

FOCUSED GROUNDWATER REMEDIATION REPORT

(Volume III of V)
Appendix E-2 (Cont'd)

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.



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, Mike McAdams, at (717) 656-2300 extension 1246.

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 09/28/01-10/01/01
Sample No. 3699890-3699903*

*PA Cert. # 36-037
NY Cert. # 10670
NJ Cert. # 77011
NC Cert. # 521*

Prepared by Amy W. Mason
Quality Assurance Review Roy C. Jones
Date November 9, 2001
Delivery Date 11-12-01



**Sample Reference List for SDG Number HUL02
with a Data Package Type of NYSDEC**

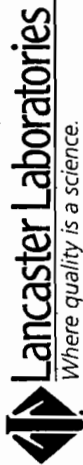
10062 - Hull & Associates
IMC Magnetics - NY

Lab Sample Number	Lab Sample Code	Client Sample Description
3699890	MW-6L	NMB007:MW-6L:G092801 Grab Water Sample
3699891	MW-7U	NMB007:MW-7U:G092801 Grab Water Sample
3699892	MW-7M	NMB007:MW-7M:G092801 Grab Water Sample
3699893	MW-7L	NMB007:MW-7L:G092801 Grab Water Sample
3699894	MW-8U	NMB007:MW-8U:G100101 Grab Water Sample
3699895	MW-8M	NMB007:MW-8M:G100101 Grab Water Sample
3699896	MW-8L	NMB007:MW-8L:G100101 Grab Water Sample
3699897	MW-9U	NMB007:MW-9U:G100101 Grab Water Sample
3699898	MW-9L	NMB007:MW-9L:G100101 Grab Water Sample
3699899	W-10U	NMB007:MW-10U:G100101 Grab Water Sample
3699900	W-10L	NMB007:MW-10L:G100101 Grab Water Sample
3699901	NB7FB	Field Blank Grab Water Sample
3699902	NB7TB	Trip Blank Water Sample
3699903	AW1UB	NMB007:AW-1U:G100101B Grab Water Sample

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Analysis Request Environmental Services Corporation

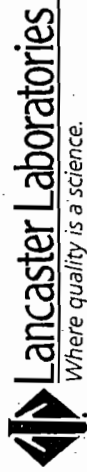


For Lancaster Laboratories use only
 Acct. # 10062 Sample # 3699800-905
 4 795-914

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

Client: <u>Hull Associates, Inc.</u> Acct. #: _____ Project Name: <u>IMC Magnetics</u> PWSID #: _____ Project Manager: <u>Lance Turley</u> P.O. #: _____ Sampler: <u>A. Fornaro</u> Quote #: _____ Name of state where samples were collected: <u>NY</u>		Matrix (4) Soil ☐ Water ☐ NPDES (check if applicable) ☐ Other ☐ Total # of Containers		Analyses Requested (5) TOC ☐ Fe ☐ TDS & SO4 ☐		For lab use only FSC: _____ SCR #: <u>1157264</u>	
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 #: _____		Relinquished by: <u>J. Hetch</u> Relinquished by: <u>John Fur</u> Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Date: <u>9/19/01</u> Time: <u>15:00</u> Date: <u>10/4/01</u> Time: <u>15:00</u> Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____		Received by: _____ Received by: _____ Received by: _____ Received by: _____ Received by: <u>Class Zxc</u>	
Data Package Options (please circle if requested) QC Summary Type VI (Raw Data) _____ Type I (Tier I) GLP _____ Type II (Tier II) Other _____ Type III (NJ Red. Del.) _____ Type IV (CLP) _____		SDG Complete? Yes ☐ No ☐ Site-specific QC required? Yes ☐ No ☐ (If yes, indicate QC sample and submit triplicate volume.) Internal Chain of Custody required? Yes ☐ No ☐		Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____		Received by: _____ Received by: _____ Received by: _____ Received by: _____ Received by: _____	

Analysis Request Environmental Services Chain of Custody



For Lancaster Laboratories use only
 Acct. # 10067 Sample # 3699795-815
+890-905

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

Client: <u>Hull & Associates, Inc.</u> Acct. #: _____ Project Name: <u>IMC Magnetics</u> PWSID #: _____ Project Manager: <u>Lance Turley</u> P.O. #: _____ Sampler: <u>A. Fornaro</u> Quote #: _____ Name of state where samples were collected: <u>NY</u>		Matrix: (4) Soil ☒ Potable (check if applicable) ☐ NPDES ☐ Other ☐ Total # of Containers: _____		Analyses Requested: (5) TOC ☒ Fe ☒ TDS & SO4 ☒		For lab use only FSC: <u>1157264</u> SCR #: <u>1157264</u>						
Sample Identification	Date Collected	Time Collected	Grab Composite	Soil	Potable	NPDES	Other	Total # of Containers	Analyses Requested	Remarks	Temperature of samples upon receipt (if requested)	
NMB007: MW-1: G100101	10/1/01	11:30	X	X	X	X	X	3				
NMB007: MW-3: G092801A	9/30/01	9:30	Y	X	X	X	X	3				
NMB007: MW-3: G092801B	9/30/01	9:30	Y	X	X	X	X	3				
NMB007: AW-1U: G100101A	10/1/01	12:15	X	X	X	X	X	9				
NMB007: AW-1U: G100101B	10/1/01	12:15	X	X	X	X	X	9				
NMB007: AW-1L: G100101	10/1/01	12:00	X	X	X	X	X	9				
NMB007: AW-2U: G100101	10/1/01	4:00	X	X	X	X	X	9				
NMB007: AW-2L: G100101	10/1/01	3:45	X	X	X	X	X	9				
NMB007: AW-3U: G100101	10/1/01	1:00	X	X	X	X	X	9				
NMB007: AW-3L: G100101	10/1/01	12:45	X	X	X	X	X	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>[Signature]</u> Relinquished by: <u>[Signature]</u> Relinquished by: _____ Relinquished by: _____		Date: <u>9/19/01</u> Time: <u>1:15 PM</u> Date: <u>10/4/01</u> Time: <u>1500</u> Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____		Received by: _____ Received by: _____ Received by: _____ Received by: _____ Received by: _____		Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ 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: (GLP)			SDG Complete? Yes No Site-specific QC required? Yes No (if yes, indicate QC sample and submit triplicate volume.) Internal Chain of Custody required? Yes No		Relinquished by: _____ Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____		Received by: _____ Received by: _____ Received by: _____ Received by: _____		Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____ Date: _____ Time: _____	



Lancaster Laboratories

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For Lancaster Laboratories use only

Acct. # 10062 Sample # 3699890-905

+ 795-915

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

Client: <u>Hull & Associates, Inc.</u> Acct. #: _____ Project Name: <u>IMC Magnetics</u> PWSID #: _____ Project Manager: <u>Lance Turley</u> P.O. #: _____ Sampler: <u>A. Fornaro</u> Quote #: _____ Name of state where samples were collected: <u>NY</u>			Matrix 4 ☐ Soil ☐ Water ☐ NPDES ☐ Other		Total # of Containers 9		Analyses Requested 5 TOC Fe TDS & SO4		For lab use only FSC: <u>SCR # 1157264</u>	
Sample Identification 2 <u>NMBO07.MW-10L.G100101</u> <u>Field Blank</u> <u>Trip Blank</u>			Date Collected <u>10/11/01</u> <u>10/11/01</u> <u>9/19/01</u>		Time Collected <u>3:00</u> <u>4:10</u>		Grab 3 ☒ Composite		Remarks 10/11/01	
7 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. H. H. H.</u> Relinquished by: <u>John F.</u> Relinquished by: _____ Relinquished by: _____ Relinquished by: _____		Date <u>9/19/01</u> <u>10/11/01</u> _____ _____ _____		Time <u>1500</u> <u>1500</u> _____ _____ _____		Received by: _____ _____ _____ _____ _____	
8 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 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		Date _____ _____ _____ _____ _____		Time _____ _____ _____ _____ _____		Received by: _____ _____ _____ _____ _____	

Sample Administration Receipt Documentation Log

Client/Project: Hendey (ny)
Date of Receipt: 10/4/01
Time of Receipt: 0900
Source Code: SD-1

Shipping Container Sealed: (Y) / N

COC Seal Present: Y / (N)

COC Seal Intact: Y / (N)

Package: (Chilled) / Not Chilled

Unpacker Emp. No.: 1165

Temperature of Shipping Containers			
#1	#2		
Thermometer ID: <u>23496</u>	Thermometer ID: <u>23496</u>		
Temp.: <u>4.0</u>	Temp.: <u>4.0</u>		
Temp. Bottle / Surface Temp.	Temp. Bottle / Surface Temp.	Uials	
<u>(Wet Ice)</u> / Dry Ice / Ice Packs	<u>(Wet Ice)</u> / Dry Ice / Ice Packs		
Ice Present? <u>(Y)</u> / N	Ice Present? <u>(Y)</u> / N	Loose / <u>(Bagged)</u>	
#3	#4		
Thermometer ID: <u>23496</u>	Thermometer ID: <u>23496</u>		
Temp.: <u>3.0</u>	Temp.: <u>4.0</u>		
Temp. Bottle / Surface Temp.	Temp. Bottle / Surface Temp.		
<u>(Wet Ice)</u> / Dry Ice / Ice Packs	<u>(Wet Ice)</u> / Dry Ice / Ice Packs		
Ice Present? <u>(Y)</u> / N	Ice Present? <u>(Y)</u> / N	Loose / <u>(Bagged)</u>	

Paperwork Discrepancy/Unpacking Problems:

(1) Loc Broken - NM B007 MV-9U: 6100101 @ 10/1/01
@ 2:45

Sample Administration Internal Chain of Custody			
Name	Date	Time	Reason for Transfer
<u>Jess Zork</u>	<u>10/4/01</u>	<u>1315</u>	Unpacking <u>to storage</u>
<u>Travis Bedard</u>	<u>10-4-01</u>	<u>1500</u>	Place in Storage or <u>(Entry)</u>
			Remove from Storage
			Place in Storage or Entry
			Entry



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METHODOLOGY SUMMARY/REFERENCE

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

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



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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



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 780796. Samples arrived at the laboratory on Thursday, October 04, 2001.

Client Description

NMB007:MW-6L:G092801 Grab Water Sample
NMB007:MW-7U:G092801 Grab Water Sample
NMB007:MW-7M:G092801 Grab Water Sample
NMB007:MW-7L:G092801 Grab Water Sample
NMB007:MW-8U:G100101 Grab Water Sample
NMB007:MW-8M:G100101 Grab Water Sample
NMB007:MW-8L:G100101 Grab Water Sample
NMB007:MW-9U:G100101 Grab Water Sample
NMB007:MW-9L:G100101 Grab Water Sample
NMB007:MW-10U:G100101 Grab Water Sample
NMB007:MW-10L:G100101 Grab Water Sample
Field Blank Grab Water Sample
Trip Blank Water Sample
NMB007:AW-1U:G100101B Grab Water Sample

Lancaster Labs Number

3699890
3699891
3699892
3699893
3699894
3699895
3699896
3699897
3699898
3699899
3699900
3699901
3699902
3699903

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



Lancaster Laboratories

Where quality is a science.

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

Respectfully Submitted,



Erik J. Frederiksen
Group Leader



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 3699890

Collected: 09/28/2001 12:30 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:47

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

NMB007:MW-6L:G092801 Grab Water Sample

IMC Magnetics - NY

MW-6L SDG#: HUL02-01

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



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 3699890

Collected: 09/28/2001 12:30 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:47

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

NMB007:MW-6L:G092801 Grab Water Sample

IMC Magnetix - NY

MW-6L SDG#: HUL02-01

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/09/2001 08:21	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/09/2001 08:21	Todd T. Smythe	n.a.



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 3699891

Collected: 09/28/2001 12:00 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

NMB007:MW-7U:G092801 Grab Water Sample

IMC Magnetics - NY

MW-7U SDG#: HUL02-02

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	1.4	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	2.9	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



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 3699891

Collected: 09/28/2001 12:00 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:48

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

NMB007:MW-7U:G092801 Grab Water Sample

IMC Magnetics - NY

MW-7U SDG#: HUL02-02

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/09/2001 08:59	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/09/2001 08:59	Todd T. Smythe	n.a.



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2425 New Holland Pike
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Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. WW 3699892

Collected: 09/28/2001 11:45 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

NMB007:MW-7M:G092801 Grab Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

MW-7M SDG#: HUL02-03

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	1.1	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	5.8	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



Lancaster Laboratories, Inc.
 2425 New Holland Pike
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Lancaster Laboratories Sample No. WW 3699892

Collected: 09/28/2001 11:45 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

NMB007:MW-7M:G092801 Grab Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

MW-7M SDG#: HUL02-03

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/09/2001 09:36	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/09/2001 09:36	Todd T. Smythe	n.a.



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 3699893

Collected: 09/28/2001 11:30 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:48

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

NMB007:MW-7L:G092801 Grab Water Sample

IMC Magnetics - NY

MW-7L SDG#: HUL02-04

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	2.5	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	6.0	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	13.	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	4.4	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



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



Lancaster Laboratories Sample No. WW 3699893

Collected: 09/28/2001 11:30 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

NMB007:MW-7L:G092801 Grab Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

MW-7L SDG#: HUL02-04

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/09/2001 10:14	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/09/2001 10:14	Todd T. Smythe	n.a.



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



Lancaster Laboratories Sample No. WW 3699894

Collected: 10/01/2001 14:00 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:48

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

NMB007:MW-8U:G100101 Grab Water Sample

IMC Magnetics - NY

MW-8U SDG#: HUL02-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	29.7	2.00	mg/l	20
00212	Total Dissolved Solids	n.a.	293.	30.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	3.4	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:

3.1 mg/l

3.1 mg/l

3.7 mg/l

3.7 mg/l

The Total Organic Carbon (TOC) result reported above was determined by measuring total carbon by a persulfate digestion/infrared detection method on an acidified sample which has been purged of inorganic carbon using nitrogen. It represents "non-purgeable TOC".

01125	Sulfate (turbidimetric)	14808-79-8	< 170.	170.	mg/l	33.33333
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	2.5	1.0	ug/l	1



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2425 New Holland Pike
PO Box 12425
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717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. WW 3699894

Collected: 10/01/2001 14:00 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

NMB007:MW-8U:G100101 Grab Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

MW-8U SDG#: HUL02-05

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
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
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	Time		
00254	Iron	SW-846 7380	1	10/15/2001	14:24	Deborah A. Krady	20
00212	Total Dissolved Solids	EPA 160.1	1	10/05/2001	08:23	Susan A. Engle	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	10/11/2001	14:27	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	10/18/2001	09:52	Susan A. Engle	33.333
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/10/2001	23:04	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	10/12/2001	09:43	Denise K. Connors	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/10/2001	23:04	Todd T. Smythe	n.a.



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Lancaster, PA 17605-2425
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Lancaster Laboratories Sample No. WW 3699895

Collected: 10/01/2001 13:45 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

NMB007:MW-8M:G100101 Grab Water Sample

IMC Magnetix - NY

MW-8M SDG#: HUL02-06

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	1.31	0.100	mg/l	1
00212	Total Dissolved Solids	n.a.	220.	30.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	2.4	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:

2.3 mg/l
2.6 mg/l
2.1 mg/l
2.6 mg/l

The Total Organic Carbon (TOC) result reported above was determined by measuring total carbon by a persulfate digestion/infrared detection method on an acidified sample which has been purged of inorganic carbon using nitrogen. It represents "non-purgeable TOC".

01125	Sulfate (turbidimetric)	14808-79-8	64.	10.	mg/l	2

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	5.3	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	1.1	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



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 3699895

Collected: 10/01/2001 13:45

by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

NMB007:MW-8M:G100101 Grab Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

MW-8M SDG#: HUL02-06

CAT No.	Analysis Name	CAS Number	As Received	As Received	Units	Dilution Factor
			Result	Limit of Quantitation		
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	3.5	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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis	Analyst	Dilution Factor
				Date and Time		
00254	Iron	SW-846 7380	1	10/15/2001 14:24	Deborah A. Krady	1
00212	Total Dissolved Solids	EPA 160.1	1	10/05/2001 08:23	Susan A. Engle	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	10/11/2001 15:15	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	10/18/2001 09:52	Susan A. Engle	2
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/10/2001 19:47	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	10/12/2001 09:43	Denise K. Connors	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/10/2001 19:47	Todd T. Smythe	n.a.



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 3699896

Collected: 10/01/2001 13:30 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

NMB007:MW-8L:G100101 Grab Water Sample

IMC Magnetix - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

MW-8L SDG#: HUL02-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	1.60	0.100	mg/l	1
00212	Total Dissolved Solids	n.a.	269.	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:						
			2.9 mg/l			
			2.9 mg/l			
			2.2 mg/l			
			4.0 mg/l			
The Total Organic Carbon (TOC) result reported above was determined by measuring total carbon by a persulfate digestion/infrared detection method on an acidified sample which has been purged of inorganic carbon using nitrogen. It represents "non-purgeable TOC".						
01125	Sulfate (turbidimetric)	14808-79-8	68.	10.	mg/l	2
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	5.0	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	1.3	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	4.3	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	25.	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



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 3699896

Collected: 10/01/2001 13:30 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:48

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

NMB007:MW-8L:G100101 Grab Water Sample

IMC Magnetix - NY

MW-8L SDG#: HUL02-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
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
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	Time		
00254	Iron	SW-846 7380	1	10/15/2001	14:25	Deborah A. Krady	1
00212	Total Dissolved Solids	EPA 160.1	1	10/05/2001	08:23	Susan A. Engle	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	10/11/2001	15:48	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	10/18/2001	09:52	Susan A. Engle	2
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/10/2001	23:41	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	10/12/2001	09:43	Denise K. Connors	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/10/2001	23:41	Todd T. Smythe	n.a.



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 3699897

Collected: 10/01/2001 14:45 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

NMB007:MW-9U:G100101 Grab Water Sample

IMC Magnetix - NY

MW-9U SDG#: HUL02-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	5.78	0.500	mg/l	5
00212	Total Dissolved Solids	n.a.	445.	30.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	3.6	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:

3.4 mg/l

4.0 mg/l

3.6 mg/l

3.6 mg/l

The Total Organic Carbon (TOC) result reported above was determined by measuring total carbon by a persulfate digestion/infrared detection method on an acidified sample which has been purged of inorganic carbon using nitrogen. It represents "non-purgeable TOC".

01125	Sulfate (turbidimetric)	14808-79-8	< 250.	250.	mg/l	50

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	1.9	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 3699897

Collected: 10/01/2001 14:45 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

NMB007:MW-9U:G100101 Grab Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

MW-9U SDG#: HUL02-08

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
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	29.	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		Analyst	Dilution Factor
				Date and Time			
00254	Iron	SW-846 7380	1	10/15/2001 14:27		Deborah A. Krady	5
00212	Total Dissolved Solids	EPA 160.1	1	10/05/2001 08:23		Susan A. Engle	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	10/11/2001 16:36		Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	10/18/2001 09:52		Susan A. Engle	50
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/11/2001 00:19		Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	10/12/2001 09:43		Denise K. Connors	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/11/2001 00:19		Todd T. Smythe	n.a.



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 3699898

Collected: 10/01/2001 14:30 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

NMB007:MW-9L:G100101 Grab Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

MW-9L SDG#: HUL02-09

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	0.434	0.100	mg/l	1
00212	Total Dissolved Solids	n.a.	279.	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:

3.1 mg/l
2.5 mg/l
3.5 mg/l
2.7 mg/l

The Total Organic Carbon (TOC) result reported above was determined by measuring total carbon by a persulfate digestion/infrared detection method on an acidified sample which has been purged of inorganic carbon using nitrogen. It represents "non-purgeable TOC".

01125	Sulfate (turbidimetric)	14808-79-8	76.	10.	mg/l	2

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	1.8	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



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 3699898

Collected: 10/01/2001 14:30 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:48

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

NMB007:MW-9L:G100101 Grab Water Sample

IMC Magnetix - NY

MW-9L SDG#: HUL02-09

CAT No.	Analysis Name	CAS Number	As Received	As Received	Units	Dilution Factor
			Result	Limit of Quantitation		
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
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	10/15/2001 14:27	Deborah A. Krady	1
00212	Total Dissolved Solids	EPA 160.1	1	10/05/2001 08:23	Susan A. Engle	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	10/11/2001 17:08	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	10/18/2001 09:52	Susan A. Engle	2
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/11/2001 00:56	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	10/12/2001 09:43	Denise K. Connors	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/11/2001 00:56	Todd T. Smythe	n.a.



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 3699899

Collected: 10/01/2001 15:15 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

NMB007:MW-10U:G100101 Grab Water Sample

IMC Magnetics - NY

W-10U SDG#: HUL02-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	578.	50.0	mg/l	500
00212	Total Dissolved Solids	n.a.	850.	120.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	7.4	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:

7.6 mg/l
7.2 mg/l
7.2 mg/l
7.5 mg/l

The Total Organic Carbon (TOC) result reported above was determined by measuring total carbon by a persulfate digestion/infrared detection method on an acidified sample which has been purged of inorganic carbon using nitrogen. It represents "non-purgeable TOC".

01125	Sulfate (turbidimetric)	14808-79-8	< 2,500.	2,500.	mg/l	500

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	< 4.0	4.0	ug/l	2
08484	Chloromethane	74-87-3	< 10.	10.	ug/l	2
08485	Vinyl Chloride	75-01-4	< 2.0	2.0	ug/l	2
08487	Bromomethane	74-83-9	< 10.	10.	ug/l	2
08488	Chloroethane	75-00-3	< 2.0	2.0	ug/l	2
08489	Trichlorofluoromethane	75-69-4	< 2.0	2.0	ug/l	2
08490	1,1-Dichloroethene	75-35-4	< 2.0	2.0	ug/l	2
08492	Methylene Chloride	75-09-2	< 2.0	2.0	ug/l	2
08494	trans-1,2-Dichloroethene	156-60-5	< 2.0	2.0	ug/l	2
08496	1,1-Dichloroethane	75-34-3	< 2.0	2.0	ug/l	2
08498	cis-1,2-Dichloroethene	156-59-2	< 2.0	2.0	ug/l	2
08502	Chloroform	67-66-3	< 2.0	2.0	ug/l	2
08504	1,2-Dichloroethane	107-06-2	< 2.0	2.0	ug/l	2
08506	1,1,1-Trichloroethane	71-55-6	< 2.0	2.0	ug/l	2
08509	Carbon Tetrachloride	56-23-5	< 2.0	2.0	ug/l	2
08511	1,2-Dichloropropane	78-87-5	< 2.0	2.0	ug/l	2
08512	Trichloroethene	79-01-6	< 2.0	2.0	ug/l	2



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 3699899

Collected: 10/01/2001 15:15 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

NMB007:MW-10U:G100101 Grab Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

W-10U SDG#: HUL02-10

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
08514	Bromodichloromethane	75-27-4	< 2.0	2.0	ug/l	2
08516	cis-1,3-Dichloropropene	10061-01-5	< 2.0	2.0	ug/l	2
08517	trans-1,3-Dichloropropene	10061-02-6	< 2.0	2.0	ug/l	2
08518	1,1,2-Trichloroethane	79-00-5	< 2.0	2.0	ug/l	2
08520	Dibromochloromethane	124-48-1	< 2.0	2.0	ug/l	2
08523	Tetrachloroethene	127-18-4	76.	2.0	ug/l	2
08526	Chlorobenzene	108-90-7	< 2.0	2.0	ug/l	2
08527	Bromoform	75-25-2	< 2.0	2.0	ug/l	2
08528	1,1,2,2-Tetrachloroethane	79-34-5	< 2.0	2.0	ug/l	2
08533	1,3-Dichlorobenzene (m)	541-73-1	< 2.0	2.0	ug/l	2
08534	1,4-Dichlorobenzene (p)	106-46-7	< 2.0	2.0	ug/l	2
08535	1,2-Dichlorobenzene (o)	95-50-1	< 2.0	2.0	ug/l	2
08541	Benzene	71-43-2	< 2.0	2.0	ug/l	2
08543	Toluene	108-88-3	< 2.0	2.0	ug/l	2
08545	Ethylbenzene	100-41-4	< 2.0	2.0	ug/l	2
08561	Xylene (total)	1330-20-7	< 6.0	6.0	ug/l	2

The vial submitted for volatile analysis did not have a pH < 2 at the time of analysis. Due to the volatile nature of the analytes, it is not appropriate for the laboratory to adjust the pH at the time of sample receipt.

Due to dilution of the sample made necessary by the high level of tetrachloroethene, normal reporting limits were not attained.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis		Analyst	Dilution Factor
				Date and Time			
00254	Iron	SW-846 7380	1	10/15/2001 14:38		Deborah A. Krady	500
00212	Total Dissolved Solids	EPA 160.1	1	10/05/2001 08:23		Susan A. Engle	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	10/11/2001 17:57		Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	10/18/2001 09:52		Susan A. Engle	500
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/08/2001 23:24		Victoria M. Martell	2



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



Page 3 of 3

Lancaster Laboratories Sample No. WW 3699899

Collected: 10/01/2001 15:15 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:48

Discard: 10/30/2001

NMB007:MW-10U:G100101 Grab Water Sample

IMC Magnetix - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

W-10U SDG#: HUL02-10

00820 WW SW-846 FAA Digest (tot SW-846 3005A
rec)

1 10/12/2001 09:43 Denise K. Conners 1

01127 GC VOA Water Prep SW-846 5030B

1 10/08/2001 23:24 Victoria M. Martell n.a.



Lancaster Laboratories, Inc.
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717-656-2300 Fax: 717-656-2681



Lancaster Laboratories Sample No. WW 3699900

Collected: 10/01/2001 15:00

by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:49

Discard: 10/30/2001

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

NMB007:MW-10L:G100101 Grab Water Sample

IMC Magnetix - NY

W-10L SDG#: HUL02-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	0.423	0.100	mg/l	1
00212	Total Dissolved Solids	n.a.	257.	30.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	3.2	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:

3.1 mg/l
2.9 mg/l
2.9 mg/l
4.0 mg/l

The Total Organic Carbon (TOC) result reported above was determined by measuring total carbon by a persulfate digestion/infrared detection method on an acidified sample which has been purged of inorganic carbon using nitrogen. It represents "non-purgeable TOC".

01125	Sulfate (turbidimetric)	14808-79-8	76.	20.	mg/l	4
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



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2425 New Holland Pike
PO Box 12425
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Lancaster Laboratories Sample No. WW 3699900

Collected: 10/01/2001 15:00 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:49

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

NMB007:MW-10L:G100101 Grab Water Sample

IMC Magnetics - NY

W-10L SDG#: HUL02-11

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
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
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	10/15/2001 14:39		Deborah A. Krady	1
00212	Total Dissolved Solids	EPA 160.1	1	10/05/2001 08:23		Susan A. Engle	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	10/11/2001 18:29		Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	10/18/2001 09:52		Susan A. Engle	4
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/11/2001 01:34		Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	10/12/2001 09:43		Denise K. Connors	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/11/2001 01:34		Todd T. Smythe	n.a.



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Lancaster, PA 17605-2425
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Lancaster Laboratories Sample No. WW 3699901

Collected: 10/01/2001 16:10 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:49

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

Field Blank Grab Water Sample

IMC Magnetix - NY

NB7FB SDG#: HUL02-12FB

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:

.3 mg/l

.5 mg/l

.6 mg/l

1.0 mg/l

The Total Organic Carbon (TOC) result reported above was determined by measuring total carbon by a persulfate digestion/infrared detection method on an acidified sample which has been purged of inorganic carbon using nitrogen. It represents "non-purgeable TOC".

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



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2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
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Lancaster Laboratories Sample No. WW 3699901

Collected: 10/01/2001 16:10 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:49

Discard: 10/30/2001

Field Blank Grab Water Sample

IMC Magnetix - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

NB7FB SDG#: HUL02-12FB

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

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
00254	Iron	SW-846 7380	1	10/15/2001 14:39	Deborah A. Krady	1
00212	Total Dissolved Solids	EPA 160.1	1	10/05/2001 08:23	Susan A. Engle	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	10/15/2001 13:27	Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	10/18/2001 09:52	Susan A. Engle	1
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/10/2001 22:14	Todd T. Smythe	1
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	10/12/2001 09:43	Denise K. Connors	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/10/2001 22:14	Todd T. Smythe	n.a.



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 3699902

Collected: n.a.

Account Number: 10062

Submitted: 10/04/2001 09:00
 Reported: 10/22/2001 at 05:49
 Discard: 10/30/2001
 Trip Blank Water Sample
 IMC Magnetix - NY

Hull & Associates
 6130 Wilcox Rd.
 Dublin OH 43016

NB7TB SDG#: HUL02-13TB*

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



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 3699902

Collected: n.a.

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:49

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

Trip Blank Water Sample

IMC Magnetix - NY

NB7TB SDG#: HUL02-13TB*

Laboratory Chronicle

CAT No.	Analysis Name	Method	Analysis		Analyst	Dilution Factor
			Trial#	Date and Time		
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/09/2001 05:52	Todd T. Smythe	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/09/2001 05:52	Todd T. Smythe	n.a.



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 3699903

Collected: 10/01/2001 12:15 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Hull & Associates

Reported: 10/22/2001 at 05:49

6130 Wilcox Rd.

Discard: 10/30/2001

Dublin OH 43016

NMB007:AW-1U:G100101B Grab Water Sample

IMC Magnetics - NY

AW1UB SDG#: HUL02-14*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Limit of Quantitation	Units	Dilution Factor
00254	Iron	7439-89-6	103.	5.00	mg/l	50
00212	Total Dissolved Solids	n.a.	321.	30.	mg/l	1
00354	Total Organic Carbon (Quad)	n.a.	2.5	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:

2.4 mg/l
2.7 mg/l
2.6 mg/l
2.5 mg/l

The Total Organic Carbon (TOC) result reported above was determined by measuring total carbon by a persulfate digestion/infrared detection method on an acidified sample which has been purged of inorganic carbon using nitrogen. It represents "non-purgeable TOC".

01125	Sulfate (turbidimetric)	14808-79-8	< 170.	170.	mg/l	33.33333
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	2.4	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	1.6	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



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 3699903

Collected: 10/01/2001 12:15 by AF

Account Number: 10062

Submitted: 10/04/2001 09:00

Reported: 10/22/2001 at 05:49

Discard: 10/30/2001

NMB007:AW-1U:G100101B Grab Water Sample

IMC Magnetics - NY

Hull & Associates

6130 Wilcox Rd.

Dublin OH 43016

AW1UB SDG#: HUL02-14*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received		Dilution Factor
				Limit of Quantitation	Units	
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
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	10/15/2001 14:40		Deborah A. Krady	50
00212	Total Dissolved Solids	EPA 160.1	1	10/08/2001 10:16		Anne L. Kuenzli	1
00354	Total Organic Carbon (Quad)	SW-846 9060	1	10/15/2001 14:00		Timothy M. Petree	1
01125	Sulfate (turbidimetric)	EPA 375.4	1	10/18/2001 09:52		Susan A. Engle	33.333
08404	Halocarbons/Aromatics by SW846	SW-846 8021B	1	10/11/2001 02:12		Todd T. Smythe	33
00820	WW SW-846 FAA Digest (tot rec)	SW-846 3005A	1	10/12/2001 09:43		Denise K. Conners	1
01127	GC VOA Water Prep	SW-846 5030B	1	10/11/2001 02:12		Todd T. Smythe	n.a.



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Volatiles by GC Data

**Case Narrative
Conformance/Nonconformance
Summary**

Case Narrative
SDG# HUL02

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

SAMPLE ANALYSES

LL Sample #	Sample Designation	Matrix Soil Water	Comments
3699890	MW-6L	X	
3699891	MW-7U	X	
3699892	MW-7M	X	
3699893	MW-7L	X	
3699894	MW-8U	X	
3699895	MW-8M	X	
3699896	MW-8L	X	
3699897	MW-9U	X	
3699898	MW-9L	X	
3699899	W-10U	X	DF 2
3699900	W-10L	X	
3699901	NB7FB	X	
3699902	NB7TB	X	
3699903	AW1UB	X	

ALITY CONTROL ANALYSES

BLK2009	X	Method Blank
BLK2010	X	Method Blank
BLK2011	X	Method Blank
BLK2014	X	Method Blank
BLK2015	X	Method Blank
BLK2016	X	Method Blank
3699802	X	DF 100 Unspiked
3699802MS	X	DF 100 Matrix Spike
3699802MSD	X	DF 100 Matrix Spike Dup
LCS2003	X	Lab Control Sample
LDS2003	X	Lab Control Dup
LCS2006	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."

Case Narrative
SDG# HUL02

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

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

The calibration verification standard (injection #22 analyzed on 10/08/01 at 15:53) 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 fell outside of the +/- 15% criteria.

The calibration verification standard (injection #37 analyzed on 10/09/01 at 03:15) 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 bromoform fell outside of the +/- 15% criteria.

The calibration verification standard (injection #13 analyzed on 10/10/01 at 04:28) 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 trichlorofluoromethane fell outside of the +/- 15% criteria.

The calibration verification standard (injection #11 analyzed on 10/10/01 at 12:19) 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, chloromethane and trichlorofluoromethane fell outside of the +/- 15% criteria.

The calibration verification standard (injection #23 analyzed on 10/10/01 at 20:26) 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 chloromethane fell outside of the +/- 15% criteria.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY

There was no client submitted QC, so Lancaster Laboratories batch QC was referenced.

The recovery of tetrachloroethene in the MSD is outside of specifications, however, the corresponding laboratory control sample and laboratory control sample duplicate is acceptable and shows the system to be in calibration.

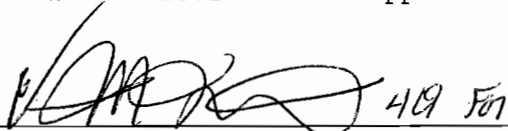
Case Narrative
SDG# HUL02

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

DATA INTERPRETATION

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:

 4/9 For
Steve J. Stabinger, Group Leader

11/07/0
Date

GC Volatiles Calculations

1. Calculation of Calibration Factor:

$$\text{Calibration Factor (CF)} = \frac{H_n}{A_n}$$

Where: A_n = amount of analyte in the nth calibration level (ug/l)
 H_n = peak height of the nth calibration level

2. Calculation of Average Calibration Factor:

$$\text{AVG}_{\text{CF}} = \frac{\sum(CF_i)}{n}$$

Where: CF_i = Calibration factor of the ith level

3. Determining the Analyte Concentration

$$\text{Sample concentration (ug/l)} = \frac{\text{Peak Height of Analyte}}{\text{AVG}_{\text{CF}}} \times (\text{DF})$$

DF = Dilution factor

4. Calculation used for the quadratic curve : $AX^2 + BX + C = 0$

Determining the Analyte Concentration

Using the equation to solve for X(concentration)

$$X = \frac{-B \pm \sqrt{(B)^2 - (4)(A)(-C)}}{2(A)} \times (\text{DF})$$

DF = Dilution factor

5. % Relative Standard Deviation(%RSD):

$$\% \text{RSD} = \frac{\text{Standard Deviation}}{\text{Mean}} \times 100$$

6. % Difference(%D)

$$\% \text{D} = \frac{\text{CFc} - \text{Cfi}}{\text{Cfi}} \times 100$$

Where:

CFc = Calibration factor from continuing calibration standard

Cfi = Mean calibration factor from the initial calibration

Volatiles by GC Calculations - PID

1. Calculation of Calibration Factor:

$$\text{Calibration Factor (CF)} = \frac{(A_x)(C_{is})}{(A_{is})(C_x)}$$

Where: A_x = Peak area of the compound to be measured

A_{is} = Peak area of the internal standard

C_{is} = Concentration of the internal standard (Note: For our calculations, C_{is} had been arbitrarily chosen as 1)

C_x = Concentration of the compound to be measured

2. Calculation of Average Calibration Factor:

$$AVG_{CF} = \frac{\sum(CF_i)}{n}$$

Where: CF_i = Calibration factor of the i th level

3. Determining the Analyte Concentration

$$\text{Sample concentration (ug/l)} = \frac{(A_x)(C_{is})}{(A_{is})(CF)} \times DF$$

Where: A_x = Peak area of the compound to be measured

A_{is} = Peak area of the internal standard

C_{is} = Concentration of the internal standard (Note: For our calculations, C_{is} had been arbitrarily chosen as 1)

C_x = Concentration of the compound to be measured

DF = Dilution factor

4. Calculation used for the quadratic curve : $0 = C + BX + AX^2$

Determining the Analyte Concentration

Using the equation to solve for X (concentration)

$$X = \frac{-B \pm \sqrt{B^2 - (4)(A)(-C)}}{2(A)} \times (DF)$$

DF = Dilution factor

C = Peak Area of analyte

Volatiles by GC Calculations - PID

5. % Relative Standard Deviation(%RSD):

$$\%RSD = \frac{\text{Standard Deviation}}{\text{Mean}} \times 100$$

6. % Difference(%D)

$$\%D = \frac{CFc - Cfi}{Cfi} \times 100$$

Where:

CFc = Calibration factor from continuing calibration standard

Cfi = Mean calibration factor from the initial calibration

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
3699890	MW-6L	1.0	94	90	
3699891	MW-7U	1.0	89	88	
3699892	MW-7M	1.0	90	90	
3699893	MW-7L	1.0	89	88	
3699894	MW-8U	1.0	91	94	
3699895	MW-8M	1.0	88	92	
3699896	MW-8L	1.0	90	95	
3699897	MW-9U	1.0	94	94	
3699898	MW-9L	1.0	91	92	
3699899	W-10U	2.0	99	92	
3699900	W-10L	1.0	88	92	
3699901	NB7FB	1.0	92	92	
3699902	NB7TB	1.0	90	91	
3699903	AW1UB	1.0	91	94	
BLK2009	METHOD BLANK	1.0	93	91	
BLK2010	METHOD BLANK	1.0	86	92	
BLK2011	METHOD BLANK	1.0	89	90	
BLK2014	METHOD BLANK	1.0	94	93	
BLK2015	METHOD BLANK	1.0	94	93	
BLK2016	METHOD BLANK	1.0	93	91	
3699802		100.0	92	90	
3699802MS		100.0	96	96	
3699802MSD		100.0	90	96	
LCS2003	LAB CONTROL	1.0	98	98	
LDS2003	LAB CON DUP	1.0	101	98	
LCS2006	LAB CONTROL	1.0	100	97	

* = 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

Blank ID.....: BLK2009
Date.....: 10/08/01
Instrument.....: 6245

Batch Number.....: 01280A20
Time.....: 18:19
Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
LCS2003	LAB CONTROL	10/08/01	20:23
LDS2003	LAB CON DUP	10/08/01	21:00

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.....: BLK2010
Date.....: 10/08/01
Instrument.....: 6245

Batch Number.....: 01280A20
Time.....: 22:29
Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
3699899	W-10U	10/08/01	23:24

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-DICHLORORETHENE	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.....: BLK2011
Date.....: 10/09/01
Instrument.....: 6245

Batch Number.....: 01280A20
Time.....: 04:46
Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
3699902	NB7TB	10/09/01	05:52
3699890	MW-6L	10/09/01	08:21
3699891	MW-7U	10/09/01	08:59
3699892	MW-7M	10/09/01	09:36
3699893	MW-7L	10/09/01	10:14

Quality Control Summary
SDG# HUL02

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK2011
Date.....: 10/09/01
Instrument.....: 6245

Batch Number.....: 01280A20
Time.....: 04:46
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.....: BLK2014
 Date.....: 10/10/01
 Instrument.....: 6245

 Batch Number.....: 01283A20
 Time.....: 06:53
 Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
3699802	LAB CONTROL	10/10/01	09:31
3699802MS		10/10/01	10:13
3699802MSD		10/10/01	10:51
LCS2006		10/10/01	11:29

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.....: BLK2015
Date.....: 10/10/01
Instrument.....: 6245

Batch Number.....: 01283A20
Time.....: 13:21
Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
3699895	MW-8M	10/10/01	19:47

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.....: BLK2016
Date.....: 10/10/01
Instrument.....: 6245

Batch Number.....: 01283A20
Time.....: 21:19
Matrix.....: Water

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
3699901	NB7FB	10/10/01	22:14
3699894	MW-8U	10/10/01	23:04
3699896	MW-8L	10/10/01	23:41
3699897	MW-9U	10/11/01	00:19
3699898	MW-9L	10/11/01	00:56
3699900	W-10L	10/11/01	01:34
3699903	AW1UB	10/11/01	02:12

Method Blank
Volatiles by GC - Water

Blank ID.....: BLK2016
Date.....: 10/10/01
Instrument.....: 6245

Batch Number.....: 01283A20
Time.....: 21:19
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....: 3699802
Spiked Sample Number.....: 3699802MS
Spiked Dup Sample Number...: 3699802MSD

Batch Number.....: 01283A20
Date.....: 10/10/01
Matrix.....: Water

Instrument.....: 6245

This MS/MSD applies to the
following samples:
3699890 3699891 3699892 3699893
3699894 3699895 3699896 3699897
3699898 3699899 3699900 3699901
3699902 3699903

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	2000	32.6	1430	1490	70	73	18-211	4	30
CHLOROMETHANE	2000	0.00	1140	1160	57	58	01-159	2	30
VINYL CHLORIDE	2000	0.00	1570	1580	79	79	49-142	0	30
BROMOMETHANE	2000	0.00	1540	1930	77	97	13-163	23	30
CHLOROETHANE	2000	0.00	1190	1740	59	87	26-143	38**	30
TRICHLOROFLUOROMETHA	2000	0.00	1450	1460	72	73	52-127	0	30
1,1-DICHLOROETHENE	2000	0.00	1820	1940	91	97	42-154	6	30
METHYLENE CHLORIDE	2000	29.4	1710	1930	84	95	61-128	12	30
TRANS-1,2-DICHLORORE	2000	0.00	1910	1980	96	99	74-133	4	30
1,1-DICHLOROETHANE	2000	0.00	2020	2000	101	100	75-130	1	30
CIS-1,2-DICHLOROETHE	2000	0.00	2100	2050	105	102	68-137	3	30
CHLOROFORM	2000	0.00	2040	1950	102	98	76-127	5	30
1,2-DICHLOROETHANE	2000	0.53	2060	2030	103	101	79-130	2	30
1,1,1-TRICHLOROETHAN	2000	0.91	1950	1910	98	96	72-130	2	30
CARBON TETRACHLORIDE	2000	0.00	1950	1890	97	95	72-130	3	30
BENZENE	2000	0.00	1940	1910	97	95	79-119	2	30
1,2-DICHLOROPROPANE	2000	0.00	2060	2040	103	102	80-128	1	30
TRICHLOROETHENE	2000	10.9	1900	1870	95	93	65-130	2	30
BROMODICHLOROMETHANE	2000	0.00	1950	1980	98	99	75-127	2	30
CIS-1,3-DICHLOROPROP	2000	0.00	1970	1940	98	97	62-128	1	30
TRANS-1,3-DICHLOROPR	2000	0.00	2000	1930	100	96	73-129	4	30
1,1,2-TRICHLOROETHAN	2000	0.00	1960	1840	98	92	81-123	6	30
TOLUENE	2000	11.1	1930	1890	96	94	76-120	3	30
DIBROMOCHLOROMETHANE	2000	0.00	2070	1910	104	95	78-134	8	30
TETRACHLOROETHENE	2000	4040	5550	4930	75	44 *	72-129	12	30
CHLOROBENZENE	2000	0.00	1960	1920	98	96	83-117	2	30
ETHYLBENZENE	2000	0.00	1940	1900	97	95	79-121	2	30
BROMOFORM	2000	0.00	2160	2030	108	102	72-143	6	30
1,1,2,2-TETRACHLOROE	2000	0.00	2020	1890	101	94	80-132	7	30
1,3-DICHLOROBENZENE	2000	0.00	2070	1920	104	96	81-132	8	30
1,4-DICHLOROBENZENE	2000	4.31	1960	1910	98	95	84-115	3	30
1,2-DICHLOROBENZENE	2000	0.39	1990	1850	100	93	78-131	7	30
TOTAL XYLENES	6000	0.00	5840	5720	97	95	80-121	2	30

S=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.

Lab Control/Lab Control Duplicate
Volatiles by GC - Water

Batch Number.....: 01280A20
Date.....: 10/08/01
Matrix.....: Water

This LCS/LDS applies to the
following samples:
3699890 3699891 3699892 3699893
3699899 3699902

Instrument.....: 6245
Calibration Date.....: 10/08/01 (HALL)
Calibration Date.....: 10/08/01 (PID)

Compound	Spike Added (UG/L)	LCS Conc (UG/L)	LDS Conc (UG/L)	LCS % Recov	LDS % Recov	LCS Limits Recov	RPD	LCS Limits RPD
DICHLORODIFLUOROMETHANE	20.0	9.10	8.9	45	44	29-208	2	30
CHLOROMETHANE	20.0	9.15	10.3	46	51	17-149	10	30
VINYL CHLORIDE	20.0	13.2	12.7	66	64	53-137	2	30
BROMOMETHANE	20.0	16.8	17.7	84	89	27-153	6	30
CHLOROETHANE	20.0	15.5	17.3	78	87	31-137	11	30
TRICHLOROFLUOROMETHANE	20.0	14.4	13.9	72	69	51-125	4	30
1,1-DICHLOROETHENE	20.0	19.9	19.1	99	96	44-147	3	30
METHYLENE CHLORIDE	20.0	20.0	19.7	100	98	68-121	2	30
TRANS-1,2-DICHLORORETHENE	20.0	20.6	19.2	103	96	78-124	7	30
1,1-DICHLOROETHANE	20.0	20.9	20.1	105	100	80-122	5	30
CIS-1,2-DICHLOROETHENE	20.0	21.4	20.7	107	103	80-125	4	30
CHLOROFORM	20.0	20.7	19.9	104	99	78-122	5	30
1,2-DICHLOROETHANE	20.0	20.8	20.6	104	103	80-127	1	30
1,1,1-TRICHLOROETHANE	20.0	20.1	18.9	101	95	77-121	6	30
CARBON TETRACHLORIDE	20.0	20.3	19.1	101	95	75-122	6	30
BENZENE	20.0	19.7	19.0	98	95	85-111	3	30
1,2-DICHLOROPROPANE	20.0	21.6	21.0	108	105	81-126	3	30
TRICHLOROETHENE	20.0	19.5	18.7	97	93	82-110	4	30
BROMODICHLOROMETHANE	20.0	20.0	20.0	100	100	78-121	0	30
CIS-1,3-DICHLOROPROPENE	20.0	20.7	20.4	103	102	74-118	1	30
TRANS-1,3-DICHLOROPROPENE	20.0	21.0	20.9	105	105	78-124	0	30
1,1,2-TRICHLOROETHANE	20.0	20.1	20.1	100	101	83-122	1	30
TOLUENE	20.0	19.6	18.9	98	95	84-112	3	30
DIBROMOCHLOROMETHANE	20.0	21.5	21.2	107	106	79-132	1	30
TETRACHLOROETHENE	20.0	19.3	18.3	97	92	76-123	5	30
CHLOROBENZENE	20.0	19.9	19.4	100	97	85-114	3	30
ETHYLBENZENE	20.0	19.7	19.1	99	96	84-114	3	30
BROMOFORM	20.0	22.1	22.6	110	113	75-141	3	30
1,1,2,2-TETRACHLOROETHANE	20.0	21.2	20.5	106	103	84-129	3	30
1,3-DICHLOROBENZENE	20.0	21.8	21.4	109	107	84-128	2	30
1,4-DICHLOROBENZENE	20.0	19.8	19.4	99	97	86-112	2	30
1,2-DICHLOROBENZENE	20.0	21.0	20.8	105	104	82-127	1	30
TOTAL XYLENES	60.0	59.6	57.6	99	96	85-115	3	30

LCS=Lab Control Sample; LDS=Lab Control Sample Duplicate; RPD=Relative Percent Difference

* = Value outside quality control limits.

Laboratory Control Sample
Volatiles by GC - Water

Batch Number.....: 01283A20
Date.....: 10/10/01
Matrix.....: Water

Instrument.....: 6245
Calibration Date.....: 10/8/01 (HALL)
Calibration Date.....: 10/8/01 (PID)

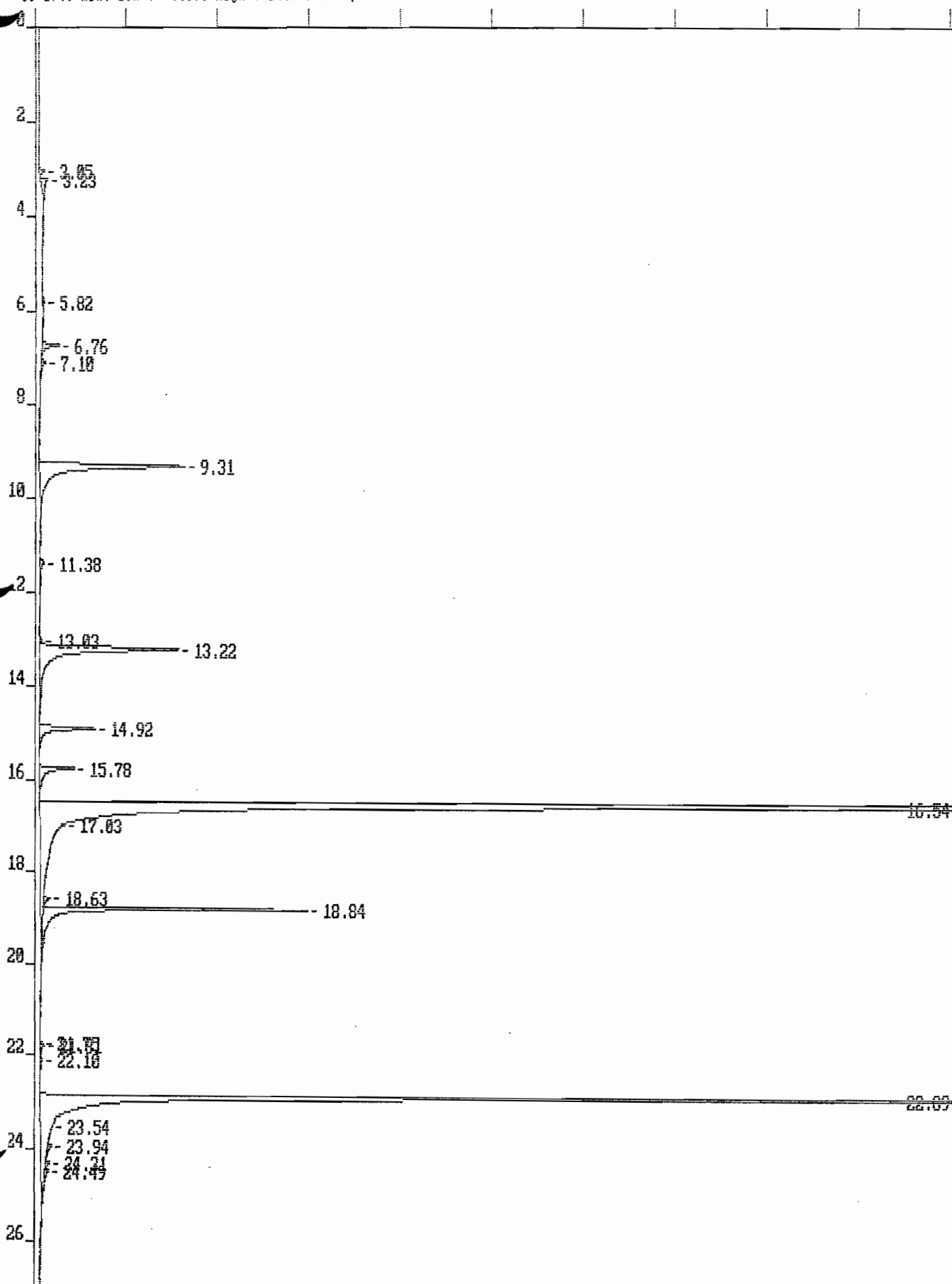
This LCS applies to the
following samples:
3699894 3699895 3699896 3699897
3699898 3699900 3699901 3699903

Compound	Spike Added (UG/L)	LCS Conc (UG/L)	LCS % Recov	LCS Limits Recov
DICHLORODIFLUOROMETHANE	20.0	18.8	94	29-208
CHLOROMETHANE	20.0	13.4	67	17-149
VINYL CHLORIDE	20.0	19.8	99	53-137
BROMOMETHANE	20.0	22.1	110	27-153
CHLOROETHANE	20.0	19.8	99	31-137
TRICHLOROFLUOROMETHANE	20.0	17.1	85	51-125
1,1-DICHLOROETHENE	20.0	22.1	111	44-147
METHYLENE CHLORIDE	20.0	21.5	108	68-121
TRANS-1,2-DICHLOROETHENE	20.0	20.1	101	78-124
1,1-DICHLOROETHANE	20.0	21.1	105	80-122
CIS-1,2-DICHLOROETHENE	20.0	21.5	107	80-125
CHLOROFORM	20.0	20.6	103	78-122
1,2-DICHLOROETHANE	20.0	20.9	104	80-127
1,1,1-TRICHLOROETHANE	20.0	19.6	98	77-121
CARBON TETRACHLORIDE	20.0	19.5	98	75-122
BENZENE	20.0	19.5	97	85-111
1,2-DICHLOROPROPANE	20.0	20.8	104	81-126
TRICHLOROETHENE	20.0	19.1	95	82-110
BROMODICHLOROMETHANE	20.0	19.9	100	78-121
CIS-1,3-DICHLOROPROPENE	20.0	20.4	102	74-118
TRANS-1,3-DICHLOROPROPENE	20.0	20.9	105	78-124
1,1,2-TRICHLOROETHANE	20.0	20.1	100	83-122
TOLUENE	20.0	19.3	97	84-112
DIBROMOCHLOROMETHANE	20.0	21.3	107	79-132
TETRACHLOROETHENE	20.0	18.5	93	76-123
CHLOROBENZENE	20.0	19.6	98	85-114
ETHYLBENZENE	20.0	19.5	97	84-114
BROMOFORM	20.0	22.3	112	75-141
1,1,2,2-TETRACHLOROETHANE	20.0	21.2	106	84-129
1,3-DICHLOROBENZENE	20.0	21.4	107	84-128
1,4-DICHLOROBENZENE	20.0	19.7	98	86-112
1,2-DICHLOROBENZENE	20.0	21.2	106	82-127
TOTAL XYLENES	60.0	58.4	97	85-115

* = Recovery outside quality control limits.

Sample Data

File=C:\CP\DATA1\20280.44R Date printed=10-09-2001 Time= 08:21:54
Sample Name=3699890 01280A201127,8404
to 27.0 min. Low Y=-0.093 High Y=14.907 mv Span=15.0



Sample Name: 3699890

Batch: 01280A20

Date Taken: Oct 9, 2001 08:21:50

Raw File: C:\CP\DATA1\20280.44R

ea File: C:\CP\DATA1\20280.44A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.610	3.610	DICHLORODIFLUOROMETH	0.0000	0	0
3.824	3.824	CHLOROMETHANE	0.0000	0	0
4.146	4.146	VINYL CHLORIDE	0.0000	0	0
4.655	4.655	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.816	5.758	TRICHLOROFLUOROMETHA	0.0234	447	36
6.756	6.724	1,1-DICHLOROETHENE	0.1004	1546	296
7.102	7.068	METHYLENE CHLORIDE	0.0192	708	83
7.253	7.253	TRICHLOROTRIFLUOROET	0.0000	0	0
8.664	8.664	TRANS-1,2-DICHLOROET	0.0000	0	0
9.313	9.286	1,1-DICHLOROETHANE	0.8534	20520	2404
10.780	10.780	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.157	11.157	BROMOCHLOROMETHANE	0.0000	0	0
11.381	11.339	CHLOROFORM	0.0165	1019	67
11.499	11.499	2,2-DICHLOROPROPANE	0.0000	0	0
13.034	12.987	1,2-DICHLOROETHANE	0.0115	208	36
13.222	13.200	1,1,1-TRICHLOROETHAN	0.7000	20618	2295
13.752	13.752	1,1-DICHLOROPROPENE	0.0000	0	0
14.150	14.150	CARBON TETRACHLORIDE	0.0000	0	0
15.556	15.556	DIBROMOMETHANE	0.0000	0	0
15.659	15.659	1,2-DICHLOROPROPANE	0.0000	0	0
15.779	15.756	TRICHLOROETHENE	0.1044	4004	592
15.830	15.830	BROMODICHLOROMETHANE	0.0000	0	0
16.538	16.531	ISTD-1-BR-2-CLETHANE	1.0000	294810	76536
17.030	16.963	CIS-1,3-DICHLOROPROP	0.0116	91	59
17.602	17.602	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.760	17.760	1,1,2-TRICHLOROETHAN	0.0000	0	0
18.068	18.068	1,3-DICHLOROPROPANE	0.0000	0	0
18.334	18.334	DIBROMOCHLOROMETHANE	0.0000	0	0
18.629	18.613	1,2-DIBROMOETHANE	0.0456	589	115
18.839	18.833	TETRACHLOROETHENE	0.5671	16561	4359
19.476	19.476	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.547	19.547	CHLOROBENZENE	0.0000	0	0
20.015	20.015	BROMOFORM	0.0000	0	0
20.316	20.316	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.442	20.442	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.840	20.840	BROMOBENZENE	0.0000	0	0
21.100	21.100	2-CHLOROTOLUENE	0.0000	0	0
21.168	21.168	4-CHLOROTOLUENE	0.0000	0	0
21.746	21.740	1,3-DICHLOROBENZENE	0.0080	80	37
21.807	21.798	1,4-DICHLOROBENZENE	0.0160	516	83
22.104	22.099	1,2-DICHLOROBENZENE	0.0069	376	32
22.521	22.521	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.890	22.888	SURR-1B4CB-H	28.1464	219618	84483
23.937	23.929	1,2,4-TRICHLOROBENZE	0.0187	414	63
24.313	24.299	HEXACHLOROBUTADIENE	0.0175	386	72
24.489	24.482	1,2,3-TRICHLOROBENZE	0.0187	581	58
TOTAL 1,2-DICHLOROETHENE:			0.0000		

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

Surrogate Recovery: BrClBenzene 93.8215 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 08:23:45

Sample name: 3699890

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280.44R

Reviewed by: mm46

Verified by: mm46

Date: 10/9/01

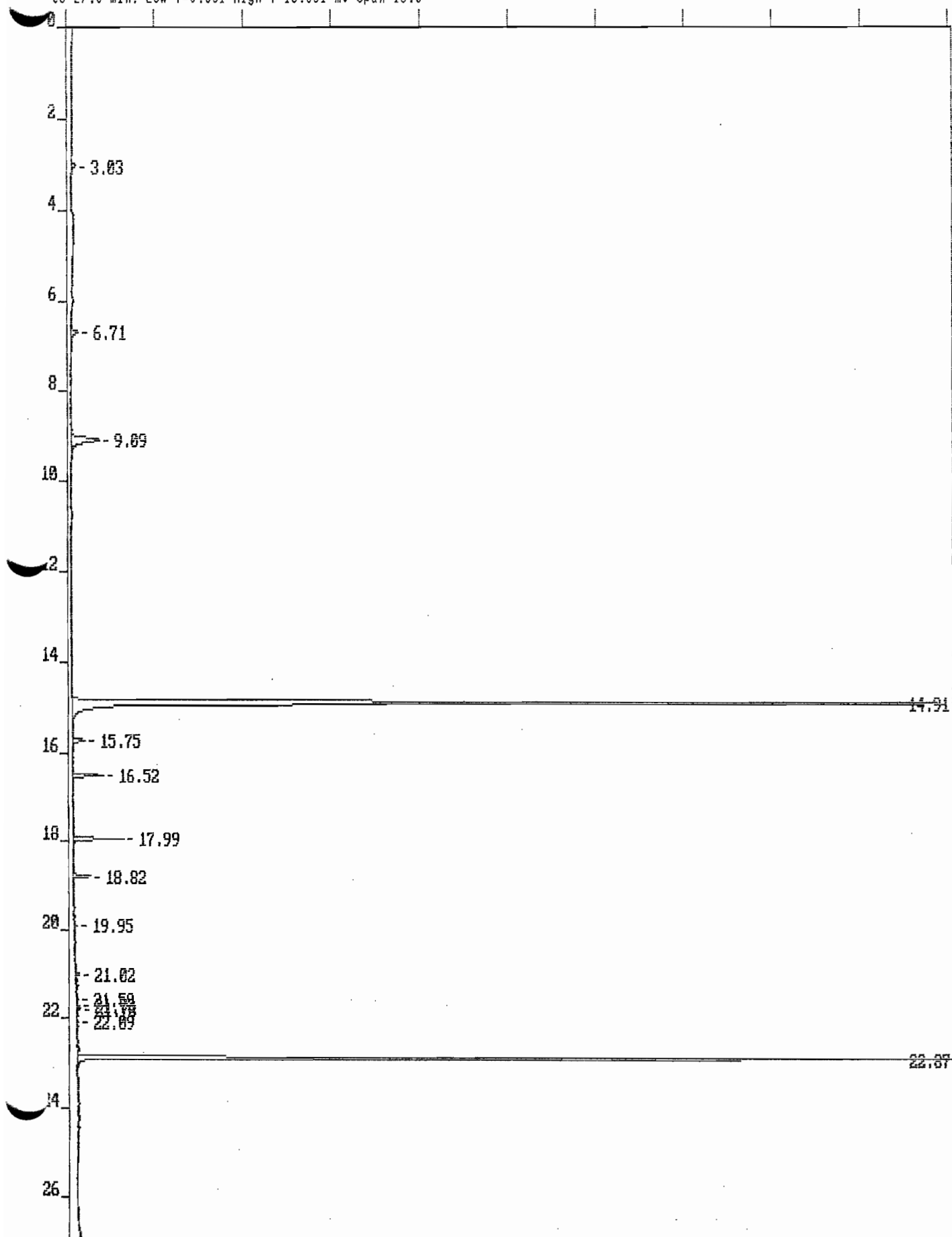
Date: 10/10/01

File=C:\CP\DATA1\20280B.44R Date printed=10-09-2001 Time= 08:23:59

Sample Name=3699890

01280A201127,8404

to 27.0 min. Low Y=0.031 High Y=15.031 mv Span=15.0



Sample Name: 3699890
 Batch: 01280A20 Date Taken: Oct 9, 2001 08:21:50
 Raw File: C:\CP\DATA1\20280B.44R
 ea File: C:\CP\DATA1\20280B.44A
 Method File: c:\cp\data1\20280B.MET(version 2)
 EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75m x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 115
 Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 62):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.129	4.129	VINYL CHLORIDE	0.0000	0	0
6.711	6.706	1,1-DICHLOROETHENE	0.3323	933	119
8.646	8.646	TRANS-1,2-DICHLOROET	0.0000	0	0
9.087	9.056	METHYL T-BUTYL ETHER	1.9523	4378	470
10.762	10.762	CIS-1,2-DICHLOROETHE	0.0000	0	0
13.733	13.733	1,1-DICHLOROPROPENE	0.0000	0	0
14.292	14.292	BENZENE	0.0000	0	0
14.907	14.904	ISTD-FBENZENE	1.0000	69715	14673
15.746	15.742	TRICHLOROETHENE	0.3481	906	215
16.521	16.516	1-BROMO-2-CHLOROETHA	1.0000	1930	528
16.948	16.948	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.587	17.587	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.987	17.983	TOLUENE	0.8803	2651	868
18.822	18.819	TETRACHLOROETHENE	0.7267	1086	303
19.533	19.533	CHLOROBENZENE	0.0000	0	0
19.755	19.755	ETHYLBENZENE	0.0000	0	0
19.955	19.947	M,P-XYLENE	0.0563	222	51
20.243	20.243	STYRENE	0.0000	0	0
20.307	20.307	O-XYLENE	0.0000	0	0
20.636	20.636	ISOPROPYLBENZENE	0.0000	0	0
20.825	20.825	BROMOBENZENE	0.0000	0	0
21.020	21.017	N-PROPYLBENZENE	0.0776	312	65
21.086	21.086	2-CHLOROTOLUENE	0.0000	0	0
21.153	21.153	4-CHLOROTOLUENE	0.0000	0	0
21.270	21.270	1,3,5-TRIMETHYLBENZE	0.0000	0	0
21.493	21.493	TERT-BUTYLBENZENE	0.0000	0	0
21.586	21.588	1,2,4-TRIMETHYLBENZE	0.0410	129	39
21.674	21.674	SEC-BUTYLBENZENE	0.0000	0	0
21.728	21.726	1,3-DICHLOROBENZENE	0.0488	104	46
21.784	21.785	1,4-DICHLOROBENZENE	0.0664	212	63
21.828	21.828	P-ISOPROPYLTOLUENE	0.0000	0	0
22.090	22.085	1,2-DICHLOROBENZENE	0.0464	181	34
22.176	22.176	N-BUTYLBENZENE	0.0000	0	0
22.875	22.874	SURR-1B4CB-P	26.9297	50196	23331
23.915	23.915	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.217	24.217	NAPHTHALENE	0.0000	0	0
24.285	24.285	HEXACHLOROBUTADIENE	0.0000	0	0
24.467	24.467	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0563

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

Surrogate Recovery: BrClBenzene 89.7655 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 08:27:03

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699890

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280B.44R

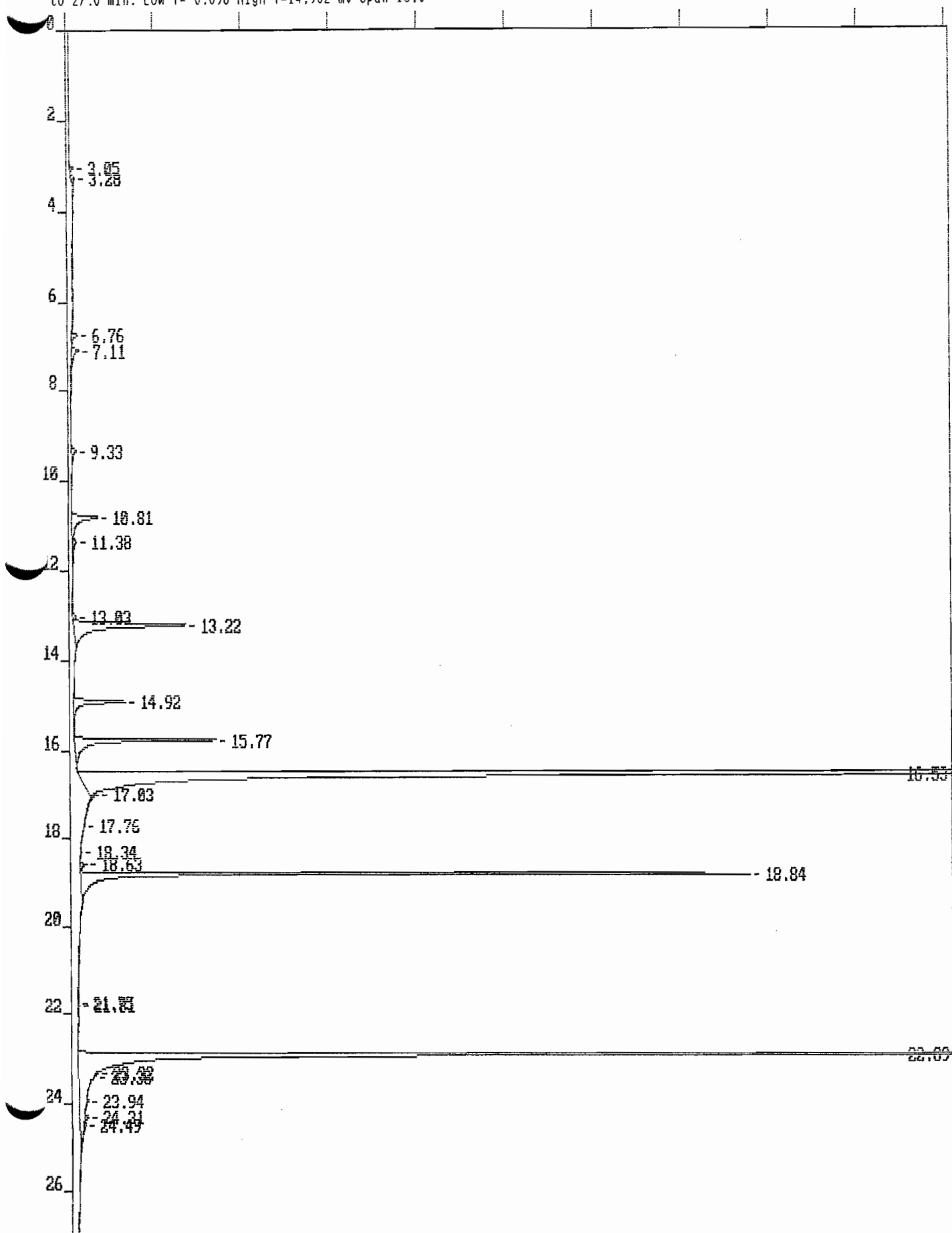
Reviewed by: MMB/44

Verified by: MMM/44

Date: 16/9/01

Date: 10/10/01

File=C:\CP\DATA1\20280.45R Date printed=10-09-2001 Time= 08:59:24
Sample Name=3699891 01280A201127,8404
to 27.0 min. Low Y=-0.098 High Y=14,902 mv Span=15.0



Sample Name: 3699891

Batch: 01280A20

Date Taken: Oct 9, 2001 08:59:20

Raw File: C:\CP\DATA1\20280.45R

ba File: C:\CP\DATA1\20280.45A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.610	3.610	DICHLORODIFLUOROMETH	0.0000	0	0
3.824	3.824	CHLOROMETHANE	0.0000	0	0
4.146	4.146	VINYL CHLORIDE	0.0000	0	0
4.655	4.655	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.758	5.758	TRICHLOROFLUOROMETHA	0.0000	0	0
6.764	6.724	1,1-DICHLOROETHENE	0.0351	637	109
7.106	7.068	METHYLENE CHLORIDE	0.0281	1479	128
7.253	7.253	TRICHLOROTRIFLUOROET	0.0000	0	0
8.664	8.664	TRANS-1,2-DICHLOROET	0.0000	0	0
9.332	9.286	1,1-DICHLOROETHANE	0.0255	547	76
10.811	10.780	CIS-1,2-DICHLOROETHE	0.1433	4026	463
11.157	11.157	BROMOCHLOROMETHANE	0.0000	0	0
11.376	11.339	CHLOROFORM	0.0157	727	67
11.499	11.499	2,2-DICHLOROPROPANE	0.0000	0	0
13.033	12.987	1,2-DICHLOROETHANE	0.0173	323	57
13.224	13.200	1,1,1-TRICHLOROETHAN	0.5548	15359	1913
13.752	13.752	1,1-DICHLOROPROPENE	0.0000	0	0
14.150	14.150	CARBON TETRACHLORIDE	0.0000	0	0
15.556	15.556	DIBROMOMETHANE	0.0000	0	0
15.659	15.659	1,2-DICHLOROPROPANE	0.0000	0	0
15.774	15.756	TRICHLOROETHENE	0.4080	12097	2434
15.830	15.830	BROMODICHLOROMETHANE	0.0000	0	0
16.535	16.531	ISTD-1-BR-2-CLETHANE	1.0000	278718	80492
17.034	16.963	CIS-1,3-DICHLOROPROP	0.0280	431	151
17.602	17.602	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.763	17.760	1,1,2-TRICHLOROETHAN	0.0026	129	17
18.068	18.068	1,3-DICHLOROPROPANE	0.0000	0	0
18.343	18.334	DIBROMOCHLOROMETHANE	0.0041	88	17
18.626	18.613	1,2-DIBROMOETHANE	0.0440	484	117
18.837	18.833	TETRACHLOROETHENE	1.4138	34655	11431
19.476	19.476	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.547	19.547	CHLOROBENZENE	0.0000	0	0
20.015	20.015	BROMOFORM	0.0000	0	0
20.316	20.316	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.442	20.442	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.840	20.840	BROMOBENZENE	0.0000	0	0
21.100	21.100	2-CHLOROTOLUENE	0.0000	0	0
21.168	21.168	4-CHLOROTOLUENE	0.0000	0	0
21.748	21.740	1,3-DICHLOROBENZENE	0.0036	35	17
21.808	21.798	1,4-DICHLOROBENZENE	0.0054	178	30
22.099	22.099	1,2-DICHLOROBENZENE	0.0000	0	0
22.521	22.521	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.890	22.888	SURR-1B4CB-H	26.5676	221691	83865
23.937	23.929	1,2,4-TRICHLOROBENZE	0.0141	310	50
24.307	24.299	HEXACHLOROBUTADIENE	0.0171	407	75
24.493	24.482	1,2,3-TRICHLOROBENZE	0.0154	597	50
TOTAL 1,2-DICHLOROETHENE:			0.1433		

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

Surrogate Recovery: BrClBenzene 88.5588 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 09:01:15

Sample name: 3699891

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280.45R

Reviewed by: MMB994

Verified by: Vmm46

Date: 10/9/01

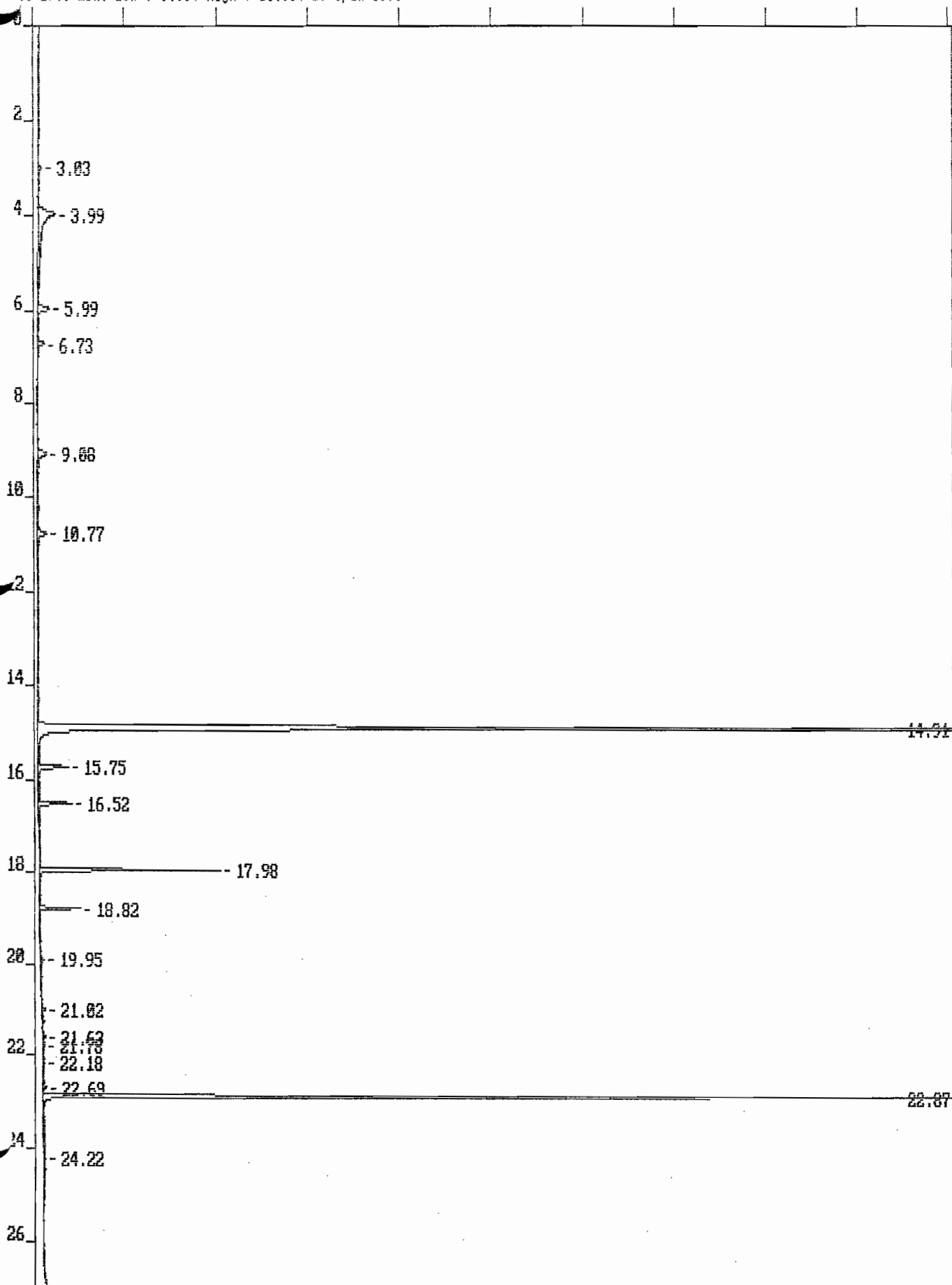
Date: 10/10/01

File=C:\CP\DATA1\20280B.45R Date printed=10-09-2001 Time= 09:01:29

Sample Name=3699891

01280A201127,8404

to 27.0 min. Low Y=0.034 High Y=15.034 mv Span=15.0



Sample Name: 3699891

Batch: 01280A20

Date Taken: Oct 9, 2001 08:59:20

Raw File: C:\CP\DATA1\20280B.45R

ea File: C:\CP\DATA1\20280B.45A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 62):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.129	4.129	VINYL CHLORIDE	0.0000	0	0
6.730	6.706	1,1-DICHLOROETHENE	0.2999	1066	110
8.646	8.646	TRANS-1,2-DICHLOROET	0.0000	0	0
9.077	9.056	METHYL T-BUTYL ETHER	0.6101	2257	151
10.774	10.762	CIS-1,2-DICHLOROETHE	0.3784	1506	151
13.733	13.733	1,1-DICHLOROPROPENE	0.0000	0	0
14.292	14.292	BENZENE	0.0000	0	0
14.909	14.904	ISTD-FBENZENE	1.0000	70014	15078
15.747	15.742	TRICHLOROETHENE	0.7848	2494	498
16.519	16.516	1-BROMO-2-CHLOROETHA	1.0000	2301	547
16.948	16.948	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.587	17.587	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.985	17.983	TOLUENE	2.9224	7706	2962
18.819	18.819	TETRACHLOROETHENE	1.6016	1816	685
19.533	19.533	CHLOROBENZENE	0.0000	0	0
19.755	19.755	ETHYLBENZENE	0.0000	0	0
19.950	19.947	M,P-XYLENE	0.0741	279	69
20.243	20.243	STYRENE	0.0000	0	0
20.307	20.307	O-XYLENE	0.0000	0	0
20.636	20.636	ISOPROPYLBENZENE	0.0000	0	0
20.825	20.825	BROMOBENZENE	0.0000	0	0
21.018	21.017	N-PROPYLBENZENE	0.0843	321	73
21.086	21.086	2-CHLOROTOLUENE	0.0000	0	0
21.153	21.153	4-CHLOROTOLUENE	0.0000	0	0
21.270	21.270	1,3,5-TRIMETHYLBENZE	0.0000	0	0
21.493	21.493	TERT-BUTYLBENZENE	0.0000	0	0
21.628	21.588	1,2,4-TRIMETHYLBENZE	0.0565	247	56
21.674	21.674	SEC-BUTYLBENZENE	0.0000	0	0
21.726	21.726	1,3-DICHLOROBENZENE	0.0000	0	0
21.785	21.785	1,4-DICHLOROBENZENE	0.0359	135	35
21.828	21.828	P-ISOPROPYLTOLUENE	0.0000	0	0
22.085	22.085	1,2-DICHLOROBENZENE	0.0000	0	0
22.177	22.176	N-BUTYLBENZENE	0.0564	266	39
22.874	22.874	SURR-1B4CB-P	26.5141	53567	23605
23.915	23.915	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.221	24.217	NAPHTHALENE	0.0722	154	33
24.285	24.285	HEXACHLOROBUTADIENE	0.0000	0	0
24.467	24.467	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0741

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

Surrogate Recovery: BrClBenzene 88.3803 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 09:04:33

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

1Std range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699891

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280B.45R

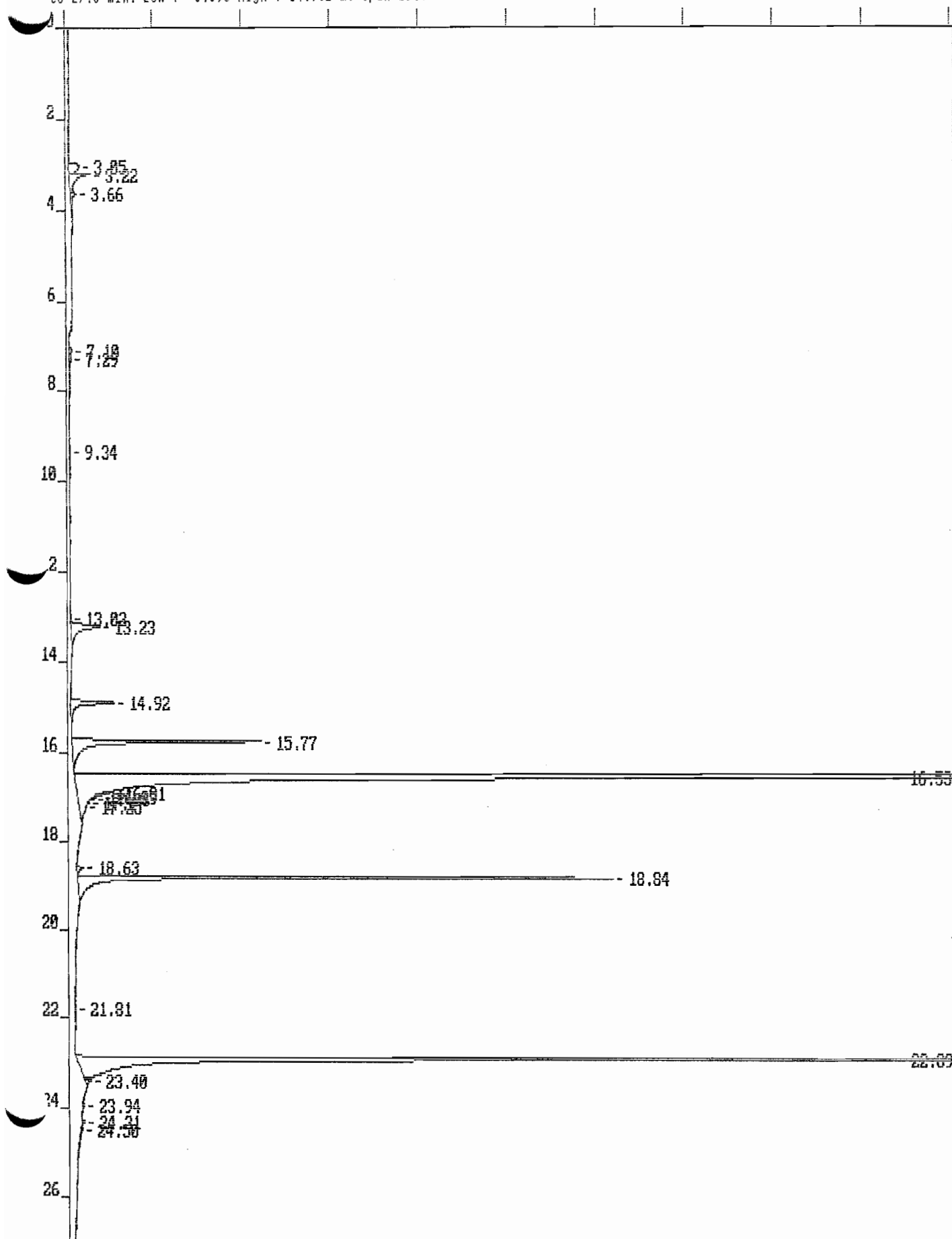
Reviewed by: MFB 994

Verified by: mmmk

Date: 10/9/01

Date: 10/10/01

File=C:\CP\DATA1\20280.46R Date printed=10-09-2001 Time= 09:36:50
Sample Name=3699892 01280A201127,8404
to 27.0 min. Low Y=-0.098 High Y=14.902 mv Span=15.0



Sample Name: 3699892

Batch: 01280A20

Date Taken: Oct 9, 2001 09:36:45

Raw File: C:\CP\DATA1\20280.46R

ea File: C:\CP\DATA1\20280.46A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.664	3.610	DICHLORODIFLUOROMETH	0.1062	703	94
3.824	3.824	CHLOROMETHANE	0.0000	0	0
4.146	4.146	VINYL CHLORIDE	0.0000	0	0
4.655	4.655	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.758	5.758	TRICHLOROFLUOROMETHA	0.0000	0	0
6.724	6.724	1,1-DICHLOROETHENE	0.0000	0	0
7.103	7.068	METHYLENE CHLORIDE	0.0117	672	53
7.286	7.253	TRICHLOROTRIFLUOROET	0.0072	84	14
8.664	8.664	TRANS-1,2-DICHLOROET	0.0000	0	0
9.340	9.286	1,1-DICHLOROETHANE	0.0080	300	23
10.780	10.780	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.157	11.157	BROMOCHLOROMETHANE	0.0000	0	0
11.339	11.339	CHLOROFORM	0.0000	0	0
11.499	11.499	2,2-DICHLOROPROPANE	0.0000	0	0
13.023	12.987	1,2-DICHLOROETHANE	0.0055	89	18
13.229	13.200	1,1,1-TRICHLOROETHAN	0.1487	4524	506
13.752	13.752	1,1-DICHLOROPROPENE	0.0000	0	0
14.150	14.150	CARBON TETRACHLORIDE	0.0000	0	0
15.556	15.556	DIBROMOMETHANE	0.0000	0	0
15.659	15.659	1,2-DICHLOROPROPANE	0.0000	0	0
15.768	15.756	TRICHLOROETHENE	0.5479	15831	3229
15.830	15.830	BROMODICHLOROMETHANE	0.0000	0	0
16.534	16.531	ISTD-1-BR-2-CLETHANE	1.0000	285260	79503
16.991	16.963	CIS-1,3-DICHLOROPROP	0.0251	268	133
17.602	17.602	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.760	17.760	1,1,2-TRICHLOROETHAN	0.0000	0	0
18.068	18.068	1,3-DICHLOROPROPANE	0.0000	0	0
18.334	18.334	DIBROMOCHLOROMETHANE	0.0000	0	0
18.629	18.613	1,2-DIBROMOETHANE	0.0437	510	115
18.837	18.833	TETRACHLOROETHENE	1.1367	27950	9077
19.476	19.476	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.547	19.547	CHLOROBENZENE	0.0000	0	0
20.015	20.015	BROMOFORM	0.0000	0	0
20.316	20.316	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.442	20.442	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.840	20.840	BROMOBENZENE	0.0000	0	0
21.100	21.100	2-CHLOROTOLUENE	0.0000	0	0
21.168	21.168	4-CHLOROTOLUENE	0.0000	0	0
21.740	21.740	1,3-DICHLOROBENZENE	0.0000	0	0
21.805	21.798	1,4-DICHLOROBENZENE	0.0035	143	19
22.099	22.099	1,2-DICHLOROBENZENE	0.0000	0	0
22.521	22.521	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.890	22.888	SURR-1B4CB-H	27.0795	209379	84431
23.940	23.929	1,2,4-TRICHLOROBENZE	0.0127	284	44
24.313	24.299	HEXACHLOROBUTADIENE	0.0144	340	62
24.495	24.482	1,2,3-TRICHLOROBENZE	0.0149	492	48

TOTAL 1,2-DICHLOROETHENE: 0.0000

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

Surrogate Recovery: BrClBenzene 90.2650 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 09:38:40

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Sample name: 3699892

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280.46R

Reviewed by: mm46

Verified by: mm46

Date: 10/9/07

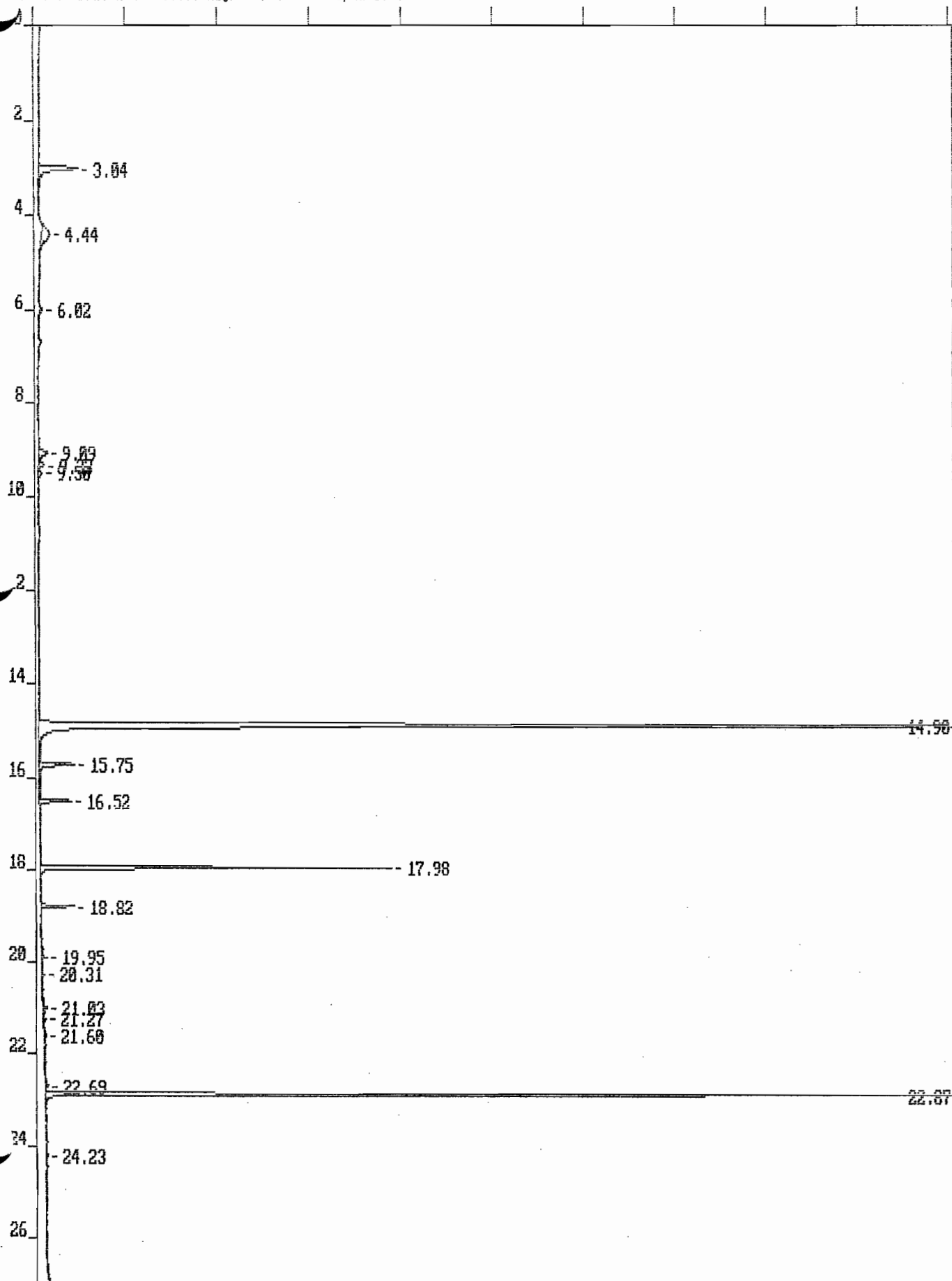
Date: 10/10/07

File=C:\CP\DATA1\20280B.46R Date printed=10-09-2001 Time= 09:38:54

Sample Name=3699892

01280A201127,8404

to 27.0 min. Low Y=0.035 High Y=15.035 mv Span=15.0



6.09.01

Sample Name: 3699892

Batch: 01280A20

Date Taken: Oct 9, 2001 09:36:45

Raw File: C:\CP\DATA1\20280B.46R

ea File: C:\CP\DATA1\20280B.46A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 62):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.129	4.129	VINYL CHLORIDE	0.0000	0	0
6.706	6.706	1,1-DICHLOROETHENE	0.0000	0	0
8.646	8.646	TRANS-1,2-DICHLOROET	0.0000	0	0
9.087	9.056	METHYL T-BUTYL ETHER	0.5470	1044	133
10.762	10.762	CIS-1,2-DICHLOROETHE	0.0000	0	0
13.733	13.733	1,1-DICHLOROPROPENE	0.0000	0	0
14.292	14.292	BENZENE	0.0000	0	0
14.904	14.904	ISTD-FBENZENE	1.0000	69154	14841
15.746	15.742	TRICHLOROETHENE	0.9560	2782	597
16.517	16.516	1-BROMO-2-CHLOROETHA	1.0000	2479	540
16.948	16.948	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.587	17.587	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.984	17.983	TOLUENE	5.7571	14747	5744
18.819	18.819	TETRACHLOROETHENE	1.3261	1353	559
19.533	19.533	CHLOROBENZENE	0.0000	0	0
19.755	19.755	ETHYLBENZENE	0.0000	0	0
19.946	19.947	M,P-XYLENE	0.0956	375	87
20.243	20.243	STYRENE	0.0000	0	0
20.307	20.307	O-XYLENE	0.0488	295	43
20.636	20.636	ISOPROPYLBENZENE	0.0000	0	0
20.825	20.825	BROMOBENZENE	0.0000	0	0
21.025	21.017	N-PROPYLBENZENE	0.0842	293	72
21.086	21.086	2-CHLOROTOLUENE	0.0000	0	0
21.153	21.153	4-CHLOROTOLUENE	0.0000	0	0
21.274	21.270	1,3,5-TRIMETHYLBENZE	0.0359	204	45
21.493	21.493	TERT-BUTYLBENZENE	0.0000	0	0
21.596	21.588	1,2,4-TRIMETHYLBENZE	0.0391	195	38
21.674	21.674	SEC-BUTYLBENZENE	0.0000	0	0
21.726	21.726	1,3-DICHLOROBENZENE	0.0000	0	0
21.785	21.785	1,4-DICHLOROBENZENE	0.0000	0	0
21.828	21.828	P-ISOPROPYLTOLUENE	0.0000	0	0
22.085	22.085	1,2-DICHLOROBENZENE	0.0000	0	0
22.176	22.176	N-BUTYLBENZENE	0.0000	0	0
22.874	22.874	SURR-1B4CB-P	26.9432	50655	23609
23.915	23.915	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.227	24.217	NAPHTHALENE	0.0559	130	25
24.285	24.285	HEXACHLOROBUTADIENE	0.0000	0	0
24.467	24.467	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.1444

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

Surrogate Recovery: BrClBenzene 89.8108 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 09:41:57

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

1Std range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699892

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280B.46R

Reviewed by: *[Signature]*

Verified by: *[Signature]*

Date: 10/9/07

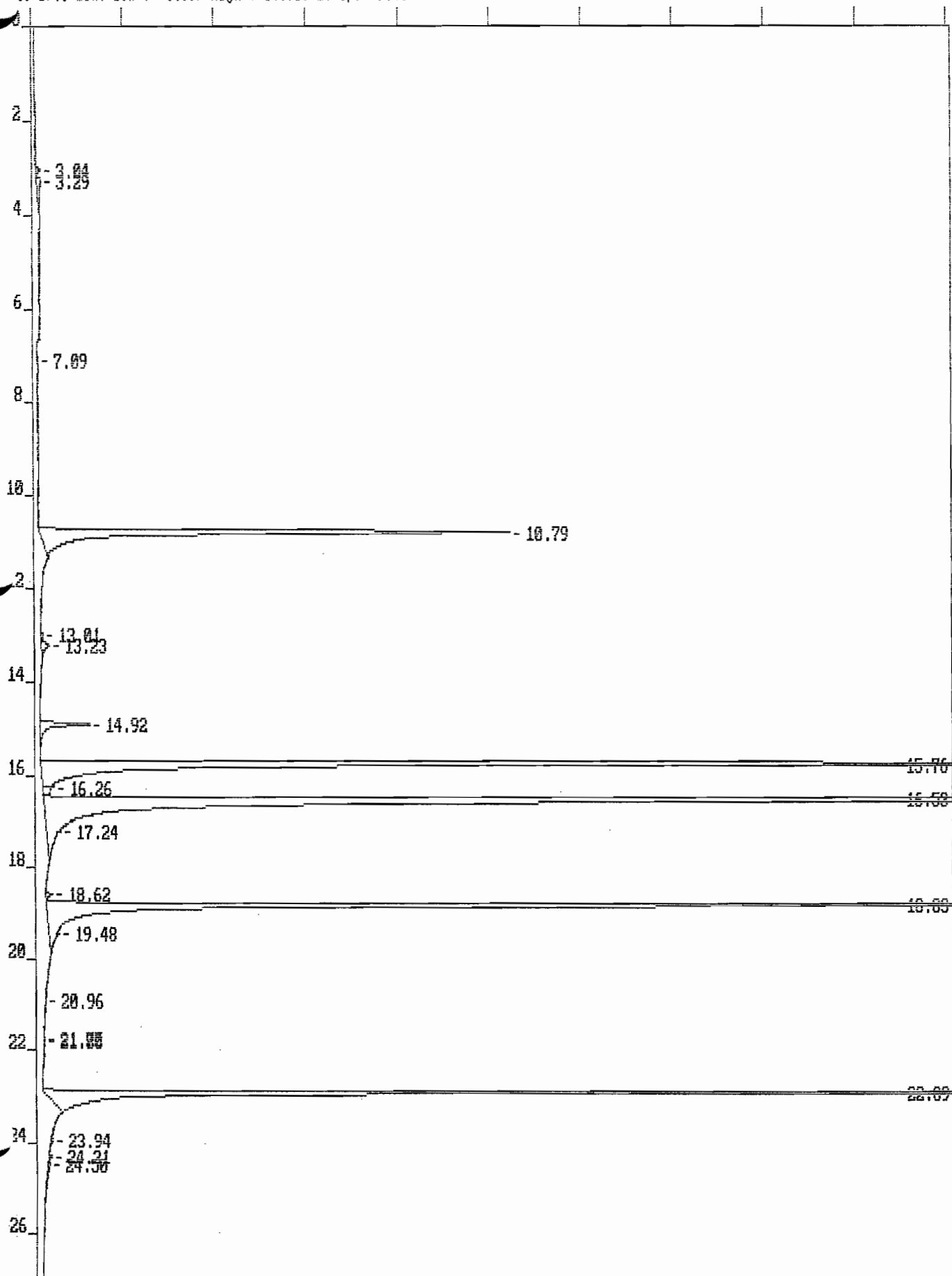
Date: 10/10/07

File=C:\CP\DATA1\20280.47R Date printed=10-09-2001 Time= 10:14:50

Sample Name=3699893

01280A201127,8404

to 27.0 min. Low Y=-0.087 High Y=14.913 mv Span=15.0



Sample Name: 3699893

Batch: 01280A20

Date Taken: Oct 9, 2001 10:14:45

Raw File: C:\CP\DATA1\20280.47R

ea File: C:\CP\DATA1\20280.47A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 68):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
3.610	3.610	DICHLORODIFLUOROMETH	0.0000	0
3.824	3.824	CHLOROMETHANE	0.0000	0
4.146	4.146	VINYL CHLORIDE	0.0000	0
4.655	4.655	BROMOMETHANE	0.0000	0
4.864	4.864	CHLOROETHANE	0.0000	0
5.758	5.758	TRICHLOROFLUOROMETHA	0.0000	0
6.724	6.724	1,1-DICHLOROETHENE	0.0000	0
7.095	7.068	METHYLENE CHLORIDE	0.0037	72 16
7.253	7.253	TRICHLOROTRIFLUOROET	0.0000	0
8.664	8.664	TRANS-1,2-DICHLOROET	0.0000	0
9.286	9.286	1,1-DICHLOROETHANE	0.0000	0
10.789	10.780	CIS-1,2-DICHLOROETHE	2.5198	50285 7699
11.157	11.157	BROMOCHLOROMETHANE	0.0000	0
11.339	11.339	CHLOROFORM	0.0000	0
11.499	11.499	2,2-DICHLOROPROPANE	0.0000	0
13.010	12.987	1,2-DICHLOROETHANE	0.0129	266 40
13.232	13.200	1,1,1-TRICHLOROETHAN	0.0411	1373 134
13.752	13.752	1,1-DICHLOROPROPENE	0.0000	0
14.150	14.150	CARBON TETRACHLORIDE	0.0000	0
15.556	15.556	DIBROMOMETHANE	0.0000	0
15.659	15.659	1,2-DICHLOROPROPANE	0.0000	0
15.759	15.756	TRICHLOROETHENE	5.7087	136199 32220
15.830	15.830	BROMODICHLOROMETHANE	0.0000	0
16.531	16.531	ISTD-1-BR-2-CLETHANE	1.0000	294931 76142
16.963	16.963	CIS-1,3-DICHLOROPROP	0.0000	0
17.602	17.602	TRANS-1,3-DICHLOROPR	0.0000	0
17.760	17.760	1,1,2-TRICHLOROETHAN	0.0000	0
18.068	18.068	1,3-DICHLOROPROPANE	0.0000	0
18.334	18.334	DIBROMOCHLOROMETHANE	0.0000	0
18.624	18.613	1,2-DIBROMOETHANE	0.0446	465 112
18.833	18.833	TETRACHLOROETHENE	13.2604	277343 101417
19.482	19.476	1,1,1,2-TETRACHLOROE	0.0042	169 32
19.547	19.547	CHLOROBENZENE	0.0000	0
20.015	20.015	BROMOFORM	0.0000	0
20.316	20.316	1,1,2,2-TETRACHLOROE	0.0000	0
20.442	20.442	1,2,3-TRICHLOROPROPA	0.0000	0
20.957	20.840	BROMOBENZENE	0.0041	34 8
21.100	21.100	2-CHLOROTOLUENE	0.0000	0
21.168	21.168	4-CHLOROTOLUENE	0.0000	0
21.753	21.740	1,3-DICHLOROBENZENE	0.0036	40 16
21.804	21.798	1,4-DICHLOROBENZENE	0.0041	88 21
22.099	22.099	1,2-DICHLOROBENZENE	0.0000	0
22.521	22.521	1,2-DIBROMO-3-CHLORO	0.0000	0
22.889	22.888	SURR-1B4CB-H	26.6199	197335 79489
23.936	23.929	1,2,4-TRICHLOROBENZE	0.0102	201 34
24.308	24.299	HEXACHLOROBUTADIENE	0.0134	276 55
24.496	24.482	1,2,3-TRICHLOROBENZE	0.0117	382 36

TOTAL 1,2-DICHLOROETHENE: 2.5198

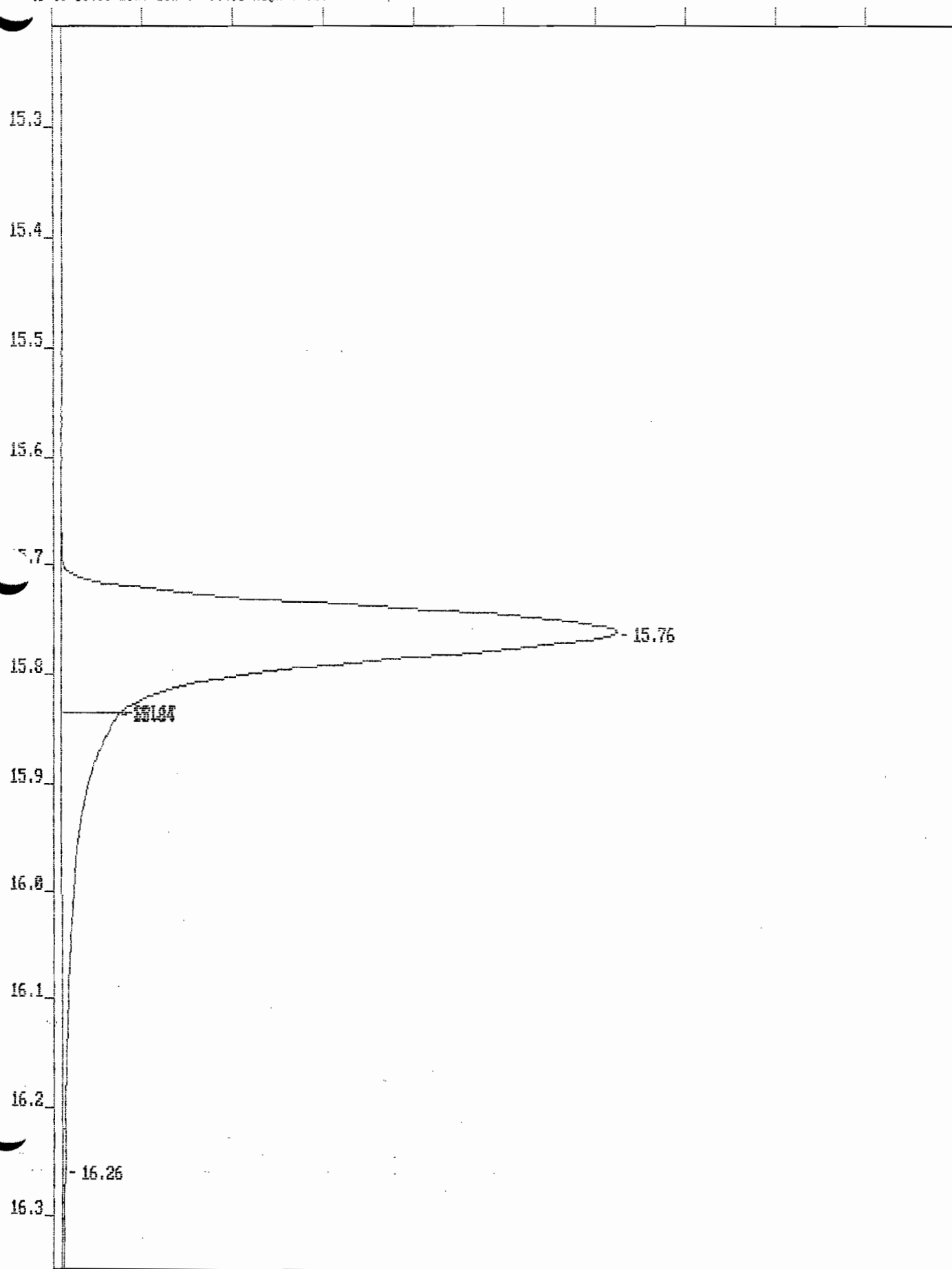
* Amounts in ug/L for water samples, ug/kg for solid samples.

