



(Handwritten initials)

*file your shelves
32 Nov 83*

UCAR CARBON COMPANY INC. P.O. BOX 513, COLUMBIA, TENNESSEE 38402-0513

March 30, 1992

Mr. Robert J. Mitrey
Associate Sanitary Engineer
New York State Department of Environmental Conservation
600 Delaware Street
Buffalo, New York 14202-1073

RE: Quarterly Report of Groundwater Analysis
Republic Solid Waste Management Facility
Post-Closure Monitoring Program

Dear Mr. Mitrey:

I am enclosing a copy of the sixteenth quarter's groundwater sampling analysis from the closed Republic Solid Waste Management Facility. Bedrock well, BW -4, continues to demonstrate some slight volatile organic contamination in the less than one part per million range.

The following will summarize the positive organic parameters:

<u>CONTAMINATE</u>	<u>16TH Qtr.</u> <u>ppb</u>	<u>Mean Conc.</u> <u>ppb</u>	<u>Range</u> <u>ppb</u>
Chloroform	5.87	7.6	5.9 - 11.3
Hexachlorobutadiene	44	55.2	10 - 160
Tetrachlorethylene	186	280	72 - 380
Trichloroethene	187	331.6	30 - 740
Trans - 1,2 - Dichloroethene	282	143.8	5.6 - 282
Vinyl Chloride	61.8	88.3	29 - 300

UCAR Carbon Company continues to maintain the opinion that this contamination at well BW-4-86 is not related to the closed Republic Solid Waste Management Facility particularly since the down-gradient bedrock well BW-6 continues to show no contamination. If you have further questions or concerns about

March 30, 1992

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this data, please contact me at 615-380-4215.

Very truly yours,



R. A. Bolton, Manager
HSEP

RAB:cjm

cc: Mr. Jim Devald, Sr. Public Health Engineer
Niagara County Health Department
P. O. Box 428
Niagara Falls, N. Y. 14302-0428

Mr. Dave O'Tool
New York Department of Environmental Conservation
50 Wolf Road
Albany, N. Y. 12233

A. C. Ogg

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ENVIR

CONSERVATION

UCAR CARBON COMPANY, INC.

QUARTERLY REPUBLIC WASTE MANAGEMENT FACILITY
POST CLOSURE MONITORING PROGRAM

Prepared By:



"A Company Dedicated to Honesty, Quality and Service"

QA/QC Verification

The following report, as well as the supporting data, have been carefully reviewed for accuracy, adherence to the cited methods, and completeness. All data contained in this report was generated in accordance with the AES Laboratory Quality Assurance/Quality Control Program.

Denise R. Tuhovak

Denise R. Tuhovak
Organics Supervisor

Linda A. Ratka

Linda A. Ratka
Senior Inorganic Technician

Paul T. McMahon

Paul T. McMahon
Quality Control Officer

Maura S. Cattarin

Maura S. Cattarin
Project Manager

All "Total" results on soil matrices are calculated on a dry weight basis, unless otherwise noted.

The following are standard abbreviations:

SQL - Below Quantifiable Limits
ND - None Detected
NG - No Growth of Colonies
NR - Not Requested

ADVANCED ENVIRONMENTAL SERVICES, INC.

QUARTERLY MONITORING FIELD INFORMATION

UCAR Carbon Company, Inc.

Niagara Falls, New York

AES Code: CTC

Monitoring Well I.D.	Date	Sampling Time	Water Level (ft.)	Turbidity (NTU)	Filter Time	Comments
/ BW-1	2/25/92	11:30 AM	16.00	28.8	6:00 PM	Clear w/orange particuli, no odor.
/ BW-2	2/26/92	12:05 PM	13.96	57.2	5:10 PM	Clear to cloudy, odor present.
/ BW-3	2/27/92	4:50 PM	10.25	7.7	5:20 PM	Clear with some solids , odor present.
/ BW-4	2/26/92	4:05 PM	10.45	63.1	5:02 PM	Clear, rust color solids w/oily sheen.
/ BW-5	2/28/92	2:50 PM	7.93	113.5	4:05 PM	Clear with rust colored suspended solids.
/ BW-6	2/26/92	11:00 AM	16.66	275.0	4:55 PM	Cloudy tan/rust color.
/ MW-1	2/26/92	2:55 PM	12.58	15.7	5:13 PM	Clear, some rust colored solids.
/ MW-2	2/27/92	4:00 PM	24.11	127.5	5:40 PM	Turbid black.
/ MW-3	2/28/92	2:20 PM	3.42	13.25	4:15 PM	Clear, no odor.
OW-1 South	N/A	N/A	N/A	N/A	N/A	N/A
OW-2 North	N/A	N/A	N/A	N/A	N/A	N/A
Blind Duplicate	2/26/92	11:00 AM	16.66	260.0	4:58 PM	Cloudy tan/rust color.
Trip Blank	2/25/92	9:00 AM	N/A	0.5	N/A	Very Clear Deionized Water.

The blind duplicate site was BW-6 and the quality control site was BW-4.

N/A = Not Applicable

Mike Champ
Technician

3-16-92
Date

ADVANCED ENVIRONMENTAL SERVICES, INC.

QUARTERLY MONITORING WELL INFORMATION

UCAR Carbon Company, Inc.
Niagara Falls, New York

AES Code: CTC

Monitoring Well I.D.	Evacuation Date	Top of Inner Casing Elevation (ft.)	Monitoring Well Diameter	Water Level (ft.)	Water Elevation (ft.)	Bottom of Well (ft.)	Volume of Standing Water (gallons)	Volume of Evacuated Water (gallons)	Recharge Rate
✓ BW-1	2/25/92	610.72	4	15.99	594.73	28.60	8.23	25.0	C
✓ BW-2	2/26/92	608.43	4	13.95	594.48	26.10	7.93	24.0	C
✓ BW-3	2/27/92	604.72	4	10.21	594.51	24.70	9.46	28.0	C
✓ BW-4	2/26/92	607.08	4	9.85	597.23	22.50	8.26	26.0	C
✓ BW-5	2/28/92	603.33	4	7.93	595.40	25.70	11.60	35.0	C
✓ BW-6	2/25/92	607.04	4	16.76	590.28	24.65	5.15	16.0	R
✓ MW-1	2/25/92	609.43	2	12.72	596.71	21.10	1.37	1.5(DRY)	S
✓ MW-2	2/26/92	607.54	2	22.87	584.67	24.40	0.25	0.5 (DRY)	R
✓ MW-3	2/27/92	601.61	2	4.55	597.06	16.20	1.90	2.0(DRY)	N/A
OW-1 SOUTH	2/25/92	608.81	4	6.62	608.81	36.05	19.21	NR	N/A
OW-2 NORTH	2/25/92	607.06	4	7.19	607.06	35.90	18.74	NR	N/A

Abbreviations:

- VS = Very Slow ----- Recharge Rate longer than 24 hr period.
- S = Slow ----- Recharge Rate within 24 hr period.
- R = Rapid ----- Recharge Rate within 1 hr period.
- C = Continuous ---- Recharge Rate immediate.
- NR = Not Required
- N/A = Not Applicable

Technician Mike Champ Date 3-16-92

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: MW-1

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good Condition

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other:

Depth of Well Bottom (A): 21.10 feet

Depth of Watertable (B): 12.72 feet

Length of Water Column [A-B=C]: 8.38 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	1.36 gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	NA gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: Stainless Steel Bailer

Purge Date: 2/25/92

Weather during purging: Overcast 32 F

Volume of water in well: 1.36 gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: 10:15

Purge Stop Time: 10:30

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NR	NR	NR	NR	NR
Conductivity	NR	NR	NR	NR	NR
Turbidity	NR	NR	NR	NR	NR

Monitoring Preparation - cont

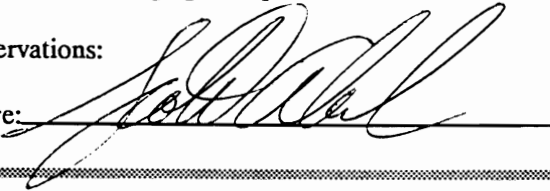
Volume of Water Purged: 1.5 gallons

Number of Well Volumes Purged: 1.10

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: Clear

Comments/Observations:

Purgers Signature: 

Date: 2/25/92

Sampling Statistics:

Method of Sampling: Stainless Steel Bailer

Sampling Date: 2/26/92

Depth of Watertable: 12.58 feet

Weather during Sampling: Overcast 25 F

Sampling Start Time: 14:55

Sampling Stop Time: 14:57

Site Location: MW-1

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	15.7
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	, ppm	NR

Color of Sample Water: Clear, some rust colored solids.

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

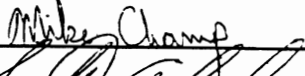
Filter Start Time: 17:13

Filter Stop Time: 17:15

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: 

Date: 2-26-92

Samplers Signature: 

Date: 2-26-92

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: MW-2

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good condition. There is no bailer in well.

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other:

Depth of Well Bottom (A): 24.40 feet

Depth of Watertable (B): 22.87 feet

Length of Water Column [A-B=C]: 1.53 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	0.25 gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	NA gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: Teflon Bailer

Purge Date: 2/26/92

Weather during purging: Overcast 25 F

Volume of water in well: 0.25 gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: 11:25

Purge Stop Time: 11:35

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NR	NR	NR	NR	NR
Conductivity	NR	NR	NR	NR	NR
Turbidity	NR	NR	NR	NR	NR

Monitoring Preparation - cont

Volume of Water Purged: 0.50 gallons

Number of Well Volumes Purged: 2.0

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: Clear to very turbid black.

