DEPARTMENT OF THE ARMY
SENECA ARMY DEPOT
ROMULUS, NEW YORK 14541-5001

February 17, 1989

452-30

REPLY TO
ATTENTION OF

Office of Commander

Mr. Joseph Nogle
RD East Lake Road
Geneva, New York 14456

Dear Mr. Nogle:

Enclosed is a copy of the laboratory results for our January 26, 1989 sampling of the three wells on your Smith Vineyard Road property.

As shown in the laboratory report, none of the suspected chemicals were detected in any of your wells.

If you have any further questions, please feel free to contact Randall W. Battaglia at (607) 869-1450.

Sincerely,

William R. Holmes
Colonel, Ordnance Corps
Commanding

Enclosure

Copies Furnished:

Mr. and Mrs. Thomas Shaw, Smith Vineyard Road, MacDougall, NY 14541

Mr. Charles Carroll, Seneca County Health Department, Thurber Drive, Waterloo, NY 13165

Mr. John J. Nicit, Attorney at Law, 20 W. Main Street, Waterloo, NY 13165

CS Environmental LABORATORY, INC.
5854 Butternut Drive, East Syracuse, NY 13057

New York State
Approved Laboratory
(315) 446-8795

NATIONAL ENVIRONMENTAL TESTING NORTHEAST, INC.

SAMPLE #1138

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
BROMODICHLOROMETHANE	<1.0	ug/l
1,2-DICHLOROPROPANE	<1.0	ug/l
TRANS-1,3-DICHLOROPROPENE	<1.0	ug/l
TRICHLOROETHYLENE	<1.0	ug/l
DIBROMOCHLOROMETHANE	<1.0	ug/l
CIS-1,3-DICHLOROPROPENE	<1.0	ug/l
1,1,2-TRICHLOROETHANE	<1.0	ug/l
BENZENE	<1.0	ug/l
2-CHLOROETHYLVINYL ETHER	<1.0	ug/l
BROMOFORM	<1.0	ug/l
TETRACHLOROETHYLENE	<1.0	ug/l
1,1,2,2-TETRACHLOROETHANE	<1.0	ug/l
TOLUENE	<1.0	ug/l
1,2 DICHLOROBENZENE	<1.0	ug/l
1,3 DICHLOROBENZENE	<1.0	ug/l
1,4 DICHLOROBENZENE	<1.0	ug/l
TRICHLOROFLUOROMETHANE	<1.0	ug/l

NYSDOH - ELAP #10067

APPROVED BY: Conrad Teufel Jr. DATE: 2/8/89

Environmental LABORATORY, INC.
5854 Butternut Drive, East Syracuse, NY 13057

New York State
Approved Laboratory
(315) 446-8795

NATIONAL ENVIRONMENTAL TESTING NORTHEAST, INC.

To: SENECA ARMY DEPOT
BUILDING 323 MAT MGT BR
ROMULUS, NY 14541

Date: Feb 07 1989

Attention: COMMANDER

****

SAMPLE #827

LABORATORY ANALYSIS REPORT

****

SAMPLE SUMMARY

CLIENT : SENECA ARMY DEPOT
DATE RECEIVED : 01/26/89

JOB # : 179.005.00
DATE COLLECTED : 01/26/89

LOCATION : DEEP WELL (SOUTH) WATER FILTER
TIME COLLECTED : 1100

METHOD :GRAB

PARAMETER	RESULTS	UNITS
CHLOROMETHANE	<1.0	ug/l
BROMOMETHANE	<1.0	ug/l
VINYL CHLORIDE	<1.0	ug/l
CHLOROETHANE	<1.0	ug/l
METHYLENE CHLORIDE	<1.0	ug/l
CHLOROBENZENE	<1.0	ug/l
1,1-DICHLOROETHYLENE	<1.0	ug/l
1,1-DICHLOROETHANE	<1.0	ug/l
TRANS-1,2-DICHLOROETHYLENE	<1.0	ug/l
ETHYLBENZENE	<1.0	ug/l
CHLOROFORM	<1.0	ug/l
1,2-DICHLOROETHANE	<1.0	ug/l
1,1,1-TRICHLOROETHANE	<1.0	ug/l
CARBON TETRACHLORIDE	<1.0	ug/l

CS Environmental LABORATORY, INC.
5854 Butternut Drive, East Syracuse, NY 13057

New York State
Approved Laboratory
(315) 446-8795

NATIONAL ENVIRONMENTAL TESTING NORTHEAST, INC.

SAMPLE #827

LABORATORY ANALYSIS REPORT

PARAMETER	RESULTS	UNITS
BROMODICHLOROMETHANE	<1.0	ug/l
1,2-DICHLOROPROPANE	<1.0	ug/l
TRANS-1,3-DICHLOROPROPENE	<1.0	ug/l
TRICHLOROETHYLENE	<1.0	ug/l
DIBROMOCHLOROMETHANE	<1.0	ug/l
CIS-1,3-DICHLOROPROPENE	<1.0	ug/l
1,1,2-TRICHLOROETHANE	<1.0	ug/l
BENZENE	<1.0	ug/l
2-CHLOROETHYLVINYL ETHER	<1.0	ug/l
BROMOFORM	<1.0	ug/l
TETRACHLOROETHYLENE	<1.0	ug/l
1,1,2,2-TETRACHLOROETHANE	<1.0	ug/l
TOLUENE	<1.0	ug/l
1,2 DICHLOROBENZENE	<1.0	ug/l
1,3 DICHLOROBENZENE	<1.0	ug/l
1,4 DICHLOROBENZENE	<1.0	ug/l
TRICHLOROFLUOROMETHANE	<1.0	ug/l

NYSDOH - ELAP #10067

APPROVED BY: Conrad Teufel Jr. DATE: 2/8/89

Environmental LABORATORY, INC.
5854 Butternut Drive, East Syracuse, NY 13057

New York State
Approved Laboratory
(315) 446-8795

NATIONAL ENVIRONMENTAL TESTING NORTHEAST, INC.

To: SENECA ARMY DEPOT
BUILDING 323 MAT MGT BR
ROMULUS, NY 14541

Date: Feb 07 1989

Attention: COMMANDER

****

SAMPLE #828

LABORATORY ANALYSIS REPORT

****

SAMPLE SUMMARY

CLIENT : SENECA ARMY DEPOT
JOB # : 179.005.00
LOCATION : SHALLOW WELL(NORTH)GARDEN HOSE
METHOD :GRAB

DATE RECEIVED : 01/26/89
DATE COLLECTED : 01/26/89
TIME COLLECTED : 1110

PARAMETER	RESULTS	UNITS
CHLOROMETHANE	<1.0	ug/l
BROMOMETHANE	<1.0	ug/l
VINYL CHLORIDE	<1.0	ug/l
CHLOROETHANE	<1.0	ug/l
METHYLENE CHLORIDE	<1.0	ug/l
CHLOROBENZENE	<1.0	ug/l
1,1-DICHLOROETHYLENE	<1.0	ug/l
1,1-DICHLOROETHANE	<1.0	ug/l
TRANS-1,2-DICHLOROETHYLENE	<1.0	ug/l
ETHYLBENZENE	<1.0	ug/l
CHLOROFORM	<1.0	ug/l
1,2-DICHLOROETHANE	<1.0	ug/l
1,1,1-TRICHLOROETHANE	<1.0	ug/l
CARBON TETRACHLORIDE	<1.0	ug/l

Environmental LABORATORY, INC.
5854 Butternut Drive, East Syracuse, NY 13057

New York State
Approved Laboratory
(315) 446-8795

NATIONAL ENVIRONMENTAL TESTING NORTHEAST, INC.

****

SAMPLE #828

LABORATORY ANALYSIS REPORT

****

PARAMETER	RESULTS	UNITS
BROMODICHLOROMETHANE	<1.0	ug/l
1,2-DICHLOROPROPANE	<1.0	ug/l
TRANS-1,3-DICHLOROPROPENE	<1.0	ug/l
TRICHLOROETHYLENE	<1.0	ug/l
DIBROMOCHLOROMETHANE	<1.0	ug/l
CIS-1,3-DICHLOROPROPENE	<1.0	ug/l
1,1,2-TRICHLOROETHANE	<1.0	ug/l
BENZENE	<1.0	ug/l
2-CHLOROETHYLVINYL ETHER	<1.0	ug/l
BROMOFORM	<1.0	ug/l
TETRACHLOROETHYLENE	<1.0	ug/l
1,1,2,2-TETRACHLOROETHANE	<1.0	ug/l
TOLUENE	<1.0	ug/l
1,2 DICHLOROBENZENE	<1.0	ug/l
1,3 DICHLOROBENZENE	<1.0	ug/l
1,4 DICHLOROBENZENE	<1.0	ug/l
TRICHLOROFLUOROMETHANE	<1.0	ug/l

NYSDOH - ELAP #10067

APPROVED BY: Conrad Teufel Jr. DATE: 2/8/89

Environmental LABORATORY, INC.
5854 Butternut Drive, East Syracuse, NY 13057

New York State
Approved Laboratory
(315) 446-8795

NATIONAL ENVIRONMENTAL TESTING NORTHEAST, INC.

To: SENECA ARMY DEPOT
BUILDING 323 MAT MGT BR
ROMULUS, NY 14541

Date: Feb 07 1989

Attention: COMMANDER

****

SAMPLE #1138

LABORATORY ANALYSIS REPORT

****

SAMPLE SUMMARY

CLIENT	: SENECA ARMY DEPOT	DATE RECEIVED	: 02/02/89
JOB #	: 179.005.00	DATE COLLECTED	: 01/26/89
LOCATION	: BARN WELL OUTSIDE	TIME COLLECTED	: 1130
METHOD	:GRAB		

PARAMETER	RESULTS	UNITS
CHLOROMETHANE	<1.0	ug/l
BROMOMETHANE	<1.0	ug/l
VINYL CHLORIDE	<1.0	ug/l
CHLOROETHANE	<1.0	ug/l
METHYLENE CHLORIDE	<1.0	ug/l
CHLOROBENZENE	<1.0	ug/l
1,1-DICHLOROETHYLENE	<1.0	ug/l
1,1-DICHLOROETHANE	<1.0	ug/l
TRANS-1,2-DICHLOROETHYLENE	<1.0	ug/l
ETHYLBENZENE	<1.0	ug/l
CHLOROFORM	<1.0	ug/l
1,2-DICHLOROETHANE	<1.0	ug/l
1,1,1-TRICHLOROETHANE	<1.0	ug/l
CARBON TETRACHLORIDE	<1.0	ug/l

17 FEB 1989

RBattaglia/kah/41450

Office of Commander

Mr. Joseph Nogle
RD East Lake Road
Geneva, New York 14456

Dear Mr. Nogle:

Enclosed is a copy of the laboratory results for our January 26, 1989 sampling of the three wells on your Smith Vineyard Road property.

As shown in the laboratory report, none of the suspected chemicals were detected in any of your wells.

If you have any further questions, please feel free to contact Randall W. Battaglia at (607) 869-1450.

Sincerely,

William R. Holmes
Colonel, ~~Ordnance Corps~~ U.S. Army
Commanding

Enclosure

Copies Furnished:

Mr. and Mrs. Thomas Shaw, Smith Vineyard Road, MacDougall, NY 14541

Mr. Charles Carroll, Seneca County Health Department, Thurber Drive, Waterloo, NY 13165

Mr. John J. Nicit, Attorney at Law, 20 W. Main Street, Waterloo, NY 13165

Sara
D/EH

CEA

GC/MS SAMPLE REPORT

SENECA ARMY DEPOT
89033116

Galson Laboratories

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

April 28, 1989

Mr. Randy Battaglia
Seneca Army Depot
Building 323 - Mat. Mgt. Br.
Romulus, NY 14541-5001

RE: GTS #L9052

Dear Randy:

Enclosed are the results of the analyses performed on the samples we received on March 31, 1989.

If you have any questions concerning our results, please feel free to contact me.

Sincerely,

F. Joseph Unangst for

Edward A. Stuber, CIH
Associate Laboratory Director
GALSON LABORATORIES

EAS/mrb

Enclosure

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

Sample ID	Lab ID	TOTAL BARIUM MG/L	LEAD MG/L	SILVER MG/L	IRON MG/L
W-1	H7050	0.090	<0.1	<0.03	0.022
W-2	H7051	0.078	<0.1	<0.03	0.032
W-3	H7052	0.058	<0.1	<0.03	0.043
W-4	H7053	0.072	<0.1	<0.03	0.042
W-5	H7054	0.060	<0.1	<0.03	0.024
W-6	H7055	0.018	<0.1	<0.03	0.12
W-7	H7056	0.036	<0.1	<0.03	2.0
PT-10	H7057	0.20	<0.1	<0.03	<0.02
PT-11	H7058	0.095	<0.1	<0.03	<0.02
PT-12	H7059	0.031	0.12	<0.03	<0.02
PT-15	H7060	0.014	<0.1	<0.03	<0.02
PT-16	H7061	0.087	<0.1	<0.03	<0.02
PT-17	H7062	0.072	<0.1	<0.03	<0.02

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: DRS,NJH
Approved by: Nancy J Howe
Date: 25-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

Sample ID	TOTAL Lab ID	SODIUM MG/L	POTASSIUM MG/L
W-1	H7050	6.7	2.7
W-2	H7051	6.8	0.8
W-3	H7052	3.7	0.9
W-4	H7053	9.0	4.1
W-5	H7054	6.9	0.8
W-6	H7055	9.4	0.8
W-7	H7056	1.4	4.2
PT-10	H7057	35	2.2
PT-11	H7058	46	2.1
PT-12	H7059	45	1.8
PT-15	H7060	28	1.7
PT-16	H7061	4.4	0.6
PT-17	H7062	29	1.0

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: DRS,NJH
Approved by: Nancy J Howe
Date: 25-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

Sample ID	TOTAL Lab ID	ARSENIC MG/L	CADMIUM MG/L	CHROMIUM MG/L	SELENIUM MG/L
W-1	H7050	<0.005	0.002	<0.01	<0.005
W-2	H7051	<0.005	<0.001	<0.01	<0.005
W-3	H7052	<0.005	<0.001	<0.01	<0.005
W-4	H7053	<0.005	0.001	<0.01	<0.005
W-5	H7054	<0.005	<0.001	<0.01	<0.005
W-6	H7055	<0.005	<0.001	<0.01	<0.005
W-7	H7056	<0.005	<0.001	<0.01	<0.005
PT-10	H7057	<0.005	<0.001	<0.01	<0.005
PT-11	H7058	<0.005	<0.001	<0.01	<0.005
PT-12	H7059	<0.005	<0.001	<0.01	<0.005
PT-15	H7060	<0.005	<0.001	<0.01	<0.005
PT-16	H7061	<0.005	<0.001	<0.01	<0.005
PT-17	H7062	<0.005	<0.001	<0.01	<0.005

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: DRS,NJH
Approved by: Nancy J Howe
Date: 25-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

TOTAL MERCURY

Sample ID	Lab ID	MG/L
W-1	H7050	0.002
W-2	H7051	0.002
W-3	H7052	<0.002
W-4	H7053	<0.002
W-5	H7054	<0.002
W-6	H7055	<0.002
W-7	H7056	<0.002
PT-10	H7057	<0.002
PT-11	H7058	<0.002
PT-12	H7059	<0.002
PT-15	H7060	<0.002
PT-16	H7061	<0.002
PT-17	H7062	<0.002
PT-10	H7063	<0.002
PT-11	H7064	<0.002
PT-12	H7065	<0.002
PT-15	H7066	<0.002
PT-16	H7067	<0.002
PT-17	H7068	<0.002

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: NJH
Approved by: Nancy J Howe
Date: 25-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

TOTAL ORGANIC CARBON

Sample ID	Lab ID	MG/L
W-1	H7082	6.1
W-2	H7083	4.5
W-3	H7084	5.6
W-4	H7085	11.3
W-5	H7086	3.5
W-6	H7087	7.2
W-7	H7088	18.3
PT-10	H7089	2.0
PT-11	H7090	4.4
PT-12	H7091	2.4
PT-15	H7092	4.6
PT-16	H7093	9.4
PT-17	H7094	6.3

Method(s): EPA 415.1
Footnotes:

Submitted by: AES
Approved by: N. Ackerman
Date: 25-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

PHENOLS WATER

Sample ID	Lab ID	MG/L
W-1	H7095	<0.02
W-2	H7096	<0.02
W-3	H7097	<0.02
W-4	H7098	<0.02
W-5	H7099	<0.02
W-6	H7101	<0.02
W-7	H7102	<0.02

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: KAC,ALB
Approved by: N.Ackerman
Date: 28-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

TOTAL ORGANIC HALOGENS - WATER

Sample ID	Lab ID	MG/L
W-1	H7103	<0.010
W-2	H7104	<0.010
W-3	H7105	<0.010
W-4	H7106	0.017
W-5	H7107	<0.010
W-6	H7108	0.037
W-7	H7109	0.016
PT-10	H7110	<0.010
PT-11	H7111	0.010
PT-12	H7112	0.085
PT-15	H7113	0.010
PT-16	H7114	<0.010
PT-17	H7115	0.042

Method(s): STANDARD METHODS 16TH EDITION 506
Footnotes:

Submitted by: BTS
Approved by: N. Ackerman
Date: 28-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

Sample ID	Lab ID	PH ELECTRODE
PT-10	H7076	8.0
PT-11	H7077	7.8
PT-12	H7078	7.8
PT-15	H7079	8.3
PT-16	H7080	7.9
PT-17	H7081	8.0

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: KAC
Approved by: N. Ackerman
Date: 28-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

SPECIFIC CONDUCTANCE

Sample ID	Lab ID	UMHO
PT-10	H7076	760
PT-11	H7077	770
PT-12	H7078	1400
PT-15	H7079	520
PT-16	H7080	600
PT-17	H7081	730

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: PKC
Approved by: N. Ackerman
Date: 28-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

SULFATE

Sample ID	Lab ID	MG/L
W-1	H7069	220
W-2	H7070	140
W-3	H7071	210
W-4	H7072	130
W-5	H7073	100
W-6	H7074	69
W-7	H7075	29
PT-10	H7076	38
PT-11	H7077	190
PT-12	H7078	300
PT-15	H7079	57
PT-16	H7080	60
PT-17	H7081	86

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: ALB
Approved by: N. Ackerman
Date: 28-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

CHLORIDE

Sample ID	Lab ID	MG/L
W-1	H7069	8.6
W-2	H7070	6.2
W-3	H7071	13
W-4	H7072	6.4
W-5	H7073	6.2
W-6	H7074	6.0
W-7	H7075	1.8
PT-10	H7076	61
PT-11	H7077	46
PT-12	H7078	40
PT-15	H7079	13
PT-16	H7080	18
PT-17	H7081	71

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: ALB
Approved by: N. Ackerman
Date: 28-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89033116
Location: SEAD

Job Number: L9052

Date Sampled: 29-MAR-1989

PO Number: DAAC71-88-Q-B276

NITRATE

Sample ID	Lab ID	NO3-N MG/L
PT-10	H7076	0.035
PT-11	H7077	0.12
PT-12	H7078	1.4
PT-15	H7079	0.16
PT-16	H7080	0.77
PT-17	H7081	1.2

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: ALB
Approved by: N. Ackerman
Date: 28-APR-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

REPORT OF ANALYSES

22 APR 1988 AN

RETURN ADDRESS	PROJECT NUMBER	DATE SAMPLES REC'D
WDED	38-	12 Apr 88
	PROJECT OFFICER: Beth Martin (?)	

