLUOROMETHA (HALL)	20.0	18.4	-8	-20 to +20
1,1-DICHLOROETHENE (HALL)	20.0	18.9	-5	-15 to +15
METHYLENE CHLORIDE (HALL)	20.0	17.7	-11	-15 to +15
TRANS-1,2-DICHLOROET (HALL)	20.0	19.7	-1	-15 to +15
1,1-DICHLOROETHANE (HALL)	20.0	20.5	2	-15 to +15
CIS-1,2-DICHLOROETHE (HALL)	20.0	20.3	2	-15 to +15
CHLOROFORM (HALL)	20.0	20.3	2	-15 to +15
1,2-DICHLOROETHANE (HALL)	20.0	20.6	3	-15 to +15
1,1,1-TRICHLOROETHAN (HALL)	20.0	20.3	1	-15 to +15
CARBON TETRACHLORIDE (HALL)	20.0	20.1	0	-15 to +15
BENZENE (PID)	20.0	18.9	-5	-15 to +15

* = %DRIFT outside control limits.

Quality Control Summary
SDG# HUL05
Instrument ID: 5843
Beginning Calibration Verification Summary

CCV Batch: 02015A18
Data File: C:\CP\DATA1\18014.33R
Date Injected: 01/15/02 Time Injected: 04:03
Initial Calibration Date(s): 12/31/01(HALL)
Initial Calibration Date(s): 12/31/01(PID)

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
1,2-DICHLOROPROPANE (HALL)	20.0	20.1	1	-15 to +15
TRICHLOROETHENE (PID)	20.0	18.4	-8	-15 to +15
BROMODICHLOROMETHANE (HALL)	20.0	18.9	-6	-15 to +15
CIS-1,3-DICHLOROPROP (HALL)	20.0	19.2	-4	-15 to +15
TRANS-1,3-DICHLOROPR (HALL)	20.0	17.7	-11	-15 to +15
1,1,2-TRICHLOROETHAN (HALL)	20.0	19.5	-2	-15 to +15
TOLUENE (PID)	20.0	18.6	-7	-15 to +15
DIBROMOCHLOROMETHANE (HALL)	20.0	20.5	3	-15 to +15
TETRACHLOROETHENE (HALL)	20.0	18.7	-6	-15 to +15
CHLOROBENZENE (PID)	20.0	18.7	-6	-15 to +15
ETHYLBENZENE (PID)	20.0	18.9	-6	-15 to +15
M,P-XYLENE (PID)	40.0	37.7	-6	-15 to +15
BROMOFORM (HALL)	20.0	21.2	6	-15 to +15
O-XYLENE (PID)	20.0	19.2	-4	-15 to +15
1,1,2,2-TETRACHLOROE (HALL)	20.0	20.5	3	-15 to +15
1,3-DICHLOROBENZENE (HALL)	20.0	19.5	-3	-15 to +15
1,4-DICHLOROBENZENE (PID)	20.0	18.8	-6	-15 to +15
1,2-DICHLOROBENZENE (HALL)	20.0	19.5	-3	-15 to +15
SURR-1B4CB-P (PID)	30.0	28.8	-4	-31 to +21
SURR-1B4CB-H (HALL)	30.0	28.8	-4	-41 to +32

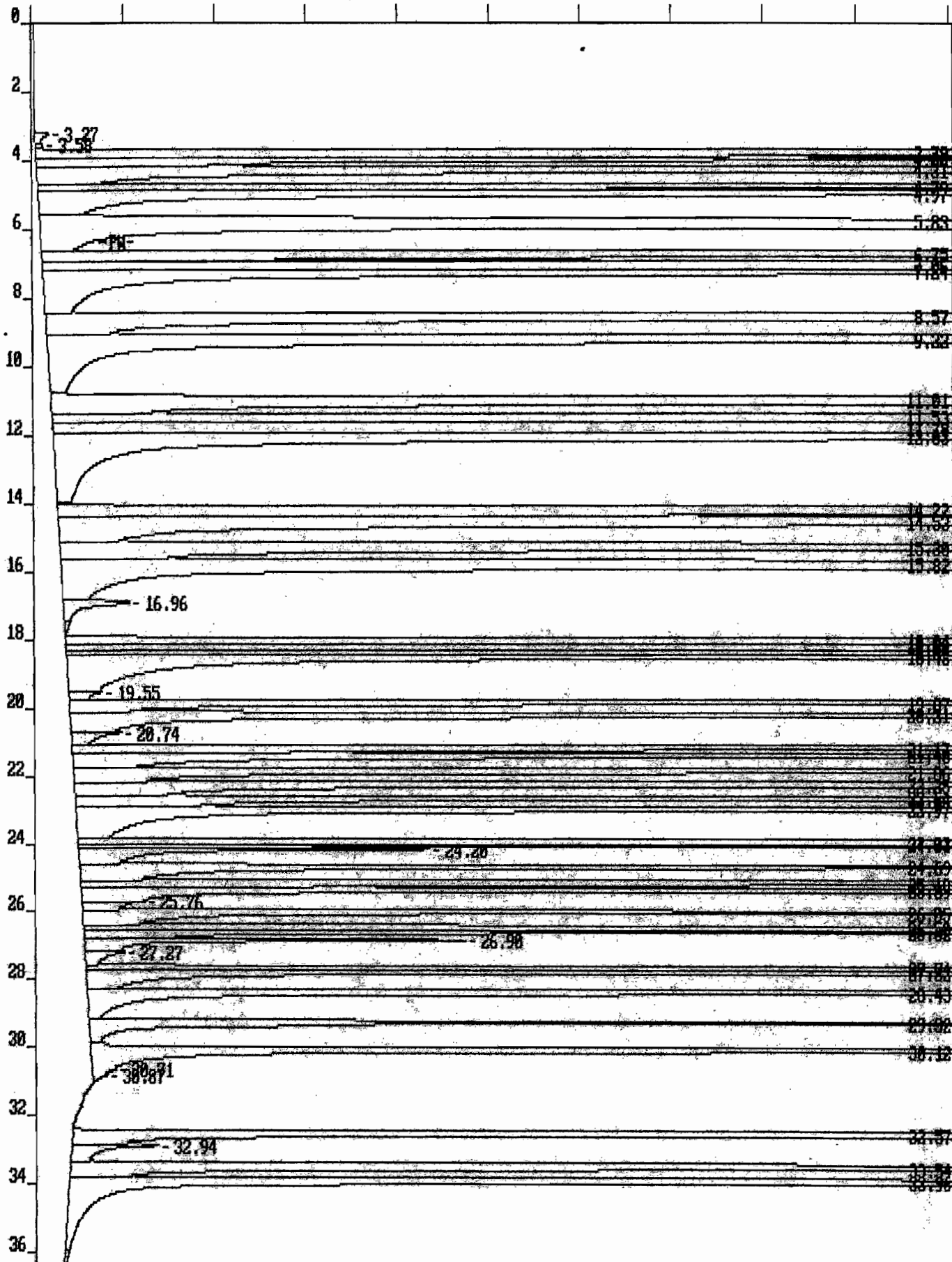
Mean %Drift for all calibration compounds (HALL) = -5.4
Mean %Drift for all calibration compounds (PID) = -8.4

File=C:\CP\DATA1\18014.33R Date printed=01-15-2002 Time= 04:32:36

Sample Name=CHKSTD

02015A188400,8401

0.0 to 37.0 min. Low Y=-0.006 High Y=14.994 mv Span=15.0



Sample Name: CHKSTD

Batch: 02015A18

Date Taken: Jan 15, 2002 04:03:17

Raw File: C:\CP\DATA1\18014.33R

Area File: C:\CP\DATA1\18014.33A

Reprocessed with batch # 02015A18.

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap

Inst. ID#05843 - 5890#18HALL Mod 01-15-2002

Peak Width: .05

Dil. Factor: 1

Analyst: 115

Threshold: -3

Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 24):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.793	3.793	25.2480	352795	51109
3.996	3.996	13.3856	206615	29909
4.306	4.306	20.0836	498608	71449
4.785	4.785	16.6733	256764	44814
4.974	4.974	16.3227	436561	69558
5.830	5.830	18.4406	673606	47082
6.750	6.750	18.9091	556705	87537
7.061	7.061	17.7066	845634	146913
7.241	7.241	17.6545	668536	64128
8.573	8.573	19.7011	854536	123089
9.222	9.222	20.4504	936207	109440
11.009	11.009	20.3067	864672	102765
11.529	11.529	20.5257	602269	74707
11.784	11.784	20.3111	1147363	124225
12.033	12.033	18.6689	800966	60632
14.215	14.215	20.6055	787635	98563
14.534	14.534	20.2865	1068914	100793
15.298	15.298	19.6911	736164	86566
15.821	15.821	20.0834	1193721	121666
18.043	18.043	20.0124	345283	59320
18.215	18.215	20.1184	742499	114651
18.372	18.372	18.5881	871697	148579
18.480	18.480	18.8571	873100	127632
19.867	19.867	21.5470	261163	49595
20.214	20.214	19.1598	696765	138373
21.170	21.170	17.7032	541107	123079
21.399	21.399	19.5481	778425	164083
21.862	21.862	19.4432	608061	136482
22.245	22.245	20.5269	546147	119822
22.640	22.640	19.8173	340344	74596
22.965	22.965	18.7390	911506	208257
23.916	23.916	19.6053	855191	229428
24.013	24.013	18.9259	407937	104435
24.694	24.694	21.2432	352962	78547
25.184	25.184	20.5361	532556	133282
25.388	25.388	20.7512	452646	105889
26.054	26.054	19.0247	244691	53850
26.504	26.504	19.4071	294555	77387
26.622	26.622	18.9517	320438	76689
27.707	27.707	19.4718	444067	114036
27.822	27.822	19.2890	533845	120223
28.433	28.433	19.4824	499454	110228
29.318	29.318	21.8719	143496	24610
30.118	30.118	28.7598	503724	98580
32.575	32.575	19.5665	451475	78629
33.538	33.538	19.1766	600848	90932
33.963	33.963	20.3587	474316	69548
TOTAL 1,2-DICHLOROETHENE:		40.0077		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 95.8661%

Sample name: CHKSTD

Batch: 02015A188400,840

Raw file:

C:\CP\DATA1\18014.33R

Reviewed by:

JB us

Verified by:

VMM49

Date:

1-15-02

Date:

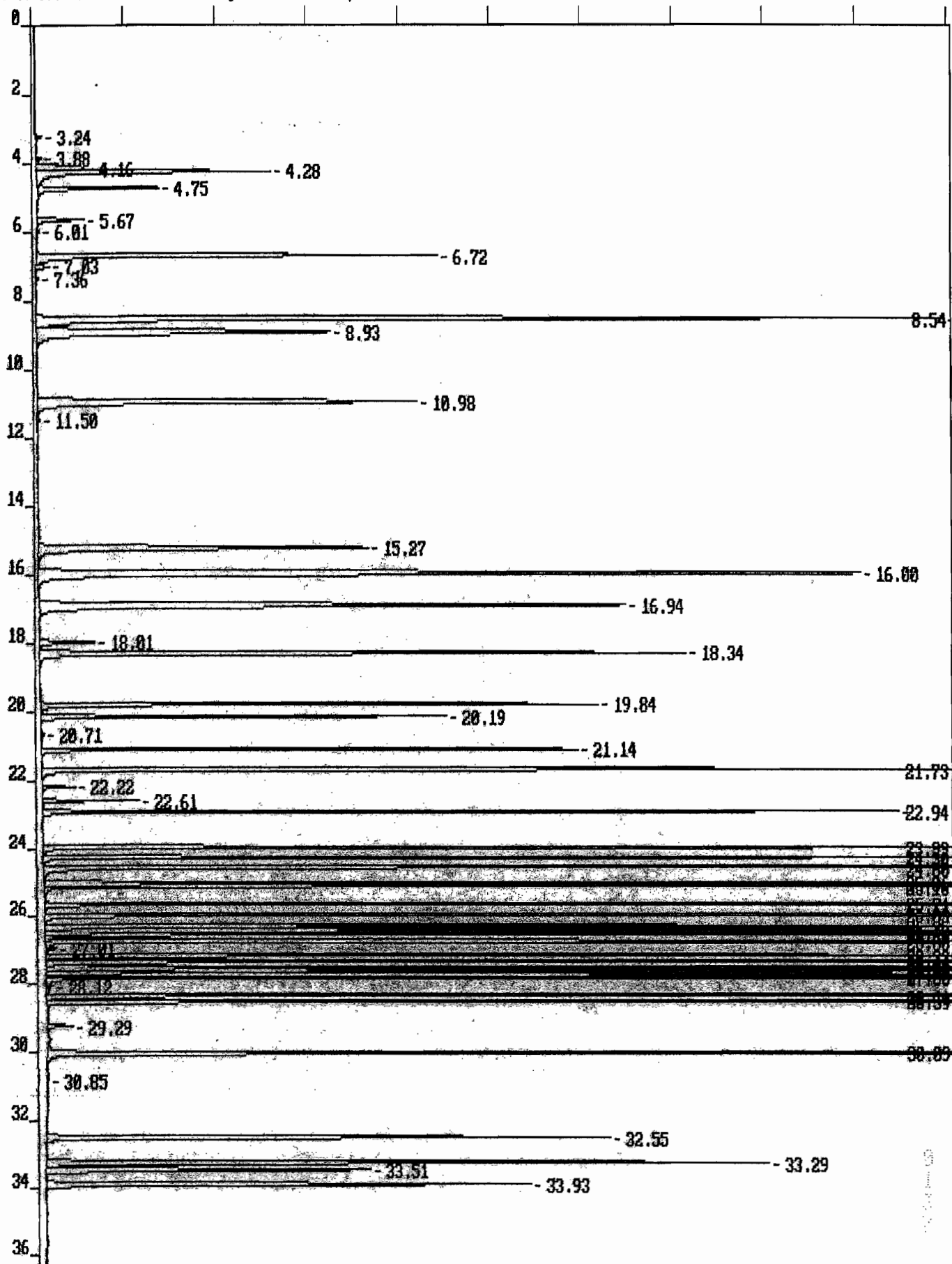
01/15/02

File=C:\CP\DATA1\180148.33R Date printed=01-15-2002 Time= 04:33:34

Sample Name=CHKSTD

02015A188400,8401

0.0 to 37.0 min. Low Y=-0.001 High Y=14.999 mv Span=15.0



Sample Name: CHKSTD

Batch: 02015A18

Date Taken: Jan 15, 2002 04:03:17

Raw File: C:\CP\DATA1\18014B.33R

Area File: C:\CP\DATA1\18014B.33A

Reprocessed with batch # 02015A18.

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID Mod 01-15-2002 0

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 26):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.278	4.278	VINYL CHLORIDE	12.5197	24537	3819
6.722	6.722	1,1-DICHLOROETHENE	18.8836	34737	6576
8.544	8.544	TRANS-1,2-DICHLOROET	18.3640	85012	14849
8.932	8.932	METHYL T-BUTYL ETHER	20.1320	42495	4799
10.981	10.981	CIS-1,2-DICHLOROETHE	18.9352	46172	6219
15.267	15.267	1,1-DICHLOROPROPENE	18.7202	40003	5390
16.005	16.005	BENZENE	18.9301	97644	13467
16.940	16.940	ISTD-FBENZENE	1.0000	72046	9594
18.344	18.344	TRICHLOROETHENE	18.3946	55324	10596
19.838	19.838	2-CHLOROETHYL VINYL	21.3861	36886	9147
20.187	20.187	CIS-1,3-DICHLOROPROP	18.3670	25439	6660
21.143	21.143	TRANS-1,3-DICHLOROPR	16.8839	29062	8787
21.731	21.731	TOLUENE	18.6066	89493	26809
22.940	22.940	TETRACHLOROETHENE	18.3442	42732	14039
23.990	23.990	CHLOROBENZENE	18.7199	94179	36406
24.304	24.304	ETHYLBENZENE	18.8647	80802	29986
24.597	24.597	M,P-XYLENE	37.6967	189817	59589
25.062	25.062	STYRENE	19.0708	102475	38381
25.164	25.164	O-XYLENE	19.2119	84736	29983
25.708	25.708	ISOPROPYLBENZENE	19.5402	69640	23404
26.026	26.026	BROMOBENZENE	18.7394	96408	33698
26.354	26.354	N-PROPYLBENZENE	18.8661	75600	26240
26.478	26.478	2-CHLOROTOLUENE	18.9551	84098	28937
26.597	26.597	4-CHLOROTOLUENE	18.8576	85921	30441
26.801	26.801	1,3,5-TRIMETHYLBENZE	19.0363	110968	37390
27.225	27.225	TERT-BUTYLBENZENE	19.1463	65426	19853
27.407	27.407	1,2,4-TRIMETHYLBENZE	19.0293	85073	27941
27.575	27.575	SEC-BUTYLBENZENE	18.7437	66094	19849
27.681	27.681	1,3-DICHLOROBENZENE	18.8185	83255	27101
27.797	27.797	1,4-DICHLOROBENZENE	18.7590	83033	27142
27.882	27.882	P-ISOPROPYLTOLUENE	19.6755	66569	20467
28.406	28.406	1,2-DICHLOROBENZENE	18.9070	67120	20450
28.594	28.594	N-BUTYLBENZENE	18.8920	63681	18578
30.090	30.090	SURR-1B4CB-P	28.8148	129350	34385
32.546	32.546	1,2,4-TRICHLOROBENZE	19.6794	43780	9248
33.292	33.292	NAPHTHALENE	21.5632	58254	11869
33.509	33.509	HEXACHLOROBUTADIENE	19.1429	30115	5319
33.934	33.934	1,2,3-TRICHLOROBENZE	20.4843	42063	7964

XYLENES (Total): 56.9086

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 96.0495%

Chrom Perfect version 6.07

Reported on 01-15-2002at 04:35:10

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: CHKSTD

Batch: 02015A188400,840

Raw file:

C:\CP\DATA1\18014B.33R

Reviewed by: TBL

Verified by: MM48

Date: 1-15-02

Date: 01/15/02

Quality Control Summary

SDG# HUL05

Instrument ID: 5843

Ending Calibration Verification Summary

CCV Batch: 02015A18

Data File: C:\CP\DATA1\18015.09R

Date Injected: 01/15/02 Time Injected: 10:36

Initial Calibration Date(s): 12/31/01 (HALL)

Sample Information			
LL Sample#	Sample Code	Date	Analysis Time
BLK1831	METHOD BLANK	01/15/02	05:04
3753742	A2U--	01/15/02	06:34
3753745	A2U-D	01/15/02	07:19
3753743MS	A2U--	01/15/02	08:05
3753744MSD	A2U--	01/15/02	08:50
LCS1806	LAB CONTROL	01/15/02	09:35

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	24.6	23 *	-20 to +20
CHLOROMETHANE (HALL)	20.0	13.1	-35 *	-20 to +20
VINYL CHLORIDE (HALL)	20.0	19.8	-1	-20 to +20
BROMOMETHANE (HALL)	20.0	16.4	-18	-20 to +20
CHLOROETHANE (HALL)	20.0	16.2	-19	-20 to +20
TRICHLOROFUOROMETHA (HALL)	20.0	17.4	-13	-20 to +20
1,1-DICHLOROETHENE (HALL)	20.0	19.3	-3	-15 to +15
METHYLENE CHLORIDE (HALL)	20.0	17.8	-11	-15 to +15
TRANS-1,2-DICHLOROET (HALL)	20.0	20.2	1	-15 to +15
1,1-DICHLOROETHANE (HALL)	20.0	20.6	3	-15 to +15
CIS-1,2-DICHLOROETHE (HALL)	20.0	20.5	3	-15 to +15
CHLOROFORM (HALL)	20.0	20.6	3	-15 to +15
1,2-DICHLOROETHANE (HALL)	20.0	20.8	4	-15 to +15
1,1,1-TRICHLOROETHAN (HALL)	20.0	20.5	2	-15 to +15
CARBON TETRACHLORIDE (HALL)	20.0	20.7	3	-15 to +15
1,2-DICHLOROPROPANE (HALL)	20.0	21.2	6	-15 to +15
BROMODICHLOROMETHANE (HALL)	20.0	20.1	0	-15 to +15

* = %DRIFT outside control limits.