Comments/Observations: No comments.

Purgers Signature: Mike Champ

Date: 2-26-92

Sampling Statistics:

Method of Sampling: Teflon Bailer

Sampling Date: 2/27 & 28/92

Depth of Watertable: 24.11 feet

Weather during Sampling: Cloudy 20 F

Sampling Start Time: 16:00

Sampling Stop Time: 16:05

Site Location: MW-2

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	127.5
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	, ppm	NR

Color of Sample Water: Turbid black

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: 17:40

Filter Stop Time: 17:45

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: _____

Date: _____

Samplers Signature: Mike Champ

Date: 2-28-92

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: MW-3

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good condition.

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other:

Depth of Well Bottom (A): 16.20 feet

Depth of Watertable (B): 4.55 feet

Length of Water Column [A-B=C]: 11.65 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	1.86 gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	NA gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: Peristaltic ISCO Pump

Purge Date: 2/27/92

Weather during purging: Cloudy 20 F

Volume of water in well: 1.86 gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: 15:15

Purge Stop Time: 15:25

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NR	NR	NR	NR	NR
Conductivity	NR	NR	NR	NR	NR
Turbidity	NR	NR	NR	NR	NR

Monitoring Preparation - cont

Volume of Water Purged: 2.0 gallons

Number of Well Volumes Purged: 1.08

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: Clear

Comments/Observations: No comments.

Purgers Signature: [Signature]

Date: 2/27/92

Sampling Statistics:

Method of Sampling: Teflon Bailer

Sampling Date: 2/28/92

Depth of Watertable: 3.42 feet

Weather during Sampling: Rain, Snow, Windy 30 F

Sampling Start Time: 14:20

Sampling Stop Time: 14:23

Site Location: MW-3

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	13.25
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	ppm	NR

Color of Sample Water: Clear

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: 16:15

Filter Stop Time: 16:20

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: [Signature]

Date: 2-28-92

Samplers Signature: [Signature]

Date: 2-28-92

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: BW-1

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good Condition.

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other: There is only one casing.

Depth of Well Bottom (A): 28.60 feet

Depth of Watertable (B): 15.99 feet

Length of Water Column [A-B=C]: 12.61 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	8.23 gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: Peristaltic ISCO Pump

Purge Date: 2/25/92

Weather during purging: Overcast 30 F

Volume of water in well: 8.23 gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: 10:25

Purge Stop Time: 11:30

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NR	NR	NR	NR	NR
Conductivity	NR	NR	NR	NR	NR
Turbidity	NR	NR	NR	NR	NR

Monitoring Preparation - cont

Volume of Water Purged: 25.0 gallons

Number of Well Volumes Purged: 3.04

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: Clear to cloudy

Comments/Observations: There were rust colored solids present in the purge water.

Purgers Signature: *Scott Akel*

Date: 2-25-92

Sampling Statistics:

Method of Sampling: Teflon Bailer

Sampling Date: 2/25/92

Depth of Watertable: 16.00 feet

Weather during Sampling: Overcast 32 F

Sampling Start Time: 11:30

Sampling Stop Time: 11:32

Site Location: BW-1

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	28.8
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	ppm	NR

Color of Sample Water: Clear with orange particulates.

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: 18:00

Filter Stop Time: 18:05

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: *Scott Akel*

Date: 2-25-92

Samplers Signature: _____

Date: _____

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: BW-2

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good condition.

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other:

Depth of Well Bottom (A): 26.10 feet

Depth of Watertable (B): 13.95 feet

Length of Water Column [A-B=C]: 12.15 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	7.93 gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: Peristaltic ISCO Pump

Purge Date: 2/26/92

Weather during purging: Overcast 25 F

Volume of water in well: 7.93 gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: 11:25

Purge Stop Time: 12:05

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NR	NR	NR	NR	NR
Conductivity	NR	NR	NR	NR	NR
Turbidity	NR	NR	NR	NR	NR

Monitoring Preparation - cont

Volume of Water Purged: 24.0 gallons

Number of Well Volumes Purged: 3.03

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: Clear to cloudy

Comments/Observations: No comments.

Purgers Signature: Mike Champ

Date: 2-26-92

Sampling Statistics:

Method of Sampling: Teflon Bailer

Sampling Date: 2/26/92

Depth of Watertable: 13.96 feet

Weather during Sampling: Overcast 25 F

Sampling Start Time: 12:05

Sampling Stop Time: 12:15

Site Location: BW-2

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	57.2
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	ppm	NR

Color of Sample Water: Clear to cloudy

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: 17:10

Filter Stop Time: 17:12

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: Mike Champ

Date: 2-26-92

Samplers Signature: _____

Date: _____

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: BW-3

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good condition.

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other:

Depth of Well Bottom (A): 24.70 feet

Depth of Watertable (B): 10.21 feet

Length of Water Column [A-B=C]: 14.49 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	9.42 gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: Peristaltic ISCO Pump

Purge Date: 2/27/92

Weather during purging: Cloudy

Volume of water in well: 9.42 gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: 16:14

Purge Stop Time: 16:42

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NR	NR	NR	NR	NR
Conductivity	NR	NR	NR	NR	NR
Turbidity	NR	NR	NR	NR	NR

Monitoring Preparation - cont

Volume of Water Purged: 28.0 gallons

Number of Well Volumes Purged: 2.97

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: Clear

Comments/Observations: No comments.

Purgers Signature: *[Signature]*

Date: 2/27/92

Sampling Statistics:

Method of Sampling: Stainless Steel Bailer

Sampling Date: 2/27/92

Depth of Watertable: 10.25 feet

Weather during Sampling: Cloudy 20 F

Sampling Start Time: 16:50

Sampling Stop Time: 16:52

Site Location: BW-3

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	7.70
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	ppm	NR

Color of Sample Water: Clear

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: 17:20

Filter Stop Time: 17:30

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: *[Signature]*

Date: 2/27/92

Samplers Signature: _____

Date: _____

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: BW-4

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good condition

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other:

Depth of Well Bottom (A): 22.50 feet

Depth of Watertable (B): 9.85 feet

Length of Water Column [A-B=C]: 12.65 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	8.26 gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: Peristaltic ISCO Pump

Purge Date: 2/26/92

Weather during purging: Overcast 25 F

Volume of water in well: 8.26 gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: 15:05

Purge Stop Time: 15:55

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NR	NR	NR	NR	NR
Conductivity	NR	NR	NR	NR	NR
Turbidity	NR	NR	NR	NR	NR

Monitoring Preparation - cont

Volume of Water Purged: 26.0 gallons

Number of Well Volumes Purged: 3.15

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: Clear

Comments/Observations: Water was clear with some rust solids and a visible sheen on the surface.

Purgers Signature: Mike Champ

Date: 2-26-92

Sampling Statistics:

Method of Sampling: Stainless Steel Bailer

Sampling Date: 2/26/92

Depth of Watertable: 10.45 feet

Weather during Sampling: Overcast 25 F

Sampling Start Time: 16:05

Sampling Stop Time: 16:10

Site Location: BW-4

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	63.1
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	ppm	NR

Color of Sample Water: Clear, rust color solids w/oily sheen.

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: 17:02

Filter Stop Time: 17:04

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: Mike Champ

Date: 2-26-92

Samplers Signature: _____

Date: _____

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: BW-5

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Well is in good condition; bailer is rusty.

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other:

Depth of Well Bottom (A): 25.70 feet

Depth of Watertable (B): 7.93 feet

Length of Water Column [A-B=C]: 17.77 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	11.61 gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: Peristaltic ISCO Pump

Purge Date: 2/28/92

Weather during purging: Rain, Snow, Wind 30 F

Volume of water in well: 11.61 gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: 14:05

Purge Stop Time: 14:50

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NR	NR	NR	NR	NR
Conductivity	NR	NR	NR	NR	NR
Turbidity	NR	NR	NR	NR	NR

Monitoring Preparation - cont

Volume of Water Purged: 35.0 gallons

Number of Well Volumes Purged: 3.01

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: Clear to slightly rusty.

Comments/Observations: No comments.

Purgers Signature: Mike Champ

Date: 2-28-92

Sampling Statistics:

Method of Sampling: Stainless Steel Bailer

Sampling Date: 2/28/92

Depth of Watertable: 7.93 feet

Weather during Sampling: Rain, Snow, Windy 30 F

Sampling Start Time: 14:50

Sampling Stop Time: 14:53

Site Location: BW-5

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	113.5
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	ppm	NR

Color of Sample Water: Clear with rust colored suspended solids. Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: 16:05

Filter Stop Time: 16:10

- | | | |
|---|---|---|
| <input type="checkbox"/> Volatile Organics (VOAs) | <input type="checkbox"/> Semi-Volatile Organics | <input type="checkbox"/> Appendix 33 |
| <input type="checkbox"/> Purgeable Organic Halogens | <input type="checkbox"/> Total Organic Halogens (TOX) | <input type="checkbox"/> Pesticides & PCBs |
| <input checked="" type="checkbox"/> Total Metals | <input checked="" type="checkbox"/> Soluble Metals | <input type="checkbox"/> Total Recoverable Phenols |
| <input type="checkbox"/> Cyanide(s) | <input type="checkbox"/> Soluble Boron | <input type="checkbox"/> Soluble Hexachrome |
| <input type="checkbox"/> Total Boron | <input type="checkbox"/> Total Hexachrome | <input type="checkbox"/> Chlorides |
| <input type="checkbox"/> Nitrate | <input checked="" type="checkbox"/> Nitrite | <input checked="" type="checkbox"/> TKN |
| <input checked="" type="checkbox"/> Ammonia | <input type="checkbox"/> COD | <input type="checkbox"/> BOD |
| <input type="checkbox"/> Odor | <input type="checkbox"/> TDS | <input type="checkbox"/> TSS |
| <input type="checkbox"/> Hardness | <input type="checkbox"/> Alkalinity | <input type="checkbox"/> Sulfate |
| <input type="checkbox"/> Sulfide | <input type="checkbox"/> Sulfite | <input type="checkbox"/> Total Organic Carbon (TOC) |
| <input type="checkbox"/> Apparent Color | <input type="checkbox"/> True Color | |

Samplers Signature: Mike Champ

Date: 2-28-92

Samplers Signature: _____

Date: _____

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.
Address: 3625 Highland Avenue, Niagara Falls, NY 14305

AES Job Code: CTC
Monitoring Well No: BW-6

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good condition.

