SDMS Document
98459

THE
WHITMAN
COMPANIES, INC.

Setting the Standard in
Environmental Engineering & Management

FINAL REMEDIAL INVESTIGATION REPORT

FOR

ROCKAWAY BOROUGH WELL FIELD SITE
OPERABLE UNIT #3
FOR PROPERTY OF
KLOCKNER & KLOCKNER
ROCKAWAY BOROUGH, NEW JERSEY

VOLUME 14
LABORATORY QA/QC DATA PACKAGE
2/15/00 - JOB #455

SUBMITTED TO
USEPA-REGION II
EMERGENCY & REMEDIAL RESPONSE DIVISION
NEW YORK, NEW YORK

SUBMITTED BY
THE WHITMAN COMPANIES, INC.
ON BEHALF OF KLOCKNER & KLOCKNER

IN ACCORDANCE WITH
ADMINISTRATIVE ORDER ON CONSENT
INDEX NO. II-CERCLA-95-0104

306571

MAY 2004

116 Tices Lane, Unit B-1, East Brunswick, NJ 08816
www.whitmanco.com

STL Envirotech
a division of Severn Trent Laboratories, Inc.

STL Envirotech
777 New Durham Road
Edison, NJ 08817
Tel: (732) 549-3900
Fax: (732) 549-3679
www.stl-inc.com

No GC/MS Instrument Performance checks
Cont. Cal, MSD,
Blanks w/ X456 packet

March 06, 2000

RECEIVED
MAR - 9 2000
The Whitman Companies, Inc.

The Whitman Companies, Inc.
44 West Ferris Street
East Brunswick, NJ 08816

Attention: Mr. Michael Metlitz

Re: Job No. X455 - Klockner & Klockner

Dear Mr. Metlitz:

Enclosed are the results you requested for the following sample(s) received at our laboratory on February 16, 2000:

Lab No.	Client ID	Analysis Required
183826	SSFA-1	Method 8021 - Purgeable Halocarbons
183827	SSFA-D	Method 8021 - Purgeable Halocarbons
183828	SSFA-4A	Method 8021 - Purgeable Halocarbons
183829	SSFA-4B	Method 8021 - Purgeable Halocarbons
183830	SSFA-4C	Method 8021 - Purgeable Halocarbons

If you have any questions please contact your Project Manager, Brian Reddy, at (732) 549-3900.

Very truly yours,

Michael J. Urban
Laboratory Manager

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Client ID: **SSFA-1**
Site: Klockner & Klockner

Lab Sample No: **183826**
Lab Job No: X455

Date Sampled: 02/15/00
Date Received: 02/16/00
Date Analyzed: 02/25/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: held7679.d

Matrix: SOIL
Level: HIGH
Sample Weight: 12 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 4.0

VOLATILE ORGANICS - GC

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	110
Chloromethane	ND	110
Vinyl Chloride	ND	110
Bromomethane	ND	110
Chloroethane	ND	110
Trichlorofluoromethane	ND	110
1,1-Dichloroethene	ND	110
Methylene Chloride	ND	110
trans-1,2-Dichloroethene	ND	110
1,1-Dichloroethane	ND	110
cis-1,2-Dichloroethene	ND	110
Chloroform	ND	110
1,1,1-Trichloroethane	ND	110
Carbon Tetrachloride	ND	110
1,2-Dichloroethane	ND	110
Trichloroethene	ND	110
1,2-Dichloropropane	ND	110
Bromodichloromethane	ND	110
2-Chloroethyl Vinyl Ether	ND	110
cis-1,3-Dichloropropene	ND	110
trans-1,3-Dichloropropene	ND	110
1,1,2-Trichloroethane	ND	110
Tetrachloroethene	ND	110
Dibromochloromethane	ND	110
Chlorobenzene	ND	110
Bromoform	ND	110
1,1,2,2-Tetrachloroethane	ND	110
1,3-Dichlorobenzene	ND	110
1,4-Dichlorobenzene	ND	110
1,2-Dichlorobenzene	ND	110

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Client ID: **SSFA-D**
Site: Klockner & Klockner

Lab Sample No: **183827**
Lab Job No: X455

Date Sampled: 02/15/00
Date Received: 02/16/00
Date Analyzed: 02/25/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: held7680.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 20.7

VOLATILE ORGANICS - GC

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	140
Chloromethane	ND	140
Vinyl Chloride	ND	140
Bromomethane	ND	140
Chloroethane	ND	140
Trichlorofluoromethane	ND	140
1,1-Dichloroethene	ND	140
Methylene Chloride	ND	140
trans-1,2-Dichloroethene	ND	140
1,1-Dichloroethane	ND	140
cis-1,2-Dichloroethene	ND	140
Chloroform	ND	140
1,1,1-Trichloroethane	ND	140
Carbon Tetrachloride	ND	140
1,2-Dichloroethane	ND	140
Trichloroethene	ND	140
1,2-Dichloropropane	ND	140
Bromodichloromethane	ND	140
2-Chloroethyl Vinyl Ether	ND	140
cis-1,3-Dichloropropene	ND	140
trans-1,3-Dichloropropene	ND	140
1,1,2-Trichloroethane	ND	140
Tetrachloroethene	2600	140
Dibromochloromethane	ND	140
Chlorobenzene	ND	140
Bromoform	ND	140
1,1,2,2-Tetrachloroethane	ND	140
1,3-Dichlorobenzene	ND	140
1,4-Dichlorobenzene	ND	140
1,2-Dichlorobenzene	ND	140

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Client ID: **SSFA-4A**
Site: Klockner & Klockner

Lab Sample No: **183828**
Lab Job No: X455

Date Sampled: 02/15/00
Date Received: 02/16/00
Date Analyzed: 02/25/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: held7681.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 7.2

VOLATILE ORGANICS - GC

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	120
Chloromethane	ND	120
Vinyl Chloride	ND	120
Bromomethane	ND	120
Chloroethane	ND	120
Trichlorofluoromethane	ND	120
1,1-Dichloroethene	ND	120
Methylene Chloride	ND	120
trans-1,2-Dichloroethene	ND	120
1,1-Dichloroethane	ND	120
cis-1,2-Dichloroethene	ND	120
Chloroform	ND	120
1,1,1-Trichloroethane	ND	120
Carbon Tetrachloride	ND	120
1,2-Dichloroethane	ND	120
Trichloroethene	ND	120
1,2-Dichloropropane	ND	120
Bromodichloromethane	ND	120
2-Chloroethyl Vinyl Ether	ND	120
cis-1,3-Dichloropropene	ND	120
trans-1,3-Dichloropropene	ND	120
1,1,2-Trichloroethane	ND	120
Tetrachloroethene	ND	120
Dibromochloromethane	ND	120
Chlorobenzene	ND	120
Bromoform	ND	120
1,1,2,2-Tetrachloroethane	ND	120
1,3-Dichlorobenzene	ND	120
1,4-Dichlorobenzene	ND	120
1,2-Dichlorobenzene	ND	120

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Client ID: **SSFA-4B**
Site: Klockner & Klockner

Lab Sample No: **183829**
Lab Job No: X455

Date Sampled: 02/15/00
Date Received: 02/16/00
Date Analyzed: 02/25/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: held7682.d

Matrix: SOIL
Level: HIGH
Sample Weight: 12 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 6.9

VOLATILE ORGANICS - GC

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	120
Chloromethane	ND	120
Vinyl Chloride	ND	120
Bromomethane	ND	120
Chloroethane	ND	120
Trichlorofluoromethane	ND	120
1,1-Dichloroethene	ND	120
Methylene Chloride	ND	120
trans-1,2-Dichloroethene	ND	120
1,1-Dichloroethane	ND	120
cis-1,2-Dichloroethene	ND	120
Chloroform	ND	120
1,1,1-Trichloroethane	ND	120
Carbon Tetrachloride	ND	120
1,2-Dichloroethane	ND	120
Trichloroethene	ND	120
1,2-Dichloropropane	ND	120
Bromodichloromethane	ND	120
2-Chloroethyl Vinyl Ether	ND	120
cis-1,3-Dichloropropene	ND	120
trans-1,3-Dichloropropene	ND	120
1,1,2-Trichloroethane	ND	120
Tetrachloroethene	ND	120
Dibromochloromethane	ND	120
Chlorobenzene	ND	120
Bromoform	ND	120
1,1,2,2-Tetrachloroethane	ND	120
1,3-Dichlorobenzene	ND	120
1,4-Dichlorobenzene	ND	120
1,2-Dichlorobenzene	ND	120

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Client ID: **SSFA-4C**
Site: Klockner & Klockner

Lab Sample No: **183830**
Lab Job No: X455

Date Sampled: 02/15/00
Date Received: 02/16/00
Date Analyzed: 02/25/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: held7683.d

Matrix: SOIL
Level: HIGH
Sample Weight: 12 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 14.1

VOLATILE ORGANICS - GC

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	130
Chloromethane	ND	130
Vinyl Chloride	ND	130
Bromomethane	ND	130
Chloroethane	ND	130
Trichlorofluoromethane	ND	130
1,1-Dichloroethene	ND	130
Methylene Chloride	ND	130
trans-1,2-Dichloroethene	ND	130
1,1-Dichloroethane	ND	130
cis-1,2-Dichloroethene	ND	130
Chloroform	ND	130
1,1,1-Trichloroethane	ND	130
Carbon Tetrachloride	ND	130
1,2-Dichloroethane	ND	130
Trichloroethene	ND	130
1,2-Dichloropropane	ND	130
Bromodichloromethane	ND	130
2-Chloroethyl Vinyl Ether	ND	130
cis-1,3-Dichloropropene	ND	130
trans-1,3-Dichloropropene	ND	130
1,1,2-Trichloroethane	ND	130
Tetrachloroethene	150	130
Dibromochloromethane	ND	130
Chlorobenzene	ND	130
Bromoform	ND	130
1,1,2,2-Tetrachloroethane	ND	130
1,3-Dichlorobenzene	ND	130
1,4-Dichlorobenzene	ND	130
1,2-Dichlorobenzene	ND	130

306578

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CHAIN-OF-CUSTODY

PROJECT NAME: Klockner & Klockner
PROJECT NO: 95-03-02 T204
LABORATORY: ENVIROTECH RESEARCH

SITE ADDRESS: Stickle Ave and Elm St, Rockaway, N
SAMPLE DATE: Feb 15, 2000
SAMPLER(S): Cheryl L. Coffee

Job X455

SAMPLE TIME	SAMPLE LOCATION	SAMPLE ID#	SAMPLE DEPTH	SAMPLE MATRIX	ANALYSIS REQUESTED	PRESER-VATIVE	NO. OF CONT.	SPECIAL INSTRUCTIONS
14:40	Fence Area	SSFA-1	5-5.5'	Soil	PHAL 183826	MeOH	2	PHAL by 8021
14:45	Fence Area	SSFA-D	5-5.5'	Soil	PHAL 183827	MeOH	2	
14:20	Fence Area	SSFA-4A	5-5.5'	Soil	PHAL 183828	MeOH	2	CLP Package
14:25	Fence Area	SSFA-4B	7-7.5'	Soil	PHAL 183829	MeOH	2	
14:30	Fence Area	SSFA-4C	10.5-11'	Soil	PHAL 183830	MeOH	2	

RELINQUISHED BY: Cheryl L. Coffee DATE: 2/16/00 TIME: 0820 RECEIVED BY: [illegible] DATE: 2/16/00 TIME 0820

RELINQUISHED BY: [illegible] DATE: 2/16/00 TIME: [illegible] RECEIVED BY: [illegible] DATE: 2/16/00 TIME 1000

ANALYTICAL PARAMETER IDENTIFICATION KEY:
PHC: PETROLEUM HYDROCARBONS
VOC: VOLATILE ORGANICS BY GC/MS WITH LIBRARY SEARCH
PAH: POLYCYCLIC AROMATIC HYDROCARBONS IN BASE NEUTRAL SCAN WITH LIBRARY SEARCH
BN: BASE NEUTRALS WITH LIBRARY SEARCH
AE: ACID EXTRACTABLES WITH LIBRARY SEARCH

TOTAL NO. CONTAINERS_____

The Whitman Companies
44 West Ferris Street
East Brunswick, NJ 08816
908-390-5858

306579

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
STL Envirotech

777 New Durham Road, Edison, New Jersey
08817

Job No: X455 **Site:** Klockner & Klockner

Client: The Whitman Companies, Inc.

VOAGC

8021Be

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
SOLID							
183826	2/15/2000	2/16/2000			2/25/00	SP	6958
183827	2/15/2000	2/16/2000					
183828	2/15/2000	2/16/2000					
183829	2/15/2000	2/16/2000					
183830	2/15/2000	2/16/2000					

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Analytical Methodology Summary

Volatile Organics:

Unless otherwise specified, water samples are analyzed for volatile organics by purge and trap GC/MS as specified in EPA Method 624. Drinking water samples are analyzed by EPA Method 524.2. Solid samples are analyzed for volatile organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8260B. Water samples are analyzed for volatile organics by purge and trap GC/PID and GC/ELCD as specified in EPA Methods 601 and 602. Solid samples are analyzed by GC/PID and GC/ELCD in accordance with SW-846, 3rd Edition Method 8021B.

Acid and Base/Neutral Extractable Organics:

Unless otherwise specified, water samples are analyzed for acid and/or base/neutral extractable organics by GC/MS in accordance with EPA Method 625. Solids are analyzed for acid and/or base/neutral extractable organics as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8270C.

GC/MS Nontarget Compound Analysis:

Analysis for nontarget compounds is conducted, upon request, in conjunction with GC/MS analyses by EPA Methods 624, 625, 8260B and 8270C. Nontarget compound analysis is conducted using a forward library search of the EPA/NIH/NBS mass spectral library of compounds at the greatest apparent concentration (10% or greater of the nearest internal standard) in each organic fraction (15 for volatile, 15 for base/neutrals and 10 for acid extractables).

Organochlorine Pesticides and PCBs:

Unless otherwise specified, water samples are analyzed for organochlorine pesticides and PCBs by dual column gas chromatography with electron capture detectors as specified in EPA Method 608. Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition) Method 8081A for organochlorine pesticides and Method 8082 for PCBs.

Total Petroleum Hydrocarbons:

Water samples are analyzed for petroleum hydrocarbons by I.R. using EPA Method 418.1. Solid samples are prepared for analysis by soxhlet extraction consistent with the March 1990 N.J. DEP "Remedial Investigation Guide" Appendix A, page 52, and analyzed by U.S. EPA Method 418.1

Metals Analysis:

Metals analyses are performed by any of four techniques specified by a Method Code provided on each data report page, as follows:

P - Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP)

A - Flame Atomic Absorption

F - Furnace Atomic Absorption

CV - Manual Cold Vapor (Mercury)

Water samples are digested and analyzed using EPA methods provided in "Methods for Chemical Analysis of Water and Wastewater" (EPA 600/4-79-020). Solid samples are analyzed as specified in the EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition); samples are digested according to Method 3050B "Acid Digestion of Soil, Sediments and Sludges."