SAMPLED INSTALLATION: Seneca AD.

LAB NUMBER	SAMPLE NUMBER	SAMPLE RESULTS (PARAMETER AND UNITS)						
		ppb 2,6-DNT	ppb 2,4-DNT	ppb 2,4,6-TNT	ppb RDX	ppb Hmx	ppb Tetryl	
F111 27A	N7059	<1	<1	<1	<30	<100	<10	
F111 28A	N7060	<1	<1	<1	<30	<100	<10	
F111 29A	N7061	<1	<1	<1	<30	<100	<10	
F111 30A	N7062	<1	<1	<1	<30	<100	<10	
F111 31A	N7063	<1	<1	<1	<30	<100	<10	
F111 32A	N7064	<1	<1	<1	<30	<100	<10	
F111 33A	N7065	<1	<1	<1	<30	<100	<10	
F111 27B	N7066	<1	<1	<1	<30	<100	<10	
F111 28B	N7067	<1	<1	<1	<30	<100	<10	
F111 29B	N7068	<1	<1	<1	<30	<100	<10	
F111 30B	N7069	<1	<1	<1	<30	<100	<10	
F111 31B	N7070	<1	<1	<1	<30	<100	<10	
F111 32B	N7071	<1	<1	<1	<30	<100	<10	
F111 33B	N7072	<1	<1	<1	<30	<100	<10	

PROCEDURES PERFORMED: GC/C Quant

ANALYST(s) (initial)	REVIEWED BY (initial)	DATE RESULTS REPORTED
MK.	[illegible]	20 Apr 88

AEHA Form 14, 1 Sep 82 (HSHB-ML-O)

Galson Laboratories

GC/MS NARRATIVE

SENECA ARMY DEPOT
89033116

The following package contains data relating to the following samples submitted for analysis on March 31, 1989 :

Client No.	GTS No.	Analysis
PT-12	H7116	volatiles
PT-17	H7117	volatiles
Field Blank	H7118	volatiles

The samples were run following EPA method 624 for volatile analysis. Quality control followed current EPA CLP quidelines.

Analysis of the samples revealed the presence of 1,2-Dichloroethene and Trichloroethene in samples PT-12 and PT-17. The field blank was found to contain no detectable levels of target compounds. No other target compounds were found in the samples.

GC/MS Manager

GC/MS

VOLATILES

SAMPLE DATA

REVIEWED _____

DATE 4/4/89

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 1

SAMPLE: FIELD BLANK

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89033116

Matrix: (soil/water) WATER Lab Sample ID: H7118

Sample wt/vol: 5 mL Lab File ID: >BA879::D1

Level: (low/med) LOW Date Received: 03/31/89

% Moisture: not dec.: Date Analyzed: 04/03/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
75-69-4	Trichlorofluoromethane	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-6	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
110-75-8	2-Chloroethylvinyl Ether	5.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
541-73-1	1,3-Dichlorobenzene	5.	U
95-50-1	1,2-Dichlorobenzene	5.	U
106-46-7	1,4-Dichlorobenzene	5.	U

Qualifiers:
U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.

QUANT REPORT

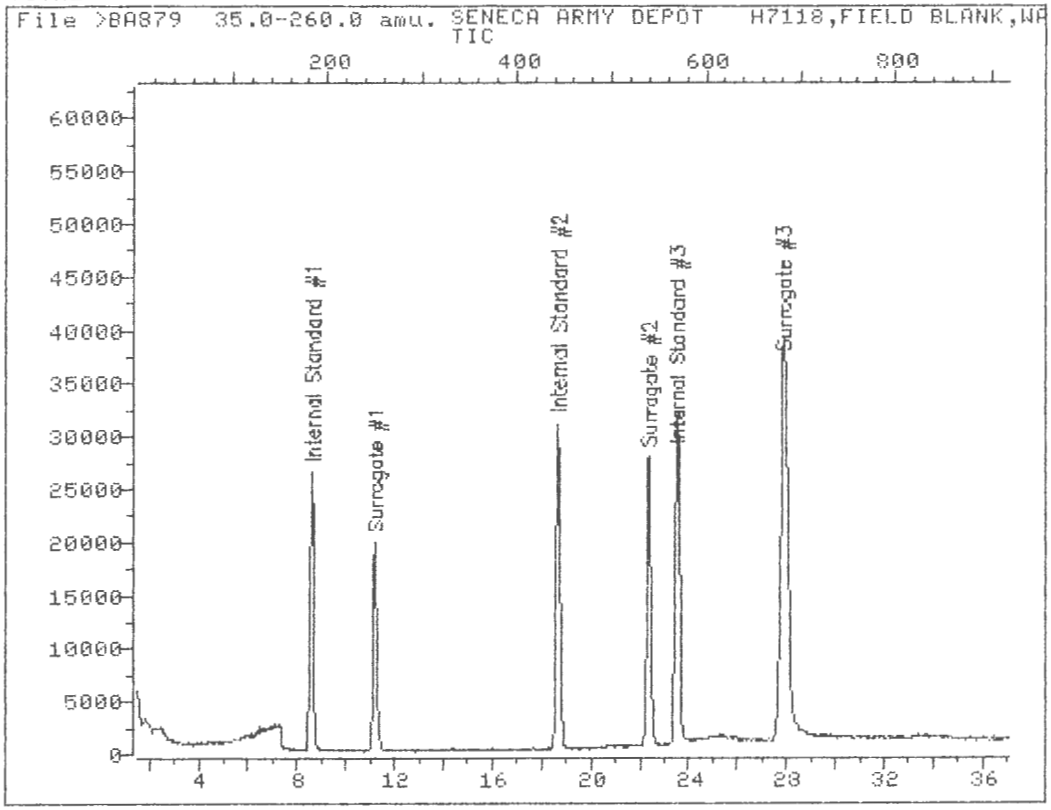
Operator ID: DAVE Quant Rev: 6 Quant Time: 890403 15:58
Output File: ^BA879::QT Injected at: 890403 14:11
Data File: >BA879::D1 Dilution Factor: 1.00000
Name: SENECA ARMY DEPOT
Misc: H7118,FIELD BLANK,WATER,5

ID File: B624W::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890403 15:56

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane		8.60	184	38613	50.00	UG/L	91
12)	1,2-Dichloroethane-d4	(Surr)	11.19	251	88363	49.00	UG/L	86
14)	*1,4-Difluorobenzene		18.66	444	127060	50.00	UG/L	91
27)	*Chlorobenzene-d5		23.50	569	99496	50.00	UG/L	96
31)	Toluene-d8	(Surr)	22.34	539	112092	51.23	UG/L	95
34)	Bromofluorobenzene	(Surr)	27.84	681	101640	50.73	UG/L	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >BA879::D1 Quant Output File: ^BA879::QT
Name: SENECA ARMY DEPOT
Misc: H7118,FIELD BLANK,WATER,5

Id File: B624W::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890403 15:56

Operator ID: DAVE
Quant Time: 890403 15:58
Injected at: 890403 14:11

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD DEMO GROUNDS Well I.D.: W 5

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 11:07 Method (check one): X steel tape X electric meter ___ well sounder ___ other (specify)

Reference Point (check one): X top of well casing -or- ___ top of protective casing

(a) Depth of water from reference point: 2.9 Units (check one) X Feet ___ Meters

(b) Height of reference point above ground surface: 2.9

(c) Depth to water from ground surface (a-b): 0

PURGING

Date: 3/28/89 Time: 11:09 Method: bailer type ___ pump type FULTZ SP-202 sub.

Inside diameter of well 4 inches

Calculated amount to be purged: 11.0

5 volumes = (11 ft [total depth of well] feet - 0 [depth of water from ground (c above)] feet) X 3.27 [conversion factor*] = 36.0 gallons [5 volumes]

*conversion factors: for a 2-inch well = .82 -or for a 4-inch well = 3.27

Amount actually purged: 10 gallons Well pumped dry? X yes ___ no

SAMPLING

Date: 3/29/89 Time: 10:35 Method: bailer type Stainless pump type ___

component materials (e.g., tubing, pump parts, bailer material) ___

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)

① GLASS LITER TOX

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)

① gallon Polyethylene

Sampler's Name: Bernard M Cahill

FIELD MEASUREMENTS

Temperature: 4 °C pH 7.4 . ___ 4 Replicates if a hazardous waste site Conductivity: 545 umhos/cm

Time: 10:38

Meter Type: Lamotte Lamotte

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 AM Filtering Method: 0.45 μm filter

Required Preservation Completed: Yes Sample Preparer's Name: D. Cichowski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

H2O - Slightly Turbid – Turbid

Low Recharge

?

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD DEMO GROUNDS Well I.D.: W 4 ___ ___ ___

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 11:34 Method (check one): X steel tape X electric meter
___ well sounder ___ other (specify)

Reference Point (check one): X top of well casing -or- ___ top of protective casing

(a) Depth of water from reference point: 6.2 Units (check one) X Feet ___ Meters

(b) Height of reference point above ground surface: 3.5

(c) Depth to water from ground surface (a-b): 3.2

PURGING

Date: 3/28/89 Time: 11:37 Method: bailer type ___ pump type FULTZ SP-202 sub.

Inside diameter of well 4 inches

Calculated amount to be purged: 5.7

5 volumes= (8.9 feet- 3.2 feet) X 3.27 = 18.6 gallons
(total depth of well; depth of water from ground (c above); conversion factor*; 5 volumes)

*conversion factors: for a 2-inch well = .82 -or- for a 4-inch well = 3.27

Amount actually purged: 8 gallons Well pumped dry? X yes ___ no

SAMPLING

Date: 3/29/89 Time: 11:00 Method: bailer type Stainless pump type ___
component materials (e.g., tubing, pump parts, bailer material)

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)
① GLASS Liter (TOX)

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)
① gal Polyethylene

Sampler's Name: Bernadette Cahill

FIELD MEASUREMENTS

Temperature: 4 °C pH 7.2 ___ 4 Replicates Conductivity: 720 umhos/cm
___ ___ if a hazardous ___
___ ___ waste site ___
___ ___ ___

Time: 11:05 LAMOTTE HA LAMOTTE
Meter Type: Ph meter COND METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 AM Filtering Method: 0.45 µm filter

Required Preservation Completed: Yes Sample Preparer's Name: D. Cichowski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

H2O Clear - Slightly Turbid
Well Recharging & screened well but not Quick Enough

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD DEMO GROUNDS Well I.D.: W 6

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 11:55 Method (check one): X steel tape ___ electric meter ___ well sounder ___ other (specify)

Reference Point (check one): X top of well casing -or- ___ top of protective casing

(a) Depth of water from reference point: 3.0

(b) Height of reference point above ground surface: 2.7

(c) Depth to water from ground surface (a-b): .3

Units (check one) X Feet ___ Meters

PURGING

Date: 3/28/89 Time: 11:57 Method: bailer type ___ pump type FULTZ

Inside diameter of well 4 inches

Calculated amount to be purged:

5 volumes = (8.3 feet - .3 feet) X 3.27 = 27 gallons

(total depth of well; depth of water from ground (c above); conversion factor*; 5 volumes)

8.0

*conversion factors: for a 2-inch well = .82 -or- for a 4-inch well = 3.27

Amount actually purged: 8 gallons Well pumped dry? X yes ___ no

SAMPLING

Date: 3/29/89 Time: 11:20 Method: bailer type Stainless pump type ___

component materials (e.g., tubing, pump parts, bailer material)

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)

① glass liter (TOR)

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)

① gal polyethylene

Sampler's Name: Bernadine Calise

FIELD MEASUREMENTS

Temperature: 40 °C pH 7.5 ___ 4 Replicates Conductivity: 420 umhos/cm

___ ___ if a hazardous

___ ___ waste site

___ ___

Time: 11:22 LAMOTTE HA 2 LAMOTTE

Meter Type: PHMETER COND. METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 AM Filtering Method: 0.45 um filter

Required Preservation Completed: Yes Sample Preparer's Name: D. Cichowski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD DEMO GROUND Well I.D.: W 1

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 12:13 Method (check one): X steel tape X electric meter
___ well sounder ___ other (specify)

Reference Point (check one): X top of well casing -or- ___ top of protective casing

(a) Depth of water from reference point: 5.8

(b) Height of reference point above ground surface: 3.2

(c) Depth to water from ground surface (a-b): 2.1

Units (check one) X Feet ___ Meters

PURGING

Date: 3/28/89 Time: 12:15 Method: bailer type ___ pump type FULTZ SP-202 sub

Inside diameter of well 4 inches

Calculated amount to be purged:

5 volumes= (10.0 (total depth of well) feet- 2.1 (depth of water from ground (c above)) feet) X 3.27 (conversion factor*) = 25.8 (5 volumes) gallons

7.9

*conversion factors: for a 2-inch well = .82 -or- for a 4-inch well = 3.27

Amount actually purged: 15 gallons Well pumped dry? X yes ___ no

SAMPLING

Date: 3/29/89 Time: 11:35 Method: bailer type STAINLESS pump type ___

component materials (e.g., tubing, pump parts, bailer material)

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)
(1) GLASS LITER (TOX)

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)
(1) gal poly

Sampler's Name: Bernard Calicis

FIELD MEASUREMENTS

Temperature: 5 °C pH 7.4 ___ 4 Replicates Conductivity: 790 umhos/cm

___ ___ if a hazardous

___ ___ waste site

___ ___

Time: 11:42 LAMOTTE HA LAMOTTE

Meter Type: PH METER COND METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 AM Filtering Method: 0.45 um Filter

Required Preservation Completed: Yes Sample Preparer's Name: D. Clebowski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

H2O clear when Purged

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD DEMO GROUNDS Well I.D.: W 3 ___ ___ ___

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 12:36 Method (check one): X steel tape X electric meter ___ well sounder ___ other (specify)

Reference Point (check one): X top of well casing -or- ___ top of protective casing

(a) Depth of water from reference point: 2.4

(b) Height of reference point above ground surface: 5.3

(c) Depth to water from ground surface (a-b): 2.1

Units (check one) X Feet ___ Meters

PURGING

Date: 3/28/89 Time: 12:38 Method: bailer type ___ pump type FULTZ SP-202 Sub

Inside diameter of well 4 inches

Calculated amount to be purged:

5 volumes= (10.7 (total depth of well) feet - 2.1 (depth of water from ground (c above)) feet) X 3.27 (conversion factor*) = 28.1 (5 volumes) gallons

8.6

*conversion factors: for a 2-inch well = .82 -or- for a 4-inch well = 3.27

Amount actually purged: 10 gallons Well pumped dry? X yes ___ no

SAMPLING

Date: 3/29/89 Time: 11:48 Method: bailer type Stainless pump type ___

component materials (e.g., tubing, pump parts, bailer material)

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)

(1) GLASS LITER (TOL)

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)

(1) gal Poly

Sampler's Name: Brad McCabe

FIELD MEASUREMENTS

Temperature: 4 °C pH 7.4 ___ 4 Replicates Conductivity: 730 umhos/cm

___ ___ If a hazardous

___ ___ waste site

___ ___

Time:	11:51	
Meter Type:	LAMOTTE HA PHMETER	LAMOTTE COND METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 Filtering Method: 0.45 um filter

Required Preservation Completed: Yes Sample Preparer's Name: D. Cichowski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

H2O clear when purged

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD DEMO GROUNDS Well I.D.: W 2

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 12:55 Method (check one): X steel tape X electric meter ___ well sounder ___ other (specify)

8
9.5
3.7
5.8

Reference Point (check one): X top of well casing -or- ___ top of protective casing

(a) Depth of water from reference point: 6.0 Units (check one) X Feet ___ Meters

(b) Height of reference point above ground surface: 3.7

(c) Depth to water from ground surface (a-b): 2.3

PURGING

Date: 3/28/89 Time: 1:00 Method: bailer type ___ pump type FACTZ

Inside diameter of well 4 inches

Calculated amount to be purged:

3.5

5 volumes = (5.8 total depth of well feet - 2.3 depth of water from ground (c above) feet) X 3.27 conversion factor* = 11.5 5 volumes gallons

*conversion factors: for a 2-inch well = .82 -or- for a 4-inch well = 3.27

Amount actually purged: 4 gallons Well pumped dry? X yes ___ no

SAMPLING

Date: 3/29/89 Time: 12:07 Method: bailer type Stainless pump type ___

component materials (e.g., tubing, pump parts, bailer material)

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)

(1) Glass Liter (TOX)

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)

(1) gal. Polyethelene

Sampler's Name: B. Calvin

FIELD MEASUREMENTS

Temperature: 4 °C pH 7.3 ___ 4 Replicates Conductivity: 610 umhos/cm

___ . ___ if a hazardous

___ . ___ waste site

___ . ___

Time: 12:09 LAMOTTE HA LAMOTTE

Meter Type: PH METER COND METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 AM Filtering Method: 0.45 µm Filter

Required Preservation Completed: Yes Sample Preparer's Name: D. Cichowski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD DEMO GROUNDS Well I.D.: W 7 ___ ___ ___

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 1:07 Method (check one): X steel tape ___ electric meter ___ well sounder ___ other (specify)

Reference Point (check one): 4 top of well casing -or- ___ top of protective casing

(a) Depth of water from reference point: 2.5

(b) Height of reference point above ground surface: 2.5

(c) Depth to water from ground surface (a-b): 0

Units (check one) X Feet ___ Meters

PURGING

Date: 3/29 Time: 1:10 Method: bailer type ___ pump type FACET 5P-202 SUB.

Inside diameter of well 4 inches

Calculated amount to be purged:

5 volumes= (5.0 feet - 0 feet) X 3.27 = 16.4 gallons

(total depth of well; depth of water from ground (c above); conversion factor*; 5 volumes)

50

*conversion factors: for a 2-inch well = .82 -or- for a 4-inch well = 3.27

Amount actually purged: 6 gallons Well pumped dry? X yes ___ no

SAMPLING

Date: 3/29/89 Time: 12:18 Method: bailer type Stainless pump type ___

component materials (e.g., tubing, pump parts, bailer material)

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)

(1) glass LITER (TOX)

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)

1 gal. Poly

Sampler's Name: Bernadine Calvert

FIELD MEASUREMENTS

Temperature: 4 °C pH 7.5 ___ 4 Replicates - Conductivity: 220 umhos/cm

___ . ___ if a hazardous ___

___ . ___ waste site ___

___ . ___ ___

Time:	12:20	
Meter Type:	LAMOTTE HA ph meter	LAMOTTE COND METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 Filtering Method: 0.45 um Filter

Required Preservation Completed: yes Sample Preparer's Name: D. Cichanski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD LANDFILL Bldg #2207 Well I.D.: P T 1 0

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 1:27 Method (check one): X steel tape X electric meter
___ well sounder ___ other (specify)

Reference Point (check one): ___ top of well casing -or- X top of protective casing

(a) Depth of water from reference point: 5.0

(b) Height of reference point above ground surface: 3.7

(c) Depth to water from ground surface (a-b): 2.3

Units (check one) X Feet ___ Meters

PURGING

Date: 3/28/89 Time: 1:31 Method: bailer type ___ pump type FULTZ SP-202 SUB.