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other: There is only one casing.

Depth of Well Bottom (A): 24.65 feet

Depth of Watertable (B): 16.76 feet

Length of Water Column [A-B=C]: 7.89 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	5.15 gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: Peristaltic ISCO Pump

Purge Date: 2/25/92

Weather during purging: Overcast 32 F

Volume of water in well: 5.15 gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: 14:05

Purge Stop Time: 14:35

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NR	NR	NR	NR	NR
Conductivity	NR	NR	NR	NR	NR
Turbidity	NR	NR	NR	NR	NR

Monitoring Preparation - cont

Volume of Water Purged: 16.0 gallons

Number of Well Volumes Purged: 3.11

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: Lightly turbid tan

Comments/Observations: No comments

Purgers Signature: Mike Champ

Date: 2-25-92

Sampling Statistics:

Method of Sampling: Stainless Steel Bailer

Sampling Date: 2/26/92

Depth of Watertable: 16.66 feet

Weather during Sampling: Overcast 25 F

Sampling Start Time: 11:00

Sampling Stop Time: 11:10

Site Location: BW-6

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	275
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	ppm	NR

Color of Sample Water: Cloudy tan/rust color.

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: 16:55

Filter Stop Time: 16:57

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: Mike Champ

Date: 2-25-92

Samplers Signature: _____

Date: _____

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: Blind Duplicate (BW-6)

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good condition.

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other: There is only one casing.

Depth of Well Bottom (A): 24.65 feet

Depth of Watertable (B): 16.76 feet

Length of Water Column [A-B=C]: 7.89 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	5.15 gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: Peristaltic ISCO Pump

Purge Date: 2/25/92

Weather during purging: Overcast 32 F

Volume of water in well: 5.15 gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: 14:05

Purge Stop Time: 14:35

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NR	NR	NR	NR	NR
Conductivity	NR	NR	NR	NR	NR
Turbidity	NR	NR	NR	NR	NR

Monitoring Preparation - cont

Volume of Water Purged: 16.0 gallons

Number of Well Volumes Purged: 3.11

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: Lightly turbid tan

Comments/Observations: No comments

Purgers Signature: Mike Champ

Date: 2-25-92

Sampling Statistics:

Method of Sampling: Stainless Steel Bailer

Sampling Date: 2/26/92

Depth of Watertable: 16.66 feet

Weather during Sampling: Overcast 25 F

Sampling Start Time: 11:00

Sampling Stop Time: 11:10

Site Location: Blind Duplicate (BW-6)

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	260
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	ppm	NR

Color of Sample Water: Cloudy tan/rust color.

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: 16:58

Filter Stop Time: 17:01

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: Mike Champ

Date: 2-26-92

Samplers Signature: _____

Date: _____

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: Field Blank

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well:

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other:

Depth of Well Bottom (A): NA feet

Depth of Watertable (B): NA feet

Length of Water Column [A-B=C]: NA feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	NA gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: NA

Purge Date: NA

Weather during purging: NA

Volume of water in well: NA gallons

HNU Background: NA

HNU in Well: NA

Purge Start Time: NA

Purge Stop Time: NA

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NA	NA	NA	NA	NA
Conductivity	NA	NA	NA	NA	NA
Turbidity	NA	NA	NA	NA	NA

Monitoring Preparation - cont

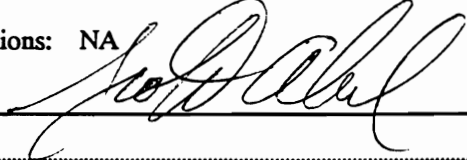
Volume of Water Purged: NA gallons

Number of Well Volumes Purged: NA

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: NA

Comments/Observations: NA

Purgers Signature: 

Date: 2/25/92

Sampling Statistics:

Method of Sampling: Glassware DI Water Tap.

Sampling Date: 2/25/92

Depth of Watertable: NA feet

Weather during Sampling: Indoors 72 F

Sampling Start Time: 9:00

Sampling Stop Time: 9:05

Site Location: Field Blank

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	0.5
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	ppm	NR

Color of Sample Water: Very Clear

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

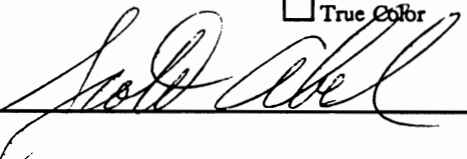
Filter Start Time: NR

Filter Stop Time: NR

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: 

Date: 2/25/92

Samplers Signature: _____

Date: _____

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: Trip Blank

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well:

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other:

Depth of Well Bottom (A): NA feet

Depth of Watertable (B): NA feet

Length of Water Column [A-B=C]: NA feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	NA gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: NA

Purge Date: NA

Weather during purging: NA

Volume of water in well: NA gallons

HNU Background: NA

HNU in Well: NA

Purge Start Time: NA

Purge Stop Time: NA

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NA	NA	NA	NA	NA
Conductivity	NA	NA	NA	NA	NA
Turbidity	NA	NA	NA	NA	NA

Monitoring Preparation - cont

Volume of Water Purged: NA gallons

Number of Well Volumes Purged: NA

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water: NA

Comments/Observations: NA

Purgers Signature: 

Date: 2/25/92

Sampling Statistics:

Method of Sampling: Baker Bottled DI Water

Sampling Date: 2/25/92

Depth of Watertable: NA feet

Weather during Sampling: Indoors 72 F

Sampling Start Time: 9:00

Sampling Stop Time: 9:05

Site Location: Trip Blank

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NR	Turbidity	NTU	NR
Temperature	F	NR	Eh (ORP)	millivolts	NR
Specific Conductivity	umhos/cm	NR	Dissolved Oxygen	, ppm	NR

Color of Sample Water: Very Clear

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: NR

Filter Stop Time: NR

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: 

Date: 2/25/92

Samplers Signature: _____

Date: _____

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: OW-1

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good condition.

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other: There is only one casing.

Depth of Well Bottom (A): 36.05 feet

Depth of Watertable (B): 6.62 feet

Length of Water Column [A-B=C]: 29.43 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	NA gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: NA

Purge Date: NA

Weather during purging: NA

Volume of water in well: NA gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: NA

Purge Stop Time: NA

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NA	NA	NA	NA	NA
Conductivity	NA	NA	NA	NA	NA
Turbidity	NA	NA	NA	NA	NA

Monitoring Preparation - cont

Volume of Water Purged: NA gallons

Number of Well Volumes Purged: NA

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water:

Comments/Observations: NA

Purgers Signature: _____

Date: _____

Sampling Statistics:

Method of Sampling: NA

Sampling Date: 2/25/92

Depth of Watertable: 6.62 feet

Weather during Sampling: Overcast 32 F

Sampling Start Time: NA

Sampling Stop Time: NA

Site Location: OW-1

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NA	Turbidity	NTU	NA
Temperature	F	NA	Eh (ORP)	millivolts	NA
Specific Conductivity	umhos/cm	NA	Dissolved Oxygen	ppm	NA

Color of Sample Water: NA

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: NA

Filter Stop Time: NA

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: Mike Champ

Date: 2-25-92

Samplers Signature: [Signature]

Date: 2-25-92

Groundwater Sampling Field Log
Monitoring Information

Site Location: UCAR Carbon Company, Inc.

AES Job Code: CTC

Address: 3625 Highland Avenue, Niagara Falls, NY 14305

Monitoring Well No: OW-2

Was Well Locked? Yes No

Was Well I.D. Easily Visible? Yes No

Physical Condition of Well: Good condition.

Water Table Information

Elevation Measurements Taken From: Inner Casing Outer Casing Other: There is only one casing.