Quality Control Summary
SDG# HUL05
Instrument ID: 5843
Ending Calibration Verification Summary

CCV Batch: 02015A18
Data File: C:\CP\DATA1\18015.09R
Date Injected: 01/15/02 Time Injected: 10:36
Initial Calibration Date(s): 12/31/01(HALL)

COMPOUND (DETECTOR)	THEORETICAL		% DRIFT	%DRIFT LIMITS
	CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)		
CIS-1,3-DICHLOROPROP (HALL)	20.0	20.5	3	-15 to +15
TRANS-1,3-DICHLOROPROP (HALL)	20.0	18.8	-6	-15 to +15
1,1,2-TRICHLOROETHAN (HALL)	20.0	20.4	2	-15 to +15
DIBROMOCHLOROMETHANE (HALL)	20.0	21.0	5	-15 to +15
TETRACHLOROETHENE (HALL)	20.0	19.5	-3	-15 to +15
BROMOFORM (HALL)	20.0	21.3	6	-15 to +15
1,1,2,2-TETRACHLOROETHANE (HALL)	20.0	20.6	3	-15 to +15
1,3-DICHLOROBENZENE (HALL)	20.0	19.7	-1	-15 to +15
1,2-DICHLOROBENZENE (HALL)	20.0	19.6	-2	-15 to +15
SURR-1B4CB-H (HALL)	30.0	29.1	-3	-41 to +32

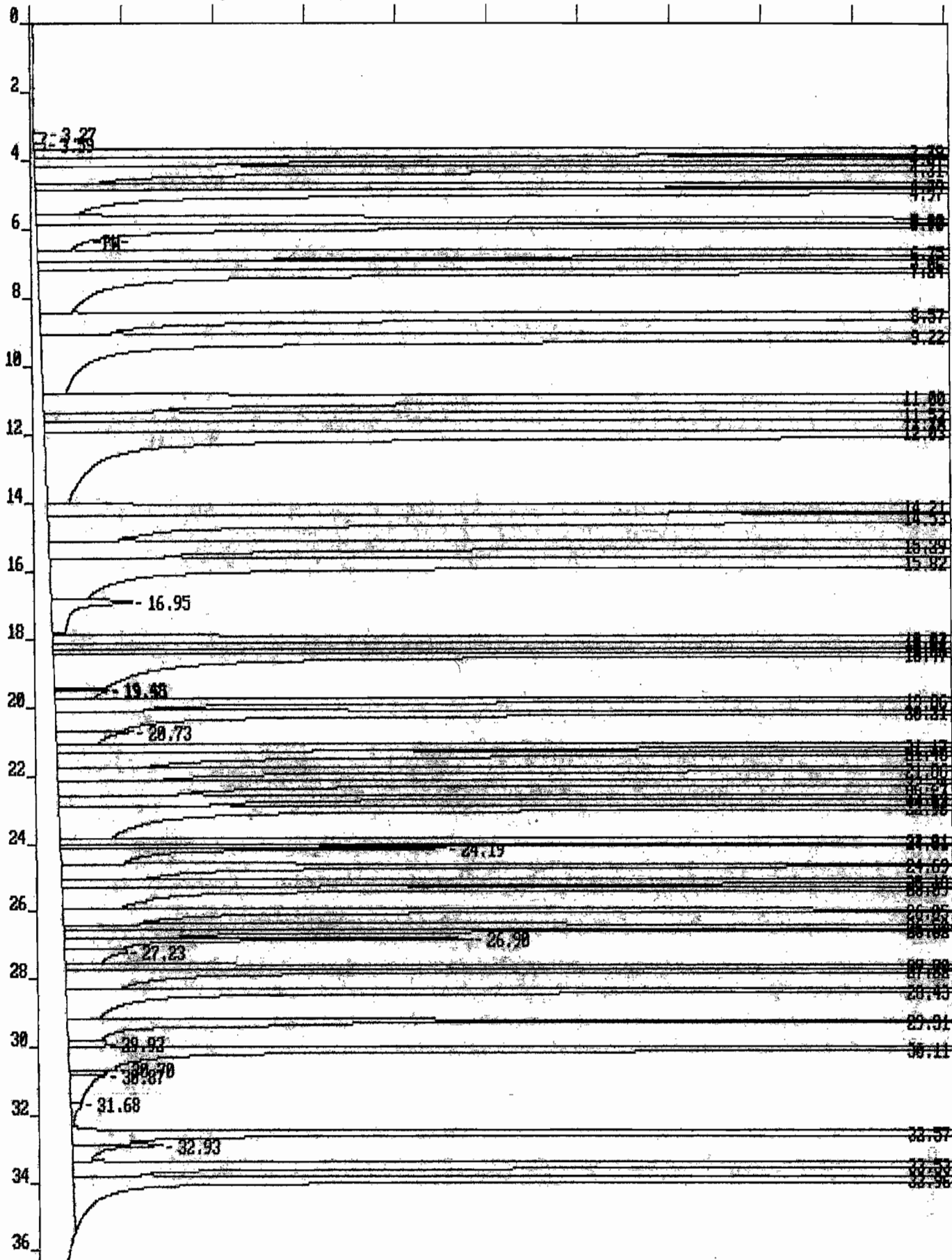
Mean %Drift for all calibration compounds (HALL) = -3.5

File=C:\CP\DATA1\18015.09R Date printed=01-15-2002 Time= 10:37:00

Sample Name=CHKSTD

Q2015A188400,8401

0.0 to 37.0 min. Low Y=0.069 High Y=15.069 mv Span=15.0



Sample Name: CHKSTD

Batch: 02015A18

Date Taken: Jan 15, 2002 10:36:53

Raw File: C:\CP\DATA1\18015.09R

Area File: C:\CP\DATA1\18015.09A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05

Dil. Factor: 1

Analyst: 115

Threshold: -3

Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 25):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.790	3.793	DICHLORODIFLUOROMETH	24.5510	342811	49698
4.005	3.996	CHLOROMETHANE	13.0546	198954	29169
4.307	4.306	VINYL CHLORIDE	19.8380	499179	70575
4.790	4.785	BROMOMETHANE	16.3735	257164	44008
4.973	4.974	CHLOROETHANE	16.1557	436197	68847
5.829	5.830	TRICHLOROFLUOROMETHA	17.3577	274680	44317
6.747	6.750	1,1-DICHLOROETHENE	19.3096	572953	89391
7.057	7.061	METHYLENE CHLORIDE	17.8472	865754	148080
7.238	7.241	TRICHLOROTRIFLUOROET	17.6313	668324	64043
8.569	8.573	TRANS-1,2-DICHLOROET	20.2197	878159	126329
9.217	9.222	1,1-DICHLOROETHANE	20.6344	955369	110425
11.005	11.009	CIS-1,2-DICHLOROETHE	20.5100	875507	103794
11.523	11.529	BROMOCHLOROMETHANE	20.6103	606707	75015
11.778	11.784	CHLOROFORM	20.5651	1157766	125778
12.027	12.033	2,2-DICHLOROPROPANE	19.3407	843948	62814
14.210	14.215	1,2-DICHLOROETHANE	20.8061	796174	99523
14.529	14.534	1,1,1-TRICHLOROETHAN	20.4510	1086147	101610
15.292	15.298	1,1-DICHLOROPROPENE	20.1150	752965	88429
15.815	15.821	CARBON TETRACHLORIDE	20.6778	1233566	125267
18.035	18.043	DIBROMOMETHANE	20.9751	366590	62174
18.207	18.215	1,2-DICHLOROPROPANE	21.2302	777278	120986
18.365	18.372	TRICHLOROETHENE	19.9720	946537	159641
18.472	18.480	BROMODICHLOROMETHANE	20.0978	938409	136030
19.862	19.867	2-CHLOROETHYL VINYL	22.8855	284136	52675
20.210	20.214	CIS-1,3-DICHLOROPROP	20.5339	758550	148297
21.167	21.170	TRANS-1,3-DICHLOROPR	18.8010	576489	130712
21.396	21.399	1,1,2-TRICHLOROETHAN	20.4423	823682	171589
21.860	21.862	1,3-DICHLOROPROPANE	20.2547	641309	142178
22.244	22.245	DIBROMOCHLOROMETHANE	20.9942	566338	122550
22.638	22.640	1,2-DIBROMOETHANE	20.3092	354901	76448
22.964	22.965	TETRACHLOROETHENE	19.4568	966614	216235
23.914	23.916	1,1,1,2-TETRACHLOROE	19.9419	867092	233368
24.012	24.013	CHLOROBENZENE	19.4382	427250	107262
24.692	24.694	BROMOFORM	21.2652	362849	78628
25.182	25.184	1,1,2,2-TETRACHLOROE	20.6150	538460	133794
25.386	25.388	1,2,3-TRICHLOROPROPA	20.8810	477489	106551
26.052	26.054	BROMOBENZENE	19.2587	256918	54512
26.501	26.504	2-CHLOROTOLUENE	19.7003	299881	78556
26.620	26.622	4-CHLOROTOLUENE	19.5205	334725	78990
27.704	27.707	1,3-DICHLOROBENZENE	19.7278	449509	115536
27.818	27.822	1,4-DICHLOROBENZENE	19.4865	556659	121454
28.429	28.433	1,2-DICHLOROBENZENE	19.6326	521308	111078
29.314	29.318	1,2-DIBROMO-3-CHLORO	21.9594	155358	24709
30.114	30.118	SURR-1B4CB-H	29.1117	515720	99786
32.568	32.575	1,2,4-TRICHLOROBENZE	20.2622	469281	81425
33.531	33.538	HEXACHLOROBUTADIENE	19.9422	624670	94563
33.956	33.963	1,2,3-TRICHLOROBENZE	20.8993	476501	71395
TOTAL 1,2-DICHLOROETHENE:			40.7297		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 97.0389%

Sample name: CHKSTD

Batch: 02015A188400,840

Raw file:

C:\CP\DATA1\18015.09R

Reviewed by: MM464

Verified by: MM469

Date: 1/15/02

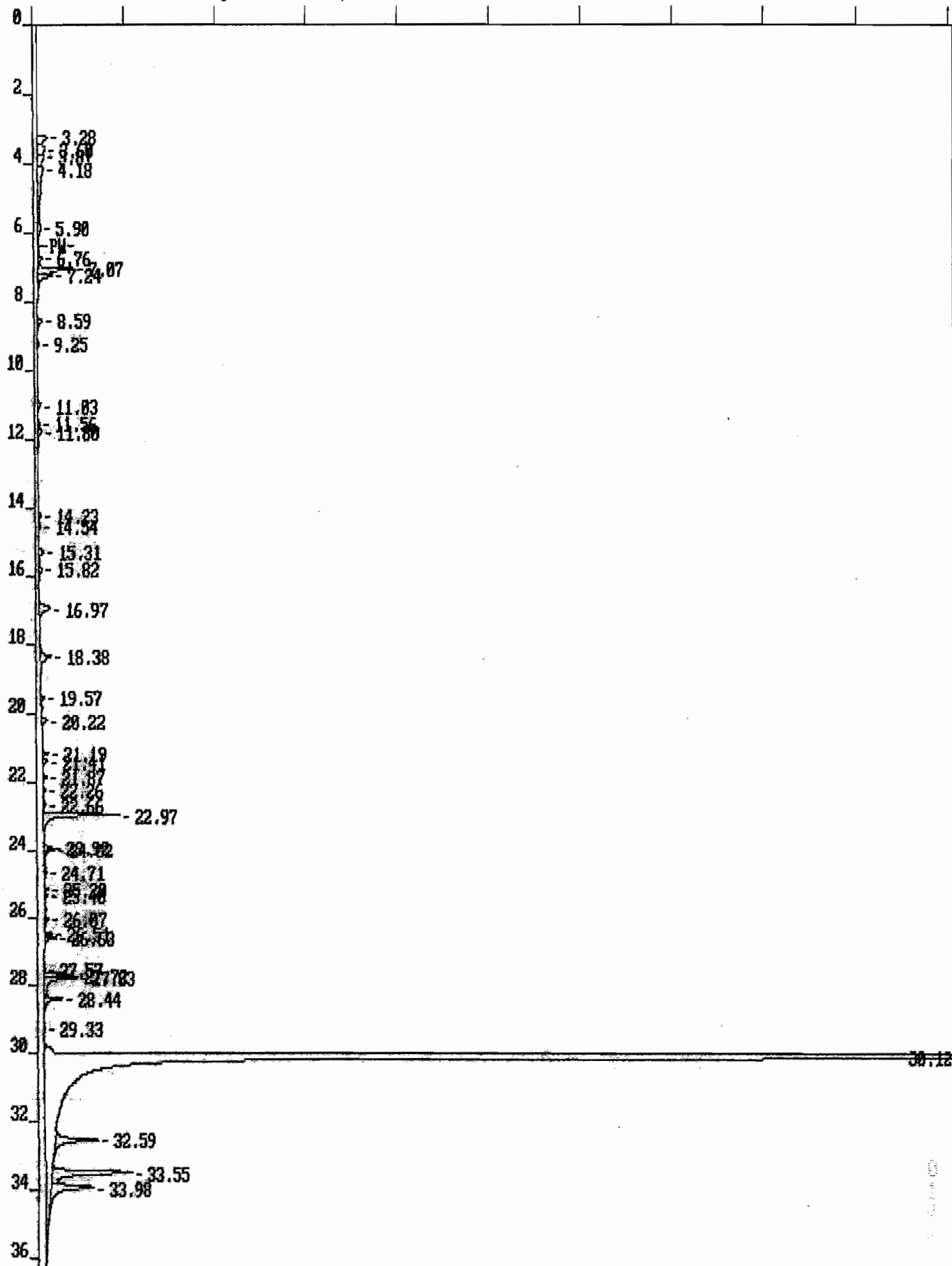
Date: 01/15/02

Raw QC Data

File=C:\CP\DATA1\18015.02R Date printed=01-15-2002 Time= 05:04:32

Sample Name=BLK1831 02015A188400,8401

0.0 to 37.0 min. Low Y=0.011 High Y=15.011 mv Span=15.0



Sample Name: BLK1831

Batch: 02015A18

Date Taken: Jan 15, 2002 05:04:27

Raw File: C:\CP\DATA1\18015.02R

Area File: C:\CP\DATA1\18015.02A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 25):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.807	3.793	DICHLORODIFLUOROMETH	0.0584	1844	118
3.996	3.996	CHLOROMETHANE	0.0000	0	0
4.181	4.306	VINYL CHLORIDE	0.0295	3967	105
4.785	4.785	BROMOMETHANE	0.0000	0	0
4.974	4.974	CHLOROETHANE	0.0000	0	0
5.903	5.830	TRICHLOROFLUOROMETHA	0.0230	1534	59
6.763	6.750	1,1-DICHLOROETHENE	0.0152	794	70
7.074	7.061	METHYLENE CHLORIDE	0.0722	3946	599
7.243	7.241	TRICHLOROTRIFLUOROET	0.0687	2757	250
8.593	8.573	TRANS-1,2-DICHLOROET	0.0140	736	88
9.250	9.222	1,1-DICHLOROETHANE	0.0049	281	26
11.034	11.009	CIS-1,2-DICHLOROETHE	0.0101	470	51
11.559	11.529	BROMOCHLOROMETHANE	0.0089	286	32
11.804	11.784	CHLOROFORM	0.0102	876	63
12.033	12.033	2,2-DICHLOROPROPANE	0.0000	0	0
14.233	14.215	1,2-DICHLOROETHANE	0.0114	489	54
14.540	14.534	1,1,1-TRICHLOROETHAN	0.0062	334	31
15.308	15.298	1,1-DICHLOROPROPENE	0.0204	868	90
15.822	15.821	CARBON TETRACHLORIDE	0.0093	639	57
18.043	18.043	DIBROMOMETHANE	0.0000	0	0
18.215	18.215	1,2-DICHLOROPROPANE	0.0000	0	0
18.381	18.372	TRICHLOROETHENE	0.0227	1721	181
18.480	18.480	BROMODICHLOROMETHANE	0.0000	0	0
19.867	19.867	2-CHLOROETHYL VINYL	0.0000	0	0
20.224	20.214	CIS-1,3-DICHLOROPROP	0.0149	717	108
21.190	21.170	TRANS-1,3-DICHLOROPR	0.0162	652	113
21.408	21.399	1,1,2-TRICHLOROETHAN	0.0111	692	93
21.874	21.862	1,3-DICHLOROPROPANE	0.0112	539	79
22.257	22.245	DIBROMOCHLOROMETHANE	0.0105	494	61
22.658	22.640	1,2-DIBROMOETHANE	0.0120	424	45
22.971	22.965	TETRACHLOROETHENE	0.1135	7537	1262
23.921	23.916	1,1,1,2-TETRACHLOROE	0.0118	571	139
24.021	24.013	CHLOROBENZENE	0.0336	1491	185
24.707	24.694	BROMOFORM	0.0135	518	50
25.197	25.184	1,1,2,2-TETRACHLOROE	0.0125	445	81
25.400	25.388	1,2,3-TRICHLOROPROPA	0.0108	351	55
26.073	26.054	BROMOBENZENE	0.0250	387	71
26.514	26.504	2-CHLOROTOLUENE	0.0328	548	131
26.632	26.622	4-CHLOROTOLUENE	0.0500	1078	202
27.719	27.707	1,3-DICHLOROBENZENE	0.0718	1933	420
27.833	27.822	1,4-DICHLOROBENZENE	0.0856	4231	533
28.444	28.433	1,2-DICHLOROBENZENE	0.0567	2152	321
29.333	29.318	1,2-DIBROMO-3-CHLORO	0.0226	251	25
30.123	30.118	SURR-1B4CB-H	29.0048	561005	99420
32.586	32.575	1,2,4-TRICHLOROBENZE	0.1757	6256	706
33.547	33.538	HEXACHLOROBUTADIENE	0.2797	10926	1326
33.975	33.963	1,2,3-TRICHLOROBENZE	0.2061	8014	704
TOTAL 1,2-DICHLOROETHENE:			0.0242		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 96.6828%

Sample name: BLK1831

Batch: 02015A188400,840

Raw file:

C:\CP\DATA1\18015.02R

Reviewed by: TS us

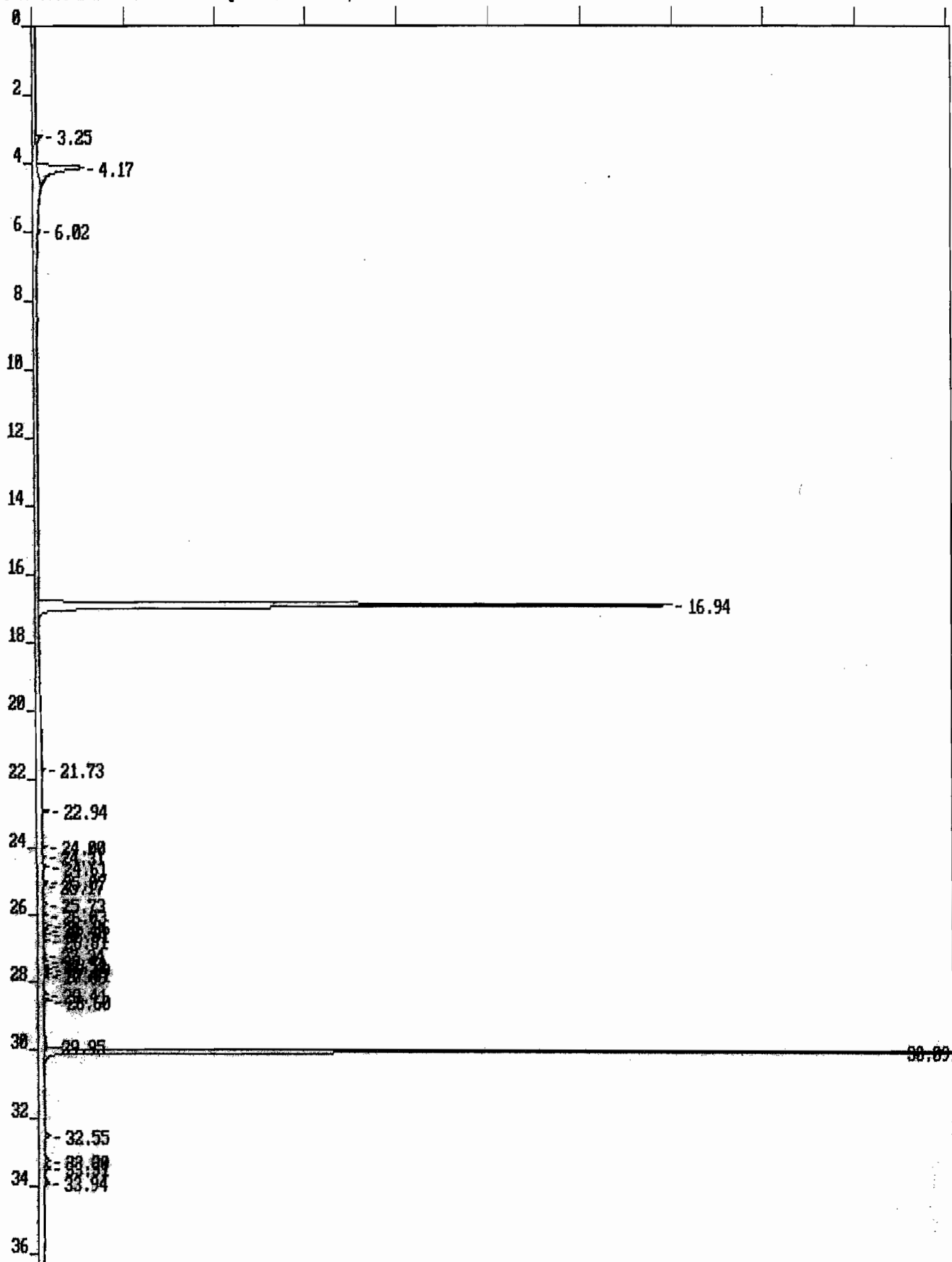
Verified by: UMM419

Date: 1-15-02

Date: 01/15/02

02015A188400;8401

Sample Name=BLK1831 02015A188400,8401
0.0 to 37.0 min. Low Y=-0.002 High Y=14.998 mv Span=15.0



Sample Name: BLK1831

Batch: 02015A18

Date Taken: Jan 15, 2002 05:04:27

Raw File: C:\CP\DATA1\18015B.02R

Area File: C:\CP\DATA1\18015B.02A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 27):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.278	4.278	VINYL CHLORIDE	0.0000	0	0
6.722	6.722	1,1-DICHLOROETHENE	0.0000	0	0
8.544	8.544	TRANS-1,2-DICHLOROET	0.0000	0	0
8.932	8.932	METHYL T-BUTYL ETHER	0.0000	0	0
10.981	10.981	CIS-1,2-DICHLOROETHE	0.0000	0	0
15.267	15.267	1,1-DICHLOROPROPENE	0.0000	0	0
16.005	16.005	BENZENE	0.0000	0	0
16.939	16.940	ISTD-FBENZENE	1.0000	77995	10379
18.344	18.344	TRICHLOROETHENE	0.0000	0	0
19.838	19.838	2-CHLOROETHYL VINYL	0.0000	0	0
20.187	20.187	CIS-1,3-DICHLOROPROP	0.0000	0	0
21.143	21.143	TRANS-1,3-DICHLOROPR	0.0000	0	0
21.734	21.731	TOLUENE	0.0424	242	66
22.941	22.940	TETRACHLOROETHENE	0.1432	402	119
24.000	23.990	CHLOROBENZENE	0.0365	230	77
24.310	24.304	ETHYLBENZENE	0.0298	151	51
24.606	24.597	M,P-XYLENE	0.0578	391	99
25.069	25.062	STYRENE	0.0340	215	74
25.170	25.164	O-XYLENE	0.0256	146	43
25.733	25.708	ISOPROPYLBENZENE	0.0518	328	67
26.033	26.026	BROMOBENZENE	0.0472	335	92
26.362	26.354	N-PROPYLBENZENE	0.0870	506	131
26.479	26.478	2-CHLOROTOLUENE	0.0470	275	78
26.606	26.597	4-CHLOROTOLUENE	0.0676	389	118
26.807	26.801	1,3,5-TRIMETHYLBENZE	0.0440	323	93
27.240	27.225	TERT-BUTYLBENZENE	0.0424	174	48
27.410	27.407	1,2,4-TRIMETHYLBENZE	0.0442	214	70
27.581	27.575	SEC-BUTYLBENZENE	0.0638	241	73
27.689	27.681	1,3-DICHLOROBENZENE	0.0826	401	129
27.806	27.797	1,4-DICHLOROBENZENE	0.0871	446	136
27.892	27.882	P-ISOPROPYLTOLUENE	0.0668	266	75
28.408	28.406	1,2-DICHLOROBENZENE	0.0688	303	81
28.600	28.594	N-BUTYLBENZENE	0.1242	483	132
30.094	30.090	SURR-1B4CB-P	27.2977	132865	35242
32.546	32.546	1,2,4-TRICHLOROBENZE	0.1761	455	90
33.303	33.292	NAPHTHALENE	0.1458	444	87
33.513	33.509	HEXACHLOROBUTADIENE	0.2967	534	89
33.936	33.934	1,2,3-TRICHLOROBENZE	0.1818	384	76

XYLENES (Total): 0.0834

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 90.9922%

Chrom Perfect version 6.07

Reported on 01-15-2002at 05:06:52

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: BLK1831

Batch: 02015A188400,840

Raw file:

C:\CP\DATA1\18015B.02R

Reviewed by:

T3us

Verified by:

DMm49

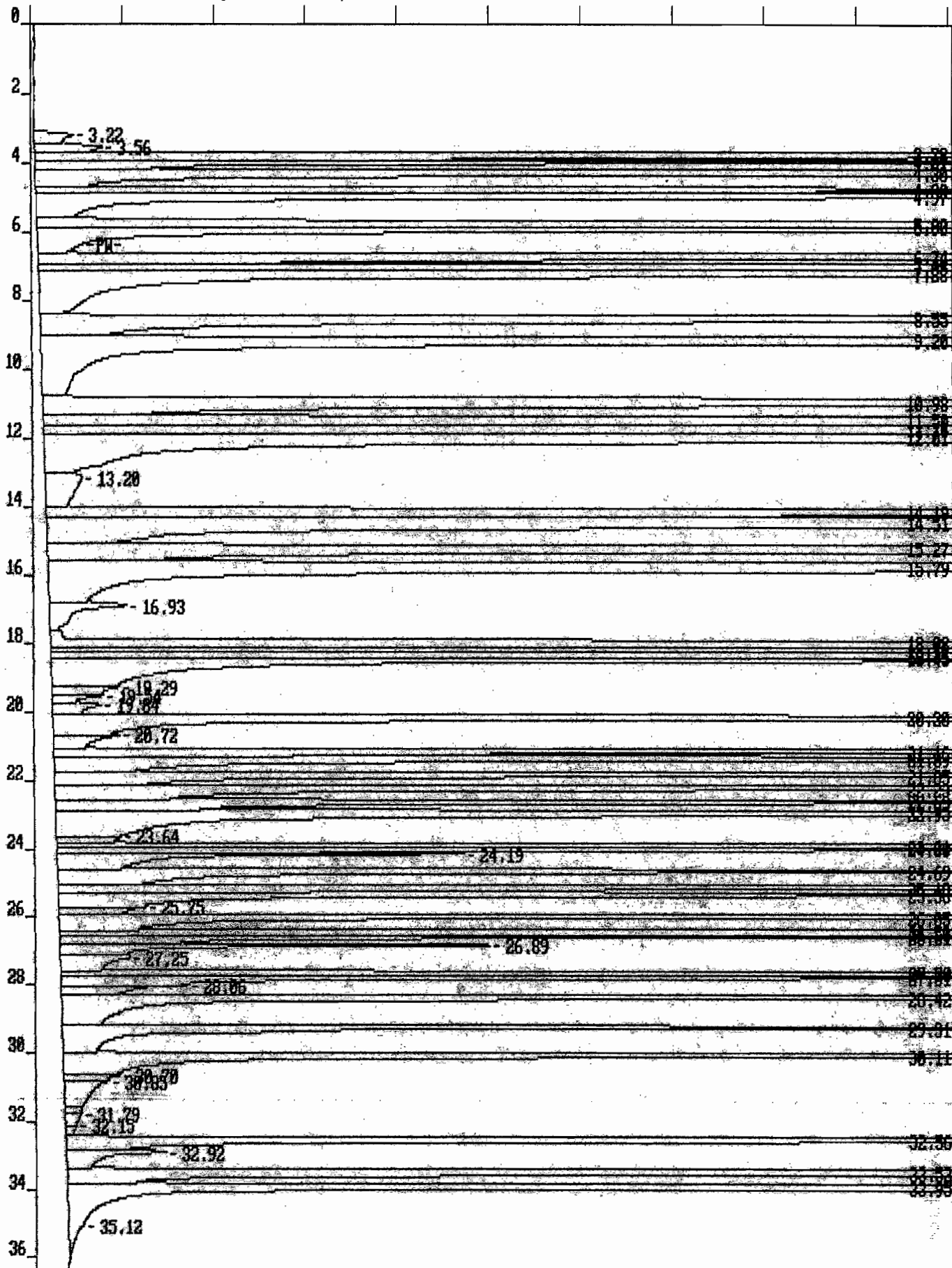
Date:

1-15-02

Date:

01/15/02

File=C:\CP\DATA1\18015.06R Date printed=01-15-2002 Time= 08:05:28
Sample Name=3753743 MS 02015A181127,8404,8400,8401
0.0 to 37.0 min. Low Y=0.001 High Y=15.001 mv Span=15.0



Sample Name: 3753743 MS

Batch: 02015A18

Date Taken: Jan 15, 2002 08:05:22

Raw File: C:\CP\DATA1\18015.06R

Area File: C:\CP\DATA1\18015.06A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 25):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.776	3.793	19.3930	276403	39257
4.011	3.996	9.0043	125515	20119
4.301	4.306	18.1800	452046	64677
4.800	4.785	15.0546	240693	40463
4.971	4.974	16.5221	449277	70408
5.818	5.830	17.3821	263187	44379
6.738	6.750	20.5949	618235	95341
7.047	7.061	17.9349	874833	148807
7.229	7.241	18.8356	708243	68418
8.553	8.573	21.0704	899731	131644
9.199	9.222	21.6524	990581	115873
10.982	11.009	21.8611	927423	110631
11.501	11.529	21.5527	629792	78445
11.756	11.784	21.7232	1215365	132861
12.008	12.033	20.7216	877473	67298
14.185	14.215	21.4534	813994	102619
14.508	14.534	21.5351	1153601	106996
15.268	15.298	21.4325	795549	94221
15.793	15.821	21.6715	1294108	131287
18.018	18.043	20.9818	369260	62194
18.192	18.215	21.2273	778055	120970
18.349	18.372	21.4384	1004627	171362
18.456	18.480	20.3356	941502	137640
19.845	19.867	0.3526	12298	811
20.198	20.214	20.7270	748806	149691
21.157	21.170	19.1795	585791	133343
21.386	21.399	20.7535	825794	174201
21.850	21.862	20.6073	643314	144654
22.233	22.245	20.9905	566420	122528
22.628	22.640	21.0907	362501	79390
22.954	22.965	34.0933	1624137	378899
23.906	23.916	20.7441	905088	242755
24.004	24.013	20.1762	438818	111335
24.685	24.694	22.0804	371946	81642
25.175	25.184	21.4242	555660	139046
25.379	25.388	21.6082	477730	110262
26.045	26.054	20.5613	268687	58199
26.495	26.504	20.7291	314206	82658
26.614	26.622	20.5977	351672	83349
27.698	27.707	20.1279	463255	117879
27.813	27.822	19.8925	543764	123985
28.423	28.433	20.8212	551372	117802
29.307	29.318	23.7098	172545	26678
30.106	30.118	30.0972	532769	103164
32.560	32.575	21.1846	489486	85132
33.523	33.538	21.1539	663012	100308
33.947	33.963	22.1133	513213	75542
TOTAL 1,2-DICHLOROETHENE:		42.9314		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 100.3239%

Sample name: 3753743 MS
Raw file: C:\CP\DATA1\18015.06R

Batch: 02015A181127,840

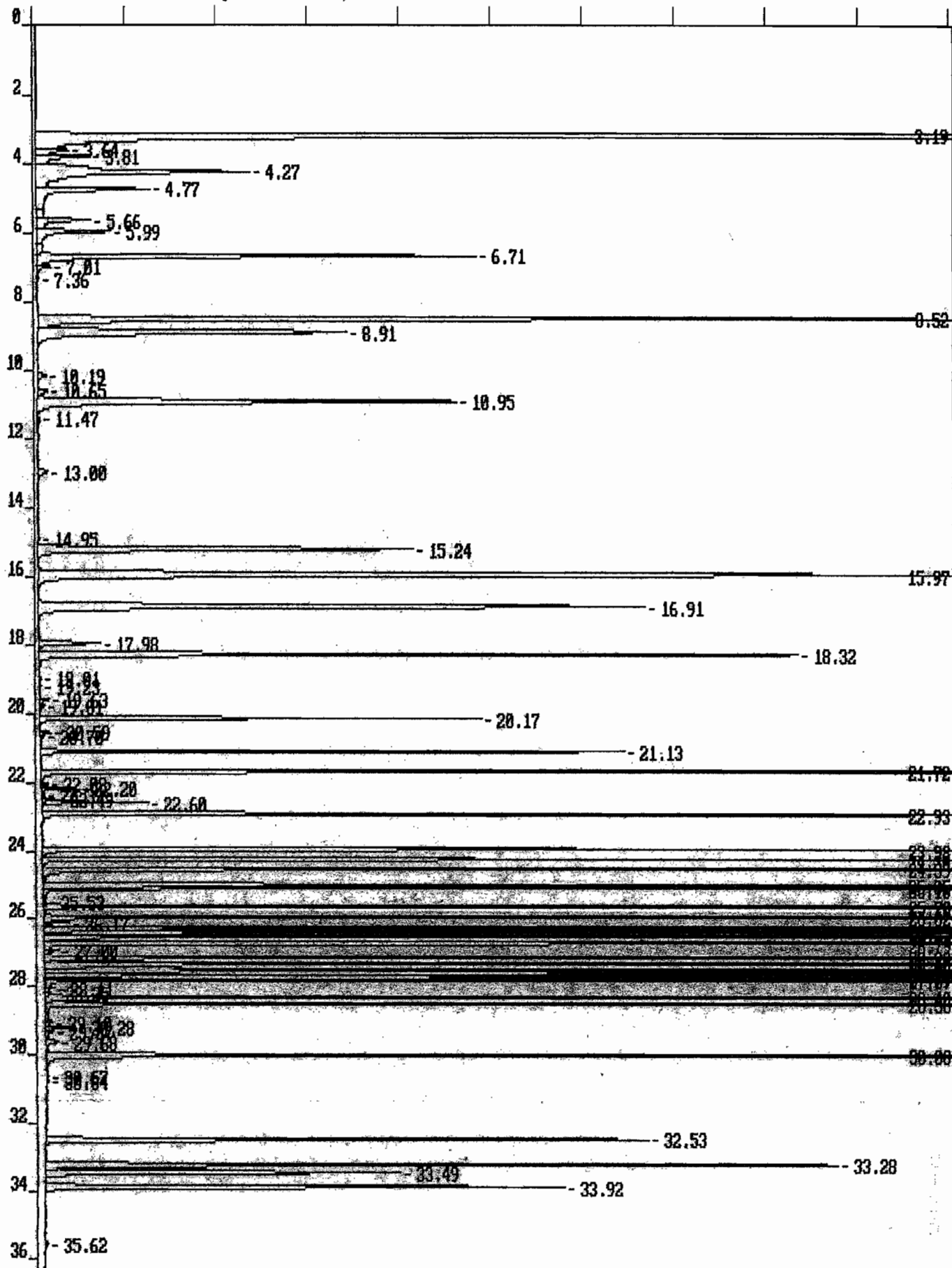
Reviewed by: mm49

Verified by: mm49

Date: 1/15/02

Date: 01/15/02

File=C:\CP\DATA1\180158.06R Date printed=01-15-2002 Time= 08:06:30
Sample Name=3753743 MS 02015A181127,8404,8400,8401
0.0 to 37.0 min. Low Y=0.005 High Y=15.005 mv Span=15.0



Sample Name: 3753743 MS

Batch: 02015A18

Date Taken: Jan 15, 2002 08:05:22

Raw File: C:\CP\DATA1\18015B.06R

Area File: C:\CP\DATA1\18015B.06A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 27):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.271	4.278	VINYL CHLORIDE	11.0890	36667	3496
6.709	6.722	1,1-DICHLOROETHENE	19.9714	39939	7188
8.523	8.544	TRANS-1,2-DICHLOROET	19.6673	93983	16436
8.915	8.932	METHYL T-BUTYL ETHER	20.4641	44435	5042
10.952	10.981	CIS-1,2-DICHLOROETHE	20.1629	50909	6844
15.237	15.267	1,1-DICHLOROPROPENE	20.5861	44981	6126
15.975	16.005	BENZENE	20.3355	107017	14951
16.910	16.940	ISTD-FBENZENE	1.0000	74345	9915
18.320	18.344	TRICHLOROETHENE	20.8223	64701	12397
19.808	19.838	2-CHLOROETHYL VINYL	0.1797	482	79
20.171	20.187	CIS-1,3-DICHLOROPROP	19.2556	27498	7216
21.130	21.143	TRANS-1,3-DICHLOROPR	17.7019	31408	9521
21.718	21.731	TOLUENE	19.7150	98022	29358
22.929	22.940	TETRACHLOROETHENE	34.2394	82003	27082
23.981	23.990	CHLOROBENZENE	19.5538	102372	39302
24.296	24.304	ETHYLBENZENE	20.0205	88470	32889
24.588	24.597	M, P-XYLENE	40.1435	208030	65583
25.054	25.062	STYRENE	19.6184	109503	40806
25.156	25.164	O-XYLENE	20.1725	91300	32537
25.700	25.708	ISOPROPYLBENZENE	20.7686	76503	25709
26.018	26.026	BROMOBENZENE	19.4708	102935	36186
26.346	26.354	N-PROPYLBENZENE	19.8554	82761	28541
26.469	26.478	2-CHLOROTOLUENE	19.8453	90272	31311
26.588	26.597	4-CHLOROTOLUENE	19.6290	92413	32748
26.793	26.801	1,3,5-TRIMETHYLBENZE	19.9109	119586	40419
27.217	27.225	TERT-BUTYLBENZENE	20.2648	72562	21717
27.399	27.407	1,2,4-TRIMETHYLBENZE	20.1145	98898	30524
27.566	27.575	SEC-BUTYLBENZENE	19.7724	71979	21640
27.672	27.681	1,3-DICHLOROBENZENE	19.4730	89106	28983
27.788	27.797	1,4-DICHLOROBENZENE	19.3624	88379	28954
27.874	27.882	P-ISOPROPYLTOLUENE	20.6663	72290	22218
28.397	28.406	1,2-DICHLOROBENZENE	19.3400	71069	21620
28.584	28.594	N-BUTYLBENZENE	19.9985	69823	20325
30.078	30.090	SURR-1B4CB-P	28.9785	133639	35739
32.531	32.546	1,2,4-TRICHLOROBENZE	20.3129	46367	9865
33.277	33.292	NAPHTHALENE	22.7918	63266	12966
33.493	33.509	HEXACHLOROBUTADIENE	20.2893	32920	5827
33.918	33.934	1,2,3-TRICHLOROBENZE	21.1598	44755	8502

XYLENES (Total): 60.3160

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 96.5951%

Chrom Perfect version 6.07

Reported on 01-15-2002at 08:07:47

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753743 MS

Batch: 02015A181127,840

Raw file: C:\CP\DATA1\18015B.06R

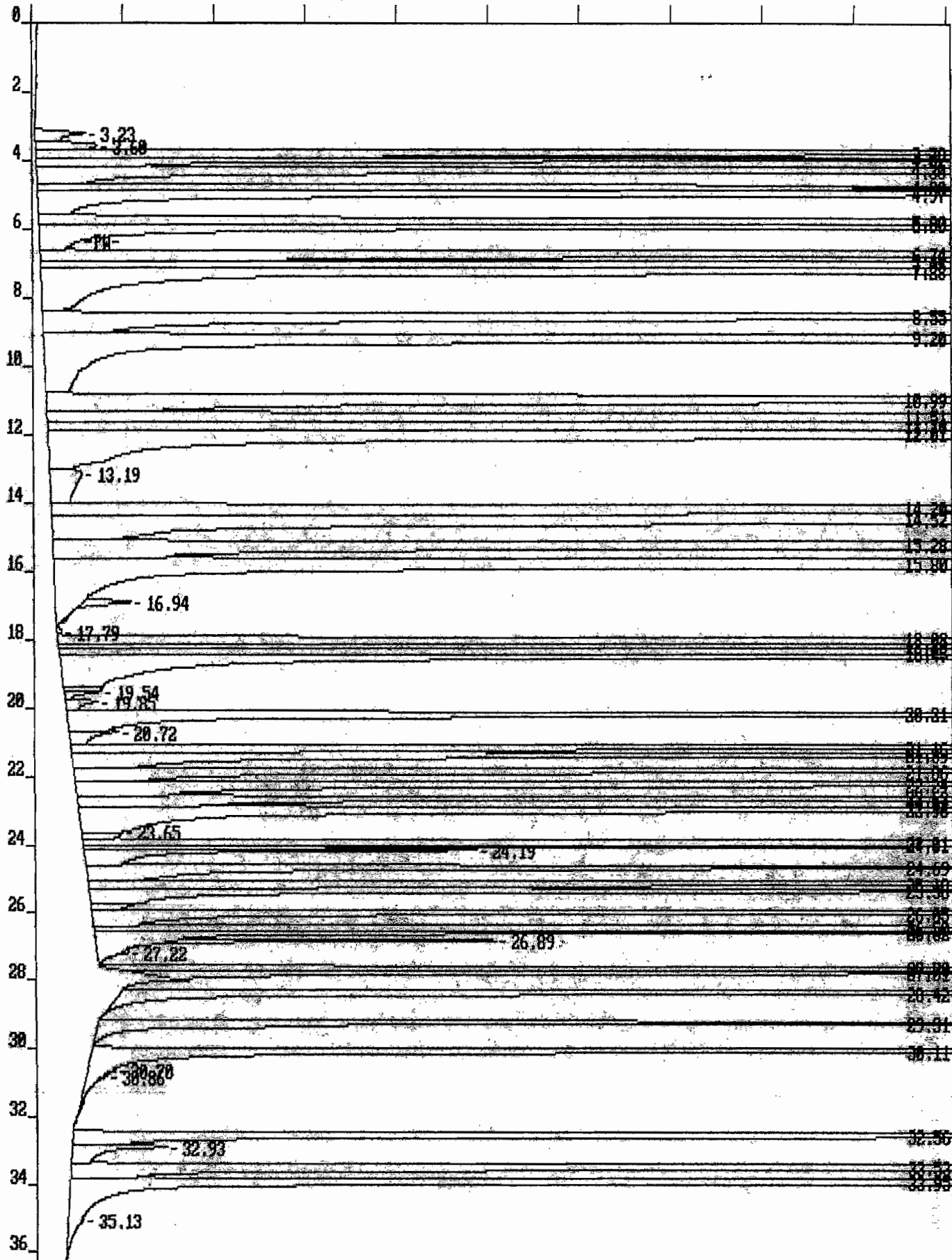
Reviewed by: mm49

Verified by: mm49

Date: 1/15/02

Date: 01/15/02

File=C:\CP\DATA1\18015.07R Date printed=01-15-2002 Time= 08:50:44
Sample Name=3753744 MSD 02015A181127,8404,8400,8401
0.0 to 37.0 min. Low Y=0.074 High Y=15.074 mv Span=15.0



Sample Name: 3753744 MSD

Batch: 02015A18

Date Taken: Jan 15, 2002 08:50:37

Raw File: C:\CP\DATA1\18015.07R

Area File: C:\CP\DATA1\18015.07A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 25):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.782	3.793	DICHLORODIFLUOROMETH	19.4936	251617	39460
4.016	3.996	CHLOROMETHANE	8.5398	114264	19081
4.303	4.306	VINYL CHLORIDE	17.6678	430690	62855
4.803	4.785	BROMOMETHANE	14.6108	235360	39270
4.974	4.974	CHLOROETHANE	16.6795	455260	71079
5.817	5.830	TRICHLOROFLUOROMETHA	17.0462	263738	43522
6.740	6.750	1,1-DICHLOROETHENE	21.0526	629474	97460
7.049	7.061	METHYLENE CHLORIDE	18.8202	917096	156152
7.231	7.241	TRICHLOROTRIFLUOROET	19.9854	740370	72594
8.555	8.573	TRANS-1,2-DICHLOROET	21.8041	929395	136228
9.202	9.222	1,1-DICHLOROETHANE	22.4176	1021828	119968
10.987	11.009	CIS-1,2-DICHLOROETHE	22.4485	950588	113604
11.505	11.529	BROMOCHLOROMETHANE	22.0659	646151	80313
11.761	11.784	CHLOROFORM	22.4926	1258069	137567
12.011	12.033	2,2-DICHLOROPROPANE	21.6470	896585	70304
14.196	14.215	1,2-DICHLOROETHANE	21.9163	832369	104833
14.516	14.534	1,1,1-TRICHLOROETHAN	22.3363	1183324	110977
15.279	15.298	1,1-DICHLOROPROPENE	22.2234	822544	97698
15.804	15.821	CARBON TETRACHLORIDE	22.3734	1339406	135539
18.029	18.043	DIBROMOMETHANE	21.4632	370106	63621
18.203	18.215	1,2-DICHLOROPROPANE	21.5789	795805	122974
18.360	18.372	TRICHLOROETHENE	21.8803	1031689	174894
18.468	18.480	BROMODICHLOROMETHANE	20.8168	942956	140897
19.855	19.867	2-CHLOROETHYL VINYL	0.2323	6550	535
20.206	20.214	CIS-1,3-DICHLOROPROP	20.8493	744703	150574
21.163	21.170	TRANS-1,3-DICHLOROPR	19.3410	587782	134466
21.393	21.399	1,1,2-TRICHLOROETHAN	20.9383	826117	175752
21.856	21.862	1,3-DICHLOROPROPANE	20.8053	643483	146043
22.239	22.245	DIBROMOCHLOROMETHANE	21.0246	560758	122727
22.634	22.640	1,2-DIBROMOETHANE	21.3816	362083	80485
22.959	22.965	TETRACHLOROETHENE	34.4044	1622568	382356
23.910	23.916	1,1,1,2-TETRACHLOROE	21.1381	916975	247366
24.008	24.013	CHLOROBENZENE	20.5160	443672	113210
24.688	24.694	BROMOFORM	22.1561	362677	81922
25.177	25.184	1,1,2,2-TETRACHLOROE	21.7276	558603	141015
25.381	25.388	1,2,3-TRICHLOROPROPA	21.9557	474652	112035
26.047	26.054	BROMOBENZENE	20.2493	253753	57316
26.497	26.504	2-CHLOROTOLUENE	20.9980	317751	83731
26.615	26.622	4-CHLOROTOLUENE	20.7780	371759	84079
27.699	27.707	1,3-DICHLOROBENZENE	20.0995	456289	117713
27.814	27.822	1,4-DICHLOROBENZENE	19.8636	526253	123805
28.425	28.433	1,2-DICHLOROBENZENE	20.7001	510620	117117
29.308	29.318	1,2-DIBROMO-3-CHLORO	23.5831	148461	26536
30.107	30.118	SURR-184CB-H	30.4791	533554	104473
32.563	32.575	1,2,4-TRICHLOROBENZE	21.4568	494923	86226
33.527	33.538	HEXACHLOROBUTADIENE	21.8597	681468	103655
33.951	33.963	1,2,3-TRICHLOROBENZE	22.2290	514438	75937
		TOTAL 1,2-DICHLOROETHENE:	44.2526		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 101.5971%