Surrogate Recovery: BrClBenzene 88.7331 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 10:16:40

File=C:\CP\DATA1\20280.47R Date printed=10-10-2001 Time= 22:14:59
Sample Name=3699893 01280A201127,8404
21 to 16.35 min. Low Y=-0.461 High Y=52.058 mv Span=52.519



369893

⑥ 01280A20

Batch: 01280A20 Date Taken: Oct 9, 2001 10:14:45
 Raw File: C:\CP\DATA1\20280.47R
 Area File: C:\CP\DATA1\20280.47R
 Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75M x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115
 Threshold: -2 Calculation: INTERNAL std using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 74):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.612	3.612	DICHLORODIFLUOROMETH	0.0000	0	0
3.818	3.818	CHLOROMETHANE	0.0000	0	0
4.141	4.141	VINYL CHLORIDE	0.0000	0	0
4.652	4.652	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.760	5.760	TRICHLOROFLUOROMETHA	0.0000	0	0
6.732	6.732	1,1-DICHLOROETHENE	0.0000	0	0
7.095	7.077	METHYLENE CHLORIDE	0.0037	72	16
7.259	7.259	TRICHLOROTRIFLUOROET	0.0000	0	0
8.675	8.675	TRANS-1,2-DICHLOROET	0.0000	0	0
9.300	9.300	1,1-DICHLOROETHANE	0.0000	0	0
10.789	10.793	CIS-1,2-DICHLOROETHE	2.5198	50285	7699
11.168	11.168	BROMOCHLOROMETHANE	0.0000	0	0
11.352	11.352	CHLOROFORM	0.0000	0	0
11.512	11.512	2,2-DICHLOROPROPANE	0.0000	0	0
13.010	13.006	1,2-DICHLOROETHANE	0.0129	266	40
13.232	13.217	1,1,1-TRICHLOROETHAN	0.0411	1373	134
13.766	13.766	1,1-DICHLOROPROPENE	0.0000	0	0
14.168	14.168	CARBON TETRACHLORIDE	0.0000	0	0
15.570	15.570	DIBROMOMETHANE	0.0000	0	0
15.674	15.674	1,2-DICHLOROPROPANE	0.0000	0	0
15.759	15.771	TRICHLOROETHENE	5.7087	116047	32220
15.837	15.845	BROMODICHLOROMETHANE	0.7178	20152	3308
16.531	16.546	ISTD-1-BR-2-CLETHANE	1.0000	294931	76142
16.976	16.976	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.614	17.614	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.772	17.772	1,1,2-TRICHLOROETHAN	0.0000	0	0
18.080	18.080	1,3-DICHLOROPROPANE	0.0000	0	0
18.345	18.345	DIBROMOCHLOROMETHANE	0.0000	0	0
18.624	18.623	1,2-DIBROMOETHANE	0.0446	465	112
18.833	18.842	TETRACHLOROETHENE	13.2604	277343	101417
19.482	19.485	1,1,1,2-TETRACHLOROE	0.0042	169	32
19.556	19.556	CHLOROBENZENE	0.0000	0	0
20.022	20.022	BROMOFORM	0.0000	0	0
20.323	20.323	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.450	20.450	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.957	20.847	BROMOBENZENE	0.0041	34	8
21.107	21.107	2-CHLOROTOLUENE	0.0000	0	0
21.175	21.175	4-CHLOROTOLUENE	0.0000	0	0
21.753	21.747	1,3-DICHLOROBENZENE	0.0036	40	16
21.804	21.805	1,4-DICHLOROBENZENE	0.0041	88	21
22.106	22.106	1,2-DICHLOROBENZENE	0.0000	0	0
22.527	22.527	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.889	22.895	SURR-1B4CB-H	26.6199	197335	79489
23.936	23.936	1,2,4-TRICHLOROBENZE	0.0102	201	34
24.308	24.306	HEXACHLOROBUTADIENE	0.0134	276	55
24.496	24.489	1,2,3-TRICHLOROBENZE	0.0117	382	36
TOTAL 1,2-DICHLOROETHENE:			2.5198		

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

Surrogate Recovery: BrClBenzene 88.7331 %

Chrom Perfect version 6.07

Reported on 10-10-2001 at 22:17:17

Sample name: 3699893

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280.47R

Reviewed by: mm49

Verified by: mm49

Date: 10/9/01

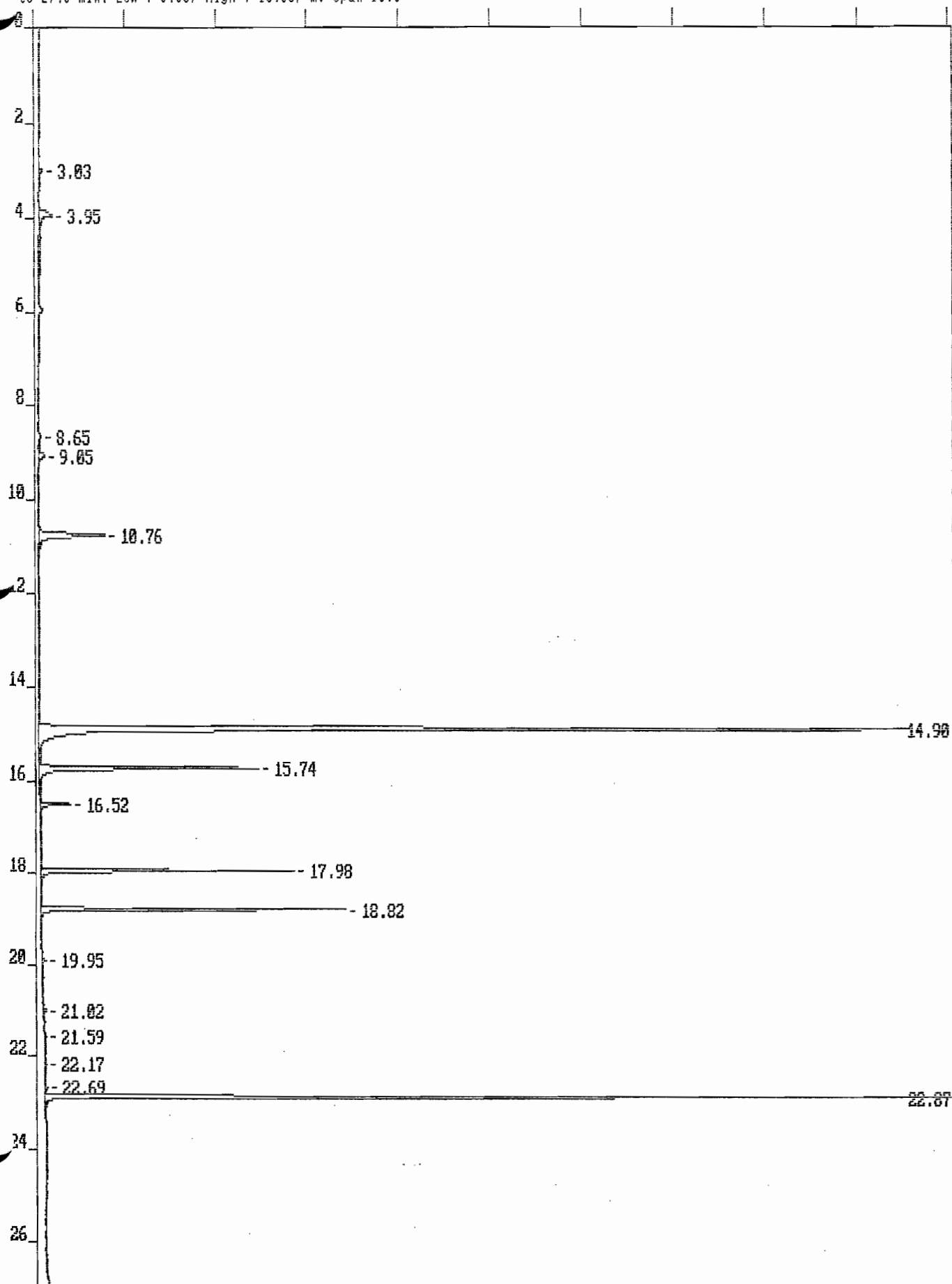
Date: 10/10/01

File=C:\CP\DATA1\20280B.47R Date printed=10-09-2001 Time= 10:16:54

Sample Name=3699893

01280A201127,8404

to 27.0 min. Low Y=0.037 High Y=15.037 mv Span=15.0



Sample Name: 3699893

Batch: 01280A20

Date Taken: Oct 9, 2001 10:14:45

Raw File: C:\CP\DATA1\20280B.47R

ba File: C:\CP\DATA1\20280B.47A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 62):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.129	4.129	VINYL CHLORIDE	0.0000	0	0
6.706	6.706	1,1-DICHLOROETHENE	0.0000	0	0
8.654	8.646	TRANS-1,2-DICHLOROET	0.0469	113	35
9.054	9.056	METHYL T-BUTYL ETHER	0.4123	755	97
10.762	10.762	CIS-1,2-DICHLOROETHE	2.8857	6707	1095
13.733	13.733	1,1-DICHLOROPROPENE	0.0000	0	0
14.292	14.292	BENZENE	0.0000	0	0
14.902	14.904	ISTD-FBENZENE	1.0000	69085	14296
15.741	15.742	TRICHLOROETHENE	6.0055	15410	3611
16.515	16.516	1-BROMO-2-CHLOROETHA	1.0000	1683	502
16.948	16.948	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.587	17.587	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.983	17.983	TOLUENE	4.3620	11401	4192
18.819	18.819	TETRACHLOROETHENE	12.4364	12734	5046
19.533	19.533	CHLOROBENZENE	0.0000	0	0
19.755	19.755	ETHYLBENZENE	0.0000	0	0
19.949	19.947	M,P-XYLENE	0.0801	180	70
20.243	20.243	STYRENE	0.0000	0	0
20.307	20.307	O-XYLENE	0.0000	0	0
20.636	20.636	ISOPROPYLBENZENE	0.0000	0	0
20.825	20.825	BROMOBENZENE	0.0000	0	0
21.018	21.017	N-PROPYLBENZENE	0.0596	162	49
21.086	21.086	2-CHLOROTOLUENE	0.0000	0	0
21.153	21.153	4-CHLOROTOLUENE	0.0000	0	0
21.270	21.270	1,3,5-TRIMETHYLBENZE	0.0000	0	0
21.493	21.493	TERT-BUTYLBENZENE	0.0000	0	0
21.591	21.588	1,2,4-TRIMETHYLBENZE	0.0364	164	34
21.674	21.674	SEC-BUTYLBENZENE	0.0000	0	0
21.726	21.726	1,3-DICHLOROBENZENE	0.0000	0	0
21.785	21.785	1,4-DICHLOROBENZENE	0.0000	0	0
21.828	21.828	P-ISOPROPYLTOLUENE	0.0000	0	0
22.085	22.085	1,2-DICHLOROBENZENE	0.0000	0	0
22.173	22.176	N-BUTYLBENZENE	0.0437	162	29
22.873	22.874	SURR-1B4CB-P	26.4210	48045	22302
23.915	23.915	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.217	24.217	NAPHTHALENE	0.0000	0	0
24.285	24.285	HEXACHLOROBUTADIENE	0.0000	0	0
24.467	24.467	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0801

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

Surrogate Recovery: BrClBenzene 88.0702 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 10:19:58

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699893

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280B.47R

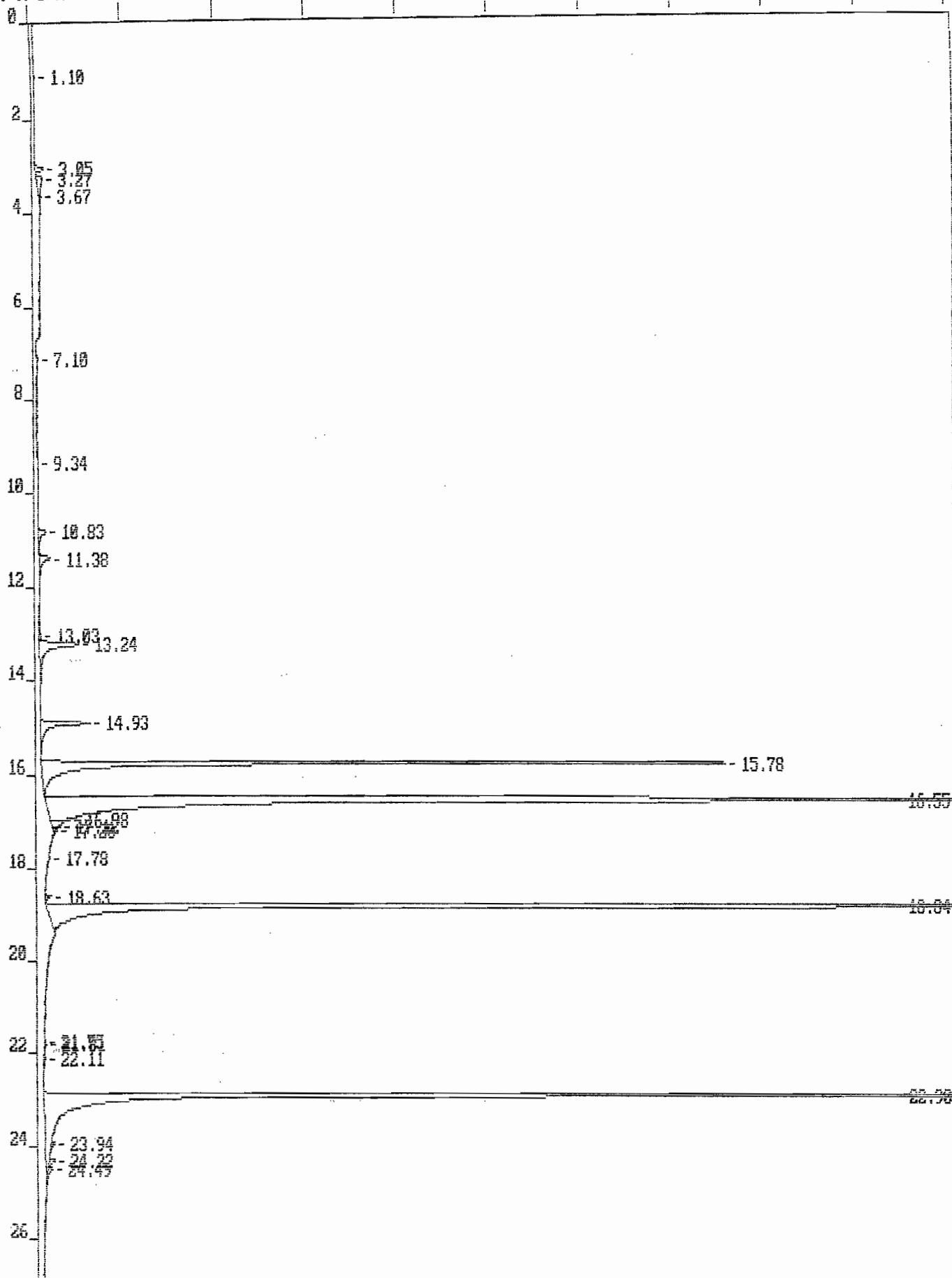
Reviewed by: MM49

Verified by: MM49

Date: 10/9/01

Date: 10/10/01

File=C:\CP\DATA1\20283.26R Date printed=10-10-2001 Time= 23:04:34
Sample Name=3699894 01283A201127,8404
0.0 to 27.0 min. Low Y=-0.091 High Y=14.909 mv Span=15.0



Sample Name: 3699894

Batch: 01283A20

Date Taken: Oct 10, 2001 23:04:29

Raw File: C:\CP\DATA1\20283.26R

Area File: C:\CP\DATA1\20283.26A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 74):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.669	3.612	DICHLORODIFLUOROMETH	0.0475	331	43
3.818	3.818	CHLOROMETHANE	0.0000	0	0
4.141	4.141	VINYL CHLORIDE	0.0000	0	0
4.652	4.652	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.760	5.760	TRICHLOROFLUOROMETHA	0.0000	0	0
6.732	6.732	1,1-DICHLOROETHENE	0.0000	0	0
7.100	7.077	METHYLENE CHLORIDE	0.0072	165	33
7.259	7.259	TRICHLOROTRIFLUOROET	0.0000	0	0
8.675	8.675	TRANS-1,2-DICHLOROET	0.0000	0	0
9.336	9.300	1,1-DICHLOROETHANE	0.0038	104	11
10.830	10.793	CIS-1,2-DICHLOROETHE	0.0399	1145	130
11.168	11.168	BROMOCHLOROMETHANE	0.0000	0	0
11.384	11.352	CHLOROFORM	0.0421	1521	182
11.512	11.512	2,2-DICHLOROPROPANE	0.0000	0	0
13.033	13.006	1,2-DICHLOROETHANE	0.0094	218	31
13.244	13.217	1,1,1-TRICHLOROETHAN	0.1849	5876	645
13.766	13.766	1,1-DICHLOROPROPENE	0.0000	0	0
14.168	14.168	CARBON TETRACHLORIDE	0.0000	0	0
15.570	15.570	DIBROMOMETHANE	0.0000	0	0
15.674	15.674	1,2-DICHLOROPROPANE	0.0000	0	0
15.779	15.771	TRICHLOROETHENE	1.8537	48031	11192
15.845	15.845	BROMODICHLOROMETHANE	0.0000	0	0
16.545	16.546	ISTD-1-BR-2-CLETHANE	1.0000	288350	81454
16.977	16.976	CIS-1,3-DICHLOROPROP	0.0588	1785	319
17.614	17.614	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.778	17.772	1,1,2-TRICHLOROETHAN	0.0032	79	21
18.080	18.080	1,3-DICHLOROPROPANE	0.0000	0	0
18.345	18.345	DIBROMOCHLOROMETHANE	0.0000	0	0
18.633	18.623	1,2-DIBROMOETHANE	0.0398	413	107
18.843	18.842	TETRACHLOROETHENE	10.8739	233601	88967
19.485	19.485	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.556	19.556	CHLOROBENZENE	0.0000	0	0
20.022	20.022	BROMOFORM	0.0000	0	0
20.323	20.323	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.450	20.450	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.847	20.847	BROMOBENZENE	0.0000	0	0
21.107	21.107	2-CHLOROTOLUENE	0.0000	0	0
21.175	21.175	4-CHLOROTOLUENE	0.0000	0	0
21.752	21.747	1,3-DICHLOROBENZENE	0.0051	62	25
21.811	21.805	1,4-DICHLOROBENZENE	0.0074	261	41
22.113	22.106	1,2-DICHLOROBENZENE	0.0051	167	25
22.527	22.527	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.895	22.895	SURR-1B4CB-H	27.2607	221685	87081
23.941	23.936	1,2,4-TRICHLOROBENZE	0.0182	372	65
24.316	24.306	HEXACHLOROBUTADIENE	0.0233	540	103
24.494	24.489	1,2,3-TRICHLOROBENZE	0.0224	551	74
		TOTAL 1,2-DICHLOROETHENE:	0.0399		

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

Surrogate Recovery: BrClBenzene 90.8690 %

Chrom Perfect version 6.07

Reported on 10-10-2001 at 23:06:24

Sample name: 3699894

Batch: 01283A201127,840

Raw file: C:\CP\DATA1\20283.26R

Reviewed by: SCP 1688

Verified by: VMM469

Date: 10-10-01

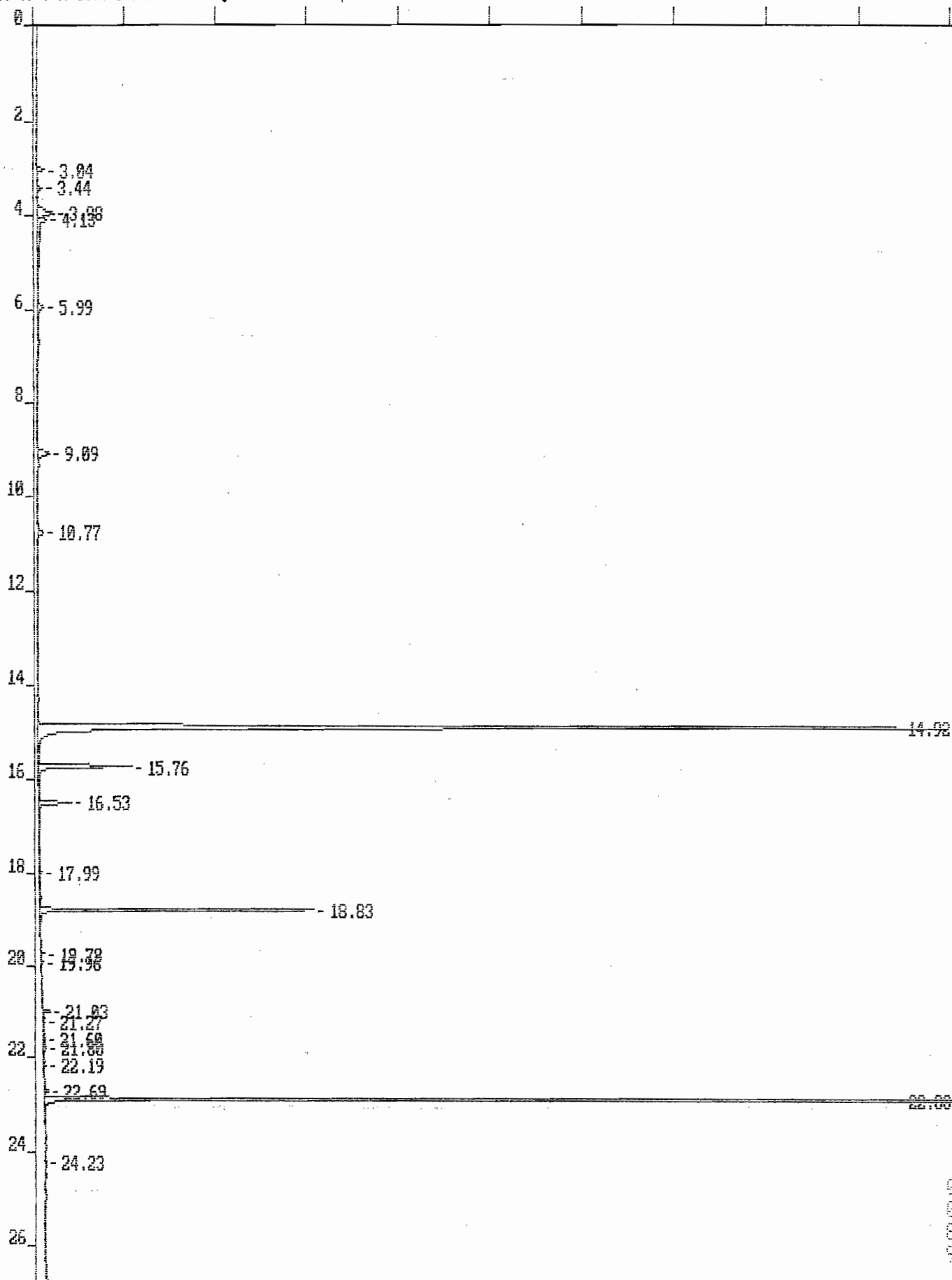
Date: 10/11/01

File=C:\CP\DATA1\202838.26R Date printed=10-10-2001 Time= 23:06:38

Sample Name=3699894

01283A201127,8404

0.0 to 27.0 min. Low Y=0.016 High Y=15.016 mv Span=15.0



Sample Name: 3699894

Batch: 01283A20

Date Taken: Oct 10, 2001 23:04:29

Raw File: C:\CP\DATA1\20283B.26R

Area File: C:\CP\DATA1\20283B.26A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.125	4.126	VINYL CHLORIDE	0.8442	3965	167
6.714	6.714	1,1-DICHLOROETHENE	0.0000	0	0
8.658	8.658	TRANS-1,2-DICHLOROET	0.0000	0	0
9.085	9.063	METHYL T-BUTYL ETHER	0.7774	1441	187
10.773	10.776	CIS-1,2-DICHLOROETHE	0.2372	518	92
13.753	13.753	1,1-DICHLOROPROPENE	0.0000	0	0
14.311	14.311	BENZENE	0.0000	0	0
14.920	14.921	ISTD-FBENZENE	1.0000	69749	14660
15.758	15.756	TRICHLOROETHENE	2.4970	6033	1539
16.529	16.530	1-BROMO-2-CHLOROETHA	1.0000	2021	544
16.961	16.961	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.599	17.599	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.994	17.995	TOLUENE	0.0490	563	48
18.828	18.828	TETRACHLOROETHENE	10.8585	11228	4518
19.542	19.542	CHLOROBENZENE	0.0000	0	0
19.775	19.763	ETHYLBENZENE	0.0765	225	65
19.956	19.956	M,P-XYLENE	0.0566	248	51
20.251	20.251	STYRENE	0.0000	0	0
20.314	20.314	O-XYLENE	0.0000	0	0
20.644	20.644	ISOPROPYLBENZENE	0.0000	0	0
20.833	20.833	BROMOBENZENE	0.0000	0	0
21.027	21.024	N-PROPYLBENZENE	0.1440	369	121
21.093	21.093	2-CHLOROTOLUENE	0.0000	0	0
21.160	21.160	4-CHLOROTOLUENE	0.0000	0	0
21.274	21.277	1,3,5-TRIMETHYLBENZE	0.0329	104	41
21.500	21.500	TERT-BUTYLBENZENE	0.0000	0	0
21.596	21.595	1,2,4-TRIMETHYLBENZE	0.0370	162	35
21.680	21.680	SEC-BUTYLBENZENE	0.0000	0	0
21.733	21.733	1,3-DICHLOROBENZENE	0.0000	0	0
21.796	21.791	1,4-DICHLOROBENZENE	0.0507	321	48
21.834	21.834	P-ISOPROPYLTOLUENE	0.0000	0	0
22.092	22.092	1,2-DICHLOROBENZENE	0.0000	0	0
22.187	22.182	N-BUTYLBENZENE	0.0622	307	42
22.880	22.880	SURR-1B4CB-P	28.1267	52459	24346
23.921	23.921	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.232	24.223	NAPHTHALENE	0.0574	136	26
24.291	24.291	HEXACHLOROBUTADIENE	0.0000	0	0
24.474	24.474	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0566

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

Surrogate Recovery: BrClBenzene 93.7558 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 23:09:42

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699894

Batch: 01283A201127,840

Raw file:

C:\CP\DATA1\20283B.26R

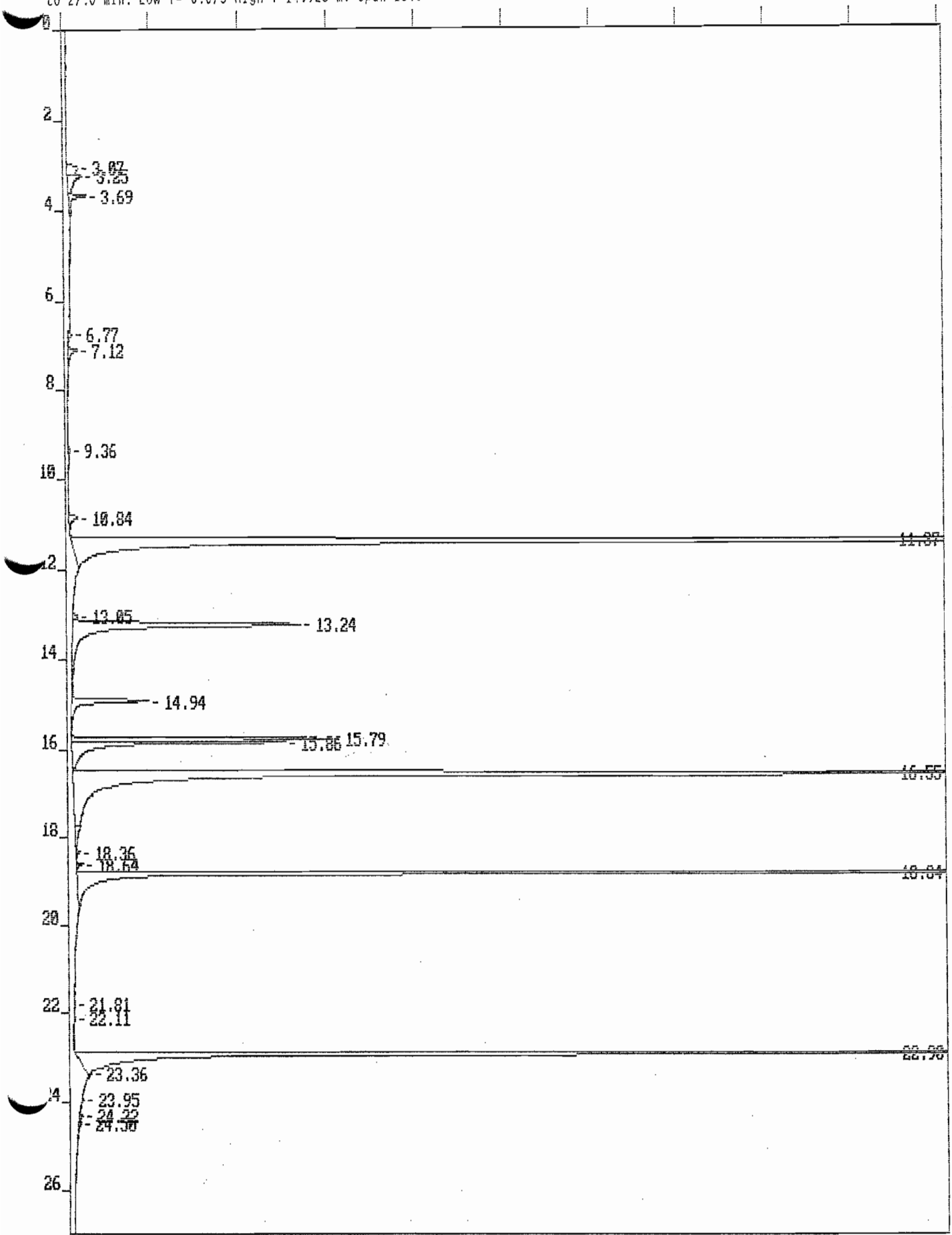
Reviewed by: SKP 1088

Verified by: IMM469

Date: 10-10-01

Date: 10/10/01

File=C:\VCP\DATA1\20283.22R Date printed=10-10-2001 Time=19:47:57
Sample Name=3699895 01283A201127,8404
to 27.0 min. Low Y=-0.075 High Y=14.925 mv Span=15.0



00002

Sample Name: 3699895
 Batch: 01283A20 Date Taken: Oct 10, 2001 19:47:52
 Raw File: C:\CP\DATA1\20283.22R
 Data File: C:\CP\DATA1\20283.22A
 Method File: c:\cp\data1\20280.MET(version 5)
 EPA Methods 502.2/601/80108/8021A Run Time: 27
 75M x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115
 Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 73):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.688	3.610	DICHLORODIFLUOROMETH	0.3243	2372	304
3.814	3.814	CHLOROMETHANE	0.0000	0	0
4.137	4.137	VINYL CHLORIDE	0.0000	0	0
4.649	4.649	BROMOMETHANE	0.0000	0	0
4.862	4.862	CHLOROETHANE	0.0000	0	0
5.755	5.755	TRICHLOROFLUOROMETHA	0.0000	0	0
6.771	6.730	1,1-DICHLOROETHENE	0.0217	406	71
7.116	7.076	METHYLENE CHLORIDE	0.0345	1317	164
7.260	7.260	TRICHLOROTRIFLUOROET	0.0000	0	0
8.674	8.674	TRANS-1,2-DICHLOROET	0.0000	0	0
9.360	9.300	1,1-DICHLOROETHANE	0.0130	414	40
10.836	10.795	CIS-1,2-DICHLOROETHE	0.0469	1308	159
11.161	11.161	BROMOCHLOROMETHANE	0.0000	0	0
11.368	11.350	CHLOROFORM	5.2596	147385	23532
11.510	11.510	2,2-DICHLOROPROPANE	0.0000	0	0
13.050	13.004	1,2-DICHLOROETHANE	0.0256	504	89
13.236	13.217	1,1,1-TRICHLOROETHAN	1.0773	32424	3888
13.770	13.770	1,1-DICHLOROPROPENE	0.0000	0	0
14.166	14.166	CARBON TETRACHLORIDE	0.0000	0	0
15.569	15.569	DIBROMOMETHANE	0.0000	0	0
15.673	15.673	1,2-DICHLOROPROPANE	0.0000	0	0
15.787	15.770	TRICHLOROETHENE	0.7053	14407	4404
15.855	15.843	BROMODICHLOROMETHANE	0.7179	21335	3661
16.549	16.544	ISTD-1-BR-2-CLETHANE	1.0000	301648	84248
16.974	16.974	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.612	17.612	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.770	17.770	1,1,2-TRICHLOROETHAN	0.0000	0	0
18.078	18.078	1,3-DICHLOROPROPANE	0.0000	0	0
18.359	18.343	DIBROMOCHLOROMETHANE	0.0202	487	86
18.636	18.622	1,2-DIBROMOETHANE	0.0471	546	131
18.845	18.840	TETRACHLOROETHENE	3.4577	82091	29260
19.484	19.484	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.555	19.555	CHLOROBENZENE	0.0000	0	0
20.022	20.022	BROMOFORM	0.0000	0	0
20.322	20.322	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.448	20.448	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.846	20.846	BROMOBENZENE	0.0000	0	0
21.106	21.106	2-CHLOROTOLUENE	0.0000	0	0
21.173	21.173	4-CHLOROTOLUENE	0.0000	0	0
21.746	21.746	1,3-DICHLOROBENZENE	0.0000	0	0
21.811	21.803	1,4-DICHLOROBENZENE	0.0042	203	24
22.110	22.105	1,2-DICHLOROBENZENE	0.0037	290	19
22.526	22.526	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.896	22.894	SURR-1B4CB-H	26.5098	214872	87588
23.950	23.935	1,2,4-TRICHLOROBENZE	0.0110	244	41
24.319	24.305	HEXACHLOROBUTADIENE	0.0144	338	65
24.503	24.488	1,2,3-TRICHLOROBENZE	0.0118	344	40
TOTAL 1,2-DICHLOROETHENE:			0.0469		

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

Surrogate Recovery: BrClBenzene 88.3661 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 19:49:47

Sample name: 3699895

Batch: 01263A201127,840

Raw file: C:\CP\DATA1\20283.22R

Reviewed by: SCP 688

Verified by: VMM 419

Date: 10-11-01

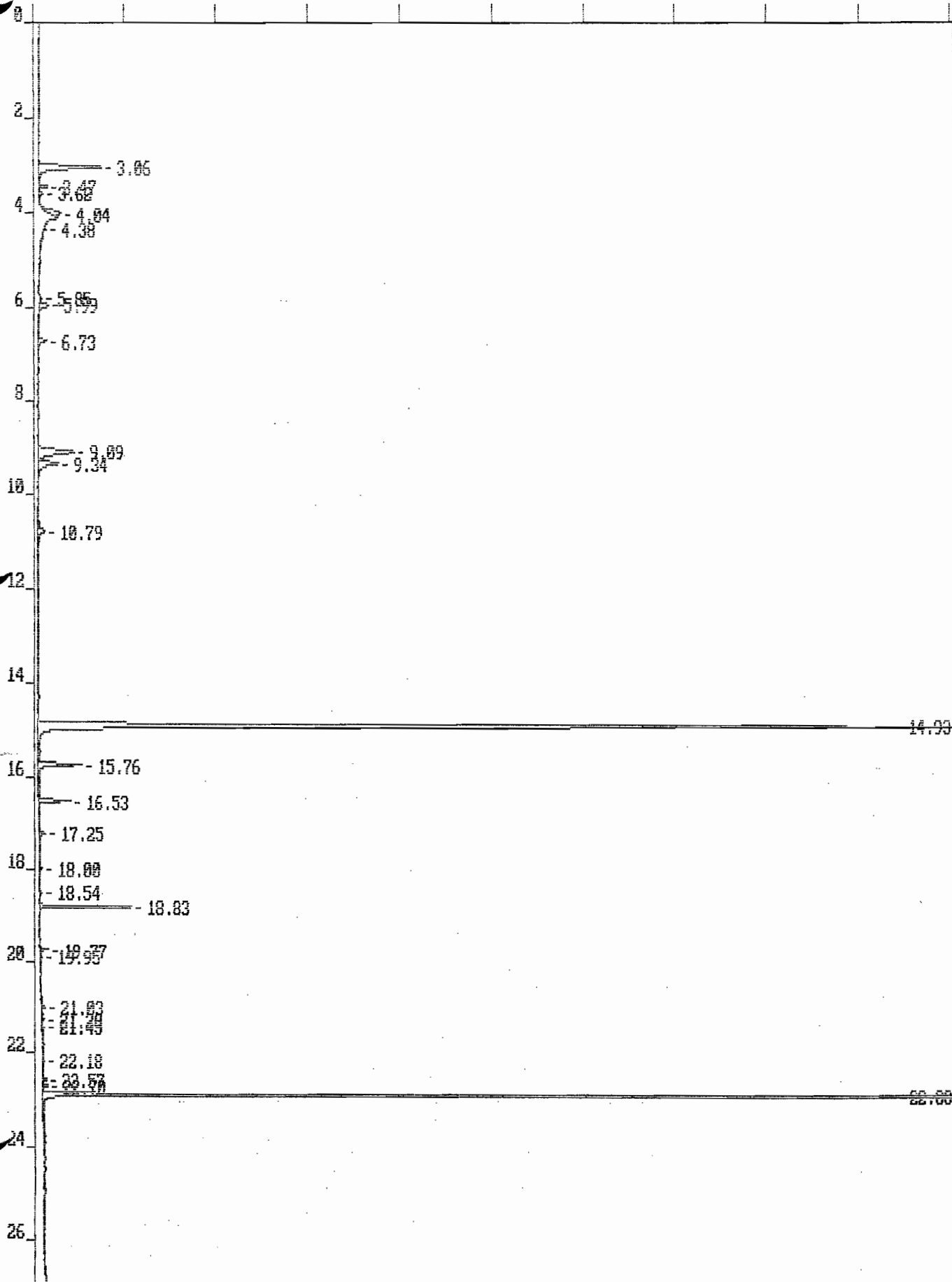
Date: 10/11/09

File=C:\CP\DATA1\20283B.22R Date printed=10-10-2001 Time= 19:50:01

Sample Name=3699895

01283A201127,8404

to 27.0 min. Low Y=0.033 High Y=15.033 mv Span=15.0



Sample Name: 3699895

Batch: 01283A20

Date Taken: Oct 10, 2001 19:47:52

Raw File: C:\CP\DATA1\20283B.22R

Seal File: C:\CP\DATA1\20283B.22A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 67):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.120	4.120	VINYL CHLORIDE	0.0000	0	0
6.734	6.712	1,1-DICHLOROETHENE	0.3629	795	134
8.657	8.657	TRANS-1,2-DICHLOROET	0.0000	0	0
9.087	9.066	METHYL T-BUTYL ETHER	2.3720	4729	591
10.793	10.776	CIS-1,2-DICHLOROETHE	0.2710	1109	109
13.753	13.753	1,1-DICHLOROPROPENE	0.0000	0	0
14.311	14.311	BENZENE	0.0000	0	0
14.927	14.920	ISTD-FBENZENE	1.0000	69273	15192
15.763	15.755	TRICHLOROETHENE	1.1265	3186	720
16.532	16.527	1-BROMO-2-CHLOROETHA	1.0000	2079	539
16.959	16.959	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.597	17.597	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.999	17.992	TOLUENE	0.0471	161	48
18.830	18.826	TETRACHLOROETHENE	3.4809	3669	1501
19.541	19.541	CHLOROBENZENE	0.0000	0	0
19.773	19.762	ETHYLBENZENE	0.1664	332	146
19.954	19.954	M,P-XYLENE	0.0298	153	28
20.249	20.249	STYRENE	0.0000	0	0
20.313	20.313	O-XYLENE	0.0000	0	0
20.642	20.642	ISOPROPYLBENZENE	0.0000	0	0
20.831	20.831	BROMOBENZENE	0.0000	0	0
21.033	21.022	N-PROPYLBENZENE	0.0838	277	73
21.091	21.091	2-CHLOROTOLUENE	0.0000	0	0
21.159	21.159	4-CHLOROTOLUENE	0.0000	0	0
21.280	21.275	1,3,5-TRIMETHYLBENZE	0.0340	210	44
21.454	21.498	TERT-BUTYLBENZENE	0.0664	315	46
21.594	21.594	1,2,4-TRIMETHYLBENZE	0.0000	0	0
21.679	21.679	SEC-BUTYLBENZENE	0.0000	0	0
21.732	21.732	1,3-DICHLOROBENZENE	0.0000	0	0
21.790	21.790	1,4-DICHLOROBENZENE	0.0000	0	0
21.833	21.833	P-ISOPROPYLTOLUENE	0.0000	0	0
22.091	22.091	1,2-DICHLOROBENZENE	0.0000	0	0
22.178	22.181	N-BUTYLBENZENE	0.0449	208	32
22.881	22.879	SURR-1B4CB-P	27.5127	53638	24678
23.920	23.920	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.223	24.223	NAPHTHALENE	0.0000	0	0
24.290	24.290	HEXACHLOROBUTADIENE	0.0000	0	0
24.474	24.474	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0298

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

Surrogate Recovery: BrClBenzene 91.7089 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 19:53:06

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699895

Batch: 01283A201127,840

Raw file: C:\CP\DATA1\20283B.22R

Reviewed by: SKP688

Verified by: UMMK9

Date: 10-10-01

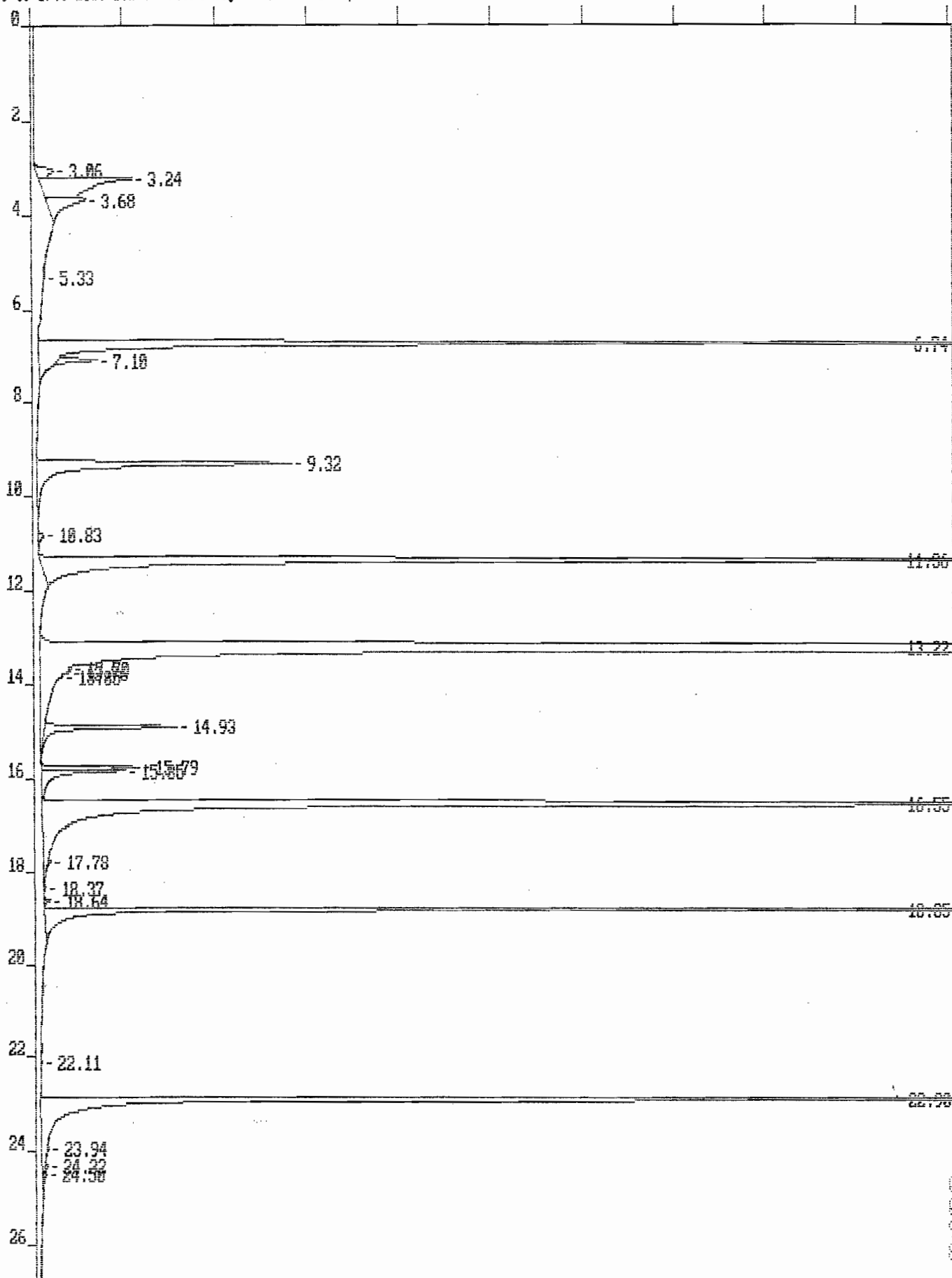
Date: 10/11/07

File=C:\CP\DATA1\20283.27R Date printed=10-10-2001 Time= 23:41:50

Sample Name=3699896

01283A201127,8404

0.0 to 27.0 min. Low Y=-0.074 High Y=14.926 mv Span=15.0



Sample Name: 3699896

Batch: 01283A20

Date Taken: Oct 10, 2001 23:41:45

Raw File: C:\CP\DATA1\20283.27R

Area File: C:\CP\DATA1\20283.27A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 74):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.676	3.612	DICHLORODIFLUOROMETH	0.6683	8929	637
3.818	3.818	CHLOROMETHANE	0.0000	0	0
4.141	4.141	VINYL CHLORIDE	0.0000	0	0
4.652	4.652	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.760	5.760	TRICHLOROFLUOROMETHA	0.0000	0	0
6.745	6.732	1,1-DICHLOROETHENE	4.9777	90845	16469
7.097	7.077	METHYLENE CHLORIDE	0.1402	3308	679
7.259	7.259	TRICHLOROTRIFLUOROET	0.0000	0	0
8.675	8.675	TRANS-1,2-DICHLOROET	0.0000	0	0
9.318	9.300	1,1-DICHLOROETHANE	1.3137	33317	4146
10.830	10.793	CIS-1,2-DICHLOROETHE	0.0279	892	96
11.168	11.168	BROMOCHLOROMETHANE	0.0000	0	0
11.361	11.352	CHLOROFORM	4.3144	127757	19647
11.512	11.512	2,2-DICHLOROPROPANE	0.0000	0	0
13.006	13.006	1,2-DICHLOROETHANE	0.0000	0	0
13.223	13.217	1,1,1-TRICHLOROETHAN	25.3377	663444	93065
13.759	13.766	1,1-DICHLOROPROPENE	0.0375	324	107
14.168	14.168	CARBON TETRACHLORIDE	0.0000	0	0
15.570	15.570	DIBROMOMETHANE	0.0000	0	0
15.674	15.674	1,2-DICHLOROPROPANE	0.0000	0	0
15.786	15.771	TRICHLOROETHENE	0.2532	5482	1609
15.853	15.845	BROMODICHLOROMETHANE	0.2673	9416	1388
16.547	16.546	ISTD-1-BR-2-CLETHANE	1.0000	321633	85748
16.976	16.976	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.614	17.614	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.784	17.772	1,1,2-TRICHLOROETHAN	0.0086	276	58
18.080	18.080	1,3-DICHLOROPROPANE	0.0000	0	0
18.366	18.345	DIBROMOCHLOROMETHANE	0.0053	113	23
18.637	18.623	1,2-DIBROMOETHANE	0.0414	458	117
18.845	18.842	TETRACHLOROETHENE	3.1607	76140	27223
19.485	19.485	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.556	19.556	CHLOROBENZENE	0.0000	0	0
20.022	20.022	BROMOFORM	0.0000	0	0
20.323	20.323	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.450	20.450	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.847	20.847	BROMOBENZENE	0.0000	0	0
21.107	21.107	2-CHLOROTOLUENE	0.0000	0	0
21.175	21.175	4-CHLOROTOLUENE	0.0000	0	0
21.747	21.747	1,3-DICHLOROBENZENE	0.0000	0	0
21.805	21.805	1,4-DICHLOROBENZENE	0.0000	0	0
22.114	22.106	1,2-DICHLOROBENZENE	0.0025	59	13
22.527	22.527	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.898	22.895	SURR-1B4CB-H	26.9109	228409	90496
23.943	23.936	1,2,4-TRICHLOROBENZE	0.0106	196	40
24.322	24.306	HEXACHLOROBUTADIENE	0.0126	301	58
24.497	24.489	1,2,3-TRICHLOROBENZE	0.0099	281	34
TOTAL 1,2-DICHLOROETHENE:			0.0279		

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

Surrogate Recovery: BrClBenzene 89.7028 %

Chrom Perfect version 6.07

Reported on 10-10-2001 at 23:43:40

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Sample name: 3699896

Batch: 01283A201127,840

Raw file: C:\CP\DATA1\20283.27R

Reviewed by: SAPL088

Verified by: Ummu49

Date: 10-10-01

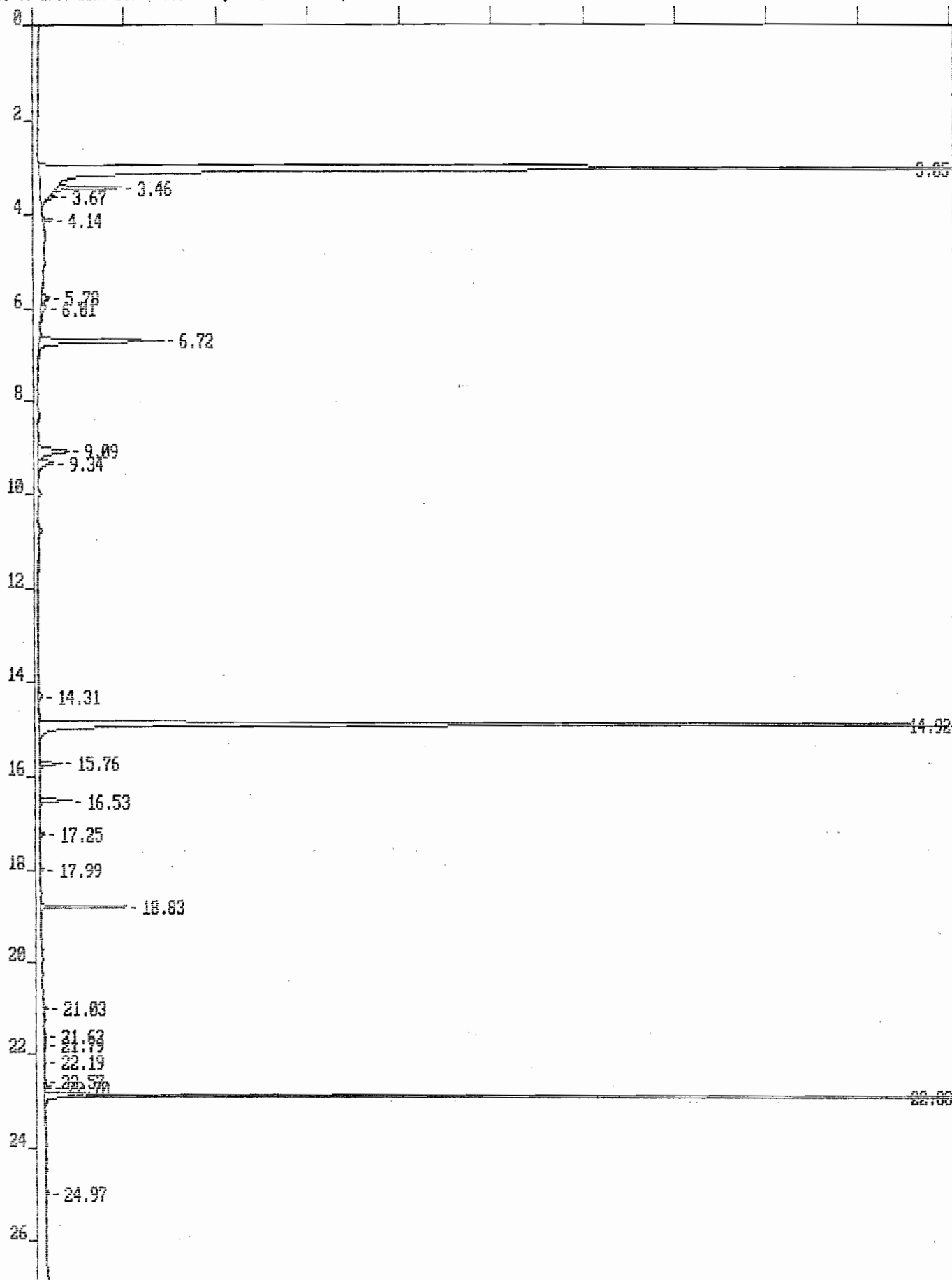
Date: 10/1/01

File=C:\CP\DATA1\202838.27R Date printed=10-10-2001 Time= 23:43:54

Sample Name=3699896

01283A201127,8404

0.0 to 27.0 min. Low Y=0.027 High Y=15.027 mv Span=15.0



Sample Name: 3699896
 Batch: 01283A20 Date Taken: Oct 10, 2001 23:41:45
 Raw File: C:\CP\DATA1\20283B.27R
 Area File: C:\CP\DATA1\20283B.27A
 Method File: c:\cp\data1\20280B.MET(version 2)
 EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75m x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 115
 Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.142	4.126	VINYL CHLORIDE	0.8782	690	176
6.720	6.714	1,1-DICHLOROETHENE	5.6315	10382	2032
8.658	8.658	TRANS-1,2-DICHLOROET	0.0000	0	0
9.090	9.063	METHYL T-BUTYL ETHER	2.0828	4122	507
13.753	13.753	1,1-DICHLOROPROPENE	0.0000	0	0
14.307	14.311	BENZENE	0.0877	463	69
14.921	14.921	ISTD-FBENZENE	1.0000	70697	14832
15.757	15.756	TRICHLOROETHENE	0.5616	1219	350
16.532	16.530	1-BROMO-2-CHLOROETHA	1.0000	1807	525
16.961	16.961	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.599	17.599	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.994	17.995	TOLUENE	0.0666	252	66
18.829	18.828	TETRACHLOROETHENE	3.3371	3771	1405
19.542	19.542	CHLOROBENZENE	0.0000	0	0
19.763	19.763	ETHYLBENZENE	0.0000	0	0
19.956	19.956	M,P-XYLENE	0.0000	0	0
20.251	20.251	STYRENE	0.0000	0	0
20.314	20.314	O-XYLENE	0.0000	0	0
20.644	20.644	ISOPROPYLBENZENE	0.0000	0	0
20.833	20.833	BROMOBENZENE	0.0000	0	0
21.033	21.024	N-PROPYLBENZENE	0.1055	346	90
21.093	21.093	2-CHLOROTOLUENE	0.0000	0	0
21.160	21.160	4-CHLOROTOLUENE	0.0000	0	0
21.277	21.277	1,3,5-TRIMETHYLBENZE	0.0000	0	0
21.500	21.500	TERT-BUTYLBENZENE	0.0000	0	0
21.623	21.595	1,2,4-TRIMETHYLBENZE	0.0364	197	35
21.680	21.680	SEC-BUTYLBENZENE	0.0000	0	0
21.733	21.733	1,3-DICHLOROBENZENE	0.0000	0	0
21.794	21.791	1,4-DICHLOROBENZENE	0.0412	407	39
21.834	21.834	P-ISOPROPYLTOLUENE	0.0000	0	0
22.092	22.092	1,2-DICHLOROBENZENE	0.0000	0	0
22.187	22.182	N-BUTYLBENZENE	0.0585	263	40
22.882	22.880	SURR-1B4CB-P	28.4439	55126	24910
23.921	23.921	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.223	24.223	NAPHTHALENE	0.0000	0	0
24.291	24.291	HEXACHLOROBUTADIENE	0.0000	0	0
24.474	24.474	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0000

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

Surrogate Recovery: BrClBenzene 94.8130 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 23:46:57

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699896

Batch: 01283A201127,840

Raw file:

C:\CP\DATA1\20283B.27R

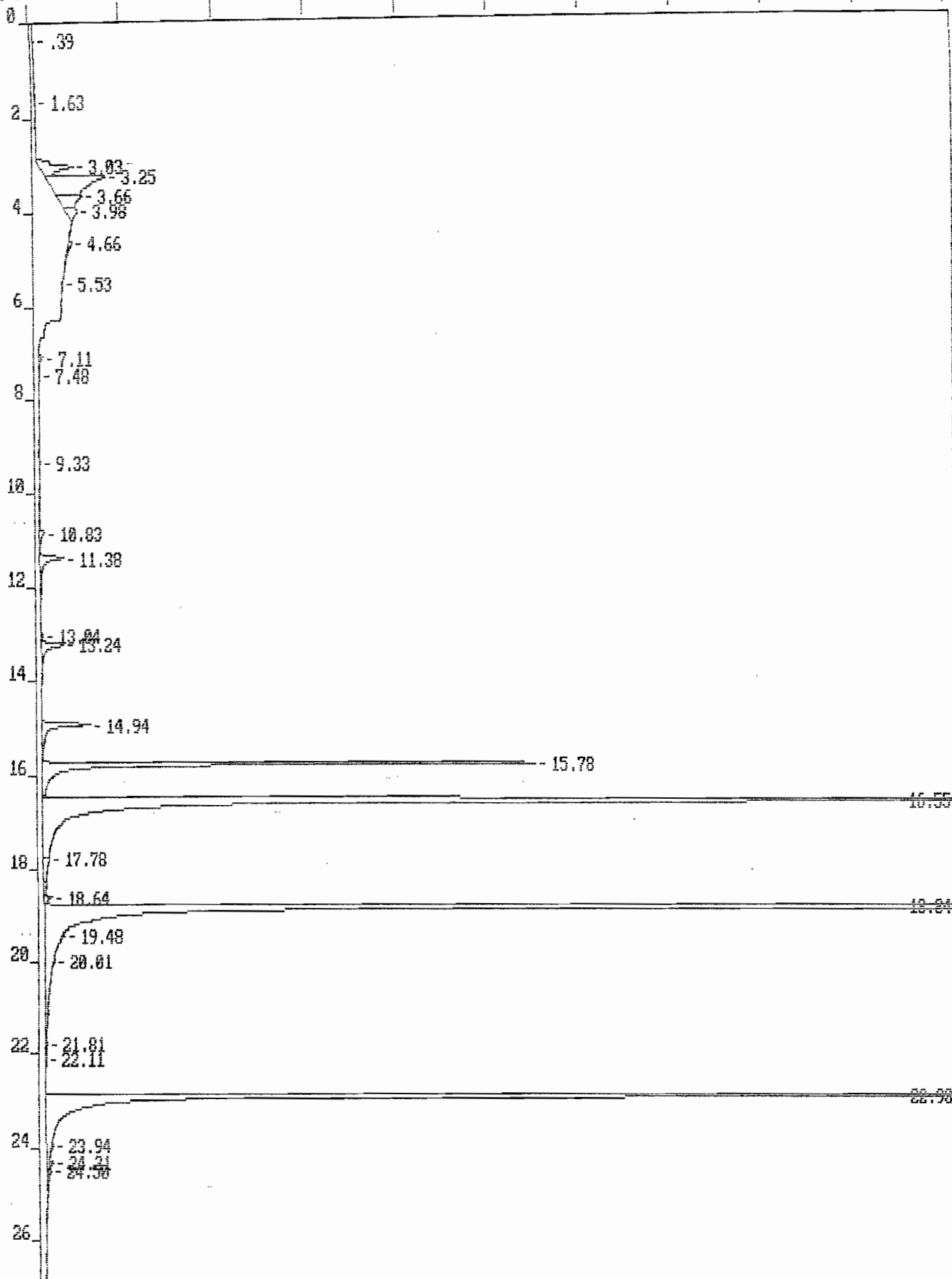
Reviewed by: SDP688

Verified by: VMM469

Date: 10-10-01

Date: 10/11/07

File=C:\CP\DATA\20283.28R Date printed=10-11-2001 Time= 00:19:31
Sample Name=3699897 01283A201127,8404
0.0 to 27.0 min. Low Y=-0.075 High Y=14.925 mv Span=15.0



Sample Name: 3699897

Batch: 01283A20

Date Taken: Oct 11, 2001 00:19:26

Raw File: C:\CP\DATA1\20283.28R

Area File: C:\CP\DATA1\20283.28A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 74):

Ret Time	Expected	Peak Name	Amount *	Peak Area	Peak Height
(min)	RT (min)		(ug/L)		
3.663	3.612	DICHLORODIFLUOROMETH	0.4428	4623	413
3.818	3.818	CHLOROMETHANE	0.0000	0	0
3.984	4.141	VINYL CHLORIDE	0.0920	2462	200
4.657	4.652	BROMOMETHANE	0.0530	815	69
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.760	5.760	TRICHLOROFLUOROMETHA	0.0000	0	0
6.732	6.732	1,1-DICHLOROETHENE	0.0000	0	0
7.108	7.077	METHYLENE CHLORIDE	0.0133	439	63
7.259	7.259	TRICHLOROTRIFLUOROET	0.0000	0	0
8.675	8.675	TRANS-1,2-DICHLOROET	0.0000	0	0
9.331	9.300	1,1-DICHLOROETHANE	0.0057	106	18
10.832	10.793	CIS-1,2-DICHLOROETHE	0.0218	764	73
11.168	11.168	BROMOCHLOROMETHANE	0.0000	0	0
11.383	11.352	CHLOROFORM	0.0865	3493	386
11.512	11.512	2,2-DICHLOROPROPANE	0.0000	0	0
13.044	13.006	1,2-DICHLOROETHANE	0.0100	233	35
13.244	13.217	1,1,1-TRICHLOROETHAN	0.1018	3151	366
13.766	13.766	1,1-DICHLOROPROPENE	0.0000	0	0
14.168	14.168	CARBON TETRACHLORIDE	0.0000	0	0
15.570	15.570	DIBROMOMETHANE	0.0000	0	0
15.674	15.674	1,2-DICHLOROPROPANE	0.0000	0	0
15.783	15.771	TRICHLOROETHENE	1.2999	34771	8085
15.845	15.845	BROMODICHLOROMETHANE	0.0000	0	0
16.548	16.546	ISTD-1-BR-2-CLETHANE	1.0000	297480	83912
16.976	16.976	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.614	17.614	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.785	17.772	1,1,2-TRICHLOROETHAN	0.0163	2305	107
18.080	18.080	1,3-DICHLOROPROPANE	0.0000	0	0
18.345	18.345	DIBROMOCHLOROMETHANE	0.0000	0	0
18.637	18.623	1,2-DIBROMOETHANE	0.0462	743	128
18.845	18.842	TETRACHLOROETHENE	28.5551	625097	240678
19.480	19.485	1,1,1,2-TETRACHLOROE	0.0069	217	59
19.556	19.556	CHLOROBENZENE	0.0000	0	0
20.013	20.022	BROMOFORM	0.0063	84	16
20.323	20.323	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.450	20.450	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.847	20.847	BROMOBENZENE	0.0000	0	0
21.107	21.107	2-CHLOROTOLUENE	0.0000	0	0
21.175	21.175	4-CHLOROTOLUENE	0.0000	0	0
21.747	21.747	1,3-DICHLOROBENZENE	0.0000	0	0
21.810	21.805	1,4-DICHLOROBENZENE	0.0044	154	25
22.109	22.106	1,2-DICHLOROBENZENE	0.0026	112	13
22.527	22.527	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.897	22.895	SURR-1B4CB-H	28.1089	234520	92501
23.943	23.936	1,2,4-TRICHLOROBENZE	0.0120	245	44
24.313	24.306	HEXACHLOROBUTADIENE	0.0146	324	66
24.499	24.489	1,2,3-TRICHLOROBENZE	0.0112	337	38
		TOTAL 1,2-DICHLOROETHENE:	0.0218		

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

Surrogate Recovery: BrClBenzene 93.6962 %

Chrom Perfect version 6.07

Reported on 10-11-2001at 00:21:22

Sample name: 3699897

Batch: 01283A201127,840

Raw file:

C:\CP\DATA1\20283.28R

Reviewed by:

JS WS

Verified by:

VMM469

Date:

10-11-01

Date:

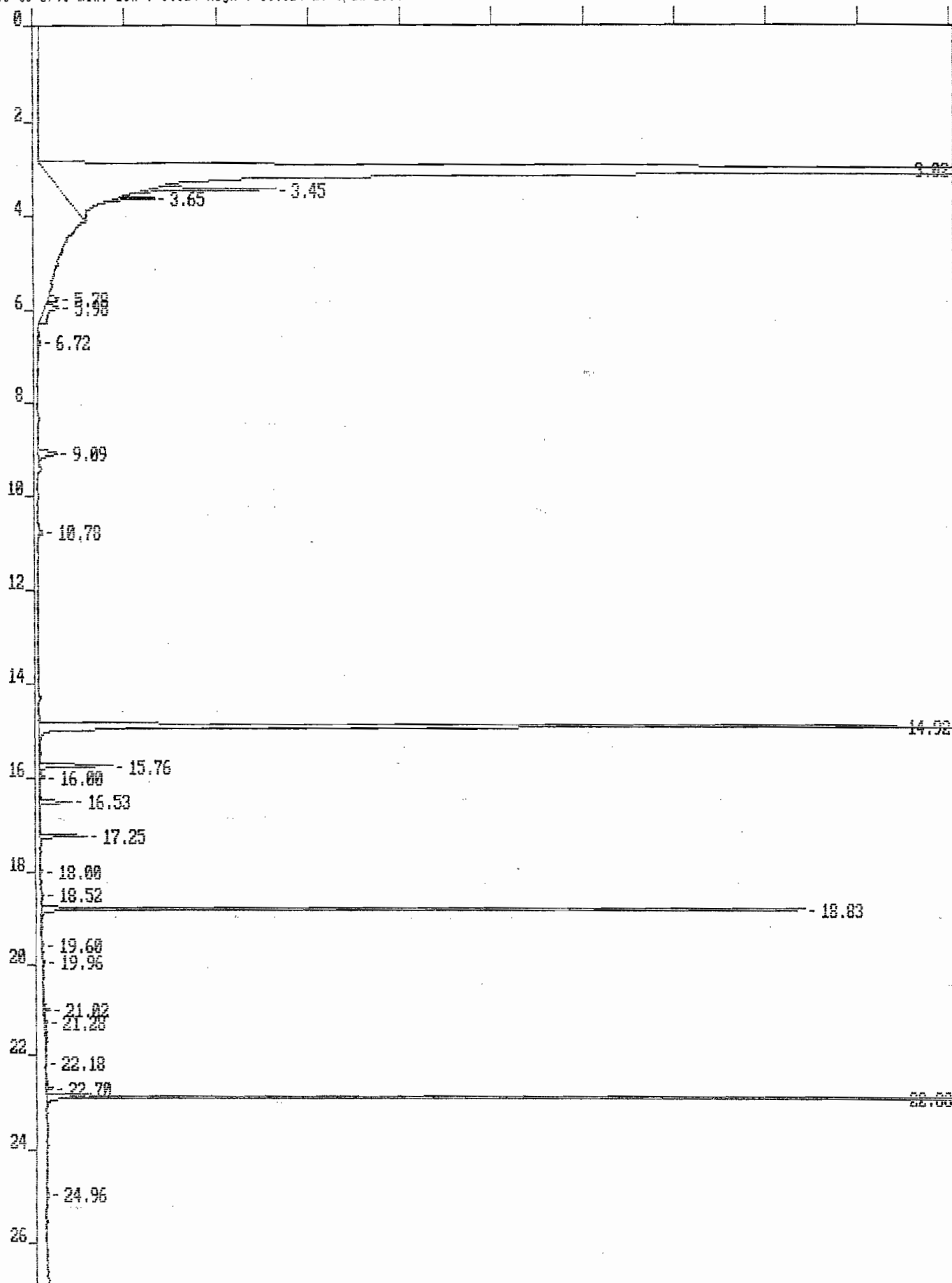
10/11/01

File=C:\CP\DATA1\20283B.28R Date printed=10-11-2001 Time= 00:21:36

Sample Name=3699897

01283A201127,8404

0.0 to 27.0 min. Low Y=0.024 High Y=15.024 mv Span=15.0



Sample Name: 3699897

Batch: 01283A20

Date Taken: Oct 11, 2001 00:19:26

Raw File: C:\CP\DATA1\20283B.28R

Area File: C:\CP\DATA1\20283B.28A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.126	4.126	VINYL CHLORIDE	0.0000	0	0
6.723	6.714	1,1-DICHLOROETHENE	0.1432	416	53
8.658	8.658	TRANS-1,2-DICHLOROET	0.0000	0	0
9.086	9.063	METHYL T-BUTYL ETHER	1.2364	2477	309
10.784	10.776	CIS-1,2-DICHLOROETHE	0.1774	367	72
13.753	13.753	1,1-DICHLOROPROPENE	0.0000	0	0
14.311	14.311	BENZENE	0.0000	0	0
14.923	14.921	ISTD-FBENZENE	1.0000	70630	15230
15.760	15.756	TRICHLOROETHENE	1.8594	4509	1191
16.531	16.530	1-BROMO-2-CHLOROETHA	1.0000	1971	531
16.961	16.961	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.599	17.599	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.998	17.995	TOLUENE	0.0549	179	56
18.830	18.828	TETRACHLOROETHENE	28.8695	29276	12479
19.604	19.542	CHLOROBENZENE	0.0345	109	36
19.763	19.763	ETHYLBENZENE	0.0000	0	0
19.957	19.956	M,P-XYLENE	0.0402	242	38
20.251	20.251	STYRENE	0.0000	0	0
20.314	20.314	O-XYLENE	0.0000	0	0
20.644	20.644	ISOPROPYLBENZENE	0.0000	0	0
20.833	20.833	BROMOBENZENE	0.0000	0	0
21.025	21.024	N-PROPYLBENZENE	0.1264	395	111
21.093	21.093	2-CHLOROTOLUENE	0.0000	0	0
21.160	21.160	4-CHLOROTOLUENE	0.0000	0	0
21.275	21.277	1,3,5-TRIMETHYLBENZE	0.0409	277	53
21.500	21.500	TERT-BUTYLBENZENE	0.0000	0	0
21.595	21.595	1,2,4-TRIMETHYLBENZE	0.0000	0	0
21.680	21.680	SEC-BUTYLBENZENE	0.0000	0	0
21.733	21.733	1,3-DICHLOROBENZENE	0.0000	0	0
21.791	21.791	1,4-DICHLOROBENZENE	0.0000	0	0
21.834	21.834	P-ISOPROPYLTOLUENE	0.0000	0	0
22.092	22.092	1,2-DICHLOROBENZENE	0.0000	0	0
22.184	22.182	N-BUTYLBENZENE	0.0379	114	27
22.882	22.880	SURR-1B4CB-P	28.2695	54064	25421
23.921	23.921	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.223	24.223	NAPHTHALENE	0.0000	0	0
24.291	24.291	HEXACHLOROBUTADIENE	0.0000	0	0
24.474	24.474	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0402

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

Surrogate Recovery: BrClBenzene 94.2318 %

Chrom Perfect version 6.07

Reported on 10-11-2001at 00:24:41

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699897

Batch: 01283A201127,840

Raw file:

C:\CP\DATA1\20283B.28R

Reviewed by: DS US

Verified by: mm49

Date: 10-11-01

Date: ~~10/10~~ 10/11/01

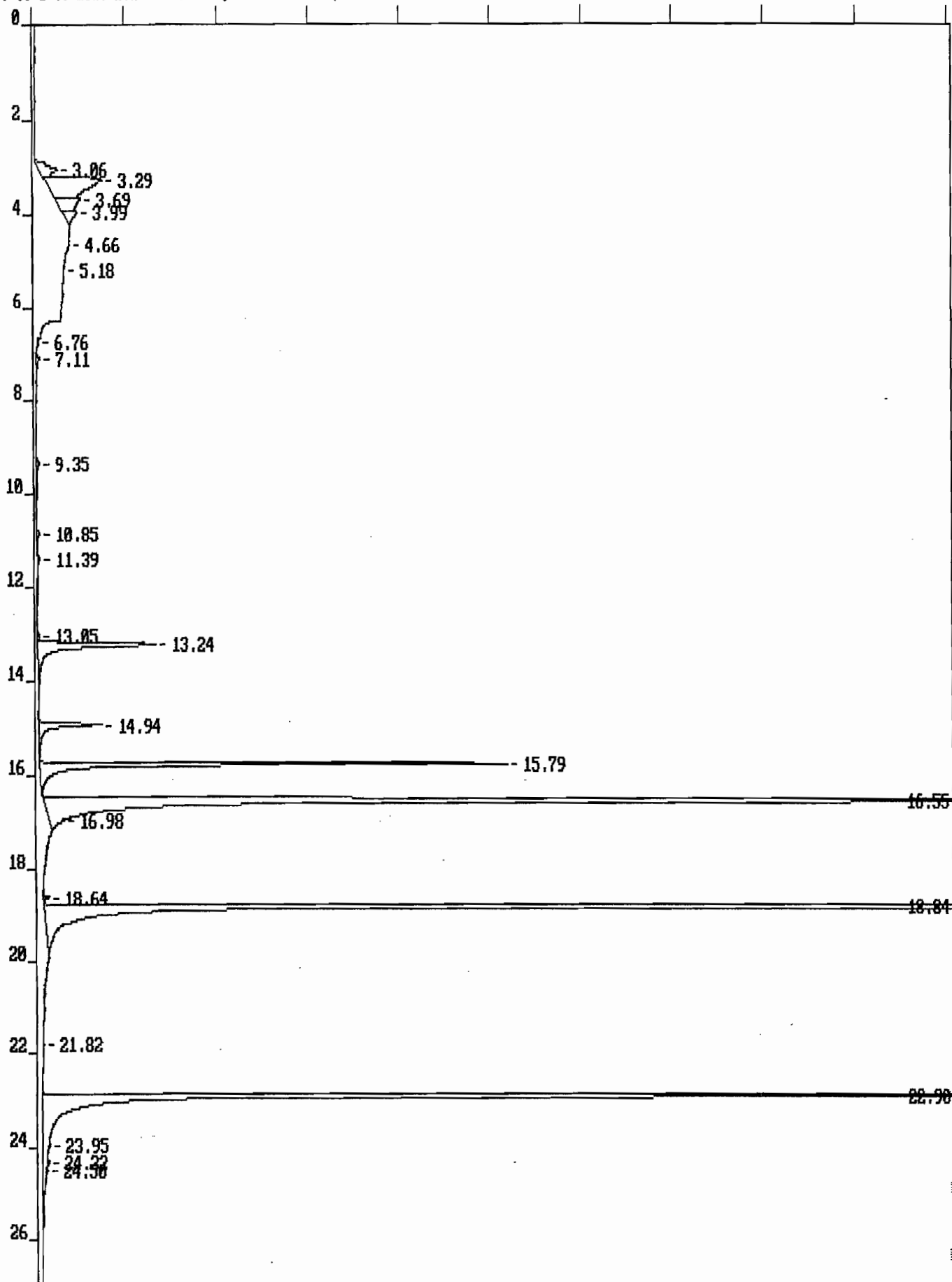
③ mm49
10/11/01

File=c:\cp\data1\20283.29R Date printed=10-11-2001 Time= 02:21:40

Sample Name=3699898

01283A201127,8404

0.0 to 27.0 min. Low Y=-0.07 High Y=14.93 mv Span=15.0



Sample Name: 3699898

Batch: 01283A20

Date Taken: Oct 11, 2001 00:56:50

Raw File: c:\cp\data1\20283.29R

Sea File: c:\cp\data1\20283.29A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 74):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.695	3.612	DICHLORODIFLUOROMETH	0.4110	5288	391
3.818	3.818	CHLOROMETHANE	0.0000	0	0
3.990	4.141	VINYL CHLORIDE	0.1000	2519	221
4.664	4.652	BROMOMETHANE	0.0202	204	27
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.760	5.760	TRICHLOROFLUOROMETHA	0.0000	0	0
6.763	6.732	1,1-DICHLOROETHENE	0.0073	131	24
7.107	7.077	METHYLENE CHLORIDE	0.0119	490	57
7.259	7.259	TRICHLOROTRIFLUOROET	0.0000	0	0
8.675	8.675	TRANS-1,2-DICHLOROET	0.0000	0	0
9.353	9.300	1,1-DICHLOROETHANE	0.0174	709	55
10.846	10.793	CIS-1,2-DICHLOROETHE	0.0161	552	55
11.168	11.168	BROMOCHLOROMETHANE	0.0000	0	0
11.386	11.352	CHLOROFORM	0.0111	470	50
11.512	11.512	2,2-DICHLOROPROPANE	0.0000	0	0
13.053	13.006	1,2-DICHLOROETHANE	0.0101	208	36
13.243	13.217	1,1,1-TRICHLOROETHAN	0.5220	15100	1911
13.766	13.766	1,1-DICHLOROPROPENE	0.0000	0	0
14.168	14.168	CARBON TETRACHLORIDE	0.0000	0	0
15.570	15.570	DIBROMOMETHANE	0.0000	0	0
15.674	15.674	1,2-DICHLOROPROPANE	0.0000	0	0
15.786	15.771	TRICHLOROETHENE	1.2100	32323	7667
15.845	15.845	BROMODICHLOROMETHANE	0.0000	0	0
16.551	16.546	ISTD-1-BR-2-CLETHANE	1.0000	295807	85477
16.977	16.976	CIS-1,3-DICHLOROPROP	0.0100	121	57
17.614	17.614	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.772	17.772	1,1,2-TRICHLOROETHAN	0.0000	0	0
18.080	18.080	1,3-DICHLOROPROPANE	0.0000	0	0
18.345	18.345	DIBROMOCHLOROMETHANE	0.0000	0	0
18.639	18.623	1,2-DIBROMOETHANE	0.0329	363	93
18.843	18.842	TETRACHLOROETHENE	17.4696	386520	149989
19.485	19.485	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.556	19.556	CHLOROBENZENE	0.0000	0	0
20.022	20.022	BROMOFORM	0.0000	0	0
20.323	20.323	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.450	20.450	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.847	20.847	BROMOBENZENE	0.0000	0	0
21.107	21.107	2-CHLOROTOLUENE	0.0000	0	0
21.175	21.175	4-CHLOROTOLUENE	0.0000	0	0
21.747	21.747	1,3-DICHLOROBENZENE	0.0000	0	0
21.815	21.805	1,4-DICHLOROBENZENE	0.0034	60	19
22.106	22.106	1,2-DICHLOROBENZENE	0.0000	0	0
22.527	22.527	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.898	22.895	SURR-1B4CB-H	27.4373	233413	91974
23.947	23.936	1,2,4-TRICHLOROBENZE	0.0090	171	34
24.317	24.306	HEXACHLOROBUTADIENE	0.0110	266	51
24.501	24.489	1,2,3-TRICHLOROBENZE	0.0094	351	32

TOTAL 1,2-DICHLOROETHENE: 0.0161

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

Surrogate Recovery: BrClBenzene 91.4577 %

Chrom Perfect version 6.07

Reported on 10-11-2001at 02:23:33

Sample name: 3699898

Batch: 01283A201127,840

Raw file: c:\cp\data1\20283.29R

Reviewed by: DS us

Verified by: mm469

Date: 10-11-01

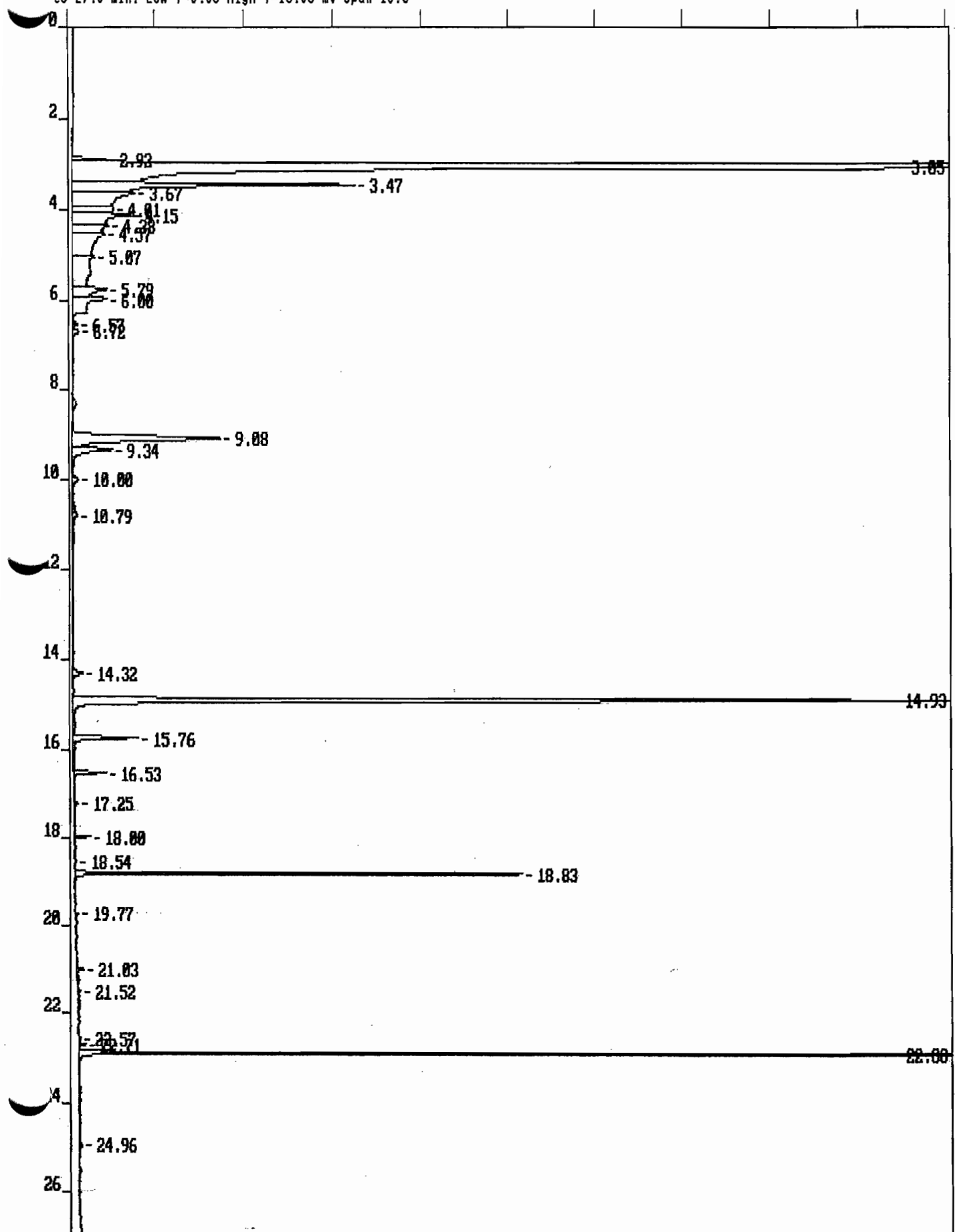
Date: 10/11/01

File=c:\cp\data\202838.29R Date printed=10-11-2001 Time= 02:23:39

Sample Name=3699898

01283A201127,8404

to 27.0 min. Low Y=0.03 High Y=15.03 mv Span=15.0



Sample Name: 3699898

Batch: 01283A20

Date Taken: Oct 11, 2001 00:56:50

Raw File: c:\cp\data1\20283B.29R

ea File: c:\cp\data1\20283B.29A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.151	4.126	VINYL CHLORIDE	4.9072	11098	1022
6.720	6.714	1,1-DICHLOROETHENE	0.3044	1325	114
8.658	8.658	TRANS-1,2-DICHLOROET	0.0000	0	0
9.079	9.063	METHYL T-BUTYL ETHER	9.9831	20357	2526
10.788	10.776	CIS-1,2-DICHLOROETHE	0.2029	1712	83
13.753	13.753	1,1-DICHLOROPROPENE	0.0000	0	0
14.323	14.311	BENZENE	0.2068	1047	170
14.928	14.921	ISTD-FBENZENE	1.0000	70626	15424
15.763	15.756	TRICHLOROETHENE	1.7576	4960	1140
16.534	16.530	1-BROMO-2-CHLOROETHA	1.0000	2149	564
16.961	16.961	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.599	17.599	TRANS-1,3-DICHLOROPR	0.0000	0	0
18.000	17.995	TOLUENE	0.2674	757	277
18.830	18.828	TETRACHLOROETHENE	17.4116	17874	7622
19.542	19.542	CHLOROBENZENE	0.0000	0	0
19.771	19.763	ETHYLBENZENE	0.0759	182	68
19.956	19.956	M,P-XYLENE	0.0000	0	0
20.251	20.251	STYRENE	0.0000	0	0
20.314	20.314	O-XYLENE	0.0000	0	0
20.644	20.644	ISOPROPYLBENZENE	0.0000	0	0
20.833	20.833	BROMOBENZENE	0.0000	0	0
21.027	21.024	N-PROPYLBENZENE	0.1443	475	128
21.093	21.093	2-CHLOROTOLUENE	0.0000	0	0
21.160	21.160	4-CHLOROTOLUENE	0.0000	0	0
21.277	21.277	1,3,5-TRIMETHYLBENZE	0.0000	0	0
21.520	21.500	TERT-BUTYLBENZENE	0.0719	148	50
21.595	21.595	1,2,4-TRIMETHYLBENZE	0.0000	0	0
21.680	21.680	SEC-BUTYLBENZENE	0.0000	0	0
21.733	21.733	1,3-DICHLOROBENZENE	0.0000	0	0
21.791	21.791	1,4-DICHLOROBENZENE	0.0000	0	0
21.834	21.834	P-ISOPROPYLTOLUENE	0.0000	0	0
22.092	22.092	1,2-DICHLOROBENZENE	0.0000	0	0
22.182	22.182	N-BUTYLBENZENE	0.0000	0	0
22.883	22.880	SURR-1B4CB-P	27.7075	55112	25233
23.921	23.921	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.223	24.223	NAPHTHALENE	0.0000	0	0
24.291	24.291	HEXACHLOROBUTADIENE	0.0000	0	0
24.474	24.474	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0000

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

Surrogate Recovery: BrClBenzene 92.3582 %

Chrom Perfect version 6.07

Reported on 10-11-2001at 02:26:52

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699898

Batch: 01283A201127,840

Raw file: c:\cp\data1\20283B.29R

Reviewed by:

JS

Verified by:

mm49

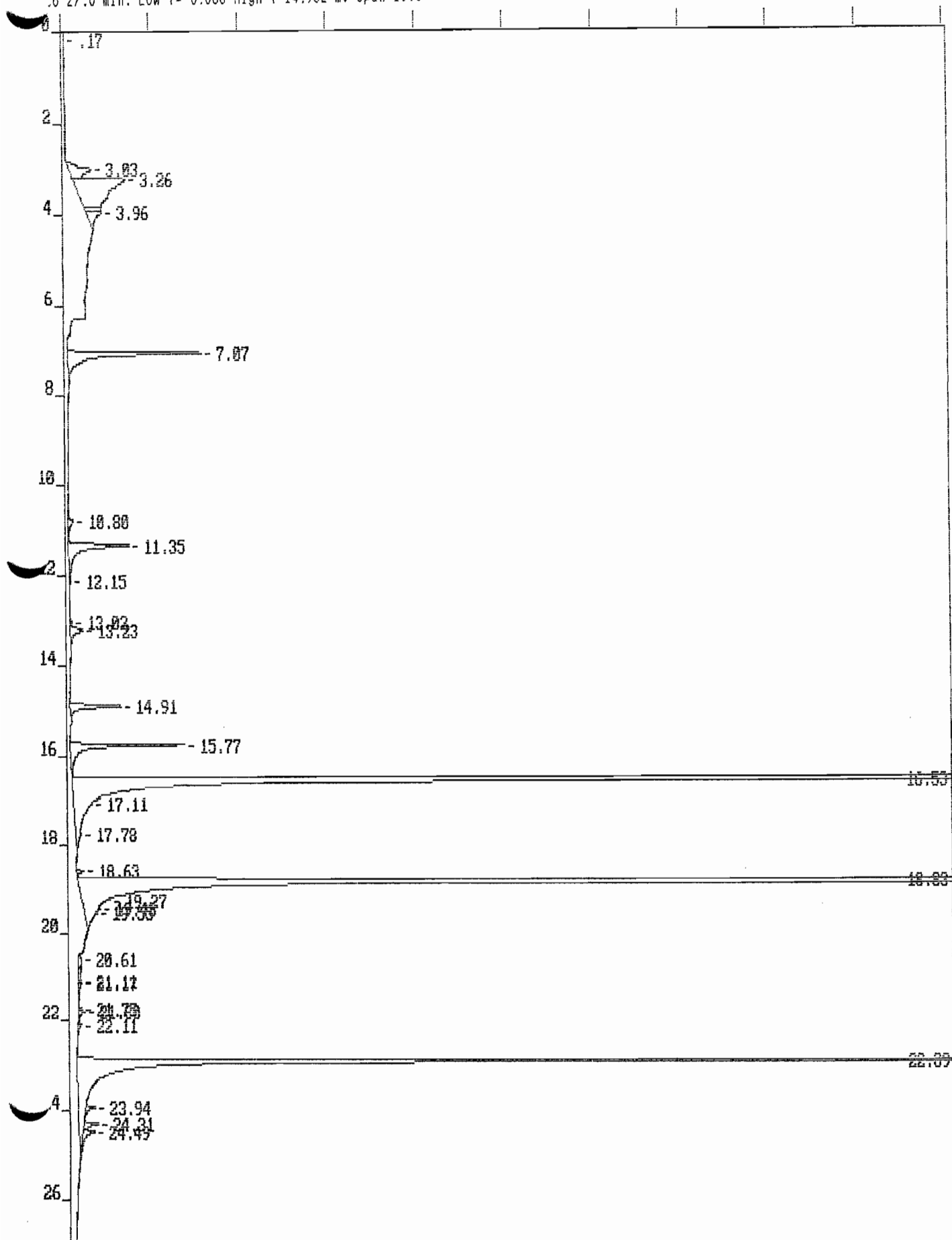
Date:

10-11-01

Date:

10/11/01

File=C:\CP\DATA1\20280.32R Date printed=10-08-2001 Time= 23:24:52
Sample Name=3699899 01280A201127,8404
to 27.0 min. Low Y=-0.068 High Y=14.932 mv Span=15.0



Sample Name: 3699899

Batch: 01280A20

Date Taken: Oct 8, 2001 23:24:47

Raw File: C:\CP\DATA1\20280.32R

Sea File: C:\CP\DATA1\20280.32A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 2 Analyst: 419

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 67):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.609	3.609	DICHLORODIFLUOROMETH	0.0000	0	0
3.820	3.820	CHLOROMETHANE	0.0000	0	0
3.962	4.142	VINYL CHLORIDE	0.2575	3200	259
4.652	4.652	BROMOMETHANE	0.0000	0	0
4.863	4.863	CHLOROETHANE	0.0000	0	0
5.753	5.753	TRICHLOROFLUOROMETHA	0.0000	0	0
6.726	6.726	1,1-DICHLOROETHENE	0.0000	0	0
7.073	7.070	METHYLENE CHLORIDE	1.0350	14275	2275
7.253	7.253	TRICHLOROTRIFLUOROET	0.0000	0	0
8.666	8.666	TRANS-1,2-DICHLOROET	0.0000	0	0
9.291	9.291	1,1-DICHLOROETHANE	0.0000	0	0
10.804	10.783	CIS-1,2-DICHLOROETHE	0.0536	836	84
11.161	11.161	BROMOCHLOROMETHANE	0.0000	0	0
11.351	11.342	CHLOROFORM	0.5000	8690	1034
11.504	11.504	2,2-DICHLOROPROPANE	0.0000	0	0
13.023	12.996	1,2-DICHLOROETHANE	0.0227	226	36
13.226	13.206	1,1,1-TRICHLOROETHAN	0.1278	2079	213
13.757	13.757	1,1-DICHLOROPROPENE	0.0000	0	0
14.155	14.155	CARBON TETRACHLORIDE	0.0000	0	0
15.560	15.560	DIBROMOMETHANE	0.0000	0	0
15.664	15.664	1,2-DICHLOROPROPANE	0.0000	0	0
15.769	15.762	TRICHLOROETHENE	0.6730	10068	1942
15.835	15.835	BROMODICHLOROMETHANE	0.0000	0	0
16.533	16.537	ISTD-1-BR-2-CLETHANE	1.0000	282184	77852
17.113	16.968	CIS-1,3-DICHLOROPROP	0.0148	88	38
17.607	17.607	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.782	17.765	1,1,2-TRICHLOROETHAN	0.0104	281	32
18.073	18.073	1,3-DICHLOROPROPANE	0.0000	0	0
18.339	18.339	DIBROMOCHLOROMETHANE	0.0000	0	0
18.627	18.618	1,2-DIBROMOETHANE	0.1030	520	132
18.833	18.838	TETRACHLOROETHENE	75.5691	755914	295471
19.477	19.480	1,1,1,2-TETRACHLOROE	0.0114	146	45
19.549	19.551	CHLOROBENZENE	0.0241	123	44
20.018	20.018	BROMOFORM	0.0000	0	0
20.319	20.319	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.445	20.445	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.842	20.842	BROMOBENZENE	0.0000	0	0
21.106	21.103	2-CHLOROTOLUENE	0.0352	215	52
21.170	21.171	4-CHLOROTOLUENE	0.0355	425	56
21.748	21.743	1,3-DICHLOROBENZENE	0.0287	177	68
21.803	21.801	1,4-DICHLOROBENZENE	0.0408	724	107
22.106	22.102	1,2-DICHLOROBENZENE	0.0252	352	59
22.524	22.524	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.889	22.892	SURR-1B4CB-H	59.1564	236165	90307
23.939	23.933	1,2,4-TRICHLOROBENZE	0.1036	972	177
24.308	24.302	HEXACHLOROBUTADIENE	0.1207	1246	254
24.488	24.486	1,2,3-TRICHLOROBENZE	0.1238	1636	195

TOTAL 1,2-DICHLOROETHENE: 0.0536

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

Surrogate Recovery: BrClBenzene 98.5940 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 23:26:42

Sample name: 3699899

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280.32R

Reviewed by: SKPL688

Verified by: MM468

Date: 10-8-01

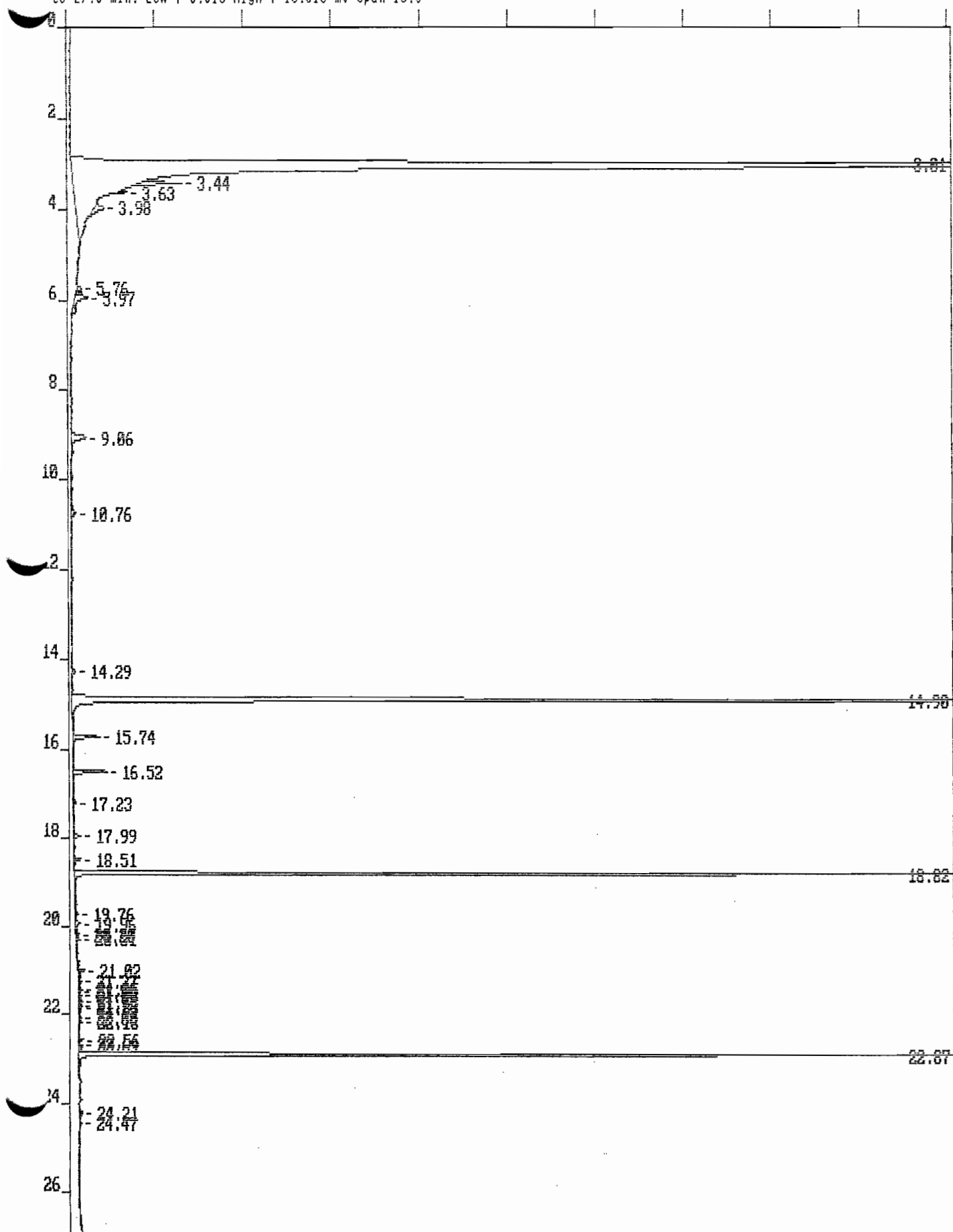
Date: 10/10/01

File=C:\CP\DATA1\202808.32R Date printed=10-08-2001 Time= 23:26:56

Sample Name=3699899

01280A201127,8404

to 27.0 min. Low Y=0.015 High Y=15.015 mv Span=15.0



Sample Name: 3699899

Batch: 01280A20

Date Taken: Oct 8, 2001 23:24:47

Raw File: C:\CP\DATA1\20280B.32R

ba File: C:\CP\DATA1\20280B.32A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 2 Analyst: 419

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 61):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.126	4.126	VINYL CHLORIDE	0.0000	0	0
6.708	6.708	1,1-DICHLOROETHENE	0.0000	0	0
8.648	8.648	TRANS-1,2-DICHLOROET	0.0000	0	0
9.057	9.054	METHYL T-BUTYL ETHER	1.9258	2315	243
10.760	10.768	CIS-1,2-DICHLOROETHE	0.3568	421	73
13.741	13.741	1,1-DICHLOROPROPENE	0.0000	0	0
14.290	14.300	BENZENE	0.1588	373	65
14.903	14.910	ISTD-FBENZENE	1.0000	70798	15390
15.742	15.747	TRICHLOROETHENE	1.3906	1805	450
16.516	16.522	1-BROMO-2-CHLOROETHA	1.0000	2022	570
16.953	16.953	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.592	17.592	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.988	17.988	TOLUENE	0.2367	639	122
18.819	18.823	TETRACHLOROETHENE	73.8152	37172	16122
19.537	19.537	CHLOROBENZENE	0.0000	0	0
19.760	19.759	ETHYLBENZENE	0.1136	172	51
19.956	19.951	M,P-XYLENE	0.1684	407	79
20.196	20.246	STYRENE	0.0876	112	52
20.310	20.310	O-XYLENE	0.1508	277	70
20.639	20.639	ISOPROPYLBENZENE	0.0000	0	0
20.829	20.829	BROMOBENZENE	0.0000	0	0
21.017	21.020	N-PROPYLBENZENE	0.2643	273	117
21.089	21.089	2-CHLOROTOLUENE	0.0000	0	0
21.156	21.156	4-CHLOROTOLUENE	0.0000	0	0
21.272	21.273	1,3,5-TRIMETHYLBENZE	0.0977	238	64
21.500	21.496	TERT-BUTYLBENZENE	0.1381	125	48
21.585	21.591	1,2,4-TRIMETHYLBENZE	0.1136	196	57
21.677	21.677	SEC-BUTYLBENZENE	0.0000	0	0
21.727	21.729	1,3-DICHLOROBENZENE	0.1298	136	64
21.784	21.788	1,4-DICHLOROBENZENE	0.1254	123	62
21.829	21.831	P-ISOPROPYLTOLUENE	0.1918	143	70
22.083	22.089	1,2-DICHLOROBENZENE	0.1168	133	45
22.182	22.179	N-BUTYLBENZENE	0.1935	206	69
22.873	22.877	SURR-1B4CB-P	55.2891	54016	25121
23.918	23.918	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.214	24.221	NAPHTHALENE	0.2253	257	53
24.288	24.288	HEXACHLOROBUTADIENE	0.0000	0	0
24.466	24.471	1,2,3-TRICHLOROBENZE	0.2303	122	39

TOTAL XYLENES: 0.3192

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

Surrogate Recovery: BrClBenzene 92.1485 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 23:30:01

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699899

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280B.32R

Reviewed by: SKP088

Verified by: mm403

Date: 10-8-01

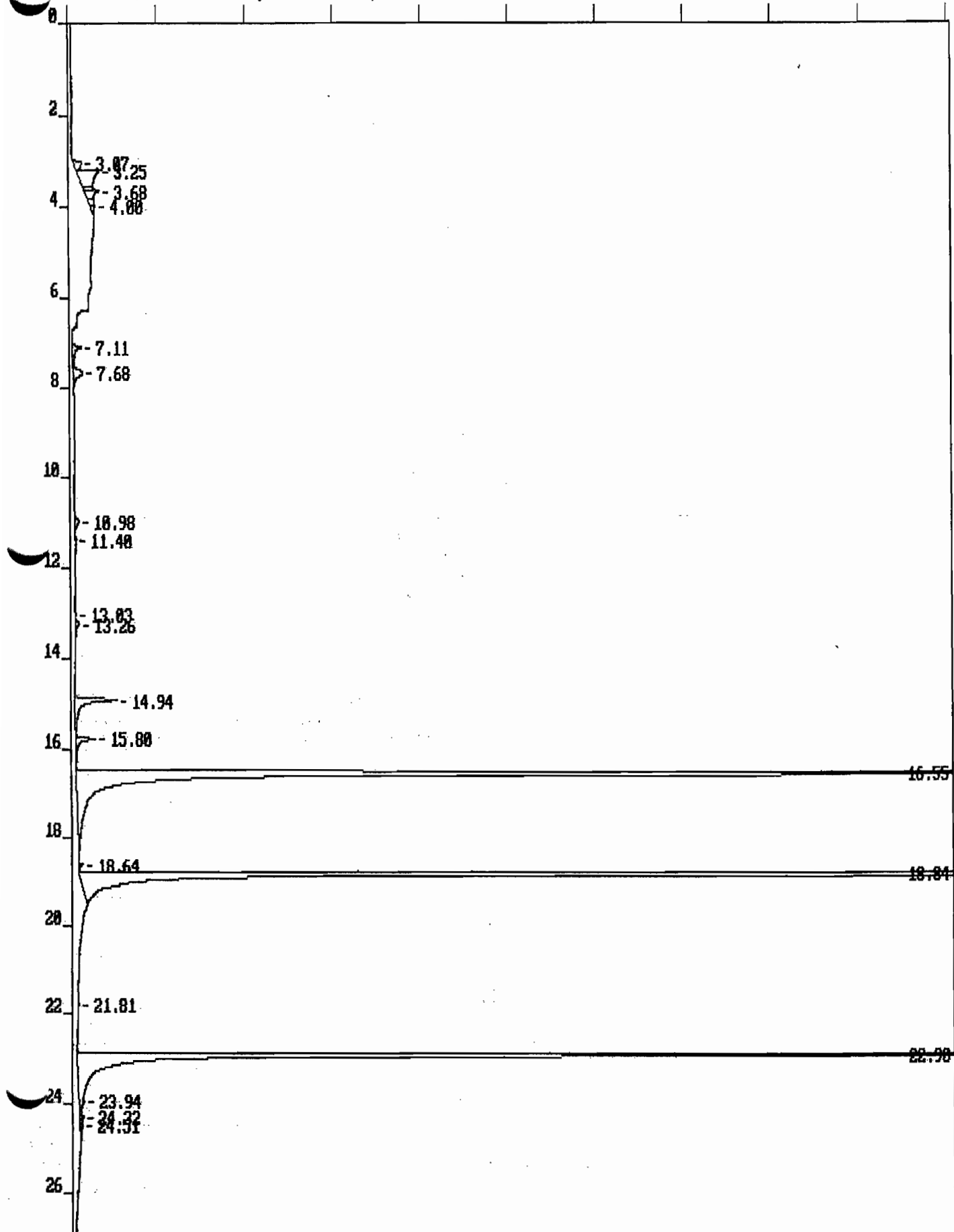
Date: 10/10/07

File=c:\cp\data1\20283.30R Date printed=10-11-2001 Time= 02:26:58

Sample Name=3699900

01283A201127,8404

to 27.0 min. Low Y=-0.062 High Y=14.938 mv Span=15.0



Sample Name: 3699900

Batch: 01283A20

Date Taken: Oct 11, 2001 01:34:32

Raw File: c:\cp\data1\20283.30R

Sea File: c:\cp\data1\20283.30A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 74):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.681	3.612	DICHLORODIFLUOROMETH	0.2640	2089	242
3.818	3.818	CHLOROMETHANE	0.0000	0	0
4.004	4.141	VINYL CHLORIDE	0.0344	555	73
4.652	4.652	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.760	5.760	TRICHLOROFLUOROMETHA	0.0000	0	0
6.732	6.732	1,1-DICHLOROETHENE	0.0000	0	0
7.110	7.077	METHYLENE CHLORIDE	0.0342	1487	159
7.259	7.259	TRICHLOROTRIFLUOROET	0.0000	0	0
8.675	8.675	TRANS-1,2-DICHLOROET	0.0000	0	0
9.300	9.300	1,1-DICHLOROETHANE	0.0000	0	0
10.977	10.793	CIS-1,2-DICHLOROETHE	0.0227	803	75
11.168	11.168	BROMOCHLOROMETHANE	0.0000	0	0
11.397	11.352	CHLOROFORM	0.0042	100	19
11.512	11.512	2,2-DICHLOROPROPANE	0.0000	0	0
13.033	13.006	1,2-DICHLOROETHANE	0.0055	109	19
13.255	13.217	1,1,1-TRICHLOROETHAN	0.0184	614	65
13.766	13.766	1,1-DICHLOROPROPENE	0.0000	0	0
14.168	14.168	CARBON TETRACHLORIDE	0.0000	0	0
15.570	15.570	DIBROMOMETHANE	0.0000	0	0
15.674	15.674	1,2-DICHLOROPROPANE	0.0000	0	0
15.796	15.771	TRICHLOROETHENE	0.0562	1928	343
15.845	15.845	BROMODICHLOROMETHANE	0.0000	0	0
16.550	16.546	ISTD-1-BR-2-CLETHANE	1.0000	290486	82445
16.976	16.976	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.614	17.614	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.772	17.772	1,1,2-TRICHLOROETHAN	0.0000	0	0
18.080	18.080	1,3-DICHLOROPROPANE	0.0000	0	0
18.345	18.345	DIBROMOCHLOROMETHANE	0.0000	0	0
18.637	18.623	1,2-DIBROMOETHANE	0.0306	316	83
18.844	18.842	TETRACHLOROETHENE	16.8400	355936	139456
19.485	19.485	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.556	19.556	CHLOROBENZENE	0.0000	0	0
20.022	20.022	BROMOFORM	0.0000	0	0
20.323	20.323	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.450	20.450	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.847	20.847	BROMOBENZENE	0.0000	0	0
21.107	21.107	2-CHLOROTOLUENE	0.0000	0	0
21.175	21.175	4-CHLOROTOLUENE	0.0000	0	0
21.747	21.747	1,3-DICHLOROBENZENE	0.0000	0	0
21.813	21.805	1,4-DICHLOROBENZENE	0.0033	157	18
22.106	22.106	1,2-DICHLOROBENZENE	0.0000	0	0
22.527	22.527	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.896	22.895	SURR-1B4CB-H	26.4262	218042	85443
23.944	23.936	1,2,4-TRICHLOROBENZE	0.0085	145	31
24.319	24.306	HEXACHLOROBUTADIENE	0.0114	293	51
24.506	24.489	1,2,3-TRICHLOROBENZE	0.0101	422	34
TOTAL 1,2-DICHLOROETHENE:			0.0227		

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

Surrogate Recovery: BrClBenzene 88.0874 %

Chrom Perfect version 6.07

Reported on 10-11-2001at 02:30:01

Sample name: 3699900

Batch: 01283A201127,840

Raw file: c:\cp\data1\20283.30R

Reviewed by:

[Signature]

Verified by:

mm49

Date:

10-11-01

Date:

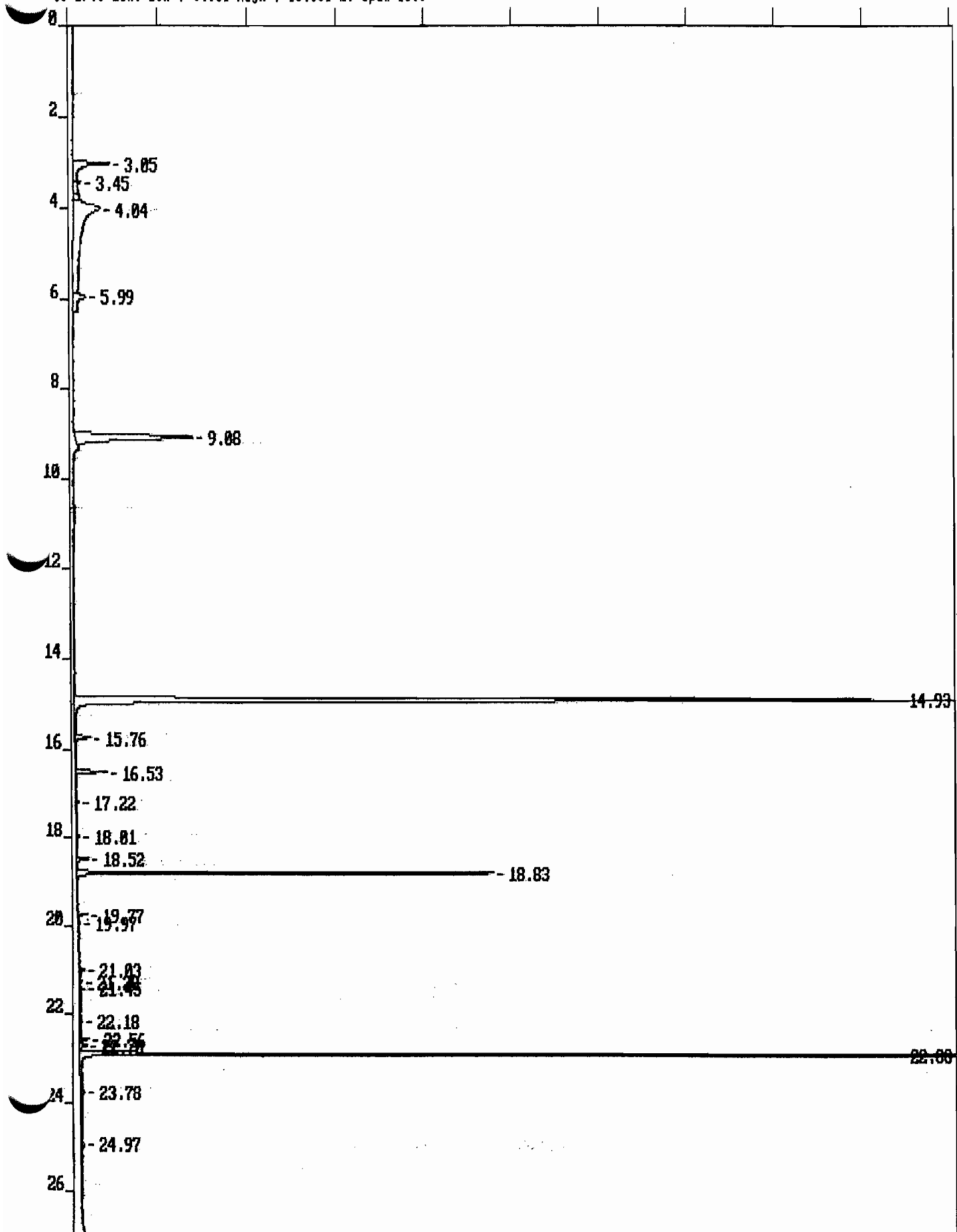
10/11/01

File=c:\cp\data1\20283B.30R Date printed=10-11-2001 Time= 02:30:07

Sample Name=3699900

01283A201127,8404

to 27.0 min. Low Y=0.031 High Y=15.031 mv Span=15.0



Sample Name: 3699900

Batch: 01283A20

Date Taken: Oct 11, 2001 01:34:32

w File: c:\cp\data1\20283B.30R

ea File: c:\cp\data1\20283B.30A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.126	4.126	VINYL CHLORIDE	0.0000	0	0
6.714	6.714	1,1-DICHLOROETHENE	0.0000	0	0
8.658	8.658	TRANS-1,2-DICHLOROET	0.0000	0	0
9.076	9.063	METHYL T-BUTYL ETHER	7.9349	15439	1970
10.776	10.776	CIS-1,2-DICHLOROETHE	0.0000	0	0
13.753	13.753	1,1-DICHLOROPROPENE	0.0000	0	0
14.311	14.311	BENZENE	0.0000	0	0
14.925	14.921	ISTD-FBENZENE	1.0000	69441	15128
15.761	15.756	TRICHLOROETHENE	0.3687	1120	235
16.532	16.530	1-BROMO-2-CHLOROETHA	1.0000	1853	526
16.961	16.961	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.599	17.599	TRANS-1,3-DICHLOROPR	0.0000	0	0
18.006	17.995	TOLUENE	0.0554	142	56
18.830	18.828	TETRACHLOROETHENE	16.4853	16907	7079
19.542	19.542	CHLOROBENZENE	0.0000	0	0
19.773	19.763	ETHYLBENZENE	0.1915	409	168
19.965	19.956	M,P-XYLENE	0.0401	191	37
20.251	20.251	STYRENE	0.0000	0	0
20.314	20.314	O-XYLENE	0.0000	0	0
20.644	20.644	ISOPROPYLBENZENE	0.0000	0	0
20.833	20.833	BROMOBENZENE	0.0000	0	0
21.033	21.024	N-PROPYLBENZENE	0.1156	419	101
21.093	21.093	2-CHLOROTOLUENE	0.0000	0	0
21.160	21.160	4-CHLOROTOLUENE	0.0000	0	0
21.280	21.277	1,3,5-TRIMETHYLBENZE	0.0390	312	50
21.454	21.500	TERT-BUTYLBENZENE	0.1388	1172	95
21.595	21.595	1,2,4-TRIMETHYLBENZE	0.0000	0	0
21.680	21.680	SEC-BUTYLBENZENE	0.0000	0	0
21.733	21.733	1,3-DICHLOROBENZENE	0.0000	0	0
21.791	21.791	1,4-DICHLOROBENZENE	0.0000	0	0
21.834	21.834	P-ISOPROPYLTOLUENE	0.0000	0	0
22.092	22.092	1,2-DICHLOROBENZENE	0.0000	0	0
22.183	22.182	N-BUTYLBENZENE	0.0790	617	55
22.881	22.880	SURR-1B4CB-P	27.5868	55845	24642
23.776	23.921	1,2,4-TRICHLOROBENZE	0.1258	731	46
24.223	24.223	NAPHTHALENE	0.0000	0	0
24.291	24.291	HEXACHLOROBUTADIENE	0.0000	0	0
24.474	24.474	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0401

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

Surrogate Recovery: BrClBenzene 91.9560 %

Chrom Perfect version 6.07

Reported on 10-11-2001at 02:33:20

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699900

Batch: 01283A201127,840

Raw file: c:\cp\data1\20283B.30R

Reviewed by: [Signature]

Verified by: [Signature]

Date: 10-11-01

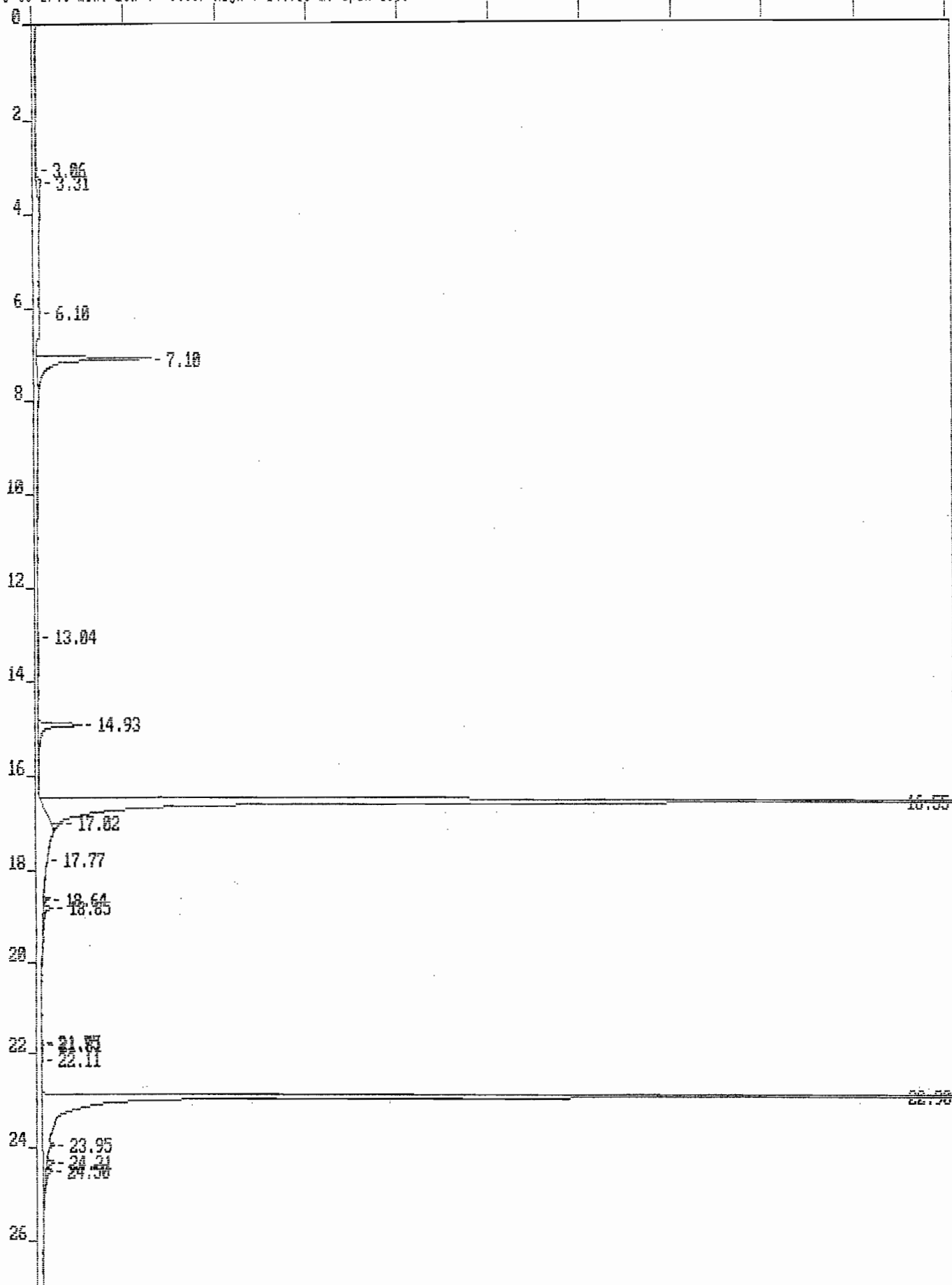
Date: 10/11/01

File=C:\CP\DATA1\20283.25R Date printed=10-10-2001 Time= 22:21:16

Sample Name=3699901

01283A201127,8404

0.0 to 27.0 min. Low Y=-0.087 High Y=14.913 mv Span=15.0



Sample Name: 3699901

Batch: 01283A20

Date Taken: Oct 10, 2001 22:14:26

Raw File: C:\CP\DATA1\20283.25R

Area File: C:\CP\DATA1\20283.25A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 74):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.612	3.612	DICHLORODIFLUOROMETH	0.0000	0	0
3.818	3.818	CHLOROMETHANE	0.0000	0	0
4.141	4.141	VINYL CHLORIDE	0.0000	0	0
4.652	4.652	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.760	5.760	TRICHLOROFLUOROMETHA	0.0000	0	0
6.732	6.732	1,1-DICHLOROETHENE	0.0000	0	0
7.101	7.077	METHYLENE CHLORIDE	0.4269	12769	1869
7.259	7.259	TRICHLOROTRIFLUOROET	0.0000	0	0
8.675	8.675	TRANS-1,2-DICHLOROET	0.0000	0	0
9.300	9.300	1,1-DICHLOROETHANE	0.0000	0	0
10.793	10.793	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.168	11.168	BROMOCHLOROMETHANE	0.0000	0	0
11.352	11.352	CHLOROFORM	0.0000	0	0
11.512	11.512	2,2-DICHLOROPROPANE	0.0000	0	0
13.040	13.006	1,2-DICHLOROETHANE	0.0069	206	22
13.217	13.217	1,1,1-TRICHLOROETHAN	0.0000	0	0
13.766	13.766	1,1-DICHLOROPROPENE	0.0000	0	0
14.168	14.168	CARBON TETRACHLORIDE	0.0000	0	0
15.570	15.570	DIBROMOMETHANE	0.0000	0	0
15.674	15.674	1,2-DICHLOROPROPANE	0.0000	0	0
15.771	15.771	TRICHLOROETHENE	0.0000	0	0
15.845	15.845	BROMODICHLOROMETHANE	0.0000	0	0
16.546	16.546	ISTD-1-BR-2-CLETHANE	1.0000	268024	77538
17.016	16.976	CIS-1,3-DICHLOROPROP	0.0362	909	187
17.614	17.614	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.772	17.772	1,1,2-TRICHLOROETHAN	0.0022	64	13
18.080	18.080	1,3-DICHLOROPROPANE	0.0000	0	0
18.345	18.345	DIBROMOCHLOROMETHANE	0.0000	0	0
18.635	18.623	1,2-DIBROMOETHANE	0.0431	568	110
18.851	18.842	TETRACHLOROETHENE	0.0218	1038	170
19.485	19.485	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.556	19.556	CHLOROBENZENE	0.0000	0	0
20.022	20.022	BROMOFORM	0.0000	0	0
20.323	20.323	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.450	20.450	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.847	20.847	BROMOBENZENE	0.0000	0	0
21.107	21.107	2-CHLOROTOLUENE	0.0000	0	0
21.175	21.175	4-CHLOROTOLUENE	0.0000	0	0
21.750	21.747	1,3-DICHLOROBENZENE	0.0046	51	22
21.812	21.805	1,4-DICHLOROBENZENE	0.0067	162	35
22.113	22.106	1,2-DICHLOROBENZENE	0.0048	119	22
22.527	22.527	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.897	22.895	SURR-1B4CB-H	27.5565	219577	83795
23.946	23.936	1,2,4-TRICHLOROBENZE	0.0244	392	83
24.314	24.306	HEXACHLOROBUTADIENE	0.0292	626	122
24.498	24.489	1,2,3-TRICHLOROBENZE	0.0278	765	87
		TOTAL 1,2-DICHLOROETHENE:	0.0000		

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

Surrogate Recovery: BrClBenzene 91.8549 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 22:23:06

0129

Sample name: 3699901

Batch: 01283A201127,840

Raw file: C:\CP\DATA1\20283.25R

Reviewed by: *[Signature]*

Verified by: *Vmm469*

km

Date: *10/11/01*

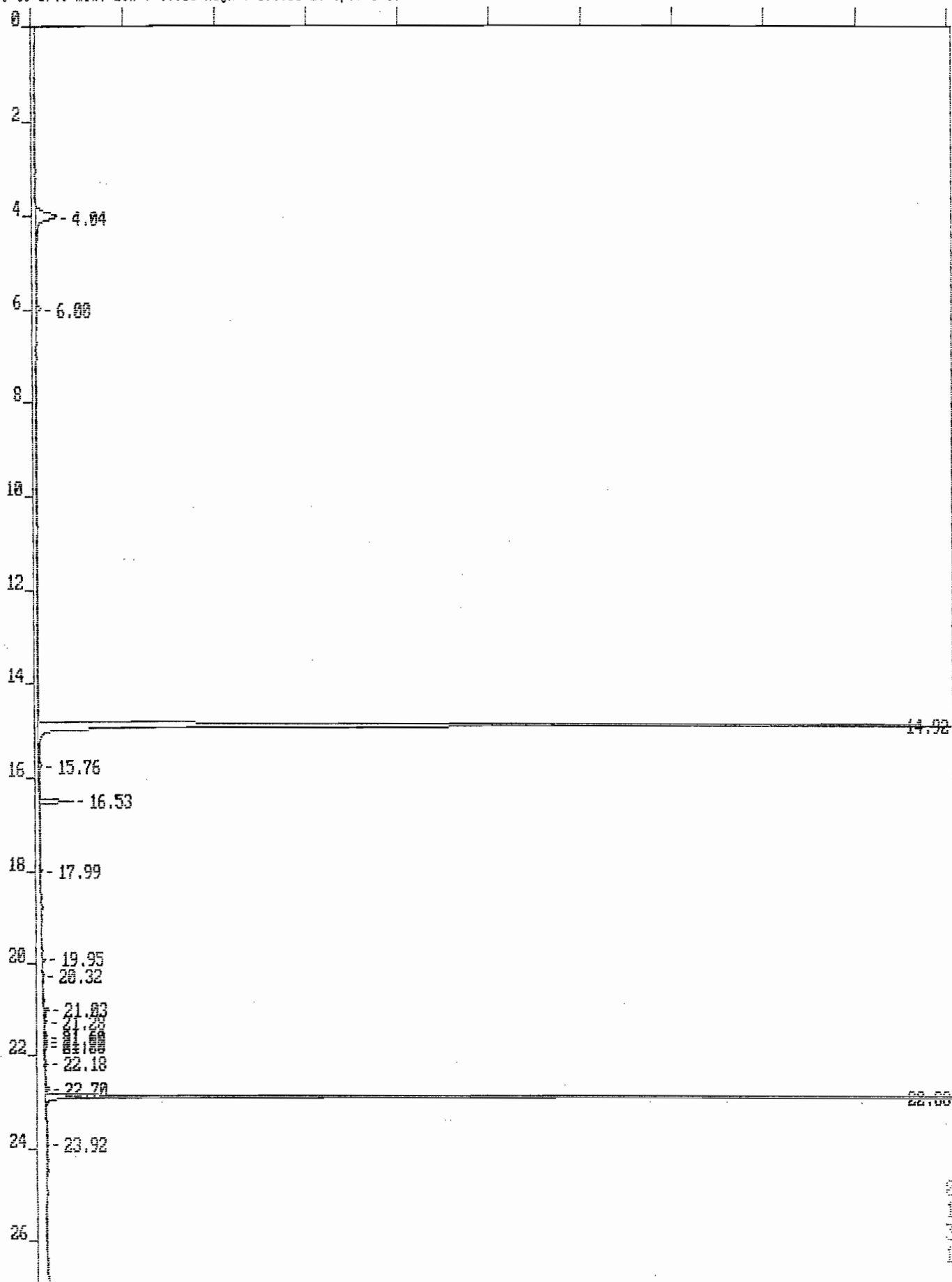
Date: *10/11/01*

File=C:\CP\DATA1\202838.25R Date printed=10-10-2001 Time= 22:23:20

Sample Name=3699901

01283A201127,8404

0.0 to 27.0 min. Low Y=0.011 High Y=15.011 mv Span=15.0



Sample Name: 3699901

Batch: 01283A20

Date Taken: Oct 10, 2001 22:14:26

Raw File: C:\CP\DATA1\20283B.25R

Area File: C:\CP\DATA1\20283B.25A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 68):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.126	4.126	0.0000	0	0
6.714	6.714	0.0000	0	0
8.658	8.658	0.0000	0	0
9.063	9.063	0.0000	0	0
10.776	10.776	0.0000	0	0
13.753	13.753	0.0000	0	0
14.311	14.311	0.0000	0	0
14.919	14.921	1.0000	71146	14926
15.760	15.756	0.0637	219	40
16.529	16.530	1.0000	1892	560
16.961	16.961	0.0000	0	0
17.599	17.599	0.0000	0	0
17.994	17.995	0.0513	199	51
18.828	18.828	0.0000	0	0
19.542	19.542	0.0000	0	0
19.763	19.763	0.0000	0	0
19.951	19.956	0.0567	135	52
20.251	20.251	0.0000	0	0
20.318	20.314	0.0296	114	26
20.644	20.644	0.0000	0	0
20.833	20.833	0.0000	0	0
21.027	21.024	0.1045	319	90
21.093	21.093	0.0000	0	0
21.160	21.160	0.0000	0	0
21.279	21.277	0.0426	395	54
21.500	21.500	0.0000	0	0
21.597	21.595	0.0524	130	51
21.680	21.680	0.0000	0	0
21.731	21.733	0.0521	104	50
21.799	21.791	0.0583	365	56
21.834	21.834	0.0000	0	0
22.092	22.092	0.0000	0	0
22.183	22.182	0.0794	302	55
22.881	22.880	27.5040	52173	24240
23.917	23.921	0.0769	107	28
24.223	24.223	0.0000	0	0
24.291	24.291	0.0000	0	0
24.474	24.474	0.0000	0	0

TOTAL XYLENES: 0.0863

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

Surrogate Recovery: BrClBenzene 91.6800 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 22:26:23

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699901

Batch: 01283A201127,840

Raw file: C:\CP\DATA1\20283B.25R

Reviewed by: MM46994

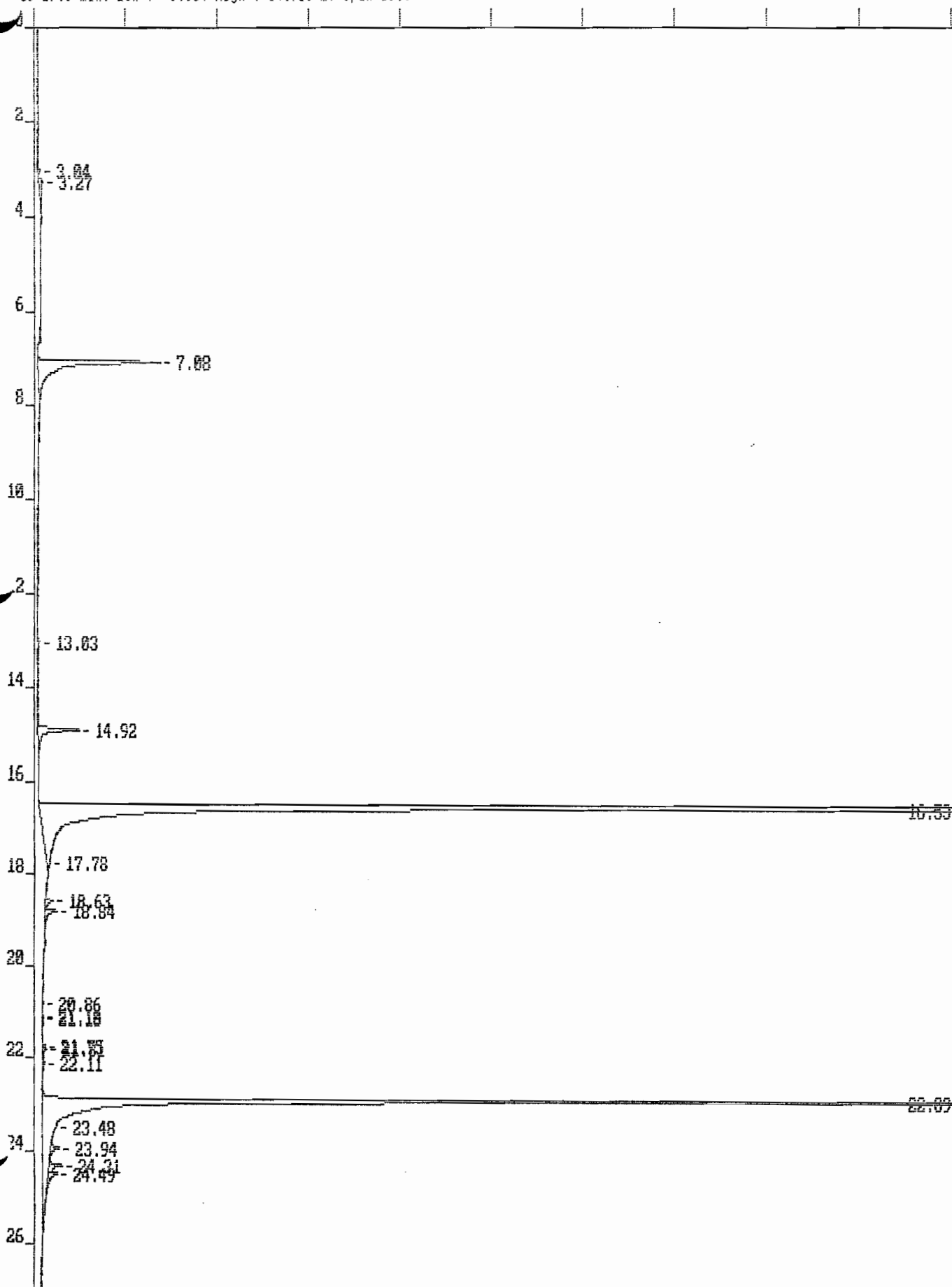
Verified by: MM469

VM

Date: 10/11/07

Date: 10/11/07

File=C:\CP\DATA1\20280.40R Date printed=10-09-2001 Time= 05:52:08
Sample Name=3699902 01280A201127,8404
to 27.0 min. Low Y=-0.084 High Y=14.916 mv Span=15.0



Sample Name: 3699902

Batch: 01280A20

Date Taken: Oct 9, 2001 05:52:04

Raw File: C:\CP\DATA1\20280.40R

ea File: C:\CP\DATA1\20280.40A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.610	3.610	DICHLORODIFLUOROMETH	0.0000	0	0
3.824	3.824	CHLOROMETHANE	0.0000	0	0
4.146	4.146	VINYL CHLORIDE	0.0000	0	0
4.655	4.655	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.758	5.758	TRICHLOROFLUOROMETHA	0.0000	0	0
6.724	6.724	1,1-DICHLOROETHENE	0.0000	0	0
7.084	7.068	METHYLENE CHLORIDE	0.4618	14817	2021
7.253	7.253	TRICHLOROTRIFLUOROET	0.0000	0	0
8.664	8.664	TRANS-1,2-DICHLOROET	0.0000	0	0
9.286	9.286	1,1-DICHLOROETHANE	0.0000	0	0
10.780	10.780	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.157	11.157	BROMOCHLOROMETHANE	0.0000	0	0
11.339	11.339	CHLOROFORM	0.0000	0	0
11.499	11.499	2,2-DICHLOROPROPANE	0.0000	0	0
13.026	12.987	1,2-DICHLOROETHANE	0.0074	143	24
13.200	13.200	1,1,1-TRICHLOROETHAN	0.0000	0	0
13.752	13.752	1,1-DICHLOROPROPENE	0.0000	0	0
14.150	14.150	CARBON TETRACHLORIDE	0.0000	0	0
15.556	15.556	DIBROMOMETHANE	0.0000	0	0
15.659	15.659	1,2-DICHLOROPROPANE	0.0000	0	0
15.756	15.756	TRICHLOROETHENE	0.0000	0	0
15.830	15.830	BROMODICHLOROMETHANE	0.0000	0	0
16.533	16.531	ISTD-1-BR-2-CLETHANE	1.0000	272549	77482
16.963	16.963	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.602	17.602	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.777	17.760	1,1,2-TRICHLOROETHAN	0.0041	126	25
18.068	18.068	1,3-DICHLOROPROPANE	0.0000	0	0
18.334	18.334	DIBROMOCHLOROMETHANE	0.0000	0	0
18.626	18.613	1,2-DIBROMOETHANE	0.0513	661	131
18.842	18.833	TETRACHLOROETHENE	0.0255	1152	199
19.476	19.476	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.547	19.547	CHLOROBENZENE	0.0000	0	0
20.015	20.015	BROMOFORM	0.0000	0	0
20.316	20.316	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.442	20.442	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.857	20.840	BROMOBENZENE	0.0055	44	11
21.098	21.100	2-CHLOROTOLUENE	0.0052	50	15
21.176	21.168	4-CHLOROTOLUENE	0.0075	176	24
21.746	21.740	1,3-DICHLOROBENZENE	0.0100	127	47
21.808	21.798	1,4-DICHLOROBENZENE	0.0144	520	76
22.110	22.099	1,2-DICHLOROBENZENE	0.0093	390	43
22.521	22.521	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.889	22.888	SURR-1B4CB-H	27.0557	221461	82213
23.939	23.929	1,2,4-TRICHLOROBENZE	0.0419	816	142
24.308	24.299	HEXACHLOROBUTADIENE	0.0538	1189	225
24.489	24.482	1,2,3-TRICHLOROBENZE	0.0515	1544	161
TOTAL 1,2-DICHLOROETHENE:			0.0000		

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

Surrogate Recovery: BrClBenzene 90.1856 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 05:53:59

11/10/01

Sample name: 3699902

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280.40R

Reviewed by: TS LS

Verified by: MMMLG

Date: 10-9-01

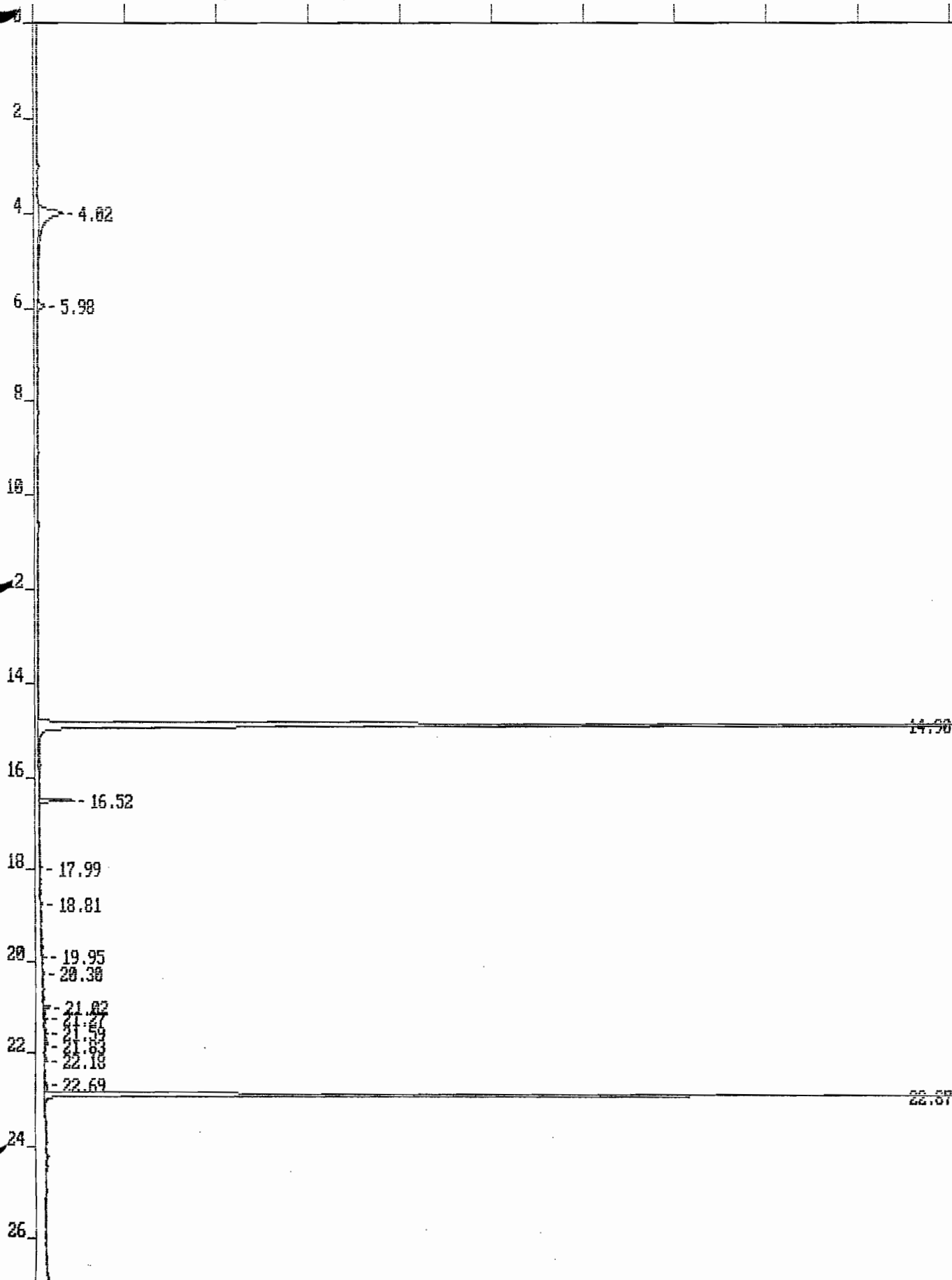
Date: 10/10/01

File=C:\CP\DATA1\20280B.40R Date printed=10-09-2001 Time= 05:54:13

Sample Name=3699902

01280A201127,8404

to 27.0 min. Low Y=0.013 High Y=15.013 mv Span=15.0



Sample Name: 3699902
 Batch: 01280A20 Date Taken: Oct 9, 2001 05:52:04
 Raw File: C:\CP\DATA1\20280B.40R
 ea File: C:\CP\DATA1\20280B.40A
 Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75m x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 115
 Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 62):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.129	4.129	VINYL CHLORIDE	0.0000	0
6.706	6.706	1,1-DICHLOROETHENE	0.0000	0
8.646	8.646	TRANS-1,2-DICHLOROET	0.0000	0
9.056	9.056	METHYL T-BUTYL ETHER	0.0000	0
10.762	10.762	CIS-1,2-DICHLOROETHE	0.0000	0
13.733	13.733	1,1-DICHLOROPROPENE	0.0000	0
14.292	14.292	BENZENE	0.0000	0
14.905	14.904	ISTD-FBENZENE	1.0000	70352
15.742	15.742	TRICHLOROETHENE	0.0000	15184
16.516	16.516	1-BROMO-2-CHLOROETHA	1.0000	1772
16.948	16.948	CIS-1,3-DICHLOROPROP	0.0000	570
17.587	17.587	TRANS-1,3-DICHLOROPR	0.0000	0
17.994	17.983	TOLUENE	0.0516	339
18.810	18.819	TETRACHLOROETHENE	0.0996	510
19.533	19.533	CHLOROBENZENE	0.0000	43
19.755	19.755	ETHYLBENZENE	0.0000	0
19.947	19.947	M,P-XYLENE	0.0764	184
20.243	20.243	STYRENE	0.0000	71
20.305	20.307	O-XYLENE	0.0379	162
20.636	20.636	ISOPROPYLBENZENE	0.0000	34
20.825	20.825	BROMOBENZENE	0.0000	0
21.020	21.017	N-PROPYLBENZENE	0.1152	312
21.086	21.086	2-CHLOROTOLUENE	0.0000	101
21.153	21.153	4-CHLOROTOLUENE	0.0000	0
21.273	21.270	1,3,5-TRIMETHYLBENZE	0.0452	128
21.493	21.493	TERT-BUTYLBENZENE	0.0000	58
21.594	21.588	1,2,4-TRIMETHYLBENZE	0.0472	111
21.674	21.674	SEC-BUTYLBENZENE	0.0000	47
21.726	21.726	1,3-DICHLOROBENZENE	0.0000	0
21.785	21.785	1,4-DICHLOROBENZENE	0.0000	0
21.829	21.828	P-ISOPROPYLTOLUENE	0.0679	219
22.085	22.085	1,2-DICHLOROBENZENE	0.0000	49
22.177	22.176	N-BUTYLBENZENE	0.0842	267
22.873	22.874	SURR-1B4CB-P	27.1530	52315
23.915	23.915	1,2,4-TRICHLOROBENZE	0.0000	24344
24.217	24.217	NAPHTHALENE	0.0000	0
24.285	24.285	HEXACHLOROBUTADIENE	0.0000	0
24.467	24.467	1,2,3-TRICHLOROBENZE	0.0000	0

TOTAL XYLENES: 0.1143

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

Surrogate Recovery: BrClBenzene 90.5100 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 05:57:15

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699902

Batch: 01280A201127,840

Raw file: C:\CP\DATA1\20280B.40R

Reviewed by: JS us

Verified by: mm49

Date: 10-9-01

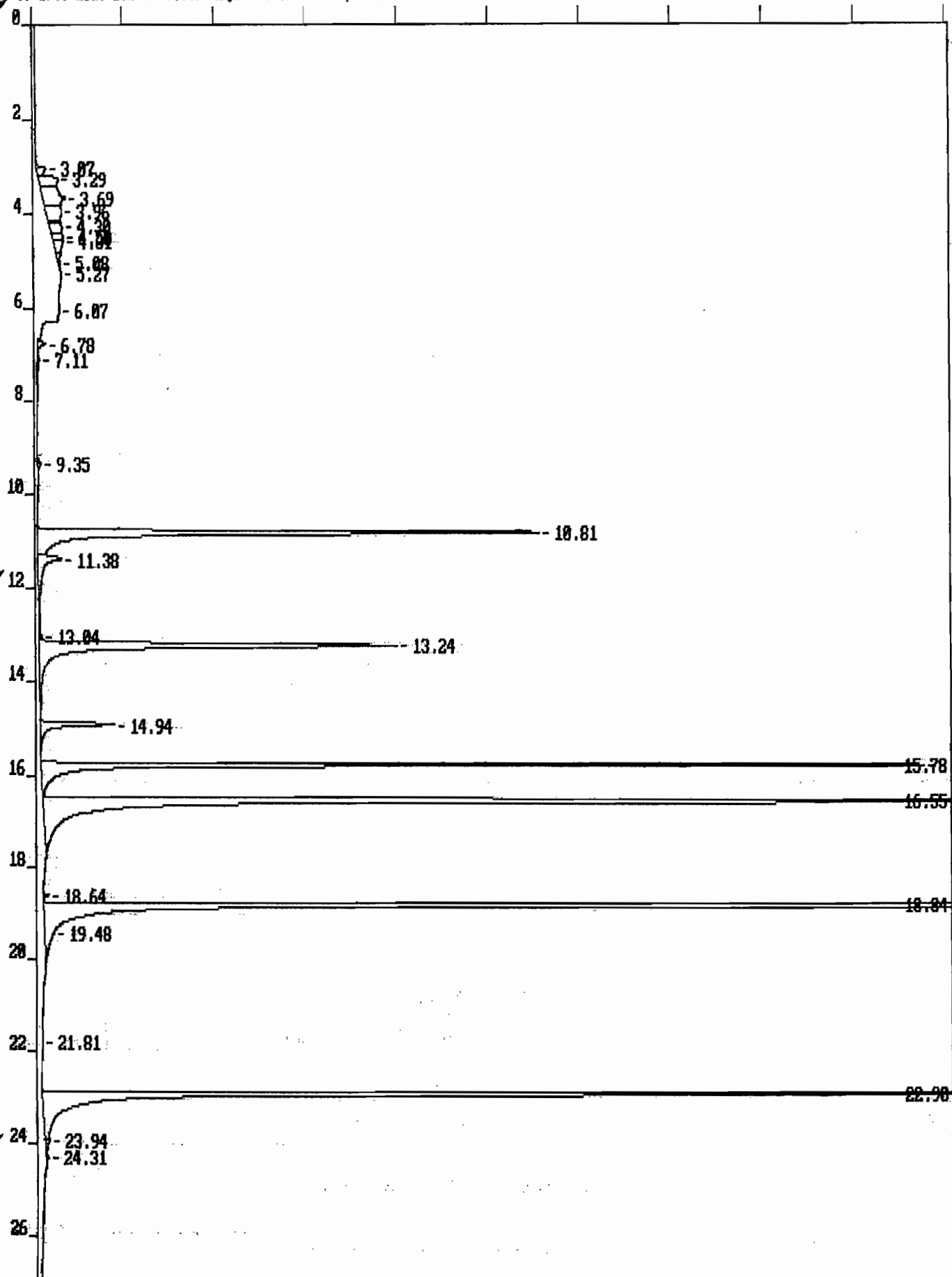
Date: 10/10/01

File=c:\cp\data\20283.31R Date printed=10-11-2001 Time= 02:33:26

Sample Name=3699903

01283A201127,8404

to 27.0 min. Low Y=-0.067 High Y=14.933 mv Span=15.0



Sample Name: 3699903

Batch: 01283A20

Date Taken: Oct 11, 2001 02:12:04

Raw File: c:\cp\data1\20283.31R

Area File: c:\cp\data1\20283.31A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 74):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.686	3.612	DICHLORODIFLUOROMETH	0.3698	7120	359
3.818	3.818	CHLOROMETHANE	0.0000	0	0
4.303	4.141	VINYL CHLORIDE	0.0894	2904	202
4.610	4.652	BROMOMETHANE	0.1231	1887	168
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.760	5.760	TRICHLOROFLUOROMETHA	0.0000	0	0
6.776	6.732	1,1-DICHLOROETHENE	0.0386	776	130
7.109	7.077	METHYLENE CHLORIDE	0.0081	469	40
7.259	7.259	TRICHLOROTRIFLUOROET	0.0000	0	0
8.675	8.675	TRANS-1,2-DICHLOROET	0.0000	0	0
9.348	9.300	1,1-DICHLOROETHANE	0.0190	481	61
10.815	10.793	CIS-1,2-DICHLOROETHE	2.3575	52866	8254
11.168	11.168	BROMOCHLOROMETHANE	0.0000	0	0
11.385	11.352	CHLOROFORM	0.0876	6119	406
11.512	11.512	2,2-DICHLOROPROPANE	0.0000	0	0
13.040	13.006	1,2-DICHLOROETHANE	0.0159	369	57
13.238	13.217	1,1,1-TRICHLOROETHAN	1.5805	46031	5907
13.766	13.766	1,1-DICHLOROPROPENE	0.0000	0	0
14.168	14.168	CARBON TETRACHLORIDE	0.0000	0	0
15.570	15.570	DIBROMOMETHANE	0.0000	0	0
15.674	15.674	1,2-DICHLOROPROPANE	0.0000	0	0
15.782	15.771	TRICHLOROETHENE	2.2450	60067	14520
15.845	15.845	BROMODICHLOROMETHANE	0.0000	0	0
16.548	16.546	ISTD-1-BR-2-CLETHANE	1.0000	306389	87253
16.976	16.976	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.614	17.614	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.772	17.772	1,1,2-TRICHLOROETHAN	0.0000	0	0
18.080	18.080	1,3-DICHLOROPROPANE	0.0000	0	0
18.345	18.345	DIBROMOCHLOROMETHANE	0.0000	0	0
18.636	18.623	1,2-DIBROMOETHANE	0.0333	394	96
18.843	18.842	TETRACHLOROETHENE	15.9024	359977	139370
19.482	19.485	1,1,1,2-TETRACHLOROE	0.0022	89	20
19.556	19.556	CHLOROBENZENE	0.0000	0	0
20.022	20.022	BROMOFORM	0.0000	0	0
20.323	20.323	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.450	20.450	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.847	20.847	BROMOBENZENE	0.0000	0	0
21.107	21.107	2-CHLOROTOLUENE	0.0000	0	0
21.175	21.175	4-CHLOROTOLUENE	0.0000	0	0
21.747	21.747	1,3-DICHLOROBENZENE	0.0000	0	0
21.810	21.805	1,4-DICHLOROBENZENE	0.0029	266	17
22.106	22.106	1,2-DICHLOROBENZENE	0.0000	0	0
22.527	22.527	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.896	22.895	SURR-1B4CB-H	27.3533	233800	93598
23.943	23.936	1,2,4-TRICHLOROBENZE	0.0202	731	78
24.313	24.306	HEXACHLOROBUTADIENE	0.0094	222	44
24.489	24.489	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL 1,2-DICHLOROETHENE: 2.3575

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

Surrogate Recovery: BrClBenzene 91.1777 %

Chrom Perfect version 6.07

Reported on 10-11-2001at 02:36:31

Sample name: 3699903

Batch: 01283A201127,840

Raw file: c:\cp\data1\20283.31R

Reviewed by:

TSK

Verified by:

Vmm419

Date:

10-11-01

Date:

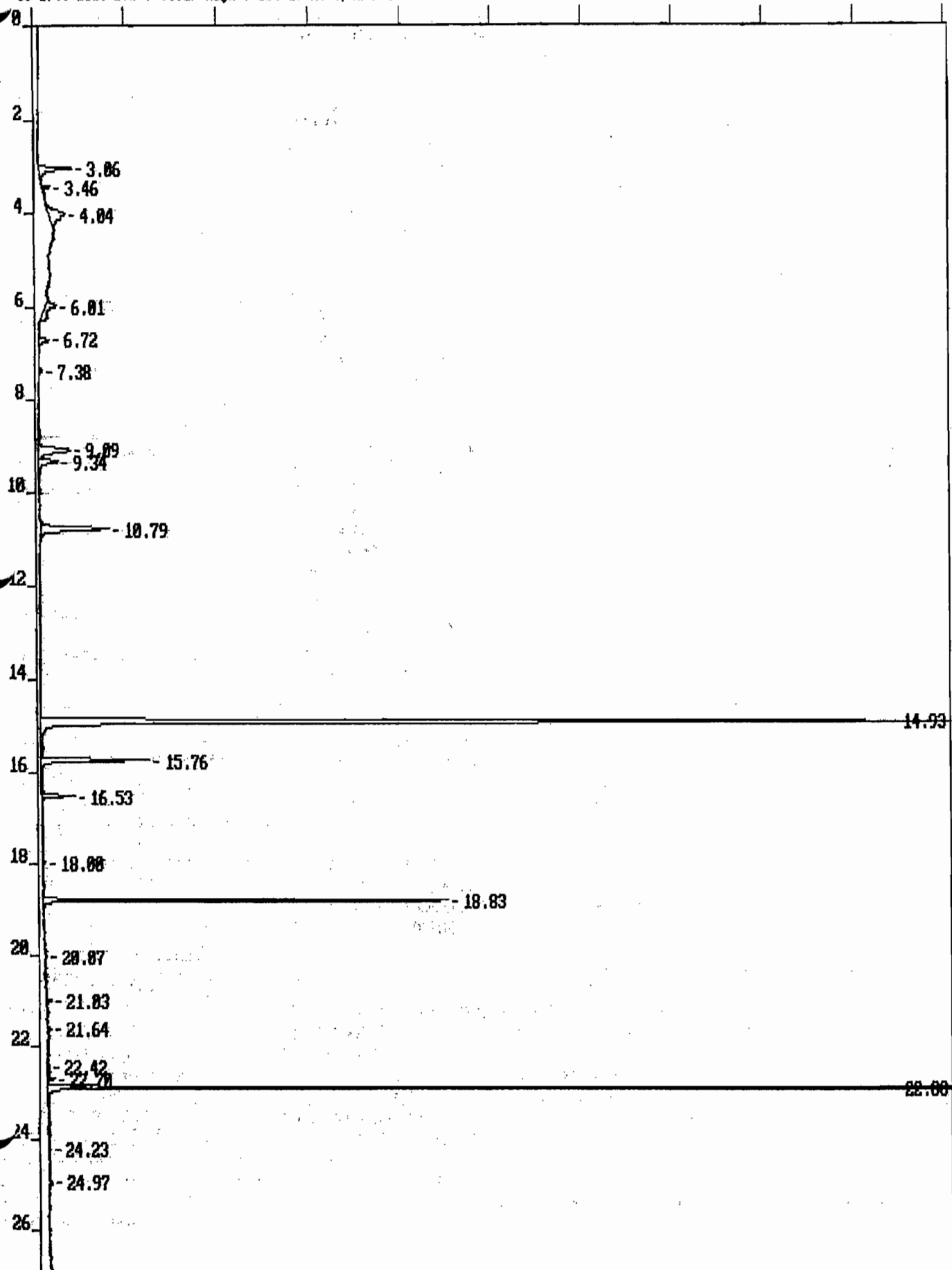
10/11/02

File=c:\cp\data1\202838.31R Date printed=10-11-2001 Time= 02:36:37

Sample Name=3699903

01283A201127,8404

to 27.0 min. Low Y=0.027 High Y=15.027 mv Span=15.0



Sample Name: 3699903

Batch: 01283A20

Date Taken: Oct 11, 2001 02:12:04

Raw File: c:\cp\data1\20283B.31R

Sea File: c:\cp\data1\20283B.31A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.126	4.126	VINYL CHLORIDE	0.0000	0	0
6.724	6.714	1,1-DICHLOROETHENE	0.4161	866	153
8.658	8.658	TRANS-1,2-DICHLOROET	0.0000	0	0
9.093	9.063	METHYL T-BUTYL ETHER	2.0744	4178	515
10.788	10.776	CIS-1,2-DICHLOROETHE	2.7908	6497	1120
13.753	13.753	1,1-DICHLOROPROPENE	0.0000	0	0
14.311	14.311	BENZENE	0.0000	0	0
14.925	14.921	ISTD-FBENZENE	1.0000	69337	15118
15.761	15.756	TRICHLOROETHENE	2.7967	7171	1778
16.532	16.530	1-BROMO-2-CHLOROETHA	1.0000	2647	550
16.961	16.961	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.599	17.599	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.998	17.995	TOLUENE	0.0459	170	47
18.829	18.828	TETRACHLOROETHENE	15.5637	15800	6678
19.542	19.542	CHLOROBENZENE	0.0000	0	0
19.763	19.763	ETHYLBENZENE	0.0000	0	0
20.068	19.956	M,P-XYLENE	0.0307	101	28
20.251	20.251	STYRENE	0.0000	0	0
20.314	20.314	O-XYLENE	0.0000	0	0
20.644	20.644	ISOPROPYLBENZENE	0.0000	0	0
20.833	20.833	BROMOBENZENE	0.0000	0	0
21.027	21.024	N-PROPYLBENZENE	0.1075	296	94
21.093	21.093	2-CHLOROTOLUENE	0.0000	0	0
21.160	21.160	4-CHLOROTOLUENE	0.0000	0	0
21.277	21.277	1,3,5-TRIMETHYLBENZE	0.0000	0	0
21.500	21.500	TERT-BUTYLBENZENE	0.0000	0	0
21.636	21.595	1,2,4-TRIMETHYLBENZE	0.0554	117	55
21.680	21.680	SEC-BUTYLBENZENE	0.0000	0	0
21.733	21.733	1,3-DICHLOROBENZENE	0.0000	0	0
21.791	21.791	1,4-DICHLOROBENZENE	0.0000	0	0
21.834	21.834	P-ISOPROPYLTOLUENE	0.0000	0	0
22.092	22.092	1,2-DICHLOROBENZENE	0.0000	0	0
22.182	22.182	N-BUTYLBENZENE	0.0000	0	0
22.881	22.880	SURR-1B4CB-P	28.1697	54797	25145
23.921	23.921	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.227	24.223	NAPHTHALENE	0.0702	194	32
24.291	24.291	HEXACHLOROBUTADIENE	0.0000	0	0
24.474	24.474	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0307

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

Surrogate Recovery: BrClBenzene 93.8990 %

Chrom Perfect version 6.07

Reported on 10-11-2001at 02:39:49

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699903

Batch: 01283A201127,840

Raw file: c:\cp\data1\20283B.31R

Reviewed by: JSWS Verified by: mmm468

Date: 10-11-01

Date: 10/11/01

Standards Data

Quality Control Summary
SDG# HUL02
Instrument ID: 6245
Initial Calibration Summary

Calibration Batch: 01280A20
Initial Calibration Date(s): 10/08/01 (HALL)
Initial Calibration Date(s): 10/08/01 (PID)

Sample Information			
LL Sample#	Sample Code	Analysis	
		Date	Time
CHKSTD		10/08/01	15:53
BLK2009	METHOD BLANK	10/08/01	18:19
LCS2003	LAB CONTROL	10/08/01	20:23
LDS2003	LAB CON DUP	10/08/01	21:00
BLK2010	METHOD BLANK	10/08/01	22:29
3699899	W-10U	10/08/01	23:24
CHKSTD		10/09/01	03:15
BLK2011	METHOD BLANK	10/09/01	04:46
3699902	NB7TB	10/09/01	05:52
3699890	MW-6L	10/09/01	08:21
3699891	MW-7U	10/09/01	08:59
3699892	MW-7M	10/09/01	09:36
3699893	MW-7L	10/09/01	10:14
CHKSTD		10/10/01	04:28
BLK2014	METHOD BLANK	10/10/01	06:53
3699802		10/10/01	09:31
3699802MS		10/10/01	10:13
3699802MSD		10/10/01	10:51
LCS2006	LAB CONTROL	10/10/01	11:29
CHKSTD		10/10/01	12:19
BLK2015	METHOD BLANK	10/10/01	13:21
3699895	MW-8M	10/10/01	19:47
CHKSTD		10/10/01	20:26
BLK2016	METHOD BLANK	10/10/01	21:19
3699901	NB7FB	10/10/01	22:14
3699894	MW-8U	10/10/01	23:04
3699896	MW-8L	10/10/01	23:41
3699897	MW-9U	10/11/01	00:19
3699898	MW-9L	10/11/01	00:56
3699900	W-10L	10/11/01	01:34
3699903	AW1UB	10/11/01	02:12

Quality Control Summary

SDG# HUL02

Instrument ID: 6245

Initial Calibration Summary

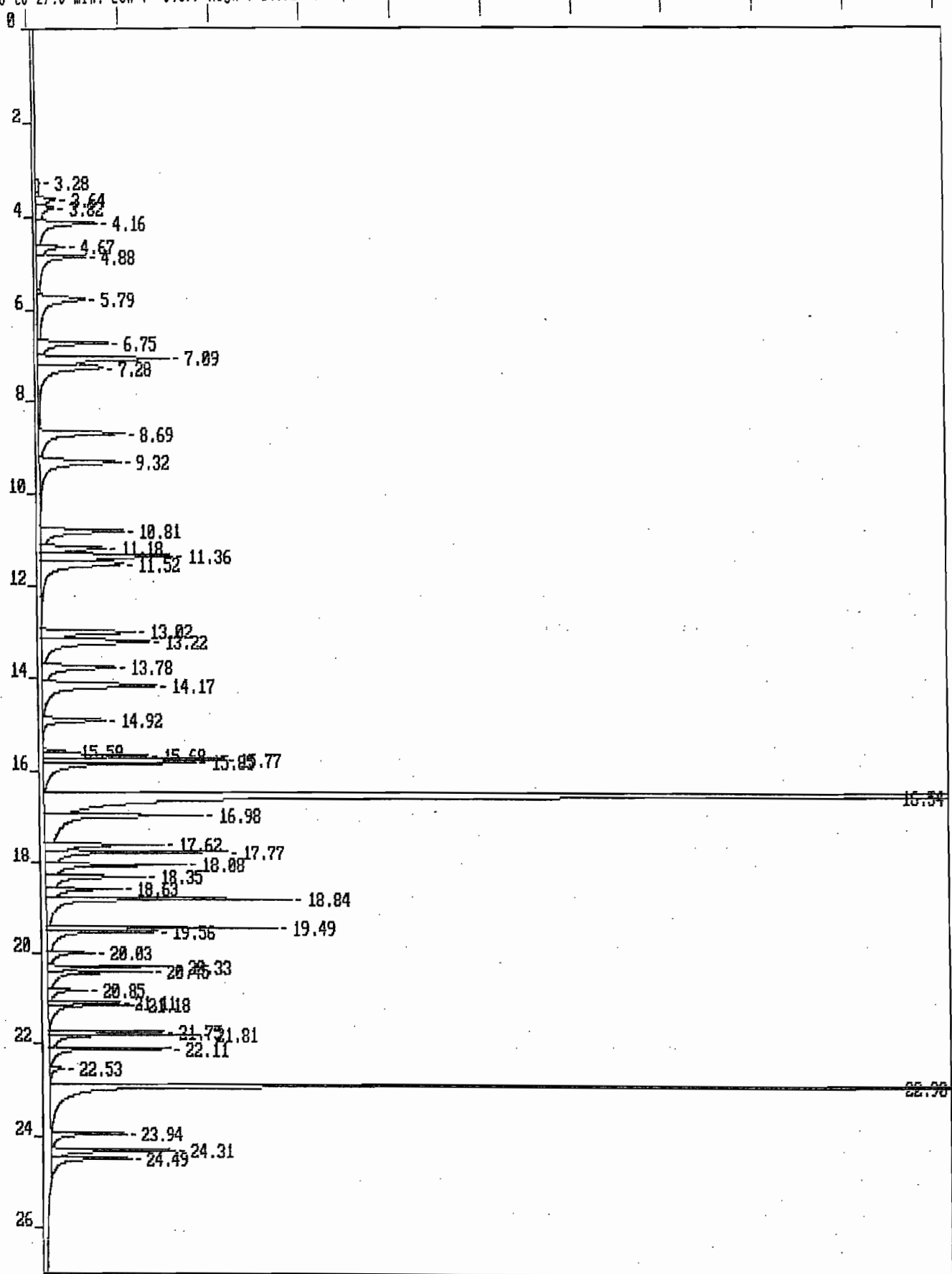
Calibration Batch: 01280A20

Initial Calibration Date(s): 10/08/01 (HALL)

Initial Calibration Date(s): 10/08/01 (PID)

STANDARD DATE INJECTED TIME INJECTED	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8	
	10/08/01 05:57	10/08/01 06:36	10/08/01 07:13	10/08/01 07:51	10/08/01 08:28	10/08/01 09:05	10/08/01 09:42	10/08/01 10:19	
COMPOUND (DETECTOR)	Relative Response Factor (RRF)								% RSD
	Retention Time LEVEL 3	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	
ETHYLBENZENE (PID)	19.762	0.0639	0.0610	0.0564	0.0588	0.0574	0.0565	0.0561	0.0578
M,P-XYLENE (PID)	19.954	0.0686	0.0650	0.0597	0.0622	0.0607	0.0595	0.0592	0.0613
BROMOFORM (HALL)	20.023	0.0203	0.0295	0.0305	0.0341	0.0345	0.0344	0.0342	0.0311
O-XYLENE (PID)	20.312	0.0680	0.0646	0.0585	0.0618	0.0605	0.0585	0.0579	0.0599
1,1,2,2-TETRACHLOROETHANE (HALL)	20.322	0.0541	0.0663	0.0647	0.0627	0.0651	0.0607	0.0562	0.0614
1,3-DICHLOROBENZENE (HALL)	21.746	0.0493	0.0613	0.0645	0.0641	0.0667	0.0613	0.0563	0.0605
1,4-DICHLOROBENZENE (PID)	21.790	0.0709	0.0666	0.0616	0.0650	0.0639	0.0630	0.0635	0.0643
1,2-DICHLOROBENZENE (HALL)	22.105	0.0524	0.0638	0.0631	0.0627	0.0638	0.0597	0.0547	0.0600
SURR-1B4CB-P (PID)	22.879	0.0548	0.0572	0.0588	0.0610	0.0605	0.0610	0.0617	0.0590
SURR-1B4CB-H (HALL)	22.894	0.0373	0.0378	0.0406	0.0399	0.0387	0.0402	0.0401	0.0392

File=C:\CP\DATA1\20280.07R Date printed=10-08-2001 Time= 05:58:00
Sample Name=CALSTD1 01280A208400,8401,8464
0.0 to 27.0 min. Low Y=-0.077 High Y=14.923 mv Span=15.0



001110

Sample Name: CALSTD1

Batch: 01280A20

Date Taken: Oct 8, 2001 05:57:56

Raw File: C:\CP\DATA1\20280.07R

Area File: C:\CP\DATA1\20280.07A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap

Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 49):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.643	3.631	DICHLORODIFLUOROMETH	0.1468	2459	328
3.825	3.822	CHLOROMETHANE	0.2215	3011	307
4.156	4.154	VINYL CHLORIDE	0.1725	7909	999
4.667	4.661	BROMOMETHANE	0.1429	2888	470
4.881	4.872	CHLOROETHANE	0.1750	7519	815
5.790	5.780	TRICHLOROFLUOROMETHA	0.1834	11188	794
6.748	6.744	1,1-DICHLOROETHENE	0.1356	7406	1155
7.090	7.085	METHYLENE CHLORIDE	0.1773	11820	2171
7.277	7.270	TRICHLOROTRIFLUOROET	0.2179	13338	1069
8.691	8.685	TRANS-1,2-DICHLOROET	0.1557	10977	1418
9.315	9.310	1,1-DICHLOROETHANE	0.1671	12381	1349
10.811	10.803	CIS-1,2-DICHLOROETHE	0.1572	9774	1378
11.182	11.175	BROMOCHLOROMETHANE	0.1663	6519	1077
11.361	11.351	CHLOROFORM	0.1815	14309	2188
11.518	11.516	2,2-DICHLOROPROPANE	0.2109	15223	1374
13.018	13.004	1,2-DICHLOROETHANE	0.1796	9177	1560
13.224	13.220	1,1,1-TRICHLOROETHAN	0.1974	16601	1795
13.781	13.769	1,1-DICHLOROPROPENE	0.1756	9514	1230
14.173	14.167	CARBON TETRACHLORIDE	0.1857	17380	1913
15.586	15.578	DIBROMOMETHANE	0.0665	1163	373
15.680	15.672	1,2-DICHLOROPROPANE	0.1536	7311	1742
15.774	15.767	TRICHLOROETHENE	0.1750	11927	2991
15.845	15.838	BROMODICHLOROMETHANE	0.1952	15885	2534
16.542	16.536	ISTD-1-BR-2-CLETHANE	1.0000	271974	77295
16.982	16.974	CIS-1,3-DICHLOROPROP	0.1860	18994	2638
17.622	17.617	TRANS-1,3-DICHLOROPR	0.1423	7747	1993
17.774	17.769	1,1,2-TRICHLOROETHAN	0.1859	14072	3012
18.083	18.078	1,3-DICHLOROPROPANE	0.1784	10032	2339
18.349	18.345	DIBROMOCHLOROMETHANE	0.1519	7989	1662
18.628	18.625	1,2-DIBROMOETHANE	0.1825	5823	1263
18.844	18.840	TETRACHLOROETHENE	0.2060	16480	4088
19.486	19.484	1,1,1,2-TETRACHLOROE	0.1834	9776	3833
19.557	19.554	CHLOROBENZENE	0.2002	9167	1842
20.029	20.027	BROMOFORM	0.1094	3921	783
20.326	20.324	1,1,2,2-TETRACHLOROE	0.1631	5967	2091
20.452	20.450	1,2,3-TRICHLOROPROPA	0.1681	7525	1735
20.854	20.852	BROMOBENZENE	0.1206	2945	661
21.110	21.108	2-CHLOROTOLUENE	0.1520	2819	1186
21.177	21.176	4-CHLOROTOLUENE	0.1737	6471	1414
21.751	21.750	1,3-DICHLOROBENZENE	0.1525	4046	1906
21.807	21.806	1,4-DICHLOROBENZENE	0.1853	8506	2507
22.109	22.108	1,2-DICHLOROBENZENE	0.1659	7223	2025
22.535	22.534	1,2-DIBROMO-3-CHLORO	0.0930	1395	235
22.896	22.895	SURR-1B4CB-H	3.8935	80553	29378
23.943	23.942	1,2,4-TRICHLOROBENZE	0.1397	4951	1224
24.311	24.310	HEXACHLOROBUTADIENE	0.1809	7856	2058
24.495	24.494	1,2,3-TRICHLOROBENZE	0.1663	6524	1317
		TOTAL 1,2-DICHLOROETHENE:	0.3129		

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

Surrogate Recovery: BrClBenzene 12.9783 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 05:59:51

Sample name: CALSTD1

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.07R

Reviewed by:

JS

Verified by:

Vmm469

Date:

10-8-01

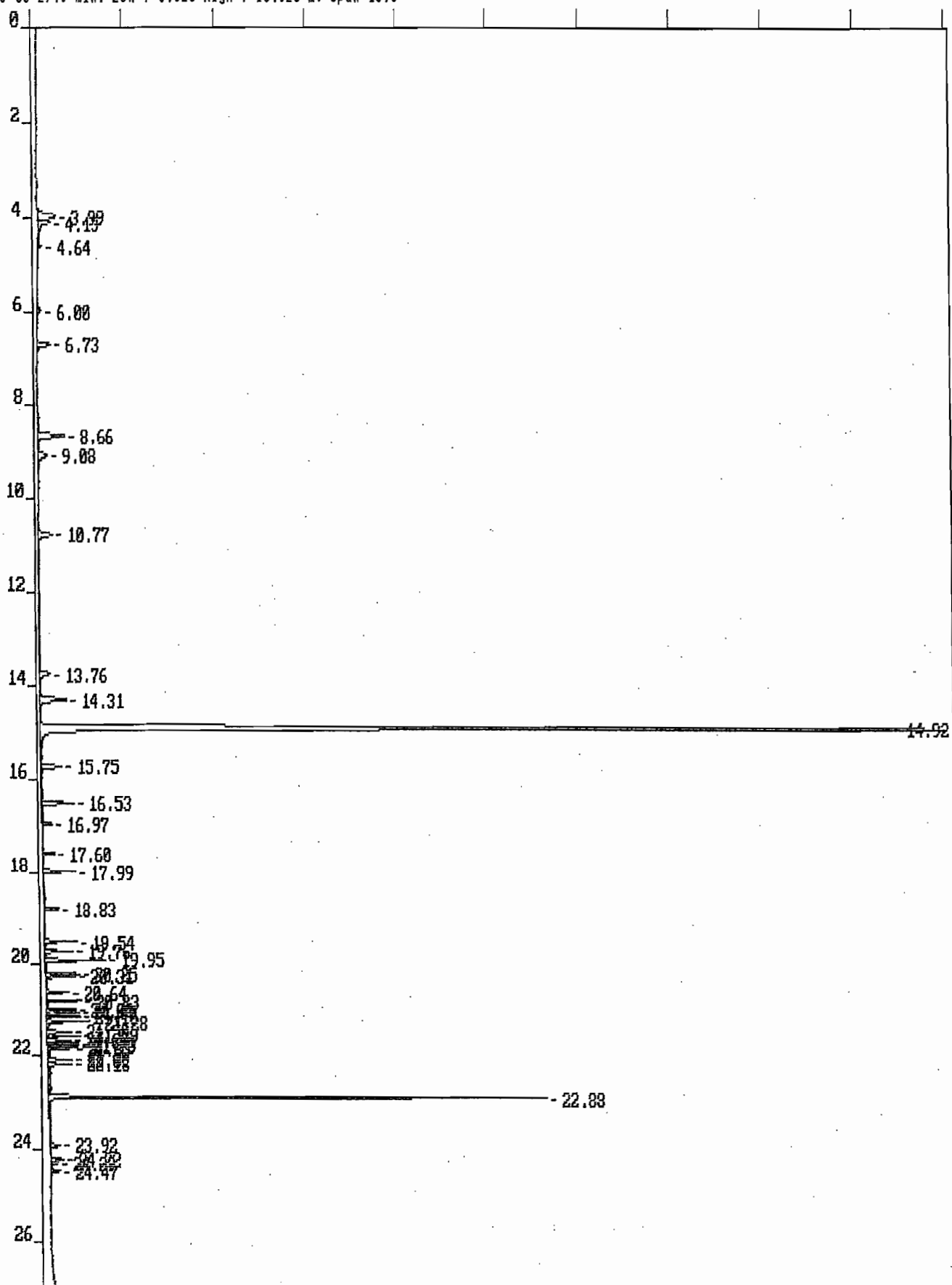
Date:

10/09/01

File=C:\CP\DATA1\20280B.07R Date printed=10-08-2001 Time= 06:00:19

Sample Name=CALSTD1 01280A208400,8401,8464

0.0 to 27.0 min. Low Y=0.026 High Y=15.026 mv Span=15.0



Sample Name: CALSTD1

Batch: 01280A20

Date Taken: Oct 8, 2001 05:57:56

Raw File: C:\CP\DATA1\20280B.07R

Area File: C:\CP\DATA1\20280B.07A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap

Inst. ID#06245 - 5890#20PID

Peak width: .04

Dil. factor: 1

Analyst: 115

Threshold: -1

Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 44):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.133	4.130	VINYL CHLORIDE	0.4079	1821	205
6.726	6.723	1,1-DICHLOROETHENE	0.1917	1129	209
8.663	8.657	TRANS-1,2-DICHLOROET	0.2122	2615	448
9.080	9.083	METHYL T-BUTYL ETHER	0.2110	1716	142
10.774	10.771	CIS-1,2-DICHLOROETHE	0.2006	1648	218
13.759	13.743	1,1-DICHLOROPROPENE	0.2072	1089	171
14.314	14.299	BENZENE	0.2026	2514	440
14.916	14.905	ISTD-FBENZENE	1.0000	67902	14657
15.751	15.749	TRICHLOROETHENE	0.1750	1426	344
16.525	16.517	1-BROMO-2-CHLOROETHA	1.0000	1896	536
16.965	16.951	CIS-1,3-DICHLOROPROP	0.1932	669	156
17.600	17.595	TRANS-1,3-DICHLOROPR	0.1850	670	196
17.993	17.988	TOLUENE	0.1987	1926	551
18.827	18.822	TETRACHLOROETHENE	0.2098	770	247
19.542	19.539	CHLOROBENZENE	0.1927	1235	545
19.762	19.760	ETHYLBENZENE	0.1946	1079	468
19.954	19.953	M,P-XYLENE	0.3961	2498	1006
20.250	20.248	STYRENE	0.1692	1091	561
20.313	20.311	O-XYLENE	0.1992	1218	498
20.642	20.640	ISOPROPYLBENZENE	0.2018	940	390
20.832	20.830	BROMOBENZENE	0.1879	1278	584
21.022	21.022	N-PROPYLBENZENE	0.2036	983	486
21.092	21.090	2-CHLOROTOLUENE	0.2010	1067	535
21.160	21.158	4-CHLOROTOLUENE	0.1963	1147	561
21.276	21.274	1,3,5-TRIMETHYLBENZE	0.2012	1670	708
21.498	21.497	TERT-BUTYLBENZENE	0.1992	970	405
21.594	21.592	1,2,4-TRIMETHYLBENZE	0.1860	1080	551
21.679	21.679	SEC-BUTYLBENZENE	0.1891	877	393
21.733	21.731	1,3-DICHLOROBENZENE	0.1933	1007	516
21.791	21.790	1,4-DICHLOROBENZENE	0.1947	1031	519
21.834	21.832	P-ISOPROPYLTOLUENE	0.1968	1096	418
22.092	22.092	1,2-DICHLOROBENZENE	0.1953	905	404
22.182	22.180	N-BUTYLBENZENE	0.1904	1824	398
22.880	22.879	SURR-1B4CB-P	3.4147	18486	8199
23.921	23.922	1,2,4-TRICHLOROBENZE	0.1770	545	178
24.224	24.226	NAPHTHALENE	0.1769	599	222
24.294	24.290	HEXACHLOROBUTADIENE	0.2163	411	136
24.474	24.476	1,2,3-TRICHLOROBENZE	0.1747	474	159

TOTAL XYLENES: 0.5954

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

Surrogate Recovery: BrClBenzene 11.3822 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 06:04:13

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P20280.CAL Current version number = 44

Updated from file = C:\CP\DATA1\20280B.07A

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: 01280A208400,840

Raw file:

C:\CP\DATA1\20280B.07R

Reviewed by:

JS WS

Verified by:

VMM419

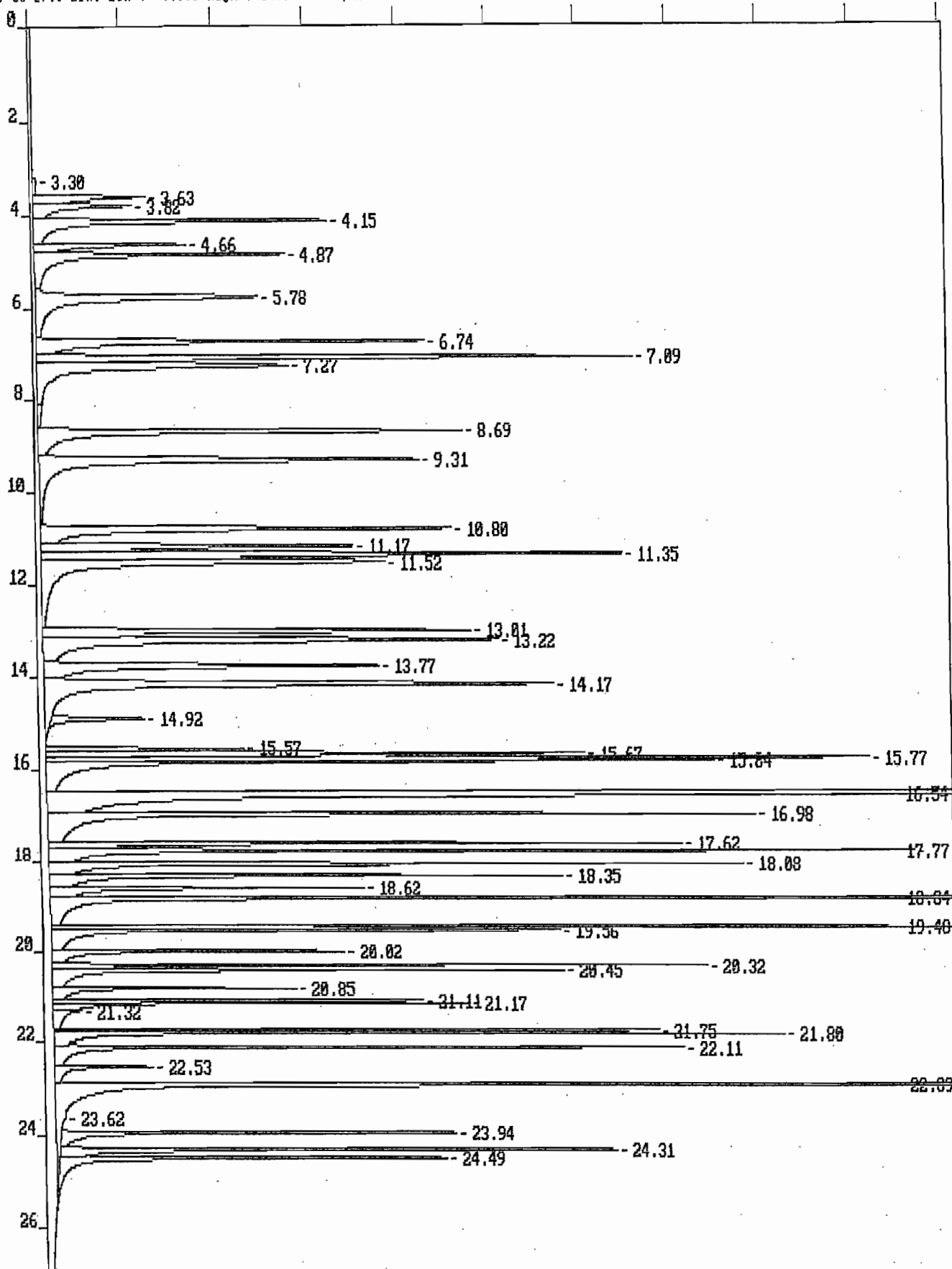
Date:

10-8-01

Date:

10/09/07

File=C:\CP\DATA1\20280.08R Date printed=10-08-2001 Time= 06:36:21
Sample Name=CALSTD2 01280A208400,8401,8464
0.0 to 27.0 min. Low Y=-0.088 High Y=14.912 mv Span=15.0



Sample Name: CALSTD2
 Batch: 01280A20 Date Taken: Oct 8, 2001 06:36:16
 Raw File: C:\CP\DATA1\20280.08R
 Area File: C:\CP\DATA1\20280.08A
 Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75M x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115
 Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 50):
 Ret Time Expected

(min) RT (min)	Peak Name	Amount * (ug/L)	Peak Area	Peak Height
3.628	3.643 DICHLORODIFLUOROMETH	0.8169	11898	1848
3.817	3.825 CHLOROMETHANE	1.1851	11901	1611
4.154	4.156 VINYL CHLORIDE	0.8259	30018	4804
4.661	4.667 BROMOMETHANE	0.7524	12844	2494
4.873	4.881 CHLOROETHANE	0.8830	26663	4092
5.776	5.790 TRICHLOROFLUOROMETHA	0.8326	40719	3637
6.742	6.748 1,1-DICHLOROETHENE	0.7118	37261	6365
7.085	7.090 METHYLENE CHLORIDE	0.7656	50089	9816
7.266	7.277 TRICHLOROTRIFLUOROET	0.8000	43509	4118
8.685	8.691 TRANS-1,2-DICHLOROET	0.7247	45466	6953
9.308	9.315 1,1-DICHLOROETHANE	0.7352	52088	6241
10.801	10.811 CIS-1,2-DICHLOROETHE	0.7291	43652	6730
11.172	11.182 BROMOCHLOROMETHANE	0.7464	29753	5098
11.354	11.361 CHLOROFORM	0.7514	59671	9544
11.517	11.518 2,2-DICHLOROPROPANE	0.8191	57808	5619
13.008	13.018 1,2-DICHLOROETHANE	0.7694	38761	7043
13.216	13.224 1,1,1-TRICHLOROETHAN	0.7842	61500	7492
13.774	13.781 1,1-DICHLOROPROPENE	0.7444	38978	5495
14.167	14.173 CARBON TETRACHLORIDE	0.7752	70728	8390
15.574	15.586 DIBROMOMETHANE	0.5456	11133	3227
15.674	15.680 1,2-DICHLOROPROPANE	0.7422	37090	8856
15.769	15.774 TRICHLOROETHENE	0.7549	52741	13560
15.842	15.845 BROMODICHLOROMETHANE	0.8095	58036	11017
16.541	16.542 ISTD-1-BR-2-CLETHANE	1.0000	290713	81533
16.977	16.982 CIS-1,3-DICHLOROPROP	0.7742	54653	11666
17.616	17.622 TRANS-1,3-DICHLOROPR	0.7053	32191	10447
17.771	17.774 1,1,2-TRICHLOROETHAN	0.8364	50961	14283
18.080	18.083 1,3-DICHLOROPROPANE	0.8260	37960	11438
18.346	18.349 DIBROMOCHLOROMETHANE	0.7310	30577	8452
18.624	18.628 1,2-DIBROMOETHANE	0.7020	19001	5144
18.841	18.844 TETRACHLOROETHENE	0.8887	59511	18541
19.483	19.486 1,1,1,2-TETRACHLOROE	0.8737	45910	19195
19.555	19.557 CHLOROBENZENE	0.8713	30493	8429
20.024	20.029 BROMOFORM	0.6360	16701	4811
20.323	20.326 1,1,2,2-TETRACHLOROE	0.7995	26703	10814
20.450	20.452 1,2,3-TRICHLOROPROPA	0.7753	27547	8436
20.849	20.854 BROMOBENZENE	0.6930	12989	4007
21.107	21.110 2-CHLOROTOLUENE	0.7428	13604	6107
21.175	21.177 4-CHLOROTOLUENE	0.8039	18979	6897
21.748	21.751 1,3-DICHLOROBENZENE	0.7597	20230	10001
21.805	21.807 1,4-DICHLOROBENZENE	0.8522	32663	12128
22.107	22.109 1,2-DICHLOROBENZENE	0.8096	29479	10397
22.531	22.535 1,2-DIBROMO-3-CHLORO	0.6047	7308	1617
22.895	22.896 SURR-1B4CB-H	7.7653	169463	61709
23.939	23.943 1,2,4-TRICHLOROBENZE	0.7057	22125	6513
24.307	24.311 HEXACHLOROBUTADIENE	0.7651	31856	9189
24.491	24.495 1,2,3-TRICHLOROBENZE	0.7675	26839	6398
	TOTAL 1,2-DICHLOROETHENE:	1.4538		

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

Surrogate Recovery: BrClBenzene 25.8845 %

Chrom Perfect version 6.07

Reported on 10-08-2001 at 06:38:12

Sample name: CALSTD2

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.08R

Reviewed by: JS

Verified by: mm46

Date: 10-8-01

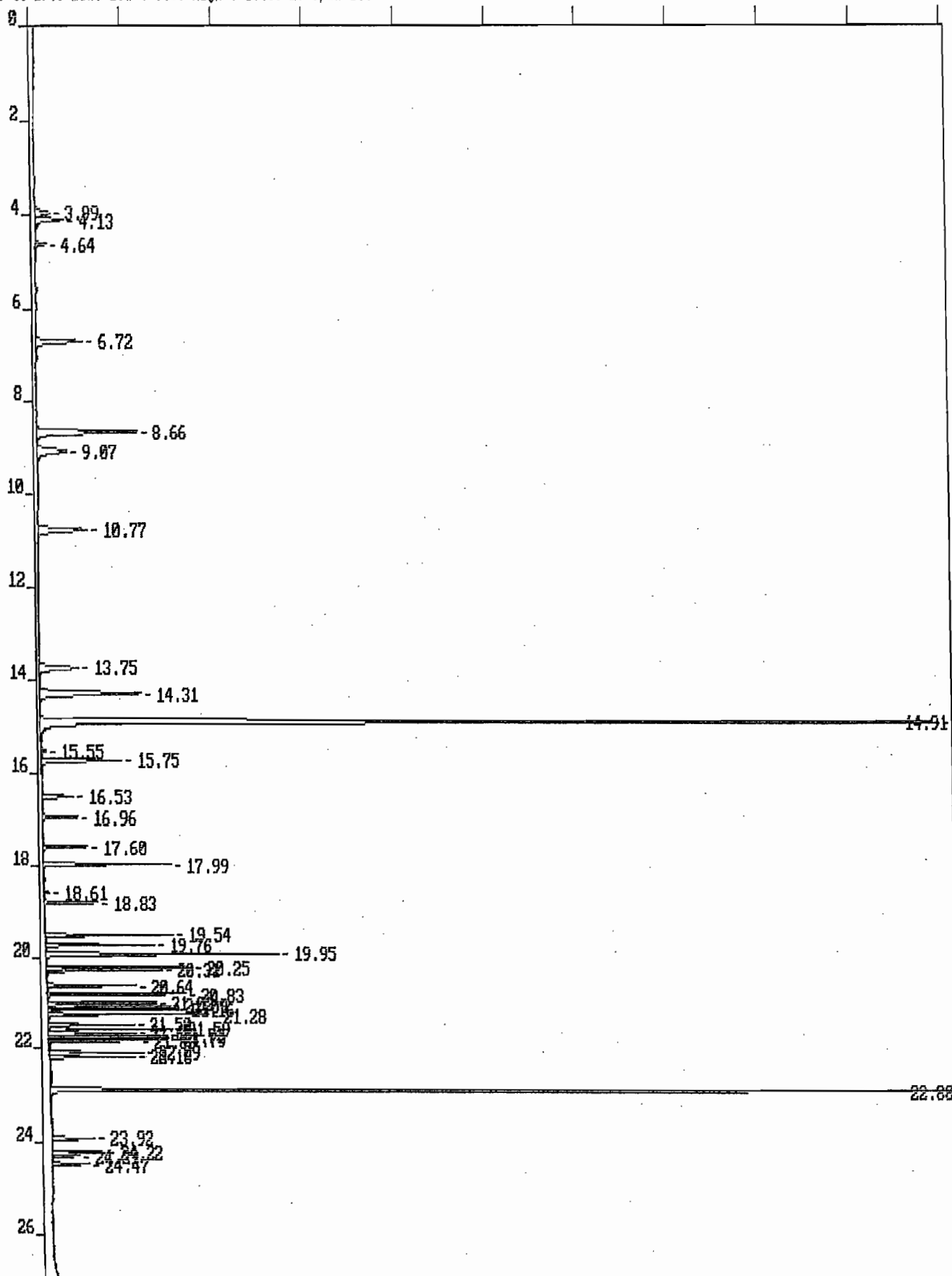
Date: 10/09/01

File=C:\CP\DATA1\20280B.08R Date printed=10-08-2001 Time= 06:38:39

Sample Name=CALSTD2

01280A208400,8401,8464

0.0 to 27.0 min. Low Y=0.03 High Y=15.03 mv Span=15.0



01280A208400

Sample Name: CALSTD2

Batch: 01280A20

Date Taken: Oct 8, 2001 06:36:16

Raw File: C:\CP\DATA1\20280B.08R

Area File: C:\CP\DATA1\20280B.08A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap

Inst. ID#06245 - 5890#20PID

Peak width: .04

Dil. factor: 1

Analyst: 115

Threshold: -1

Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 45):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.131	4.133	VINYL CHLORIDE	0.9379	2763	475
6.718	6.726	1,1-DICHLOROETHENE	0.6972	3942	766
8.663	8.663	TRANS-1,2-DICHLOROET	0.7725	9074	1642
9.069	9.080	METHYL T-BUTYL ETHER	0.7362	4365	499
10.775	10.774	CIS-1,2-DICHLOROETHE	0.7531	4980	823
13.750	13.759	1,1-DICHLOROPROPENE	0.7717	3932	641
14.307	14.314	BENZENE	0.7511	9376	1643
14.915	14.916	ISTD-FBENZENE	1.0000	67905	14767
15.752	15.751	TRICHLOROETHENE	0.6572	5170	1301
16.525	16.525	1-BROMO-2-CHLOROETHA	1.0000	1800	520
16.958	16.965	CIS-1,3-DICHLOROPROP	0.7238	2028	590
17.598	17.600	TRANS-1,3-DICHLOROPR	0.6918	2066	739
17.992	17.993	TOLUENE	0.7525	5663	2100
18.826	18.827	TETRACHLOROETHENE	0.7408	2288	880
19.540	19.542	CHLOROBENZENE	0.7371	4487	2103
19.762	19.762	ETHYLBENZENE	0.7431	3858	1800
19.954	19.954	M,P-XYLENE	1.5005	8844	3842
20.249	20.250	STYRENE	0.7205	4553	2397
20.312	20.313	O-XYLENE	0.7568	4028	1908
20.642	20.642	ISOPROPYLBENZENE	0.7491	3092	1461
20.831	20.832	BROMOBENZENE	0.7292	4555	2288
21.022	21.022	N-PROPYLBENZENE	0.7471	3552	1799
21.091	21.092	2-CHLOROTOLUENE	0.7473	3905	2010
21.159	21.160	4-CHLOROTOLUENE	0.7350	4080	2123
21.275	21.276	1,3,5-TRIMETHYLBENZE	0.7483	5349	2657
21.498	21.498	TERT-BUTYLBENZENE	0.6930	3022	1420
21.593	21.594	1,2,4-TRIMETHYLBENZE	0.6839	3883	2040
21.679	21.679	SEC-BUTYLBENZENE	0.6790	2935	1423
21.732	21.733	1,3-DICHLOROBENZENE	0.7318	3786	1970
21.790	21.791	1,4-DICHLOROBENZENE	0.7308	3825	1968
21.832	21.834	P-ISOPROPYLTOLUENE	0.6887	3040	1474
22.091	22.092	1,2-DICHLOROBENZENE	0.7363	3099	1535
22.181	22.182	N-BUTYLBENZENE	0.6647	3435	1399
22.879	22.880	SURR-1B4CB-P	6.9831	36891	16901
23.921	23.921	1,2,4-TRICHLOROBENZE	0.6964	1959	706
24.224	24.224	NAPHTHALENE	0.6864	2399	870
24.290	24.294	HEXACHLOROBUTADIENE	0.7211	1339	458
24.473	24.474	1,2,3-TRICHLOROBENZE	0.6801	1853	623

TOTAL XYLENES: 2.2573

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

Surrogate Recovery: BrClBenzene

23.2771 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 06:42:34

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\20280.CAL Current version number = 45

Updated from file = C:\CP\DATA1\20280B.08A

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: 01280A208400,840

Raw file:

C:\CP\DATA1\20280B.08R

Reviewed by:

PK is

Verified by:

Vmm49

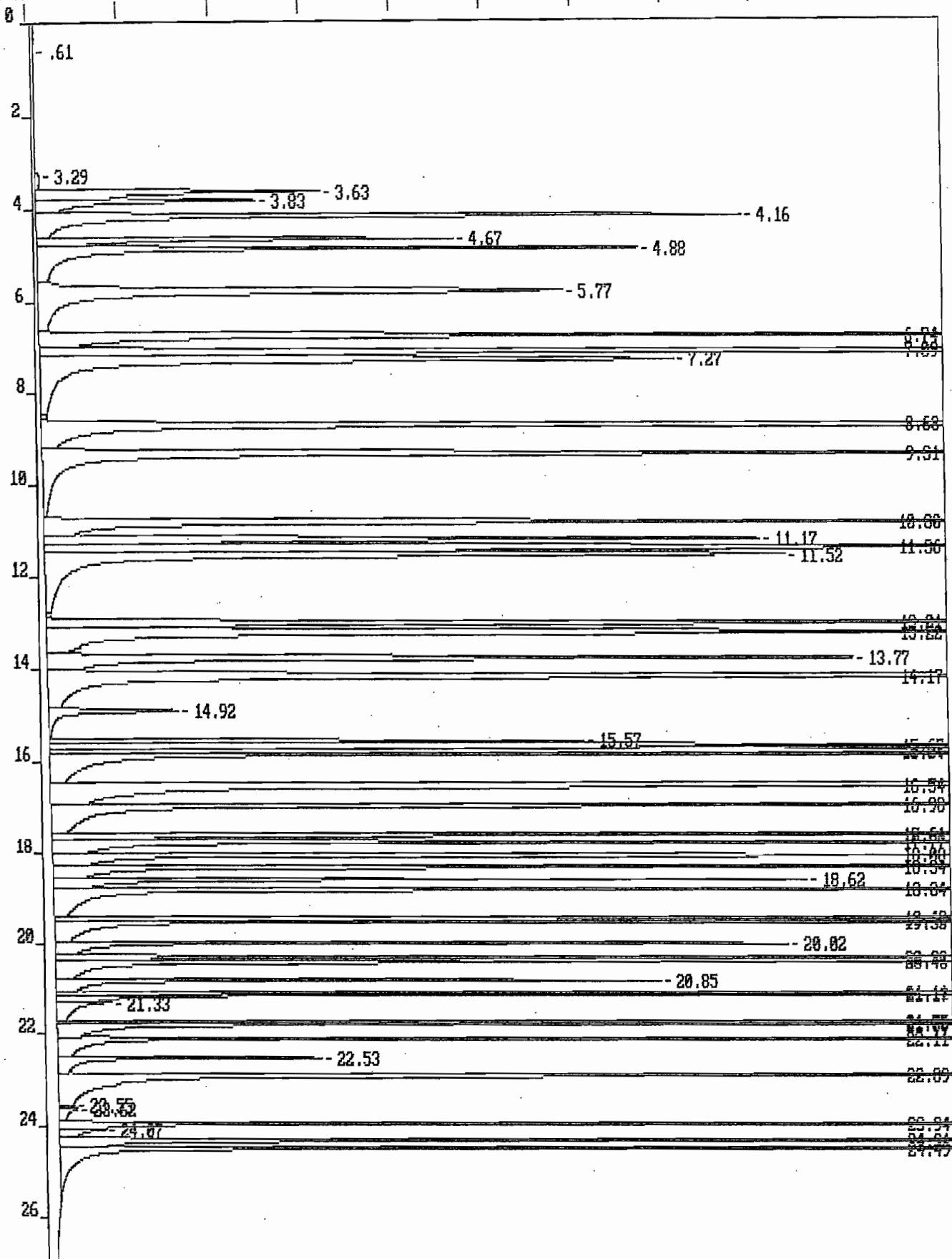
Date:

10-8-01

Date:

10/09/01

File=C:\CP\DATA1\20280.09R Date printed=10-08-2001 Time= 07:13:52
Sample Name=CALSTD3 01280A208400,8401,8464
0.0 to 27.0 min. Low Y=-0.093 High Y=14.907 mv Span=15.0



Sample Name: CALSTD3

Batch: 01280A20

Date Taken: Oct 8, 2001 07:13:48

Raw File: C:\CP\DATA1\20280.09R

Area File: C:\CP\DATA1\20280.09A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 51):

Ret Time	Expected	Peak Name	Amount *	Peak	Peak
(min)	RT (min)		(ug/L)	Area	Height
3.631	3.628	DICHLORODIFLUOROMETH	2.4214	30116	4686
3.835	3.817	CHLOROMETHANE	3.1209	25044	3621
4.162	4.154	VINYL CHLORIDE	2.3486	68581	11664
4.668	4.661	BROMOMETHANE	2.3478	32225	6874
4.877	4.873	CHLOROETHANE	2.4367	57822	9914
5.771	5.776	TRICHLOROFLUOROMETHA	2.3309	93695	8648
6.743	6.742	1,1-DICHLOROETHENE	2.2700	96974	17342
7.087	7.085	METHYLENE CHLORIDE	2.3825	128619	25718
7.270	7.266	TRICHLOROTRIFLUOROET	2.3985	109543	10467
8.684	8.685	TRANS-1,2-DICHLOROET	2.3590	119990	19251
9.308	9.308	1,1-DICHLOROETHANE	2.1431	119760	15454
10.800	10.801	CIS-1,2-DICHLOROETHE	2.0440	98715	16177
11.174	11.172	BROMOCHLOROMETHANE	2.0020	66830	11840
11.356	11.354	CHLOROFORM	2.0454	132227	21395
11.516	11.517	2,2-DICHLOROPROPANE	2.0967	114694	12257
13.009	13.008	1,2-DICHLOROETHANE	2.0442	86593	16164
13.219	13.216	1,1,1-TRICHLOROETHAN	2.1076	133367	17194
13.771	13.774	1,1-DICHLOROPROPENE	2.0948	87953	13329
14.167	14.167	CARBON TETRACHLORIDE	2.1086	149873	19482
15.573	15.574	DIBROMOMETHANE	1.7146	30474	8825
15.673	15.674	1,2-DICHLOROPROPANE	2.1112	87808	21487
15.770	15.769	TRICHLOROETHENE	2.1466	119604	31310
15.843	15.842	BROMODICHLOROMETHANE	2.1394	119677	24837
16.543	16.541	ISTD-1-BR-2-CLETHANE	1.0000	279990	79672
16.975	16.977	CIS-1,3-DICHLOROPROP	2.0546	101773	26588
17.614	17.616	TRANS-1,3-DICHLOROPR	2.0224	72553	25728
17.770	17.771	1,1,2-TRICHLOROETHAN	2.1909	103998	32152
18.078	18.080	1,3-DICHLOROPROPANE	2.2384	79728	26779
18.344	18.346	DIBROMOCHLOROMETHANE	2.0338	65183	20410
18.624	18.624	1,2-DIBROMOETHANE	1.9483	40005	12488
18.841	18.841	TETRACHLOROETHENE	2.3886	124213	42541
19.483	19.483	1,1,1,2-TETRACHLOROE	2.3004	101890	43255
19.554	19.555	CHLOROBENZENE	2.2875	59960	19159
20.023	20.024	BROMOFORM	1.8402	36248	12147
20.322	20.323	1,1,2,2-TETRACHLOROE	2.2051	59705	25759
20.448	20.450	1,2,3-TRICHLOROPROPA	2.1688	57416	20377
20.848	20.849	BROMOBENZENE	1.9874	28342	10073
21.106	21.107	2-CHLOROTOLUENE	2.2131	32484	15759
21.173	21.175	4-CHLOROTOLUENE	2.2757	41122	16900
21.746	21.748	1,3-DICHLOROBENZENE	2.2553	51070	25696
21.803	21.805	1,4-DICHLOROBENZENE	2.3322	69896	28780
22.105	22.107	1,2-DICHLOROBENZENE	2.2510	64109	25122
22.528	22.531	1,2-DIBROMO-3-CHLORO	1.8658	16411	4377
22.894	22.895	SURR-1B4CB-H	13.9313	248485	97107
23.936	23.939	1,2,4-TRICHLOROBENZE	2.2098	51577	17961
24.306	24.307	HEXACHLOROBUTADIENE	2.1968	76474	22672
24.489	24.491	1,2,3-TRICHLOROBENZE	2.2483	63849	16596
		TOTAL 1,2-DICHLOROETHENE:	4.4030		

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

Surrogate Recovery: BrClBenzene 46.4378 %

Sample name: CALSTD3

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.09R

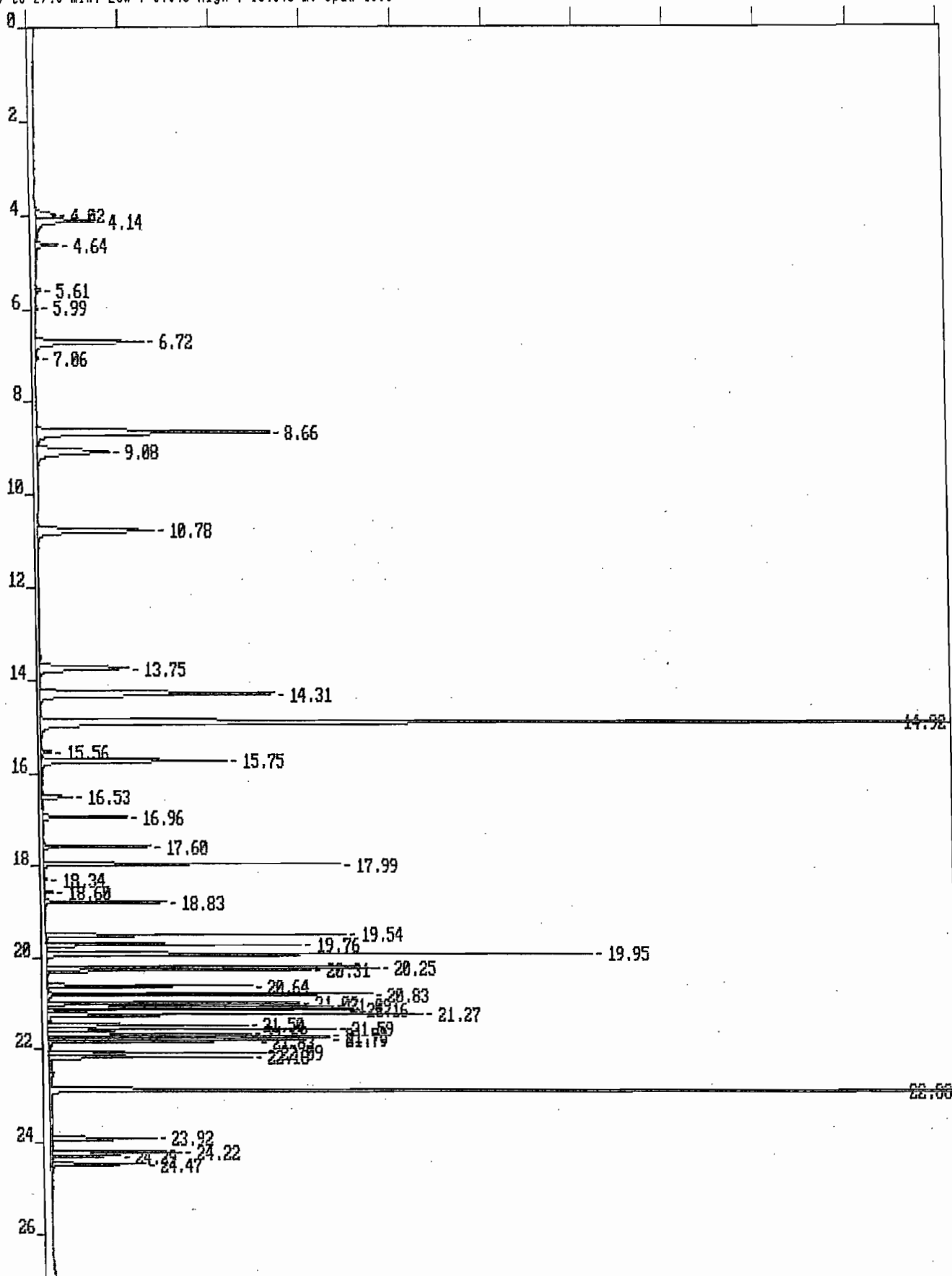
Reviewed by: MM5944

Verified by: VMM469

Date: 10/8/01

Date: 10/09/01

File=C:\CP\DATA1\202808.09R Date printed=10-08-2001 Time= 07:16:10
Sample Name=CALSTD3 01280A208400,8401,8464
0.0 to 27.0 min. Low Y=0.048 High Y=15.048 mv Span=15.0



Sample Name: CALSTD3

Batch: 01280A20

Date Taken: Oct 8, 2001 07:13:48

Raw File: C:\CP\DATA1\20280B.09R

Area File: C:\CP\DATA1\20280B.09A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 46):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.144	4.131	VINYL CHLORIDE	1.8851	6118	966
6.722	6.718	1,1-DICHLOROETHENE	1.6075	9346	1803
8.665	8.663	TRANS-1,2-DICHLOROET	1.9673	21560	3847
9.077	9.069	METHYL T-BUTYL ETHER	1.9207	11644	1198
10.782	10.775	CIS-1,2-DICHLOROETHE	1.9267	12183	1935
13.752	13.750	1,1-DICHLOROPROPENE	1.9439	8828	1485
14.311	14.307	BENZENE	1.9179	21927	3870
14.918	14.915	ISTD-FBENZENE	1.0000	69169	15103
15.754	15.752	TRICHLOROETHENE	1.5172	11882	3063
16.527	16.525	1-BROMO-2-CHLOROETHA	1.0000	1855	499
16.960	16.958	CIS-1,3-DICHLOROPROP	1.8627	4403	1399
17.598	17.598	TRANS-1,3-DICHLOROPR	1.7998	4663	1778
17.992	17.992	TOLUENE	1.9114	12306	4915
18.826	18.826	TETRACHLOROETHENE	1.8446	4961	2014
19.540	19.540	CHLOROBENZENE	1.8755	10290	4946
19.762	19.762	ETHYLBENZENE	1.9089	8893	4258
19.954	19.954	M,P-XYLENE	3.8253	20315	9017
20.249	20.249	STYRENE	1.7989	10375	5516
20.312	20.312	O-XYLENE	1.9009	9070	4415
20.642	20.642	ISOPROPYLBENZENE	1.9071	7189	3423
20.831	20.831	BROMOBENZENE	1.8512	10486	5369
21.022	21.022	N-PROPYLBENZENE	1.9066	8202	4220
21.090	21.091	2-CHLOROTOLUENE	1.9083	9067	4730
21.158	21.159	4-CHLOROTOLUENE	1.8968	9487	5059
21.275	21.275	1,3,5-TRIMETHYLBENZE	1.9088	12316	6252
21.498	21.498	TERT-BUTYLBENZENE	1.5823	6941	3309
21.593	21.593	1,2,4-TRIMETHYLBENZE	1.5673	9089	4772
21.679	21.679	SEC-BUTYLBENZENE	1.5735	6866	3365
21.731	21.732	1,3-DICHLOROBENZENE	1.8762	8827	4671
21.790	21.790	1,4-DICHLOROBENZENE	1.8671	8941	4652
21.833	21.832	P-ISOPROPYLTOLUENE	1.5850	6992	3462
22.091	22.091	1,2-DICHLOROBENZENE	1.8659	7229	3597
22.181	22.181	N-BUTYLBENZENE	1.5663	7822	3365
22.879	22.879	SURR-1B4CB-P	11.7610	61291	26652
23.920	23.921	1,2,4-TRICHLOROBENZE	1.8108	4553	1720
24.223	24.224	NAPHTHALENE	1.7879	5739	2142
24.290	24.290	HEXACHLOROBUTADIENE	1.8856	3261	1106
24.474	24.473	1,2,3-TRICHLOROBENZE	1.7950	5015	1542

TOTAL XYLENES: 5.7261

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

Surrogate Recovery: BrClBenzene 39.2033 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 07:20:05

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\20280.CAL Current version number = 46

Updated from file = C:\CP\DATA1\20280B.09A

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

Today's Date = 10-08-2001 time = 07:20:06

10-08-2001

Sample name: CALSTD3

Batch: 01280A208400,840

Raw file:

C:\CP\DATA1\20280B.09R

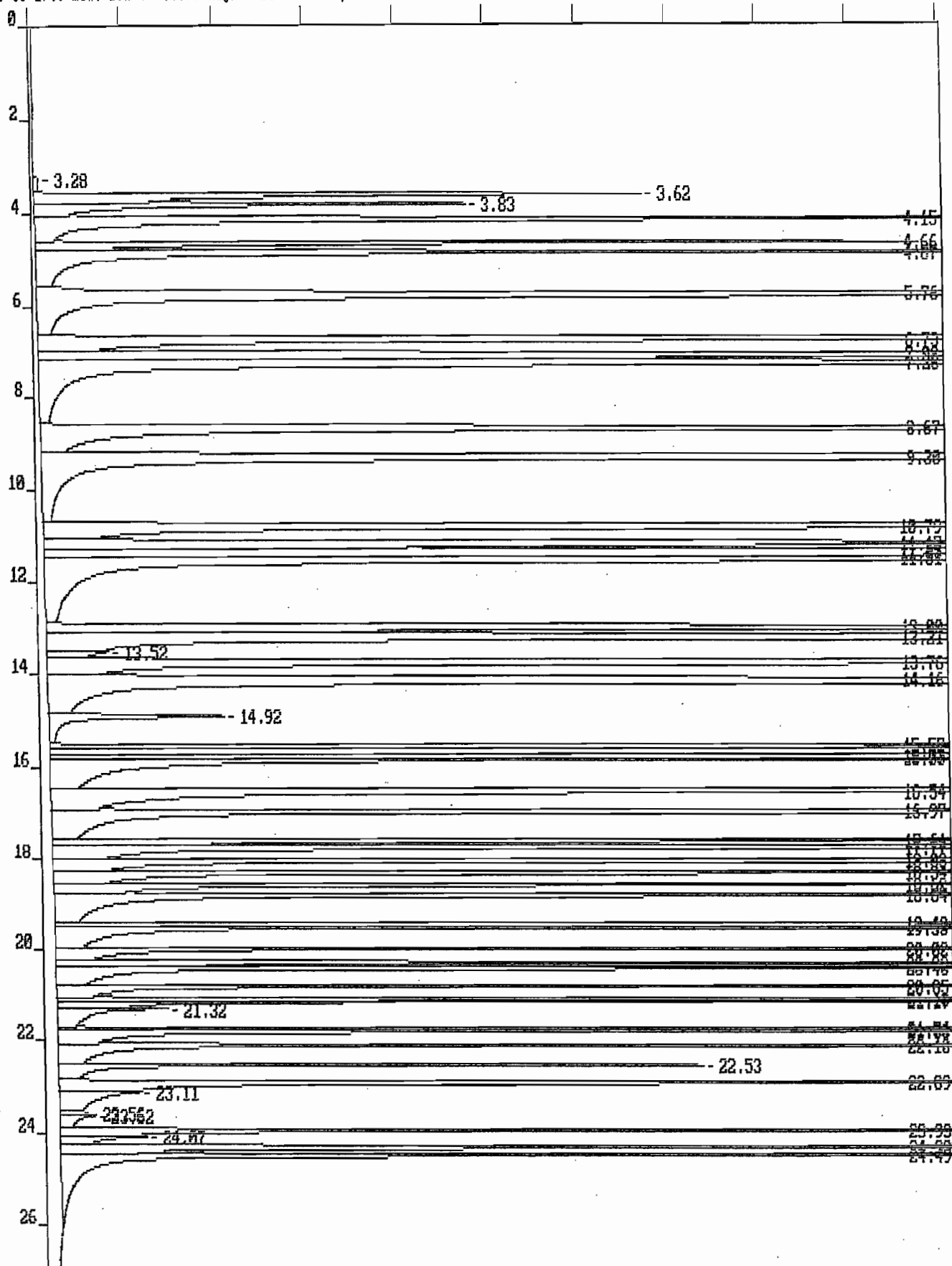
Reviewed by: mm469

Verified by: mm469

Date: 10/8/01

Date: 10/09/01

File=C:\CP\DATA1\20280.10R Date printed=10-08-2001 Time= 07:51:06
 Sample Name=CALSTD4 01280A208400,8401,8464
 0.0 to 27.0 min. Low Y=-0.077 High Y=14.923 mv Span=15.0



Sample Name: CALSTD4

Batch: 01280A20

Date Taken: Oct 8, 2001 07:51:01

Raw File: C:\CP\DATA1\20280.10R

Area File: C:\CP\DATA1\20280.10A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 52):