Inside diameter of well 2 inches

Calculated amount to be purged:

5 volumes= (42.4 (total depth of well) feet - 2.3 (depth of water from ground (c above)) feet) X .82 (conversion factor*) = 32.9 gallons (5 volumes)

40.1

*conversion factors: for a 2-inch well = .82 -or- for a 4-inch well = 3.27

Amount actually purged: 15 gallons Well pumped dry? X yes ___ no

SAMPLING

Date: 3/29/89 Time: 12 39 Method: bailer type TEFLON pump type ___

component materials (e.g., tubing, pump parts, bailer material)

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)
(1) GLASS LITER TOX

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)
(1) Gallon Polyethylene

Sampler's Name: B. Calise

FIELD MEASUREMENTS

Temperature: 6 °C

pH 7 . 4 4 Replicates
___ . ___ if a hazardous
___ . ___ waste site
___ . ___

Conductivity: 830 umhos/cm

Time: 12:37

Meter Type: Lamotte HA Phmeter

Lamotte COND. METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 AM Filtering Method: 0.45 µm Filter

Required Preservation Completed: Yes Sample Preparer's Name: D. Cieksowski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

Clear to Slightly Turbid when Purged

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD LANDFILL Bldg #2207 Well I.D.: P I 1 2

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 2:08 Method (check one): X steel tape X electric meter
___ well sounder ___ other (specify)

Reference Point (check one): ___ top of well casing -or- X top of protective casing

(a) Depth of water from reference point: 4.0

(b) Height of reference point above ground surface: 3.3

(c) Depth to water from ground surface (a-b): 1.3

Units (check one) X Feet ___ Meters

PURGING

Date: 3/28/89 Time: 2:10 Method: bailer type ___ pump type Fluid SP-202 sub.

Inside diameter of well 2 inches

Calculated amount to be purged:

5 volumes = (9.8 feet - 1.3 feet) X 8.5 X .82 = 7.0 gallons
(total depth of well; depth of water from ground (c above); conversion factor*; 5 volumes)

*conversion factors: for a 2-inch well = .82 -or- for a 4-inch well = 3.27

Amount actually purged: 2 gallons Well pumped dry? X yes ___ no

SAMPLING

Date: 3/29/89 Time: 1:00 Method: bailer type TEFLON pump type ___
component materials (e.g., tubing, pump parts, bailer material)

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)

(1) GLASS (TPH/TOX)

GCMS-PURG (3) 40 ml VOC VIALS

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)

(1) gallon Polyethylene

Sampler's Name: Bernard McCabell

FIELD MEASUREMENTS

Temperature: 5 °C pH 7 . 2 4 Replicates Conductivity: 1200 umhos/cm

___ . ___ if a hazardous

___ . ___ waste its

___ . ___

Time:	1:00	
Meter Type:	LaMotte HA Phmete	LaMotte COND METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 AM Filtering Method: 0.45 µm Filter

Required Preservation Completed: Yes Sample Preparer's Name: D. Cielowski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

Turbid

Low Recharge

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD LANDFILL Bldg #2207 Well I.D.: P I 1 7

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 2:26 Method (check one): K steel tape K electric meter
___ well sounder ___ other (specify)

Reference Point (check one): ___ top of well casing -or- K top of protective casing

(a) Depth of water from reference point: 4.5

(b) Height of reference point above ground surface: 2.0

(c) Depth to water from ground surface (a-b): 2.5

Units (check one) K Feet ___ Meters

11.6

PURGING

Date: 3/28/89 Time: 2:28 Method: bailer type _____ pump type FULTZ SP 202 SUB

Inside diameter of well 2 inches

Calculated amount to be purged:

5 volumes= (9.6 feet- 2.5 feet) X .82 = 5.9 gallons

7.1

(total depth of well; depth of water from ground (c above); conversion factor*; 5 volumes)

*conversion factors: for a 2-inch well = .82 -or- for a 4-inch well = 3.27

Amount actually purged: 6 gallons Well pumped dry? ___ yes K no

SAMPLING

Date: 3/29/89 Time: 1:42 Method: bailer type TEFLON pump type _____

component materials (e.g., tubing, pump parts, bailer material)

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)

(1) GLASS LITER (TOX)

GC MS-Purg (3) 40ml VOC VIALS

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)

(1) GALLON POLYETHYLENE

Sampler's Name: Bernard McCabe

FIELD MEASUREMENTS

Temperature: 5 °C

pH 2 . 2 4 Replicates
___ . ___ if a hazardous
___ . ___ waste site
___ . ___

Conductivity: 1100 umhos/cm

Time: 1:45

Meter Type: Lamotte HA PH METER

Lamotte COND METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 AM Filtering Method: 0.45 µm filter

Required Preservation Completed: Yes Sample Preparer's Name: D. Cichonski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

Turbid H2O
Good Recharge

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD LANDFILL Bldg #2207 Well I.D.: P T 1 6

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 2:43 Method (check one): X steel tape X electric meter ___ well sounder ___ other (specify)

Reference Point (check one): ___ top of well casing -or- X top of protective casing

(a) Depth of water from reference point: 3.0 Units (check one) X Feet ___ Meters

(b) Height of reference point above ground surface: 2.2

(c) Depth to water from ground surface (a-b): .8 11.1 3

PURGING

Date: 3/28/89 Time: 2:45 Method: bailer type ___ pump type FULTZ SP202 sub.

Inside diameter of well 2 inches

Calculated amount to be purged:

5 volumes= (8.9 (total depth of well) feet- .8 (depth of water from ground (c above)) feet) X .82 (conversion factor*) = 6.6 (5 volumes) gallons

8.1

*conversion factors: for a 2-inch well = .82 -or for a 4-inch well = 3.27

Amount actually purged: 7 gallons Well pumped dry? ___ yes X no

SAMPLING

Date: 3/29/89 Time: 1:50 Method: bailer type TeFLON pump type ___

component materials (e.g., tubing, pump parts, bailer material) ___

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)

(1) glass LITER (TOX)

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)

(1) gal Poly

Sampler's Name: B Cahill

FIELD MEASUREMENTS

Temperature: 4 °C

pH 2.3 4 Replicates if a hazardous waste site

Conductivity: 1030 umhos/cm

Time: 1:53

Meter Type: Lamotte HA Ph Meter; Lamotte COND METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 AM Filtering Method: 0.45um filter

Required Preservation Completed: yes Sample Preparer's Name: D. Cichowski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

GROUND-WATER SAMPLING FIELD DATA LOGSHEET

Installation: SEAD LANDFILL Bldg #2207 Well I.D.: P T 1 5

WATER LEVEL MEASUREMENTS (BEFORE PURGING)

Date: 3/28/89 Time: 2:55 Method (check one): X steel tape X electric meter ___ well sounder ___ other (specify)

Reference Point (check one): ___ top of well casing -or- X top of protective casing

(a) Depth of water from reference point: 4.0

(b) Height of reference point above ground surface: 3.5

(c) Depth to water from ground surface (a-b): .5

Units (check one) X Feet ___ Meters

PURGING

Date: 3/28/89 Time: 3:00 Method: bailer type ___ pump type FULTZ SP-202 sub.

Inside diameter of well 2 inches

Calculated amount to be purged:

5 volumes = (15.8 (153) total depth of well feet - .5 depth of water from ground (c above) feet) X .82 conversion factor* = 12.6 gallons (5 volumes)

*conversion factors: for a 2-inch well = .82 -or- for a 4-inch well = 3.27

Amount actually purged: 4 gallons Well pumped dry? X yes ___ no

SAMPLING

Date: 3/29/89 Time: 2:02 Method: bailer type TEFLON pump type ___

component materials (e.g., tubing, pump parts, bailer material)

List containers filled in the field:

(a) Unfiltered Samples (specify parameters)

(1) glass LITER (TOX)

(b) Samples to be filtered (specify container type, e.g. glass, polyethylene, etc.)

(1) gal Poly

Sampler's Name: Bernadine Cahill

FIELD MEASUREMENTS

Temperature: 5 °C pH 7.2 ___ 4 Replicates Conductivity: 1030 umhos/cm

___ . ___ if a hazardous ___

___ . ___ waste site ___

___ . ___ ___

Time:	2:05	
Meter Type:	Lamotte HA pH meter	Lamotte COND. METER

SAMPLE PREPARATION

Date: 3/29/89 Time Completed: 3/30/89 AM Filtering Method: 0.45 um filter

Required Preservation Completed: Yes. Sample Preparer's Name: D. Ciekanski

COMMENTS AND OBSERVATIONS (Notes concerning well, samples, procedures, etc.)

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 1

SAMPLE

| PT-12 |

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89033116

Matrix: (soil/water) WATER Lab Sample ID: H7116

Sample wt/vol: 5 mL Lab File ID: >BA880::D1

Level: (low/med) LOW Date Received: 03/31/89

% Moisture: not dec.: Date Analyzed: 04/03/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
75-69-4	Trichlorofluoromethane	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	43.	
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-6	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	68.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
110-75-8	2-Chloroethylvinyl Ether	5.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
541-73-1	1,3-Dichlorobenzene	5.	U
95-50-1	1,2-Dichlorobenzene	5.	U
106-46-7	1,4-Dichlorobenzene	5.	U

Qualifiers:

U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.

QUANT REPORT

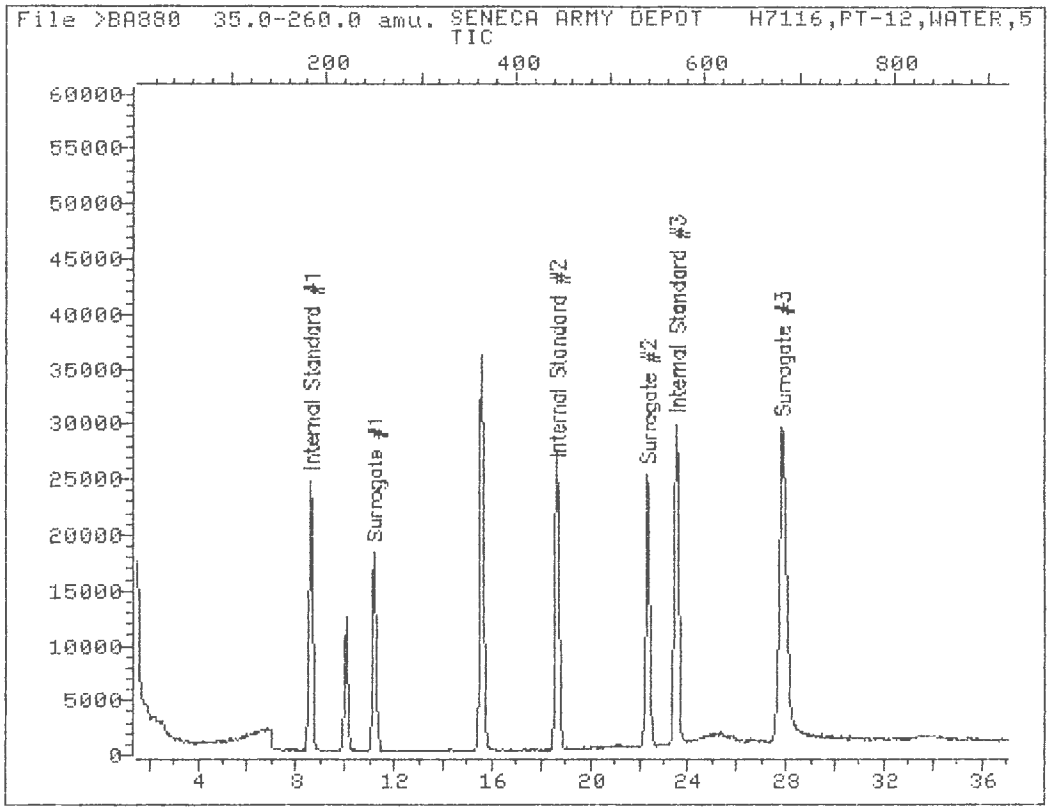
Operator ID: DAVE Quant Rev: 6 Quant Time: 890403 16:13
Output File: ^BA880::QT Injected at: 890403 14:54
Data File: >BA880::D1 Dilution Factor: 1.00000
Name: SENECA ARMY DEPOT
Misc: H7116,PT-12,WATER,5

ID File: B624W::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890403 15:56

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane		8.60	184	35305	50.00	UG/L	84
10)	1,2-Dichloroethene (total)		10.03	221	26113	43.27	UG/L	97
12)	1,2-Dichloroethane-d4	(Surr)	11.19	251	80036	48.54	UG/L	85
14)	*1,4-Difluorobenzene		18.63	443	112569	50.00	UG/L	91
20)	Trichloroethene		15.57	364	68350	68.44	UG/L	90
27)	*Chlorobenzene-d5		23.55	570	94244	50.00	UG/L	95
31)	Toluene-d8	(Surr)	22.35	539	102781	49.59	UG/L	94
34)	Bromofluorobenzene	(Surr)	27.85	681	94844	49.98	UG/L	82

* Compound is ISTD

TOTAL ION CHROMATOGRAM

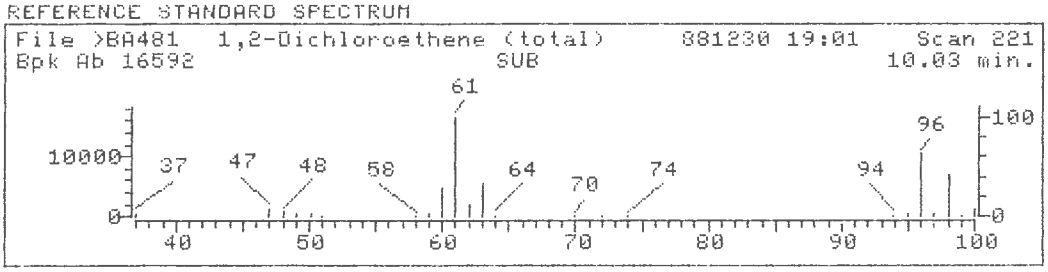


Data File: >BA880::D1 Quant Output File: ^BA880::QT
Name: SENECA ARMY DEPOT
Misc: H7116,PT-12,WATER,5

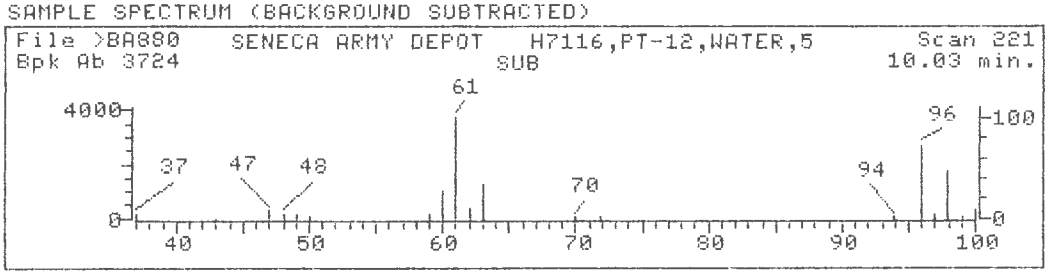
Id File: B624W::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890403 15:56

Operator ID: DAVE
Quant Time: 890403 16:13
Injected at: 890403 14:54

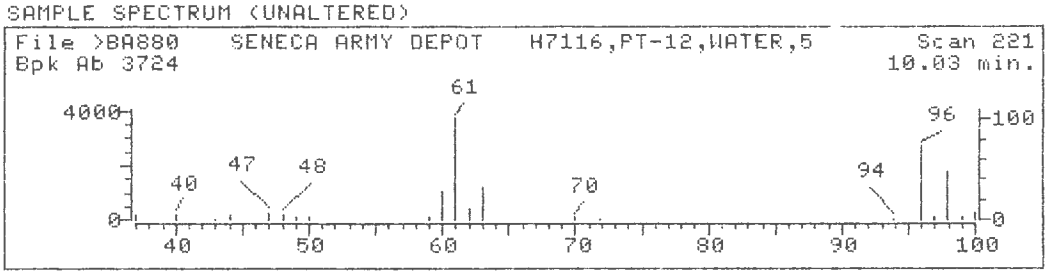
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



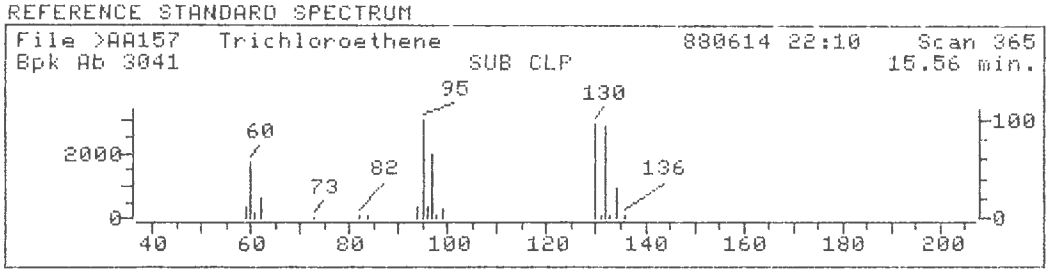
SAMPLE SPECTRUM (UNALTERED)



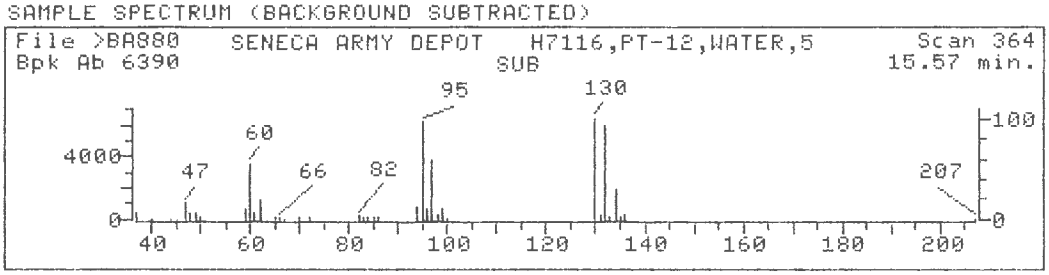
Data File: >BA880::D1 Quant Output File: ^BA880::QT
Name: SENECA ARMY DEPOT
Misc: H7116,PT-12,WATER,5
Quant Time: 890403 16:13 Quant ID File: B624W::SC
Injected at: 890403 14:54 Last Calibration: 890403 15:56

Compound No: 10
Compound Name: 1,2-Dichloroethene (total)
Scan Number: 221
Retention Time: 10.03 min.
Quant Ion: 96.0
Area: 26113
Concentration: 43.27 UG/L
q-value: 97

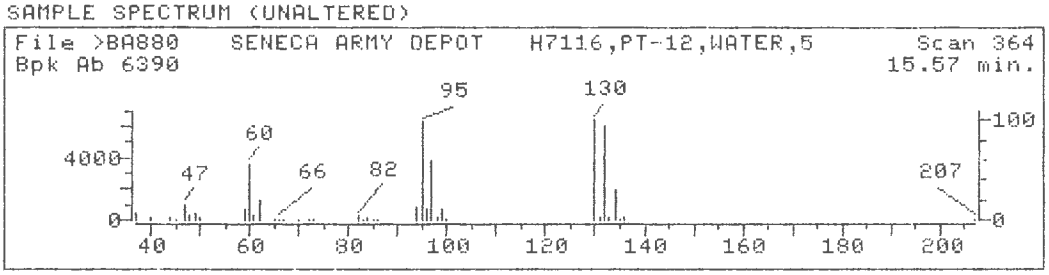
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >BA880::D1 Quant Output File: ^BA880::QT
Name: SENECA ARMY DEPOT
Misc: H7116,PT-12,WATER,5
Quant Time: 890403 16:13 Quant ID File: B624W::SC
Injected at: 890403 14:54 Last Calibration: 890403 15:56

Compound No: 20
Compound Name: Trichloroethene
Scan Number: 364
Retention Time: 15.57 min.
Quant Ion: 130.0
Area: 68350
Concentration: 68.44 UG/L
q-value: 90

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 1

SAMPLE

PT-17

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89033116

Matrix: (soil/water) WATER Lab Sample ID: H7117

Sample wt/vol: 5 mL Lab File ID: >BA881::D1

Level: (low/med) LOW Date Received: 03/31/89

% Moisture: not dec.: Date Analyzed: 04/03/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
75-69-4	Trichlorofluoromethane	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	6.	
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-6	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	59.	
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
110-75-8	2-Chloroethylvinyl Ether	5.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
541-73-1	1,3-Dichlorobenzene	5.	U
95-50-1	1,2-Dichlorobenzene	5.	U
106-46-7	1,4-Dichlorobenzene	5.	U

Qualifiers:

U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.

