SDMS Document
98455

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 10
LABORATORY QA/QC DATA PACKAGE
10/16/98 - JOB #I279

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

305730

MAY 2004

116 Tices Lane, Unit B-1, East Brunswick, NJ 08816
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ENVIROTECH RESEARCH, INC.

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Edison, New Jersey 08817
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November 06, 1998

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

RECEIVED
NOV 17 1998
The Whitman Comp

Attention: Mr. Michael Metlitz

Re: Job No. I279 - Klockner & Klockner

Dear Mr. Metlitz:

Enclosed are the results you requested for the following sample(s) received at our laboratory on October 16, 1998:

Lab No.	Client ID	Analysis Required
90821	SSFA-1_1.5-2	Purgeable Halocarbons
90822	SSFA-6A_1.5-2	Purgeable Halocarbons
90823	SSFA-1_10.5-11	Purgeable Halocarbons
90824	SSFA-2_0.5-1	Purgeable Halocarbons
90825	SSFA-3_0.5-1	Purgeable Halocarbons
90826	SSFA-4_0.5-1	Purgeable Halocarbons
90827	SSFA-5_3-3.5	Purgeable Halocarbons
90828	SSPP-1_6.5-7	Purgeable Halocarbons
90829	SSFD-2_3-4	Purgeable Halocarbons
90830	SSDW-1_1.5-2	Purgeable Halocarbons
90831	SSSD-1_5-5.5	Purgeable Halocarbons
90832	SSDA-1_1.5-2	Purgeable Halocarbons
90833	Trip_Blank-4	Purgeable Halocarbons
90834	Field_Blank-3	Purgeable Halocarbons
90835	SSGC-4_2-4	TOC

305731

Lab No.	Client ID	Analysis Required
90836	SSGC-3_4.5-5	TOC
90837	SSGC-2_3-4	TOC

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

Very truly yours,

Michael J. Urban
Laboratory Manager

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ENVIROTECH RESEARCH, INC.

Client ID: **SSFA-1_1.5-2**
Site: Klockner & Klockner

Lab Sample No: **90821**
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/22/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9629.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 9.9

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	128
Chloromethane	ND	128
Vinyl Chloride	ND	128
Bromomethane	ND	128
Chloroethane	ND	128
Trichlorofluoromethane	ND	128
1,1-Dichloroethene	ND	128
Methylene Chloride	ND	128
trans-1,2-Dichloroethene	ND	128
1,1-Dichloroethane	ND	128
cis-1,2-Dichloroethene	ND	128
Chloroform	ND	128
1,1,1-Trichloroethane	ND	128
Carbon Tetrachloride	ND	128
1,2-Dichloroethane	ND	128
Trichloroethene	ND	128
1,2-Dichloropropane	ND	128
Bromodichloromethane	ND	128
2-Chloroethyl Vinyl Ether	ND	128
cis-1,3-Dichloropropene	ND	128
trans-1,3-Dichloropropene	ND	128
1,1,2-Trichloroethane	ND	128
Tetrachloroethene	1510	128
Dibromochloromethane	ND	128
Chlorobenzene	ND	128
Bromoform	ND	128
1,1,2,2-Tetrachloroethane	ND	128
1,3-Dichlorobenzene	ND	128
1,4-Dichlorobenzene	ND	128
1,2-Dichlorobenzene	ND	128

ENVIROTECH RESEARCH, INC.

Client ID: SSFA-6A_1.5-2
Site: Klockner & Klockner

Lab Sample No: 90822
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/22/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9634.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 8.6

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	134
Chloromethane	ND	134
Vinyl Chloride	ND	134
Bromomethane	ND	134
Chloroethane	ND	134
Trichlorofluoromethane	ND	134
1,1-Dichloroethene	ND	134
Methylene Chloride	ND	134
trans-1,2-Dichloroethene	ND	134
1,1-Dichloroethane	ND	134
cis-1,2-Dichloroethene	ND	134
Chloroform	ND	134
1,1,1-Trichloroethane	ND	134
Carbon Tetrachloride	ND	134
1,2-Dichloroethane	ND	134
Trichloroethene	ND	134
1,2-Dichloropropane	ND	134
Bromodichloromethane	ND	134
2-Chloroethyl Vinyl Ether	ND	134
cis-1,3-Dichloropropene	ND	134
trans-1,3-Dichloropropene	ND	134
1,1,2-Trichloroethane	ND	134
Tetrachloroethene	3720	134
Dibromochloromethane	ND	134
Chlorobenzene	ND	134
Bromoform	ND	134
1,1,2,2-Tetrachloroethane	ND	134
1,3-Dichlorobenzene	ND	134
1,4-Dichlorobenzene	ND	134
1,2-Dichlorobenzene	ND	134

ENVIROTECH RESEARCH, INC.

Client ID: **SSFA-1_10.5-11**
Site: Klockner & Klockner

Lab Sample No: **90823**
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/22/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9635.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 5.0

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	123
Chloromethane	ND	123
Vinyl Chloride	ND	123
Bromomethane	ND	123
Chloroethane	ND	123
Trichlorofluoromethane	ND	123
1,1-Dichloroethene	ND	123
Methylene Chloride	ND	123
trans-1,2-Dichloroethene	ND	123
1,1-Dichloroethane	ND	123
cis-1,2-Dichloroethene	ND	123
Chloroform	ND	123
1,1,1-Trichloroethane	ND	123
Carbon Tetrachloride	ND	123
1,2-Dichloroethane	ND	123
Trichloroethene	ND	123
1,2-Dichloropropane	ND	123
Bromodichloromethane	ND	123
2-Chloroethyl Vinyl Ether	ND	123
cis-1,3-Dichloropropene	ND	123
trans-1,3-Dichloropropene	ND	123
1,1,2-Trichloroethane	ND	123
Tetrachloroethene	ND	123
Dibromochloromethane	ND	123
Chlorobenzene	ND	123
Bromoform	ND	123
1,1,2,2-Tetrachloroethane	ND	123
1,3-Dichlorobenzene	ND	123
1,4-Dichlorobenzene	ND	123
1,2-Dichlorobenzene	ND	123

ENVIROTECH RESEARCH, INC.

Client ID: SSFA-2_0.5-1
Site: Klockner & Klockner

Lab Sample No: 90824
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/22/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9636.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 8.3

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	124
Chloromethane	ND	124
Vinyl Chloride	ND	124
Bromomethane	ND	124
Chloroethane	ND	124
Trichlorofluoromethane	ND	124
1,1-Dichloroethene	ND	124
Methylene Chloride	ND	124
trans-1,2-Dichloroethene	ND	124
1,1-Dichloroethane	ND	124
cis-1,2-Dichloroethene	ND	124
Chloroform	ND	124
1,1,1-Trichloroethane	ND	124
Carbon Tetrachloride	ND	124
1,2-Dichloroethane	ND	124
Trichloroethene	ND	124
1,2-Dichloropropane	ND	124
Bromodichloromethane	ND	124
2-Chloroethyl Vinyl Ether	ND	124
cis-1,3-Dichloropropene	ND	124
trans-1,3-Dichloropropene	ND	124
1,1,2-Trichloroethane	ND	124
Tetrachloroethene	161	124
Dibromochloromethane	ND	124
Chlorobenzene	ND	124
Bromoform	ND	124
1,1,2,2-Tetrachloroethane	ND	124
1,3-Dichlorobenzene	ND	124
1,4-Dichlorobenzene	ND	124
1,2-Dichlorobenzene	ND	124

ENVIROTECH RESEARCH, INC.

Client ID: SSFA-3_0.5-1
Site: Klockner & Klockner

Lab Sample No: 90825
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9646.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 4.1

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	137
Chloromethane	ND	137
Vinyl Chloride	ND	137
Bromomethane	ND	137
Chloroethane	ND	137
Trichlorofluoromethane	ND	137
1,1-Dichloroethene	ND	137
Methylene Chloride	ND	137
trans-1,2-Dichloroethene	ND	137
1,1-Dichloroethane	ND	137
cis-1,2-Dichloroethene	ND	137
Chloroform	ND	137
1,1,1-Trichloroethane	ND	137
Carbon Tetrachloride	ND	137
1,2-Dichloroethane	ND	137
Trichloroethene	ND	137
1,2-Dichloropropane	ND	137
Bromodichloromethane	ND	137
2-Chloroethyl Vinyl Ether	ND	137
cis-1,3-Dichloropropene	ND	137
trans-1,3-Dichloropropene	ND	137
1,1,2-Trichloroethane	ND	137
Tetrachloroethene	1100	137
Dibromochloromethane	ND	137
Chlorobenzene	ND	137
Bromoform	ND	137
1,1,2,2-Tetrachloroethane	ND	137
1,3-Dichlorobenzene	ND	137
1,4-Dichlorobenzene	ND	137
1,2-Dichlorobenzene	ND	137

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ENVIROTECH RESEARCH, INC.

Client ID: SSFA-4_0.5-1
Site: Klockner & Klockner

Lab Sample No: 90826
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9647.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 3.2

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	129
Chloromethane	ND	129
Vinyl Chloride	ND	129
Bromomethane	ND	129
Chloroethane	ND	129
Trichlorofluoromethane	ND	129
1,1-Dichloroethene	ND	129
Methylene Chloride	ND	129
trans-1,2-Dichloroethene	ND	129
1,1-Dichloroethane	ND	129
cis-1,2-Dichloroethene	ND	129
Chloroform	ND	129
1,1,1-Trichloroethane	ND	129
Carbon Tetrachloride	ND	129
1,2-Dichloroethane	ND	129
Trichloroethene	ND	129
1,2-Dichloropropane	ND	129
Bromodichloromethane	ND	129
2-Chloroethyl Vinyl Ether	ND	129
cis-1,3-Dichloropropene	ND	129
trans-1,3-Dichloropropene	ND	129
1,1,2-Trichloroethane	ND	129
Tetrachloroethene	4280	129
Dibromochloromethane	ND	129
Chlorobenzene	ND	129
Bromoform	ND	129
1,1,2,2-Tetrachloroethane	ND	129
1,3-Dichlorobenzene	ND	129
1,4-Dichlorobenzene	ND	129
1,2-Dichlorobenzene	ND	129

ENVIROTECH RESEARCH, INC.

Client ID: **SSFA-5_3-3.5**
Site: Klockner & Klockner

Lab Sample No: 90827
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9648.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 13.9

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	127
Chloromethane	ND	127
Vinyl Chloride	ND	127
Bromomethane	ND	127
Chloroethane	ND	127
Trichlorofluoromethane	ND	127
1,1-Dichloroethene	ND	127
Methylene Chloride	ND	127
trans-1,2-Dichloroethene	ND	127
1,1-Dichloroethane	ND	127
cis-1,2-Dichloroethene	ND	127
Chloroform	ND	127
1,1,1-Trichloroethane	ND	127
Carbon Tetrachloride	ND	127
1,2-Dichloroethane	ND	127
Trichloroethene	ND	127
1,2-Dichloropropane	ND	127
Bromodichloromethane	ND	127
2-Chloroethyl Vinyl Ether	ND J	127
cis-1,3-Dichloropropene	ND	127
trans-1,3-Dichloropropene	ND	127
1,1,2-Trichloroethane	ND	127
Tetrachloroethene	ND	127
Dibromochloromethane	ND	127
Chlorobenzene	ND	127
Bromoform	ND	127
1,1,2,2-Tetrachloroethane	ND	127
1,3-Dichlorobenzene	ND	127
1,4-Dichlorobenzene	ND	127
1,2-Dichlorobenzene	ND	127

ENVIROTECH RESEARCH, INC.

Client ID: SSPP-1_6.5-7
Site: Klockner & Klockner

Lab Sample No: 90828
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9649.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 11.2

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	123
Chloromethane	ND	123
Vinyl Chloride	ND	123
Bromomethane	ND	123
Chloroethane	ND	123
Trichlorofluoromethane	ND	123
1,1-Dichloroethene	ND	123
Methylene Chloride	ND	123
trans-1,2-Dichloroethene	ND	123
1,1-Dichloroethane	ND	123
cis-1,2-Dichloroethene	ND	123
Chloroform	ND	123
1,1,1-Trichloroethane	ND	123
Carbon Tetrachloride	ND	123
1,2-Dichloroethane	ND	123
Trichloroethene	ND	123
1,2-Dichloropropane	ND	123
Bromodichloromethane	ND	123
2-Chloroethyl Vinyl Ether	ND	123
cis-1,3-Dichloropropene	ND	123
trans-1,3-Dichloropropene	ND	123
1,1,2-Trichloroethane	ND	123
Tetrachloroethene	ND	123
Dibromochloromethane	ND	123
Chlorobenzene	ND	123
Bromoform	ND	123
1,1,2,2-Tetrachloroethane	ND	123
1,3-Dichlorobenzene	ND	123
1,4-Dichlorobenzene	ND	123
1,2-Dichlorobenzene	ND	123

ENVIROTECH RESEARCH, INC.

Client ID: SSFD-2_3-4
Site: Klockner & Klockner

Lab Sample No: 90829
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9650.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 14.6

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	139
Chloromethane	ND	139
Vinyl Chloride	ND	139
Bromomethane	ND	139
Chloroethane	ND	139
Trichlorofluoromethane	ND	139
1,1-Dichloroethene	ND	139
Methylene Chloride	ND	139
trans-1,2-Dichloroethene	ND	139
1,1-Dichloroethane	ND	139
cis-1,2-Dichloroethene	ND	139
Chloroform	ND	139
1,1,1-Trichloroethane	ND	139
Carbon Tetrachloride	ND	139
1,2-Dichloroethane	ND	139
Trichloroethene	ND	139
1,2-Dichloropropane	ND	139
Bromodichloromethane	ND	139
2-Chloroethyl Vinyl Ether	ND	139
cis-1,3-Dichloropropene	ND	139
trans-1,3-Dichloropropene	ND	139
1,1,2-Trichloroethane	ND	139
Tetrachloroethene	266	139
Dibromochloromethane	ND	139
Chlorobenzene	ND	139
Bromoform	ND	139
1,1,2,2-Tetrachloroethane	ND	139
1,3-Dichlorobenzene	ND	139
1,4-Dichlorobenzene	ND	139
1,2-Dichlorobenzene	ND	139

ENVIROTECH RESEARCH, INC.

Client ID: SSDW-1_1.5-2
Site: Klockner & Klockner

Lab Sample No: 90830
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9651.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 12.5

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	128
Chloromethane	ND	128
Vinyl Chloride	ND	128
Bromomethane	ND	128
Chloroethane	ND	128
Trichlorofluoromethane	ND	128
1,1-Dichloroethene	ND	128
Methylene Chloride	ND	128
trans-1,2-Dichloroethene	ND	128
1,1-Dichloroethane	ND	128
cis-1,2-Dichloroethene	ND	128
Chloroform	ND	128
1,1,1-Trichloroethane	ND	128
Carbon Tetrachloride	ND	128
1,2-Dichloroethane	ND	128
Trichloroethene	ND	128
1,2-Dichloropropane	ND	128
Bromodichloromethane	ND	128
2-Chloroethyl Vinyl Ether	ND J	128
cis-1,3-Dichloropropene	ND	128
trans-1,3-Dichloropropene	ND	128
1,1,2-Trichloroethane	ND	128
Tetrachloroethene	1040	128
Dibromochloromethane	ND	128
Chlorobenzene	ND	128
Bromoform	ND	128
1,1,2,2-Tetrachloroethane	ND	128
1,3-Dichlorobenzene	ND	128
1,4-Dichlorobenzene	ND	128
1,2-Dichlorobenzene	ND	128

305743

ENVIROTECH RESEARCH, INC.

Client ID: SSSD-1_5-5.5
Site: Klockner & Klockner

Lab Sample No: 90831
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9652.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 4.7

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	125
Chloromethane	ND	125
Vinyl Chloride	ND	125
Bromomethane	ND	125
Chloroethane	ND	125
Trichlorofluoromethane	ND	125
1,1-Dichloroethene	ND	125
Methylene Chloride	ND	125
trans-1,2-Dichloroethene	ND	125
1,1-Dichloroethane	ND	125
cis-1,2-Dichloroethene	ND	125
Chloroform	ND	125
1,1,1-Trichloroethane	ND	125
Carbon Tetrachloride	ND	125
1,2-Dichloroethane	ND	125
Trichloroethene	ND	125
1,2-Dichloropropane	ND	125
Bromodichloromethane	ND	125
2-Chloroethyl Vinyl Ether	ND	125
cis-1,3-Dichloropropene	ND	125
trans-1,3-Dichloropropene	ND	125
1,1,2-Trichloroethane	ND	125
Tetrachloroethene	ND	125
Dibromochloromethane	ND	125
Chlorobenzene	ND	125
Bromoform	ND	125
1,1,2,2-Tetrachloroethane	ND	125
1,3-Dichlorobenzene	ND	125
1,4-Dichlorobenzene	ND	125
1,2-Dichlorobenzene	ND	125

305744

ENVIROTECH RESEARCH, INC.

Client ID: SSDA-1_1.5-2
Site: Klockner & Klockner

Lab Sample No: 90832
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9653.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 15.5

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	132
Chloromethane	ND	132
Vinyl Chloride	ND	132
Bromomethane	ND	132
Chloroethane	ND	132
Trichlorofluoromethane	ND	132
1,1-Dichloroethene	ND	132
Methylene Chloride	ND	132
trans-1,2-Dichloroethene	ND	132
1,1-Dichloroethane	ND	132
cis-1,2-Dichloroethene	ND	132
Chloroform	ND	132
1,1,1-Trichloroethane	ND	132
Carbon Tetrachloride	ND	132
1,2-Dichloroethane	ND	132
Trichloroethene	ND	132
1,2-Dichloropropane	ND	132
Bromodichloromethane	ND	132
2-Chloroethyl Vinyl Ether	ND	132
cis-1,3-Dichloropropene	ND	132
trans-1,3-Dichloropropene	ND	132
1,1,2-Trichloroethane	ND	132
Tetrachloroethene	154	132
Dibromochloromethane	ND	132
Chlorobenzene	ND	132
Bromoform	ND	132
1,1,2,2-Tetrachloroethane	ND	132
1,3-Dichlorobenzene	ND	132
1,4-Dichlorobenzene	ND	132
1,2-Dichlorobenzene	ND	132

ENVIROTECH RESEARCH, INC.

Client ID: **Trip_Blank-4**
Site: Klockner & Klockner

Lab Sample No: 90833
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/24/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9661.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0.0

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	125
Chloromethane	ND J	125
Vinyl Chloride	ND	125
Bromomethane	ND	125
Chloroethane	ND	125
Trichlorofluoromethane	ND	125
1,1-Dichloroethene	ND	125
Methylene Chloride	ND	125
trans-1,2-Dichloroethene	ND	125
1,1-Dichloroethane	ND	125
cis-1,2-Dichloroethene	ND	125
Chloroform	ND	125
1,1,1-Trichloroethane	ND	125
Carbon Tetrachloride	ND	125
1,2-Dichloroethane	ND	125
Trichloroethene	ND	125
1,2-Dichloropropane	ND	125
Bromodichloromethane	ND	125
2-Chloroethyl Vinyl Ether	ND	125
cis-1,3-Dichloropropene	ND	125
trans-1,3-Dichloropropene	ND	125
1,1,2-Trichloroethane	ND	125
Tetrachloroethene	ND	125
Dibromochloromethane	ND	125
Chlorobenzene	ND	125
Bromoform	ND	125
1,1,2,2-Tetrachloroethane	ND	125
1,3-Dichlorobenzene	ND	125
1,4-Dichlorobenzene	ND	125
1,2-Dichlorobenzene	ND	125

ENVIROTECH RESEARCH, INC.

Client ID: **Field_Blank-3**
Site: Klockner & Klockner

Lab Sample No: 90834
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/24/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9662.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Dichlorodifluoromethane	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
2-Chloroethyl Vinyl Ether	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

ENVIROTECH RESEARCH, INC.

Site: Klockner & Klockner

Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Matrix: SOIL

Date Analyzed: 10/20/98
QA Batch: 1404

TOTAL ORGANIC CARBON

Envirotech Sample #	Client ID	% Moisture	Dilution Factor	Analytical Result mg/kg (Dry Wt.)
90835	SSGC-4A_2-4	9.5	1.0	10400
90836	SSGC-3A_4.5-5.5	7.1	1.0	429
90837	SSGC-2A_3-4	14.6	2.5	1960

Quantitation Limit for Total Organic Carbon is 100 mg/kg for an undiluted sample.

CHAIN-OF-CUSTODY

PROJECT NAME: Klockner & Klockner

PROJECT NO: 95-03-02

LABORATORY: Envirotech Project #809002

SITE ADDRESS: Stickle Avenue & Elm Street, Rockaway Borough, NJ

SAMPLE DATE: 10/16/98

SAMPLER(S): Cheryl L. Coffee

I279

SAMPLE TIME	SAMPLE LOCATION	SAMPLE ID#	SAMPLE DEPTH	SAMPLE MATRIX	ANALYSIS REQUESTED		PRESER-VATIVE	NO. OF CONT.	SPECIAL INSTRUCTIONS
11:47	~~SS~~ fence Area SG33	SSFA-1	1.5-2'	soil	PHAL	90821	ice MEOH	2	
11:50	fence Area SG33	SSFA-6A	1.5-2'	soil	PHAL	90822	ice MEOH	2	
11:45	fence Area SG33	SSFA-1	10.5-11'	soil	PHAL	90823	ice MEOH	2	
1:10	Fence area SG33	SSFA-2	0.5-1'	soil	PHAL	90824	ice MEOH	2	contingent
1:35	Fence area SG33A	SSFA-3	0.5-1'	soil	PHAL	90825	ice MEOH	2	contingent
12:10	Fence Area SG32A	SSFA-4	0.5-1'	soil	PHAL	90826	ice MEOH	2	contingent
10:00	Fence Area SG23A	SSFA-5	3-3.5	soil	PHAL	90827	ice MEOH	2	contingent
2:55	pipe through wall	SSPP-1	6.5-7	soil	PHAL	90828	ice MEOH	2	
11:00	floor drain hydropress	SSFD-2	3-4	soil	PHAL	90829	ice MEOH	2	
1:45	Near drywell	SSDW-1	1.5-2	soil	PHAL	90830	ice MEOH	2	
3:10	catch Basin	SSSD-1	5-5.5	soil	PHAL	90831	ice MEOH	2	
2:35	Dumpster Pad	SSDA-1	1.5-2	soil	PHAL	90832	ice MEOH	2	

RELINQUISHED BY: Cheryl L. Coffee DATE: 10/16/98 TIME: 1755 RECEIVED BY: [illegible] DATE: 10/16/98 TIME 1755

RELINQUISHED BY: DATE: TIME: RECEIVED BY: DATE: TIME

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
PPM: PRIORITY POLLUTANT METALS
PP+40: PRIORITY POLLUTANT PLUS FORTY PEAKS

CT: CEILING TILE
FT: FLOOR TILE
TSI: THERMAL SYSTEM INSULATION

TOTAL NO. CONTAINERS_____

THE WHITMAN COMPANIES INC
44 WEST FERRIS STREET
EAST BRUNSWICK, NJ 08816

305749

16

CHAIN-OF-CUSTODY

PROJECT NAME: Kloekner & Kloekner

PROJECT NO: 95-03-02

LABORATORY: Envirotech Project #809002

SITE ADDRESS: Stickle Avenue & Elm Street, Rockaway Borough, NJ

SAMPLE DATE: 10/16/98

SAMPLER(S): Cheryl L. Coffee

SAMPLE TIME	SAMPLE LOCATION	SAMPLE ID#	SAMPLE DEPTH	SAMPLE MATRIX	ANALYSIS REQUESTED	PRESER-VATIVE	NO. OF CONT.	SPECIAL INSTRUCTIONS
–	~~FB-4~~ Trip Blank	TB-4	–	~~H_2O~~ MeOH	PHAL	Ice MEOH	1	90833
3:30	Field Blank	FB-3	·	H_2O	PHAL	ice HCL	2	90834
1:45	Geologic Character	SSGC-4A 2-4'	soil	Grain Size & TOC	ice	2	90835
11:55	Geologic Character	SSGC-3A 4.5-5	soil	Grain Size & TOC	ice	2	90836
10:00	Geologic Character	SSGC-2A 3-4	soil	Grain Size & TOC	ice	2	90837

RELINQUISHED BY: Cheryl L Coffee DATE: 10/16/98 TIME: 1755 RECEIVED BY: [signature] DATE: 10/16/98 TIME 1755

RELINQUISHED BY: DATE: TIME: RECEIVED BY: DATE: TIME

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
PPM: PRIORITY POLLUTANT METALS
PP+40: PRIORITY POLLUTANT PLUS FORTY PEAKS

CT - CEILING TILE
FT - FLOOR TILE

TSI - THERMAL SYSTEM INSULATION

TOTAL NO. CONTAINERS_____

THE WHITMAN COMPANIES INC
44 WEST FERRIS STREET
EAST BRUNSWICK, NJ 08816

305750

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ
08817
(732) 549-3900

Job No: 1279 **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
WATER							
90834	10/16/1998	10/16/1998			10-24-98	KB	3706
SOLID							
90821	10/16/1998	10/16/1998			10-22-98	KB	3706
90822	10/16/1998	10/16/1998					
90823	10/16/1998	10/16/1998					
90824	10/16/1998	10/16/1998					
90825	10/16/1998	10/16/1998			10-23-98		
90826	10/16/1998	10/16/1998					
90827	10/16/1998	10/16/1998					
90828	10/16/1998	10/16/1998					
90829	10/16/1998	10/16/1998					
90830	10/16/1998	10/16/1998					
90831	10/16/1998	10/16/1998					
90832	10/16/1998	10/16/1998					
90833	10/16/1998	10/16/1998			10-24-98		

305751

INTERNAL CUSTODY RECORD
AND
LABORATORY CHRONICLE
ENVIROTECH RESEARCH, INC.

777 NEW DURHAM ROAD, EDISON, NJ
08817
(732) 549-3900

Job No: 1279 **Site:** Klockner & Klockner

Client: The Whitman Companies, Inc.

WET CHEM

TOC

Lab Sample ID	Date Sampled	Date Received	Preparation Date	Technician's Name	Analysis Date	Analyst's Name	QA Batch
SOLID							
90835	10/16/1998	10/16/1998			10/20/98	AA	1400
90836	10/16/1998	10/16/1998			10/20/98	ECT	↓
90837	10/16/1998	10/16/1998			↓	↓	↓

305752

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

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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.

305754

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.

305755

DATA REPORTING QUALIFIERS

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

J - Mass spectral data indicates the presence of a compound that meets the identification criteria. The result is less than the specified detection limit but greater than zero. The concentration given is an approximate value.

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.

NON-CONFORMANCE SUMMARY

Envirotech Research, Inc. Job Number: I279

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:

QA-3700: MS/MSD % recovery Chloromethane = 143/1632 (70-130% QC limits)
" " " " " Vinyl chloride = 138/1472 (70-130% QC limits)
note: α,α,α-TFT spiked prior to sampling / CH_2BrCl spiked upon return to laboratory.

