Site: Atlantic Water
ID #: IOD039954300
Break: 6.3
Other: Univ of Iowa
7-27-87

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

TRANSMITTAL FORM

TO: PHILIP DULA
ECOLOGY AND ENVIRONMENT, INC.
CLOVERLEAF BLDG 3
6405 METCALF
OVERLAND PARK, KS 66202

FROM: Jean CARLETON
UNCONTROLLED SITES
Phone: (515)281- 7040
DATE: 7/27/87

A72Q 1.0
04-08 161191

Enclosed or attached is the following:

No.	Description
1	ATLANTIC WATER SUPPLY - SEDIMENT SAMPLE TAKEN DOWNSTREAM OF WELL 7 DISCHARGE

- [x] For your information and use
- [ ] Necessary action
- [ ] As requested
- [ ] Please return
- [ ] Review and comment
- [ ] _____

REMARKS: _____

The University of Iowa
Iowa City, Iowa 52242

Hygienic Laboratory
Office of the Director

(319) 335-4500

1847

22 July 1987

Jean Carleton
Dept. of Natural Resources
Uncontrolled Sites
H. A. Wallace Building
900 E. Grand
Des Moines, IA 50319

RE: UHL Sample #8706864
Buttermilk Creek Downstream of Well #7 (Sediment)
Collected 6-10-87

Dear Ms. Carleton:

Please find enclosed the analytical results for the above referenced samples submitted to our Laboratory on 12 June 1987 for volatile priority pollutant analysis. This sample belongs with UHL Samples #8705521-8705534, which were directed to you under a 8 July 1987 letter.

The University Hygienic Laboratory appreciates the opportunity to assist you in this analytical project. Questions concerning the analytical data can be directed to Mr. Dennis Seeger of our GC/MS Department.

Sincerely,

George M. Breuer

George M. Breuer, Ph.D., CIH
Chief, ORganic Analysis

pjp

Enclosure

cc: Mr. Seeger
DCO

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Buttermilk Creek Downstream of Well 7 (Sediment)
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8706864

ANALYTE	CONCENTRATION (ug/Kg)	QUANTITATION LIMIT (ug/Kg)
CHLOROMETHANE	<5	5
BROMOMETHANE	<5	5
VINYL CHLORIDE	<5	5
CHLOROETHANE	<5	5
METHYLENE CHLORIDE	<25	25
TRICHLOROFLUOROMETHANE	<5	5
1,1-DICHLOROETHENE	<5	5
1,1-DICHLOROETHANE	<5	5
CIS- & TRANS-1,2-DICHLOROETHENE	<5	5
CHLOROFORM	<5	5
1,2-DICHLOROETHANE	<5	5
1,1,1-TRICHLOROETHANE	<5	5
CARBON TETRACHLORIDE	<5	5
BROMODICHLOROMETHANE	<5	5
1,2-DICHLOROPROPANE	<5	5
CIS-1,3-DICHLOROPROPENE	<5	5
TRICHLOROETHENE	5	5

ANALYTICAL RESULTS

UHL Lab No. 8706864

ANALYTE	CONCENTRATION (ug/Kg)	QUANTITAION LIMIT (ug/Kg)
DIBROMOCHLOROMETHANE	<5	5
1,1,2-TRICHLOROETHANE	<5	5
BENZENE	<5	5
TRANS-1,3-DICHLOROPROPENE	<5	5
2-CHLOROETHYL VINYL ETHER	<25	25
BROMOFORM	<5	5
TETRACHLOROETHENE	<5	5
1,1,2,2-TETRACHLOROETHANE	<5	5
TOLUENE	<5	5
CHLOROBENZENE	<5	5
ETHYLBENZENE	<5	5

Analytical Method: EPA Method 8240

Analyst: J.Moder/J.Filkins
Verified:
Date Reported: 7-15-87

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

TRANSMITTAL FORM

TO: PHILIP DULA
ECOLOGY AND ENVIRONMENT, INC
CLOVER LEAF BLDG 3
6405 METCALF
OVERLAND PARK, KS 66202

FROM: Jean Carleton
Uncontrolled Sites
Phone: (515)281 - 7040
DATE: July 13, 1987

Enclosed or attached is the following:

No.	Description
1	ATLANTIC WATER SUPPLY SAMPLE RESULTS FOR SAMPLES TAKEN ON 6/10/87

- [x] **For your information and use**
- [ ] **Necessary action**
- [ ] **As requested**
- [ ] **Please return**
- [ ] **Review and comment**
- [ ] _____

REMARKS: DUE TO A MIX-UP AT THE LAB, THE DOWNSTREAM SEDIMENT SAMPLE HAS NOT BEEN ANALYZED YET. I'LL SEND YOU THOSE RESULTS WHEN THEY ARE RECEIVED. GIVE ME A CALL TO DISCUSS THE NEXT STEP AFTER YOU HAVE A CHANCE TO REVIEW THESE RESULTS.