Sample name: 3753744 MSD
Raw file: C:\CP\DATA1\18015.07R

Batch: 02015A181127,840

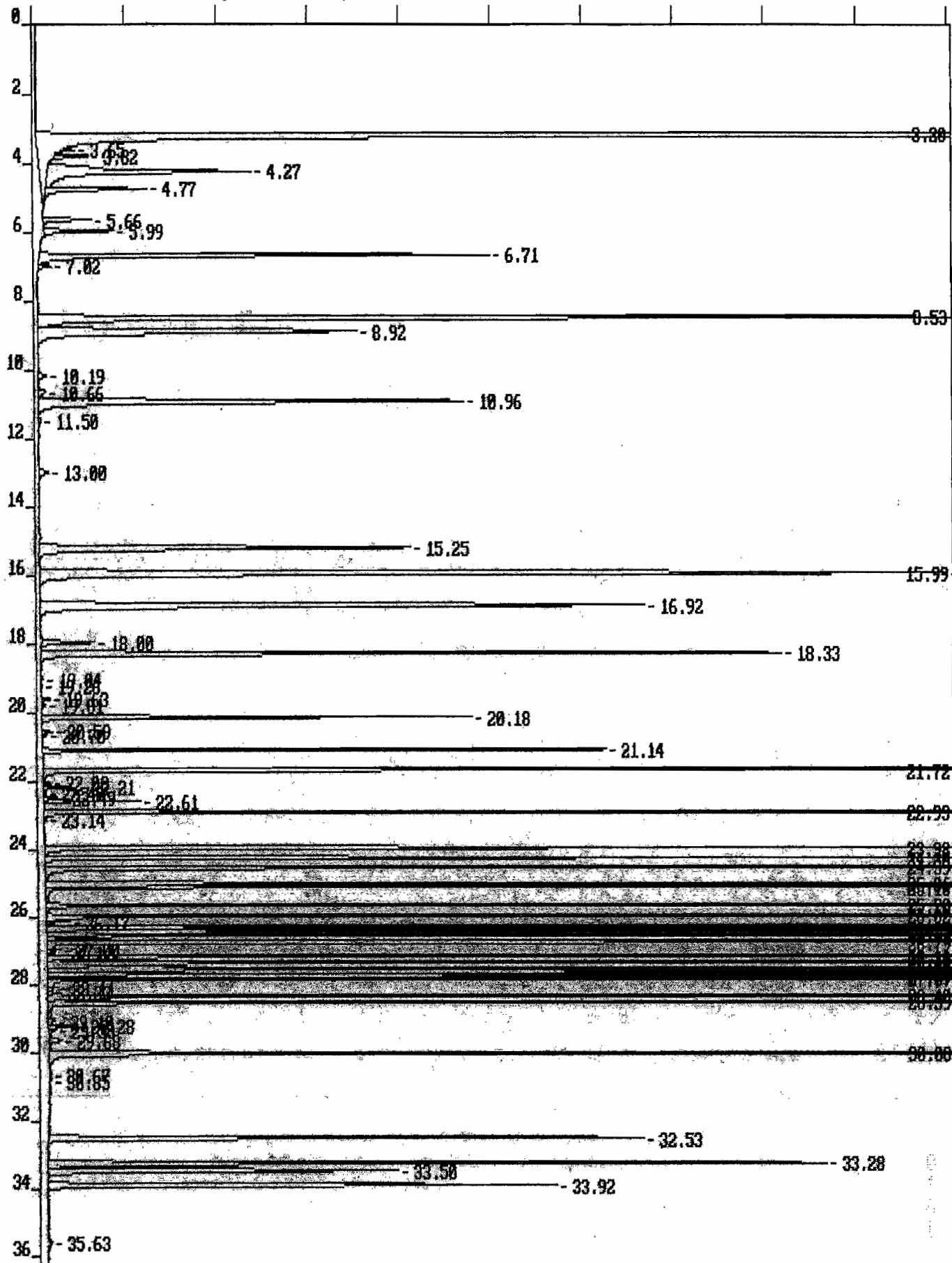
Reviewed by: UMP909

Verified by: UMM46

Date: 1/15/02

Date: 01/15/02

File=C:\CP\DATA1\18015B.07R Date printed=01-15-2002 Time= 08:51:46
Sample Name=3753744 MSD 02015A181127,8404,8400,8401
0.0 to 37.0 min. Low Y=0.008 High Y=15.008 mv Span=15.0



Sample Name: 3753744 MSD

Batch: 02015A18

Date Taken: Jan 15, 2002 08:50:37

Raw File: C:\CP\DATA1\18015B.07R

Area File: C:\CP\DATA1\18015B.07A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 27):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.273	4.278	VINYL CHLORIDE	10.5102	30006	3310
6.711	6.722	1,1-DICHLOROETHENE	20.4881	39836	7366
8.525	8.544	TRANS-1,2-DICHLOROET	20.2730	96732	16924
8.917	8.932	METHYL T-BUTYL ETHER	21.1277	45641	5200
10.956	10.981	CIS-1,2-DICHLOROETHE	20.4796	51181	6944
15.248	15.267	1,1-DICHLOROPROPENE	20.4716	44809	6086
15.988	16.005	BENZENE	20.2402	106182	14865
16.923	16.940	ISTD-FBENZENE	1.0000	73979	9904
18.332	18.344	TRICHLOROETHENE	20.4049	62955	12135
19.814	19.838	2-CHLOROETHYL VINYL	0.1709	432	75
20.178	20.187	CIS-1,3-DICHLOROPROP	18.8278	26601	7049
21.136	21.143	TRANS-1,3-DICHLOROPR	17.1430	30350	9211
21.724	21.731	TOLUENE	19.7264	97594	29343
22.934	22.940	TETRACHLOROETHENE	33.9282	81132	26807
23.984	23.990	CHLOROBENZENE	19.4451	101442	39042
24.299	24.304	ETHYLBENZENE	19.9952	88133	32812
24.591	24.597	M,P-XYLENE	39.8480	206752	65031
25.056	25.062	STYRENE	19.4053	108098	40319
25.158	25.164	O-XYLENE	19.9933	90702	32214
25.702	25.708	ISOPROPYLBENZENE	20.7699	76393	25683
26.019	26.026	BROMOBENZENE	19.4038	102148	36023
26.347	26.354	N-PROPYLBENZENE	19.9566	82764	28656
26.471	26.478	2-CHLOROTOLUENE	19.7687	90285	31157
26.590	26.597	4-CHLOROTOLUENE	19.5782	92129	32628
26.794	26.801	1,3,5-TRIMETHYLBENZE	19.8380	119363	40227
27.218	27.225	TERT-BUTYLBENZENE	20.3788	72112	21816
27.400	27.407	1,2,4-TRIMETHYLBENZE	20.0578	98558	30406
27.567	27.575	SEC-BUTYLBENZENE	19.8086	72024	21656
27.674	27.681	1,3-DICHLOROBENZENE	19.4504	88890	28919
27.789	27.797	1,4-DICHLOROBENZENE	19.1713	88142	28638
27.875	27.882	P-ISOPROPYLTOLUENE	20.6781	71889	22207
28.398	28.406	1,2-DICHLOROBENZENE	19.2030	70562	21443
28.586	28.594	N-BUTYLBENZENE	20.1720	70180	20479
30.079	30.090	SURR-1B4CB-P	29.0983	133914	35848
32.534	32.546	1,2,4-TRICHLOROBENZE	20.1437	46012	9773
33.280	33.292	NAPHTHALENE	22.4658	62370	12766
33.497	33.509	HEXACHLOROBUTADIENE	20.0712	32667	5758
33.921	33.934	1,2,3-TRICHLOROBENZE	20.7855	43992	8343

XYLENES (Total): 59.8412

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 96.9943%

Chrom Perfect version 6.07

Reported on 01-15-2002at 08:53:03

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: 3753744 MSD

Batch: 02015A181127,840

Raw file: C:\CP\DATA1\18015B.07R

Reviewed by: mm48

Verified by: mm48

Date: 1/15/02

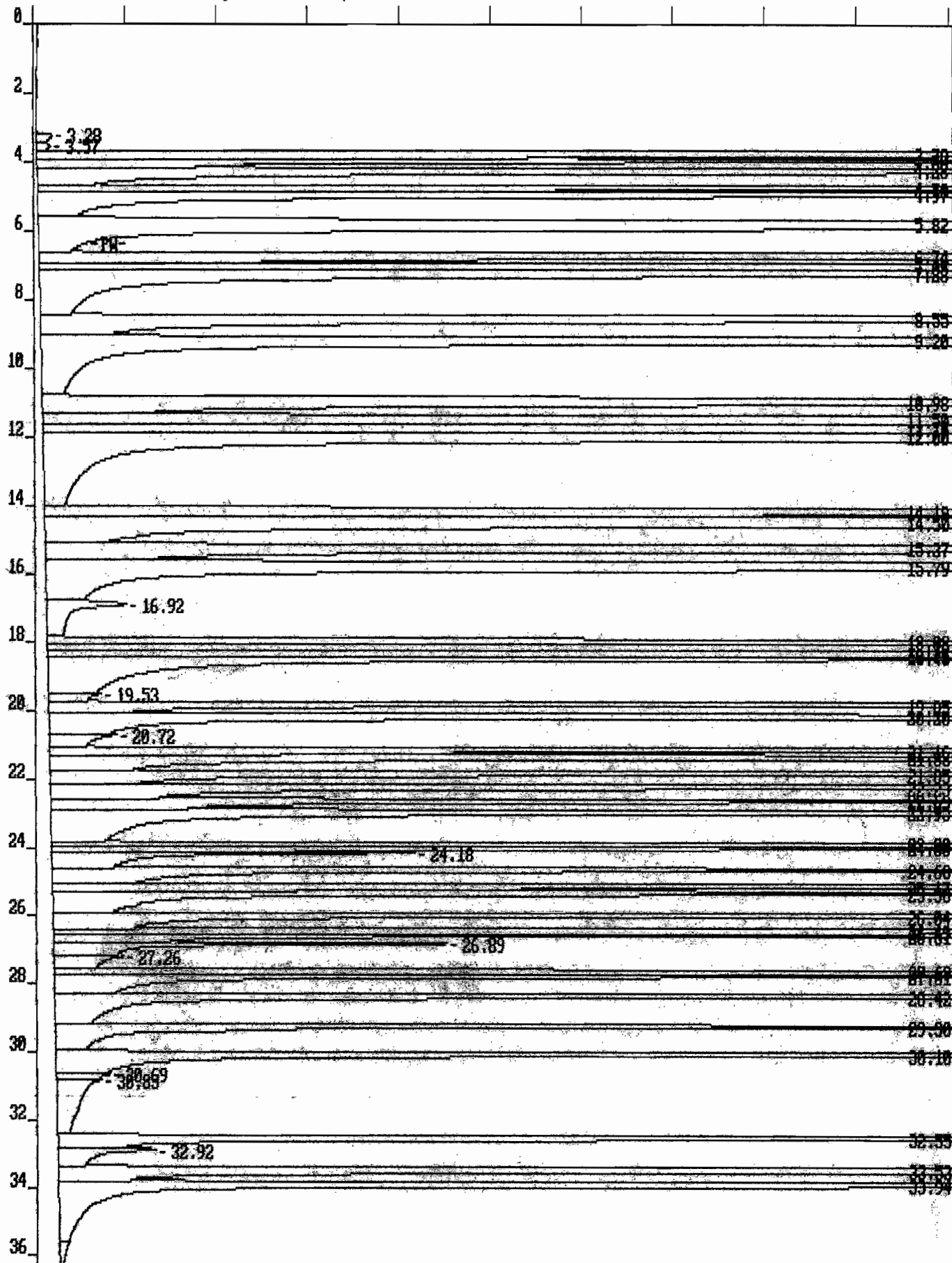
Date: 01/15/02

File=C:\CP\DATA1\18015.08R Date printed=01-15-2002 Time= 09:35:35

Sample Name=LCS1806

02015A188400,8401

0.0 to 37.0 min. Low Y=0.093 High Y=15.093 mv Span=15.0



Sample Name: LCS1806

Batch: 02015A18

Date Taken: Jan 15, 2002 09:35:29

Raw File: C:\CP\DATA1\18015.08R

Area File: C:\CP\DATA1\18015.08A

Method File: C:\CP\DATA1\18365.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SQ/C trap Inst. ID#05843 - 5890#18HALL

Peak Width: .05 Dil. Factor: 1 Analyst: 115

Threshold: -3 Calculation: EXTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H18365.CAL(version 25):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.789	3.793	23.6296	309381	47833
4.000	3.996	11.9613	175071	26727
4.281	4.306	18.2527	444876	64936
4.782	4.785	15.4890	241575	41630
4.966	4.974	16.4185	438484	69966
5.818	5.830	17.8629	643391	45607
6.736	6.750	18.9507	556431	87729
7.047	7.061	18.1393	865313	150503
7.226	7.241	18.0253	684233	65475
8.555	8.573	19.6416	853803	122718
9.203	9.222	20.2409	932929	108319
10.984	11.009	20.3411	864221	102939
11.501	11.529	19.9787	588964	72716
11.757	11.784	19.9212	1115642	121840
12.003	12.033	18.7533	823078	60906
14.186	14.215	19.6942	755232	94204
14.504	14.534	19.1535	1015951	95163
15.268	15.298	18.9368	710927	83250
15.790	15.821	19.2888	1150551	116852
18.017	18.043	19.4247	337378	57578
18.191	18.215	19.7421	729365	112506
18.349	18.372	18.3721	877167	146853
18.457	18.480	18.9160	890265	128031
19.849	19.867	20.5662	256710	47337
20.197	20.214	19.3314	714313	139612
21.156	21.170	17.4785	537353	121517
21.385	21.399	18.8590	759257	158299
21.849	21.862	18.5354	589176	130110
22.232	22.245	19.6101	528767	114471
22.627	22.640	18.9344	328792	71273
22.953	22.965	18.4741	917959	205314
23.904	23.916	19.2715	837316	225522
24.002	24.013	18.8813	415240	104189
24.682	24.694	19.8914	338250	73549
25.172	25.184	18.6868	490831	121280
25.376	25.388	19.0035	440377	96971
26.041	26.054	18.9075	251581	53518
26.491	26.504	19.1098	291669	76201
26.610	26.622	18.9642	326338	76739
27.693	27.707	19.3242	438637	113172
27.807	27.822	19.0682	544469	118848
28.418	28.433	19.2389	515371	108850
29.302	29.318	19.7277	149432	22198
30.100	30.118	28.5970	506748	98022
32.553	32.575	19.4745	452551	78260
33.515	33.538	19.3066	606694	91549
33.939	33.963	19.7993	471118	67637
TOTAL 1,2-DICHLOROETHENE:		39.9827		

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 95.3234%

Sample name: LCS1806

Batch: 02015A188400,840

Raw file:

C:\CP\DATA1\18015.08R

Reviewed by: MM49

Verified by: MM49

Date: 1/15/02

Date: 01/15/02

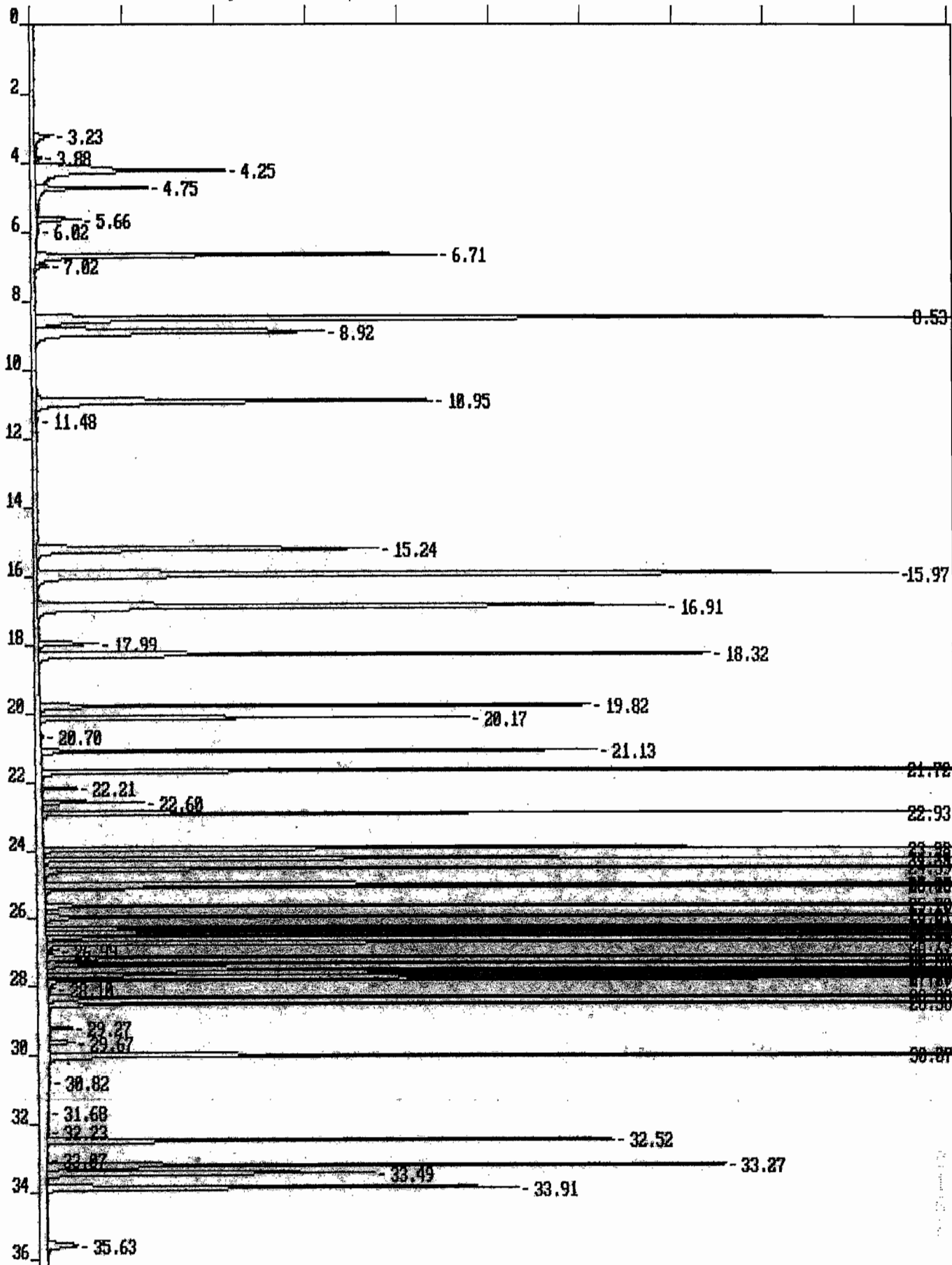
00000

File=C:\CP\DATA1\180158.08R Date printed=01-15-2002 Time= 09:36:37

Sample Name=LCS1806

02015A188400,8401

0.0 to 37.0 min. Low Y=-0.003 High Y=14.997 mv Span=15.0



Sample Name: LCS1806

Batch: 02015A18

Date Taken: Jan 15, 2002 09:35:29

Raw File: C:\CP\DATA1\18015B.08R

Area File: C:\CP\DATA1\18015B.08A

Method File: C:\CP\DATA1\18365B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 37

75m x 0.45mm ID J&W Scientific DB-VRX column

T/SG/C trap Inst. ID#05843 - 5890#18PID

Peak width: .04 Dil. factor: 1 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P18365.CAL(version 27):

Ret Time	Expected	Amount *	Peak	Peak	
(min)	RT (min)	(ug/L)	Area	Height	
4.253	4.278	VINYL CHLORIDE	9.5137	31547	3099
6.708	6.722	1,1-DICHLOROETHENE	17.5890	34372	6539
8.525	8.544	TRANS-1,2-DICHLOROET	17.8050	87475	15371
8.917	8.932	METHYL T-BUTYL ETHER	18.4513	41567	4696
10.954	10.981	CIS-1,2-DICHLOROETHE	18.4073	47677	6455
15.237	15.267	1,1-DICHLOROPROPENE	18.1055	41692	5566
15.974	16.005	BENZENE	18.5164	101513	14063
16.907	16.940	ISTD-FBENZENE	1.0000	77156	10243
18.319	18.344	TRICHLOROETHENE	17.8514	57591	10979
19.821	19.838	2-CHLOROETHYL VINYL	19.6954	36304	8994
20.169	20.187	CIS-1,3-DICHLOROPROP	18.0759	26721	6998
21.129	21.143	TRANS-1,3-DICHLOROPR	16.3564	29985	9088
21.717	21.731	TOLUENE	18.1076	93435	27855
22.927	22.940	TETRACHLOROETHENE	17.7757	44159	14524
23.979	23.990	CHLOROBENZENE	18.1881	97908	37765
24.293	24.304	ETHYLBENZENE	18.2132	83342	30909
24.585	24.597	M,P-XYLENE	36.4618	195551	61536
25.050	25.062	STYRENE	18.3617	105952	39454
25.153	25.164	O-XYLENE	18.4827	86783	30797
25.696	25.708	ISOPROPYLBENZENE	18.7921	71280	24031
26.013	26.026	BROMOBENZENE	18.2324	99489	35004
26.342	26.354	N-PROPYLBENZENE	18.0688	77587	26831
26.465	26.478	2-CHLOROTOLUENE	18.3027	86562	29832
26.584	26.597	4-CHLOROTOLUENE	18.1896	88735	31349
26.789	26.801	1,3,5-TRIMETHYLBENZE	18.3253	113604	38429
27.212	27.225	TERT-BUTYLBENZENE	18.2616	66458	20217
27.394	27.407	1,2,4-TRIMETHYLBENZE	18.4463	87798	28918
27.561	27.575	SEC-BUTYLBENZENE	17.9726	67030	20320
27.667	27.681	1,3-DICHLOROBENZENE	18.2342	86181	28036
27.782	27.797	1,4-DICHLOROBENZENE	18.1967	85796	28110
27.868	27.882	P-ISOPROPYLTOLUENE	18.8197	67568	20901
28.392	28.406	1,2-DICHLOROBENZENE	17.8831	67913	20651
28.580	28.594	N-BUTYLBENZENE	18.2547	65196	19166
30.072	30.090	SURR-1B4CB-P	27.3143	129444	34799
32.524	32.546	1,2,4-TRICHLOROBENZE	18.5158	43935	9290
33.269	33.292	NAPHTHALENE	18.9231	54537	11120
33.485	33.509	HEXACHLOROBUTADIENE	18.0808	30403	5364
33.910	33.934	1,2,3-TRICHLOROBENZE	18.6051	40659	7723

XYLENES (Total): 54.9445

* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 91.0476%

Chrom Perfect version 6.07

Reported on 01-15-2002at 09:37:54

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 8,624 - 12,937 (80% - 120% of midpoint 10,781)

Used initial calibration files to determine range.

Sample name: LCS1806

Batch: 02015A188400,840

Raw file:

C:\CP\DATA1\18015B.08R

Reviewed by: MM/09/04

Verified by: MM/09/04

Date: 1/15/02

Date: 01/15/02

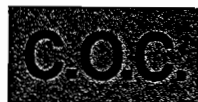
Problems or comments are as follows:

*
*
*

Data file	SampleName	Batch#	DF	Analysis#s	CL-CK	QCCode	Bottle	Upload	Verify	Comments
18365.01R	CBLK	01365A18	1.0							
18365.02R	CBLK	01365A18	1.0							
18365.03R	CALSTD1	01365A18	1.0	8400,8401,8464		C1				OK
18365.04R	CALSTD2	01365A18	1.0	8400,8401,8464		C2				
18365.05R	CALSTD3	01365A18	1.0	8400,8401,8464		C3				
18365.06R	CALSTD4	01365A18	1.0	8400,8401,8464		C4				
18365.07R	CALSTD5	01365A18	1.0	8400,8401,8464		C5				
18365.08R	CALSTD6	01365A18	1.0	8400,8401,8464		C6				
18365.09R	CALSTD7	01365A18	1.0	8400,8401,8464		C7				
18365.10R	CALSTD8	01365A18	1.0	8400,8401,8464		C8				PPD only
18365.11R	CBLK	01365A18	1.0							
18365.12R	CBLK	01365A18	1.0							
18365.13R	CBLK	01365A18	1.0							
18365.14R	CBLK	01365A18	1.0							
18365.15R	SETUP	01365A18	1.0							
18365.16R	CBLK	01365A18	1.0							
18365.17R	CHKSTD	01365A18	1.0	8400,8401						neg. In Spec
18365.18R	CBLK	01365A18	1.0							
18365.19R	BLK1808	01365A18	1.0	8400,8401						
18365.20R	MDL	01365A18	1.0							
18365.21R	DLG1802	01365A18	1.0							

Revised sequence
SEP 01 12-31-01

Problems or comments are as follows:



*
*
*

18014.33R

Data file	SampleName	Batch#	DF	Analysis#s	CL-CK	QCCode	Bottle	Upload	Verify	Comments
18015.01R	CHKSTD	02015A18	1.0	8400,8401	---	---	---	---	OK	Avg. in spec
18015.02R	BLK1831	02015A18	1.0	8400,8401	---	---	---	994	OK	OK
18015.03R	DLS1821	02015A18	1.0		---	---	---	---	OK	OK
18015.04R	3753742	02015A18	1.0	1127,8404,8400,8401	A	BGM	52A	994	OK	OK
18015.05R	3753745	02015A18	1.0	1127,8404	↓	---	---	994	OK	OK
18015.06R	3753743	M 02015A18	1.0	1127,8404,8400,8401	↓	MS	---	994	OK	OK
18015.07R	3753744	M 02015A18	1.0	1127,8404,8400,8401	↓	MSD	---	994	OK	OK
18015.08R	LCS1806	02015A18	1.0	8400,8401	---	LCS	---	994	OK	In Spec
18015.09R	CHKSTD	02015A18	1.0	8400,8401	---	---	---	---	OK	Avg. In Spec

4 samples

Metals Data

Case Narrative Conformance/Nonconformance Summary



CASE NARRATIVE FOR INORGANICS

Laboratory Name: Lancaster Laboratories

SDG Number: HUL05

Date Received: 1/05/02

Analysis:

Refer to the analysis run logs for samples requiring dilutions.