Ret Time	Expected (min)	RT (min)	Peak Name	Amount * (ug/L)	Peak Area	Peak Height
3.622		3.631	DICHLORODIFLUOROMETH	5.2429	59948	10029
3.834		3.835	CHLOROMETHANE	6.1757	43660	7122
4.151		4.162	VINYL CHLORIDE	4.8336	128226	23214
4.661		4.668	BROMOMETHANE	4.9503	64435	14582
4.870		4.877	CHLOROETHANE	5.1874	110717	21062
5.762		5.771	TRICHLOROFLUOROMETHA	5.1594	179401	18429
6.734		6.743	1,1-DICHLOROETHENE	4.9040	193868	35900
7.079		7.087	METHYLENE CHLORIDE	4.8090	250789	49940
7.262		7.270	TRICHLOROTRIFLUOROET	4.8820	204515	20565
8.675		8.684	TRANS-1,2-DICHLOROET	4.7161	223871	36762
9.298		9.308	1,1-DICHLOROETHANE	4.8790	250373	33384
10.792		10.800	CIS-1,2-DICHLOROETHE	4.9491	221933	37336
11.166		11.174	BROMOCHLOROMETHANE	4.8915	154555	27805
11.350		11.356	CHLOROFORM	4.9418	298889	48862
11.510		11.516	2,2-DICHLOROPROPANE	4.9600	246946	27712
13.001		13.009	1,2-DICHLOROETHANE	4.9722	201337	37856
13.214		13.219	1,1,1-TRICHLOROETHAN	5.0106	282541	38931
13.764		13.771	1,1-DICHLOROPROPENE	5.0598	197301	30828
14.161		14.167	CARBON TETRACHLORIDE	5.0043	325742	43825
15.567		15.573	DIBROMOMETHANE	4.7676	81751	23540
15.669		15.673	1,2-DICHLOROPROPANE	5.1187	202752	49390
15.767		15.770	TRICHLOROETHENE	4.9328	251663	67611
15.835		15.843	BROMODICHLOROMETHANE	4.9170	253067	54321
16.539		16.543	ISTD-1-BR-2-CLETHANE	1.0000	310922	87650
16.973		16.975	CIS-1,3-DICHLOROPROP	4.8054	211042	59043
17.610		17.614	TRANS-1,3-DICHLOROPR	4.7514	159904	57213
17.768		17.770	1,1,2-TRICHLOROETHAN	5.1296	219736	71775
18.076		18.078	1,3-DICHLOROPROPANE	5.1051	169805	58533
18.341		18.344	DIBROMOCHLOROMETHANE	4.9337	141957	47295
18.620		18.624	1,2-DIBROMOETHANE	4.8658	89911	30215
18.838		18.841	TETRACHLOROETHENE	5.4791	261197	92995
19.481		19.483	1,1,1,2-TETRACHLOROE	5.3042	222890	94638
19.552		19.554	CHLOROBENZENE	5.3607	124050	43177
20.020		20.023	BROMOFORM	4.7264	81905	29914
20.319		20.322	1,1,2,2-TETRACHLOROE	4.9231	127078	54957
20.446		20.448	1,2,3-TRICHLOROPROPA	5.0757	120185	45668
20.845		20.848	BROMOBENZENE	5.0211	63173	24688
21.103		21.106	2-CHLOROTOLUENE	5.3314	74737	36535
21.171		21.173	4-CHLOROTOLUENE	5.3772	87964	38465
21.744		21.746	1,3-DICHLOROBENZENE	5.1205	111679	56146
21.802		21.803	1,4-DICHLOROBENZENE	5.1242	144790	60903
22.103		22.105	1,2-DICHLOROBENZENE	5.1192	135343	54954
22.526		22.528	1,2-DIBROMO-3-CHLORO	4.7210	35445	10692
22.892		22.894	SURR-1B4CB-H	20.5767	338784	140428
23.934		23.936	1,2,4-TRICHLOROBENZE	5.4019	118433	42667
24.304		24.306	HEXACHLOROBUTADIENE	5.1852	167011	50725
24.487		24.489	1,2,3-TRICHLOROBENZE	5.3878	142023	38658
			TOTAL 1,2-DICHLOROETHENE:	9.6652		

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

Surrogate Recovery: BrClBenzene 68.5892 %

Chrom Perfect version 6.07

Reported on 10-08-2001 at 07:52:56

Sample name: CALSTD4

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.10R

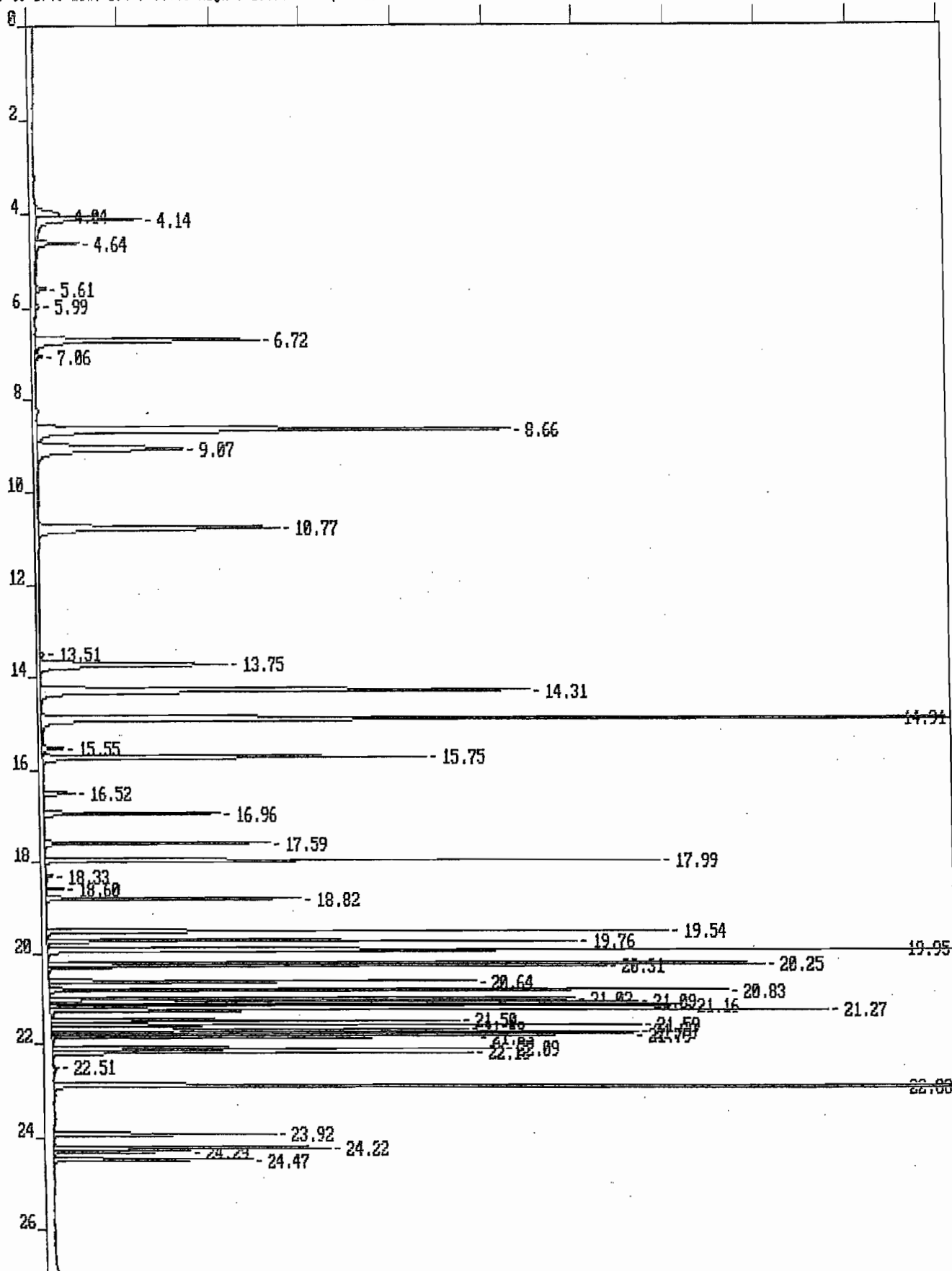
Reviewed by: MM461

Verified by: MM461

Date: 10/8/01

Date: 10/09/01

File=C:\CP\DATA1\20280B.10R Date printed=10-08-2001 Time= 07:53:24
Sample Name=CALSTD4 01280A208400,8401,8464
0.0 to 27.0 min. Low Y=0.043 High Y=15.043 mv Span=15.0



Sample Name: CALSTD4

Batch: 01280A20

Date Taken: Oct 8, 2001 07:51:01

Raw File: C:\CP\DATA1\20280B.10R

Area File: C:\CP\DATA1\20280B.10A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 47):

Ret Time	Expected	Peak Name	Amount *	Peak	Peak
(min)	RT (min)		(ug/L)	Area	Height
4.136	4.144	VINYL CHLORIDE	3.6070	10265	1766
6.716	6.722	1,1-DICHLOROETHENE	3.3658	18664	3702
8.658	8.665	TRANS-1,2-DICHLOROET	4.5266	43297	7836
9.070	9.077	METHYL T-BUTYL ETHER	4.3985	21245	2440
10.774	10.782	CIS-1,2-DICHLOROETHE	4.4983	22395	3995
13.747	13.752	1,1-DICHLOROPROPENE	4.5778	18001	3088
14.307	14.311	BENZENE	4.5243	44919	8075
14.914	14.918	ISTD-FBENZENE	1.0000	68141	14949
15.750	15.754	TRICHLOROETHENE	3.2133	23494	6357
16.525	16.527	1-BROMO-2-CHLOROETHA	1.0000	1858	525
16.955	16.960	CIS-1,3-DICHLOROPROP	4.4143	8573	2937
17.594	17.598	TRANS-1,3-DICHLOROPR	4.2942	9474	3759
17.990	17.992	TOLUENE	4.4784	25082	10169
18.824	18.826	TETRACHLOROETHENE	4.4167	10042	4255
19.538	19.540	CHLOROBENZENE	4.4282	21251	10326
19.760	19.762	ETHYLBENZENE	4.4610	18204	8792
19.952	19.954	M,P-XYLENE	8.9362	41662	18604
20.247	20.249	STYRENE	4.3851	22316	11858
20.310	20.312	O-XYLENE	4.5097	18324	9244
20.640	20.642	ISOPROPYLBENZENE	4.4614	14440	7069
20.829	20.831	BROMOBENZENE	4.3812	21344	11242
21.020	21.022	N-PROPYLBENZENE	4.4549	16734	8701
21.089	21.090	2-CHLOROTOLUENE	4.4665	18394	9770
21.157	21.158	4-CHLOROTOLUENE	4.4234	19295	10436
21.274	21.275	1,3,5-TRIMETHYLBENZE	4.4329	24627	12828
21.497	21.498	TERT-BUTYLBENZENE	3.3001	13956	6767
21.592	21.593	1,2,4-TRIMETHYLBENZE	3.2998	18458	9853
21.678	21.679	SEC-BUTYLBENZENE	3.2983	14097	6918
21.730	21.731	1,3-DICHLOROBENZENE	4.4201	18165	9725
21.788	21.790	1,4-DICHLOROBENZENE	4.4079	17871	9716
21.832	21.833	P-ISOPROPYLTOLUENE	3.3119	13835	7093
22.089	22.091	1,2-DICHLOROBENZENE	4.3891	14687	7478
22.180	22.181	N-BUTYLBENZENE	3.3047	14461	6964
22.878	22.879	SURR-1B4CB-P	18.0768	78623	36664
23.919	23.920	1,2,4-TRICHLOROBENZE	4.3662	9600	3703
24.222	24.223	NAPHTHALENE	4.2943	12396	4619
24.289	24.290	HEXACHLOROBUTADIENE	4.4145	6607	2288
24.472	24.474	1,2,3-TRICHLOROBENZE	4.3203	9374	3318

TOTAL XYLENES: 13.4458

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

Surrogate Recovery: BrClBenzene 60.2560 %

Chrom Perfect version 6.07

Reported on 10-08-2001 at 07:57:19

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\20280.CAL Current version number = 47

Updated from file = C:\CP\DATA1\20280B.10A

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

Today's Date = 10-08-2001 time = 07:57:21

Sample name: CALSTD4

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280B.10R

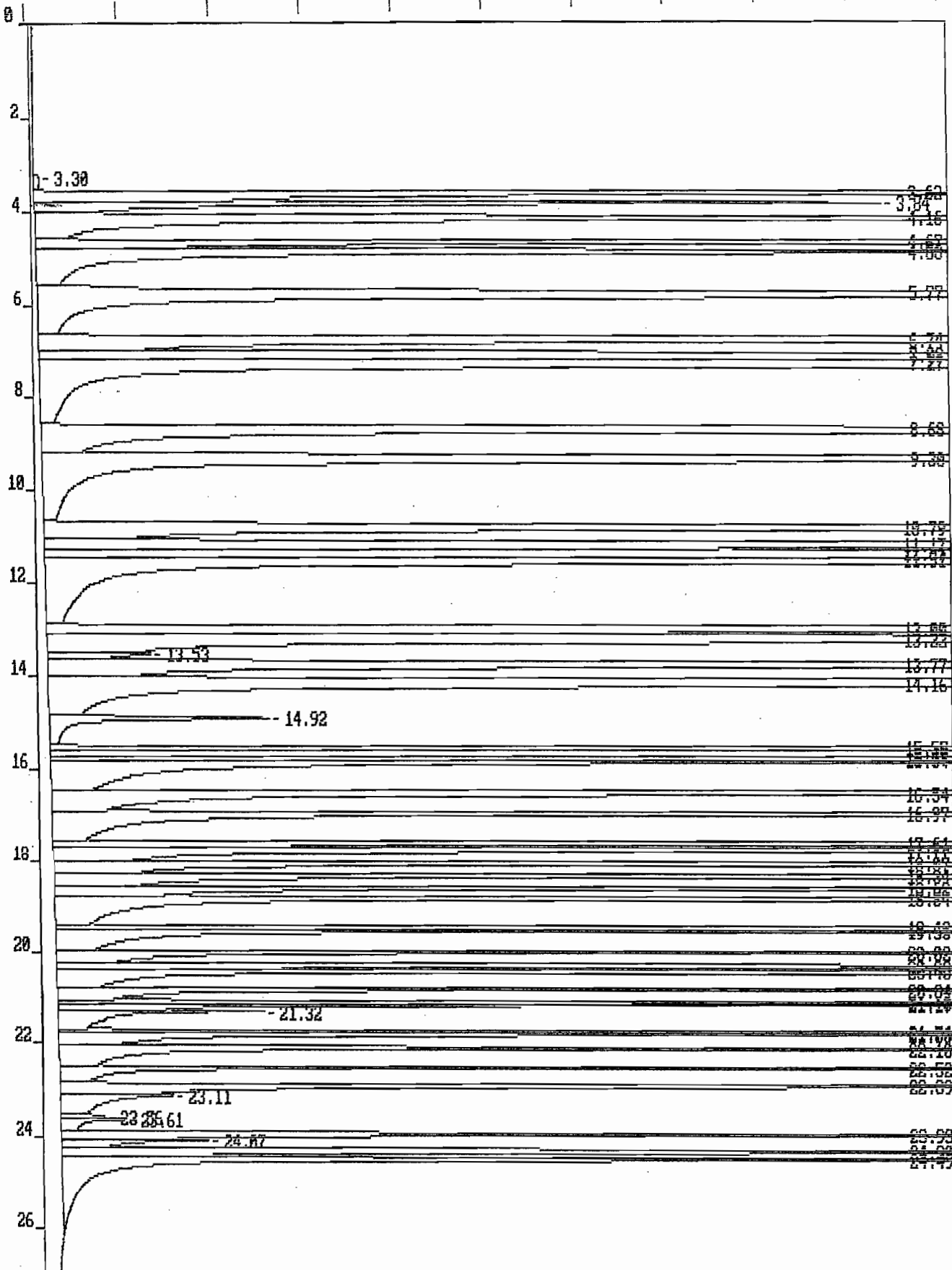
Reviewed by: MMB/AY

Verified by: Vmm49

Date: 10/6/01

Date: 10/09/01

File=C:\CP\DATA1\20280.11R Date printed=10-08-2001 Time= 08:28:19
 Sample Name=CALSTD5 01280A208400,8401,8464
 0.0 to 27.0 min. Low Y=-0.072 High Y=14.928 mv Span=15.0



Sample Name: CALSTD5
 Batch: 01280A20 Date Taken: Oct 8, 2001 08:28:15
 Raw File: C:\CP\DATA1\20280.11R
 Area File: C:\CP\DATA1\20280.11A
 Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 53):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.624	3.622	DICHLORODIFLUOROMETH	12.8031	121526	21413
3.843	3.834	CHLOROMETHANE	13.4299	80483	13884
4.160	4.151	VINYL CHLORIDE	11.0607	252526	45834
4.666	4.661	BROMOMETHANE	12.1115	136906	31445
4.876	4.870	CHLOROETHANE	11.8464	213512	42861
5.766	5.762	TRICHLOROFLUOROMETHA	11.6600	348314	36531
6.737	6.734	1,1-DICHLOROETHENE	11.8156	395853	74649
7.083	7.079	METHYLENE CHLORIDE	11.5052	501885	102609
7.269	7.262	TRICHLOROTRIFLUOROET	11.1502	398871	40934
8.681	8.675	TRANS-1,2-DICHLOROET	11.5150	461937	77503
9.302	9.298	1,1-DICHLOROETHANE	11.7671	497552	69600
10.794	10.792	CIS-1,2-DICHLOROETHE	11.9424	451881	77463
11.174	11.166	BROMOCHLOROMETHANE	11.3901	313938	55956
11.354	11.350	CHLOROFORM	11.1359	578594	94580
11.512	11.510	2,2-DICHLOROPROPANE	11.3469	459752	54811
13.002	13.001	1,2-DICHLOROETHANE	11.6420	405133	76316
13.216	13.214	1,1,1-TRICHLOROETHAN	11.6563	551432	77985
13.766	13.764	1,1-DICHLOROPROPENE	11.8474	385336	62067
14.163	14.161	CARBON TETRACHLORIDE	11.4237	622513	85797
15.565	15.567	DIBROMOMETHANE	11.9733	176375	50678
15.669	15.669	1,2-DICHLOROPROPANE	11.8155	385057	97571
15.766	15.767	TRICHLOROETHENE	11.1710	503909	130597
15.840	15.835	BROMODICHLOROMETHANE	11.0932	454095	105486
16.540	16.539	ISTD-1-BR-2-CLETHANE	1.0000	319060	88592
16.971	16.973	CIS-1,3-DICHLOROPROP	11.6902	403205	124286
17.609	17.610	TRANS-1,3-DICHLOROPR	11.8283	323298	122582
17.767	17.768	1,1,2-TRICHLOROETHAN	11.8276	417868	142790
18.075	18.076	1,3-DICHLOROPROPANE	12.1075	327207	121184
18.341	18.341	DIBROMOCHLOROMETHANE	11.6393	275312	96188
18.620	18.620	1,2-DIBROMOETHANE	10.9960	172127	59241
18.839	18.838	TETRACHLOROETHENE	12.1064	483416	177459
19.482	19.481	1,1,1,2-TETRACHLOROE	11.7763	430676	180989
19.552	19.552	CHLOROBENZENE	11.8979	222779	83213
20.019	20.020	BROMOFORM	11.2479	160799	61162
20.320	20.319	1,1,2,2-TETRACHLOROE	11.9816	255906	115406
20.446	20.446	1,2,3-TRICHLOROPROPA	11.7496	225260	90866
20.844	20.845	BROMOBENZENE	12.1071	123725	51825
21.104	21.103	2-CHLOROTOLUENE	12.0639	146751	71440
21.171	21.171	4-CHLOROTOLUENE	11.9421	162612	74119
21.744	21.744	1,3-DICHLOROBENZENE	12.4050	229469	118211
21.802	21.802	1,4-DICHLOROBENZENE	12.0487	274528	125319
22.103	22.103	1,2-DICHLOROBENZENE	12.1628	261231	112987
22.525	22.526	1,2-DIBROMO-3-CHLORO	11.6898	69136	22939
22.893	22.892	SURR-1B4CB-H	28.7981	422592	172669
23.933	23.934	1,2,4-TRICHLOROBENZE	12.7982	238218	88182
24.303	24.304	HEXACHLOROBUTADIENE	11.7321	322557	98780
24.486	24.487	1,2,3-TRICHLOROBENZE	12.4465	268401	78049
		TOTAL 1,2-DICHLOROETHENE:	23.4574		

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

Surrogate Recovery: BrClBenzene 95.9937 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 08:30:10

Sample name: CALSTD5

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.11R

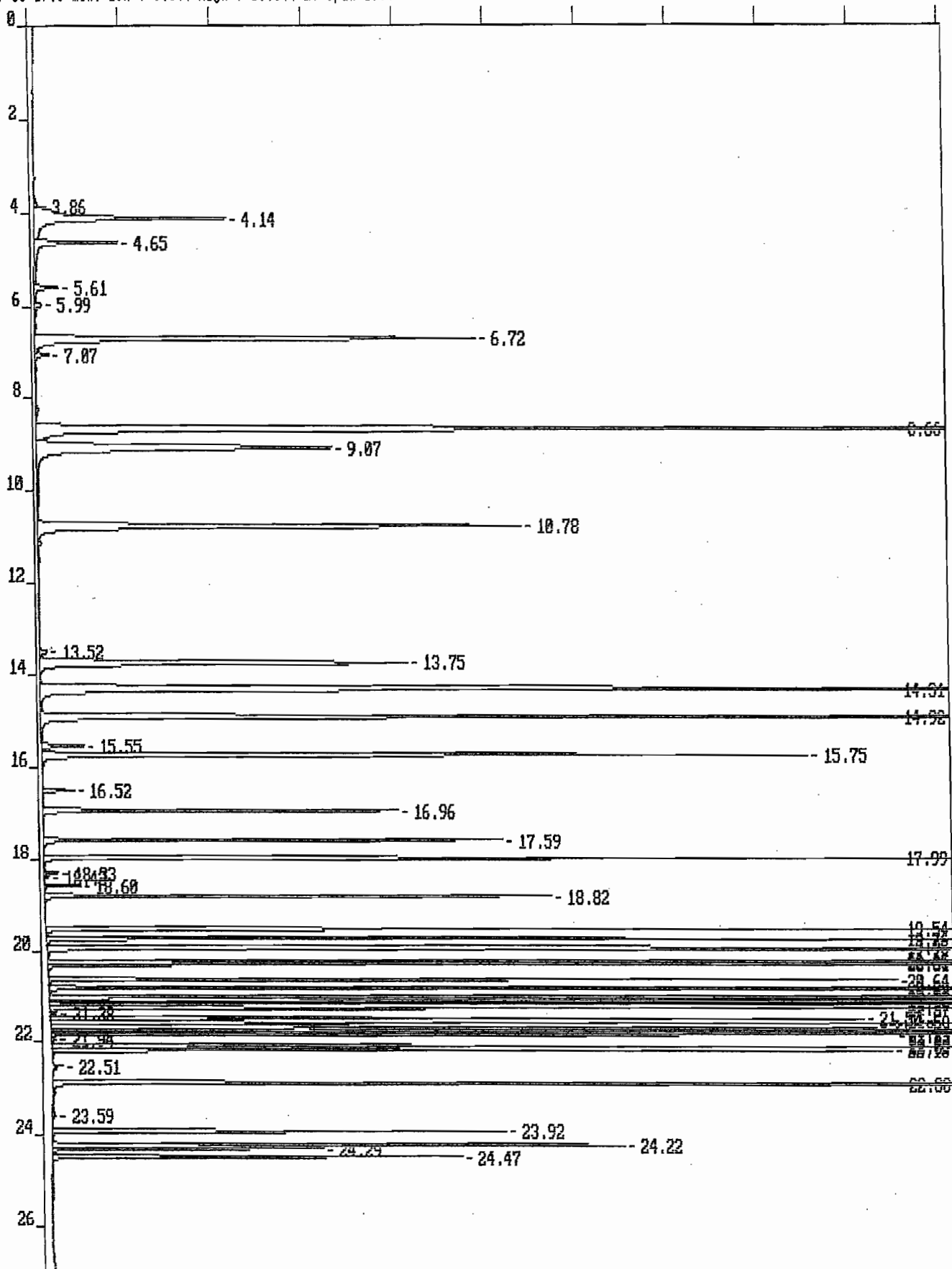
Reviewed by: *[Signature]*

Verified by: *Vmm49*

Date: *10/8/01*

Date: *10/09/01*

File=C:\CP\DATA1\20280B.11R Date printed=10-08-2001 Time= 08:30:38
Sample Name=CALSTD5 01280A208400,8401,8464
0.0 to 27.0 min. Low Y=0.044 High Y=15.044 mv Span=15.0



Sample Name: CALSTD5
 Batch: 01280A20 Date Taken: Oct 8, 2001 08:28:15
 Raw File: C:\CP\DATA1\20280B.11R
 Area File: C:\CP\DATA1\20280B.11A
 Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75m x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 115
 Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 48):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.145	4.136	VINYL CHLORIDE	7.0987	21451	3162
6.722	6.716	1,1-DICHLOROETHENE	6.7222	36938	7260
8.662	8.658	TRANS-1,2-DICHLOROET	9.9217	85052	15422
9.071	9.070	METHYL T-BUTYL ETHER	9.7429	41845	4860
10.778	10.774	CIS-1,2-DICHLOROETHE	9.9876	46662	7965
13.750	13.747	1,1-DICHLOROPROPENE	9.9813	35243	6059
14.308	14.307	BENZENE	9.8701	88427	15850
14.916	14.914	ISTD-FBENZENE	1.0000	69565	15171
15.751	15.750	TRICHLOROETHENE	6.5089	46176	12638
16.523	16.525	1-BROMO-2-CHLOROETHA	1.0000	1970	531
16.956	16.955	CIS-1,3-DICHLOROPROP	9.7994	16855	5867
17.595	17.594	TRANS-1,3-DICHLOROPR	9.6639	18872	7600
17.990	17.990	TOLUENE	9.9044	49567	20199
18.825	18.824	TETRACHLOROETHENE	9.6970	19716	8395
19.538	19.538	CHLOROBENZENE	9.8646	42004	20674
19.760	19.760	ETHYLBENZENE	9.8418	35822	17414
19.952	19.952	M,P-XYLENE	19.7128	82014	36856
20.247	20.247	STYRENE	9.9212	45112	24047
20.311	20.310	O-XYLENE	9.9812	36158	18350
20.640	20.640	ISOPROPYLBENZENE	9.8282	28418	13971
20.829	20.829	BROMOBENZENE	9.7930	42486	22595
21.020	21.020	N-PROPYLBENZENE	9.8016	33031	17183
21.089	21.089	2-CHLOROTOLUENE	9.8297	36359	19319
21.157	21.157	4-CHLOROTOLUENE	9.8283	38138	20836
21.274	21.274	1,3,5-TRIMETHYLBENZE	9.8310	48317	25551
21.497	21.497	TERT-BUTYLBENZENE	6.6524	27499	13400
21.592	21.592	1,2,4-TRIMETHYLBENZE	6.6703	36566	19575
21.678	21.678	SEC-BUTYLBENZENE	6.6179	27844	13640
21.730	21.730	1,3-DICHLOROBENZENE	9.8705	36249	19531
21.788	21.788	1,4-DICHLOROBENZENE	9.7733	35650	19397
21.831	21.832	P-ISOPROPYLTOLUENE	6.6370	27043	13969
22.089	22.089	1,2-DICHLOROBENZENE	9.7784	29262	14973
22.180	22.180	N-BUTYLBENZENE	6.6830	28455	13845
22.878	22.878	SURR-1B4CB-P	25.2446	99234	46295
23.919	23.919	1,2,4-TRICHLOROBENZE	9.8228	19274	7527
24.221	24.222	NAPHTHALENE	9.6956	25394	9471
24.288	24.289	HEXACHLOROBUTADIENE	9.6976	12920	4520
24.472	24.472	1,2,3-TRICHLOROBENZE	9.8002	20233	6816

TOTAL XYLENES: 29.6941

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

Surrogate Recovery: BrClBenzene 84.1485 %

Chrom Perfect version 6.07

Reported on 10-08-2001 at 08:34:32

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P20280.CAL Current version number = 48

Updated from file = C:\CP\DATA1\20280B.11A

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

Today's Date = 10-08-2001 time = 08:34:34

Sample name: CALSTD5

Batch: 01280A208400,840

Raw file:

C:\CP\DATA1\20280B.11R

Reviewed by:

mm49

Verified by:

mm49

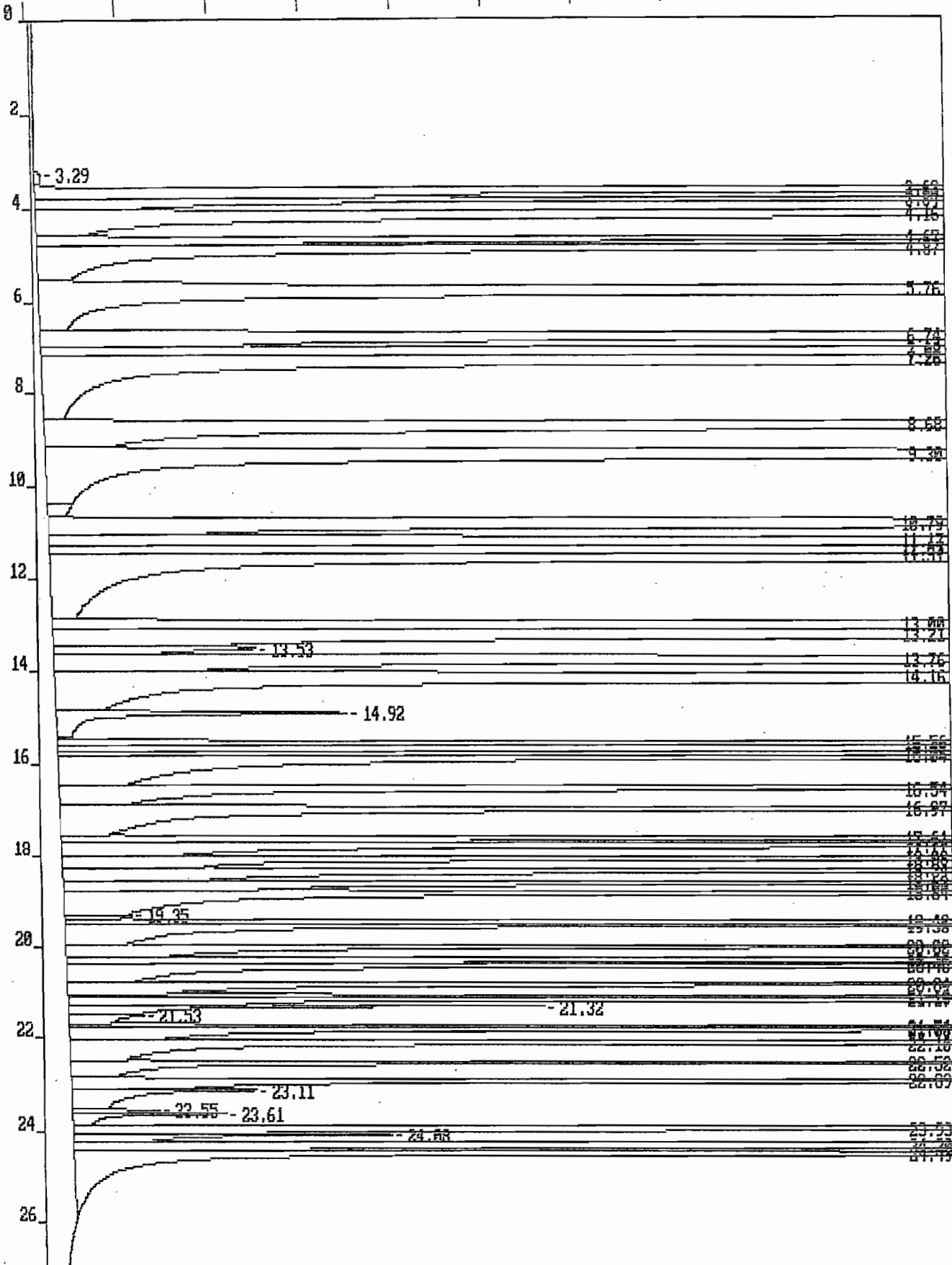
Date:

10/8/01

Date:

10/09/01

File=C:\CP\DATA1\20280.12R Date printed=10-08-2001 Time= 09:05:40
 Sample Name=CALSTD6 01280A208400,8401,8464
 0.0 to 27.0 min. Low Y=-0.063 High Y=14.937 mv Span=15.0



Sample Name: CALSTD6

Batch: 01280A20

Date Taken: Oct 8, 2001 09:05:35

Raw File: C:\CP\DATA1\20280.12R

Area File: C:\CP\DATA1\20280.12A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 54):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.621	3.624	DICHLORODIFLUOROMETH	31.8552	246715	45308
3.845	3.843	CHLOROMETHANE	30.9905	156382	28403
4.159	4.160	VINYL CHLORIDE	24.2558	486195	84588
4.669	4.666	BROMOMETHANE	27.7430	263268	60858
4.875	4.876	CHLOROETHANE	25.7323	386859	80238
5.765	5.766	TRICHLOROFLUOROMETHA	26.8914	661201	71158
6.737	6.737	1,1-DICHLOROETHENE	33.8236	940076	178692
7.084	7.083	METHYLENE CHLORIDE	31.7264	1161599	237255
7.261	7.269	TRICHLOROTRIFLUOROET	30.7047	892954	95415
8.677	8.681	TRANS-1,2-DICHLOROET	32.3925	1083334	183863
9.304	9.302	1,1-DICHLOROETHANE	32.3446	1132023	160015
10.794	10.794	CIS-1,2-DICHLOROETHE	33.2365	1063603	181704
11.166	11.174	BROMOCHLOROMETHANE	32.5971	746093	135170
11.353	11.354	CHLOROFORM	31.0576	1352911	219955
11.509	11.512	2,2-DICHLOROPROPANE	30.6953	1015503	125287
13.002	13.002	1,2-DICHLOROETHANE	32.7112	961851	180626
13.215	13.216	1,1,1-TRICHLOROETHAN	31.6235	1255413	178717
13.763	13.766	1,1-DICHLOROPROPENE	33.1178	910151	147201
14.161	14.163	CARBON TETRACHLORIDE	31.6559	1436573	200058
15.564	15.565	DIBROMOMETHANE	37.0814	457050	129470
15.669	15.669	1,2-DICHLOROPROPANE	32.6127	899011	225805
15.765	15.766	TRICHLOROETHENE	30.9384	1180831	302703
15.839	15.840	BROMODICHLOROMETHANE	31.1050	1009217	248946
16.540	16.540	ISTD-1-BR-2-CLETHANE	1.0000	324826	89176
16.970	16.971	CIS-1,3-DICHLOROPROP	32.0654	901585	286291
17.609	17.609	TRANS-1,3-DICHLOROPR	32.5813	741255	281039
17.767	17.767	1,1,2-TRICHLOROETHAN	31.6013	935598	322822
18.075	18.075	1,3-DICHLOROPROPANE	33.1679	748932	282445
18.341	18.341	DIBROMOCHLOROMETHANE	32.2909	627817	224489
18.618	18.620	1,2-DIBROMOETHANE	33.7142	412586	153404
18.838	18.839	TETRACHLOROETHENE	31.9719	1075399	403938
19.480	19.482	1,1,1,2-TETRACHLOROE	31.9792	1005529	418910
19.552	19.552	CHLOROBENZENE	31.6109	476936	189915
20.018	20.019	BROMOFORM	33.8601	381452	153570
20.320	20.320	1,1,2,2-TETRACHLOROE	33.3686	592582	270710
20.446	20.446	1,2,3-TRICHLOROPROPA	32.2819	499185	211091
20.844	20.844	BROMOBENZENE	36.5847	299831	132167
21.104	21.104	2-CHLOROTOLUENE	33.7570	345372	169926
21.171	21.171	4-CHLOROTOLUENE	32.8284	374489	174441
21.744	21.744	1,3-DICHLOROBENZENE	33.8747	537479	273163
21.802	21.802	1,4-DICHLOROBENZENE	32.1888	600138	285317
22.103	22.103	1,2-DICHLOROBENZENE	33.6117	589951	266022
22.524	22.525	1,2-DIBROMO-3-CHLORO	35.3078	162837	57648
22.893	22.893	SURR-1B4CB-H	41.4459	518239	215126
23.933	23.933	1,2,4-TRICHLOROBENZE	36.3264	572683	213257
24.303	24.303	HEXACHLOROBUTADIENE	32.3746	745161	229864
24.487	24.486	1,2,3-TRICHLOROBENZE	33.9275	586872	181560
TOTAL 1,2-DICHLOROETHENE:			65.6291		

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

Surrogate Recovery: BrClBenzene 138.1531 %

Chrom Perfect version 6.07

Reported on 10-08-2001 at 09:07:30

Printed on 10-08-2001 at 09:07:30

Sample name: CALSTD6

Batch: 01280A208400,840

Raw file:

C:\CP\DATA1\20280.12R

Reviewed by: MM419

Verified by: MM419

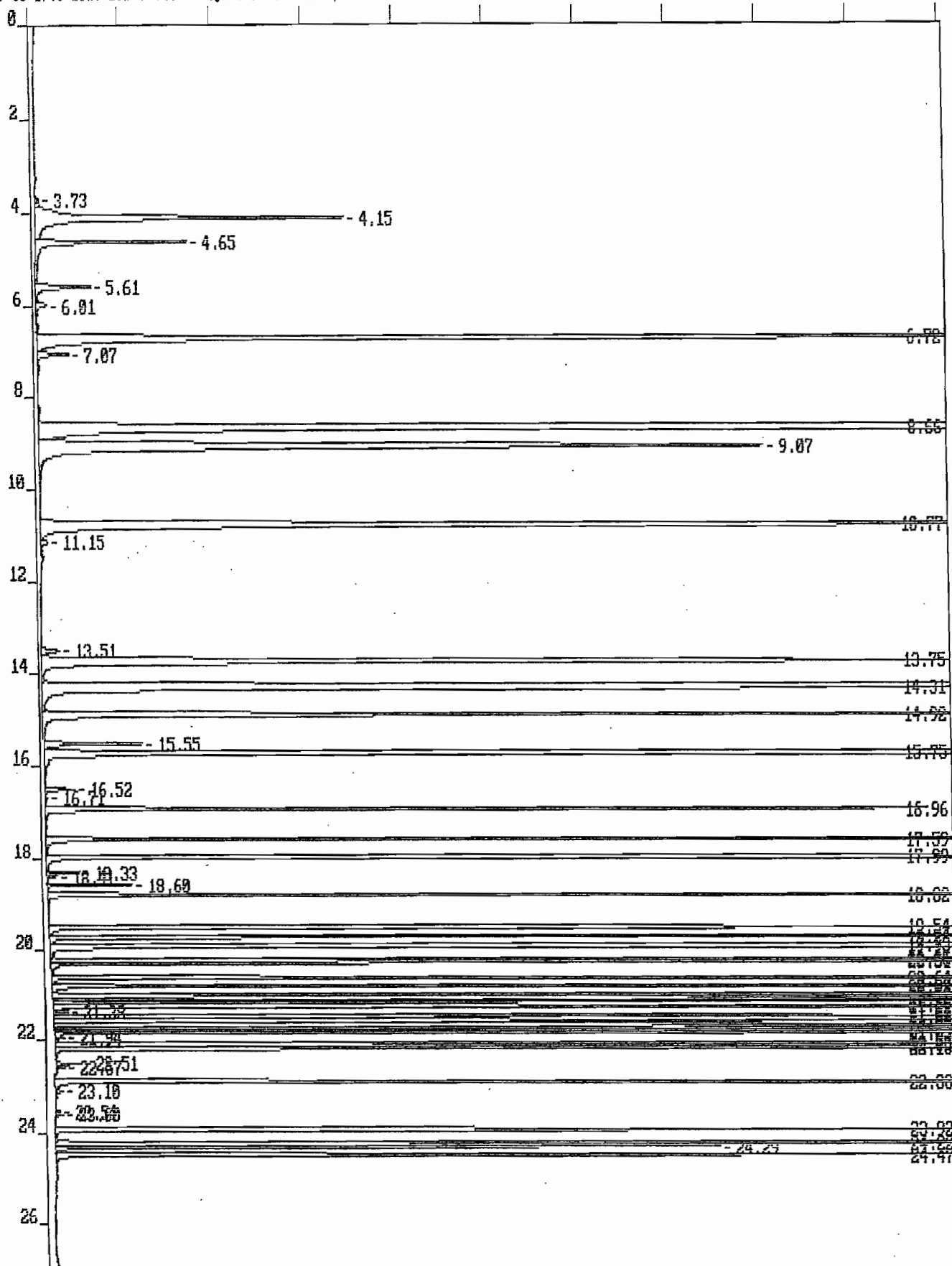
Date: 10/8/01

Date: 10/09/01

File=C:\CP\DATA1\202808.12R Date printed=10-08-2001 Time= 09:07:59

Sample Name=CALSTD6 01280A208400,8401,8464

0.0 to 27.0 min. Low Y=0.048 High Y=15.048 mv Span=15.0



Sample Name: CALSTD6
 Batch: 01280A20 Date Taken: Oct 8, 2001 09:05:35
 Raw File: C:\CP\DATA1\20280B.12R
 Area File: C:\CP\DATA1\20280B.12A
 Method File: c:\cp\data1\20280B.MET(version 2)
 EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75m x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 115
 Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 49):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.145	4.145	VINYL CHLORIDE	15.6146	33175 5087
6.720	6.722	1,1-DICHLOROETHENE	18.3152	90141 17754
8.660	8.662	TRANS-1,2-DICHLOROET	27.5843	208301 37535
9.068	9.071	METHYL T-BUTYL ETHER	27.4717	98781 11968
10.775	10.778	CIS-1,2-DICHLOROETHE	28.1192	109216 19598
13.747	13.750	1,1-DICHLOROPROPENE	28.2317	87218 15004
14.307	14.308	BENZENE	28.0714	220255 39458
14.915	14.916	ISTD-FBENZENE	1.0000	69813 15188
15.750	15.751	TRICHLOROETHENE	18.0503	113873 31354
16.524	16.523	1-BROMO-2-CHLOROETHA	1.0000	1742 512
16.955	16.956	CIS-1,3-DICHLOROPROP	27.9017	40870 14578
17.594	17.595	TRANS-1,3-DICHLOROPR	27.6305	46406 18919
17.990	17.990	TOLUENE	27.7968	121929 49585
18.825	18.825	TETRACHLOROETHENE	27.5791	48358 20894
19.538	19.538	CHLOROBENZENE	27.7350	103176 50755
19.760	19.760	ETHYLBENZENE	27.7664	88135 42903
19.952	19.952	M,P-XYLENE	55.2488	200640 90302
20.247	20.247	STYRENE	28.1273	111164 59367
20.311	20.311	O-XYLENE	27.7054	87453 44407
20.640	20.640	ISOPROPYLBENZENE	27.6365	69571 34301
20.829	20.829	BROMOBENZENE	27.7209	104321 55777
21.021	21.020	N-PROPYLBENZENE	27.6068	81009 42278
21.089	21.089	2-CHLOROTOLUENE	27.6039	89016 47365
21.157	21.157	4-CHLOROTOLUENE	27.7658	93540 51399
21.274	21.274	1,3,5-TRIMETHYLBENZE	27.5996	118197 62621
21.497	21.497	TERT-BUTYLBENZENE	18.1535	67001 32766
21.592	21.592	1,2,4-TRIMETHYLBENZE	18.1778	89344 47889
21.678	21.678	SEC-BUTYLBENZENE	18.0422	67917 33373
21.730	21.730	1,3-DICHLOROBENZENE	27.7680	89070 47962
21.789	21.788	1,4-DICHLOROBENZENE	27.6069	87345 47871
21.831	21.831	P-ISOPROPYLTOLUENE	18.0918	65836 34174
22.089	22.089	1,2-DICHLOROBENZENE	27.5655	71079 36774
22.179	22.180	N-BUTYLBENZENE	18.3265	69804 34122
22.878	22.878	SURR-1B4CB-P	34.5812	117814 55579
23.918	23.919	1,2,4-TRICHLOROBENZE	28.3010	47854 18932
24.221	24.221	NAPHTHALENE	28.0894	64245 24030
24.289	24.288	HEXACHLOROBUTADIENE	27.0692	31412 11018
24.472	24.472	1,2,3-TRICHLOROBENZE	28.2409	48013 17165

TOTAL XYLENES: 82.9542

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

Surrogate Recovery: BrClBenzene 115.2707 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 09:11:53

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P20280.CAL Current version number = 49

Updated from file = C:\CP\DATA1\20280B.12A

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

Today's Date = 10-08-2001 time = 09:11:55

Sample name: CALSTD6

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280B.12R

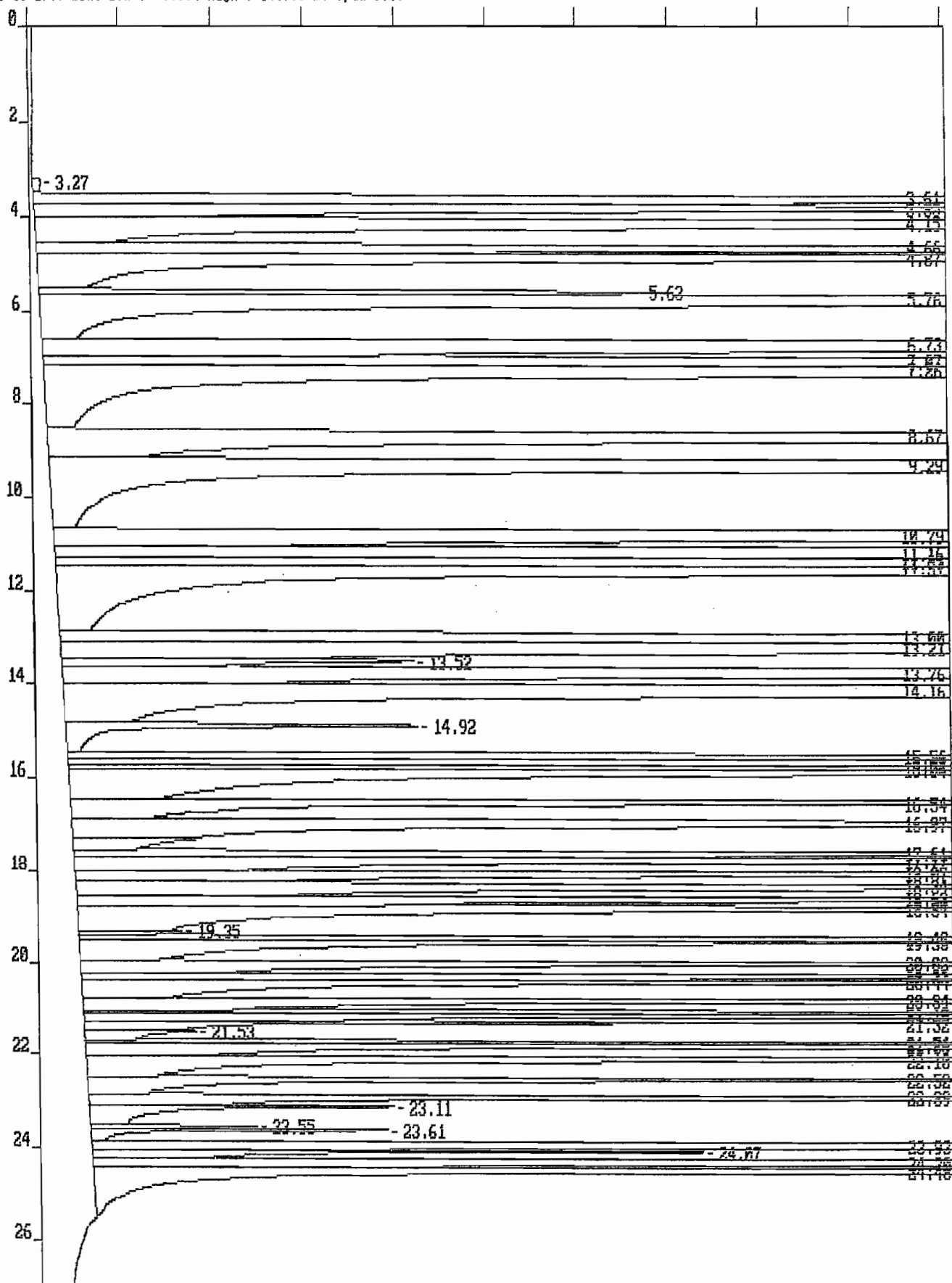
Reviewed by: MMB/10/8/01

Verified by: VMM/10/9/01

Date: 10/8/01

Date: 10/09/01

File=C:\CP\DATA1\20280.13R Date printed=10-08-2001 Time= 09:52:26
 Sample Name=CALSTD7 01280A208400,8401,8464
 0.0 to 27.0 min. Low Y=-0.034 High Y=14.966 mv Span=15.0



Sample Name: CALSTD7

Batch: 01280A20

Date Taken: Oct 8, 2001 09:42:40

Raw File: C:\CP\DATA1\20280.13R

Area File: C:\CP\DATA1\20280.13A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 55):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.610	3.621	DICHLORODIFLUOROMETH	64.8490	465681	82773
3.850	3.845	CHLOROMETHANE	65.8105	313507	57188
4.152	4.159	VINYL CHLORIDE	51.6812	905213	156294
4.660	4.669	BROMOMETHANE	60.3037	520801	115925
4.869	4.875	CHLOROETHANE	57.4522	755560	157514
5.760	5.765	TRICHLOROFLUOROMETHA	53.1758	1217611	124126
6.727	6.737	1,1-DICHLOROETHENE	70.4247	1742227	323805
7.074	7.084	METHYLENE CHLORIDE	66.1783	2201089	434323
7.258	7.261	TRICHLOROTRIFLUOROET	65.8047	1592600	180486
8.668	8.677	TRANS-1,2-DICHLOROET	69.7307	2026804	343895
9.294	9.304	1,1-DICHLOROETHANE	70.0139	2135446	304327
10.787	10.794	CIS-1,2-DICHLOROETHE	71.3347	2014054	340811
11.160	11.166	BROMOCHLOROMETHANE	74.0088	1479131	267809
11.347	11.353	CHLOROFORM	67.2751	2556237	417251
11.506	11.509	2,2-DICHLOROPROPANE	65.1231	1875596	234009
12.996	13.002	1,2-DICHLOROETHANE	71.3416	1866788	344322
13.208	13.215	1,1,1-TRICHLOROETHAN	68.0459	2376877	336009
13.760	13.763	1,1-DICHLOROPROPENE	72.8063	1719184	281940
14.157	14.161	CARBON TETRACHLORIDE	67.6856	2704653	373321
15.560	15.564	DIBROMOMETHANE	90.1046	939391	264127
15.666	15.669	1,2-DICHLOROPROPANE	72.0124	1794726	432920
15.762	15.765	TRICHLOROETHENE	67.4246	2230998	572777
15.837	15.839	BROMODICHLOROMETHANE	68.4382	1921284	477967
16.537	16.540	ISTD-1-BR-2-CLETHANE	1.0000	346257	93911
16.967	16.970	CIS-1,3-DICHLOROPROP	70.9785	1701203	549066
17.606	17.609	TRANS-1,3-DICHLOROPR	74.4609	1463235	547434
17.765	17.767	1,1,2-TRICHLOROETHAN	69.0302	1798987	617847
18.073	18.075	1,3-DICHLOROPROPANE	72.4068	1442795	541641
18.338	18.341	DIBROMOCHLOROMETHANE	76.1564	1267261	455210
18.616	18.618	1,2-DIBROMOETHANE	79.3355	823403	311768
18.836	18.838	TETRACHLOROETHENE	66.7837	2014812	751173
19.479	19.480	1,1,1,2-TETRACHLOROE	66.3087	1905137	765174
19.550	19.552	CHLOROBENZENE	69.7952	896867	372064
20.018	20.018	BROMOFORM	83.1148	771967	320719
20.319	20.320	1,1,2,2-TETRACHLOROE	73.6348	1168173	528211
20.444	20.446	1,2,3-TRICHLOROPROPA	73.4303	970114	419221
20.844	20.844	BROMOBENZENE	85.0448	586855	263436
21.103	21.104	2-CHLOROTOLUENE	78.1840	693240	344317
21.170	21.171	4-CHLOROTOLUENE	75.1093	723693	350771
21.743	21.744	1,3-DICHLOROBENZENE	75.2307	1066400	528982
21.802	21.802	1,4-DICHLOROBENZENE	70.6592	1156001	549623
22.102	22.103	1,2-DICHLOROBENZENE	74.4827	1138834	514146
22.522	22.524	1,2-DIBROMO-3-CHLORO	89.5263	326500	124575
22.891	22.893	SURR-1B4CB-H	57.5347	629779	262566
23.932	23.933	1,2,4-TRICHLOROBENZE	81.2241	1136253	416262
24.302	24.303	HEXACHLOROBUTADIENE	70.5122	1451373	437981
24.485	24.487	1,2,3-TRICHLOROBENZE	78.5039	1155144	368794
		TOTAL 1,2-DICHLOROETHENE:	141.0654		

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

Surrogate Recovery: BrClBenzene 191.7824 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 09:55:23

Sample name: CALSTD7

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.13R

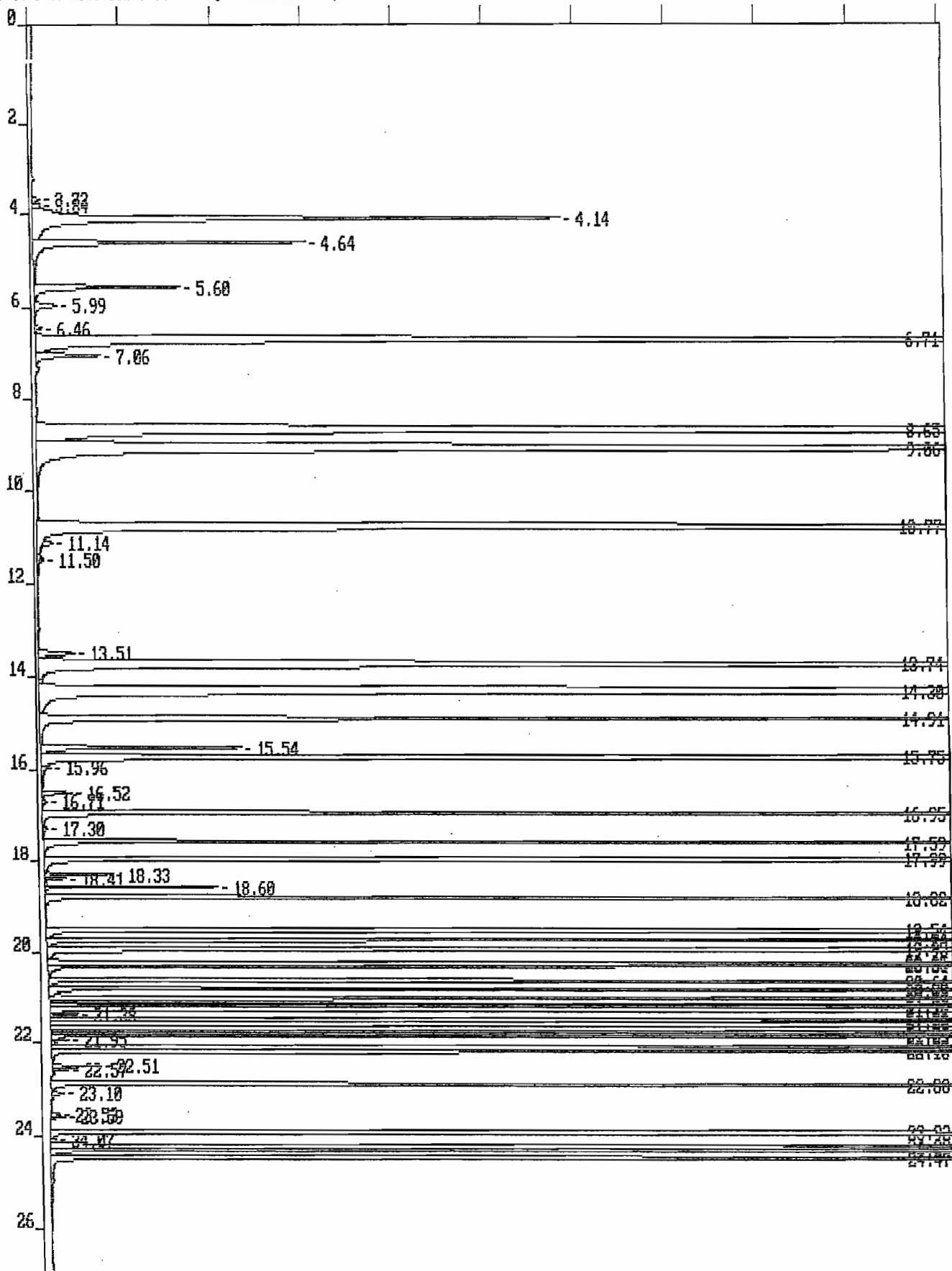
Reviewed by: mm419

Verified by: Vmm419

Date: 10/8/01

Date: 10/09/01

File=C:\CP\DATA1\202808.13R Date printed=10-08-2001 Time= 09:55:52
 Sample Name=CALSTD7 01280A208400,8401,8464
 0.0 to 27.0 min. Low Y=0.048 High Y=15.048 mv Span=15.0



Sample Name: CALSTD7
Batch: 01280A20 Date Taken: Oct 8, 2001 09:42:40
Raw File: C:\CP\DATA1\20280B.13R
Area File: C:\CP\DATA1\20280B.13A
Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 50):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.141	4.145	VINYL CHLORIDE	42.9307	54102	8717
6.711	6.720	1,1-DICHLOROETHENE	52.0706	178468	35040
8.653	8.660	TRANS-1,2-DICHLOROET	63.6045	421128	76264
9.062	9.068	METHYL T-BUTYL ETHER	64.7696	203599	24806
10.772	10.775	CIS-1,2-DICHLOROETHE	64.8608	224230	39853
13.744	13.747	1,1-DICHLOROPROPENE	64.4935	176087	30214
14.304	14.307	BENZENE	65.1632	447368	80602
14.913	14.915	ISTD-FBENZENE	1.0000	71303	15490
15.748	15.750	TRICHLOROETHENE	52.8397	227711	63388
16.522	16.524	1-BROMO-2-CHLOROETHA	1.0000	1760	517
16.953	16.955	CIS-1,3-DICHLOROPROP	65.5514	83170	29942
17.592	17.594	TRANS-1,3-DICHLOROPR	66.1239	95661	39409
17.988	17.990	TOLUENE	64.4892	246466	100889
18.823	18.825	TETRACHLOROETHENE	64.0613	97901	42503
19.537	19.538	CHLOROBENZENE	64.7803	209688	103666
19.759	19.760	ETHYLBENZENE	64.2407	177766	86873
19.952	19.952	M,P-XYLENE	128.3059	406653	183507
20.247	20.247	STYRENE	65.6751	227235	120739
20.310	20.311	O-XYLENE	64.2740	175947	89695
20.640	20.640	ISOPROPYLBENZENE	62.8869	138202	68238
20.829	20.829	BROMOBENZENE	65.0456	212263	114195
21.020	21.021	N-PROPYLBENZENE	63.5364	162662	85145
21.089	21.089	2-CHLOROTOLUENE	63.8293	180634	95726
21.157	21.157	4-CHLOROTOLUENE	64.4391	188687	104299
21.273	21.274	1,3,5-TRIMETHYLBENZE	63.7620	238134	126453
21.496	21.497	TERT-BUTYLBENZENE	52.5589	134549	65792
21.592	21.592	1,2,4-TRIMETHYLBENZE	52.7705	180404	97050
21.678	21.678	SEC-BUTYLBENZENE	52.5541	137560	67594
21.730	21.730	1,3-DICHLOROBENZENE	64.8870	180794	97793
21.788	21.789	1,4-DICHLOROBENZENE	64.8828	178983	98308
21.831	21.831	P-ISOPROPYLTOLUENE	52.6996	131554	69150
22.089	22.089	1,2-DICHLOROBENZENE	64.6104	145620	75297
22.179	22.179	N-BUTYLBENZENE	53.0420	141627	69329
22.877	22.878	SURR-1B4CB-P	47.6898	141200	66822
23.918	23.918	1,2,4-TRICHLOROBENZE	66.9179	98558	39024
24.221	24.221	NAPHTHALENE	67.9166	135878	50549
24.288	24.289	HEXACHLOROBUTADIENE	63.5587	64161	22614
24.471	24.472	1,2,3-TRICHLOROBENZE	67.8595	102311	35872

TOTAL XYLENES: 192.5800

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

Surrogate Recovery: BrClBenzene 158.9660 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 09:59:45

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P20280.CAL Current version number = 50

Updated from file = C:\CP\DATA1\20280B.13A

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

Today's Date = 10-08-2001 time = 09:59:47

1000

Sample name: CALSTD7

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280B.13R

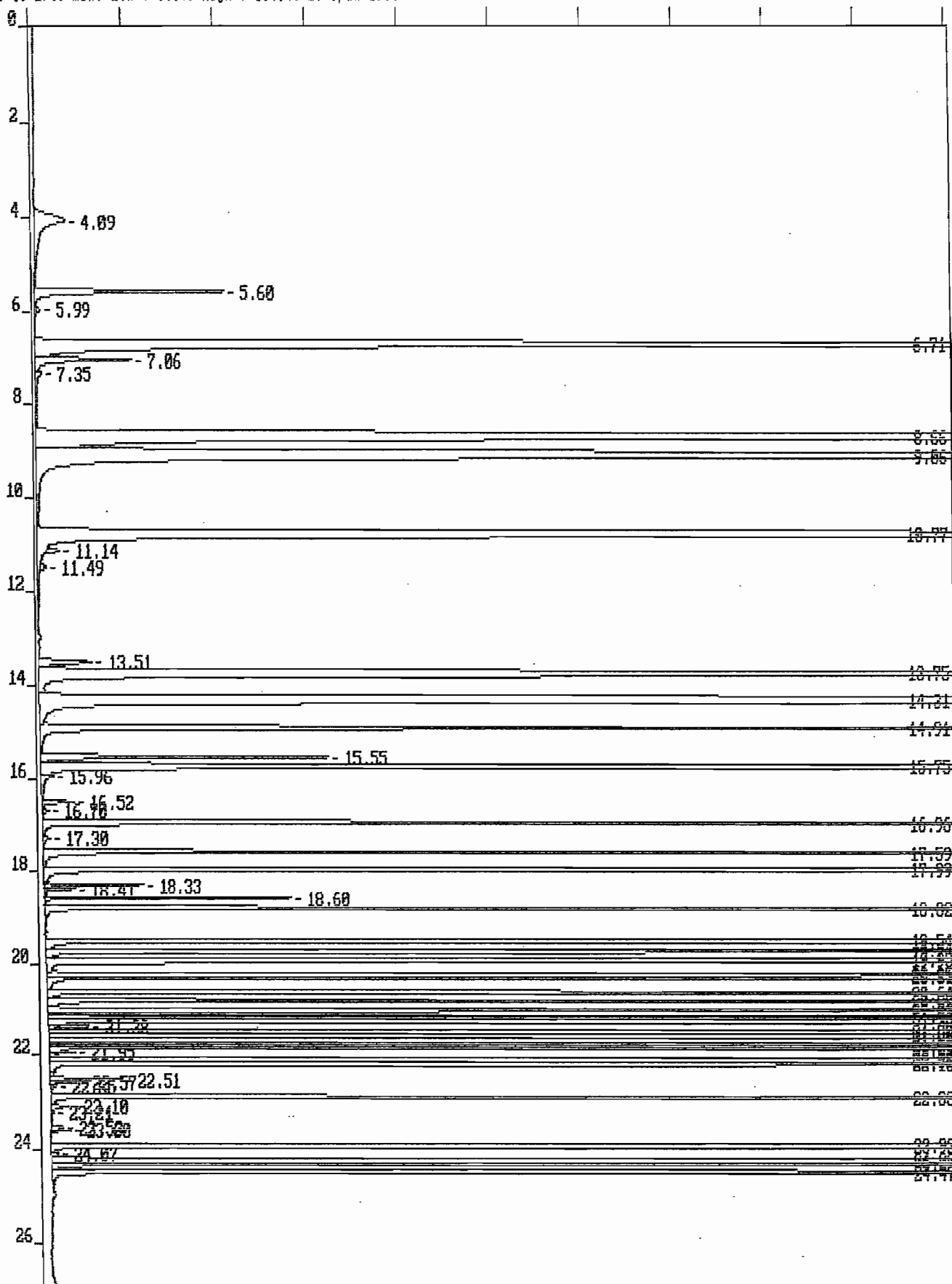
Reviewed by: 12/11/01

Verified by: Vmm46

Date: 10/8/01

Date: 10/09/01

File=C:\CP\DATA1\202808.14R Date printed=10-08-2001 Time= 10:24:29
 Sample Name=CALSTD8 01280A208400,8401,8464
 0.0 to 27.0 min. Low Y=0.043 High Y=15.043 mv Span=15.0



Sample Name: CALSTD8
 Batch: 01280A20 Date Taken: Oct 8, 2001 10:19:29
 Raw File: C:\CP\DATA1\20280B.14R
 Area File: C:\CP\DATA1\20280B.14A
 Method File: c:\cp\data1\20280B.MET(version 2)
 EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75m x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 115
 Threshold: -1 Calculation: INTERNALstd using peak heights
 Peak table using calibration C:\CP\DATA1\P20280.CAL(version 58):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area Height
4.094	4.141	VINYL CHLORIDE	2.8748	11376 508
6.712	6.711	1,1-DICHLOROETHENE	-52.4298	255197 50257
8.655	8.653	TRANS-1,2-DICHLOROET	103.1005	608320 110820
9.064	9.062	METHYL T-BUTYL ETHER	102.6340	288718 35024
10.774	10.772	CIS-1,2-DICHLOROETHE	104.3062	322244 57337
13.746	13.744	1,1-DICHLOROPROPENE	102.2808	250354 43030
14.307	14.304	BENZENE	103.9744	640763 115139
14.915	14.913	ISTD-FBENZENE	1.0000	76785 16651
15.750	15.748	TRICHLOROETHENE	-52.3013	324158 89777
16.524	16.522	1-BROMO-2-CHLOROETHA	1.0000	1865 535
16.955	16.953	CIS-1,3-DICHLOROPROP	103.6616	117389 42124
17.594	17.592	TRANS-1,3-DICHLOROPR	104.5546	134718 55071
17.990	17.988	TOLUENE	102.3108	349915 143105
18.824	18.823	TETRACHLOROETHENE	101.8964	138724 60283
19.539	19.537	CHLOROBENZENE	103.4188	297366 147454
19.761	19.759	ETHYLBENZENE	101.8131	251712 122856
19.954	19.952	M,P-XYLENE	202.7834	574298 258827
20.249	20.247	STYRENE	104.5307	319740 170308
20.312	20.310	O-XYLENE	93.1106	239039 115544
20.641	20.640	ISOPROPYLBENZENE	100.4495	197465 97337
20.831	20.829	BROMOBENZENE	103.7315	298836 161918
21.022	21.020	N-PROPYLBENZENE	100.3808	230048 120199
21.091	21.089	2-CHLOROTOLUENE	100.2020	253775 134290
21.159	21.157	4-CHLOROTOLUENE	101.0214	262353 145791
21.275	21.273	1,3,5-TRIMETHYLBENZE	100.7135	335978 178227
21.498	21.496	TERT-BUTYLBENZENE	-51.2766	189682 92658
21.594	21.592	1,2,4-TRIMETHYLBENZE	-51.2827	254656 136919
21.680	21.678	SEC-BUTYLBENZENE	-51.2453	196798 95899
21.732	21.730	1,3-DICHLOROBENZENE	101.5670	249384 136390
21.791	21.788	1,4-DICHLOROBENZENE	103.1328	258624 139102
21.833	21.831	P-ISOPROPYLTOLUENE	-51.1615	180917 97843
22.091	22.089	1,2-DICHLOROBENZENE	101.8148	204294 105611
22.180	22.179	N-BUTYLBENZENE	-51.3199	200860 98684
22.878	22.877	SURR-1B4CB-P	61.1248	160612 76014
23.920	23.918	1,2,4-TRICHLOROBENZE	108.6640	141216 56077
24.222	24.221	NAPHTHALENE	108.2630	188628 70796
24.289	24.288	HEXACHLOROBUTADIENE	102.7502	93375 32599
24.473	24.471	1,2,3-TRICHLOROBENZE	108.3881	141016 50539

TOTAL XYLENES: 295.8940

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

Surrogate Recovery: BrClBenzene 203.7493 %

Chrom Perfect version 6.07

Reported on 10-08-2001 at 10:27:34

CALIBRATION UPDATE REPORT

Calibration file = C:\CP\DATA1\P20280.CAL Current version number = 58

Updated from file = C:\CP\DATA1\20280B.14A

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

Today's Date = 10-08-2001 time = 10:27:36

Sample name: CALSTD8

Batch: 01280A208400,840

Raw file:

C:\CP\DATA1\20280B.14R

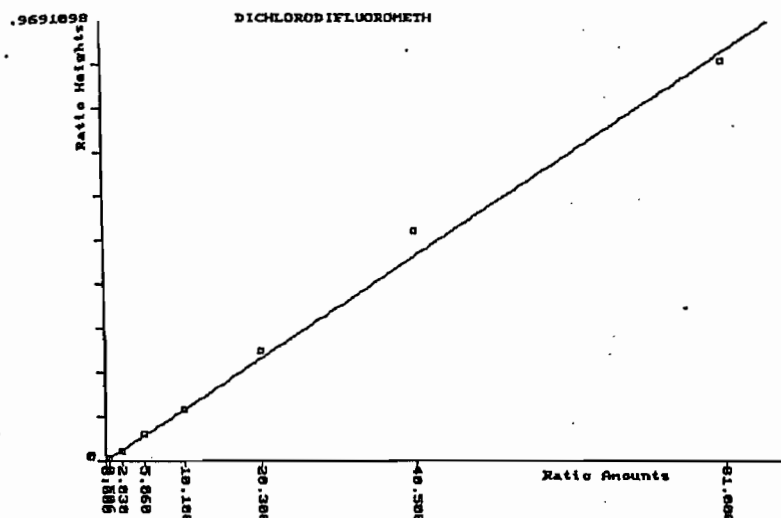
Reviewed by: MMB944

Verified by: mm468

Date: 10/8/01

Date: 10/09/01

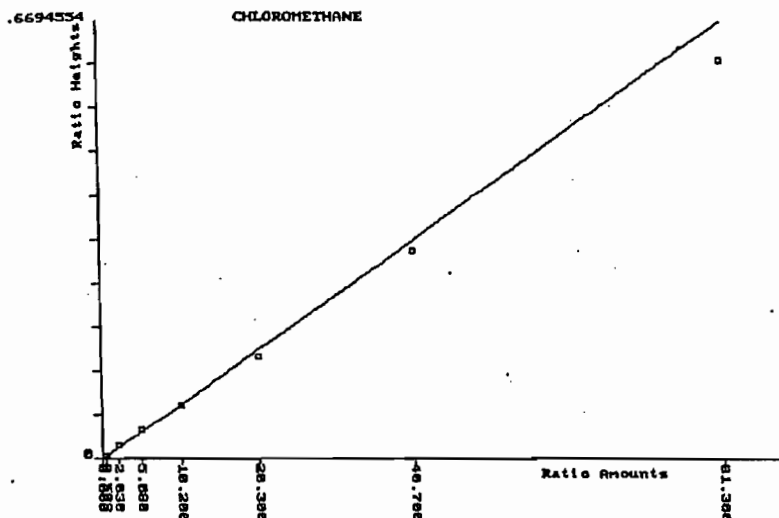
1 DICHLORODIFLUOROMETH Ret time= 3.609 min. Search window= 0.100 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50600	328	1.0000	77295	0.5060	0.0042	20280.07A	10-08-2001 10:19
2	2.03000	1848	1.0000	81533	2.0300	0.0227	20280.08A	10-08-2001 10:19
3	5.06000	4686	1.0000	79672	5.0600	0.0588	20280.09A	10-08-2001 10:20
4	10.10000	10029	1.0000	87650	10.1000	0.1144	20280.10A	10-08-2001 10:20
5	20.30000	21413	1.0000	88592	20.3000	0.2417	20280.11A	10-08-2001 10:21
6	40.50000	45308	1.0000	89176	40.5000	0.5081	20280.12A	10-08-2001 10:21
7	81.00000	82773	1.0000	93911	81.0000	0.8814	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9964221 Ave error=7.4172%
 Ratio Height = +11.12e-03*X^1
 Average CF (EPA method 8000) = 0.0111 with %RSD = 11.884%

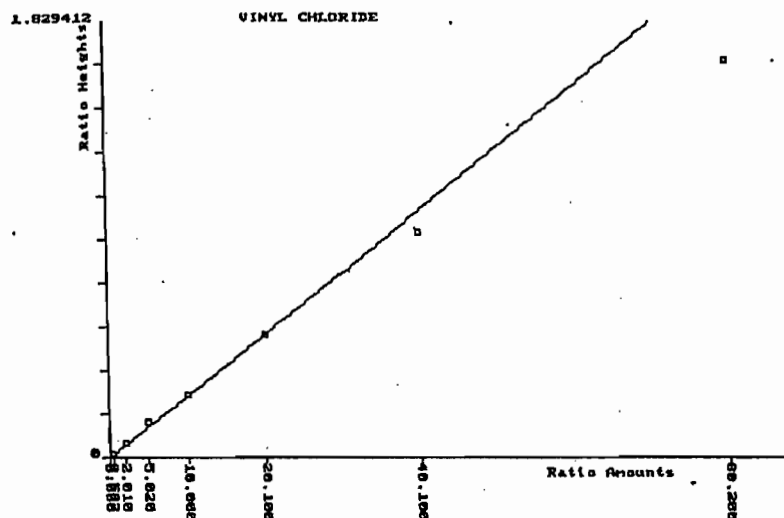
2 CHLOROMETHANE Ret time= 3.820 min. Search window= 0.100 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50800	307	1.0000	77295	0.5080	0.0040	20280.07A	10-08-2001 10:19
2	2.03000	1611	1.0000	81533	2.0300	0.0198	20280.08A	10-08-2001 10:19
3	5.08000	3621	1.0000	79672	5.0800	0.0455	20280.09A	10-08-2001 10:20
4	10.20000	7122	1.0000	87650	10.2000	0.0813	20280.10A	10-08-2001 10:20
5	20.30000	13884	1.0000	88592	20.3000	0.1567	20280.11A	10-08-2001 10:21
6	40.70000	28403	1.0000	89176	40.7000	0.3185	20280.12A	10-08-2001 10:21
7	81.30000	57188	1.0000	93911	81.3000	0.6090	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9923879 Ave error=6.6284%
 Ratio Height = +82.148e-04*X^1
 Average CF (EPA method 8000) = 0.0082 with %RSD = 9.92%

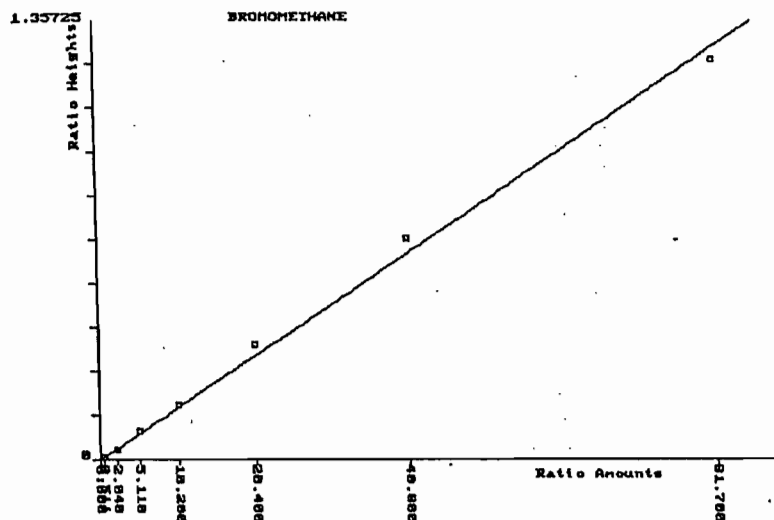
3 VINYL CHLORIDE Ret time= 4.142 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50200	999	1.0000	77295	0.5020	0.0129	20280.07A	10-08-2001 10:19
2	2.01000	4804	1.0000	81533	2.0100	0.0589	20280.08A	10-08-2001 10:19
3	5.02000	11664	1.0000	79672	5.0200	0.1464	20280.09A	10-08-2001 10:20
4	10.00000	23214	1.0000	87650	10.0000	0.2649	20280.10A	10-08-2001 10:20
5	20.10000	45834	1.0000	88592	20.1000	0.5174	20280.11A	10-08-2001 10:21
6	40.10000	84588	1.0000	89176	40.1000	0.9486	20280.12A	10-08-2001 10:21
7	80.20000	156294	1.0000	93911	80.2000	1.6643	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .95675 Ave error=7.5189%
 Ratio Height = +25.837e-03*X^1
 Average CF (EPA method 8000) = 0.0258 with %RSD = 11.634%

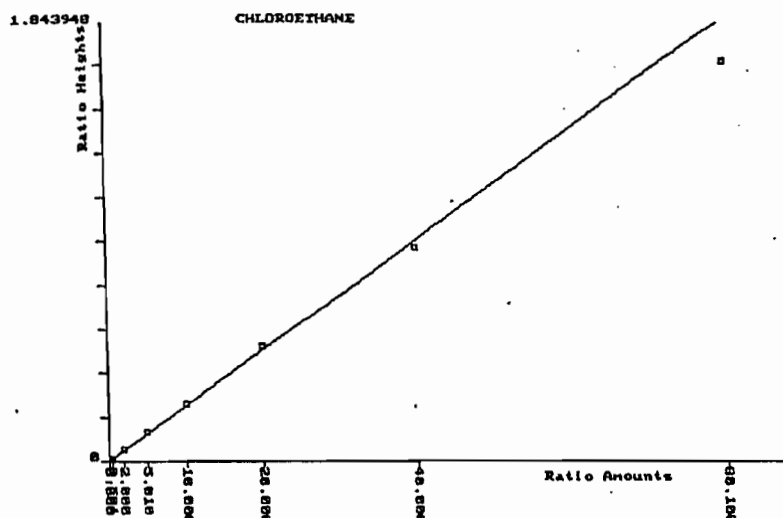
4 BROMOMETHANE Ret time= 4.652 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.51100	470	1.0000	77295	0.5110	0.0061	20280.07A	10-08-2001 10:19
2	2.04000	2494	1.0000	81533	2.0400	0.0306	20280.08A	10-08-2001 10:19
3	5.11000	6874	1.0000	79672	5.1100	0.0863	20280.09A	10-08-2001 10:20
4	10.20000	14582	1.0000	87650	10.2000	0.1664	20280.10A	10-08-2001 10:20
5	20.40000	31445	1.0000	88592	20.4000	0.3549	20280.11A	10-08-2001 10:21
6	40.80000	60858	1.0000	89176	40.8000	0.6825	20280.12A	10-08-2001 10:21
7	81.70000	115925	1.0000	93911	81.7000	1.2344	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9975879 Ave error=8.4347%
 Ratio Height = $+15.617e-03 \times X^1$
 Average CF (EPA method 8000) = 0.0156 with %RSD = 11.986%

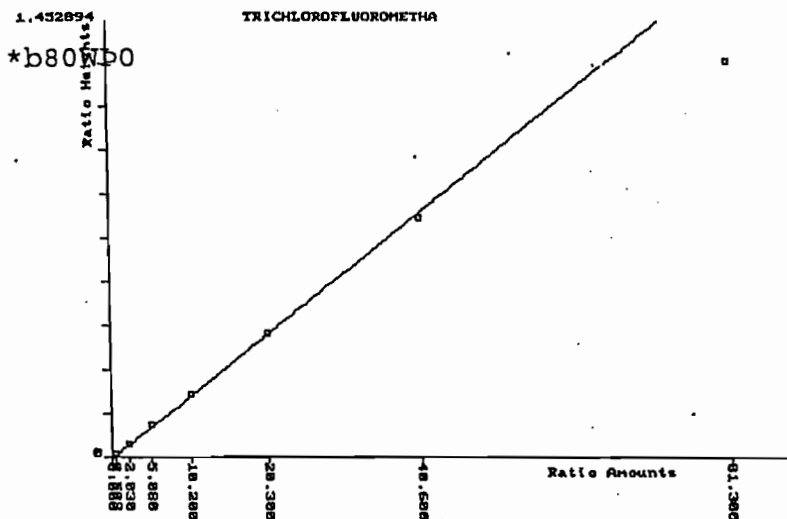
5 CHLOROETHANE Ret time= 4.863 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50100	815	1.0000	77295	0.5010	0.0105	20280.07A	10-08-2001 10:19
2	2.00000	4092	1.0000	81533	2.0000	0.0502	20280.08A	10-08-2001 10:19
3	5.01000	9914	1.0000	79672	5.0100	0.1244	20280.09A	10-08-2001 10:20
4	10.00000	21062	1.0000	87650	10.0000	0.2403	20280.10A	10-08-2001 10:20
5	20.00000	42861	1.0000	88592	20.0000	0.4838	20280.11A	10-08-2001 10:21
6	40.00000	80238	1.0000	89176	40.0000	0.8998	20280.12A	10-08-2001 10:21
7	80.10000	157514	1.0000	93911	80.1000	1.6773	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9910751 Ave error=5.7264%
 Ratio Height = +23.232e-03*X^1
 Average CF (EPA method 8000) = 0.0232 with %RSD = 7.498%

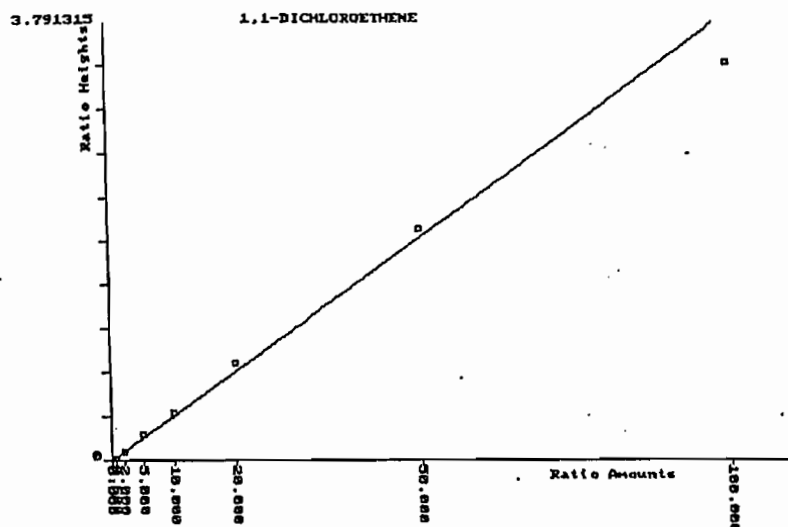
6 TRICHLOROFLUOROMETHA Ret time= 5.753 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50800	794	1.0000	77295	0.5080	0.0103	20280.07A	10-08-2001 10:19
2	2.03000	3637	1.0000	81533	2.0300	0.0446	20280.08A	10-08-2001 10:19
3	5.08000	8648	1.0000	79672	5.0800	0.1085	20280.09A	10-08-2001 10:20
4	10.20000	18429	1.0000	87650	10.2000	0.2103	20280.10A	10-08-2001 10:20
5	20.30000	36531	1.0000	88592	20.3000	0.4124	20280.11A	10-08-2001 10:21
6	40.60000	71158	1.0000	89176	40.6000	0.7979	20280.12A	10-08-2001 10:21
7	81.30000	124126	1.0000	93911	81.3000	1.3217	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9633139 Ave error=5.6314%
 Ratio Height = +20.057e-03*X^1
 Average CF (EPA method 8000) = 0.0201 with %RSD = 9.19%

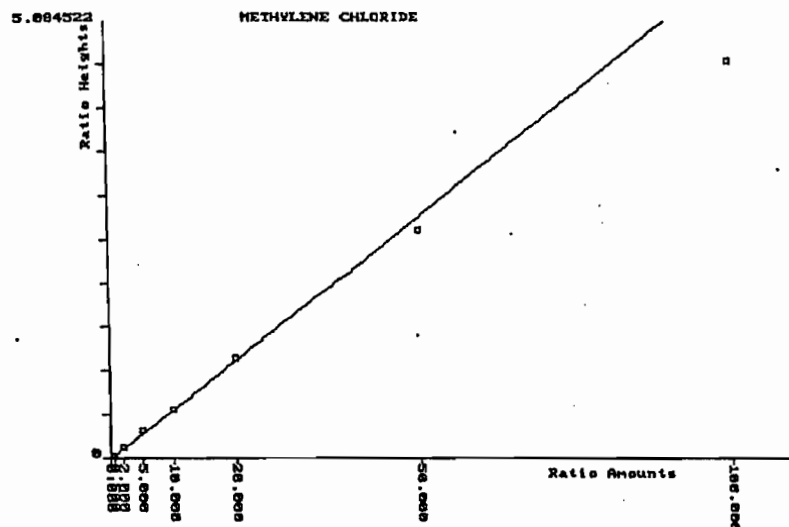
7 1,1-DICHLOROETHENE Ret time= 6.726 min. Search window=. 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1155	1.0000	77295	0.5000	0.0149	20280.07A	10-08-2001 10:19
2	2.00000	6365	1.0000	81533	2.0000	0.0781	20280.08A	10-08-2001 10:19
3	5.00000	17342	1.0000	79672	5.0000	0.2177	20280.09A	10-08-2001 10:20
4	10.00000	35900	1.0000	87650	10.0000	0.4096	20280.10A	10-08-2001 10:20
5	20.00000	74649	1.0000	88592	20.0000	0.8426	20280.11A	10-08-2001 10:21
6	50.00000	178692	1.0000	89176	50.0000	2.0038	20280.12A	10-08-2001 10:21
7	100.00000	323805	1.0000	93911	100.0000	3.4480	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9892961 Ave error=8.9394%
 Ratio Height = $+38.584e-03 \times X^1$
 Average CF (EPA method 8000) = 0.0386 with %RSD = 12.422%

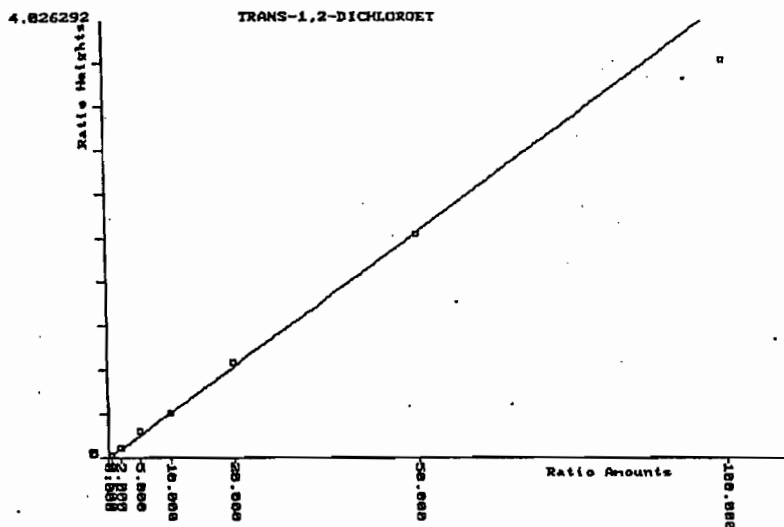
8 METHYLENE CHLORIDE Ret time= 7.070 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	2171	1.0000	77295	0.5000	0.0281	20280.07A	10-08-2001 10:19
2	2.00000	9816	1.0000	81533	2.0000	0.1204	20280.08A	10-08-2001 10:19
3	5.00000	25718	1.0000	79672	5.0000	0.3228	20280.09A	10-08-2001 10:20
4	10.00000	49940	1.0000	87650	10.0000	0.5698	20280.10A	10-08-2001 10:20
5	20.00000	102609	1.0000	88592	20.0000	1.1582	20280.11A	10-08-2001 10:21
6	50.00000	237255	1.0000	89176	50.0000	2.6605	20280.12A	10-08-2001 10:21
7	100.00000	434323	1.0000	93911	100.0000	4.6248	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9645057 Ave error=6.3549%
 Ratio Height = +56.47e-03*X^1
 Average CF (EPA method 8000) = 0.0565 with %RSD = 10.144%

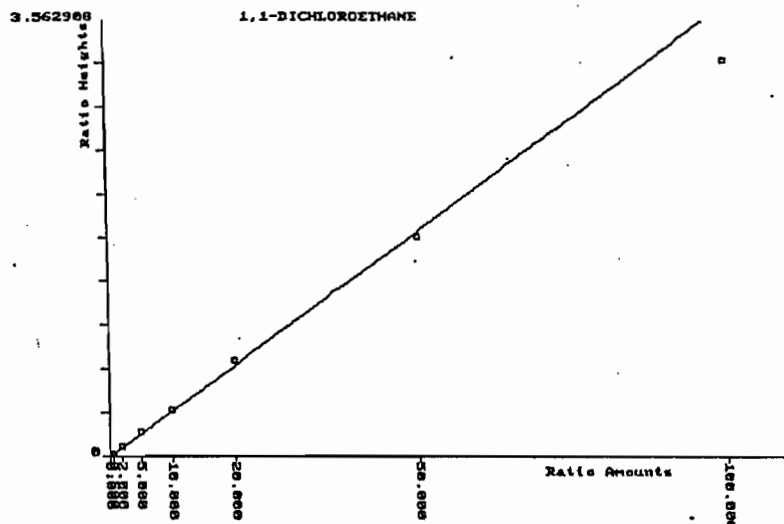
10 TRANS-1,2-DICHLOROET Ret time= 8.666 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 Group number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1418	1.0000	77295	0.5000	0.0183	20280.07A	10-08-2001 10:19
2	2.00000	6953	1.0000	81533	2.0000	0.0853	20280.08A	10-08-2001 10:19
3	5.00000	19251	1.0000	79672	5.0000	0.2416	20280.09A	10-08-2001 10:20
4	10.00000	36762	1.0000	87650	10.0000	0.4194	20280.10A	10-08-2001 10:20
5	20.00000	77503	1.0000	88592	20.0000	0.8748	20280.11A	10-08-2001 10:21
6	50.00000	183863	1.0000	89176	50.0000	2.0618	20280.12A	10-08-2001 10:21
7	100.00000	343895	1.0000	93911	100.0000	3.6619	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9865319 Ave error=6.2381%
 Ratio Height = +41.6e-03*X^1
 Average CF (EPA method 8000) = 0.0416 with %RSD = 9.812%

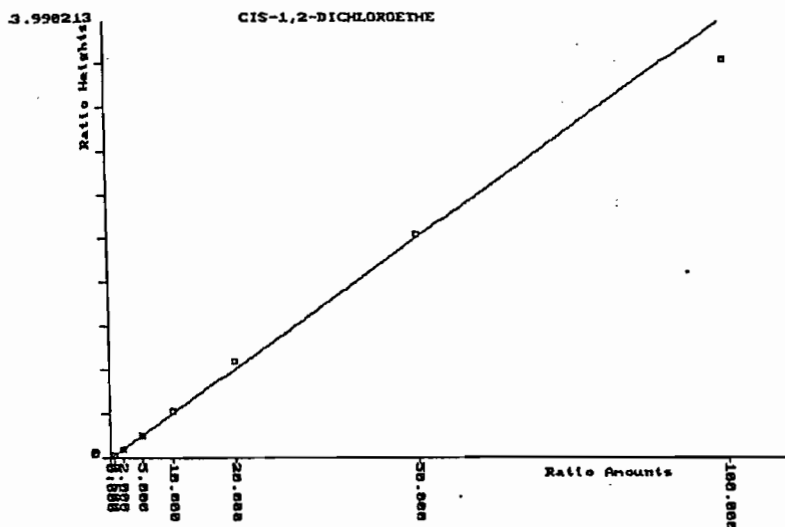
11 1,1-DICHLOROETHANE Ret time= 9.291 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1349	1.0000	77295	0.5000	0.0175	20280.07A	10-08-2001 10:19
2	2.00000	6241	1.0000	81533	2.0000	0.0765	20280.08A	10-08-2001 10:19
3	5.00000	15454	1.0000	79672	5.0000	0.1940	20280.09A	10-08-2001 10:20
4	10.00000	33384	1.0000	87650	10.0000	0.3809	20280.10A	10-08-2001 10:20
5	20.00000	69600	1.0000	88592	20.0000	0.7856	20280.11A	10-08-2001 10:21
6	50.00000	160015	1.0000	89176	50.0000	1.7944	20280.12A	10-08-2001 10:21
7	100.00000	304327	1.0000	93911	100.0000	3.2406	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9863476 Ave error=5.0280%
 Ratio Height = +36.805e-03*X^1
 Average CF (EPA method 8000) = 0.0368 with %RSD = 6.812%

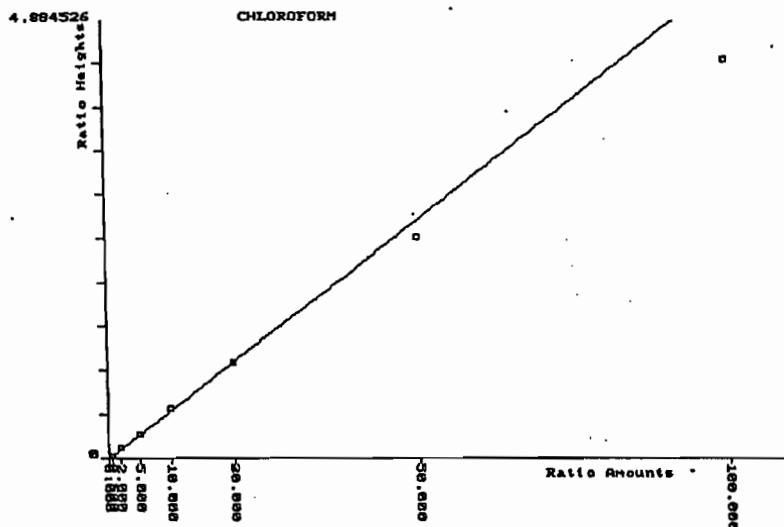
12 CIS-1,2-DICHLOROETHE Ret time= 10.783 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 Group number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1378	1.0000	77295	0.5000	0.0178	20280.07A	10-08-2001 10:19
2	2.00000	6730	1.0000	81533	2.0000	0.0825	20280.08A	10-08-2001 10:19
3	5.00000	16177	1.0000	79672	5.0000	0.2030	20280.09A	10-08-2001 10:20
4	10.00000	37336	1.0000	87650	10.0000	0.4260	20280.10A	10-08-2001 10:20
5	20.00000	77463	1.0000	88592	20.0000	0.8744	20280.11A	10-08-2001 10:21
6	50.00000	181704	1.0000	89176	50.0000	2.0376	20280.12A	10-08-2001 10:21
7	100.00000	340811	1.0000	93911	100.0000	3.6291	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9915905 Ave error=5.3239%
 Ratio Height = $+40.129e-03 \times X^1$
 Average CF (EPA method 8000) = 0.0401 with %RSD = 7.586%

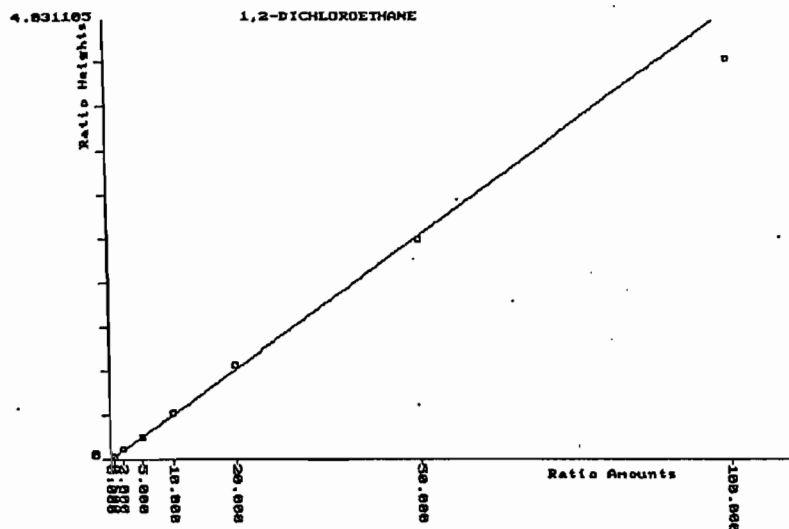
14 CHLOROFORM Ret time= 11.342 min. Search window= 0.100 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	2188	1.0000	77295	0.5000	0.0283	20280.07A	10-08-2001 10:19
2	2.00000	9544	1.0000	81533	2.0000	0.1171	20280.08A	10-08-2001 10:19
3	5.00000	21395	1.0000	79672	5.0000	0.2685	20280.09A	10-08-2001 10:20
4	10.00000	48862	1.0000	87650	10.0000	0.5575	20280.10A	10-08-2001 10:20
5	20.00000	94580	1.0000	88592	20.0000	1.0676	20280.11A	10-08-2001 10:21
6	50.00000	219955	1.0000	89176	50.0000	2.4665	20280.12A	10-08-2001 10:21
7	100.00000	417251	1.0000	93911	100.0000	4.4431	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .971156 Ave error=6.1277%
 Ratio Height = +53.106e-03*X^1
 Average CF (EPA method 8000) = 0.0531 with %RSD = 9.053%

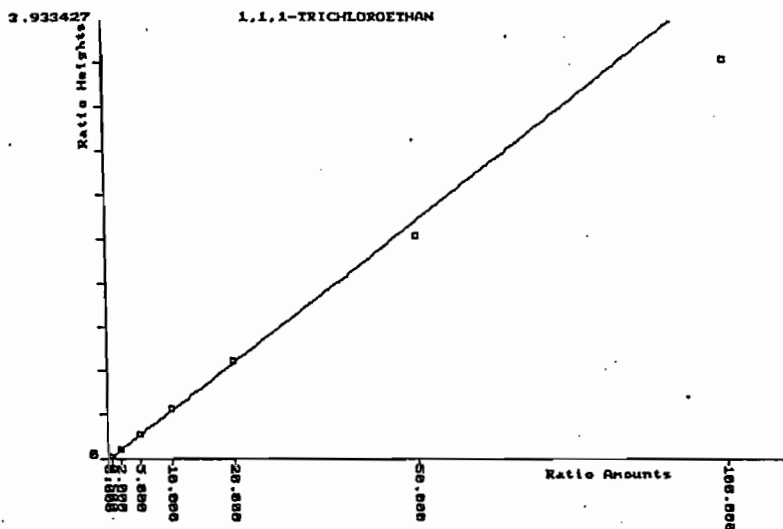
16 1,2-DICHLOROETHANE Ret time= 12.996 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1560	1.0000	77295	0.5000	0.0202	20280.07A	10-08-2001 10:19
2	2.00000	7043	1.0000	81533	2.0000	0.0864	20280.08A	10-08-2001 10:19
3	5.00000	16164	1.0000	79672	5.0000	0.2029	20280.09A	10-08-2001 10:20
4	10.00000	37856	1.0000	87650	10.0000	0.4319	20280.10A	10-08-2001 10:20
5	20.00000	76316	1.0000	88592	20.0000	0.8614	20280.11A	10-08-2001 10:21
6	50.00000	180626	1.0000	89176	50.0000	2.0255	20280.12A	10-08-2001 10:21
7	100.00000	344322	1.0000	93911	100.0000	3.6665	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9893113 Ave error=3.8557%
 Ratio Height = +41.082e-03*X^1
 Average CF (EPA method 8000) = 0.0411 with %RSD = 5.747%

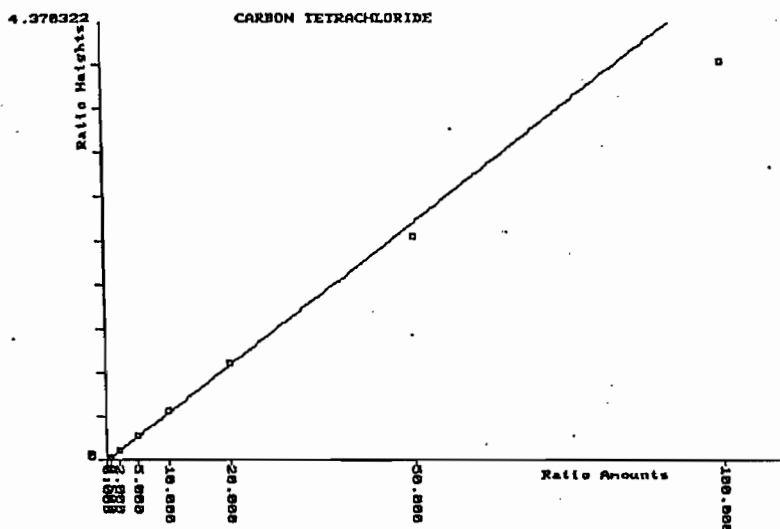
17 1,1,1-TRICHLOROETHAN Ret time= 13.206 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1795	1.0000	77295	0.5000	0.0232	20280.07A	10-08-2001 10:19
2	2.00000	7492	1.0000	81533	2.0000	0.0919	20280.08A	10-08-2001 10:19
3	5.00000	17194	1.0000	79672	5.0000	0.2158	20280.09A	10-08-2001 10:20
4	10.00000	38931	1.0000	87650	10.0000	0.4442	20280.10A	10-08-2001 10:20
5	20.00000	77985	1.0000	88592	20.0000	0.8803	20280.11A	10-08-2001 10:21
6	50.00000	178717	1.0000	89176	50.0000	2.0041	20280.12A	10-08-2001 10:21
7	100.00000	336009	1.0000	93911	100.0000	3.5780	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9710003 Ave error=6.0157%
 Ratio Height = $+42.835e-03 \times X^1$
 Average CF (EPA method 8000) = 0.0428 with %RSD = 8.738%

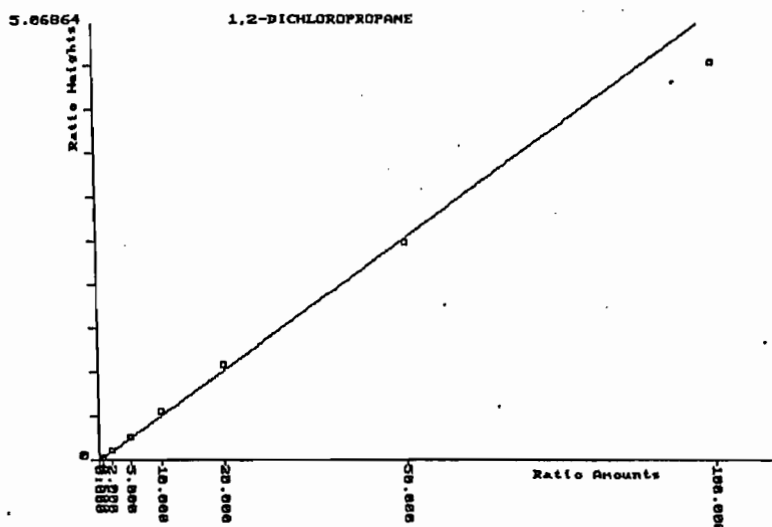
19 CARBON TETRACHLORIDE Ret time= 14.155 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1913	1.0000	77295	0.5000	0.0247	20280.07A	10-08-2001 10:19
2	2.00000	8390	1.0000	81533	2.0000	0.1029	20280.08A	10-08-2001 10:19
3	5.00000	19482	1.0000	79672	5.0000	0.2445	20280.09A	10-08-2001 10:20
4	10.00000	43825	1.0000	87650	10.0000	0.5000	20280.10A	10-08-2001 10:20
5	20.00000	85797	1.0000	88592	20.0000	0.9685	20280.11A	10-08-2001 10:21
6	50.00000	200058	1.0000	89176	50.0000	2.2434	20280.12A	10-08-2001 10:21
7	100.00000	373321	1.0000	93911	100.0000	3.9753	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9715838 Ave error=5.8167%
 Ratio Height = $+47.555e-03 \cdot X^1$
 Average CF (EPA method 8000) = 0.0476 with %RSD = 8.392%

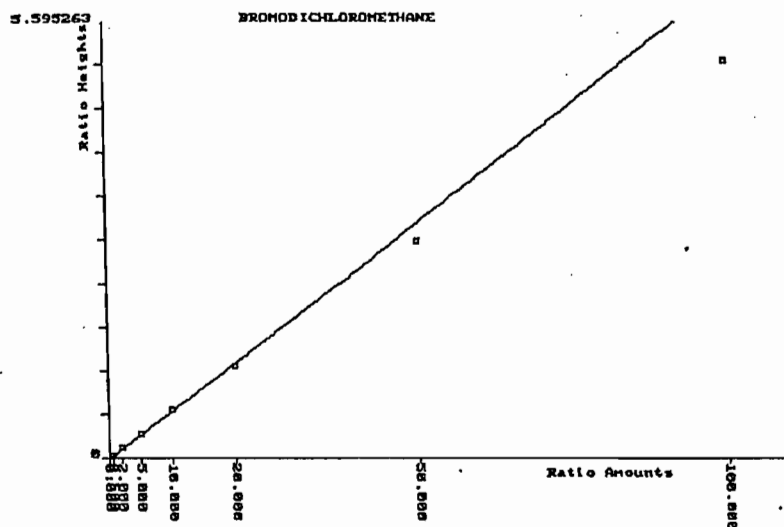
21 1,2-DICHLOROPROPANE Ret time= 15.664 min. Search window= 0.100 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1742	1.0000	77295	0.5000	0.0225	20280.07A	10-08-2001 10:19
2	2.00000	8856	1.0000	81533	2.0000	0.1086	20280.08A	10-08-2001 10:19
3	5.00000	21487	1.0000	79672	5.0000	0.2697	20280.09A	10-08-2001 10:20
4	10.00000	49390	1.0000	87650	10.0000	0.5635	20280.10A	10-08-2001 10:20
5	20.00000	97571	1.0000	88592	20.0000	1.1014	20280.11A	10-08-2001 10:21
6	50.00000	225805	1.0000	89176	50.0000	2.5321	20280.12A	10-08-2001 10:21
7	100.00000	432920	1.0000	93911	100.0000	4.6099	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9891807 Ave error=6.5350%
 Ratio Height = +51.642e-03*X^1
 Average CF (EPA method 8000) = 0.0516 with %RSD = 8.695%

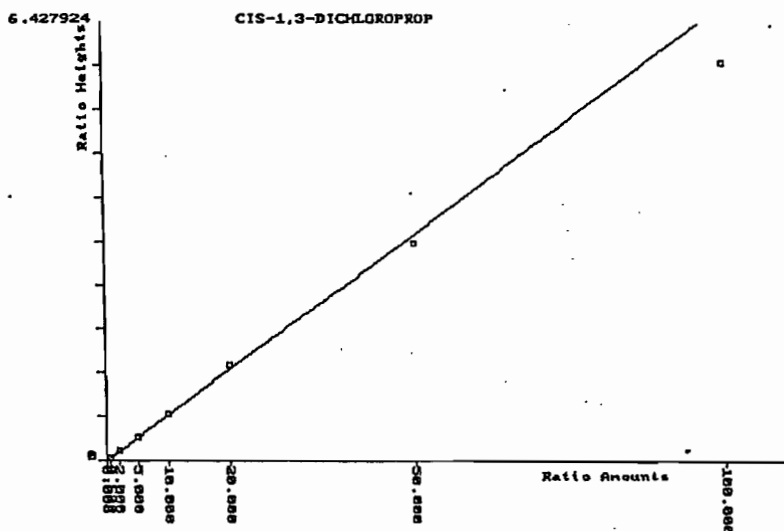
23 BROMODICHLOROMETHANE Ret time= 15.835 min. Search window= 0.100 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	2534	1.0000	77295	0.5000	0.0328	20280.07A	10-08-2001 10:19
2	2.00000	11017	1.0000	81533	2.0000	0.1351	20280.08A	10-08-2001 10:19
3	5.00000	24837	1.0000	79672	5.0000	0.3117	20280.09A	10-08-2001 10:20
4	10.00000	54321	1.0000	87650	10.0000	0.6197	20280.10A	10-08-2001 10:20
5	20.00000	105486	1.0000	88592	20.0000	1.1907	20280.11A	10-08-2001 10:21
6	50.00000	248946	1.0000	89176	50.0000	2.7916	20280.12A	10-08-2001 10:21
7	100.00000	477967	1.0000	93911	100.0000	5.0896	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9723506 Ave error=6.5457%
 Ratio Height = +60.532e-03*X^1
 Average CF (EPA method 8000) = 0.0605 with %RSD = 9.447%