Specific method references for ICP analyses are water Method 200.7 and solid Method 6010B. Mercury analyses are conducted by the manual cold vapor technique specified by water Method 245.1 and solid Method 7471A. Other specific Atomic Absorption method references are as follows:

	Water Test Method		Solid Test Method	
Element	Flame	Furnace	Flame	Furnace
Aluminum	202.1	202.2	7020	--
Antimony	204.1	204.2	7040	7041
Arsenic	--	206.2	--	7060
Barium	208.1	--	7080	--
Beryllium	210.1	210.2	7090	7091
Cadmium	213.1	213.2	7130	7131
Calcium	215.1	--	7140	--
Chromium, Total	218.1	218.2	7190	7191
Chromium, (+6)	218.4	218.5	7197	7195
Cobalt	219.1	219.2	7200	7201
Copper	220.1	220.2	7210	--
Iron	236.1	236.2	7380	--
Lead	239.1	239.2	7420	7421
Magnesium	242.1	--	7450	--
Manganese	243.1	243.2	7460	--
Nickel	249.1	249.2	7520	--
Potassium	258.1	--	7610	--
Selenium	--	270.2	--	7740
Silver	272.1	272.2	7760	--
Sodium	273.1	--	7770	--
Tin	283.1	283.2	7870	--
Thallium	279.1	279.2	7840	7841
Vanadium	286.1	286.2	7910	7911
Zinc	289.1	289.2	7950	--

Cyanide:

Water samples are analyzed for cyanide using EPA Method 335.3. Cyanide is determined in solid samples as specified in the EPA Contract Laboratory Program IFB dated July 1988, revised February 1989.

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Phenols:

Water samples are analyzed for total phenols using EPA Method 420.2. Total phenols are determined in solid samples by preparing the sample as outlined in the EPA Contract Laboratory Program IFB for cyanide, followed by a phenols determination using EPA Method 420.1.

Cleanup of Semivolatile Extracts:

Upon request Method 3611B Alumina Column Cleanup and/or Method 3650B Acid-Base Partition Cleanup are performed to improve detection limits by the removal of saturated hydrocarbon interferences.

Hazardous Waste Characteristics:

Samples for hazardous waste characteristics are analyzed as specified in the U.S. EPA publication "Test Methods for Evaluating Solid Waste" (SW-846, 3rd Edition). Specific method references are as follows:

Ignitability	- Method 1020A
Corrosivity	- Water pH Method 9040B Soil pH Method 9045C
Reactivity	- Chapter 7, Section 7.3.3 and 7.3.4 respectively for hydrogen cyanide and hydrogen sulfide release
Toxicity	- TCLP Method 1311

Miscellaneous Parameters:

Additional analyses performed on both aqueous and solid samples are in accordance with methods published in the following references:

- Test Methods for Evaluating Solid Wastes, SW-846 3rd Edition, November 1986.
- Standard Methods for the Examination of Water and Wastewater, 17th Edition.
- Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, 1979.

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DATA REPORTING QUALIFIERS

ND - The compound was not detected at the indicated concentration.

B - The analyte was found in the laboratory blank as well as the sample. This indicates possible laboratory contamination of the environmental sample.

P - For dual column analysis, the percent difference between the quantitated concentrations on the two columns is greater than 40%.

* - For dual column analysis, the lowest quantitated concentration is being reported due to coeluting interference.

306584

NON-CONFORMANCE SUMMARY

STL Envirotech Job Number: Y455

Volatile Organics Analysis:

All data conforms with method requirements ✓; or
Analysis was not requested _____; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

Base/Neutral and/or Acid Extractable Organics:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

PCBs and/or Organochlorine Pesticides:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

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Non-conformance Summary, Page 2 of 2
STL Envirotech Job Number: X455

Metals Analysis:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

Total Petroleum Hydrocarbons:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

General Chemistry/Disposal Parameters:

All data conforms with method requirements _____; or
Analysis was not requested ✓; or
Non-conformance for the specific samples listed is as follows:

See continuation page if checked ( )

Signature of
Laboratory Manager: _____ Date: 3/8/02

306586

Client ID: **SSFA-1**
Site: Klockner & Klockner

Lab Sample No: **183826**
Lab Job No: X455

Date Sampled: 02/15/00
Date Received: 02/16/00
Date Analyzed: 02/25/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: held7679.d

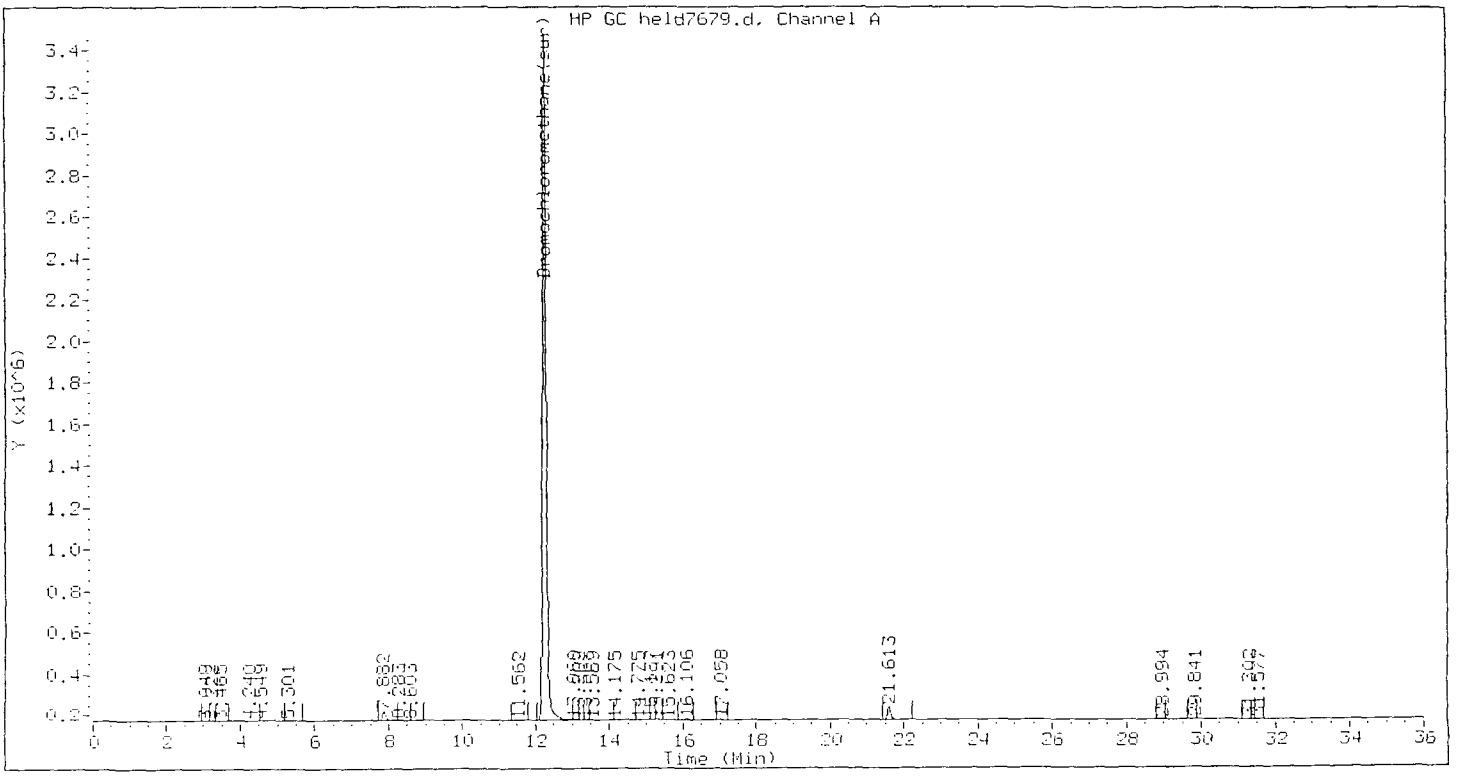
Matrix: SOIL
Level: HIGH
Sample Weight: 12 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 4.0

VOLATILE ORGANICS - GC

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	110
Chloromethane	ND	110
Vinyl Chloride	ND	110
Bromomethane	ND	110
Chloroethane	ND	110
Trichlorofluoromethane	ND	110
1,1-Dichloroethene	ND	110
Methylene Chloride	ND	110
trans-1,2-Dichloroethene	ND	110
1,1-Dichloroethane	ND	110
cis-1,2-Dichloroethene	ND	110
Chloroform	ND	110
1,1,1-Trichloroethane	ND	110
Carbon Tetrachloride	ND	110
1,2-Dichloroethane	ND	110
Trichloroethene	ND	110
1,2-Dichloropropane	ND	110
Bromodichloromethane	ND	110
2-Chloroethyl Vinyl Ether	ND	110
cis-1,3-Dichloropropene	ND	110
trans-1,3-Dichloropropene	ND	110
1,1,2-Trichloroethane	ND	110
Tetrachloroethene	ND	110
Dibromochloromethane	ND	110
Chlorobenzene	ND	110
Bromoform	ND	110
1,1,2,2-Tetrachloroethane	ND	110
1,3-Dichlorobenzene	ND	110
1,4-Dichlorobenzene	ND	110
1,2-Dichlorobenzene	ND	110

306587

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7679.d Page 1
Report Date 02/28/2000 10:53



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : 183826;;50
Lab ID : 183826
Inj Date : 25-FEB-2000 18:17
Operator : SP
Cpnd Sublist: 601

Inst ID : VOAGC2.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Bromochloromethane(sur)	12.248	12.236	0.011	110855170	28.690	3192.914

306588

Client ID: **SSFA-D**
Site: Klockner & Klockner

Lab Sample No: **183827**
Lab Job No: X455

Date Sampled: 02/15/00
Date Received: 02/16/00
Date Analyzed: 02/25/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: held7680.d

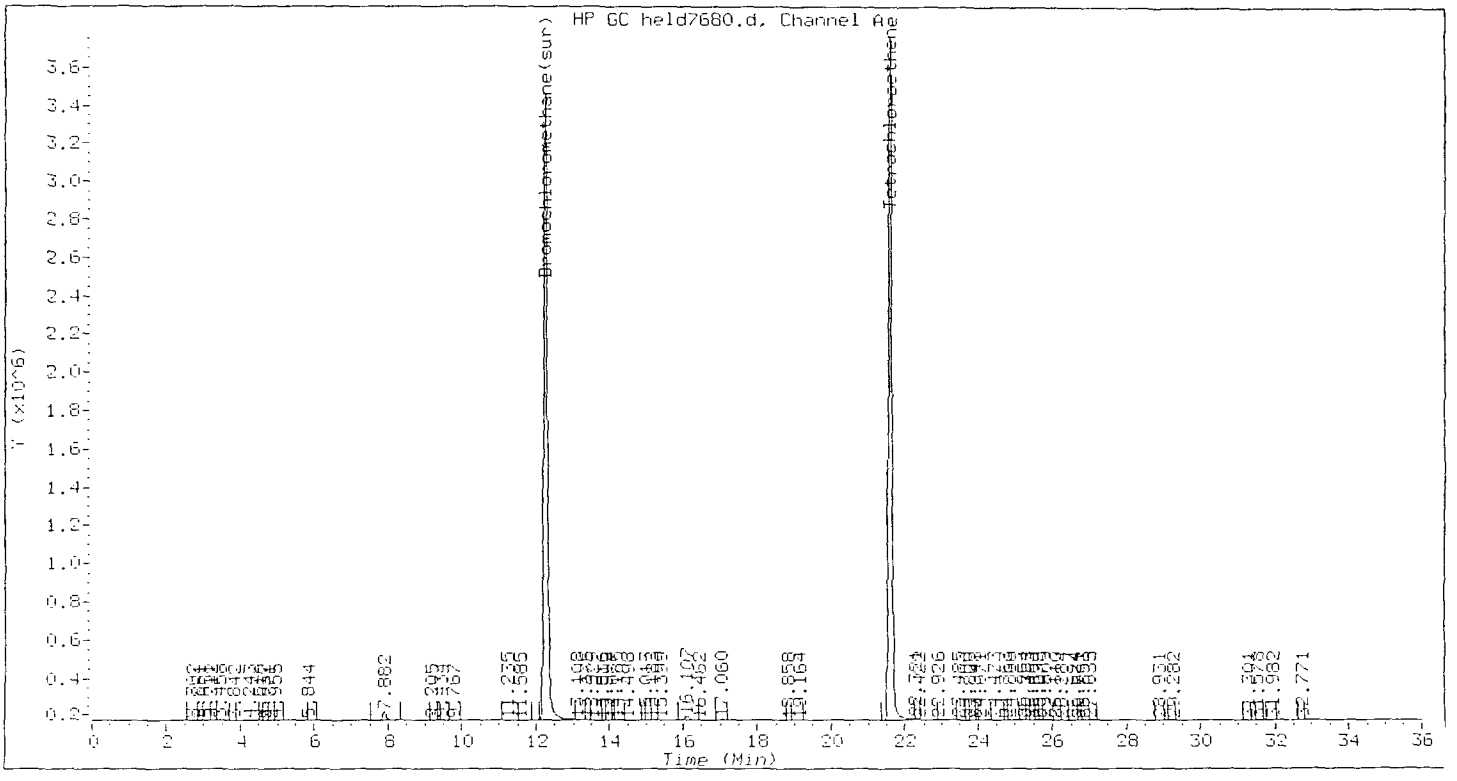
Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 20.7

VOLATILE ORGANICS - GC

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	140
Chloromethane	ND	140
Vinyl Chloride	ND	140
Bromomethane	ND	140
Chloroethane	ND	140
Trichlorofluoromethane	ND	140
1,1-Dichloroethene	ND	140
Methylene Chloride	ND	140
trans-1,2-Dichloroethene	ND	140
1,1-Dichloroethane	ND	140
cis-1,2-Dichloroethene	ND	140
Chloroform	ND	140
1,1,1-Trichloroethane	ND	140
Carbon Tetrachloride	ND	140
1,2-Dichloroethane	ND	140
Trichloroethene	ND	140
1,2-Dichloropropane	ND	140
Bromodichloromethane	ND	140
2-Chloroethyl Vinyl Ether	ND	140
cis-1,3-Dichloropropene	ND	140
trans-1,3-Dichloropropene	ND	140
1,1,2-Trichloroethane	ND	140
Tetrachloroethene	2600	140
Dibromochloromethane	ND	140
Chlorobenzene	ND	140
Bromoform	ND	140
1,1,2,2-Tetrachloroethane	ND	140
1,3-Dichlorobenzene	ND	140
1,4-Dichlorobenzene	ND	140
1,2-Dichlorobenzene	ND	140

306589

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7680.d Page 1
Report Date 02/28/2000 10:53



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : 183827;;50
Lab ID : 183827 Inst ID : VOAGC2.i
Inj Date : 25-FEB-2000 19:00 Dil Factor : 50
Operator : SP Sample Matrix : SOIL
Cpnd Sublist: 601 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Tetrachloroethene	21.610	21.600	0.010	115302059	18.553	2658.664
Bromochloromethane(sur)	12.249	12.236	0.012	110761901	28.666	4107.835