Quality Control:

The recovery percentages of the matrix spike and matrix spike duplicate for iron were not used to validate the data because the sample results were greater than four times the respective amounts of spike added.

Explanatory Notes:

The instrument detection limits (IDLs) are used for determining the U flags on the initial and continuing calibration blanks. The method detection limits (MDLs) are used for determining all other U flags.

The final concentration is obtained using the following calculation:

$$\text{final conc.} = \text{instrument reading} \times \frac{\text{final vol.} \times \text{dilution factor}}{\text{initial volume or weight}}$$

Calibration Standards:

Instrument calibration standards are prepared monthly from stock solutions purchased from Spex Industries Inc., JT Baker, Aldrich Chemical, VWR Scientific, EM Science, High Purity, Ultra Scientific or VHG Laboratories.

Case Narrative reviewed and approved by:

Kathleen A. Risko Date 1/15/02
Kathleen A. Risko, Specialist
Inorganic Data Packages

QUALITY ASSURANCE SUMMARY

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Name: LANCASTER LABORATORIES

SDG No.: HUL05

Client Sample ID.

A2U--
A2U-D

Lab Sample ID.

3753742
3753745

Were ICP interelement corrections applied ?

Yes/No YES

Were ICP background corrections applied ?
If yes - were raw data generated before
application of background corrections ?

Yes/No YES

Yes/No NO

LEGEND:=====

U = Below MDL B = Below LOQ
FLAGS: (indicate matrix interference)
N = Matrix Spike OOS
* = Duplicate OOS
W = Method F Analytical Spike Recovery
<85% or > 115% when the sample conc.
is <50% of the spike conc.
S = Analysis Determined by MSA
+ = MSA Correlation Coefficient < 0.995
E = Matrix Effects exist as proven by
Serial Dilution or Spiked Dilution
M = Duplicate Injection Precision not met
Presence of FLAGS does not invalidate data

METHODS:
A = Flame Atomic Absorption
P = Inductively Coupled Plasma
F = Graphite Furnace
AS = Hydride Generation
CV = Cold Vapor
NR = Not Required
TERMS:
MDL = Method Detection Limit
LOQ = Limit Of Quantitation
OOS = Out of Specification
MSA = Method of Standard Addition

I certify that this data package is technically accurate and complete.
Release of the data contained in this data package has been authorized by
the Laboratory Manager or the Manager's designee, as verified by the
following signature.

Signature: Kathleen A. Risko

Name: Kathleen A. Risko

Date: 1/15/02

Title: Specialist
Inorganic Data Packages

Sample Data

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

A2U--

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL05

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753742

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	164000			A

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:
Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

A2U-D

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL05

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3753745

Date Received: 01/05/02

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	100000			A

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:
Artifacts:

Comments:

Quality Control Data

QUALITY ASSURANCE SUMMARY

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL05

Initial Calibration Source: LLI

Continuing Calibration Source: LLI

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(2)	Found	%R(2)	
Iron	2500.0	2482.00	99.3	500.0	489.00	97.8	483.00	96.6	A

(1) Control Limits: All Metals 90-110

(2) Control Limits: Mercury, Flame AA, Graphite Furnace AA 80-120; ICP 90-110

QUALITY ASSURANCE SUMMARY

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL05

Initial Calibration Source: LLI

Continuing Calibration Source: LLI

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(2)	Found	%R(2)	
Iron				500.0	492.00	98.4	487.00	97.4	A

(1) Control Limits: All Metals 90-110

(2) Control Limits: Mercury, Flame AA, Graphite Furnace AA 80-120; ICP 90-110

QUALITY ASSURANCE SUMMARY

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Name: LANCASTER LABORATORIES

SDG No.: HUL05

Initial Calibration Source: LLI

Continuing Calibration Source: LLI

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(2)	Found	%R(2)	
Iron				500.0	492.00	98.4	483.00	96.6	A

(1) Control Limits: All Metals 90-110

(2) Control Limits: Mercury, Flame AA, Graphite Furnace AA 80-120; ICP 90-110

QUALITY ASSURANCE SUMMARY

CRDL STANDARD FOR AA AND ICP

Lab Name: LANCASTER LABORATORIES

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: HUL05

AA CRDL Standard Source: LLI

ICP CRDL Standard Source:

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Iron	100.0	96.00	96.0					

QUALITY ASSURANCE SUMMARY

BLANKS

Name: LANCASTER LABORATORIES

SDG No.: HUL05

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L) C		Continuing Calibration Blank (ug/L)						Preparation Blank C		M
	1	C	2	C	3	C					
Iron	12.5	U	12.5	U	16.0	B	12.5	U	50.000	U	A

BLANKS

Lab Name: LANCASTER LABORATORIES

SDG No. : HUL05

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

[illegible]

QUALITY ASSURANCE SUMMARY

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

CLIENT SAMPLE NO.

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL05

Matrix (Soil/Water): WATER

A2U--S

% Solids for sample: 0.0 Concentration Units (ug/l or mg/kg dry weight): UG/L Level (low/med): LOW

Analyte	M	Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	MS %R	Q	MSD %R	Q	Control Limits %R	RPD	Q	Ctl Lim RPD
Iron	A	164050.0000		173600.0000		178600.0000		1000.00	1000.00	955		1455			3		20

Note: An (N) in column "Q" indicates a spike recovery that is not within the control limits. An asterisk (*) in column "Q" indicates poor duplicate precision between the matrix spike and the matrix spike duplicate. The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample page of the Quality Assurance Summary.

QUALITY ASSURANCE SUMMARY

DUPLICATES

CLIENT SAMPLE NO.

A2U--D

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL05

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids for Sample: 0.0

% Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S) C	Duplicate (D) C	RPD	Q	M
Iron		164050.0000	156250.0000	5		A

NOTE: An asterisk(*) in column "Q" indicates poor duplicate precision (RPD > 20% OR $|(S) - (D)| > LOQ$ for values < 5x LOQ). The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample page of the Quality Assurance Summary.

QUALITY ASSURANCE SUMMARY

LABORATORY CONTROL SAMPLE

Name: LANCASTER LABORATORIES

SDG No.: HUL05

Solid LCS Source:

Aqueous LCS Source: LLI

Analyte	Aqueous (ug/L)			Solid (mg/kg)				%R
	True	Found	%R(1)	True	Found	C	Limits	
Iron	1000.0	967.00	97					

(1) Control Limits: Statistically determined

7/12/01

Statistical Windows: Waters LCS/LCSD

SW846 ICP

Element	True value mg/L	Statistical Window
AL	2	93-112
SB	0.5	94-112
AS	2	92-109
BA	2	93-109
BE	0.05	92-109
B	2	93-110
CD	0.05	93-111
CA	4	93-113
CR	0.2	95-112
CO	0.5	95-109
CU	0.25	92-110
FE	1	91-114
PB	0.5	93-110
MG	2	93-110
MN	0.5	93-110
MO	2	97-109
NI	0.5	93-110
K	4	80-120
SE	2	91-111
AG	0.05	93-110
NA	4	87-117
SR	1	91-112
TL	2	92-107
SN	4	95-112
TI	1	96-109
V	0.5	96-109
ZN	0.5	94-112
LI	2	80-120

SW846 Mercury

Element	True value mg/L	Statistical Window
HG	1	84-124

SW846 GFAA

Element	True value mg/L	Statistical Window
SB	50	83-122
AS	40	83-116
BE	2.5	80-120
CD	2.5	82-117
CR	10	79-117
CU	20	85-116
PB	20	80-117
NI	20	80-120
SE	10	83-119
AG	2.5	80-120
TL	50	90-108

SW846 Flame AA

Element	True value mg/L	Statistical Window
AL	2	77-110
BA	2	72-110
BE	0.05	80-120
CD	0.05	85-113
CA	4	80-120
CR	0.2	86-121
CU	0.25	87-106
FE	1	88-111
PB	0.5	86-114
MG	2	80-120
MN	0.5	90-108
NI	0.5	85-110
K	4	80-120
AG	0.05	82-116
NA	4	80-120
ZN	0.5	88-109

Verification of Instrument Parameters

QUALITY ASSURANCE SUMMARY

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Name: LANCASTER LABORATORIES
 SDG No.: HUL05

ICP ID Number: _____

Date: 10/15/01

Flame AA ID Number: 03907

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	IDL (ug/L)	M
Iron	248.30	BD	12.5	A

Comments:

QUALITY ASSURANCE SUMMARY

METHOD DETECTION LIMITS (ANNUALLY)

Client Name: LANCASTER LABORATORIES
 Sample No.: HUL05

Method: A

Matrix (soil/water): WATER

Date: 04/02/01

Analyte	Wave-length (nm)	Back-ground	LOQ (ug/L)	MDL (ug/L)
Iron	248.30	BD	100	50.0

** The LOQ must be adjusted for % Solids and Sample Weight for samples reporting in mg/Kg and ug.

Comments:

Preparation and Run Logs

QUALITY ASSURANCE SUMMARY

PREPARATION LOG

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL05

Method: A

Client Sample No.	Preparation Date	Weight (gram)	Volume (ml)
A2U--	01/10/02		50
A2U--D	01/10/02		50
A2U--M	01/10/02		50
A2U--S	01/10/02		50
LCSW	01/10/02		50
PBW	01/10/02		50

ANALYSIS RUN LOG

End Date: 01/11/02

EPA Sample No.	D/F	Time	% R	Analytes																			
				F E																			
S0	1.00	0813		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S100	1.00	0813		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S250	1.00	0813		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S500	1.00	0814		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S1000	1.00	0814		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S5000	1.00	0814		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ICV	1.00	0815		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ICB	1.00	0815		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CRA	1.00	0815		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	0816		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	0816		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0816			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0817			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0817			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZ	1.00	0817			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0818			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0820			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0820			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0825			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0825			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0825			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	0826		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	0827		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	20.00	0830			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	20.00	0836			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	100.00	0837			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	20.00	0838			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	20.00	0838			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	20.00	0839			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0839			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	10.00	0841			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	0841			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

ANALYSIS RUN LOG

End Date: 01/11/02

[illegible]

ANALYSIS RUN LOG

End Date: 01/11/02

[illegible]

Raw Data

Flame AA Data

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TUBE: 1 1/11/02 8:13:01

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
S0	*		0.000	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			0.000	-0.001	-0.001	-0.001	-0.003	

TUBE: 2 1/11/02 8:13:03

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
S100	*		0.100	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			11.400	0.016	0.018	0.015	0.015	

TUBE: 3 1/11/02 8:13:05

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
S250	*		0.250	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			6.100	0.039	0.037	0.038	0.042	

TUBE: 4 1/11/02 8:14:01

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
S500	*		0.500	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			1.000	0.078	0.079	0.077	0.079	

TUBE: 5 1/11/02 8:14:02

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
S1000	*		1.000	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			0.900	0.149	0.150	0.149	0.147	

DATA SHEET FOR FLAMEAAS RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TUBE: 6 1/11/02 8:14:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
55000	*		5.000	1.000	1.000	1.000	1.000	1.000
			%RSD	MEAN ABS	READING1	READING2	READING3	
			0.800	0.584	0.580	0.581	0.589	

TUBE: 7 1/11/02 8:15:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
ICV	*		2.482	1.000	1.000	1.000	1.000	1.000
			% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
			99.3	1.000	0.327	0.324	0.330	0.325

TUBE: 8 1/11/02 8:15:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
ICB	*		0.002	1.000	1.000	1.000	1.000	1.000
			%RSD	MEAN ABS	READING1	READING2	READING3	
			99.900	0.000	0.001	0.001	0.000	

TUBE: 9 1/11/02 8:15:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CRA	*		0.096	1.000	1.000	1.000	1.000	1.000
			%RSD	MEAN ABS	READING1	READING2	READING3	
			15.600	0.015	0.017	0.016	0.013	

TUBE: 10 1/11/02 8:16:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV1	*		0.489	1.000	1.000	1.000	1.000	1.000
			% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
			97.8	2.000	0.077	0.077	0.078	0.075

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 11 **ZZZZZZ** 1/11/02 8:16:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB1	*		0.009	1.000	1.000	1.000	1.000	1.000
			%RSD	MEAN ABS	READING1	READING2	READING3	
			99.900	0.001	0.003	-0.002	0.004	

TUBE: 12 **ZZZZZZ** 1/11/02 8:16:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
PBW	*	020085733002	-0.003	1.000	1.000	1.000	50.000	50.000
			% RSD	MEAN ABS	READING1	READING2	READING3	
			99.900	0.000	0.002	-0.003	0.000	

TUBE: 13 **ZZZZZZ** 1/11/02 8:17:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
LCSW	*	020085733002	0.946	1.000	1.000	1.000	1.000	1.000
			% RSD	MEAN ABS	READING1	READING2	READING3	
			2.200	0.142	0.138	0.144	0.142	

TUBE: 14 **ZZZZZZ** 1/11/02 8:17:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3754009	U	020085733002	3.046	1.000	1.000	1.000	50.000	50.000
			% RSD	MEAN ABS	READING1	READING2	READING3	
			1.400	0.387	0.381	0.392	0.388	

TUBE: 15 **ZZZZZZ** 1/11/02 8:17:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3754009	D	020085733002	2.455	1.000	1.000	1.000	50.000	50.000
			% RSD	MEAN ABS	READING1	READING2	READING3	
			0.500	0.324	0.325	0.322	0.324	

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 16 **ZZZZZZ** 1/11/02 8:18:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3754009	R	020085733002	3.423	1.000	1.000	1.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>V</u>		—	—	0.800	0.426	0.423	0.425	0.430

TUBE: 17 **ZZZZZZ** 1/11/02 8:20:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3754009	P	020085733002	4.129	1.000	1.000	1.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>V</u>		—	—	0.200	0.497	0.498	0.498	0.496

TUBE: 18 **ZZZZZZ** 1/11/02 8:20:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753487	*	020085733002	0.912	1.000	1.000	1.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>X</u>		—	—	0.900	0.137	0.139	0.138	0.136

TUBE: 19 **ZZZZZZ** 1/11/02 8:25:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
PBW	*	020100820008	0.009	1.000	1.000	1.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>V</u>		—	—	99.900	0.001	0.004	-0.002	0.002

TUBE: 20 **ZZZZZZ** 1/11/02 8:25:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
LCSW	*	020100820008	0.976	1.000	1.000	1.000	1.000	1.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>V</u>		—	—	1.500	0.146	0.144	0.145	0.148

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 21 **ZZZZZZ** 1/11/02 8:25:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	U	020100820008	50.000	1.000	1.000	1.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	20	—	0.500	1.093	1.087	1.095	1.098

TUBE: 22 1/11/02 8:26:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV2	*		0.483	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
96.6	2.200	0.076	0.077	0.074	0.076

TUBE: 23 1/11/02 8:27:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB2	*		0.016	1.000	1.000	1.000	1.000	1.000

%RSD	MEAN ABS	READING1	READING2	READING3
76.700	0.003	0.004	0.000	0.003

TUBE: 24 **ZZZZZZ** 1/11/02 8:30:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	U	020100820008	2.368	10.000	0.500	20.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X	—	—	0.700	0.314	0.312	0.313	0.316

TUBE: 25 **ZZZZZZ** 1/11/02 8:36:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	P	020100820008	3.600	10.000	0.500	20.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
✓	—	—	0.900	0.444	0.447	0.439	0.445

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 26 **ZZZZZZ** 1/11/02 8:37:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	L	020100820008	0.464	50.000	0.500	100.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>V</u>		—	—	1.300	0.073	0.072	0.074	0.072

TUBE: 27 **ZZZZZZ** 1/11/02 8:38:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	D	020100820008	2.508	10.000	0.500	20.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>V</u>		—	—	0.600	0.329	0.330	0.331	0.327

TUBE: 28 **ZZZZZZ** 1/11/02 8:38:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	R	020100820008	2.489	10.000	0.500	20.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>V</u>		—	—	0.500	0.327	0.326	0.329	0.327

TUBE: 29 **ZZZZZZ** 1/11/02 8:39:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753720	M	020100820008	2.427	10.000	0.500	20.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>V</u>		—	—	1.200	0.321	0.319	0.318	0.325

TUBE: 30 **ZZZZZZ** 1/11/02 8:39:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753715	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>—</u>		IQ	—	0.800	0.941	0.947	0.933	0.943

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 31 **ZZZZZZ** 1/11/02 8:41:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753715	*	020100820008	1.926	10.000	1.000	10.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
~~V~~ ~~X~~	—	—	1.600	0.264	0.265	0.259	0.267

TUBE: 32 **ZZZZZZ** 1/11/02 8:41:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753716	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	40	—	0.700	1.204	1.214	1.199	1.198

TUBE: 33 **ZZZZZZ** 1/11/02 8:43:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753716	*	020100820008	2.081	10.000	0.250	40.000	50.000	50.000

~~V~~ ~~X~~	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	—	1.000	0.282	0.279	0.284	0.283

TUBE: 34 1/11/02 8:44:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV3	*		0.492	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
98.4	1.600	0.077	0.077	0.078	0.076

TUBE: 35 1/11/02 8:45:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB3	*		0.001	1.000	1.000	1.000	1.000	1.000

%RSD	MEAN ABS	READING1	READING2	READING3
99.900	0.000	-0.002	-0.002	0.004

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 36 **ZZZZZZ** 1/11/02 8:45:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753717	*	0201100820008	50.000	1.000	1.000	1.000	50.000	50.000
V		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—		40	—	1.200	1.158	1.168	1.166	1.142

TUBE: 37 **ZZZZZZ** 1/11/02 8:50:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753717	*	0201100820008	1.616	10.000	0.250	40.000	50.000	50.000
V		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X		—	—	0.700	0.227	0.228	0.225	0.227

TUBE: 38 **ZZZZZZ** 1/11/02 8:50:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753718	*	0201100820008	3.908	1.000	1.000	1.000	50.000	50.000
V		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X		—	—	0.800	0.475	0.471	0.478	0.477

TUBE: 39 **ZZZZZZ** 1/11/02 8:51:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753719	*	0201100820008	4.998	1.000	1.000	1.000	50.000	50.000
V		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X		—	—	0.700	0.583	0.579	0.585	0.586

TUBE: 40 **ZZZZZZ** 1/11/02 8:51:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753723	*	0201100820008	50.000	1.000	1.000	1.000	50.000	50.000
V		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—		40	—	0.400	1.119	1.119	1.114	1.123

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 41 **ZZZZZZ** 1/11/02 8:51:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753723	*	020100820008	1.248	10.000	0.250	40.000	50.000	50.000
~~V~~		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
~~X~~		—	—	2.000	0.181	0.185	0.178	0.180

TUBE: 42 **ZZZZZZ** 1/11/02 8:52:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753724	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—		10	—	0.400	1.020	1.015	1.024	1.020

TUBE: 43 **ZZZZZZ** 1/11/02 8:53:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753724	*	020100820008	2.477	10.000	1.000	10.000	50.000	50.000
~~V~~		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
~~X~~		—	—	0.100	0.326	0.326	0.326	0.326

TUBE: 44 **ZZZZZZ** 1/11/02 8:54:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753725	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—		46	—	0.500	1.166	1.164	1.173	1.161

TUBE: 45 **ZZZZZZ** 1/11/02 8:55:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753725	*	020100820008	1.677	10.000	0.250	40.000	50.000	50.000
~~V~~		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
~~X~~		—	—	1.200	0.234	0.233	0.237	0.232

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 46 1/11/02 8:55:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV4	*		0.487	1.000	1.000	1.000	1.000	1.000
			% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
			97.4	0.500	0.076	0.077	0.076	0.076

TUBE: 47 1/11/02 8:55:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB4	*		-0.006	1.000	1.000	1.000	1.000	1.000
			%RSD	MEAN ABS	READING1	READING2	READING3	
			99.900	-0.001	-0.004	-0.001	0.002	

TUBE: 48 1/11/02 8:56:01

ZZZZZZ

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753726	*	020100820008	0.017	1.000	1.000	1.000	50.000	50.000
			% RSD	MEAN ABS	READING1	READING2	READING3	
			81.700	0.003	0.003	0.000	0.005	

TUBE: 49 1/11/02 8:56:03

ZZZZZZ

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753727	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
			% RSD	MEAN ABS	READING1	READING2	READING3	
			0.400	1.266	1.260	1.269	1.269	

TUBE: 50 1/11/02 8:56:05

ZZZZZZ

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753727	*	020100820008	3.747	10.000	0.250	40.000	50.000	50.000
			% RSD	MEAN ABS	READING1	READING2	READING3	
			0.200	0.459	0.460	0.459	0.458	

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 51 **ZZZZZZ** 1/11/02 8:57:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753728	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
<u>V</u>		<u>RR</u>	<u>RD</u>	<u>% RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>
—		<u>10</u>	—	0.400	0.979	0.979	0.983	0.974

TUBE: 52 **ZZZZZZ** 1/11/02 9:00:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753728	*	020100820008	2.068	10.000	1.000	10.000	50.000	50.000
<u>V</u>		<u>RR</u>	<u>RD</u>	<u>% RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>
—		—	—	0.300	0.280	0.280	0.280	0.281

TUBE: 53 **ZZZZZZ** 1/11/02 9:00:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753729	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
<u>V</u>		<u>RR</u>	<u>RD</u>	<u>% RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>
—		<u>10</u>	—	0.800	1.066	1.069	1.056	1.073

TUBE: 54 **ZZZZZZ** 1/11/02 9:01:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753729	*	020100820008	3.561	10.000	1.000	10.000	50.000	50.000
<u>V</u>		<u>RR</u>	<u>RD</u>	<u>% RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>
—		—	—	0.700	0.440	0.437	0.443	0.440

TUBE: 55 **ZZZZZZ** 1/11/02 9:01:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753730	*	020100820008	50.000	1.000	1.000	1.000	50.000	50.000
<u>V</u>		<u>RR</u>	<u>RD</u>	<u>% RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>
—		<u>20</u>	—	0.800	1.127	1.136	1.128	1.118

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 56 **ZZZZZZ** 1/11/02 9:03:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753730	*	020100820008	2.814	10.000	0.500	20.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X	—	—	0.100	0.362	0.362	0.362	0.363

TUBE: 57 1/11/02 9:10:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
PBW	*	020100820009	0.015	1.000	1.000	1.000	50.000	50.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
✓	—	—	99.900	0.002	0.004	0.005	-0.002

TUBE: 58 1/11/02 9:13:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV5	*		0.492	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
98.4	1.300	0.077	0.076	0.076	0.077