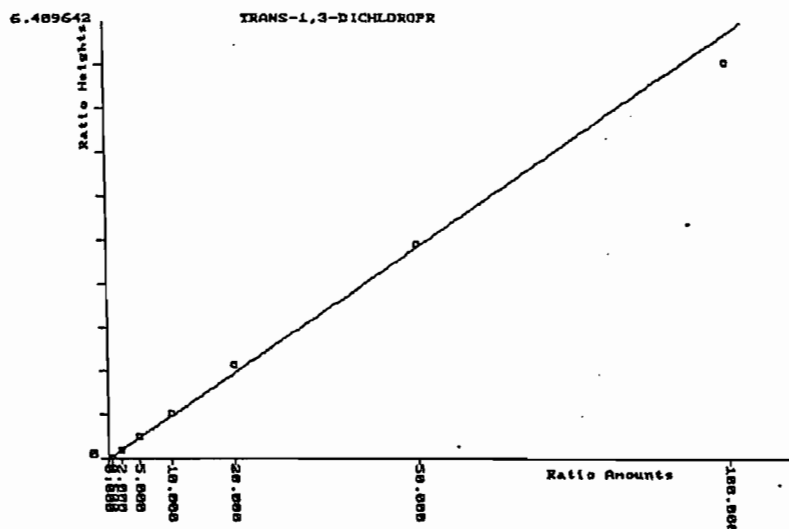
25 CIS-1,3-DICHLOROPROP Ret time= 16.968 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	2638	1.0000	77295	0.5000	0.0341	20280.07A	10-08-2001 10:19
2	2.00000	11666	1.0000	81533	2.0000	0.1431	20280.08A	10-08-2001 10:19
3	5.00000	26588	1.0000	79672	5.0000	0.3337	20280.09A	10-08-2001 10:20
4	10.00000	59043	1.0000	87650	10.0000	0.6736	20280.10A	10-08-2001 10:20
5	20.00000	124286	1.0000	88592	20.0000	1.4029	20280.11A	10-08-2001 10:21
6	50.00000	286291	1.0000	89176	50.0000	3.2104	20280.12A	10-08-2001 10:21
7	100.00000	549066	1.0000	93911	100.0000	5.8467	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9852478 Ave error=4.1345%
 Ratio Height = +66.675e-03*X^1
 Average CF (EPA method 8000) = 0.0667 with %RSD = 6.485%

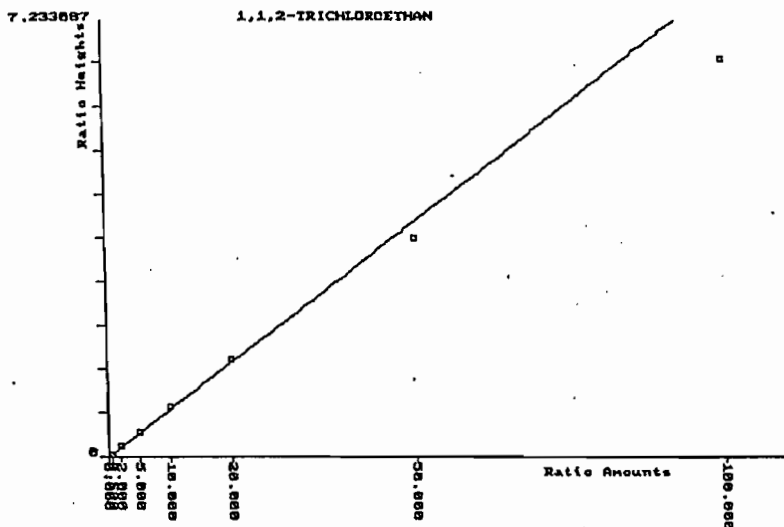
26 TRANS-1,3-DICHLOROPR Ret time= 17.607 min. Search window= 0.100 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1993	1.0000	77295	0.5000	0.0258	20280.07A	10-08-2001 10:19
2	2.00000	10447	1.0000	81533	2.0000	0.1281	20280.08A	10-08-2001 10:19
3	5.00000	25728	1.0000	79672	5.0000	0.3229	20280.09A	10-08-2001 10:20
4	10.00000	57213	1.0000	87650	10.0000	0.6527	20280.10A	10-08-2001 10:20
5	20.00000	122582	1.0000	88592	20.0000	1.3837	20280.11A	10-08-2001 10:21
6	50.00000	281039	1.0000	89176	50.0000	3.1515	20280.12A	10-08-2001 10:21
7	100.00000	547434	1.0000	93911	100.0000	5.8293	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9960962 Ave error=6.2099%
 Ratio Height = +62.288e-03*X^1
 Average CF (EPA method 8000) = 0.0623 with %RSD = 9.18%

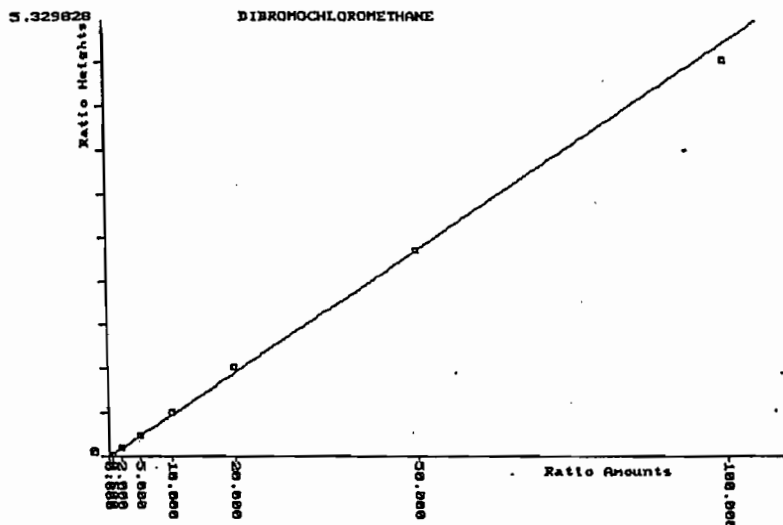
27 1,1,2-TRICHLOROETHAN Ret time= 17.765 min. Search window= 0.100 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	3012	1.0000	77295	0.5000	0.0390	20280.07A	10-08-2001 10:19
2	2.00000	14283	1.0000	81533	2.0000	0.1752	20280.08A	10-08-2001 10:19
3	5.00000	32152	1.0000	79672	5.0000	0.4036	20280.09A	10-08-2001 10:20
4	10.00000	71775	1.0000	87650	10.0000	0.8189	20280.10A	10-08-2001 10:20
5	20.00000	142790	1.0000	88592	20.0000	1.6118	20280.11A	10-08-2001 10:21
6	50.00000	322822	1.0000	89176	50.0000	3.6200	20280.12A	10-08-2001 10:21
7	100.00000	617847	1.0000	93911	100.0000	6.5791	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9731213 Ave error=6.0701%
 Ratio Height = +78.129e-03*X^1
 Average CF (EPA method 8000) = 0.0781 with %RSD = 9.073%

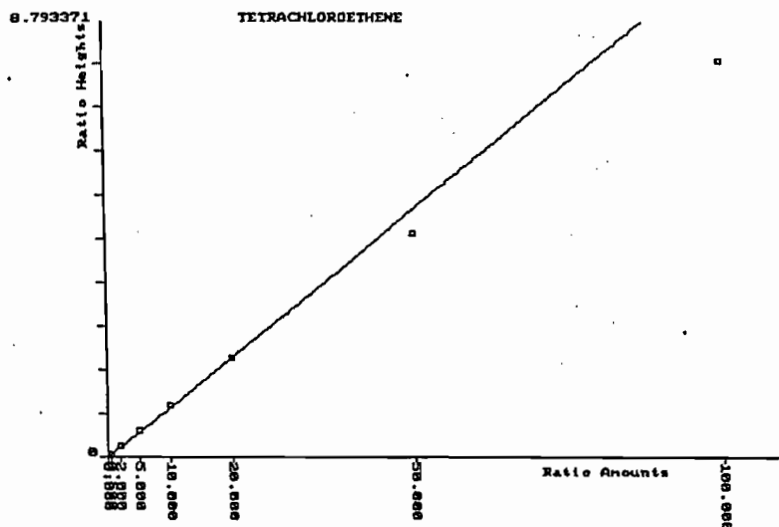
29 DIBROMOCHLOROMETHANE Ret time= 18.339 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1662	1.0000	77295	0.5000	0.0215	20280.07A	10-08-2001 10:19
2	2.00000	8452	1.0000	81533	2.0000	0.1037	20280.08A	10-08-2001 10:19
3	5.00000	20410	1.0000	79672	5.0000	0.2562	20280.09A	10-08-2001 10:20
4	10.00000	47295	1.0000	87650	10.0000	0.5396	20280.10A	10-08-2001 10:20
5	20.00000	96188	1.0000	88592	20.0000	1.0857	20280.11A	10-08-2001 10:21
6	50.00000	224489	1.0000	89176	50.0000	2.5174	20280.12A	10-08-2001 10:21
7	100.00000	455210	1.0000	93911	100.0000	4.8473	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9985282 Ave error=4.9248%
 Ratio Height = $+50.447e-03 \cdot X^1$
 Average CF (EPA method 8000) = 0.0504 with %RSD = 7.637%

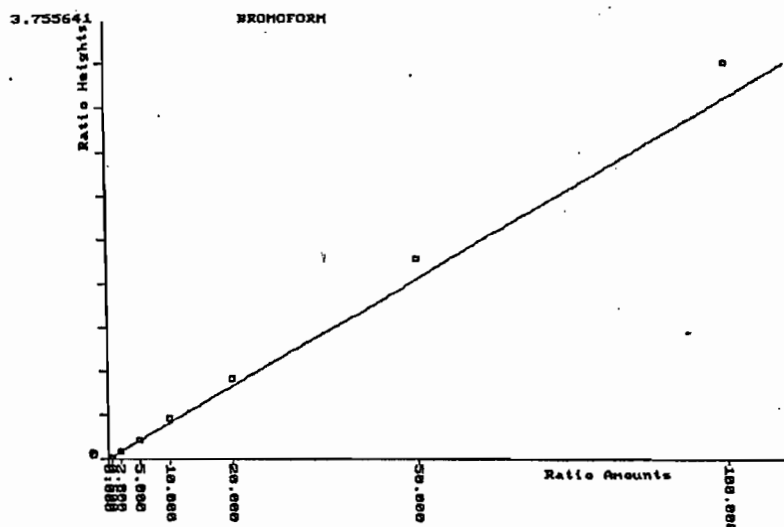
31 TETRACHLOROETHENE Ret time= 18.838 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	4088	1.0000	77295	0.5000	0.0529	20280.07A	10-08-2001 10:19
2	2.00000	18541	1.0000	81533	2.0000	0.2274	20280.08A	10-08-2001 10:19
3	5.00000	42541	1.0000	79672	5.0000	0.5339	20280.09A	10-08-2001 10:20
4	10.00000	92995	1.0000	87650	10.0000	1.0610	20280.10A	10-08-2001 10:20
5	20.00000	177459	1.0000	88592	20.0000	2.0031	20280.11A	10-08-2001 10:21
6	50.00000	403938	1.0000	89176	50.0000	4.5297	20280.12A	10-08-2001 10:21
7	100.00000	751173	1.0000	93911	100.0000	7.9988	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9507351 Ave error=8.0900%
 Ratio Height = +10.045e-02*X^1
 Average CF (EPA method 8000) = 0.1004 with %RSD = 11.44%

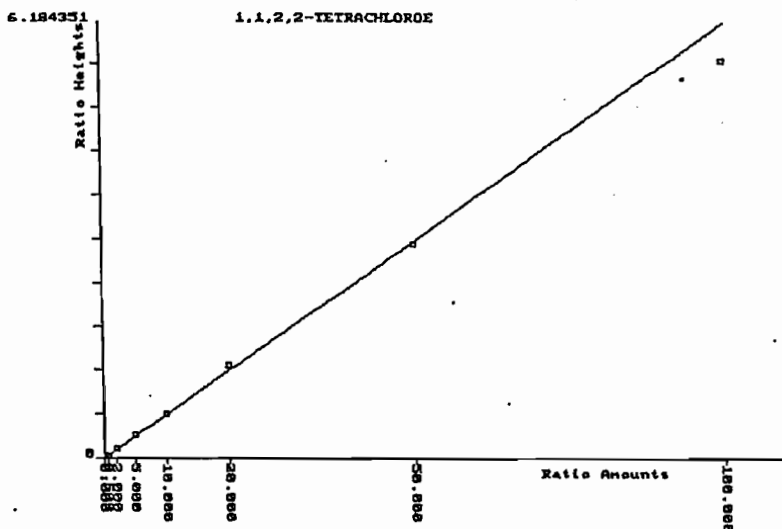
34 BROMOFORM Ret time= 20.018 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	783	1.0000	77295	0.5000	0.0101	20280.07A	10-08-2001 10:19
2	2.00000	4811	1.0000	81533	2.0000	0.0590	20280.08A	10-08-2001 10:19
3	5.00000	12147	1.0000	79672	5.0000	0.1525	20280.09A	10-08-2001 10:20
4	10.00000	29914	1.0000	87650	10.0000	0.3413	20280.10A	10-08-2001 10:20
5	20.00000	61162	1.0000	88592	20.0000	0.6904	20280.11A	10-08-2001 10:21
6	50.00000	153570	1.0000	89176	50.0000	1.7221	20280.12A	10-08-2001 10:21
7	100.00000	320719	1.0000	93911	100.0000	3.4151	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9915421 Ave error=12.2866%
 Ratio Height = $+31.072e-03 \cdot X^1$
 Average CF (EPA method 8000) = 0.0311 with %RSD = 16.706%

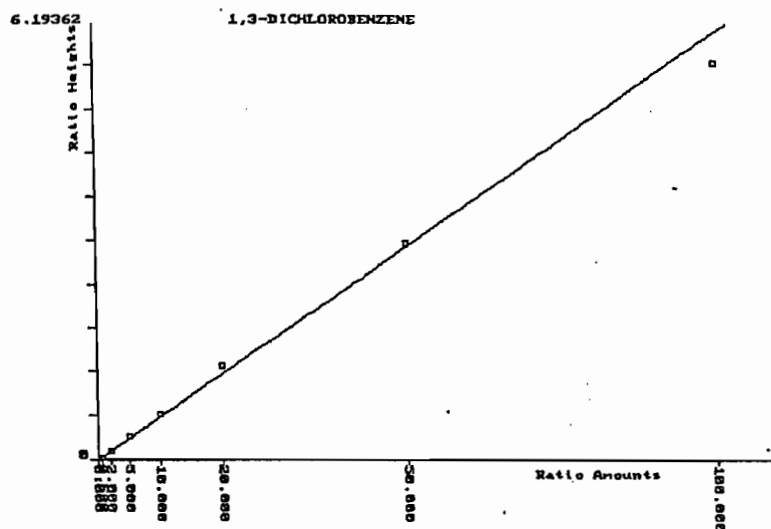
35 1,1,2,2-TETRACHLORO Ret time= 20.319 min. Search window= 0.100 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	2091	1.0000	77295	0.5000	0.0270	20280.07A	10-08-2001 10:19
2	2.00000	10814	1.0000	81533	2.0000	0.1326	20280.08A	10-08-2001 10:19
3	5.00000	25759	1.0000	79672	5.0000	0.3233	20280.09A	10-08-2001 10:20
4	10.00000	54957	1.0000	87650	10.0000	0.6270	20280.10A	10-08-2001 10:20
5	20.00000	115406	1.0000	88592	20.0000	1.3027	20280.11A	10-08-2001 10:21
6	50.00000	270710	1.0000	89176	50.0000	3.0357	20280.12A	10-08-2001 10:21
7	100.00000	528211	1.0000	93911	100.0000	5.6246	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9936383 Ave error=5.5059%
 Ratio Height = $+61.41e-03 \cdot X^1$
 Average CF (EPA method 8000) = 0.0614 with %RSD = 7.603%

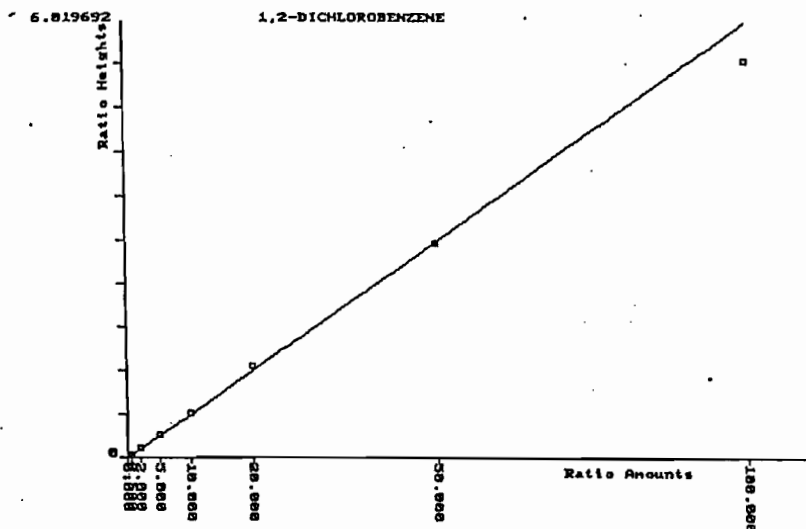
40 1,3-DICHLOROBENZENE Ret time= 21.743 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	1906	1.0000	77295	0.5000	0.0247	20280.07A	10-08-2001 10:19
2	2.00000	10001	1.0000	81533	2.0000	0.1227	20280.08A	10-08-2001 10:19
3	5.00000	25696	1.0000	79672	5.0000	0.3225	20280.09A	10-08-2001 10:20
4	10.00000	56146	1.0000	87650	10.0000	0.6406	20280.10A	10-08-2001 10:20
5	20.00000	118211	1.0000	88592	20.0000	1.3343	20280.11A	10-08-2001 10:21
6	50.00000	273163	1.0000	89176	50.0000	3.0632	20280.12A	10-08-2001 10:21
7	100.00000	528982	1.0000	93911	100.0000	5.6328	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .995556 Ave error=6.7157%
 Ratio Height = +60.504e-03*X^1
 Average CF (EPA method 8000) = 0.0605 with %RSD = 9.798%

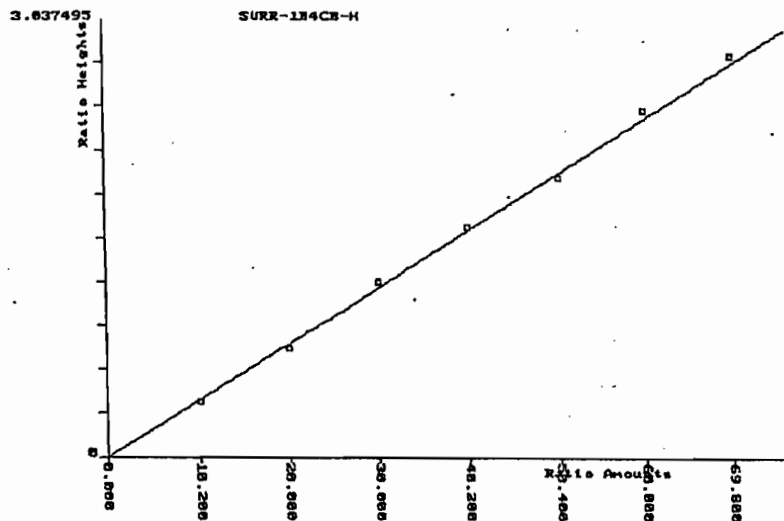
42 1,2-DICHLOROBENZENE Ret time= 22.102 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	2025	1.0000	77295	0.5000	0.0262	20280.07A	10-08-2001 10:19
2	2.00000	10397	1.0000	81533	2.0000	0.1275	20280.08A	10-08-2001 10:19
3	5.00000	25122	1.0000	79672	5.0000	0.3153	20280.09A	10-08-2001 10:20
4	10.00000	54954	1.0000	87650	10.0000	0.6270	20280.10A	10-08-2001 10:20
5	20.00000	112987	1.0000	88592	20.0000	1.2754	20280.11A	10-08-2001 10:21
6	50.00000	266022	1.0000	89176	50.0000	2.9831	20280.12A	10-08-2001 10:21
7	100.00000	514146	1.0000	93911	100.0000	5.4748	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9930678 Ave error=5.7022%
 Ratio Height = +60.014e-03*X^1
 Average CF (EPA method 8000) = 0.06 with %RSD = 7.77%

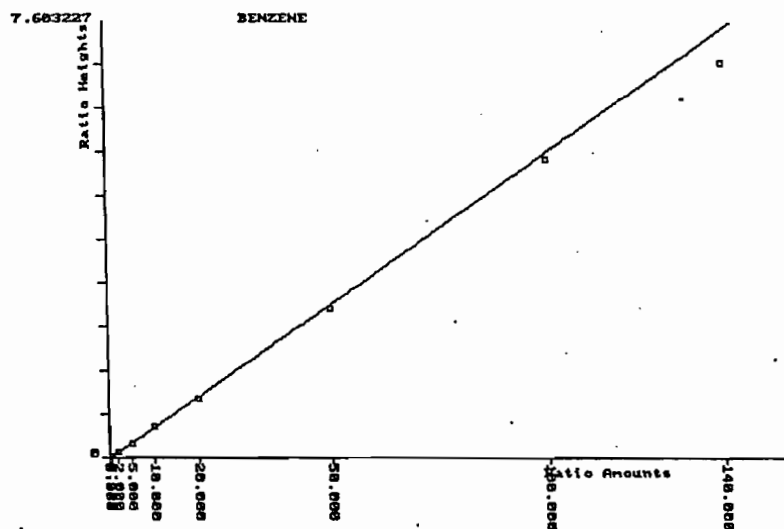
44 SURR-1B4CB-H Ret time= 22.892 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-1-BR-2-CLETHANE at 16.53654 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	10.20000	29378	1.0000	77295	10.2000	0.3801	20280.07A	10-08-2001 10:19
2	20.00000	61709	1.0000	81533	20.0000	0.7569	20280.08A	10-08-2001 10:19
3	30.00000	97107	1.0000	79672	30.0000	1.2188	20280.09A	10-08-2001 10:20
4	40.20000	140428	1.0000	87650	40.2000	1.6022	20280.10A	10-08-2001 10:20
5	50.40000	172659	1.0000	88592	50.4000	1.9490	20280.11A	10-08-2001 10:21
6	60.00000	215126	1.0000	89176	60.0000	2.4124	20280.12A	10-08-2001 10:21
7	69.80000	262566	1.0000	93911	69.8000	2.7959	20280.13A	10-08-2001 10:21

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9994909 Ave error=2.4895%
 Ratio Height = +39.217e-03*X^1
 Average CF (EPA method 8000) = 0.0392 with %RSD = 3.306%

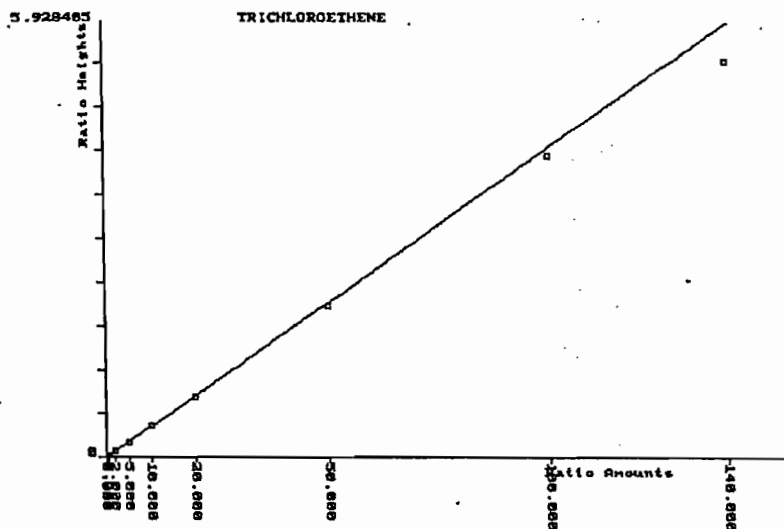
7 BENZENE Ret time= 14.300 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 14.90983 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	440	1.0000	14657	0.5000	0.0300	20280B.07A	10-08-2001 10:19
2	2.00000	1643	1.0000	14767	2.0000	0.1113	20280B.08A	10-08-2001 10:19
3	5.00000	3870	1.0000	15103	5.0000	0.2562	20280B.09A	10-08-2001 10:20
4	10.00000	8075	1.0000	14949	10.0000	0.5402	20280B.10A	10-08-2001 10:20
5	20.00000	15850	1.0000	15171	20.0000	1.0447	20280B.11A	10-08-2001 10:21
6	50.00000	39458	1.0000	15188	50.0000	2.5980	20280B.12A	10-08-2001 10:21
7	100.00000	80602	1.0000	15490	100.0000	5.2034	20280B.13A	10-08-2001 10:22
8	140.00000	115139	1.0000	16651	140.0000	6.9148	20280B.14A	10-08-2001 10:27

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9960963 Ave error=3.9803%
 Ratio Height = +53.32e-03*X^1
 Average CF (EPA method 8000) = 0.0533 with %RSD = 6.161%

9 TRICHLOROETHENE Ret time= 15.747 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 14.90983 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	344	1.0000	14657	0.5000	0.0235	20280B.07A	10-08-2001 10:19
2	2.00000	1301	1.0000	14767	2.0000	0.0881	20280B.08A	10-08-2001 10:19
3	5.00000	3063	1.0000	15103	5.0000	0.2028	20280B.09A	10-08-2001 10:20
4	10.00000	6357	1.0000	14949	10.0000	0.4253	20280B.10A	10-08-2001 10:20
5	20.00000	12638	1.0000	15171	20.0000	0.8330	20280B.11A	10-08-2001 10:21
6	50.00000	31354	1.0000	15188	50.0000	2.0644	20280B.12A	10-08-2001 10:21
7	100.00000	63388	1.0000	15490	100.0000	4.0922	20280B.13A	10-08-2001 10:22
8	140.00000	89777	1.0000	16651	140.0000	5.3916	20280B.14A	10-08-2001 10:27

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9948873 Ave error=3.8337%
 Ratio Height = +42.056e-03*X^1
 Average CF (EPA method 8000) = 0.0421 with %RSD = 6.018%

13 TOLUENE Ret time= 17.988 min. Search window= 0.200 min.

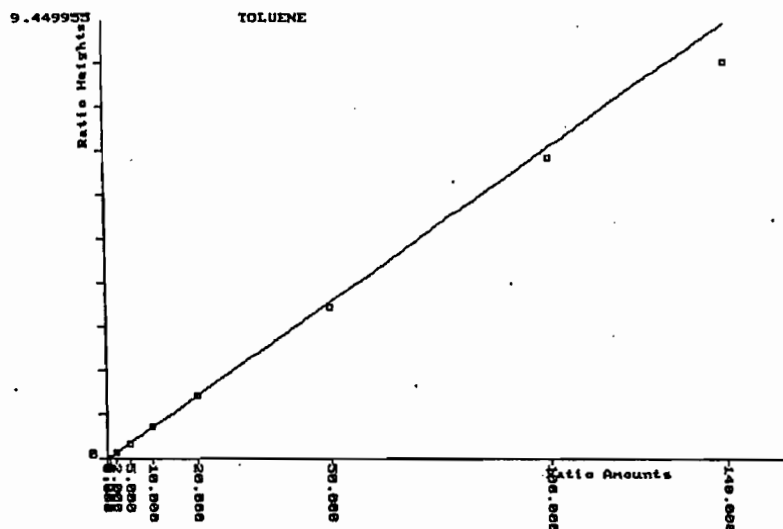
No reference peak for this compound.

Internal standard=ISTD-FBENZENE at 14.90983 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	551	1.0000	14657	0.5000	0.0376	20280B.07A	10-08-2001 10:19
2	2.00000	2100	1.0000	14767	2.0000	0.1422	20280B.08A	10-08-2001 10:19
3	5.00000	4915	1.0000	15103	5.0000	0.3254	20280B.09A	10-08-2001 10:20
4	10.00000	10169	1.0000	14949	10.0000	0.6803	20280B.10A	10-08-2001 10:20
5	20.00000	20199	1.0000	15171	20.0000	1.3314	20280B.11A	10-08-2001 10:21
6	50.00000	49585	1.0000	15188	50.0000	3.2648	20280B.12A	10-08-2001 10:21
7	100.00000	100889	1.0000	15490	100.0000	6.5131	20280B.13A	10-08-2001 10:22
8	140.00000	143105	1.0000	16651	140.0000	8.5943	20280B.14A	10-08-2001 10:27

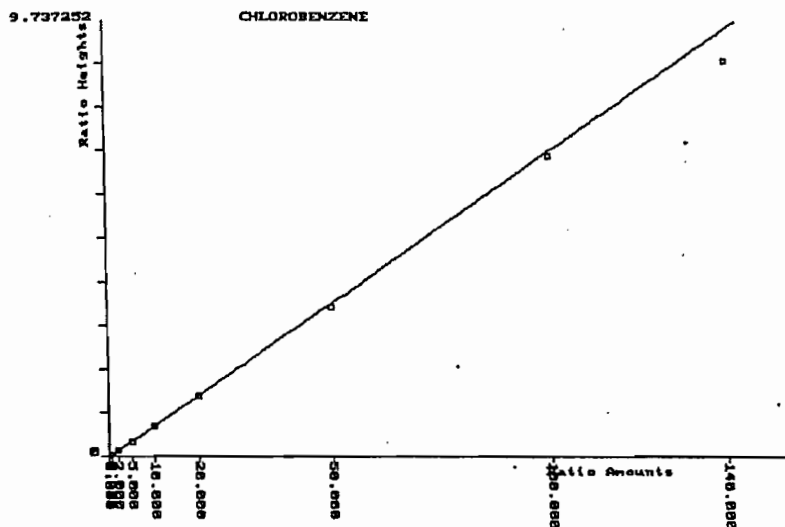
Fit type = Average CF with equal weighting, forced through zero

Coef of determination= .9944223 Ave error=4.1310%

Ratio Height = +67.224e-03*X^1

Average CF (EPA method 8000) = 0.0672 with %RSD = 6.317%

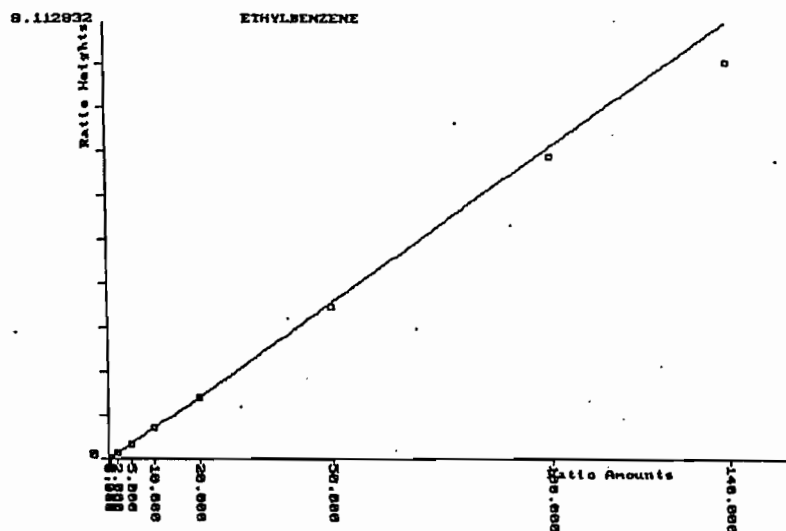
15 CHLOROBENZENE Ret time= 19.537 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 14.90983 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	545	1.0000	14657	0.5000	0.0372	20280B.07A	10-08-2001 10:19
2	2.00000	2103	1.0000	14767	2.0000	0.1424	20280B.08A	10-08-2001 10:19
3	5.00000	4946	1.0000	15103	5.0000	0.3275	20280B.09A	10-08-2001 10:20
4	10.00000	10326	1.0000	14949	10.0000	0.6908	20280B.10A	10-08-2001 10:20
5	20.00000	20674	1.0000	15171	20.0000	1.3627	20280B.11A	10-08-2001 10:21
6	50.00000	50755	1.0000	15188	50.0000	3.3419	20280B.12A	10-08-2001 10:21
7	100.00000	103666	1.0000	15490	100.0000	6.6924	20280B.13A	10-08-2001 10:22
8	140.00000	147454	1.0000	16651	140.0000	8.8554	20280B.14A	10-08-2001 10:27

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9963902 Ave error=3.3069%
 Ratio Height = +68.169e-03*X^1
 Average CF (EPA method 8000) = 0.0682 with %RSD = 5.079%

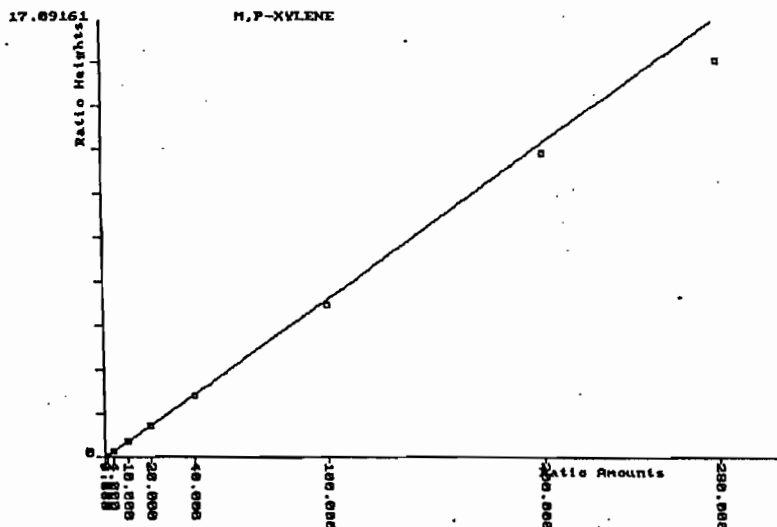
16 ETHYLBENZENE Ret time= 19.759 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 14.90983 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	468	1.0000	14657	0.5000	0.0319	20280B.07A	10-08-2001 10:19
2	2.00000	1800	1.0000	14767	2.0000	0.1219	20280B.08A	10-08-2001 10:19
3	5.00000	4258	1.0000	15103	5.0000	0.2819	20280B.09A	10-08-2001 10:20
4	10.00000	8792	1.0000	14949	10.0000	0.5882	20280B.10A	10-08-2001 10:20
5	20.00000	17414	1.0000	15171	20.0000	1.1478	20280B.11A	10-08-2001 10:21
6	50.00000	42903	1.0000	15188	50.0000	2.8249	20280B.12A	10-08-2001 10:21
7	100.00000	86873	1.0000	15490	100.0000	5.6082	20280B.13A	10-08-2001 10:22
8	140.00000	122856	1.0000	16651	140.0000	7.3782	20280B.14A	10-08-2001 10:27

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9942158 Ave. error=3.8716%
 Ratio Height = +57.84e-03*X^1
 Average CF (EPA method 8000) = 0.0578 with %RSD = 5.873%

17 M,P-XYLENE Ret time= 19.951 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 14.90983 minutes
 Group number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.

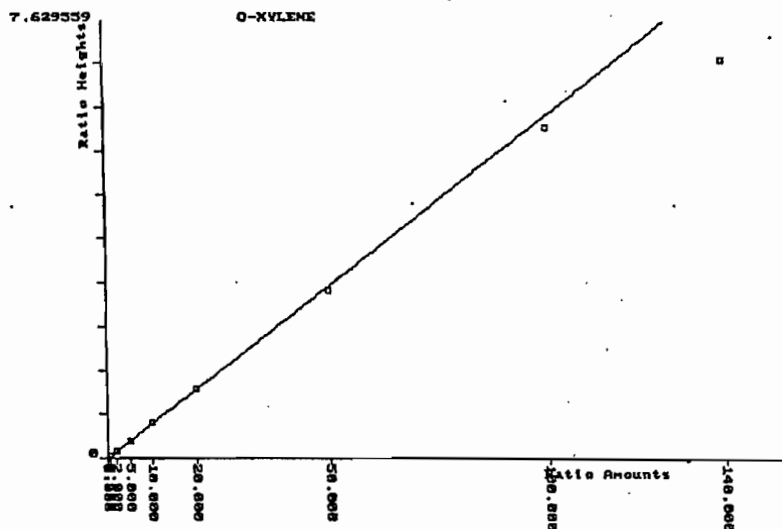


LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	1.00000	1006	1.0000	14657	1.0000	0.0686	20280B.07A	10-08-2001 10:19
2	4.00000	3842	1.0000	14767	4.0000	0.2602	20280B.08A	10-08-2001 10:19
3	10.00000	9017	1.0000	15103	10.0000	0.5970	20280B.09A	10-08-2001 10:20
4	20.00000	18604	1.0000	14949	20.0000	1.2445	20280B.10A	10-08-2001 10:20
5	40.00000	36856	1.0000	15171	40.0000	2.4293	20280B.11A	10-08-2001 10:21
6	100.00000	90302	1.0000	15188	100.0000	5.9458	20280B.12A	10-08-2001 10:21
7	200.00000	183507	1.0000	15490	200.0000	11.8467	20280B.13A	10-08-2001 10:22
8	280.00000	258827	1.0000	16651	280.0000	15.5441	20280B.14A	10-08-2001 10:27

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9932963 Ave error=4.2905%
 Ratio Height = $+61.318e-03 \times X^1$
 Average CF (EPA method 8000) = 0.0613 with %RSD = 6.542%

00000

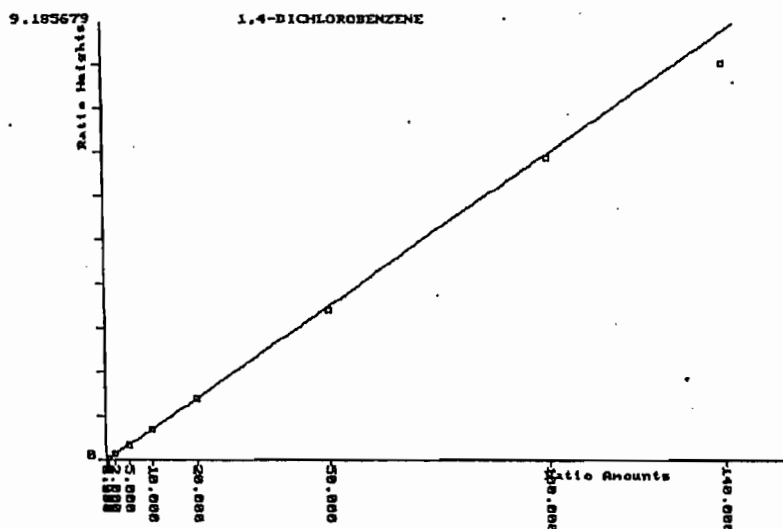
19 O-XYLENE Ret time= 20.310 min. Search window= 0.060 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 14.90983 minutes
 Group number = 1 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	498	1.0000	14657	0.5000	0.0340	20280B.07A	10-08-2001 10:19
2	2.00000	1908	1.0000	14767	2.0000	0.1292	20280B.08A	10-08-2001 10:19
3	5.00000	4415	1.0000	15103	5.0000	0.2923	20280B.09A	10-08-2001 10:20
4	10.00000	9244	1.0000	14949	10.0000	0.6183	20280B.10A	10-08-2001 10:20
5	20.00000	18350	1.0000	15171	20.0000	1.2095	20280B.11A	10-08-2001 10:21
6	50.00000	44407	1.0000	15188	50.0000	2.9239	20280B.12A	10-08-2001 10:21
7	100.00000	89695	1.0000	15490	100.0000	5.7904	20280B.13A	10-08-2001 10:22
8	140.00000	115544	1.0000	16651	140.0000	6.9391	20280B.14A	10-08-2001 10:27

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9766967 Ave error=5.8346%
 Ratio Height = +59.92e-03*X^1
 Average CF (EPA method 8000) = 0.0599 with %RSD = 9.077%

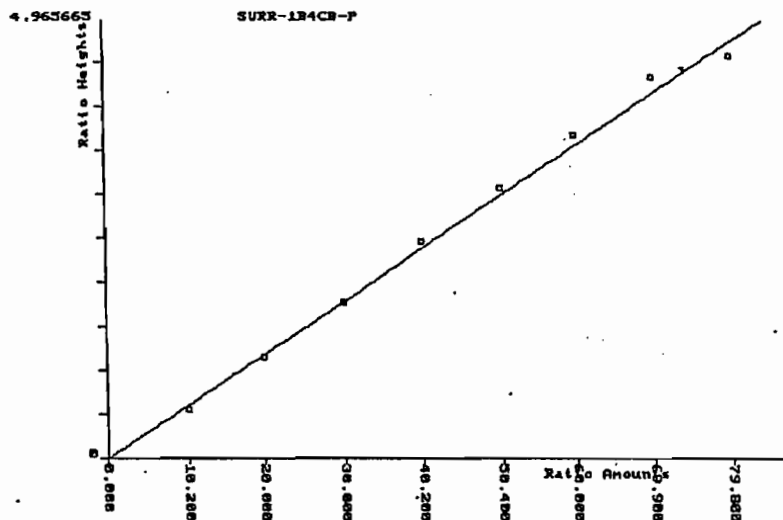
30 1,4-DICHLOROBENZENE Ret time= 21.788 min. Search window= 0.040 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 14.90983 minutes
 High Alarm amount = 0 Low Alarm amount = 0
 Component constant = 0
 Quantitation will be by peak height.



LEVEL	AMOUNT	HEIGHT	INT AMT	INT HEIGHT	RATIO AMT	RATIO HEIGHT	Source	Date Updated
1	0.50000	519	1.0000	14657	0.5000	0.0354	20280B.07A	10-08-2001 10:19
2	2.00000	1968	1.0000	14767	2.0000	0.1333	20280B.08A	10-08-2001 10:19
3	5.00000	4652	1.0000	15103	5.0000	0.3080	20280B.09A	10-08-2001 10:20
4	10.00000	9716	1.0000	14949	10.0000	0.6499	20280B.10A	10-08-2001 10:20
5	20.00000	19397	1.0000	15171	20.0000	1.2785	20280B.11A	10-08-2001 10:21
6	50.00000	47871	1.0000	15188	50.0000	3.1519	20280B.12A	10-08-2001 10:21
7	100.00000	98308	1.0000	15490	100.0000	6.3465	20280B.13A	10-08-2001 10:22
8	140.00000	139102	1.0000	16651	140.0000	8.3538	20280B.14A	10-08-2001 10:27

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9965065 Ave error=3.3141%
 Ratio Height = +64.278e-03*X^1
 Average CF (EPA method 8000) = 0.0643 with %RSD = 5.275%

34 SURR-1B4CB-P Ret time= 22.877 min. Search window= 0.200 min.
 No reference peak for this compound.
 Internal standard=ISTD-FBENZENE at 14.90983 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	8199	1.0000	14657	10.2000	0.5594	20280B.07A	10-08-2001 10:19
2	20.00000	16901	1.0000	14767	20.0000	1.1445	20280B.08A	10-08-2001 10:19
3	30.00000	26652	1.0000	15103	30.0000	1.7647	20280B.09A	10-08-2001 10:20
4	40.20000	36664	1.0000	14949	40.2000	2.4526	20280B.10A	10-08-2001 10:20
5	50.40000	46295	1.0000	15171	50.4000	3.0515	20280B.11A	10-08-2001 10:21
6	60.00000	55579	1.0000	15188	60.0000	3.6595	20280B.12A	10-08-2001 10:21
7	69.90000	66822	1.0000	15490	69.9000	4.3138	20280B.13A	10-08-2001 10:22
8	79.80000	76014	1.0000	16651	79.8000	4.5651	20280B.14A	10-08-2001 10:27

Fit type = Average CF with equal weighting, forced through zero
 Coef of determination= .9988319 Ave error=3.0728%
 Ratio Height = +59.045e-03*X^1
 Average CF (EPA method 8000) = 0.059 with %RSD = 4.121%

Quality Control Summary
SDG# HUL02
Instrument ID: 6245
Calibration Verification Summary

CCV Batch: 01280A20
Data File: C:\CP\DATA1\20280.22R
Date Injected: 10/08/01 Time Injected: 15:53
Initial Calibration Date(s): 10/08/01(HALL)
Initial Calibration Date(s): 10/08/01(PID)

Sample Information			
LL Sample#	Sample Code	Date	Analysis Time
BLK2009	METHOD BLANK	10/08/01	18:19
LCS2003	LAB CONTROL	10/08/01	20:23
LDS2003	LAB CON DUP	10/08/01	21:00
BLK2010	METHOD BLANK	10/08/01	22:29
3699899	W-10U	10/08/01	23:24

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)		% DRIFT	% DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	16.6	-17	-20 to +20	
CHLOROMETHANE (HALL)	20.0	12.6	-37 *	-20 to +20	
VINYL CHLORIDE (HALL)	20.0	17.2	-14	-20 to +20	
BROMOMETHANE (HALL)	20.0	19.2	-4	-20 to +20	
CHLOROETHANE (HALL)	20.0	18.1	-9	-20 to +20	
TRICHLOROFLUOROMETHA (HALL)	20.0	16.3	-19	-20 to +20	
1,1-DICHLOROETHENE (HALL)	20.0	20.3	2	-15 to +15	
METHYLENE CHLORIDE (HALL)	20.0	19.9	0	-15 to +15	
TRANS-1,2-DICHLOROET (HALL)	20.0	19.8	-1	-15 to +15	
1,1-DICHLOROETHANE (HALL)	20.0	20.1	1	-15 to +15	
CIS-1,2-DICHLOROETHE (HALL)	20.0	20.7	4	-15 to +15	
CHLOROFORM (HALL)	20.0	20.3	2	-15 to +15	
1,2-DICHLOROETHANE (HALL)	20.0	20.9	5	-15 to +15	
1,1,1-TRICHLOROETHAN (HALL)	20.0	20.1	0	-15 to +15	
CARBON TETRACHLORIDE (HALL)	20.0	19.6	-2	-15 to +15	

* = %DRIFT outside control limits.

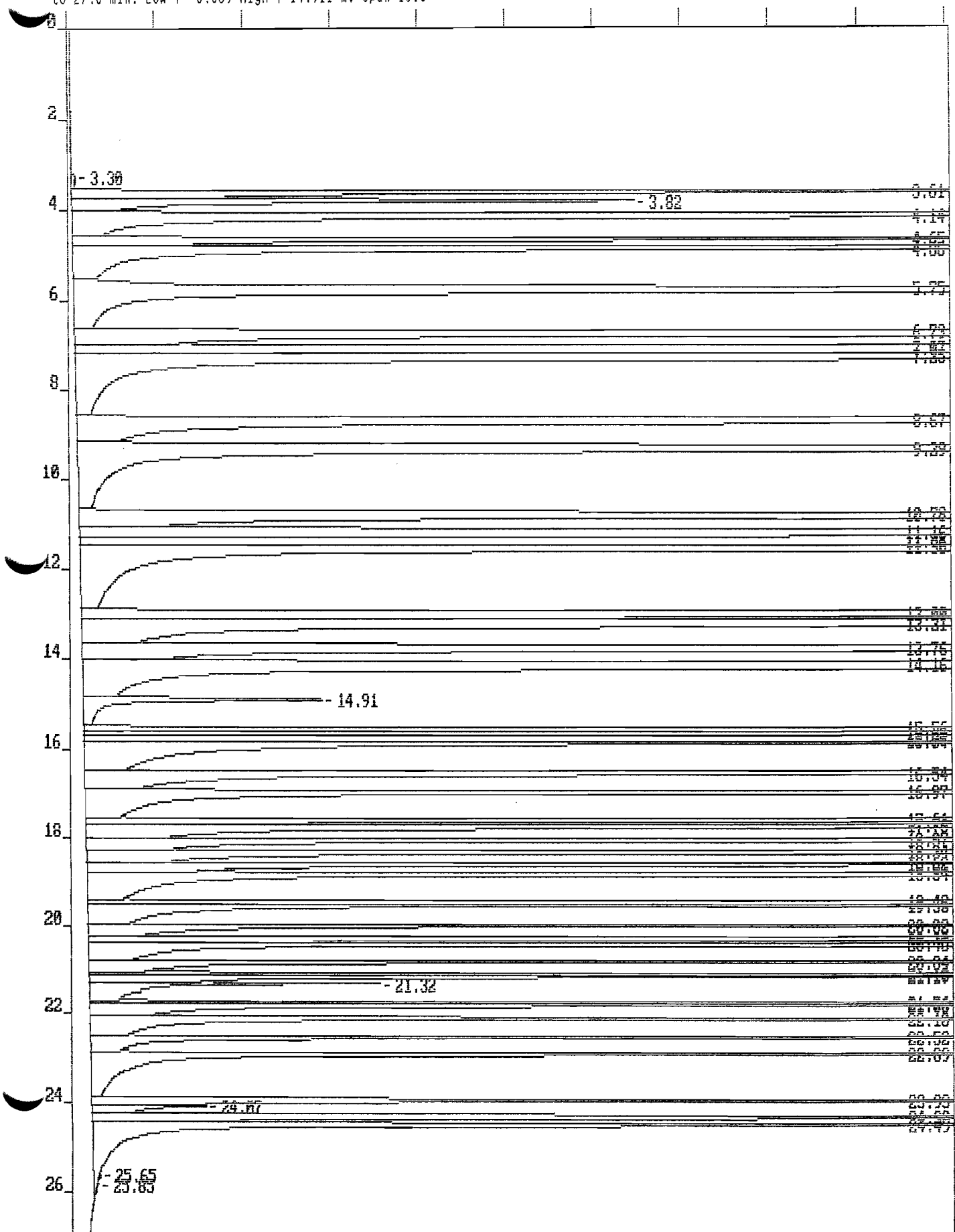
Quality Control Summary
SDG# HUL02
Instrument ID: 6245
Calibration Verification Summary

CCV Batch: 01280A20
Data File: C:\CP\DATA1\20280.22R
Date Injected: 10/08/01 Time Injected: 15:53
Initial Calibration Date(s): 10/08/01 (HALL)
Initial Calibration Date(s): 10/08/01 (PID)

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)		ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
BENZENE (PID)	20.0	20.0	20.0	0	-15 to +15
1,2-DICHLOROPROPANE (HALL)	20.0	20.0	21.4	7	-15 to +15
TRICHLOROETHENE (PID)	20.0	20.0	19.8	-1	-15 to +15
BROMODICHLOROMETHANE (HALL)	20.0	20.0	20.3	1	-15 to +15
CIS-1,3-DICHLOROPROP (HALL)	20.0	20.0	20.6	3	-15 to +15
TRANS-1,3-DICHLOROPR (HALL)	20.0	20.0	21.3	6	-15 to +15
1,1,2-TRICHLOROETHAN (HALL)	20.0	20.0	20.2	1	-15 to +15
TOLUENE (PID)	20.0	20.0	20.0	0	-15 to +15
DIBROMOCHLOROMETHANE (HALL)	20.0	20.0	21.2	6	-15 to +15
TETRACHLOROETHENE (HALL)	20.0	20.0	18.9	-6	-15 to +15
CHLOROBENZENE (PID)	20.0	20.0	20.3	1	-15 to +15
ETHYLBENZENE (PID)	20.0	20.0	20.2	1	-15 to +15
M,P-XYLENE (PID)	40.0	40.0	40.6	1	-15 to +15
BROMOFORM (HALL)	20.0	20.0	22.6	13	-15 to +15
O-XYLENE (PID)	20.0	20.0	20.4	2	-15 to +15
1,1,2,2-TETRACHLOROE (HALL)	20.0	20.0	20.9	4	-15 to +15
1,3-DICHLOROBENZENE (HALL)	20.0	20.0	21.4	7	-15 to +15
1,4-DICHLOROBENZENE (PID)	20.0	20.0	20.5	3	-15 to +15
1,2-DICHLOROBENZENE (HALL)	20.0	20.0	21.0	5	-15 to +15
SURR-1B4CB-P (PID)	30.0	30.0	30.2	1	-31 to +21
SURR-1B4CB-H (HALL)	30.0	30.0	29.0	-3	-41 to +32

* = %DRIFT outside control limits. Mean %Drift for all calibration compounds (HALL) = 1

File=C:\CP\DATA1\20280.22R Date printed=10-08-2001 Time= 15:53:55
 Sample Name=CHKSTD 01280A208400,8401,8464
 to 27.0 min. Low Y=-0.089 High Y=14.911 mv Span=15.0



Sample Name: CHKSTD

Batch: 01280A20

Date Taken: Oct 8, 2001 15:53:50

Raw File: C:\CP\DATA1\20280.22R

ba File: C:\CP\DATA1\20280.22A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 994

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 66):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.609	3.610	DICHLORODIFLUOROMETH	16.6243	92879	17142
3.820	3.850	CHLOROMETHANE	12.6321	59332	9623
4.142	4.152	VINYL CHLORIDE	17.2260	224099	41274
4.652	4.660	BROMOMETHANE	19.2356	120178	27857
4.863	4.869	CHLOROETHANE	18.1233	197655	39045
5.753	5.760	TRICHLOROFLUOROMETHA	16.2668	284841	30256
6.726	6.727	1,1-DICHLOROETHENE	20.3254	378254	72725
7.070	7.074	METHYLENE CHLORIDE	19.9344	519894	104390
7.253	7.258	TRICHLOROTRIFLUOROET	18.2972	387148	40328
8.666	8.668	TRANS-1,2-DICHLOROET	19.8167	460766	76448
9.291	9.294	1,1-DICHLOROETHANE	20.1364	503040	68727
10.783	10.787	CIS-1,2-DICHLOROETHE	20.7011	458073	77035
11.161	11.160	BROMOCHLOROMETHANE	20.7316	324365	57949
11.342	11.347	CHLOROFORM	20.3166	613715	100055
11.504	11.506	2,2-DICHLOROPROPANE	19.8760	483845	56965
12.996	12.996	1,2-DICHLOROETHANE	20.9248	421676	79718
13.206	13.208	1,1,1-TRICHLOROETHAN	20.0615	575334	79689
13.757	13.760	1,1-DICHLOROPROPENE	20.8010	396067	63992
14.155	14.157	CARBON TETRACHLORIDE	19.5933	638428	86406
15.560	15.560	DIBROMOMETHANE	23.9544	182550	52111
15.664	15.666	1,2-DICHLOROPROPANE	21.4345	408749	102648
15.762	15.762	TRICHLOROETHENE	20.2957	540737	139509
15.835	15.837	BROMODICHLOROMETHANE	20.2694	479638	113781
16.537	16.537	ISTD-1-BR-2-CLETHANE	1.0000	332427	92734
16.968	16.967	CIS-1,3-DICHLOROPROP	20.6282	418432	127546
17.607	17.606	TRANS-1,3-DICHLOROPR	21.2960	324107	123010
17.765	17.765	1,1,2-TRICHLOROETHAN	20.1907	433325	146287
18.073	18.073	1,3-DICHLOROPROPANE	20.5126	335938	123395
18.339	18.338	DIBROMOCHLOROMETHANE	21.1716	284765	99045
18.618	18.616	1,2-DIBROMOETHANE	20.5780	181475	62997
18.838	18.836	TETRACHLOROETHENE	18.8860	486676	175917
19.480	19.479	1,1,1,2-TETRACHLOROE	19.6801	443408	185377
19.551	19.550	CHLOROBENZENE	19.6745	229033	84938
20.018	20.018	BROMOFORM	22.6047	169653	65133
20.319	20.319	1,1,2,2-TETRACHLOROE	20.8680	262599	118839
20.445	20.444	1,2,3-TRICHLOROPROPA	19.8754	227328	90348
20.842	20.844	BROMOBENZENE	22.0278	127663	53128
21.103	21.103	2-CHLOROTOLUENE	21.3064	150441	74655
21.171	21.170	4-CHLOROTOLUENE	20.3380	169676	76383
21.743	21.743	1,3-DICHLOROBENZENE	21.3813	233525	119966
21.801	21.802	1,4-DICHLOROBENZENE	20.4638	281247	128558
22.102	22.102	1,2-DICHLOROBENZENE	20.9937	270920	116838
22.524	22.522	1,2-DIBROMO-3-CHLORO	23.0962	76895	23961
22.892	22.891	SURR-1B4CB-H	29.0417	279222	105618
23.933	23.932	1,2,4-TRICHLOROBENZE	21.5496	239227	87731
24.302	24.302	HEXACHLOROBUTADIENE	20.2307	331219	101397
24.486	24.485	1,2,3-TRICHLOROBENZE	20.9451	271595	78559
		TOTAL 1,2-DICHLOROETHENE:	40.5178		

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

Surrogate Recovery: BrClBenzene 96.8057 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 15:55:45

Sample name: CHKSTD

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.22R

Reviewed by:

mm457

Verified by:

mm457

Date:

10/8/01

Date:

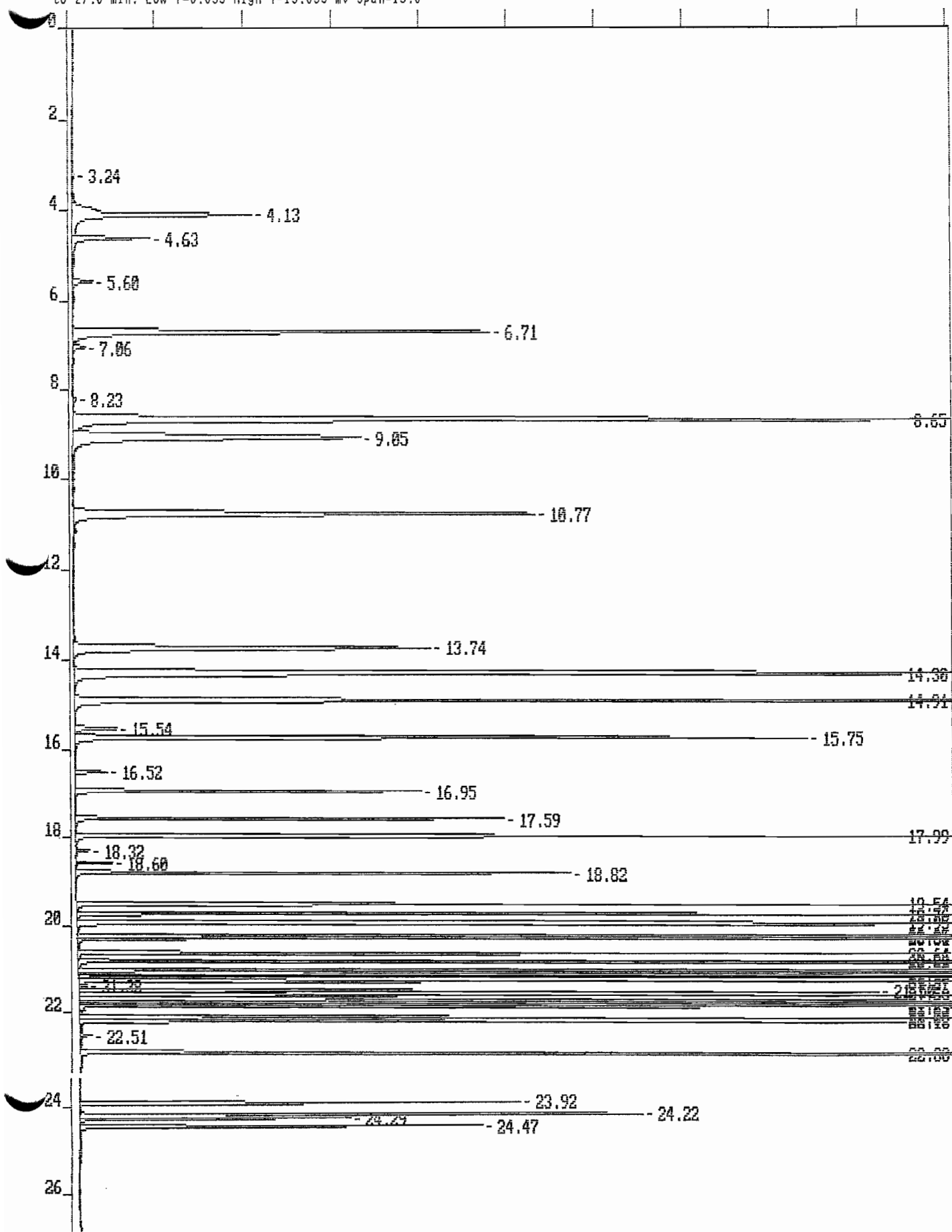
10/10/01

File=C:\CP\DATA1\20280B.22R Date printed=10-08-2001 Time= 15:56:04

Sample Name=CHKSTD

01280A208400,8401,8464

to 27.0 min. Low Y=0.035 High Y=15.035 mv Span=15.0



Sample Name: CHKSTD

Batch: 01280A20

Date Taken: Oct 8, 2001 15:53:50

Raw File: C:\CP\DATA1\20280B.22R

ea File: C:\CP\DATA1\20280B.22A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 994

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 60):

Ret Time	Expected	Peak Name	Amount *	Peak	Peak
(min)	RT (min)		(ug/L)	Area	Height
4.126	4.141	VINYL CHLORIDE	15.1236	19889	3067
6.708	6.712	1,1-DICHLOROETHENE	19.5273	35919	7134
8.648	8.655	TRANS-1,2-DICHLOROET	19.2147	83632	15043
9.054	9.064	METHYL T-BUTYL ETHER	19.9142	41234	4906
10.768	10.774	CIS-1,2-DICHLOROETHE	19.8281	45536	7902
13.741	13.746	1,1-DICHLOROPROPENE	19.9077	35460	6091
14.300	14.307	BENZENE	20.0206	89281	16030
14.910	14.915	ISTD-FBENZENE	1.0000	68660	15016
15.747	15.750	TRICHLOROETHENE	19.7839	45745	12494
16.522	16.522	1-BROMO-2-CHLOROETHA	1.0000	1896	567
16.953	16.955	CIS-1,3-DICHLOROPROP	20.2421	16798	5901
17.592	17.594	TRANS-1,3-DICHLOROPR	19.6605	18183	7361
17.988	17.990	TOLUENE	19.9640	49365	20153
18.823	18.824	TETRACHLOROETHENE	19.8298	19717	8452
19.537	19.539	CHLOROBENZENE	20.2627	42441	20742
19.759	19.761	ETHYLBENZENE	20.1698	36152	17518
19.951	19.954	M,P-XYLENE	40.5502	83525	37338
20.246	20.249	STYRENE	20.4326	44583	23721
20.310	20.312	O-XYLENE	20.3664	36221	18325
20.639	20.641	ISOPROPYLBENZENE	21.2851	30343	14875
20.829	20.831	BROMOBENZENE	20.4028	43071	22772
21.020	21.022	N-PROPYLBENZENE	19.7669	32775	17071
21.089	21.091	2-CHLOROTOLUENE	20.2975	36941	19604
21.156	21.159	4-CHLOROTOLUENE	20.2599	38469	20971
21.273	21.275	1,3,5-TRIMETHYLBENZE	20.2248	48788	25813
21.496	21.498	TERT-BUTYLBENZENE	20.0654	27958	13633
21.591	21.594	1,2,4-TRIMETHYLBENZE	20.3023	37167	19903
21.677	21.680	SEC-BUTYLBENZENE	20.5292	28964	14117
21.729	21.732	1,3-DICHLOROBENZENE	20.5054	36698	19752
21.788	21.791	1,4-DICHLOROBENZENE	20.5013	36597	19788
21.831	21.833	P-ISOPROPYLTOLUENE	20.8629	28437	14798
22.089	22.091	1,2-DICHLOROBENZENE	20.1944	29416	15025
22.179	22.180	N-BUTYLBENZENE	20.3164	29594	14126
22.877	22.878	SURR-1B4CB-P	30.2162	56835	26791
23.918	23.920	1,2,4-TRICHLOROBENZE	20.7506	19513	7585
24.221	24.222	NAPHTHALENE	20.9655	25886	9635
24.288	24.289	HEXACHLOROBUTADIENE	20.3375	13305	4655
24.471	24.473	1,2,3-TRICHLOROBENZE	21.0349	20631	6920

TOTAL XYLENES: 60.9166

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

Surrogate Recovery: BrClBenzene 100.7207 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 15:59:28

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: CHKSTD

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280B.22R

Reviewed by: *[Signature]*

Verified by: *Vmm49*

Date: *10/8/01*

Date: *10/10/01*

Quality Control Summary
SDG# HUL02
Instrument ID: 6245
Calibration Verification Summary

CCV Batch: 01280A20
Data File: C:\CP\DATA\20280.37R
Date Injected: 10/09/01 Time Injected: 03:15
Initial Calibration Date(s): 10/08/01 (HALL)
Initial Calibration Date(s): 10/08/01 (PID)

Sample Information				
LL Sample#	Sample Code	Date	Analysis Time	
BLK2011	METHOD BLANK	10/09/01	04:46	
3699902	NB7TB	10/09/01	05:52	
3699890	MW-6L	10/09/01	08:21	
3699891	MW-7U	10/09/01	08:59	
3699892	MW-7M	10/09/01	09:36	
3699893	MW-7L	10/09/01	10:14	

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	21.0	5	-20 to +20
CHLOROMETHANE (HALL)	20.0	13.5	-33 *	-20 to +20
VINYL CHLORIDE (HALL)	20.0	19.4	-3	-20 to +20
BROMOMETHANE (HALL)	20.0	20.0	0	-20 to +20
CHLOROETHANE (HALL)	20.0	18.2	-9	-20 to +20
TRICHLOROFLUOROMETHA (HALL)	20.0	16.4	-18	-20 to +20
1,1-DICHLOROETHENE (HALL)	20.0	20.1	0	-15 to +15
METHYLENE CHLORIDE (HALL)	20.0	20.0	0	-15 to +15
TRANS-1,2-DICHLOROET (HALL)	20.0	19.8	-1	-15 to +15
1,1-DICHLOROETHANE (HALL)	20.0	20.0	0	-15 to +15
CIS-1,2-DICHLOROETHE (HALL)	20.0	20.2	1	-15 to +15
CHLOROFORM (HALL)	20.0	19.1	-4	-15 to +15
1,2-DICHLOROETHANE (HALL)	20.0	20.5	2	-15 to +15
1,1,1-TRICHLOROETHAN (HALL)	20.0	19.5	-2	-15 to +15

* = %DRIFT outside control limits.

Quality Control Summary
SDG# HUL02
Instrument ID: 6245
Calibration Verification Summary

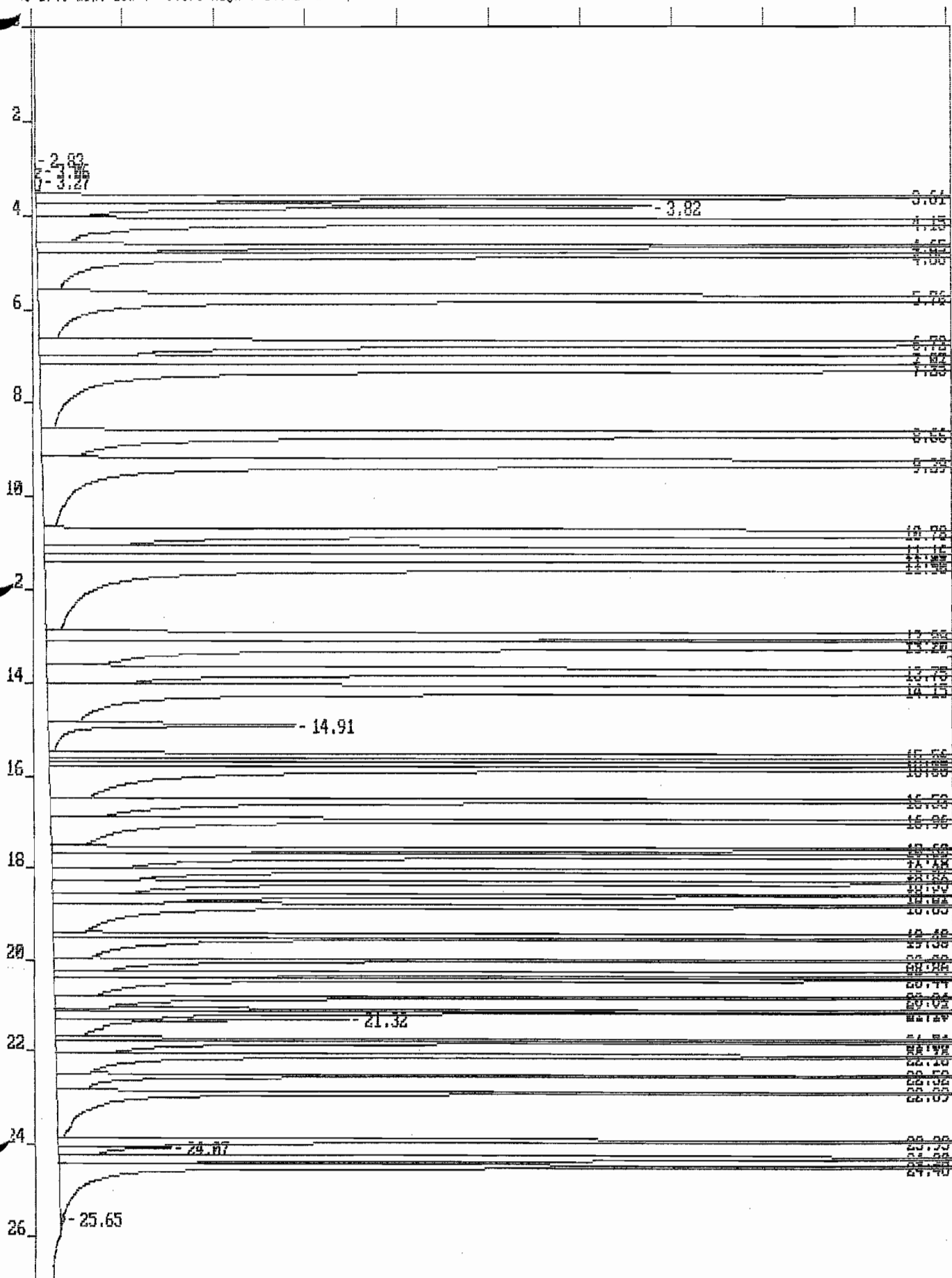
CCV Batch: 01280A20

Data File: C:\CP\DATA1\20280.37R
Date Injected: 10/09/01 Time Injected: 03:15
Initial Calibration Date(s): 10/08/01(HALL)
Initial Calibration Date(s): 10/08/01(PID)

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)		ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS	
CARBON TETRACHLORIDE (HALL)	20.0	19.4	-3	-15	to	+15
BENZENE (PID)	20.0	19.9	-1	-15	to	+15
1,2-DICHLOROPROPANE (HALL)	20.0	20.4	2	-15	to	+15
TRICHLOROETHENE (PID)	20.0	19.9	-1	-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	20.9	5	-15	to	+15
1,1,2-TRICHLOROETHAN (HALL)	20.0	20.2	1	-15	to	+15
TOLUENE (PID)	20.0	19.9	0	-15	to	+15
DIBROMOCHLOROMETHANE (HALL)	20.0	21.6	8	-15	to	+15
TETRACHLOROETHENE (HALL)	20.0	18.9	-6	-15	to	+15
CHLOROBENZENE (PID)	20.0	20.3	1	-15	to	+15
ETHYLBENZENE (PID)	20.0	20.2	1	-15	to	+15
M,P-XYLENE (PID)	40.0	40.5	1	-15	to	+15
BROMOFORM (HALL)	20.0	23.4	17 *	-15	to	+15
O-XYLENE (PID)	20.0	20.3	2	-15	to	+15
1,1,2,2-TETRACHLOROE (HALL)	20.0	22.2	11	-15	to	+15
1,3-DICHLOROBENZENE (HALL)	20.0	21.0	5	-15	to	+15
1,4-DICHLOROBENZENE (PID)	20.0	20.7	3	-15	to	+15
1,2-DICHLOROBENZENE (HALL)	20.0	20.9	5	-15	to	+15
SURR-1B4CB-P (PID)	30.0	29.9	0	-31	to	+21
SURR-1B4CB-H (HALL)	30.0	29.2	-3	-41	to	+32

* = %DRIFT outside control limits. Mean %Drift for all calibration compounds (HALL) = -1

File=C:\CP\DATA1\20280.37R Date printed=10-09-2001 Time= 03:15:58
 Sample Name=CHKSTD 01280A208400,8401
 'o 27.0 min. Low Y=-0.073 High Y=14.927 mv Span=15.0



Sample Name: CHKSTD

Batch: 01280A20

Date Taken: Oct 9, 2001 03:15:54

Raw File: C:\CP\DATA1\20280.37R

ea File: C:\CP\DATA1\20280.37A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 67):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.610	3.609	DICHLORODIFLUOROMETH	20.9930	111486	21233
3.824	3.820	CHLOROMETHANE	13.4694	62210	10065
4.146	4.142	VINYL CHLORIDE	19.4007	240601	45595
4.655	4.652	BROMOMETHANE	19.9801	120876	28382
4.864	4.863	CHLOROETHANE	18.2225	190482	38508
5.758	5.753	TRICHLOROFLUOROMETHA	16.3572	290717	29843
6.724	6.726	1,1-DICHLOROETHENE	20.0687	366309	70433
7.068	7.070	METHYLENE CHLORIDE	19.9746	505473	102600
7.253	7.253	TRICHLOROTRIFLUOROET	18.6542	387656	40328
8.664	8.666	TRANS-1,2-DICHLOROET	19.8205	442568	75001
9.286	9.291	1,1-DICHLOROETHANE	19.9680	483365	66849
10.780	10.783	CIS-1,2-DICHLOROETHE	20.2165	435859	73793
11.157	11.161	BROMOCHLOROMETHANE	20.1144	313292	55149
11.339	11.342	CHLOROFORM	19.1305	571173	92411
11.499	11.504	2,2-DICHLOROPROPANE	19.3419	464342	54374
12.987	12.996	1,2-DICHLOROETHANE	20.4741	405869	76508
13.200	13.206	1,1,1-TRICHLOROETHAN	19.5477	554118	76163
13.752	13.757	1,1-DICHLOROPROPENE	19.9329	378970	60149
14.150	14.155	CARBON TETRACHLORIDE	19.4444	612576	84109
15.556	15.560	DIBROMOMETHANE	23.7531	176751	50685
15.659	15.664	1,2-DICHLOROPROPANE	20.3682	389040	95676
15.756	15.762	TRICHLOROETHENE	19.4324	499628	131019
15.830	15.835	BROMODICHLOROMETHANE	19.4675	464042	107189
16.531	16.537	ISTD-1-BR-2-CLETHANE	1.0000	320666	90961
16.963	16.968	CIS-1,3-DICHLOROPROP	20.2248	400978	122660
17.602	17.607	TRANS-1,3-DICHLOROPR	20.9219	312114	118537
17.760	17.765	1,1,2-TRICHLOROETHAN	20.1792	428892	143407
18.068	18.073	1,3-DICHLOROPROPANE	20.6259	331776	121703
18.334	18.339	DIBROMOCHLOROMETHANE	21.6107	282906	99165
18.613	18.618	1,2-DIBROMOETHANE	20.7568	179005	62329
18.833	18.838	TETRACHLOROETHENE	18.8973	476237	172657
19.476	19.480	1,1,1,2-TETRACHLOROE	19.2634	425859	177981
19.547	19.551	CHLOROBENZENE	19.2438	218919	81490
20.015	20.018	BROMOFORM	23.4318	171840	66225
20.316	20.319	1,1,2,2-TETRACHLOROE	22.1629	273662	123799
20.442	20.445	1,2,3-TRICHLOROPROPA	21.1322	234842	94225
20.840	20.842	BROMOBENZENE	22.6850	127970	53667
21.100	21.103	2-CHLOROTOLUENE	21.3033	147266	73217
21.168	21.171	4-CHLOROTOLUENE	20.2527	165749	74608
21.740	21.743	1,3-DICHLOROBENZENE	21.0130	225626	115645
21.798	21.801	1,4-DICHLOROBENZENE	20.3949	274071	125675
22.099	22.102	1,2-DICHLOROBENZENE	20.9175	262092	114187
22.521	22.524	1,2-DIBROMO-3-CHLORO	25.1182	77989	25560
22.888	22.892	SURR-1B4CB-H	29.2384	271882	104300
23.929	23.933	1,2,4-TRICHLOROBENZE	21.3888	232656	85411
24.299	24.302	HEXACHLOROBUTADIENE	20.9644	333092	103065
24.482	24.486	1,2,3-TRICHLOROBENZE	21.5743	265958	79371

TOTAL 1,2-DICHLOROETHENE: 40.0370

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

Surrogate Recovery: BrClBenzene 97.4614 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 03:17:49

Sample name: CHKSTD

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.37R

Reviewed by: JS ks

Verified by: mm469

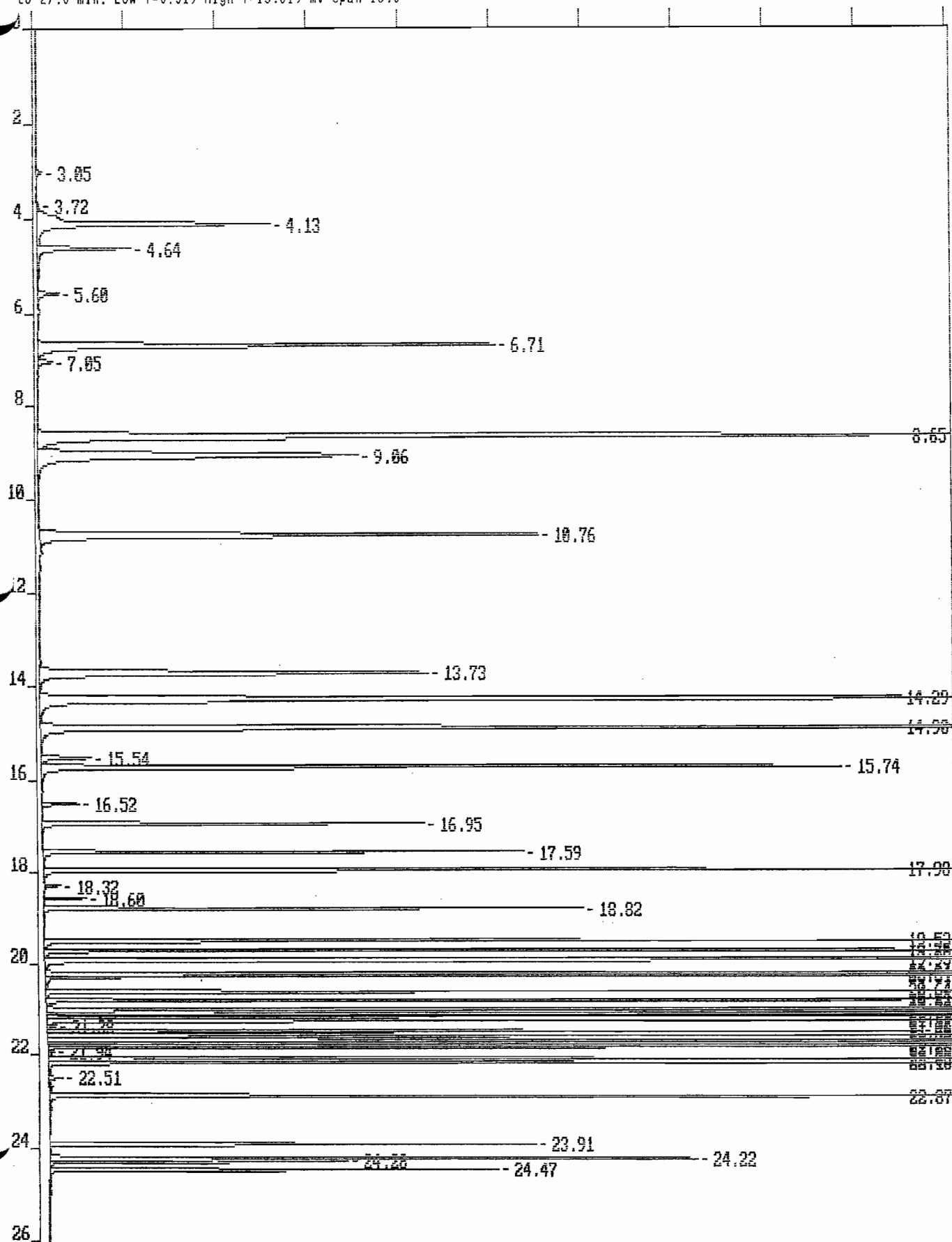
Date: 10-9-01

Date: 10/10/01

File=C:\CP\DATA1\202808.37R Date printed=10-09-2001 Time= 03:18:08

Sample Name=CHKSTD 01280A208400,8401

to 27.0 min. Low Y=0.019 High Y=15.019 mv Span=15.0



Sample Name: CHKSTD

Batch: 01280A20

Date Taken: Oct 9, 2001 03:15:54

Raw File: C:\CP\DATA1\20280B.37R

ea File: C:\CP\DATA1\20280B.37A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 61):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.129	4.126	VINYL CHLORIDE	18.0347	22441	3831
6.706	6.708	1,1-DICHLOROETHENE	19.5881	37335	7496
8.646	8.648	TRANS-1,2-DICHLOROET	19.1460	87188	15700
9.056	9.054	METHYL T-BUTYL ETHER	20.3739	44073	5258
10.762	10.768	CIS-1,2-DICHLOROETHE	19.5897	46034	8177
13.733	13.741	1,1-DICHLOROPROPENE	19.8585	37352	6365
14.292	14.300	BENZENE	19.8719	93935	16666
14.904	14.910	ISTD-FBENZENE	1.0000	72489	15729
15.742	15.747	TRICHLOROETHENE	19.8805	48067	13151
16.516	16.522	1-BROMO-2-CHLOROETHA	1.0000	1958	620
16.948	16.953	CIS-1,3-DICHLOROPROP	20.4826	17805	6255
17.587	17.592	TRANS-1,3-DICHLOROPR	20.1300	19478	7895
17.983	17.988	TOLUENE	19.9233	51776	21066
18.819	18.823	TETRACHLOROETHENE	19.9052	20963	8886
19.533	19.537	CHLOROBENZENE	20.2705	44549	21734
19.755	19.759	ETHYLBENZENE	20.1582	37901	18339
19.947	19.951	M,P-XYLENE	40.4934	87703	39054
20.243	20.246	STYRENE	20.9748	47913	25505
20.307	20.310	O-XYLENE	20.3419	38081	19171
20.636	20.639	ISOPROPYLBENZENE	21.2761	31861	15574
20.825	20.829	BROMOBENZENE	20.4661	45195	23926
21.017	21.020	N-PROPYLBENZENE	20.2603	35119	18327
21.086	21.089	2-CHLOROTOLUENE	20.3489	38911	20585
21.153	21.156	4-CHLOROTOLUENE	20.1643	40225	21862
21.270	21.273	1,3,5-TRIMETHYLBENZE	20.2844	51127	27117
21.493	21.496	TERT-BUTYLBENZENE	20.1195	29447	14319
21.588	21.591	1,2,4-TRIMETHYLBENZE	20.3336	39056	20880
21.674	21.677	SEC-BUTYLBENZENE	20.7729	30552	14963
21.726	21.729	1,3-DICHLOROBENZENE	20.6018	38689	20786
21.785	21.788	1,4-DICHLOROBENZENE	20.6784	38411	20906
21.828	21.831	P-ISOPROPYLTOLUENE	20.9658	30118	15577
22.085	22.089	1,2-DICHLOROBENZENE	20.3479	31033	15857
22.176	22.179	N-BUTYLBENZENE	20.6497	31117	15039
22.874	22.877	SURR-1B4CB-P	29.8882	59085	27757
23.915	23.918	1,2,4-TRICHLOROBENZE	20.9009	20478	8002
24.217	24.221	NAPHTHALENE	22.1015	28161	10639
24.285	24.288	HEXACHLOROBUTADIENE	20.5390	14452	4924
24.467	24.471	1,2,3-TRICHLOROBENZE	21.4294	21361	7385

TOTAL XYLENES: 60.8352

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

Surrogate Recovery: BrClBenzene 99.6273 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 03:21:32

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: CHKSTD

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280B.37R

Reviewed by: BS

Verified by: imm48

Date: 10-9-01

Date: 10/10/01

Quality Control Summary

SDG# HUL02

Instrument ID: 6245

Calibration Verification Summary

CCV Batch: 01283A20

Data File: C:\CP\DATA1\20282.13R

Date Injected: 10/10/01 Time Injected: 04:28

Initial Calibration Date(s): 10/08/01(HALL)

Initial Calibration Date(s): 10/08/01(PID)

Sample Information			
LL Sample#	Sample Code	Date	Analysis Time
BLK2014	METHOD BLANK	10/10/01	06:53
3699802		10/10/01	09:31
3699802MS		10/10/01	10:13
3699802MSD		10/10/01	10:51
LCS2006	LAB CONTROL	10/10/01	11:29

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	19.0	-5	-20 to +20
CHLOROMETHANE (HALL)	20.0	14.9	-25 *	-20 to +20
VINYL CHLORIDE (HALL)	20.0	17.2	-14	-20 to +20
BROMOMETHANE (HALL)	20.0	19.9	0	-20 to +20
CHLOROETHANE (HALL)	20.0	17.5	-13	-20 to +20
TRICHLOROFLUOROMETHA (HALL)	20.0	15.7	-21 *	-20 to +20
1,1-DICHLOROETHENE (HALL)	20.0	18.3	-9	-15 to +15
METHYLENE CHLORIDE (HALL)	20.0	18.5	-8	-15 to +15
TRANS-1,2-DICHLOROET (HALL)	20.0	18.3	-9	-15 to +15
1,1-DICHLOROETHANE (HALL)	20.0	18.1	-9	-15 to +15
CIS-1,2-DICHLOROETHE (HALL)	20.0	19.1	-4	-15 to +15
CHLOROFORM (HALL)	20.0	18.4	-8	-15 to +15
1,2-DICHLOROETHANE (HALL)	20.0	19.6	-2	-15 to +15
1,1,1-TRICHLOROETHAN (HALL)	20.0	17.6	-12	-15 to +15
CARBON TETRACHLORIDE (HALL)	20.0	18.0	-10	-15 to +15

* = %DRIFT outside control limits.

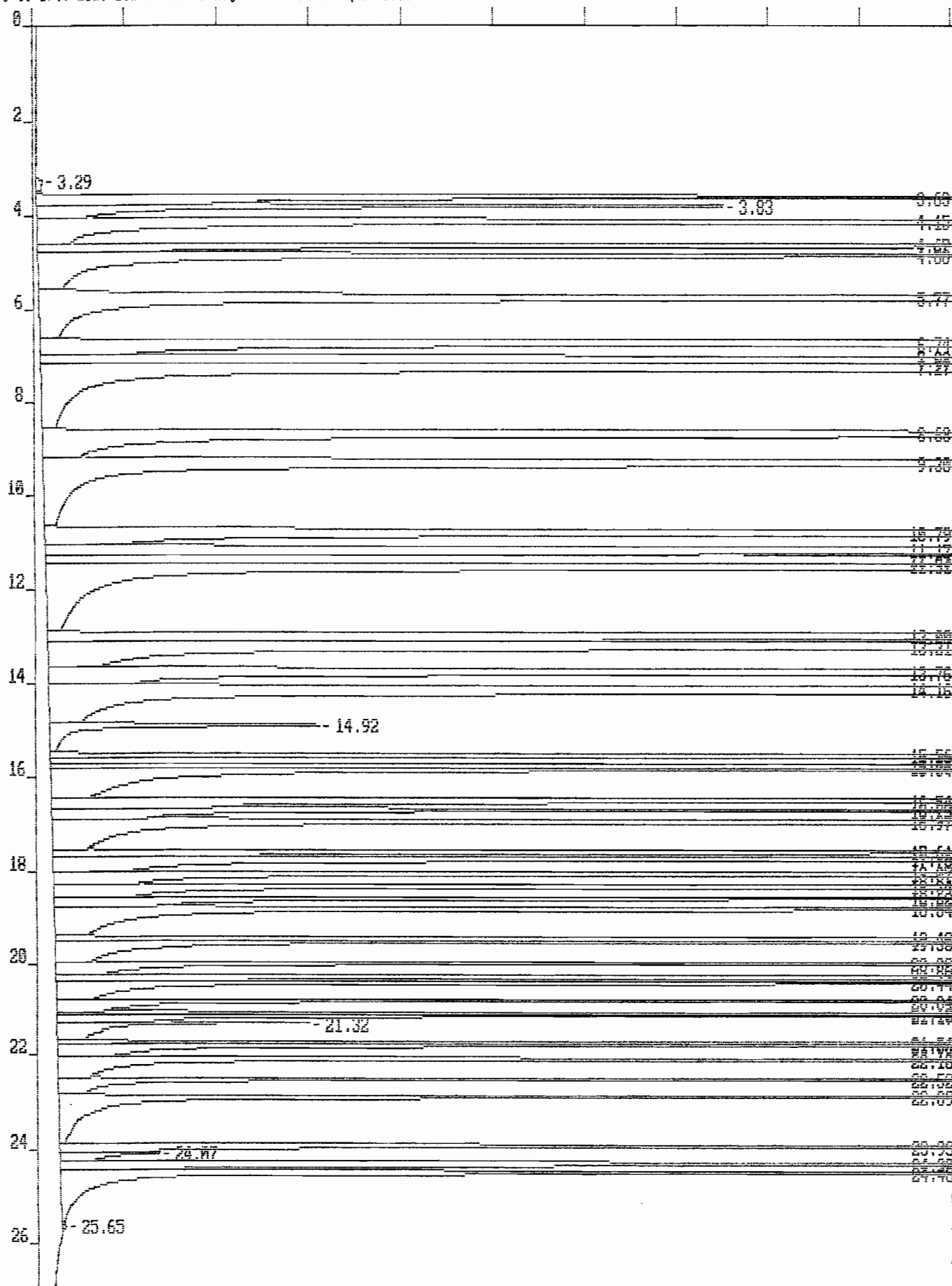
Quality Control Summary
SDG# HUL02
Instrument ID: 6245
Calibration Verification Summary

CCV Batch: 01283A20
Data File: C:\CP\DATA1\20282.13R
Date Injected: 10/10/01 Time Injected: 04:28
Initial Calibration Date(s): 10/08/01(HALL)
Initial Calibration Date(s): 10/08/01(PID)

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
BENZENE (PID)	20.0	18.5	-7	-15 to +15
1,2-DICHLOROPROPANE (HALL)	20.0	19.7	-1	-15 to +15
TRICHLOROETHENE (PID)	20.0	18.3	-8	-15 to +15
BROMODICHLOROMETHANE (HALL)	20.0	18.7	-7	-15 to +15
CIS-1,3-DICHLOROPROP (HALL)	20.0	19.2	-4	-15 to +15
TRANS-1,3-DICHLOROPR (HALL)	20.0	19.8	-1	-15 to +15
1,1,2-TRICHLOROETHAN (HALL)	20.0	19.4	-3	-15 to +15
TOLUENE (PID)	20.0	18.5	-8	-15 to +15
DIBROMOCHLOROMETHANE (HALL)	20.0	20.4	2	-15 to +15
TETRACHLOROETHENE (HALL)	20.0	17.5	-12	-15 to +15
CHLOROBENZENE (PID)	20.0	18.8	-6	-15 to +15
ETHYLBENZENE (PID)	20.0	18.6	-7	-15 to +15
M, P-XYLENE (PID)	40.0	37.3	-7	-15 to +15
BROMOFORM (HALL)	20.0	20.3	1	-15 to +15
O-XYLENE (PID)	20.0	18.7	-6	-15 to +15
1,1,2,2-TETRACHLOROE (HALL)	20.0	18.8	-6	-15 to +15
1,3-DICHLOROBENZENE (HALL)	20.0	18.6	-7	-15 to +15
1,4-DICHLOROBENZENE (PID)	20.0	19.0	-5	-15 to +15
1,2-DICHLOROBENZENE (HALL)	20.0	18.0	-10	-15 to +15
SURR-1B4CB-P (PID)	30.0	29.0	-3	-31 to +21
SURR-1B4CB-H (HALL)	30.0	25.8	-14	-41 to +32

* = %DRIFT outside control limits. Mean %Drift for all calibration compounds (HALL) = -9

0.0 to 27.0 min. Low Y=-0.072 High Y=14.928 mv Span=15.0



Sample Name: CHKSTD

Batch: 01283A20

Date Taken: Oct 10, 2001 04:28:07

Raw File: c:\cp\data1\20282.13R

Area File: c:\cp\data1\20282.13A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap

Inst. ID#06245 - 5890#20HALL; Mod 10-10-2001

Peak Width: .04

Dil. Factor: 1

Analyst: 115

Threshold: -2

Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 71):

Ret Time Expected (min)	RT (min)	Peak Name	Amount * (ug/L)	Peak Area	Peak Height
3.627	3.609	DICHLORODIFLUOROMETH	19.0084	103179	19282
3.831	3.818	CHLOROMETHANE	14.9193	66404	11181
4.155	4.137	VINYL CHLORIDE	17.1929	215216	40525
4.667	4.650	BROMOMETHANE	19.9424	118063	28411
4.880	4.861	CHLOROETHANE	17.4835	186223	37055
5.768	5.751	TRICHLOROFLUOROMETHA	15.7444	265548	28809
6.739	6.719	1,1-DICHLOROETHENE	18.2707	340445	64311
7.084	7.065	METHYLENE CHLORIDE	18.4929	471126	95268
7.267	7.248	TRICHLOROTRIFLUOROET	16.5765	343854	35942
8.678	8.656	TRANS-1,2-DICHLOROET	18.2560	417783	69284
9.300	9.280	1,1-DICHLOROETHANE	18.1136	441343	60819
10.791	10.774	CIS-1,2-DICHLOROETHE	19.1294	409812	70030
11.165	11.142	BROMOCHLOROMETHANE	19.9870	302725	54960
11.349	11.331	CHLOROFORM	18.4064	539820	89175
11.509	11.493	2,2-DICHLOROPROPANE	17.8071	431055	50207
12.999	12.984	1,2-DICHLOROETHANE	19.6269	388055	73558
13.211	13.197	1,1,1-TRICHLOROETHAN	17.6307	503721	68896
13.765	13.749	1,1-DICHLOROPROPENE	18.4690	352584	55895
14.158	14.144	CARBON TETRACHLORIDE	17.9812	571479	78009
15.562	15.554	DIBROMOMETHANE	22.8815	167951	48969
15.666	15.658	1,2-DICHLOROPROPANE	19.7153	374039	92882
15.763	15.755	TRICHLOROETHENE	18.5163	471718	125210
15.837	15.830	BROMODICHLOROMETHANE	18.6510	443326	102995
16.537	16.531	ISTD-1-BR-2-CLETHANE	1.0000	304192	91228
16.968	16.962	CIS-1,3-DICHLOROPROP	19.1864	388748	116704
17.606	17.601	TRANS-1,3-DICHLOROPR	19.8058	296796	112544
17.764	17.760	1,1,2-TRICHLOROETHAN	19.4339	408277	138516
18.072	18.068	1,3-DICHLOROPROPANE	19.8299	318153	117350
18.338	18.335	DIBROMOCHLOROMETHANE	20.4147	267117	93952
18.616	18.613	1,2-DIBROMOETHANE	19.1153	166666	57568
18.835	18.833	TETRACHLOROETHENE	17.5239	445496	160579
19.478	19.476	1,1,1,2-TETRACHLOROE	18.0830	402840	167566
19.549	19.547	CHLOROBENZENE	17.8417	202675	75774
20.016	20.015	BROMOFORM	20.2648	150061	57443
20.317	20.316	1,1,2,2-TETRACHLOROE	18.7600	232036	105099
20.444	20.442	1,2,3-TRICHLOROPROPA	17.8936	199718	80019
20.842	20.841	BROMOBENZENE	19.5866	110581	46473
21.102	21.100	2-CHLOROTOLUENE	18.0836	127106	62334
21.169	21.168	4-CHLOROTOLUENE	17.3052	141995	63937
21.742	21.740	1,3-DICHLOROBENZENE	18.5873	198276	102595
21.799	21.798	1,4-DICHLOROBENZENE	17.6953	242464	109360
22.101	22.099	1,2-DICHLOROBENZENE	18.0313	228490	98721
22.522	22.521	1,2-DIBROMO-3-CHLORO	20.3986	65081	20819
22.889	22.888	SURR-1B4CB-H	25.8345	241975	92428
23.930	23.929	1,2,4-TRICHLOROBENZE	18.7535	205418	75107
24.300	24.298	HEXACHLOROBUTADIENE	17.1538	275377	84579
24.483	24.481	1,2,3-TRICHLOROBENZE	18.6670	232924	68877
TOTAL 1,2-DICHLOROETHENE:			37.3855		

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

Surrogate Recovery: BrClBenzene 86.1151 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 05:42:52

Reprocessed with batch # 01283A20.

T-3 45
10-10-01

Sample name: CHKSTD

Batch: 01283A208400,840

Raw file: c:\cp\data1\20282.13R

Reviewed by:

JS

Verified by:

mm49

Date:

10-10-01

Date:

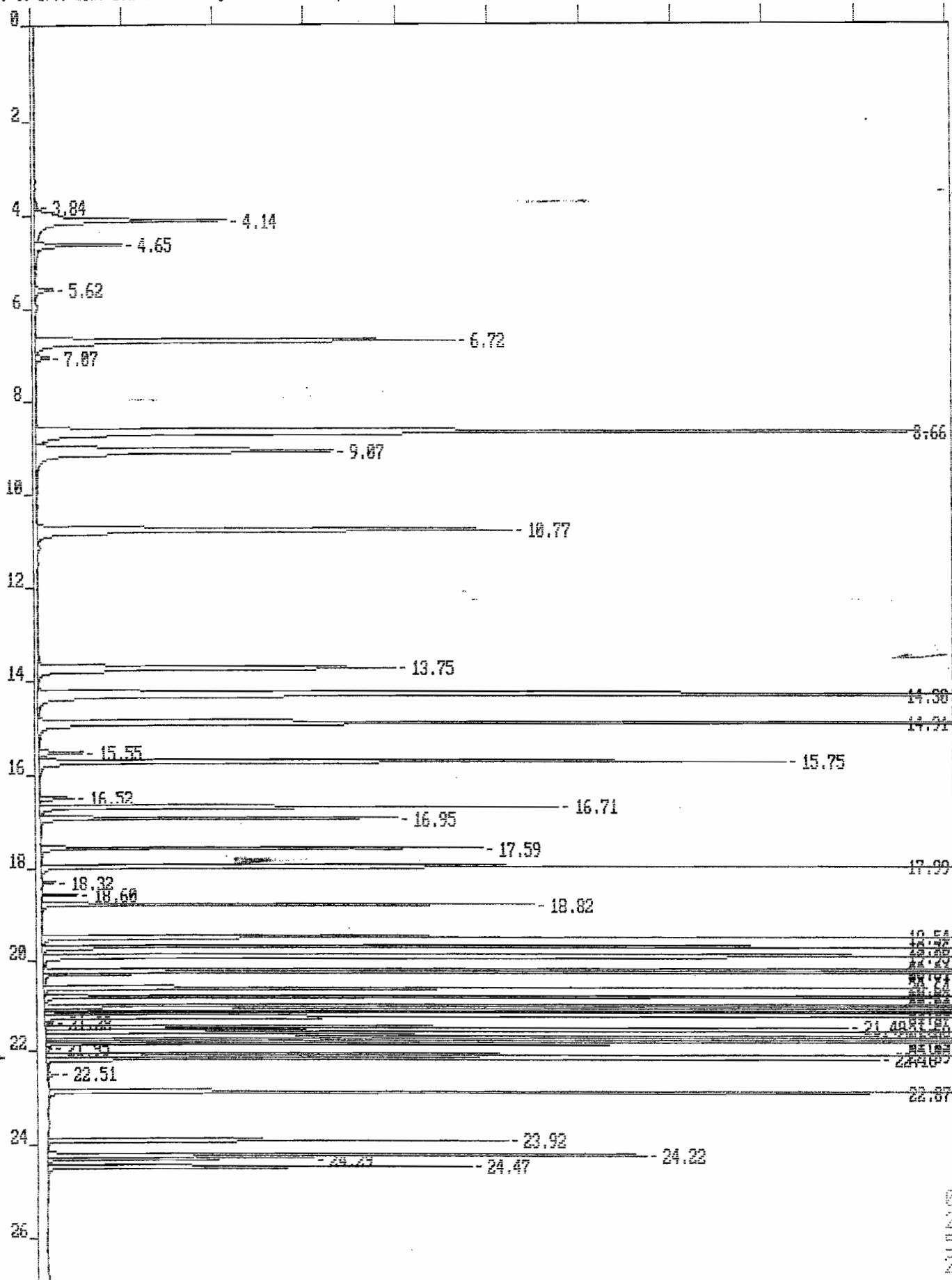
01/11/01

File=c:\cp\data1\20282B.13R Date printed=10-10-2001 Time= 05:43:01

Sample Name=CHKSTD

01283A208400,8401

0.0 to 27.0 min. Low Y=0.009 High Y=15.009 mv Span=15.0



Sample Name: CHKSTD

Batch: 01283A20

Date Taken: Oct 10, 2001 04:28:07

Raw File: c:\cp\data1\20282B.13R

Area File: c:\cp\data1\20282B.13A

Reprocessed with batch # 01283A20

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap

Inst. ID#06245 - 5890#20PID Mod 10-10-2001 0

Peak width: .04

Dil. factor: 1

Analyst: 115

Threshold: -1

Calculation: INTERNALStd using peak heights

*TS us
10-10-01*

Peak table using calibration C:\CP\DATA1\20280.CAL(version 65):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.140	4.123	VINYL CHLORIDE	14.7667	20789	3167
6.722	6.702	1,1-DICHLOROETHENE	17.7928	34874	6875
8.659	8.640	TRANS-1,2-DICHLOROET	17.4440	80502	14443
9.068	9.047	METHYL T-BUTYL ETHER	18.7594	41471	4888
10.775	10.758	CIS-1,2-DICHLOROETHE	18.4617	43326	7781
13.745	13.731	1,1-DICHLOROPROPENE	18.1244	34123	5865
14.303	14.290	BENZENE	18.5409	87425	15700
14.912	14.901	ISTD-FBENZENE	1.0000	72606	15881
15.748	15.740	TRICHLOROETHENE	18.3263	44618	12240
16.522	16.515	1-BROMO-2-CHLOROETHA	1.0000	1800	584
16.953	16.947	CIS-1,3-DICHLOROPROP	19.0267	16741	5866
17.592	17.586	TRANS-1,3-DICHLOROPR	18.3863	18080	7280
17.987	17.983	TOLUENE	18.4607	48320	19708
18.821	18.818	TETRACHLOROETHENE	17.9858	18915	8107
19.535	19.533	CHLOROBENZENE	18.8242	41600	20379
19.757	19.755	ETHYLBENZENE	18.6158	35236	17099
19.949	19.947	M,P-XYLENE	37.2926	81257	36315
20.245	20.243	STYRENE	19.0570	43658	23397
20.308	20.306	O-XYLENE	18.7488	35559	17841
20.638	20.636	ISOPROPYLBENZENE	19.4291	29402	14360
20.827	20.825	BROMOBENZENE	18.9536	42182	22372
21.018	21.017	N-PROPYLBENZENE	18.3315	32289	16742
21.087	21.085	2-CHLOROTOLUENE	18.7526	36201	19154
21.155	21.153	4-CHLOROTOLUENE	18.6576	37429	20424
21.272	21.270	1,3,5-TRIMETHYLBENZE	18.4856	47041	24952
21.495	21.493	TERT-BUTYLBENZENE	18.3413	27054	13179
21.590	21.588	1,2,4-TRIMETHYLBENZE	18.5998	36144	19284
21.675	21.674	SEC-BUTYLBENZENE	18.7862	27507	13662
21.728	21.726	1,3-DICHLOROBENZENE	18.9531	36026	19307
21.786	21.784	1,4-DICHLOROBENZENE	18.9636	36700	19358
21.829	21.828	P-ISOPROPYLTOLUENE	18.9798	26692	14237
22.087	22.085	1,2-DICHLOROBENZENE	18.6837	28792	14701
22.177	22.175	N-BUTYLBENZENE	18.5108	28089	13611
22.875	22.873	SURR-1B4CB-P	29.0054	57771	27198
23.916	23.914	1,2,4-TRICHLOROBENZE	19.5568	19423	7560
24.218	24.216	NAPHTHALENE	20.3248	26427	9878
24.285	24.283	HEXACHLOROBUTADIENE	18.1780	12742	4400
24.468	24.467	1,2,3-TRICHLOROBENZE	20.0975	20458	6993

TOTAL XYLENES: 56.0414

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

Surrogate Recovery: BrClBenzene 96.6846 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 05:46:33

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: CHKSTD

Batch: 01283A208400,840

Raw file: c:\cp\data1\20282B.13R

Reviewed by: [Signature]

Verified by: mm49

Date: 10-10-01

Date: 10/11/07

Quality Control Summary
SDG# HUL02
Instrument ID: 6245
Calibration Verification Summary
CCV Batch: 01283A20
Data File: C:\CP\DATA\20283.11R
Date Injected: 10/10/01 Time Injected: 12:19
Initial Calibration Date(s): 10/08/01 (HALL)
Initial Calibration Date(s): 10/08/01 (PID)

Sample Information			
LL Sample#	Sample Code	Date	Analysis Time
BLK2015	METHOD BLANK	10/10/01	13:21
3699895	MW-8M	10/10/01	19:47

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	% DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	14.4	-28 *	-20 to +20
CHLOROMETHANE (HALL)	20.0	11.6	-42 *	-20 to +20
VINYL CHLORIDE (HALL)	20.0	17.1	-15	-20 to +20
BROMOMETHANE (HALL)	20.0	19.4	-3	-20 to +20
CHLOROETHANE (HALL)	20.0	17.5	-13	-20 to +20
TRICHLOROFLUOROMETHA (HALL)	20.0	15.2	-24 *	-20 to +20
1,1-DICHLOROETHENE (HALL)	20.0	18.3	-8	-15 to +15
METHYLENE CHLORIDE (HALL)	20.0	18.7	-6	-15 to +15
TRANS-1,2-DICHLOROET (HALL)	20.0	18.2	-9	-15 to +15
1,1-DICHLOROETHANE (HALL)	20.0	18.9	-5	-15 to +15
CIS-1,2-DICHLOROETHE (HALL)	20.0	19.0	-5	-15 to +15
CHLOROFORM (HALL)	20.0	18.6	-7	-15 to +15
1,2-DICHLOROETHANE (HALL)	20.0	19.2	-4	-15 to +15
1,1,1-TRICHLOROETHAN (HALL)	20.0	18.2	-9	-15 to +15
CARBON TETRACHLORIDE (HALL)	20.0	18.2	-9	-15 to +15
BENZENE (PID)	20.0	19.0	-5	-15 to +15
1,2-DICHLOROPROPANE (HALL)	20.0	19.6	-2	-15 to +15
TRICHLOROETHENE (PID)	20.0	18.8	-6	-15 to +15

* = %DRIFT outside control limits.