306590

Client ID: **SSFA-4A**
Site: Klockner & Klockner

Lab Sample No: **183828**
Lab Job No: X455

Date Sampled: 02/15/00
Date Received: 02/16/00
Date Analyzed: 02/25/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: held7681.d

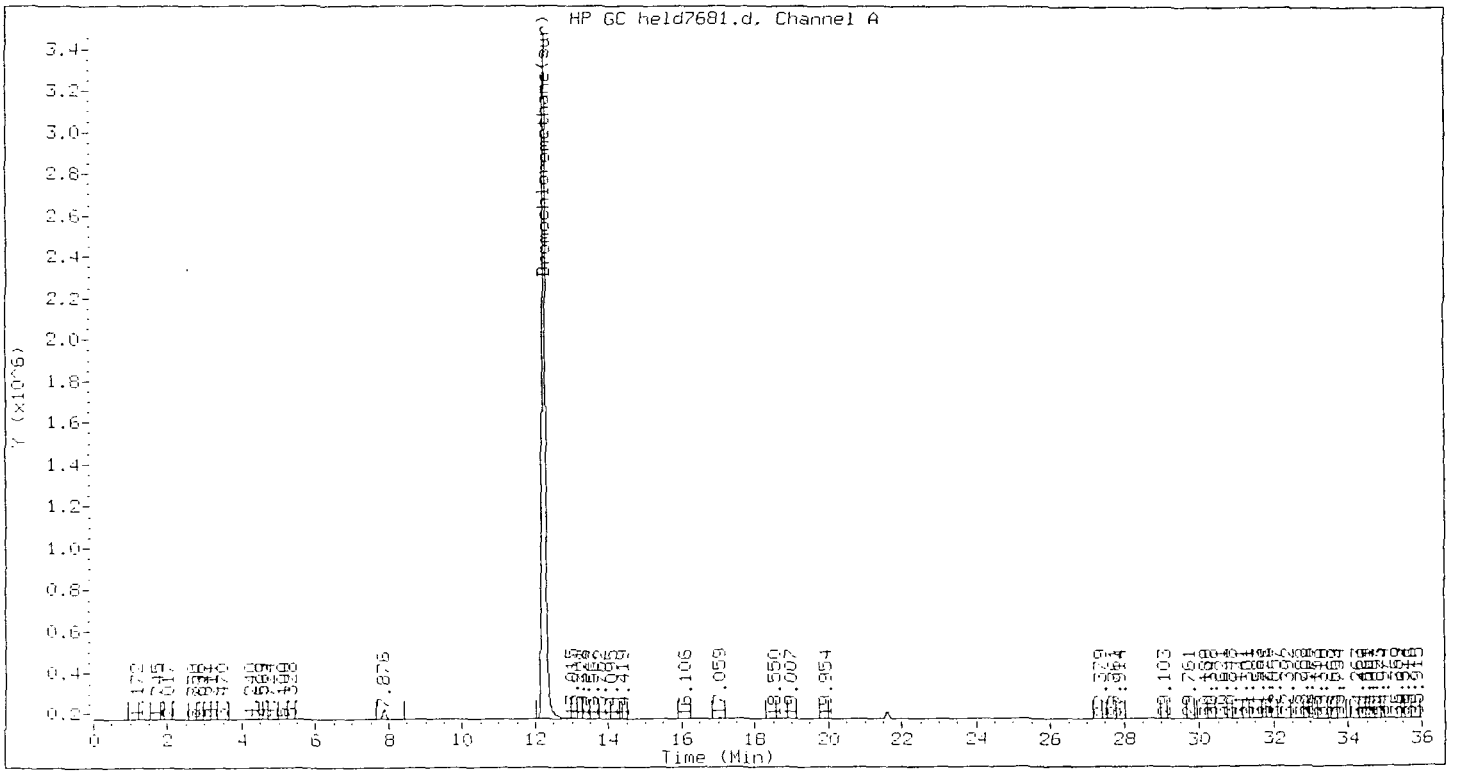
Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 7.2

VOLATILE ORGANICS - GC

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	120
Chloromethane	ND	120
Vinyl Chloride	ND	120
Bromomethane	ND	120
Chloroethane	ND	120
Trichlorofluoromethane	ND	120
1,1-Dichloroethene	ND	120
Methylene Chloride	ND	120
trans-1,2-Dichloroethene	ND	120
1,1-Dichloroethane	ND	120
cis-1,2-Dichloroethene	ND	120
Chloroform	ND	120
1,1,1-Trichloroethane	ND	120
Carbon Tetrachloride	ND	120
1,2-Dichloroethane	ND	120
Trichloroethene	ND	120
1,2-Dichloropropane	ND	120
Bromodichloromethane	ND	120
2-Chloroethyl Vinyl Ether	ND	120
cis-1,3-Dichloropropene	ND	120
trans-1,3-Dichloropropene	ND	120
1,1,2-Trichloroethane	ND	120
Tetrachloroethene	ND	120
Dibromochloromethane	ND	120
Chlorobenzene	ND	120
Bromoform	ND	120
1,1,2,2-Tetrachloroethane	ND	120
1,3-Dichlorobenzene	ND	120
1,4-Dichlorobenzene	ND	120
1,2-Dichlorobenzene	ND	120

306591

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7681.d Page 1
Report Date 02/28/2000 10:54



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : 183828;;50
Lab ID : 183828
Inj Date : 25-FEB-2000 19:44
Operator : SP
Cpnd Sublist: 601

Inst ID : VOAGC2.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Bromochloromethane(sur)	12.246	12.236	0.010	110983525	28.723	3423.896

306592

Client ID: **SSFA-4B**
Site: Klockner & Klockner

Lab Sample No: **183829**
Lab Job No: X455

Date Sampled: 02/15/00
Date Received: 02/16/00
Date Analyzed: 02/25/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: held7682.d

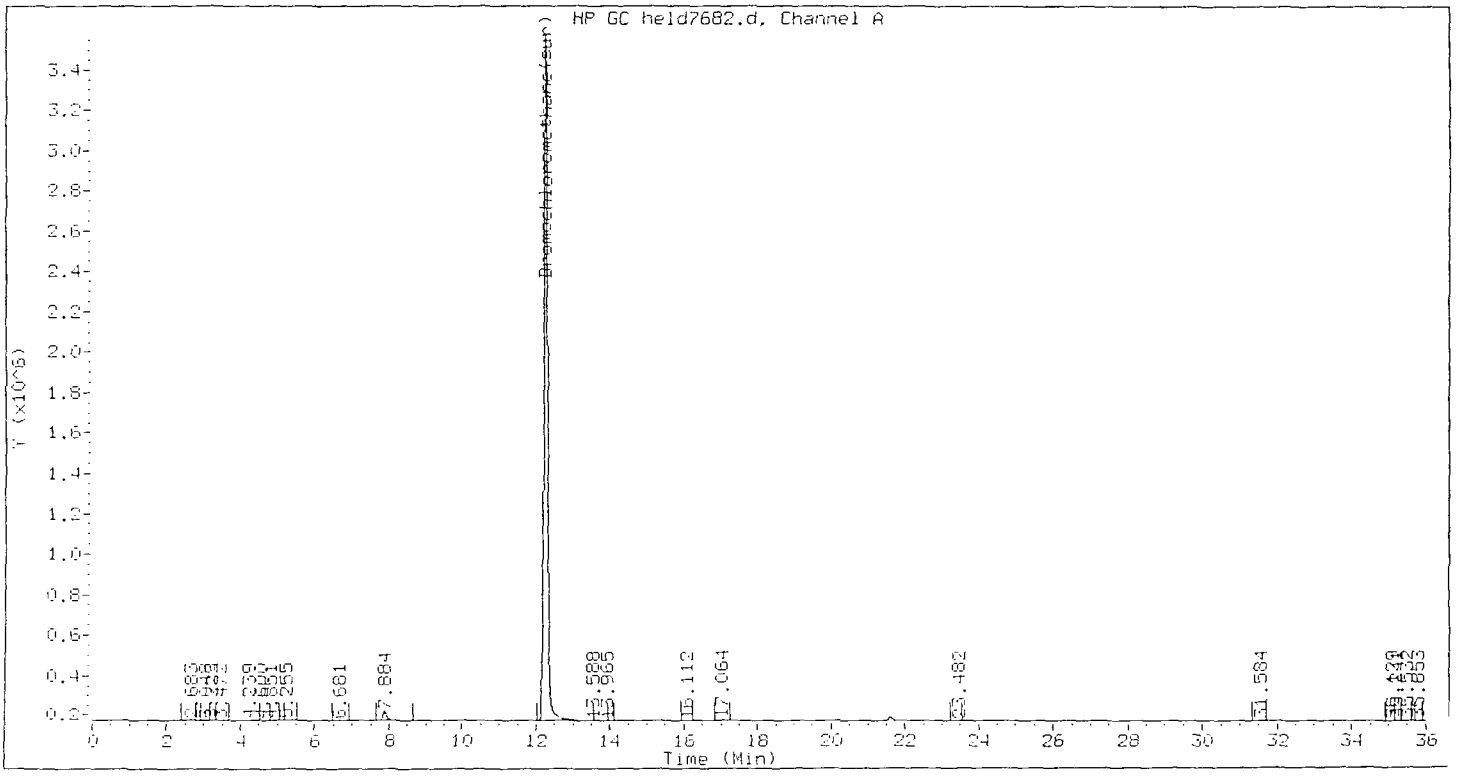
Matrix: SOIL
Level: HIGH
Sample Weight: 12 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 6.9

VOLATILE ORGANICS - GC

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	120
Chloromethane	ND	120
Vinyl Chloride	ND	120
Bromomethane	ND	120
Chloroethane	ND	120
Trichlorofluoromethane	ND	120
1,1-Dichloroethene	ND	120
Methylene Chloride	ND	120
trans-1,2-Dichloroethene	ND	120
1,1-Dichloroethane	ND	120
cis-1,2-Dichloroethene	ND	120
Chloroform	ND	120
1,1,1-Trichloroethane	ND	120
Carbon Tetrachloride	ND	120
1,2-Dichloroethane	ND	120
Trichloroethene	ND	120
1,2-Dichloropropane	ND	120
Bromodichloromethane	ND	120
2-Chloroethyl Vinyl Ether	ND	120
cis-1,3-Dichloropropene	ND	120
trans-1,3-Dichloropropene	ND	120
1,1,2-Trichloroethane	ND	120
Tetrachloroethene	ND	120
Dibromochloromethane	ND	120
Chlorobenzene	ND	120
Bromoform	ND	120
1,1,2,2-Tetrachloroethane	ND	120
1,3-Dichlorobenzene	ND	120
1,4-Dichlorobenzene	ND	120
1,2-Dichlorobenzene	ND	120

306593

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7682.d Page 1
Report Date 02/28/2000 10:54



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : 183829;;50
Lab ID : 183829 Inst ID : VOAGC2.i
Inj Date : 25-FEB-2000 20:27 Dil Factor : 50
Operator : SP Sample Matrix : SOIL
Cpnd Sublist: 601 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
Bromochloromethane(sur)	12.254	12.236	0.018	114524491	29.640	3460.503

306594

Client ID: **SSFA-4C**
Site: Klockner & Klockner

Lab Sample No: **183830**
Lab Job No: X455

Date Sampled: 02/15/00
Date Received: 02/16/00
Date Analyzed: 02/25/00
GC Column: DB624
Instrument ID: VOAGC2.i
Lab File ID: held7683.d

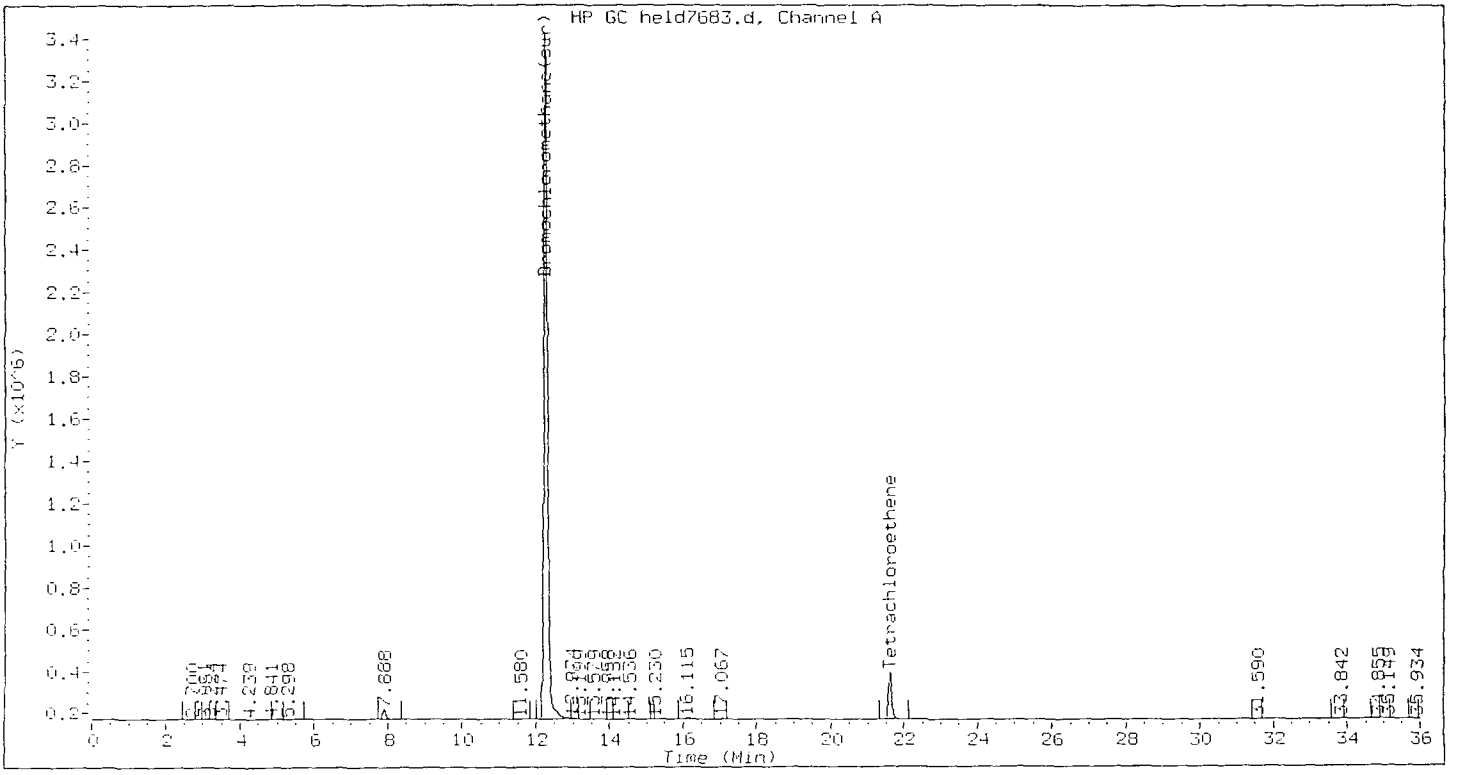
Matrix: SOIL
Level: HIGH
Sample Weight: 12 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 14.1