TUBE: 59 1/11/02 9:14:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB5	*		0.002	1.000	1.000	1.000	1.000	1.000

%RSD	MEAN ABS	READING1	READING2	READING3
99.900	0.000	0.002	-0.001	0.000

TUBE: 60 1/11/02 9:14:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
LCSW	*	020100820009	0.967	1.000	1.000	1.000	1.000	1.000

	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
✓	—	—	0.700	0.144	0.143	0.145	0.144

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 61 AAU-- 1/11/02 9:15:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753742	U	020100820009	50.000	1.000	1.000	1.000	50.000	50.000
<u>V</u>		<u>RR</u>	<u>RD</u>	<u>% RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>
—		50	—	0.300	1.260	1.260	1.256	1.265

TUBE: 62 AAU-- 1/11/02 9:20:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753742	U	020100820009	3.281	10.000	0.200	50.000	50.000	50.000
<u>X</u>		<u>RR</u>	<u>RD</u>	<u>% RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>
—		—	—	0.600	0.411	0.409	0.412	0.413

TUBE: 63 AAU--A 1/11/02 9:24:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753742	P	020100820009	4.549	10.000	0.200	50.000	50.000	50.000
<u>V</u>		<u>RR</u>	<u>RD</u>	<u>% RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>
—		—	—	1.000	0.539	0.538	0.545	0.534

TUBE: 64 AAU--L 1/11/02 9:24:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753742	L	020100820009	0.651	50.000	0.200	250.000	50.000	50.000
<u>V</u>		<u>RR</u>	<u>RD</u>	<u>% RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>
—		—	—	4.900	0.101	0.096	0.102	0.105

TUBE: 65 AAU--D 1/11/02 9:25:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753742	D	020100820009	3.125	10.000	0.200	50.000	50.000	50.000
<u>V</u>		<u>RR</u>	<u>RD</u>	<u>% RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>
—		—	—	0.500	0.395	0.396	0.393	0.397

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 66 *AAU--S* 1/11/02 9:25:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753742	R	020100820009	3.472	10.000	0.200	50.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>✓</u>		—	—	0.700	0.431	0.427	0.433	0.432

TUBE: 67 *AAU--M* 1/11/02 9:26:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753742	M	020100820009	3.572	10.000	0.200	50.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
<u>✓</u>		—	—	0.300	0.441	0.441	0.441	0.443

TUBE: 68 *AAU--D* 1/11/02 9:26:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753745	*	020100820009	50.000	1.000	1.000	1.000	50.000	50.000
<u>V</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—		<u>40</u>	—	1.100	1.212	1.199	1.212	1.225

TUBE: 69 *AAU--D* 1/11/02 9:26:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3753745	*	020100820009	2.501	10.000	0.250	40.000	50.000	50.000
<u>X</u>		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		—	—	0.400	0.329	0.330	0.328	0.327

TUBE: 70 1/11/02 9:27:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV6	*		0.483	1.000	1.000	1.000	1.000	1.000
% RECOVERY			% RSD			MEAN ABS	READING1	READING2
96.6			1.600			0.076	0.077	0.075

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0201101A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 71 1/11/02 9:27:04

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
CCB6	*		0.012	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			99.900	0.002	0.004	0.002	0.000	

TUBE: 72 1/11/02 9:30:04

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
BLANK	*		0.000	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			0.000	0.001	0.004	0.000	-0.002	

TUBE: 73 1/11/02 9:30:05

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
BLANK	*		0.000	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			0.000	0.002	0.002	0.000	0.005	

TUBE: 74 1/11/02 9:31:01

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
BLANK	*		0.000	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			0.000	-0.002	-0.003	-0.002	-0.001	

TUBE: 75 1/11/02 9:31:03

<u>SAMPLE</u>	<u>QC</u>	<u>BATCH#</u>	<u>CONC. (ppm)</u>	<u>DILVOL</u>	<u>ALIQVOL</u>	<u>DF</u>	<u>FINVOL</u>	<u>SAMP WT</u>
RESLOPE	*		0.500	1.000	1.000	1.000	1.000	1.000
			<u>%RSD</u>	<u>MEAN ABS</u>	<u>READING1</u>	<u>READING2</u>	<u>READING3</u>	
			2.900	0.073	0.073	0.071	0.075	

Extraction/Distillation/Digestion Logs

Water Digestion Logbook
AA/ICP - 820/1848/5705/5706/6360

Digest Type: AA/ICP/GF(Sb)-SW846
COC (Y/N): yes

Start Time [24:00] ON Hotplate/IN HotBlock: 14:30
EndTime [24:00] OFF Hotplate/OUT of HotBlock: 15:25
[May include time for cooling, reagent additions, etc.]

Batch #

0	7	0	1	0

0	2	8	0

0	0	9

	Sample #	T	Initial Vol (mL)	Final Vol (mL)	SDG #	AA (A)	ICP (I)	GF (G)
1	3753742	1	50	50	H4405	+		
2	3753745	↓	↓	↓	↓	↓		
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
	Dup (D)	1	50	50	H4405	+		
	Spike (R)	↓	↓	↓	↓	↓		
	MSD (M)	↓	↓	↓	↓	↓		
	Blank	BLANK						

Blank and LCS(s) final volumes are the same.

Sample #	Spike Information							
	Soln ID	1	2	3	4	5	8 (GF)	
3753742 (R)	Lot #	004	347	362	333	348	2	
3753742 (M)	Vol Added (mL)	1.0				→	→	
	Vol Added (mL)	1.0						
LCS								
LCS/D								

QC

Digest Date: 01/10/02

Digested By (Init/Emp #): cmc/328

14 032839

1480.01 01/11/01

1480a.01 01/11/01

032839

Instrumental Analysis Data

Case Narrative Conformance/Nonconformance Summary



Where quality is a science.

CLIENT: Hull & Associates
SDG: HUL05

LANCASTER LABORATORIES

INSTRUMENTAL WET CHEMISTRY

SAMPLE NUMBERS:

<u>Sample #</u>	<u>Sample Code</u>	<u>Comments</u>
3753742	A2U--	
3753745	A2U-D	
LCS		DF5

ANALYSIS:

Dilution for the total organic carbon analysis is listed in the comments section above.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

QC was within specification.

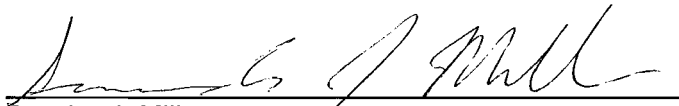
DATA INTERPRETATION:

Due to the limitations of the data package software, Form I's are not available for the Instrumental analysis data. Please refer to the analysis reports for this information.

TOC water (mg/l) = raw result (mg/l) X dilution factor

No further interpretation is necessary for the data submitted.

Case Narrative Reviewed and Approved by:

 Date: 1-16-02
Sandra J. Miller
Specialist/Coordinator

QC Summary

[illegible]

Comments: The blank is acceptable when the result is less than the limit of quantitation.	ABBREVIATION KEY IC = Ion Chromatography < = Less Than TOC = Total Organic Carbon ND = Not Detected TOX = Total Organic Halogen J = Estimated Value < LOQ TKN = Total Kjeldahl Nitrogen MDL = Method Detection Limit AK = Alpkem LOQ = Limit of Quantitation DOC = Dissolved Organic Carbon NA = Not Applicable B = Background * = Out of Specification S = Spike D = Duplicate M = Matrix Spike Duplicate U = Under P = Post Distillation Spike	

Sample Info.	Matrix Spike Analysis										Matrix: WATER								
Sample Number	Sample Code	Batch Number	Parameter	ME	Analysis Date	BKG Sample	BKG Result	MS Sample	MS Spike Added	MS Result	MSD Sample	MSD Spike Added	MSD Result	Units	MS Rec (%)	MSD Rec (%)	Acceptance Window (%)	RPD (%)	% RPD Limits
3753742	A2U--	0201001111	TOC	TOC	1/11/02	3753742	28.0	3753742	9.8	36.5	3753742	9.8	37.0	mg/l	88	92	73 - 128	1	20
3753745	A2U-D																		

ABBREVIATION KEY

IC = Ion Chromatography	< = Less Than
TOC = Total Organic Carbon	ND = Not Detected
TOX = Total Organic Halogen	ME = Method
TKN = Total Kjeldahl Nitrogen	LOQ = Limit of Quantitation
AK = Alpkem	* = Out of Specification
DOC = Dissolved Organic Carbon	NA = Not Applicable
RA = Rapid Analyzer	U = Under
B = Background	P = Post Distillation Spike (PDS)
S = Spike	D = Duplicate
MSD = Matrix Spike Duplicate	J = Estimated Value < LOQ



Std mass:
Calib. Const:

25.0 ug C
0.06035 ug C/mV

Blank: 5.21568 mv
Blank: 5.29326 mv
Blank: 5.06054 mv
Average: 5.18983 mv

Standard: 410.784 mv
Standard: 413.298 mv
Standard: 418.552 mv
Average: 414.211 mv

Quality Control Summary
Initial Calibration & Linearity Check
Instrument Analysis
Total Organic Carbon
Instrument Identification: 5214
Calibration Date: 1/9/02
Matrix: WATER
SDG: HUL05

Units=
mg/L

Batch Number	This IC applies to samples:	Sample Code	Analysis #	Method	ICV/	ICV/	ICV/	ICV/	ICV/	ICV/	ICV/
02010011111	Blank LCS 3753742 3753745	A2U-- B,S,D A2U-D	354	Blank 0.149	1.951	7.157	9.706	24.917	50.018	75	NA

Continuing Calibration Dates: 1/10/02, 1/11/02
Concentration Units: mg/L

Parameter	Reference Concentration	Result Cont. Cal	% Recovery	Acceptance Range +/- 10%	Out of Specifications
TOC	25	24.735	99	22.375 - 27.6	
CCV	25	24.762	99	22.375 - 27.6	
CCV	25	24.563	98	22.375 - 27.6	
CCV	25	25.259	101	22.375 - 27.6	
CCV	25	25.271	101	22.375 - 27.6	
CCV	25	26.038	104	22.375 - 27.6	
CCV	25	26.581	106	22.375 - 27.6	

Dept. 27 MDL/LOQ Values

Date Last Printed: 11/21/01

Analysis Name	Analysis Number	Method	Calc. MDL	Calc. LOQ	True MDL	True LOQ	Units
Total Kjeldahl Nitrogen (Water)	0217	AK	0.21	0.6	0.3	1	mg/l
Nitrite-Nitrogen	0219(S)	AK	0.09	0.26	0.2	0.6	mg/kg
Nitrite Nitrogen	0219(W)	AK	0.003	0.008	0.015	0.05	mg/l
Nitrate-Nitrogen	0220(S)	AK	0.5	1.6	0.6	1.7	mg/kg
Nitrate Nitrogen	0220/7882	AK	0.033	0.099	0.04	0.1	mg/l
Ammonia Nitrogen	0222	AK	0.018	0.055	0.02	0.1	mg/l
Total Phosphorus	0227/0345	AK	0.01	0.029	0.04	0.05	mg/l
Total Cyanide, EPA	0237	AK	0.0007	0.0022	0.004	0.005	mg/l
Free Cyanide	0241	AK	0.002	0.005	0.004	0.005	mg/l
Phenol (Water), EPA	0434	AK	0.007	0.02	0.009	0.03	mg/l
Reactive Cyanide	1123	AK	15	46	100	100	mg/kg
Total Kjeldahl Nitrogen (Solid)	1511	AK	116	348	150	500	mg/kg
Soluble Phosphorus	1546	AK	0.04	0.13	0.05	0.15	mg/l
Hydrolyzable Phosphorus	1547	AK	0.008	0.025	0.04	0.05	mg/l
Amenable Cyanide, Waters	1549	AK	0.0015	0.0045	0.004	0.005	mg/l
Phenol (Water), SW-846	2393	AK	0.003	0.01	0.009	0.03	mg/l
CLP Cyanide (IDL)	3343/5910	AK	1.4	4.2	4	10	ug/l
Nitrocellulose, WW	370	AK	500	1500	500	1500	ug/l
Nitrocellulose, SW	371	AK	60	180	60	180	mg/kg
Total Phosphorus (Solid)	5893/5894	AK	5.9	17.6	10	20	mg/kg
Total CN (Solid)	5895	AK	0.08	0.24	0.18	0.5	mg/kg
Amenable Cyanide, Solids	5898	AK	0.08	0.24	0.18	0.5	mg/kg
Phenol (Solid)	5912	AK	0.16	0.49	0.2	0.7	mg/kg
Total Cyanide, SW-846	8255	AK	0.0015	0.0045	0.004	0.005	mg/l
Chloride	0224	IC	0.07	0.2	0.3	0.4	mg/l
Sulfate	0228	IC	0.11	0.32	0.3	1	mg/l
Nitrite-Nitrogen	0332/1506	IC	0.009	0.026	0.08	0.1	mg/l
Nitrate-Nitrogen	0368	IC	0.007	0.021	0.08	0.1	mg/l
Fluoride	1504	IC	0.008	0.024	0.08	0.1	mg/l
Bromide	1505	IC	0.05	0.15	0.4	0.5	mg/l
Hexavalent Chromium (Solid)	5892	IC	0.12	0.36	0.2	1	mg/kg
Hexavalent Chromium (Water)	6467	IC	1.2	3.5	5	10	ug/l
Orthophosphate	7322	IC	0.15	0.46	0.35	1	mg/l
Fluoride, Solid	7332	IC	0.22	0.67	0.8	1	mg/kg
Chloride, Solid	7333	IC	0.77	2.3	3	4	mg/kg
Nitrite, Solid	7334	IC	0.11	0.34	0.8	1	mg/kg
Bromide, Solid	7335	IC	0.93	2.8	4	5	mg/kg
Nitrate, Solid	7336	IC	0.25	0.75	0.8	1.5	mg/kg
Orthophosphate, Solid	7337	IC	2.2	6.6	3	10	mg/kg
Sulfate, Solid	7338	IC	1.3	3.8	3	10	mg/kg
Titrimetric Cyanide	2109	NA	0.58	1.7	0.6	2	mg/l
Moisture	2111/2118/2121/2353	RA	0.39	1.2	1.5	1.5	%
Moisture	7116/7119	RA	0.65	2	2	2	%
Total Carbon	1550	TC	0.09	0.26	0.6	2	mg/l
TOC (Solid)	0138	TOC	9.8	30	17	50	mg/kg
TOC (Water)	0273/0354	TOC	0.57	1.7	0.6	2	mg/l
TOC Combustion	2079/0383	TOC	56	167	60	170	mg/kg
Dissolved Organic Carbon	7547	TOC	0.57	1.7	0.6	2	mg/l
TOX (Water)	0574/0555	TOX	3.03	9.08	4	10	ug/l
TOX (Solid)	1503	TOX	46	139	50	150	mg/kg

LEGEND

AK = Alpkem
 IC = Ion Chromotography
 TOC = Total Organic Carbon
 TOX = Total Organic Halogens
 TC = Total Carbon
 RA = Rapid Analyzer

*NOTE: The MDL and LOQ for moisture are the same to avoid inconsistencies between reporting types.

**NOTE: To obtain values for Total Phosphorus as PO4 (#345, 5894), multiply above values by 3.07

Reported MDL's are based on calculated MDLs for most compounds.
 Some reported MDLs are set higher based on our experience with specific compounds.

Raw Data

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 01.09.02 / 01.10.02 Analyst: J. Miller

Calibration Constant: 0.06635 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
BLANK	5.21568 mV				1				Slope = 1.6615
↓	5.29326 mV		5.18983 mV		2				1/ Intercept = -0.12396
↓	5.66054 mV				3				Corrcoef = 0.999952
25 CHL STD	440.784 mV				4				
↓	413.298 mV		414.211 mV		5				
↓	418.552 mV				6				
RINSE	0.281				7				
METHOD BLANK	0.149				8				
ICV-2.0 µg/L	1.951				9				
7.5 µg/L	7.157				10				
10.0 µg/L	9.706				11				
25.0 µg/L	24.917				12				
↓ 50.6 µg/L	50.018				13				
RINSE	0.615				14				
ICB/KB	0.160				15				
J746879 (A)	44.658	1	44.7	2	16	1510	0200J0111 11A		confirms A bottle high
LEV	26.489				17	1518			12 = 106.4
CP	0.849				18	1526			data reduced 11/10/02
RINSE	0.519		0.519		19	0443	01/10/02		
RINSE	0.341		0.341		20	0451			
LEV	24.818				21	0508			10 = 99.1
KB	0.191				22	0508			
J750010 (A)	0.169	1	0.169	2	23	0514	0200J0111 11B		

Verified by: J. Miller Date: 1/10/02

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 01-10-02 Analyst: DBL

Calibration Constant: 0.06035 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
J75 0010 (B)	0.442	1	0.201	2	24	0535	02010 0111 118		
(C)	0.092	↓		↓	25	0537			
(D)	0.075	↓		↓	26	0541			
LCV	24.735		0.0		27	0547			12-99.1
CCB	0.182				28	0557			1/10/02
PBN	-0.016	1	0.0	1	29	0605	02010 0111 11A		
LCBN	3.165	5x	15.8	1	30	0614			Rpt. PS. B. 51.8 mg 12-31-01 bottle codes
J75 J159 (A)	29.720	1x	30.0	1	31	0622			
(B)	29.970	↓	29.9	↓	32	0630			
(C)	30.268	↓		↓	33	0638			
(D)	30.166	↓		↓	34	0646			
J75 J160 (A)	1.036	1x	0.519	1	35	0654			bottle A Rpt. PS. B EB
(B)	0.309	↓		↓	36	0702			
(C)	0.443	↓		↓	37	0710			
(D)	0.330	↓		↓	38	0718			
LCV	24.762		0.0		39	0726			12-99.1
CCB	0.197				40	0734			
J75 J715 (A)	26.793	1x	REPEAT	1	41	0742	02010 0111 11A	HUL 04	Rpt. PS. 13
(B)	26.409	↓		↓	42	0751			
(C)	26.757	↓		↓	43	0759			
(D)	27.030	↓		↓	44	0807			
J75 J716 (A)	189.109	1x	0.0	1	45	0815			Rpt. PS. 14
(B)	188.852	↓		↓	46	0823			

Verified by: 1/10/02

Date: 1/11/02

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 01-10-02 / 01-11-02 Analyst: JML

Calibration Constant: 0.0635 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
J75J742 (01)	28.879	1x	REPEAT	1	116	1749	02010 0111 11B	HUL 05	
J75J742 2	26.989	1x		1	117	1757			+7.5 mg/L, 12- 1
↓ J742 m	27.116	↓		1	118	1808			↓ PD = 12- 1
J75J745 1A	24.735	1x		1	119	1817			Ret. 05-17
(B)	24.772	↓			120	1821			
(C)	28.687	↓			121	1829			
(D)	24.926	↓			122	1837			
CV	25.984		(B)		123	1845			12- 104. 1
CB	1.183				124	1853			✓ 11/11/02
RINSE	0.144		0.144		125	1880	01-11-02		
RINSE	0.298		0.298		126	1889			
RINSE	0.171		0.171		127	1827			
CV	24.521		(B)		128	1835			12- 98. 1
CB	0.644				129	1843			
PBW	0.083	1	0.083 M/L	1	130	0902			
LCIN	10.070	5x	50. 0	2	131	0911	02010 0111 11A		51.8 mg/L 12- 97. 1
LCIN	10.181	5x	51. ↓	3	132	0921			51.8 mg/L 12- 98. 1
J75J740 (A)	0.584	1x		2	133	1142			
J75J715 (A)	27.447	1x		2	134	1150		HUL 04	
(B)	27.789	↓	27.6		135	1157			
(C)	27.848	↓			136	1207			
(D)	27.217	↓			137	1215			
CV	25.259		(B)		138	1223			12- 101. 1

Verified by: 1/14/02

Date: 1/14/02

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 11-11-02 Analyst: JWH

Calibration Constant: 0.06035 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
128	0.409		Ⓟ		135	1251			
J75J716 (A)	13.414	25x	324.	2	141	1259	02010 OMI 11A	HHL04	
(B)	12.766	↓		↓	141	1249	↓	↓	
(C)	12.882	↓		↓	142	1255	↓	↓	
(D)	12.836	↓		↓	147	1303	↓	↓	
J75J717 (A)	3.183	1x	3.0	2	144	1311			
(B)	3.192	↓		↓	145	1319			
(C)	2.712	↓		↓	146	1327			
(D)	2.851	↓		↓	147	1336			
129	24.784				148	1344			12-99-1
130	6.297				149	1352			
J75J718 (A)	1.919	1x	1.858	2	150	1400	02010 OMI 11A	HHL04	
(B)	1.909	↓		↓	151	1408	↓	↓	
(C)	1.859	↓		↓	152	1416	↓	↓	
(D)	1.834	↓		↓	153	1424	↓	↓	
J75J719 (A)	1.464	1x	1.287	2	154	1432			
(B)	1.292	↓		↓	155	1440	↓	↓	
(C)	1.227	↓		↓	156	1448	↓	↓	
(D)	1.225	↓		↓	157	1456	↓	↓	
131	24.753		Ⓟ		158	1504			12-99-1
132	0.209		↓		159	1512			
J75J720 (A)	8.914	5x	43.	2	160	1521	02010 OMI 11A	HHL04	
(B)	8.615	↓		↓	161	1529	↓	↓	

Verified by: JWH Date: 11/14/02

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 01-11-02 Analyst: [Signature]

Calibration Constant: 1.1405 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
J75 J726 (D)	0.102	1x		2	115	1143	02010 G111 118	H4104	
J75 J727 (A)	10.498	10x		2	116	1151			
(B)	10.300		103. X		117	1155			
(C)	10.347				118	1167			
(D)	10.196				119	1175			
12V	25.265		123		120	1123			12-101. L
12B	0.474				121	1131			
J75 J728 (A)	14.162	1x		2	122	1129	02010 G111 118	H4104	
(B)	14.633		15.8 X		123	1147			
(C)	15.012				124	1155			
(D)	17.360				125	2004			
J75 J729 (A)	5.152	1x		2	126	2012			
(B)	5.725		5.2 X		127	2020			
(C)	4.998				128	2028			
(D)	4.928				129	2036			
12V	25.271		123		200	2044			12-101. L
12B	0.319				201	2052			
J75 J730 (A)	15.035	10x		2	202	2100	02010 G111 118	H4104	
(B)	14.494		15.7 X		203	2108			
(C)	17.642				204	2116			
(D)	15.645				205	2124			
J75 J742 (A)	25.147	1x	28.0 X	2	206	2132		H4105	
(B)	28.564				207	2140			

Verified by: [Signature] Date: 1/15/02

Raw Data Notebook
Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 524

Date: 01-11-02 / 01-14-02 Analyst: JPL

Calibration Constant: 0.06435 µg C/mv Run #:

0	2	0	0	9	1

Standard Mass: 75.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
J75 J742 (C)	29.126	1x		2	208	2149	02010 C111 118	HHL05	
(D)	29.019	↓		↓	207	2157	↓	↓	
J75 J742 R	36.542	16 mL 7.2 mL 500 ppm	36.5	2	210	2205	↓	↓	+9.8 mg/L, re = 88.1%
↓ J742 µ	36.978	↓	37.0	2	211	2213	↓	↓	✓ RPD = 1 re = 92.1%
CCV	26.038		Ⓟ		212	2221			re = 104.1%
CCB	0.782		↓		213	2229			
J75 J745 (A)	24.519	1x		2	214	2237	02010 C111 118	HHL05	
(B)	24.871	↓	25.6	↓	215	2245	↓	↓	
(C)	28.663	↓		↓	216	2253	↓	↓	
(D)	24.510	↓		↓	217	2261	↓	↓	
CCV	26.581		Ⓟ		218	2269			re = 101.1%
CCB	0.681		↓		219	2278			
RINSE	0.174		0.174		220	0617	01-14-02		
RINSE	0.136		0.136		221	0625			
RINSE	0.084		0.084		222	0633			
CCV	24.636		Ⓟ		223	0641			re = 99.1%
CCB	0.136		↓		224	0649			
BBW	0.037	1	0.037 Ⓟ	1	225	0650	02014 C111 11A		
CCSW	10.258	5x	51. ↓	1	226	0658	↓	↓	51.8 mg/L re = 99.1%
J75 4532	10.307	1	10.3	1	227	0716	↓	DPL 16	
4533	4.310	1	4.3	1	228	0824	↓	↓	
4534	14.484	1	14.5	1	229	0832	↓	↓	
4535	7.898	1	7.9	1	230	0840	↓	↓	

Verified by: J/mk 1170 Date: 1/14/02

Run# 020091

1/9/02

✓ M. H. H. H.
1/9/02

SPL# 00001	11:57:38	TIC =	0.74097 mV	0.04236 ug C	0.04236 pp
SPL# 00001	12:02:38	TOC =	5.21568 mV	0.29823 ug C	0.29823 pp
SPL# 00002	12:05:43	TIC =	1.15038 mV	0.06577 ug C	0.06577 pp
SPL# 00002	12:10:43	TOC =	5.29326 mV	0.30266 ug C	0.30266 pp
SPL# 00003	12:13:48	TIC =	1.15038 mV	0.06577 ug C	0.06577 pp
SPL# 00003	12:18:48	TOC =	5.06054 mV	0.28936 ug C	0.28936 pp
SPL# 00004	12:23:27	TIC =	3.53829 mV	0.20231 ug C	0.20231 pp
SPL# 00004	12:28:27	TOC =	410.784 mV	23.4885 ug C	23.4885 pp
SPL# 00005	12:31:32	TIC =	4.87964 mV	0.27901 ug C	0.27901 pp
SPL# 00005	12:36:32	TOC =	413.298 mV	23.6322 ug C	23.6322 pp
SPL# 00006	12:39:37	TIC =	4.82797 mV	0.27606 ug C	0.27606 pp
SPL# 00006	12:44:37	TOC =	418.552 mV	23.9326 ug C	23.9326 pp

LANCASTER LABORATORIES

TOC

JAN 9 9 2002

*** MODEL 700 TOC ANALYZER ***

CALIBRATION FACTORS:

IC BLANK= 000000 mV	OC BLANK= 5.18983 mV	I.R. OFFSET= 177.650 mV
STD. MASS= 25.0000 ug	STD. AVG.= 414.211 mV	SCALING FACTOR= 0.06035 ug/

VOLUMES:

SPL. VOL.= 1.00000 ml	ACID VOL.= 00002 x100ul	OXID. VOL.= 00025 x100ul

SPL# 00007	12:50:06	TIC =	4.82797 mV	0.27606 ug C	0.27606 pp
SPL# 00007	12:55:09	TOC =	418.552 mV	23.9326 ug C	23.9326 pp
SPL# 00007	12:59:10	TIC =	2.38109 mV	0.14371 ug C	0.14371 pp
SPL# 00007	13:04:10	TOC =	4.65500 mV	0.28095 ug C	0.28095 pp
SPL# 00008	13:07:15	TIC =	1.73963 mV	0.10499 ug C	0.10499 pp
SPL# 00008	13:12:15	TOC =	2.46390 mV	0.14871 ug C	0.14871 pp
SPL# 00009	13:15:20	TIC =	3.84744 mV	0.23221 ug C	0.23221 pp
SPL# 00009	13:20:20	TOC =	32.3328 mV	1.95147 ug C	1.95147 pp
SPL# 00010	13:23:25	TIC =	4.23421 mV	0.25555 ug C	0.25555 pp
SPL# 00010	13:28:25	TOC =	118.580 mV	7.15697 ug C	7.15697 pp
SPL# 00011	13:31:30	TIC =	4.46645 mV	0.26957 ug C	0.26957 pp
SPL# 00011	13:36:30	TOC =	160.821 mV	9.70649 ug C	9.70649 pp
SPL# 00012	13:39:35	TIC =	5.11225 mV	0.30855 ug C	0.30855 pp
SPL# 00012	13:44:35	TOC =	412.835 mV	24.9170 ug C	24.9170 pp
SPL# 00013	13:47:40	TIC =	6.04402 mV	0.36479 ug C	0.36479 pp
SPL# 00013	13:52:40	N.L.	TOC =	828.726 mV	50.0183 pp
SPL# 00014	13:55:45	TIC =	6.25136 mV	0.37730 ug C	0.37730 pp
SPL# 00014	14:00:45	TOC =	10.1844 mV	0.61468 ug C	0.61468 pp
SPL# 00015	14:03:50	TIC =	5.83678 mV	0.35228 ug C	0.35228 pp
SPL# 00015	14:08:50	TOC =	2.64605 mV	0.15970 ug C	0.15970 pp
SPL# 00016	15:05:13	TIC =	175.296 mV	10.5801 ug C	10.5801 pp
SPL# 00016	15:10:13	N.L.	TOC =	739.916 mV	44.6582 pp
SPL# 00017	15:13:18	TIC =	6.22544 mV	0.37574 ug C	0.37574 pp
SPL# 00017	15:18:18	TOC =	438.877 mV	26.4887 ug C	26.4887 pp
SPL# 00018	15:21:23	TIC =	3.15220 mV	0.19025 ug C	0.19025 pp
SPL# 00018	15:26:23	TOC =	14.0725 mV	0.84935 ug C	0.84935 pp

JAN 9 2002

TOC

LANCASTER LABORATORIES

JAN 9 2002

TOC

LABORATORY

SPL# 00027	05:44:19	TIC =	4.75048 mV	0.28671 ug C	0.28671 pp
SPL# 00027	05:49:19	TOC =	409.812 mV	24.7345 ug C	24.7345 pp
SPL# 00028	05:52:24	TIC =	3.56405 mV	0.21511 ug C	0.21511 pp
SPL# 00028	05:57:24	TOC =	3.08874 mV	0.18642 ug C	0.18642 pp
SPL# 00029	06:00:55	TIC =	2.07306 mV	0.12512 ug C	0.12512 pp
SPL# 00029	06:05:55	TOC =	-0.10343 mV	-0.00624 ug C	-0.00624 pp
SPL# 00030	06:09:00	TIC =	60.2105 mV	3.63405 ug C	3.63405 pp
SPL# 00030	06:14:00	TOC =	52.4425 mV	3.16520 ug C	3.16520 pp
SPL# 00031	06:17:05	TIC =	333.366 mV	20.1205 ug C	20.1205 pp
SPL# 00031	06:22:05	TOC =	492.407 mV	29.7196 ug C	29.7196 pp
SPL# 00032	06:25:10	TIC =	337.411 mV	20.3647 ug C	20.3647 pp
SPL# 00032	06:30:10	TOC =	496.550 mV	29.9696 ug C	29.9696 pp
SPL# 00033	06:33:15	TIC =	332.532 mV	20.0702 ug C	20.0702 pp
SPL# 00033	06:38:15	TOC =	501.500 mV	30.2684 ug C	30.2684 pp
SPL# 00034	06:41:20	TIC =	324.514 mV	19.5862 ug C	19.5862 pp
SPL# 00034	06:46:20	TOC =	499.810 mV	30.1664 ug C	30.1664 pp
SPL# 00035	06:49:25	TIC =	10.6826 mV	0.64475 ug C	0.64475 pp
SPL# 00035	06:54:25	TOC =	17.1607 mV	1.03575 ug C	1.03575 pp
SPL# 00036	06:57:30	TIC =	7.47168 mV	0.45095 ug C	0.45095 pp
SPL# 00036	07:02:30	TOC =	5.12604 mV	0.30938 ug C	0.30938 pp
SPL# 00037	07:05:35	TIC =	8.22646 mV	0.49651 ug C	0.49651 pp
SPL# 00037	07:10:35	TOC =	6.67382 mV	0.40280 ug C	0.40280 pp
SPL# 00038	07:13:40	TIC =	7.78384 mV	0.46979 ug C	0.46979 pp
SPL# 00038	07:18:40	TOC =	5.46658 mV	0.32993 ug C	0.32993 pp
SPL# 00039	07:21:45	TIC =	5.52611 mV	0.33353 ug C	0.33353 pp

TOC JAN 10 2002 LANCASTER LABORATORIES

JAN 10 2002

TOC

LANCASTER LABORATORIES

SPL# 00037	07:05:35		TIC = 8.22646 mV	0.49651 ug C	0.49651 pp
SPL# 00037	07:10:35		TOC = 6.67382 mV	0.40280 ug C	0.40280 pp
SPL# 00038	07:13:40		TIC = 7.78384 mV	0.46979 ug C	0.46979 pp
SPL# 00038	07:18:40		TOC = 5.46658 mV	0.32993 ug C	0.32993 pp
SPL# 00039	07:21:45		TIC = 5.52611 mV	0.33353 ug C	0.33353 pp
SPL# 00039	07:26:45		TOC = 410.272 mV	24.7623 ug C	24.7623 pp
SPL# 00040	07:29:50		TIC = 3.77013 mV	0.22754 ug C	0.22754 pp
SPL# 00040	07:34:50		TOC = 3.27116 mV	0.19743 ug C	0.19743 pp
SPL# 00041	07:37:55	O.R.	TIC = 3022.52 mV	182.426 ug C	182.426 pp
SPL# 00041	07:42:55		TOC = 443.910 mV	26.7925 ug C	26.7925 pp
SPL# 00042	07:46:00	O.R.	TIC = 3016.71 mV	182.076 ug C	182.076 pp
SPL# 00042	07:51:00		TOC = 437.557 mV	26.4091 ug C	26.4091 pp
SPL# 00043	07:54:05	O.R.	TIC = 3002.65 mV	181.227 ug C	181.227 pp
SPL# 00043	07:59:05		TOC = 443.326 mV	26.7572 ug C	26.7572 pp
SPL# 00044	08:02:10	O.R.	TIC = 2877.71 mV	173.686 ug C	173.686 pp
SPL# 00044	08:07:10		TOC = 447.849 mV	27.0303 ug C	27.0303 pp
SPL# 00045	08:10:15	O.R.	TIC = 2451.75 mV	147.977 ug C	147.977 pp
SPL# 00045	08:15:15	O.R.	TOC = 3133.24 mV	189.109 ug C	189.109 pp
SPL# 00046	08:18:20	O.R.	TIC = 2683.83 mV	161.984 ug C	161.984 pp
SPL# 00046	08:23:20	O.R.	TOC = 3128.99 mV	188.852 ug C	188.852 pp
SPL# 00047	08:26:25	O.R.	TIC = 2628.68 mV	158.656 ug C	158.656 pp
SPL# 00047	08:31:25	O.R.	TOC = 3129.84 mV	188.903 ug C	188.903 pp
SPL# 00048	08:34:30	O.R.	TIC = 2558.78 mV	154.437 ug C	154.437 pp
SPL# 00048	08:39:30	O.R.	TOC = 3125.25 mV	188.627 ug C	188.627 pp
SPL# 00049	08:42:35		TIC = 32.7736 mV	1.97807 ug C	1.97807 pp

Run # 020071 1-11-02 *PMH* / *Mark*
11/10
1/14/02

SPL# 00125	08:05:58		TIC =	19.2891 mV	1.16421 ug C	1.16421 ppm
SPL# 00125	08:10:58		TOC =	2.38588 mV	0.14400 ug C	0.14400 ppm
SPL# 00126	08:14:03		TIC =	1.45771 mV	0.08798 ug C	0.08798 ppm
SPL# 00126	08:19:03		TOC =	4.94279 mV	0.29832 ug C	0.29832 ppm
SPL# 00127	08:22:08		TIC =	1.48332 mV	0.08952 ug C	0.08952 ppm
SPL# 00127	08:27:08		TOC =	2.82828 mV	0.17070 ug C	0.17070 ppm
SPL# 00128	08:30:13		TIC =	8.01811 mV	0.48393 ug C	0.48393 ppm
SPL# 00128	08:35:13		TOC =	407.053 mV	24.5680 ug C	24.5680 ppm
SPL# 00129	08:38:18		TIC =	6.74425 mV	0.40705 ug C	0.40705 ppm
SPL# 00129	08:43:18		TOC =	0.72464 mV	0.04373 ug C	0.04373 ppm
SPL# 00130	08:57:55		TIC =	1.97043 mV	0.11892 ug C	0.11892 ppm
SPL# 00130	09:02:55		TOC =	1.37276 mV	0.08285 ug C	0.08285 ppm
SPL# 00131	09:06:00		TIC =	4.33741 mV	0.26178 ug C	0.26178 ppm
SPL# 00131	09:11:00		TOC =	166.849 mV	10.0703 ug C	10.0703 ppm
SPL# 00132	09:16:41		TIC =	4.05367 mV	0.24466 ug C	0.24466 ppm
SPL# 00132	09:21:41		TOC =	168.676 mV	10.1806 ug C	10.1806 ppm
SPL# 00133	11:37:51		TIC =	7.67976 mV	0.46351 ug C	0.46351 ppm
SPL# 00133	11:42:51		TOC =	9.68102 mV	0.58430 ug C	0.58430 ppm
SPL# 00134	11:45:56	O.R.	TIC =	2904.46 mV	175.301 ug C	175.301 ppm
SPL# 00134	11:50:56		TOC =	454.757 mV	27.4472 ug C	27.4472 ppm
SPL# 00135	11:54:01	O.R.	TIC =	2839.97 mV	171.409 ug C	171.409 ppm
SPL# 00135	11:59:01		TOC =	460.417 mV	27.7888 ug C	27.7888 ppm
SPL# 00136	12:02:06	O.R.	TIC =	2801.14 mV	169.065 ug C	169.065 ppm

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SPL# 00136	12:02:06	O.R.	TIC = 2801.14 mV	169.065 ug C	169.065 pp
SPL# 00136	12:07:06		TOC = 461.390 mV	27.8475 ug C	27.8475 pp
SPL# 00137	12:10:11	O.R.	TIC = 2802.25 mV	169.132 ug C	169.132 pp
SPL# 00137	12:15:11		TOC = 450.949 mV	27.2173 ug C	27.2173 pp
SPL# 00138	12:18:16		TIC = 18.8077 mV	1.13515 ug C	1.13515 pp
SPL# 00138	12:23:16		TOC = 418.500 mV	25.2589 ug C	25.2589 pp
SPL# 00139	12:26:21		TIC = 7.78383 mV	0.46979 ug C	0.46979 pp
SPL# 00139	12:31:21		TOC = 6.77898 mV	0.40915 ug C	0.40915 pp
SPL# 00140	12:34:26		TIC = 55.4756 mV	3.34827 ug C	3.34827 pp
SPL# 00140	12:39:26		TOC = 222.240 mV	13.4135 ug C	13.4135 pp
SPL# 00141	12:42:31		TIC = 47.3783 mV	2.85955 ug C	2.85955 pp
SPL# 00141	12:47:31		TOC = 211.505 mV	12.7655 ug C	12.7655 pp
SPL# 00142	12:50:36		TIC = 59.9755 mV	3.61987 ug C	3.61987 pp
SPL# 00142	12:55:36		TOC = 213.432 mV	12.8819 ug C	12.8819 pp
SPL# 00143	12:58:41		TIC = 50.0995 mV	3.02379 ug C	3.02379 pp
SPL# 00143	13:03:41		TOC = 212.566 mV	12.8296 ug C	12.8296 pp
SPL# 00144	13:06:46		TIC = 315.672 mV	19.0526 ug C	19.0526 pp
SPL# 00144	13:11:46		TOC = 52.7347 mV	3.18284 ug C	3.18284 pp
SPL# 00145	13:14:51		TIC = 333.737 mV	20.1429 ug C	20.1429 pp
SPL# 00145	13:19:51		TOC = 52.8809 mV	3.19167 ug C	3.19167 pp
SPL# 00146	13:22:56		TIC = 321.996 mV	19.4343 ug C	19.4343 pp
SPL# 00146	13:27:56		TOC = 44.9384 mV	2.71229 ug C	2.71229 pp
SPL# 00147	13:31:01		TIC = 332.439 mV	20.0646 ug C	20.0646 pp
SPL# 00147	13:36:01		TOC = 47.2430 mV	2.85138 ug C	2.85138 pp
SPL# 00148	13:39:06		TIC = 9.32208 mV	0.56264 ug C	0.56264 pp

13:03:41 13:06:46 13:11:46 13:14:51 13:19:51 13:22:56 13:27:56 13:31:01 13:36:01 13:39:06

TOC

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SPL# 00199	20:31:21		TIC = 413.060 mV	24.9305 ug C	24.9305 ppm
SPL# 00199	20:36:21		TOC = 81.6499 mV	4.92804 ug C	4.92804 ppm
SPL# 00200	20:39:26		TIC = 8.56526 mV	0.51696 ug C	0.51696 ppm
SPL# 00200	20:44:26		TOC = 418.707 mV	25.2714 ug C	25.2714 ppm
SPL# 00201	20:47:31		TIC = 7.44567 mV	0.44938 ug C	0.44938 ppm
SPL# 00201	20:52:31		TOC = 5.28318 mV	0.31887 ug C	0.31887 ppm
SPL# 00202	20:55:36		TIC = 53.9661 mV	3.25716 ug C	3.25716 ppm
SPL# 00202	21:00:36		TOC = 249.107 mV	15.0350 ug C	15.0350 ppm
SPL# 00203	21:03:41		TIC = 46.8360 mV	2.82682 ug C	2.82682 ppm
SPL# 00203	21:08:41		TOC = 240.139 mV	14.4938 ug C	14.4938 ppm
SPL# 00204	21:11:46		TIC = 49.8410 mV	3.00819 ug C	3.00819 ppm
SPL# 00204	21:16:46		TOC = 292.307 mV	17.6424 ug C	17.6424 ppm
SPL# 00205	21:19:51		TIC = 48.7798 mV	2.94414 ug C	2.94414 ppm
SPL# 00205	21:24:51		TOC = 259.206 mV	15.6446 ug C	15.6446 ppm
SPL# 00206	21:27:56	N.L.	TIC = 811.778 mV	48.9954 ug C	48.9954 ppm
SPL# 00206	21:32:56		TOC = 416.642 mV	25.1467 ug C	25.1467 ppm
SPL# 00207	21:36:01	N.L.	TIC = 909.844 mV	54.9143 ug C	54.9143 ppm
SPL# 00207	21:41:01		TOC = 473.262 mV	28.5640 ug C	28.5640 ppm
SPL# 00208	21:44:06	N.L.	TIC = 778.428 mV	46.9825 ug C	46.9825 ppm
SPL# 00208	21:49:06		TOC = 482.566 mV	29.1256 ug C	29.1256 ppm
SPL# 00209	21:52:11		TIC = 690.892 mV	41.6993 ug C	41.6993 ppm
SPL# 00209	21:57:11		TOC = 480.798 mV	29.0189 ug C	29.0189 ppm
SPL# 00210	22:00:16		TIC = 537.428 mV	32.4369 ug C	32.4369 ppm
SPL# 00210	22:05:16		TOC = 605.439 mV	36.5417 ug C	36.5417 ppm
SPL# 00211	22:08:21		TIC = 545.360 mV	32.9156 ug C	32.9156 ppm
SPL# 00211	22:13:21		TOC = 480.798 mV	29.0189 ug C	29.0189 ppm

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SPL# 00203	21:03:41		TIC = 46.8360 mV	2.82682 ug C	2.82682 ppm
SPL# 00203	21:08:41		TOC = 240.139 mV	14.4938 ug C	14.4938 ppm
SPL# 00204	21:11:46		TIC = 49.8410 mV	3.00819 ug C	3.00819 ppm
SPL# 00204	21:16:46		TOC = 292.307 mV	17.6424 ug C	17.6424 ppm
SPL# 00205	21:19:51		TIC = 48.7798 mV	2.94414 ug C	2.94414 ppm
SPL# 00205	21:24:51		TOC = 259.206 mV	15.6446 ug C	15.6446 ppm
SPL# 00206	21:27:56	N.L.	TIC = 811.778 mV	48.9954 ug C	48.9954 ppm
SPL# 00206	21:32:56		TOC = 416.642 mV	25.1467 ug C	25.1467 ppm
SPL# 00207	21:36:01	N.L.	TIC = 909.844 mV	54.9143 ug C	54.9143 ppm
SPL# 00207	21:41:01		TOC = 473.262 mV	28.5640 ug C	28.5640 ppm
SPL# 00208	21:44:06	N.L.	TIC = 778.428 mV	46.9825 ug C	46.9825 ppm
SPL# 00208	21:49:06		TOC = 482.566 mV	29.1256 ug C	29.1256 ppm
SPL# 00209	21:52:11		TIC = 690.892 mV	41.6993 ug C	41.6993 ppm
SPL# 00209	21:57:11		TOC = 480.798 mV	29.0189 ug C	29.0189 ppm
SPL# 00210	22:00:16		TIC = 537.428 mV	32.4369 ug C	32.4369 ppm
SPL# 00210	22:05:16		TOC = 605.439 mV	36.5417 ug C	36.5417 ppm
SPL# 00211	22:08:21		TIC = 545.360 mV	32.9156 ug C	32.9156 ppm
SPL# 00211	22:13:21		TOC = 612.668 mV	36.9780 ug C	36.9780 ppm
SPL# 00212	22:16:26		TIC = 11.4696 mV	0.69225 ug C	0.69225 ppm
SPL# 00212	22:21:26		TOC = 431.405 mV	26.0377 ug C	26.0377 ppm
SPL# 00213	22:24:31		TIC = 7.28969 mV	0.43997 ug C	0.43997 ppm
SPL# 00213	22:29:31		TOC = 12.9503 mV	0.78162 ug C	0.78162 ppm
SPL# 00214	22:32:36	N.L.	TIC = 756.867 mV	45.6813 ug C	45.6813 ppm
SPL# 00214	22:37:36		TOC = 406.238 mV	24.5188 ug C	24.5188 ppm
SPL# 00215	22:40:41	N.L.	TIC = 732.144 mV	44.1891 ug C	44.1891 ppm
SPL# 00215	22:45:41		TOC = 412.066 mV	24.8705 ug C	24.8705 ppm

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TOC

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SPL# 00209	21:07:11	TIC =	488.798 mV	29.0189 ug C	29.0189 pp	
SPL# 00210	22:00:16	TIC =	537.428 mV	32.4369 ug C	32.4369 pp	
SPL# 00210	22:05:16	TIC =	605.439 mV	36.5417 ug C	36.5417 pp	
SPL# 00211	22:08:21	TIC =	545.360 mV	32.9156 ug C	32.9156 pp	
SPL# 00211	22:13:21	TIC =	612.663 mV	36.9780 ug C	36.9780 pp	
SPL# 00212	22:16:26	TIC =	11.4696 mV	0.69225 ug C	0.69225 pp	
SPL# 00212	22:21:26	TIC =	431.405 mV	26.0377 ug C	26.0377 pp	
SPL# 00213	22:24:31	TIC =	7.28969 mV	0.43997 ug C	0.43997 pp	
SPL# 00213	22:29:31	TIC =	11.7863 mV	0.78162 ug C	0.78162 pp	
SPL# 00214	22:32:36	N.L.	TIC =	756.867 mV	45.6813 ug C	45.6813 pp
SPL# 00214	22:37:36	TIC =	406.130 mV	24.5188 ug C	24.5188 pp	
SPL# 00215	22:40:41	N.L.	TIC =	732.144 mV	44.1891 ug C	44.1891 pp
SPL# 00215	22:45:41	TIC =	412.066 mV	24.8705 ug C	24.8705 pp	
SPL# 00216	22:48:46	TIC =	604.000 mV	36.4549 ug C	36.4549 pp	
SPL# 00216	22:53:46	TIC =	474.907 mV	28.6633 ug C	28.6633 pp	
SPL# 00217	22:56:51	TIC =	593.427 mV	35.8167 ug C	35.8167 pp	
SPL# 00217	23:01:51	TIC =	406.085 mV	24.5095 ug C	24.5095 pp	
SPL# 00218	23:04:56	TIC =	11.3646 mV	0.68591 ug C	0.68591 pp	
SPL# 00218	23:09:56	TIC =	440.410 mV	26.5813 ug C	26.5813 pp	
SPL# 00219	23:13:01	TIC =	7.96604 mV	0.48079 ug C	0.48079 pp	
SPL# 00219	23:18:01	TIC =	11.4055 mV	0.68838 ug C	0.68838 pp	

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TOC

LANCASTER LABORATORIES

✓ 1/11/02
1/11/02

Miscellaneous Analysis Data

Case Narrative Conformance/Nonconformance Summary



Where quality is a science.