The University of Iowa

Iowa City, Iowa 52242

Hygienic Laboratory
Office of the Director

(319) 335-4500

1847

8 July 1987

Jean Carleton
Dept. of Natural Resources
Uncontrolled Sites
H. A. Wallace Building
900 E. Grand
Des Moines, IA 50319

RE: UHL Sample #8705521-8705534 Atlantic WS
Collected 6/10/87

Dear Ms. Carleton:

Please find enclosed the analytical results for the above referenced samples submitted to our Laboratory on 12 June 1987 for volatile priority pollutant analysis.

The University Hygienic Laboratory appreciates the opportunity to assist you in this analytical project. Questions conerning the analytical data can be directed to Mr. Dennis Seeger of our GC/MS Department.

Sincerely,

Mary T. Freitag for

Keith L. Cherryholmes, Ph.D.
Assistant Director

KLC/slb

Enclosure
cc: Mr. Seeger
DCO

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 1
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705521

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
METHYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
TRICHLOROETHENE	<1	1

#1

ANALYTICAL RESULTS

UHL Lab No. 8705521

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	<1	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
C' ROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J. Yoder/J.Filkins
Verified: DS
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 2
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705522

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
METHYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
CHLOROETHENE	<1	1

ANALYTICAL RESULTS

UHL Lab No. 8705522

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	1	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
[illegible]ROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J.Yoder/J.Filkins
Verified: [illegible]
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 3
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705523

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
METHYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
CHLOROETHENE	<1	1

ANALYTICAL RESULTS

UHL Lab No. 8705523

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	1	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
C' ROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J.Yoder/J.Filkins
Verified: DS
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 4
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705524

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
ML .YLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
T' HLOROETHENE	1	1

#4

ANALYTICAL RESULTS

UHL Lab No. 8705524

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	3	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
C ROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J.Yoder/J.Filkins
Verified: [illegible]
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 6
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705525

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CH[illegible]ROETHANE	<1	1
M[illegible]YLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
T[illegible]HLOROETHENE	<1	1

#6

ANALYTICAL RESULTS

UHL Lab No. 8705525

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	<1	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
C ROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J. Yoder/J.Filkins
Verified: DS
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 7
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705526

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
METHYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
TRICHLOROETHENE	1	1

#7

ANALYTICAL RESULTS

UHL Lab No. 8705526

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	150	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
OROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst:. J.Yoder/J.Filkins
Verified: DS
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 8
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705527

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
METHYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
TRICHLOROETHENE	<1	1

#8

ANALYTICAL RESULTS

UHL Lab No. 8705527

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	2	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
( )ROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J.Yoder/J.Filkins
Verified: [illegible]
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 9
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705528

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
METHYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
TRICHLOROETHENE	<1	1

#9

ANALYTICAL RESULTS

UHL Lab No. 8705528

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	1	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
OROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J.Yoder/J.Filkins
Verified: [illegible]
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 10
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705529

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
METHYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
TRICHLOROETHENE	<1	1

#10

ANALYTICAL RESULTS

UHL Lab No. 8705529

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	<1	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
OROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J.Yoder/J.Filkins
Verified: DS
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 11
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705530

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
[illegible]HYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
[illegible]CHLOROETHENE	<1	1

#11

ANALYTICAL RESULTS

UHL Lab No. 8705530

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	<1	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
OROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J.Yoder/J.Filkins
Verified: DS
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic Well 12
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705531

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
[illegible]HYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
[illegible]CHLOROETHENE	<1	1

#12

ANALYTICAL RESULTS

UHL Lab No. 8705531

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	<1	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
[illegible]ROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J.Yoder/J.Filkins
Verified: [illegible]
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Buttermilk Creek Upstream of Well 7 (Sediment)
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705532