VOLATILE ORGANICS - GC

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	130
Chloromethane	ND	130
Vinyl Chloride	ND	130
Bromomethane	ND	130
Chloroethane	ND	130
Trichlorofluoromethane	ND	130
1,1-Dichloroethene	ND	130
Methylene Chloride	ND	130
trans-1,2-Dichloroethene	ND	130
1,1-Dichloroethane	ND	130
cis-1,2-Dichloroethene	ND	130
Chloroform	ND	130
1,1,1-Trichloroethane	ND	130
Carbon Tetrachloride	ND	130
1,2-Dichloroethane	ND	130
Trichloroethene	ND	130
1,2-Dichloropropane	ND	130
Bromodichloromethane	ND	130
2-Chloroethyl Vinyl Ether	ND	130
cis-1,3-Dichloropropene	ND	130
trans-1,3-Dichloropropene	ND	130
1,1,2-Trichloroethane	ND	130
Tetrachloroethene	150	130
Dibromochloromethane	ND	130
Chlorobenzene	ND	130
Bromoform	ND	130
1,1,2,2-Tetrachloroethane	ND	130
1,3-Dichlorobenzene	ND	130
1,4-Dichlorobenzene	ND	130
1,2-Dichlorobenzene	ND	130

306595

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7683.d Page 1
Report Date 02/28/2000 10:54



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : 183830;;50
Lab ID : 183830
Inj Date : 25-FEB-2000 21:10
Operator : SP
Cpnd Sublist: 601

Inst ID : VOAGC2.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Tetrachloroethene	21.618	21.600	0.018	7255040	1.167	147.721
Bromochloromethane(sur)	12.256	12.236	0.020	110302901	28.548	3612.337

306596

LAB SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

HG056A

Date Analyzed: 02/25/00 Instrument ID: VOAGC2

Time Analyzed: 1650 Lab File ID: HELD7677

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

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	SSFA-1	183826	HELD7679	1817
02	SSFA-D	183827	HELD7680	1900
03	SSFA-4A	183828	HELD7681	1944
04	SSFA-4B	183829	HELD7682	2027
05	SSFA-4C	183830	HELD7683	2110
06				
07				
08				
09				
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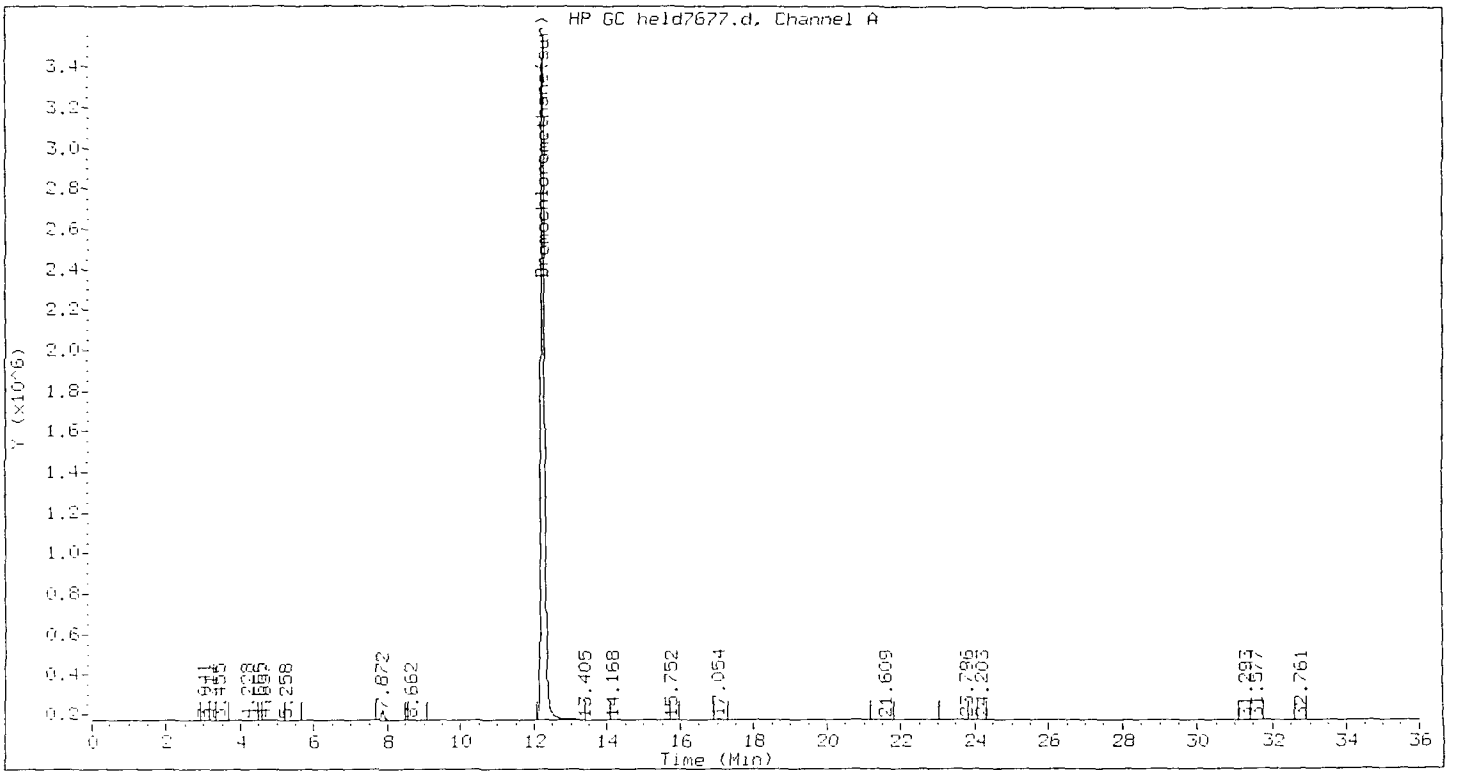
COMMENTS:

page 1 of 1

306597

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7677.d Page 1
Report Date 02/28/2000 10:53



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : HG056A
Lab ID : HG056A
Inj Date : 25-FEB-2000 16:50
Operator : SP
Cpnd Sublist: 601

Inst ID : VOAGC2.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Bromochloromethane(sur)	12.241	12.236	0.005	114144076	29.541	3692.681

306598

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Instrument ID: VOAGC2 Calibration Date(s): 02/25/00 02/25/00

Calibration Time(s): 1145 1439

LAB FILE ID: RRF1: HELD7671 RRF5: HELD7672 RRF10: HELD7673
RRF20: HELD7670 RRF40: HELD7674

COMPOUND	RRF1	RRF5	RRF10	RRF20	RRF40
Dichlorodifluoromethane	1024661	1077487	1140066	1191057	1113004
Chloromethane	552013	455972	473499	422847	459866
Vinyl Chloride	2011198	1707286	1796503	1613412	1673813
Bromomethane	1675467	1656323	1740775	1462005	1503441
Chloroethane	3253386	3147839	3256978	2932236	2931984
Trichlorofluoromethane	2667263	2862154	2933250	3432124	3114972
1,1-Dichloroethene	4729377	4682779	4743010	4309901	4354532
Methylene Chloride	6595094	5975274	5897405	5260817	5350700
trans-1,2-Dichloroethene	5504439	5346705	5339107	4724812	4886181
1,1-Dichloroethane	5713803	5567490	5590822	4930257	5057201
cis-1,2-Dichloroethene	5457234	5399877	5391014	4738204	4866264
Chloroform	7951824	7456298	7406485	6430406	6552782
1,1,1-Trichloroethane	6395300	6102124	6092985	5473607	5580688
Carbon Tetrachloride	7422899	7097923	7080829	6333370	6438101
1,2-Dichloroethane	5401624	5155463	5135949	4552369	4604998
Trichloroethene	6206903	5957214	5970356	5329698	5466922
1,2-Dichloropropane	5299870	4985636	5013269	4471720	4570837
Bromodichloromethane	5343530	5091682	5135054	4580601	4742338
2-Chloroethyl Vinyl Ether	1784585	1710439	1768782	1563191	1658638
cis-1,3-Dichloropropene	5004249	4708321	4713213	4167754	4264706
trans-1,3-Dichloropropene	4511782	4276700	4311944	3861622	3946914
1,1,2-Trichloroethane	5992120	5583496	5565683	4924785	5012957
Tetrachloroethene	6828556	6441139	6372777	5640835	5790018
Dibromochloromethane	3986359	3857406	3931387	3476560	3620479
Chlorobenzene	2640525	2488676	2480987	2262664	2330364
Bromoform	2388841	2370553	2368399	2196955	2306646
1,1,2,2-Tetrachloroethane	3989581	3810079	3795287	3391492	3421284
1,3-Dichlorobenzene	3311683	3275114	3338446	2985490	3163662
1,4-Dichlorobenzene	3680071	3500979	3554025	3182611	3319484
1,2-Dichlorobenzene	3461692	3242690	3301336	2981947	3087882
Bromochloromethane(sur)	3862079	4066986	4086377	3567240	3736628

306599

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Instrument ID: VOAGC2 Calibration Date(s): 02/25/00 02/25/00

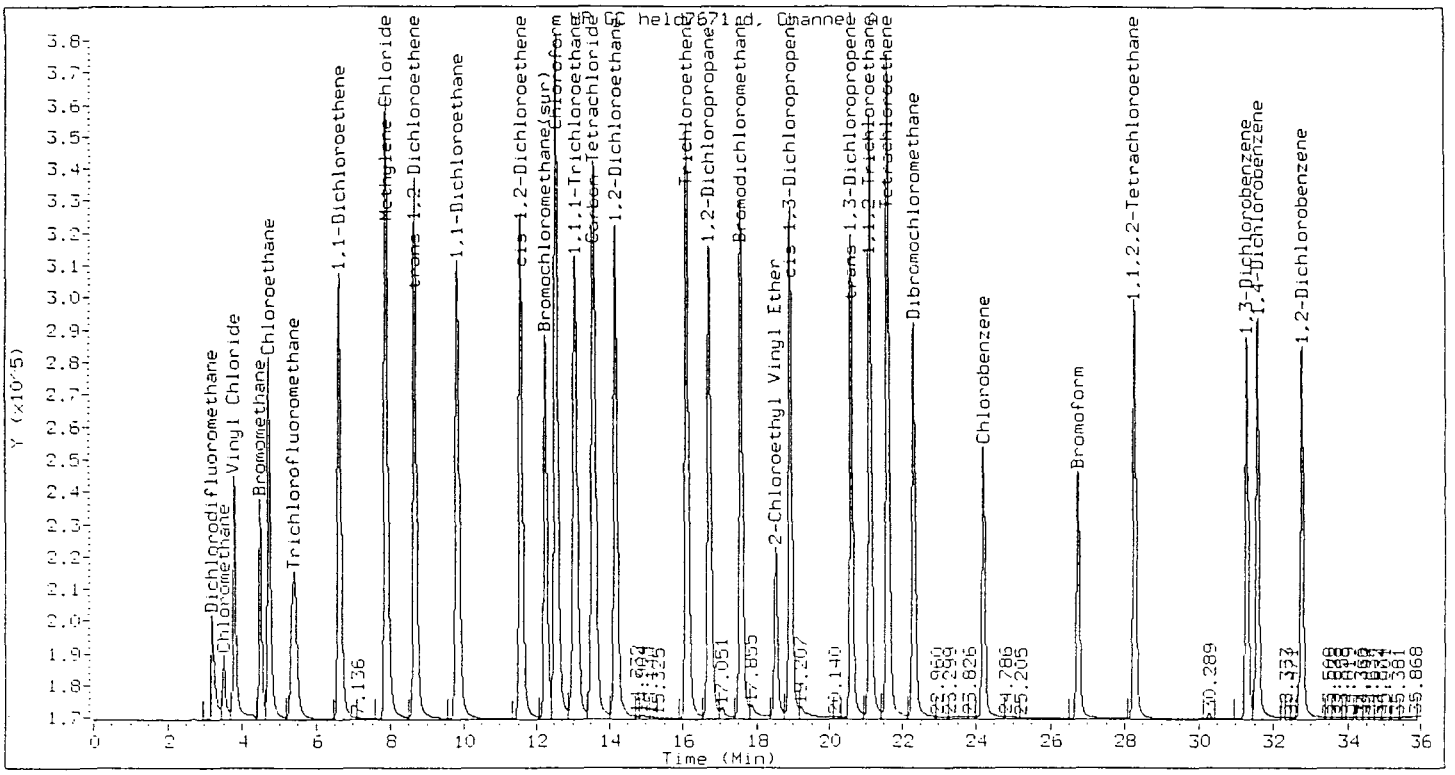
Calibration Time(s): 1145 1439

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Dichlorodifluoromethane	AVRG	1109255	5.7*
Chloromethane	AVRG	472839	10*
Vinyl Chloride	AVRG	1760442	8.8*
Bromomethane	AVRG	1607602	7.4*
Chloroethane	AVRG	3104485	5.3*
Trichlorofluoromethane	AVRG	3001952	9.6*
1,1-Dichloroethene	AVRG	4563920	4.7*
Methylene Chloride	AVRG	5815858	9.3*
trans-1,2-Dichloroethene	AVRG	5160249	6.5*
1,1-Dichloroethane	AVRG	5371915	6.6*
cis-1,2-Dichloroethene	AVRG	5170519	6.6*
Chloroform	AVRG	7159559	9.0*
1,1,1-Trichloroethane	AVRG	5928941	6.5*
Carbon Tetrachloride	AVRG	6874624	6.8*
1,2-Dichloroethane	AVRG	4970080	7.5*
Trichloroethene	AVRG	5786219	6.4*
1,2-Dichloropropane	AVRG	4868266	7.0*
Bromodichloromethane	AVRG	4978641	6.2*
2-Chloroethyl Vinyl Ether	AVRG	1697127	5.3*
cis-1,3-Dichloropropene	AVRG	4571648	7.6*
trans-1,3-Dichloropropene	AVRG	4181792	6.5*
1,1,2-Trichloroethane	AVRG	5415808	8.2*
Tetrachloroethene	AVRG	6214665	7.9*
Dibromochloromethane	AVRG	3774438	5.8*
Chlorobenzene	AVRG	2440643	6.1*
Bromoform	AVRG	2326279	3.4*
1,1,2,2-Tetrachloroethane	AVRG	3681544	7.1*
1,3-Dichlorobenzene	AVRG	3214879	4.5*
1,4-Dichlorobenzene	AVRG	3447434	5.7*
1,2-Dichlorobenzene	AVRG	3215110	5.8*
Bromochloromethane(sur)	AVRG	3863862	5.7*

* Compounds with required maximum %RSD values.