Quality Control Summary

SDG# HUL02

Instrument ID: 6245

Calibration Verification Summary

CCV Batch: 01283A20

Data File: C:\CP\DATA\20283.11R

Date Injected: 10/10/01 Time Injected: 12:19

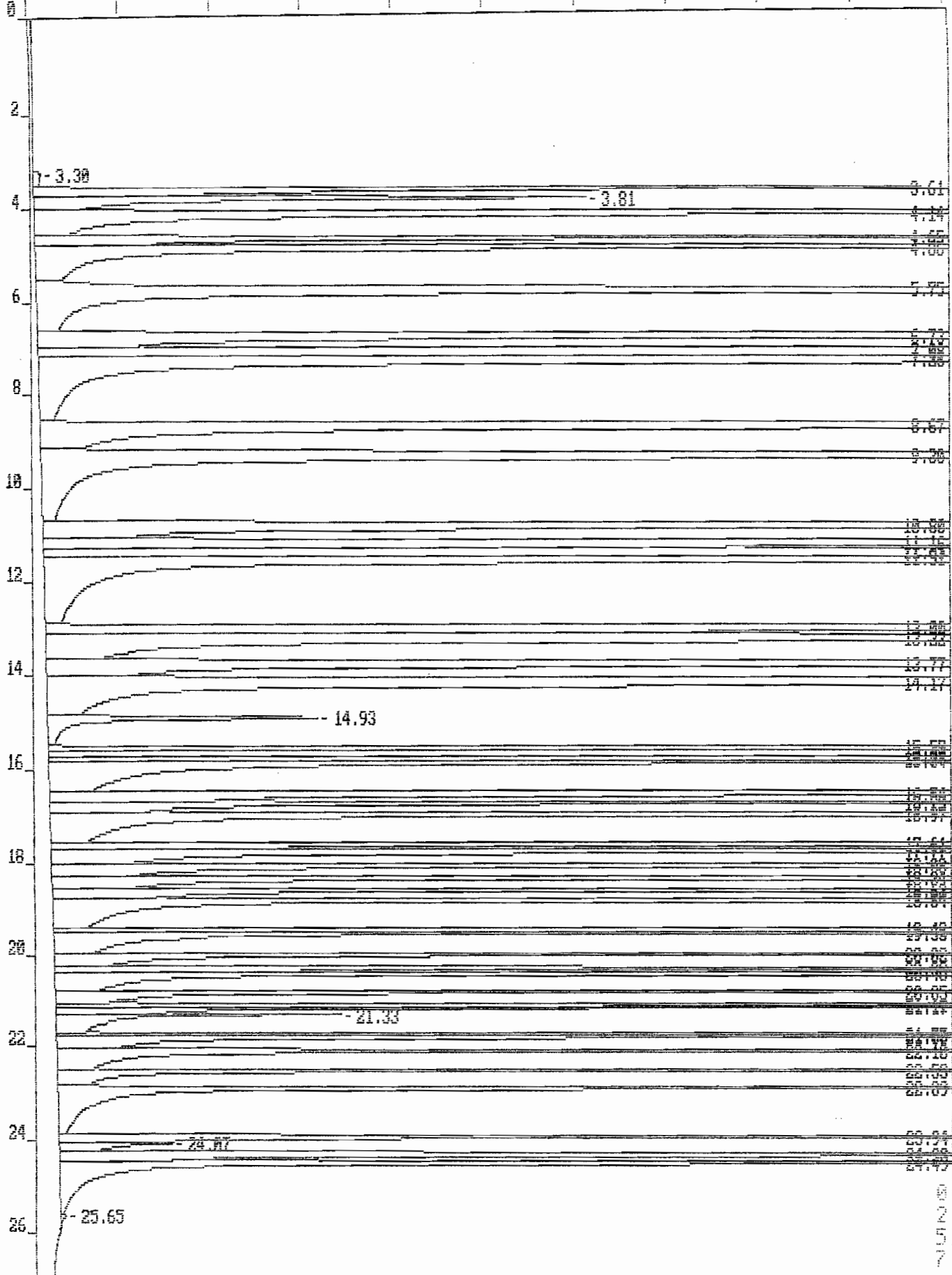
Initial Calibration Date(s): 10/08/01 (HALL)

Initial Calibration Date(s): 10/08/01 (PID)

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
BROMODICHLOROMETHANE (HALL)	20.0	19.0	-5	-15 to +15
CIS-1,3-DICHLOROPROP (HALL)	20.0	18.9	-6	-15 to +15
TRANS-1,3-DICHLOROPR (HALL)	20.0	19.6	-2	-15 to +15
1,1,2-TRICHLOROETHAN (HALL)	20.0	19.1	-4	-15 to +15
TOLUENE (PID)	20.0	18.9	-6	-15 to +15
DIBROMOCHLOROMETHANE (HALL)	20.0	20.3	2	-15 to +15
TETRACHLOROETHENE (HALL)	20.0	17.2	-14	-15 to +15
CHLOROBENZENE (PID)	20.0	19.5	-3	-15 to +15
ETHYLBENZENE (PID)	20.0	19.4	-3	-15 to +15
M, P-XYLENE (PID)	40.0	38.6	-3	-15 to +15
BROMOFORM (HALL)	20.0	21.7	8	-15 to +15
O-XYLENE (PID)	20.0	19.6	-2	-15 to +15
1,1,2,2-TETRACHLOROE (HALL)	20.0	20.6	3	-15 to +15
1,3-DICHLOROBENZENE (HALL)	20.0	20.2	1	-15 to +15
1,4-DICHLOROBENZENE (PID)	20.0	19.7	-1	-15 to +15
1,2-DICHLOROBENZENE (HALL)	20.0	19.5	-3	-15 to +15
SURR-1B4CB-P (PID)	30.0	29.8	-1	-31 to +21
SURR-1B4CB-H (HALL)	30.0	28.5	-5	-41 to +32

* = %DRIFT outside control limits. Mean %Drift for all calibration compounds (HALL) = -8

File=C:\CP\DATA1\20283.11R Date printed=10-10-2001 Time= 12:20:04
 Sample Name=CHKSTD 01283A208400,8401
 0.0 to 27.0 min. Low Y=-0.082 High Y=14.918 mv Span=15.0



Sample Name: CHKSTD
 Batch: 01283A20 Date Taken: Oct 10, 2001 12:19:59
 Raw File: C:\CP\DATA1\20283.11R
 Area File: C:\CP\DATA1\20283.11A
 Method File: c:\cp\data1\20280.MET(version 5)
 EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75M x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115
 Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 72):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.610	3.627	DICHLORODIFLUOROMETH	14.3508	84088	15140
3.814	3.831	CHLOROMETHANE	11.6210	57549	9058
4.137	4.155	VINYL CHLORIDE	17.0628	225963	41828
4.649	4.667	BROMOMETHANE	19.3828	122361	28719
4.862	4.880	CHLOROETHANE	17.4564	195311	38478
5.755	5.768	TRICHLOROFLUOROMETHA	15.1820	279098	28892
6.730	6.739	1,1-DICHLOROETHENE	18.3300	353244	67103
7.076	7.084	METHYLENE CHLORIDE	18.7481	502407	100449
7.260	7.267	TRICHLOROTRIFLUOROET	16.9055	368803	38122
8.674	8.678	TRANS-1,2-DICHLOROET	18.1584	432421	71671
9.300	9.300	1,1-DICHLOROETHANE	18.9270	486682	66093
10.795	10.791	CIS-1,2-DICHLOROETHE	18.9881	427118	72295
11.161	11.165	BROMOCHLOROMETHANE	19.5087	312444	55792
11.350	11.349	CHLOROFORM	18.6460	574666	93951
11.510	11.509	2,2-DICHLOROPROPANE	17.5759	440547	51538
13.004	12.999	1,2-DICHLOROETHANE	19.2173	396925	74906
13.217	13.211	1,1,1-TRICHLOROETHAN	18.2262	541941	74073
13.770	13.765	1,1-DICHLOROPROPENE	18.4488	363372	58068
14.166	14.158	CARBON TETRACHLORIDE	18.1921	599626	82082
15.569	15.562	DIBROMOMETHANE	22.7751	173714	50691
15.673	15.666	1,2-DICHLOROPROPANE	19.6462	389360	96261
15.770	15.763	TRICHLOROETHENE	18.6228	495328	130970
15.843	15.837	BROMODICHLOROMETHANE	18.9693	467555	108945
16.544	16.537	ISTD-1-BR-2-CLETHANE	1.0000	318009	94879
16.974	16.968	CIS-1,3-DICHLOROPROP	18.8830	399871	119456
17.612	17.606	TRANS-1,3-DICHLOROPR	19.6012	306619	115839
17.770	17.764	1,1,2-TRICHLOROETHAN	19.1022	421162	141601
18.078	18.072	1,3-DICHLOROPROPANE	19.5891	328558	120564
18.343	18.338	DIBROMOCHLOROMETHANE	20.3177	277588	97248
18.622	18.616	1,2-DIBROMOETHANE	19.1044	171728	59838
18.840	18.835	TETRACHLOROETHENE	17.1851	455085	163777
19.484	19.478	1,1,1,2-TETRACHLOROE	18.4152	423061	177475
19.555	19.549	CHLOROBENZENE	18.2978	219183	80822
20.022	20.016	BROMOFORM	21.6913	165804	63947
20.322	20.317	1,1,2,2-TETRACHLOROE	20.5749	265306	119880
20.448	20.444	1,2,3-TRICHLOROPROPA	19.7404	227883	91811
20.846	20.842	BROMOBENZENE	21.2821	124268	52517
21.106	21.102	2-CHLOROTOLUENE	19.6444	142718	70424
21.173	21.169	4-CHLOROTOLUENE	19.0361	161149	73147
21.746	21.742	1,3-DICHLOROBENZENE	20.2285	222527	116123
21.803	21.799	1,4-DICHLOROBENZENE	19.0856	272778	122673
22.105	22.101	1,2-DICHLOROBENZENE	19.4549	255570	110778
22.526	22.522	1,2-DIBROMO-3-CHLORO	23.2208	76911	24647
22.894	22.889	SURR-1B4CB-H	28.5359	277625	106179
23.935	23.930	1,2,4-TRICHLOROBENZE	20.7996	235251	86636
24.305	24.300	HEXACHLOROBUTADIENE	18.8503	316049	96663
24.488	24.483	1,2,3-TRICHLOROBENZE	20.8934	269156	80178
TOTAL 1,2-DICHLOROETHENE:			37.1466		

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

Surrogate Recovery: BrClBenzene 95.1198 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 12:21:54

Sample name: CHKSTD

Batch: 01283A208400,840

Raw file: C:\CP\DATA1\20283.11R

Reviewed by: MP 904

Verified by: VMM 469

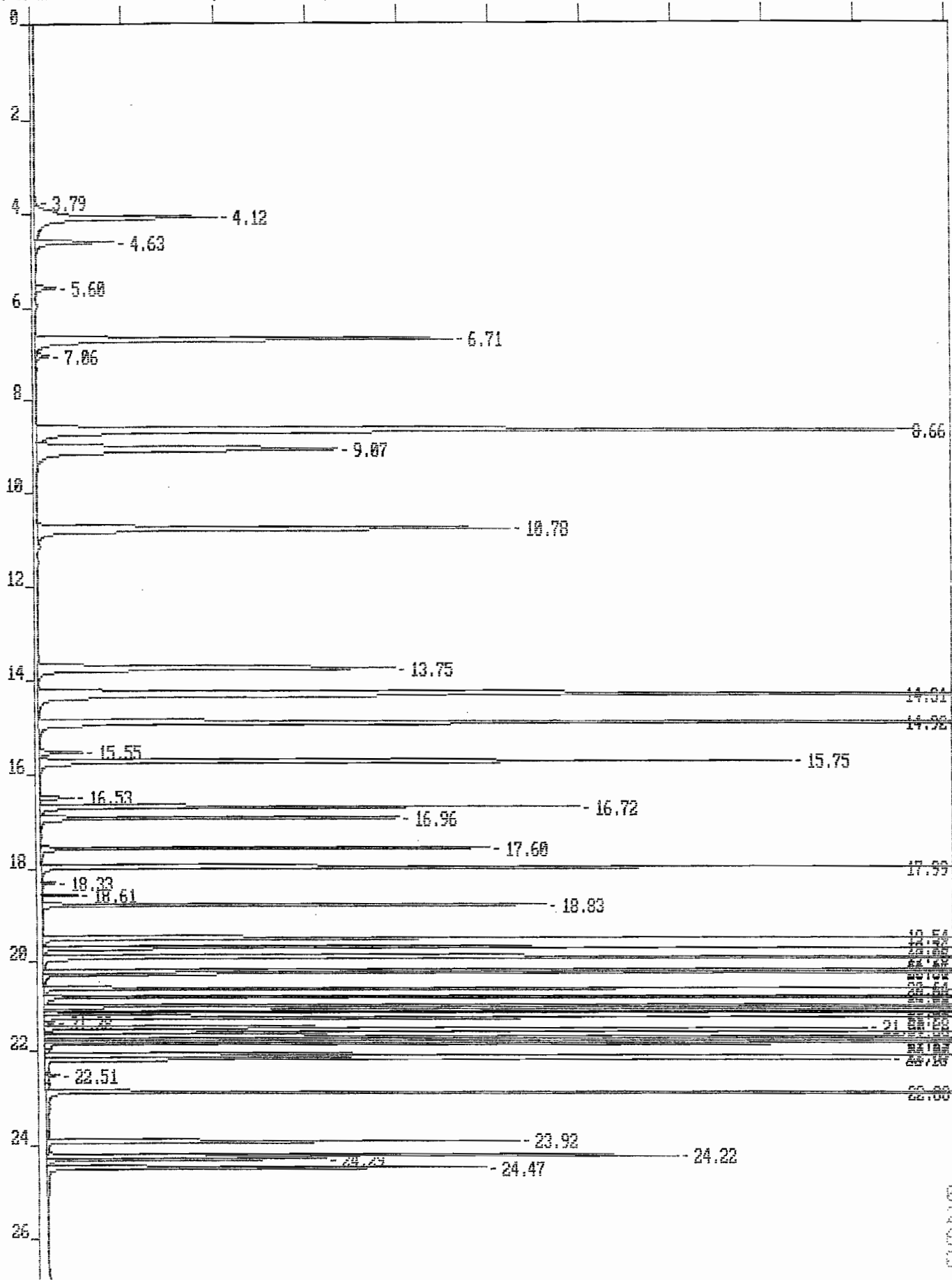
Date: 10/10/01

Date: 10/11/01

File=C:\CP\DATA1\20283B.11R Date printed=10-10-2001 Time= 12:22:13

Sample Name=CHKSTD 01283A208400,8401

0.0 to 27.0 min. Low Y=0.02 High Y=15.02 mv Span=15.0



Sample Name: CHKSTD
 Batch: 01283A20 Date Taken: Oct 10, 2001 12:19:59
 Raw File: C:\CP\DATA1\20283B.11R
 Area File: C:\CP\DATA1\20283B.11A
 Method File: c:\cp\data1\20280B.MET(version 2)
 EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75m x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 115
 Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 66):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.120	4.140	VINYL CHLORIDE	14.1403	19913	2985
6.712	6.722	1,1-DICHLOROETHENE	17.9640	35218	6831
8.657	8.659	TRANS-1,2-DICHLOROET	17.6090	80460	14350
9.066	9.068	METHYL T-BUTYL ETHER	19.1633	41106	4914
10.776	10.775	CIS-1,2-DICHLOROETHE	18.6150	43541	7721
13.753	13.745	1,1-DICHLOROPROPENE	18.3532	34308	5845
14.311	14.303	BENZENE	18.9532	88531	15796
14.920	14.912	ISTD-FBENZENE	1.0000	71683	15630
15.755	15.748	TRICHLOROETHENE	18.7830	45206	12347
16.527	16.522	1-BROMO-2-CHLOROETHA	1.0000	1823	559
16.959	16.953	CIS-1,3-DICHLOROPROP	19.3849	17240	5883
17.597	17.592	TRANS-1,3-DICHLOROPR	18.8641	18386	7352
17.992	17.987	TOLUENE	18.8733	48944	19831
18.826	18.821	TETRACHLOROETHENE	18.5973	19616	8250
19.541	19.535	CHLOROBENZENE	19.4663	42343	20741
19.762	19.757	ETHYLBENZENE	19.3574	36103	17500
19.954	19.949	M,P-XYLENE	38.6375	82985	37031
20.249	20.245	STYRENE	20.1024	45379	24292
20.313	20.308	O-XYLENE	19.5566	36610	18316
20.642	20.638	ISOPROPYLBENZENE	20.3605	30423	14811
20.831	20.827	BROMOBENZENE	19.7203	43483	22910
21.022	21.018	N-PROPYLBENZENE	19.2423	33200	17297
21.091	21.087	2-CHLOROTOLUENE	19.4958	37151	19599
21.159	21.155	4-CHLOROTOLUENE	19.4705	38482	20978
21.275	21.272	1,3,5-TRIMETHYLBENZE	19.4123	48894	25789
21.498	21.495	TERT-BUTYLBENZENE	19.1918	28034	13573
21.594	21.590	1,2,4-TRIMETHYLBENZE	19.4605	37161	19858
21.679	21.675	SEC-BUTYLBENZENE	19.6967	28384	14099
21.732	21.728	1,3-DICHLOROBENZENE	19.6554	36952	19707
21.790	21.786	1,4-DICHLOROBENZENE	19.7212	37444	19813
21.833	21.829	P-ISOPROPYLTOLUENE	19.9227	27935	14709
22.091	22.087	1,2-DICHLOROBENZENE	19.6139	29909	15190
22.181	22.177	N-BUTYLBENZENE	19.2030	29349	13898
22.879	22.875	SURR-1B4CB-P	29.8040	60760	27506
23.920	23.916	1,2,4-TRICHLOROBENZE	20.3682	20428	7749
24.223	24.218	NAPHTHALENE	21.6757	27560	10369
24.290	24.285	HEXACHLOROBUTADIENE	19.2407	13595	4584
24.474	24.468	1,2,3-TRICHLOROBENZE	21.0244	22771	7200

TOTAL XYLENES: 58.1941

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

Surrogate Recovery: BrClBenzene 99.3465 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 12:25:37

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: CHKSTD

Batch: 01283A208400,840

Raw file:

C:\CP\DATA1\20283B.11R

Reviewed by:

MPB

Verified by:

MM469

Date:

10/10/01

Date:

10/11/01

Quality Control Summary
SDG# HUL02
Instrument ID: 6245
Calibration Verification Summary

CCV Batch: 01283A20
Data File: C:\CP\DATA1\20283.23R
Date Injected: 10/10/01 Time Injected: 20:26
Initial Calibration Date(s): 10/08/01(HALL)
Initial Calibration Date(s): 10/08/01(PID)

Sample Information				
LL Sample#	Sample Code	Date	Analysis Time	
BLK2016	METHOD BLANK	10/10/01	21:19	
3699901	NB7FB	10/10/01	22:14	
3699894	MW-8U	10/10/01	23:04	
3699896	MW-8L	10/10/01	23:41	
3699897	MW-9U	10/11/01	00:19	
3699898	MW-9L	10/11/01	00:56	
3699900	W-10L	10/11/01	01:34	
3699903	AW1UB	10/11/01	02:12	

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
DICHLORODIFLUOROMETH (HALL)	20.0	17.5	-13	-20 to +20
CHLOROMETHANE (HALL)	20.0	13.2	-34 *	-20 to +20
VINYL CHLORIDE (HALL)	20.0	18.5	-8	-20 to +20
BROMOMETHANE (HALL)	20.0	20.9	4	-20 to +20
CHLOROETHANE (HALL)	20.0	18.6	-7	-20 to +20
TRICHLOROFLUOROMETHA (HALL)	20.0	17.2	-14	-20 to +20
1,1-DICHLOROETHENE (HALL)	20.0	20.7	4	-15 to +15
METHYLENE CHLORIDE (HALL)	20.0	20.2	1	-15 to +15
TRANS-1,2-DICHLOROET (HALL)	20.0	20.0	0	-15 to +15
1,1-DICHLOROETHANE (HALL)	20.0	19.5	-2	-15 to +15
CIS-1,2-DICHLOROETHE (HALL)	20.0	18.9	-5	-15 to +15
CHLOROFORM (HALL)	20.0	18.5	-8	-15 to +15

* = %DRIFT outside control limits.

Quality Control Summary
SDG# HUL02
Instrument ID: 6245
Calibration Verification Summary

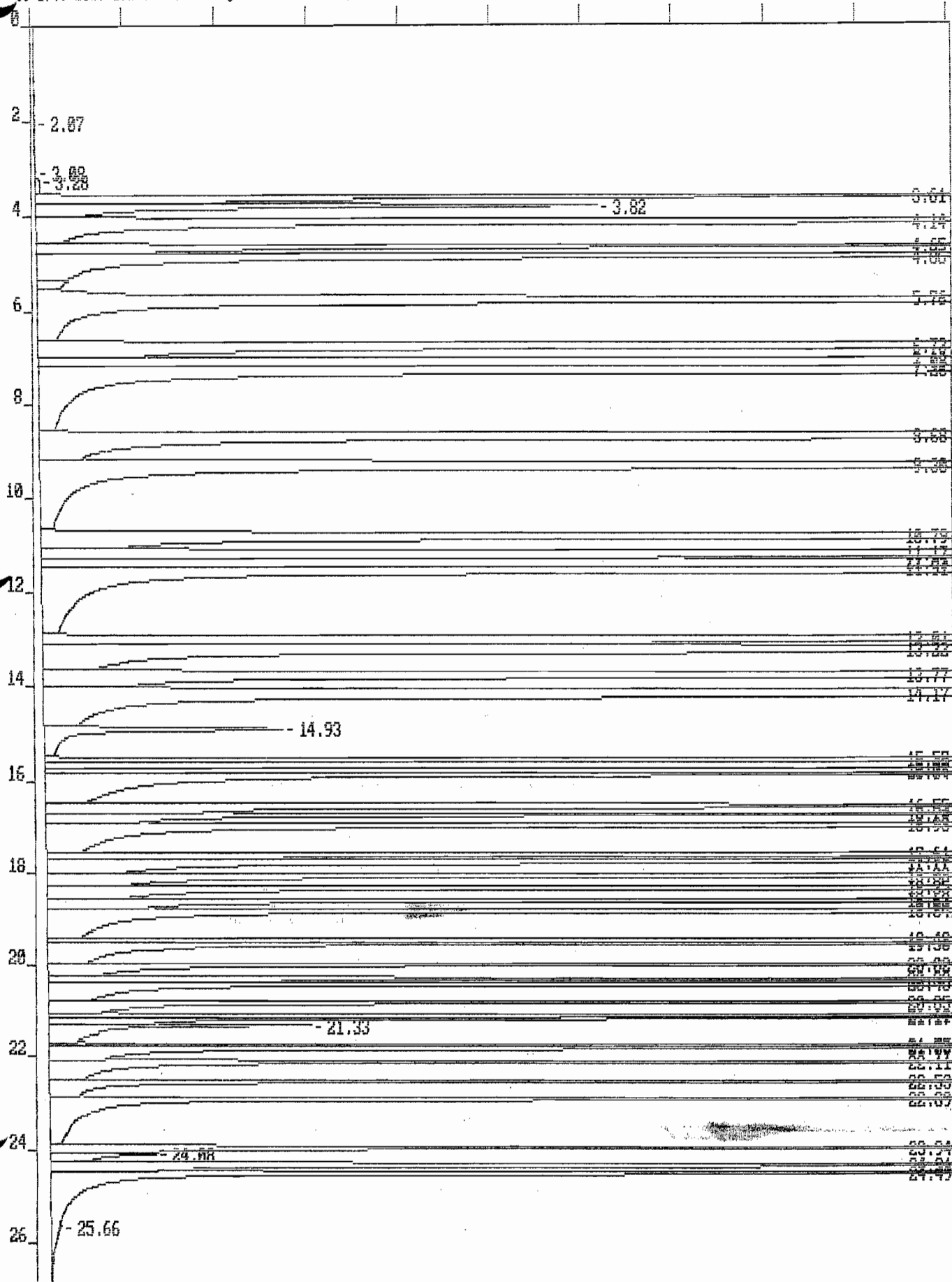
CCV Batch: 01283A20

Data File: C:\CP\DATA1\20283.23R
Date Injected: 10/10/01 Time Injected: 20:26
Initial Calibration Date(s): 10/08/01(HALL)
Initial Calibration Date(s): 10/08/01(PID)

COMPOUND (DETECTOR)	THEORETICAL CONCENTRATION (UG/L)	ACTUAL CONCENTRATION (UG/L)	% DRIFT	%DRIFT LIMITS
1, 2-DICHLOROETHANE (HALL)	20.0	19.2	-4	-15 to +15
1, 1, 1-TRICHLOROETHAN (HALL)	20.0	18.7	-7	-15 to +15
CARBON TETRACHLORIDE (HALL)	20.0	18.9	-5	-15 to +15
BENZENE (PID)	20.0	19.9	-1	-15 to +15
1, 2-DICHLOROPROPANE (HALL)	20.0	20.5	2	-15 to +15
TRICHLOROETHENE (PID)	20.0	19.6	-2	-15 to +15
BROMODICHLOROMETHANE (HALL)	20.0	19.5	-2	-15 to +15
CIS-1, 3-DICHLOROPROP (HALL)	20.0	20.1	0	-15 to +15
TRANS-1, 3-DICHLOROPR (HALL)	20.0	20.2	1	-15 to +15
1, 1, 2-TRICHLOROETHAN (HALL)	20.0	19.6	-2	-15 to +15
TOLUENE (PID)	20.0	19.9	0	-15 to +15
DIBROMOCHLOROMETHANE (HALL)	20.0	21.1	5	-15 to +15
TETRACHLOROETHENE (HALL)	20.0	18.7	-7	-15 to +15
CHLOROBENZENE (PID)	20.0	20.1	1	-15 to +15
ETHYLBENZENE (PID)	20.0	20.1	0	-15 to +15
M, P-XYLENE (PID)	40.0	40.1	0	-15 to +15
BROMOFORM (HALL)	20.0	21.4	7	-15 to +15
O-XYLENE (PID)	20.0	20.1	1	-15 to +15
1, 1, 2, 2-TETRACHLOROE (HALL)	20.0	20.1	0	-15 to +15
1, 3-DICHLOROBENZENE (HALL)	20.0	20.4	2	-15 to +15
1, 4-DICHLOROBENZENE (PID)	20.0	20.0	0	-15 to +15
1, 2-DICHLOROBENZENE (HALL)	20.0	19.7	-2	-15 to +15
SURR-1B4CB-P (PID)	30.0	29.4	-2	-31 to +21
SURR-1B4CB-H (HALL)	30.0	27.1	-10	-41 to +32

* = %DRIFT outside control limits. Mean %Drift for all calibration compounds (HALL) = -5

File=C:\CP\DATA1\20283.23R Date printed=10-10-2001 Time= 20:26:44
 Sample Name=CHKSTD 01283A208400,8401
 to 27.0 min. Low Y=-0.083 High Y=14.917 mv Span=15.0



8
2
5

Sample Name: CHKSTD

Batch: 01283A20

Date Taken: Oct 10, 2001 20:26:39

Raw File: C:\CP\DATA1\20283.23R

ea File: C:\CP\DATA1\20283.23A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 73):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.612	3.610	DICHLORODIFLUOROMETH	17.4566	92070	16459
3.818	3.814	CHLOROMETHANE	13.1821	58646	9182
4.141	4.137	VINYL CHLORIDE	18.4589	223662	40439
4.652	4.649	BROMOMETHANE	20.8659	117776	27630
4.864	4.862	CHLOROETHANE	18.6137	184341	36667
5.760	5.755	TRICHLOROFLUOROMETHA	17.1900	278621	29235
6.732	6.730	1,1-DICHLOROETHENE	20.7276	360938	67812
7.077	7.076	METHYLENE CHLORIDE	20.1676	483130	96565
7.259	7.260	TRICHLOROTRIFLUOROET	18.8385	371567	37964
8.675	8.674	TRANS-1,2-DICHLOROET	20.0217	430282	70623
9.300	9.300	1,1-DICHLOROETHANE	19.5444	454313	60993
10.793	10.795	CIS-1,2-DICHLOROETHE	18.9213	382634	64380
11.168	11.161	BROMOCHLOROMETHANE	19.3619	273950	49485
11.352	11.350	CHLOROFORM	18.4657	511692	83150
11.512	11.510	2,2-DICHLOROPROPANE	18.3885	416176	48188
13.006	13.004	1,2-DICHLOROETHANE	19.2285	355861	66980
13.217	13.217	1,1,1-TRICHLOROETHAN	18.6562	496152	67759
13.766	13.770	1,1-DICHLOROPROPENE	19.5354	343192	54950
14.168	14.166	CARBON TETRACHLORIDE	18.9006	560853	76212
15.570	15.569	DIBROMOMETHANE	23.3961	161829	46537
15.674	15.673	1,2-DICHLOROPROPANE	20.4869	356029	89706
15.771	15.770	TRICHLOROETHENE	19.5836	462311	123083
15.845	15.843	BROMODICHLOROMETHANE	19.5223	441211	100200
16.546	16.544	ISTD-1-BR-2-CLETHANE	1.0000	284033	84791
16.976	16.974	CIS-1,3-DICHLOROPROP	20.0712	379259	113472
17.614	17.612	TRANS-1,3-DICHLOROPR	20.1959	283701	106663
17.772	17.770	1,1,2-TRICHLOROETHAN	19.6219	386799	129988
18.080	18.078	1,3-DICHLOROPROPANE	20.1801	303793	110996
18.345	18.343	DIBROMOCHLOROMETHANE	21.0804	259578	90171
18.623	18.622	1,2-DIBROMOETHANE	19.8577	161122	55584
18.842	18.840	TETRACHLOROETHENE	18.6643	441406	158961
19.485	19.484	1,1,1,2-TETRACHLOROE	18.5022	386236	159353
19.556	19.555	CHLOROBENZENE	18.7292	200069	73931
20.022	20.022	BROMOFORM	21.4004	148333	56382
20.323	20.322	1,1,2,2-TETRACHLOROE	20.1021	231951	104672
20.450	20.448	1,2,3-TRICHLOROPROPA	19.3768	202869	80537
20.847	20.846	BROMOBENZENE	21.8732	115103	48236
21.107	21.106	2-CHLOROTOLUENE	20.1312	132509	64495
21.175	21.173	4-CHLOROTOLUENE	19.3721	147399	66523
21.747	21.746	1,3-DICHLOROBENZENE	20.3705	204387	104504
21.805	21.803	1,4-DICHLOROBENZENE	19.5044	247424	112035
22.106	22.105	1,2-DICHLOROBENZENE	19.6562	233154	100024
22.527	22.526	1,2-DIBROMO-3-CHLORO	21.8323	66740	20710
22.895	22.894	SURR-1B4CB-H	27.0664	241406	90003
23.936	23.935	1,2,4-TRICHLOROBENZE	19.6821	201179	73264
24.306	24.305	HEXACHLOROBUTADIENE	18.5916	279382	85200
24.489	24.488	1,2,3-TRICHLOROBENZE	19.5359	238770	66997

TOTAL 1,2-DICHLOROETHENE: 38.9430

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

Surrogate Recovery: BrClBenzene 90.2212 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 20:28:34

Sample name: CHKSTD

Batch: 01283A208400.840

Raw file: C:\CP\DATA1\20283.23R

Reviewed by: MMB994

Verified by: MMB994

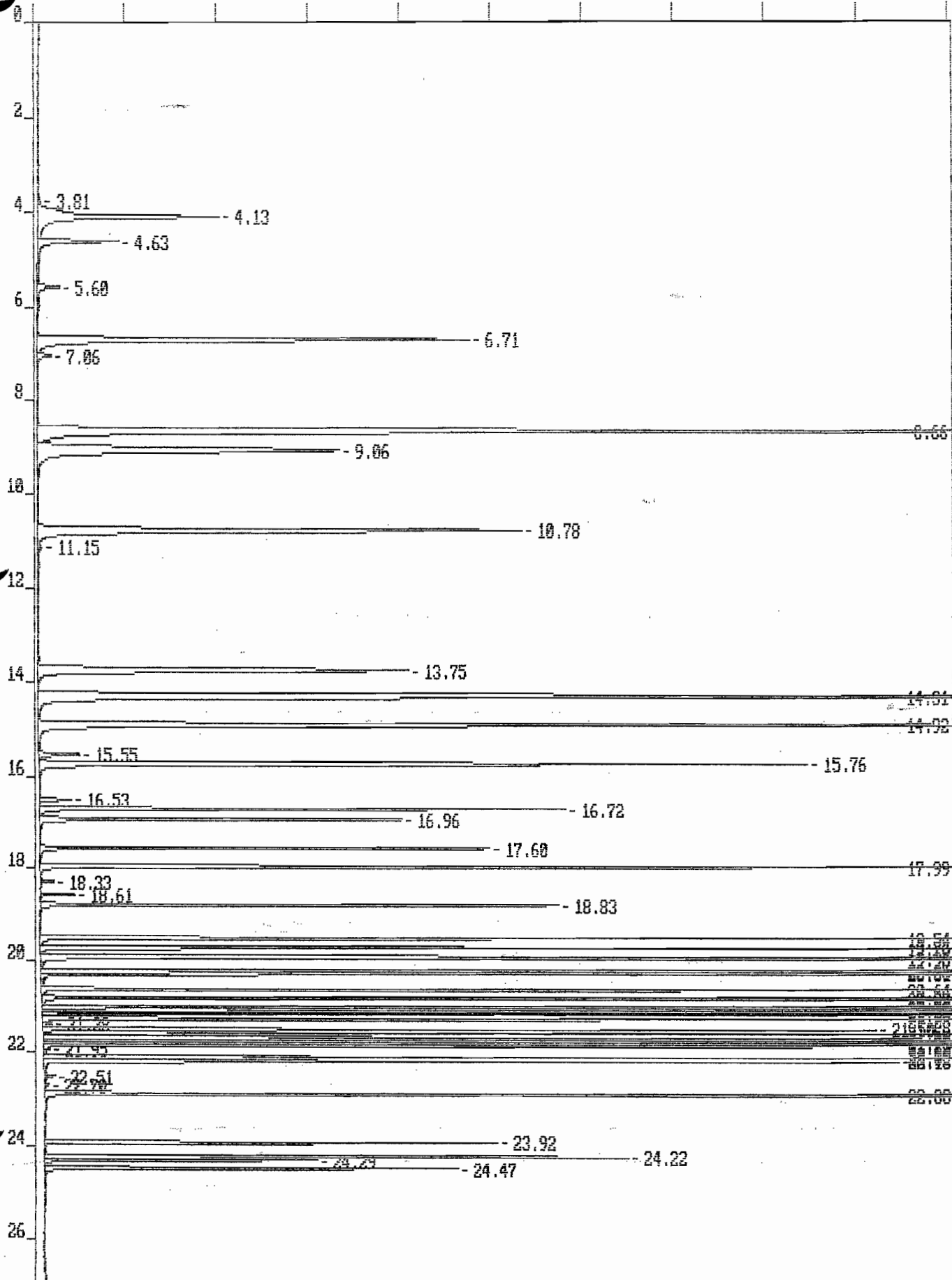
rm
Date: 10/11/01

Date: 10/11/01

File=C:\CP\DATA1\20283B.23R Date printed=10-10-2001 Time= 20:28:54

Sample Name=CHKSTD 01283A208400,8401

to 27.0 min. Low Y=0.037 High Y=15.037 mv Span=15.0



0
2
6
8

Sample Name: CHKSTD

Batch: 01283A20

Date Taken: Oct 10, 2001 20:26:39

Raw File: C:\CP\DATA1\20283B.23R

Area File: C:\CP\DATA1\20283B.23A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 67):

Ret. Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.126	4.120	VINYL CHLORIDE	14.3987	20392	2973
6.714	6.712	1,1-DICHLOROETHENE	19.0301	36149	7077
8.658	8.657	TRANS-1,2-DICHLOROET	18.8901	84155	15054
9.063	9.066	METHYL T-BUTYL ETHER	19.7434	41341	4951
10.776	10.776	CIS-1,2-DICHLOROETHE	19.5330	46266	7923
13.753	13.753	1,1-DICHLOROPROPENE	19.4727	35638	6065
14.311	14.311	BENZENE	19.8557	90535	16183
14.921	14.920	ISTD-FBENZENE	1.0000	70181	15285
15.756	15.755	TRICHLOROETHENE	19.5752	46004	12584
16.530	16.527	1-BROMO-2-CHLOROETHA	1.0000	1646	523
16.961	16.959	CIS-1,3-DICHLOROPROP	20.0161	17205	5940
17.599	17.597	TRANS-1,3-DICHLOROPR	19.3561	18276	7377
17.995	17.992	TOLUENE	19.9189	50037	20467
18.828	18.826	TETRACHLOROETHENE	19.6579	19860	8528
19.542	19.541	CHLOROBENZENE	20.1326	42869	20978
19.763	19.762	ETHYLBENZENE	20.1023	36589	17772
19.956	19.954	M,P-XYLENE	40.0541	84056	37541
20.251	20.249	STYRENE	20.2180	44768	23892
20.314	20.313	O-XYLENE	20.1395	36677	18445
20.644	20.642	ISOPROPYLBENZENE	20.9695	30557	14917
20.833	20.831	BROMOBENZENE	20.2011	43246	22951
21.024	21.022	N-PROPYLBENZENE	19.8726	33618	17469
21.093	21.091	2-CHLOROTOLUENE	20.1033	37048	19764
21.160	21.159	4-CHLOROTOLUENE	20.1077	38698	21186
21.277	21.275	1,3,5-TRIMETHYLBENZE	19.9866	48935	25966
21.500	21.498	TERT-BUTYLBENZENE	19.6992	27980	13624
21.595	21.594	1,2,4-TRIMETHYLBENZE	19.9074	37240	19865
21.680	21.679	SEC-BUTYLBENZENE	20.2694	28878	14188
21.733	21.732	1,3-DICHLOROBENZENE	20.1132	36635	19721
21.791	21.790	1,4-DICHLOROBENZENE	20.0381	36346	19687
21.834	21.833	P-ISOPROPYLTOLUENE	20.4314	28342	14752
22.092	22.091	1,2-DICHLOROBENZENE	19.8091	29329	15002
22.182	22.181	N-BUTYLBENZENE	19.8430	29192	14044
22.880	22.879	SURR-1B4CB-P	29.3948	56443	26529
23.921	23.920	1,2,4-TRICHLOROBENZE	19.9702	19107	7430
24.223	24.223	NAPHTHALENE	20.4550	25348	9569
24.291	24.290	HEXACHLOROBUTADIENE	19.2340	13189	4481
24.474	24.474	1,2,3-TRICHLOROBENZE	20.2178	19107	6771

TOTAL XYLENES: 60.1936

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

Surrogate Recovery: BrClBenzene 97.9826 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 20:32:17

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: CHKSTD

Batch: 01283A208400,840

Raw file: C:\CP\DATA1\20283B.23R

Reviewed by: mm444

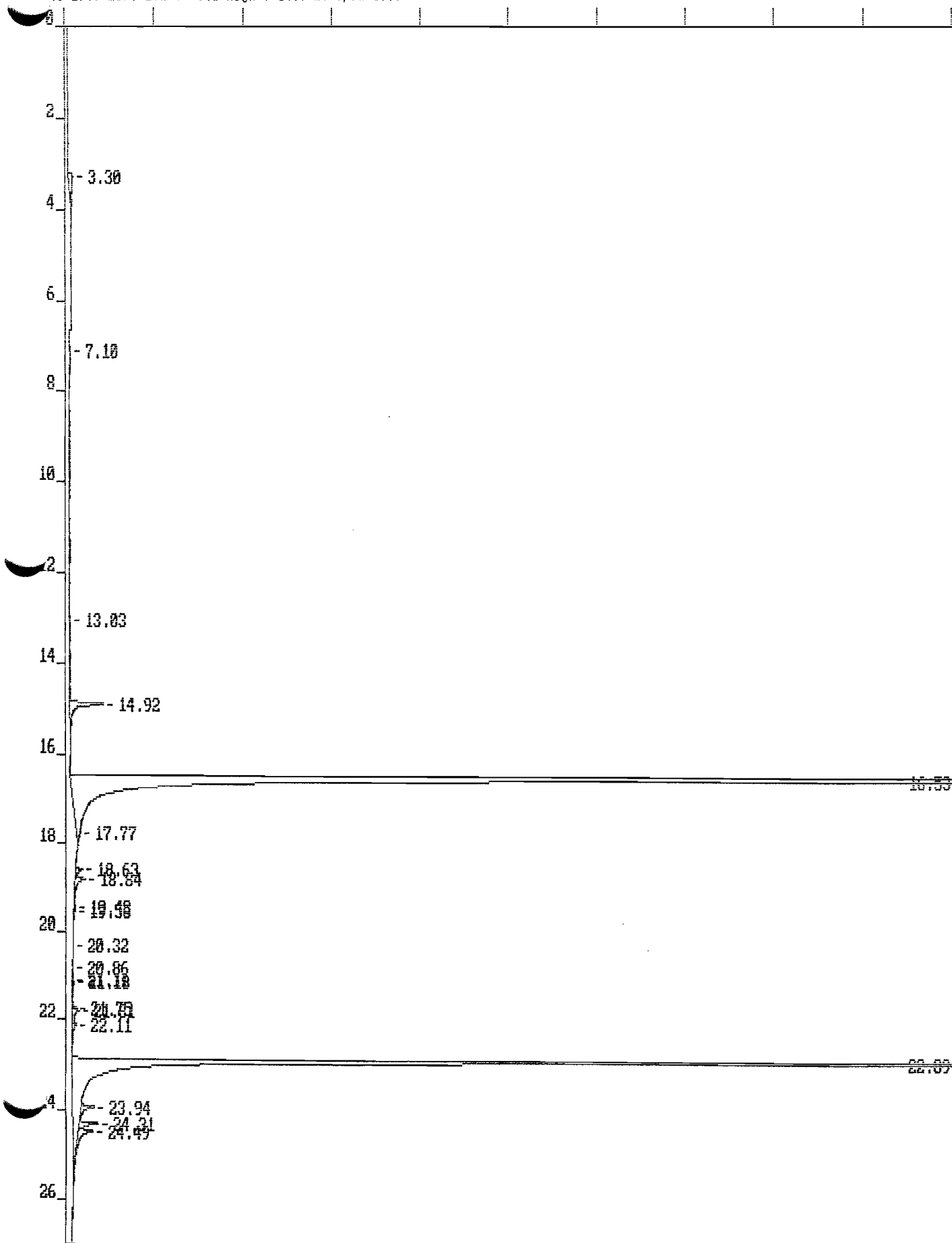
Verified by: mm444

rm Date: 10/11/01

Date: 10/11/01

Raw QC Data

File=C:\CP\DATA1\20280.25R Date printed=10-08-2001 Time= 18:19:38
Sample Name=BLK2009 01280A208400,8401
to 27.0 min. Low Y=-0.1 High Y=14.9 mv Span=15.0



Sample Name: BLK2009

Batch: 01280A20

Date Taken: Oct 8, 2001 18:19:33

Raw File: C:\CP\DATA1\20280.25R

ea File: C:\CP\DATA1\20280.25A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 419

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 67):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.609	3.609	DICHLORODIFLUOROMETH	0.0000	0	0
3.820	3.820	CHLOROMETHANE	0.0000	0	0
4.142	4.142	VINYL CHLORIDE	0.0000	0	0
4.652	4.652	BROMOMETHANE	0.0000	0	0
4.863	4.863	CHLOROETHANE	0.0000	0	0
5.753	5.753	TRICHLOROFLUOROMETHA	0.0000	0	0
6.726	6.726	1,1-DICHLOROETHENE	0.0000	0	0
7.104	7.070	METHYLENE CHLORIDE	0.0053	128	23
7.253	7.253	TRICHLOROTRIFLUOROET	0.0000	0	0
8.666	8.666	TRANS-1,2-DICHLOROET	0.0000	0	0
9.291	9.291	1,1-DICHLOROETHANE	0.0000	0	0
10.783	10.783	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.161	11.161	BROMOCHLOROMETHANE	0.0000	0	0
11.342	11.342	CHLOROFORM	0.0000	0	0
11.504	11.504	2,2-DICHLOROPROPANE	0.0000	0	0
13.033	12.996	1,2-DICHLOROETHANE	0.0063	351	20
13.206	13.206	1,1,1-TRICHLOROETHAN	0.0000	0	0
13.757	13.757	1,1-DICHLOROPROPENE	0.0000	0	0
14.155	14.155	CARBON TETRACHLORIDE	0.0000	0	0
15.560	15.560	DIBROMOMETHANE	0.0000	0	0
15.664	15.664	1,2-DICHLOROPROPANE	0.0000	0	0
15.762	15.762	TRICHLOROETHENE	0.0000	0	0
15.835	15.835	BROMODICHLOROMETHANE	0.0000	0	0
16.535	16.537	ISTD-1-BR-2-CLETHANE	1.0000	281326	76865
16.968	16.968	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.607	17.607	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.773	17.765	1,1,2-TRICHLOROETHAN	0.0028	91	17
18.073	18.073	1,3-DICHLOROPROPANE	0.0000	0	0
18.339	18.339	DIBROMOCHLOROMETHANE	0.0000	0	0
18.630	18.618	1,2-DIBROMOETHANE	0.0513	668	130
18.844	18.838	TETRACHLOROETHENE	0.0235	1207	182
19.483	19.480	1,1,1,2-TETRACHLOROE	0.0028	71	22
19.557	19.551	CHLOROBENZENE	0.0075	233	27
20.018	20.018	BROMOFORM	0.0000	0	0
20.320	20.319	1,1,2,2-TETRACHLOROE	0.0019	31	9
20.445	20.445	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.861	20.842	BROMOBENZENE	0.0050	37	10
21.110	21.103	2-CHLOROTOLUENE	0.0061	44	18
21.183	21.171	4-CHLOROTOLUENE	0.0105	234	33
21.753	21.743	1,3-DICHLOROBENZENE	0.0146	158	68
21.810	21.801	1,4-DICHLOROBENZENE	0.0221	789	115
22.112	22.102	1,2-DICHLOROBENZENE	0.0150	658	69
22.524	22.524	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.892	22.892	SURR-1B4CB-H	28.0094	226596	84433
23.942	23.933	1,2,4-TRICHLOROBENZE	0.0738	1448	249
24.312	24.302	HEXACHLOROBUTADIENE	0.0833	1678	346
24.493	24.486	1,2,3-TRICHLOROBENZE	0.0861	2305	268
TOTAL 1,2-DICHLOROETHENE:			0.0000		

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

Surrogate Recovery: BrClBenzene

93.3646 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 18:21:28

Sample name: BLK2009

Batch: 01280A208400.840

Raw file: C:\CP\DATA1\20280.25R

Reviewed by: mm/6004

Verified by: ummm469

vm Date: 10/10/01

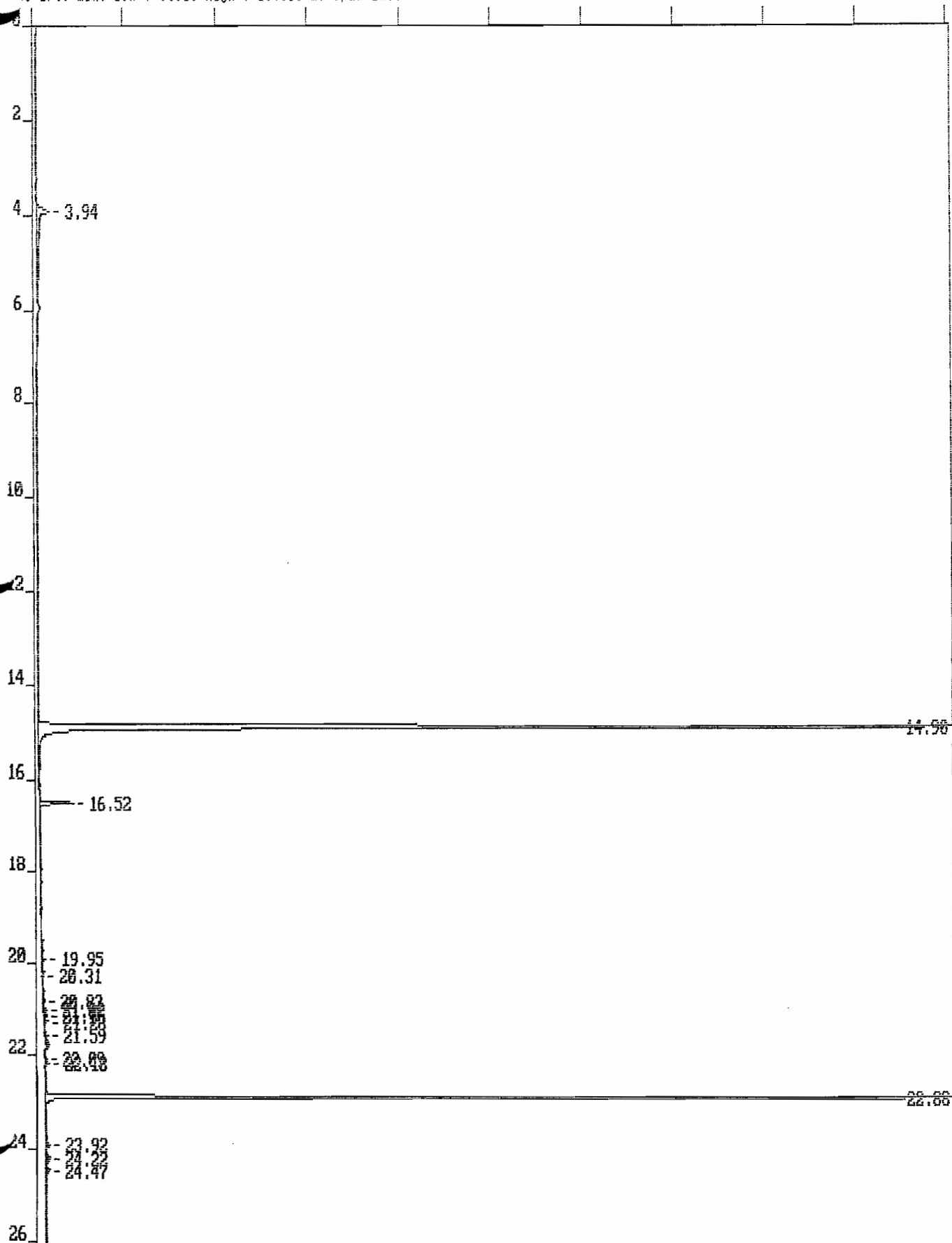
Date: 10/10/01

File=C:\CP\DATA1\202808.25R Date printed=10-08-2001 Time= 18:21:42

Sample Name=BLK2009

01280A208400,8401

to 27.0 min. Low Y=0.018 High Y=15.018 mv Span=15.0



012808

Sample Name: BLK2009

Batch: 01280A20

Date Taken: Oct 8, 2001 18:19:33

Raw File: C:\CP\DATA1\20280B.25R

ea File: C:\CP\DATA1\20280B.25A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 419

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 61):

Ret Time	Expected	Amount *	Peak	Peak
(min)	RT (min)	(ug/L)	Area	Height
4.126	4.126	0.0000	0	0
6.708	6.708	0.0000	0	0
8.648	8.648	0.0000	0	0
9.054	9.054	0.0000	0	0
10.768	10.768	0.0000	0	0
13.741	13.741	0.0000	0	0
14.300	14.300	0.0000	0	0
14.904	14.910	1.0000	71301	15053
15.747	15.747	0.0000	0	0
16.519	16.522	1.0000	1923	571
16.953	16.953	0.0000	0	0
17.592	17.592	0.0000	0	0
17.988	17.988	0.0000	0	0
18.823	18.823	0.0000	0	0
19.537	19.537	0.0000	0	0
19.759	19.759	0.0000	0	0
19.948	19.951	0.0656	279	61
20.246	20.246	0.0000	0	0
20.310	20.310	0.0335	141	30
20.639	20.639	0.0000	0	0
20.833	20.829	0.0355	162	40
21.024	21.020	0.0721	151	62
21.089	21.089	0.0000	0	0
21.154	21.156	0.0547	170	57
21.276	21.273	0.0578	265	74
21.496	21.496	0.0000	0	0
21.593	21.591	0.0564	108	55
21.677	21.677	0.0000	0	0
21.729	21.729	0.0000	0	0
21.788	21.788	0.0000	0	0
21.831	21.831	0.0000	0	0
22.093	22.089	0.0653	129	49
22.185	22.179	0.1056	540	74
22.877	22.877	27.3409	54413	24301
23.917	23.918	0.1416	163	52
24.222	24.221	0.1077	317	50
24.288	24.288	0.0000	0	0
24.470	24.471	0.1623	275	54

TOTAL XYLENES: 0.0992

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

Surrogate Recovery: BrClBenzene 91.1364 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 18:24:45

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: BLK2009

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280B.25R

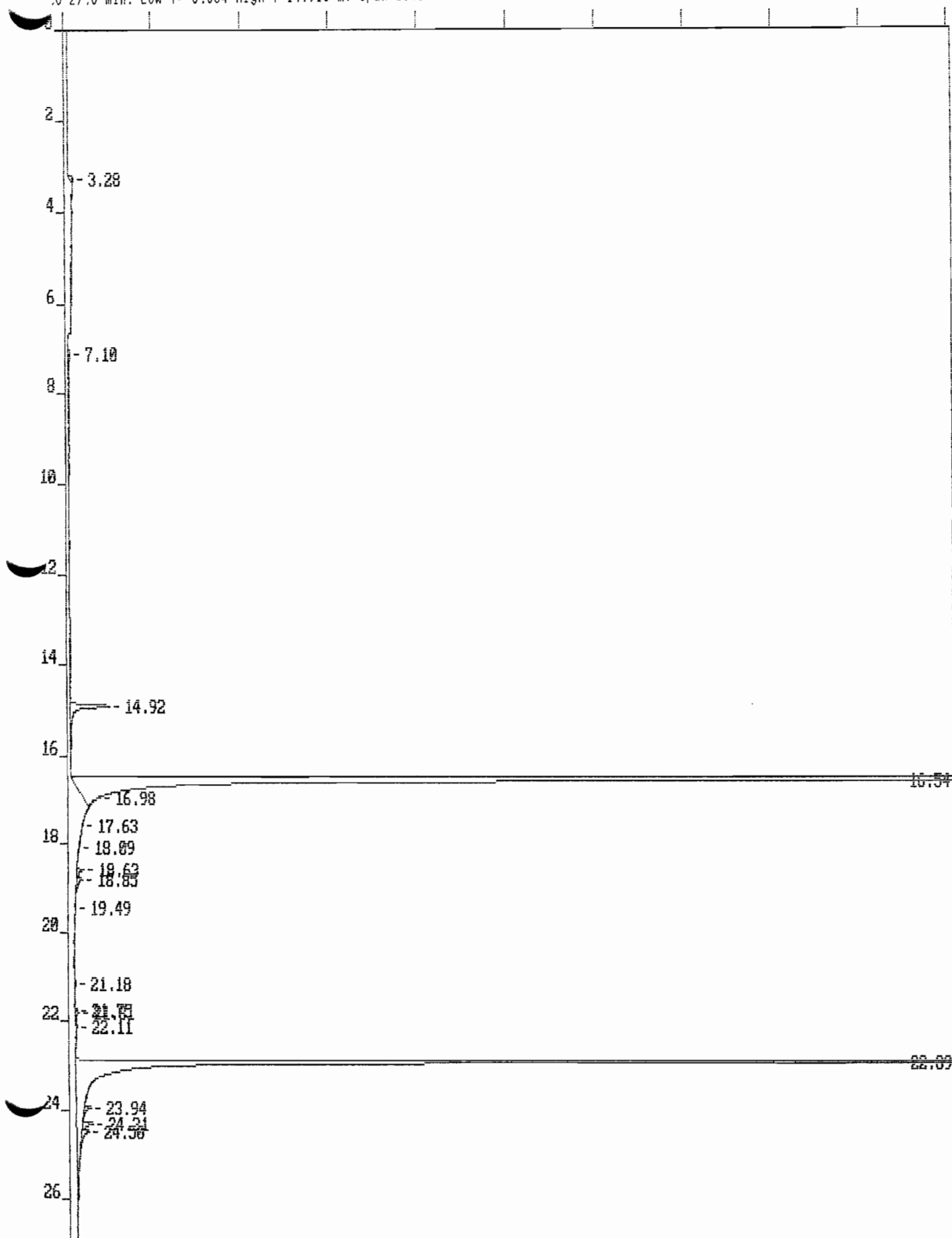
Reviewed by: MM49

Verified by: mm49

Date: 10/10/01

Date: 10/10/01

File=C:\CP\DATA1\20280.31R Date printed=10-08-2001 Time= 22:29:47
Sample Name=BLK2010 01280A208400,8401
to 27.0 min. Low Y=-0.084 High Y=14.916 mv Span=15.0



Sample Name: BLK2010

Batch: 01280A20

Date Taken: Oct 8, 2001 22:29:43

Raw File: C:\CP\DATA1\20280.31R

sa File: C:\CP\DATA1\20280.31A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 419

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 67):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.609	3.609	DICHLORODIFLUOROMETH	0.0000	0	0
3.820	3.820	CHLOROMETHANE	0.0000	0	0
4.142	4.142	VINYL CHLORIDE	0.0000	0	0
4.652	4.652	BROMOMETHANE	0.0000	0	0
4.863	4.863	CHLOROETHANE	0.0000	0	0
5.753	5.753	TRICHLOROFLUOROMETHA	0.0000	0	0
6.726	6.726	1,1-DICHLOROETHENE	0.0000	0	0
7.099	7.070	METHYLENE CHLORIDE	0.0091	612	40
7.253	7.253	TRICHLOROTRIFLUOROET	0.0000	0	0
8.666	8.666	TRANS-1,2-DICHLOROET	0.0000	0	0
9.291	9.291	1,1-DICHLOROETHANE	0.0000	0	0
10.783	10.783	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.161	11.161	BROMOCHLOROMETHANE	0.0000	0	0
11.342	11.342	CHLOROFORM	0.0000	0	0
11.504	11.504	2,2-DICHLOROPROPANE	0.0000	0	0
12.996	12.996	1,2-DICHLOROETHANE	0.0000	0	0
13.206	13.206	1,1,1-TRICHLOROETHAN	0.0000	0	0
13.757	13.757	1,1-DICHLOROPROPENE	0.0000	0	0
14.155	14.155	CARBON TETRACHLORIDE	0.0000	0	0
15.560	15.560	DIBROMOMETHANE	0.0000	0	0
15.664	15.664	1,2-DICHLOROPROPANE	0.0000	0	0
15.762	15.762	TRICHLOROETHENE	0.0000	0	0
15.835	15.835	BROMODICHLOROMETHANE	0.0000	0	0
16.539	16.537	ISTD-1-BR-2-CLETHANE	1.0000	264356	76991
16.983	16.968	CIS-1,3-DICHLOROPROP	0.0103	76	53
17.628	17.607	TRANS-1,3-DICHLOROPR	0.0029	59	14
17.765	17.765	1,1,2-TRICHLOROETHAN	0.0000	0	0
18.085	18.073	1,3-DICHLOROPROPANE	0.0028	75	14
18.339	18.339	DIBROMOCHLOROMETHANE	0.0000	0	0
18.630	18.618	1,2-DIBROMOETHANE	0.0483	668	123
18.846	18.838	TETRACHLOROETHENE	0.0151	868	116
19.489	19.480	1,1,1,2-TETRACHLOROE	0.0015	32	12
19.551	19.551	CHLOROBENZENE	0.0000	0	0
20.018	20.018	BROMOFORM	0.0000	0	0
20.319	20.319	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.445	20.445	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.842	20.842	BROMOBENZENE	0.0000	0	0
21.103	21.103	2-CHLOROTOLUENE	0.0000	0	0
21.177	21.171	4-CHLOROTOLUENE	0.0052	102	16
21.748	21.743	1,3-DICHLOROBENZENE	0.0078	79	36
21.809	21.801	1,4-DICHLOROBENZENE	0.0128	398	67
22.111	22.102	1,2-DICHLOROBENZENE	0.0076	142	35
22.524	22.524	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.892	22.892	SURR-1B4CB-H	25.8076	211492	77922
23.941	23.933	1,2,4-TRICHLOROBENZE	0.0362	693	122
24.314	24.302	HEXACHLOROBUTADIENE	0.0472	970	196
24.499	24.486	1,2,3-TRICHLOROBENZE	0.0423	1125	132

TOTAL 1,2-DICHLOROETHENE: 0.0000

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

Surrogate Recovery: BrClBenzene 86.0252 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 22:31:38

01280A20

Sample name: BLK2010

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.31R

Reviewed by: SKP088

Verified by: WMM418

Date: 10-8-01

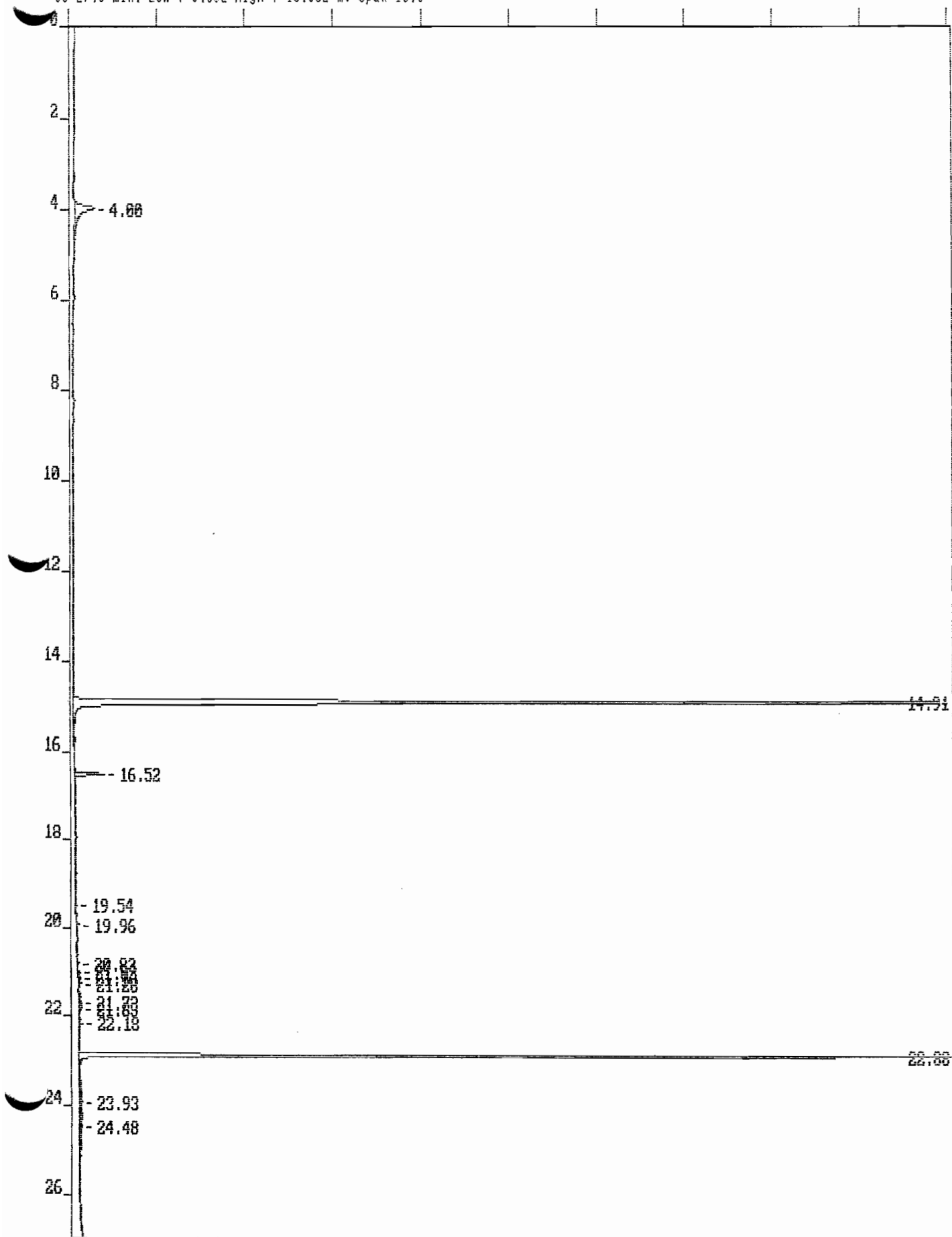
Date: 10/10/01

File=C:\CP\DATA1\20280B.31R Date printed=10-08-2001 Time= 22:31:52

Sample Name=BLK2010

01280A208400,8401

to 27.0 min. Low Y=0.032 High Y=15.032 mv Span=15.0



Sample Name: BLK2010

Batch: 01280A20

Date Taken: Oct 8, 2001 22:29:43

Raw File: C:\CP\DATA1\20280B.31R

File: C:\CP\DATA1\20280B.31A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 419

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 61):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.126	4.126	VINYL CHLORIDE	0.0000	0	0
6.708	6.708	1,1-DICHLOROETHENE	0.0000	0	0
8.648	8.648	TRANS-1,2-DICHLOROET	0.0000	0	0
9.054	9.054	METHYL T-BUTYL ETHER	0.0000	0	0
10.768	10.768	CIS-1,2-DICHLOROETHE	0.0000	0	0
13.741	13.741	1,1-DICHLOROPROPENE	0.0000	0	0
14.300	14.300	BENZENE	0.0000	0	0
14.909	14.910	ISTD-FBENZENE	1.0000	67518	14716
15.747	15.747	TRICHLOROETHENE	0.0000	0	0
16.520	16.522	1-BROMO-2-CHLOROETHA	1.0000	1894	512
16.953	16.953	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.592	17.592	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.988	17.988	TOLUENE	0.0000	0	0
18.823	18.823	TETRACHLOROETHENE	0.0000	0	0
19.540	19.537	CHLOROBENZENE	0.0317	100	32
19.759	19.759	ETHYLBENZENE	0.0000	0	0
19.959	19.951	M,P-XYLENE	0.0526	226	47
20.246	20.246	STYRENE	0.0000	0	0
20.310	20.310	O-XYLENE	0.0000	0	0
20.639	20.639	ISOPROPYLBENZENE	0.0000	0	0
20.828	20.829	BROMOBENZENE	0.0327	106	36
21.026	21.020	N-PROPYLBENZENE	0.0518	102	44
21.089	21.089	2-CHLOROTOLUENE	0.0000	0	0
21.157	21.156	4-CHLOROTOLUENE	0.0471	128	48
21.276	21.273	1,3,5-TRIMETHYLBENZE	0.0446	134	56
21.496	21.496	TERT-BUTYLBENZENE	0.0000	0	0
21.591	21.591	1,2,4-TRIMETHYLBENZE	0.0000	0	0
21.677	21.677	SEC-BUTYLBENZENE	0.0000	0	0
21.730	21.729	1,3-DICHLOROBENZENE	0.0645	132	61
21.788	21.788	1,4-DICHLOROBENZENE	0.0000	0	0
21.830	21.831	P-ISOPROPYLTOLUENE	0.0845	228	59
22.089	22.089	1,2-DICHLOROBENZENE	0.0000	0	0
22.179	22.179	N-BUTYLBENZENE	0.0885	142	60
22.876	22.877	SURR-1B4CB-P	27.4950	53404	23890
23.927	23.918	1,2,4-TRICHLOROBENZE	0.1033	147	37
24.221	24.221	NAPHTHALENE	0.0000	0	0
24.288	24.288	HEXACHLOROBUTADIENE	0.0000	0	0
24.479	24.471	1,2,3-TRICHLOROBENZE	0.1404	242	45

TOTAL XYLENES: 0.0526

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

Surrogate Recovery: BrClBenzene 91.6501 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 22:34:54

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: BLK2010

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280B.31R

Reviewed by: Scp088

Verified by: Vmm49

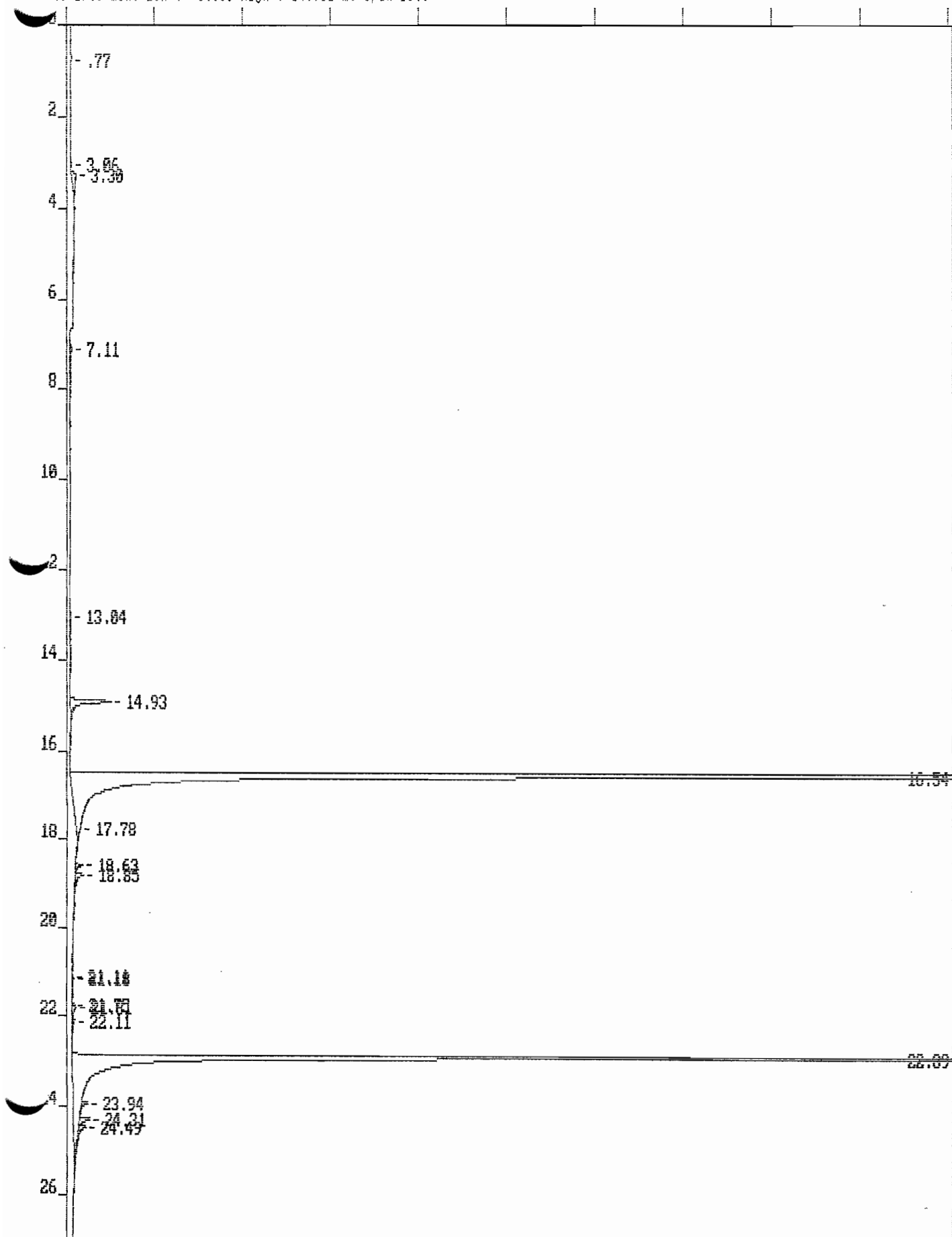
Date: 10-8-01

Date: 10/10/01

File=C:\CP\DATA1\20280.39R Date printed=10-09-2001 Time= 04:46:58

Sample Name=BLK2011 01280A208400,8401

to 27.0 min. Low Y=-0.088 High Y=14.912 mv Span=15.0



Sample Name: BLK2011

Batch: 01280A20

Date Taken: Oct 9, 2001 04:46:36

Raw File: C:\CP\DATA1\20280.39R

Sea File: C:\CP\DATA1\20280.39A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.610	3.610	DICHLORODIFLUOROMETH	0.0000	0	0
3.824	3.824	CHLOROMETHANE	0.0000	0	0
4.146	4.146	VINYL CHLORIDE	0.0000	0	0
4.655	4.655	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.758	5.758	TRICHLOROFLUOROMETHA	0.0000	0	0
6.724	6.724	1,1-DICHLOROETHENE	0.0000	0	0
7.107	7.068	METHYLENE CHLORIDE	0.0080	486	37
7.253	7.253	TRICHLOROTRIFLUOROET	0.0000	0	0
8.664	8.664	TRANS-1,2-DICHLOROET	0.0000	0	0
9.286	9.286	1,1-DICHLOROETHANE	0.0000	0	0
10.780	10.780	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.157	11.157	BROMOCHLOROMETHANE	0.0000	0	0
11.339	11.339	CHLOROFORM	0.0000	0	0
11.499	11.499	2,2-DICHLOROPROPANE	0.0000	0	0
13.043	12.987	1,2-DICHLOROETHANE	0.0058	164	19
13.200	13.200	1,1,1-TRICHLOROETHAN	0.0000	0	0
13.752	13.752	1,1-DICHLOROPROPENE	0.0000	0	0
14.150	14.150	CARBON TETRACHLORIDE	0.0000	0	0
15.556	15.556	DIBROMOMETHANE	0.0000	0	0
15.659	15.659	1,2-DICHLOROPROPANE	0.0000	0	0
15.756	15.756	TRICHLOROETHENE	0.0000	0	0
15.830	15.830	BROMODICHLOROMETHANE	0.0000	0	0
16.539	16.531	ISTD-1-BR-2-CLETHANE	1.0000	281863	81129
16.963	16.963	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.602	17.602	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.776	17.760	1,1,2-TRICHLOROETHAN	0.0028	72	18
18.068	18.068	1,3-DICHLOROPROPANE	0.0000	0	0
18.334	18.334	DIBROMOCHLOROMETHANE	0.0000	0	0
18.629	18.613	1,2-DIBROMOETHANE	0.0460	627	123
18.846	18.833	TETRACHLOROETHENE	0.0195	1218	159
19.476	19.476	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.547	19.547	CHLOROBENZENE	0.0000	0	0
20.015	20.015	BROMOFORM	0.0000	0	0
20.316	20.316	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.442	20.442	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.840	20.840	BROMOBENZENE	0.0000	0	0
21.105	21.100	2-CHLOROTOLUENE	0.0050	36	15
21.177	21.168	4-CHLOROTOLUENE	0.0081	277	27
21.749	21.740	1,3-DICHLOROBENZENE	0.0081	102	40
21.809	21.798	1,4-DICHLOROBENZENE	0.0133	504	73
22.106	22.099	1,2-DICHLOROBENZENE	0.0094	378	46
22.521	22.521	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.891	22.888	SURR-1B4CB-H	26.7952	223100	85253
23.945	23.929	1,2,4-TRICHLOROBENZE	0.0327	619	116
24.311	24.299	HEXACHLOROBUTADIENE	0.0438	981	192
24.494	24.482	1,2,3-TRICHLOROBENZE	0.0373	1111	122
TOTAL 1,2-DICHLOROETHENE:			0.0000		

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

Surrogate Recovery: BrClBenzene 89.3172 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 04:49:06

00000000

Sample name: BLK2011

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.39R

Reviewed by: [Signature]

Verified by: [Signature]

Date: 10-9-01

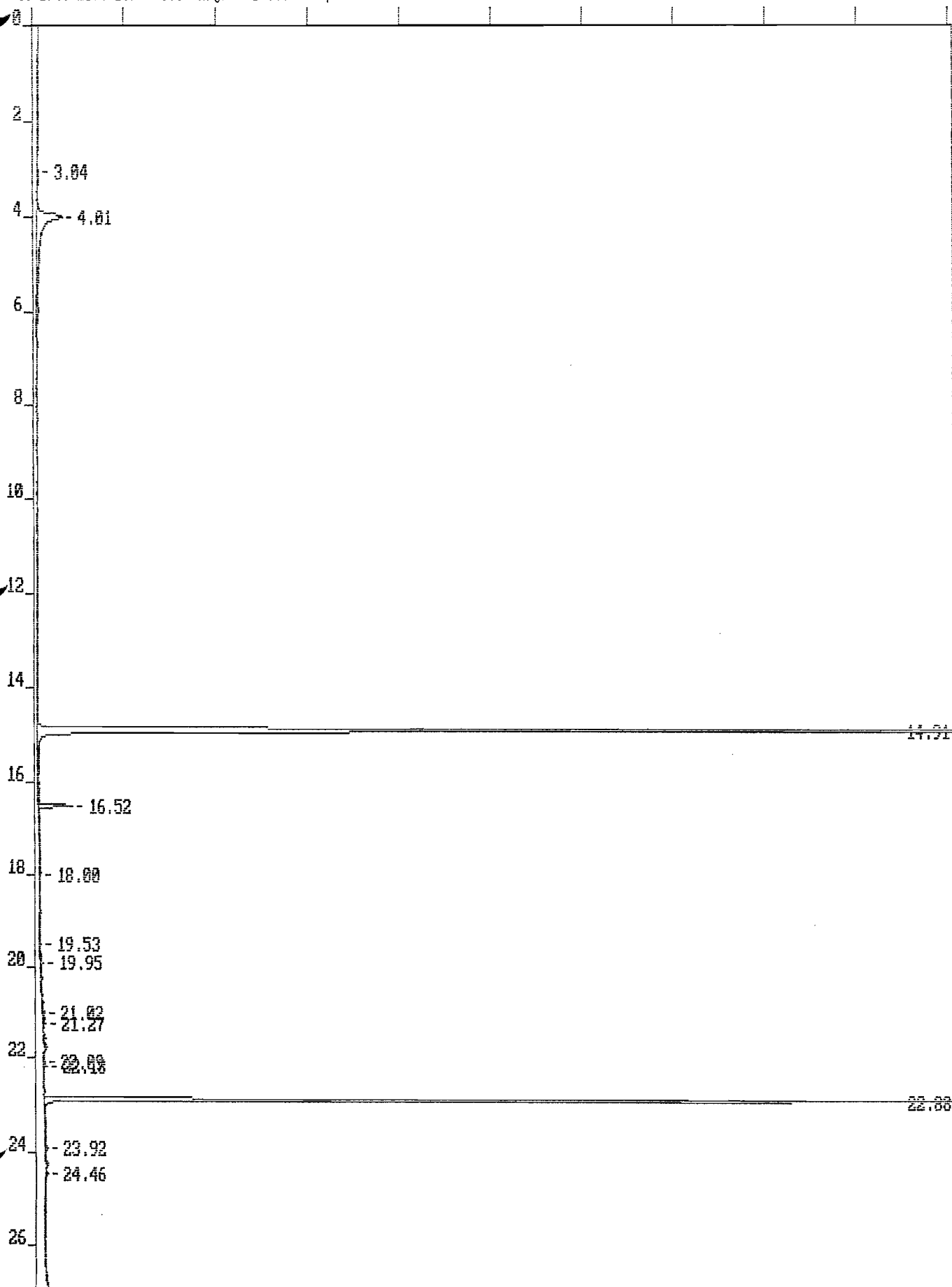
Date: 10/10/01

File=C:\CP\DATA1\20280B.39R Date printed=10-09-2001 Time= 04:49:20

Sample Name=BLK2011

01280A208400,8401

to 27.0 min. Low Y=0.03 High Y=15.03 mv Span=15.0



Sample Name: BLK2011

Batch: 01280A20

Date Taken: Oct 9, 2001 04:46:36

Raw File: C:\CP\DATA1\20280B.39R

ea File: C:\CP\DATA1\20280B.39A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 62):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.129	4.129	VINYL CHLORIDE	0.0000	0	0
6.706	6.706	1,1-DICHLOROETHENE	0.0000	0	0
8.646	8.646	TRANS-1,2-DICHLOROET	0.0000	0	0
9.056	9.056	METHYL T-BUTYL ETHER	0.0000	0	0
10.762	10.762	CIS-1,2-DICHLOROETHE	0.0000	0	0
13.733	13.733	1,1-DICHLOROPROPENE	0.0000	0	0
14.292	14.292	BENZENE	0.0000	0	0
14.913	14.904	ISTD-FBENZENE	1.0000	70766	15289
15.742	15.742	TRICHLOROETHENE	0.0000	0	0
16.522	16.516	1-BROMO-2-CHLOROETHA	1.0000	2554	579
16.948	16.948	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.587	17.587	TRANS-1,3-DICHLOROPR	0.0000	0	0
18.000	17.983	TOLUENE	0.0384	220	39
18.819	18.819	TETRACHLOROETHENE	0.0000	0	0
19.534	19.533	CHLORO BENZENE	0.0319	285	33
19.755	19.755	ETHYLBENZENE	0.0000	0	0
19.954	19.947	M,P-XYLENE	0.0656	312	61
20.243	20.243	STYRENE	0.0000	0	0
20.307	20.307	O-XYLENE	0.0000	0	0
20.636	20.636	ISOPROPYLBENZENE	0.0000	0	0
20.825	20.825	BROMOBENZENE	0.0000	0	0
21.020	21.017	N-PROPYLBENZENE	0.0543	109	48
21.086	21.086	2-CHLOROTOLUENE	0.0000	0	0
21.153	21.153	4-CHLOROTOLUENE	0.0000	0	0
21.273	21.270	1,3,5-TRIMETHYLBENZE	0.0442	185	57
21.493	21.493	TERT-BUTYLBENZENE	0.0000	0	0
21.588	21.588	1,2,4-TRIMETHYLBENZE	0.0000	0	0
21.674	21.674	SEC-BUTYLBENZENE	0.0000	0	0
21.726	21.726	1,3-DICHLOROBENZENE	0.0000	0	0
21.785	21.785	1,4-DICHLOROBENZENE	0.0000	0	0
21.828	21.828	P-ISOPROPYLTOLUENE	0.0000	0	0
22.086	22.085	1,2-DICHLOROBENZENE	0.0469	103	36
22.180	22.176	N-BUTYLBENZENE	0.0927	434	66
22.875	22.874	SURR-1B4CB-P	26.9583	52372	24336
23.920	23.915	1,2,4-TRICHLOROBENZE	0.1196	169	44
24.217	24.217	NAPHTHALENE	0.0000	0	0
24.285	24.285	HEXACHLOROBUTADIENE	0.0000	0	0
24.463	24.467	1,2,3-TRICHLOROBENZE	0.1149	201	38

TOTAL XYLENES: 0.0656

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

Surrogate Recovery: BrClBenzene 89.8610 %

Chrom Perfect version 6.07

Reported on 10-09-2001at 04:52:24

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: BLK2011

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280B.39R

Reviewed by:

[Signature]

Verified by:

[Signature]

Date:

10-9-01

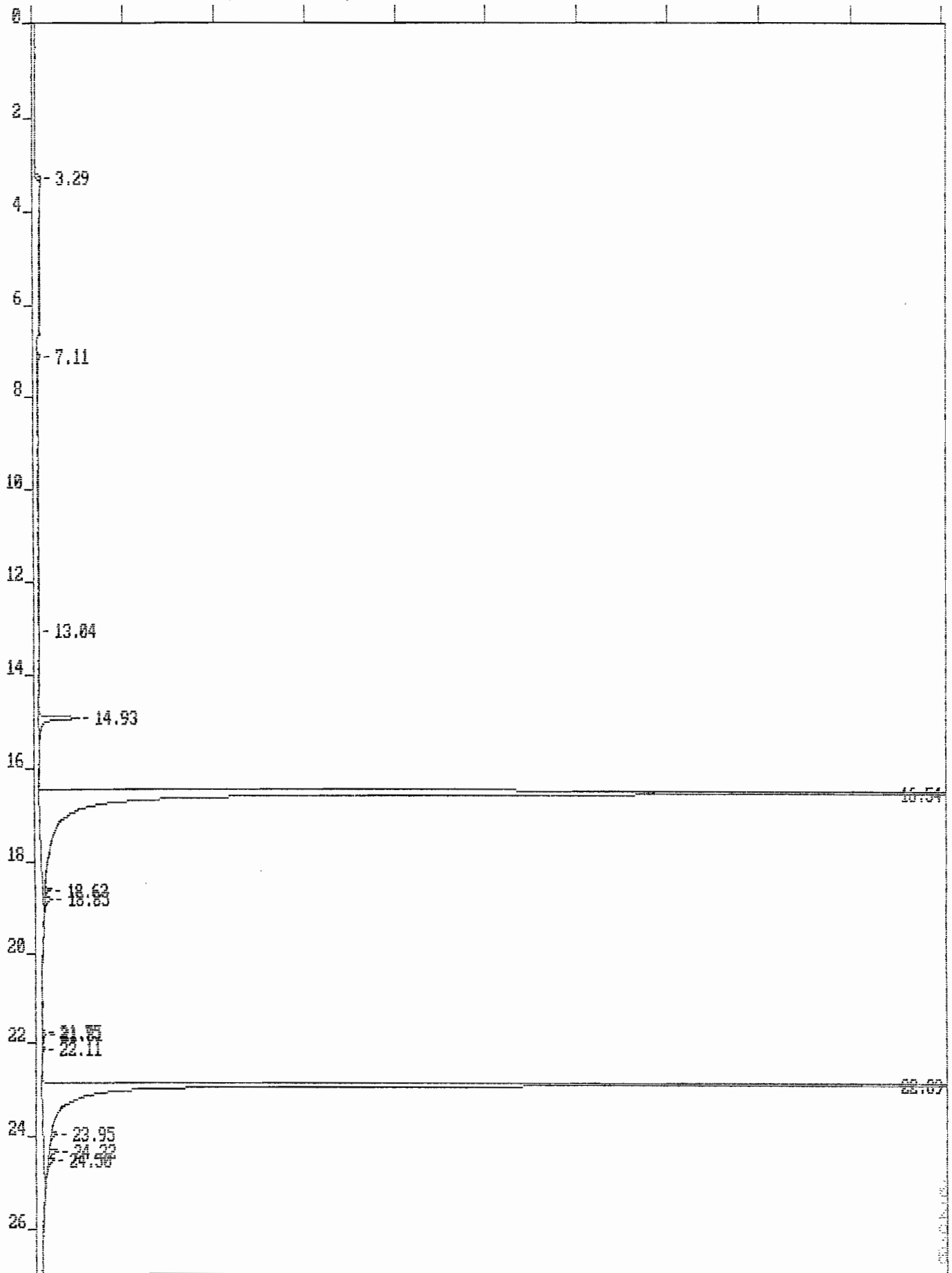
Date:

10/10/01

File=C:\CP\DATA1\20283.03R Date printed=10-10-2001 Time= 06:53:07

Sample Name=BLK2014 01283A208400,8401

0.0 to 27.0 min. Low Y=-0.088 High Y=14.912 mv Span=15.0



Sample Name: BLK2014

Batch: 01283A20

Date Taken: Oct 10, 2001 06:53:02

Raw File: C:\CP\DATA1\20283.03R

Area File: C:\CP\DATA1\20283.03A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 72):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.627	3.627	DICHLORODIFLUOROMETH	0.0000	0	0
3.831	3.831	CHLOROMETHANE	0.0000	0	0
4.155	4.155	VINYL CHLORIDE	0.0000	0	0
4.667	4.667	BROMOMETHANE	0.0000	0	0
4.880	4.880	CHLOROETHANE	0.0000	0	0
5.768	5.768	TRICHLOROFLUOROMETHA	0.0000	0	0
6.739	6.739	1,1-DICHLOROETHENE	0.0000	0	0
7.107	7.084	METHYLENE CHLORIDE	0.0111	558	52
7.267	7.267	TRICHLOROTRIFLUOROET	0.0000	0	0
8.678	8.678	TRANS-1,2-DICHLOROET	0.0000	0	0
9.300	9.300	1,1-DICHLOROETHANE	0.0000	0	0
10.791	10.791	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.165	11.165	BROMOCHLOROMETHANE	0.0000	0	0
11.349	11.349	CHLOROFORM	0.0000	0	0
11.509	11.509	2,2-DICHLOROPROPANE	0.0000	0	0
13.043	12.999	1,2-DICHLOROETHANE	0.0045	200	15
13.211	13.211	1,1,1-TRICHLOROETHAN	0.0000	0	0
13.765	13.765	1,1-DICHLOROPROPENE	0.0000	0	0
14.158	14.158	CARBON TETRACHLORIDE	0.0000	0	0
15.562	15.562	DIBROMOMETHANE	0.0000	0	0
15.666	15.666	1,2-DICHLOROPROPANE	0.0000	0	0
15.763	15.763	TRICHLOROETHENE	0.0000	0	0
15.837	15.837	BROMODICHLOROMETHANE	0.0000	0	0
16.545	16.537	ISTD-1-BR-2-CLETHANE	1.0000	294984	82322
16.968	16.968	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.606	17.606	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.764	17.764	1,1,2-TRICHLOROETHAN	0.0000	0	0
18.072	18.072	1,3-DICHLOROPROPANE	0.0000	0	0
18.338	18.338	DIBROMOCHLOROMETHANE	0.0000	0	0
18.634	18.616	1,2-DIBROMOETHANE	0.0432	623	117
18.849	18.835	TETRACHLOROETHENE	0.0154	885	127
19.478	19.478	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.549	19.549	CHLOROBENZENE	0.0000	0	0
20.016	20.016	BROMOFORM	0.0000	0	0
20.317	20.317	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.444	20.444	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.842	20.842	BROMOBENZENE	0.0000	0	0
21.102	21.102	2-CHLOROTOLUENE	0.0000	0	0
21.169	21.169	4-CHLOROTOLUENE	0.0000	0	0
21.747	21.742	1,3-DICHLOROBENZENE	0.0081	101	40
21.810	21.799	1,4-DICHLOROBENZENE	0.0122	501	68
22.110	22.101	1,2-DICHLOROBENZENE	0.0082	360	41
22.522	22.522	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.894	22.889	SURR-1B4CB-H	28.2037	239911	91053
23.946	23.930	1,2,4-TRICHLOROBENZE	0.0289	568	104
24.317	24.300	HEXACHLOROBTADIENE	0.0389	882	173
24.499	24.483	1,2,3-TRICHLOROBENZE	0.0347	956	115
		TOTAL 1,2-DICHLOROETHENE:	0.0000		

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

Surrogate Recovery: BrClBenzene 94.0122 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 06:54:57

Sample name: BLK2014

Batch: 01283A208400,840

Raw file:

C:\CP\DATA1\20283.03R

Reviewed by:

JS 45

Verified by:

mm46

Date:

10-10-01

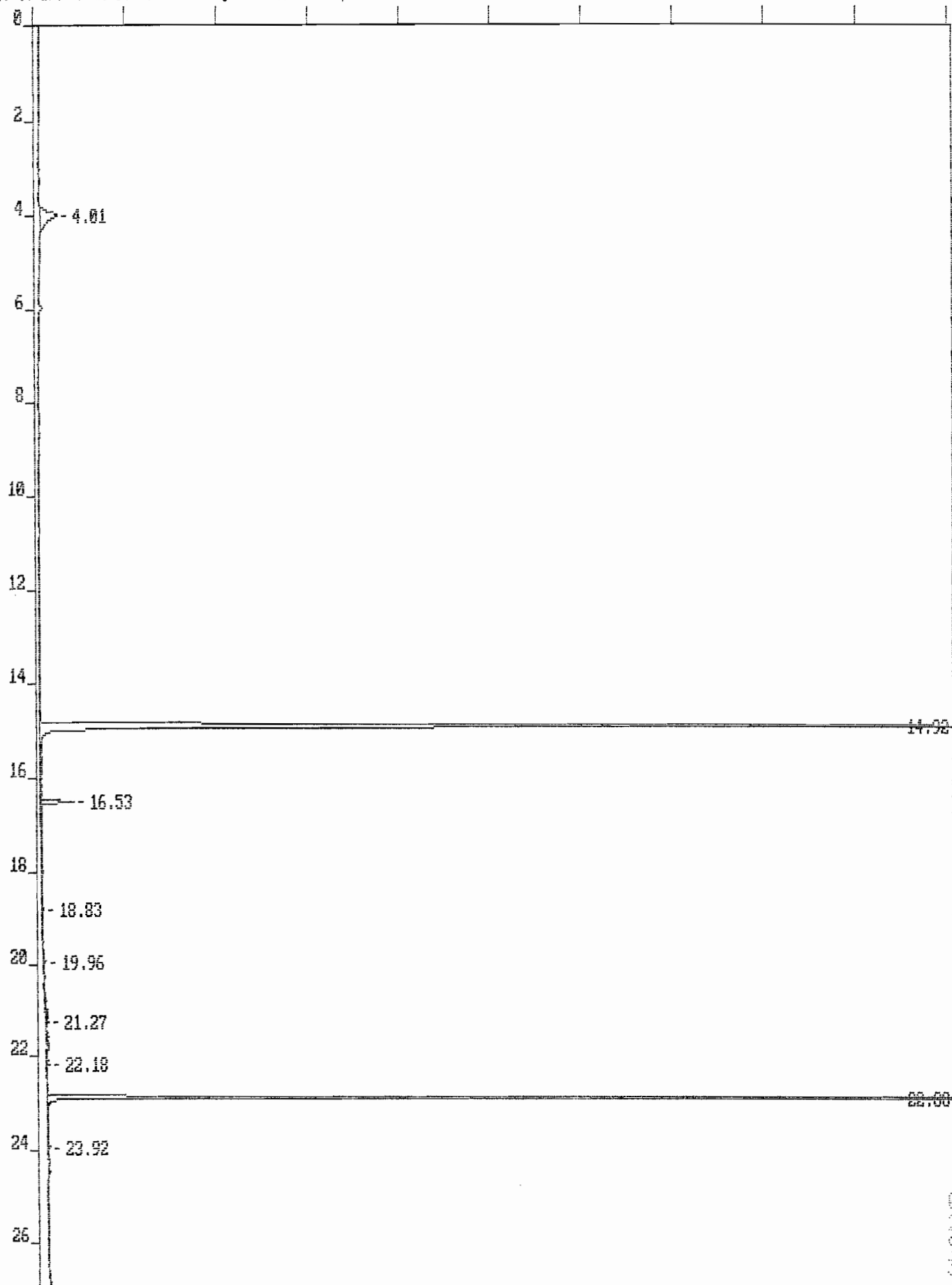
Date:

10/11/01

File=C:\CP\DATA1\20283B.03R Date printed=10-10-2001 Time= 06:55:11

Sample Name=BLK2014 01283A208400,8401

0.0 to 27.0 min. Low Y=0.016 High Y=15.016 mv Span=15.0



Sample Name: BLK2014
 Batch: 01283A20 Date Taken: Oct 10, 2001 06:53:02
 Raw File: C:\CP\DATA1\20283B.03R
 Area File: C:\CP\DATA1\20283B.03A
 Method File: c:\cp\data1\20280B.MET(version 2)
 EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75m x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 115
 Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 66):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.140	4.140	VINYL CHLORIDE	0.0000	0	0
6.722	6.722	1,1-DICHLOROETHENE	0.0000	0	0
8.659	8.659	TRANS-1,2-DICHLOROET	0.0000	0	0
9.068	9.068	METHYL T-BUTYL ETHER	0.0000	0	0
10.775	10.775	CIS-1,2-DICHLOROETHE	0.0000	0	0
13.745	13.745	1,1-DICHLOROPROPENE	0.0000	0	0
14.303	14.303	BENZENE	0.0000	0	0
14.919	14.912	ISTD-FBENZENE	1.0000	70924	15128
15.748	15.748	TRICHLOROETHENE	0.0000	0	0
16.527	16.522	1-BROMO-2-CHLOROETHA	1.0000	2270	547
16.953	16.953	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.592	17.592	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.987	17.987	TOLUENE	0.0000	0	0
18.830	18.821	TETRACHLOROETHENE	0.0854	355	37
19.535	19.535	CHLOROBENZENE	0.0000	0	0
19.757	19.757	ETHYLBENZENE	0.0000	0	0
19.957	19.949	M,P-XYLENE	0.0597	256	55
20.245	20.245	STYRENE	0.0000	0	0
20.308	20.308	O-XYLENE	0.0000	0	0
20.638	20.638	ISOPROPYLBENZENE	0.0000	0	0
20.827	20.827	BROMOBENZENE	0.0000	0	0
21.018	21.018	N-PROPYLBENZENE	0.0000	0	0
21.087	21.087	2-CHLOROTOLUENE	0.0000	0	0
21.155	21.155	4-CHLOROTOLUENE	0.0000	0	0
21.274	21.272	1,3,5-TRIMETHYLBENZE	0.0437	180	56
21.495	21.495	TERT-BUTYLBENZENE	0.0000	0	0
21.590	21.590	1,2,4-TRIMETHYLBENZE	0.0000	0	0
21.675	21.675	SEC-BUTYLBENZENE	0.0000	0	0
21.728	21.728	1,3-DICHLOROBENZENE	0.0000	0	0
21.786	21.786	1,4-DICHLOROBENZENE	0.0000	0	0
21.829	21.829	P-ISOPROPYLTOLUENE	0.0000	0	0
22.087	22.087	1,2-DICHLOROBENZENE	0.0000	0	0
22.181	22.177	N-BUTYLBENZENE	0.0871	164	61
22.879	22.875	SURR-1B4CB-P	27.9562	53851	24971
23.923	23.916	1,2,4-TRICHLOROBENZE	0.1358	192	50
24.218	24.218	NAPHTHALENE	0.0000	0	0
24.285	24.285	HEXACHLOROBUTADIENE	0.0000	0	0
24.468	24.468	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0597

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

Surrogate Recovery: BrClBenzene 93.1872 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 06:58:15

Internal Standard Calculations From ISTDCHK v. 950609.1130

ISTd height for ISTD-FBENZENE is within range.