Depth of Well Bottom (A): 35.90 feet

Depth of Watertable (B): 7.19 feet

Length of Water Column [A-B=C]: 28.71 feet

Volume of Water in Well

1 ¹ / ₄ " diameter C * 0.064 =	NA gallons	5" diameter C * 1.020 =	NA gallons
2" diameter C * 0.163 =	NA gallons	6" diameter C * 1.469 =	NA gallons
3" diameter C * 0.367 =	NA gallons	7" diameter C * 1.999 =	NA gallons
4" diameter C * 0.653 =	NA gallons	8" diameter C * 2.611 =	NA gallons

Monitoring Preparation

Method of Purging: NA

Purge Date: NA

Weather during purging: NA

Volume of water in well: NA gallons

HNU Background: NR

HNU in Well: NR

Purge Start Time: NA

Purge Stop Time: NA

Solids Content: None Low Medium High

Odor Yes No

Groundwater Indicator	After 1 Volume	After 2 Volumes	After 3 Volumes	After 4 Volumes	After 5 Volumes
pH	NA	NA	NA	NA	NA
Conductivity	NA	NA	NA	NA	NA
Turbidity	NA	NA	NA	NA	NA

Monitoring Preparation - cont

Volume of Water Purged: NA gallons

Number of Well Volumes Purged: NA

Did Well Go Dry Before Purging Completed: Yes No

Color of Purge Water:

Comments/Observations: NA

Purgers Signature: _____

Date: _____

Sampling Statistics:

Method of Sampling: NA

Sampling Date: 2/25/92

Depth of Watertable: 7.19 feet

Weather during Sampling: Overcast 32 F

Sampling Start Time: NA

Sampling Stop Time: NA

Site Location: OW-2

Groundwater Indicator	Units	Results	Groundwater Indicator	Units	Results
pH	Std. Units	NA	Turbidity	NTU	NA
Temperature	F	NA	Eh (ORP)	millivolts	NA
Specific Conductivity	umhos/cm	NA	Dissolved Oxygen	, ppm	NA

Color of Sample Water: NA

Odor: Yes No

Solids Content: None Low Medium High

Did Well Go Dry During Sampling: Yes No

Filter Start Time: NA

Filter Stop Time: NA

- Volatile Organics (VOAs)
- Purgeable Organic Halogens
- Total Metals
- Cyanide(s)
- Total Boron
- Nitrate
- Ammonia
- Odor
- Hardness
- Sulfide
- Apparent Color

- Semi-Volatile Organics
- Total Organic Halogens (TOX)
- Soluble Metals
- Soluble Boron
- Total Hexachrome
- Nitrite
- COD
- TDS
- Alkalinity
- Sulfite
- True Color

- Appendix 33
- Pesticides & PCBs
- Total Recoverable Phenols
- Soluble Hexachrome
- Chlorides
- TKN
- BOD
- TSS
- Sulfate
- Total Organic Carbon (TOC)

Samplers Signature: Mike Champ

Date: 2-25-92

Samplers Signature: [Signature]

Date: 2-25-92

CUST SAMPLE ID: MW-1 COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13149 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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ICP Iron Analysis on Water	18.5	mg/l	0.01	---	EPA 200.7
ICP Soluble Iron Analysis on Water	0.07	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	44.4	mg/l	0.40	---	EPA 200.7
ICP (Sol) Potassium Analysis	39.9	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	0.29	mg/l	0.01	---	EPA 200.7
ICP Soluble Zinc on Water	ND	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: MW-1 COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13149 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Ammonia	7.00	mg/l	---	0.02	EPA 350.1
Nitrite	0.02	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	7.6	mg/l	---	0.1	EPA 351.2

CUST. SAMPLE ID: MW-2 COLLECTION DATE(S): 2/27/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13150 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
ICP Iron Analysis on Water	258	mg/l	0.01	---	EPA 200.7
ICP Soluble Iron Analysis on Water	0.02	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	6.11	mg/l	0.40	---	EPA 200.7
ICP (Sol) Potassium Analysis	5.14	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	1.37	mg/l	0.01	---	EPA 200.7
ICP Soluble Zinc on Water	ND	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: MW-2 COLLECTION DATE(S): 2/27/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13150 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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Ammonia	BQL	mg/l	---	0.02	EPA 350.1
Nitrite	0.01	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	0.3	mg/l	---	0.1	EPA 351.2

CUST SAMPLE ID: MW-3 COLLECTION DATE(S): COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13151 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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ICP Iron Analysis on Water	13.5	mg/l	0.01	---	EPA 200.7
ICP Soluble Iron Analysis on Water	0.05	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	1.69	mg/l	0.40	---	EPA 200.7
ICP (Sol) Potassium Analysis	1.54	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	0.18	mg/l	0.01	---	EPA 200.7
ICP Soluble Zinc on Water	ND	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: MW-3 COLLECTION DATE(S): COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13151 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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Ammonia	0.52	mg/l	---	0.02	EPA 350.1
Nitrite	0.07	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	1.2	mg/l	---	0.1	EPA 351.2

CUST SAMPLE ID: BW-1 COLLECTION DATE(S): 2/25/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13152 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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ICP Iron Analysis on Water	3.66	mg/l	0.01	---	EPA 200.7
ICP Soluble Iron Analysis on Water	1.00	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	4.23	mg/l	0.40	---	EPA 200.7
ICP (Sol) Potassium Analysis	3.73	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	1.30	mg/l	0.01	---	EPA 200.7
ICP Soluble Zinc on Water	0.71	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: BW-1 COLLECTION DATE(S): 2/25/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13152 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Ammonia	0.66	mg/l	---	0.02	EPA 350.1
Nitrite	0.02	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	1.4	mg/l	---	0.1	EPA 351.2

CUST SAMPLE ID: BW-2 COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13153 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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ICP Iron Analysis on Water	4.55	mg/l	0.01	---	EPA 200.7
ICP Soluble Iron Analysis on Water	0.06	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	13.4	mg/l	0.40	---	EPA 200.7
ICP (Sol) Potassium Analysis	32.8	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	1.62	mg/l	0.01	---	EPA 200.7
ICP Soluble Zinc on Water	0.37	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: BW-2 COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13153 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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Ammonia	0.64	mg/l	---	0.02	EPA 350.1
Nitrite	0.01	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	2.8	mg/l	---	0.1	EPA 351.2

CUST SAMPLE ID: BW-3 COLLECTION DATE(S): 2/27/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13154 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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ICP Iron Analysis on Water	2.11	mg/l	0.01	---	EPA 200.7
ICP Soluble Iron Analysis on Water	1.07	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	7.68	mg/l	0.40	---	EPA 200.7
ICP (Sol) Potassium Analysis	8.23	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	2.31	mg/l	0.01	---	EPA 200.7
ICP Soluble Zinc on Water	0.14	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: BW-3 COLLECTION DATE(S): 2/27/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13154 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Ammonia	0.68	mg/l	---	0.02	EPA 350.1
Nitrite	0.01	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	1.4	mg/l	---	0.1	EPA 351.2

CUST SAMPLE ID: BW-4 COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13155 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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ICP Iron Analysis on Water	23.0	mg/l	0.01	---	EPA 200.7
ICP Soluble Iron Analysis on Water	1.39	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	22.6	mg/l	0.40	---	EPA 200.7
ICP (Sol) Potassium Analysis	20.4	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	1.82	mg/l	0.01	---	EPA 200.7
ICP Soluble Zinc on Water	0.22	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: BW-4 COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13155 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Ammonia	5.6	mg/l	---	0.02	EPA 350.1
Nitrite	0.01	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	5.6	mg/l	---	0.1	EPA 351.2

CUST SAMPLE ID: BW-4 COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13155 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
TCL Volatiles					
Chloromethane	BQL	ug/l,ppb	---	10.0	SW 846 8240
Vinyl chloride	61.8	ug/l,ppb	---	10.0	SW 846 8240
Chloroethane	BQL	ug/l,ppb	---	10.0	SW 846 8240
Bromomethane	BQL	ug/l,ppb	---	10.0	SW 846 8240
Acetone	BQL	ug/l,ppb	---	50.0	SW 846 8240
1,1-Dichloroethene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Carbon disulfide	BQL	ug/l,ppb	---	5.00	SW 846 8240
Methylene chloride	BQL	ug/l,ppb	---	10.0	SW 846 8240
trans-1,2-Dichloroethene	282	ug/l,ppb	---	5.00	SW 846 8240
1,1-Dichloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Vinyl acetate	BQL	ug/l,ppb	---	50.0	SW 846 8240
2-Butanone	BQL	ug/l,ppb	---	50.0	SW 846 8240
Chloroform	5.87	ug/l,ppb	---	5.00	SW 846 8240
1,1,1-Trichloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Carbon tetrachloride	BQL	ug/l,ppb	---	5.00	SW 846 8240
Benzene	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,2-Dichloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Trichloroethene	187	ug/l,ppb	---	5.00	SW 846 8240
1,2-Dichloropropane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Bromodichloromethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
2-Chloroethyl vinyl ether	BQL	ug/l,ppb	---	10.0	SW 846 8240
4-Methyl-2-pentanone	BQL	ug/l,ppb	---	50.0	SW 846 8240
cis-1,3-Dichloropropene	BQL	ug/l,ppb	---	5.00	SW 846 8240

CUST SAMPLE ID: BW-4 COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13155 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Toluene	BQL	ug/l,ppb	---	5.00	SW 846 8240
trans-1,3-Dichloropropene	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,1,2-Trichloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Tetrachloroethene	186	ug/l,ppb	---	5.00	SW 846 8240
Chlorodibromomethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Chlorobenzene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Ethylbenzene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Bromoform	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,1,2,2-Tetrachloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
2-Hexanone	BQL	ug/l,ppb	---	50.0	SW 846 8240
m/p-Xylene	BQL	ug/l,ppb	---	5.00	SW 846 8240
o-Xylene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Styrene	BQL	ug/l,ppb	---	5.00	SW 846 8240
TCL Semi-Volatiles					
N-Nitrosodimethylamine	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-chloroethyl) ether	BQL	ug/l,ppb	---	10	SW 846 8270
1,3-Dichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
1,4-Dichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzyl alcohol	BQL	ug/l,ppb	---	10	SW 846 8270
1,2-Dichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-chloroisopropyl) ether	BQL	ug/l,ppb	---	10	SW 846 8270
N-Nitrosodipropylamine	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachloroethane	BQL	ug/l,ppb	---	10	SW 846 8270
Nitrobenzene	BQL	ug/l,ppb	---	10	SW 846 8270