ANALYTE	CONCENTRATION (ug/Kg)	QUANTITATION LIMIT (ug/Kg)
CHLOROMETHANE	<5	5
BROMOMETHANE	<5	5
VINYL CHLORIDE	<5	5
CHLOROETHANE	<5	5
METHYLENE CHLORIDE	<25	25
TRICHLOROFLUOROMETHANE	<5	5
1,1-DICHLOROETHENE	<5	5
1,1-DICHLOROETHANE	<5	5
CIS- & TRANS-1,2-DICHLOROETHENE	<5	5
CHLOROFORM	<5	5
1,2-DICHLOROETHANE	<5	5
1,1,1-TRICHLOROETHANE	<5	5
CARBON TETRACHLORIDE	<5	5
BROMODICHLOROMETHANE	<5	5
1,2-DICHLOROPROPANE	<5	5
CIS-1,3-DICHLOROPROPENE	<5	5
TRICHLOROETHENE	<5	5

ANALYTICAL RESULTS

UHL Lab No. 8705532

ANALYTE	CONCENTRATION (ug/Kg)	QUANTITAION LIMIT (ug/Kg)
DIBROMOCHLOROMETHANE	<5	5
1,1,2-TRICHLOROETHANE	<5	5
BENZENE	<5	5
TRANS-1,3-DICHLOROPROPENE	<5	5
2-CHLOROETHYL VINYL ETHER	<25	25
BROMOFORM	<5	5
TETRACHLOROETHENE	<5	5
1,1,2,2-TETRACHLOROETHANE	<5	5
TOLUENE	<5	5
CHLOROBENZENE	<5	5
ETHYLBENZENE	<5	5

Analytical Method: EPA Method 8240

Analyst: J.Yoder/J.Filkins
Verified: DS
Date Reported: 7-07-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Atlantic, Buttermilk Creek downstream well 7
Date Sample Collected: 6-10-87
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705533

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
CHLOROETHANE	<1	1
METHYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
TRICHLOROETHENE	1	1

ANALYTICAL RESULTS

UHL Lab No. 8705533

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	81	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
ORBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J. Yoder/J.Filkins
Verified:
Date Reported: 6-24-87

UNIVERSITY HYGIENIC LABORATORY
Analytical Report
Finnigan 4000

Client: DNR Atten: Jean Carleton
Client Address: Abandoned & Uncontrolled Sites
Wallace Building
Des Moines, Iowa 50319
Client Sample Identification: Shipping Blank
Date Sample Collected:
Date Sample Received: 6-12-87

ANALYTICAL RESULTS

UHL Lab No. 8705534

ANALYTE	CONCENTRATION (ug/L)	QUANTITATION LIMIT (ug/L)
CHLOROMETHANE	<1	1
BROMOMETHANE	<1	1
VINYL CHLORIDE	<1	1
C[illegible]OROETHANE	<1	1
[illegible]HYLENE CHLORIDE	<5	5
TRICHLOROFLUOROMETHANE	<1	1
1,1-DICHLOROETHENE	<1	1
1,1-DICHLOROETHANE	<1	1
CIS- & TRANS-1,2-DICHLOROETHENE	<1	1
CHLOROFORM	<1	1
1,2-DICHLOROETHANE	<1	1
1,1,1-TRICHLOROETHANE	<1	1
CARBON TETRACHLORIDE	<1	1
BROMODICHLOROMETHANE	<1	1
1,2-DICHLOROPROPANE	<1	1
CIS-1,3-DICHLOROPROPENE	<1	1
[illegible]CHLOROETHENE	<1	1

ANALYTICAL RESULTS

UHL Lab No. 8705534

ANALYTE	CONCENTRATION (ug/L)	QUANTITAION LIMIT (ug/L)
DIBROMOCHLOROMETHANE	<1	1
1,1,2-TRICHLOROETHANE	<1	1
BENZENE	<1	1
TRANS-1,3-DICHLOROPROPENE	<1	1
2-CHLOROETHYL VINYL ETHER	<5	5
BROMOFORM	<1	1
TETRACHLOROETHENE	<1	1
1,1,2,2-TETRACHLOROETHANE	<1	1
TOLUENE	<1	1
OROBENZENE	<1	1
ETHYLBENZENE	<1	1

Analytical Method: EPA Method 524

Analyst: J. Yoder/J.Filkins
Verified:
Date Reported: 6-24-87