CLIENT: Hull & Associates
SDG: HUL05

LANCASTER LABORATORIES

MISCELLANEOUS WET CHEMISTRY

SAMPLE NUMBERS:

<u>Sample #</u>	<u>Sample Code</u>	<u>Comments</u>
3753742	A2U--	DF50
3753745	A2U-D	DF50
P753728		DF10 / BKG / DUP

ANALYSIS:

Dilution factors are listed in the comment section above for the sulfate analysis.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

QC was within specifications.

DATA INTERPRETATION:

Due to limitations of the data package software, form I's are unavailable for wet chemistry data. Please refer to analysis reports for this information.

The sulfate calculation is:

The sample NTU value is entered into the computer and the mg/L value is calculated from the calibration curve.

Concentration X Dilution Factor

Note: When dilution is used

The total dissolved solids calculation is:

$$\text{mg total dissolved solids/L} = \frac{(A - B) \times 1000 \times 1000}{\text{sample volume, mL}}$$

Where: A = weight of dried residue and beaker or dish, g
B = weight of beaker or dish, g

Case Narrative Reviewed and Approved by:

Sandra J. Miller
Specialist/Coordinator

Date: 1-14-02

QC Summary

Lancaster Laboratories

Quality Control Summary

Method Blank

Miscellaneous Wet Chemistry

SDG: HUL05

Method Blank Analysis					Matrix: WATER				
Parameter	Sample Number	Sample Code	Method	Analysis Date	Batch Number	Blank Results	Units	MDL	LOQ
Sulfate	3753742	A2U--	M	1/10/02	02010112501	ND	mg/l	1.5	5
	3753745	A2U-D							
	P753728	B,D							
	P753958	B,S,M							
TDS	3753742	A2U--	G	1/7/02	02007021201	ND	mg/l	9.7	30
	3753745	A2U-D							
	P753159	B,D							
	P753716	B,S,M							

Comments: The blank is acceptable when the result is less than the limit of quantitation.

ABBREVIATION KEY

CO = Colorimetric	MDL = Method Detection Limit
DI = Distillation	LOQ = Limit of Quantitation
G = Gravimetric	NA = Not Applicable
IR = Infrared Spectrophotometry	J = Estimated Value < LOQ
M = Meter	< = Less Than
OD = Oven Dried	ND = Not Detected
TI = Titration	* = Out of Specification
B = Background	D = Duplicate
S = Spike	LS = Low Spike
HS = High Spike	PDS = Post Digestion Spike

Sample Info.		Matrix Spike Analysis					Matrix: WATER												
Sample Number	Sample Code	Batch Number	Parameter	ME	Analysis Date	BKG Sample	BKG Result	MS Sample	MS Spike Added	MS Result	MSD Sample	MSD Spike Added	MSD Result	Units	MS Rec (%)	MSD Rec (%)	Acceptance Window (%)	RPD (%)	% RPD Limits
3753742 3753745	A2U-- A2U-D	02010112501	Sulfate	M	1/10/02	P753958	1.7 J	P753958	20	20.9	P753958	20	20.6	mg/l	96	94	77 - 114	1	4
3753742 3753745	A2U-- A2U-D	02007021201	TDS	G	1/7/02	P753716	4416.00	P753716	1600.00	6160.00	P753716	1600.00	6140.00	mg/l	109	108	91 - 114	0	3

ABBREVIATION KEY	
CO = Colorimetric	ND = Not Detected
DI = Distillation	ME = Method
G = Gravimetric	< = Less Than
IR = Infrared Spectrophotometry	NA = Not Applicable
M = Meter	LOQ = Limit of Quantitation
OD = Oven Dried	* = Out of Specification
TI = Titration	J = Estimated Value < LOQ

Lancaster Laboratories

Quality Control Summary
Duplicate Analysis
Miscellaneous Wet Chemistry
SDG: HUL05

Sample Information		Duplicate Analysis										
		Matrix: WATER										
Sample Number	Sample Code	Batch Number	Parameter	ME	Analysis Date	BKG Sample	BKG Results	DUP Sample	DUP Results	Units	RPD (%)	Control Limits % <=
3753742 3753745	A2U-- A2U-D	02010112501	Sulfate	M	1/10/02	P753728	224.7	P753728	222.9	mg/l	1	4
3753742 3753745	A2U-- A2U-D	02007021201	TDS	G	1/7/02	P753159	3088.00	P753159	3004.00	mg/l	3	4

Comments: If the background and/or the duplicate result was less than the limit of quantitation, the RPD is not required.

ABBREVIATION KEY

CO = Colorimetric	MDL = Method Detection Limit
DI = Distillation	LOQ = Limit of Quantitation
G = Gravimetric	NA = Not Applicable
IR = Infrared Spectrophotometry	J = Estimated Value < LOQ
M = Meter	< = Less Than
OD = Oven Dried	ND = Not Detected
TI = Titration	* = Out of Specification

Lancaster Laboratories
Method Detection Limits
Department 29 – Water Quality

ANALYSIS	LL #	MDL	ANALYSIS	LL #	MDL
Acidity	476	0.39 mg/l	Oil and Grease	231	2.5 mg/l
Acidity	4530	1.36 mg/l	Oil and Grease	236	900 mg/kg
Alkalinity to pH 4.5	202	0.41 mg/l	Oil and Grease	429	0.26 mg/l
Ammonia Nitrogen	573	8.3 mg/kg	Oil and Grease	2446	233 mg/kg
Ammonia Nitrogen	221	0.16 mg/l	Orthophosphate	226	0.0028 mg/l
Ammonia Nitrogen	6914	0.04 mg/l	Paraquat	1733	17 ug/l
BOD	235	0.80 mg/l	Petroleum Hydrocarbons	1126, 8140	0.32 mg/l
Carbonaceous BOD	1364	0.80 mg/l	Petroleum Hydrocarbons	1554	0.24 mg/l
Chemical Oxygen Demand	1553	1.67 mg/l	Petroleum Hydrocarbons	1562	9.4 mg/kg
Chemical Oxygen Demand	234	335 mg/l	Petroleum Hydrocarbons	1663	21 mg/kg
Chemical Oxygen Demand	4001	8.84 mg/l	Petroleum Hydrocarbons	1720	15.5 mg/kg
Chloride	1124	0.398 mg/l	Petroleum Hydrocarbons	8129	9 mg/kg
Chlorine Residual	240	0.04 mg/l	Petroleum Hydrocarbons	8141	12.6 mg/kg
Dissolved Oxygen	428	0.09 mg/l	Silica	559	0.024 mg/l
Dithiocarbamates	8322	0.47 ug/l	Soluble BOD	541	0.80 mg/l
Ferrous Iron	8344	0.009 mg/l	Specific Conductance	280	2 umhos/cm
Fluoride	263	0.03 mg/l	Specific Gravity	1443	0.004
Fluoride Distillation	1448	0.03 mg/l	Sulfate	1125	1.5 mg/l
Hexane Extractable Materials(Silica-Gel Treated)	8078	1.4 mg/l	Sulfide	230	0.022 mg/l
Hexane Extractable Materials	8079	1.2 mg/l	Sulfide, Acid Volatile	1630	0.39 micromol/g
Hexavalent Chromium	276	0.003 mg/l	Sulfide Titration	1333	0.53 mg/l
Hexavalent Chromium	425	0.39 mg/kg	Sulfide Titration	1122	20 mg/kg
Hexavalent Chromium	1446	0.0009 mg/l	Sulfide Titration	487	7.1 mg/kg
Hexavalent Chromium	4858	0.39 mg/kg	Sulfite	229	0.68 mg/l
Hexavalent Chromium	4859	0.004 mg/l	Total Dissolved Solids	212	9.7 mg/l
Iodide	6867	0.015 mg/l	Total Hardness	216	0.29 mg/l
Karl Fischer Moisture	4529	0.027 %	Total Solids	203	4.62 mg/l
M.B.A.S.	225	0.028 mg/l	Total Suspended Solids	206	3.0 mg/l
Moisture	111	0.5 %	Turbidity	279	0.063 NTU
Moisture	1353	0.5 %	Thiocyanate	8355	0.246 mg/l
			UV Absorbance	7120	0.006 cm-1

Revised 1/4/02

Raw Data

Raw Data Logbook
Sulfate (Turbidimetric)
Analysis #1125

Name of curve: 1125 11-29-01 SAG
Corr. Coeff.: .999541
Slope: 4.25821
Y-intercept: -2.39749
Std. Ref. (Book/pg): _____

Batch #: _____

C U R V E

Time: 10:15 Day #: 01333
Date: 11-29-01 Inst. ID#: 6165
Init/Emp. #: SAG/227

Upld Date: _____

Upld by: _____

Before After
10NTU = 9.61 9.77
100NTU = 99.6 98.0

	Sample Number	Sample Vol. (mL)	D.F.	NTU			Conc. From Curve	Calc. Value (mg/L)	LOQ (mg/L)	Spike Added	QC#	Comments
				Sample	-Samp BL	=Corr. NTU						
1	Blank	100	1	.364	.102	.262	.62456		5			
2	5mg/L	1	1	19.0	.369	18.731	4.96182		5			1mL of 500mg/L - 7100
3	10mg/L			39.3	.304	38.996	9.72087		5			2mL
4	15mg/L			60.2	.333	59.867	14.62222		5			3mL
5	20mg/L			80.9	.581	80.319	19.42518		5			4mL
6	25mg/L			105	.437	104.563	25.11865		5			5mL
7	30mg/L			126	.316	125.634	30.07872		5			6mL
8	35mg/L			150	.717	149.283	35.12072		5			7mL
9	40mg/L			168	.804	167.196	39.82741		5			8mL
10									5			
11												
12	Blank	100	1	.934	.393	.541	.69008					Raw = .469
13	20mg/L	1	1	81.9	.323	81.577	19.72061					Rec = 99%
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
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33												

1125 CURVE
11-29-01
SAG/227

D.F. = Dilution Factor

Verified by: RN/355

Date: 11/30/01

Raw Data Logbook
Sulfate (Turbidimetric)
Analysis #1125

Name of curve: 1125 11-29-01 SAE
Corr. Coeff.: .999541
Slope: 4.25821
Y-intercept: -2.39749
Std. Ref. (Book/pg): 031987 p15

(* + 4 mL of 500 mg/L)

Batch #: 02010 112 501 A

Before After

Time: <u>06:43</u> Day #: <u>02010</u> Upd Date: <u>1-10-02</u>											
Date: <u>1-10-02</u> Inst. ID#: <u>6165</u> Upd by: <u>227</u>											
Init/Emp. #: <u>SAE/227</u>											
Sample Number	Sample Vol. (mL)	D.F.	NTU	Sample	-Samp BL	=Corr. NTU	Calc. Conc. From Curve	Calc. Value (mg/L)	LOQ (mg/L)	Spike Added	QC#
1	Blank	100	1	.796	.305	.491	.67833	.7	5		
2	5mg/L			15.3	.685	14.615	3.99522	4.0	5		
3	40mg/L			165	1.33	163.67	38.99937	39.0	5		
4	20mg/L			81.7	.168	81.532	19.71004	19.7	5	20	4
5	3753715	2	50	43.1	7.33	35.77	8.96327	448.2	250		
6	3753716	1	100	74.5	.942	73.558	17.83742	1783.7	500		
7	3753717	1	100	144	1.42	2.0	1.03271	103.3	500		
8	3753718	20	5	109	28.2	80.8	19.53814	97.7	25		
9	20mg/L	100	1	80.4	.192	80.208	19.39911	19.4	5	20	4
10	3753719	20	5	85.1	59.1	26.0	6.66888	33.3	25		
11	3753720	5	20	119	39.8	79.2	19.16239	383.2	100		
12	3753723			99.3	22.4	76.7	18.57529	371.5	100		
13	3753724			104	.837	103.163	24.78987	495.8	100		
14	20mg/L	100	1	80.5	.346	80.154	19.38643	19.4	5		
15	3753725	2	50	114	11.86	112.14	26.89804	1344.9	250		
16	3753726	100	1	1.30	2.08	-.78	.37985	.4	5		
17	3753727	.5	200	122	123	-1.0	.32819	65.6	1000		
18	3753728	10	10	163	69.7	93.3	22.47364	224.7	50		
19	20mg/L	100	1	80.1	215	79.885	19.32326	19.3	5		
20	3753729	.5	200	52.3	50.8	1.5	.91529	183.1	1000		
21	3753730	2	50	77.0	1.86	75.14	18.20894	910.4	250		
22	3753742			128	49.4	78.6	19.62149	951.1	250		
23	3753745			119	46.5	72.5	17.58896	879.4	250		
24	20mg/L	100	1	79.9	214	79.686	19.27652	19.3	5		
25	3753797	10	10	91.2	.406	90.794	21.88513	218.9	50		
26	3753957	100	1	.281	.210	.071	.57970	.6	5		
27	3753958	100	1	5.62	.640	4.98	1.73253	1.7	5		
28	3754494	25	4	94.5	6.52	87.98	21.22429	84.9	20		
29	20mg/L	100	1	80.5	.187	80.313	19.42377	19.4	5		
30	3753958			87.3	.756	86.544	20.88706	20.9	5	20	
31	3753958M			86.2	.768	85.432	20.62592	20.6	5	20	
32	3753988	10	10	158	65.5	92.5	22.28577	222.9	50		
33	20mg/L	100	1	80.7	.539	80.161	19.38807	19.4	5		

D.F. = Dilution Factor

Verified by: 20463

Date: 1/10/02

Batch#: 02007021201

LLENS Worksheet for Total Dissolved Solids

Oven ID #: 6605 Temperature In: 181° Temperature Out: 183° 1/9/02
 Balance ID #: 8119 Std. Ref. (book/pg.): 031987 p 46 182° 1/8/02

#	Sample ID	Date Added	Crucible ID	Vol.	BC	Comments	Analysis#
1)	BLK	01/07/02 10:29	D25	200			
2)	LCS 200	01/07/02 10:29	BSB	100			
3)	3753159	01/07/02 10:28	SK4	25	05A		00212
4)	3753159DUP	01/07/02 10:29	KOB	25	↓		00212
5)	3753160	01/07/02 10:28	COW	200	04A		00212
6)	3753583	01/07/02 10:28	TUB	100	05A		00212
7)	3753715	01/07/02 10:28	G19	50	05A		00212
8)	3753716	01/07/02 10:28	WORD	25			00212
9)	3753716MS	01/07/02 10:29	FFA	25		+10 ml of 4000	00212
10)	3753716MSD	01/07/02 10:29	TD2	25		↓	00212
11)	3753717	01/07/02 10:28	PAC	200			00212
12)	3753718	01/07/02 10:28	943	200			00212
13)	3753719	01/07/02 10:28	X47	200			00212
14)	3753720	01/07/02 10:28	9	50			00212
15)	3753723	01/07/02 10:28	1205	50			00212
16)	3753724	01/07/02 10:28	14	50			00212
17)	3753725	01/07/02 10:28	TAP	25			00212
18)	3753726	01/07/02 10:28	356	200			00212
19)	3753727	01/07/02 10:28	BK	50			00212
20)	3753728	01/07/02 10:28	DAD	200			00212
21)	3753729	01/07/02 10:28	11	100			00212
22)	3753730	01/07/02 10:28	CRX	50	✓		00212

Signature: Anne L. Kuengh

Printed by 00284 on 01/07/2002 at 10:29

Date: 1/7/02✓ 20463 1/9/02

Batch#: 02007021201

LLENS Worksheet for Total Dissolved Solids

Oven ID #: 6605 Temperature In: 181° Temperature Out: 183° 1/9/02
Balance ID #: 8119 Std. Ref. (book/pg.): 031987 p 46

#	Sample ID	Date Added	Crucible ID	Vol.	BC	Comments	Analysis#
23)	3753742	01/07/02 10:28	B	25	05A		00212
24)	3753745	01/07/02 10:28	035	25			00212
25)	3753797	01/07/02 10:28	TD4	100	✓		00212

Signature: Anne L. Kuengli

Printed by 00284 on 01/07/2002 at 10:29

Date: 1/7/02✓ 20463 1/9/02

Batch#: 02007021201

LLENS Batch Chronology Report - Total Dissolved Solids

#	Operation	Instrument	Date	Time	Analyst
1)	Batch Creation		01/07/2002	10:28	00284
2)	Tare Weight	003636	01/07/2002	15:35	00284
3)	Spiking Info		01/07/2002	15:36	00284
4)	Sample Volumes		01/07/2002	15:37	00284
5)	Final Dry Weight 1	008119	01/08/2002	08:42	00284
6)	Final Dry Weight 2	008119	01/08/2002	12:08	00284
7)	Final Dry Weight 3	008119	01/09/2002	08:41	00284
8)	Final Dry Weight 4	008119	01/09/2002	11:58	00284
9)	Calculate/Transmit	LLENS3	01/09/2002	12:02	00284

Comments:

✓ 00463 1/9/02

Sample ID	BI	MAN	Rep	Crucible ID	Tare Wt	SPK Aliquot	SPK Conc	SPK Volume	Volume	Dry wt#1	Dry wt#2	Dry wt#3	Dry wt#4	Spk Added	%Rel Diff	TDS (mg/L)
DJLX	A			D25	100.5725	✓			200.00	✓	100.5720	100.5720	✓			-2.50
LCS 200	A			BSB	104.7459	✓			100.00	✓	104.7656	104.7652	✓			193.00
3753159	A	00212		SKY	113.0686	✓			25.00	✓	113.9662	113.9506	✓	113.9540		3088.00
375315900P	A	00212		KOB	109.7042	✓			25.00	✓	109.7975	109.7845	✓	109.7874	2.76	3004.00
3753160	A	00212		COM	101.3686	✓			200.00	✓	101.3677	101.3602	✓			-4.50
3753583	A	00212		TUB	93.2226	✓			100.00	✓	93.2830	93.2835	✓			604.00
3753715	A	00212		619	103.2216	✓			50.00	✓	103.3132	103.3133	✓			1832.00
3753716	A	00212		NORD	104.7373	✓			25.00	✓	104.8477	104.8491	✓			4416.00
3753716MS	A	00212		FFA	98.9588	✓	10.00	4000.00	25.00	✓	99.1128	99.1137	✓	SA 1600.00		6160.00
3753716MSD	A	00212		TD2	102.2751	✓	10.00	4000.00	25.00	✓	102.4286	102.4286	✓	SA 1600.00	0.33	6140.00
3753717	A	00212		PAC	103.4072	✓			200.00	✓	103.4805	103.4782	✓			355.00
3753718	A	00212		943	105.6243	✓			200.00	✓	105.6989	105.6988	✓			377.50
3753719	A	00212		XYZ	103.3724	✓			200.00	✓	103.4216	103.4215	✓			245.50
3753720	A	00212		9	108.6485	✓			50.00	✓	108.7121	108.7121	✓			1272.00
3753723	A	00212		1205	117.5820	✓			50.00	✓	117.6434	117.6434	✓			1228.00
3753724	A	00212		14	109.7885	✓			50.00	✓	109.8561	109.8563	✓			1352.00
3753725	A	00212		TAP	107.7521	✓			25.00	✓	107.8355	107.8355	✓			3336.00
3753726	A	00212		356	102.6523	✓			200.00	✓	102.6518	102.6520	✓			-2.50
3753727	A	00212		BK	102.7449	✓			50.00	✓	102.8295	102.8297	✓			1692.00
3753728	A	00212		DAD	107.0488	✓			200.00	✓	107.1608	107.1614	✓			560.00
3753729	A	00212		11	101.3907	✓			100.00	✓	101.4691	101.4691	✓			784.00
3753730	A	00212		CRX	105.2848	✓			50.00	✓	105.3860	105.3858	✓			2020.00
3753742	A	00212		B	100.5234	✓			25.00	✓	100.5872	100.5870	✓			2544.00
3753745	A	00212		35	102.7313	✓			25.00	✓	102.7937	102.7937	✓			2496.00

Printed by 00284 on 01/09/2002 at 12:02

✓ 20463 1/9/02

Tare Weight Summary

Sample ID	Date/Time	ID	Wt.	Analyst	Date/Time	ID	Wt.	Analyst	Date/Time	ID	Wt.	Analyst
BLK	01/03/02 12:03	D25	100.5725	00284								
LCS 200	01/03/02 12:11	BSB	104.7459	00284								
3753159	01/03/02 12:06	SKY	113.8686	00284								
3753159DUP	01/03/02 12:04	KOB	109.7042	00284								
3753160	01/03/02 12:05	COW	101.3686	00284								
3753583	01/03/02 12:02	TUB	93.2226	00284								
3753715	01/03/02 11:59	619	103.2216	00284								
3753716	01/03/02 12:04	WORD	104.7373	00284								
3753716MS	01/03/02 12:01	FFA	98.9588	00284								
3753716MSD	01/03/02 11:59	TD2	102.2751	00284								
3753717	01/03/02 11:57	PAC	103.4072	00284								
3753718	01/03/02 11:57	943	105.6243	00284								
3753719	01/03/02 11:58	XYZ	103.3724	00284								
3753720	01/03/02 12:00	9	108.6485	00284								
3753723	01/03/02 12:09	1205	117.5820	00284								
3753724	01/03/02 12:10	14	109.7885	00284								
3753725	01/03/02 12:01	TAP	107.7521	00284								
3753726	01/03/02 12:07	356	102.6523	00284								
3753727	01/03/02 12:09	BK	102.7449	00284								
3753728	01/03/02 12:05	DAD	107.0488	00284								
3753729	01/03/02 12:02	11	101.3907	00284								
3753730	01/03/02 12:08	CRX	105.2848	00284								
3753742	01/03/02 12:07	B	100.5234	00284								
3753745	01/03/02 12:00	035	102.7313	00284								
3753797	01/03/02 12:06	TD4	104.2727	00284								

✓ 30463 1/9/02