306600

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7671.d Page 1
Report Date 02/28/2000 10:52



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : HSTD001
Lab ID : HSTD001 Inst ID : VOAGC2.i
Inj Date : 25-FEB-2000 12:28 Dil Factor : 1
Operator : SP Sample Matrix : SOIL
Cpnd Sublist: 601 Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
Dichlorodifluoromethane	3.209	3.198	0.011	1024661	0.925	0.925
Chloromethane	3.513	3.522	0.009	552013	1.132	1.132
Vinyl Chloride	3.801	3.804	0.003	2011198	1.110	1.110
Bromomethane	4.489	4.457	0.032	1675467	1.068	1.068
Chloroethane	4.728	4.691	0.036	3253386	1.052	1.052
Trichlorofluoromethane	5.405	5.392	0.013	2667263	0.875	0.875
1,1-Dichloroethene	6.636	6.618	0.017	4729377	1.046	1.046
Methylene Chloride	7.888	7.869	0.019	6595094	1.113	1.113
trans-1,2-Dichloroethene	8.660	8.637	0.023	5504439	1.076	1.076

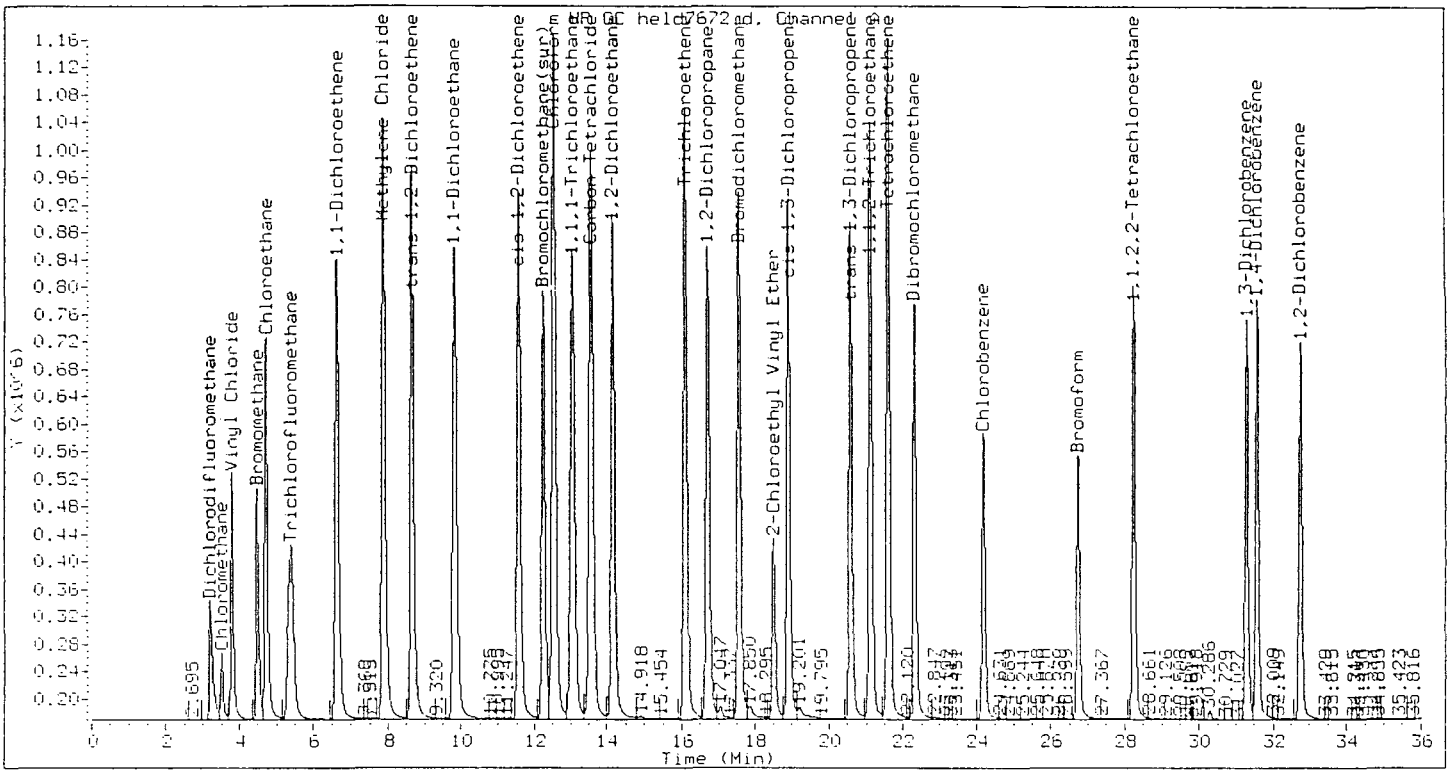
306601

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7671.d Page 2
Report Date 02/28/2000 10:52

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	9.835	9.816	0.019	5713803	1.074	1.074
cis-1,2-Dichloroethene	11.571	11.553	0.018	5457234	1.071	1.071
Chloroform	12.545	12.530	0.015	7951824	1.106	1.106
1,1,1-Trichloroethane	13.063	13.047	0.016	6395300	1.078	1.078
Carbon Tetrachloride	13.575	13.559	0.017	7422899	1.079	1.079
1,2-Dichloroethane	14.177	14.161	0.016	5401624	1.085	1.085
Trichloroethene	16.105	16.090	0.015	6206903	1.076	1.076
1,2-Dichloropropane	16.708	16.695	0.013	5299870	1.085	1.085
Bromodichloromethane	17.568	17.556	0.012	5343530	1.077	1.077
2-Chloroethyl Vinyl Ether	18.513	18.500	0.013	1784585	1.066	1.066
cis-1,3-Dichloropropene	18.915	18.904	0.011	5004249	1.091	1.091
trans-1,3-Dichloropropene	20.591	20.582	0.010	4511782	1.078	1.078
1,1,2-Trichloroethane	21.123	21.115	0.007	5992120	1.098	1.098
Tetrachloroethene	21.608	21.600	0.008	6828556	1.095	1.095
Dibromochloromethane	22.318	22.310	0.008	3986359	1.068	1.068
Chlorobenzene	24.196	24.188	0.007	2640525	1.077	1.077
Bromoform	26.737	26.730	0.007	2388841	1.042	1.042
1,1,2,2-Tetrachloroethane	28.254	28.249	0.005	3989581	1.081	1.081
1,3-Dichlorobenzene	31.283	31.278	0.005	3311683	1.052	1.052
1,4-Dichlorobenzene	31.569	31.565	0.005	3680071	1.072	1.072
1,2-Dichlorobenzene	32.753	32.749	0.004	3461692	1.074	1.074
Bromochloromethane(sur)	12.254	12.236	0.018	3862079	1.040	1.040

306602

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7672.d Page 1
Report Date 02/28/2000 10:52



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : HSTD005
Lab ID : HSTD005
Inj Date : 25-FEB-2000 13:12
Operator : SP
Cpnd Sublist: 601

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_2

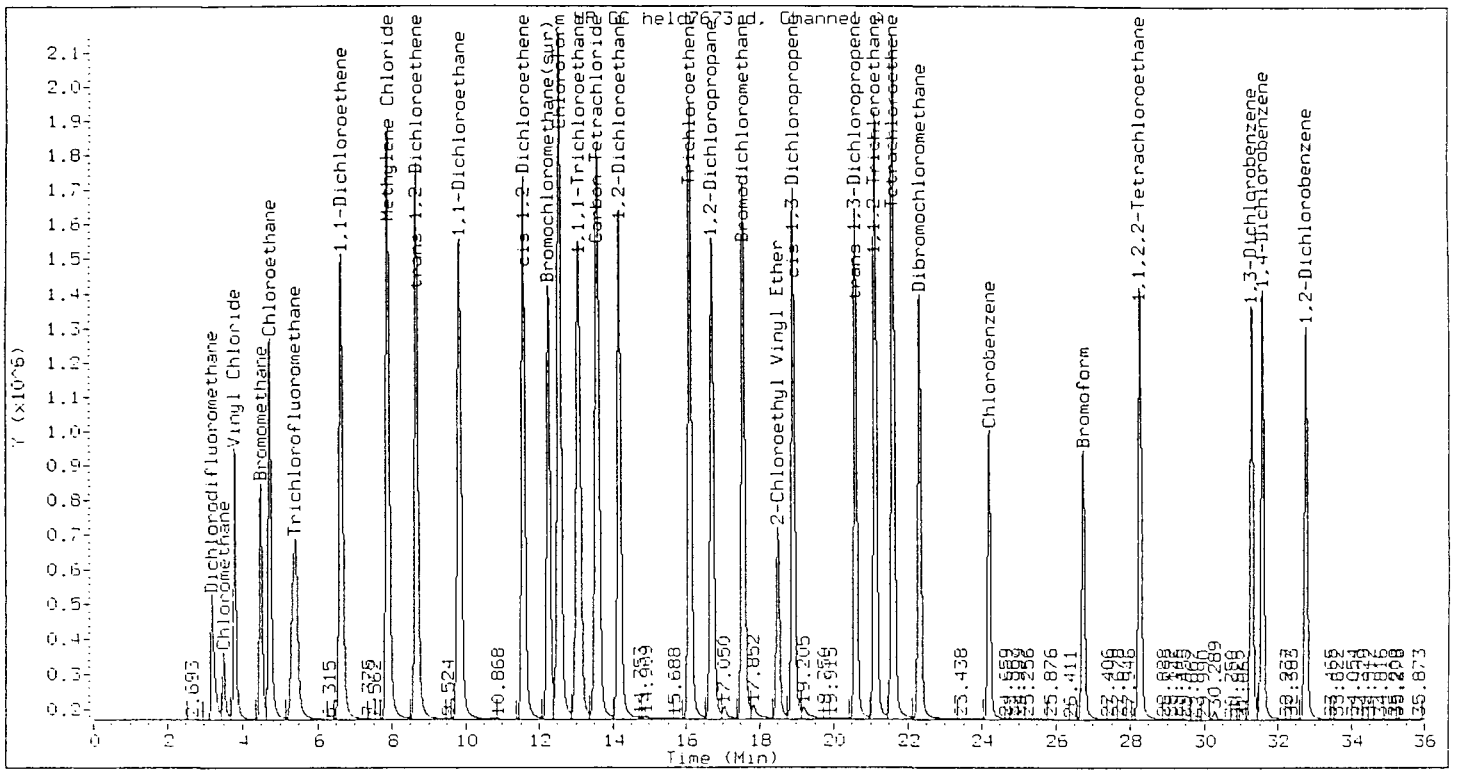
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.207	3.198	0.008	5387433	4.908	4.908
Chloromethane	3.513	3.522	0.009	2279862	4.780	4.780
Vinyl Chloride	3.799	3.804	0.005	8536431	4.803	4.803
Bromomethane	4.483	4.457	0.025	8281617	5.183	5.183
Chloroethane	4.718	4.691	0.026	15739196	5.059	5.059
Trichlorofluoromethane	5.403	5.392	0.011	14310771	4.791	4.791
1,1-Dichloroethene	6.631	6.618	0.013	23413894	5.119	5.119
Methylene Chloride	7.880	7.869	0.011	29876371	5.027	5.027
trans-1,2-Dichloroethene	8.652	8.637	0.015	26733526	5.149	5.149

306603

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	9.828	9.816	0.012	27837452	5.151	5.151
cis-1,2-Dichloroethene	11.565	11.553	0.011	26999385	5.194	5.194
Chloroform	12.540	12.530	0.010	37281492	5.121	5.121
1,1,1-Trichloroethane	13.057	13.047	0.010	30510619	5.093	5.093
Carbon Tetrachloride	13.570	13.559	0.011	35489616	5.105	5.105
1,2-Dichloroethane	14.171	14.161	0.011	25777315	5.118	5.118
Trichloroethene	16.102	16.090	0.011	29786071	5.108	5.108
1,2-Dichloropropane	16.704	16.695	0.009	24928179	5.068	5.068
Bromodichloromethane	17.564	17.556	0.008	25458412	5.086	5.086
2-Chloroethyl Vinyl Ether	18.507	18.500	0.007	8552197	5.072	5.072
cis-1,3-Dichloropropene	18.910	18.904	0.006	23541606	5.088	5.088
trans-1,3-Dichloropropene	20.587	20.582	0.005	21383499	5.071	5.071
1,1,2-Trichloroethane	21.120	21.115	0.005	27917481	5.076	5.076
Tetrachloroethene	21.605	21.600	0.005	32205697	5.109	5.109
Dibromochloromethane	22.317	22.310	0.006	19287028	5.111	5.111
Chlorobenzene	24.194	24.188	0.006	12443378	5.050	5.050
Bromoform	26.735	26.730	0.005	11852763	5.112	5.112
1,1,2,2-Tetrachloroethane	28.253	28.249	0.004	19050393	5.107	5.107
1,3-Dichlorobenzene	31.280	31.278	0.001	16375570	5.132	5.132
1,4-Dichlorobenzene	31.566	31.565	0.001	17504896	5.067	5.067
1,2-Dichlorobenzene	32.749	32.749	0.000	16213451	5.022	5.022
Bromochloromethane(sur)	12.248	12.236	0.011	20334928	5.306	5.306

306604

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7673.d Page 1
Report Date 02/28/2000 10:52



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : HSTD010
Lab ID : HSTD010 Inst ID : VOAGC2.i
Inj Date : 25-FEB-2000 13:55 Dil Factor : 1
Operator : SP Sample Matrix : SOIL
Cpnd Sublist: 601 Sample Type: CALIB_3