CUST SAMPLE ID: BW-4
COLLECTION DATE(S): 2/26/92

LABORATORY JOB NO: 920723
LABORATORY REFERENCE NO: 13155
LABORATORY ORGANIC ANALYSIS

COLLECTION METHOD: GRAB
SAMPLE TYPE: GROUNDWATER

Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Isophorone	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-chloroethoxy) methane	BQL	ug/l,ppb	---	10	SW 846 8270
1,2,4-Trichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Naphthalene	BQL	ug/l,ppb	---	10	SW 846 8270
4-Chloroaniline	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachlorobutadiene	44	ug/l,ppb	---	10	SW 846 8270
2-Methylnaphthalene	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachlorocyclopentadiene	BQL	ug/l,ppb	---	10	SW 846 8270
2-Chloronaphthalene	BQL	ug/l,ppb	---	10	SW 846 8270
2-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
Dimethylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
2,6-Dinitrotoluene	BQL	ug/l,ppb	---	10	SW 846 8270
Acenaphthylene	BQL	ug/l,ppb	---	10	SW 846 8270
3-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
Acenaphthene	BQL	ug/l,ppb	---	10	SW 846 8270
Dibenzofuran	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dinitrotoluene	BQL	ug/l,ppb	---	10	SW 846 8270
Diethylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
4-Chlorophenyl phenyl ether	BQL	ug/l,ppb	---	10	SW 846 8270
Fluorene	BQL	ug/l,ppb	---	10	SW 846 8270
4-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
N-Nitrosodiphenylamine	BQL	ug/l,ppb	---	10	SW 846 8270
4-Bromophenyl phenyl ether	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Phenanthrene	BQL	ug/l,ppb	---	10	SW 846 8270

CUST SAMPLE ID: BW-4
COLLECTION DATE(S): 2/26/92

LABORATORY JOB NO: 920723
LABORATORY REFERENCE NO: 13155
LABORATORY ORGANIC ANALYSIS

COLLECTION METHOD: GRAB
SAMPLE TYPE: GROUNDWATER

Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Di-n-butylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzidine	BQL	ug/l,ppb	---	40	SW 846 8270
Pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Butyl benzyl phthalate	BQL	ug/l,ppb	---	10	SW 846 8270
3,3-Dichlorobenzidine	BQL	ug/l,ppb	---	20	SW 846 8270
Benzo (a) anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-ethylhexyl) phthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Chrysene	BQL	ug/l,ppb	---	10	SW 846 8270
Di-n-octylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (b) fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (k) fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (a) pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Indeno (1,2,3-cd)pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Dibenz (a,h) anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (g,h,i) perylene	BQL	ug/l,ppb	---	10	SW 846 8270
Phenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
4-Methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Nitrophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dimethylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
Benzoic acid	BQL	ug/l,ppb	---	30	SW 846 8270
2,4-Dichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Chlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270

CUST SAMPLE ID: BW-4 COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13155 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
4-Chloro-3-methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4,6-Trichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4,5-Trichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dinitrophenol	BQL	ug/l,ppb	---	40	SW 846 8270
4-Nitrophenol	BQL	ug/l,ppb	---	40	SW 846 8270
4,6-Dinitro-2-methylphenol	BQL	ug/l,ppb	---	40	SW 846 8270
Pentachlorophenol	BQL	ug/l,ppb	---	40	SW 846 8270

CUST SAMPLE ID: BW-5 COLLECTION DATE(S): COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13156 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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ICP Iron Analysis on Water	17.2	mg/l	0.01	---	EPA 200.7
ICP Soluble Iron Analysis on Water	1.42	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	3.36	mg/l	0.40	---	EPA 200.7
ICP (Sol) Potassium Analysis	3.30	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	0.36	mg/l	0.01	---	EPA 200.7
ICP Soluble Zinc on Water	0.15	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: BW-5 COLLECTION DATE(S): COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13156 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Ammonia	BQL	mg/l	---	0.02	EPA 350.1
Nitrite	BQL	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	0.1	mg/l	---	0.1	EPA 351.2

CUST SAMPLE ID: BW-6 COLLECTION DATE(S): 2/25-26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13157 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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ICP Iron Analysis on Water	42.0	mg/l	0.01	---	EPA 200.7
ICP Soluble Iron Analysis on Water	9.39	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	8.35	mg/l	0.40	---	EPA 200.7
ICP (Sol) Potassium Analysis	7.30	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	0.20	mg/l	0.01	---	EPA 200.7
ICP Soluble Zinc on Water	0.03	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: BW-6 COLLECTION DATE(S): 2/25-26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13157 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Ammonia	BQL	mg/l	---	0.02	EPA 350.1
Nitrite	BQL	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	0.2	mg/l	---	0.1	EPA 351.2

CUST SAMPLE ID: BW-6 COLLECTION DATE(S): 2/25-26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13157 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
TCL Volatiles					
Chloromethane	BQL	ug/l, ppb	---	10.0	SW 846 8240
Vinyl chloride	BQL	ug/l, ppb	---	10.0	SW 846 8240
Chloroethane	BQL	ug/l, ppb	---	10.0	SW 846 8240
Bromomethane	BQL	ug/l, ppb	---	10.0	SW 846 8240
Acetone	BQL	ug/l, ppb	---	50.0	SW 846 8240
1,1-Dichloroethene	BQL	ug/l, ppb	---	5.00	SW 846 8240
Carbon disulfide	BQL	ug/l, ppb	---	5.00	SW 846 8240
Methylene chloride	BQL	ug/l, ppb	---	10.0	SW 846 8240
trans-1,2-Dichloroethene	BQL	ug/l, ppb	---	5.00	SW 846 8240
1,1-Dichloroethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
Vinyl acetate	BQL	ug/l, ppb	---	50.0	SW 846 8240
2-Butanone	BQL	ug/l, ppb	---	50.0	SW 846 8240
Chloroform	BQL	ug/l, ppb	---	5.00	SW 846 8240
1,1,1-Trichloroethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
Carbon tetrachloride	BQL	ug/l, ppb	---	5.00	SW 846 8240
Benzene	BQL	ug/l, ppb	---	5.00	SW 846 8240
1,2-Dichloroethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
Trichloroethene	BQL	ug/l, ppb	---	5.00	SW 846 8240
1,2-Dichloropropane	BQL	ug/l, ppb	---	5.00	SW 846 8240
Bromodichloromethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
2-Chloroethyl vinyl ether	BQL	ug/l, ppb	---	10.0	SW 846 8240
4-Methyl-2-pentanone	BQL	ug/l, ppb	---	50.0	SW 846 8240
cis-1,3-Dichloropropene	BQL	ug/l, ppb	---	5.00	SW 846 8240

CUST SAMPLE ID: BW-6
 COLLECTION DATE(S): 2/25-26/92

LABORATORY JOB NO: 920723
 LABORATORY REFERENCE NO: 13157
 LABORATORY ORGANIC ANALYSIS

COLLECTION METHOD: GRAB
 SAMPLE TYPE: GROUNDWATER

Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Toluene	BQL	ug/l,ppb	---	5.00	SW 846 8240
trans-1,3-Dichloropropene	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,1,2-Trichloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Tetrachloroethene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Chlorodibromomethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Chlorobenzene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Ethylbenzene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Bromoform	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,1,2,2-Tetrachloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
2-Hexanone	BQL	ug/l,ppb	---	50.0	SW 846 8240
m/p-Xylene	BQL	ug/l,ppb	---	5.00	SW 846 8240
o-Xylene	BQL	ug/l,ppb	---	5.00	SW 846 8240
styrene	BQL	ug/l,ppb	---	5.00	SW 846 8240
TCL Semi-Volatiles					
N-Nitrosodimethylamine	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-chloroethyl) ether	BQL	ug/l,ppb	---	10	SW 846 8270
1,3-Dichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
1,4-Dichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzyl alcohol	BQL	ug/l,ppb	---	10	SW 846 8270
1,2-Dichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-chloroisopropyl) ether	BQL	ug/l,ppb	---	10	SW 846 8270
N-Nitrosodipropylamine	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachloroethane	BQL	ug/l,ppb	---	10	SW 846 8270
Nitrobenzene	BQL	ug/l,ppb	---	10	SW 846 8270