ISTd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: BLK2014

Batch: 01283A208400,840

Raw file:

C:\CP\DATA1\20283B.03R

Reviewed by: JS

Verified by: mm46

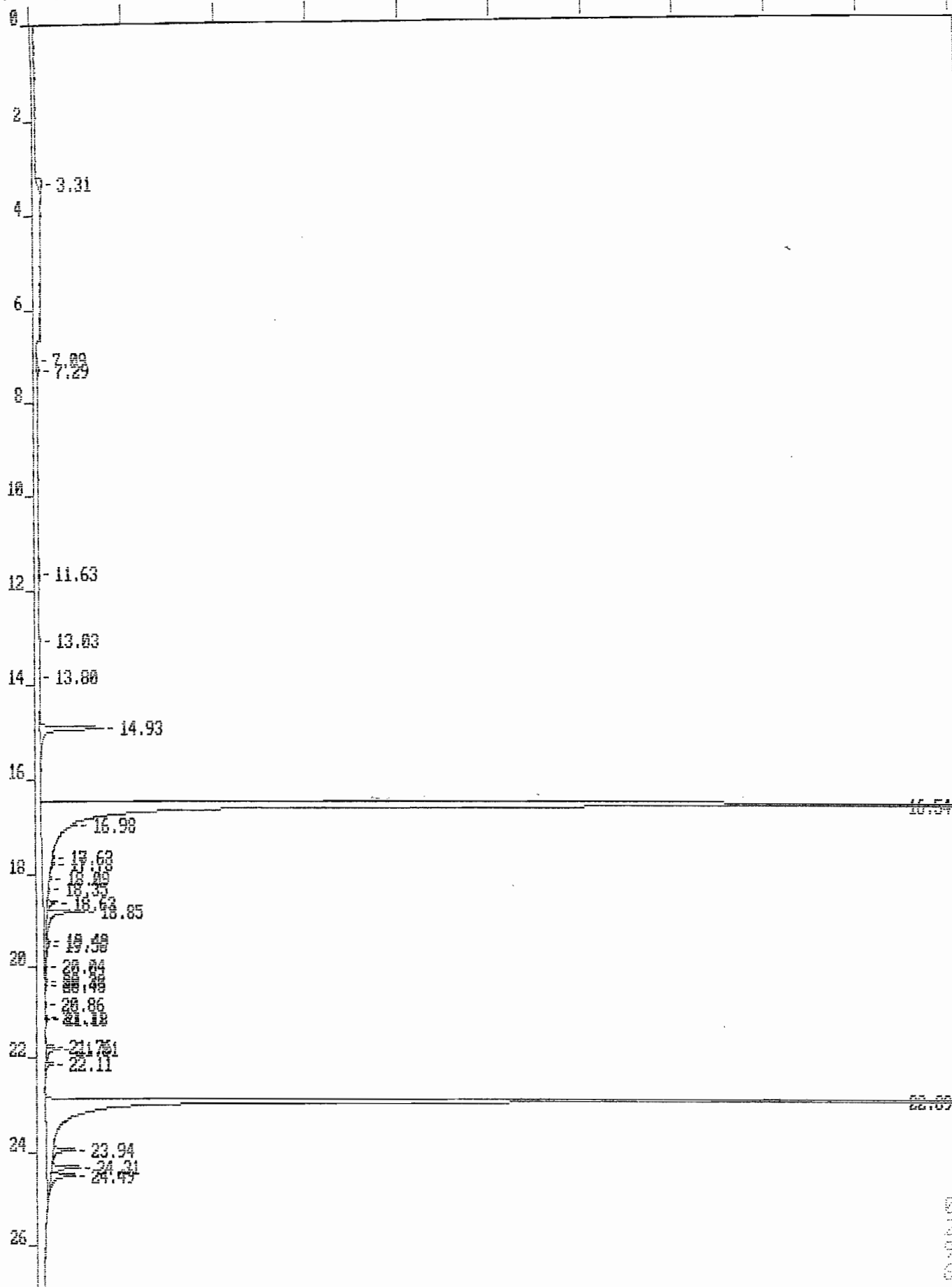
Date: 10-10-01

Date: 10/11/07

File=C:\CP\DATA1\20283.12R Date printed=10-10-2001 Time= 13:21:42

Sample Name=BLK2015 01283A208400,8401

0.0 to 27.0 min. Low Y=-0.088 High Y=14.912 mv Span=15.0



Sample Name: BLK2015

Batch: 01283A20

Date Taken: Oct 10, 2001 13:21:38

Raw File: C:\CP\DATA1\20283.12R

Area File: C:\CP\DATA1\20283.12A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 73):

Ret Time	Expected	Peak Name	Amount *	Peak	Peak
(min)	RT (min)		(ug/L)	Area	Height
3.610	3.610	DICHLORODIFLUOROMETH	0.0000	0	0
3.814	3.814	CHLOROMETHANE	0.0000	0	0
4.137	4.137	VINYL CHLORIDE	0.0000	0	0
4.649	4.649	BROMOMETHANE	0.0000	0	0
4.862	4.862	CHLOROETHANE	0.0000	0	0
5.755	5.755	TRICHLOROFLUOROMETHA	0.0000	0	0
6.730	6.730	1,1-DICHLOROETHENE	0.0000	0	0
7.090	7.076	METHYLENE CHLORIDE	0.0056	135	25
7.290	7.260	TRICHLOROTRIFLUOROET	0.0231	534	44
8.674	8.674	TRANS-1,2-DICHLOROET	0.0000	0	0
9.300	9.300	1,1-DICHLOROETHANE	0.0000	0	0
10.795	10.795	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.161	11.161	BROMOCHLOROMETHANE	0.0000	0	0
11.350	11.350	CHLOROFORM	0.0000	0	0
11.510	11.510	2,2-DICHLOROPROPANE	0.0000	0	0
13.030	13.004	1,2-DICHLOROETHANE	0.0075	152	25
13.217	13.217	1,1,1-TRICHLOROETHAN	0.0000	0	0
13.799	13.770	1,1-DICHLOROPROPENE	0.0054	155	15
14.166	14.166	CARBON TETRACHLORIDE	0.0000	0	0
15.569	15.569	DIBROMOMETHANE	0.0000	0	0
15.673	15.673	1,2-DICHLOROPROPANE	0.0000	0	0
15.770	15.770	TRICHLOROETHENE	0.0000	0	0
15.843	15.843	BROMODICHLOROMETHANE	0.0000	0	0
16.543	16.544	ISTD-1-BR-2-CLETHANE	1.0000	302082	80766
16.976	16.974	CIS-1,3-DICHLOROPROP	0.0166	238	89
17.633	17.612	TRANS-1,3-DICHLOROPR	0.0089	188	45
17.783	17.770	1,1,2-TRICHLOROETHAN	0.0095	315	60
18.089	18.078	1,3-DICHLOROPROPANE	0.0083	191	44
18.354	18.343	DIBROMOCHLOROMETHANE	0.0078	157	32
18.634	18.622	1,2-DIBROMOETHANE	0.0616	816	164
18.848	18.840	TETRACHLOROETHENE	0.0756	3188	613
19.492	19.484	1,1,1,2-TETRACHLOROE	0.0076	180	63
19.557	19.555	CHLOROBENZENE	0.0154	473	58
20.036	20.022	BROMOFORM	0.0087	132	22
20.326	20.322	1,1,2,2-TETRACHLOROE	0.0072	138	36
20.452	20.448	1,2,3-TRICHLOROPROPA	0.0077	186	31
20.856	20.846	BROMOBENZENE	0.0125	126	26
21.108	21.106	2-CHLOROTOLUENE	0.0122	102	37
21.182	21.173	4-CHLOROTOLUENE	0.0183	216	60
21.755	21.746	1,3-DICHLOROBENZENE	0.0268	319	131
21.810	21.803	1,4-DICHLOROBENZENE	0.0428	1321	234
22.112	22.105	1,2-DICHLOROBENZENE	0.0280	744	136
22.526	22.526	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.894	22.894	SURR-1B4CB-H	28.0639	233432	88890
23.941	23.935	1,2,4-TRICHLOROBENZE	0.1053	1907	374
24.313	24.305	HEXACHLOROBUTADIENE	0.1110	2229	485
24.494	24.488	1,2,3-TRICHLOROBENZE	0.1276	2972	417
		TOTAL 1,2-DICHLOROETHENE:	0.0000		

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

Surrogate Recovery: BrClBenzene 93.5464 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 13:23:33

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Sample name: BLK2015

Batch: 01283A208400,840

Raw file: C:\CP\DATA1\20283.12R

Reviewed by: MM4694

Verified by: VMM469

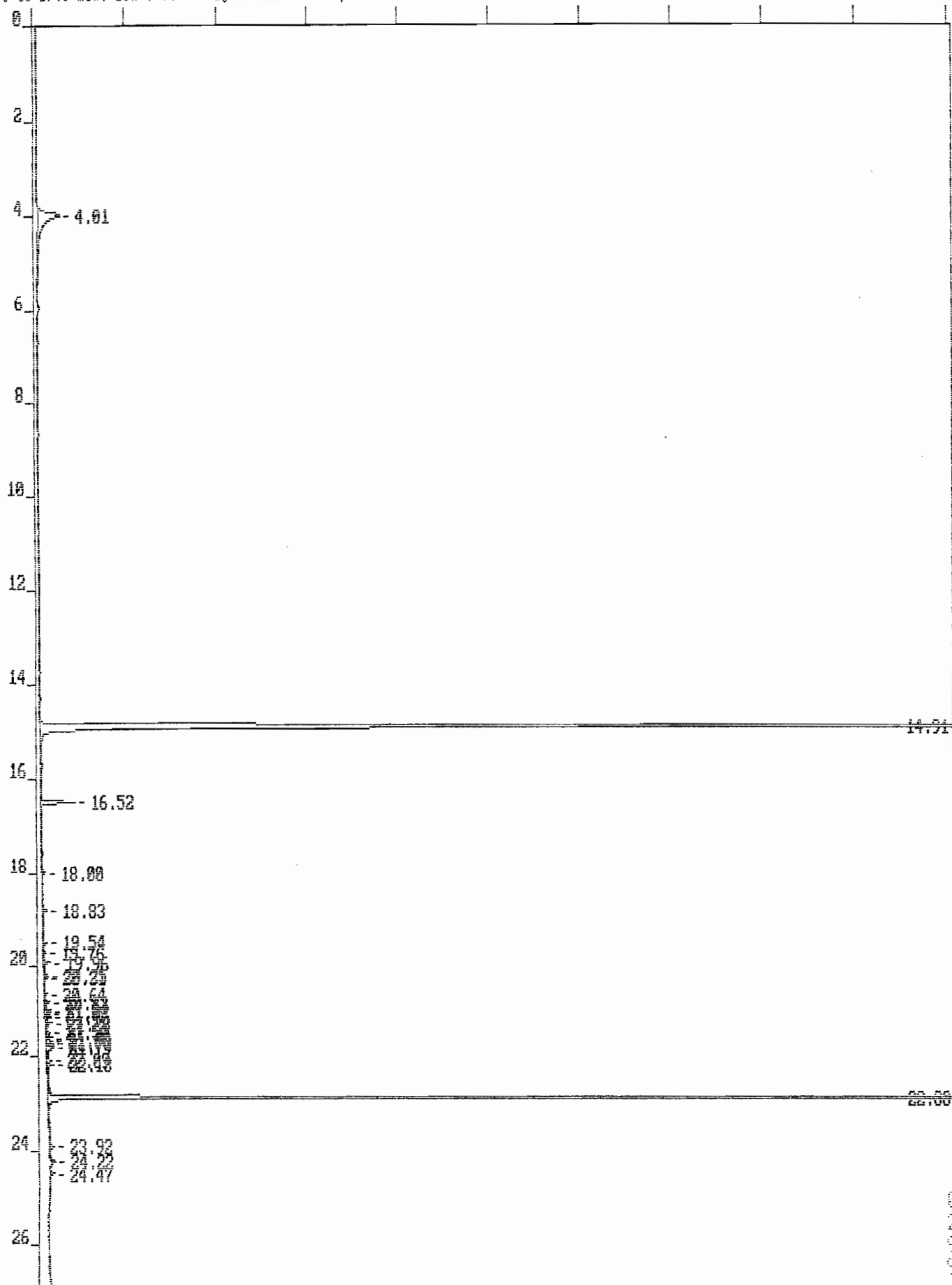
Date: 10/10/01

Date: 10/11/01

File=C:\CP\DATA1\20283B.12R Date printed=10-10-2001 Time= 13:23:47

Sample Name=BLK2015 01283A208400,8401

0.0 to 27.0 min. Low Y=0.006 High Y=15.006 mv Span=15.0



Sample Name: BLK2015

Batch: 01283A20

Date Taken: Oct 10, 2001 13:21:38

Raw File: C:\CP\DATA1\20283B.12R

Area File: C:\CP\DATA1\20283B.12A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 67):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.120	4.120	VINYL CHLORIDE	0.0000	0	0
6.712	6.712	1,1-DICHLOROETHENE	0.0000	0	0
8.657	8.657	TRANS-1,2-DICHLOROET	0.0000	0	0
9.066	9.066	METHYL T-BUTYL ETHER	0.0000	0	0
10.776	10.776	CIS-1,2-DICHLOROETHE	0.0000	0	0
13.753	13.753	1,1-DICHLOROPROPENE	0.0000	0	0
14.311	14.311	BENZENE	0.0000	0	0
14.915	14.920	ISTD-FBENZENE	1.0000	69965	15348
15.755	15.755	TRICHLOROETHENE	0.0000	0	0
16.525	16.527	1-BROMO-2-CHLOROETHA	1.0000	2292	560
16.959	16.959	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.597	17.597	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.996	17.992	TOLUENE	0.0597	235	62
18.827	18.826	TETRACHLOROETHENE	0.1675	192	73
19.540	19.541	CHLOROBENZENE	0.0582	214	61
19.761	19.762	ETHYLBENZENE	0.0591	188	52
19.959	19.954	M,P-XYLENE	0.1219	478	115
20.249	20.249	STYRENE	0.0599	162	71
20.314	20.313	O-XYLENE	0.0624	313	57
20.641	20.642	ISOPROPYLBENZENE	0.0803	273	57
20.830	20.831	BROMOBENZENE	0.0711	351	81
21.021	21.022	N-PROPYLBENZENE	0.1204	268	106
21.094	21.091	2-CHLOROTOLUENE	0.0835	213	82
21.157	21.159	4-CHLOROTOLUENE	0.0912	294	97
21.276	21.275	1,3,5-TRIMETHYLBENZE	0.0915	538	119
21.497	21.498	TERT-BUTYLBENZENE	0.1125	283	78
21.596	21.594	1,2,4-TRIMETHYLBENZE	0.1053	280	106
21.680	21.679	SEC-BUTYLBENZENE	0.1398	245	98
21.731	21.732	1,3-DICHLOROBENZENE	0.1264	287	124
21.788	21.790	1,4-DICHLOROBENZENE	0.1246	745	123
21.833	21.833	P-ISOPROPYLTOLUENE	0.0000	0	0
22.089	22.091	1,2-DICHLOROBENZENE	0.1098	262	83
22.183	22.181	N-BUTYLBENZENE	0.1665	878	118
22.878	22.879	SURR-1B4CB-P	27.7663	54817	25162
23.920	23.920	1,2,4-TRICHLOROBENZE	0.2016	214	75
24.223	24.223	NAPHTHALENE	0.1538	168	72
24.290	24.290	HEXACHLOROBUTADIENE	0.0000	0	0
24.471	24.474	1,2,3-TRICHLOROBENZE	0.2101	269	71

TOTAL XYLENES: 0.1843

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

Surrogate Recovery: BrClBenzene 92.5542 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 13:26:50

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: BLK2015

Batch: 01283A208400,840

Raw file: C:\CP\DATA1\20283B.12R

Reviewed by: MMB994

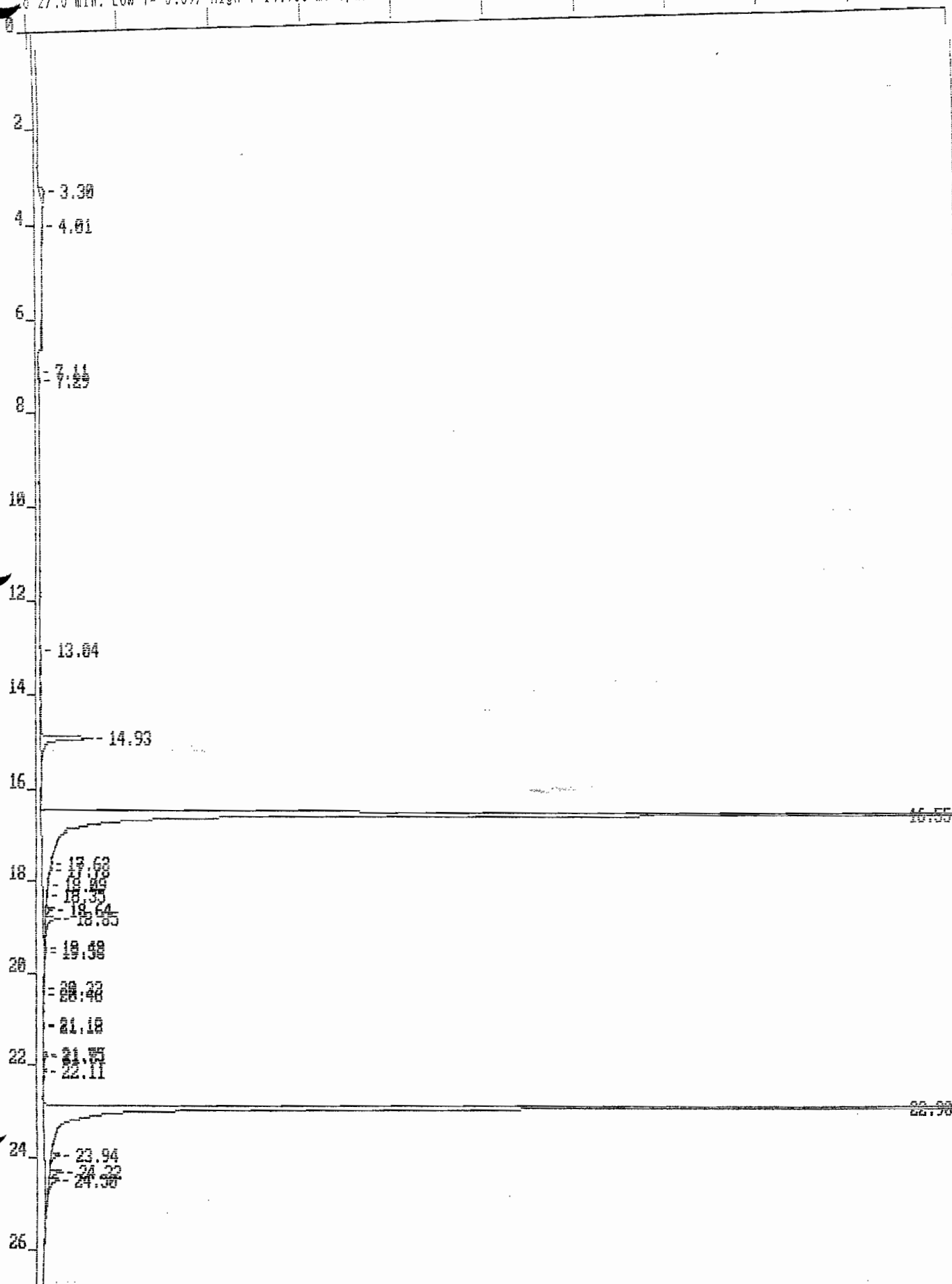
Verified by: Vmm46

Date: 10/10/01

Date: 10/11/01

File=C:\CP\DATA1\20283.24R Date printed=10-10-2001 Time= 21:19:33

File Name=BLK2016 01283A208400.8401
27.0 min. Low Y=-0.097 High Y=14.903 mv Span=15.0



Sample Name: BLK2016

Batch: 01283A20

Date Taken: Oct 10, 2001 21:19:23

File: C:\CP\DATA1\20283.24R

Sea File: C:\CP\DATA1\20283.24A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 74):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.612	3.612	DICHLORODIFLUOROMETH	0.0000	0	0
3.818	3.818	CHLOROMETHANE	0.0000	0	0
4.007	4.141	VINYL CHLORIDE	0.0073	107	14
4.652	4.652	BROMOMETHANE	0.0000	0	0
4.864	4.864	CHLOROETHANE	0.0000	0	0
5.760	5.760	TRICHLOROFLUOROMETHA	0.0000	0	0
6.732	6.732	1,1-DICHLOROETHENE	0.0000	0	0
7.106	7.077	METHYLENE CHLORIDE	0.0043	73	18
7.293	7.259	TRICHLOROTRIFLUOROET	0.0146	239	26
8.675	8.675	TRANS-1,2-DICHLOROET	0.0000	0	0
9.300	9.300	1,1-DICHLOROETHANE	0.0000	0	0
10.793	10.793	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.168	11.168	BROMOCHLOROMETHANE	0.0000	0	0
11.352	11.352	CHLOROFORM	0.0000	0	0
11.512	11.512	2,2-DICHLOROPROPANE	0.0000	0	0
13.036	13.006	1,2-DICHLOROETHANE	0.0052	78	16
13.217	13.217	1,1,1-TRICHLOROETHAN	0.0000	0	0
13.766	13.766	1,1-DICHLOROPROPENE	0.0000	0	0
14.168	14.168	CARBON TETRACHLORIDE	0.0000	0	0
15.570	15.570	DIBROMOMETHANE	0.0000	0	0
15.674	15.674	1,2-DICHLOROPROPANE	0.0000	0	0
15.771	15.771	TRICHLOROETHENE	0.0000	0	0
15.845	15.845	BROMODICHLOROMETHANE	0.0000	0	0
16.547	16.546	ISTD-1-BR-2-CLETHANE	1.0000	267649	73881
16.976	16.976	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.630	17.614	TRANS-1,3-DICHLOROPR	0.0056	128	26
17.780	17.772	1,1,2-TRICHLOROETHAN	0.0068	205	39
18.092	18.080	1,3-DICHLOROPROPANE	0.0051	134	24
18.354	18.345	DIBROMOCHLOROMETHANE	0.0052	88	19
18.637	18.623	1,2-DIBROMOETHANE	0.0518	644	126
18.851	18.842	TETRACHLOROETHENE	0.0341	1565	253
19.493	19.485	1,1,1,2-TETRACHLOROE	0.0042	102	32
19.561	19.556	CHLOROBENZENE	0.0087	192	30
20.022	20.022	BROMOFORM	0.0000	0	0
20.325	20.323	1,1,2,2-TETRACHLOROE	0.0039	70	18
20.462	20.450	1,2,3-TRICHLOROPROPA	0.0037	135	14
20.847	20.847	BROMOBENZENE	0.0000	0	0
21.115	21.107	2-CHLOROTOLUENE	0.0067	50	19
21.177	21.175	4-CHLOROTOLUENE	0.0092	175	28
21.751	21.747	1,3-DICHLOROBENZENE	0.0113	130	50
21.814	21.805	1,4-DICHLOROBENZENE	0.0155	446	78
22.114	22.106	1,2-DICHLOROBENZENE	0.0115	330	51
22.527	22.527	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.895	22.895	SURR-1B4CB-H	27.9362	210384	80943
23.945	23.936	1,2,4-TRICHLOROBENZE	0.0489	851	159
24.316	24.306	HEXACHLOROBUTADIENE	0.0602	1151	240
24.497	24.489	1,2,3-TRICHLOROBENZE	0.0612	1413	183
TOTAL 1,2-DICHLOROETHENE:			0.0000		

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

Surrogate Recovery: BrClBenzene 93.1208 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 21:21:24

Sample name: BLK2016

Batch: 01283A208400,840

Raw file: C:\CP\DATA1\20283.24R

Reviewed by: *[Signature]*

Verified by: *mm469*

m

Date: 10/11/01

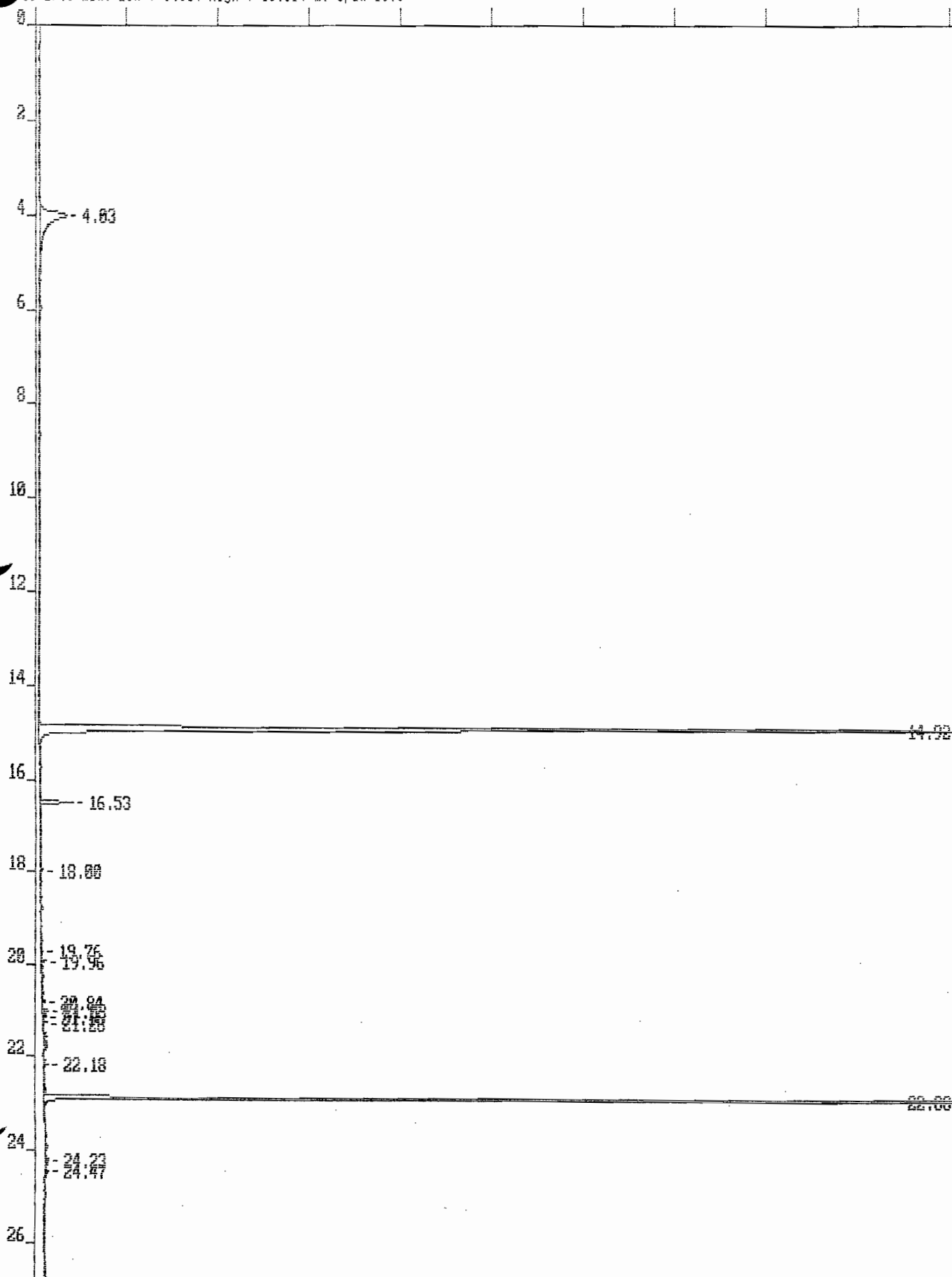
Date: 10/11/01

File=C:\CP\DATA1\20283B.24R Date printed=10-10-2001 Time= 21:21:37

File Name=BLK2016

01283A208400,8401

to 27.0 min. Low Y=0.014 High Y=15.014 mv Span=15.0



Sample Name: BLK2016

Batch: 01283A20

Date Taken: Oct 10, 2001 21:19:28

File: C:\CP\DATA1\20283B.24R

File: C:\CP\DATA1\20283B.24A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

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

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 68):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.126	4.126	VINYL CHLORIDE	0.0000	0	0
6.714	6.714	1,1-DICHLOROETHENE	0.0000	0	0
8.658	8.658	TRANS-1,2-DICHLOROET	0.0000	0	0
9.063	9.063	METHYL T-BUTYL ETHER	0.0000	0	0
10.776	10.776	CIS-1,2-DICHLOROETHE	0.0000	0	0
13.753	13.753	1,1-DICHLOROPROPENE	0.0000	0	0
14.311	14.311	BENZENE	0.0000	0	0
14.920	14.921	ISTD-FBENZENE	1.0000	69047	15144
15.756	15.756	TRICHLOROETHENE	0.0000	0	0
16.531	16.530	1-BROMO-2-CHLOROETHA	1.0000	1856	548
16.961	16.961	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.599	17.599	TRANS-1,3-DICHLOROPR	0.0000	0	0
18.004	17.995	TOLUENE	0.0412	112	42
18.828	18.828	TETRACHLOROETHENE	0.0000	0	0
19.542	19.542	CHLOROBENZENE	0.0000	0	0
19.761	19.763	ETHYLBENZENE	0.0419	177	37
19.960	19.956	M,P-XYLENE	0.0851	371	79
20.251	20.251	STYRENE	0.0000	0	0
20.314	20.314	O-XYLENE	0.0000	0	0
20.644	20.644	ISOPROPYLBENZENE	0.0000	0	0
20.836	20.833	BROMOBENZENE	0.0420	153	47
21.029	21.024	N-PROPYLBENZENE	0.1061	254	92
21.093	21.093	2-CHLOROTOLUENE	0.0000	0	0
21.161	21.160	4-CHLOROTOLUENE	0.0607	197	63
21.280	21.277	1,3,5-TRIMETHYLBENZE	0.0627	248	81
21.500	21.500	TERT-BUTYLBENZENE	0.0000	0	0
21.595	21.595	1,2,4-TRIMETHYLBENZE	0.0000	0	0
21.680	21.680	SEC-BUTYLBENZENE	0.0000	0	0
21.733	21.733	1,3-DICHLOROBENZENE	0.0000	0	0
21.791	21.791	1,4-DICHLOROBENZENE	0.0000	0	0
21.834	21.834	P-ISOPROPYLTOLUENE	0.0000	0	0
22.092	22.092	1,2-DICHLOROBENZENE	0.0000	0	0
22.184	22.182	N-BUTYLBENZENE	0.0988	291	69
22.880	22.880	SURR-1B4CB-P	27.3087	52722	24419
23.921	23.921	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.233	24.223	NAPHTHALENE	0.1334	339	62
24.291	24.291	HEXACHLOROBUTADIENE	0.0000	0	0
24.467	24.474	1,2,3-TRICHLOROBENZE	0.1383	233	46

TOTAL XYLENES: 0.0851

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

Surrogate Recovery: BrClBenzene 91.0290 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 21:24:40

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: BLK2016

Batch: 01283A208400,840

Raw file: C:\CP\DATA1\20283B.24R

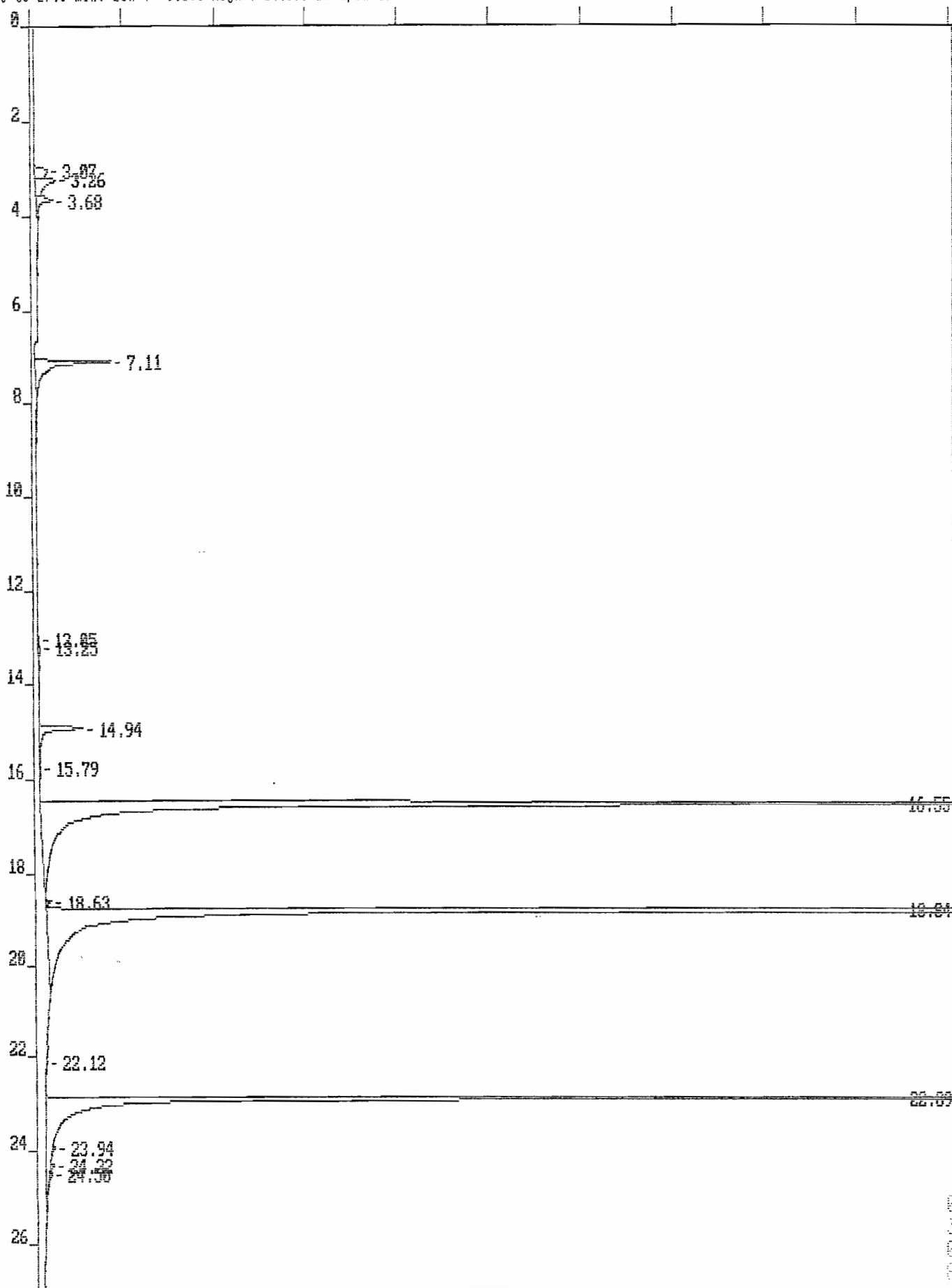
Reviewed by: mm4g

Verified by: mm4g

W Date: 10/11/01

Date: 10/11/01

File=C:\CP\DATA1\20283.07R Date printed=10-10-2001 Time= 09:32:33
Sample Name=3699802 01283A201127,8404,8400,8401
0.0 to 27.0 min. Low Y=-0.105 High Y=14.895 mv Span=15.0



Sample Name: 3699802

Batch: 01283A20

Date Taken: Oct 10, 2001 09:31:38

Raw File: C:\CP\DATA1\20283.07R

Area File: C:\CP\DATA1\20283.07A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 100 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 72):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.677	3.627	DICHLORODIFLUOROMETH	32.5716	2731	272
3.831	3.831	CHLOROMETHANE	0.0000	0	0
4.155	4.155	VINYL CHLORIDE	0.0000	0	0
4.667	4.667	BROMOMETHANE	0.0000	0	0
4.880	4.880	CHLOROETHANE	0.0000	0	0
5.768	5.768	TRICHLOROFLUOROMETHA	0.0000	0	0
6.739	6.739	1,1-DICHLOROETHENE	0.0000	0	0
7.111	7.084	METHYLENE CHLORIDE	29.4194	9651	1246
7.267	7.267	TRICHLOROTRIFLUOROET	0.0000	0	0
8.678	8.678	TRANS-1,2-DICHLOROET	0.0000	0	0
9.300	9.300	1,1-DICHLOROETHANE	0.0000	0	0
10.791	10.791	CIS-1,2-DICHLOROETHE	0.0000	0	0
11.165	11.165	BROMOCHLOROMETHANE	0.0000	0	0
11.349	11.349	CHLOROFORM	0.0000	0	0
11.509	11.509	2,2-DICHLOROPROPANE	0.0000	0	0
13.049	12.999	1,2-DICHLOROETHANE	0.5284	99	16
13.247	13.211	1,1,1-TRICHLOROETHAN	0.9049	484	29
13.765	13.765	1,1-DICHLOROPROPENE	0.0000	0	0
14.158	14.158	CARBON TETRACHLORIDE	0.0000	0	0
15.562	15.562	DIBROMOMETHANE	0.0000	0	0
15.666	15.666	1,2-DICHLOROPROPANE	0.0000	0	0
15.790	15.763	TRICHLOROETHENE	0.3737	136	21
15.837	15.837	BROMODICHLOROMETHANE	0.0000	0	0
16.547	16.537	ISTD-1-BR-2-CLETHANE	1.0000	269490	74992
16.968	16.968	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.606	17.606	TRANS-1,3-DICHLOROPR	0.0000	0	0
17.764	17.764	1,1,2-TRICHLOROETHAN	0.0000	0	0
18.072	18.072	1,3-DICHLOROPROPANE	0.0000	0	0
18.338	18.338	DIBROMOCHLOROMETHANE	0.0000	0	0
18.633	18.616	1,2-DIBROMOETHANE	4.2638	468	106
18.840	18.835	TETRACHLOROETHENE	4044.5718	789561	304660
19.478	19.478	1,1,1,2-TETRACHLOROE	0.0000	0	0
19.549	19.549	CHLOROBENZENE	0.0000	0	0
20.016	20.016	BROMOFORM	0.0000	0	0
20.317	20.317	1,1,2,2-TETRACHLOROE	0.0000	0	0
20.444	20.444	1,2,3-TRICHLOROPROPA	0.0000	0	0
20.842	20.842	BROMOBENZENE	0.0000	0	0
21.102	21.102	2-CHLOROTOLUENE	0.0000	0	0
21.169	21.169	4-CHLOROTOLUENE	0.0000	0	0
21.742	21.742	1,3-DICHLOROBENZENE	0.0000	0	0
21.799	21.799	1,4-DICHLOROBENZENE	0.0000	0	0
22.115	22.101	1,2-DICHLOROBENZENE	0.3867	126	17
22.522	22.522	1,2-DIBROMO-3-CHLORO	0.0000	0	0
22.894	22.889	SURR-1B4CB-H	2749.9648	212783	80876
23.945	23.930	1,2,4-TRICHLOROBENZE	1.6249	318	53
24.315	24.300	HEXACHLOROBUTADIENE	1.8127	372	73
24.498	24.483	1,2,3-TRICHLOROBENZE	1.6360	428	50
		TOTAL 1,2-DICHLOROETHENE:	0.0000		

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

Surrogate Recovery: BrClBenzene 91.6655 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 09:34:23

01283A20

Sample name: 3699802

Batch: 01283A201127,840

Raw file: C:\CP\DATA1\20283.07R

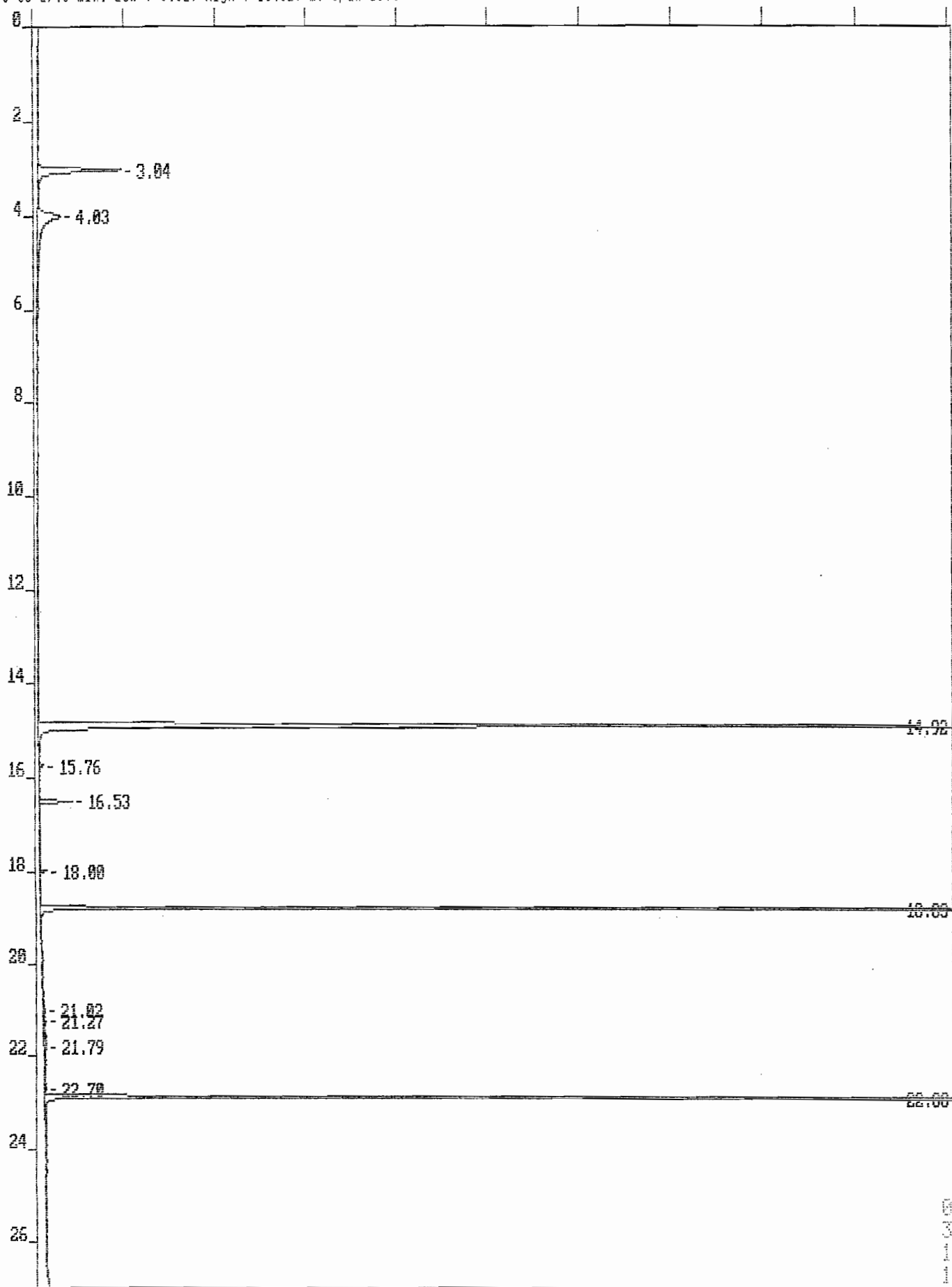
Reviewed by: *[Signature]*

Verified by: *mmm49*

Date: *10/10/01*

Date: *10/10/01*

File=C:\CP\DATA1\202838.07R Date printed=10-10-2001 Time= 09:34:37
Sample Name=3699802 01283A201127,8404,8400,8401
0.0 to 27.0 min. Low Y=0.029 High Y=15.029 mv Span=15.0



Sample Name: 3699802

Batch: 01283A20

Date Taken: Oct 10, 2001 09:31:38

Raw File: C:\CP\DATA1\20283B.07R

Area File: C:\CP\DATA1\20283B.07A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 100 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\20280.CAL(version 66):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.140	4.140	VINYL CHLORIDE	0.0000	0	0
6.722	6.722	1,1-DICHLOROETHENE	0.0000	0	0
8.659	8.659	TRANS-1,2-DICHLOROET	0.0000	0	0
9.068	9.068	METHYL T-BUTYL ETHER	0.0000	0	0
10.775	10.775	CIS-1,2-DICHLOROETHE	0.0000	0	0
13.745	13.745	1,1-DICHLOROPROPENE	0.0000	0	0
14.303	14.303	BENZENE	0.0000	0	0
14.922	14.912	ISTD-FBENZENE	1.0000	70013	15312
15.760	15.748	TRICHLOROETHENE	10.8542	313	70
16.529	16.522	1-BROMO-2-CHLOROETHA	1.0000	1994	546
16.953	16.953	CIS-1,3-DICHLOROPROP	0.0000	0	0
17.592	17.592	TRANS-1,3-DICHLOROPR	0.0000	0	0
18.000	17.987	TOLUENE	11.1066	505	114
18.826	18.821	TETRACHLOROETHENE	4087.1873	41298	17763
19.535	19.535	CHLOROBENZENE	0.0000	0	0
19.757	19.757	ETHYLBENZENE	0.0000	0	0
19.949	19.949	M,P-XYLENE	0.0000	0	0
20.245	20.245	STYRENE	0.0000	0	0
20.308	20.308	O-XYLENE	0.0000	0	0
20.638	20.638	ISOPROPYLBENZENE	0.0000	0	0
20.827	20.827	BROMOBENZENE	0.0000	0	0
21.023	21.018	N-PROPYLBENZENE	4.2039	174	37
21.087	21.087	2-CHLOROTOLUENE	0.0000	0	0
21.155	21.155	4-CHLOROTOLUENE	0.0000	0	0
21.271	21.272	1,3,5-TRIMETHYLBENZE	3.4621	408	45
21.495	21.495	TERT-BUTYLBENZENE	0.0000	0	0
21.590	21.590	1,2,4-TRIMETHYLBENZE	0.0000	0	0
21.675	21.675	SEC-BUTYLBENZENE	0.0000	0	0
21.728	21.728	1,3-DICHLOROBENZENE	0.0000	0	0
21.792	21.786	1,4-DICHLOROBENZENE	4.3130	441	42
21.829	21.829	P-ISOPROPYLTOLUENE	0.0000	0	0
22.087	22.087	1,2-DICHLOROBENZENE	0.0000	0	0
22.177	22.177	N-BUTYLBENZENE	0.0000	0	0
22.878	22.875	SURR-1B4CB-P	2701.1333	53274	24421
23.916	23.916	1,2,4-TRICHLOROBENZE	0.0000	0	0
24.218	24.218	NAPHTHALENE	0.0000	0	0
24.285	24.285	HEXACHLOROBUTADIENE	0.0000	0	0
24.468	24.468	1,2,3-TRICHLOROBENZE	0.0000	0	0

TOTAL XYLENES: 0.0000

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

Surrogate Recovery: BrClBenzene 90.0378 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 09:37:41

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699802

Batch: 01283A201127,840

Raw file:

C:\CP\DATA1\20283B.07R

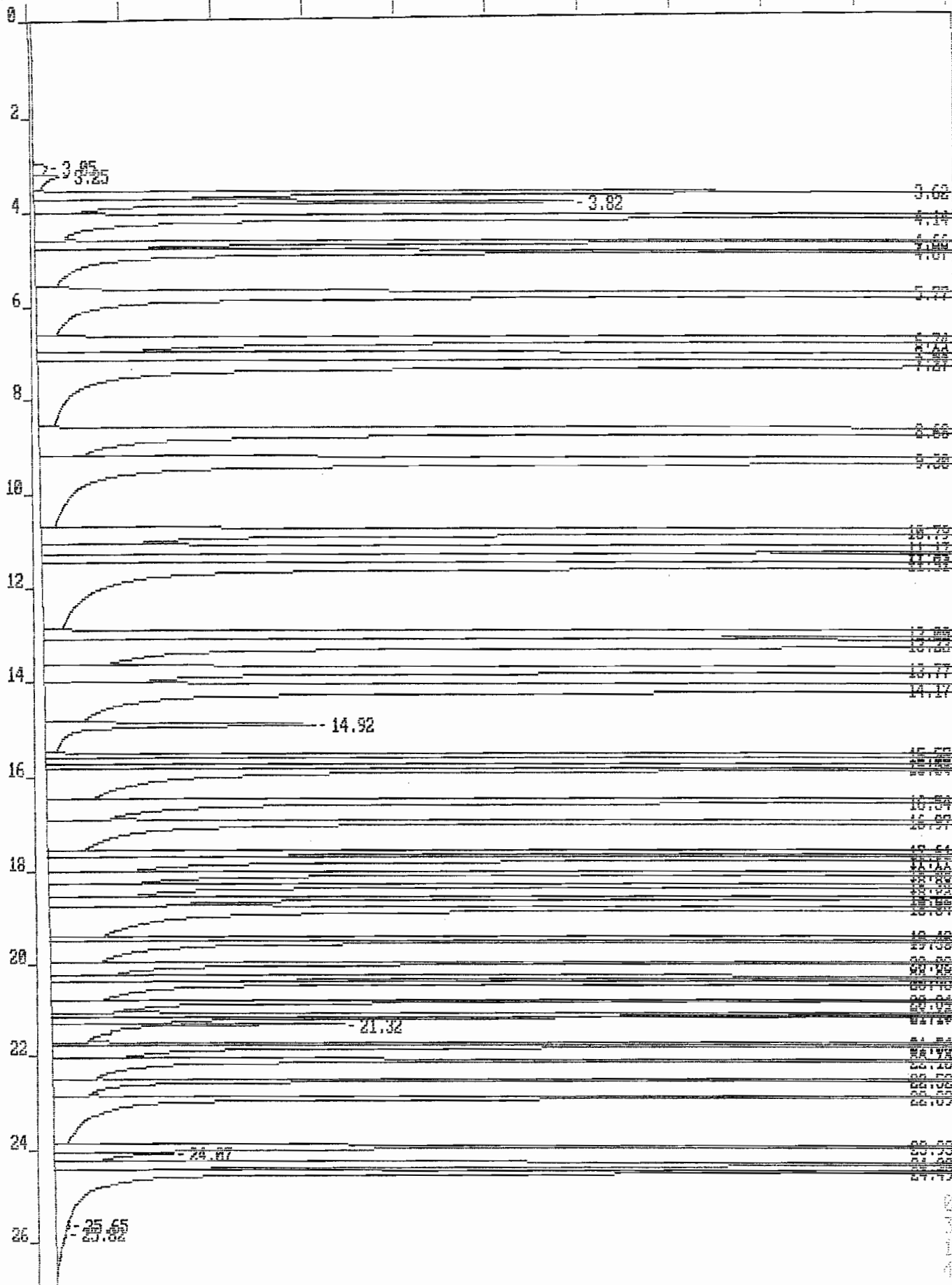
Reviewed by: MMB904

Verified by: MM49

Date: 10/10/01

Date: 10/11/01

File=C:\CP\DATA1\20283.08R Date printed=10-10-2001 Time= 10:13:52
 Sample Name=3699802MS 01283A208400,8401
 0.0 to 27.0 min. Low Y=-0.081 High Y=14.919 mv Span=15.0



Sample Name: 3699802MS

Batch: 01283A20

Date Taken: Oct 10, 2001 10:13:47

Raw File: C:\CP\DATA1\20283.08R

Area File: C:\CP\DATA1\20283.08A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 100 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 72):

Ret Time	Expected	Peak Name	Amount *	Peak	Peak
(min)	RT (min)		(ug/L)	Area	Height
3.620	3.627	DICHLORODIFLUOROMETH	1431.1605	76485	14916
3.821	3.831	CHLOROMETHANE	1141.6970	53547	8791
4.138	4.155	VINYL CHLORIDE	1572.5934	199288	38084
4.659	4.667	BROMOMETHANE	1536.7974	95375	22495
4.873	4.880	CHLOROETHANE	1188.6617	139916	25883
5.765	5.768	TRICHLOROFLUOROMETHA	1449.5579	258878	27251
6.736	6.739	1,1-DICHLOROETHENE	1822.1987	349632	65898
7.083	7.084	METHYLENE CHLORIDE	1706.6204	447042	90329
7.266	7.267	TRICHLOROTRIFLUOROET	1465.4816	325250	32646
8.677	8.678	TRANS-1,2-DICHLOROET	1910.2495	449113	74484
9.303	9.300	1,1-DICHLOROETHANE	2015.0790	508319	69514
10.795	10.791	CIS-1,2-DICHLOROETHE	2100.7336	461439	79013
11.171	11.165	BROMOCHLOROMETHANE	2073.8135	325757	58589
11.353	11.349	CHLOROFORM	2043.2797	616850	101707
11.509	11.509	2,2-DICHLOROPROPANE	1910.0609	481587	55330
13.004	12.999	1,2-DICHLOROETHANE	2060.6328	415769	79346
13.217	13.211	1,1,1-TRICHLOROETHAN	1954.9730	573390	78489
13.768	13.765	1,1-DICHLOROPROPENE	2007.7657	389420	62429
14.167	14.158	CARBON TETRACHLORIDE	1946.6525	637123	86768
15.567	15.562	DIBROMOMETHANE	2361.4458	180286	51923
15.671	15.666	1,2-DICHLOROPROPANE	2056.7329	397844	99552
15.768	15.763	TRICHLOROETHENE	1998.3860	516612	138838
15.841	15.837	BROMODICHLOROMETHANE	1950.8280	488839	110683
16.541	16.537	ISTD-1-BR-2-CLETHANE	1.0000	335698	93729
16.972	16.968	CIS-1,3-DICHLOROPROP	1965.9523	406257	122861
17.610	17.606	TRANS-1,3-DICHLOROPR	1999.1848	307680	116715
17.768	17.764	1,1,2-TRICHLOROETHAN	1961.1521	427190	143615
18.076	18.072	1,3-DICHLOROPROPANE	1996.9109	334018	121414
18.341	18.338	DIBROMOCHLOROMETHANE	2070.5972	281669	97905
18.620	18.616	1,2-DIBROMOETHANE	1954.2483	173362	60469
18.838	18.835	TETRACHLOROETHENE	5546.2617	1381113	522160
19.482	19.478	1,1,1,2-TETRACHLOROE	1911.5228	435489	181988
19.552	19.549	CHLOROBENZENE	1890.7058	225722	82500
20.020	20.016	BROMOFORM	2157.1016	165393	62822
20.320	20.317	1,1,2,2-TETRACHLOROE	2020.4203	257891	116293
20.447	20.444	1,2,3-TRICHLOROPROPA	1948.8865	227414	89542
20.843	20.842	BROMOBENZENE	2131.3271	126751	51956
21.104	21.102	2-CHLOROTOLUENE	2057.6262	148163	72870
21.172	21.169	4-CHLOROTOLUENE	1956.1814	165182	74256
21.744	21.742	1,3-DICHLOROBENZENE	2074.7214	228232	117657
21.802	21.799	1,4-DICHLOROBENZENE	1993.0807	280304	126553
22.103	22.101	1,2-DICHLOROBENZENE	1991.7902	262721	112040
22.525	22.522	1,2-DIBROMO-3-CHLORO	2270.8718	77460	23812
22.892	22.889	SURR-1B4CB-H	2873.2393	283120	105614
23.933	23.930	1,2,4-TRICHLOROBENZE	2088.1052	234400	85921
24.302	24.300	HEXACHLOROBUTADIENE	1917.7654	318119	97150
24.486	24.483	1,2,3-TRICHLOROBENZE	2116.7170	285028	80243
TOTAL 1,2-DICHLOROETHENE:			4010.9832		

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

Surrogate Recovery: BrClBenzene 95.7746 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 10:15:43

Sample name: 3699802MS

Batch: 01283A208400,840

Raw file: C:\CP\DATA1\20283.08R

Reviewed by: mm469

Verified by: mm469

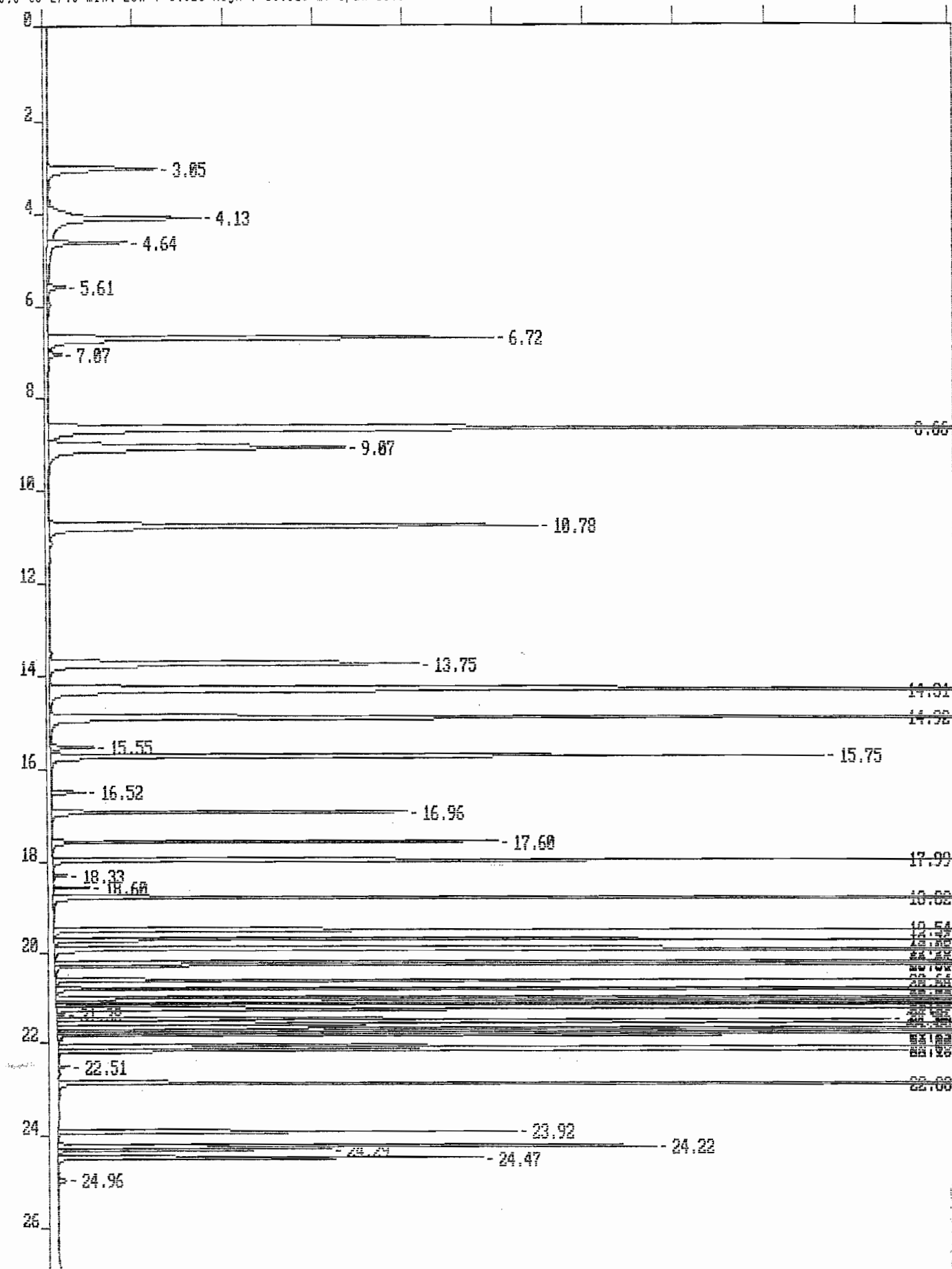
Date: 10/10/01

Date: 10/11/01

File=C:\CP\DATA1\20283B.08R Date printed=10-10-2001 Time= 10:15:57

Sample Name=3699802MS 01283A208400,8401

0.0 to 27.0 min. Low Y=0.028 High Y=15.028 mv Span=15.0



Sample Name: 3699802MS

Batch: 01283A20

Date Taken: Oct 10, 2001 10:13:47

Raw File: C:\CP\DATA1\20283B.08R

Area File: C:\CP\DATA1\20283B.08A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 100 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 66):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.126	4.140	VINYL CHLORIDE	1181.0684	20344	2555
6.718	6.722	1,1-DICHLOROETHENE	1902.4988	37025	7413
8.662	8.659	TRANS-1,2-DICHLOROET	1851.1407	85746	15457
9.073	9.068	METHYL T-BUTYL ETHER	1885.6615	41529	4955
10.779	10.775	CIS-1,2-DICHLOROETHE	1912.1025	45468	8127
13.752	13.745	1,1-DICHLOROPROPENE	1886.3062	36003	6156
14.310	14.303	BENZENE	1938.0321	92363	16550
14.918	14.912	ISTD-FBENZENE	1.0000	73138	16016
15.753	15.748	TRICHLOROETHENE	1901.5049	47121	12808
16.525	16.522	1-BROMO-2-CHLOROETHA	1.0000	2054	577
16.957	16.953	CIS-1,3-DICHLOROPROP	1905.9015	17092	5926
17.595	17.592	TRANS-1,3-DICHLOROPR	1864.8634	18497	7447
17.990	17.987	TOLUENE	1934.0487	50880	20823
18.824	18.821	TETRACHLOROETHENE	6353.3604	66586	28881
19.538	19.535	CHLOROBENZENE	1956.2686	43493	21358
19.760	19.757	ETHYLBENZENE	1935.7151	36967	17932
19.952	19.949	M,P-XYLENE	3889.8704	85121	38201
20.247	20.245	STYRENE	2009.0591	46522	24876
20.311	20.308	O-XYLENE	1953.4672	37008	18747
20.640	20.638	ISOPROPYLBENZENE	2030.3368	30809	15134
20.830	20.827	BROMOBENZENE	1952.5570	43830	23244
21.021	21.018	N-PROPYLBENZENE	1911.5947	33841	17607
21.089	21.087	2-CHLOROTOLUENE	1952.1471	37630	20109
21.157	21.155	4-CHLOROTOLUENE	1945.2717	39284	21476
21.274	21.272	1,3,5-TRIMETHYLBENZE	1933.6222	49526	26322
21.497	21.495	TERT-BUTYLBENZENE	1904.8231	28287	13804
21.592	21.590	1,2,4-TRIMETHYLBENZE	1936.4933	37767	20248
21.678	21.675	SEC-BUTYLBENZENE	1945.5635	29021	14270
21.730	21.728	1,3-DICHLOROBENZENE	1960.4324	37387	20141
21.788	21.786	1,4-DICHLOROBENZENE	1958.9144	37005	20166
21.831	21.829	P-ISOPROPYLTOLUENE	1978.8004	28823	14970
22.089	22.087	1,2-DICHLOROBENZENE	1934.4479	29890	15351
22.179	22.177	N-BUTYLBENZENE	1899.4282	28927	14086
22.877	22.875	SURR-1B4CB-P	2889.0415	58156	27320
23.919	23.916	1,2,4-TRICHLOROBENZE	1967.3031	19541	7670
24.221	24.218	NAPHTHALENE	2029.6183	26751	9949
24.288	24.285	HEXACHLOROBUTADIENE	1878.5118	13101	4586
24.471	24.468	1,2,3-TRICHLOROBENZE	2024.7799	20877	7105

TOTAL XYLENES: 5843.3374

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

Surrogate Recovery: BrClBenzene 96.3014 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 10:18:59

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699802MS

Batch: 01283A208400,840

Raw file:

C:\CP\DATA1\20283B.08R

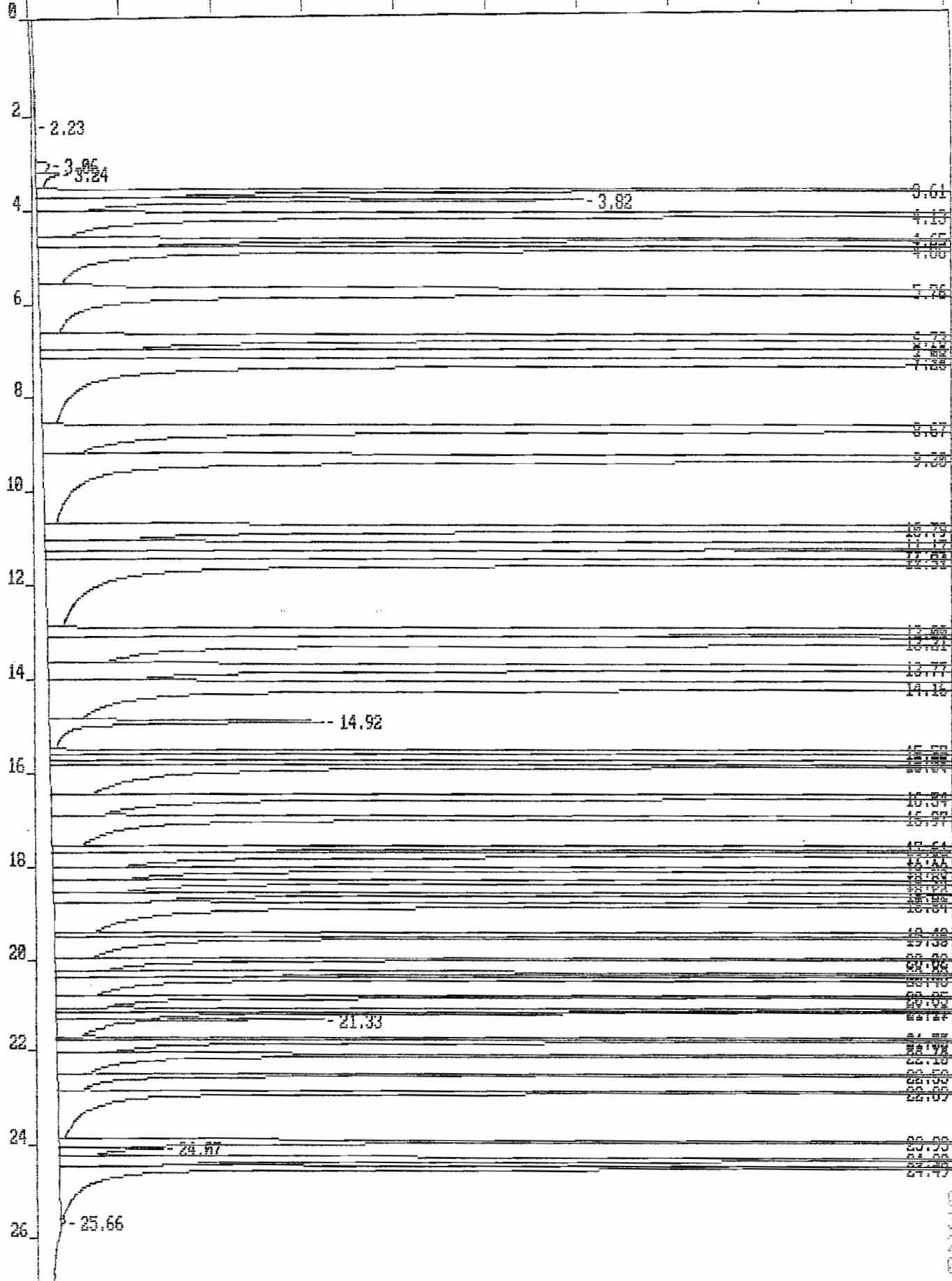
Reviewed by: MM5994

Verified by: Vmm49

Date: 10/10/01

Date: 10/11/01

File=C:\CP\DATA\20283.09R Date printed=10-10-2001 Time= 10:51:56
Sample Name=3699802MSD 01283A208400,8401
0.0 to 27.0 min. Low Y=-0.057 High Y=14.943 mv Span=15.0



Sample Name: 3699802MSD

Batch: 01283A20

Date Taken: Oct 10, 2001 10:51:51

Raw File: C:\CP\DATA1\20283.09R

Area File: C:\CP\DATA1\20283.09A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 100 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 72):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.611	3.627	DICHLORODIFLUOROMETH	1490.4971	78711	15516
3.818	3.831	CHLOROMETHANE	1161.2224	55704	8931
4.133	4.155	VINYL CHLORIDE	1576.6311	219591	38137
4.651	4.667	BROMOMETHANE	1933.3914	120344	28267
4.864	4.880	CHLOROETHANE	1737.9113	193143	37799
5.760	5.768	TRICHLOROFLUOROMETHA	1455.0844	267298	27323
6.732	6.739	1,1-DICHLOROETHENE	1938.0845	365018	70008
7.077	7.084	METHYLENE CHLORIDE	1930.5074	498885	102060
7.257	7.267	TRICHLOROTRIFLUOROET	1718.4551	376102	38237
8.673	8.678	TRANS-1,2-DICHLOROET	1983.0491	453681	77232
9.299	9.300	1,1-DICHLOROETHANE	2003.5164	497540	69034
10.792	10.791	CIS-1,2-DICHLOROETHE	2047.9132	441315	76937
11.169	11.165	BROMOCHLOROMETHANE	1991.3734	313249	56195
11.351	11.349	CHLOROFORM	1950.6982	586111	96985
11.510	11.509	2,2-DICHLOROPROPANE	1851.3822	460020	53568
13.001	12.999	1,2-DICHLOROETHANE	2029.1477	409394	78043
13.213	13.211	1,1,1-TRICHLOROETHAN	1912.3766	556896	76689
13.767	13.765	1,1-DICHLOROPROPENE	1920.9174	374559	59659
14.163	14.158	CARBON TETRACHLORIDE	1892.2876	619824	84247
15.567	15.562	DIBROMOMETHANE	2415.8577	182340	53057
15.671	15.666	1,2-DICHLOROPROPANE	2037.2931	398852	98497
15.770	15.763	TRICHLOROETHENE	1958.7175	497664	135924
15.841	15.837	BROMODICHLOROMETHANE	1981.3915	490697	112286
16.542	16.537	ISTD-1-BR-2-CLETHANE	1.0000	332395	93620
16.973	16.968	CIS-1,3-DICHLOROPROP	1939.7145	397226	121080
17.611	17.606	TRANS-1,3-DICHLOROPR	1925.7792	295472	112299
17.769	17.764	1,1,2-TRICHLOROETHAN	1837.8676	398196	134430
18.077	18.072	1,3-DICHLOROPROPANE	1855.8042	305938	112703
18.343	18.338	DIBROMOCHLOROMETHANE	1906.4619	256076	90039
18.621	18.616	1,2-DIBROMOETHANE	1782.4270	157321	55088
18.840	18.835	TETRACHLOROETHENE	4934.2432	1219850	464000
19.483	19.478	1,1,1,2-TETRACHLOROE	1707.0225	389997	162329
19.554	19.549	CHLOROBENZENE	1701.1550	202150	74143
20.021	20.016	BROMOFORM	2032.1512	153505	59114
20.322	20.317	1,1,2,2-TETRACHLOROE	1889.1377	240714	108610
20.448	20.444	1,2,3-TRICHLOROPROPA	1822.7214	208887	83648
20.846	20.842	BROMOBENZENE	2055.3762	117762	50046
21.106	21.102	2-CHLOROTOLUENE	1870.5128	133926	66167
21.173	21.169	4-CHLOROTOLUENE	1800.7885	151772	68278
21.746	21.742	1,3-DICHLOROBENZENE	1918.4822	209364	108670
21.804	21.799	1,4-DICHLOROBENZENE	1840.0961	258748	116703
22.105	22.101	1,2-DICHLOROBENZENE	1853.3745	241191	104133
22.526	22.522	1,2-DIBROMO-3-CHLORO	2127.8718	70096	22286
22.893	22.889	SURR-1B4CB-H	2690.5828	256670	98785
23.934	23.930	1,2,4-TRICHLOROBENZE	1889.6348	212562	77664
24.304	24.300	HEXACHLOROBUTADIENE	1762.8597	290035	89199
24.487	24.483	1,2,3-TRICHLOROBENZE	1861.4553	238975	70484
		TOTAL 1,2-DICHLOROETHENE:	4030.9624		

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

Surrogate Recovery: BrClBenzene 89.6861 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 10:53:47

00000000

Sample name: 3699802MSD

Batch: 01283A208400,840

Raw file:

C:\CP\DATA1\20283.09R

Reviewed by: *[Signature]*

Verified by: *Vmm469*

Date: *10/10/01*

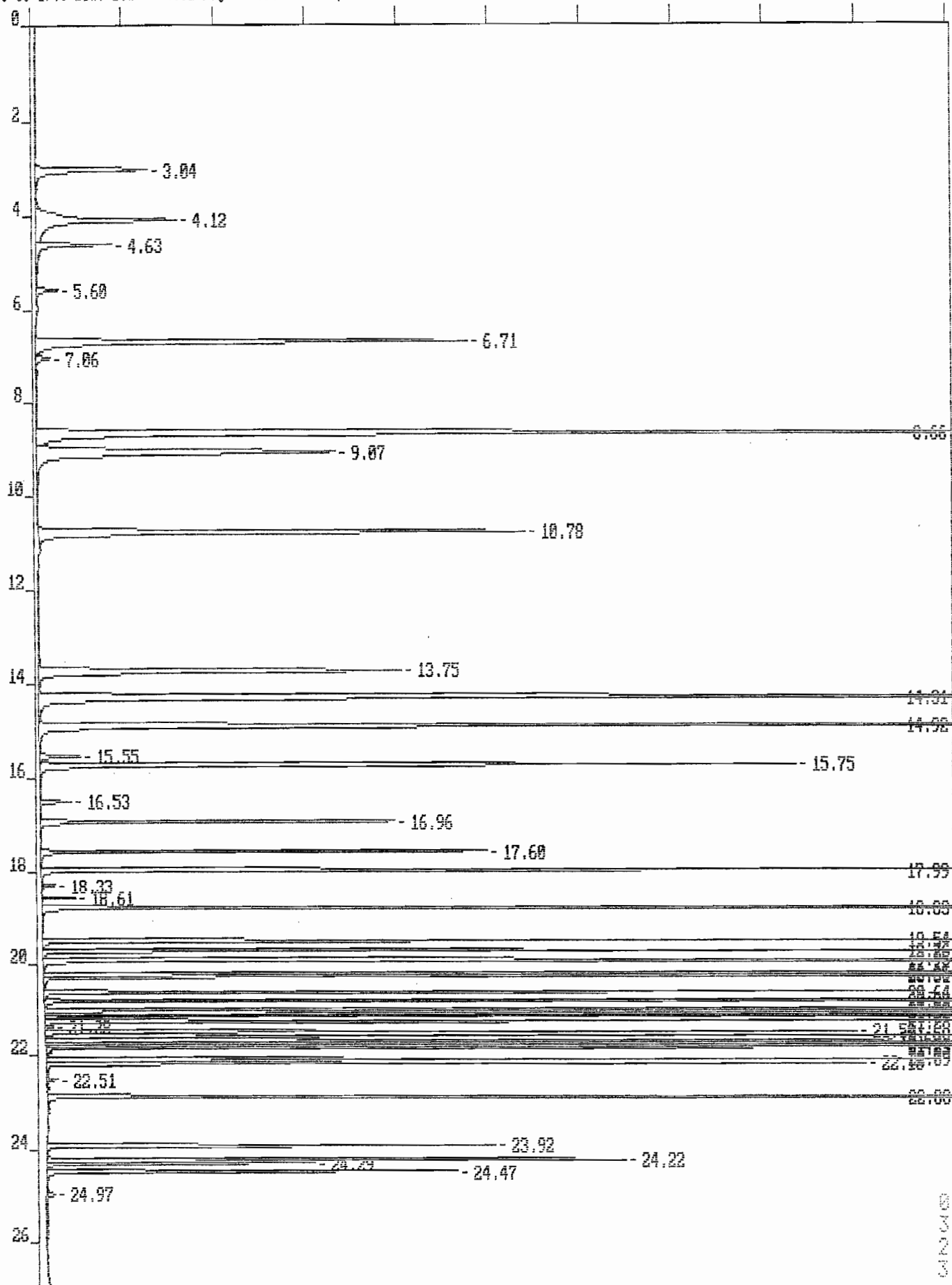
Date: *10/10/01*

File=C:\CP\DATA1\202838.09R Date printed=10-10-2001 Time= 10:54:01

Sample Name=3699802MSD

01283A208400,8401

0.0 to 27.0 min. Low Y=0.032 High Y=15.032 mv Span=15.0



Sample Name: 3699802MSD

Batch: 01283A20

Date Taken: Oct 10, 2001 10:51:51

Raw File: C:\CP\DATA1\20283B.09R

Area File: C:\CP\DATA1\20283B.09A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 100 Analyst: 115

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 66):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.118	4.140	VINYL CHLORIDE	1085.4132	19354	2313
6.714	6.722	1,1-DICHLOROETHENE	1844.7019	35452	7081
8.657	8.659	TRANS-1,2-DICHLOROET	1841.6415	82880	15148
9.065	9.068	METHYL T-BUTYL ETHER	1891.6506	41423	4897
10.776	10.775	CIS-1,2-DICHLOROETHE	1907.0072	44082	7984
13.749	13.745	1,1-DICHLOROPROPENE	1855.4257	34701	5965
14.309	14.303	BENZENE	1908.3582	89487	16053
14.918	14.912	ISTD-FBENZENE	1.0000	71990	15777
15.754	15.748	TRICHLOROETHENE	1868.0956	45521	12395
16.525	16.522	1-BROMO-2-CHLOROETHA	1.0000	1817	534
16.958	16.953	CIS-1,3-DICHLOROPROP	1903.7781	16529	5831
17.597	17.592	TRANS-1,3-DICHLOROPR	1863.5509	18188	7331
17.992	17.987	TOLUENE	1886.0585	49185	20003
18.827	18.821	TETRACHLOROETHENE	6171.1221	63711	27634
19.540	19.535	CHLOROBENZENE	1922.9708	42073	20681
19.762	19.757	ETHYLBENZENE	1902.1481	35739	17357
19.954	19.949	M,P-XYLENE	3803.1174	82054	36791
20.250	20.245	STYRENE	1957.4274	44696	23875
20.313	20.308	O-XYLENE	1915.5830	35725	18109
20.642	20.638	ISOPROPYLBENZENE	1968.2078	29531	14452
20.832	20.827	BROMOBENZENE	1932.9902	42593	22667
21.022	21.018	N-PROPYLBENZENE	1857.7034	32278	16855
21.091	21.087	2-CHLOROTOLUENE	1904.0409	36460	19321
21.159	21.155	4-CHLOROTOLUENE	1903.3350	37742	20699
21.276	21.272	1,3,5-TRIMETHYLBENZE	1886.0613	47755	25291
21.498	21.495	TERT-BUTYLBENZENE	1872.5012	27331	13367
21.593	21.590	1,2,4-TRIMETHYLBENZE	1891.2048	36403	19479
21.679	21.675	SEC-BUTYLBENZENE	1900.7283	27557	13733
21.731	21.728	1,3-DICHLOROBENZENE	1911.8330	36215	19348
21.790	21.786	1,4-DICHLOROBENZENE	1909.3611	36521	19363
21.833	21.829	P-ISOPROPYLTOLUENE	1919.8820	27074	14307
22.091	22.087	1,2-DICHLOROBENZENE	1878.1843	28646	14682
22.181	22.177	N-BUTYLBENZENE	1840.6820	27867	13446
22.879	22.875	SURR-1B4CB-P	2873.3899	56762	26766
23.920	23.916	1,2,4-TRICHLOROBENZE	1915.5646	18897	7356
24.222	24.218	NAPHTHALENE	1969.6093	25409	9510
24.290	24.285	HEXACHLOROBUTADIENE	1836.5370	12850	4416
24.473	24.468	1,2,3-TRICHLOROBENZE	1956.4417	20092	6763

TOTAL XYLENES: 5718.7002

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

Surrogate Recovery: BrClBenzene 95.7797 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 10:57:03

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: 3699802MSD

Batch: 01283A208400,840

Raw file:

C:\CP\DATA1\20283B.09R

Reviewed by:

MM4G

Verified by:

MM4G

Date:

10/10/01

Date:

10/11/01

to 27.0 min. Low Y=-0.087 High Y=14.913 mv Span=15.0



Sample Name: LCS2003

Batch: 01280A20

Date Taken: Oct 8, 2001 20:23:01

Raw File: C:\CP\DATA1\20280.28R

sa File: C:\CP\DATA1\20280.28A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 419

Threshold: -2 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 67):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.626	3.609	DICHLORODIFLUOROMETH	9.0996	50968	9311
3.828	3.820	CHLOROMETHANE	9.1461	42899	6914
4.148	4.142	VINYL CHLORIDE	13.1909	188989	31363
4.662	4.652	BROMOMETHANE	16.8400	104371	24201
4.874	4.863	CHLOROETHANE	15.5162	168638	33172
5.769	5.753	TRICHLOROFLUOROMETHA	14.3588	259127	26503
6.739	6.726	1,1-DICHLOROETHENE	19.8988	386450	70653
7.084	7.070	METHYLENE CHLORIDE	20.0349	514105	104111
7.263	7.253	TRICHLOROTRIFLUOROET	18.6977	392279	40894
8.676	8.666	TRANS-1,2-DICHLOROET	20.6221	469889	78945
9.301	9.291	1,1-DICHLOROETHANE	20.9045	512539	70801
10.793	10.783	CIS-1,2-DICHLOROETHE	21.3876	462617	78979
11.170	11.161	BROMOCHLOROMETHANE	21.1883	327550	58771
11.354	11.342	CHLOROFORM	20.7138	614145	101228
11.513	11.504	2,2-DICHLOROPROPANE	19.6790	477120	55968
12.999	12.996	1,2-DICHLOROETHANE	20.7528	414019	78455
13.214	13.206	1,1,1-TRICHLOROETHAN	20.1101	572879	79269
13.763	13.757	1,1-DICHLOROPROPENE	21.0115	396633	64143
14.159	14.155	CARBON TETRACHLORIDE	20.2730	644942	88718
15.564	15.560	DIBROMOMETHANE	24.3005	179147	52458
15.668	15.664	1,2-DICHLOROPROPANE	21.5980	411994	102638
15.764	15.762	TRICHLOROETHENE	20.5235	527069	139992
15.837	15.835	BROMODICHLOROMETHANE	20.0109	483421	111468
16.539	16.537	ISTD-1-BR-2-CLETHANE	1.0000	328165	92023
16.969	16.968	CIS-1,3-DICHLOROPROP	20.6764	413331	126863
17.607	17.607	TRANS-1,3-DICHLOROPR	20.9726	314584	120212
17.766	17.765	1,1,2-TRICHLOROETHAN	20.0993	426075	144507
18.073	18.073	1,3-DICHLOROPROPANE	20.7797	336691	124042
18.339	18.339	DIBROMOCHLOROMETHANE	21.4848	284226	99738
18.618	18.618	1,2-DIBROMOETHANE	20.2665	176821	61567
18.838	18.838	TETRACHLOROETHENE	19.3117	488748	178503
19.480	19.480	1,1,1,2-TETRACHLOROE	19.4928	436163	182204
19.550	19.551	CHLOROBENZENE	19.7746	225365	84715
20.018	20.018	BROMOFORM	22.0653	165077	63091
20.318	20.319	1,1,2,2-TETRACHLOROE	21.2428	265514	120045
20.445	20.445	1,2,3-TRICHLOROPROPA	20.3830	228509	91945
20.842	20.842	BROMOBENZENE	21.8305	126579	52248
21.103	21.103	2-CHLOROTOLUENE	21.6996	152220	75450
21.170	21.171	4-CHLOROTOLUENE	20.7643	170500	77385
21.743	21.743	1,3-DICHLOROBENZENE	21.7539	231184	121120
21.801	21.801	1,4-DICHLOROBENZENE	20.7752	285270	129513
22.101	22.102	1,2-DICHLOROBENZENE	21.0471	266966	116236
22.523	22.524	1,2-DIBROMO-3-CHLORO	22.8603	73940	23534
22.891	22.892	SURR-1B4CB-H	29.2810	277151	105671
23.932	23.933	1,2,4-TRICHLOROBENZE	21.0889	232496	85196
24.301	24.302	HEXACHLOROBUTADIENE	20.2907	327924	100917
24.484	24.486	1,2,3-TRICHLOROBENZE	21.3073	265249	79304
		TOTAL 1,2-DICHLOROETHENE:	42.0097		

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

Surrogate Recovery: BrClBenzene

97.6033 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 20:24:56

Sample name: LCS2003

Batch: 01280A208400,840

Raw file: C:\CP\DATA1\20280.28R

Reviewed by: SKP488

Verified by: MMM419

Date: 10-8-01

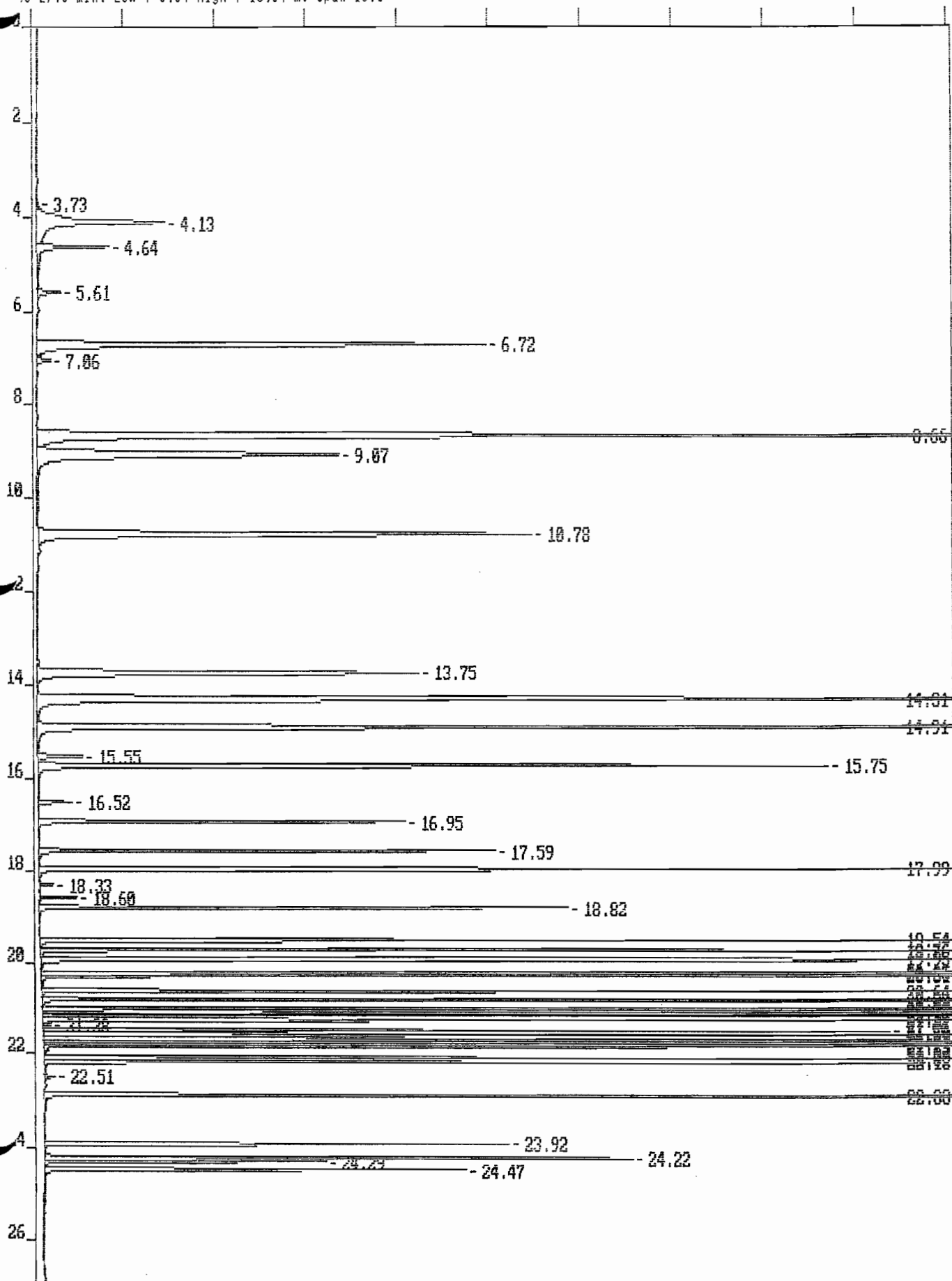
Date: 10/10/01

File=C:\CP\DATA1\20280B.28R Date printed=10-08-2001 Time= 20:25:10

Sample Name=LCS2003

01280A208400,8401

to 27.0 min. Low Y=0.04 High Y=15.04 mv Span=15.0



Sample Name: LCS2003

Batch: 01280A20

Date Taken: Oct 8, 2001 20:23:01

Raw File: C:\CP\DATA1\20280B.28R

ea File: C:\CP\DATA1\20280B.28A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 419

Threshold: -1 Calculation: INTERNALstd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 61):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.133	4.126	VINYL CHLORIDE	9.9051	18570	2110
6.720	6.708	1,1-DICHLOROETHENE	19.2007	37818	7369
8.660	8.648	TRANS-1,2-DICHLOROET	18.9855	86420	15613
9.071	9.054	METHYL T-BUTYL ETHER	19.1891	41662	4966
10.777	10.768	CIS-1,2-DICHLOROETHE	19.3391	45242	8095
13.747	13.741	1,1-DICHLOROPROPENE	19.4446	36417	6250
14.305	14.300	BENZENE	19.6917	92425	16562
14.913	14.910	ISTD-FBENZENE	1.0000	72158	15774
15.749	15.747	TRICHLOROETHENE	19.4920	47357	12931
16.523	16.522	1-BROMO-2-CHLOROETHA	1.0000	2014	563
16.954	16.953	CIS-1,3-DICHLOROPROP	19.6578	17304	6020
17.593	17.592	TRANS-1,3-DICHLOROPR	19.0886	18540	7508
17.988	17.988	TOLUENE	19.6286	51036	20814
18.823	18.823	TETRACHLOROETHENE	19.3746	20210	8674
19.536	19.537	CHLOROBENZENE	19.9045	43598	21403
19.758	19.759	ETHYLBENZENE	19.7498	37177	18019
19.950	19.951	M,P-XYLENE	39.6977	85635	38396
20.246	20.246	STYRENE	19.3972	44029	23655
20.309	20.310	O-XYLENE	19.9073	37474	18816
20.639	20.639	ISOPROPYLBENZENE	20.7429	31047	15228
20.828	20.829	BROMOBENZENE	19.8741	43931	23301
21.019	21.020	N-PROPYLBENZENE	19.5583	34025	17742
21.088	21.089	2-CHLOROTOLUENE	19.7950	37937	20082
21.156	21.156	4-CHLOROTOLUENE	19.8432	39313	21576
21.272	21.273	1,3,5-TRIMETHYLBENZE	19.7852	49862	26526
21.495	21.496	TERT-BUTYLBENZENE	19.5006	28455	13918
21.591	21.591	1,2,4-TRIMETHYLBENZE	19.7373	37907	20325
21.676	21.677	SEC-BUTYLBENZENE	19.9097	29598	14382
21.728	21.729	1,3-DICHLOROBENZENE	19.9118	36748	20147
21.787	21.788	1,4-DICHLOROBENZENE	19.8447	37928	20121
21.830	21.831	P-ISOPROPYLTOLUENE	20.2016	28440	15052
22.087	22.089	1,2-DICHLOROBENZENE	19.5819	29858	15304
22.178	22.179	N-BUTYLBENZENE	19.6163	29610	14327
22.876	22.877	SURR-1B4CB-P	29.3522	57898	27337
23.917	23.918	1,2,4-TRICHLOROBENZE	19.8880	19551	7636
24.219	24.221	NAPHTHALENE	19.9766	25636	9644
24.287	24.288	HEXACHLOROBUTADIENE	19.3155	13588	4644
24.470	24.471	1,2,3-TRICHLOROBENZE	20.0434	20702	6927

TOTAL XYLENES: 59.6050

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

Surrogate Recovery: BrClBenzene 97.8407 %

Chrom Perfect version 6.07

Reported on 10-08-2001at 20:28:13

Internal Standard Calculations From ISTDCHK v. 950609.1130

Std height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Raw file:

C:\CP\DATA1\20280B.28R

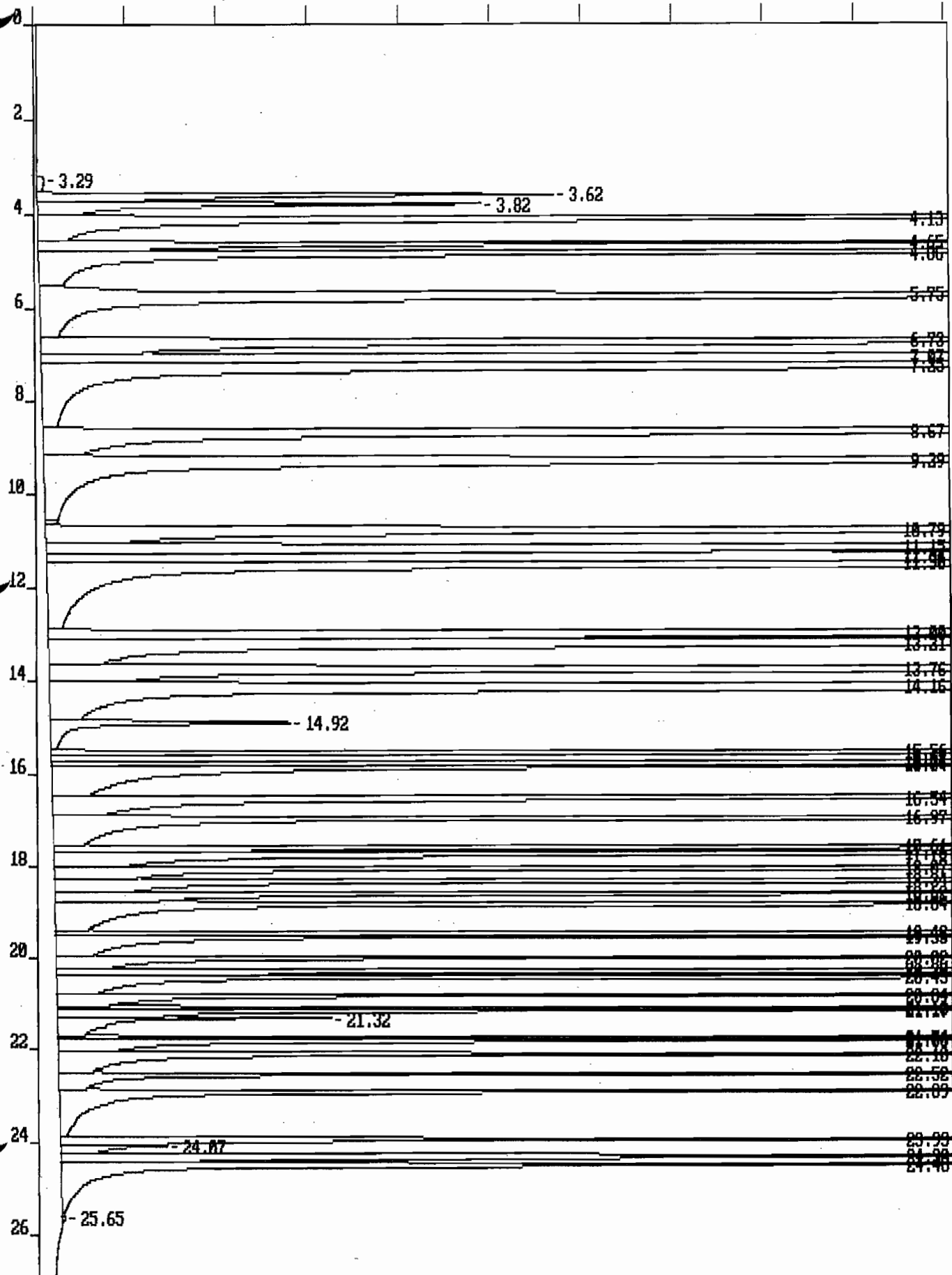
Reviewed by: SKP 688

Verified by: mm46

Date: 10-8-01

Date: 10/10/00

File=c:\cp\data1\20280.29R Date printed=10-24-2001 Time= 15:20:30
Sample Name=LDS2003 01280A208400,8401
to 27.0 min. Low Y=-0.06 High Y=14.94 mv Span=15.0



Sample Name: LDS2003

Batch: 01280A20

Date Taken: Oct 8, 2001 21:00:27

Raw File: c:\cp\data1\20280.29R

Area File: c:\cp\data1\20280.29A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap

Inst. ID#06245 - 5890#20HALL Mod 10-24-2001

Peak Width: .04

Dil. Factor: 1

Analyst: 419

Threshold: -2

Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 86):

Ret Time Expected (min)	RT (min)	Peak Name	Amount * (ug/L)	Peak Area	Peak Height
3.615	3.614	DICHLORODIFLUOROMETH	8.8641	48598	8483
3.821	3.843	CHLOROMETHANE	10.2845	45160	7271
4.133	4.148	VINYL CHLORIDE	12.7208	178347	28287
4.649	4.665	BROMOMETHANE	17.7161	103230	23811
4.861	4.870	CHLOROETHANE	17.3060	176831	34603
5.754	5.766	TRICHLOROFLUOROMETHA	13.8696	243891	23942
6.727	6.737	1,1-DICHLOROETHENE	19.1008	331989	63428
7.070	7.082	METHYLENE CHLORIDE	19.6510	476606	95505
7.253	7.267	TRICHLOROTRIFLUOROET	17.8255	356322	36463
8.668	8.679	TRANS-1,2-DICHLOROET	19.2426	413378	68895
9.294	9.305	1,1-DICHLOROETHANE	20.0578	461798	63535
10.788	10.799	CIS-1,2-DICHLOROETHE	20.6556	416806	71338
11.154	11.172	BROMOCHLOROMETHANE	20.9129	299497	54252
11.342	11.358	CHLOROFORM	19.8688	552295	90813
11.503	11.517	2,2-DICHLOROPROPANE	18.7579	425552	49895
12.995	13.009	1,2-DICHLOROETHANE	20.6320	383071	72949
13.206	13.224	1,1,1-TRICHLOROETHAN	18.9173	505649	69740
13.765	13.769	1,1-DICHLOROPROPENE	19.4433	355939	55513
14.155	14.173	CARBON TETRACHLORIDE	19.0509	572176	77972
15.562	15.575	DIBROMOMETHANE	24.0890	168840	48635
15.667	15.679	1,2-DICHLOROPROPANE	21.0395	374121	93511
15.763	15.775	TRICHLOROETHENE	19.7631	473286	126078
15.836	15.849	BROMODICHLOROMETHANE	20.0315	445373	104359
16.537	16.550	ISTD-1-BR-2-CLETHANE	1.0000	307506	86065
16.968	16.981	CIS-1,3-DICHLOROPROP	20.3721	380658	116904
17.607	17.619	TRANS-1,3-DICHLOROPR	20.9328	294742	112216
17.765	17.777	1,1,2-TRICHLOROETHAN	20.1482	400989	135481
18.073	18.085	1,3-DICHLOROPROPANE	20.8255	315684	116267
18.339	18.351	DIBROMOCHLOROMETHANE	21.2250	265283	92153
18.618	18.629	1,2-DIBROMOETHANE	20.1842	166317	57347
18.837	18.847	TETRACHLOROETHENE	18.3468	442491	158605
19.479	19.491	1,1,1,2-TETRACHLOROE	19.5154	408418	170606
19.550	19.562	CHLOROBENZENE	19.4590	209082	77966
20.018	20.029	BROMOFORM	22.5744	157293	60368
20.318	20.328	1,1,2,2-TETRACHLOROE	20.5034	242267	108366
20.445	20.455	1,2,3-TRICHLOROPROPA	20.3847	215054	86000
20.843	20.853	BROMOBENZENE	22.5921	120337	50570
21.103	21.112	2-CHLOROTOLUENE	20.7471	137239	67468
21.170	21.180	4-CHLOROTOLUENE	19.8636	154775	69236
21.743	21.752	1,3-DICHLOROBENZENE	21.4307	214445	111596
21.801	21.810	1,4-DICHLOROBENZENE	20.4179	264531	119045
22.102	22.111	1,2-DICHLOROBENZENE	20.7639	247554	107249
22.523	22.533	1,2-DIBROMO-3-CHLORO	24.1080	72239	23212
22.890	22.900	SURR-1B4CB-H	30.1844	265971	101880
23.931	23.943	1,2,4-TRICHLOROBENZE	21.3913	218717	80823
24.301	24.313	HEXACHLOROBUTADIENE	19.5166	296785	90783
24.484	24.496	1,2,3-TRICHLOROBENZE	20.9487	246419	72922

TOTAL 1,2-DICHLOROETHENE: 39.8982

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

Surrogate Recovery: BrClBenzene

100.6147 %

Chrom Perfect version 6.07

Reported on 10-24-2001 at 15:22:21

Reproc with correct sample ID.

SKPL088
10-24-01

Sample name: LDS2003

Batch: 01280A208400,840

Raw file: c:\cp\data1\20280.29R

Reviewed by: *[Signature]*

Verified by: *S/CPLess*

Date: *10/24/01*

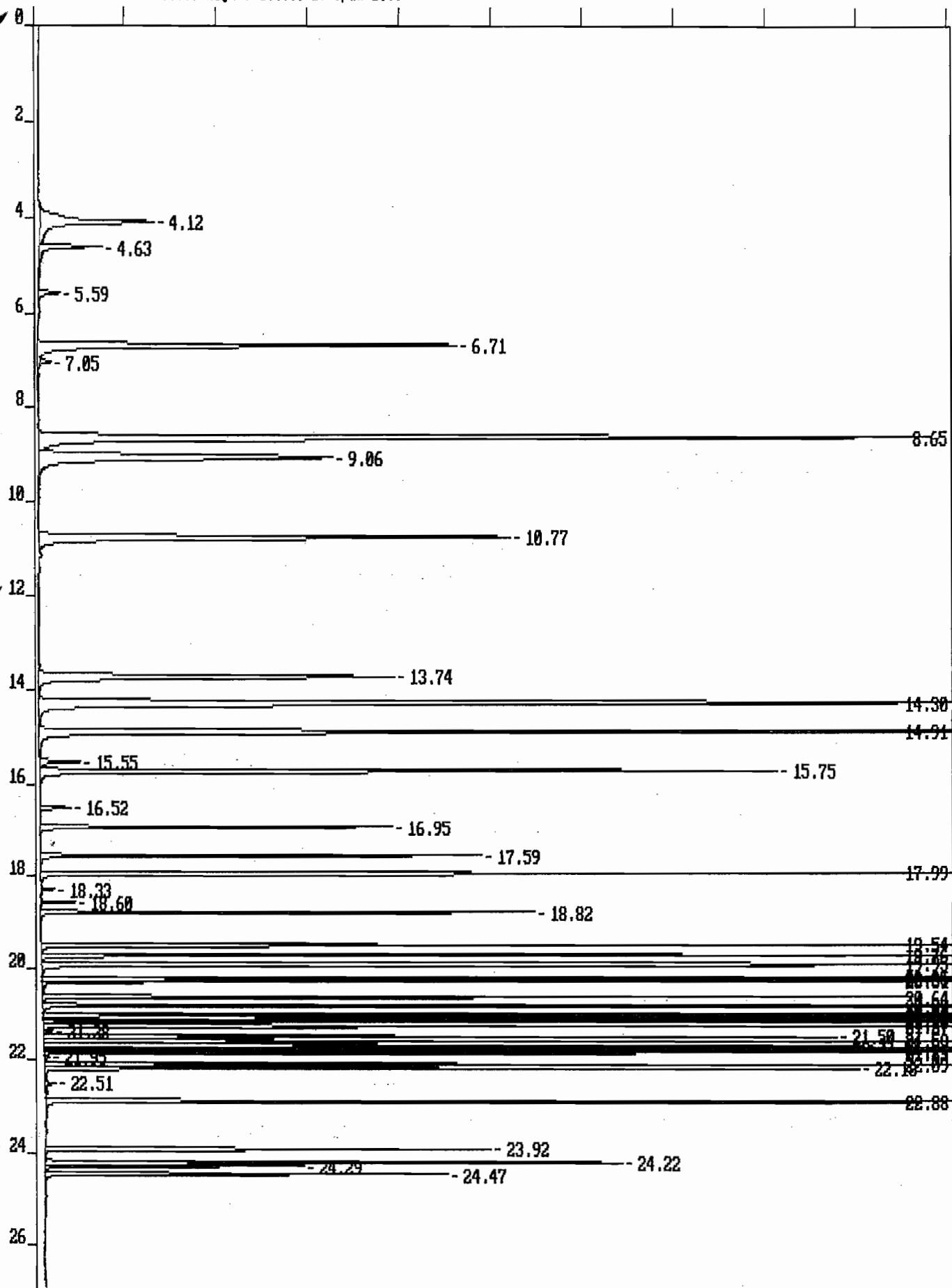
Date: *10-24-01*

File=c:\cp\data1\202808.29R Date printed=10-24-2001 Time= 15:22:27

Sample Name=LDS2003

01280A208400,8401

9 to 27.0 min. Low Y=0.038 High Y=15.038 mv Span=15.0



Sample Name: LDS2003

Batch: 01280A20

Date Taken: Oct 8, 2001 21:00:27

Raw File: c:\cp\data1\20280B.29R

Sea File: c:\cp\data1\20280B.29A

Method File: c:\cp\data1\20280B.MET(version 2)

EPA Methods 502.2/601/8010B/8021A

Run Time: 27

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

T/SG/C trap

Inst. ID#06245 - 5890#20PID|Mod 10-24-2001 1 10-24-01

Peak width: .04 Dil. factor: 1 Analyst: 419

Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 80):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.118	4.134	VINYL CHLORIDE	9.0470	15799	1883
6.708	6.718	1,1-DICHLOROETHENE	18.3348	34940	6872
8.650	8.662	TRANS-1,2-DICHLOROET	18.1731	81109	14597
9.061	9.071	METHYL T-BUTYL ETHER	19.1462	40473	4840
10.770	10.781	CIS-1,2-DICHLOROETHE	18.8745	43266	7717
13.742	13.759	1,1-DICHLOROPROPENE	18.6376	34218	5851
14.302	14.317	BENZENE	18.9845	87641	15595
14.911	14.925	ISTD-FBENZENE	1.0000	70800	15406
15.748	15.760	TRICHLOROETHENE	18.6888	44615	12109
16.521	16.535	1-BROMO-2-CHLOROETHA	1.0000	1740	528
16.954	16.966	CIS-1,3-DICHLOROPROP	19.3277	16443	5781
17.592	17.604	TRANS-1,3-DICHLOROPR	18.9171	18009	7267
17.988	18.000	TOLUENE	18.9285	48214	19604
18.823	18.834	TETRACHLOROETHENE	18.5654	19160	8118
19.536	19.547	CHLOROBENZENE	19.3949	41423	20369
19.758	19.769	ETHYLBENZENE	19.1011	35102	17021
19.950	19.961	M,P-XYLENE	38.3306	81069	36210
20.246	20.256	STYRENE	18.9750	42251	22601
20.309	20.319	O-XYLENE	19.2887	35588	17806
20.639	20.649	ISOPROPYLBENZENE	19.9359	29249	14294
20.828	20.838	BROMOBENZENE	19.3870	41903	22200
21.019	21.029	N-PROPYLBENZENE	18.6323	31664	16509
21.088	21.098	2-CHLOROTOLUENE	19.1503	35845	18976
21.156	21.165	4-CHLOROTOLUENE	19.2540	37369	20447
21.273	21.282	1,3,5-TRIMETHYLBENZE	19.0163	47096	24901
21.496	21.504	TERT-BUTYLBENZENE	18.7007	26752	13036
21.591	21.600	1,2,4-TRIMETHYLBENZE	19.0977	35986	19209
21.676	21.685	SEC-BUTYLBENZENE	19.0521	27745	13442
21.728	21.738	1,3-DICHLOROBENZENE	19.4443	35126	19216
21.787	21.796	1,4-DICHLOROBENZENE	19.4076	36209	19219
21.830	21.839	P-ISOPROPYLTOLUENE	19.4140	26851	14128
22.088	22.097	1,2-DICHLOROBENZENE	19.3203	28816	14748
22.178	22.187	N-BUTYLBENZENE	18.8000	27743	13411
22.876	22.886	SURR-1B4CB-P	29.4033	56971	26747
23.917	23.928	1,2,4-TRICHLOROBENZE	19.5103	18745	7317
24.219	24.231	NAPHTHALENE	20.0523	25110	9455
24.286	24.298	HEXACHLOROBUTADIENE	18.2069	12480	4275
24.470	24.481	1,2,3-TRICHLOROBENZE	19.5964	18744	6615

TOTAL XYLENES: 57.6193

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

Surrogate Recovery: BrClBenzene 98.0109 %

Chrom Perfect version 6.07

Reported on 10-24-2001at 15:25:37

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: LDS2003

Batch: 01280A208400,840

Raw file: c:\cp\data1\20280B.29R

Reviewed by: SKP 10/24/01

Verified by: SKP 10/24/01

Date: 10/24/01

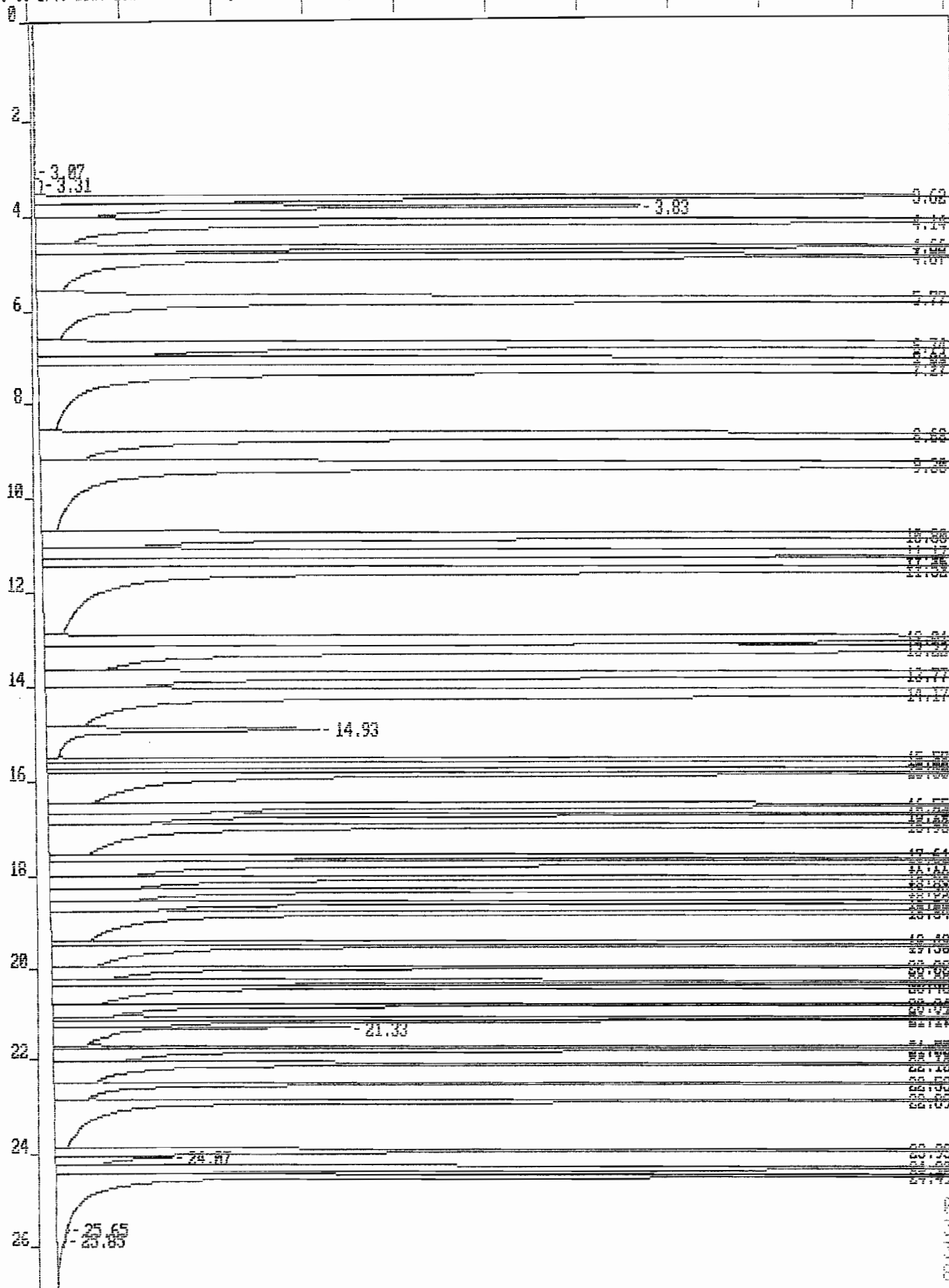
Date: 10-24-01

File=C:\CP\DATA1\20283.10R Date printed=10-10-2001 Time= 11:29:25

Sample Name=LCS2006

01283A20B400,8401

0.0 to 27.0 min. Low Y=-0.066 High Y=14.934 mv Span=15.0



Sample Name: LCS2006

Batch: 01283A20

Date Taken: Oct 10, 2001 11:29:20

Raw File: C:\CP\DATA1\20283.10R

Area File: C:\CP\DATA1\20283.10A

Method File: c:\cp\data1\20280.MET(version 5)

EPA Methods 502.2/601/8010B/8021A Run Time: 27

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

T/SG/C trap Inst. ID#06245 - 5890#20HALL

Peak Width: .04 Dil. Factor: 1 Analyst: 115

Threshold: -2 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\H20280.CAL(version 72):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
3.619	3.627	DICHLORODIFLUOROMETH	18.8073	101199	18746
3.830	3.831	CHLOROMETHANE	13.4084	61986	9874
4.137	4.155	VINYL CHLORIDE	19.7910	241007	45837
4.659	4.667	BROMOMETHANE	22.0728	131256	30899
4.871	4.880	CHLOROETHANE	19.8057	210322	41246
5.767	5.768	TRICHLOROFLUOROMETHA	17.0600	299289	30673
6.738	6.739	1,1-DICHLOROETHENE	22.1128	403282	76480
7.085	7.084	METHYLENE CHLORIDE	21.5411	542756	109040
7.266	7.267	TRICHLOROTRIFLUOROET	19.3283	400661	41179
8.681	8.678	TRANS-1,2-DICHLOROET	20.1417	453568	75109
9.304	9.300	1,1-DICHLOROETHANE	21.0929	513659	69589
10.797	10.791	CIS-1,2-DICHLOROETHE	21.4565	454637	77182
11.175	11.165	BROMOCHLOROMETHANE	21.4250	325161	57889
11.357	11.349	CHLOROFORM	20.5870	600673	98004
11.515	11.509	2,2-DICHLOROPROPANE	19.7869	470961	54818
13.009	12.999	1,2-DICHLOROETHANE	20.8523	405183	76790
13.220	13.211	1,1,1-TRICHLOROETHAN	19.5955	550974	75240
13.774	13.765	1,1-DICHLOROPROPENE	19.9213	375676	59240
14.169	14.158	CARBON TETRACHLORIDE	19.5377	606258	83286
15.573	15.562	DIBROMOMETHANE	24.3951	177310	51299
15.676	15.666	1,2-DICHLOROPROPANE	20.8002	382680	96287
15.772	15.763	TRICHLOROETHENE	19.7983	505759	131548
15.846	15.837	BROMODICHLOROMETHANE	19.9165	464145	108069
16.546	16.537	ISTD-1-BR-2-CLETHANE	1.0000	301136	89640
16.976	16.968	CIS-1,3-DICHLOROPROP	20.4378	407979	122152
17.614	17.606	TRANS-1,3-DICHLOROPR	20.9191	307759	116801
17.772	17.764	1,1,2-TRICHLOROETHAN	20.0526	416937	140438
18.079	18.072	1,3-DICHLOROPROPANE	20.8851	330637	121443
18.344	18.338	DIBROMOCHLOROMETHANE	21.3394	276164	96498
18.623	18.616	1,2-DIBROMOETHANE	19.9777	169826	59118
18.842	18.835	TETRACHLOROETHENE	18.5226	466703	166776
19.484	19.478	1,1,1,2-TETRACHLOROE	19.6090	424723	178544
19.555	19.549	CHLOROBENZENE	19.5188	222817	81454
20.022	20.016	BROMOFORM	22.3114	162230	62143
20.322	20.317	1,1,2,2-TETRACHLOROE	21.1827	257330	116606
20.448	20.444	1,2,3-TRICHLOROPROPA	20.2591	223741	89020
20.845	20.842	BROMOBENZENE	22.6045	125389	52700
21.106	21.102	2-CHLOROTOLUENE	21.1346	144593	71582
21.173	21.169	4-CHLOROTOLUENE	20.3913	164595	74027
21.745	21.742	1,3-DICHLOROBENZENE	21.4045	222574	116089
21.803	21.799	1,4-DICHLOROBENZENE	20.5423	277383	124745
22.104	22.101	1,2-DICHLOROBENZENE	21.1666	263522	113869
22.526	22.522	1,2-DIBROMO-3-CHLORO	24.0956	77461	24164
22.893	22.889	SURR-1B4CB-H	29.9301	278693	105217
23.934	23.930	1,2,4-TRICHLOROBENZE	21.3601	229663	84057
24.304	24.300	HEXACHLOROBUTADIENE	19.4212	308777	94091
24.487	24.483	1,2,3-TRICHLOROBENZE	21.5847	273858	78257
TOTAL 1,2-DICHLOROETHENE:			41.5982		

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

Surrogate Recovery: BrClBenzene 99.7669 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 11:31:15

10/10/01

Sample name: LCS2006

Batch: 01283A208400,840

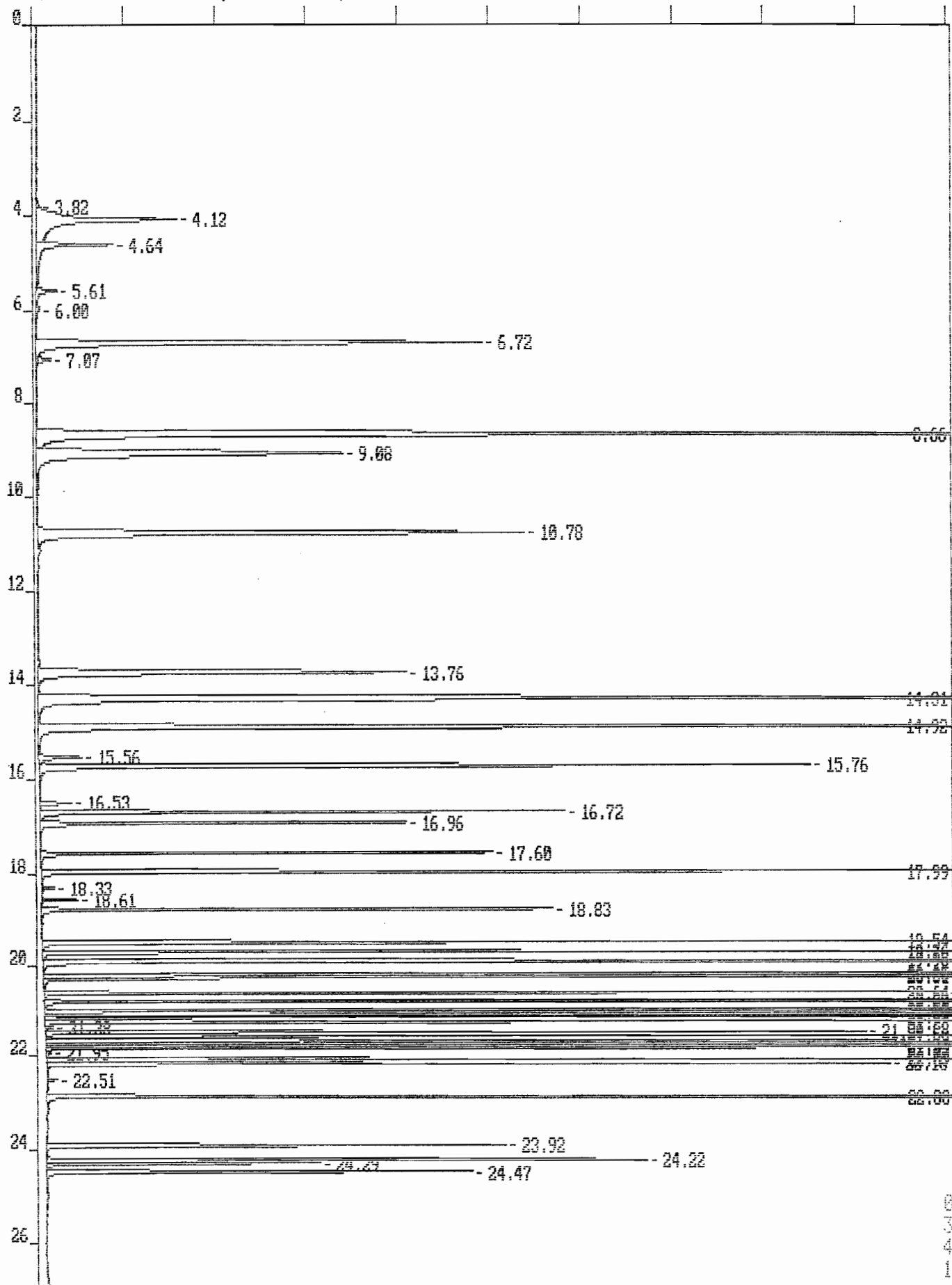
Raw file: C:\CP\DATA1\20283.10R

Reviewed by: MMB904

Verified by: VMM46

Date: 10/10/01

Date: 10/11/01



Sample Name: LCS2006
 Batch: 01283A20 Date Taken: Oct 10, 2001 11:29:20
 Raw File: C:\CP\DATA1\20283B.10R
 Area File: C:\CP\DATA1\20283B.10A
 Method File: c:\cp\data1\20280B.MET(version 2)
 EPA Methods 502.2/601/8010B/8021A Run Time: 27
 75m x 0.45mm ID J&W Scientific DB-VRX column
 T/SG/C trap Inst. ID#06245 - 5890#20PID

Peak width: .04 Dil. factor: 1 Analyst: 115
 Threshold: -1 Calculation: INTERNALStd using peak heights

Peak table using calibration C:\CP\DATA1\P20280.CAL(version 66):

Ret Time	Expected		Amount *	Peak	Peak
(min)	RT (min)	Peak Name	(ug/L)	Area	Height
4.121	4.140	VINYL CHLORIDE	10.8819	20699	2314
6.720	6.722	1,1-DICHLOROETHENE	19.0817	37551	7309
8.665	8.659	TRANS-1,2-DICHLOROET	18.6690	85649	15323
9.080	9.068	METHYL T-BUTYL ETHER	19.3720	42112	5004
10.782	10.775	CIS-1,2-DICHLOROETHE	19.0631	45238	7964
13.756	13.745	1,1-DICHLOROPROPENE	18.7917	35278	6028
14.315	14.303	BENZENE	19.4568	91451	16333
14.922	14.912	ISTD-FBENZENE	1.0000	71868	15743
15.757	15.748	TRICHLOROETHENE	19.0566	46069	12617
16.531	16.522	1-BROMO-2-CHLOROETHA	1.0000	1716	534
16.961	16.953	CIS-1,3-DICHLOROPROP	19.6625	17336	6010
17.599	17.592	TRANS-1,3-DICHLOROPR	18.9379	18420	7434
17.994	17.987	TOLUENE	19.3436	50033	20472
18.827	18.821	TETRACHLOROETHENE	18.7995	19941	8400
19.541	19.535	CHLOROBENZENE	19.6177	43000	21054
19.762	19.757	ETHYLBENZENE	19.4702	36425	17729
19.954	19.949	M,P-XYLENE	38.8171	83849	37472
20.249	20.245	STYRENE	20.1109	45982	24477
20.313	20.308	O-XYLENE	19.5494	36415	18442
20.642	20.638	ISOPROPYLBENZENE	20.2791	30241	14858
20.831	20.827	BROMOBENZENE	19.8141	43638	23186
21.022	21.018	N-PROPYLBENZENE	19.0382	33073	17237
21.091	21.087	2-CHLOROTOLUENE	19.4915	37238	19736
21.159	21.155	4-CHLOROTOLUENE	19.5113	38597	21174
21.275	21.272	1,3,5-TRIMETHYLBENZE	19.3369	48747	25875
21.498	21.495	TERT-BUTYLBENZENE	19.0032	27722	13537
21.593	21.590	1,2,4-TRIMETHYLBENZE	19.4042	37221	19944
21.679	21.675	SEC-BUTYLBENZENE	19.3959	28037	13984
21.731	21.728	1,3-DICHLOROBENZENE	19.6928	37030	19887
21.790	21.786	1,4-DICHLOROBENZENE	19.6825	37640	19918
21.833	21.829	P-ISOPROPYLTOLUENE	19.5926	27287	14570
22.090	22.087	1,2-DICHLOROBENZENE	19.5537	29674	15253
22.181	22.177	N-BUTYLBENZENE	18.9643	28480	13824
22.878	22.875	SURR-1B4CB-P	29.1522	57481	27099
23.920	23.916	1,2,4-TRICHLOROBENZE	19.6948	19373	7547
24.222	24.218	NAPHTHALENE	20.4278	26260	9843
24.290	24.285	HEXACHLOROBUTADIENE	18.7763	13039	4506
24.473	24.468	1,2,3-TRICHLOROBENZE	20.3168	19859	7008

TOTAL XYLENES: 58.3665

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

Surrogate Recovery: BrClBenzene 97.1740 %

Chrom Perfect version 6.07

Reported on 10-10-2001at 11:34:32

Internal Standard Calculations From ISTDCHK v. 950609.1130

Istd height for ISTD-FBENZENE is within range.