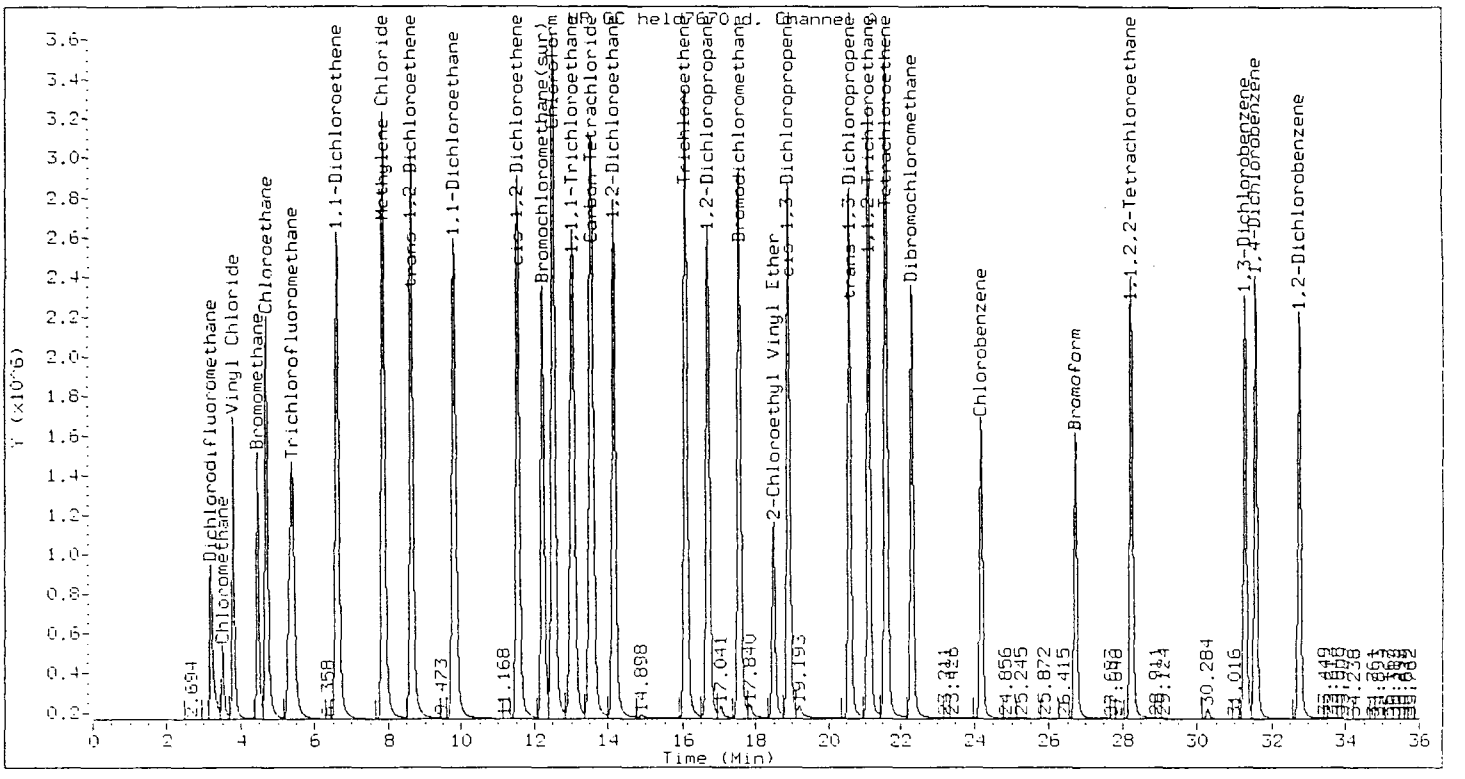
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.207	3.198	0.008	11400663	10.286	10.286
Chloromethane	3.518	3.522	0.004	4734992	9.946	9.946
Vinyl Chloride	3.805	3.804	0.001	17965029	10.081	10.081
Bromomethane	4.480	4.457	0.023	17407753	10.656	10.656
Chloroethane	4.716	4.691	0.025	32569779	10.347	10.347
Trichlorofluoromethane	5.402	5.392	0.010	29332495	9.864	9.864
1,1-Dichloroethene	6.633	6.618	0.014	47430097	10.275	10.275
Methylene Chloride	7.882	7.869	0.013	58974049	9.941	9.941
trans-1,2-Dichloroethene	8.654	8.637	0.017	53391072	10.211	10.211

306605

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	9.830	9.816	0.015	55908216	10.257	10.257
cis-1,2-Dichloroethene	11.566	11.553	0.013	53910135	10.275	10.275
Chloroform	12.541	12.530	0.011	74064847	10.130	10.130
1,1,1-Trichloroethane	13.059	13.047	0.012	60929848	10.128	10.128
Carbon Tetrachloride	13.571	13.559	0.013	70808292	10.139	10.139
1,2-Dichloroethane	14.172	14.161	0.012	51359494	10.147	10.147
Trichloroethene	16.102	16.090	0.012	59703563	10.178	10.178
1,2-Dichloropropane	16.705	16.695	0.010	50132693	10.143	10.143
Bromodichloromethane	17.565	17.556	0.009	51350545	10.193	10.193
2-Chloroethyl Vinyl Ether	18.508	18.500	0.008	17687819	10.363	10.363
cis-1,3-Dichloropropene	18.912	18.904	0.008	47132131	10.139	10.139
trans-1,3-Dichloropropene	20.588	20.582	0.007	43119435	10.168	10.168
1,1,2-Trichloroethane	21.122	21.115	0.007	55656826	10.089	10.089
Tetrachloroethene	21.608	21.600	0.008	63727774	10.082	10.082
Dibromochloromethane	22.317	22.310	0.007	39313874	10.311	10.311
Chlorobenzene	24.194	24.188	0.006	24809870	10.052	10.052
Bromoform	26.735	26.730	0.005	23683991	10.160	10.160
1,1,2,2-Tetrachloroethane	28.254	28.249	0.005	37952867	10.130	10.130
1,3-Dichlorobenzene	31.282	31.278	0.004	33384463	10.343	10.343
1,4-Dichlorobenzene	31.568	31.565	0.004	35540249	10.214	10.214
1,2-Dichlorobenzene	32.752	32.749	0.003	33013362	10.168	10.168
Bromochloromethane(sur)	12.249	12.236	0.013	40863766	10.490	10.490

306606

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7670.d Page 1
Report Date 02/28/2000 10:52



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : HSTD020
Lab ID : HSTD020
Inj Date : 25-FEB-2000 11:45
Operator : SP
Cpnd Sublist: 601

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_4

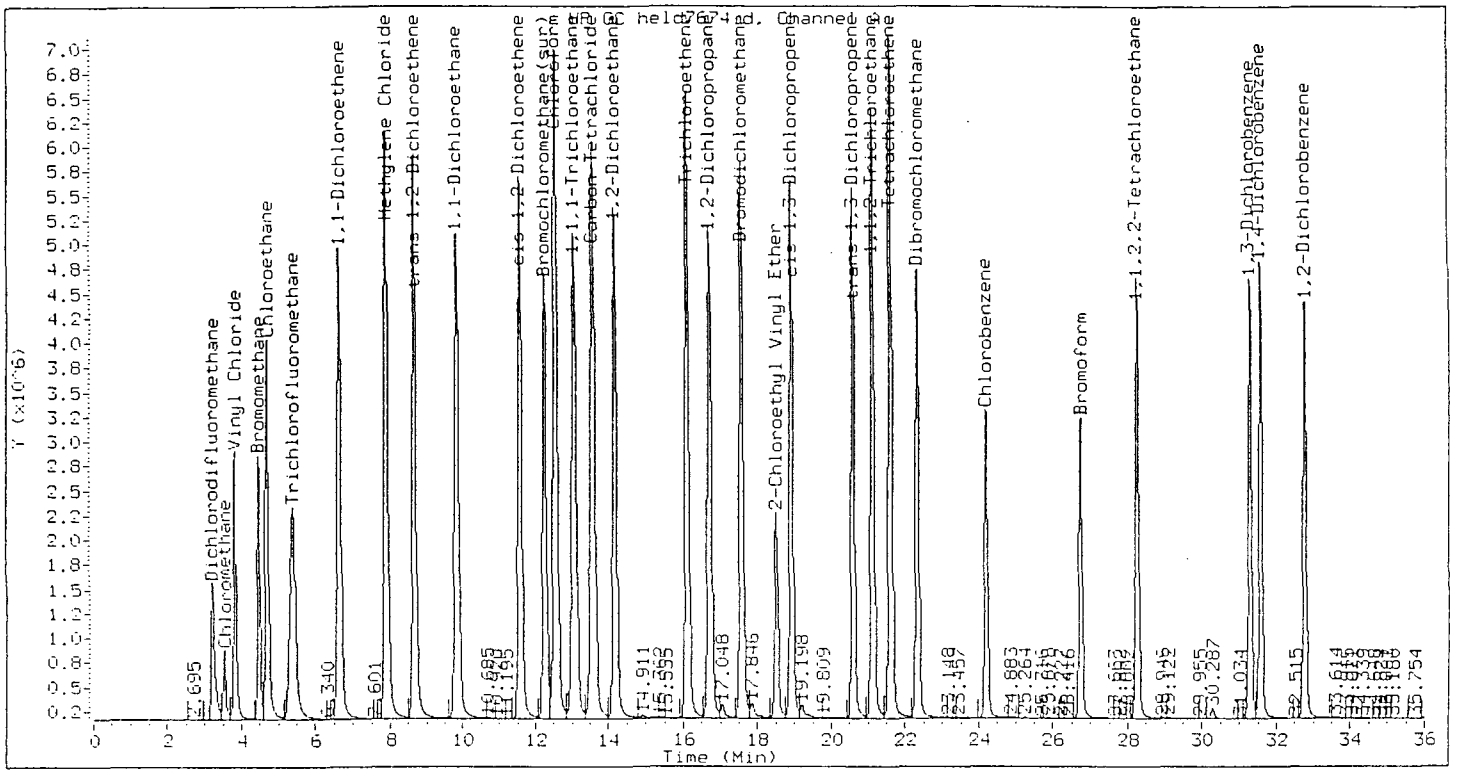
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.198	3.198	0.000	23821149	20.000	20.000
Chloromethane	3.522	3.522	0.000	8456943	20.000	20.000
Vinyl Chloride	3.804	3.804	0.000	32268249	20.000	20.000
Bromomethane	4.457	4.457	0.000	29240103	20.000	20.000
Chloroethane	4.691	4.691	0.000	58644725	20.000	20.000
Trichlorofluoromethane	5.392	5.392	0.000	68642474	20.000	20.000
1,1-Dichloroethene	6.618	6.618	0.000	86198028	20.000	20.000
Methylene Chloride	7.869	7.869	0.000	105216338	20.000	20.000
trans-1,2-Dichloroethene	8.637	8.637	0.000	94496233	20.000	20.000

306607

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	9.816	9.816	0.000	98605141	20.000	20.000
cis-1,2-Dichloroethene	11.553	11.553	0.000	94764087	20.000	20.000
Chloroform	12.530	12.530	0.000	128608131	20.000	20.000
1,1,1-Trichloroethane	13.047	13.047	0.000	109472142	20.000	20.000
Carbon Tetrachloride	13.559	13.559	0.000	126667398	20.000	20.000
1,2-Dichloroethane	14.161	14.161	0.000	91047377	20.000	20.000
Trichloroethene	16.090	16.090	0.000	106593957	20.000	20.000
1,2-Dichloropropane	16.695	16.695	0.000	89434392	20.000	20.000
Bromodichloromethane	17.556	17.556	0.000	91612018	20.000	20.000
2-Chloroethyl Vinyl Ether	18.500	18.500	0.000	31263824	20.000	20.000
cis-1,3-Dichloropropene	18.904	18.904	0.000	83355073	20.000	20.000
trans-1,3-Dichloropropene	20.582	20.582	0.000	77232451	20.000	20.000
1,1,2-Trichloroethane	21.115	21.115	0.000	98495704	20.000	20.000
Tetrachloroethene	21.600	21.600	0.000	112816706	20.000	20.000
Dibromochloromethane	22.310	22.310	0.000	69531200	20.000	20.000
Chlorobenzene	24.188	24.188	0.000	45253287	20.000	20.000
Bromoform	26.730	26.730	0.000	43939107	20.000	20.000
1,1,2,2-Tetrachloroethane	28.249	28.249	0.000	67829834	20.000	20.000
1,3-Dichlorobenzene	31.278	31.278	0.000	59709800	20.000	20.000
1,4-Dichlorobenzene	31.565	31.565	0.000	63652215	20.000	20.000
1,2-Dichlorobenzene	32.749	32.749	0.000	59638939	20.000	20.000
Bromochloromethane(sur)	12.236	12.236	0.000	71344805	20.000	20.000

306608

Data File: /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/held7674.d Page 1
Report Date 02/28/2000 10:53



Method : /chem/VOAGC2.i/8021EHIGH/02-25-00/25FEB00.b/8021BEHIGH.m
Sample Info : HSTD040
Lab ID : HSTD040
Inj Date : 25-FEB-2000 14:39
Operator : SP
Cpnd Sublist: 601

Inst ID : VOAGC2.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_5

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.202	3.198	0.004	44520156	40.135	40.135
Chloromethane	3.535	3.522	0.013	18394625	38.902	38.902
Vinyl Chloride	3.816	3.804	0.011	66952504	38.032	38.032
Bromomethane	4.461	4.457	0.003	60137649	37.408	37.408
Chloroethane	4.680	4.691	0.011	117279374	37.777	37.777
Trichlorofluoromethane	5.391	5.392	0.001	124598876	41.506	41.506
1,1-Dichloroethene	6.628	6.618	0.010	174181293	38.165	38.165
Methylene Chloride	7.880	7.869	0.011	214028017	36.801	36.801
trans-1,2-Dichloroethene	8.648	8.637	0.011	195447239	37.876	37.876

306609

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1,1-Dichloroethane	9.827	9.816	0.011	202288053	37.657	37.657
cis-1,2-Dichloroethene	11.563	11.553	0.010	194650575	37.646	37.646
Chloroform	12.540	12.530	0.010	262111303	36.610	36.610
1,1,1-Trichloroethane	13.056	13.047	0.009	223227525	37.650	37.650
Carbon Tetrachloride	13.568	13.559	0.009	257524033	37.460	37.460
1,2-Dichloroethane	14.168	14.161	0.008	184199906	37.062	37.062
Trichloroethene	16.099	16.090	0.009	218676895	37.793	37.793
1,2-Dichloropropane	16.703	16.695	0.008	182833468	37.556	37.556
Bromodichloromethane	17.563	17.556	0.007	189693528	38.101	38.101
2-Chloroethyl Vinyl Ether	18.505	18.500	0.006	66345534	39.093	39.093
cis-1,3-Dichloropropene	18.910	18.904	0.006	170588230	37.314	37.314
trans-1,3-Dichloropropene	20.587	20.582	0.005	157876568	37.753	37.753
1,1,2-Trichloroethane	21.121	21.115	0.006	200518264	37.025	37.025
Tetrachloroethene	21.607	21.600	0.007	231600708	37.267	37.267
Dibromochloromethane	22.317	22.310	0.007	144819147	38.368	38.368
Chlorobenzene	24.193	24.188	0.005	93214551	38.193	38.193
Bromoform	26.734	26.730	0.004	92265847	39.662	39.662
1,1,2,2-Tetrachloroethane	28.253	28.249	0.004	136851374	37.172	37.172
1,3-Dichlorobenzene	31.282	31.278	0.004	126546462	39.363	39.363
1,4-Dichlorobenzene	31.568	31.565	0.003	122779371	38.515	38.515
1,2-Dichlorobenzene	32.753	32.749	0.004	123515299	38.417	38.417
Bromochloromethane(sur)	12.246	12.236	0.010	149465114	38.683	38.683

306610

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Matrix: SOIL Level: HIGH Lab Job No: X455

	LAB SAMPLE NO.	SMC1 #	SMC2 #	OTHER	TOT OUT
01	HG056A	98			0
02	183826	96			0
03	183827	96			0
04	183828	96			0
05	183829	99			0
06	183830	95			0
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

QC LIMITS

SMC1 = Bromochloromethane(sur (70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