QUANT REPORT

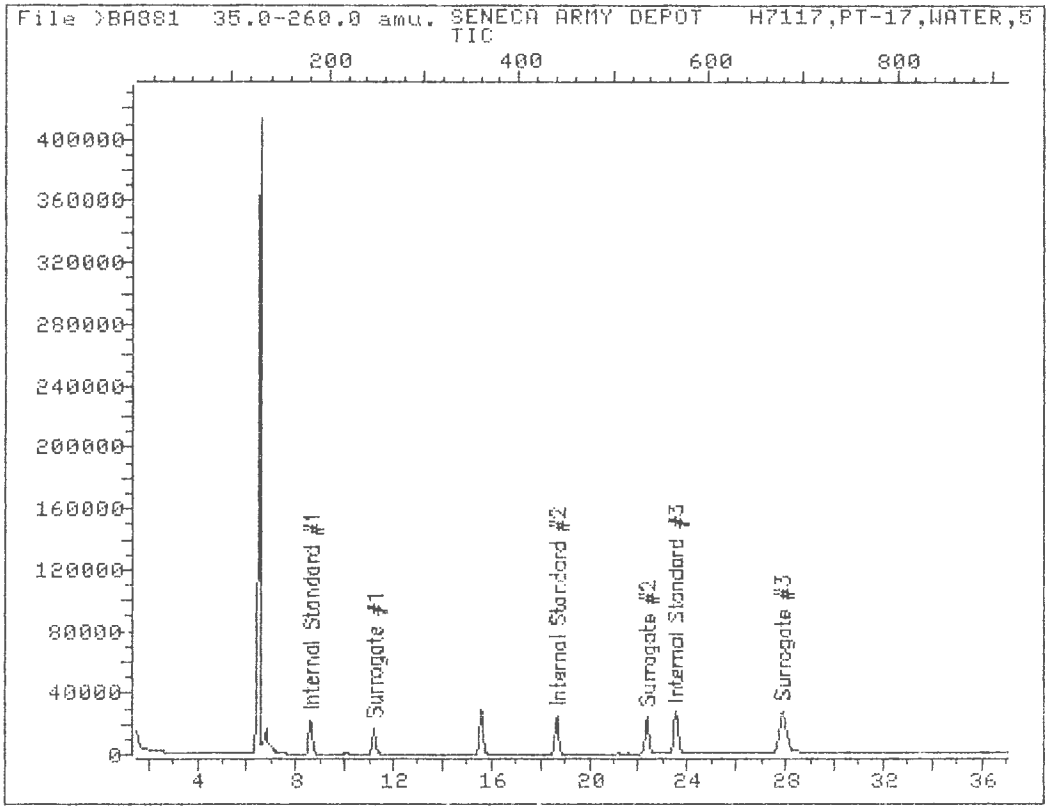
Operator ID: DAVE Quant Rev: 6 Quant Time: 890403 16:21
Output File: ^BA881::QT Injected at: 890403 15:37
Data File: >BA881::D1 Dilution Factor: 1.00000
Name: SENECA ARMY DEPOT
Misc: H7117,PT-17,WATER,5

ID File: B624W::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890403 15:56

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane		8.62	181	31901	50.00	UG/L	90
10)	1,2-Dichloroethene (total)		10.09	219	3210	5.89	UG/L	99
12)	1,2-Dichloroethane-d4	(Surr)	11.21	248	73135	49.09	UG/L	85
14)	*1,4-Difluorobenzene		18.68	441	103711	50.00	UG/L	90
20)	Trichloroethene		15.59	361	54166	58.87	UG/L	93
27)	*Chlorobenzene-d5		23.53	566	88415	50.00	UG/L	96
31)	Toluene-d8	(Surr)	22.36	536	96374	49.57	UG/L	95
34)	Bromofluorobenzene	(Surr)	27.86	678	89186	50.09	UG/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM

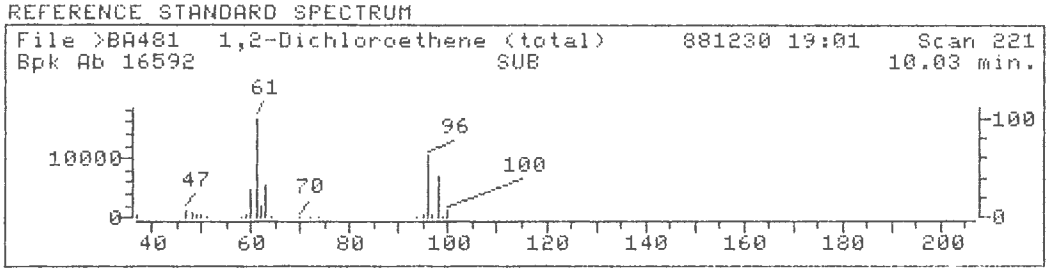


Data File: >BA881::D1 Quant Output File: ^BA881::QT
Name: SENECA ARMY DEPOT
Misc: H7117,PT-17,WATER,5

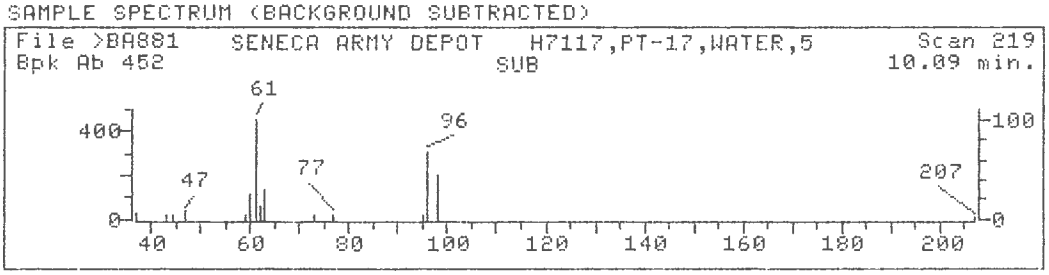
Id File: B624W::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890403 15:56

Operator ID: DAVE
Quant Time: 890403 16:21
Injected at: 890403 15:37

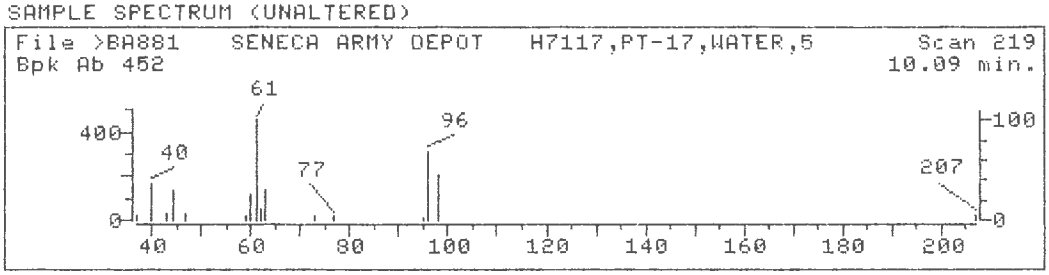
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



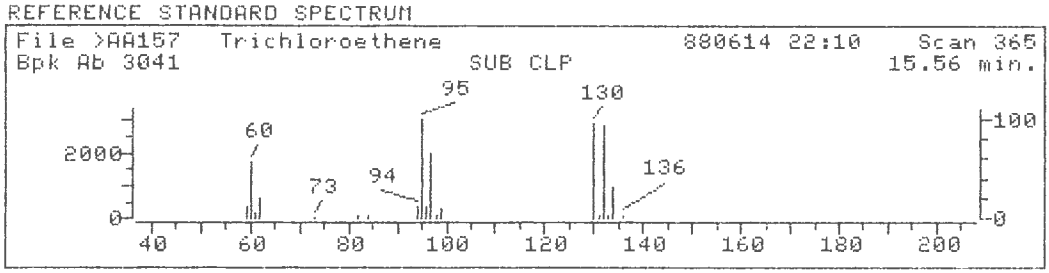
SAMPLE SPECTRUM (UNALTERED)



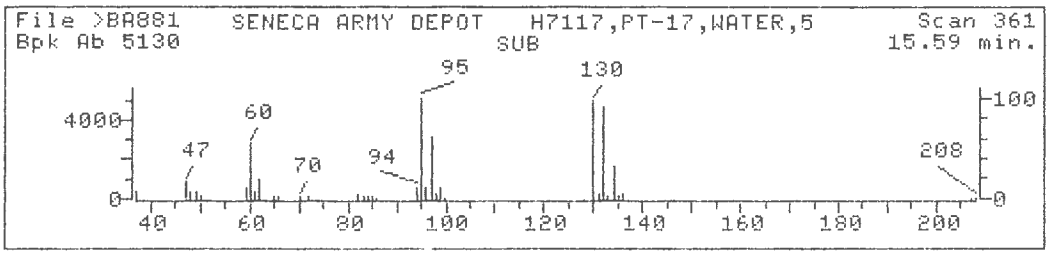
Data File: >BA881::D1 Quant Output File: ^BA881::QT
Name: SENECA ARMY DEPOT
Misc: H7117,PT-17,WATER,5
Quant Time: 890403 16:21 Quant ID File: B624W::SC
Injected at: 890403 15:37 Last Calibration: 890403 15:56

Compound No: 10
Compound Name: 1,2-Dichloroethene (total)
Scan Number: 219
Retention Time: 10.09 min.
Quant Ion: 96.0
Area: 3210
Concentration: 5.89 UG/L
q-value: 99

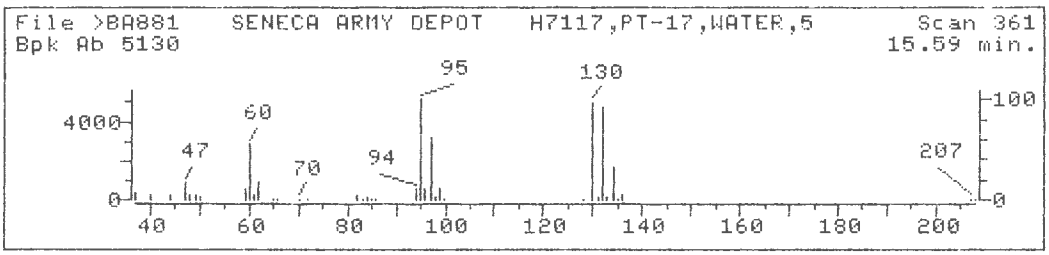
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >BA881::D1 Quant Output File: ^BA881::QT
Name: SENECA ARMY DEPOT
Misc: H7117,PT-17,WATER,5
Quant Time: 890403 16:21 Quant ID File: B624W::SC
Injected at: 890403 15:37 Last Calibration: 890403 15:56

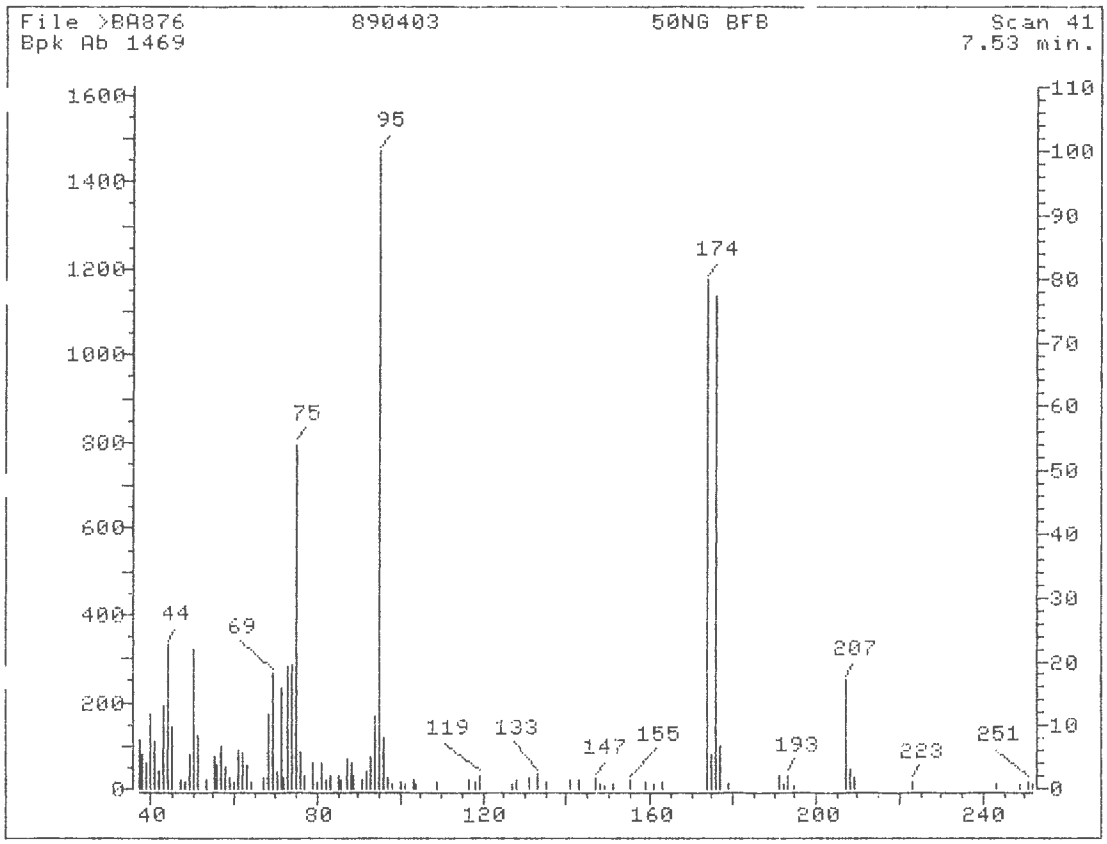
Compound No: 20
Compound Name: Trichloroethene
Scan Number: 361
Retention Time: 15.59 min.
Quant Ion: 130.0
Area: 54166
Concentration: 58.87 UG/L
q-value: 93

GC/MS

VOLATILES

QUALITY CONTROL DATA

REVIEWED [signature]
DATE 4/4/89



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	21.92	21.92	Ok
75	30-60% of mass 95	54.19	54.19	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.96	7.96	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	79.78	79.78	Ok
175	5-9% of mass 174	5.38	6.74	Ok
176	95-101% of mass 174	77.33	96.93	Ok
177	5-9% of mass 176	6.88	8.89	Ok

Injection Date: 04/03/89
Injection Time: 09:53
Data File: >BA876
Scan: 41

Continuing Calibration Check
HSL Compounds

Case No: [redacted] Calibration Date: 04/03/89

Contractor: GALSON TECHNICAL Time: 10:50

Contract No: Laboratory ID: >BA877

Instrument ID: [redacted] Initial Calibration Date: 04/03/89

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Chloromethane	.48704	.42470	12.80		**
Bromomethane	1.15857	1.10178	4.90		
Vinyl Chloride	.70381	.64645	8.15	*	
Chloroethane	.45974	.45328	1.40		
Methylene Chloride	.96503	.95720	.81		
Trichlorofluoromethane	2.86081	1.93548	32.35		
1,1-Dichloroethene	.75326	.77331	2.66	*	
1,1-Dichloroethane	1.66231	1.65935	.18		**
1,2-Dichloroethene (total)	.92761	.85459	7.87		
Chloroform	2.69210	2.75805	2.45	*	
1,2-Dichloroethane-d4 (Surr)	2.36105	2.33508	1.10		
1,2-Dichloroethane	2.51390	2.50288	.44		
1,1,1-Trichloroethane	.75339	.72920	3.21		
Carbon Tetrachloride	.67872	.73646	8.51		
Bromodichloromethane	.92374	.93227	.92		
1,2-Dichloropropane	.26819	.26004	3.04	*	
cis-1,3-Dichloropropene	.70332	.69433	1.28		
Trichloroethene	.43452	.44356	2.08		
Dibromochloromethane	.83043	.85337	2.76		
1,1,2-Trichloroethane	.35712	.36076	1.02		
Benzene	.63987	.58843	8.04		
trans-1,3-Dichloropropene	.40352	.40709	.88		
Bromoform	.84636	.82657	2.34		**
2-Chloroethylvinyl Ether	.04216	.04278	1.48		
Tetrachloroethene	.51639	.52348	1.37		
1,1,2,2-Tetrachloroethane	.64101	.59422	7.30		**
Toluene	.60074	.54682	8.98	*	
Toluene-d8 (Surr)	1.13355	1.09959	3.00		
Chlorobenzene	.91050	.90106	1.04		**
Ethylbenzene	.39210	.35701	8.95	*	
Bromofluorobenzene (Surr)	1.01813	1.00687	1.11		
1,3-Dichlorobenzene	1.18923	1.15847	2.59		

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: [illegible] Calibration Date: 04/03/89

Contractor: GALSON TECHNICAL Time: 10:50

Contract No: Laboratory ID: >BA877

Instrument ID: (5) (B 2) Initial Calibration Date: 04/03/89

Minimum $\overline{RF}$ for SPCC is .3 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
1,2-Dichlorobenzene	1.14629	1.13248	1.20		
1,4-Dichlorobenzene	1.25596	1.21040	3.63		

RF - Response Factor from daily standard file at 50.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 1

SAMPLE

| METHOD BLANK |

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89033116

Matrix: (soil/water) WATER Lab Sample ID: BLANK

Sample wt/vol: 5 mL Lab File ID: >BA878::D2

Level: (low/med) LOW Date Received: 00/00/00

% Moisture: not dec.: Date Analyzed: 04/03/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
75-69-4	Trichlorofluoromethane	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-6	Carbon Tetrachloride	5.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
110-75-8	2-Chloroethylvinyl Ether	5.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U
100-41-4	Ethylbenzene	5.	U
541-73-1	1,3-Dichlorobenzene	5.	U
95-50-1	1,2-Dichlorobenzene	5.	U
106-46-7	1,4-Dichlorobenzene	5.	U

Qualifiers:
U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.