Istd range: 12,198 - 18,297 (80% - 120% of midpoint 15,247)

Used initial calibration files to determine range.

Sample name: LCS2006

Batch: 01283A208400,840

Raw file: C:\CP\DATA1\20283B.10R

Reviewed by: MMB 994

Verified by: umm469

Date: 10/10/01

Date: 10/11/01

Problems or comments are as follows:

*

*

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Data file	SampleName	Batch#	DF	Analysis#s	CL-CK	QCCode	Bottle	Upload	Verify	Comments
20280.01R	CBLK	01280A20	1.0							
20280.02R	CBLK	01280A20	1.0							
20280.03R	CBLK	01280A20	1.0							
20280.04R	CBLK	01280A20	1.0							
20280.05R	CALSTD1	01280A20	1.0	8400,8401,8464						Repeat
20280.06R	CBLK	01280A20	1.0							
20280.07R	CALSTD1	01280A20	1.0	8400,8401,8464		C1			OK	OK
20280.08R	CALSTD2	01280A20	1.0	8400,8401,8464		C2				
20280.09R	CALSTD3	01280A20	1.0	8400,8401,8464		C3				
20280.10R	CALSTD4	01280A20	1.0	8400,8401,8464		C4				
20280.11R	CALSTD5	01280A20	1.0	8400,8401,8464		C5				
20280.12R	CALSTD6	01280A20	1.0	8400,8401,8464		C6				
20280.13R	CALSTD7	01280A20	1.0	8400,8401,8464		C7				
20280.14R	CALSTD8	01280A20	1.0	8400,8401,8464		C8				
20280.15R	CBLK	01280A20	1.0							
20280.16R	CBLK	01280A20	1.0							
20280.17R	CBLK	01280A20	1.0							
20280.18R	CBLK	01280A20	1.0							
20280.19R	CBLK	01280A20	1.0							
20280.20R	CBLK	01280A20	1.0							
20280.21R	CBLK	01280A20	1.0							
20280.22R	CHKSTD	01280A20	1.0	8400,8401,8464	10/8/01 @ 15:53				OK	Avg in spec
20280.23R	CBLK	01280A20	1.0							
20280.24R	BLK2008	01280A20	1.0	8400,8401						Naph > MDL
20280.25R	BLK2009	01280A20	1.0	8400,8401				994	409	OK
20280.26R	MDL	01280A20	1.0						OK	OK
20280.27R	DLS2003	01280A20	1.0						OK	OK
20280.28R	LCS2003	01280A20	1.0	8400,8401		LCS		994	409	In spec
20280.29R	LDS2004	01280A20	1.0	8400,8401		LSD		994	409	In spec
20280.30R	CBLK	01280A20	1.0							
20280.31R	BLK2010	01280A20	1.0	8400,8401					OK	OK
20280.32R	3699899	01280A20	2.0	1127,8404	A	52A	994	409		OK
20280.33R	3699797	01280A20	1.0	1127,8404	A	52A	994			OK
20280.34R	3698395	01280A20	1.0	1127,8404,8423	A	17B	994			OK PH 2
20280.35R	3696803	01280A20	1.0	1127,8402,8403,8400	A	QC BGM	52A	994		OK PH 7
20280.36R	3696803MS	01280A20	1.0	1127,8402,8403,8400	A	MS	52B	994		In spec
20280.37R	CHKSTD	01280A20	1.0	8400,8401	03:15 10/9/01				OK	Avg in spec
20280.38R	CBLK	01280A20	1.0							
20280.39R	BLK2011	01280A20	1.0	8400,8401					OK	OK
20280.40R	3699902	01280A20	1.0	1127,8404	A	52A	994	409		OK
20280.41R	3696809	01280A20	1.0	1127,8402,8403		QC		994		OK
20280.42R	3696805	01280A20	1.0	1127,8402,8403		QC		994		OK
20280.43R	3696807	01280A20	1.0	1127,8402,8403		QC		994		OK
20280.44R	3699890	01280A20	1.0	1127,8404				994		OK
20280.45R	3699891	01280A20	1.0	1127,8404				994		OK
20280.46R	3699892	01280A20	1.0	1127,8404				994		OK

Problems or comments are as follows:

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*
*

Data file	SampleName	Batch#	OF	Analysis#'s	CL-CK	QCCode	Bottle	Upload	Verify	Comments
20280.47R	3699893	01280A20	1.0	1127,8404	A		52A	994	49	OK
20280.48R	3699796	01280A20	1.0	1127,8404	↓		↓	994	↓	OK
20280.49R	3699810	01280A20	1.0	1127,8404	↓		↓	994	↓	OK
20280.50R	CHKSTD	01280A20	1.0	8400,8401			10/9/01 @ 12:06	OK		Aug (13)
20280.51R	CBLK	01280A20	1.0							
20280.52R	BLK2012	01280A20	1.0	8400,8401					OK	OK
20280.53R	3699811	01280A20	1.0	1127,8404	A		52A	994	49	OK
20280.54R	3699812	01280A20	1.0	1127,8404	↓		↓	994	↓	OK
20280.55R	3699813	01280A20	1.0	1127,8404	↓		↓	994	↓	OK
20280.56R	3699814	01280A20	1.0	1127,8404	↓		↓	994	↓	OK
~~20280.57R~~	~~3699815~~	~~01280A20~~	~~1.0~~	~~1127,8404~~						
20280.58R	3695543	01280A20	1.0	1127,8407						
20280.59R	3695544	01280A20	5.0	1127,8407						
~~20280.60R~~	~~CHKSTD~~	~~01280A20~~	~~1.0~~	~~8400,8401~~						

⑧ Revised Sequence

Problems or comments are as follows:

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20282.13R TB ws 10-10-01

Data file	SampleName	Batch#	DF	Analysis#s	CL-CK	QCCode	Bottle	Upload	Verify	Comments
20283.01R	CHKSTD	01283A20	1.0	8400,8401					OK	Avg in spec
20283.02R	CBLK	01283A20	1.0							
20283.03R	BLK2014	01283A20	1.0	8400,8401				994	409	OK
20283.04R	DLS2006	01283A20	1.0						OK	OK
20283.05R	3699815	01283A20	1.0	1127,8404	A		52A	994	409	OK
20283.06R	3699803	01283A20	10.0	1127,8404	↓			994		OK
20283.07R	3699802	01283A20	100.0	1127,8404,8400,8401	↓	BGM		994		OK
20283.08R	3699802MS	01283A20	100.0	8400,8401	↓	MS		994		OK
20283.09R	3699802MSD	01283A20	100.0	8400,8401	↓	MSD		994		OK
20283.10R	LCS2006	01283A20	1.0	8400,8401		LCS		994	↓	In Spec
20283.11R	CHKSTD	01283A20	1.0	8400,8401					OK	Avg (13)
20283.12R	BLK2015	01283A20	1.0	8400,8401					OK	OK
20283.13R	3699805	01283A20	1.0	1127,8404	A		52A	994	409	OK
20283.14R	3699795	01283A20	1.0	1127,8404	↓			994		OK
20283.15R	3699798	01283A20	1.0	1127,8404	↓			994		OK
20283.16R	3699801	01283A20	1.0	1127,8404	↓			994		OK
20283.17R	3699804	01283A20	1.0	1127,8404	↓			994		OK
20283.18R	3699806	01283A20	1.0	1127,8404	↓			994		OK
20283.19R	3699807	01283A20	1.0	1127,8404	↓			994		OK
20283.20R	3699808	01283A20	1.0	1127,8404	↓			994		OK
20283.21R	3699809	01283A20	1.0	1127,8404	↓			994	↓	OK
20283.22R	3699895	01283A20	1.0	1127,8404	↓			994	↓	OK
20283.23R	CHKSTD	01283A20	1.0	8400,8401					OK	OK
20283.24R	BLK2016	01283A20	1.0	8400,8401					OK	OK
20283.25R	3699901	01283A20	1.0	1127,8404	A		52A	994		OK
20283.26R	3699894	01283A20	1.0	1127,8404 - Refilled	↓			994		OK
20283.27R	3699896	01283A20	1.0	1127,8404	↓			994		OK
20283.28R	3699897	01283A20	1.0	1127,8404	↓			994		OK
20283.29R	3699898	01283A20	1.0	1127,8404	↓			994		OK
20283.30R	3699900	01283A20	1.0	1127,8404	↓			994		OK
20283.31R	3699903	01283A20	1.0	1127,8404	↓			994	↓	OK
20283.32R	CHKSTD	01283A20	1.0	8400,8401						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: HUL02

Date Received: 10/04/01

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 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.

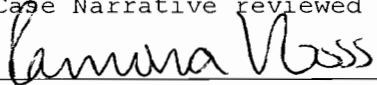
The final concentration is obtained using the following calculation:

$$\text{final conc.} = \text{instrument reading} \times \frac{\text{final vol.} \times \text{dilution factor}}{\text{initial volume or weight}}$$

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:


Ramona V. Goss, Manager
Inorganic Analysis

Date 11/7/01

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QUALITY ASSURANCE SUMMARY

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Name: LANCASTER LABORATORIES

SDG No.: HUL02

Client Sample ID.

AW1UB
MW-8L
MW-8M
MW-8U
MW-9L
MW-9U
NB7FB
W-10L
W-10U

Lab Sample ID.

3699903
3699896
3699895
3699894
3699898
3699897
3699901
3699900
3699899

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: Ramona V. Goss

Name: Ramona V. Goss

Date: 10/26/01

Title: Manager
Inorganic Analysis

Sample Data

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

AW1UB

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3699903

Date Received: 10/04/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	103000			A

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:
Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

MW-8L

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3699896

Date Received: 10/04/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	1600			A

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:
Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

MW-8M

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3699895

Date Received: 10/04/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	1310			A

Color Before: _____
Color After: _____

Clarity Before: _____
Clarity After: _____

Texture: _____
Artifacts: _____

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

MW-8U

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3699894

Date Received: 10/04/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	29700			A

Color Before:
Color After:

Clarity Before:
Clarity After:

Texture:
Artifacts:

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

MW-9L

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3699898

Date Received: 10/04/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	434			A

Color Before: _____
Color After: _____

Clarity Before: _____
Clarity After: _____

Texture: _____
Artifacts: _____

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

MW-9U

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3699897

Date Received: 10/04/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	5780			A

Color Before: _____
Color After: _____

Clarity Before: _____
Clarity After: _____

Texture: _____
Artifacts: _____

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

NB7FB

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3699901

Date Received: 10/04/01

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.

W-10L

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3699900

Date Received: 10/04/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	423			A

Color Before: _____
Color After: _____

Clarity Before: _____
Clarity After: _____

Texture: _____
Artifacts: _____

Comments:

QUALITY ASSURANCE SUMMARY

INORGANIC ANALYSIS DATA SHEET FORM I

CLIENT SAMPLE NO.

W-10U

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Matrix (soil/water): WATER

Level (low/med): LOW

% Solids: 0.0

Lab Sample ID: 3699899

Date Received: 10/04/01

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7439-89-6	Iron	578000			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.: HUL02

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	2347.00	93.9	500.0	510.00	102.0	495.00	99.0	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.: HUL02

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	469.00	93.8	508.00	101.6	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

Name: LANCASTER LABORATORIES

SDG No.: HUL02

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	496.00	99.2	467.00	93.4	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

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

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	501.00	100.2			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.: HUL02

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	84.00	84.0					

QUALITY ASSURANCE SUMMARY

BLANKS

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

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)						Prepa- ration 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

QUALITY ASSURANCE SUMMARY

BLANKS

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Preparation Blank Matrix (soil/water):

Preparation Blank Concentration Units (ug/L or mg/kg):

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Iron			12.5	U	12.5	U	-20.0	B			A

QUALITY ASSURANCE SUMMARY

BLANKS

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

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)						Prepa- ration Blank	C	M
		1	C	2	C	3	C			
Iron		23.0	B							A

QUALITY ASSURANCE SUMMARY

CLIENT SAMPLE NO.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Matrix (Soil/Water): WATER

*99798S

% 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	MSD %R	Control Limits	Ctl Lim
Iron	A	58320.0000		59500.0000		58860.0000		1000.00	1000.00	118	54		120

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.

*99798D

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

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		58320.0000	49200.0000	17		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.

2/3/01

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	92-110
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	80-120
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	79-114
AG	2.5	80-120
TL	50	84-108

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	86-111
FE	1	88-111
PB	0.5	86-114
MG	2	80-120
MN	0.5	90-108
NI	0.5	81-115
K	4	80-120
AG	0.05	82-116
NA	4	80-120
ZN	0.5	88-109

QUALITY ASSURANCE SUMMARY

LABORATORY CONTROL SAMPLE

Name: LANCASTER LABORATORIES

SDG No.: HUL02

Solid LCS Source:

Aqueous LCS Source: LLI

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R(1)	True	Found	C	Limits	%R
Iron	1000.0	926.00	93					

(1) Control Limits: Statistically determined

Verification of Instrument Parameters

QUALITY ASSURANCE SUMMARY

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Name: LANCASTER LABORATORIES
 G No.: HUL02

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)

Name: LANCASTER LABORATORIES
 SSG No.: HUL02

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.: HUL02

Method: A

Client Sample No.	Preparation Date	Weight (gram)	Volume (ml)
*99798	10/12/01		50
*99798D	10/12/01		50
*99798M	10/12/01		50
*99798S	10/12/01		50
AW1UB	10/12/01		50
LCSW	10/12/01		50
MW-8L	10/12/01		50
MW-8M	10/12/01		50
MW-8U	10/12/01		50
MW-9L	10/12/01		50
MW-9U	10/12/01		50
NB7FB	10/12/01		50
PBW	10/12/01		50
W-10L	10/12/01		50
W-10U	10/12/01		50

QUALITY ASSURANCE SUMMARY

ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES

SDG No.: HUL02

Instrument ID Number: 03907

Method: A

Start Date: 10/15/01

End Date: 10/15/01

EPA Sample No.	D/F	Time	% R	Analytes																									
				F E																									
S0	1.00	1352		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S100	1.00	1353		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S250	1.00	1353		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S500	1.00	1353		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S1000	1.00	1353		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S5000	1.00	1354		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ICV	1.00	1354		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ICB	1.00	1355		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CRA	1.00	1355			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1355		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1356		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1356		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1356		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1357		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1358		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1358		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1358		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1359		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1359			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PBW	1.00	1401		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LCSW	1.00	1402		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1403		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1403		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1404		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1404		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1404		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1405		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1405		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
*99798	1.00	1406			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
*99798	20.00	1412		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
*99798A	20.00	1416			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
*99798L	100.00	1417			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

QUALITY ASSURANCE SUMMARY

ANALYSIS RUN LOG

Lab Name: LANCASTER LABORATORIES__

SDG No.: HUL02__

Instrument ID Number: 03907__

Method: A__

Start Date: 10/15/01

End Date: 10/15/01

EPA Sample No.	D/F	Time	% R	Analytes																									
				F E																									
*99798D	20.00	1417		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1417		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1417		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
*99798S	20.00	1418		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
*99798M	20.00	1418		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1419		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1419		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1421		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1422		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZZZZZZ	1.00	1422		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-8U	1.00	1423		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-8U	20.00	1424		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-8M	1.00	1424		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1425		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1425		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-8L	1.00	1425		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-9U	1.00	1426		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-9U	5.00	1427		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-9L	1.00	1427		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
W-10U	1.00	1430		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
W-10U	500.00	1438		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
W-10L	1.00	1439		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NB7FB	1.00	1439		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AW1UB	1.00	1439		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AW1UB	50.00	1440		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1440		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1441		X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Raw Data

Flame AA Data

LANCASTER LABORATORIES

FLAME AA REPORT

DATA REVIEWED BY: DA Lady 399

DATE: 10-15-01

DATA VERIFIED BY: RDG 114

DATE: 10/15/01

____ Samples Verified

RUN NAME: 0128803A04

RUN DATE: 10/15/01

DATA FILE NAME: FE28809.FAA

RUN STARTTIME: 13:52:04

INSTRUMENT NO: 03907

RUN ENDTIME: 14:41:01

ANALYST: 399

ELEMENT: FE

INTEGRATION TIME : 3.0

ABSORBANCE/EMMISSIONS : ABSORBANCE

BC ON/OFF : ON

N20-ACETYLENE/ACETYLENE-AIR : AIR-Acetylene

DATA SHEET FOR FLAMEAA RUN

NAME: 0128803A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 1 10/15/01 13:52:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
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	0.000	0.002	-0.001	0.000	

TUBE: 2 10/15/01 13:53:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
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>	
			10.000	0.010	0.009	0.009	0.011	

TUBE: 3 10/15/01 13:53:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
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>	
			5.400	0.022	0.021	0.023	0.023	

TUBE: 4 10/15/01 13:53:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
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>	
			2.100	0.045	0.045	0.045	0.046	

TUBE: 5 10/15/01 13:53:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
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>	
			2.500	0.086	0.089	0.085	0.085	

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0128803A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TUBE: 6 10/15/01 13:54:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
S5000	*		5.000	1.000	1.000	1.000	1.000	1.000
			%RSD	MEAN ABS	READING1	READING2	READING3	
			1.900	0.387	0.381	0.387	0.395	

TUBE: 7 10/15/01 13:54:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
ICV	*		2.347	1.000	1.000	1.000	1.000	1.000
			% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
			93.9	0.600	0.195	0.194	0.195	0.196

TUBE: 8 10/15/01 13:55:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
ICB	*		0.009	1.000	1.000	1.000	1.000	1.000
			%RSD	MEAN ABS	READING1	READING2	READING3	
			99.900	0.001	0.002	0.002	-0.001	

TUBE: 9 10/15/01 13:55:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CRA	*		0.004	1.000	1.000	1.000	1.000	1.000
			%RSD	MEAN ABS	READING1	READING2	READING3	
			11.000	0.008	0.009	0.007	0.009	

TUBE: 10 10/15/01 13:55:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV1	*		0.510	1.000	1.000	1.000	1.000	1.000
			% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
			102.0	2.500	0.046	0.047	0.047	0.045

DATA SHEET FOR FLAMEAA RUN

NAME: 0128803A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 11 10/15/01 13:56:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB1	*		0.011	1.000	1.000	1.000	1.000	1.000
			%RSD	MEAN ABS	READING1	READING2	READING3	
			99.900	0.001	0.002	-0.001	0.002	

TUBE: 12 10/15/01 13:56:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
PBW	*	012835719002	0.009	1.000	1.000	1.000	25.000	100.000
V ~~222222~~	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3	
			99.900	0.001	0.001	0.001	0.000	

TUBE: 13 10/15/01 13:56:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
LCSD	*	012835719002	0.957	1.000	1.000	1.000	1.000	1.000
V ~~222222~~	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3	
			3.100	0.003	0.002	0.006	0.002	

TUBE: 14 10/15/01 13:57:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
LCSW	*	012835719002	1.141	1.000	1.000	1.000	1.000	1.000
V ~~222222~~	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3	
			2.700	0.098	0.100	0.095	0.099	

TUBE: 15 10/15/01 13:58:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
BLANK	*		0.000	1.000	1.000	1.000	1.000	1.000
			%RSD	MEAN ABS	READING1	READING2	READING3	
			0.000	0.000	0.000	0.000	-0.001	

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0128803A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TUBE: 16 10/15/01 13:58:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
RESLOPE	*		0.500	1.000	1.000	1.000	1.000	1.000

ZZZZZ

%RSD	MEAN ABS	READING1	READING2	READING3
5.700	0.046	0.047	0.048	0.043

TUBE: 17 10/15/01 13:58:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV2	*		0.495	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
99.0	2.200	0.046	0.046	0.044	0.046

TUBE: 18 10/15/01 13:59:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CR2	*		0.016	1.000	1.000	1.000	1.000	1.000

%RSD	MEAN ABS	READING1	READING2	READING3
99.900	0.002	0.000	0.004	0.001

TUBE: 19 10/15/01 13:59:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
LCSW	*	012835719002	1.141	1.000	1.000	1.000	1.000	1.000

ZZZZZ

% RSD	MEAN ABS	READING1	READING2	READING3
2.400	0.100	0.097	0.101	0.101

TUBE: 20 10/15/01 14:01:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
FBW	*	012850820001	0.019	1.000	1.000	1.000	50.000	50.000

% RSD	MEAN ABS	READING1	READING2	READING3
75.700	0.002	0.003	0.000	0.002

2
3
0
7

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0128803A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TURE: 21 10/15/01 14:02:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
LCSW	*	012850820001	0.926	1.000	1.000	1.000	1.000	1.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X	---	---	3.000	0.082	0.080	0.085	0.082

TURE: 22 10/15/01 14:03:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV3	*		0.469	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
93.8	2.500	0.043	0.042	0.044	0.043

TURE: 23 10/15/01 14:03:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCR3	*		0.011	1.000	1.000	1.000	1.000	1.000

%RSD	MEAN ABS	READING1	READING2	READING3
99.900	0.001	0.001	-0.001	0.002

TURE: 24 10/15/01 14:04:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
BLANK	*		0.000	1.000	1.000	1.000	1.000	1.000

ZZZZZZ

%RSD	MEAN ABS	READING1	READING2	READING3
0.000	0.003	0.004	0.003	0.001

TURE: 25 10/15/01 14:04:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
BLANK	*		0.000	1.000	1.000	1.000	1.000	1.000

ZZZZZZ

%RSD	MEAN ABS	READING1	READING2	READING3
0.000	0.000	0.000	0.000	0.000

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0128803A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TUBE: 26 10/15/01 14:04:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
RESLOPE	*		0.500	1.000	1.000	1.000	1.000	1.000

ZZZZZZ

%RSD	MEAN ABS	READING1	READING2	READING3
4.600	0.045	0.043	0.045	0.047

TUBE: 27 10/15/01 14:05:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV4	*		0.500	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
101.6	2.700	0.046	0.047	0.044	0.046

TUBE: 28 10/15/01 14:05:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCR4	*		-0.004	1.000	1.000	1.000	1.000	1.000

%RSD	MEAN ABS	READING1	READING2	READING3
99.900	0.000	0.000	-0.001	0.000

TUBE: 29 10/15/01 14:06:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699798 U		012850820001	50.000	1.000	1.000	1.000	50.000	50.000

*99798

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
20		1.100	1.213	1.200	1.213	1.227

TUBE: 30 10/15/01 14:12:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699798 U		012850820001	2.916	10.000	0.500	20.000	50.000	50.000

*99798

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		0.900	0.237	0.237	0.235	0.240

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0128803A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TUBE: 31 10/15/01 14:16:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699798 P		012850820001	4.554	10.000	0.500	20.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
✓	—	—	0.300	0.355	0.356	0.354	0.356

TUBE: 32 10/15/01 14:17:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699798 L		012850820001	0.585	100.000	1.000	100.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
✓	—	—	1.600	0.053	0.053	0.052	0.053

TUBE: 33 10/15/01 14:17:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699798 D		012850820001	2.460	10.000	0.500	20.000	50.000	50.000

V	RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
X	—	—	0.700	0.203	0.203	0.201	0.204

TUBE: 34 10/15/01 14:17:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV5	*		0.496	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
99.2	0.600	0.045	0.045	0.045	0.044

TUBE: 35 10/15/01 14:17:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCRS	*		-0.003	1.000	1.000	1.000	1.000	1.000

% RSD	MEAN ABS	READING1	READING2	READING3
99.900	-0.001	0.001	-0.003	0.000

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0128803A04
ELEMENT FE

LANCASTER LABRATORIES
INSTRUMENT ID: 03907

TUBE: 36 10/15/01 14:18:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699798	R	012850820001	2.975	10.000	0.500	20.000	50.000	50.000
		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		---	---	1.600	0.242	0.246	0.240	0.240

*997985

TUBE: 37 10/15/01 14:18:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699798	M	012850820001	2.943	10.000	0.500	20.000	50.000	50.000
		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		---	---	0.700	0.240	0.241	0.240	0.238

*99798M

TUBE: 38 10/15/01 14:19:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699801	*	012850820001	0.464	1.000	1.000	1.000	50.000	50.000
		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		---	---	1.300	0.042	0.042	0.041	0.042

zzzzzz

TUBE: 39 10/15/01 14:19:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699802	*	012850820001	4.837	1.000	1.000	1.000	50.000	50.000
		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		---	---	17.600	0.375	0.451	0.338	0.335

zzzzzz

TUBE: 40 10/15/01 14:21:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699803	*	012850820001	1.623	1.000	1.000	1.000	50.000	50.000
		RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		---	---	3.900	0.137	0.143	0.134	0.134

zzzzzz

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0128503A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TUBE: 41 10/15/01 14:22:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699804	*	012850820001	0.765	1.000	1.000	1.000	50.000	50.000

ZZZZZZ

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	13.400	0.068	0.078	0.064	0.061

TUBE: 42 10/15/01 14:22:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699805	*	012850820001	0.974	1.000	1.000	1.000	50.000	50.000

ZZZZZ

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	2.900	0.084	0.084	0.081	0.086

TUBE: 43 10/15/01 14:23:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699894	*	012850820001	50.000	1.000	1.000	1.000	50.000	50.000

MW-8U

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
20	—	0.900	1.034	1.023	1.039	1.039

TUBE: 44 10/15/01 14:24:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699894	*	012850820001	1.483	10.000	0.500	20.000	50.000	50.000

MW-8U

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	2.000	0.126	0.128	0.123	0.125

TUBE: 45 10/15/01 14:24:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699895	*	012850820001	1.307	1.000	1.000	1.000	50.000	50.000

MW-8M

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	1.200	0.111	0.112	0.110	0.111

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0128803A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TURE: 46 10/15/01 14:25:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV6	*		0.467	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
93.4	7.800	0.042	0.040	0.046	0.040

TURE: 47 10/15/01 14:25:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB6	*		-0.020	1.000	1.000	1.000	1.000	1.000

%RSD	MEAN ABS	READING1	READING2	READING3
33.500	-0.002	-0.003	-0.001	-0.002

TURE: 48 10/15/01 14:25:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
599896	*	012850820001	1.601	1.000	1.000	1.000	50.000	50.000

MW-8L

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	3.100	0.135	0.140	0.133	0.133

TURE: 49 10/15/01 14:26:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699897	*	012850820001	5.169	1.000	1.000	1.000	50.000	50.000

MW-9U

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
5	—	1.000	0.397	0.400	0.398	0.393

TURE: 50 10/15/01 14:27:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699897	*	012850820001	1.156	5.000	1.000	5.000	50.000	50.000

MW-9U

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	2.600	0.099	0.100	0.100	0.096

DATA SHEET FOR FLAMEAA RUN

RUN NAME: 0128803A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TUBE: 51 10/15/01 14:27:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699898	*	012850820001	0.434	1.000	1.000	1.000	50.000	50.000

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	7.200	0.039	0.042	0.037	0.038

TUBE: 52 10/15/01 14:30:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699899	*	012850820001	50.000	1.000	1.000	1.000	50.000	50.000

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
500	—	0.500	1.368	1.374	1.370	1.361

TUBE: 53 10/15/01 14:38:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699899	*	012850820001	1.157	100.000	0.200	500.000	50.000	50.000

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	3.500	0.099	0.103	0.097	0.097

TUBE: 54 10/15/01 14:39:00

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699900	*	012850820001	0.423	1.000	1.000	1.000	50.000	50.000

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	7.300	0.038	0.041	0.038	0.035

TUBE: 55 10/15/01 14:39:02

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699901	*	012850820001	0.007	1.000	1.000	1.000	50.000	50.000

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
—	—	81.500	0.001	0.001	0.001	0.000

DATA SHEET FOR FLAMEAA RUN

N NAME: 0128803A04
ELEMENT FE

LANCASTER LABORATORIES
INSTRUMENT ID: 03907

TUBE: 56 10/15/01 14:39:04

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699903	*	012850820001	50.000	1.000	1.000	1.000	50.000	50.000

AWIUB

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
50		0.400	1.271	1.265	1.273	1.276

TUBE: 57 10/15/01 14:40:03

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
3699903	*	012850820001	2.058	10.000	0.200	50.000	50.000	50.000

AWIUB

RR	RD	% RSD	MEAN ABS	READING1	READING2	READING3
		0.300	0.172	0.171	0.172	0.171

TUBE: 58 10/15/01 14:40:05

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCV7	*		0.501	1.000	1.000	1.000	1.000	1.000

% RECOVERY	% RSD	MEAN ABS	READING1	READING2	READING3
100.2	2.700	0.045	0.045	0.046	0.044

TUBE: 59 10/15/01 14:41:01

SAMPLE	QC	BATCH#	CONC. (ppm)	DILVOL	ALIQVOL	DF	FINVOL	SAMP WT
CCB7	*		0.023	1.000	1.000	1.000	1.000	1.000

% RSD	MEAN ABS	READING1	READING2	READING3
81.300	0.002	0.001	0.004	0.001

Reviewer's Signature

DAKOL 399

Date

10-15-01

Verifier's Signature

R06/14

Date

10/15/01

Extraction/Distillation/Digestion Logs

Batch #

01285 0820 001

Digest Type: AA/ICP/GF(Sb)-SW846

COC (Y/N): N

Start Time [24:00] ON Hotplate/IN Hotplate
End Time [24:00] OFF Hotplate/OUT of HotBlock: 11/31
[May include time for cooling, reagent additions, etc.]

Reagents

Notes	1:1 HNO ₃			1:1 HCl			HNO ₃		
	Lot #	Vol Added (mL)	Vol Added (mL)	Lot #	Vol Added (mL)	Vol Added (mL)	Lot #	Vol Added (mL)	Vol Added (mL)
	Vol Added (mL)	Vol Added (mL)	Vol Added (mL)	Vol Added (mL)	Vol Added (mL)	Vol Added (mL)	Vol Added (mL)	Vol Added (mL)	Vol Added (mL)
1	09a	1.0	5.0						
2	08a								
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15	FB								
16									
17	Dishdine 800 preserved aliquot 42 pH 23a								
18									
19									
20									
Dup									
Spike									
MSD									
Blank									

Digest Date: 10-12-01

Digested By (Init/Emp #): DKC 824

031994

1480a.01 01/11/01

Sample #	T	Initial Vol (mL)	Final Vol (mL)	SDG #	AA (A)	ICP (I)	GF (G)
3699798	1	50	50	HuL01	A		
9798							
9801							
9802							
9803							
9804							
9805							
9894				HuL02			
9895							
9896							
9897							
9898							
9899							
9900							
9901							
9903							
370 5844							
3699798	1	50	50	HuL01	A		
9798							
9798							
Blank							

Blank and LCS(s) final volumes are the same.

Spike Information							
Sample #	Soln ID	1	2	3	4	5	8 (GF)
3699798 (R)	Lot #	257	282	242	248	255	
3699798 (M)	Vol Added (mL)	1.0					
LCS	Vol Added (mL)	1.0					
LCS							

QC

1480.01 01/11/01

4 031994

Instrumental Analysis Data

Case Narrative Conformance/Nonconformance Summary



CLIENT: Hull & Associates
SDG: HUL02

LANCASTER LABORATORIES

INSTRUMENTAL WET CHEMISTRY

SAMPLE NUMBERS:

<u>Sample #</u>	<u>Sample Code</u>	<u>Comments</u>
3699894	MW-8U	
3699895	MW-8M	
3699896	MW-8L	
3699897	MW-9U	
3699898	MW-9L	
3699899	W-10U	
3699900	W-10L	
3699901	NB7FB	Client Blank
3699903	AW1UB	
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.

EXAMPLE CALCULATION:

TOC water (mg/l) = raw result (mg/l) X dilution factor

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.

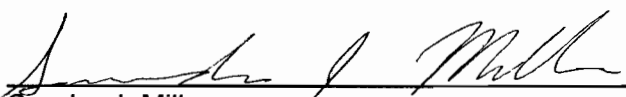
TOC:

LCS/LCSD True Value = 51.8 mg/l Standard

CCV/CCB True Value = 25 mg/l Standard

Spike added True Value = 9.8 mg/l Standard

Case Narrative Reviewed and Approved by:


Sandra J. Miller
Specialist/Coordinator

Date: 10-19-01

QC Summary

Lancaster Laboratories

Quality Control Summary
Method Blank
Instrumental Water Quality
SDG: HUL02

Method Blank Analysis					Matrix: WATER				
Parameter	Sample Number	Sample Code	Method	Analysis Date	Batch Number	Blank Results	Units	MDL	LOQ
TOC	3699894	MW-8U	TOC	10/11/01	01284011111	ND	mg/l	0.6	2
	3699895	MW-8M							
	3699896	MW-8L							
	3699897	MW-9U							
	3699898	MW-9L							
	3699899	W-10U							
	3699900	W-10L							
	3699901	NB7FB							
	3699903	AW1UB B							
	3699903	S,M							
	P699798	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	MS Units	MS Rec (%)	MSD Rec (%)	Acceptance Window (%)	RPD (%)	% RPD Limits
3699894	MW-8U	0128401111	TOC	TOC	10/11/01	P699798	3.2	P699798	9.8	12.9	P699798	9.8	12.9	mg/l	99	100	73 - 129	0	1
3699895	MW-8M			TOC	10/15/01	3699903	2.5	3699903	9.8	12.7	3699903	9.8	12.9	mg/l	104	105	73 - 129	1	1
3699896	MW-8L																		
3699897	MW-9U																		
3699898	MW-9L																		
3699899	W-10U																		
3699900	W-10L																		
3699901	NB7FB																		
3699903	AW1UB																		

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

Lancaster Laboratories

Quality Control Summary
 Laboratory Control Standard
 Laboratory Control Standard Duplicate
 Instrumental Water Quality
 SDG: HUL02

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 <=
3699894	MW-8U	01284011111	TOC	10/11/01	51.8	51	NA	mg/l	44.0 - 59.6	NA	NA
3699895	MW-8M										
3699896	MW-8L										
3699897	MW-9U										
3699898	MW-9L										
3699899	W-10U										
3699900	W-10L										
3699901	NB7FB										
3699903	AW1UB										

Std mass: 25.0
Calib. Const: 0.05728

ug C
ug C/mV

Blank: 5.88857 mv
Blank: 7.31569 mv
Blank: 5.86268 mv
Average: 6.35565 mv

Standard: 433.915 mv
Standard: 438.451 mv
Standard: 436.813 mv
Average: 436.393 mv

Quality Control Summary
Initial Calibration & Linearity Check
Instrument Analysis
Total Organic Carbon
Instrument Identification: 5214
Calibration Date: 10/9/01
Matrix: Water
SDG: HUL02

Units=
mg/L

Batch Number	This IC applies to samples:	Sample Code	Analysis #	Method Blank	ICV/	ICV/	ICV/	ICV/	ICV/	ICV/
0128401111	Blank LCS 3699894 3699895 3699896 3699897 3699898 3699899 3699900 P699798		354	0.294	2.101	7.542	9.807	25.060	49.983	75
	MW-8U MW-8M MW-8L MW-9U MW-9L W-10U W-10L B,S,M									NA

Continuing Calibration Dates: 10/11/01
Concentration Units: mg/L

Parameter	Reference Concentration	Result Cont. Cal	% Recovery	Acceptance Range $\pm 10\%$	Out of Specifications
TOC	25	24.801	99	22.375 - 28.5	
CCV	25	25.000	100	22.375 - 28.5	
CCV	25	25.051	100	22.375 - 28.5	
CCV	25	25.422	102	22.375 - 28.5	
CCV	25	25.343	101	22.375 - 28.5	
CCV	25	25.218	101	22.375 - 28.5	
CCV	25	25.599	102	22.375 - 28.5	

Quality Control Summary
Initial Calibration & Linearity Check
Instrument Analysis
Total Organic Carbon
Instrument Identification: 5214
Calibration Date: 10/15/01
Matrix: Water
SDG: HUL02

Std mass: 25.0
Calib. Const: 0.05807
ug C
ug C/mV
Blank: 5.29326 mv
Standard: 429.322 mv
Blank: 6.69233 mv
Standard: 431.051 mv
Blank: 6.84808 mv
Standard: 430.998 mv
Average: 6.27789 mv
Average: 430.457 mv

Batch Number	This IC applies to samples:	Sample Code	Analysis #	Method Blank	ICV/	ICV/	ICV/	ICV/	ICV/	Units=
0128401111	3699901 3699903 3699903	NB7FB AW1UB B S.M	354	0.476	2.273	7.555	10.099	24.955	49.858	mg/L

Continuing Calibration Dates: 10/15/01
Concentration Units: mg/L

Parameter	Reference Concentration	Result Cont. Cal	% Recovery	Acceptance Range +/- 10%	Out of Specifications
TOC	25	24.788	99	22.375 - 28.5	
CCV					

Dept. 27 MDL/LOQ Values

Date Last Printed: 8/1/01

Analysis Name	Analysis Number	Method	Calc. MDL	Calc. LOQ	True MDL	True LOQ	Units
Total Kjeldahl Nitrogen (Water)	0217	AK	0.21	0.63	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	148	445	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	0.41	1.2	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	0.62	1.9	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
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 #: 5714

Date: 10-09-01 Analyst: THH

Calibration Constant: 0.05728 µg C/mv Run #:

0	1	2	8	2	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	5.8857 mV				1				Slope = .99706
↓	7.31569 mV		$\bar{x} = 6.35565$ mV		2				1/intercept = .09414
↓	5.86268 mV				3				corr. coef = .99997
25 µg STD	433.915 mV				4				
↓	438.451 mV		$\bar{x} = 436.193$ mV		5				
↓	436.813 mV				6				
RINSE	0.555				7				
METHOD BLANK	0.794		(B)		8				
ICV - 2.0 µg/L	11.751		(B)		9				wrong vial loaded
7.5 µg/L	7.542		(B)		10				
10.0 µg/L	0.791		(B)		11				wrong vial loaded
25.0 µg/L	25.060		(B)		12				
50.0 µg/L	49.987		↓		13				
RINSE	0.669				14				
ICV/RIS	0.638		(B)		15				
ICV - 2.0 µg/L	2.101		↓		16				
↓ 10.0 µg/L	9.807		↓		17				
ICV	24.681		(B)		18	1427			rec = 99.1%
ICB	0.252		↓		19	1435			
RDN	0.269		0.269	X	20	1507	01282 G11 KJA		
ICSW	10.500	5X	53.	X	21	1515			51.8 µg/L rec = 101.1%
J498989	2.135	10X	< 3x 10k		22	1524			repeat 85.60
↓ 926.9 µ	1.076	1	1.08	X	23	1532		ISP 13	

Verified by: THH

Date: 10/11/01

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 10-11-01 Analyst: J. H. H.

Calibration Constant: 0.65728 µg C/mv Run #:

0	1	2	3	4	5

Standard Mass: 75.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
1CV	24.89		(B)		93	1072			100 = 99.2
1CB	0.763				94	1071			
BBN	0.130	1	0.130 (B)	1	95	1058	01284 OH 11A		
1CSH	10.287	5x	51.1	1	96	1096			51.8 mg/L 100 = 99.2
JL99798H (A)	3.351	1x		1	97	1068		HUL 01	
(B)	3.375		3.2	1	98	1066			
(C)	2.994			1	99	1024			
(D)	2.964			1	100	1072			
JL99798R	12.878	10 mL 1.000 Sample	12.9	1	101	1090			+9.8 mg/L SA, 100 = 99.2
↓ 9798H	12.920		12.9	1	102	1049			↓ RPD = 0 @ 100 = 100.2
1CV	25.000		(B)		103	1057			100 = 100.2
1CB	0.459				104	1105			
JL99801 (A)	2.267	1x		1	105	1113	01284 OH 11A	HUL 01	
(B)	2.580		2.2	1	106	1121			
(C)	1.941			1	107	1129			
(D)	1.840			1	108	1137			
JL99802 (A)	3.307	1x		1	109	1145			
(B)	3.376		3.4	1	110	1153			
(C)	3.672			1	111	1201			
(D)	3.424			1	112	1209			
1CV	24.923		(B)		113	1217			100 = 100.2
1CB	0.520				114	1226			
JL99803 (A)	2.069	1x		1	115	1234	01284 OH 11A	HUL 01	

Verified by: N. H. H. Date: 10/12/01

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 10-11-01 Analyst: [Signature]

Calibration Constant: 0.05728 µg C/mv Run #:

6	1	2	3	2	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
J699803 (B)	2.023	1x	2.2	1	116	1242	01284 6111 11A	HML 01	
(C)	2.531	↓		X	117	1250	↓	↓	
(D)	2.027	↓		↓	118	1258	↓	↓	
J699804 (A)	4.183	1x	4.3	1	119	1306	↓	↓	
(B)	4.167	↓		X	120	1314			
(C)	4.474	↓		↓	121	1322			
(D)	4.403	↓		↓	122	1330	↓	↓	
CV	25.051		(15)		123	1338			10 = 100 %
CB	0.597		↓		124	1346			
J699805 (A)	2.966	1x	2.6	1	125	1354	01284 6111 11A	HML 01	
(B)	2.469	↓		X	126	1403	↓	↓	
(C)	2.346	↓		↓	127	1411	↓	↓	
(D)	2.490	↓		↓	128	1419	↓	↓	
J699894 (A)	3.121	1x	3.4	1	129	1427	↓	↓	HML 02
(B)	3.110	↓		X	130	1435			
(C)	3.709	↓		↓	131	1443			
(D)	3.672	↓		↓	132	1451	↓	↓	
CV	25.422		(15)		133	1459			10 = 102 %
CB	0.738		↓		134	1507			
J699895 (A)	2.293	1x	2.4	1	135	1515	01284 6111 11A	HML 02	
(B)	2.583	↓		X	136	1523	↓	↓	
(C)	2.067	↓		↓	137	1531	↓	↓	
(D)	2.539	↓		↓	138	1540	↓	↓	

Verified by: [Signature]

Date: 10/12/01

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5218

Date: 10-11-01 Analyst: JFK

Calibration Constant: 0.05728 µg C/mv Run #:

0	1	2	8	2

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
JL99896 (A)	2.909	1x	J.0	1	135	1548	01284 014 114	HAL 02	
(B)	2.911			X	146	1552			
(C)	2.211				141	1604			
(D)	3.970				146	1612			
REV	25.343		(P)		142	1620			100 = 101 %
CB	1.196				144	1628			
JL99897 (A)	3.390	1x	J.6	1	145	1636	01284 011 114	HAL 02	
(B)	3.984			X	146	1644			
(C)	3.568				141	1652			
(D)	3.595				14	1700			✓ 10/12/01
JL99898 (A)	3.124	1x	J.0	1	148	1708	01284 011 118		
(B)	2.511			X	150	1717			
(C)	3.499				152	1725			
(D)	2.681				152	1732			
REV	25.218		(P)		153	1741			100 = 101 %
CB	0.946				154	1749			
JL99899 (A)	7.639	1x	7.4	1	157	1757	01284 011 118	HAL 02	
(B)	7.172			X	156	1805			
(C)	7.168				157	1813			
(D)	7.544				157	1821			
JL99900 (A)	3.052	1x	J.2	1	157	1829			
(B)	2.919			X	160	1837			
(C)	2.876				161	1845			

Verified by: JMK 1130

Date: 10/18/01

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 10-11-01 Analyst: JPL

Calibration Constant: 0.05728 µg C/mv Run #:

0	1	2	3	4	5

Standard Mass: 25.0 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
JL99906 (D)	4.029	1x		1	162	1854	01284 c111 118	H4L 02	
16V	25.597		0.5		163	1902			rec=102 %
16B	1.105				164	1910			
JL99901 (A)	0.821	1x	REPEAT	1	165	1918	01284 c111 118	H4L 02	Ret. Pg. 68
(B)	1.001				166	1926			
(C)	1.116				167	1934			
(D)	2.090				168	1942			
JL99902 R (A)	3.043	1x		1	169	1950			
(B)	3.208				170	1958			
(C)	2.884				171	2004			
(D)	3.117				172	2014			
JL99903 R	12.633	10 mL 2nd Skip		1	173	2022			+9.8 mg/L SA, rec=
↓ 99903 R	10.787			1	174	2031			↓ RPD= rec=
16V	7.846		0.5		175	2039			rec= %
16B	0.130				176	2047			
PSN	0.294	1	REPEAT	1	177	2055	01284 c111 13A		
165H	-0.182	5x		1	178	2103			51.8 mg/L rec= %
J704395	-0.012	1		1	179	2111			
4396 H	2.247	1		1	180	2119			
4396 D	-0.160	1		1	181	2127			
4396 R	-0.269	10 mL 2nd Skip		1	182	2135			+9.8 mg/L SA, rec= %
4397	-0.122	1		1	183	2143			
↓ 4398	-0.147	1		1	184	2151			

Verified by: JPL

Date: 10/18/01

RUN # 012821 10-07-99 *THA*

✓ Nmk 1150
10/10/01

SPL# 000001	11:54:04	TIC =	0.71540 mV	0.04175 ug C	0.04175 ppm
SPL# 000001	11:59:04	TOC =	5.88857 mV	0.34368 ug C	0.34368 ppm
SPL# 000002	12:02:09	TIC =	0.81770 mV	0.04772 ug C	0.04772 ppm
SPL# 000002	12:07:09	TOC =	7.31569 mV	0.42697 ug C	0.42697 ppm
SPL# 000003	12:10:14	TIC =	0.76655 mV	0.04473 ug C	0.04473 ppm
SPL# 000003	12:15:14	TOC =	5.86268 mV	0.34217 ug C	0.34217 ppm
SPL# 000004	12:22:33	TIC =	2.71505 mV	0.15846 ug C	0.15846 ppm
SPL# 000004	12:27:33	TOC =	433.915 mV	25.3251 ug C	25.3251 ppm
SPL# 000005	12:30:38	TIC =	2.81787 mV	0.16446 ug C	0.16446 ppm
SPL# 000005	12:35:38	TOC =	438.451 mV	25.5899 ug C	25.5899 ppm
SPL# 000006	12:38:43	TIC =	3.28085 mV	0.19148 ug C	0.19148 ppm
SPL# 000006	12:43:43	TOC =	436.813 mV	25.4943 ug C	25.4943 ppm

LANCASTER LABORATORIES

*** MODEL 700 TOC ANALYZER ***

TOC

CALIBRATION FACTORS:

OCT 09 2001

IC BLANK= 000000 mV	OC BLANK= 6.35565 mV	I.R. OFFSET= 166.050 mV
STD. MASS= 25.0000 ug	STD. AVG.= 436.393 mV	SCALING FACTOR= 0.05728 ug/mV

VOLUMES:

SPL. VOL.= 1.00000 ml	ACID VOL.= 00002 x100ul	OXID. VOL.= 00025 x100ul

LOW/HIGH ALARM SETPOINTS (ppm C):

LAST ANALYSIS RESULTS:

SPL# 00007	12:49:05	TIC = 3.28085 mV	0.19148 ug C	0.19148 ppm
SPL# 00007	12:49:08	TOC = 436.813 mV	25.4943 ug C	25.4943 ppm
SPL# 00007	12:52:54	TIC = 3.04930 mV	0.17468 ug C	0.17468 ppm
SPL# 00007	12:57:54	TOC = 10.2131 mV	0.58508 ug C	0.58508 ppm
SPL# 00008	13:00:59	TIC = 3.28086 mV	0.18795 ug C	0.18795 ppm
SPL# 00008	13:05:59	TOC = 5.14021 mV	0.29447 ug C	0.29447 ppm
SPL# 00009	13:09:04	TIC = 3.48679 mV	0.19975 ug C	0.19975 ppm
SPL# 00009	13:14:04	TOC = 205.642 mV	11.7808 ug C	11.7808 ppm
SPL# 00010	13:17:09	TIC = 3.95054 mV	0.22631 ug C	0.22631 ppm
SPL# 00010	13:22:09	TOC = 131.650 mV	7.54194 ug C	7.54194 ppm
SPL# 00011	13:25:14	TIC = 4.15682 mV	0.23813 ug C	0.23813 ppm
SPL# 00011	13:30:14	TOC = 6.82426 mV	0.39094 ug C	0.39094 ppm
SPL# 00012	13:33:19	TIC = 4.38901 mV	0.25143 ug C	0.25143 ppm
SPL# 00012	13:38:19	TOC = 437.447 mV	25.0604 ug C	25.0604 ppm
SPL# 00013	13:41:24	TIC = 5.34499 mV	0.30620 ug C	0.30620 ppm
SPL# 00013	13:46:24	TOC = 872.488 mV	49.9829 ug C	49.9829 ppm
SPL# 00014	13:49:29	TIC = 13.1008 mV	0.75051 ug C	0.75051 ppm
SPL# 00014	13:54:29	TOC = 11.6777 mV	0.66899 ug C	0.66899 ppm
SPL# 00015	13:57:34	TIC = 3.53830 mV	0.20270 ug C	0.20270 ppm
SPL# 00015	14:02:34	TOC = 11.1445 mV	0.63844 ug C	0.63844 ppm
SPL# 00016	14:06:07	TIC = 2.43245 mV	0.13935 ug C	0.13935 ppm
SPL# 00016	14:11:07	TOC = 36.6748 mV	2.10102 ug C	2.10102 ppm
SPL# 00017	14:14:12	TIC = 2.76646 mV	0.15848 ug C	0.15848 ppm

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SPL# 00092	08:14:54	TOC =	0.12910 mV	0.00739 ug C	0.00739 ppm
SPL# 00093	08:17:59	TIC =	5.39673 mV	0.30916 ug C	0.30916 ppm
SPL# 00093	08:22:59	TDC =	432.916 mV	24.8008 ug C	24.8008 ppm
SPL# 00094	08:26:04	TIC =	2.27839 mV	0.13052 ug C	0.13052 ppm
SPL# 00094	08:31:04	TDC =	5.63944 mV	0.32307 ug C	0.32307 ppm
SPL# 00095	08:53:23	TIC =	2.94642 mV	0.16879 ug C	0.16879 ppm
SPL# 00095	08:58:23	TDC =	2.26177 mV	0.12957 ug C	0.12957 ppm
SPL# 00096	09:01:28	TIC =	7.86191 mV	0.45039 ug C	0.45039 ppm
SPL# 00096	09:06:28	TDC =	179.569 mV	10.2871 ug C	10.2871 ppm
SPL# 00097	10:03:38	TIC =	423.329 mV	24.2516 ug C	24.2516 ppm
SPL# 00097	10:08:38	TDC =	58.4909 mV	3.35082 ug C	3.35082 ppm
SPL# 00098	10:11:43	TIC =	408.274 mV	23.3891 ug C	23.3891 ppm
SPL# 00098	10:16:43	TDC =	58.9066 mV	3.37463 ug C	3.37463 ppm
SPL# 00099	10:19:48	TIC =	406.651 mV	23.2961 ug C	23.2961 ppm
SPL# 00099	10:24:48	TDC =	52.3004 mV	2.99617 ug C	2.99617 ppm
SPL# 00100	10:27:53	TIC =	436.385 mV	24.9995 ug C	24.9995 ppm
SPL# 00100	10:32:53	TDC =	50.6928 mV	2.90408 ug C	2.90408 ppm
SPL# 00101	10:35:58	TIC =	337.830 mV	19.3536 ug C	19.3536 ppm
SPL# 00101	10:40:58	TDC =	224.800 mV	12.8783 ug C	12.8783 ppm
SPL# 00102	10:44:03	TIC =	304.963 mV	17.4707 ug C	17.4707 ppm
SPL# 00102	10:49:03	TDC =	225.524 mV	12.9198 ug C	12.9198 ppm
SPL# 00103	10:52:08	TIC =	7.73179 mV	0.44293 ug C	0.44293 ppm
SPL# 00103	10:57:08	TDC =	436.391 mV	24.9999 ug C	24.9999 ppm
SPL# 00104	11:00:13	TIC =	3.77014 mV	0.21598 ug C	0.21598 ppm
SPL# 00104	11:05:13	TDC =	8.01248 mV	0.45901 ug C	0.45901 ppm

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SPL# 00122	13:30:43	TOC =	76.8605 mV	4.40317 ug C	4.40317 ppm
SPL# 00123	13:33:48	TIC =	7.94001 mV	0.45486 ug C	0.45486 ppm
SPL# 00123	13:38:48	TOC =	437.288 mV	25.0513 ug C	25.0513 ppm
SPL# 00124	13:41:53	TIC =	4.77630 mV	0.27362 ug C	0.27362 ppm
SPL# 00124	13:46:53	TOC =	10.4258 mV	0.59727 ug C	0.59727 ppm
SPL# 00125	13:49:58	TIC =	470.485 mV	26.9530 ug C	26.9530 ppm
SPL# 00125	13:54:58	TOC =	51.7736 mV	2.96600 ug C	2.96600 ppm
SPL# 00126	13:58:03	TIC =	450.269 mV	25.7949 ug C	25.7949 ppm
SPL# 00126	14:03:03	TOC =	46.5973 mV	2.66946 ug C	2.66946 ppm
SPL# 00127	14:06:08	TIC =	373.400 mV	21.3913 ug C	21.3913 ppm
SPL# 00127	14:11:08	TOC =	40.4233 mV	2.31576 ug C	2.31576 ppm
SPL# 00128	14:14:13	TIC =	376.721 mV	21.5815 ug C	21.5815 ppm
SPL# 00128	14:19:13	TOC =	43.4566 mV	2.48953 ug C	2.48953 ppm
SPL# 00129	14:22:18	TIC =	332.578 mV	19.0527 ug C	19.0527 ppm
SPL# 00129	14:27:18	TOC =	54.4723 mV	3.12060 ug C	3.12060 ppm
SPL# 00130	14:30:23	TIC =	354.990 mV	20.3366 ug C	20.3366 ppm
SPL# 00130	14:35:23	TOC =	54.2958 mV	3.11049 ug C	3.11049 ppm
SPL# 00131	14:38:28	TIC =	323.460 mV	18.5303 ug C	18.5303 ppm
SPL# 00131	14:43:28	TOC =	64.7353 mV	3.70854 ug C	3.70854 ppm
SPL# 00132	14:46:33	TIC =	286.219 mV	16.3969 ug C	16.3969 ppm
SPL# 00132	14:51:33	TOC =	64.1041 mV	3.67238 ug C	3.67238 ppm
SPL# 00133	14:54:38	TIC =	7.67975 mV	0.43995 ug C	0.43995 ppm
SPL# 00133	14:59:38	TOC =	443.754 mV	25.4217 ug C	25.4217 ppm
SPL# 00134	15:02:43	TIC =	4.80214 mV	0.27510 ug C	0.27510 ppm
SPL# 00134	15:07:43	TOC =	12.8799 mV	0.73786 ug C	0.73786 ppm

SPL#	TIME	TOC	TIC	TOC / TIC	TOC / TIC
				ug C	ppm
SPL# 00134	15:02:43	TIC =	4.80214 mV	0.27510 ug C	0.27510 ppm
SPL# 00134	15:07:43	TOC =	12.8799 mV	0.73786 ug C	0.73786 ppm
SPL# 00135	15:10:48	TIC =	200.370 mV	11.4788 ug C	11.4788 ppm
SPL# 00135	15:15:48	TOC =	40.0243 mV	2.29290 ug C	2.29290 ppm
SPL# 00136	15:18:53	TIC =	193.634 mV	11.0929 ug C	11.0929 ppm
SPL# 00136	15:23:53	TOC =	45.0962 mV	2.58347 ug C	2.58347 ppm
SPL# 00137	15:26:58	TIC =	189.786 mV	10.8724 ug C	10.8724 ppm
SPL# 00137	15:31:58	TOC =	36.0813 mV	2.06702 ug C	2.06702 ppm
SPL# 00138	15:35:03	TIC =	201.366 mV	11.5358 ug C	11.5358 ppm
SPL# 00138	15:40:03	TOC =	44.6642 mV	2.55871 ug C	2.55871 ppm
SPL# 00139	15:43:08	TIC =	294.452 mV	16.8685 ug C	16.8685 ppm
SPL# 00139	15:48:08	TOC =	50.7803 mV	2.90909 ug C	2.90909 ppm
SPL# 00140	15:51:13	TIC =	268.885 mV	15.4038 ug C	15.4038 ppm
SPL# 00140	15:56:13	TOC =	50.8095 mV	2.91076 ug C	2.91076 ppm
SPL# 00141	15:59:18	TIC =	252.261 mV	14.4515 ug C	14.4515 ppm
SPL# 00141	16:04:18	TOC =	38.6019 mV	2.21142 ug C	2.21142 ppm
SPL# 00142	16:07:23	TIC =	259.726 mV	14.8791 ug C	14.8791 ppm
SPL# 00142	16:12:23	TOC =	69.2992 mV	3.97000 ug C	3.97000 ppm
SPL# 00143	16:15:28	TIC =	8.12227 mV	0.46530 ug C	0.46530 ppm
SPL# 00143	16:20:28	TOC =	442.372 mV	25.3425 ug C	25.3425 ppm
SPL# 00144	16:23:33	TIC =	5.78498 mV	0.33140 ug C	0.33140 ppm
SPL# 00144	16:28:33	TOC =	20.8745 mV	1.19586 ug C	1.19586 ppm
SPL# 00145	16:31:38	TIC =	343.540 mV	19.6807 ug C	19.6807 ppm
SPL# 00145	16:36:38	TOC =	59.1740 mV	3.38995 ug C	3.38995 ppm
SPL# 00146	16:39:43	TIC =	328.098 mV	18.7960 ug C	18.7960 ppm

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SPL# 00145	16:31:38	TIC =	343.540 mV	19.6807 ug C	19.6807 ppm
SPL# 00145	16:36:38	TOC =	59.1740 mV	3.38995 ug C	3.38995 ppm
SPL# 00146	16:39:43	TIC =	328.098 mV	18.7960 ug C	18.7960 ppm
SPL# 00146	16:44:43	TOC =	69.5422 mV	3.98392 ug C	3.98392 ppm
SPL# 00147	16:47:48	TIC =	375.791 mV	21.5283 ug C	21.5283 ppm
SPL# 00147	16:52:48	TOC =	62.2754 mV	3.56762 ug C	3.56762 ppm
SPL# 00148	16:55:53	TIC =	317.168 mV	18.1699 ug C	18.1699 ppm
SPL# 00148	17:00:53	TOC =	62.7543 mV	3.59506 ug C	3.59506 ppm
SPL# 00149	17:03:58	TIC =	223.527 mV	12.8054 ug C	12.8054 ppm
SPL# 00149	17:08:58	TOC =	54.7077 mV	3.13408 ug C	3.13408 ppm
SPL# 00150	17:12:03	TIC =	225.157 mV	12.8988 ug C	12.8988 ppm
SPL# 00150	17:17:03	TOC =	43.8300 mV	2.51093 ug C	2.51093 ppm
SPL# 00151	17:20:08	TIC =	217.323 mV	12.4500 ug C	12.4500 ppm
SPL# 00151	17:25:08	TOC =	61.0801 mV	3.49914 ug C	3.49914 ppm
SPL# 00152	17:28:13	TIC =	201.635 mV	11.5512 ug C	11.5512 ppm
SPL# 00152	17:33:13	TOC =	46.7998 mV	2.68106 ug C	2.68106 ppm
SPL# 00153	17:36:18	TIC =	7.65373 mV	0.43846 ug C	0.43846 ppm
SPL# 00153	17:41:18	TOC =	440.198 mV	25.2180 ug C	25.2180 ppm
SPL# 00154	17:44:23	TIC =	4.93133 mV	0.28250 ug C	0.28250 ppm
SPL# 00154	17:49:23	TOC =	16.5073 mV	0.94566 ug C	0.94566 ppm
SPL# 00155	17:52:28	N.L.	TIC = 788.478 mV	45.1702 ug C	45.1702 ppm
SPL# 00155	17:57:28		TOC = 133.336 mV	7.63851 ug C	7.63851 ppm
SPL# 00156	18:00:33		TIC = 634.670 mV	36.3589 ug C	36.3589 ppm
SPL# 00156	18:05:33		TOC = 125.197 mV	7.17225 ug C	7.17225 ppm
SPL# 00157	18:08:38	N.L.	TIC = 750.661 mV	43.0037 ug C	43.0037 ppm

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SPL# 00156	18:00:33		TIC = 634.670 mV	36.3589 ug C	36.3589 ppm
SPL# 00156	18:05:33		TOC = 125.197 mV	7.17225 ug C	7.17225 ppm
SPL# 00157	18:08:38	N.L.	TIC = 750.661 mV	43.0037 ug C	43.0037 ppm
SPL# 00157	18:13:38		TOC = 125.129 mV	7.16836 ug C	7.16836 ppm
SPL# 00158	18:16:43		TIC = 719.242 mV	41.2038 ug C	41.2038 ppm
SPL# 00158	18:21:43		TOC = 131.684 mV	7.54391 ug C	7.54391 ppm
SPL# 00159	18:24:48		TIC = 236.400 mV	13.5428 ug C	13.5428 ppm
SPL# 00159	18:29:48		TOC = 53.2676 mV	3.05159 ug C	3.05159 ppm
SPL# 00160	18:32:53		TIC = 219.174 mV	12.5560 ug C	12.5560 ppm
SPL# 00160	18:37:53		TOC = 50.9554 mV	2.91913 ug C	2.91913 ppm
SPL# 00161	18:40:58		TIC = 225.675 mV	12.9284 ug C	12.9284 ppm
SPL# 00161	18:45:58		TOC = 50.1970 mV	2.87568 ug C	2.87568 ppm
SPL# 00162	18:49:03		TIC = 235.752 mV	13.5057 ug C	13.5057 ppm
SPL# 00162	18:54:03		TOC = 70.3329 mV	4.02922 ug C	4.02922 ppm
SPL# 00163	18:57:08		TIC = 7.10780 mV	0.40719 ug C	0.40719 ppm
SPL# 00163	19:02:08		TOC = 446.844 mV	25.5987 ug C	25.5987 ppm
SPL# 00164	19:05:13		TIC = 5.65552 mV	0.32399 ug C	0.32399 ppm
SPL# 00164	19:10:13		TOC = 19.2961 mV	1.10543 ug C	1.10543 ppm
SPL# 00165	19:13:18		TIC = 5.06054 mV	0.28990 ug C	0.28990 ppm
SPL# 00165	19:18:18		TOC = 14.3271 mV	0.82077 ug C	0.82077 ppm
SPL# 00166	19:21:23		TIC = 4.98301 mV	0.28546 ug C	0.28546 ppm
SPL# 00166	19:26:23		TOC = 17.4799 mV	1.00139 ug C	1.00139 ppm
SPL# 00167	19:29:28		TIC = 4.93133 mV	0.28250 ug C	0.28250 ppm
SPL# 00167	19:34:28		TOC = 19.4863 mV	1.11632 ug C	1.11632 ppm
SPL# 00168	19:37:33		TIC = 5.39673 mV	0.30916 ug C	0.30916 ppm

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Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 10-15-01 Analyst: [Signature]

Calibration Constant: 0.05807 µg C/mv Run #:

0	1	2	8	8	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	5.29326 mV				1				Slip - 0.99623
↓	6.69233 mV	$\bar{x} =$	6.27789 mV		2				Intercept = 0.2319
↓	6.84808 mV				3				Corr Coef = 0.999778
25 µg C STD	429.322 mV				4				
↓	431.051 mV	$\bar{x} =$	430.457 mV		5				
↓	430.998 mV				6				
RINSE	0.562				7				
METHOD BLANK	0.476		(B)		8				
DEV-2.0 mg/L	2.273				9				
7.5 mg/L	7.555				10				
10.0 mg/L	10.699				11				
25.0 mg/L	24.955				12				
↓ 50.0 mg/L	49.858				13				
RINSE	0.890				14				
ICB / RST	0.774		(B)		15				
JL9 9901 (A)	0.294	1x		2	16	1327	01284 0111 11B	HUL02	
(B)	0.533	↓	0.621 X		17	1335			
(C)	0.647	↓			18	1344			
(D)	1.009	↓			19	1352			
JL9 9903 R (A)	2.412	1x		2	20	1460			
(B)	2.650	↓	2.5 X		21	1468			
(C)	2.639	↓			22	1476			
(D)	2.467	↓			23	1424			

Verified by: [Signature]

Date: 10/18/01

Raw Data Notebook

Total Organic Carbon Analyzer, O.I.

Sample Loop: 1.0 mL Instrument #: 5214

Date: 10-18-01 Analyst: JRS

Calibration Constant: 0.65867 µg C/mv Run #:

0	1	2	3	4	5	6

Standard Mass: 75.2 µg C

Sample Number	Raw Result (mg/L)	DF	Calc. Result (mg/L)	Trial #	Inj. #	Time	Batch Number	SDG	Comments
J69 9903 R	12.719	16mlt. 7ml 500ppm	12.7	2	24	1432	01284 0111 11A	HUL 02	+9.8mg/L SA, re=104.2
↓ 9903 M	12.872	↓	12.9	↓	25	1440	↓	↓	P.D. 1 re=105.2
REV	24.758		(B)		26	1448			re=99.2
COB	0.624		↓		27	1452			
BBW	0.277	1	0.277	1	28	1524	01288 0111 11A		
CGSW	10.273	5x	51.	1	29	1512			51.8mg/L re=99.2
J70 4172	1.449	1	1.45	1	30	1521			
4173	1.390	1	1.39	1	31	1529			
4215	6.013	1	6.0	1	32	1537			
4216	5.755	1	5.8	1	33	1545			
4217 H	5.838	1	5.8	1	34	1553		XXXD1	
4217 D	5.970	1	6.0	1	35	1601		↓	P.D.
4217 R	15.861	16mlt. 7ml 500ppm	15.9	1	36	1609		↓	+9.8mg/L SA, re=102.2
↓ 4218	0.969	10x	<3x 100	1	37	1617			reagent C to 10pt. RS.
REV	24.761		(B)		38	1625			re=99.2
16B	0.522		↓		39	1633			
J70 4219	0.695	1	0.70	1	40	1641	01288 0111 11A		
4675	1.255	1	1.255	1	41	1649			
4676	0.969	1	0.969	1	42	1658			
4677	0.654	1	0.654	1	43	1706			
4678 H	0.627	1	0.627	1	44	1714	01288 0111 11A		
4678 D	0.655	1	0.66	1	45	1722			P.D.
↓ 4678 R	10.614	16mlt. 7ml 500ppm	10.6	1	46	1730			+9.8mg/L SA, re=102.2

Verified by: JRS

Date: 10/18/01

Run # 012881 10-15-01 *DR*

Handwritten signature
10/15/01

PL# 00001	08:55:51	TIC =	1.12478 mV	0.06443 ug C	0.06443 ppm
SPL# 00001	09:00:51	TOC =	5.29326 mV	0.30323 ug C	0.30323 ppm
SPL# 00002	09:03:56	TIC =	1.43209 mV	0.08204 ug C	0.08204 ppm
SPL# 00002	09:08:56	TOC =	6.69233 mV	0.38338 ug C	0.38338 ppm
SPL# 00003	09:12:01	TIC =	1.45771 mV	0.08350 ug C	0.08350 ppm
SPL# 00003	09:17:01	TOC =	6.84808 mV	0.39231 ug C	0.39231 ppm
SPL# 00004	09:21:19	TIC =	2.99785 mV	0.17174 ug C	0.17174 ppm
SPL# 00004	09:26:19	TOC =	429.322 mV	24.5949 ug C	24.5949 ppm
SPL# 00005	09:29:24	TIC =	2.81787 mV	0.16142 ug C	0.16142 ppm
SPL# 00005	09:34:24	TOC =	431.051 mV	24.6940 ug C	24.6940 ppm
SPL# 00006	09:37:29	TIC =	4.10525 mV	0.23518 ug C	0.23518 ppm
SPL# 00006	09:42:29	TOC =	430.998 mV	24.6909 ug C	24.6909 ppm

LANCASTER LABORATORIES

*** MODEL 700 TOC ANALYZER ***

TOC

CALIBRATION FACTORS:

OCT 15 2001

IC BLANK= 000000 mV	OC BLANK= 6.27789 mV	I.R. OFFSET= 167.650 mV
STD. MASS= 25.0000 ug	STD. AVG.= 430.457 mV	SCALING FACTOR= 0.05807 ug/mV

VOLUMES:

SPL. VOL.= 1.00000 ml	ACID VOL.= 00002 x100ul	OXID. VOL.= 00025 x100ul

0
4
2
3

LOW/HIGH ALARM SETPOINTS (ppm C):

SPL# 00007	09:44:26	TIC = 4.10525 mV	0.23518 ug C	0.23518 ppm
SPL# 00007	09:44:28	TOC = 430.998 mV	24.6909 ug C	24.6909 ppm
SPL# 00007	09:48:13	TIC = 2.09872 mV	0.12188 ug C	0.12188 ppm
SPL# 00007	09:53:13	TOC = 9.67987 mV	0.56218 ug C	0.56218 ppm
SPL# 00008	09:56:18	TIC = 2.71505 mV	0.15768 ug C	0.15768 ppm
SPL# 00008	10:01:18	TOC = 8.19602 mV	0.47600 ug C	0.47600 ppm
SPL# 00009	10:04:23	TIC = 3.10074 mV	0.18008 ug C	0.18008 ppm
SPL# 00009	10:09:23	TOC = 39.1343 mV	2.27284 ug C	2.27284 ppm
SPL# 00010	10:12:28	TIC = 3.17792 mV	0.18456 ug C	0.18456 ppm
SPL# 00010	10:17:28	TOC = 130.082 mV	7.55485 ug C	7.55485 ppm
SPL# 00011	10:20:33	TIC = 3.82167 mV	0.22195 ug C	0.22195 ppm
SPL# 00011	10:25:33	TOC = 173.883 mV	10.0987 ug C	10.0987 ppm
SPL# 00012	10:28:38	TIC = 3.71860 mV	0.21596 ug C	0.21596 ppm
SPL# 00012	10:33:38	TOC = 429.698 mV	24.9553 ug C	24.9553 ppm
SPL# 00013	10:36:43	TIC = 4.59553 mV	0.26689 ug C	0.26689 ppm
SPL# 00013	10:41:43	TOC = 858.468 mV	49.8580 ug C	49.8580 ppm
SPL# 00014	10:44:48	TIC = 3.89899 mV	0.22644 ug C	0.22644 ppm
SPL# 00014	10:49:48	TOC = 15.3187 mV	0.88967 ug C	0.88967 ppm
SPL# 00015	10:52:53	TIC = 3.43530 mV	0.19951 ug C	0.19951 ppm
SPL# 00015	10:57:53	TOC = 13.3324 mV	0.77431 ug C	0.77431 ppm
SPL# 00016	13:22:53	TIC = 12.8900 mV	0.74862 ug C	0.74862 ppm
SPL# 00016	13:27:53	TOC = 5.06044 mV	0.29389 ug C	0.29389 ppm
SPL# 00017	13:30:58	TIC = 4.31161 mV	0.25040 ug C	0.25040 ppm
SPL# 00017	13:35:58	TOC = 9.17582 mV	0.53291 ug C	0.53291 ppm
SPL# 00018	13:39:03	TIC = 5.16396 mV	0.29991 ug C	0.29991 ppm
SPL# 00018	13:44:03	TOC = 11.1424 mV	0.64712 ug C	0.64712 ppm

OCT 15 2001

TOC

LANCASTER LABORATORIES

SPL# 00015	10:57:53	TIC =	3.93350 mV	0.17731 ug C	0.17731 ppm
SPL# 00015	10:57:53	TOC =	13.3324 mV	0.77431 ug C	0.77431 ppm
SPL# 00016	13:22:53	TIC =	12.8900 mV	0.74862 ug C	0.74862 ppm
SPL# 00016	13:27:53	TOC =	5.06044 mV	0.29389 ug C	0.29389 ppm
SPL# 00017	13:30:58	TIC =	4.31161 mV	0.25040 ug C	0.25040 ppm
SPL# 00017	13:35:58	TOC =	9.17582 mV	0.53291 ug C	0.53291 ppm
SPL# 00018	13:39:03	TIC =	5.16396 mV	0.29991 ug C	0.29991 ppm
SPL# 00018	13:44:03	TOC =	11.1424 mV	0.64712 ug C	0.64712 ppm
SPL# 00019	13:47:08	TIC =	5.86267 mV	0.34049 ug C	0.34049 ppm
SPL# 00019	13:52:08	TOC =	17.3684 mV	1.00872 ug C	1.00872 ppm
SPL# 00020	13:55:13	TIC =	409.493 mV	23.7825 ug C	23.7825 ppm
SPL# 00020	14:00:13	TOC =	41.5290 mV	2.41191 ug C	2.41191 ppm
SPL# 00021	14:03:18	TIC =	396.374 mV	23.0205 ug C	23.0205 ppm
SPL# 00021	14:08:18	TOC =	45.6353 mV	2.65040 ug C	2.65040 ppm
SPL# 00022	14:11:23	TIC =	389.192 mV	22.6034 ug C	22.6034 ppm
SPL# 00022	14:16:23	TOC =	45.4334 mV	2.63868 ug C	2.63868 ppm
SPL# 00023	14:19:28	TIC =	393.773 mV	22.8695 ug C	22.8695 ppm
SPL# 00023	14:24:28	TOC =	42.4732 mV	2.46675 ug C	2.46675 ppm
SPL# 00024	14:27:33	TIC =	330.866 mV	19.2160 ug C	19.2160 ppm
SPL# 00024	14:32:33	TOC =	218.999 mV	12.7190 ug C	12.7190 ppm
SPL# 00025	14:35:38	TIC =	281.229 mV	16.3332 ug C	16.3332 ppm
SPL# 00025	14:40:38	TOC =	221.632 mV	12.8719 ug C	12.8719 ppm
SPL# 00026	14:43:43	TIC =	5.26740 mV	0.30591 ug C	0.30591 ppm
SPL# 00026	14:48:43	TOC =	426.812 mV	24.7883 ug C	24.7883 ppm
SPL# 00027	14:51:48	TIC =	3.89899 mV	0.22644 ug C	0.22644 ppm
SPL# 00027	14:56:48	TOC =	10.7430 mV	0.62392 ug C	0.62392 ppm

OCT 15 2001

TOC

LANCASTER LABORATORIES

Miscellaneous Analysis Data

Case Narrative Conformance/Nonconformance Summary



Where quality is a science.

CLIENT: Hull & Associates
SDG: HUL02

LANCASTER LABORATORIES

MISCELLANEOUS WET CHEMISTRY

SAMPLE NUMBERS:

<u>Sample #</u>	<u>Sample Code</u>	<u>Comments</u>
3699894	MW-8U	DF33
3699895	MW-8M	DF2
3699896	MW-8L	DF2
3699897	MW-9U	DF50
3699898	MW-9L	DF2
3699899	W-10U	DF500
3699900	W-10L	DF4
3699901	NB7FB	Client blank
3699903	AW1UB	DF33
P700404	B,D	DF20
P700601	B	DF10
P700603	S	DF20
P700605	M	DF20

ANALYSIS:

Dilutions for the sulfate analysis are listed in the comments section above.

EXAMPLE CALCULATIONS:

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

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

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

The matrix spike and matrix spike samples (P698321) for the total dissolved solids analysis were out of specifications.

Continued on page 2

5042400



Where quality is a science.

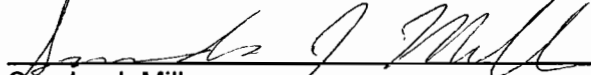
Case Narrative Page 2

SDG: HUL02

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.

Case Narrative Reviewed and Approved by:

 Date: 10-22-01
Sandra J. Miller
Specialist/Coordinator

2001

QC Summary

Lancaster Laboratories

Quality Control Summary

Method Blank

Miscellaneous Wet Chemistry

SDG: HUL02

Method Blank Analysis					Matrix: WATER				
Parameter	Sample Number	Sample Code	Method	Analysis Date	Batch Number	Blank Results	Units	MDL	LOQ
SULFATE	3699894	MW-8U	M	10/18/01	01291112501	1.5	J mg/l	1.5	5
	3699895	MW-8M							
	3699896	MW-8L							
	3699897	MW-9U							
	3699898	MW-9L							
	3699899	W-10U							
	3699900	W-10L							
	3699901	NB7FB							
	3699903	AW1UB							
	P700404	B,D							
	P700601	B							
	P700603	S							
	P700605	M							
TDS	3699894	MW-8U	G	10/5/01	01278021201	ND	mg/l	9.7	30
	3699895	MW-8M							
	3699896	MW-8L							
	3699897	MW-9U							
	3699898	MW-9L							
	3699899	W-10U							
	3699900	W-10L							
	3699901	NB7FB							
	P698321	B,D,S,M							
	3699903	AW1UB							
	P698181	B							
	P698182	S							
	P698183	M							
	P699577	B,D	G	10/8/01	01281021201	ND	mg/l	9.7	30

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
IS = Insoluble Spike	ISD = Insoluble Spike Duplicate
HS = High Spike	PDS = Post Digestion Spike
SS = Soluble Spike	

Matrix Spike Analysis													
Sample Info.	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
3699894	MW-8U	01291112501	SULFATE	M	10/18/01	P700601	204.9	P700603	400	589.3	P700605	400	582.5
3699895	MW-8M												
3699896	MW-8L												
3699897	MW-9U												
3699898	MW-9L												
3699899	W-10U												
3699900	W-10L												
3699901	NB7FB												
3699903	AW1UB												
3699894	MW-8U	01278021201	TDS	G	10/5/01	P698321	2338.00	P698321	800.00	3034.00	P698321	800.00	3030.00
3699895	MW-8M												
3699896	MW-8L												
3699897	MW-9U												
3699898	MW-9L												
3699899	W-10U												
3699900	W-10L												
3699901	NB7FB												
3699903	AW1UB	01281021201	TDS	G	10/8/01	P698181	1040.00	P698182	800.00	1924.00	P698183	800.00	1926.00
											MS Rec (%)	MSD Rec (%)	Acceptance Window (%)
											96	94	77 - 114
											mg/l	mg/l	
											87	87	91 - 114
											0	0	
											1	1	
											% RPD Limits </=		4
													3
													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: HUL02

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 % </=
3699894	MW-8U	01291112501	SULFATE	M	10/18/01	P700404	493.0	P700404	492.2	mg/l	0	4
3699895	MW-8M											
3699896	MW-8L											
3699897	MW-9U											
3699898	MW-9L											
3699899	W-10U											
3699900	W-10L											
3699901	NB7FB											
3699903	AW1UB											
3699894	MW-8U	01278021201	TDS	G	10/5/01	P698321	2338.00	P698321	2250.00	mg/l	4	4
3699895	MW-8M											
3699896	MW-8L											
3699897	MW-9U											
3699898	MW-9L											
3699899	W-10U											
3699900	W-10L											
699901	NB7FB											
3699903	AW1UB	01281021201	TDS	G	10/8/01	P699577	3220.00	P699577	3276.00	mg/l	2	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

Quality Control Summary
 Laboratory Control Standard
 Laboratory Control Standard Duplicate
 Miscellaneous Wet Chemistry
 SDG: HUL02

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 <=
3699894	MW-8U	01291112501	SULFATE	10/18/01	20	18.9	19.2	mg/l	18	-	22	2	3
3699895	MW-8M			10/18/01	20	19.3	NA	mg/l	18	-	22	NA	NA
3699896	MW-8L			10/18/01	20	18.9	NA	mg/l	18	-	22	NA	NA
3699897	MW-9U			10/18/01	20	19.0	NA	mg/l	18	-	22	NA	NA
3699898	MW-9L			10/18/01	20	19.1	NA	mg/l	18	-	22	NA	NA
3699899	W-10U			10/18/01	20	19.1	NA	mg/l	18	-	22	NA	NA
3699900	W-10L												
3699901	NB7FB												
3699903	AW1UB												
3699894	MW-8U	01278021201	TDS	10/5/01	200	195.00	NA	mg/l	1741	-	230	NA	NA
3699895	MW-8M												
3699896	MW-8L												
3699897	MW-9U												
3699898	MW-9L												
3699899	W-10U												
3699900	W-10L												
3699901	NB7FB												
3699903	AW1UB	01281021201	TDS	10/8/01	200	184.00	NA	mg/l	1741	-	230	NA	NA

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	Orthophosphate	226	0.0028 mg/l
Ammonia Nitrogen	221	0.16 mg/l	Paraquat	1733	17 ug/l
Ammonia Nitrogen	6914	0.04 mg/l	Petroleum Hydrocarbons	1126, 8140	0.28 mg/l
BOD	235	0.80 mg/l	Petroleum Hydrocarbons	1554	0.30 mg/l
Carbonaceous BOD	1364	0.80 mg/l	Petroleum Hydrocarbons	1562	9.4 mg/kg
Chemical Oxygen Demand	1553	1.67 mg/l	Petroleum Hydrocarbons	1663	21 mg/kg
Chemical Oxygen Demand	234	335 mg/l	Petroleum Hydrocarbons	1720	15.5 mg/kg
Chemical Oxygen Demand	4001	8.84 mg/l	Petroleum Hydrocarbons	8129	9 mg/kg
Chloride	1124	0.398 mg/l	Petroleum Hydrocarbons	8141	12.6 mg/kg
Chlorine Residual	240	0.03 mg/l	Silica	559	0.024 mg/l
Dissolved Oxygen	428	0.09 mg/l	Soluble BOD	541	0.80 mg/l
Dithiocarbamates	8322	0.47 ug/l	Specific Conductance	280	0.208 umhos/cm
Ferrous Iron	8344	0.009 mg/l	Specific Gravity	1443	0.004
Fluoride	263	0.03 mg/l	Sulfate	1125	1.5 mg/l
Fluoride Distillation	1448	0.03 mg/l	Sulfide	230	0.022 mg/l
Hexane Extractable Materials(Silica-Gel Treated)	8078	2.1 mg/l	Sulfide, Acid Volatile	1630	0.39 micromol/g
Hexane Extractable Materials	8079	1.2 mg/l	Sulfide Titration	1333	0.53 mg/l
Hexavalent Chromium	276	0.003 mg/l	Sulfide Titration	1122	20 mg/kg
Hexavalent Chromium	425	0.39 mg/kg	Sulfide Titration	487	7.1 mg/kg
Hexavalent Chromium	1446	0.0009 mg/l	Sulfite	229	0.68 mg/l
Hexavalent Chromium	4858	0.39 mg/kg	Total Dissolved Solids	212	9.7 mg/l
Hexavalent Chromium	4859	0.004 mg/l	Total Hardness	216	0.29 mg/l
Iodide	6867	0.015 mg/l	Total Solids	203	4.62 mg/l
Karl Fischer Moisture	4529	0.027 %	Total Suspended Solids	206	3.0 mg/l
M.B.A.S.	225	0.028 mg/l	Turbidity	279	0.063 NTU
Moisture	111	0.5 %	Thiocyanate	8355	0.246 mg/l
Moisture	1353	0.5 %	UV Absorbance	7120	0.006 cm-1

Revised 10/04/01

Raw Data

Raw Data Logbook
Sulfate (Turbidimetric)
Analysis #1125

Name of curve: 1125 9-S-01 SAE
Corr. Coeff.: .998602
Slope: -4.25554
Y-intercept: -6.40318
Std. Ref. (Book/pg): 031009 p 30

Batch #:

CURVE

Time: 1605
Date: 9-5-01

Day #: 01248
Inst. ID#: 6165
Init/Emp. #: SAE1227

Upld Date:

Upld by:

Before After
10NTU = 9.03 9.12
100NTU = 94.3 93.7

	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	.705	.917	-212	1.45485					
2	5 mg/L			14.5	.306	14.194	4.84009					1mL of 5mg/L
3	10			33.1	.655	32.445	9.12885					2mL
4	15			54.9	.275	54.625	14.34058					3mL
5	20			78.0	.529	77.471	19.70941					4mL
6	25			98.5	.644	97.856	24.49664					5mL
7	30			123	.450	122.55	30.30242					6mL
8	35			143	.198	142.802	35.06140					7mL
9	40			167	.363	166.637	40.66233					8mL
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												

SAE/227
1125 Curve

D.F. = Dilution Factor

Verified by:

RA/355

Date:

9/6/01

Raw Data Logbook
Sulfate (Turbidimetric)
Analysis #1125

Name of curve: 1125 9.5-01 SAE
Corr. Coeff.: .998602
Slope: 4.25554
Y-intercept: -6.40318
Std. Ref. (Book/pg): 031009 p.30

(x + 4 mL of 500 mg/L)

Batch #:

01291 112 501 A

Time: 0952 Day #: 01291
Date: 10-18-01 Inst. ID#: 6165
Init/Emp. #: SAE1227

Upld Date: 10/18/01
Upld by: SEH/LL

Before After
NTU = 9.31 9.33
100
NTU = 94.5 93.7

	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	.391	.226	.165	1.54344	1.5	5			(15)
2	5mg/L			14.9	1.02	13.88	4.76630	4.8	5			(15) 95%
3	40mg/L			162	.674	161.326	39.41431	39.4	5			(15) 99%
4	20mg/L	✓	✓	74.5	.551	73.949	18.88178	18.9	5	4.28	4	x (15) 94%
5	3699894	3	33	113	114	-1.0	1.26968	42.3	167			153HE 237 10-18-01 05A (240)
6	3699895	50	2	151	21.3	129.7	31.98259	64.0	10			
7	3699896	✓	✓	160	21.5	138.5	34.05048	68.1	10			
8	3699897	2	50	53.1	50.3	2.8	2.16264	108.1	250			(240)
9	20mg/L	100	1	76.0	.522	75.478	19.24108	19.2	5	20	4	x (15) 96% R=2
10	3699898	50	2	166	9.77	156.23	38.21681	76.4	10			05A
11	3699899	.2	500	80.911	85.7	5.4	2.77360	1386.8	2500			1mL → 100mL 20mg/L (240)
12	3699900	25	4	79.9	5.01	74.89	19.10291	76.4	20			
13	3699901	100	1	.685	2.45	-1.765	1.08992	1.1	5			
14	20mg/L	100	1	76.5	.870	75.63	19.27680	19.3	5			X
15	3699903	3	33	123	121	2.0	1.97464	65.8	167			05A (240)
16	3700059	20	5	126	2.86	123.14	30.44167	152.2	25			050
17	3700396	100	1	.878	1.77	-.892	1.29506	1.3	5			
18	3700404	5	20	94.8	1.31	98.49	24.64862	493.0	100			
19	20mg/L	100	1	75.1	.872	74.228	18.44734	18.9	5			X
20	3700405	25	4	125	2.15	122.85	36.37292	121.5	20			05A
21	3700406	5	20	163	4.36	98.64	24.68387	493.7	100			05B
22	3700569	2.5	4	162	11.0	151	36.98783	148.0	20			
23	3700604	10	10	82.4	1.61	80.79	26.48933	204.9	50			05A
24	20mg/L	100	1	75.2	.760	74.44	18.99716	19.0	5			05A/05B 10/18/01 X
25	3700603	5	20	120	1.01	118.99	29.46587	589.3	100	4200		x (15) 96%
26	3700654	5	20	119	1.46	117.54	29.12544	582.5	100	4260		x (15) 94% P=1
27	3700607	10	10	85.6	1.48	84.12	21.27184	212.7	50			
28	3700609	100	1	.891	1.64	-.749	1.32866	1.3	5			
29	20mg/L	100	1	75.3	.599	74.701	19.85849	19.1	5			X
30	3700613	2	50	126	2.04	123.96	30.63376	1531.7	250			
31	3701471	10	10	66.4	8.90	57.5	15.01647	150.2	50			
32	3700404D	5	20	100	1.68	98.32	24.60867	492.2	100			Prog. deleted
33	20mg/L	100	1	75.5	.658	74.842	19.09163	19.1	5			X

D.F. = Dilution Factor

Verified by:

RH/355

Date: 10/18/01

Batch#: 01278021201

LLENS Worksheet for Total Dissolved Solids

Oven ID #: 6605 Temperature In: 186° Temperature Out: 186° 181°/178°
 Balance ID #: 8119 Std. Ref. (book/pg.): 031009 p 53 #3586/227 10-5-01

#	Sample ID	Date Added	Crucible ID	Vol.	BC	Comments	Analysis#
1)	BLK	10/05/01 08:23	TL6	200			
2)	LCS 200	10/05/01 08:23	C3	100			
3)	3697925	10/05/01 08:23	KCL	100	05B		00212
4)	3698319	10/05/01 08:23	TBY	50			00212
5)	3698321	10/05/01 08:23	PIE	50			00212
6)	3698321DUP	10/05/01 08:23	MLB	50			00212
7)	3698321MS	10/05/01 08:23	SAY	50		+10mL to 4000mg/L	00212
8)	3698321MSD	10/05/01 08:23	GM	50		↓	00212
9)	3698416	10/05/01 08:23	JSM	50	↓		00212
10)	3698930	10/05/01 08:23	C13	200	04A		00212
11)	3698931	10/05/01 08:23	35C	200	↓		00212
12)	3699793	10/05/01 08:23	Alot	200	05A		00212
13)	3699801	10/05/01 08:23	MAT	200	05A		00212
14)	3699802	10/05/01 08:23	MP	200			00212
15)	3699803	10/05/01 08:23	SAD	200			00212
16)	3699804	10/05/01 08:23	FFA	200			00212
17)	3699805	10/05/01 08:23	City	200			00212
18)	3699894	10/05/01 08:23	Byu	200			00212
19)	3699895	10/05/01 08:23	HEY	200			00212
20)	3699896	10/05/01 08:23	A30	200			00212
21)	3699897	10/05/01 08:23	Lyc	200			00212
22)	3699898	10/05/01 08:23	TUB	200	↓		00212

Signature: Susan EngleDate: 10-5-01

Printed by 00227 on 10/05/2001 at 08:23

✓RH/355 10/10/01

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Batch#: 01278021201

LLENS Worksheet for Total Dissolved Solids

Oven ID #: 6665 Temperature In: 186° Temperature Out: 186° 181°/178°
 Balance ID #: 849 Std. Ref. (book/pg.): 031609 p53 #3 SAE/227 10-5-01

#	Sample ID	Date Added	Crucible ID	Vol.	BC	Comments	Analysis#
23)	3699899	10/05/01 08:23	B10	50 #3 SAE/227 10-5-01 100	05A	Thick muddy water	00212
24)	3699900	10/05/01 08:23	mayo	200	↓		00212
25)	3699901	10/05/01 08:23	KZ	200	↓		00212

Signature: Dusan Engle Date: 10-5-01
 Printed by 00227 on 10/05/2001 at 08:23

✓RH/355 10/10/01

Batch#: 01278021201

LLENS Batch Chronology Report - Total Dissolved Solids

#	Operation	Instrument	Date	Time	Analyst
1)	Batch Creation		10/05/2001	08:23	00227
2)	Tare Weight	008119	10/05/2001	13:02	00227
3)	Spiking Info		10/05/2001	13:04	00227
4)	Sample Volumes		10/05/2001	13:04	00227
5)	Final Dry Weight 1	008119	10/08/2001	08:56	00284
6)	Final Dry Weight 2	008119	10/08/2001	12:26	00284
7)	Final Dry Weight 3	008119	10/09/2001	08:36	00227
8)	Final Dry Weight 4	008119	10/09/2001	12:08	00227
9)	Calculate/Transmit	LLENS3	10/09/2001	12:08	00227

Comments:

✓ RN / 355 10/10/01

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			T6	103.8792				200.00	103.8789	103.8782	103.8791				-5.00
LCS 200	A			C3	103.5486				100.00	103.5686	103.5681					195.00
3697925	A	00212		KCL	100.0045				100.00	100.0801	100.0798					753.00
3698319	A	00212		TD4	104.2782				50.00	104.3919	104.3931					2274.00
3698321	A	00212		PIE	106.6751				50.00	106.7920	106.7928					2338.00
3698321DUP	A	00212		HUB	101.3342				50.00	101.4467	101.4468					2250.00
3698321MS	A	00212		SAY	103.6414	10.00	4000.00	50.00	50.00	103.7941	103.7931	103.7934		800.00 SA	3.84	3034.00
3698321MSD	A	00212		GM	103.5059	10.00	4000.00	50.00	50.00	103.6574	103.6574			800.00 SA	0.13	3030.00
3698416	A	00212		JBM	99.3594				50.00	99.4903	99.4895	99.4897				2602.00
3698930	A	00212		C13	103.6793				200.00	103.7295	103.7297					251.00
3698931	A	00212		356	102.6660				200.00	102.7464	102.7404	102.7481				372.00
3699798	A	00212		ALOT	102.1828				200.00	102.2464	102.2464					318.00
3699801	A	00212		HAT	101.1446				200.00	101.1871	101.1874					212.50
3699802	A	00212		MP	110.2465				200.00	110.3649	110.3654					592.00
3699803	A	00212		SAD	99.7244				200.00	99.7680	99.7672	99.7667				211.50
3699804	A	00212		FFA	98.9615				200.00	99.0288	99.0285					335.00
3699805	A	00212		CITY	110.4961				200.00	110.5465	110.5479					252.00
3699894	A	00212		BYU	99.4293				200.00	99.4879	99.4899					293.00
3699895	A	00212		HEY	104.3985				200.00	104.4424	104.4429					219.50
3699896	A	00212		AJO	109.4097				200.00	109.4635	109.4641					269.00
3699897	A	00212		LVC	104.5167				200.00	104.6056	104.6065					444.50
3699898	A	00212		TUB	93.2297				200.00	93.2854	93.2857					278.50
3699899	A	00212		B10	100.1455				50.00	100.1882	100.1884					854.00
3699900	A	00212		MAYO	107.9773				200.00	108.0353	108.0319	108.0292	108.0287			257.00

Printed by 00227 on 10/09/2001 at 12:08

✓ RH/355 10/10/01

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	Hel Diff	TUS (mg/L)

3699901	A	00212		K2	102.2571-				200.00-	102.2568	102.2570					-1.50

Printed by 00227 on 10/09/2001 at 12:08

✓ RA/355 10/10/01

Tare Weight Summary

Sample ID	Date/Time	ID	Wt.	Analyst	Date/Time	ID	Wt.	Analyst	Date/Time	ID	Wt.	Analyst
BLK	10/03/01 12:24	T6	103.8792	00416								
LCS 200	10/03/01 12:24	C3	103.5486	00416								
3697925	10/03/01 12:13	KCL	100.0045	00416								
3698319	10/03/01 12:12	TD4	104.2782	00416								
3698321	10/03/01 12:11	PIE	106.6751	00416								
3698321DUP	10/03/01 12:11	MLB	101.3342	00416								
3698321MS	10/03/01 12:10	SAY	103.6414	00416								
3698321MSD	10/03/01 12:10	GM	103.5059	00416								
3698416	10/03/01 12:09	JSM	99.3594	00416								
3698930	10/03/01 12:23	C13	103.6793	00416								
3698931	10/03/01 12:22	356	102.6660	00416								
3699798	10/03/01 12:17	ALOT	102.1828	00416								
3699801	10/03/01 12:22	MAT	101.1446	00416								
3699802	10/03/01 12:17	MP	110.2465	00416								
3699803	10/03/01 12:21	SAD	99.7244	00416								
3699804	10/03/01 12:16	FFA	98.9615	00416								
3699805	10/03/01 12:20	CITY	110.4961	00416								
3699894	10/03/01 12:15	BYU	99.4293	00416								
3699895	10/03/01 12:20	HEY	104.3985	00416								
3699896	10/03/01 12:19	A30	109.4097	00416								
3699897	10/03/01 12:15	LVC	104.5167	00416								
3699898	10/03/01 12:19	TUB	93.2297	00416								
3699899	06/19/01 09:57	B10	100.1455	00227								
3699900	10/03/01 12:18	MAYO	107.9773	00416								
3699901	10/03/01 12:18	KZ	102.2571	00416								

Printed by 00227 on 10/09/2001 at 12:08

Batch#: 01281021201

LLENS Worksheet for Total Dissolved Solids

Oven ID #: 6605 Temperature In: 181° Temperature Out: 184° 10/10/01
 Balance ID #: 8119 Std. Ref. (book/pg.): Q31009 p.59 175° 10/9/01

#	Sample ID	Date Added	Crucible ID	Vol.	BC	Comments	Analysis#
1)	BLK	10/08/01 10:16	C8	200			
2)	LCS 200	10/08/01 10:16	T00	100			
3)	3698176	10/08/01 10:16	WAC	50	05A		00212
4)	3698177	10/08/01 10:16	XY2	200			00212
5)	3698179	10/08/01 10:16	BOX	50			00212
6)	3698181 BK.	10/08/01 10:16	11	50			00212
7)	3698182MS	10/08/01 10:16	34	50		+10 ml of 4000	00212
8)	3698183MSD	10/08/01 10:16	E	50		↓	00212
9)	3698186	10/08/01 10:16	DAD	50			00212
10)	3698187	10/08/01 10:16	RAM	50			00212
11)	3698189	10/08/01 10:16	AC	50			00212
12)	3698191	10/08/01 10:16	NOT	50			00212
13)	3698192	10/08/01 10:16	KJH	50			00212
14)	3698194	10/08/01 10:16	ZERO	25	✓		00212
15)	3698914	10/08/01 10:16	BK	100	05A		00212
16)	3698932	10/08/01 10:16	PAT	200	04A		00212
17)	3698933	10/08/01 10:16	810	200	↓		00212
18)	3698934	10/08/01 10:16	123	200	✓		00212
19)	3699571	10/08/01 10:16	SKY	10	05A		00212
20)	3699573	10/08/01 10:16	AM	200	↓		00212
21)	3699575	10/08/01 10:16	TD5	100	↓		00212
22)	3699577	10/08/01 10:16	VH1	25	✓		00212

Signature: Anne L. KuenghDate: 10/8/01

Printed by 00284 on 10/08/2001 at 10:16

✓RH/355 10/11/01

Batch#: 01281021201

LLENS Worksheet for Total Dissolved Solids

Oven ID #: 6605 Temperature In: 181° Temperature Out: 184° 10/10/01
 Balance ID #: 8119 Std. Ref. (book/pg.): 031009 p59 175° 10/8/01

#	Sample ID	Date Added	Crucible ID	Vol.	BC	Comments	Analysis#
23)	3699577DUP	10/08/01 10:16	XMAS	25	05A		00212
24)	3699903	10/08/01 10:16	TE	200			00212
25)	3701102	10/08/01 10:16	LB	200	✓		00212

Signature: Anne L. Kuehli Date: 10/8/01
 Printed by 00284 on 10/08/2001 at 10:16

✓RH/355 10/11/01

Batch#: 01281021201

LLENS Batch Chronology Report - Total Dissolved Solids

#	Operation	Instrument	Date	Time	Analyst
1)	Batch Creation		10/08/2001	10:16	00284
2)	Tare Weight	003636	10/08/2001	16:57	00284
3)	Spiking Info		10/08/2001	16:59	00284
4)	Sample Volumes		10/08/2001	17:00	00284
5)	Final Dry Weight 1	008119	10/09/2001	08:39	00227
6)	Final Dry Weight 2	008119	10/09/2001	12:09	00227
7)	Final Dry Weight 3	008119	10/10/2001	08:54	00284
8)	Final Dry Weight 4	008119	10/10/2001	13:42	00284
9)	Calculate/Transmit	LLENS3	10/10/2001	13:46	00284

Comments:

✓RN/355 10/11/01

Batch Page 2 of 5

Batch Page 2 of 5

Batch Page 2 of 5

Printed by 00284 on 10/10/2001 at 13:46

✓RH/355 10/11/61

⑮ $k=2$

Tare Weight Summary

Sample ID	Date/Time	ID	Wt.	Analyst	Date/Time	ID	Wt.	Analyst	Date/Time	ID	Wt.	Analyst
BLK	10/05/01 12:30	C8	100.7496	00227								
LCS 200	10/05/01 12:29	TOO	103.1845	00227								
3698176	10/05/01 12:24	WAC	108.1665	00227								
3698177	10/05/01 12:27	XYZ	103.3768	00227								
3698179	10/05/01 12:25	BOX	99.9301	00227								
3698181	10/05/01 12:24	11	101.3950	00227								
3698182	10/05/01 12:25	34	104.7875	00227								
3698183	10/05/01 12:24	E	104.0683	00227								
3698186	10/05/01 12:24	DAD	107.0526	00227								
3698187	10/05/01 12:26	RAM	104.8863	00227								
3698189	10/05/01 12:28	AC	103.5976	00227								
3698191	10/05/01 12:23	NOT	101.6066	00227								
3698192	10/05/01 12:29	KJH	112.7077	00227								
3698194	10/05/01 12:27	ZERO	98.8441	00227								
3698914	10/05/01 12:27	BK	102.7519	00227								
3698932	10/05/01 12:26	PAT	105.4040	00227								
3698933	10/05/01 12:23	810	102.5317	00227								
3698934	10/05/01 12:30	123	103.0489	00227								
3699571	10/05/01 12:28	SKY	113.8705	00227								
3699573	10/05/01 12:30	AM	103.9241	00227								
3699575	10/05/01 12:30	TD5	104.2707	00227								
3699577	10/05/01 12:31	VH1	102.8740	00227								
3699577DUP	10/05/01 12:26	XMAS	105.1690	00227								
3699903	10/05/01 12:29	TE	104.4756	00227								
3701102	10/05/01 12:28	LB	105.5010	00227								

Printed by 00284 on 10/10/2001 at 13:46