306611

VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
METHOD 8021

Matrix: SOIL

Level: HIGH

Matrix Spike - Lab Sample No.: 183835

MS Sample from Lab Job No: X456

QA Batch: 6958

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Chloromethane	2400	0.00	1800	75	70-130
Vinyl Chloride	2400	0.00	2100	88	70-130
Bromomethane	2400	0.00	2300	96	70-130
Chloroethane	2400	0.00	1800	75	70-130
Trichlorofluoromethane	2400	0.00	1700	71	70-130
1,1-Dichloroethene	2400	0.00	2100	88	70-130
Methylene Chloride	2400	0.00	2000	83	70-130
trans-1,2-Dichloroethene	2400	0.00	2000	83	70-130
1,1-Dichloroethane	2400	0.00	2000	83	70-130
Chloroform	2400	0.00	2200	92	70-130
1,1,1-Trichloroethane	2400	0.00	2100	88	70-130
Carbon Tetrachloride	2400	0.00	2000	83	70-130
1,2-Dichloroethane	2400	0.00	2000	83	70-130
Trichloroethene	2400	360	2300	81	70-130
1,2-Dichloropropane	2400	0.00	2100	88	70-130
Bromodichloromethane	2400	0.00	2200	92	70-130
2-Chloroethyl Vinyl Ethe	2400	0.00	2300	96	70-130
cis-1,3-Dichloropropene	2400	0.00	2100	88	70-130
trans-1,3-Dichloropropen	2400	0.00	2100	88	70-130
1,1,2-Trichloroethane	2400	0.00	2100	88	70-130
Tetrachloroethene	2400	0.00	2100	88	70-130
Dibromochloromethane	2400	0.00	2300	96	70-130
Chlorobenzene	2400	0.00	2000	83	70-130
Bromoform	2400	0.00	2400	100	70-130
1,1,2,2-Tetrachloroethan	2400	0.00	2100	88	70-130
1,3-Dichlorobenzene	2400	0.00	2100	88	70-130
1,4-Dichlorobenzene	2400	0.00	2100	88	70-130
1,2-Dichlorobenzene	2400	0.00	2000	83	70-130

306612

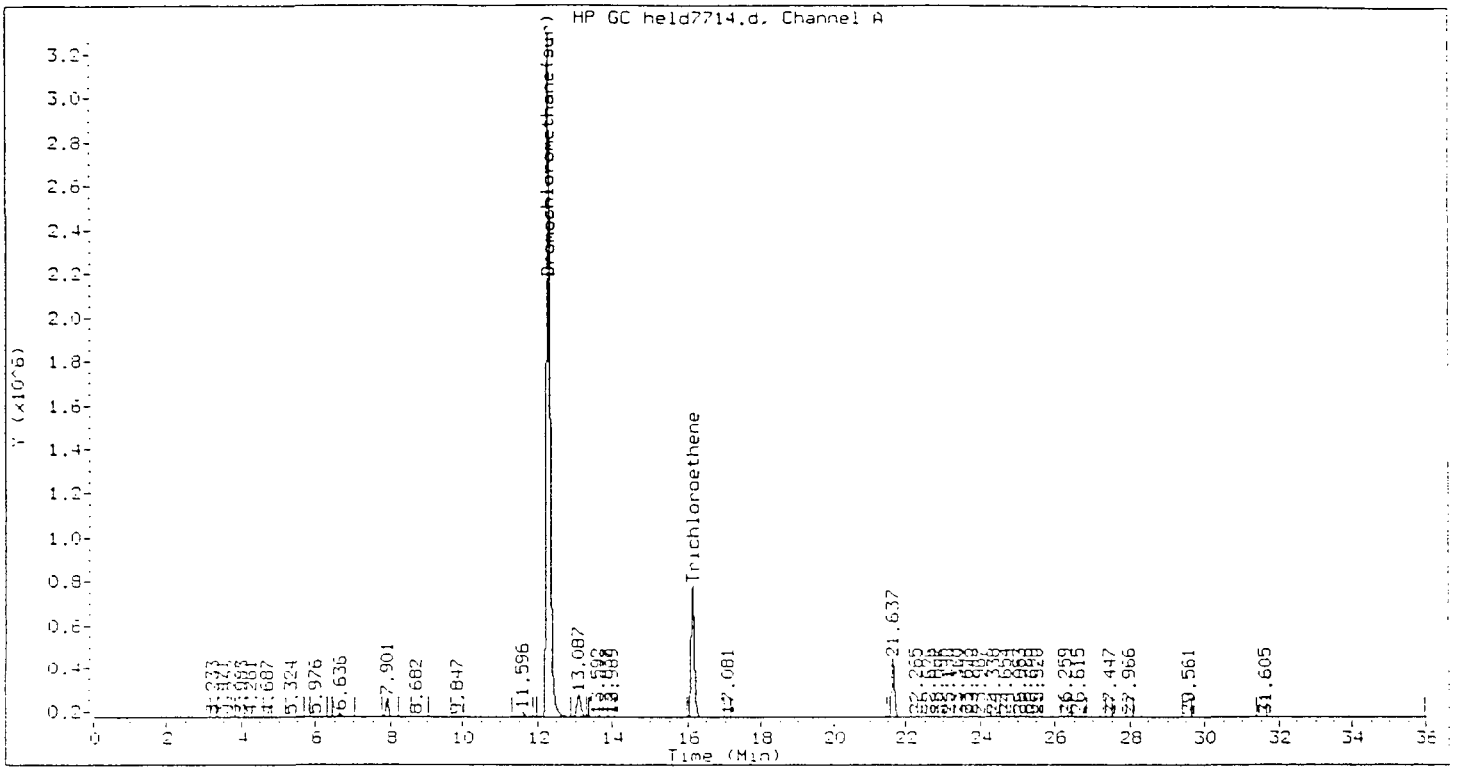
Compound	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Chloromethane	2400	1800	75	0	40	70-130
Vinyl Chloride	2400	2200	92	5	40	70-130
Bromomethane	2400	2300	96	0	40	70-130
Chloroethane	2400	1900	79	5	40	70-130
Trichlorofluoromethane	2400	1800	75	6	40	70-130
1,1-Dichloroethene	2400	2100	88	0	40	70-130
Methylene Chloride	2400	2100	88	5	40	70-130
trans-1,2-Dichloroethene	2400	2000	83	0	40	70-130
1,1-Dichloroethane	2400	2000	83	0	40	70-130
Chloroform	2400	2200	92	0	40	70-130
1,1,1-Trichloroethane	2400	2200	92	5	40	70-130
Carbon Tetrachloride	2400	2100	88	5	40	70-130
1,2-Dichloroethane	2400	2100	88	5	40	70-130
Trichloroethene	2400	2400	85	5	40	70-130
1,2-Dichloropropane	2400	2200	92	5	40	70-130
Bromodichloromethane	2400	2300	96	4	40	70-130
2-Chloroethyl Vinyl Ethe	2400	2300	96	0	40	70-130
cis-1,3-Dichloropropene	2400	2100	88	0	40	70-130
trans-1,3-Dichloropropen	2400	2100	88	0	40	70-130
1,1,2-Trichloroethane	2400	2100	88	0	40	70-130
Tetrachloroethene	2400	2100	88	0	40	70-130
Dibromochloromethane	2400	2300	96	0	40	70-130
Chlorobenzene	2400	2000	83	0	40	70-130
Bromoform	2400	2400	100	0	40	70-130
1,1,2,2-Tetrachloroethan	2400	2100	88	0	40	70-130
1,3-Dichlorobenzene	2400	2100	88	0	40	70-130
1,4-Dichlorobenzene	2400	2100	88	0	40	70-130
1,2-Dichlorobenzene	2400	2100	88	5	40	70-130

Column to be used to flag recovery and RPD values with an asterik
* Values outside of QC limits
RPD: 0 out of 28 outside limits
Spike Recovery: 0 out of 56 outside limits

COMMENTS: _____

306613

Data File: /chem/VOAGC2.i/8021EHIGH/02-28-00/28FEB00.b/held7714.d Page 1
Report Date 02/29/2000 09:49

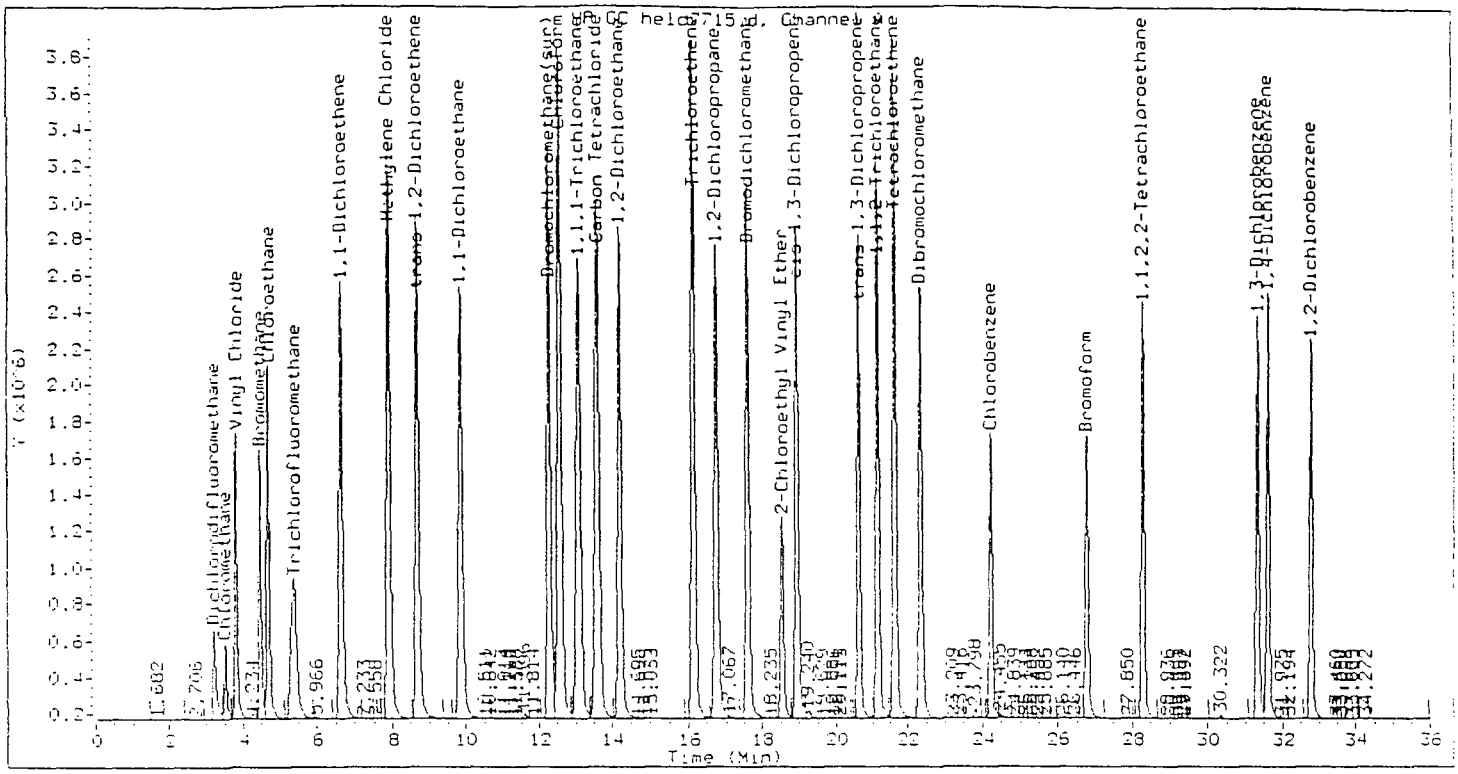


Method : /chem/VOAGC2.i/8021EHIGH/02-28-00/28FEB00.b/8021BEHIGH.m
Sample Info : 183835;;50
Lab ID : 183835 Inst ID : VOAGC2.i
Inj Date : 28-FEB-2000 18:40 Dil Factor : 50
Operator : SP Sample Matrix : SOIL
Cpnd Sublist: 601 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
Trichloroethene	16.128	16.099	0.030	18969726	2.975	357.468
Bromochloromethane(sur)	12.274	12.243	0.031	103249924	26.113	3138.227

306614

Data File: /chem/VOAGC2.i/8021EHIGH/02-28-00/28FEB00.b/held7715.d Page 1
Report Date 02/29/2000 09:49



Method : /chem/VOAGC2.i/8021EHIGH/02-28-00/28FEB00.b/8021BEHIGH.m
Sample Info : 183835MS;;50
Lab ID : 183835MS
Inj Date : 28-FEB-2000 19:23
Operator : SP
Cpnd Sublist: 601

Inst ID : VOAGC2.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: MS

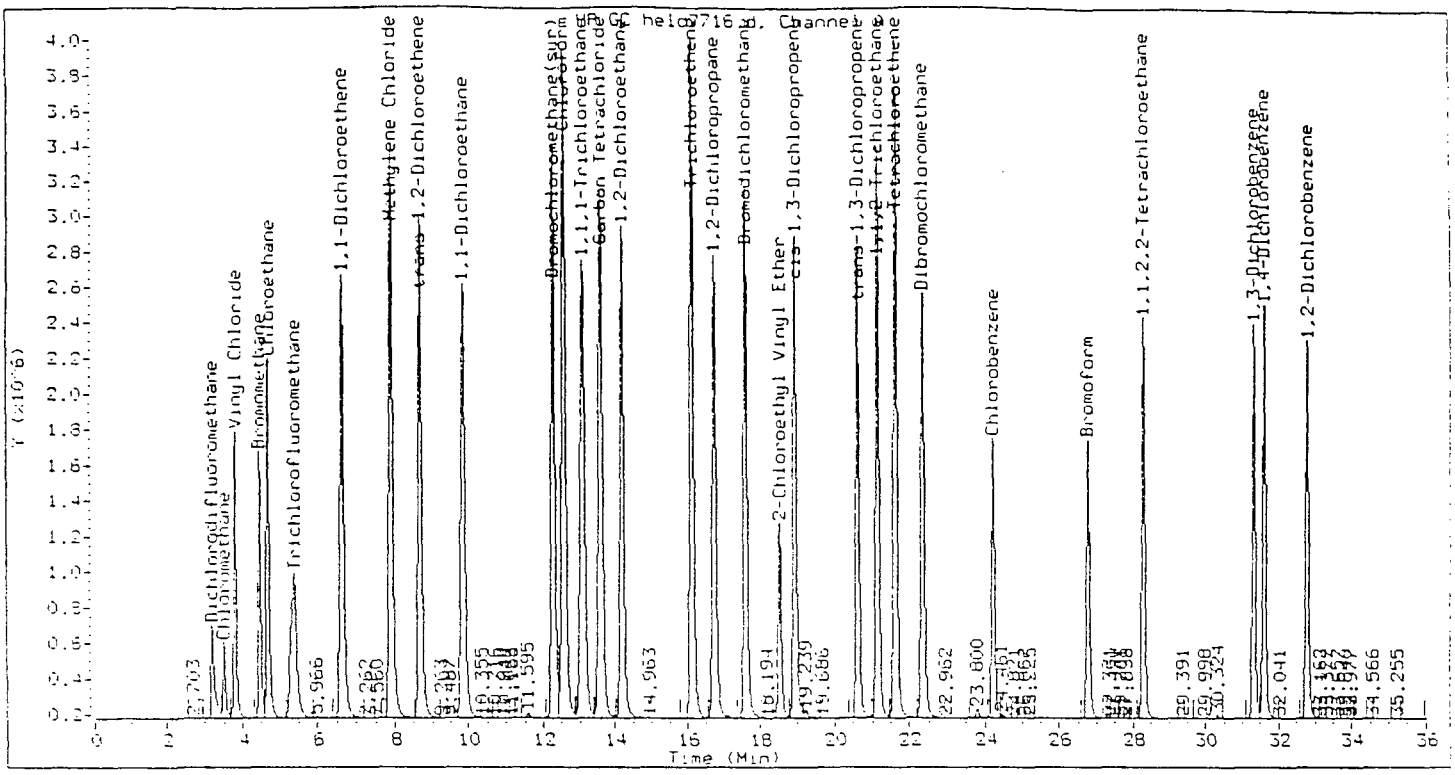
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
Dichlorodifluoromethane	3.212	3.199	0.013	15092618	12.445	1495.610
Chloromethane	3.525	3.515	0.010	9638344	14.788	1777.223
Vinyl Chloride	3.817	3.806	0.011	33334876	17.293	2078.196
Bromomethane	4.463	4.454	0.009	31299833	18.842	2264.363
Chloroethane	4.680	4.690	0.010	49625705	15.285	1836.969
Trichlorofluoromethane	5.385	5.400	0.015	43336037	14.141	1699.467
1,1-Dichloroethene	6.641	6.623	0.017	83279575	17.150	2061.030
Methylene Chloride	7.901	7.875	0.027	105755206	17.088	2053.632
trans-1,2-Dichloroethene	8.671	8.643	0.028	90175114	16.641	1999.918