CUST SAMPLE ID: BW-6
 COLLECTION DATE(S): 2/25-26/92
 COLLECTION METHOD: GRAB
 SAMPLE TYPE: GROUNDWATER

LABORATORY JOB NO: 920723
 LABORATORY REFERENCE NO: 13157
 LABORATORY ORGANIC ANALYSIS

Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Isophorone	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-chloroethoxy) methane	BQL	ug/l,ppb	---	10	SW 846 8270
1,2,4-Trichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Naphthalene	BQL	ug/l,ppb	---	10	SW 846 8270
4-Chloroaniline	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachlorobutadiene	BQL	ug/l,ppb	---	10	SW 846 8270
2-Methylnaphthalene	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachlorocyclopentadiene	BQL	ug/l,ppb	---	10	SW 846 8270
2-Chloronaphthalene	BQL	ug/l,ppb	---	10	SW 846 8270
2-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
Dimethylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
2,6-Dinitrotoluene	BQL	ug/l,ppb	---	10	SW 846 8270
Acenaphthylene	BQL	ug/l,ppb	---	10	SW 846 8270
3-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
Acenaphthene	BQL	ug/l,ppb	---	10	SW 846 8270
Dibenzofuran	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dinitrotoluene	BQL	ug/l,ppb	---	10	SW 846 8270
Diethylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
4-Chlorophenyl phenyl ether	BQL	ug/l,ppb	---	10	SW 846 8270
Fluorene	BQL	ug/l,ppb	---	10	SW 846 8270
4-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
N-Nitrosodiphenylamine	BQL	ug/l,ppb	---	10	SW 846 8270
4-Bromophenyl phenyl ether	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Phenanthrene	BQL	ug/l,ppb	---	10	SW 846 8270

CUST SAMPLE ID: BW-6 COLLECTION DATE(S): 2/25-26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13157 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Di-n-butylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzidine	BQL	ug/l,ppb	---	40	SW 846 8270
Pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Butyl benzyl phthalate	BQL	ug/l,ppb	---	10	SW 846 8270
3,3-Dichlorobenzidine	BQL	ug/l,ppb	---	20	SW 846 8270
Benzo (a) anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-ethylhexyl) phthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Chrysene	BQL	ug/l,ppb	---	10	SW 846 8270
Di-n-octylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (b) fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (k) fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (a) pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Indeno (1,2,3-cd)pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Dibenz (a,h) anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (g,h,i) perylene	BQL	ug/l,ppb	---	10	SW 846 8270
Phenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
4-Methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Nitrophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dimethylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
Benzoic acid	BQL	ug/l,ppb	---	30	SW 846 8270
2,4-Dichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Chlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270

CUST SAMPLE ID: BW-6
 COLLECTION DATE(S): 2/25-26/92

LABORATORY JOB NO: 920723
 LABORATORY REFERENCE NO: 13157
 LABORATORY ORGANIC ANALYSIS

COLLECTION METHOD: GRAB
 SAMPLE TYPE: GROUNDWATER

Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
4-Chloro-3-methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4,6-Trichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4,5-Trichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dinitrophenol	BQL	ug/l,ppb	---	40	SW 846 8270
4-Nitrophenol	BQL	ug/l,ppb	---	40	SW 846 8270
4,6-Dinitro-2-methylphenol	BQL	ug/l,ppb	---	40	SW 846 8270
Pentachlorophenol	BQL	ug/l,ppb	---	40	SW 846 8270

CUST SAMPLE ID: BLIND COLLECTION DATE(S): 2/26/92	DUPLICATE <i>BW</i>	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13158 LABORATORY INORGANIC ANALYSIS
COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER		

Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
ICP Iron Analysis on Water	58.6	mg/l	0.01	---	EPA 200.7
ICP Soluble Iron Analysis on Water	8.75	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	8.78	mg/l	0.40	---	EPA 200.7
ICP (Sol) Potassium Analysis	6.34	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	0.22	mg/l	0.01	---	EPA 200.7
ICP Soluble Zinc on Water	0.02	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: BLIND	DUPLICATE	LABORATORY JOB NO: 920723
COLLECTION DATE(S): 2/26/92		LABORATORY REFERENCE NO: 13158
COLLECTION METHOD: GRAB		LABORATORY INORGANIC ANALYSIS
SAMPLE TYPE: GROUNDWATER		

Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
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Ammonia	BQL	mg/l	--	0.02	EPA 350.1
Nitrite	BQL	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	0.1	mg/l	---	0.1	EPA 351.2

CUST SAMPLE ID: BLIND COLLECTION DATE(S): 2/26/92	DUPLICATE	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13158 LABORATORY ORGANIC ANALYSIS
COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER		



Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
TCL Volatiles					
Chloromethane	BQL	ug/l,ppb	---	10.0	SW 846 8240
Vinyl chloride	BQL	ug/l,ppb	---	10.0	SW 846 8240
Chloroethane	BQL	ug/l,ppb	---	10.0	SW 846 8240
Bromomethane	BQL	ug/l,ppb	---	10.0	SW 846 8240
Acetone	BQL	ug/l,ppb	---	50.0	SW 846 8240
1,1-Dichloroethene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Carbon disulfide	BQL	ug/l,ppb	---	5.00	SW 846 8240
Methylene chloride	BQL	ug/l,ppb	---	10.0	SW 846 8240
trans-1,2-Dichloroethene	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,1-Dichloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Vinyl acetate	BQL	ug/l,ppb	---	50.0	SW 846 8240
2-Butanone	BQL	ug/l,ppb	---	50.0	SW 846 8240
Chloroform	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,1,1-Trichloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Carbon tetrachloride	BQL	ug/l,ppb	---	5.00	SW 846 8240
Benzene	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,2-Dichloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Trichloroethene	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,2-Dichloropropane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Bromodichloromethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
2-Chloroethyl vinyl ether	BQL	ug/l,ppb	---	10.0	SW 846 8240
4-Methyl-2-pentanone	BQL	ug/l,ppb	---	50.0	SW 846 8240
cis-1,3-Dichloropropene	BQL	ug/l,ppb	---	5.00	SW 846 8240

CUST SAMPLE ID: BLIND COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	DUPLICATE	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13158 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Toluene	BQL	ug/l,ppb	---	5.00	SW 846 8240
trans-1,3-Dichloropropene	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,1,2-Trichloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Tetrachloroethene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Chlorodibromomethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
Chlorobenzene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Ethylbenzene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Bromoform	BQL	ug/l,ppb	---	5.00	SW 846 8240
1,1,2,2-Tetrachloroethane	BQL	ug/l,ppb	---	5.00	SW 846 8240
2-Hexanone	BQL	ug/l,ppb	---	50.0	SW 846 8240
m/p-Xylene	BQL	ug/l,ppb	---	5.00	SW 846 8240
o-Xylene	BQL	ug/l,ppb	---	5.00	SW 846 8240
Styrene	BQL	ug/l,ppb	---	5.00	SW 846 8240
TCL Semi-Volatiles					
N-Nitrosodimethylamine	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-chloroethyl) ether	BQL	ug/l,ppb	---	10	SW 846 8270
1,3-Dichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
1,4-Dichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzyl alcohol	BQL	ug/l,ppb	---	10	SW 846 8270
1,2-Dichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-chloroisopropyl) ether	BQL	ug/l,ppb	---	10	SW 846 8270
N-Nitrosodipropylamine	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachloroethane	BQL	ug/l,ppb	---	10	SW 846 8270
Nitrobenzene	BQL	ug/l,ppb	---	10	SW 846 8270

CUST SAMPLE ID: BLIND COLLECTION DATE(S): 2/26/92 COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER	DUPLICATE	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13158 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Isophorone	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-chloroethoxy) methane	BQL	ug/l,ppb	---	10	SW 846 8270
1,2,4-Trichlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Naphthalene	BQL	ug/l,ppb	---	10	SW 846 8270
4-Chloroaniline	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachlorobutadiene	BQL	ug/l,ppb	---	10	SW 846 8270
2-Methylnaphthalene	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachlorocyclopentadiene	BQL	ug/l,ppb	---	10	SW 846 8270
2-Chloronaphthalene	BQL	ug/l,ppb	---	10	SW 846 8270
2-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
Dimethylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
2,6-Dinitrotoluene	BQL	ug/l,ppb	---	10	SW 846 8270
Acenaphthylene	BQL	ug/l,ppb	---	10	SW 846 8270
3-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
Acenaphthene	BQL	ug/l,ppb	---	10	SW 846 8270
Dibenzofuran	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dinitrotoluene	BQL	ug/l,ppb	---	10	SW 846 8270
Diethylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
4-Chlorophenyl phenyl ether	BQL	ug/l,ppb	---	10	SW 846 8270
Fluorene	BQL	ug/l,ppb	---	10	SW 846 8270
4-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
N-Nitrosodiphenylamine	BQL	ug/l,ppb	---	10	SW 846 8270
4-Bromophenyl phenyl ether	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Phenanthrene	BQL	ug/l,ppb	---	10	SW 846 8270

CUST SAMPLE ID: BLIND COLLECTION DATE(S): 2/26/92	DUPLICATE	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13158 LABORATORY ORGANIC ANALYSIS
COLLECTION METHOD: GRAB SAMPLE TYPE: GROUNDWATER		

Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Di-n-butylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzidine	BQL	ug/l,ppb	---	40	SW 846 8270
Pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Butyl benzyl phthalate	BQL	ug/l,ppb	---	10	SW 846 8270
3,3-Dichlorobenzidine	BQL	ug/l,ppb	---	20	SW 846 8270
Benzo (a) anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-ethylhexyl) phthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Chrysene	BQL	ug/l,ppb	---	10	SW 846 8270
Di-n-octylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (b) fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (k) fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (a) pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Indeno (1,2,3-cd)pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Dibenz (a,h) anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (g,h,i) perylene	BQL	ug/l,ppb	---	10	SW 846 8270
Phenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
4-Methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Nitrophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dimethylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
Benzoic acid	BQL	ug/l,ppb	---	30	SW 846 8270
2,4-Dichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Chlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270