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 ( )

305757

Non-conformance Summary, Page 2 of 2
Envirotech Research, Inc. Job Number: I279

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: [signature] Date: 11/6/98

305758

Client ID: **SSFA-1_1.5-2**
Site: Klockner & Klockner

Lab Sample No: **90821**
Lab Job No: I279

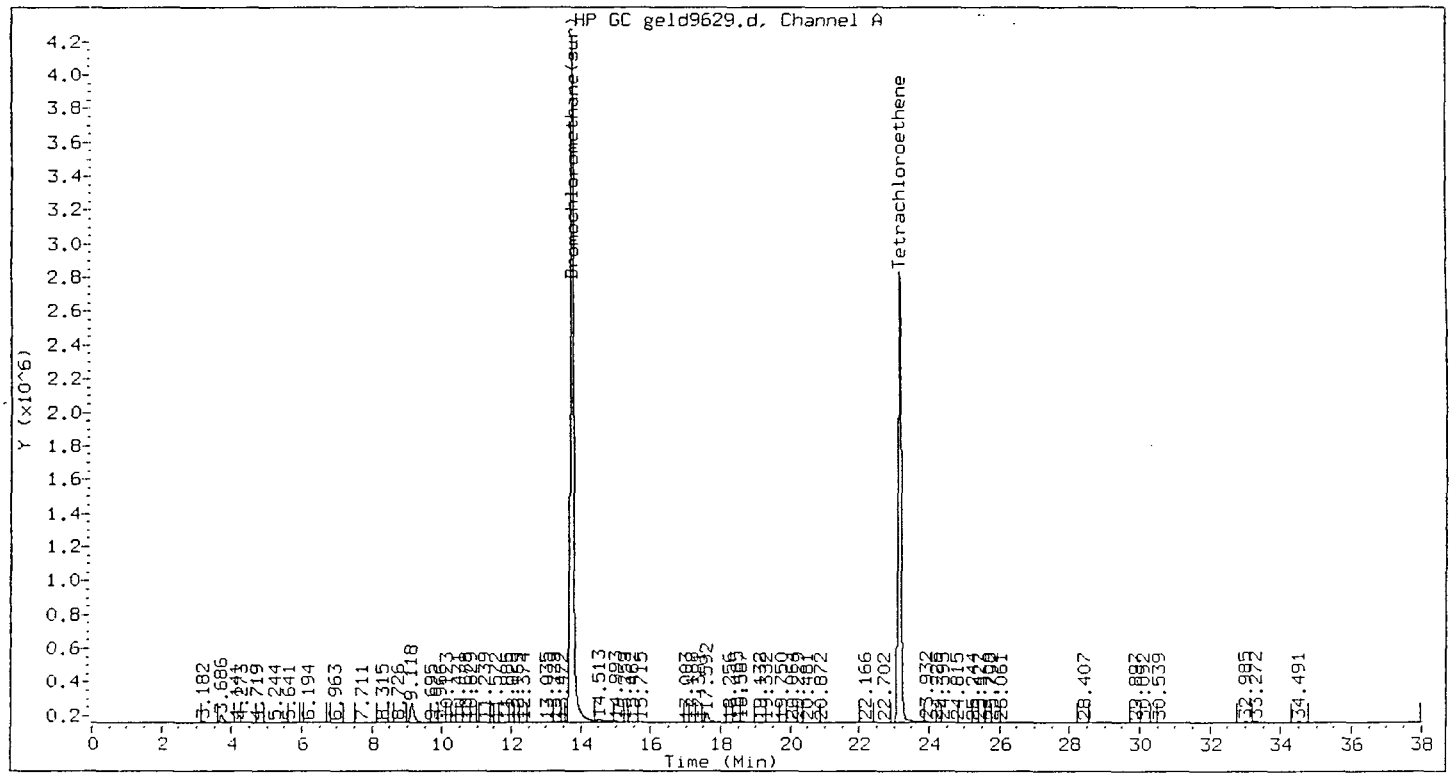
Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/22/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9629.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 9.9

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	128
Chloromethane	ND	128
Vinyl Chloride	ND	128
Bromomethane	ND	128
Chloroethane	ND	128
Trichlorofluoromethane	ND	128
1,1-Dichloroethene	ND	128
Methylene Chloride	ND	128
trans-1,2-Dichloroethene	ND	128
1,1-Dichloroethane	ND	128
cis-1,2-Dichloroethene	ND	128
Chloroform	ND	128
1,1,1-Trichloroethane	ND	128
Carbon Tetrachloride	ND	128
1,2-Dichloroethane	ND	128
Trichloroethene	ND	128
1,2-Dichloropropane	ND	128
Bromodichloromethane	ND	128
2-Chloroethyl Vinyl Ether	ND	128
cis-1,3-Dichloropropene	ND	128
trans-1,3-Dichloropropene	ND	128
1,1,2-Trichloroethane	ND	128
Tetrachloroethene	1510	128
Dibromochloromethane	ND	128
Chlorobenzene	ND	128
Bromoform	ND	128
1,1,2,2-Tetrachloroethane	ND	128
1,3-Dichlorobenzene	ND	128
1,4-Dichlorobenzene	ND	128
1,2-Dichlorobenzene	ND	128

305759



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/22oct98.b/8021E.m
Sample Info : 90821;;50
Lab ID : 90821
Inj Date : 22-OCT-98 13:37:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.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	23.135	23.163	0.028	80351060	11.789	1514.342
Bromochloromethane(sur)	13.718	13.752	0.034	132679763	32.702	4200.799

305760

Client ID: **SSFA-6A_1.5-2**
Site: Klockner & Klockner

Lab Sample No: **90822**
Lab Job No: I279

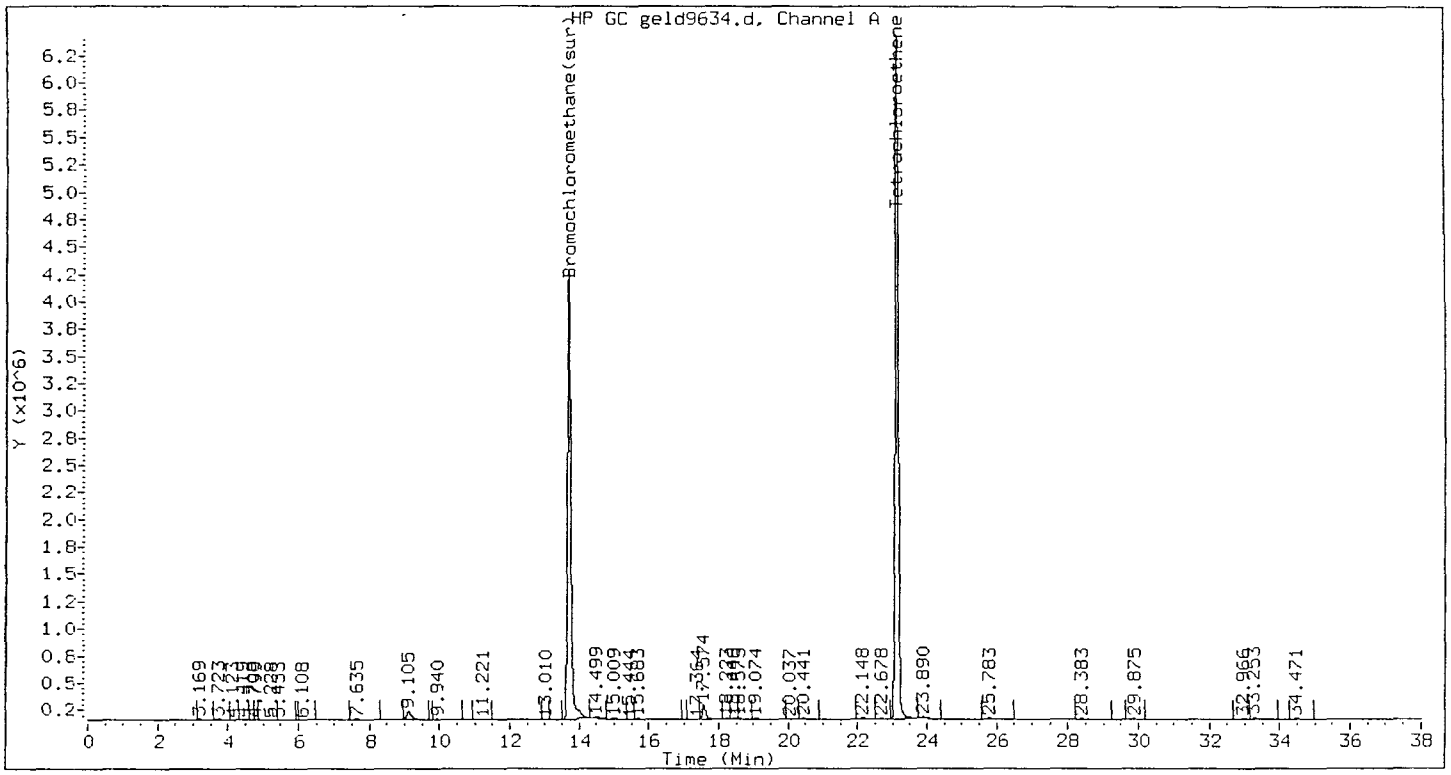
Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/22/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9634.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 8.6

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	134
Chloromethane	ND	134
Vinyl Chloride	ND	134
Bromomethane	ND	134
Chloroethane	ND	134
Trichlorofluoromethane	ND	134
1,1-Dichloroethene	ND	134
Methylene Chloride	ND	134
trans-1,2-Dichloroethene	ND	134
1,1-Dichloroethane	ND	134
cis-1,2-Dichloroethene	ND	134
Chloroform	ND	134
1,1,1-Trichloroethane	ND	134
Carbon Tetrachloride	ND	134
1,2-Dichloroethane	ND	134
Trichloroethene	ND	134
1,2-Dichloropropane	ND	134
Bromodichloromethane	ND	134
2-Chloroethyl Vinyl Ether	ND	134
cis-1,3-Dichloropropene	ND	134
trans-1,3-Dichloropropene	ND	134
1,1,2-Trichloroethane	ND	134
Tetrachloroethene	3720	134
Dibromochloromethane	ND	134
Chlorobenzene	ND	134
Bromoform	ND	134
1,1,2,2-Tetrachloroethane	ND	134
1,3-Dichlorobenzene	ND	134
1,4-Dichlorobenzene	ND	134
1,2-Dichlorobenzene	ND	134

305761



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/22oct98.b/8021E.m
Sample Info : 90822;;50
Lab ID : 90822 Inst ID : VOAGC1.i
Inj Date : 22-OCT-98 17:38:00 Dil Factor : 50
Operator : KB Sample Matrix : SOIL
Cpnd Sublist: 601 Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
Tetrachloroethene	23.118	23.163	0.044	189357723	27.781	3724.926
Bromochloromethane(sur)	13.704	13.752	0.048	136386496	33.615	4507.137

305762

Client ID: **SSFA-1_10.5-11**
Site: Klockner & Klockner

Lab Sample No: **90823**
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/22/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9635.d

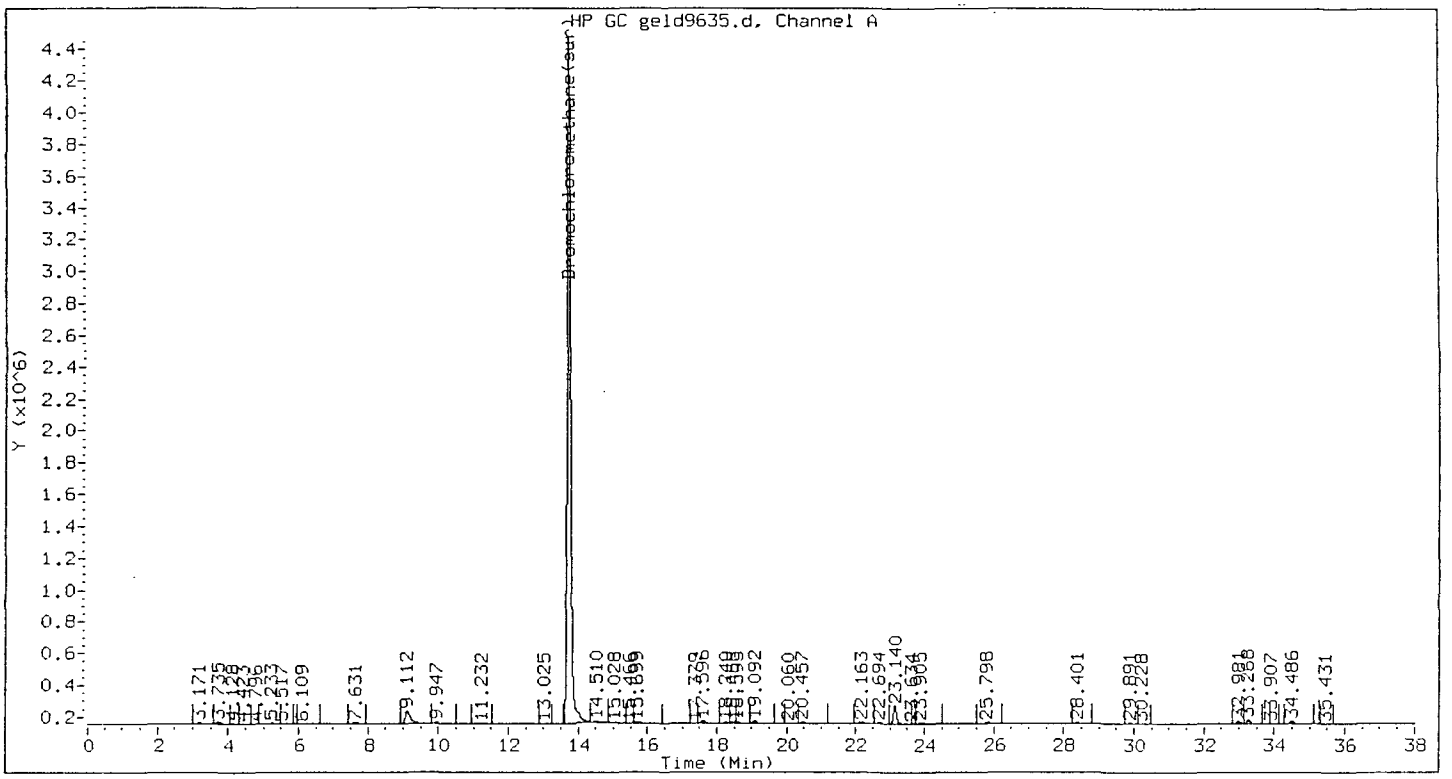
Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 5.0

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	123
Chloromethane	ND	123
Vinyl Chloride	ND	123
Bromomethane	ND	123
Chloroethane	ND	123
Trichlorofluoromethane	ND	123
1,1-Dichloroethene	ND	123
Methylene Chloride	ND	123
trans-1,2-Dichloroethene	ND	123
1,1-Dichloroethane	ND	123
cis-1,2-Dichloroethene	ND	123
Chloroform	ND	123
1,1,1-Trichloroethane	ND	123
Carbon Tetrachloride	ND	123
1,2-Dichloroethane	ND	123
Trichloroethene	ND	123
1,2-Dichloropropane	ND	123
Bromodichloromethane	ND	123
2-Chloroethyl Vinyl Ether	ND	123
cis-1,3-Dichloropropene	ND	123
trans-1,3-Dichloropropene	ND	123
1,1,2-Trichloroethane	ND	123
Tetrachloroethene	ND	123
Dibromochloromethane	ND	123
Chlorobenzene	ND	123
Bromoform	ND	123
1,1,2,2-Tetrachloroethane	ND	123
1,3-Dichlorobenzene	ND	123
1,4-Dichlorobenzene	ND	123
1,2-Dichlorobenzene	ND	123

305763

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/22oct98.b/geld9635.d Page 1
Report Date 10/23/98 08:10



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/22oct98.b/8021E.m
Sample Info : 90823;;50
Lab ID : 90823 Inst ID : VOAGC1.i
Inj Date : 22-OCT-98 18:23:00 Dil Factor : 50
Operator : KB 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)	13.719	13.752	0.033	140402065	34.605	4255.415

305764

Client ID: **SSFA-2_0.5-1**
Site: Klockner & Klockner

Lab Sample No: **90824**
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/22/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9636.d

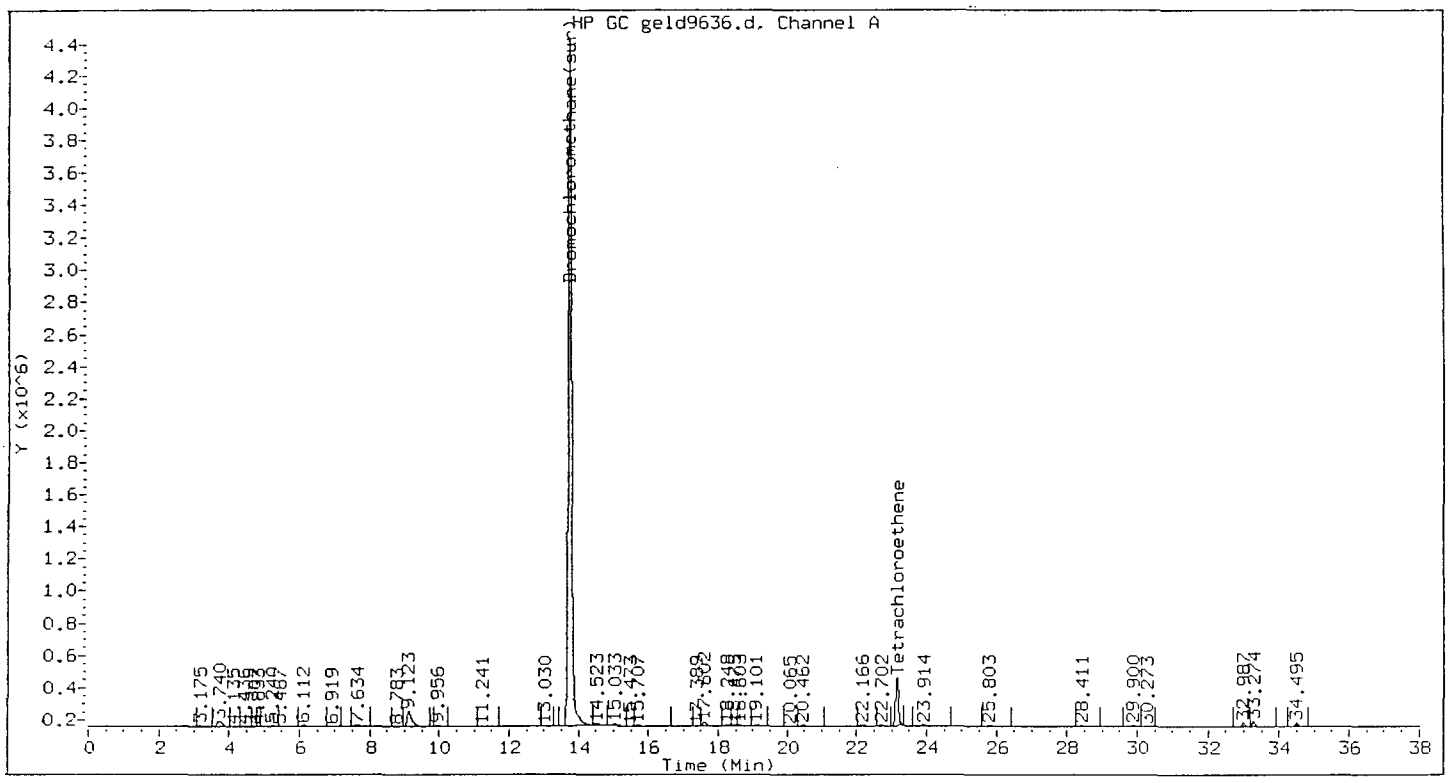
Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 8.3

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	124
Chloromethane	ND	124
Vinyl Chloride	ND	124
Bromomethane	ND	124
Chloroethane	ND	124
Trichlorofluoromethane	ND	124
1,1-Dichloroethene	ND	124
Methylene Chloride	ND	124
trans-1,2-Dichloroethene	ND	124
1,1-Dichloroethane	ND	124
cis-1,2-Dichloroethene	ND	124
Chloroform	ND	124
1,1,1-Trichloroethane	ND	124
Carbon Tetrachloride	ND	124
1,2-Dichloroethane	ND	124
Trichloroethene	ND	124
1,2-Dichloropropane	ND	124
Bromodichloromethane	ND	124
2-Chloroethyl Vinyl Ether	ND	124
cis-1,3-Dichloropropene	ND	124
trans-1,3-Dichloropropene	ND	124
1,1,2-Trichloroethane	ND	124
Tetrachloroethene	161	124
Dibromochloromethane	ND	124
Chlorobenzene	ND	124
Bromoform	ND	124
1,1,2,2-Tetrachloroethane	ND	124
1,3-Dichlorobenzene	ND	124
1,4-Dichlorobenzene	ND	124
1,2-Dichlorobenzene	ND	124

305765

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/22oct98.b/geld9636.d Page 1
Report Date 10/23/98 08:10



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/22oct98.b/8021E.m
Sample Info : 90824;;50
Lab ID : 90824 Inst ID : VOAGC1.i
Inj Date : 22-OCT-98 19:07:00 Dil Factor : 50
Operator : KB 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	23.146	23.163	0.017	8869389	1.301	161.255
Bromochloromethane(sur)	13.725	13.752	0.027	139329072	34.341	4255.548

305766

Client ID: **SSFA-3_0.5-1**
Site: Klockner & Klockner

Lab Sample No: **90825**
Lab Job No: I279

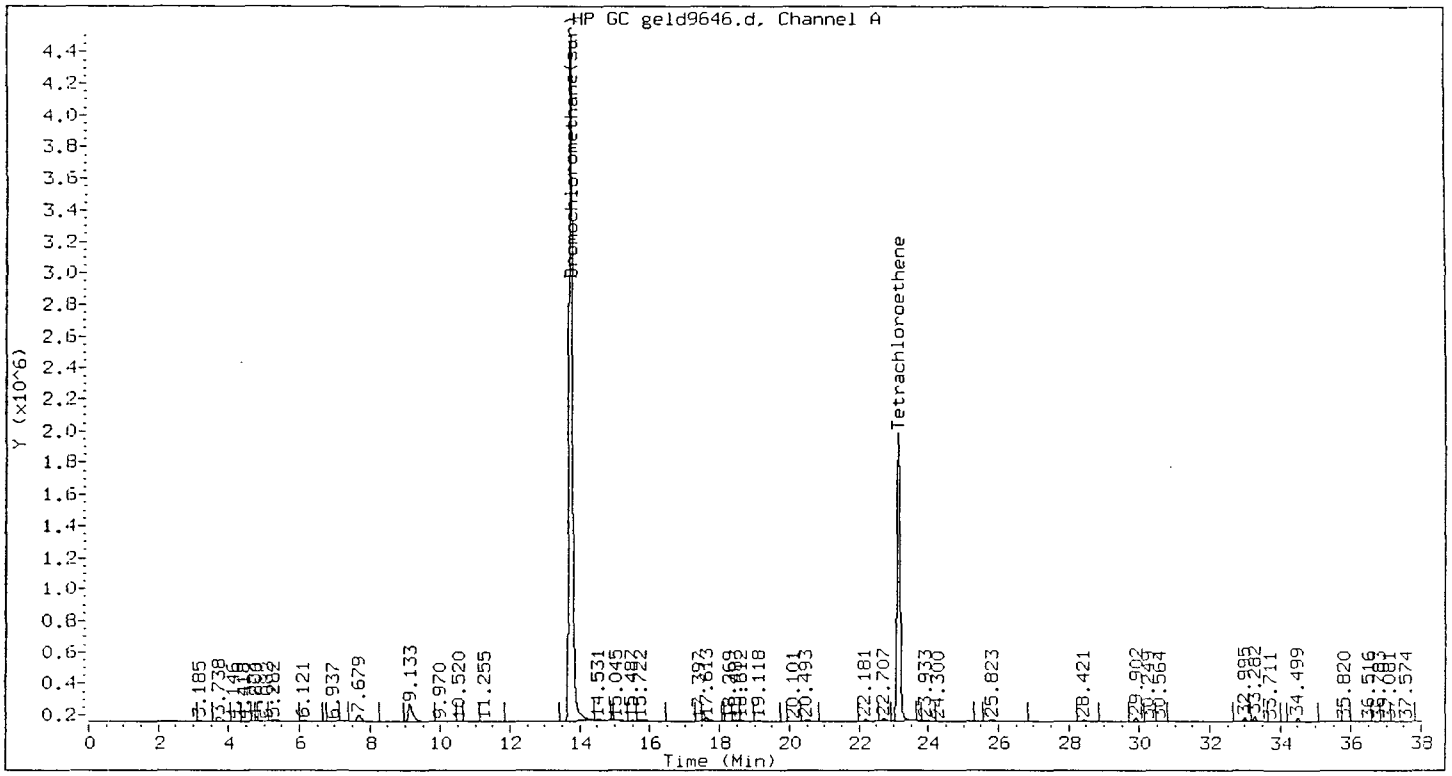
Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9646.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 4.1

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	137
Chloromethane	ND	137
Vinyl Chloride	ND	137
Bromomethane	ND	137
Chloroethane	ND	137
Trichlorofluoromethane	ND	137
1,1-Dichloroethene	ND	137
Methylene Chloride	ND	137
trans-1,2-Dichloroethene	ND	137
1,1-Dichloroethane	ND	137
cis-1,2-Dichloroethene	ND	137
Chloroform	ND	137
1,1,1-Trichloroethane	ND	137
Carbon Tetrachloride	ND	137
1,2-Dichloroethane	ND	137
Trichloroethene	ND	137
1,2-Dichloropropane	ND	137
Bromodichloromethane	ND	137
2-Chloroethyl Vinyl Ether	ND	137
cis-1,3-Dichloropropene	ND	137
trans-1,3-Dichloropropene	ND	137
1,1,2-Trichloroethane	ND	137
Tetrachloroethene	1100	137
Dibromochloromethane	ND	137
Chlorobenzene	ND	137
Bromoform	ND	137
1,1,2,2-Tetrachloroethane	ND	137
1,3-Dichlorobenzene	ND	137
1,4-Dichlorobenzene	ND	137
1,2-Dichlorobenzene	ND	137

305767



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 90825;;50
Lab ID : 90825
Inj Date : 23-OCT-98 14:02:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.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	23.149	23.163	0.014	54591201	8.009	1098.908
Bromochloromethane(sur)	13.736	13.752	0.016	139416767	34.362	4714.640

305768

Client ID: SSFA-4_0.5-1
Site: Klockner & Klockner

Lab Sample No: 90826
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9647.d

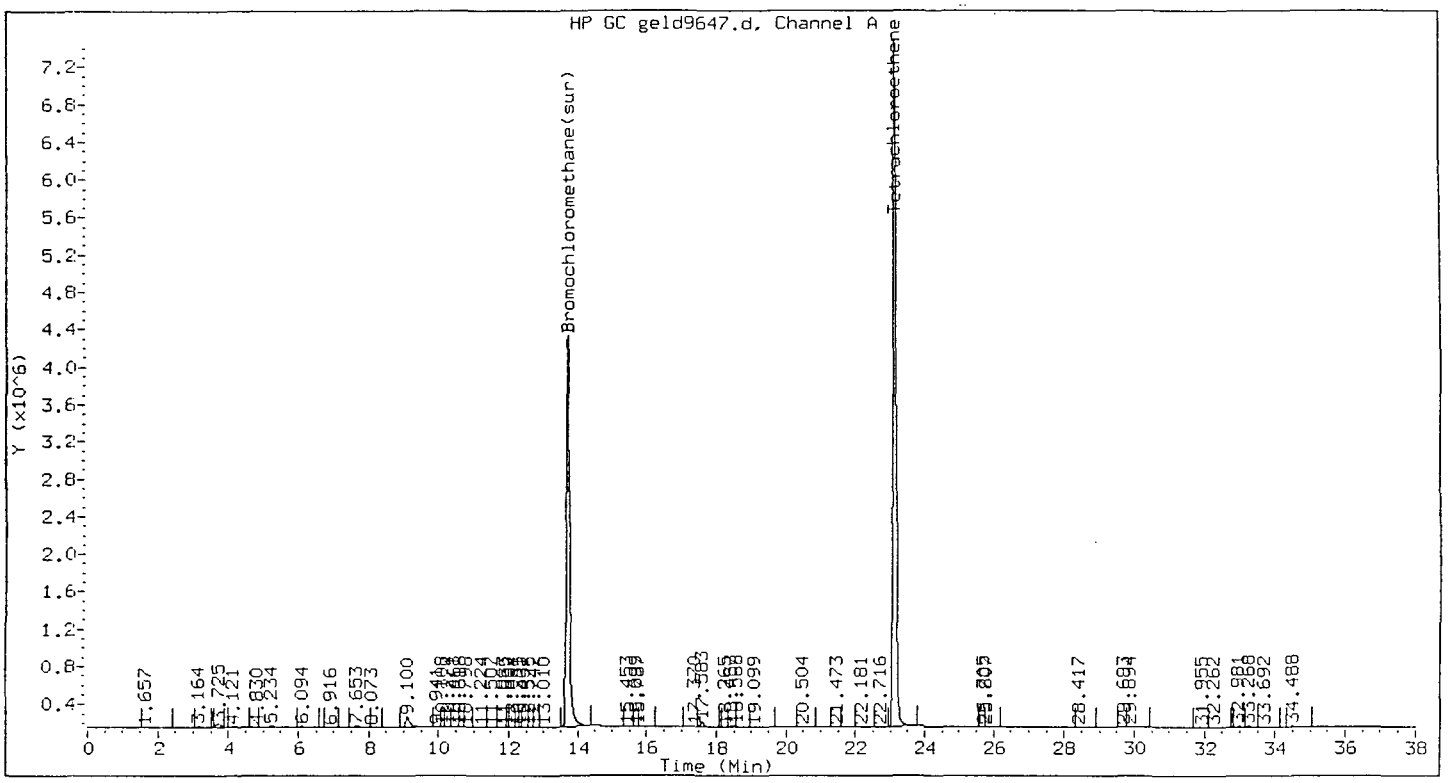
Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 3.2