306615

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	9.853	9.822	0.031	93011602	16.520	1985.358
Chloroform	12.569	12.536	0.033	137167357	18.218	2189.385
1,1,1-Trichloroethane	13.085	13.054	0.030	111336134	17.713	2128.649
Carbon Tetrachloride	13.598	13.566	0.032	121952218	16.736	2011.320
1,2-Dichloroethane	14.201	14.168	0.033	91426594	17.100	2055.052
Trichloroethene	16.129	16.099	0.030	123010931	19.288	2318.033
1,2-Dichloropropane	16.735	16.704	0.031	92428666	17.760	2134.390
Bromodichloromethane	17.595	17.565	0.030	97187682	18.554	2229.812
2-Chloroethyl Vinyl Ether	18.537	18.509	0.028	33585521	19.314	2321.076
cis-1,3-Dichloropropene	18.942	18.913	0.028	82485149	17.166	2062.982
trans-1,3-Dichloropropene	20.618	20.591	0.027	74746583	17.288	2077.575
1,1,2-Trichloroethane	21.152	21.125	0.027	98125075	17.299	2078.969
Tetrachloroethene	21.637	21.610	0.027	119250332	17.314	2080.727
Dibromochloromethane	22.349	22.321	0.028	74113591	18.936	2275.706
Chlorobenzene	24.225	24.199	0.026	44272558	16.461	1978.272
Bromoform	26.769	26.742	0.026	45156293	19.668	2363.685
1,1,2,2-Tetrachloroethane	28.285	28.260	0.025	66895615	17.672	2123.832
1,3-Dichlorobenzene	31.316	31.289	0.027	60847959	17.481	2100.855
1,4-Dichlorobenzene	31.601	31.576	0.025	64238723	17.271	2075.598
1,2-Dichlorobenzene	32.786	32.760	0.025	58435981	17.134	2059.123
Bromochloromethane (sur)	12.275	12.243	0.032	101386057	25.642	3081.575

306616

Data File: /chem/VOAGC2.i/8021EHIGH/02-28-00/28FEB00.b/held7716.d Page 1
Report Date 02/29/2000 09:49



Method : /chem/VOAGC2.i/8021EHIGH/02-28-00/28FEB00.b/8021BEHIGH.m
Sample Info : 183835MSD;;50
Lab ID : 183835MSD
Inj Date : 28-FEB-2000 20:06
Operator : SP
Cpnd Sublist: 601
Inst ID : VOAGC2.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: MSD

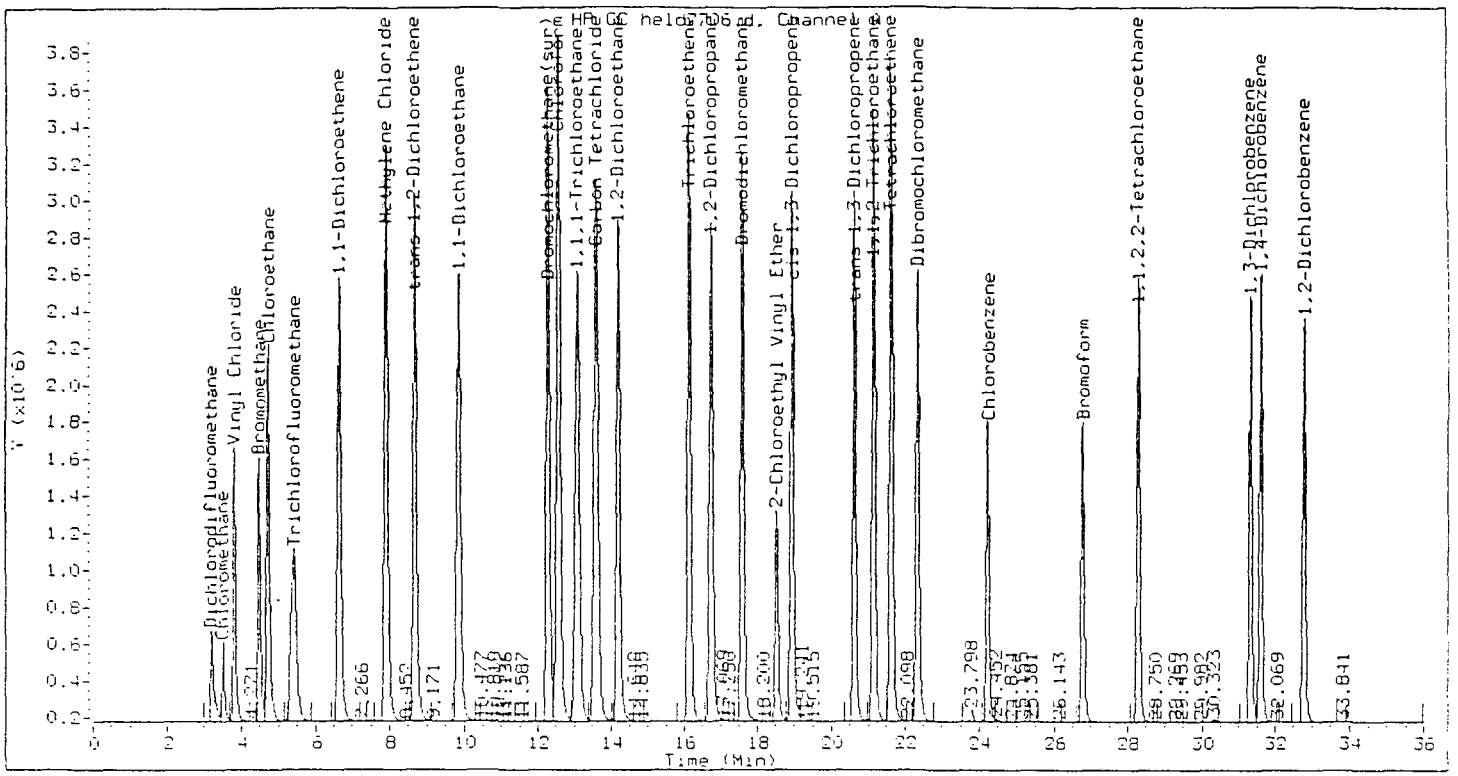
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.211	3.199	0.012	15647540	12.903	1550.601
Chloromethane	3.524	3.515	0.009	9821176	15.069	1810.935
Vinyl Chloride	3.816	3.806	0.010	34602553	17.950	2157.227
Bromomethane	4.462	4.454	0.008	32119616	19.335	2323.670
Chloroethane	4.679	4.690	0.011	52185077	16.074	1931.708
Trichlorofluoromethane	5.385	5.400	0.016	45441298	14.832	1782.438
1,1-Dichloroethene	6.640	6.623	0.017	86772885	17.869	2147.484
Methylene Chloride	7.901	7.875	0.026	108591678	17.547	2108.712
trans-1,2-Dichloroethene	8.672	8.643	0.029	92546707	17.079	2052.516

306617

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1,1-Dichloroethane	9.853	9.822	0.031	96061157	17.062	2050.452
Chloroform	12.570	12.536	0.034	141261931	18.762	2254.741
1,1,1-Trichloroethane	13.085	13.054	0.030	114499395	18.216	2189.128
Carbon Tetrachloride	13.596	13.566	0.031	126294105	17.332	2082.930
1,2-Dichloroethane	14.201	14.168	0.034	94754446	17.723	2129.854
Trichloroethene	16.131	16.099	0.032	127633690	20.013	2405.145
1,2-Dichloropropane	16.735	16.704	0.032	94769720	18.210	2188.450
Bromodichloromethane	17.597	17.565	0.031	99298407	18.957	2278.239
2-Chloroethyl Vinyl Ether	18.538	18.509	0.030	33773533	19.422	2334.069
cis-1,3-Dichloropropene	18.943	18.913	0.029	82577478	17.185	2065.291
trans-1,3-Dichloropropene	20.620	20.591	0.029	76293560	17.645	2120.573
1,1,2-Trichloroethane	21.152	21.125	0.028	99406581	17.525	2106.120
Tetrachloroethene	21.638	21.610	0.028	123068198	17.868	2147.342
Dibromochloromethane	22.350	22.321	0.029	75391331	19.263	2314.940
Chlorobenzene	24.227	24.199	0.028	45013300	16.737	2011.372
Bromoform	26.771	26.742	0.028	45916921	20.000	2403.500
1,1,2,2-Tetrachloroethane	28.288	28.260	0.027	66430569	17.550	2109.068
1,3-Dichlorobenzene	31.317	31.289	0.028	60941765	17.508	2104.093
1,4-Dichlorobenzene	31.603	31.576	0.028	64699414	17.395	2090.483
1,2-Dichlorobenzene	32.788	32.760	0.028	59949972	17.560	2110.305
Bromochloromethane(sur)	12.276	12.243	0.033	105214490	26.610	3197.938

306618

Data File: /chem/VOAGC2.i/8021EHIGH/02-28-00/28FEB00.b/held7706.d Page 1
Report Date 02/29/2000 09:47



Method : /chem/VOAGC2.i/8021EHIGH/02-28-00/28FEB00.b/8021BEHIGH.m
Sample Info : 6958BS
Lab ID : 6958BS
Inj Date : 28-FEB-2000 12:43
Operator : SP
Cpnd Sublist: 601

Inst ID : VOAGC2.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: METHSPIKE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.216	3.199	0.017	14785830	12.192	1524.008
Chloromethane	3.529	3.515	0.014	9215796	14.140	1767.502
Vinyl Chloride	3.822	3.806	0.016	31692500	16.441	2055.094
Bromomethane	4.479	4.454	0.025	34212265	20.595	2574.385
Chloroethane	4.722	4.690	0.032	59182478	18.229	2278.603
Trichlorofluoromethane	5.425	5.400	0.024	50225208	16.393	2049.151
1,1-Dichloroethene	6.653	6.623	0.030	82127378	16.913	2114.080
Methylene Chloride	7.906	7.875	0.032	103810244	16.774	2096.760
trans-1,2-Dichloroethene	8.678	8.643	0.035	90061153	16.620	2077.546

306619

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1,1-Dichloroethane	9.859	9.822	0.037	93530398	16.612	2076.549
Chloroform	12.571	12.536	0.035	136508333	18.130	2266.304
1,1,1-Trichloroethane	13.089	13.054	0.035	106212295	16.897	2112.177
Carbon Tetrachloride	13.601	13.566	0.036	121552382	16.681	2085.175
1,2-Dichloroethane	14.202	14.168	0.034	90673217	16.959	2119.908
Trichloroethene	16.132	16.099	0.033	107575870	16.868	2108.523
1,2-Dichloropropane	16.736	16.704	0.032	94700581	18.197	2274.612
Bromodichloromethane	17.596	17.565	0.031	99154711	18.930	2366.236
2-Chloroethyl Vinyl Ether	18.538	18.509	0.030	34071023	19.593	2449.120
cis-1,3-Dichloropropene	18.943	18.913	0.030	85940599	17.885	2235.660
trans-1,3-Dichloropropene	20.620	20.591	0.029	78281982	18.105	2263.158
1,1,2-Trichloroethane	21.153	21.125	0.029	101857884	17.957	2244.658
Tetrachloroethene	21.639	21.610	0.029	113701453	16.508	2063.522
Dibromochloromethane	22.350	22.321	0.028	75039976	19.173	2396.617
Chlorobenzene	24.226	24.199	0.027	45272139	16.833	2104.120
Bromoform	26.769	26.742	0.026	46261727	20.150	2518.725
1,1,2,2-Tetrachloroethane	28.285	28.260	0.024	68925240	18.209	2276.085
1,3-Dichlorobenzene	31.316	31.289	0.027	62366932	17.918	2239.711
1,4-Dichlorobenzene	31.602	31.576	0.026	65592792	17.635	2204.398
1,2-Dichlorobenzene	32.786	32.760	0.025	59581516	17.452	2181.501
Bromochloromethane(sur)	12.278	12.243	0.035	109479665	27.689	3461.112

306620

Sublinearory: E022500 Analysis: 8021E

Date	Data File ID #	A/S	SAMPLE	Sublist	JOB	QA	LPB	pH	W/V	D.F	Sol lot #	Comments	Analyst
2-25-00	HELO 7670	1	HSTD 020	601							SWA	G	SP
	7671	2	001									G	
	7672	3	005								Vw 113	G	
	7673	4	010									G	
	7674	5	040								SYL Vw 121	G	
	7675	6	BS								00-122	G	
	7676	7	HG056 W4119								00-123	G	
	7677	8	HG056A MS								BS	G	
	7678	9	183842		X456	6158	HG056	Y6	50ml	5+	Vw 118 119	G Where on one in soil	
	7679	10	183826		X455	6958	HG056A		11.7/25ml	50x		G	
	7680	11	183827						11.0/			G	
	7681	12	183828						11.3/			G	
	7682	13	183829						11.5/			G	
	7683	14	183830						11.5/			G	
	7684	15	183831		X456				11.2/			NG 100x	
	7685	16	183832						10.9/			5	
	7686	17	HSTD 020A									G	
	7687	18	020A									NG	
	7688	19	HG056B				HG056B			50x		G	
	7689	20	183833		X452	6958			11.8/25ml			NG 100x	
	7690	21	183834						10.8/			NG 100x	
	7691	22	183835						11.7/			G	
	7692	23	183836						11.1/			NG 100x	
	7693	24	183837						10.5/			NG 100x	
	7694	25	183838						11.4/			G	
	7695	26	183840						10.8/			G	
	7696	27	183843						10/			G	
	7697	28	183837MS						10.5/			NG	

Sheilah Ford

Signed

Read and Understood By

306621

Continued on Page

2/28/00

PROJECT

Notebook No. _____

Continued From Page _____

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