CUST SAMPLE ID: BLIND	DUPLICATE	LABORATORY JOB NO: 920723
COLLECTION DATE(S): 2/26/92		LABORATORY REFERENCE NO: 13158
COLLECTION METHOD: GRAB		LABORATORY ORGANIC ANALYSIS
SAMPLE TYPE: GROUNDWATER		

Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
4-Chloro-3-methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4,6-Trichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4,5-Trichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dinitrophenol	BQL	ug/l,ppb	---	40	SW 846 8270
4-Nitrophenol	BQL	ug/l,ppb	---	40	SW 846 8270
4,6-Dinitro-2-methylphenol	BQL	ug/l,ppb	---	40	SW 846 8270
Pentachlorophenol	BQL	ug/l,ppb	---	40	SW 846 8270

CUST SAMPLE ID: TRIP BLANK COLLECTION DATE(S): 2/25/92 COLLECTION METHOD: GRAB SAMPLE TYPE: BAKER WATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13159 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
TCL Volatiles					
Chloromethane	BQL	ug/l, ppb	---	10.0	SW 846 8240
Vinyl chloride	BQL	ug/l, ppb	---	10.0	SW 846 8240
Chloroethane	BQL	ug/l, ppb	---	10.0	SW 846 8240
Bromomethane	BQL	ug/l, ppb	---	10.0	SW 846 8240
Acetone	BQL	ug/l, ppb	---	50.0	SW 846 8240
1,1-Dichloroethene	BQL	ug/l, ppb	---	5.00	SW 846 8240
Carbon disulfide	BQL	ug/l, ppb	---	5.00	SW 846 8240
Methylene chloride	BQL	ug/l, ppb	---	10.0	SW 846 8240
trans-1,2-Dichloroethene	BQL	ug/l, ppb	---	5.00	SW 846 8240
1,1-Dichloroethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
Vinyl acetate	BQL	ug/l, ppb	---	50.0	SW 846 8240
2-Butanone	BQL	ug/l, ppb	---	50.0	SW 846 8240
Chloroform	BQL	ug/l, ppb	---	5.00	SW 846 8240
1,1,1-Trichloroethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
Carbon tetrachloride	BQL	ug/l, ppb	---	5.00	SW 846 8240
Benzene	BQL	ug/l, ppb	---	5.00	SW 846 8240
1,2-Dichloroethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
Trichloroethene	BQL	ug/l, ppb	---	5.00	SW 846 8240
1,2-Dichloropropane	BQL	ug/l, ppb	---	5.00	SW 846 8240
Bromodichloromethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
2-Chloroethyl vinyl ether	BQL	ug/l, ppb	---	10.0	SW 846 8240
4-Methyl-2-pentanone	BQL	ug/l, ppb	---	50.0	SW 846 8240
cis-1,3-Dichloropropene	BQL	ug/l, ppb	---	5.00	SW 846 8240

CUST SAMPLE ID: TRIP BLANK COLLECTION DATE(S): 2/25/92 COLLECTION METHOD: GRAB SAMPLE TYPE: BAKER WATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13159 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Toluene	BQL	ug/l, ppb	---	5.00	SW 846 8240
trans-1,3-Dichloropropene	BQL	ug/l, ppb	---	5.00	SW 846 8240
1,1,2-Trichloroethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
Tetrachloroethene	BQL	ug/l, ppb	---	5.00	SW 846 8240
Chlorodibromomethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
Chlorobenzene	BQL	ug/l, ppb	---	5.00	SW 846 8240
Ethylbenzene	BQL	ug/l, ppb	---	5.00	SW 846 8240
Bromoform	BQL	ug/l, ppb	---	5.00	SW 846 8240
1,1,2,2-Tetrachloroethane	BQL	ug/l, ppb	---	5.00	SW 846 8240
2-Hexanone	BQL	ug/l, ppb	---	50.0	SW 846 8240
m/p-Xylene	BQL	ug/l, ppb	---	5.00	SW 846 8240
o-Xylene	BQL	ug/l, ppb	---	5.00	SW 846 8240
Styrene	BQL	ug/l, ppb	---	5.00	SW 846 8240

CUST SAMPLE ID: FIELD BLANK COLLECTION DATE(S):	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13160 LABORATORY INORGANIC ANALYSIS
COLLECTION METHOD: GRAB SAMPLE TYPE: DI WATER	

Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
ICP Iron Analysis on Water	ND	mg/l	0.01	---	EPA 200.7
ICP Potassium Analysis on Water	ND	mg/l	0.40	---	EPA 200.7
ICP Zinc Analysis on Water	ND	mg/l	0.01	---	EPA 200.7

CUST SAMPLE ID: FIELD BLANK COLLECTION DATE(S): COLLECTION METHOD: GRAB SAMPLE TYPE: DI WATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13160 LABORATORY INORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Ammonia	BQL	mg/l	---	0.02	EPA 350.1
Nitrite	BQL	mg/l	---	0.01	EPA 353.2
Total Kjeldahl Nitrogen	BQL	mg/l	---	0.1	EPA 351.2

CUST SAMPLE ID: FIELD BLANK COLLECTION DATE(S): COLLECTION METHOD: GRAB SAMPLE TYPE: DI WATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13160 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
TCL Semi-Volatiles					
N-Nitrosodimethylamine	BQL	ug/l, ppb	---	10	SW 846 8270
Bis (2-chloroethyl) ether	BQL	ug/l, ppb	---	10	SW 846 8270
1,3-Dichlorobenzene	BQL	ug/l, ppb	---	10	SW 846 8270
1,4-Dichlorobenzene	BQL	ug/l, ppb	---	10	SW 846 8270
Benzyl alcohol	BQL	ug/l, ppb	---	10	SW 846 8270
1,2-Dichlorobenzene	BQL	ug/l, ppb	---	10	SW 846 8270
Bis (2-chloroisopropyl) ether	BQL	ug/l, ppb	---	10	SW 846 8270
N-Nitrosodipropylamine	BQL	ug/l, ppb	---	10	SW 846 8270
Hexachloroethane	BQL	ug/l, ppb	---	10	SW 846 8270
Nitrobenzene	BQL	ug/l, ppb	---	10	SW 846 8270
Isophorone	BQL	ug/l, ppb	---	10	SW 846 8270
Bis (2-chloroethoxy) methane	BQL	ug/l, ppb	---	10	SW 846 8270
1,2,4-Trichlorobenzene	BQL	ug/l, ppb	---	10	SW 846 8270
Naphthalene	BQL	ug/l, ppb	---	10	SW 846 8270
4-Chloroaniline	BQL	ug/l, ppb	---	10	SW 846 8270
Hexachlorobutadiene	BQL	ug/l, ppb	---	10	SW 846 8270
2-Methylnaphthalene	BQL	ug/l, ppb	---	10	SW 846 8270
Hexachlorocyclopentadiene	BQL	ug/l, ppb	---	10	SW 846 8270
2-Chloronaphthalene	BQL	ug/l, ppb	---	10	SW 846 8270
2-Nitroaniline	BQL	ug/l, ppb	---	40	SW 846 8270
Dimethylphthalate	BQL	ug/l, ppb	---	10	SW 846 8270
2,6-Dinitrotoluene	BQL	ug/l, ppb	---	10	SW 846 8270
Acenaphthylene	BQL	ug/l, ppb	---	10	SW 846 8270

CUST SAMPLE ID: FIELD BLANK COLLECTION DATE(S): COLLECTION METHOD: GRAB SAMPLE TYPE: DI WATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13160 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
3-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
Acenaphthene	BQL	ug/l,ppb	---	10	SW 846 8270
Dibenzofuran	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dinitrotoluene	BQL	ug/l,ppb	---	10	SW 846 8270
Diethylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
4-Chlorophenyl phenyl ether	BQL	ug/l,ppb	---	10	SW 846 8270
Fluorene	BQL	ug/l,ppb	---	10	SW 846 8270
4-Nitroaniline	BQL	ug/l,ppb	---	40	SW 846 8270
N-Nitrosodiphenylamine	BQL	ug/l,ppb	---	10	SW 846 8270
4-Bromophenyl phenyl ether	BQL	ug/l,ppb	---	10	SW 846 8270
Hexachlorobenzene	BQL	ug/l,ppb	---	10	SW 846 8270
Phenanthrene	BQL	ug/l,ppb	---	10	SW 846 8270
Anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Di-n-butylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzidine	BQL	ug/l,ppb	---	40	SW 846 8270
Pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Butyl benzyl phthalate	BQL	ug/l,ppb	---	10	SW 846 8270
3,3-Dichlorobenzidine	BQL	ug/l,ppb	---	20	SW 846 8270
Benzo (a) anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Bis (2-ethylhexyl) phthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Chrysene	BQL	ug/l,ppb	---	10	SW 846 8270
Di-n-octylphthalate	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (b) fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (k) fluoranthene	BQL	ug/l,ppb	---	10	SW 846 8270

CUST SAMPLE ID: FIELD BLANK COLLECTION DATE(S): COLLECTION METHOD: GRAB SAMPLE TYPE: DI WATER	LABORATORY JOB NO: 920723 LABORATORY REFERENCE NO: 13160 LABORATORY ORGANIC ANALYSIS
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Analytical Parameters	Analytical Results	Units	Method Detection Limits	Practical Quantifiable Limit	Method
Benzo (a) pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Indeno (1,2,3-cd)pyrene	BQL	ug/l,ppb	---	10	SW 846 8270
Dibenz (a,h) anthracene	BQL	ug/l,ppb	---	10	SW 846 8270
Benzo (g,h,i) perylene	BQL	ug/l,ppb	---	10	SW 846 8270
Phenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
4-Methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Nitrophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dimethylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
Benzoic acid	BQL	ug/l,ppb	---	30	SW 846 8270
2,4-Dichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2-Chlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
4-Chloro-3-methylphenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4,6-Trichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4,5-Trichlorophenol	BQL	ug/l,ppb	---	10	SW 846 8270
2,4-Dinitrophenol	BQL	ug/l,ppb	---	40	SW 846 8270
4-Nitrophenol	BQL	ug/l,ppb	---	40	SW 846 8270
4,6-Dinitro-2-methylphenol	BQL	ug/l,ppb	---	40	SW 846 8270
Pentachlorophenol	BQL	ug/l,pppb	---	40	SW 846 8270

ADVANCED ENVIRONMENTAL SERVICES, INC.
 LABORATORY REPORT
 QUALITY CONTROL - PRECISION
 =====

JOB# 920723

PAGE

Type of Analysis: Duplicate Analysis
 Client: UCAR Carbon Company, Inc.