QUANT REPORT

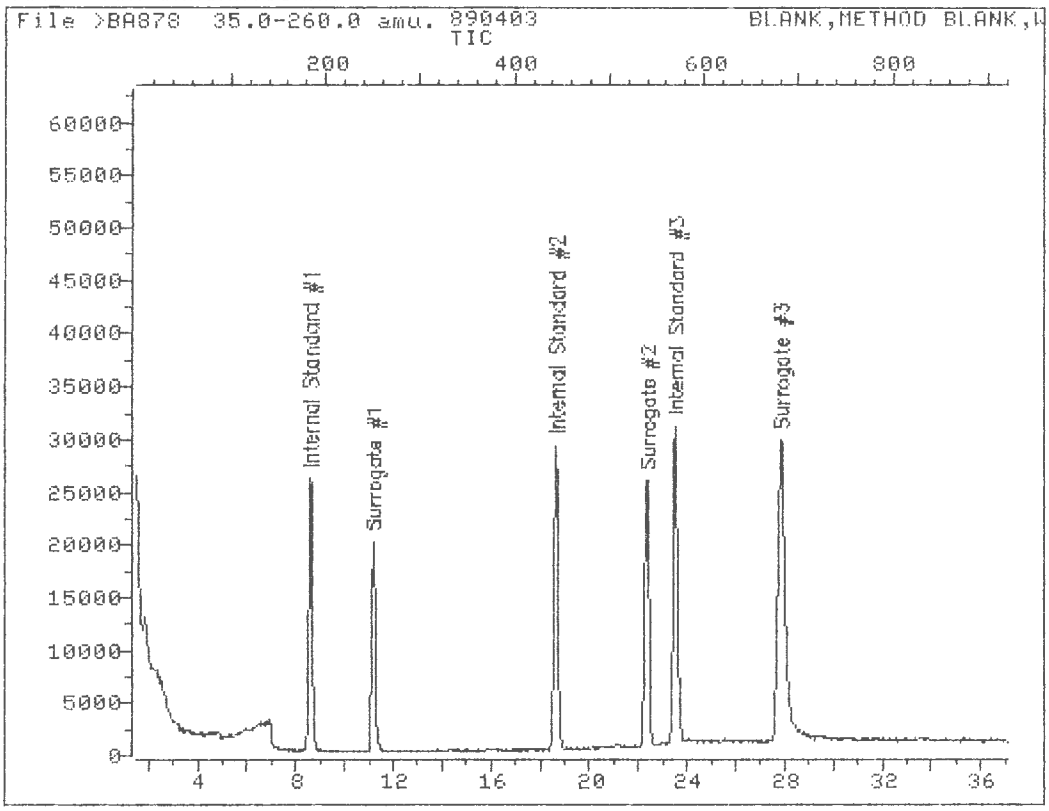
Operator ID: DAVE Quant Rev: 6 Quant Time: 890403 15:57
Output File: "BA878::QT Injected at: 890403 12:06
Data File: >BA878::D2 Dilution Factor: 1.00000
Name: 890403
Misc: BLANK,METHOD BLANK,WATER,5

ID File: B624W::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890403 15:56

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane		8.59	184	38931	50.00	UG/L	84
12)	1,2-Dichloroethane-d4	(Surr)	11.19	251	88571	48.72	UG/L	85
14)	*1,4-Difluorobenzene		18.66	444	123282	50.00	UG/L	92
27)	*Chlorobenzene-d5		23.54	570	97619	50.00	UG/L	94
31)	Toluene-d8	(Surr)	22.38	540	107637	50.14	UG/L	97
34)	Bromofluorobenzene	(Surr)	27.84	681	95872	48.77	UG/L	94

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >BA878::D2 Quant Output File: "BA878::QT
Name: 890403
Misc: BLANK,METHOD BLANK,WATER,5

Id File: B624W::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890403 15:56

Operator ID: DAVE
Quant Time: 890403 15:57
Injected at: 890403 12:06

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name:GALSON LABORATORIES

Client:SENECA ARMY DEPOT (L9052) Task # :89033116

	SAMPLE NO.	(TOL)#	(BFB)#	(DCE)#	OTHER	TOT OUT
01	METHOD BLANK	100	98	97		0
02	FIELD BLANK	102	101	98		0
03	PT-12	99	100	97		0
04	PT-17	99	100	98		0
05	-MS	99	97	94		0
06	-MSD	104	103	93		0
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
(TOL) = Toluene-d8	(88-110)
(BFB) = Bromofluorobenzene	(86-115)
(DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GALSON LABORATORIES

Client:SENECA ARMY DEPOT (L9052) Task No.: 89033116

Matrix Spike

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0.00	60.12	120	61-145
Trichloroethene	50.00	68.44	117.90	99	71-120
Benzene	50.00	0.00	53.45	107	76-127
Toluene	50.00	0.00	56.57	113	76-125
Chlorobenzene	50.00	0.00	55.26	110	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.00	56.36	113	6	14	61-145
Trichloroethene	50.00	113.35	90	10	14	71-120
Benzene	50.00	53.71	107	0	11	76-127
Toluene	50.00	55.95	112	1	13	76-125
Chlorobenzene	50.00	57.22	114	3	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of qc limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

GALSON LABORATORIES — INSTRUMENT LOG GC/MS B (#2) — DATE 4/3/89

TUNE FILE: MTB001 — INTERNAL STANDARD: 421 — DATA TAPE:

METHOD FILE: VOAB — VOLUME INTERNAL STD: 10 ul — ANALYST: David Wechsler

ID FILE: B1115LW — VOLUME ~~INJ~~/PURGED: 5 ml — SUPERVISOR: [signature]

FILE	GTS #	AS #	INITIAL WT/VOL	FINAL VOLUME	% MOIST	CLIENT	DESCRIPTION	COMMENTS
>BA876	BFB	–	1 ul	–	–	QC	50 NG BFB	OK SCAN 41
>BA877	STD	2	5 ml	–	–	↓	50 PPb VOA STD# 430	OK, QCAL
>BA878	BLANK	3	5 ml	–	–	↓	METHOD BLANK	OK
>BA879	H7115	4	5 ml	–	–	SENECA ARMY DEPOT	FIELD BLANK	OK
>BA880	H7116	5	5 ml	–	–	↓	PT-12	OK
>BA881	H7117	6	5 ml	–	–	↓	PT-17	OK
>BA882	H7017	7	0.005 ml	5 ml	–	BRISTOL MYERS	BLDG #48 GRAB #1	[illegible]
>BA883	H7116 MS	8	5 ml	–	–	SENECA ARMY DEPOT	PT-12 MATRIX SPIKE	OK
>BA884	H7116 MSD	9	5 ml	–	–	↓	PT-12 MATRIX SPIKE DUP	OK

Site CERCLA LF

GC/MS
SAMPLE REPORT

SENECA ARMY DEPOT
89092616

Galson Laboratories

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

November 9, 1989

Mr. Randy Battaglia
Seneca Army Depot
Bldg. 123
Romulus, NY 14541-5001

RE: GTS #L9052

Dear Mr. Battaglia:

Enclosed are the results of the analyses performed on the samples we received on September 26, 1989.

If you have any questions concerning our results, please feel free to call our Client Services Department at extension 126.

Sincerely,

Edward A. Stuber, CIH
Inorganic Department Manager
GALSON LABORATORIES

Gale G. Sutton, CIH
Organic Department Manager
GALSON LABORATORIES

EAS/GGS/vw

Enclosure

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89092616
Location: SEAD

Job Number: L9052

Date Sampled: 22-SEP-1989

PO Number: DAAC-7189M-0032

SPECIFIC CONDUCTANCE WATER

Sample ID	Lab ID	UMHO/CM
PT10	H23734	780
PT11	H23735	970
PT12	H23736	1000
PT15	H23737	470
PT16	H23738	620
PT17	H23739	700

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: KC
Approved by:
Date: 12-OCT-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89092616
Location: SEAD

Job Number: L9052

Date Sampled: 22-SEP-1989

PO Number: DAAC-7189M-0032

TOTAL ORGANIC CARBON

Sample ID	Lab ID	MG/L
W1	H23715	8.2
W2	H23716	8.0
W3	H23717	7.2
W4	H23718	8.5
W5	H23719	6.2
W6	H23720	4.4
W7	H23721	8.7
PT10	H23722	6.4
PT11	H23723	6.2
PT12	H23724	7.2
PT15	H23725	2.9
PT16	H23726	28.5
PT17	H23727	3.7

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: ADIRON. ENVIRONMENTAL
Approved by:
Date: 12-OCT-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89092616
Location: SEAD

Job Number: L9052

Date Sampled: 22-SEP-1989

PO Number: DAAC-7189M-0032

pH

Sample ID	Lab ID	ELECTRODE
PT10	H23734	8.0
PT11	H23735	7.8
PT12	H23736	7.9
PT15	H23737	7.9
PT16	H23738	7.8
PT17	H23739	7.8

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: PC
Approved by:
Date: 12-OCT-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89092616
Location: SEAD

Job Number: L9052

Date Sampled: 22-SEP-1989

PO Number: DAAC-7189M-0032

			Client ID:	PT10	PT11	PT12	PT15	PT16	PT17
ARSENIC	TOTAL	MG/L		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
BARIUM				0.19	<0.01	<0.01	<0.01	<0.01	0.10
CADMIUM				0.003	<0.001	0.001	<0.001	<0.001	<0.001
CHROMIUM				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LEAD				<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SELENIUM				<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
SILVER				<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
IRON				<0.02	0.082	0.54	0.35	0.058	0.49
SODIUM				29	36	25	23	4.9	22
POTASSIUM				2.8	3.1	3.5	2.8	1.2	1.4
MERCURY				<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: ES, KB, NH
Approved by: S. Braleman
Date: 3-NOV-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

Galson Laboratories

6601 Kirkville Road
E. Syracuse, NY 13057
Tel: (315) 432-0506
1-800-950-0506

LABORATORY ANALYSIS REPORT

Client: SENECA ARMY DEPOT
Task Number: 89092616
Location: SEAD

Job Number: L9052

Date Sampled: 22-SEP-1989

PO Number: DAAC-7189M-0032

Sample ID	Lab ID	CHLORIDE MG/L	SULFATE MG/L	NITRATE NO3-N MG/L
PT10	H23734	61	27	0.07
PT17	H23739	41	84	0.48

Method(s): EPA 600/4-79-020
Footnotes:

Submitted by: AB
Approved by:
Date: 12-OCT-1989

(<) - Less Than
(>) - Greater Than
NA - Not Applicable
ND - Not detectable
NS - Not specified
MG - Milligrams
L - Liters
M^3 - Cubic Meter
MG/M^3 - Milligrams Per Cubic Meter
PPM - Parts Per Million
UG - Micrograms
NG - Nanograms

I.OZIER I.ABORATORIES, INC.
23 N. MAIN STREET
FAIRPORT, NEW YORK 14450
716-388-0050

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY

SENECA ARMY

LABORATORY REPORT

PARAMETER	LANDFILL PT 17	LANDFILL PT 16	LANDFILL PT 15	UNITS
FIELD pH	7.20	7.30	7.20	S.U.
SPECIFIC CONDUCTIVITY	1100	1030	1030	uhoms/cm
pH	7.78	7.69	7.87	S.U.
TEMPERATURE	5 c	4 c	5 c	Degrees c

NYSDOH LAB ID # 10390

LABORATORY DIRECTOR

LOZIER LABORATORIES, INC.
23 N. MAIN STREET
FAIRPORT, NEW YORK 14450
716-388-0050

NEW YORK STATE
APPROVED
ENVIRONMENTAL LABORATORY

SENECA ARMY

LABORATORY REPORT

PARAMETER	LANDFILL PT 10	LANDFILL PT 11	LANDFILL PT 12	UNITS
FIELD pH	7.40	7.40	7.20	S.U.
SPECIFIC CONDUCTIVITY	830	1100	1200	uhoms/cm
pH	*	7.85	7.72	S.U.
TEMPERATURE	6 c	6 c	5 c	Degrees c

NYSDOH LAB ID # 10390

LABORATORY DIRECTOR

Galson Laboratories

GC/MS NARRATIVE

SENECA ARMY DEPOT
89092616

The following data package pertains to the samples submitted for analysis on September 26, 1989 :

Client No.	GTS No.	Analysis
PT-12	H23753	volatiles
PT-17	H23754	volatiles

The samples were analyzed following EPA method 624 for volatile compounds. Quality control followed EPA-CLP guidelines (SOW 10/86, rev. 7/87).

Analysis revealed the presence of the target compounds vinyl chloride, 1,2-dichloroethene and trichloroethene. The results are summarizd below.

	PT-12	PT-17	(ug/L)
vinyl chloride	17	-	
1,2-dichloroethene	1000	46	
trichloroethene	950	240	

GC/MS Manager

GC/MS

VOLATILES

SAMPLE DATA

REVIEWED_____

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE

PT-12

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052)

Task No.: 89092616

Matrix: (soil/water) WATER

Lab Sample ID: H23753

Sample wt/vol: 1.0 mL

Lab File ID: >BC474::A3

Level: (low/med) LOW

Date Received: 09/26/89

% Moisture: not dec.:

Date Analyzed: 09/28/89

Column: (pack/cap) PACK

Dilution Factor: 5.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	50.	U D
74-83-9	Bromomethane	50.	U D
75-01-4	Vinyl Chloride	17.	J D
75-00-3	Chloroethane	50.	U D
75-09-2	Methylene Chloride	25.	U D
67-64-1	Acetone	50.	U D
75-15-0	Carbon Disulfide	25.	U D
75-35-4	1,1-Dichloroethene	25.	U D
75-34-3	1,1-Dichloroethane	25.	U D
540-59-0	1,2-Dichloroethene (total)	1000.	D
67-66-3	Chloroform	25.	U D
107-02-2	1,2-Dichloroethane	25.	U D
78-93-3	2-Butanone	50.	U D
71-55-6	1,1,1-Trichloroethane	25.	U D
56-23-6	Carbon Tetrachloride	25.	U D
108-05-4	Vinyl Acetate	50.	U D
75-27-4	Bromodichloromethane	25.	U D
78-87-5	1,2-Dichloropropane	25.	U D
10061-01-5	cis-1,3-Dichloropropene	25.	U D
79-01-6	Trichloroethene	950.	D
124-48-1	Dibromochloromethane	25.	U D
79-00-5	1,1,2-Trichloroethane	25.	U D
71-43-2	Benzene	25.	U D
10061-02-6	trans-1,3-Dichloropropene	25.	U D
75-25-2	Bromoform	25.	U D
108-10-1	4 Methyl-2-Pentanone	50.	U D
591-78-6	2-Hexanone	50.	U D
127-18-4	Tetrachloroethene	25.	U D
79-34-5	1,1,2,2-Tetrachloroethane	25.	U D
108-88-3	Toluene	25.	U D
108-90-7	Chlorobenzene	25.	U D

Qualifiers:

U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.
D- Diluted value.

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 2

SAMPLE
PT-12

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89092616

Matrix: (soil/water) WATER Lab Sample ID: H23753

Sample wt/vol: 1.0 mL Lab File ID: >BC474::A3

Level: (low/med) LOW Date Received: 09/26/89

% Moisture: not dec.: Date Analyzed: 09/28/89

Column: (pack/cap) PACK Dilution Factor: 5.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	25.	U D
100-42-5	Styrene	25.	U D
1330-20-7	Xylene (total)	25.	U D

Qualifiers:
U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.
D- Diluted value.

QUANT REPORT

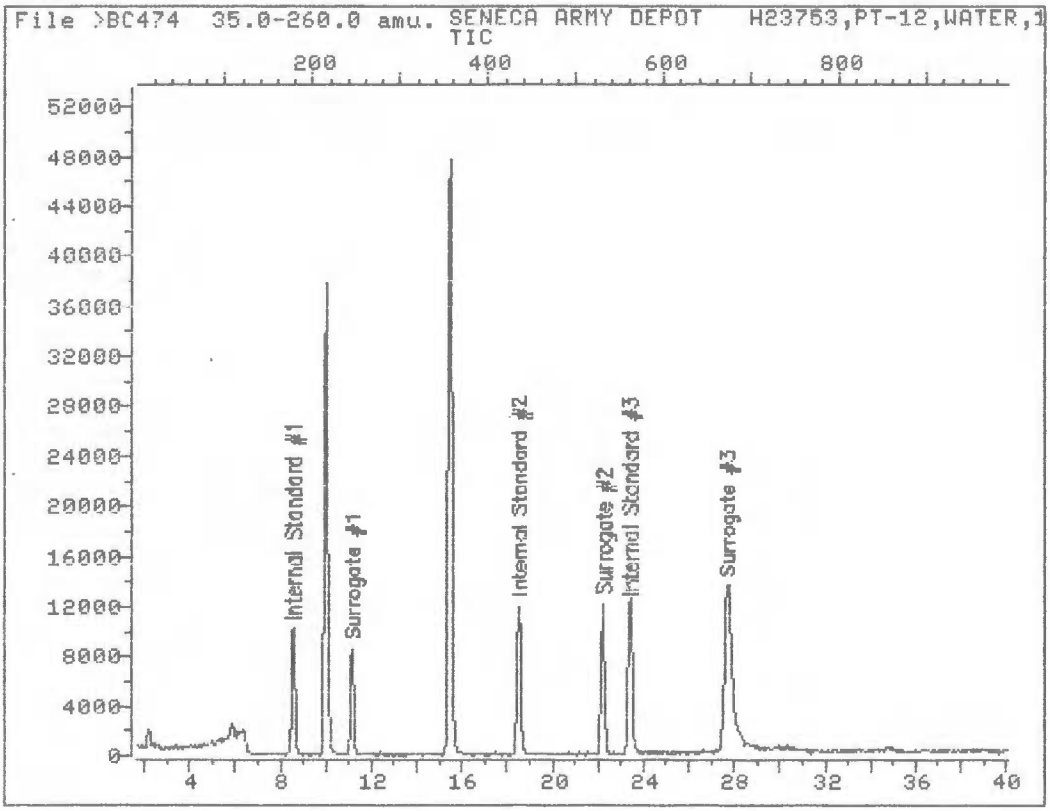
Operator ID: PETE Quant Rev: 6 Quant Time: 890929 00:13
Output File: ^BC474::D1 Injected at: 890928 23:32
Data File: >BC474::A3 Dilution Factor: 1.00000
Name: SENECA ARMY DEPOT
Misc: H23753,PT-12,WATER,1.0

ID File: BHSLW::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890928 13:20

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane		8.55	170	13425	50.00	UG/L	95
4)	Vinyl Chloride		3.40	45	1020	3.40	UG/L	94
11)	1,2-Dichloroethene (total)		9.98	215	74019	209.01	UG/L	88
13)	1,2-Dichloroethane-d4	(Surr)	11.14	245	36081	52.20	UG/L	80
15)	*1,4-Difluorobenzene		18.50	435	48372	50.00	UG/L	93
23)	Trichloroethene		15.48	357	77967	189.12	UG/L	85
29)	*Chlorobenzene-d5		23.38	561	40382	50.00	UG/L	95
35)	Toluene-d8	(Surr)	22.22	531	46283	50.65	UG/L	94
40)	Bromofluorobenzene	(Surr)	27.68	672	41114	51.35	UG/L	87

* Compound is ISTD

TOTAL ION CHROMATOGRAM

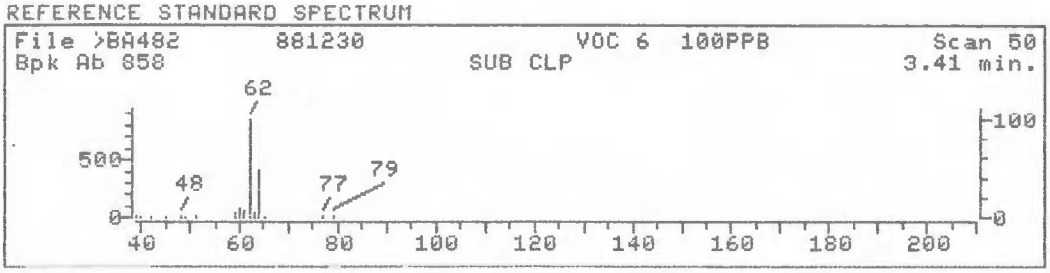


Data File: >BC474::A3 Quant Output File: ^BC474::QT
Name: SENECA ARMY DEPOT

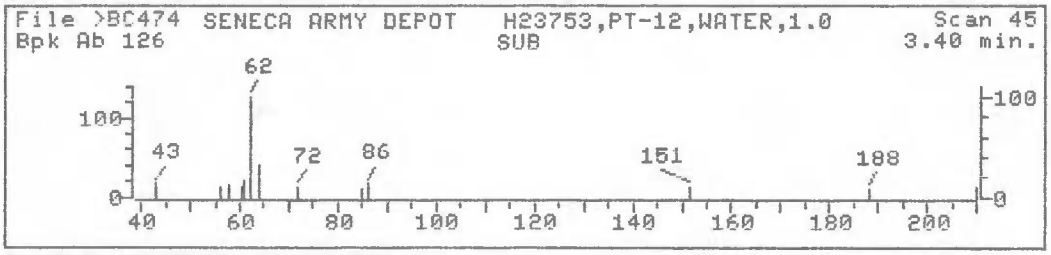
Id File: BHSLW::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890928 13:20

Operator ID: PETE
Quant Time: 890929 00:13
Injected at: 890928 23:32

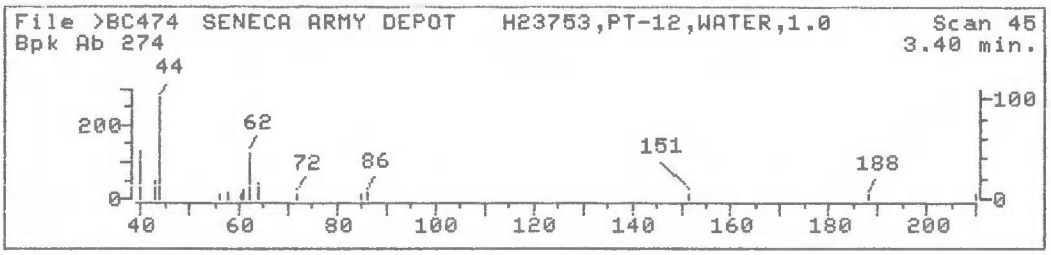
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

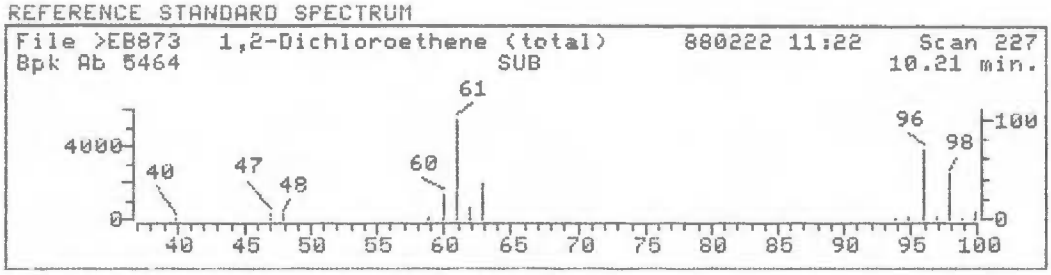


Data File: >BC474::A3 Quant Output File: ^BC474::QT
Name: SENECA ARMY DEPOT

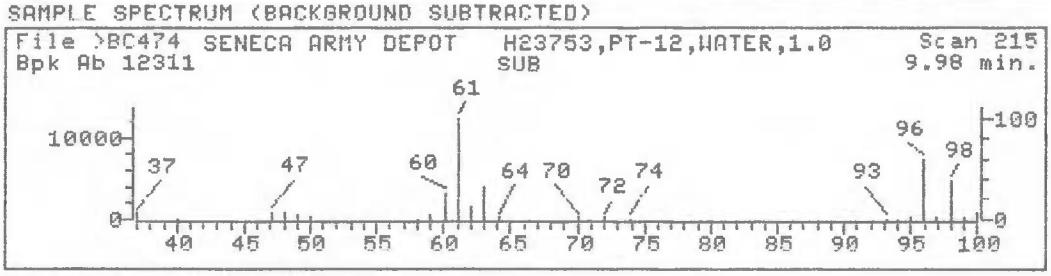
Quant Time: 890929 00:13 Quant ID File: BHSLW::SC
Injected at: 890928 23:32 Last Calibration: 890928 13:20

Compound No: 4
Compound Name: Vinyl Chloride
Scan Number: 45
Retention Time: 3.40 min.
Quant Ion: 62.0
Area: 1020
Concentration: 3.40 UG/L
q-value: 94

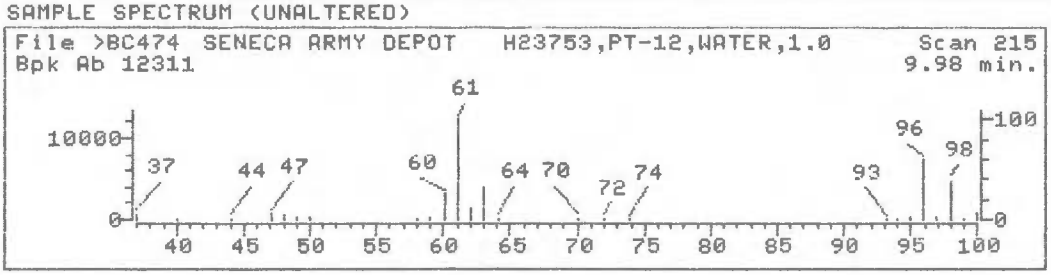
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

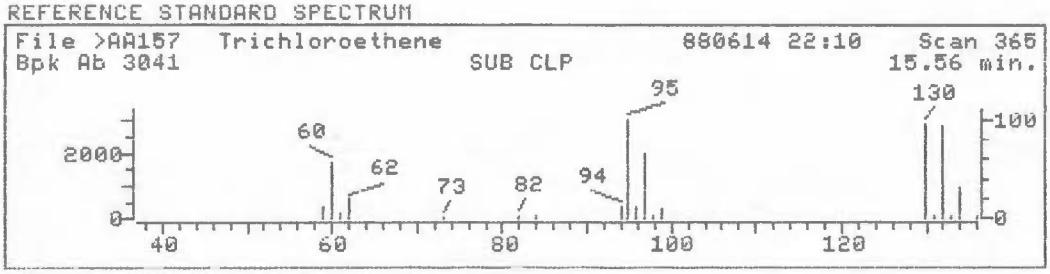


Data File: >BC474::A3 Quant Output File: ^BC474::QT
Name: SENECA ARMY DEPOT

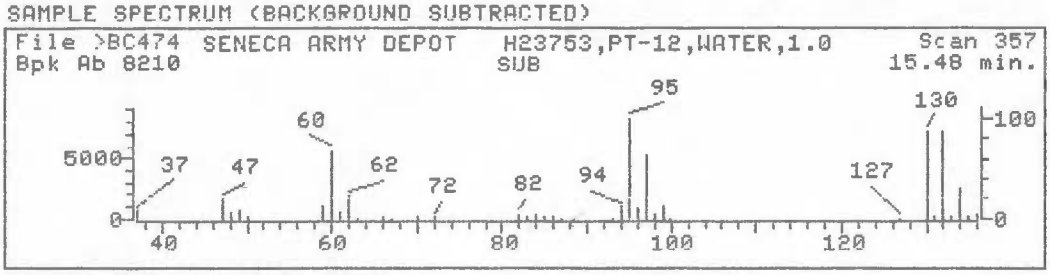
Quant Time: 890929 00:13 Quant ID File: BHSLW::SC
Injected at: 890928 23:32 Last Calibration: 890928 13:20

Compound No: 11
Compound Name: 1,2-Dichloroethene (total)
Scan Number: 215
Retention Time: 9.98 min.
Quant Ion: 96.0
Area: 74019
Concentration: 209.01 UG/L
q-value: 88

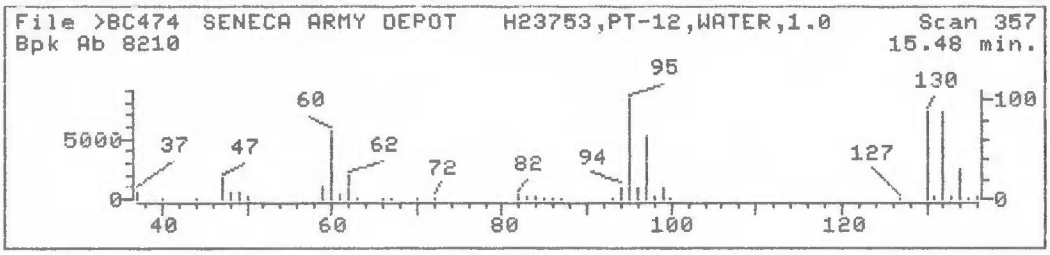
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >BC474::A3 Quant Output File: ^BC474::QT
Name: SENECA ARMY DEPOT

Quant Time: 890929 00:13 Quant ID File: BHSLW::SC
Injected at: 890928 23:32 Last Calibration: 890928 13:20

Compound No: 23
Compound Name: Trichloroethene
Scan Number: 357
Retention Time: 15.48 min.
Quant Ion: 130.0
Area: 77967
Concentration: 189.12 UG/L
q-value: 85

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 1

SAMPLE

| PT-17 |

Lab Name: CALSON LABORATORIES

Client: SENECA ARMY DEPOT (59052)

Task No.: 89092616

Matrix: (soil/water) WATER

Lab Sample ID: H23754

Sample wt/vol: 2.5 mL

Lab File ID: >BC483::A2

Level: (low/med) LOW

Date Received: 09/26/89

% Moisture: not dec.:

Date Analyzed: 09/29/89

Column: (pack/cap) PACK

Dilution Factor: 2.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	20.	U D
74-83-9	Bromomethane	20.	U D
75-01-4	Vinyl Chloride	20.	U D
75-00-3	Chloroethane	20.	U D
75-09-2	Methylene Chloride	10.	U D
67-64-1	Acetone	20.	U D
75-15-0	Carbon Disulfide	10.	U D
75-35-4	1,1-Dichloroethene	10.	U D
75-34-3	1,1-Dichloroethane	10.	U D
540-59-0	1,2-Dichloroethene (total)	46.	D
67-66-3	Chloroform	10.	U D
107-02-2	1,2-Dichloroethane	10.	U D
78-93-3	2-Butanone	20.	U D
71-55-6	1,1,1-Trichloroethane	10.	U D
56-23-6	Carbon Tetrachloride	10.	U D
108-05-4	Vinyl Acetate	20.	U D
75-27-4	Bromodichloromethane	10.	U D
78-87-5	1,2-Dichloropropane	10.	U D
10061-01-5	cis-1,3-Dichloropropene	10.	U D
79-01-6	Trichloroethene	240.	D
124-48-1	Dibromochloromethane	10.	U D
79-00-5	1,1,2-Trichloroethane	10.	U D
71-43-2	Benzene	10.	U D
10061-02-6	trans-1,3-Dichloropropene	10.	U D
75-25-2	Bromoform	10.	U D
108-10-1	4-Methyl-2-Pentanone	20.	U D
591-78-6	2-Hexanone	20.	U D
127-18-4	Tetrachloroethene	10.	U D
79-34-5	1,1,2,2-Tetrachloroethane	10.	U D
108-88-3	Toluene	10.	U D
108-90-7	Chlorobenzene	10.	U D

Qualifiers:

U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.
D- Diluted value.

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 2

SAMPLE

| PT-17 |

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89092616

Matrix: (soil/water) WATER Lab Sample ID: H23754

Sample wt/vol: 2.5 mL Lab File ID: >BC483::A2

Level: (low/med) LOW Date Received: 09/26/89

% Moisture: not dec.: Date Analyzed: 09/29/89

Column: (pack/cap) PACK Dilution Factor: 2.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	10.	U D
100-42-5	Styrene	10.	U D
1330-20-7	Xylene (total)	10.	U D

Qualifiers:

U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.
D- Diluted value.

QUANT REPORT

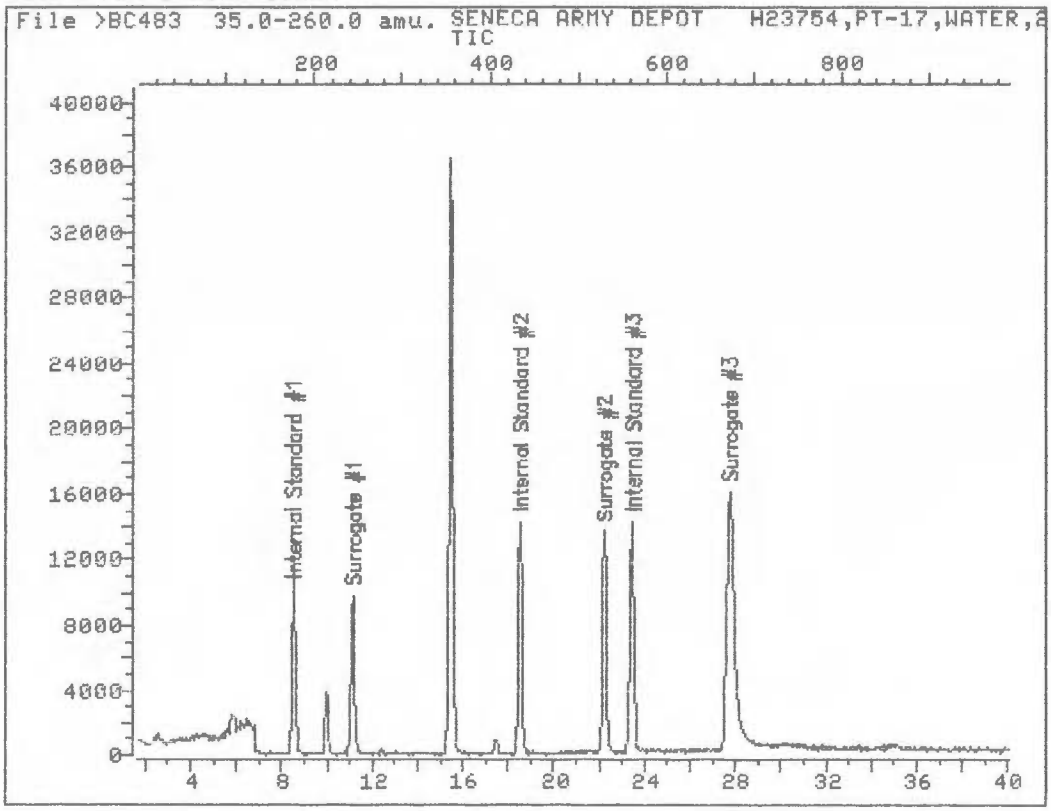
Operator ID: PETE Quant Rev: 6 Quant Time: 890929 20:05
Output File: ^BC483::QT Injected at: 890929 19:24
Data File: >BC483::A2 Dilution Factor: 1.00000
Name: SENECA ARMY DEPOT
Misc: H23754,PT-17,WATER,2.5

ID File: BHSLW::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890929 13:25

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane		8.50	176	14348	50.00	UG/L	97
11)	1,2-Dichloroethene (total)		9.97	214	7325	22.80	UG/L	88
13)	1,2-Dichloroethane-d4	(Surr)	11.13	244	39934M	54.77	UG/L	79
15)	*1,4-Difluorobenzene		18.52	435	57087	50.00	UG/L	91
23)	Trichloroethene		15.47	356	56843	120.91	UG/L	87
29)	*Chlorobenzene-d5		23.44	562	46967	50.00	UG/L	92
35)	Toluene-d8	(Surr)	22.20	530	52802	49.58	UG/L	99
40)	Bromofluorobenzene	(Surr)	27.74	673	48766	49.93	UG/L	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM

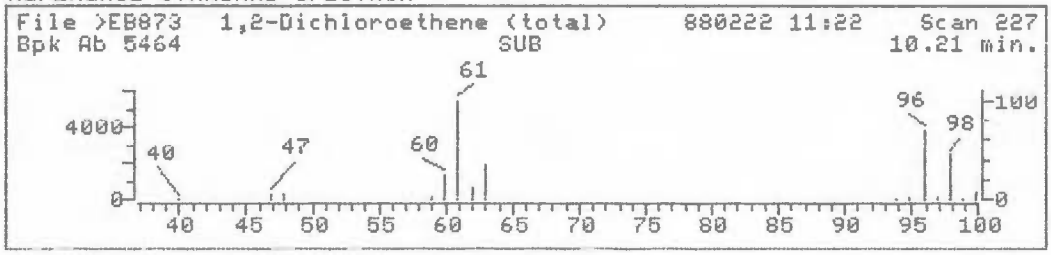


Data File: >BC483::A2 Quant Output File: ^BC483::QT
Name: SENECA ARMY DEPOT
Misc: H23754,PT-17,WATER,2.5

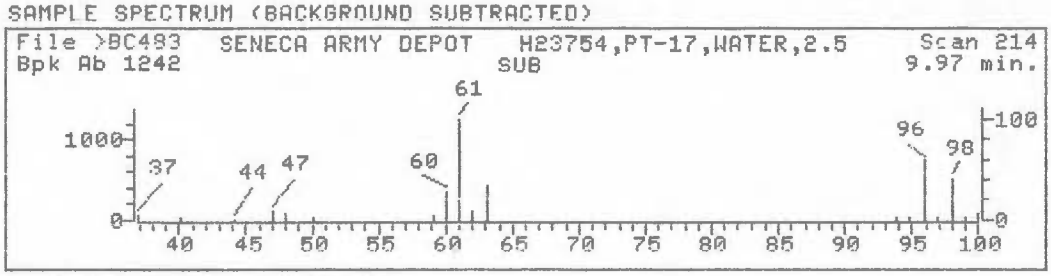
Id File: BHSLW::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890929 13:25

Operator ID: PETE
Quant Time: 890929 20:05
Injected at: 890929 19:24

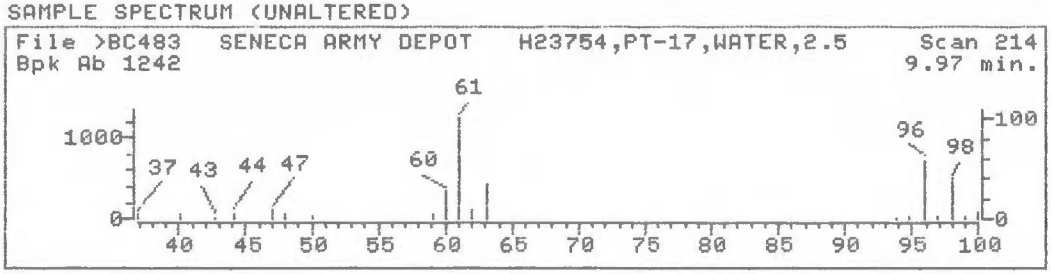
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



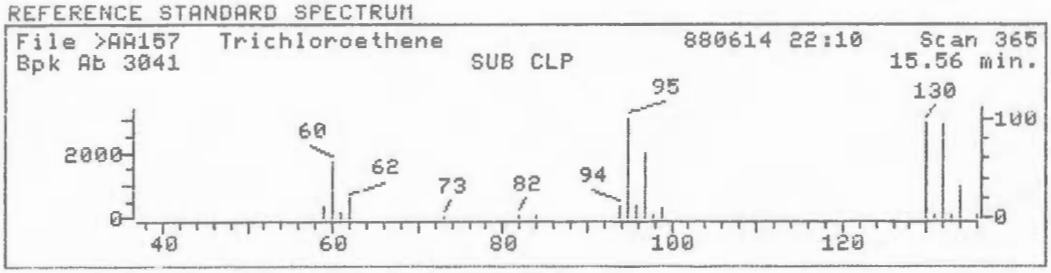
SAMPLE SPECTRUM (UNALTERED)



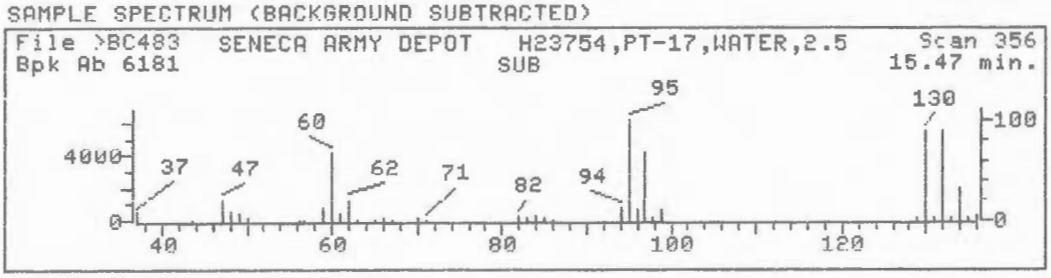
Data File: >BC483::A2 Quant Output File: ^BC483::QT
Name: SENECA ARMY DEPOT
Misc: H23754,PT-17,WATER,2.5
Quant Time: 890929 20:05 Quant ID File: BHSLW::SC
Injected at: 890929 19:24 Last Calibration: 890929 13:25

Compound No: 11
Compound Name: 1,2-Dichloroethene (total)
Scan Number: 214
Retention Time: 9.97 min.
Quant Ion: 96.0
Area: 7325
Concentration: 22.80 UG/L
q-value: 88

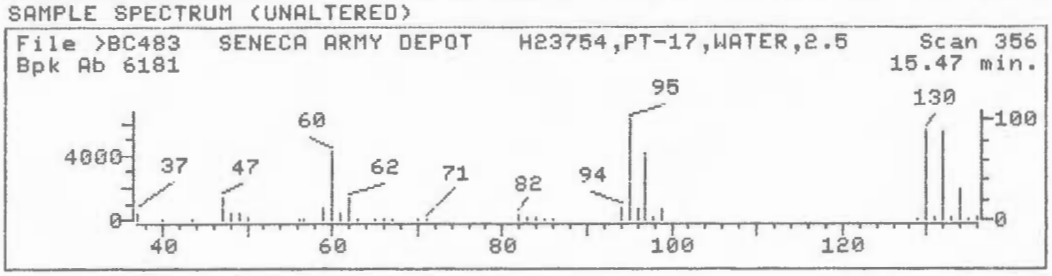
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >BC483::A2 Quant Output File: ^BC483::QT
Name: SENECA ARMY DEPOT
Misc: H23754,PT-17,WATER,2.5
Quant Time: 890929 20:05 Quant ID File: BHSLW::SC
Injected at: 890929 19:24 Last Calibration: 890929 13:25

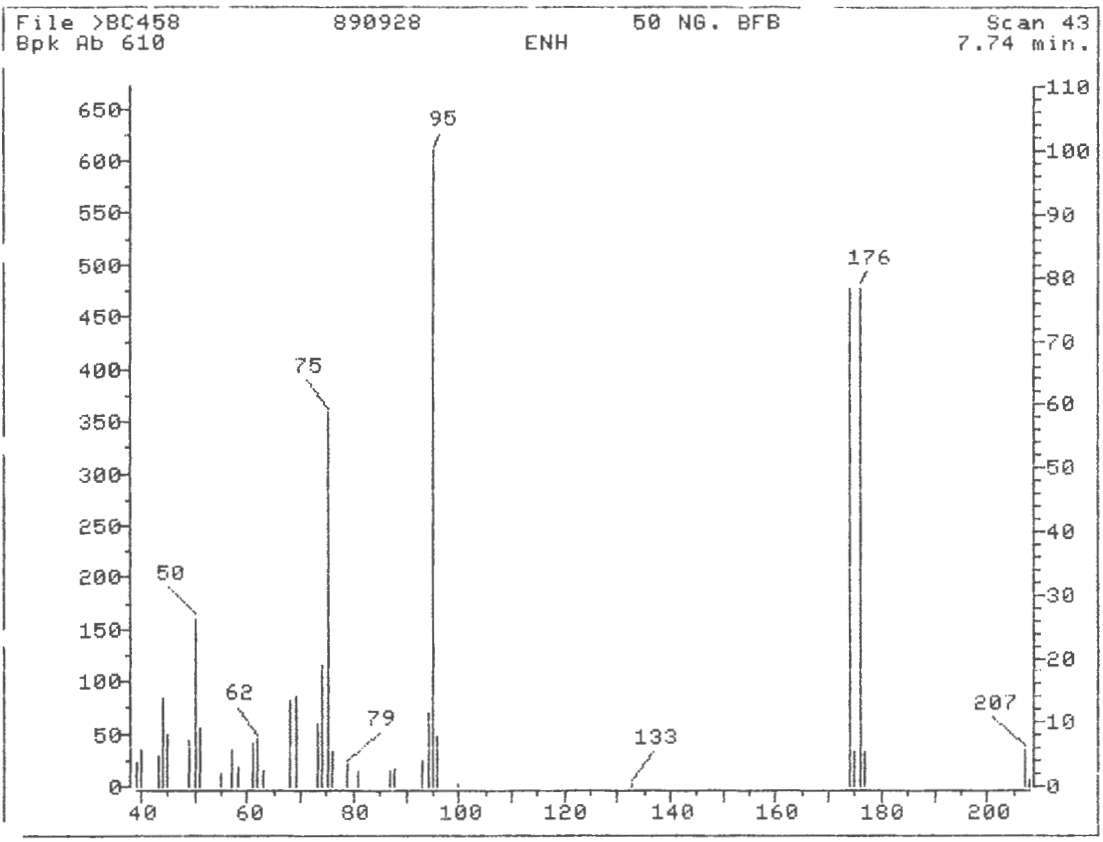
Compound No: 23
Compound Name: Trichloroethene
Scan Number: 356
Retention Time: 15.47 min.
Quant Ion: 130.0
Area: 56843
Concentration: 120.91 UG/L
q-value: 87

GC/MS

VOLATILES

QUALITY CONTROL DATA

REVIEWED_____

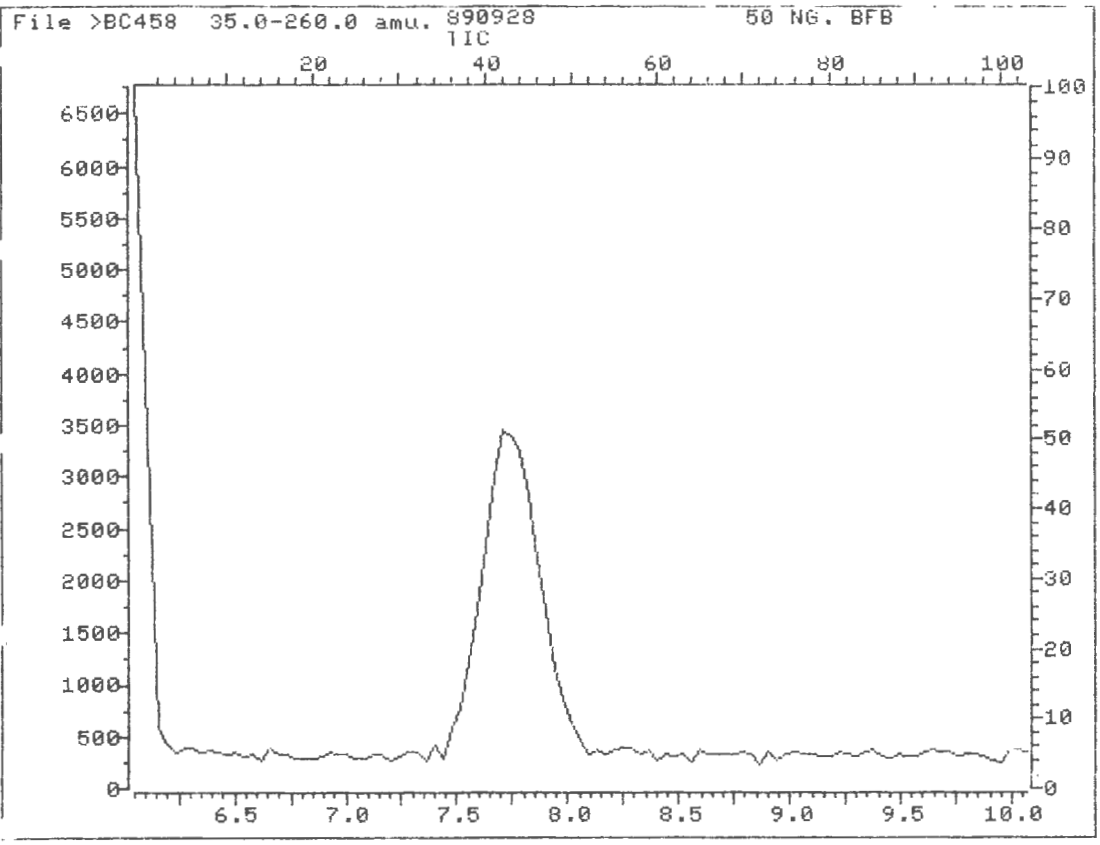


GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	26.24	26.24	Ok
75	30-60% of mass 95	58.72	58.72	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.65	7.65	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	78.18	78.18	Ok
175	5-9% of mass 174	5.30	6.78	Ok
176	95-101% of mass 174	78.40	100.28	Ok
177	5-9% of mass 176	5.47	6.97	Ok

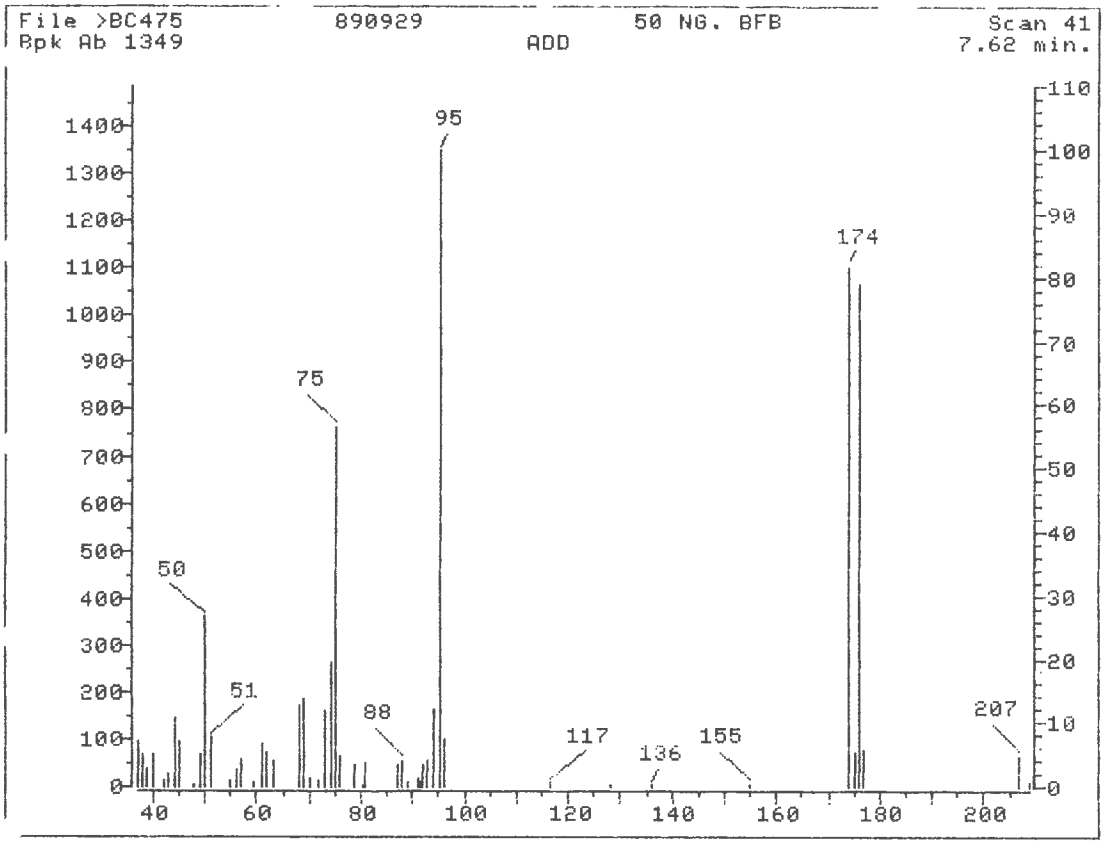
Injection Date: 09/28/89
Injection Time: 11:19
Data File: >BC458
Scan: 43



>BC458 890928 50 NG. BFB
43 NRM ENH NOM

File: >BC458 Scan #: 43 Retn. time: 7.74

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
39.00	3.773	51.05	8.967	68.05	13.614	80.95	2.351	96.05	7.654
40.05	5.796	54.95	2.023	69.05	14.161	86.95	2.296	173.90	78.185
43.15	4.593	57.05	5.686	73.05	9.677	87.95	2.624	175.00	5.303
44.05	13.723	58.05	3.062	74.05	18.863	93.05	4.046	175.90	78.404
45.05	7.983	61.05	6.780	75.05	58.721	94.05	11.318	176.90	5.467
49.05	6.944	62.05	7.272	76.05	5.413	95.05	100.000	207.05	5.741
50.05	26.244	63.05	2.515	78.95	3.280				

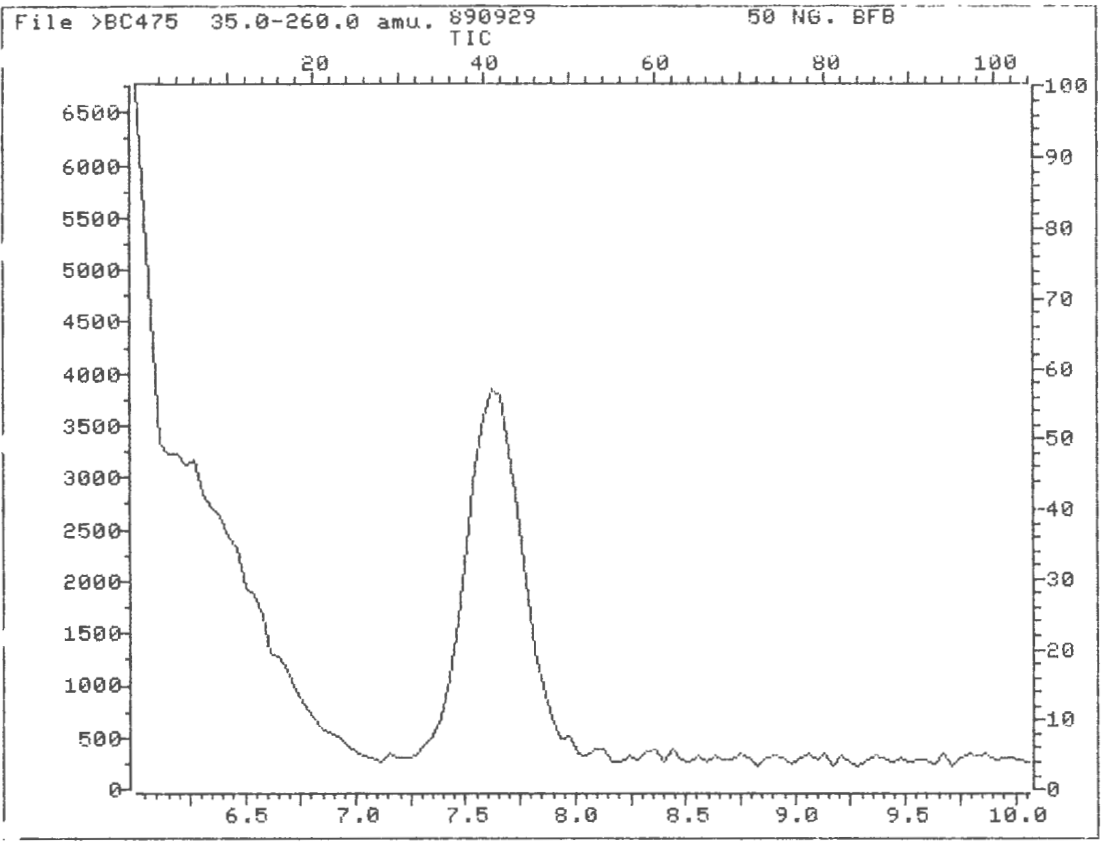


GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	26.76	26.76	Ok
75	30-60% of mass 95	56.49	56.49	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.26	7.26	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	81.76	81.76	Ok
175	5-9% of mass 174	5.56	6.80	Ok
176	95-101% of mass 174	78.95	96.55	Ok
177	5-9% of mass 176	5.63	7.14	Ok

Injection Date: 09/29/89
Injection Time: 10:46
Data File: >BC475
Scan: 41



>BC475 890929 50 NG. BFB
41 ADD NRM NOM

File: >BC475 Scan #: 41 Retn. time: 7.62

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	7.042	50.05	26.761	69.05	13.714	80.95	3.781	95.05	100.000
38.00	5.115	51.05	7.635	70.05	1.483	87.05	3.336	96.05	7.265
39.00	2.595	56.05	2.669	73.05	11.712	88.05	4.151	173.90	81.764
40.05	4.967	57.05	4.522	74.05	19.496	91.05	1.408	175.00	5.560
43.05	1.927	61.05	6.597	75.05	56.486	92.05	3.262	175.90	78.947
44.05	10.749	62.05	5.263	76.05	4.893	92.95	4.151	176.90	5.634
45.05	7.116	63.05	4.151	78.95	3.410	94.05	12.083	207.05	4.818
49.05	5.041	68.05	12.676						

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 09/28/89

Contractor: Time: 12:06

Contract No: Laboratory ID: >BC459

Instrument ID: Initial Calibration Date: 09/26/89

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Chloromethane	.93278	.90426	3.06		**
Bromomethane	1.38647	1.56199	12.66		
Vinyl Chloride	1.21125	1.11765	7.73	*	
Chloroethane	.79379	.82039	3.35		
Methylene Chloride	1.46831	1.50713	2.64		
Acetone	.64317	.80093	24.53		
Carbon Disulfide	2.04610	2.11972	3.60		
1,1-Dichloroethene	1.13544	1.16624	2.71	*	
1,1-Dichloroethane	2.71255	2.71342	.03		**
1,2-Dichloroethene (total)	1.22632	1.31898	7.56		
Chloroform	3.48749	3.59539	3.09	*	
1,2-Dichloroethane	2.96068	2.99291	1.09		
2-Butanone	.04534	.04586	1.13		
1,1,1-Trichloroethane	.79801	.85720	7.42		
Carbon Tetrachloride	.62819	.66695	6.17		
Vinyl Acetate	.37394	.35271	5.68		
Bromodichloromethane	.93193	.97860	5.01		
1,2-Dichloropropane	.36859	.36018	2.28	*	
cis-1,3-Dichloropropene	.79962	.78896	1.33		
Trichloroethene	.41536	.42615	2.60		
Dibromochloromethane	.70327	.71427	1.56		
1,1,2-Trichloroethane	.36916	.36762	.42		
Benzene	.80535	.85045	5.60		
trans-1,3-Dichloropropene	.45153	.44768	.85		
Bromoform	.58243	.57090	1.98		**
4-Methyl-2-Pentanone	.47367	.40298	14.92		
2-Hexanone	.42538	.39373	7.44		
Tetrachloroethene	.47432	.48778	2.84		
1,1,2,2-Tetrachloroethane	.68974	.65506	5.03		**
Toluene	.70531	.72282	2.48	*	
Chlorobenzene	.93957	.94495	.57		**
Ethylbenzene	.44941	.45923	2.19	*	

RF - Response Factor from daily standard file at 50.00 ug/Kg

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
VOA Compounds

Lab No: Calibration Date: 09/26/89

Contractor: Time: 12:06

Contract No: Laboratory ID: 26459

Instrument ID: Initial Calibration Date: 09/26/89

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is 25

Compound		$\overline{RF}$	RF	%Diff	CCC	SPCC
Styrene		.70039	.95890	2.98		
Xylene (total)		55501	.56750	1.35		(Conc=100.00)
Toluene-d8	(Surr)	1.14707	1.13137	1.37		
Bromofluorobenzene	(Surr)	1.00937	.99130	1.79		
1,2 Dichloroethane-d4	(Surr)	2.69711	2.67442	4.53		

RF - Response Factor from daily standard file at 50.00 ug/Kg

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
VOC Compounds

Case No: Calibration Date: 09/29/89

Contractor: Time: 12:21

Contract No: Laboratory ID: >BC476

Instrument ID: Initial Calibration Date: 09/26/89

Minimum $\overline{RF}$ for SPCC : 5 Maximum % Diff for CCC is 25 %

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC
Chloromethane	.95278	.72373	22.41		**
Bromomethane	1.30647	1.34705	2.84		
Vinyl Chloride	1.21125	.98014	19.08	*	
Chloroethane	.79379	.72836	8.24		
Methylene Chloride	1.46031	1.25858	14.28		
Acetone	.64317	.74517	15.86		
Carbon Disulfide	2.04610	1.86416	8.89		
1,1-Dichloroethene	1.13504	.96032	15.42	*	
1,1-Dichloroethane	2.71255	2.35913	13.03		**
1,2 Dichloroethene (total)	1.27632	1.11973	8.69		
Chloroform	3.48749	3.12530	10.39	*	
1,2-Dichloroethane	2.96068	2.69430	9.00		
2-Butanone	.04534	.04597	1.37		
1,1,1-Trichloroethane	.79801	.81269	1.84		
Carbon Tetrachloride	.62819	.63640	1.31		
Vinyl Acetate	.37396	.26157	30.05		
Bromodichloromethane	.93193	.93061	.72		
1,2-Dichloropropane	.36859	.33557	8.96	*	
cis-1,3-Dichloropropene	.79962	.76986	3.72		
Trichloroethene	.41536	.41176	.87		
Dibromochloromethane	.70327	.68306	2.87		
1,1,2-Trichloroethane	.36916	.35223	4.59		
Benzene	.80535	.78547	2.47		
trans-1,3-Dichloropropene	.45153	.43102	4.54		
Bromoform	.58243	.54689	6.27		**
4-Methyl-2-Pentanone	.47367	.40784	13.90		
2-Hexanone	.42338	.39152	7.96		
Tetrachloroethene	.47432	.42075	11.30		
1,1,2,2-Tetrachloroethane	.68974	.54941	20.35		**
Toluene	.70531	.64931	7.94	*	
Chlorobenzene	.93957	.85666	10.95		**
Ethylbenzene	.44941	.40107	10.76	*	

RF - Response Factor from daily standard file at 50.00 ug/Kg

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Continuing Calibration Check
HSL Compounds

Case No: Calibration Date: 09/29/89

Contractor: Time: 12:21

Contract No: Laboratory ID: >BC476

Instrument ID: Initial Calibration Date: 09/26/89

Minimum $\overline{RF}$ for SPCC is Maximum % Diff for CCC is

Compound		RF	$\overline{RF}$	%Diff	CCC	SPCC
Styrene		.98839	.96104	2.77		
Xylene (total)		.55501	.51104	.57		(Conc=100.00)
Toluene-d8	(Surr)	1.14707	1.13362	1.15		
Bromofluorobenzene	(Surr)	1.00937	1.03785	5.02		
1,2-Dichloroethane-d4	(Surr)	2.69711	2.54101	5.79		

RF - Response Factor from daily standard File at 50.00 ng/ng

$\overline{RF}$ - Average Response Factor from Initial Calibration Form VI

%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89092616

Level: (low/med) LOW

	SAMPLE NO.	(TOL)#	(BFB)#	(DCE)#	OTHER	TOT OUT
1	METHOD BLANK	94	98	94		0
2	MW-12 MS	101	107	100		0
3	MW-12 MSD	98	103	95		0
4	METHOD BLANK	97	102	99		0
5	PT-12	101	103	104		0
6	METHOD BLANK	99	100	104		0
7	PT-17	99	100	110		0
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
(TOL) = Toluene-d8	(88-110)
(BFB) = Bromofluorobenzene	(86-115)
(DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogrates diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89092616

Matrix Spike

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0.00	33.00	66	61-145
Trichloroethene	50.00	0.00	51.00	102	71-120
Benzene	50.00	0.00	50.00	100	76-127
Toluene	50.00	0.00	53.00	106	76-125
Chlorobenzene	50.00	0.00	54.00	108	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.00	33.00	66	0	14	61-145
Trichloroethene	50.00	48.00	96	3	14	71-120
Benzene	50.00	41.00	82	3	11	76-127
Toluene	50.00	52.00	104	1	13	76-125
Chlorobenzene	50.00	53.00	106	1	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of qc limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 1

SAMPLE: METHOD BLANK

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89092616

Matrix: (soil/water) WATER Lab Sample ID: BLANK

Sample wt/vol: 5 mL Lab File ID: >BC460::A1

Level: (low/med) LOW Date Received: 00/00/00

% Moisture: not dec.: Date Analyzed: 09/28/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-6	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U

Qualifiers:

U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.
D- Diluted value.

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 2

SAMPLE

| METHOD BLANK |

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89092616

Matrix: (soil/water) WATER Lab Sample ID: BLANK

Sample wt/vol: 5 mL Lab File ID: >BC460::A1

Level: (low/med) LOW Date Received: 00/00/00

% Moisture: not dec.: Date Analyzed: 09/28/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

Qualifiers:

U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.
D- Diluted value.

QUANT REPORT

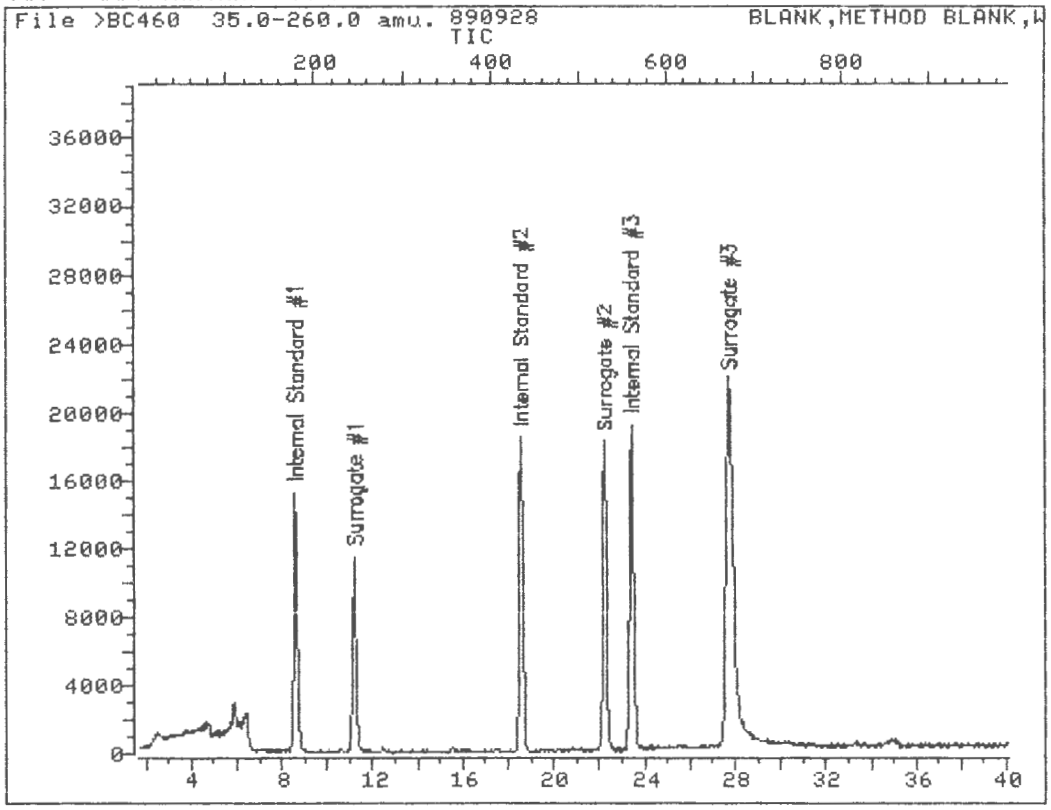
Operator ID: PETE Quant Rev: 6 Quant Time: 890928 13:55
Output File: ^BC460::QT Injected at: 890928 13:08
Data File: >BC460::A1 Dilution Factor: 1.00000
Name: 890928
Misc: BLANK,METHOD BLANK,WATER,5

ID File: BHSLW::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890928 13:20

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane		8.60	178	19263	50.00	UG/L	99
13)	1,2-Dichloroethane-d4	(Surr)	11.19	245	49156	49.56	UG/L	81
15)	*1,4-Difluorobenzene		18.55	435	71886	50.00	UG/L	90
29)	*Chlorobenzene-d5		23.43	561	62303	50.00	UG/L	94
35)	Toluene-d8	(Surr)	22.23	530	68473	48.57	UG/L	99
40)	Bromofluorobenzene	(Surr)	27.73	672	63293	51.24	UG/L	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >BC460::A1 Quant Output File: ^BC460::QT
Name: 890928
Misc: BLANK,METHOD BLANK,WATER,5

Id File: BHSLW::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890928 13:20

Operator ID: PETE
Quant Time: 890928 13:55
Injected at: 890928 13:08

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 1

SAMPLE

| METHOD BLANK |

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89092616

Matrix: (soil/water) WATER Lab Sample ID: BLANK

Sample wt/vol: 5 mL Lab File ID: >BC478::A2

Level: (low/med) LOW Date Received: 00/00/00

% Moisture: not dec.: Date Analyzed: 09/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	5.	U
75-35-4	1,1-Dichloroethene	5.	U
75-34-3	1,1-Dichloroethane	5.	U
540-59-0	1,2-Dichloroethene (total)	5.	U
67-66-3	Chloroform	5.	U
107-02-2	1,2-Dichloroethane	5.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	5.	U
56-23-6	Carbon Tetrachloride	5.	U
108-05-4	Vinyl Acetate	10.	U
75-27-4	Bromodichloromethane	5.	U
78-87-5	1,2-Dichloropropane	5.	U
10061-01-5	cis-1,3-Dichloropropene	5.	U
79-01-6	Trichloroethene	5.	U
124-48-1	Dibromochloromethane	5.	U
79-00-5	1,1,2-Trichloroethane	5.	U
71-43-2	Benzene	5.	U
10061-02-6	trans-1,3-Dichloropropene	5.	U
75-25-2	Bromoform	5.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	5.	U
79-34-5	1,1,2,2-Tetrachloroethane	5.	U
108-88-3	Toluene	5.	U
108-90-7	Chlorobenzene	5.	U

Qualifiers:

U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.
D- Diluted value.

VOLATILE ORGANICS ANALYSIS DATA SHEET
PAGE 7

SAMPLE

| METHOD BLANK |

Lab Name: GALSON LABORATORIES

Client: SENECA ARMY DEPOT (L9052) Task No.: 89092616

Matrix: (soil/water) WATER Lab Sample ID: BLANK

Sample wt/vol: 5 mL Lab File ID: >BC478::A2

Level: (low/med) LOW Date Received: 00/00/00

% Moisture: not dec.: Date Analyzed: 09/29/89

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	5.	U
100-42-5	Styrene	5.	U
1330-20-7	Xylene (total)	5.	U

Qualifiers:

U- Undetected. Value is the quantitation limit for that compound.
J- Estimated value. Value is below the compound quantitation limit.
B- Compound also found in blank.
D- Diluted value.

QUANT REPORT

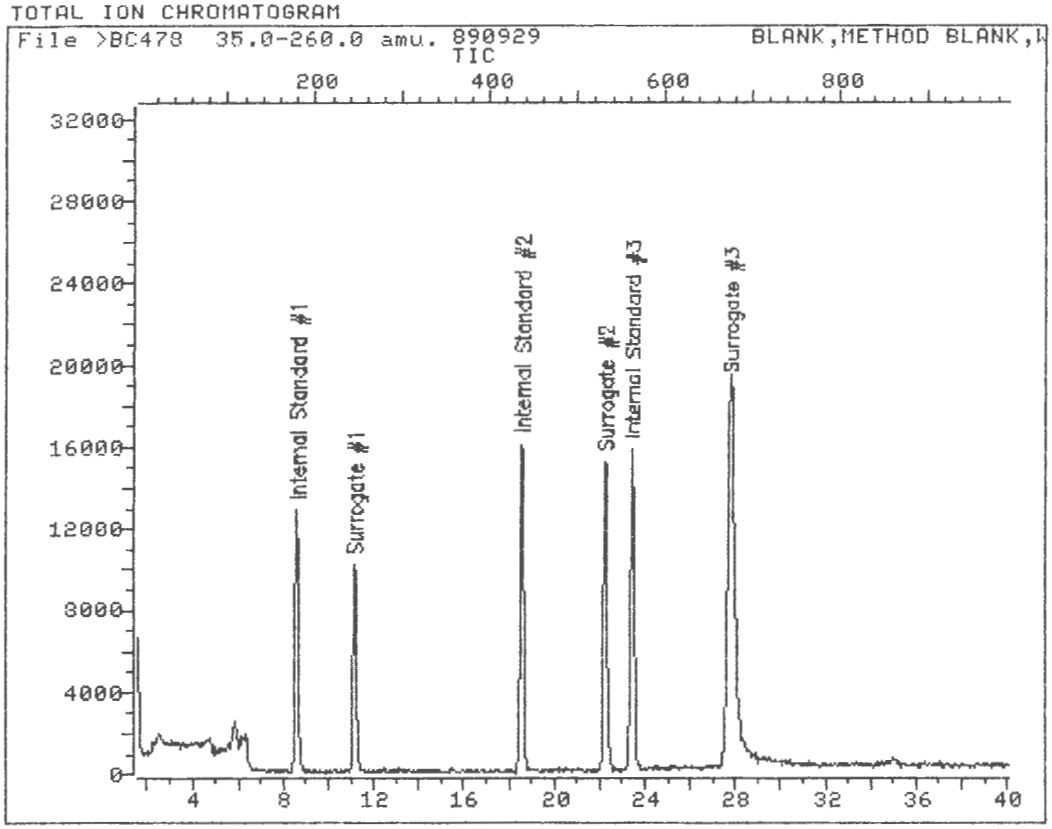
Operator ID: MARK Quant Rev: 6 Quant Time: 890929 15:13
Output File: ^BC478::QT Injected at: 890929 14:32
Data File: >BC478::A2 Dilution Factor: 1.00000
Name: 890929
Misc: BLANK,METHOD BLANK,WATER,5

ID File: BHSLW::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890929 13:25

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane		8.60	180	16409	50.00	UG/L	97
13)	1,2-Dichloroethane-d4	(Surr)	11.15	246	43309	51.93	UG/L	82
15)	*1,4-Difluorobenzene		18.55	437	62654	50.00	UG/L	90
29)	*Chlorobenzene-d5		23.43	563	51833	50.00	UG/L	98
35)	Toluene-d8	(Surr)	22.23	532	58406	49.69	UG/L	99
40)	Bromofluorobenzene	(Surr)	27.77	675	54103	50.19	UG/L	85

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >BC478::A2 Quant Output File: ^BC478::QT
Name: 890929
Misc: BLANK,METHOD BLANK,WATER,5

Id File: BHSLW::SC
Title: CLP protocol-5pt calibration, GC/MS B(#2)
Last Calibration: 890929 13:25

Operator ID: MARK
Quant Time: 890929 15:13
Injected at: 890929 14:32

GALSON LABORATORIES — **INSTRUMENT LOG GC/MS B (#2)** — **DATE** 9/28/89

TUNE FILE: MTB0001 | **INTERNAL STANDARD:** 765 | **DATA TAPE:** AD0007

METHOD FILE: VOAB | **VOLUME INTERNAL STD:** 10ul | **ANALYST:** Peter Tuliak

ID FILE: BHSLW | **VOLUME INJ/PURGED:** 5ml | **SUPERVISOR:** [illegible]

FILE	GTS #	AS #	INITIAL WT/VOL	FINAL VOLUME	% MOIST	CLIENT	DESCRIPTION	COMMENTS
>BC458	RFR	–	1ul	–	–	QC	50ng RFB	OK, BNH -1:1 scan 43 9:0[illegible]
>BC459	Std	5	5ml	–	–	↓	50ppb VOA Std #807	OK, CCAL
>BC460	Blank	6	5ml	–	–	↓	Method Blank	OK
>BC461	H22946	7	5ml	–	–	Blasland + Bouck	MW-7	OK
>BC462	H22947	8	5ml	–	–		SW-1	OK
>BC463	H22948	9	5ml	–	–		SW-3	OK
~~>BC464~~	~~H22950~~	~~10~~	~~5ml~~	~~–~~	~~–~~		~~SW-4~~	Not Run
>BC465	H22951	1	5ml					OK, Reanal 1:2
>BC466	H23111	2					MW-10	OK
>BC467	H23112	3					MW-2	OK
>BC468	H23113	4					MW-9	OK
>BC469	H23114	5					MW-1	OK
>BC470	H23115	6					MW-8	OK
>BC472	H23116	7				↓	MW-3	~~[illegible]~~ OK
>BC473	H23192	8	5ml	–	–	Niagara Mohawk	Manhole #3C4	OK
>BC47[illegible]	H23753	9	1.0ml	5ml	–	Seneca Army	PT-12	OK
>BC474	H23754	10	2.5ml	5ml	–	↓	PT-17	Not Run

VA?

GALSON LABORATORIES | **INSTRUMENT LOG GC/MS B (#2)** | **DATE** 9/29/89

TUNE FILE: MTB001
METHOD FILE: VOAB
ID FILE: BHSLW

INTERNAL STANDARD: 765
VOLUME INTERNAL STD: 10 ul
VOLUME INJ/PURGED: 5 ml

DATA TAPE: A00007
ANALYST: [illegible signature]
SUPERVISOR: [illegible signature]

FILE	GTS #	AS #	INITIAL WT/VOL	FINAL VOLUME	% MOIST	CLIENT	DESCRIPTION	COMMENTS
>BC475	BFB	-	1 ul	-	-	QC	50 ng BFB	OK SCAN 41+40
>BC476	Std	10	5 ml	-	-	↓	50 ppb VOA Std #808	OK, QCAL
>BC477	Blank	1	5 ml	-	-		Method Blank	NG - leak
>BC478	Blank	2	5 ml	-	-	↓	Method Blank	OK
>BC479	H23118	3	5 ml	-	-	Blasland + Bouck	Trip Blank	OK
>BC480	H23117	4	5 ml	-	-	↓	MW-11	OK
>BC481	H23451	5	2.5 ml	5 ml	-		SW-5	OK
>BC482	H23116	6	5 ml	-	-	↓	~~Std 5~~ MW-3	OK
>BC483	H23754	7	2.5 ml	5 ml	-	Seneca Army Depot	PT-17	OK
>BC484	H23129	8	5 ml	-	-	Severson		NG - level exceed - run 1:100
>	H23130	9				↓	~~test~~	Not Run