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	129
Chloromethane	ND	129
Vinyl Chloride	ND	129
Bromomethane	ND	129
Chloroethane	ND	129
Trichlorofluoromethane	ND	129
1,1-Dichloroethene	ND	129
Methylene Chloride	ND	129
trans-1,2-Dichloroethene	ND	129
1,1-Dichloroethane	ND	129
cis-1,2-Dichloroethene	ND	129
Chloroform	ND	129
1,1,1-Trichloroethane	ND	129
Carbon Tetrachloride	ND	129
1,2-Dichloroethane	ND	129
Trichloroethene	ND	129
1,2-Dichloropropane	ND	129
Bromodichloromethane	ND	129
2-Chloroethyl Vinyl Ether	ND	129
cis-1,3-Dichloropropene	ND	129
trans-1,3-Dichloropropene	ND	129
1,1,2-Trichloroethane	ND	129
Tetrachloroethene	4280	129
Dibromochloromethane	ND	129
Chlorobenzene	ND	129
Bromoform	ND	129
1,1,2,2-Tetrachloroethane	ND	129
1,3-Dichlorobenzene	ND	129
1,4-Dichlorobenzene	ND	129
1,2-Dichlorobenzene	ND	129

305769

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/geld9647.d Page 1
Report Date 10/24/98 10:05



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 90826;;50
Lab ID : 90826
Inj Date : 23-OCT-98 15:35:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.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	23.127	23.163	0.036	225663558	33.108	4275.305
Bromochloromethane(sur)	13.704	13.752	0.048	136153173	33.558	4333.394

305770

Client ID: **SSFA-5_3-3.5**
Site: Klockner & Klockner

Lab Sample No: **90827**
Lab Job No: I279

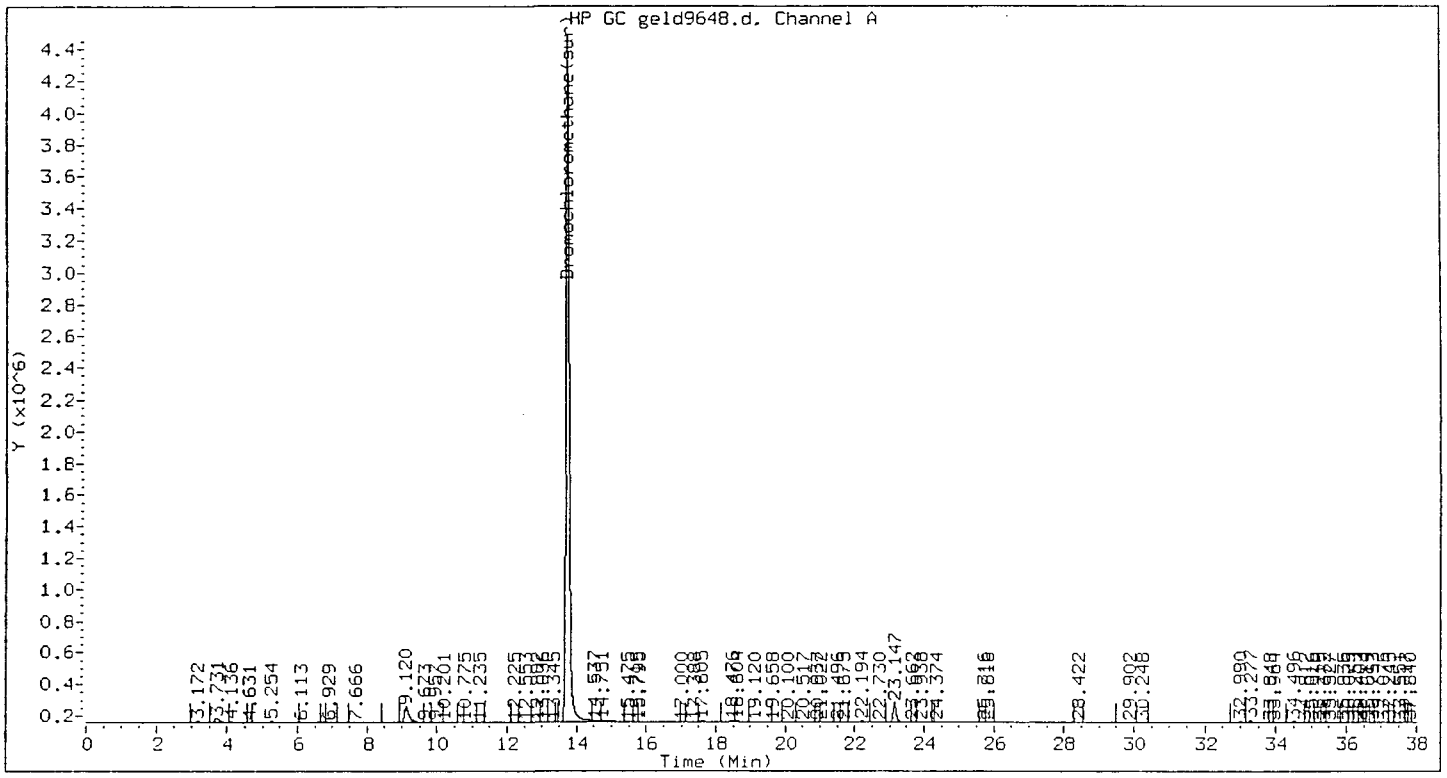
Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9648.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 13.9

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	127
Chloromethane	ND	127
Vinyl Chloride	ND	127
Bromomethane	ND	127
Chloroethane	ND	127
Trichlorofluoromethane	ND	127
1,1-Dichloroethene	ND	127
Methylene Chloride	ND	127
trans-1,2-Dichloroethene	ND	127
1,1-Dichloroethane	ND	127
cis-1,2-Dichloroethene	ND	127
Chloroform	ND	127
1,1,1-Trichloroethane	ND	127
Carbon Tetrachloride	ND	127
1,2-Dichloroethane	ND	127
Trichloroethene	ND	127
1,2-Dichloropropane	ND	127
Bromodichloromethane	ND	127
2-Chloroethyl Vinyl Ether	ND	127
cis-1,3-Dichloropropene	ND	127
trans-1,3-Dichloropropene	ND	127
1,1,2-Trichloroethane	ND	127
Tetrachloroethene	ND	127
Dibromochloromethane	ND	127
Chlorobenzene	ND	127
Bromoform	ND	127
1,1,2,2-Tetrachloroethane	ND	127
1,3-Dichlorobenzene	ND	127
1,4-Dichlorobenzene	ND	127
1,2-Dichlorobenzene	ND	127

305771



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 90827;;50
Lab ID : 90827
Inj Date : 23-OCT-98 16:20:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.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)	13.728	13.752	0.024	139378023	34.353	4374.839

305772

Client ID: SSPP-1_6.5-7
Site: Klockner & Klockner

Lab Sample No: 90828
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9649.d

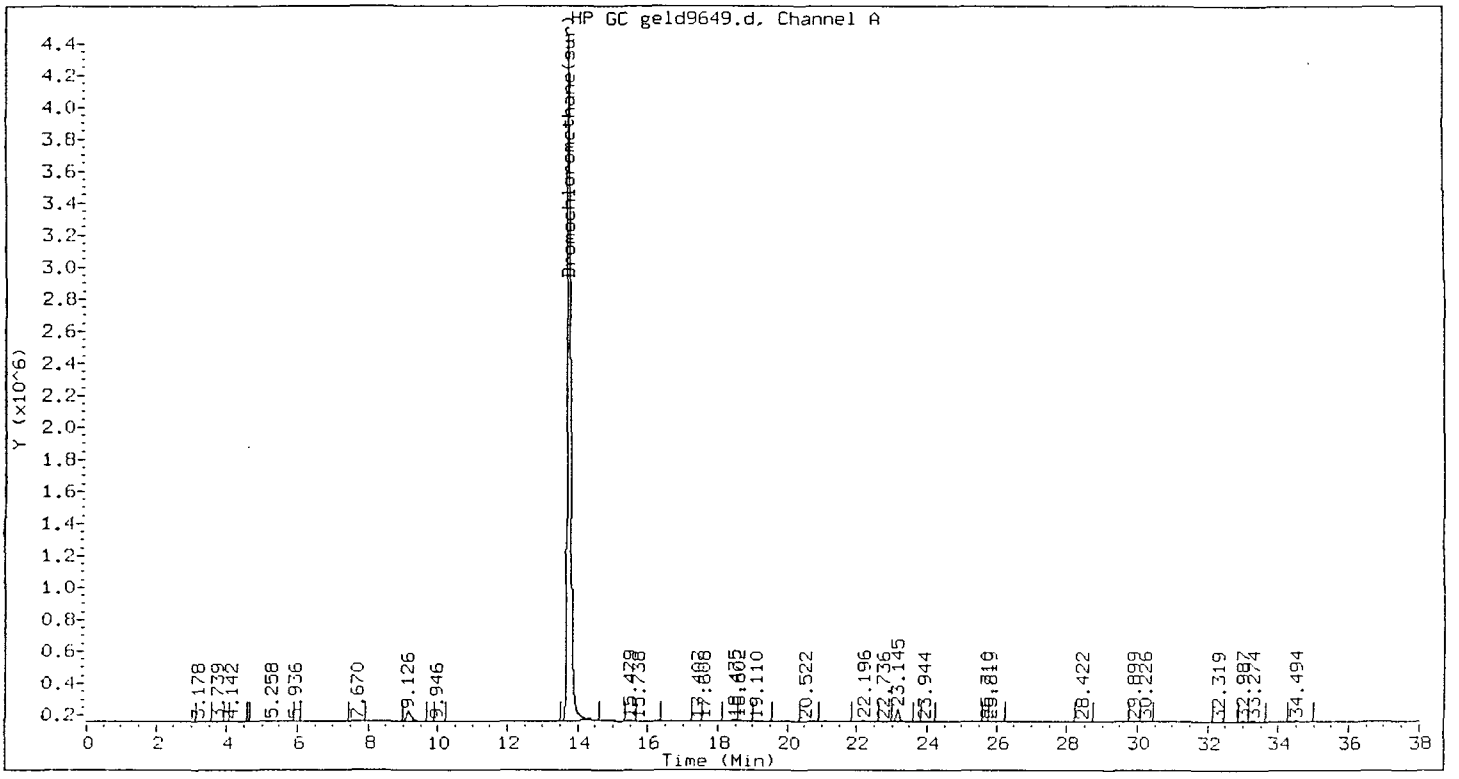
Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 11.2

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	123
Chloromethane	ND	123
Vinyl Chloride	ND	123
Bromomethane	ND	123
Chloroethane	ND	123
Trichlorofluoromethane	ND	123
1,1-Dichloroethene	ND	123
Methylene Chloride	ND	123
trans-1,2-Dichloroethene	ND	123
1,1-Dichloroethane	ND	123
cis-1,2-Dichloroethene	ND	123
Chloroform	ND	123
1,1,1-Trichloroethane	ND	123
Carbon Tetrachloride	ND	123
1,2-Dichloroethane	ND	123
Trichloroethene	ND	123
1,2-Dichloropropane	ND	123
Bromodichloromethane	ND	123
2-Chloroethyl Vinyl Ether	ND	123
cis-1,3-Dichloropropene	ND	123
trans-1,3-Dichloropropene	ND	123
1,1,2-Trichloroethane	ND	123
Tetrachloroethene	ND	123
Dibromochloromethane	ND	123
Chlorobenzene	ND	123
Bromoform	ND	123
1,1,2,2-Tetrachloroethane	ND	123
1,3-Dichlorobenzene	ND	123
1,4-Dichlorobenzene	ND	123
1,2-Dichlorobenzene	ND	123

305773

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/geld9649.d Page 1
Report Date 10/24/98 10:05



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 90828;;50
Lab ID : 90828 Inst ID : VOAGC1.i
Inj Date : 23-OCT-98 17:06:00 Dil Factor : 50
Operator : KB 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)
Bromochloromethane(sur)	13.727	13.752	0.025	138362085	34.102	4210.901

305774

Client ID: **SSFD-2_3-4**
Site: Klockner & Klockner

Lab Sample No: **90829**
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9650.d

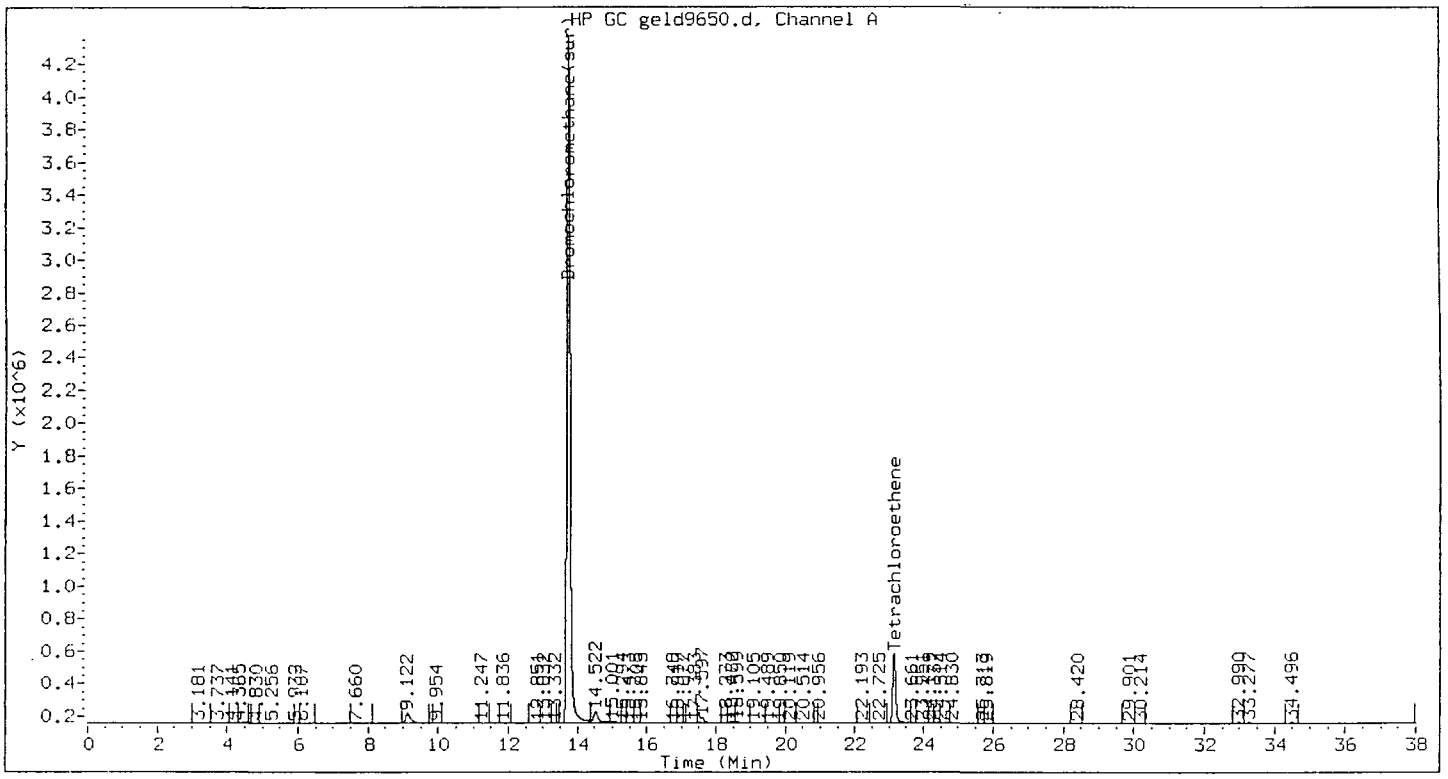
Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 14.6

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	139
Chloromethane	ND	139
Vinyl Chloride	ND	139
Bromomethane	ND	139
Chloroethane	ND	139
Trichlorofluoromethane	ND	139
1,1-Dichloroethene	ND	139
Methylene Chloride	ND	139
trans-1,2-Dichloroethene	ND	139
1,1-Dichloroethane	ND	139
cis-1,2-Dichloroethene	ND	139
Chloroform	ND	139
1,1,1-Trichloroethane	ND	139
Carbon Tetrachloride	ND	139
1,2-Dichloroethane	ND	139
Trichloroethene	ND	139
1,2-Dichloropropane	ND	139
Bromodichloromethane	ND	139
2-Chloroethyl Vinyl Ether	ND	139
cis-1,3-Dichloropropene	ND	139
trans-1,3-Dichloropropene	ND	139
1,1,2-Trichloroethane	ND	139
Tetrachloroethene	266	139
Dibromochloromethane	ND	139
Chlorobenzene	ND	139
Bromoform	ND	139
1,1,2,2-Tetrachloroethane	ND	139
1,3-Dichlorobenzene	ND	139
1,4-Dichlorobenzene	ND	139
1,2-Dichlorobenzene	ND	139

305775

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/geld9650.d Page 1
Report Date 10/24/98 10:05



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 90829;;50
Lab ID : 90829
Inj Date : 23-OCT-98 17:51:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.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	23.143	23.163	0.020	13012050	1.909	266.121
Bromochloromethane(sur)	13.725	13.752	0.027	136321660	33.599	4683.747

305776

Client ID: **SSDW-1_1.5-2**
Site: Klockner & Klockner

Lab Sample No: **90830**
Lab Job No: I279

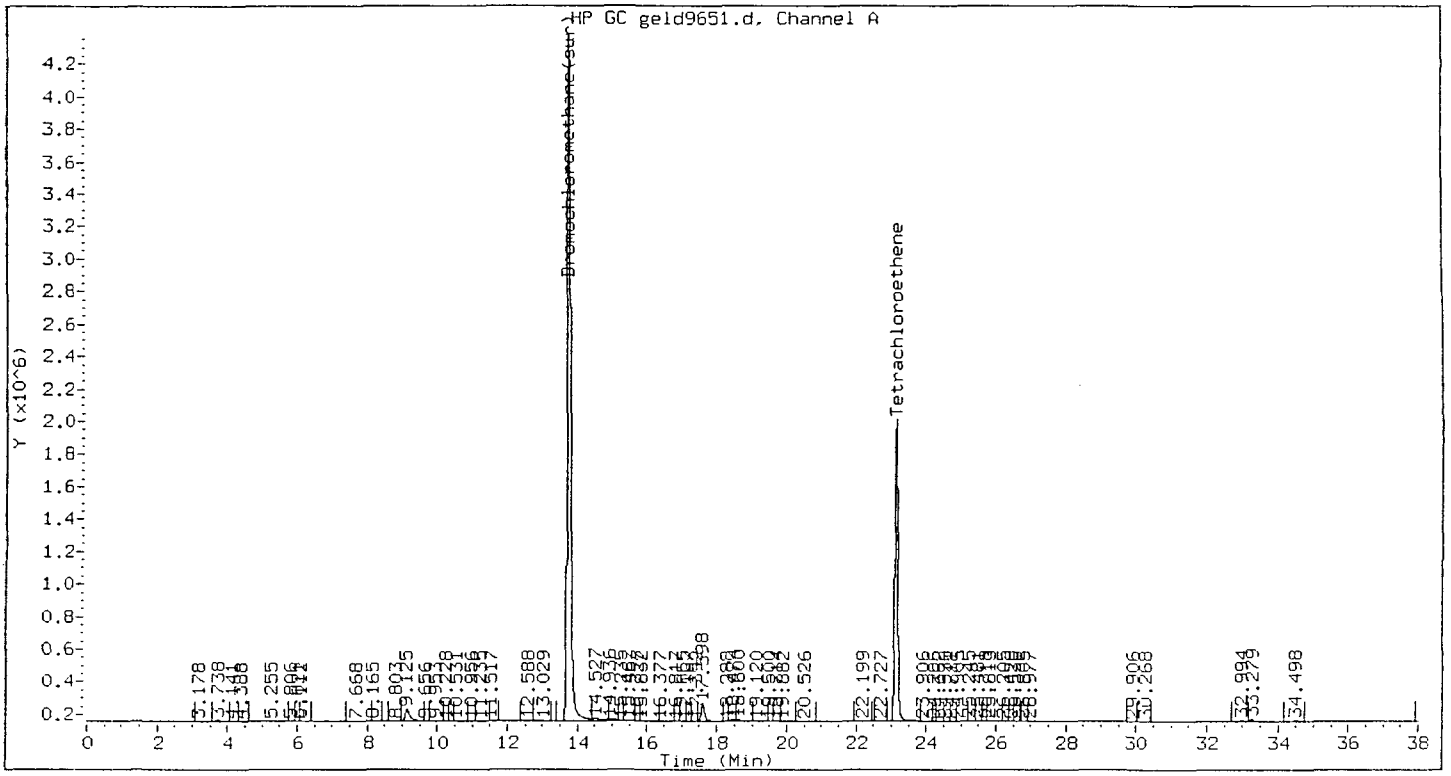
Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9651.d

Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 12.5

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	128
Chloromethane	ND	128
Vinyl Chloride	ND	128
Bromomethane	ND	128
Chloroethane	ND	128
Trichlorofluoromethane	ND	128
1,1-Dichloroethene	ND	128
Methylene Chloride	ND	128
trans-1,2-Dichloroethene	ND	128
1,1-Dichloroethane	ND	128
cis-1,2-Dichloroethene	ND	128
Chloroform	ND	128
1,1,1-Trichloroethane	ND	128
Carbon Tetrachloride	ND	128
1,2-Dichloroethane	ND	128
Trichloroethene	ND	128
1,2-Dichloropropane	ND	128
Bromodichloromethane	ND	128
2-Chloroethyl Vinyl Ether	ND	128
cis-1,3-Dichloropropene	ND	128
trans-1,3-Dichloropropene	ND	128
1,1,2-Trichloroethane	ND	128
Tetrachloroethene	1040	128
Dibromochloromethane	ND	128
Chlorobenzene	ND	128
Bromoform	ND	128
1,1,2,2-Tetrachloroethane	ND	128
1,3-Dichlorobenzene	ND	128
1,4-Dichlorobenzene	ND	128
1,2-Dichlorobenzene	ND	128

305777



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 90830;;50
Lab ID : 90830
Inj Date : 23-OCT-98 18:36:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.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	23.141	23.163	0.022	55566411	8.152	1039.842
Bromochloromethane(sur)	13.726	13.752	0.026	138073225	34.031	4340.694

305778

Client ID: SSSD-1_5-5.5
Site: Klockner & Klockner

Lab Sample No: 90831
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9652.d

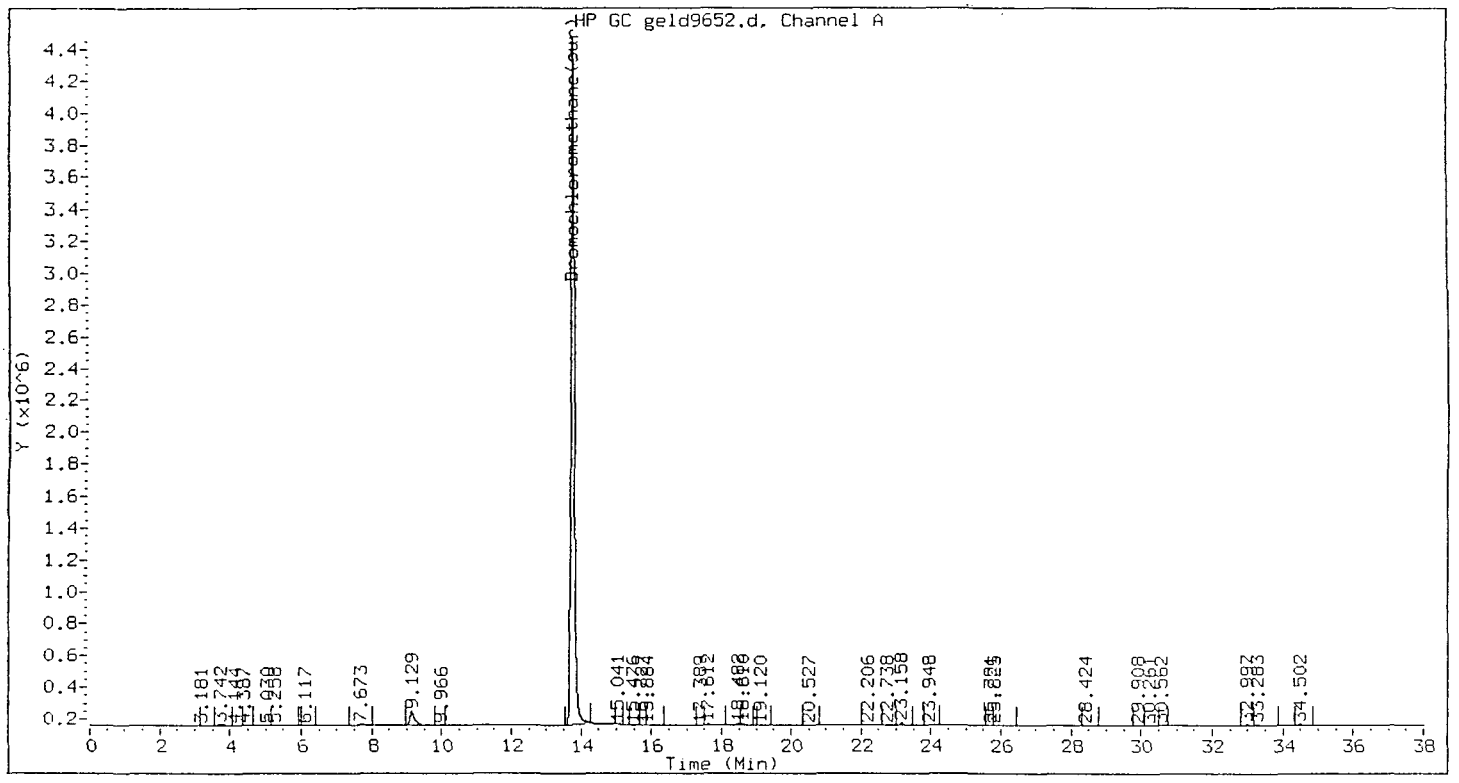
Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 4.7

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	125
Chloromethane	ND	125
Vinyl Chloride	ND	125
Bromomethane	ND	125
Chloroethane	ND	125
Trichlorofluoromethane	ND	125
1,1-Dichloroethene	ND	125
Methylene Chloride	ND	125
trans-1,2-Dichloroethene	ND	125
1,1-Dichloroethane	ND	125
cis-1,2-Dichloroethene	ND	125
Chloroform	ND	125
1,1,1-Trichloroethane	ND	125
Carbon Tetrachloride	ND	125
1,2-Dichloroethane	ND	125
Trichloroethene	ND	125
1,2-Dichloropropane	ND	125
Bromodichloromethane	ND	125
2-Chloroethyl Vinyl Ether	ND	125
cis-1,3-Dichloropropene	ND	125
trans-1,3-Dichloropropene	ND	125
1,1,2-Trichloroethane	ND	125
Tetrachloroethene	ND	125
Dibromochloromethane	ND	125
Chlorobenzene	ND	125
Bromoform	ND	125
1,1,2,2-Tetrachloroethane	ND	125
1,3-Dichlorobenzene	ND	125
1,4-Dichlorobenzene	ND	125
1,2-Dichlorobenzene	ND	125

305779

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/geld9652.d Page 1
Report Date 10/24/98 10:05



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 90831;;50
Lab ID : 90831
Inj Date : 23-OCT-98 19:21:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
Bromochloromethane(sur)	13.731	13.752	0.020	139600665	34.408	4298.145

305780

Client ID: **SSDA-1_1.5-2**
Site: Klockner & Klockner

Lab Sample No: **90832**
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9653.d

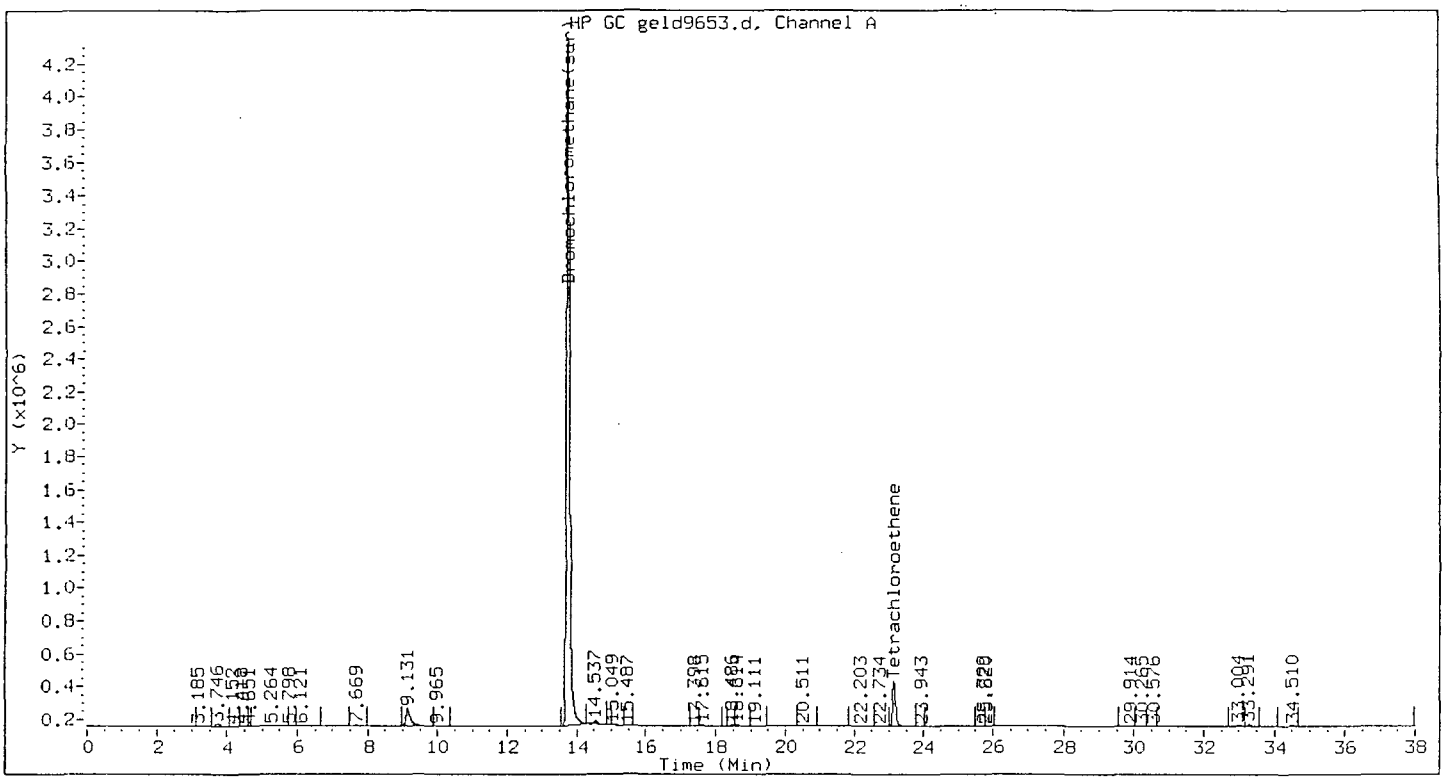
Matrix: SOIL
Level: HIGH
Sample Weight: 11 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 15.5

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	132
Chloromethane	ND	132
Vinyl Chloride	ND	132
Bromomethane	ND	132
Chloroethane	ND	132
Trichlorofluoromethane	ND	132
1,1-Dichloroethene	ND	132
Methylene Chloride	ND	132
trans-1,2-Dichloroethene	ND	132
1,1-Dichloroethane	ND	132
cis-1,2-Dichloroethene	ND	132
Chloroform	ND	132
1,1,1-Trichloroethane	ND	132
Carbon Tetrachloride	ND	132
1,2-Dichloroethane	ND	132
Trichloroethene	ND	132
1,2-Dichloropropane	ND	132
Bromodichloromethane	ND	132
2-Chloroethyl Vinyl Ether	ND	132
cis-1,3-Dichloropropene	ND	132
trans-1,3-Dichloropropene	ND	132
1,1,2-Trichloroethane	ND	132
Tetrachloroethene	154	132
Dibromochloromethane	ND	132
Chlorobenzene	ND	132
Bromoform	ND	132
1,1,2,2-Tetrachloroethane	ND	132
1,3-Dichlorobenzene	ND	132
1,4-Dichlorobenzene	ND	132
1,2-Dichlorobenzene	ND	132

305781

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/geld9653.d Page 1
Report Date 10/24/98 10:05



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 90832;;50
Lab ID : 90832 Inst ID : VOAGC1.i
Inj Date : 23-OCT-98 20:06:00 Dil Factor : 50
Operator : KB 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	23.154	23.163	0.009	7927835	1.163	153.625
Bromochloromethane(sur)	13.736	13.752	0.016	134538622	33.160	4379.737

305782

Client ID: **Trip_Blank-4**
Site: Klockner & Klockner

Lab Sample No: **90833**
Lab Job No: I279

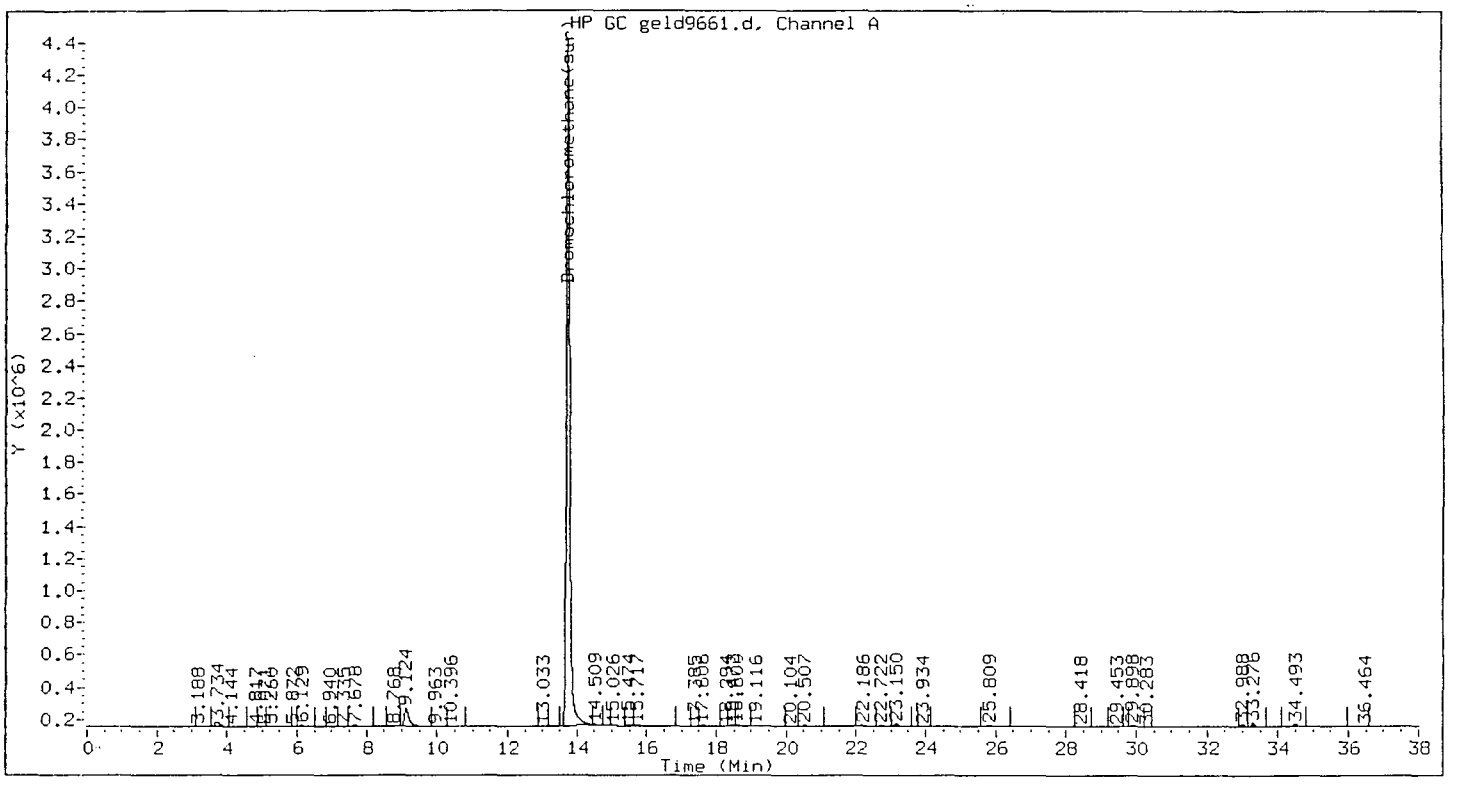
Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/24/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9661.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0.0

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	125
Chloromethane	ND	125
Vinyl Chloride	ND	125
Bromomethane	ND	125
Chloroethane	ND	125
Trichlorofluoromethane	ND	125
1,1-Dichloroethene	ND	125
Methylene Chloride	ND	125
trans-1,2-Dichloroethene	ND	125
1,1-Dichloroethane	ND	125
cis-1,2-Dichloroethene	ND	125
Chloroform	ND	125
1,1,1-Trichloroethane	ND	125
Carbon Tetrachloride	ND	125
1,2-Dichloroethane	ND	125
Trichloroethene	ND	125
1,2-Dichloropropane	ND	125
Bromodichloromethane	ND	125
2-Chloroethyl Vinyl Ether	ND	125
cis-1,3-Dichloropropene	ND	125
trans-1,3-Dichloropropene	ND	125
1,1,2-Trichloroethane	ND	125
Tetrachloroethene	ND	125
Dibromochloromethane	ND	125
Chlorobenzene	ND	125
Bromoform	ND	125
1,1,2,2-Tetrachloroethane	ND	125
1,3-Dichlorobenzene	ND	125
1,4-Dichlorobenzene	ND	125
1,2-Dichlorobenzene	ND	125

305783



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/24oct98.b/8021E.m
Sample Info : 90833;;50
Lab ID : 90833
Inj Date : 24-OCT-98 12:13:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.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)	13.725	13.752	0.027	141355623	34.840	4355.007

305784

Client ID: **Field_Blank-3**
Site: Klockner & Klockner

Lab Sample No: **90834**
Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Date Analyzed: 10/24/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9662.d

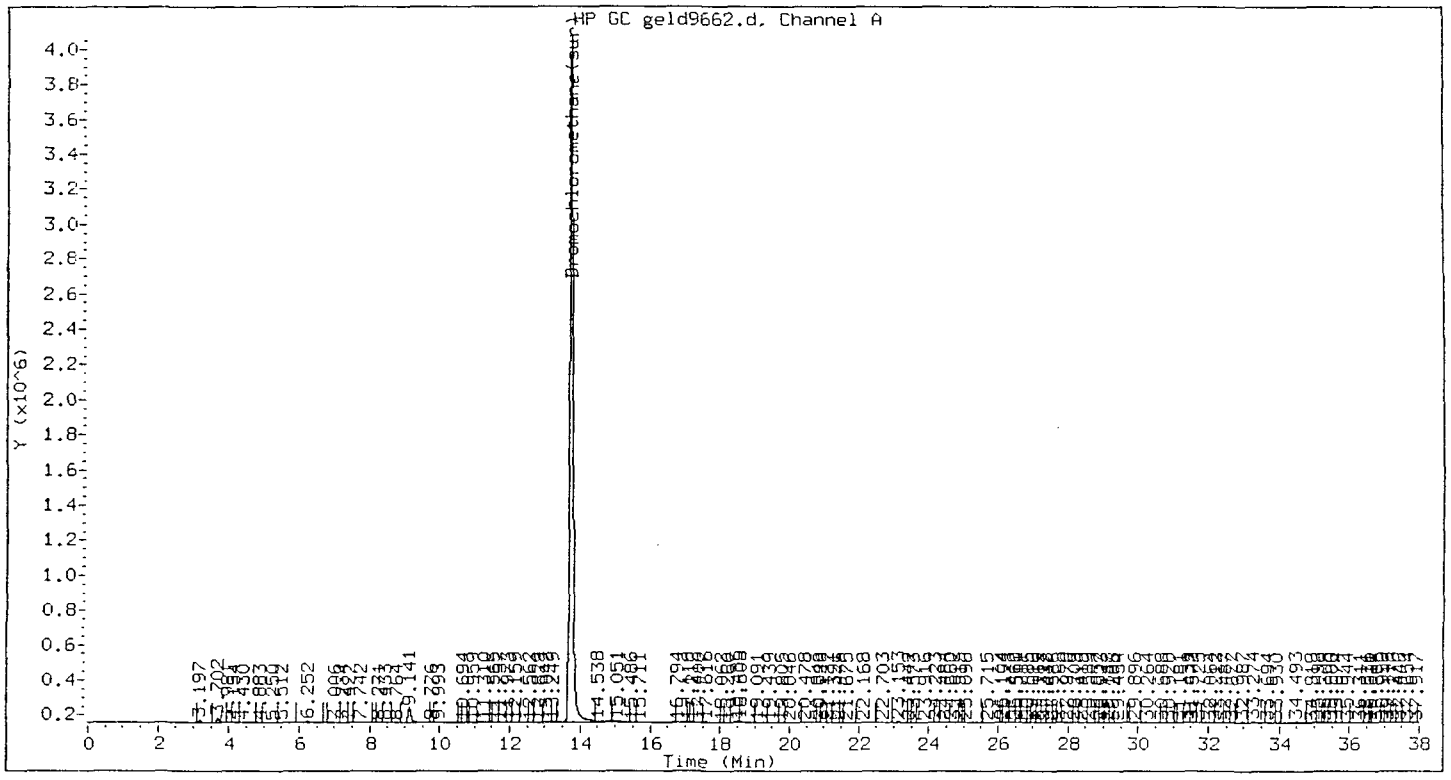
Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Dichlorodifluoromethane	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
2-Chloroethyl Vinyl Ether	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

305785

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/24oct98.b/geld9662.d Page 1
Report Date 10/26/98 08:52



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/24oct98.b/8021E.m
Sample Info : 90834
Lab ID : 90834
Inj Date : 24-OCT-98 12:58:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: SAMPLE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
Bromochloromethane(sur)	13.738	13.752	0.014	123501191	30.439	30.439

305786

LAB SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

GG295

Date Analyzed: 10/22/98

Instrument ID: VOAGC1

Time Analyzed: 1051

Lab File ID: GELD9626

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

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	SSFA-1_1.5-2	90821	GELD9629	1337
02	SSFA-6A_1.5-	90822	GELD9634	1738
03	SSFA-1_10.5-	90823	GELD9635	1823
04	SSFA-2_0.5-1	90824	GELD9636	1907
05				
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COMMENTS:

page 1 of 1

305787

Client ID: **GG295**
Site:

Lab Sample No: **GG295**
Lab Job No: I279

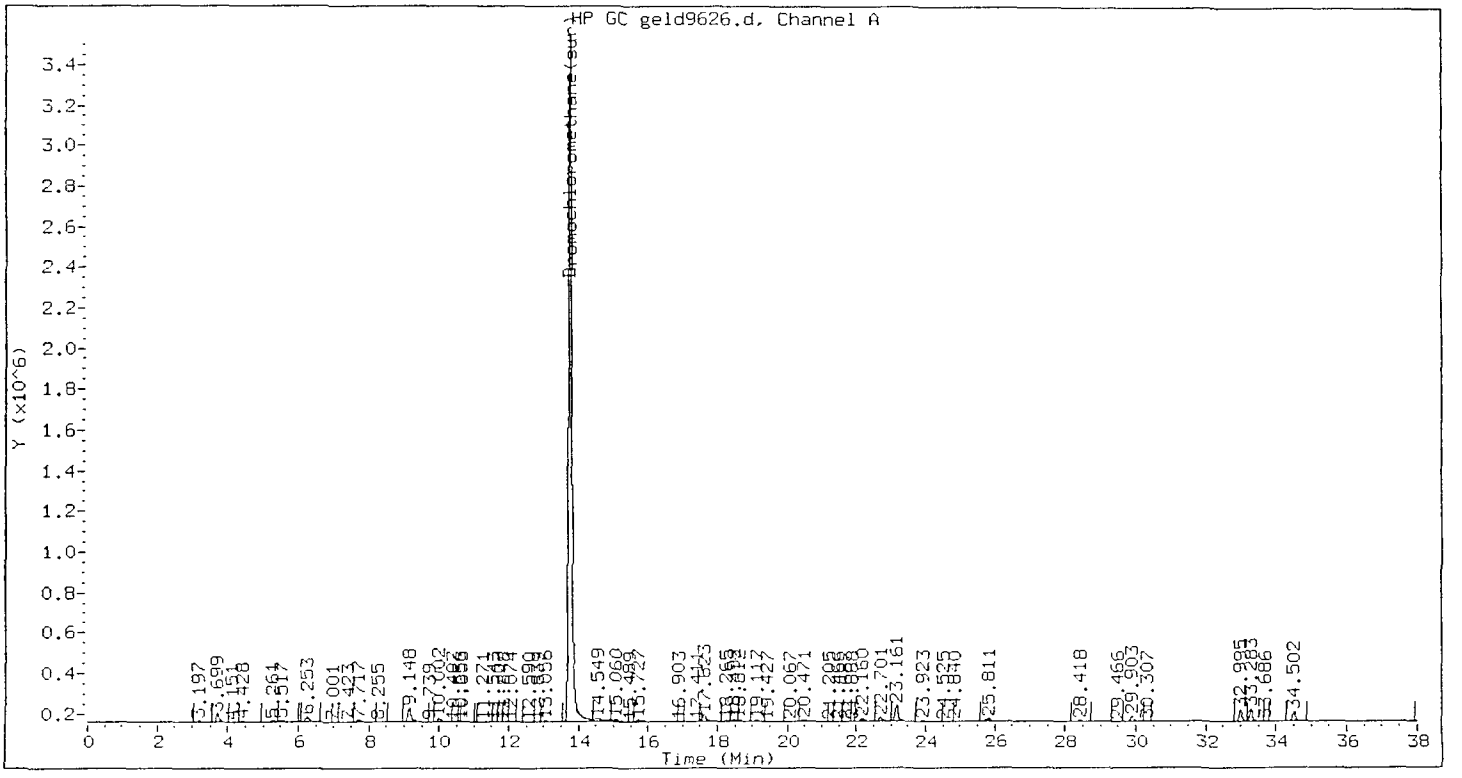
Date Sampled: _____
Date Received: _____
Date Analyzed: 10/22/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9626.d

Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0.0

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	125
Chloromethane	ND	125
Vinyl Chloride	ND	125
Bromomethane	ND	125
Chloroethane	ND	125
Trichlorofluoromethane	ND	125
1,1-Dichloroethene	ND	125
Methylene Chloride	ND	125
trans-1,2-Dichloroethene	ND	125
1,1-Dichloroethane	ND	125
cis-1,2-Dichloroethene	ND	125
Chloroform	ND	125
1,1,1-Trichloroethane	ND	125
Carbon Tetrachloride	ND	125
1,2-Dichloroethane	ND	125
Trichloroethene	ND	125
1,2-Dichloropropane	ND	125
Bromodichloromethane	ND	125
2-Chloroethyl Vinyl Ether	ND	125
cis-1,3-Dichloropropene	ND	125
trans-1,3-Dichloropropene	ND	125
1,1,2-Trichloroethane	ND	125
Tetrachloroethene	ND	125
Dibromochloromethane	ND	125
Chlorobenzene	ND	125
Bromoform	ND	125
1,1,2,2-Tetrachloroethane	ND	125
1,3-Dichlorobenzene	ND	125
1,4-Dichlorobenzene	ND	125
1,2-Dichlorobenzene	ND	125

305788



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/22oct98.b/8021E.m
Sample Info : GG295
Lab ID : GG295
Inj Date : 22-OCT-98 10:51:00
Operator : KB
Cpnd Sublist: 601
Inst ID : VOAGC1.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)	13.747	13.752	0.005	106864448	26.339	3292.373

305789

LAB SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

GG296

Date Analyzed: 10/23/98

Instrument ID: VOAGC1

Time Analyzed: 1134

Lab File ID: GELD9643

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

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	SSFA-1_10.5-	90823MS	GELD9644	1233
02	SSFA-1_10.5-	90823MSD	GELD9645	1317
03	SSFA-3_0.5-1	90825	GELD9646	1402
04	SSFA-4_0.5-1	90826	GELD9647	1535
05	SSFA-5_3-3.5	90827	GELD9648	1620
06	SSPP-1_6.5-7	90828	GELD9649	1706
07	SSFD-2_3-4	90829	GELD9650	1751
08	SSDW-1_1.5-2	90830	GELD9651	1836
09	SSSD-1_5-5.5	90831	GELD9652	1921
10	SSDA-1_1.5-2	90832	GELD9653	2006
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COMMENTS:

305790

Client ID: **GG296**
Site:

Lab Sample No: **GG296**
Lab Job No: I279

Date Sampled: _____
Date Received: _____
Date Analyzed: 10/23/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9643.d

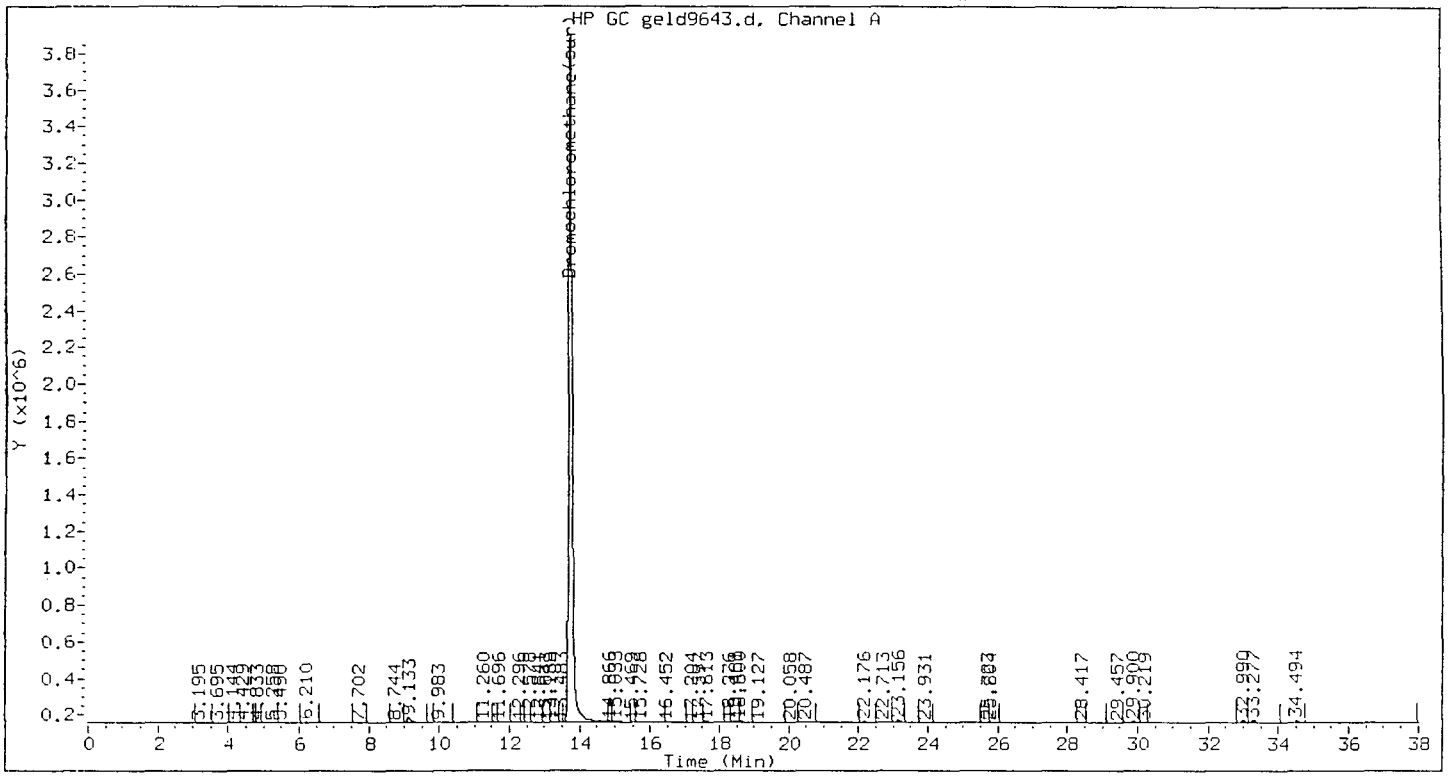
Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0.0

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	125
Chloromethane	ND	125
Vinyl Chloride	ND	125
Bromomethane	ND	125
Chloroethane	ND	125
Trichlorofluoromethane	ND	125
1,1-Dichloroethene	ND	125
Methylene Chloride	ND	125
trans-1,2-Dichloroethene	ND	125
1,1-Dichloroethane	ND	125
cis-1,2-Dichloroethene	ND	125
Chloroform	ND	125
1,1,1-Trichloroethane	ND	125
Carbon Tetrachloride	ND	125
1,2-Dichloroethane	ND	125
Trichloroethene	ND	125
1,2-Dichloropropane	ND	125
Bromodichloromethane	ND	125
2-Chloroethyl Vinyl Ether	ND	125
cis-1,3-Dichloropropene	ND	125
trans-1,3-Dichloropropene	ND	125
1,1,2-Trichloroethane	ND	125
Tetrachloroethene	ND	125
Dibromochloromethane	ND	125
Chlorobenzene	ND	125
Bromoform	ND	125
1,1,2,2-Tetrachloroethane	ND	125
1,3-Dichlorobenzene	ND	125
1,4-Dichlorobenzene	ND	125
1,2-Dichlorobenzene	ND	125

305791

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/geld9643.d Page 1
Report Date 10/24/98 08:12



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : GG296
Lab ID : GG296
Inj Date : 23-OCT-98 11:34:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.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)	13.733	13.752	0.019	123944289	30.549	3818.584

305792

LAB SAMPLE NO.

GG297

VOLATILE METHOD BLANK SUMMARY

Date Analyzed: 10/24/98

Instrument ID: VOAGC1

Time Analyzed: 1009

Lab File ID: GELD9659

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

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	TRIP_BLANK-4	90833	GELD9661	1213
02				
03				
04				
05				
06				
07				
08				
09				
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COMMENTS:

305793

Client ID: **GG297**
Site:

Lab Sample No: **GG297**
Lab Job No: I279

Date Sampled: _____
Date Received: _____
Date Analyzed: 10/24/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9659.d

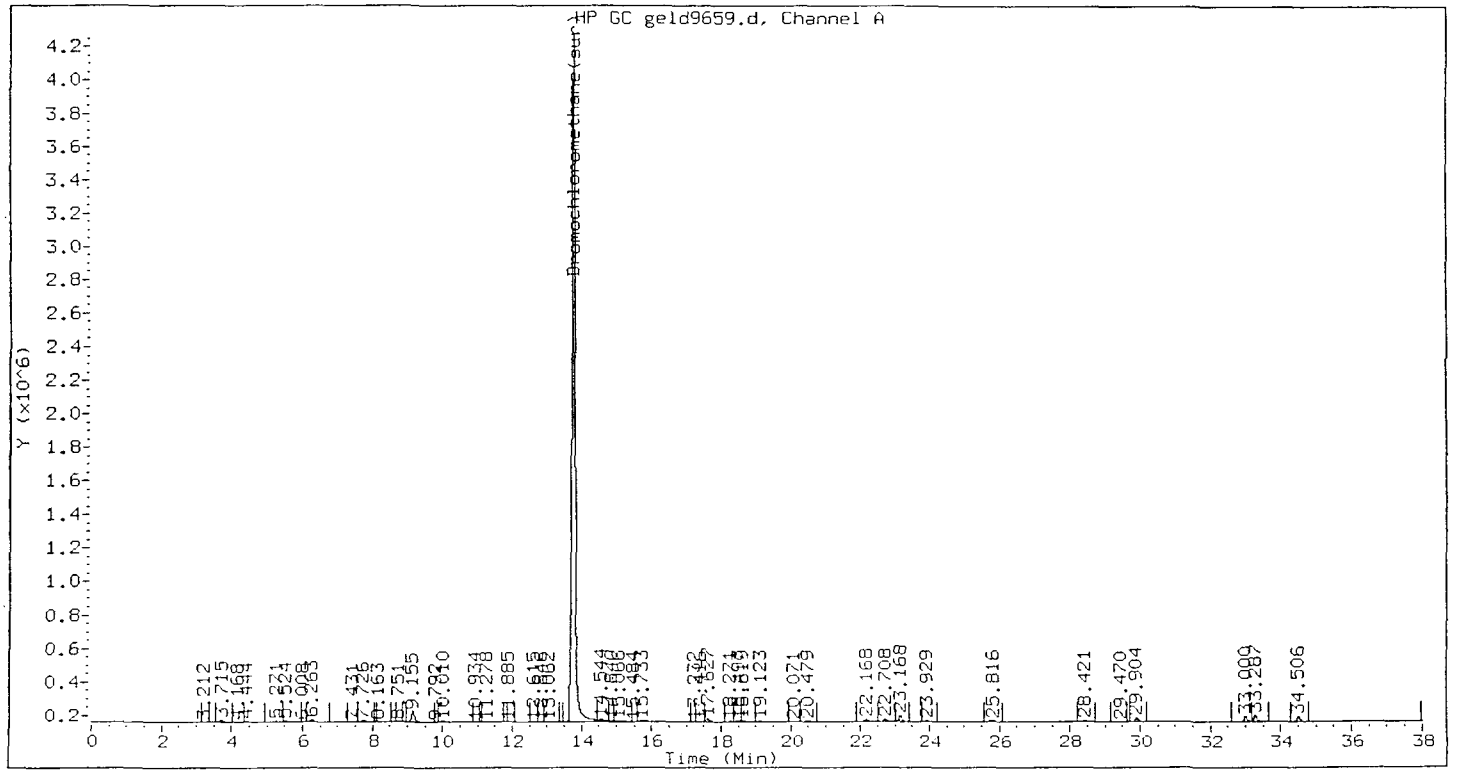
Matrix: SOIL
Level: HIGH
Sample Weight: 10 g
Methanol Ext. Volume: 25.0 ml
Ext. Dilution Factor: 50.0
% Moisture: 0.0

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Results Units: ug/kg (Dry Weight)	Quantitation Limit Units: ug/kg
Dichlorodifluoromethane	ND	125
Chloromethane	ND	125
Vinyl Chloride	ND	125
Bromomethane	ND	125
Chloroethane	ND	125
Trichlorofluoromethane	ND	125
1,1-Dichloroethene	ND	125
Methylene Chloride	ND	125
trans-1,2-Dichloroethene	ND	125
1,1-Dichloroethane	ND	125
cis-1,2-Dichloroethene	ND	125
Chloroform	ND	125
1,1,1-Trichloroethane	ND	125
Carbon Tetrachloride	ND	125
1,2-Dichloroethane	ND	125
Trichloroethene	ND	125
1,2-Dichloropropane	ND	125
Bromodichloromethane	ND	125
2-Chloroethyl Vinyl Ether	ND	125
cis-1,3-Dichloropropene	ND	125
trans-1,3-Dichloropropene	ND	125
1,1,2-Trichloroethane	ND	125
Tetrachloroethene	ND	125
Dibromochloromethane	ND	125
Chlorobenzene	ND	125
Bromoform	ND	125
1,1,2,2-Tetrachloroethane	ND	125
1,3-Dichlorobenzene	ND	125
1,4-Dichlorobenzene	ND	125
1,2-Dichlorobenzene	ND	125
1,1-Dichloropropene	ND	125

305794

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/24oct98.b/geld9659.d Page 1
Report Date 10/26/98 08:52



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/24oct98.b/8021E.m
Sample Info : GG297
Lab ID : GG297
Inj Date : 24-OCT-98 10:09:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
Bromochloromethane(sur)	13.752	13.752	0.000	130659922	32.204	4025.485

305795

LAB SAMPLE NO.

VOLATILE METHOD BLANK SUMMARY

GG297A

Date Analyzed: 10/24/98

Instrument ID: VOAGC1

Time Analyzed: 1117

Lab File ID: GELD9660

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

	CLIENT ID.	LAB SAMPLE NO	LAB FILE ID	TIME ANALYZED
01	FIELD_BLANK-	90834	GELD9662	1258
02				
03				
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05				
06				
07				
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09				
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COMMENTS:

305796

Client ID: **GG297A**
Site:

Lab Sample No: **GG297A**
Lab Job No: I279

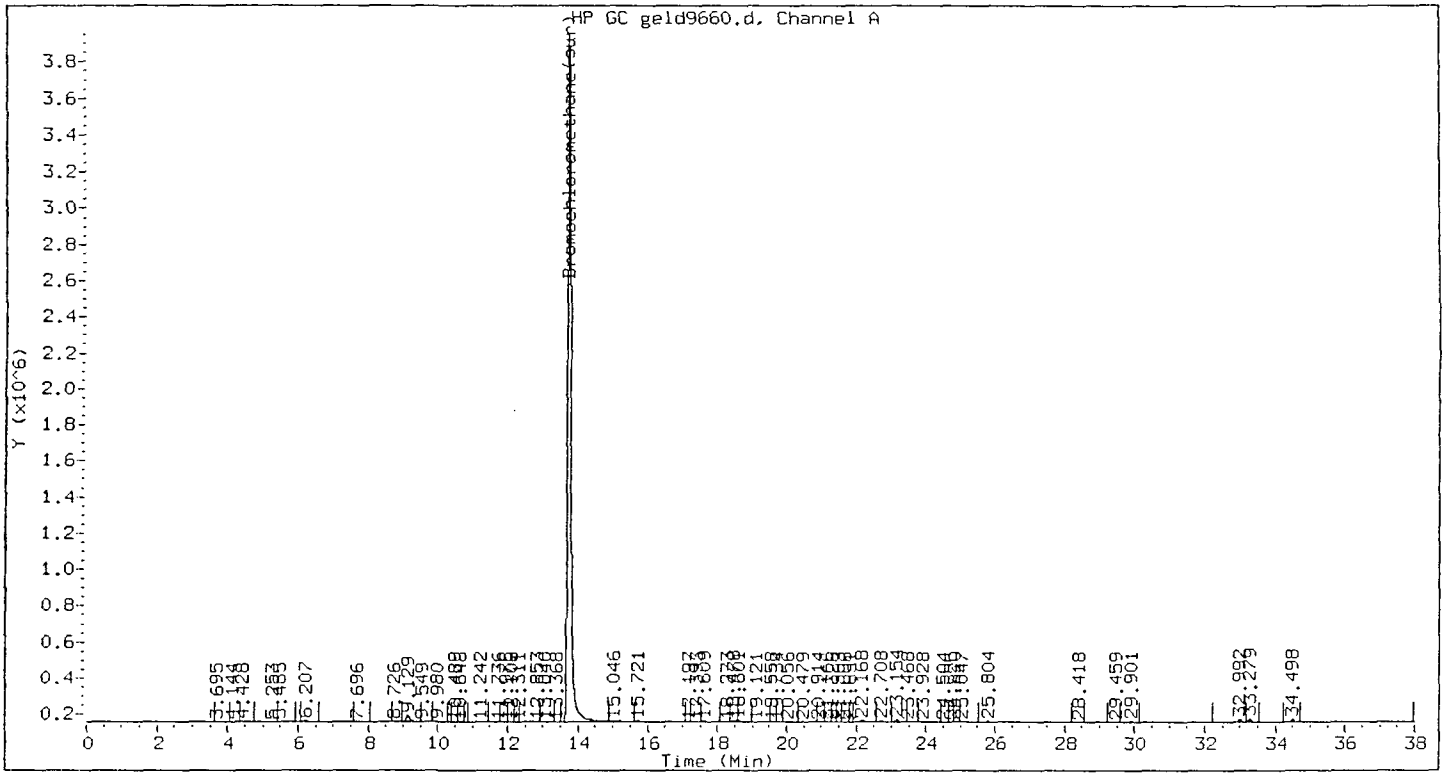
Date Sampled: _____
Date Received: _____
Date Analyzed: 10/24/98
GC Column: DB624
Instrument ID: VOAGC1.i
Lab File ID: geld9660.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Final Volume: 0.0 mL
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/ELCD
METHOD 8021B

Parameter	Analytical Result Units: ug/l	Quantitation Limit Units: ug/l
Dichlorodifluoromethane	ND	1.0
Chloromethane	ND	1.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	1.0
Chloroethane	ND	1.0
Trichlorofluoromethane	ND	1.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
2-Chloroethyl Vinyl Ether	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,1-Dichloropropene	ND	1.0

305797



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/24oct98.b/8021E.m
Sample Info : GG297A
Lab ID : GG297A
Inj Date : 24-OCT-98 11:17:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 1
Sample Matrix : WATER
Sample Type: BLANK

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
Bromochloromethane(sur)	13.730	13.752	0.022	123893970	30.536	30.536

305798

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Instrument ID: VOAGC1 Calibration Date(s): 10/21/98 10/22/98

Calibration Time(s): 2330 0810

LAB FILE ID: RRF1: GELD9618 RRF5: GELD9619 RRF10: GELD9620
RRF20: GELD9623 RRF40: GELD9622

COMPOUND	RRF1	RRF5	RRF10	RRF20	RRF40
Dichlorodifluoromethane	1698929	2013875	1920627	1524235	1732717
Chloromethane	600827	646903	761470	983446	1033018
Vinyl Chloride	2002942	2454624	2603604	2281749	2768872
Bromomethane	1385537	1454552	1564948	1034198	1249516
Chloroethane	3090325	3949558	4237114	2966088	3350713
Trichlorofluoromethane	4666803	6140168	6394439	5516525	5581294
1,1-Dichloroethene	5457054	5773197	6667892	4668874	5471945
Methylene Chloride	9041266	8125234	8881863	6036746	6848261
trans-1,2-Dichloroethene	5790659	6157378	7008862	5218723	5690299
1,1-Dichloroethane	5992021	6394063	7190065	5429320	5865938
cis-1,2-Dichloroethene	4903610	5504897	5793980	5152062	5099475
Chloroform	7767604	8421210	9168702	7063520	7296020
1,1,1-Trichloroethane	6703113	7135818	7698137	6181372	6594538
Carbon Tetrachloride	7372455	7998200	8934706	6997003	7363667
1,2-Dichloroethane	5848256	6037666	6541049	5065022	5373391
Trichloroethene	6789783	7273197	8577482	6276286	6650934
1,2-Dichloropropane	5321717	5809583	6412610	4931982	5251497
Bromodichloromethane	5466895	5657817	6246674	5007731	5212422
2-Chloroethyl Vinyl Ether	1583140	1984873	2019077	1578097	1814251
cis-1,3-Dichloropropene	4829375	5303299	5688915	4731274	4768172
trans-1,3-Dichloropropene	4175113	4962565	5278946	4475313	4302507
1,1,2-Trichloroethane	5576888	6668783	7000924	5549519	5502098
Tetrachloroethene	6188830	7157426	8003575	6317245	6412881
Dibromochloromethane	3667744	4287890	4764722	3802009	4015779
Chlorobenzene	2410697	2764351	3226895	2533123	2705136
Bromoform	2174852	2801858	3064938	2614066	2688100
1,1,2,2-Tetrachloroethane	3509529	4334471	4171051	3920832	3733405
1,3-Dichlorobenzene	3027139	3568268	4264304	3328608	3442339
1,4-Dichlorobenzene	3488647	3848458	4420018	3546205	3570843
1,2-Dichlorobenzene	3307101	3652646	4282624	3438187	3485441
Bromochloromethane(sur)	3169136	4521588	4397950	4081000	4116692

305799

VOLATILE ORGANICS INITIAL CALIBRATION DATA

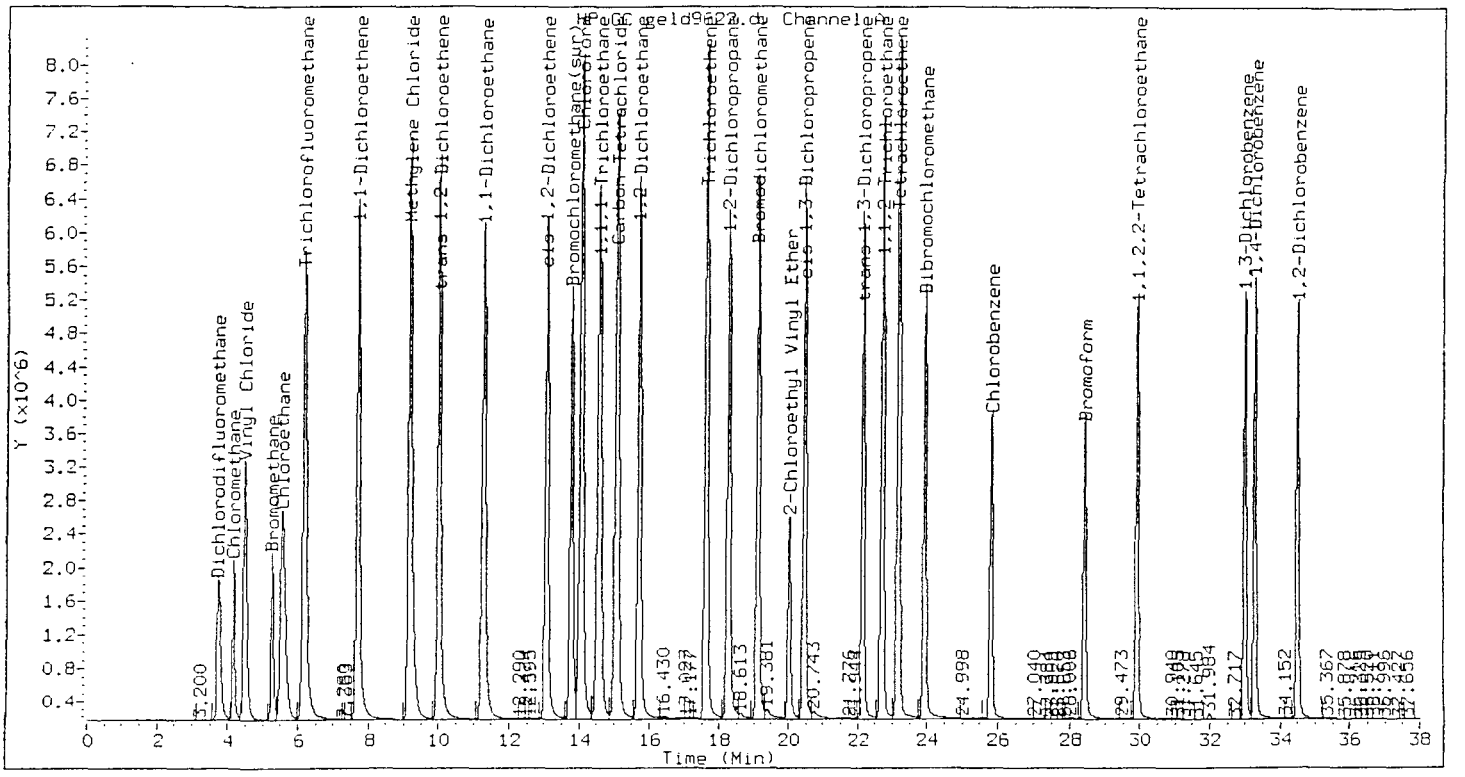
Instrument ID: VOAGC1 Calibration Date(s): 10/21/98 10/22/98

Calibration Time(s): 2330 0810

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Dichlorodifluoromethane	AVRG	1778077	11*
Chloromethane	AVRG	805133	24*
Vinyl Chloride	AVRG	2422358	12*
Bromomethane	AVRG	1337750	15*
Chloroethane	AVRG	3518760	16*
Trichlorofluoromethane	AVRG	5659846	12*
1,1-Dichloroethene	AVRG	5607792	13*
Methylene Chloride	AVRG	7786674	17*
trans-1,2-Dichloroethene	AVRG	5973184	11*
1,1-Dichloroethane	AVRG	6174281	11*
cis-1,2-Dichloroethene	AVRG	5290805	6.7*
Chloroform	AVRG	7943411	11*
1,1,1-Trichloroethane	AVRG	6862596	8.4*
Carbon Tetrachloride	AVRG	7733206	9.8*
1,2-Dichloroethane	AVRG	5773077	10.0*
Trichloroethene	AVRG	7113536	12*
1,2-Dichloropropane	AVRG	5545478	10*
Bromodichloromethane	AVRG	5518308	8.6*
2-Chloroethyl Vinyl Ether	AVRG	1795888	12*
cis-1,3-Dichloropropene	AVRG	5064207	8.3*
trans-1,3-Dichloropropene	AVRG	4638889	10*
1,1,2-Trichloroethane	AVRG	6059642	12*
Tetrachloroethene	AVRG	6815991	11*
Dibromochloromethane	AVRG	4107629	11*
Chlorobenzene	AVRG	2728040	11*
Bromoform	AVRG	2668763	12*
1,1,2,2-Tetrachloroethane	AVRG	3933858	8.4*
1,3-Dichlorobenzene	AVRG	3526132	13*
1,4-Dichlorobenzene	AVRG	3774834	10*
1,2-Dichlorobenzene	AVRG	3633200	10*
Bromochloromethane(sur)	AVRG	4057273	13*

* Compounds with required maximum %RSD values.

305800



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/21oct98a.b/8021E.m
Sample Info : GSTD040C
Lab ID : GSTD040C
Inj Date : 22-OCT-98 02:27:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_5

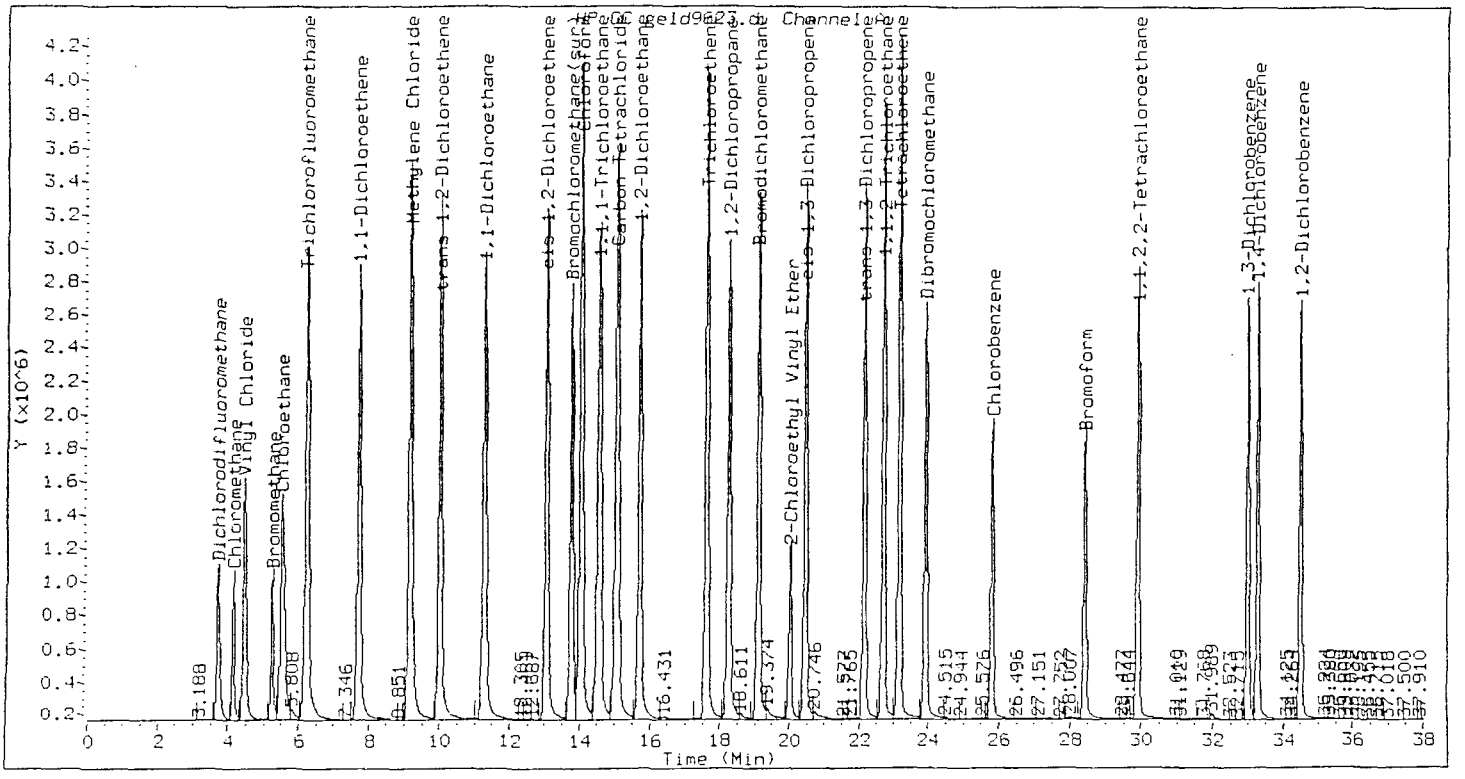
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.704	3.701	0.003	69308684	37.636	37.636
Chloromethane	4.143	4.146	0.003	41320733	54.330	54.330
Vinyl Chloride	4.443	4.433	0.011	110754881	45.068	45.068
Bromomethane	5.235	5.247	0.012	49980654	35.149	35.149
Chloroethane	5.511	5.525	0.014	134028524	36.471	36.471
Trichlorofluoromethane	6.149	6.229	0.080	223251771	38.926	38.926
1,1-Dichloroethene	7.664	7.701	0.038	218877802	37.096	37.096
Methylene Chloride	9.136	9.143	0.007	273930437	33.174	33.174
trans-1,2-Dichloroethene	9.975	9.991	0.016	227611953	36.668	36.668

305801

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	11.252	11.262	0.010	234637512	36.508	36.508
cis-1,2-Dichloroethene	13.037	13.043	0.007	203978984	37.813	37.813
Chloroform	14.030	14.030	0.000	291840796	35.496	35.496
1,1,1-Trichloroethane	14.543	14.548	0.005	263781527	37.159	37.159
Carbon Tetrachloride	15.053	15.059	0.006	294546684	36.804	36.804
1,2-Dichloroethane	15.703	15.707	0.004	214935659	35.466	35.466
Trichloroethene	17.610	17.614	0.004	266037354	36.027	36.027
1,2-Dichloropropane	18.251	18.252	0.001	210059871	36.605	36.605
Bromodichloromethane	19.105	19.104	0.001	208496902	36.708	36.708
2-Chloroethyl Vinyl Ether	20.025	20.030	0.005	72570048	38.495	38.495
cis-1,3-Dichloropropene	20.452	20.453	0.001	190726866	36.818	36.818
trans-1,3-Dichloropropene	22.137	22.139	0.001	172100294	36.436	36.436
1,1,2-Trichloroethane	22.693	22.691	0.002	220083923	35.327	35.327
Tetrachloroethene	23.162	23.163	0.001	256515233	36.603	36.603
Dibromochloromethane	23.912	23.911	0.001	160631167	37.196	37.196
Chlorobenzene	25.807	25.806	0.001	108205439	38.276	38.276
Bromoform	28.405	28.405	0.001	107524011	39.354	39.354
1,1,2,2-Tetrachloroethane	29.904	29.902	0.003	149336215	37.375	37.375
1,3-Dichlorobenzene	32.999	32.997	0.002	137693556	38.405	38.405
1,4-Dichlorobenzene	33.288	33.285	0.003	142833711	36.553	36.553
1,2-Dichlorobenzene	34.507	34.505	0.002	139417649	37.290	37.290
Bromochloromethane(sur)	13.748	13.752	0.004	164667661	40.236	40.236

305802

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/21oct98a.b/geld9623.d Page 1
Report Date 10/23/98 09:09



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/21oct98a.b/8021E.m
Sample Info : GSTD020C
Lab ID : GSTD020C
Inj Date : 22-OCT-98 08:10:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_4

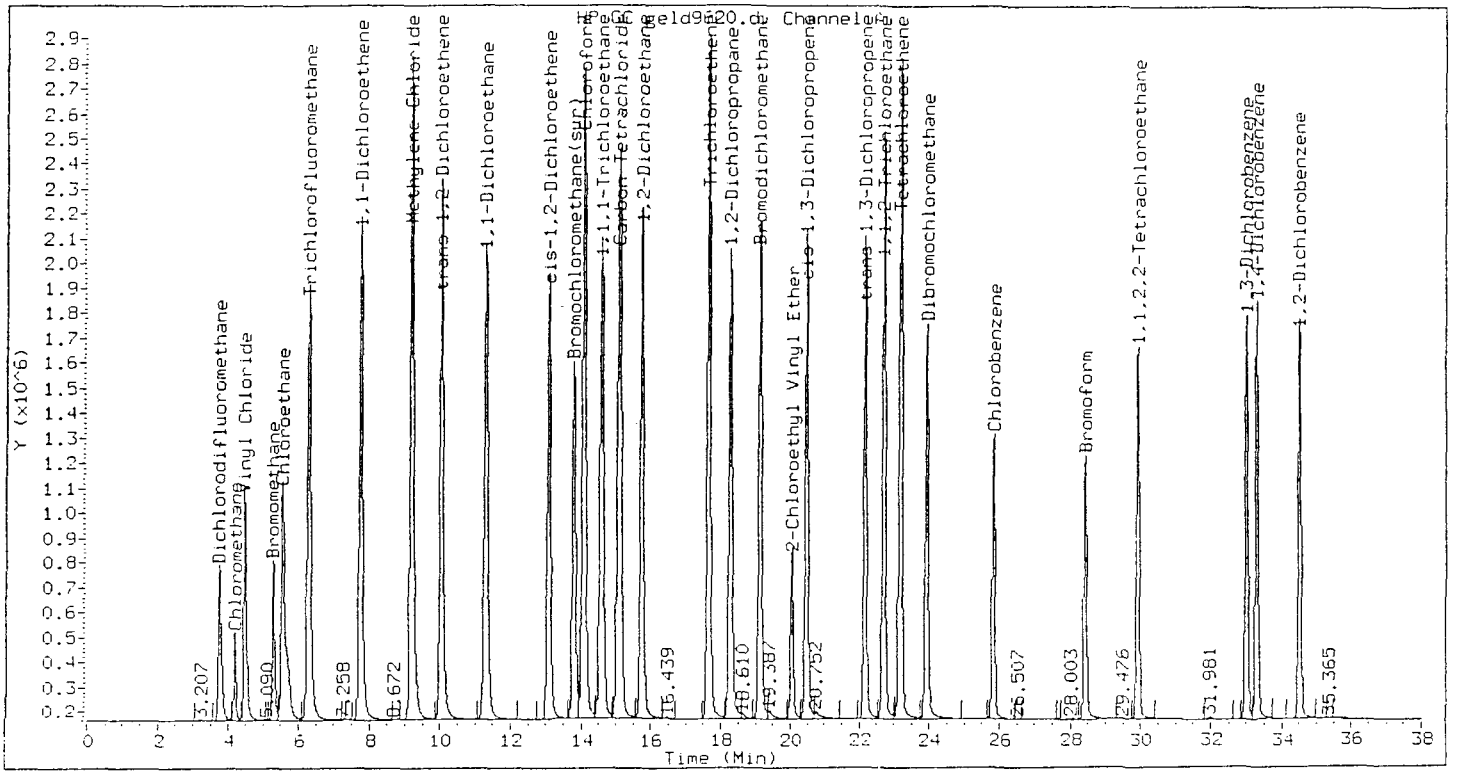
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.685	3.701	0.016	30484698	17.145	17.145
Chloromethane	4.135	4.146	0.011	19668924	24.429	24.429
Vinyl Chloride	4.424	4.433	0.009	45634979	18.839	18.839
Bromomethane	5.223	5.247	0.024	20683965	15.385	15.385
Chloroethane	5.488	5.525	0.037	59321759	16.790	16.790
Trichlorofluoromethane	6.198	6.229	0.031	110330499	19.385	19.385
1,1-Dichloroethene	7.686	7.701	0.015	93377476	16.515	16.515
Methylene Chloride	9.134	9.143	0.009	120734913	15.452	15.452
trans-1,2-Dichloroethene	9.980	9.991	0.011	104374463	17.368	17.368

305803

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	11.255	11.262	0.008	108586401	17.437	17.437
cis-1,2-Dichloroethene	13.036	13.043	0.007	103041248	19.275	19.275
Chloroform	14.027	14.030	0.003	141270409	17.681	17.681
1,1,1-Trichloroethane	14.545	14.548	0.004	123627432	17.878	17.878
Carbon Tetrachloride	15.056	15.059	0.003	139940068	17.937	17.937
1,2-Dichloroethane	15.703	15.707	0.004	101300447	17.283	17.283
Trichloroethene	17.611	17.614	0.003	125525727	17.525	17.525
1,2-Dichloropropane	18.250	18.252	0.002	98639641	17.686	17.686
Bromodichloromethane	19.104	19.104	0.000	100154627	18.061	18.061
2-Chloroethyl Vinyl Ether	20.027	20.030	0.003	31561938	17.306	17.306
cis-1,3-Dichloropropene	20.453	20.453	0.000	94625472	18.589	18.589
trans-1,3-Dichloropropene	22.139	22.139	0.000	89506266	19.151	19.151
1,1,2-Trichloroethane	22.693	22.691	0.002	110990384	18.214	18.214
Tetrachloroethene	23.166	23.163	0.003	126344900	18.391	18.391
Dibromochloromethane	23.914	23.911	0.004	76040175	18.040	18.040
Chlorobenzene	25.809	25.806	0.003	50662469	18.302	18.302
Bromoform	28.410	28.405	0.004	52281324	19.302	19.302
1,1,2,2-Tetrachloroethane	29.907	29.902	0.005	78416641	19.699	19.699
1,3-Dichlorobenzene	33.003	32.997	0.006	66572160	18.838	18.838
1,4-Dichlorobenzene	33.291	33.285	0.006	70924095	18.492	18.492
1,2-Dichlorobenzene	34.511	34.505	0.006	68763735	18.693	18.693
Bromochloromethane(sur)	13.746	13.752	0.006	81619996	19.955	19.955

305804

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/21oct98a.b/geld9620.d Page 1
Report Date 10/23/98 09:09



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/21oct98a.b/8021E.m
Sample Info : GSTD010C
Lab ID : GSTD010C
Inj Date : 22-OCT-98 00:58:00
Operator : KB
Cpnd Sublist: 601

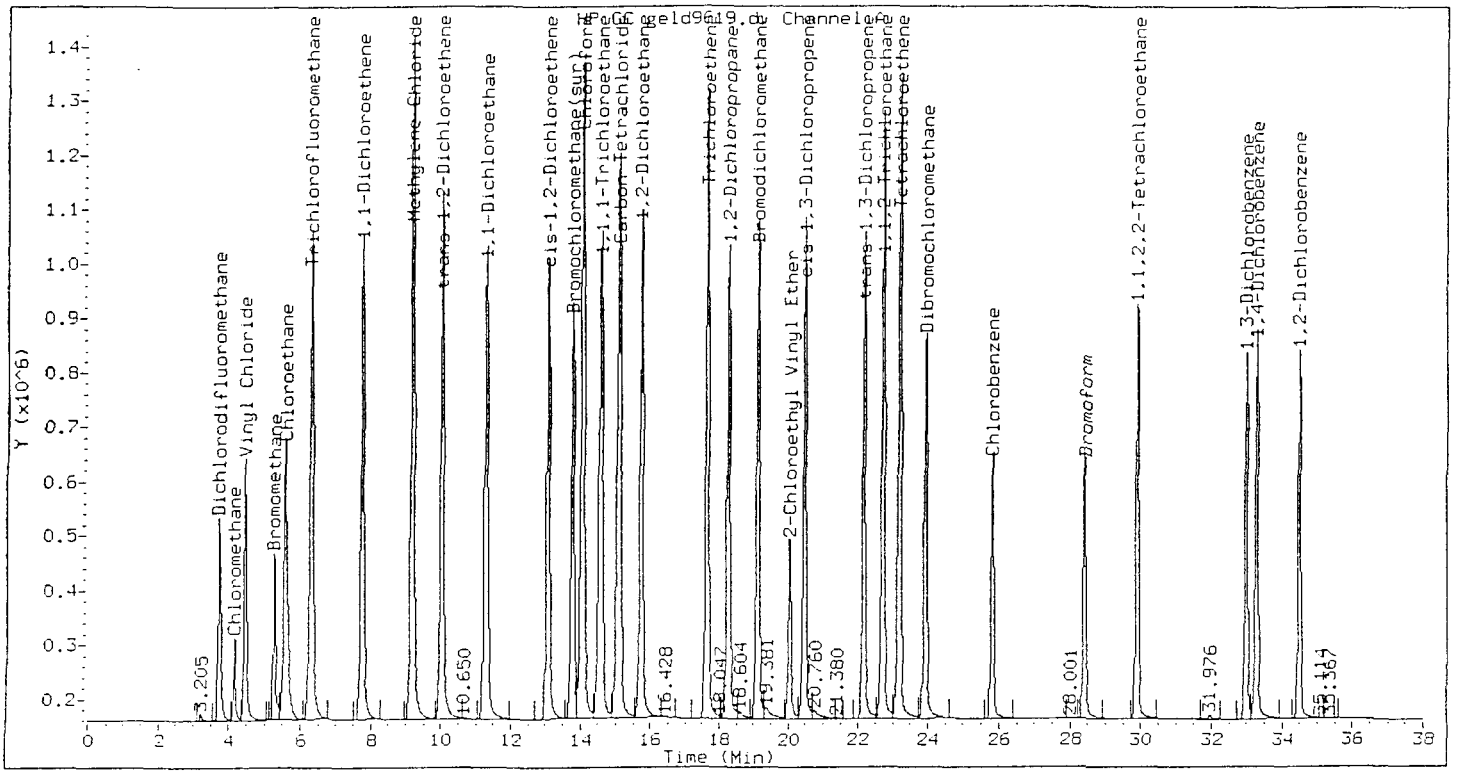
Inst ID : VOAGC1.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_3

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.708	3.701	0.007	19206268	10.802	10.802
Chloromethane	4.153	4.146	0.007	7614703	9.458	9.458
Vinyl Chloride	4.438	4.433	0.005	26036036	10.748	10.748
Bromomethane	5.247	5.247	0.001	15649481	11.698	11.698
Chloroethane	5.518	5.525	0.007	42371138	12.041	12.041
Trichlorofluoromethane	6.258	6.229	0.029	63944387	11.298	11.298
1,1-Dichloroethene	7.718	7.701	0.016	66678915	11.890	11.890
Methylene Chloride	9.151	9.143	0.008	88818628	11.406	11.406
trans-1,2-Dichloroethene	10.000	9.991	0.009	70088621	11.734	11.734

305805

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	11.270	11.262	0.008	71900646	11.645	11.645
cis-1,2-Dichloroethene	13.050	13.043	0.006	57939800	10.951	10.951
Chloroform	14.035	14.030	0.005	91687025	11.543	11.543
1,1,1-Trichloroethane	14.556	14.548	0.007	76981368	11.218	11.218
Carbon Tetrachloride	15.065	15.059	0.006	89347064	11.554	11.554
1,2-Dichloroethane	15.712	15.707	0.005	65410489	11.330	11.330
Trichloroethene	17.619	17.614	0.005	85774820	12.058	12.058
1,2-Dichloropropane	18.255	18.252	0.004	64126100	11.564	11.564
Bromodichloromethane	19.107	19.104	0.003	62466738	11.320	11.320
2-Chloroethyl Vinyl Ether	20.030	20.030	0.000	20190773	11.243	11.243
cis-1,3-Dichloropropene	20.455	20.453	0.002	56889151	11.234	11.234
trans-1,3-Dichloropropene	22.140	22.139	0.001	52789461	11.380	11.380
1,1,2-Trichloroethane	22.692	22.691	0.001	70009243	11.553	11.553
Tetrachloroethene	23.165	23.163	0.002	80035746	11.742	11.742
Dibromochloromethane	23.910	23.911	0.000	47647218	11.600	11.600
Chlorobenzene	25.806	25.806	0.000	32268949	11.829	11.829
Bromoform	28.405	28.405	0.001	30649381	11.484	11.484
1,1,2,2-Tetrachloroethane	29.901	29.902	0.001	41710508	10.603	10.603
1,3-Dichlorobenzene	32.994	32.997	0.003	42643044	12.093	12.093
1,4-Dichlorobenzene	33.282	33.285	0.003	44200178	11.709	11.709
1,2-Dichlorobenzene	34.503	34.505	0.003	42826243	11.787	11.787
Bromochloromethane(sur)	13.758	13.752	0.006	43979502	10.840	10.840

305806



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/21oct98a.b/8021E.m
Sample Info : GSTD005C
Lab ID : GSTD005C
Inj Date : 22-OCT-98 00:14:00
Operator : KB
Cpnd Sublist: 601

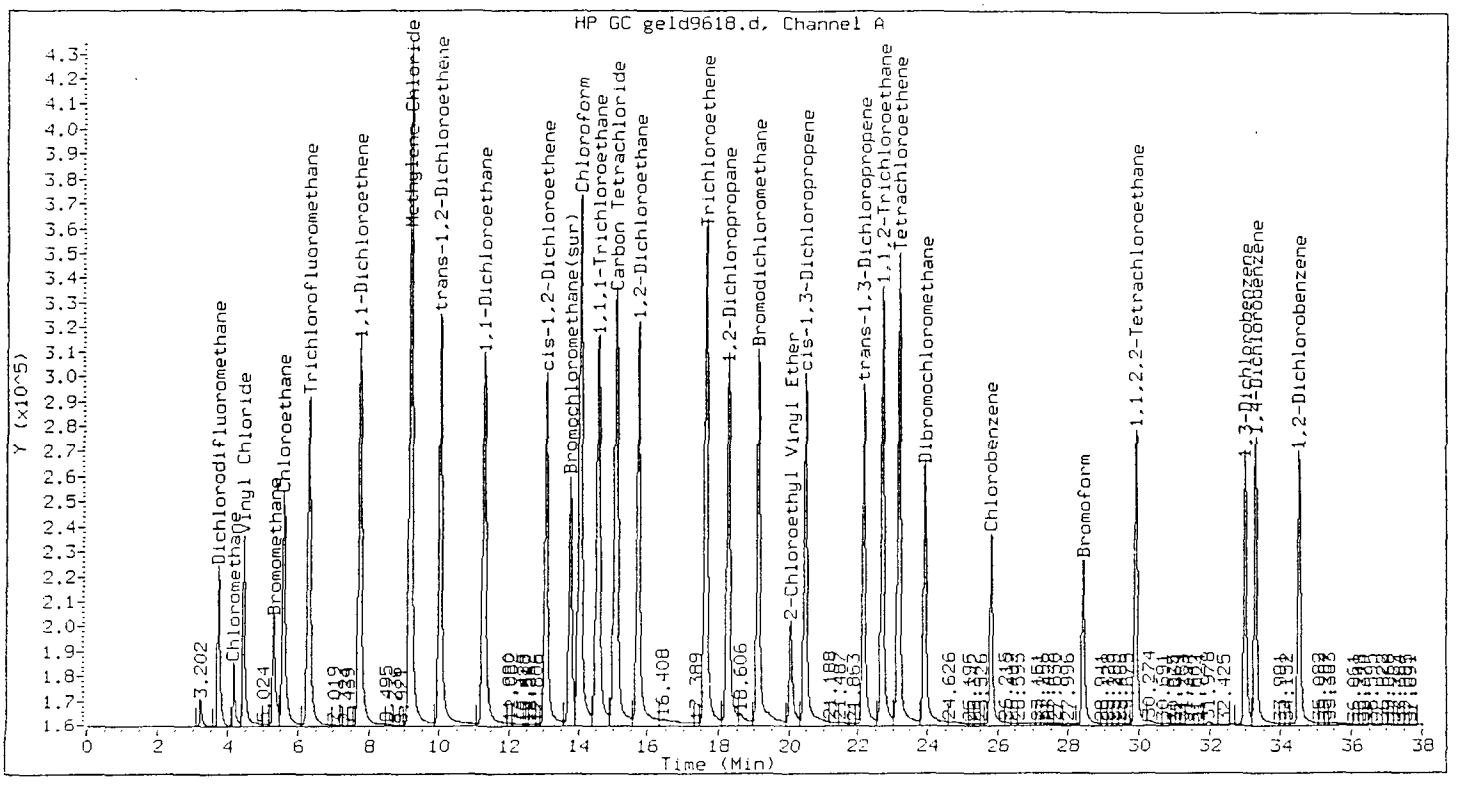
Inst ID : VOAGC1.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_2

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.705	3.701	0.004	10069376	5.663	5.663
Chloromethane	4.151	4.146	0.005	3234517	4.017	4.017
Vinyl Chloride	4.432	4.433	0.001	12273120	5.067	5.067
Bromomethane	5.244	5.247	0.003	7272758	5.437	5.437
Chloroethane	5.543	5.525	0.018	19747792	5.612	5.612
Trichlorofluoromethane	6.265	6.229	0.036	30700838	5.424	5.424
1,1-Dichloroethene	7.717	7.701	0.016	28865983	5.133	5.133
Methylene Chloride	9.147	9.143	0.004	40626172	5.208	5.208
trans-1,2-Dichloroethene	9.998	9.991	0.007	30786890	5.137	5.137

305807

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	11.265	11.262	0.003	31970316	5.157	5.157
cis-1,2-Dichloroethene	13.045	13.043	0.002	27524486	5.176	5.176
Chloroform	14.029	14.030	0.001	42106050	5.286	5.286
1,1,1-Trichloroethane	14.548	14.548	0.000	35679090	5.180	5.180
Carbon Tetrachloride	15.060	15.059	0.001	39990999	5.150	5.150
1,2-Dichloroethane	15.705	15.707	0.002	30188329	5.195	5.195
Trichloroethene	17.612	17.614	0.001	36365986	5.094	5.094
1,2-Dichloropropane	18.249	18.252	0.002	29047913	5.224	5.224
Bromodichloromethane	19.102	19.104	0.003	28289086	5.114	5.114
2-Chloroethyl Vinyl Ether	20.027	20.030	0.003	9924364	5.485	5.485
cis-1,3-Dichloropropene	20.451	20.453	0.002	26516495	5.223	5.223
trans-1,3-Dichloropropene	22.135	22.139	0.003	24812823	5.332	5.332
1,1,2-Trichloroethane	22.687	22.691	0.004	33343914	5.488	5.488
Tetrachloroethene	23.161	23.163	0.002	35787131	5.231	5.231
Dibromochloromethane	23.907	23.911	0.003	21439448	5.152	5.152
Chlorobenzene	25.803	25.806	0.003	13821754	5.039	5.039
Bromoform	28.402	28.405	0.003	14009291	5.210	5.210
1,1,2,2-Tetrachloroethane	29.897	29.902	0.005	21672355	5.461	5.461
1,3-Dichlorobenzene	32.993	32.997	0.004	17841338	5.055	5.055
1,4-Dichlorobenzene	33.281	33.285	0.004	19242290	5.055	5.055
1,2-Dichlorobenzene	34.500	34.505	0.005	18263232	4.988	4.988
Bromochloromethane(sur)	13.752	13.752	0.000	22607939	5.551	5.551

305808



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/21oct98a.b/8021E.m
Sample Info : GSTD001C
Lab ID : GSTD001C
Inj Date : 21-OCT-98 23:30:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CALIB_1

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.703	3.701	0.002	1698929	1.000	1.000
Chloromethane	4.148	4.146	0.002	600827	1.000	1.000
Vinyl Chloride	4.427	4.433	0.006	2002942	1.000	1.000
Bromomethane	5.285	5.247	0.038	1385537	1.000	1.000
Chloroethane	5.564	5.525	0.039	3090325	1.000	1.000
Trichlorofluoromethane	6.275	6.229	0.047	4666803	1.000	1.000
1,1-Dichloroethene	7.722	7.701	0.020	5457054	1.000	1.000
Methylene Chloride	9.147	9.143	0.004	9041266	1.000	1.000
trans-1,2-Dichloroethene	10.001	9.991	0.010	5790659	1.000	1.000

305809

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1,1-Dichloroethane	11.268	11.262	0.006	5992021	1.000	1.000
cis-1,2-Dichloroethene	13.049	13.043	0.006	4903610	1.000	1.000
Chloroform	14.030	14.030	0.000	7767604	1.000	1.000
1,1,1-Trichloroethane	14.550	14.548	0.002	6703113	1.000	1.000
Carbon Tetrachloride	15.062	15.059	0.003	7372455	1.000	1.000
1,2-Dichloroethane	15.712	15.707	0.005	5848256	1.000	1.000
Trichloroethene	17.617	17.614	0.003	6789783	1.000	1.000
1,2-Dichloropropane	18.253	18.252	0.001	5321717	1.000	1.000
Bromodichloromethane	19.104	19.104	0.000	5466895	1.000	1.000
2-Chloroethyl Vinyl Ether	20.040	20.030	0.010	1583140	1.000	1.000
cis-1,3-Dichloropropene	20.455	20.453	0.002	4829375	1.000	1.000
trans-1,3-Dichloropropene	22.142	22.139	0.004	4175113	1.000	1.000
1,1,2-Trichloroethane	22.690	22.691	0.001	5576888	1.000	1.000
Tetrachloroethene	23.161	23.163	0.002	6188830	1.000	1.000
Dibromochloromethane	23.910	23.911	0.001	3667744	1.000	1.000
Chlorobenzene	25.807	25.806	0.000	2410697	1.000	1.000
Bromoform	28.406	28.405	0.001	2174852	1.000	1.000
1,1,2,2-Tetrachloroethane	29.899	29.902	0.002	3509529	1.000	1.000
1,3-Dichlorobenzene	32.997	32.997	0.001	3027139	1.000	1.000
1,4-Dichlorobenzene	33.284	33.285	0.001	3488647	1.000	1.000
1,2-Dichlorobenzene	34.504	34.505	0.001	3307101	1.000	1.000
Bromochloromethane(sur)	13.756	13.752	0.004	3169136	1.000	1.000

305810

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK

Instrument ID: VOAGC1 Calibration Date: 10/22/98 Time: 0907

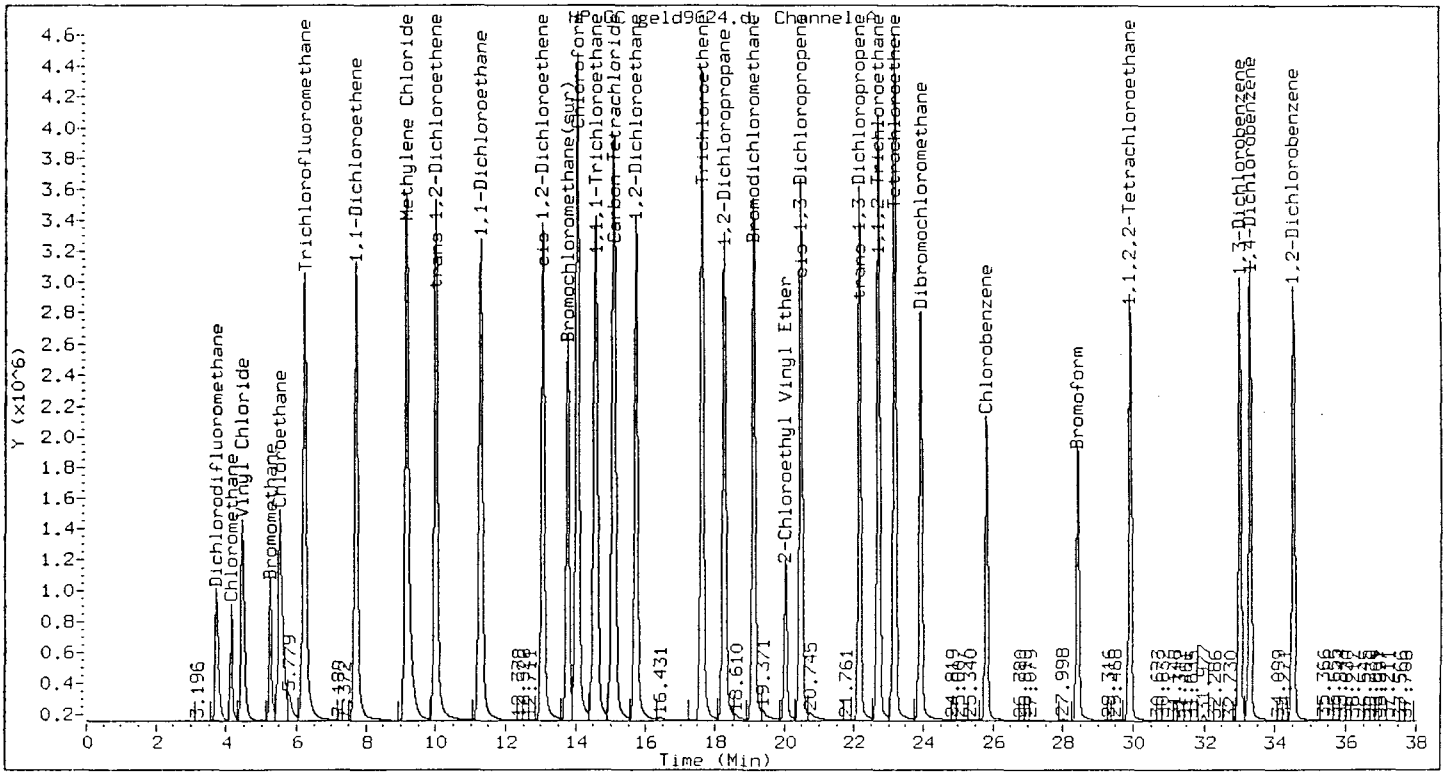
Lab File ID: GELD9624 Init. Calib. Date(s): 10/21/98 10/22/98

Heated Purge: (Y/N) N Init. Calib. Times: 2330 0810

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	1778076.6	1494246.9		16.0	15.0
Chloromethane	805133.04	786579.70		2.3	15.0
Vinyl Chloride	2422358.1	2230522.9		7.9	15.0
Bromomethane	1337750.3	1062382.4		20.6	15.0
Chloroethane	3518759.7	2954502.3		16.0	15.0
Trichlorofluoromethane	5659845.7	5586340.2		1.3	15.0
1,1-Dichloroethene	5607792.2	5147826.6		8.2	15.0
Methylene Chloride	7786674.0	6802374.9		12.6	15.0
trans-1,2-Dichloroethene	5973184.2	5691778.4		4.7	15.0
1,1-Dichloroethane	6174281.3	5976089.5		3.2	15.0
cis-1,2-Dichloroethene	5290804.8	5352439.9		-1.0	15.0
Chloroform	7943411.4	7687102.4		3.2	15.0
1,1,1-Trichloroethane	6862595.5	6674005.9		2.7	15.0
Carbon Tetrachloride	7733206.3	7565742.2		2.2	15.0
1,2-Dichloroethane	5773076.9	5420931.7		6.1	15.0
Trichloroethene	7113536.5	6793636.0		4.5	15.0
1,2-Dichloropropane	5545477.7	5389731.3		2.8	15.0
Bromodichloromethane	5518308.0	5382564.2		2.4	15.0
2-Chloroethyl Vinyl Ether	1795887.6	1540146.5		14.2	15.0
cis-1,3-Dichloropropene	5064206.9	5115670.9		-1.0	15.0
trans-1,3-Dichloropropene	4638888.9	4814509.6		-3.6	15.0
1,1,2-Trichloroethane	6059642.5	5837155.7		3.7	15.0
Tetrachloroethene	6815991.3	6908661.0		-1.2	15.0
Dibromochloromethane	4107628.7	4097503.1		0.2	15.0
Chlorobenzene	2728040.4	2817471.4		-3.1	15.0
Bromoform	2668763.0	2652308.7		0.6	15.0
1,1,2,2-Tetrachloroethane	3933857.6	3933626.3		0.0	15.0
1,3-Dichlorobenzene	3526131.6	3775254.0		-6.9	15.0
1,4-Dichlorobenzene	3774834.1	4008761.7		-6.0	15.0
1,2-Dichlorobenzene	3633199.9	3846080.1		-5.8	15.0
Bromochloromethane(sur)	4057273.1	3889475.4		4.1	15.0

305811

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/22oct98.b/geld9624.d Page 1
Report Date 10/23/98 08:08



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/22oct98.b/8021E.m
Sample Info : GSTD020
Lab ID : GSTD020
Inj Date : 22-OCT-98 09:07:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.697	3.701	0.004	29884938	16.807	16.807
Chloromethane	4.140	4.146	0.006	15731593	19.539	19.539
Vinyl Chloride	4.431	4.433	0.002	44610457	18.416	18.416
Bromomethane	5.230	5.247	0.017	21247647	15.883	15.883
Chloroethane	5.493	5.525	0.031	59090045	16.793	16.793
Trichlorofluoromethane	6.208	6.229	0.020	111726804	19.740	19.740
1,1-Dichloroethene	7.694	7.701	0.007	102956532	18.360	18.360
Methylene Chloride	9.139	9.143	0.004	136047498	17.472	17.472
trans-1,2-Dichloroethene	9.985	9.991	0.006	113835568	19.058	19.058

305812

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1,1-Dichloroethane	11.260	11.262	0.002	119521789	19.358	19.358
cis-1,2-Dichloroethene	13.040	13.043	0.003	107048798	20.233	20.233
Chloroform	14.029	14.030	0.001	153742047	19.355	19.355
1,1,1-Trichloroethane	14.546	14.548	0.002	133480118	19.450	19.450
Carbon Tetrachloride	15.056	15.059	0.003	151314843	19.567	19.567
1,2-Dichloroethane	15.703	15.707	0.004	108418634	18.780	18.780
Trichloroethene	17.612	17.614	0.002	135872720	19.101	19.101
1,2-Dichloropropane	18.250	18.252	0.001	107794626	19.438	19.438
Bromodichloromethane	19.102	19.104	0.002	107651284	19.508	19.508
2-Chloroethyl Vinyl Ether	20.024	20.030	0.005	30802929	17.152	17.152
cis-1,3-Dichloropropene	20.450	20.453	0.003	102313418	20.203	20.203
trans-1,3-Dichloropropene	22.136	22.139	0.003	96290191	20.757	20.757
1,1,2-Trichloroethane	22.689	22.691	0.002	116743114	19.266	19.266
Tetrachloroethene	23.161	23.163	0.002	138173220	20.272	20.272
Dibromochloromethane	23.909	23.911	0.002	81950062	19.951	19.951
Chlorobenzene	25.802	25.806	0.004	56349428	20.656	20.656
Bromoform	28.400	28.405	0.005	53046174	19.877	19.877
1,1,2,2-Tetrachloroethane	29.896	29.902	0.005	78672525	19.999	19.999
1,3-Dichlorobenzene	32.992	32.997	0.005	75505079	21.413	21.413
1,4-Dichlorobenzene	33.279	33.285	0.006	80175234	21.239	21.239
1,2-Dichlorobenzene	34.499	34.505	0.006	76921602	21.172	21.172
Bromochloromethane(sur)	13.750	13.752	0.002	77789507	19.173	19.173

305813

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK

Instrument ID: VOAGC1 Calibration Date: 10/23/98 Time: 0847

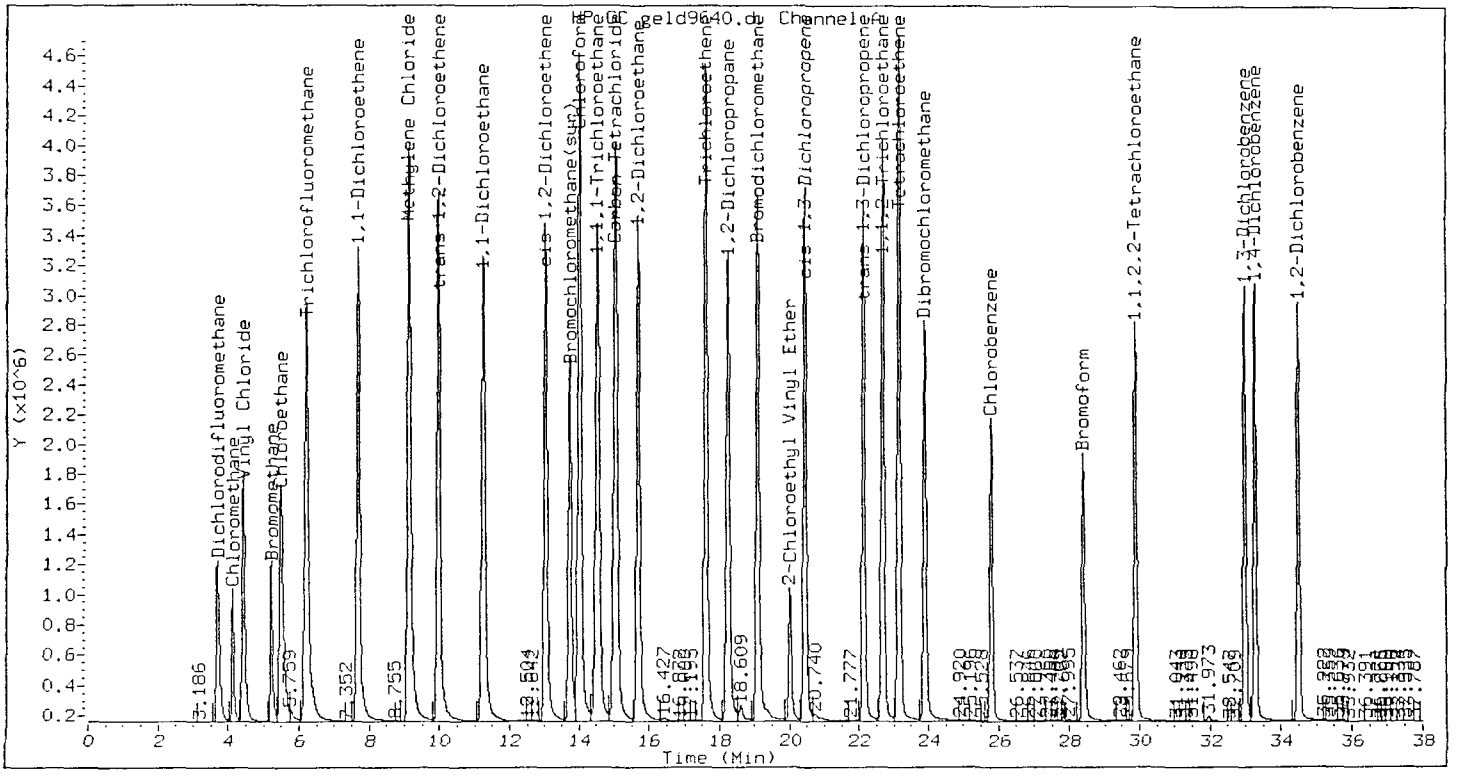
Lab File ID: GELD9640 Init. Calib. Date(s): 10/21/98 10/22/98

Heated Purge: (Y/N) N Init. Calib. Times: 2330 0810

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	1778076.6	1674017.1		5.8	15.0
Chloromethane	805133.04	914669.55		-13.6	15.0
Vinyl Chloride	2422358.1	2356719.2		2.7	15.0
Bromomethane	1337750.3	1191224.9		11.0	15.0
Chloroethane	3518759.7	3043773.1		13.5	15.0
Trichlorofluoromethane	5659845.7	5675290.1		-0.0	15.0
1,1-Dichloroethene	5607792.2	5450818.6		2.8	15.0
Methylene Chloride	7786674.0	6884012.7		11.6	15.0
trans-1,2-Dichloroethene	5973184.2	5967441.4		0.1	15.0
1,1-Dichloroethane	6174281.3	6038057.8		2.2	15.0
cis-1,2-Dichloroethene	5290804.8	5478598.5		-3.5	15.0
Chloroform	7943411.4	7869104.0		0.9	15.0
1,1,1-Trichloroethane	6862595.5	6822488.1		0.6	15.0
Carbon Tetrachloride	7733206.3	7712761.3		0.3	15.0
1,2-Dichloroethane	5773076.9	5549726.8		3.9	15.0
Trichloroethene	7113536.5	7055630.1		0.8	15.0
1,2-Dichloropropane	5545477.7	5384254.9		2.9	15.0
Bromodichloromethane	5518308.0	5857689.1		-6.0	15.0
2-Chloroethyl Vinyl Ether	1795887.6	1311259.0		27.0	15.0
cis-1,3-Dichloropropene	5064206.9	5210369.4		-2.7	15.0
trans-1,3-Dichloropropene	4638888.9	4838271.1		-4.1	15.0
1,1,2-Trichloroethane	6059642.5	5870787.0		3.1	15.0
Tetrachloroethene	6815991.3	7056608.0		-3.5	15.0
Dibromochloromethane	4107628.7	4142413.9		0.1	15.0
Chlorobenzene	2728040.4	2854986.8		-4.6	15.0
Bromoform	2668763.0	2632876.4		1.3	15.0
1,1,2,2-Tetrachloroethane	3933857.6	3884502.2		1.2	15.0
1,3-Dichlorobenzene	3526131.6	3799320.4		-7.7	15.0
1,4-Dichlorobenzene	3774834.1	4007914.1		-6.0	15.0
1,2-Dichlorobenzene	3633199.9	3782819.5		-4.1	15.0
Bromochloromethane(sur)	4057273.1	3731467.8		8.0	15.0

305814

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/geld9640.d Page 1
Report Date 10/24/98 08:12



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : GSTD020
Lab ID : GSTD020
Inj Date : 23-OCT-98 08:47:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.685	3.701	0.016	33480341	18.830	18.830
Chloromethane	4.129	4.146	0.017	18293390	22.721	22.721
Vinyl Chloride	4.420	4.433	0.013	47134384	19.458	19.458
Bromomethane	5.218	5.247	0.028	23824497	17.809	17.809
Chloroethane	5.484	5.525	0.041	60875461	17.300	17.300
Trichlorofluoromethane	6.204	6.229	0.024	113505801	20.055	20.055
1,1-Dichloroethene	7.682	7.701	0.019	109016371	19.440	19.440
Methylene Chloride	9.127	9.143	0.016	137680254	17.682	17.682
trans-1,2-Dichloroethene	9.974	9.991	0.017	119348827	19.981	19.981

305815

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	11.247	11.262	0.015	120761155	19.559	19.559
cis-1,2-Dichloroethene	13.031	13.043	0.012	109571969	20.710	20.710
Chloroform	14.021	14.030	0.009	157382080	19.813	19.813
1,1,1-Trichloroethane	14.539	14.548	0.009	136449762	19.883	19.883
Carbon Tetrachloride	15.049	15.059	0.010	154255226	19.947	19.947
1,2-Dichloroethane	15.696	15.707	0.011	110994536	19.226	19.226
Trichloroethene	17.606	17.614	0.008	141112602	19.837	19.837
1,2-Dichloropropane	18.244	18.252	0.007	107685097	19.419	19.419
Bromodichloromethane	19.097	19.104	0.008	117153782	21.230	21.230
2-Chloroethyl Vinyl Ether	20.020	20.030	0.010	26225180	14.603	14.603
cis-1,3-Dichloropropene	20.444	20.453	0.009	104207387	20.577	20.577
trans-1,3-Dichloropropene	22.129	22.139	0.009	96765421	20.860	20.860
1,1,2-Trichloroethane	22.684	22.691	0.007	117415739	19.377	19.377
Tetrachloroethene	23.154	23.163	0.008	141132159	20.706	20.706
Dibromochloromethane	23.903	23.911	0.008	82848277	20.169	20.169
Chlorobenzene	25.798	25.806	0.008	57099736	20.931	20.931
Bromoform	28.397	28.405	0.009	52657528	19.731	19.731
1,1,2,2-Tetrachloroethane	29.894	29.902	0.008	77690044	19.749	19.749
1,3-Dichlorobenzene	32.989	32.997	0.008	75986407	21.550	21.550
1,4-Dichlorobenzene	33.278	33.285	0.007	80158281	21.235	21.235
1,2-Dichlorobenzene	34.497	34.505	0.008	75656390	20.824	20.824
Bromochloromethane(sur)	13.742	13.752	0.010	74629355	18.394	18.394

305816

VOLATILE ORGANICS CONTINUING CALIBRATION CHECK

Instrument ID: VOAGC1 Calibration Date: 10/24/98 Time: 0822

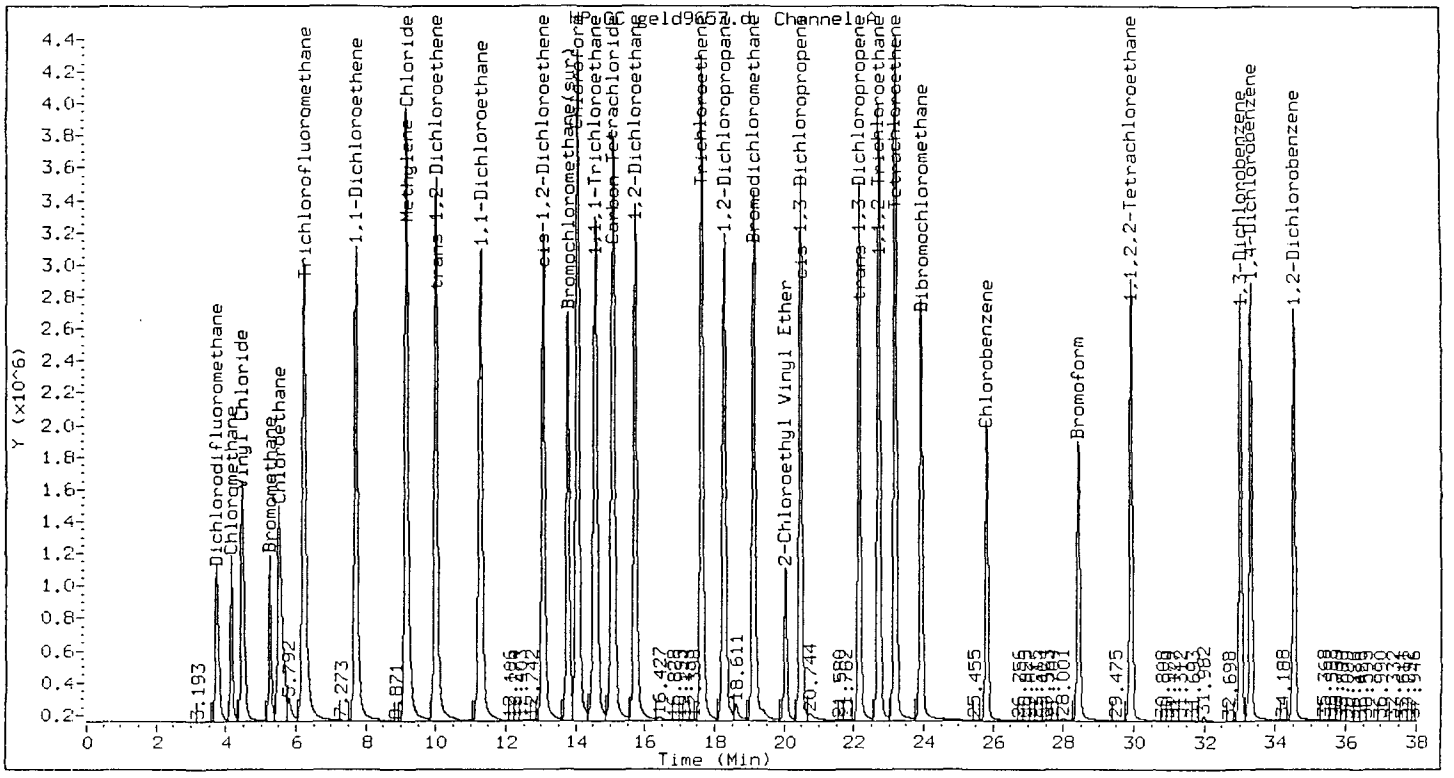
Lab File ID: GELD9657 Init. Calib. Date(s): 10/21/98 10/22/98

Heated Purge: (Y/N) N Init. Calib. Times: 2330 0810

COMPOUND	$\overline{RRF}$	RRF20	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	1778076.6	1724763.1		3.0	15.0
Chloromethane	805133.04	1078134.4		-33.9	15.0
Vinyl Chloride	2422358.1	2531021.6		-4.3	15.0
Bromomethane	1337750.3	1173528.7		12.3	15.0
Chloroethane	3518759.7	2973639.3		15.5	15.0
Trichlorofluoromethane	5659845.7	5575977.6		1.5	15.0
1,1-Dichloroethene	5607792.2	5085798.4		9.3	15.0
Methylene Chloride	7786674.0	6792071.4		12.8	15.0
trans-1,2-Dichloroethene	5973184.2	5622395.0		5.9	15.0
1,1-Dichloroethane	6174281.3	5721800.6		7.3	15.0
cis-1,2-Dichloroethene	5290804.8	5057569.2		4.4	15.0
Chloroform	7943411.4	7537348.9		5.1	15.0
1,1,1-Trichloroethane	6862595.5	6461666.4		5.8	15.0
Carbon Tetrachloride	7733206.3	7370176.0		4.7	15.0
1,2-Dichloroethane	5773076.9	5366856.0		7.0	15.0
Trichloroethene	7113536.5	6589256.4		7.4	15.0
1,2-Dichloropropane	5545477.7	5177202.6		6.6	15.0
Bromodichloromethane	5518308.0	5556018.2		0.1	15.0
2-Chloroethyl Vinyl Ether	1795887.6	1403152.8		21.9	15.0
cis-1,3-Dichloropropene	5064206.9	4970240.2		1.8	15.0
trans-1,3-Dichloropropene	4638888.9	4665766.7		-0.0	15.0
1,1,2-Trichloroethane	6059642.5	5777681.9		4.6	15.0
Tetrachloroethene	6815991.3	6598237.4		3.2	15.0
Dibromochloromethane	4107628.7	4088976.0		0.4	15.0
Chlorobenzene	2728040.4	2666583.7		2.2	15.0
Bromoform	2668763.0	2609322.8		2.2	15.0
1,1,2,2-Tetrachloroethane	3933857.6	3928171.6		0.1	15.0
1,3-Dichlorobenzene	3526131.6	3481536.2		1.3	15.0
1,4-Dichlorobenzene	3774834.1	3705221.7		1.8	15.0
1,2-Dichlorobenzene	3633199.9	3565250.9		1.9	15.0
1,1-Dichloropropene					15.0
Bromochloromethane(sur)	4057273.1	3891622.5		4.1	15.0

305817

Data File: /chem/VOAGC1.i/8021ELCD/10-21-98/24oct98.b/geld9657.d Page 1
Report Date 10/26/98 08:52



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/24oct98.b/8021E.m
Sample Info : GSTD020
Lab ID : GSTD020
Inj Date : 24-OCT-98 08:22:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 1
Sample Matrix : SOIL
Sample Type: CCALIB_4

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.691	3.701	0.010	34495261	19.400	19.400
Chloromethane	4.136	4.146	0.010	21562688	26.782	26.782
Vinyl Chloride	4.429	4.433	0.003	50620431	20.897	20.897
Bromomethane	5.225	5.247	0.022	23470573	17.545	17.545
Chloroethane	5.487	5.525	0.038	59472785	16.902	16.902
Trichlorofluoromethane	6.205	6.229	0.024	111519552	19.704	19.704
1,1-Dichloroethene	7.686	7.701	0.015	101715967	18.138	18.138
Methylene Chloride	9.129	9.143	0.014	135841427	17.445	17.445
trans-1,2-Dichloroethene	9.977	9.991	0.014	112447900	18.825	18.825

305818

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
1,1-Dichloroethane	11.249	11.262	0.013	114436012	18.534	18.534
cis-1,2-Dichloroethene	13.033	13.043	0.010	101151384	19.118	19.118
Chloroform	14.022	14.030	0.008	150746977	18.978	18.978
1,1,1-Trichloroethane	14.540	14.548	0.008	129233328	18.832	18.832
Carbon Tetrachloride	15.051	15.059	0.008	147403520	19.061	19.061
1,2-Dichloroethane	15.698	15.707	0.009	107337119	18.593	18.593
Trichloroethene	17.608	17.614	0.005	131785128	18.526	18.526
1,2-Dichloropropane	18.247	18.252	0.005	103544052	18.672	18.672
Bromodichloromethane	19.100	19.104	0.004	111120364	20.137	20.137
2-Chloroethyl Vinyl Ether	20.023	20.030	0.007	28063055	15.626	15.626
cis-1,3-Dichloropropene	20.448	20.453	0.005	99404804	19.629	19.629
trans-1,3-Dichloropropene	22.133	22.139	0.005	93315334	20.116	20.116
1,1,2-Trichloroethane	22.687	22.691	0.004	115553638	19.069	19.069
Tetrachloroethene	23.159	23.163	0.003	131964748	19.361	19.361
Dibromochloromethane	23.908	23.911	0.002	81779520	19.909	19.909
Chlorobenzene	25.803	25.806	0.003	53331673	19.549	19.549
Bromoform	28.403	28.405	0.002	52186456	19.555	19.555
1,1,2,2-Tetrachloroethane	29.901	29.902	0.001	78563431	19.971	19.971
1,3-Dichlorobenzene	32.996	32.997	0.001	69630724	19.747	19.747
1,4-Dichlorobenzene	33.284	33.285	0.001	74104434	19.631	19.631
1,2-Dichlorobenzene	34.504	34.505	0.001	71305018	19.626	19.626
Bromochloromethane(sur)	13.742	13.752	0.010	77832450	19.183	19.183

305819

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Matrix: SOIL Level: HIGH Lab Job No: I279

	LAB SAMPLE NO.	SMC1 #	SMC2 #	OTHER	TOT OUT
01	GG295	88			0
02	90821	109			0
03	90822	112			0
04	90823	115			0
05	90824	114			0
06	GG296	102			0
07	90823MS	104			0
08	90823MSD	109			0
09	90825	114			0
10	90826	112			0
11	90827	114			0
12	90828	114			0
13	90829	112			0
14	90830	113			0
15	90831	115			0
16	90832	110			0
17	GG297	107			0
18	90833	116			0
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

305820

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Matrix: WATER Level: LOW Lab Job No: I279

	LAB SAMPLE NO.	SMC1 #	SMC2 #	OTHER	TOT OUT
01	GG297A	102			0
02	90834	101			0
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

QC LIMITS

SMC1 = Bromochloromethane(sur (68-135)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

305821

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Matrix: SOIL Level: HIGH Lab Job No: I279

	LAB SAMPLE NO.	SMC1 #	SMC2 #	OTHER	TOT OUT
01	GG295	89			0
02	90821	84			0
03	90822	78			0
04	90823	91			0
05	90824	94			0
06	GG296	102			0
07	90825	96			0
08	90826	92			0
09	90827	93			0
10	90828	93			0
11	90829	92			0
12	90830	93			0
13	90831	92			0
14	90832	89			0
15	GG297	98			0
16	90833	101			0
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

		QC LIMITS
SMC1	= a,a,a,-Trifluorotoluen	(70-130)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

305822

VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Matrix: WATER Level: LOW Lab Job No: I279

	LAB SAMPLE NO.	SMC1 #	SMC2 #	OTHER	TOT OUT
01	GG297A	95			0
02	90834	92			0
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

QC LIMITS

SMC1 = a,a,a,-Trifluorotoluen (77-123)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

305823

VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
METHOD 8021

Matrix: SOIL

Level: HIGH

Matrix Spike - Lab Sample No.: 90823

MS Sample from Lab Job No: I279

QA Batch: 3706

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Chloromethane	2460	0.00	4750	193*	70-130
Vinyl Chloride	2460	0.00	3400	138*	70-130
Bromomethane	2460	0.00	2430	99	70-130
Chloroethane	2460	0.00	2350	96	70-130
Trichlorofluoromethane	2460	0.00	2720	111	70-130
1,1-Dichloroethene	2460	0.00	2330	95	70-130
Methylene Chloride	2460	0.00	2210	90	70-130
trans-1,2-Dichloroethene	2460	0.00	2350	96	70-130
1,1-Dichloroethane	2460	0.00	2240	91	70-130
Chloroform	2460	0.00	2460	100	70-130
1,1,1-Trichloroethane	2460	0.00	2360	96	70-130
Carbon Tetrachloride	2460	0.00	2380	97	70-130
1,2-Dichloroethane	2460	0.00	2360	96	70-130
Trichloroethene	2460	0.00	2370	96	70-130
1,2-Dichloropropane	2460	0.00	2460	100	70-130
Bromodichloromethane	2460	0.00	2520	102	70-130
2-Chloroethyl Vinyl Ethe	2460	0.00	2490	101	70-130
cis-1,3-Dichloropropene	2460	0.00	2370	96	70-130
trans-1,3-Dichloropropen	2460	0.00	2420	98	70-130
1,1,2-Trichloroethane	2460	0.00	2340	95	70-130
Tetrachloroethene	2460	0.00	2430	99	70-130
Dibromochloromethane	2460	0.00	2600	106	70-130
Chlorobenzene	2460	0.00	2380	97	70-130
Bromoform	2460	0.00	2570	104	70-130
1,1,2,2-Tetrachloroethan	2460	0.00	2200	89	70-130
1,3-Dichlorobenzene	2460	0.00	2590	105	70-130
1,4-Dichlorobenzene	2460	0.00	2560	104	70-130
1,2-Dichlorobenzene	2460	0.00	2460	100	70-130

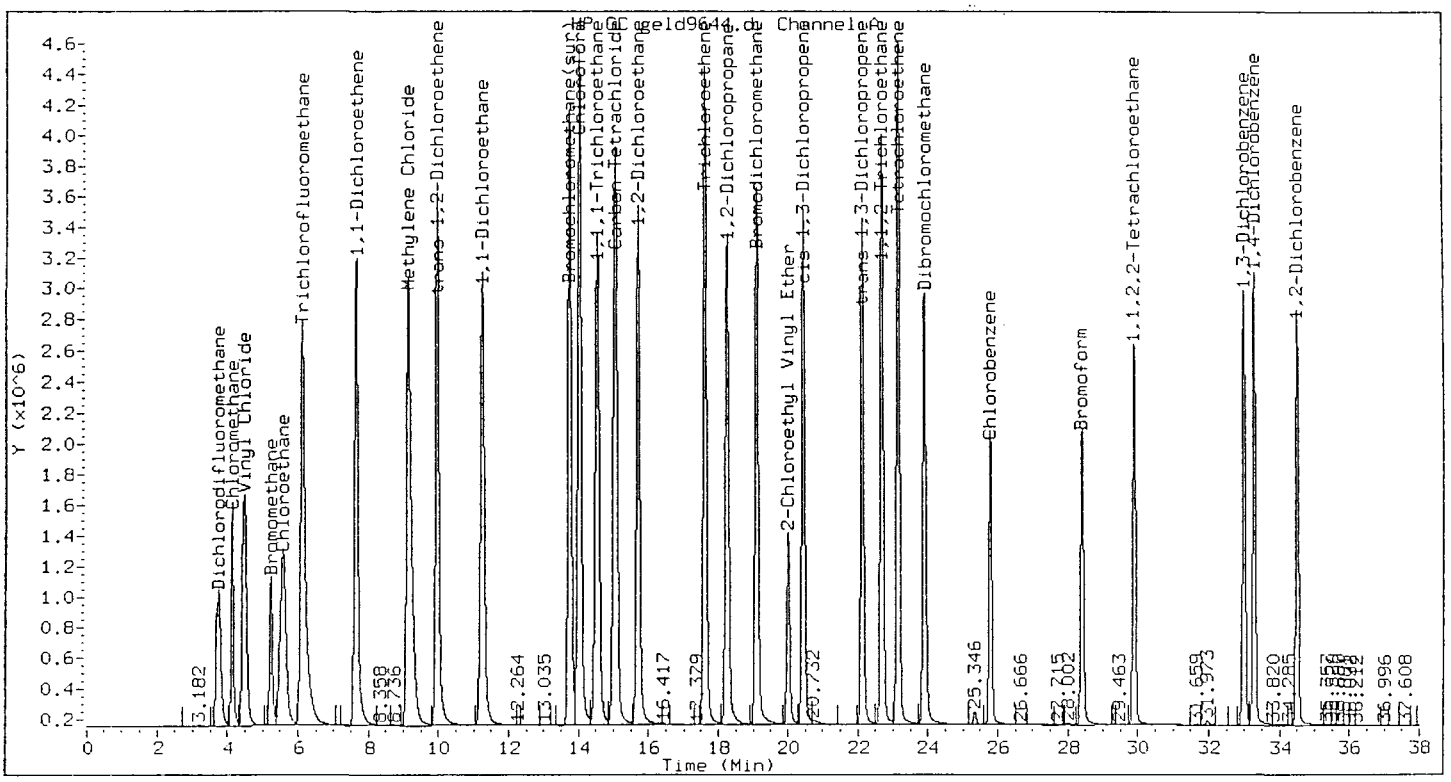
305824

Compound	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Chloromethane	2460	4010	163*	17	40	70-130
Vinyl Chloride	2460	3620	147*	6	40	70-130
Bromomethane	2460	2760	112	13	40	70-130
Chloroethane	2460	2690	109	13	40	70-130
Trichlorofluoromethane	2460	2650	108	3	40	70-130
1,1-Dichloroethene	2460	2700	110	15	40	70-130
Methylene Chloride	2460	2580	105	15	40	70-130
trans-1,2-Dichloroethene	2460	2780	113	17	40	70-130
1,1-Dichloroethane	2460	2640	107	16	40	70-130
Chloroform	2460	2870	117	15	40	70-130
1,1,1-Trichloroethane	2460	2750	112	15	40	70-130
Carbon Tetrachloride	2460	2750	112	14	40	70-130
1,2-Dichloroethane	2460	2770	113	16	40	70-130
Trichloroethene	2460	2790	113	16	40	70-130
1,2-Dichloropropane	2460	2920	119	17	40	70-130
Bromodichloromethane	2460	2980	121	17	40	70-130
2-Chloroethyl Vinyl Ethe	2460	2960	120	17	40	70-130
cis-1,3-Dichloropropene	2460	2860	116	19	40	70-130
trans-1,3-Dichloropropen	2460	2880	117	17	40	70-130
1,1,2-Trichloroethane	2460	2690	109	14	40	70-130
Tetrachloroethene	2460	2790	113	14	40	70-130
Dibromochloromethane	2460	3020	123	15	40	70-130
Chlorobenzene	2460	2910	118	20	40	70-130
Bromoform	2460	3100	126	19	40	70-130
1,1,2,2-Tetrachloroethan	2460	2620	107	17	40	70-130
1,3-Dichlorobenzene	2460	3080	125	17	40	70-130
1,4-Dichlorobenzene	2460	3030	123	17	40	70-130
1,2-Dichlorobenzene	2460	2920	119	17	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: 4 out of 56 outside limits

COMMENTS: _____

305825



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 90823MS;;50
Lab ID : 90823MS
Inj Date : 23-OCT-98 12:33:00
Operator : KB
Cpnd Sublist: 601

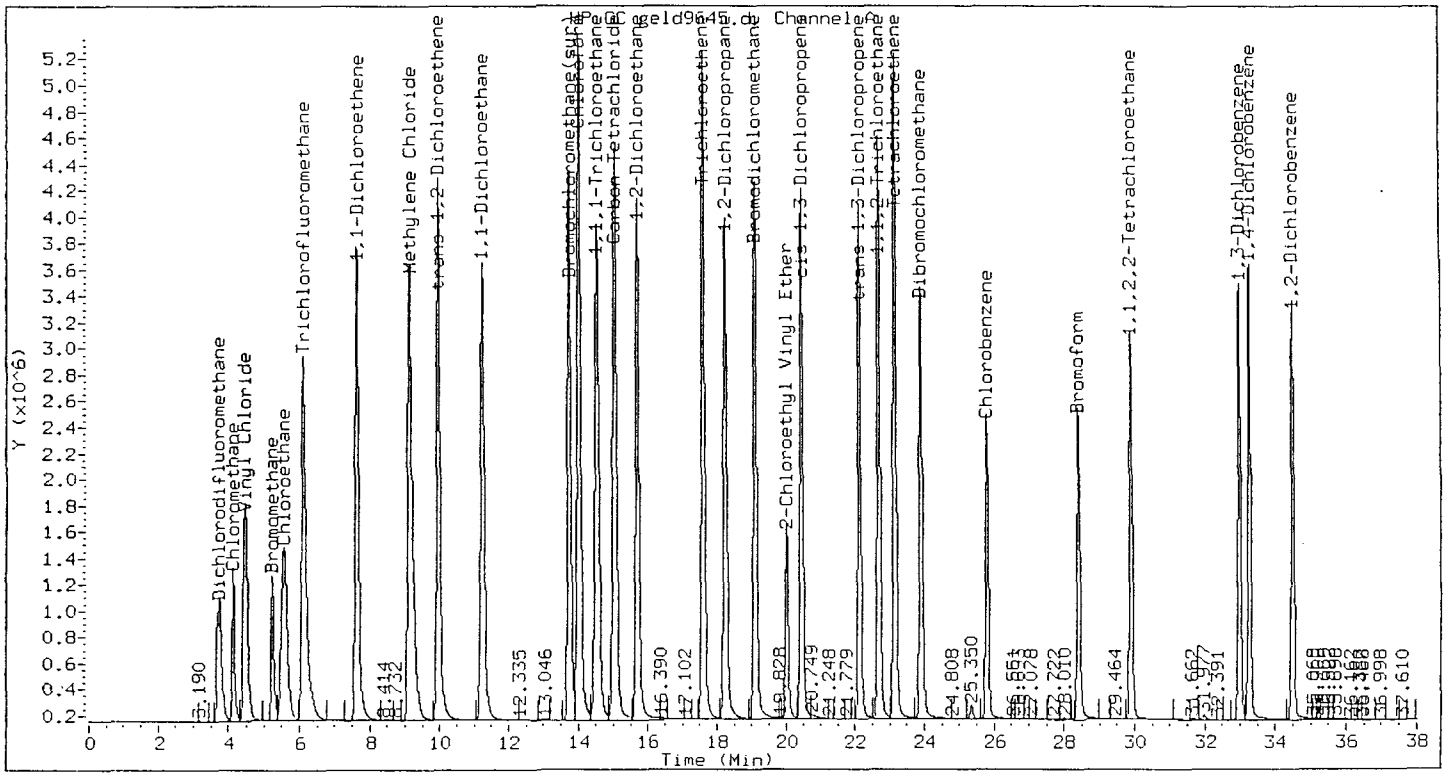
Inst ID : VOAGC1.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: MS

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/Kg)
Dichlorodifluoromethane	3.738	3.701	0.037	42746496	24.041	2956.328
Chloromethane	4.126	4.146	0.020	31122632	38.655	4753.476
Vinyl Chloride	4.456	4.433	0.023	66958736	27.642	3399.159
Bromomethane	5.222	5.247	0.025	26395954	19.732	2426.414
Chloroethane	5.561	5.525	0.036	67227558	19.105	2349.418
Trichlorofluoromethane	6.104	6.229	0.125	125377498	22.152	2724.066
1,1-Dichloroethene	7.628	7.701	0.073	106278397	18.952	2330.535
Methylene Chloride	9.120	9.143	0.024	139904292	17.967	2209.437
trans-1,2-Dichloroethene	9.950	9.991	0.040	114026403	19.090	2347.481

305826

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1,1-Dichloroethane	11.233	11.262	0.029	112342437	18.195	2237.485
Chloroform	14.015	14.030	0.015	158777499	19.989	2458.015
1,1,1-Trichloroethane	14.525	14.548	0.024	131648542	19.183	2359.013
Carbon Tetrachloride	15.034	15.059	0.025	149892618	19.383	2383.545
1,2-Dichloroethane	15.689	15.707	0.018	110752414	19.184	2359.112
Trichloroethene	17.598	17.614	0.016	137309762	19.303	2373.660
1,2-Dichloropropane	18.239	18.252	0.012	110879151	19.995	2458.745
Bromodichloromethane	19.094	19.104	0.010	113207085	20.515	2522.727
2-Chloroethyl Vinyl Ether	20.017	20.030	0.012	36393504	20.265	2491.996
cis-1,3-Dichloropropene	20.441	20.453	0.012	97602889	19.273	2370.030
trans-1,3-Dichloropropene	22.127	22.139	0.011	91169798	19.653	2416.794
1,1,2-Trichloroethane	22.682	22.691	0.009	115229428	19.016	2338.401
Tetrachloroethene	23.148	23.163	0.015	134919517	19.795	2434.156
Dibromochloromethane	23.902	23.911	0.009	86986396	21.177	2604.131
Chlorobenzene	25.795	25.806	0.011	52851468	19.373	2382.368
Bromoform	28.397	28.405	0.009	55696456	20.870	2566.375
1,1,2,2-Tetrachloroethane	29.896	29.902	0.006	70361164	17.886	2199.465
1,3-Dichlorobenzene	32.986	32.997	0.011	74329930	21.080	2592.196
1,4-Dichlorobenzene	33.275	33.285	0.010	78433076	20.778	2555.077
1,2-Dichlorobenzene	34.495	34.505	0.010	72826884	20.045	2464.933
Bromochloromethane(sur)	13.732	13.752	0.020	125994245	31.054	3818.731

305827



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 90823MSD;;50
Lab ID : 90823MSD
Inj Date : 23-OCT-98 13:17:00
Operator : KB
Cpnd Sublist: 601

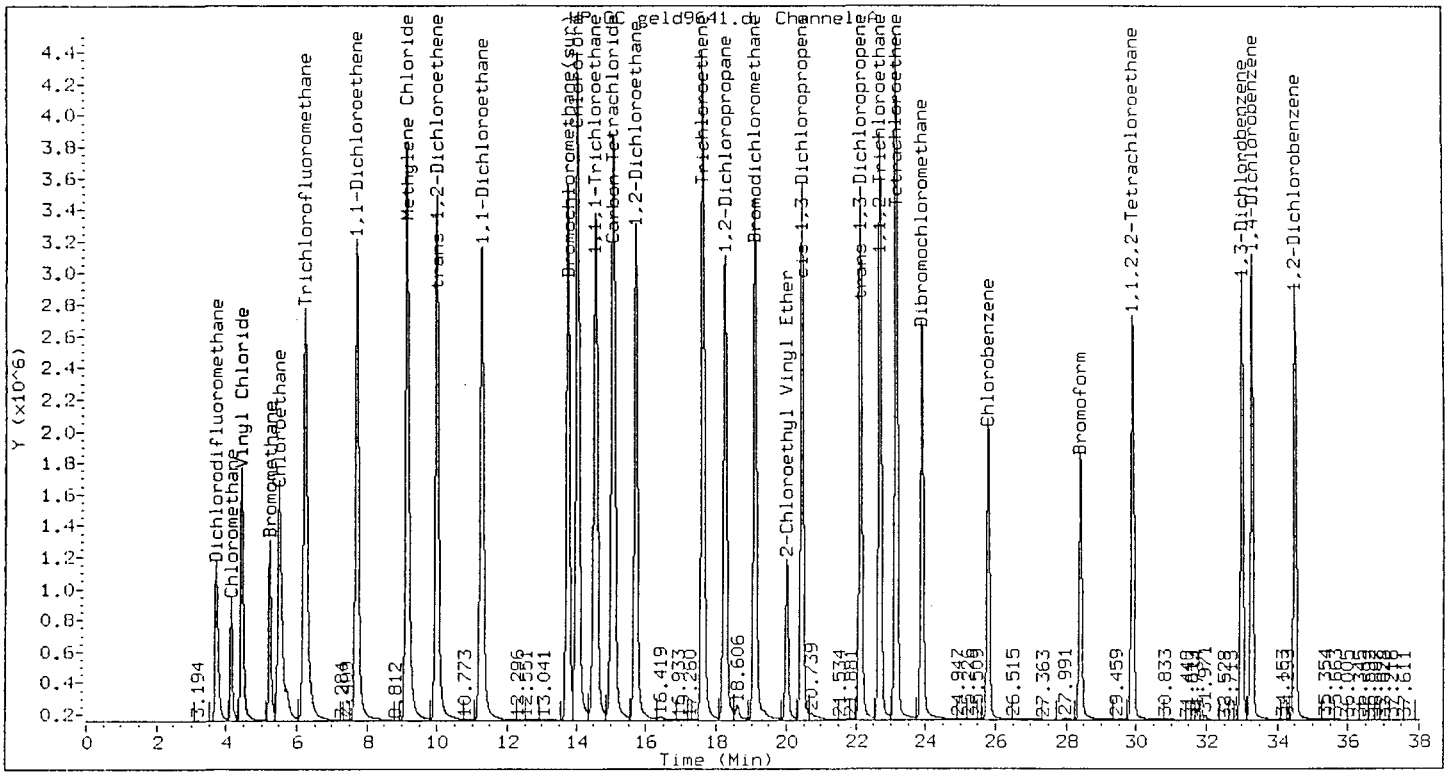
Inst ID : VOAGC1.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: MSD

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
Dichlorodifluoromethane	3.744	3.701	0.043	44644431	25.108	3087.589
Chloromethane	4.139	4.146	0.007	26286977	32.649	4014.908
Vinyl Chloride	4.464	4.433	0.032	71281339	29.426	3618.596
Bromomethane	5.234	5.247	0.013	30084146	22.489	2765.447
Chloroethane	5.558	5.525	0.034	76991690	21.880	2690.648
Trichlorofluoromethane	6.107	6.229	0.122	122042918	21.563	2651.616
1,1-Dichloroethene	7.630	7.701	0.071	122934295	21.922	2695.776
Methylene Chloride	9.130	9.143	0.013	163253772	20.966	2578.184
trans-1,2-Dichloroethene	9.959	9.991	0.032	135008016	22.602	2779.433

305828

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1,1-Dichloroethane	11.243	11.262	0.019	132678341	21.489	2642.508
Chloroform	14.023	14.030	0.007	185545475	23.358	2872.407
1,1,1-Trichloroethane	14.531	14.548	0.017	153724925	22.400	2754.600
Carbon Tetrachloride	15.040	15.059	0.019	173154300	22.391	2753.444
1,2-Dichloroethane	15.697	15.707	0.010	130186514	22.551	2773.073
Trichloroethene	17.603	17.614	0.011	161163906	22.656	2786.024
1,2-Dichloropropane	18.244	18.252	0.008	131509766	23.715	2916.229
Bromodichloromethane	19.099	19.104	0.005	133534123	24.198	2975.699
2-Chloroethyl Vinyl Ether	20.021	20.030	0.009	43277544	24.098	2963.371
cis-1,3-Dichloropropene	20.444	20.453	0.009	117837316	23.269	2861.370
trans-1,3-Dichloropropene	22.132	22.139	0.007	108623776	23.416	2879.477
1,1,2-Trichloroethane	22.686	22.691	0.005	132654768	21.892	2692.021
Tetrachloroethene	23.153	23.163	0.010	154598837	22.682	2789.201
Dibromochloromethane	23.905	23.911	0.005	101014435	24.592	3024.091
Chlorobenzene	25.800	25.806	0.006	64521142	23.651	2908.398
Bromoform	28.404	28.405	0.002	67304402	25.219	3101.245
1,1,2,2-Tetrachloroethane	29.901	29.902	0.001	83872752	21.321	2621.832
1,3-Dichlorobenzene	32.988	32.997	0.009	88245304	25.026	3077.483
1,4-Dichlorobenzene	33.276	33.285	0.009	93041493	24.648	3030.969
1,2-Dichlorobenzene	34.497	34.505	0.008	86352957	23.768	2922.742
Bromochloromethane(sur)	13.740	13.752	0.012	132740763	32.717	4023.210

305829



Method : /chem/VOAGC1.i/8021ELCD/10-21-98/23oct98.b/8021E.m
Sample Info : 3706BS
Lab ID : 3706BS
Inj Date : 23-OCT-98 09:52:00
Operator : KB
Cpnd Sublist: 601

Inst ID : VOAGC1.i
Dil Factor : 50
Sample Matrix : SOIL
Sample Type: METHSPIKE

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
Dichlorodifluoromethane	3.692	3.701	0.008	33101953	18.617	2327.090
Chloromethane	4.135	4.146	0.011	16649982	20.680	2584.974
Vinyl Chloride	4.425	4.433	0.007	48047306	19.835	2479.366
Bromomethane	5.225	5.247	0.022	25719419	19.226	2403.234
Chloroethane	5.487	5.525	0.038	66991755	19.038	2379.807
Trichlorofluoromethane	6.218	6.229	0.011	105674367	18.671	2333.861
1,1-Dichloroethene	7.690	7.701	0.012	105776990	18.863	2357.813
Methylene Chloride	9.129	9.143	0.014	131022819	16.827	2103.318
trans-1,2-Dichloroethene	9.975	9.991	0.016	111313853	18.636	2329.450

305830

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/Kg)
1,1-Dichloroethane	11.247	11.262	0.015	115791698	18.754	2344.234
Chloroform	14.016	14.030	0.014	149920834	18.874	2359.201
1,1,1-Trichloroethane	14.535	14.548	0.013	131737298	19.196	2399.553
Carbon Tetrachloride	15.046	15.059	0.013	149598316	19.345	2418.116
1,2-Dichloroethane	15.692	15.707	0.015	104600913	18.119	2264.843
Trichloroethene	17.603	17.614	0.011	136292096	19.160	2394.943
1,2-Dichloropropane	18.241	18.252	0.011	103053537	18.583	2322.918
Bromodichloromethane	19.094	19.104	0.010	109177112	19.785	2473.066
2-Chloroethyl Vinyl Ether	20.017	20.030	0.012	30230171	16.833	2104.125
cis-1,3-Dichloropropene	20.442	20.453	0.011	99639743	19.675	2459.411
trans-1,3-Dichloropropene	22.128	22.139	0.011	92580539	19.957	2494.685
1,1,2-Trichloroethane	22.680	22.691	0.011	112320116	18.536	2316.971
Tetrachloroethene	23.152	23.163	0.010	134301563	19.704	2462.987
Dibromochloromethane	23.900	23.911	0.010	78016457	18.993	2374.133
Chlorobenzene	25.795	25.806	0.012	54035592	19.807	2475.934
Bromoform	28.393	28.405	0.012	50124549	18.782	2347.743
1,1,2,2-Tetrachloroethane	29.891	29.902	0.010	74357961	18.902	2362.756
1,3-Dichlorobenzene	32.985	32.997	0.012	75029880	21.278	2659.780
1,4-Dichlorobenzene	33.273	33.285	0.012	78948073	20.914	2614.290
1,2-Dichlorobenzene	34.493	34.505	0.012	75436748	20.763	2595.396
Bromochloromethane(sur)	13.736	13.752	0.016	105257648	25.943	3242.869

305831

Subdirectory: 102198A Analysis: 8021

DATE	DATA FILE ID	Ln	Std/Sample ~~tot H~~	Std Conc	JOB	QA	LPB	PH	W/V	D.F	SubList	Comments	Analyst
10/21/98	gcld 9617	3	6810001C								601	NU	KB
	9618	4	001C	std.s								G	
	9619	5	005C	V98-525								G	
	9620	6	010C	V98-527								G	
	9621	7	020C	V98-529								did not purge	
	9622	8	040C									G	
	9623	9	020C	sum V98-565								G	

Subdirectory: P102198A Analysis: 8021H (TFT sum)

10/21/98	gpid 1816	3	6810001C								sum	NU	KB
	1817	4	001C	sum V98-562								G	
	1818	5	005C									G	
	1819	6	010C									G	
	1820	7	020C									did not purge	
	1821	8	040C									G	
	1822	9	020C									G	

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Subdirectory: 2102298 Analysis: 8021a

DATE	DATA FILE ID	#'s	SAMPLE	Std Lot #	JOB	QA	LPB	pH	W/V	D.F.	SUBLIST	Comments	Analyst
10/22/98	gold 9624	9	G80020				66				601	G	KB
	9625	10	3701 B5				295					G	
	9626	11	66 295	See								G	
	9627	12	89298		I051	3701			1.06g / 10	500x		NG (aliquot taken from methanol portion only)	
	9628	13	89308	pg	I053	3700			10.2 / 25ml	100x		G	
	9629	14	90821	27	I279	3706			10.8 / 25ml	50x		G	
	9630	12	89298*		I051	3701			1.06g / 10ml	10,000x		RR 2500x	
	9631	12	89298*		↓	↓			↓	2500x		G; dil for non-targets on PID!!!	
	9632	15	89298MS		↓	↓			↓	↓		G; swvi dil below MDL	
	9633	16	89298MSD		↓	↓			↓	↓		G; spike amt. dil below MDL	
	9634	4	90822		I279	3706			10.2g / 25ml	50x		G	
	9635	5	90823		↓	↓			10.7g / 25ml	↓		G	
	9636	6	90824						11.0g / 25ml			G	
	9637	9	G80020									G	
	9638	16	G80020									NG	

* aliquot for sample taken immediately after shaking product in methanol (so as to be evenly dispersed)

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10/22/98
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PROJECT

Notebook No. _____

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Subdirectory: E102398 Analysis: 8021c

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DATE	DATA FILE ID	A/S	SAMPLE	Std Lot #	JOB	QA	LPB	pH	W/V	D.F.	SUBLIST	Comments	Analyst
10/23/98	gold 9640	9	GSTD020				GG				601	G	(CB)
	9641	10	3706 BS				296					G	
	9642	11	GG 296	Stds								NG (DCDFM 1.3)	
	9643	11	GG 296	V98-525								G	
	9644	12	90823MS	V98-527	I279	3706			10.7g/25ml	50x		G	
	9645	13	90823MSD	V98-529					10.7g/25ml			G	
	9646	14	90825						9.5g/25ml			G	
	9647	15	90826	BS/MS					10.0g/25ml			G	
	9648	16	90827	V98-526					11.4g/25ml			G	
	9649	1	90828	V98-528					11.4g/25ml			G	
	9650	2	90829						10.5g/25ml			G	
	9651	4	90830	Surr					11.2g/25ml			G	
	9652	5	90831						10.5g/25ml			G	
	9653	6	90832	V98-565					11.2g/25ml			G	
	9654	9	GSTD020									G	
	9655	10	GSTD020									NW	
		11											

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305834

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Subdirectory: 5102498 Analysis: 8021e

DATE	DATA FILE ID.	Alg	SAMPLE	Std Col #	JOB	QA	LPB	pH	W/V	D.F.	SUBLIST	Comments	Analyst
10/24/98	gold 9657	9	6580020								601	G	KB
	9658	10	BS									G	
	9659	11	66297									G	
	9660	12	66297A	Std								G	
	9661	12	90833	PQ	1279	3706	66 297		100g/25ml	50x		G	
	9662	13	90834	30			66 297A			5+		G	
	9663	9	6580020									(QC)	
	9664	14	6580020									G	

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10/24/98
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Date

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305835

Site: Klockner & Klockner

Lab Job No: I279

Date Sampled: 10/16/98
Date Received: 10/16/98
Matrix: SOIL

Date Analyzed: 10/20/98
QA Batch: 1404

TOTAL ORGANIC CARBON

Envirotech Sample #	Client ID	% Moisture	Dilution Factor	Analytical Result mg/kg (Dry Wt.)
90835	SSGC-4A_2-4	9.5	1.0	10400
90836	SSGC-3A_4.5-5.5	7.1	1.0	429
90837	SSGC-2A_3-4	14.6	2.5	1960

Quantitation Limit for Total Organic Carbon is 100 mg/kg for an undiluted sample.

305836

TOTAL ORGANIC CARBON

Matrix: SOLID

Lab Sample No.: 90170

QA Batch No: 1404

Lab Job No.: I186

Laboratory Blank	
Blank Conc. (mg/kg)	Quant Limit (mg/kg)
ND	100

Sample Replicates				
#1 (mg/kg)	#2 (mg/kg)	#3 (mg/kg)	#4 (mg/kg)	AVG (mg/kg)
188000	*182000*	*194000*	*182000*	*186500*

Standard Deviation	%RSD	Control Limits
5744.56	3.08	26.3

LCS				
Vendor Name	Lot #	Mean Value (mg/kg)	Range (mg/kg)	Measured Value (mg/kg)
ERA	1125	6250	4690-7810	6140

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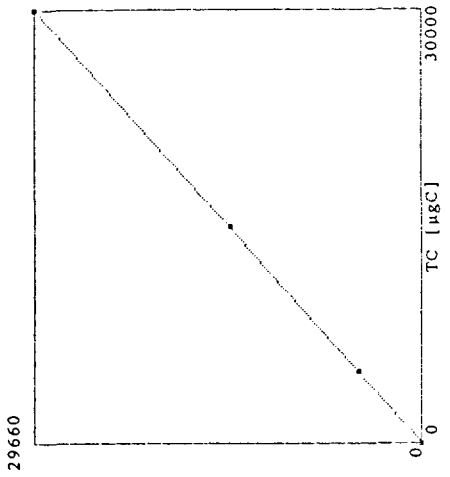

Batch	Job	Sample	#	D.L	Sample amt(g)	Readout	%cal'd	Results	spk	%Rec
		ICV	1			14875		14900	15000	99.3
		ICB	2			123.4		ND		
		PB	3			123.4		ND		
		LCS01125	4		0.9944	6886		6890		
1404	I186	90167 #	5	20x	0.0551	99999	71.0	291000		
1405	I134	89824	6	4x	0.2501	17845	80.7	22100		
↓	↓	89832	7	4x	0.2533	20152	87.6	23000		
1406	I235	90526	8	2x	0.4723	19770	42.5	46500		
		90527	9	2x	0.4962	20224	58.1	34800		
		90528	10	2x	0.4820	19378	42.0	46100		
		90529	11	2x	0.5874	17116	74.0	23100		
		90530	12	2x	0.5483	18819	39.1	48100		
		CCV	13			15028		15000	15000	100%
		CCB	14			123.4		ND		
		90531	15	2x	0.5209	23219	46.3	50100		
		90532	16	2x	0.5243	24650	43.0	57300		
		90533	17	2x	0.5181	23798	60.3	39500		
		90534	18	2x	0.5130	22627	45.5	49700		
		90534	19	2x	0.5123	23621		51900		
		90534	20	2x	0.4934	23103		50800		
		90534	21	2x	0.5174	23339		51300		
1405	I289	90862	22		0.9815	9838	85.3	11500		
1404	I279	90855	23		0.9715	NA	90.5			

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Signed	Date	Signed	Date
[illegible]	10/20/98	[illegible]	10/20/98

PROJECT TOC

Notebook No. 01123

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Batch	Job	Sample	#	D.L	Sample amt(s)	Readout	% Solid	Results	spk	% Rec
1404	I279	90835	24		0.9902	9373	90.5	10400		
		CCV	25			15217		15200	15000	101%
		CCB	26			123.4		ND		

* calculated manually by Area
Area = 11156

2758 – 2000 ppm primary stock
2757 – " – secondary stock

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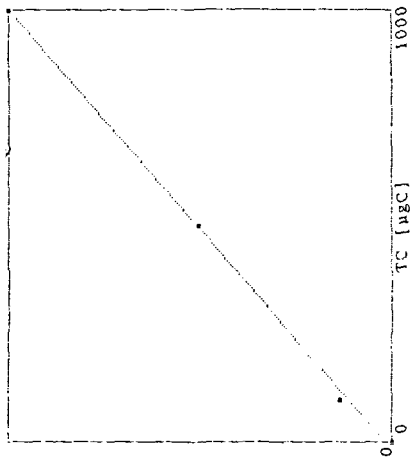
305839

Signed	Date	Signed	Date
[illegible]	10/20/98	[illegible]	10/26/98

BATCH	JOB	SAMPLE	RUN#	DIL	SAMPLE AMT (g)	READOUT	% SOLID	RESULTS	SPK	% REC



CAL CURVE F# 3
TC 4-POINT
LEAST SQUARES r=1.000

[CONDITIONS]
RANGE : x1
CELL LENGTH : W-SHORT
DATE : 10(OCT)-26-1998
[DATA]

STD CONC	AMNT	µgC	AREA	#
1000ppm	1000mg	1000	33451	1T
500.0ppm	1000mg	500.0	16835	1
100.0ppm	1000mg	100.0	4466	1
0.0ppm	1000mg	0.0	0	1

		ICV	1			504.3		504.3 int	500	
		ICB	2			-13.4		~~-13~~ int ND		
		PB	3			37.36		ND		
1406	I251	90614	4		.9958	78.92	78.2	101		
↓	↓	90616	5	2X	.5063	853.3	66.7	1280		
1404	I279	90836	6		.9970	398.3	92.9	429		
1406	I324	91038	7		.9994	409.8	89.5	466		
1404	I279	90837	8	2.5X	.4047	1674	85.4	1960		
1406	I485	92162	9		1.0000	115.3	75.6	152		
	I486	92175	10	2X	.5056	974.8	87.5	1110		
		92177	11	2X	.5041	1203	81.8	1470		
		92174	12	20X	.0542	13621	81.0	16800		
		CCV	13			458.4		458	500	
		CCB	14			-15.2		ND		
		92176	15	20X	.0560	9095	81.0	11200		
		CCV	16			471.4		471	500	
		CCB	17			-13.3		ND		

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Read and Understood By 305840

Immylou Torres — Signed
10-26-98 — Date
Signed
Date