A.E.S. Job Code: CTC
 Units: Milligrams/Liter

Analytical Parameters	Sample No.	Original Concentration	Duplicate Concentration	Average Concentration	Range	Relative % Difference
Iron	13155 S	1.45	1.33	1.39	0.12	9
Potassium	13155 S	21.0	19.8	20.4	1.2	6
Zinc	13155 S	0.22	0.22	0.22	0	0
Iron	13155 T	22.8	23.2	23.0	0.40	2
Potassium	13155 T	22.9	22.3	22.6	0.6	3
Zinc	13155 T	1.80	1.84	1.82	0.04	2

* Relative Percent Difference = (Range/Average) X 100

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 LABORATORY REPORT
 QUALITY CONTROL - PRECISION
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JOB# 920723

PAGE

Type of Analysis: Duplicate Analysis Client: UCAR Carbon Company, Inc.	A.E.S. Job Code: CTC Units: Milligrams/Liter
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Analytical Parameters	Sample No.	Original Concentration	Duplicate Concentration	Average Concentration	Range	Relative % Difference
Total Kjeldahl Nitrogen	13155	5.6	5.6	5.6	0	0
Nitrite	13155	0.01	0.01	0.01	0	0
Ammonia	13155	5.6	5.6	5.6	0	0



* Relative Percent Difference = (Range/Average) X 100

ADVANCED ENVIRONMENTAL SERVICES, INC.
 LABORATORY REPORT
 QUALITY CONTROL - PRECISION
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JOB# 920723

PAGE

Type of Analysis: Duplicate Analysis
 Client: UCAR Carbon Company, Inc.

A.E.S. Job Code: CTC
 Units: Micrograms/ liter or ppb

Analytical Parameters	Sample No.	Original Concentration	Duplicate Concentration	Average Concentration	Range	Relative % Difference
Hexachlorobutadiene	13155	44	44	44	0	0
All other 8270 analytes	13155	BQL	BQL	BQL	NA *	NA
Vinyl Chloride	13155	64.3	59.4	61.8	4.90	7.9
trans-1,2-Dichloroethene	13155	287	276	282	11.0	3.9
Chloroform	13155	5.98	5.76	5.87	0.22	3.8
Trichloroethene	13155	194	180	187	14.0	7.5
Tetrachloroethene	13155	191	181	186	10.0	5.4

* Relative Percent Difference = (Range/Average) X 100

FOOTNOTES

** Not Available

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Type of Analysis: Matrix Spikes and E.P.A. Standards
 Client: UCAR Carbon Company, Inc.

A.E.S. Job Code: CTC
 Units: mg/l

Analytical Parameters	Sample No.	Type	Observed Concentration	Original Concentration	Added Concentration	Percent Recovery*
Iron	13155 S	SPIKE	10.6	1.39	10.0	92
Potassium	13155 S	SPIKE	29.7	20.4	10.0	93
Zinc	13155 S	SPIKE	9.45	0.22	10.0	92
Iron	13155 T	SPIKE	32.0	23.0	10.0	90
Potassium	13155 T	SPIKE	33.3	22.6	10.0	107
Zinc	13155 T	SPIKE	11.7	1.82	10.0	99

* % Recovery = 100 x ((Observed Concentration - "background" Original Concentration) / "Spike" Added Concentration)

* If Added=NONE: % Recovery = 100 x (Observed Concentration / "background" Original Concentration)

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Type of Analysis: Matrix Spikes and E.P.A. Standards
 Client: UCAR Carbon Company, Inc.

A.E.S. Job Code: CTC
 Units: mg/l

Analytical Parameters	Sample No.	Type	Observed Concentration	Original Concentration	Added Concentration	Percent Recovery*
Total Kjeldahl Nitrogen	---	EPA	5.2	5.0	NONE	104
Total Kjeldahl Nitrogen	13155	SPIKE	13.6	5.6	8.0	100
Nitrite	13155	SPIKE	0.28	0.01	0.25	108
Ammonia	---	IND	0.51	0.50	NONE	102
Ammonia	13155	SPIKE	16	5.6	10	104

* % Recovery = 100 x ((Observed Concentration - "background" Original Concentration) / "Spike" Added Concentration)

* If Added=NONE: % Recovery = 100 x (Observed Concentration / "background" Original Concentration)

Type of Analysis: Matrix Spikes and E.P.A. Standards
 Client: UCAR Carbon Company, Inc.

A.E.S. Job Code: CTC
 Units: ug/l, or ppb

Analytical Parameters	Sample No.	Type	Observed Concentration	Original Concentration	Added Concentration	Percent Recovery*
Phenol	13155	MS	108	BQL	200	54
2-Chlorophenol	13155	MS	130	BQL	200	65
1,4-Dichlorobenzene	13155	MS	75.1	BQL	100	75
N-Nitrosodipropylamine	13155	MS	128	BQL	100	128
1,2,4-Trichlorobenzene	13155	MS	75.0	BQL	100	75
4-Chloro-3-Methylphenol	13155	MS	160	BQL	200	80
Acenaphthene	13155	MS	79.8	BQL	100	80
4-Nitrophenol	13155	MS	104	BQL	200	52
2,4-Dinitrotoluene	13155	MS	109	BQL	100	109
Pentachlorophenol	13155	MS	187	BQL	200	94
Pyrene	13155	MS	81.7	BQL	100	82
1,1-Dichloroethene	13155	MS	20.0	BQL	20.0	100
Trichloroethene	13155	MS	35.6	18.7 **	20.0	84
Benzene	13155	MS	19.4	BQL	20.0	97
Toluene	13155	MS	20.0	BQL	20.0	100
Chlorobenzene	13155	MS	19.4	BQL	20.0	97

* % Recovery = 100 x ((Observed Concentration - "background" Original Concentration) / "Spike" Added Concentration)

* If Added=NONE: % Recovery = 100 x (Observed Concentration / "background" Original Concentration)

FOOTNOTES

** Spike was performed on the diluted sample.



ENVIRONMENTAL SERVICES, INC.
2186 LIBERTY DRIVE
NIAGARA FALLS, NY 14304 • (716) 283-3120

CHAIN OF CUSTODY RECORD

PROJECT NAME: UCAR CARBON

SAMPLER'S SIGNATURE: Mike Champ

CONTAINER CLASSIFICATION							
UNPRESERVED	HNO ₃	H ₂ SO ₄	HCL	NAOH	VIAL (PRES.)	VIAL (UNPRES.)	TOTAL

JOB CODE: CTC

IDENTIFICATION OF BLIND FIELD DUPLICATE SITE: BW-6

DATE	TIME	SAMPLE IDENTIFICATION	GRAB	COMP	SAMPLE TYPE	UNPRESERVED	HNO ₃	H ₂ SO ₄	HCL	NAOH	VIAL (PRES.)	VIAL (UNPRES.)	TOTAL	PARAMETERS/REMARKS
2-26-92	11 ⁰⁰ Am	BW-6	✓		Groundwater	1	2	1			2		6	Tot: Sol, Metals, TKN, Ammo., N/ITE
	11 ⁰⁰ Am	Blind Dup	✓			1	2	1			2		6	TCLV, TCLSV
	12 ⁰⁵ Pm	BW-2	✓				2	1					3	Tot: Sol Metals, TKN, Ammo., N/ITE
	2 ⁵⁵ Pm	MW-1	✓				2	1					3	
	4 ⁰⁵ Pm	BW-4	✓			1	2	1			2		6	Tot: Sol Metals, TKN, Ammo, N/ITE, TCLV, TCLSV
	4 ⁰⁵ Pm	QC. (BW-4)	✓			2		1					3	TKN, Ammo., N/ITE, TCLSV
												TOTAL NUMBER OF CONTAINERS	27	

NOTE: Please indicate required analysis, and whom we may contact with questions, if you have not yet done so through your customer service representative.

1. RELINQUISHED BY: <u>Mike Champ</u>	DATE <u>2-26-92</u>	TIME <u>5¹⁵ Pm</u>	RECEIVED BY: <u>Maricia Lewis</u>
2. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
3. RELINQUISHED BY:	DATE	TIME	RECEIVED BY:

